Jones Development Company LLC
Commercial Property Development
Consulting, Management & Investments

September 1, 2017

Mr. Mark Detterman
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

SUBJECT: SUB-SLAB DEPRESSURIZATION AND SOIL VAPOR EXTRACTION FEASIBILITY TEST REPORT
SUBMITTAL ACKNOWLEDGEMENT STATEMENT
County Case #RO 2468
Former James River Corporation Site
2101 Williams Street
San Leandro, CA

Dear Mr. Detterman:

You will find enclosed one copy of the following document prepared by Geosyntec Consultants for the subject site.

- Sub-Slab Depressurization and Soil Vapor Extraction Feasibility Test Report dated September 1, 2017.

I have read and acknowledge the content, recommendations and/or conclusions contained in the attached document or report submitted on my behalf to ACDEH's FTP server and the SWRCB's Geotracker Website.

Please don't hesitate to call me if you have any questions.

Sincerely,

2101 Williams Associates LLC

Carey Andre, Manager
Jones Partners LLC, Manager of 2101 Williams Associates LLC

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1 September 2017

Mr. Mark E. Detterman, P.G., C.E.G.
Senior Hazardous Material Specialist
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

Subject: Sub-Slab Depressurization and Soil Vapor Extraction Feasibility Test Report
2101 Williams Street, San Leandro, California 94577
SLIC Case RO0002468 and Geotracker Global ID T06019771096

Dear Mr. Detterman,

This Sub-Slab Depressurization and Soil Vapor Extraction Feasibility Test Report (Report) provides the findings of a sub-slab depressurization (SSD) and soil vapor extraction (SVE) feasibility test for 2101 Williams Street, San Leandro, California (Site) (**Figure 1**). The feasibility test described in this Report was designed to evaluate the feasibility of an SSD system and an SVE system for vapor intrusion mitigation, and to assess whether an SSD or SVE system would be more effective in mitigating the potential vapor intrusion pathway into the on-Site building. Geosyntec Consultants, Inc. (Geosyntec) has prepared this Report on behalf of 2101 Williams Associates, LLC (2101 Williams Associates) for submittal to Alameda County Environmental Health (ACDEH).

Geosyntec submitted a Sub-Slab Depressurization Feasibility Testing Work Plan to ACDEH on 27 January 2017 (Work Plan). ACDEH conditionally approved implementation of the Work Plan on 3 April 2017, with the request that a baseline soil vapor sample be collected from the SVE extraction well prior to SVE system startup. This Report provides the results of the feasibility testing scope approved in that letter.

1. SITE BACKGROUND

The Site is located at the edge of an industrial area in San Leandro, approximately 3,000 feet from the San Francisco Bay (the Bay). The depth to groundwater at the Site is generally from 14 to 17

feet below ground surface (bgs).[1] The groundwater in the Site area flows west-southwest, towards the Bay. The subsurface materials beneath the Site building include the following, from ground surface down:

- 4.5-inch to 12-inch thick concrete slab;
- Gravelly silty sand ("fill") to 4 to 6 feet bgs;
- Black clay and silty clay to groundwater.

Based on Site observations, concrete has been used to fill in vault areas and trenches from historical operations, resulting in concrete thicknesses greater than 3 feet in those locations.

The building on Site has historically housed industrial processes.[2] Western Waxide, which produced wax-coated paper products, constructed the original building in 1943. In 1988, the property was sold to James River Corporation. James River Corporation had a flexible coatings plant on Site until they sold the property to Printpak in 1996. In 1998, Printpak sold the property to 2101 Williams Associates, the current owner. The building is currently used by multiple tenants for warehousing, food processing, and related offices.

Tetrachloroethene (PCE) contamination was identified in groundwater samples in the 1980s and 1990s.[3] Several groundwater, soil, and soil vapor investigations followed. The source of the PCE contamination has not been positively identified, though previous investigation reports indicate that PCE appears to have migrated onto the Site from properties east of the Site.[1]

Indoor air sampling conducted on 25 August 2015 indicated that the indoor air in the Moore Newton Quality Hardwood (Moore Newton) and King's Asian Gourmet sections of the building had indoor air concentrations exceeding the Environmental Screening Level (ESL) for PCE.[4] The indoor air concentrations in those two areas were 2.3 micrograms per cubic meter (µg/m^3) and 7.5-

[1] P&D Environmental, Inc., 2015. Subsurface Investigation Report (M1 through M6), County Case #RO 2468, Former James River Corporation Site, 2101 Williams Street, San Leandro, California. October 30.
[2] State Water Resources Control Board (SWRCB), Geotracker, 2015. James River Corporation (T06019771096). http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T06019771096
[3] Anton Geological, 2013. Soil and Groundwater Investigation, ACEH request for Data Gap Information, Former Printpack Facility, 2101 Williams Street, San Leandro, California 94577, RWQCB SLIC Case RO0002468, Geotracker Global ID T06019771096.
[4] P&D Environmental, Inc., 2015. Indoor Air Investigation Report (IA1 through IA3, and AA1), County Case #RO2468, Former James River Corporation Site, 2101 Williams Street, San Leandro, California. October 29.

7.9 µg/m^3, respectively. The ESL for PCE is 2.1 µg/m^3. The indoor air concentration in the SUNLINK area of the building was 1.7 µg/m^3, which is below the ESL (2.1 µg/m^3) for PCE.

In 2016, a sub-slab soil vapor investigation conducted by P&D Environmental, Inc. (P&D) detected a maximum sub-slab PCE concentration of 520,000 µg/m^3. The feasibility testing documented in this report was conducted to evaluate the feasibility of mitigating intrusion of sub-slab vapor into the building using subsurface treatment systems.

2. FEASIBILITY TEST OBJECTIVE

The general objective of vapor intrusion mitigation systems is to prevent volatile organic compounds (VOCs) in the soil vapor beneath the building from migrating into the building. SSD and SVE systems both produce a vacuum by extracting soil vapor from beneath the building. SSD systems are designed to create a negative-pressure (vacuum) zone by applying low vacuum immediately below the building slab to interrupt the path of contamination into the building. In contrast, SVE systems apply a high vacuum and high flow rate to soils that have high concentrations of VOCs, creating a negative-pressure zone underneath the building and removing contaminant mass in the process.

The overall objectives of this feasibility test were to evaluate the feasibility of and to obtain optimal operational parameters for a full-scale SSD system or SVE system that would mitigate vapor intrusion into the building. The area of the building selected for feasibility testing is shown in **Figure 2**. That area was selected based on building access, VOCs concentration distribution, and minimizing disturbance to the existing businesses. Based on these considerations, the test was conducted in the Moore Newton area of the building over a weekend.

3. FEASIBILITY TEST SYSTEM INSTALLATION

The feasibility test was conducted using a sub-slab extraction point (EP) for the SSD system test, a soil vapor extraction well (EW) for the SVE test, soil vapor monitoring wells (VMWs), new and existing vapor pins (VPs), and a mobile blower system to generate vacuum and treat extracted soil vapors, as described in the sections below. The EP, EW, VP, and VMW locations are indicated in **Figure 2**. Installation and geophysical survey activities took place on 26 May 2017.

3.1 Pre-Installation Activities

Permits for installation of a vapor remediation well (Permit Number W2017-0385) and four vapor monitoring wells (Permit Number W2017-0386) were obtained from Alameda County Public Works Agency. Permits were not required for the extraction point or vapor pins because of their shallow depths.

USA North was notified of the planned drilling activities for clearance. Geotech Utility performed a geophysical survey to clear potential underground utilities at each of the planned boring locations on 26 May 2017.

Although no emissions permit is required for operation of a two-day pilot test, BAAQMD was notified of the planned feasibility test on 31 May 2017.

3.2 Extraction Point and Vapor Pins

One extraction point (EP1) was installed as shown in **Figure 3** to test the feasibility of an SSD system. A 4.5-inch diameter core was removed from the 6.5-inch concrete floor slab. Approximately 6 inches of material beneath the slab were removed and replaced with clean, 1/2-inch diameter, clean rounded river rock.

For SSD testing, a pipe connected to the extraction manifold was inserted into the borehole. The extraction point pipe was constructed using 3-inch diameter Schedule 40 PVC pipe outfitted with a layered rubber gasket and ¼-inch wire mesh. The extraction point was placed and centered inside the core with the wire mesh situated on the surface of the rock layer.

For vacuum monitoring during SVE testing, a 3-inch PVC pipe with a sampling port was inserted into the borehole.

Following feasibility testing, EP1 was filled with a cement-bentonite mixture.

New VPs were installed to supplement existing VPs for monitoring the radius of influence of EP1. The new VPs (VP20 through VP23) were installed at varying distances (between 5 and 90 feet) from EP1. Two existing (VP13 and VP14) and the four new VPs were used to monitor the vacuum influence from the extraction point. The new VPs were installed by drilling through the concrete

slab and placing a Vapor Pin® in the hole per manufacturer instructions.[5] Each VP has a cap to prevent becoming a conduit for vapors to enter the building, and is covered by a protective metal lid placed flush with the concrete surface to prevent damage to the VP.

3.3 Extraction Well and Vapor Monitoring Wells

One SVE well (EW1) and four VMWs were installed as shown in **Figure 4** to test the feasibility of an SVE system. The VMWs were located at distances of 10, 22, 44, and 60 feet from EW1. EW1 and the VMWs were generally constructed the same way, but with different borehole and casing diameters.

At each well location, a 12-inch diameter concrete core was removed to access the soil. Hand augering was initially used to bore to the clay layer to avoid damaging potential pipes or other sub-slab infrastructure. After difficult soil conditions were encountered, an air knife replaced hand augering to accelerate the SVE well installation process while continuing to avoid the risk of damage to sub-slab infrastructure. The soil was bored until native clay was encountered, which was at approximately 4 feet 7 inches at each well. Borehole diameters were approximately 7 inches for EW1 and 5 inches for the VMWs.

Well casings were constructed of Schedule 40 PVC: 3-inch diameter for EW1 and 1-inch diameter for the VMWs. The well screens were placed at approximately 2.5 feet bgs and were constructed of 0.020-inch factory-slotted PVC with solid PVC bottom caps. The length of each screen was approximately 23 to 25 inches. The annular space was backfilled as follows: #3 sand from the bottom of the borehole to two inches above the top of the screen, hydrated bentonite chips for four inches above that, and Portland cement for the next 18 to 19 inches, stopping below the top of the well casing.

An H-20 traffic-rated and flush-mounted well box was set in concrete to access each well. The well boxes are 8 inches in diameter at EW1 and 5 inches in diameter at the VMWs. Each well box has a waterproof, locking cap.

The VMW2 location was moved to avoid thick concrete at the original VMW2 location. At the original VMW2 location 10 feet northeast of EW1, concrete was cored to 3 feet bgs, and soil was

[5] Cox-Colvin & Associates, Inc., 2016. Standard Operating Procedure, Installation and extraction of the Vapor Pin®, Updated September 9, 2016. https://vaporpin.coxcolvin.com/wp-content/uploads/2016/09/Vapor-Pin-SOP-09-2016-Web.pdf

not reached. Therefore, that borehole was filled with cement and a new VMW2 location was selected 10 feet southwest of EW1. The concrete thickness at the new location was approximately 7 inches.

During SVE testing, the extraction manifold shown in **Figure 3** was connected to EW1 to connect it to the mobile blower and treatment system and to take measurements. The VMWs were constructed with a sample port at the top of each for the collection of vacuum measurements.

For vacuum monitoring during SSD testing, a 3-inch PVC pipe with a sampling port was connected to the top of EW1.

3.4 Blower and Carbon Treatment System

A mobile blower system was used for this feasibility test. The system consisted of the following:

- A positive-displacement blower, rated for a vapor flow rate of up to 300 standard cubic feet per minute (SCFM);
- A vapor recirculation line for vacuum and vapor flow control;
- A 50-gallon knockout drum with high liquid level shutdown and a discharge pump; and
- Four drums, each containing 200-lbs of vapor-phase granular activated carbon (VGAC), used for abatement of extracted soil vapor prior to discharge to the atmosphere.

A conceptual process diagram of the feasibility test system is shown in **Figure 5**. The blower extraction flow rate and vacuum were controlled primarily by a valve on the extraction manifold at the extraction location, and by valves on the blower system as needed.

The vapor extraction piping leaving EP1 or EW1, depending on the test, transitioned to hose via a banded rubber coupling. The header hose extended outside of the building to the mobile blower and treatment skid located in the parking area on the north side of the building. The above-grade connections were temporary installations for the feasibility test and were removed after testing.

3.5 Observations from Borings

The thickness of the concrete slab was approximately 7 inches at EP1, EW1, VMW1, VMW2, and VMW4; it was approximately 6.5 inches at VMW3. No sub-slab aggregate was observed during the installation of EP1, EW1, or the VMWs.

The “fill” material that extends from beneath the concrete to the clay soil consists of highly compacted silt with large gravel (up to approximately 5 inches).

4. FEASIBILITY TEST PROCEDURES

The following sections describe collection of baseline data, feasibility test system operation, and feasibility test termination. The feasibility testing was conducted on 2 and 3 June 2017.

4.1 Baseline Data Collection

Atmospheric conditions were documented using weather reports for KOAK, a weather station near the Site, on 2 June 2017. The weather report is provided in **Attachment 1**.

Baseline soil vapor samples were collected from EW1 and EP 1 on 2 June 2017. A shut-in test was conducted prior to sample collection. A purge rate of 1.0 liters per minute was used at EW1, and a purge rate of 0.2 liters per minute was used at EP1. Samples were collected into 1-liter SUMMA™ canisters.

Measurements were taken prior to vapor extraction to establish a baseline. The vacuum was measured by connecting a digital micro-manometer to the extraction point and the monitoring points in turn. Geosyntec also measured the building interior air pressure relative to outdoor air.

Indoor air samples were collected on 3 and 4 June 2017 during feasibility testing. Each indoor air sample was collected using a SUMMA™ canister with a regulator set to collect the sample over eight hours. The samples were analyzed for selected VOCs using EPA Method TO-15.

4.2 SSD Test

The SSD feasibility test was conducted on 3 June 2017 and consisted of a step test and a constant rate test. For the step test, increasing vacuums were sequentially applied to EP1 for one hour each. The vacuum applied during the constant rate test was selected based on the results of the step test.

During each vacuum set point, the vacuum, flow rate, and vapor concentrations were monitored at EP1 (via a photoionization detector [PID]). Vacuums were also monitored at the VPs, VMWs, and EW1 to measure the radius of influence of the vacuum. Measurements were collected every 10 minutes.

Due to the low radii of influence observed during the first two vacuum set points, the vacuum set points of later steps were increased above the planned vacuums noted in the Work Plan. Therefore, vacuums of approximately 3, 6, 15, and 35 IWG were applied to EP1 for one hour each. In addition, a vacuum of 60 IWG was applied to EP1 for 15 minutes to evaluate if the flow at EP1 would increase significantly.

One soil vapor sample was collected from EP1 at the start of each step test. Samples were collected into 1-liter SUMMA™ canisters and were analyzed by EPA Method TO-15 by Test America Laboratories, Inc. (Test America).

Following the step testing, a constant rate SSD test was conducted. A vacuum of approximately 35 IWG was applied to EP1 based on the results of the step testing. Due to the low response observed during the constant rate test, the test was concluded after three hours. The flow rate, vacuum, and vapor concentrations were monitored at the EP (via a PID), and vacuums were monitored at the VPs, VMWs, and EW. The measurement frequency was 10 minutes.

Four soil vapor samples were collected from EP1 during the constant rate test. The samples were collected using the same procedure as for the step test samples. Samples were collected immediately after the start of the test, after 45 minutes, after 2 hours, and after 3 hours, at the termination of the test. The 3-hour sample was compromised, so the sample was not analyzed.

In addition to the sampling and monitoring described above, helium was injected into VP14 to assess the length of time required for soil vapor to travel through the subsurface. Beginning at 18:20, helium was injected at a rate of 55 cc/minute at a pressure of 0.81 IWG. The helium concentration was monitored at EP1 using a Gascheck 5kIS helium detector.

4.3 SVE Test

The SVE feasibility test was conducted on 4 June 2017 and consisted of a step test and a constant rate test. For the step test, increasing vacuums were sequentially applied to EW1 for one hour each. The vacuum applied during the constant rate test was selected based on the results of the step test. During the constant rate test, a constant vacuum was applied to EW1 for four hours.

During each vacuum set point, the vacuum, flow rate, and vapor concentrations were monitored at EW1. Vacuums were also monitored at the VPs, VMWs, and EP1 to measure the radius of influence of the vacuum. Measurements were collected every 10 minutes.

The applied vacuum set points for step testing were as planned: 25, 50, 75, and 100 IWG, for one hour each. Following the step testing, a constant rate SVE test was conducted for four hours, applying a vacuum of 100 IWG to EW1. In addition, a vacuum of 140 IWG was tested following

the constant rate test to observe the vacuum influence at the maximum vacuum that the blower could pull.

One soil vapor sample was collected from EW1 at the start of each step test, using the same sampling and analytical procedures as were used for SSD testing. During the constant rate test, samples were collected immediately after the start of the test, after 45 minutes, after 2 hours (with duplicate), and after 4 hours, at the termination of the test.

5. FEASIBILITY TEST RESULTS

The field data collected during the SSD pilot test are provided in **Tables 1** and **2**, and the SVE test data are provided in **Tables 3** and **4**. **Table 5** presents a summary of the laboratory analytical results, which are provided in **Attachment 2**.

5.1 Baseline Results

There was no measurable difference between outdoor and indoor (50-ft into the building) pressures during baseline vacuum testing. The baseline pressures at the monitoring locations were near zero (**Tables 1** and **3**).

Baseline samples were collected on 2 June 2017. PCE was detected in the EP1 sample and the EW1 sample, at concentrations of 170,000 µg/m^3 and 320,000 µg/m^3, respectively (**Table 5**). Other VOCs were not detected.

An indoor air sample was collected near the feasibility test area in Moore Newton during each of the two days of feasibility testing, 3 and 4 June 2017. The results are provided in **Table 5**. The sample collected on 3 June 2017, during the SSD test, had a PCE concentration of 2.7 µg/m^3, which is similar to the concentration measured in 2015. The sample collected from the same location on 4 June 2017, during the SVE test, had a PCE concentration of 1.4 µg/m^3.

5.2 SSD Test Results

5.2.1 Vacuum Distribution

The field data obtained during the SSD pilot test were used to determine the sub-slab vacuum distribution created by applying known vacuums at EP1.

The observed vacuum response at each vapor pin for each vacuum level applied during the step test is shown on **Graphs 1** through **5**. In addition, the minimum vacuum that DTSC recommends maintaining in the sub-slab relative to indoor air to prevent vapor intrusion (0.02 IWG) is displayed for reference. The distance from the extraction point to where the vacuum decreases below 0.02 IWG is the observed radius of influence (ROI) for the SSD system at the corresponding applied vacuum.

The results of the observed vacuum response and the estimated ROI for each applied vacuum is summarized in the following table.

Vacuum Applied at EP1 (-IWG)	**Vapor Pins (Distance from EP1)** [- IWG]					**Estimated ROI (ft)**
	VP20 (5 ft)	**VP14** (9 ft)	**VP21** (30 ft)	**VP13** (42.5 ft)	**VP22** (60 ft)	
3	0.06	0.01	0.00	0.00	0.00	8
6	0.13	0.02	0.00	0.00	0.00	9
15	0.31	0.06	0.005	0.01	0.00	25
35	0.60	0.11	0.01	0.015	0.00	32
60	0.97	0.17	0.01	0.02	0.00	32
Constant Rate (35 IWG)	0.63875	0.17	0.012	0.0188	0.0073	33

Note: Vacuums shown in this table are the average of the last few readings during each test.

Based on the pilot test results summarized above, the sub-slab layer does not appear to have sufficient interconnectivity to propagate vacuum a reasonable distance. Relatively high vacuum for an SSD system was necessary to produce a depressurization zone beneath the slab (35 IWG for a 32-foot ROI). Increases in applied vacuums over 25 IWG produced diminishing returns in ROI. The sub-slab conditions do not appear to be conducive to depressurization and therefore an SSD system would not be cost-effective for this Site.

Graph 6 shows the results of the helium injection and monitoring conducted during the constant rate 35 IWG vacuum test. As described in Section 5.2, helium was injected into VP14 and the helium concentration was measured at EP1. VP14 was only 9 feet away from EP1, and it took over two hours from the start of injection for helium concentrations to peak at EP1. This data corroborates the resistance to sub-slab air flow observed based on the vacuum response.

5.2.2 Vacuum Versus Flow Rate Relationship

Flow rate at EP1 was measured for each applied vacuum to establish a relationship between applied vacuum and flow rate and to evaluate extraction point efficiency over the range of extraction flow rates. The vacuum applied at EP1 versus flow rate is presented in **Graph 7**, and the full set of data is presented in **Tables 1 and 2**. The flow rate increased from less than 0.5 SCFM at a vacuum of 3 IWG to 2.75 SCFM at a vacuum of 35 IWG.

The specific capacity, defined as the flow per applied vacuum, was calculated for EP1 to evaluate extraction efficiency. The specific capacity for EP1 was less than 0.1 SCFM/IWG, which is very low. Buildings with a gravel layer in the sub-slab have extraction point specific capacities of 5 to over 20 SCFM/IWG.

5.2.3 Sub-Slab Vapor Concentrations

The PCE concentrations analyzed at the laboratory and the total VOC concentrations measured in the field (via PID) for the pilot test duration are presented in **Tables 1** and **2** and in **Graph 8**.

The laboratory analytical results presented in **Table 5** identified PCE as the main sub-slab vapor constituent, consistent with prior Site investigations. PCE concentrations during pilot testing remained relatively constant, ranging from 310,000 µg/m^3 to 410,000 µg/m^3. TCE was detected in one sample at a concentration of 620 µg/m^3. Cis-1,2-DCE, trans-1,2-DCE, and vinyl chloride were not detected. The PID readings ranged from approximately 50 to 100 ppm over the duration of the SSD test (approximately 600 minutes). Trends in PID readings did not correlate to the laboratory readings.

5.3 SVE Test Results

5.3.1 Vacuum Distribution

The field data obtained during the SVE pilot test were used to determine the vacuum distribution in the sub-slab zone and in the deeper zone (2.5 to 4.5 feet bgs) resulting from vacuum application at EW1.

5.3.1.1 Deeper Zone

The vacuums observed at the VMWs are shown in **Graphs 9** through **13** for each vacuum level applied during the step test. A minimum pressure differential of 0.1 IWG is considered the minimum vacuum for promoting cleanup, so this vacuum was used to estimate the effective ROI for the SVE system. Based on the results summarized in **Table 3**, applied vacuums of 25, 50, and 75 IWG did not produce the threshold vacuum at the VMW closest to EW1. Only high applied vacuums (≥100 IWG, up to a maximum feasibility test blower capacity of 140 IWG) resulted in achieving the threshold vacuum in the VMWs, with an ROI ranging from 10 to 21 feet. The constant rate test at 100 IWG resulted in an ROI of 19 feet. The results of the observed vacuum response and the estimated ROI for each vacuum applied to EW1 is summarized in the following table.

	Vapor Monitoring Wells (Distance from EW1)				
Vacuum Applied at EW1 (IWG)	**VMW1** (22.5 ft)	**VMW2** (10 ft)	**VMW3** (44 ft)	**VMW4** (59.5 ft)	**Estimated ROI (ft)**
	[Vacuum in IWG]				
25	0.01	0.01	0.00	0.00	<10
50	0.02	0.026	0.01	0.01	<10
75	0.02	0.047	0.015	0.01	<10
100	0.04	0.100	0.025	0.015	10
140	0.080	0.221	0.054	0.026	21
Constant Rate (100 IWG)	0.066	0.172	0.046	0.023	19

Note: Vacuums shown in this table are the average of the last few readings during each test. "<10" indicates that the ROI is less than 10 feet.

5.3.1.2 Sub-Slab Zone

Vacuum response was also observed at VPs for each vacuum applied at EW1 to evaluate the effectiveness of SVE at reducing the pressure in the sub-slab material. The vacuums at each VP are shown in **Graphs 14** through **18** for each applied vacuum. The minimum pressure differential that DTSC recommends maintaining between the building air and the sub-slab to prevent vapor intrusion is 0.02 IWG. The high vacuums that achieved the threshold vacuum in the VMWs produced ROIs from 36 to 65 feet in the sub-slab zone. The results of the observed vacuum response and the estimated ROI for each applied vacuum is summarized in the following table.

Vacuum Applied at EW1 (IWG)	Vapor Pins (Distance from EW1) [Vacuum in IWG]						Estimated ROI (ft)
	EP1 (7 ft)	**VP14** (7 ft)	**VP20** (9 ft)	**VP21** (35.5 ft)	**VP13** (49.5 ft)	**VP22** (67 ft)	
25	0.01	0.01	0.02	0.00	0.00	0.00	NA
50	0.04	0.03	0.06	0.01	0.01	0.00	18
75	0.08	0.06	0.11	0.01	0.01	0.01	28
100	0.17	0.13	0.24	0.01	0.01	0.01	36
140	0.42	0.31	NM	0.04	0.05	0.01	43
Constant Rate (100 IWG)	0.32	0.24	0.44	0.04	0.05	0.02	65

5.3.2 Vacuum Versus Flow Rate Relationship

Flow rate at EW1 was measured for each applied vacuum to establish a relationship between applied vacuum and flow rate and to evaluate extraction point efficiency over the range of extraction flow rates. The vacuum applied at EW1 versus flow rate is presented in **Graph 19**, and the full set of data is presented in **Tables 3 and 4**. The flow rate increased from approximately 2 SCFM at a vacuum of 25 IWG to 10 SCFM at a vacuum of 140 IWG.

Similar to the specific capacity for EP1, the specific capacity for EW1 was less than 0.1 SCFM/IWG. This low specific capacity suggests resistance to air flow and low well efficiency in the deeper zone.

5.3.3 Vapor Concentrations

The PCE concentrations analyzed at the laboratory and the total VOC concentrations measured in the field (via PID) for the SVE pilot test duration are presented in **Tables 3** and **4** and in **Graph 20**.

The laboratory analytical results of extracted vapor samples presented in **Table 5** identified PCE as the main constituent in the deeper zone, with TCE also detected at an applied vacuum of 100 IWG. PCE and TCE concentrations during SVE pilot testing ranged from 210,000 to 420,000 µg/m^3 and from 720 to 1,200 µg/m^3, respectively. Cis-1,2-DCE, trans-1,2-DCE, and vinyl chloride were not detected. The PID readings ranged from approximately 55 to 85 ppm over the duration of the SVE test (approximately 600 minutes).

6. CONCLUSIONS AND RECOMMENDATIONS

The following points summarize the conclusions of the feasibility test:

- Baseline Data: PCE was detected in the baseline EP1 and EW1 samples at concentrations of 170,000 µg/m^3 and 320,000 µg/m^3, respectively. Indoor air sampling results indicate PCE concentrations of 2.7 µg/m^3 on the day of SSD testing and 1.4 µg/m^3 on the day of SVE testing.

- SSD Feasibility Test: The maximum VOC concentrations at EP1 detected by the analytical laboratory were 410,000 µg/m^3 PCE and 620 µg/m^3 TCE. The sub-slab vacuum response was poor: the relatively high applied vacuums of 15, 35, and 60 IWG resulted in ROIs of 25, 32, and 32 feet. The specific capacity of EP1 was less than 0.1 SCFM/IWG. Based on the pilot test results, using an SSD system to mitigate vapor intrusion is not feasible for this Site.

- SVE Feasibility Test: The maximum VOC concentrations detected by the analytical laboratory were 420,000 µg/m^3 PCE and 1,200 µg/m^3 TCE at EW1. Applied vacuums of 25, 50, and 75 IWG at EW1 produced an ROI of less than 9 feet in the deeper zone. Applied vacuums of 100 and 140 for one hour, and 100 IWG for four hours produced observed ROIs of 10, 21, and 19 feet in the deeper zone, respectively. In the sub-slab zone, the application of those vacuums at EW1 produced ROIs of 36, 43, and 65 feet, respectively. The specific capacity of EW1 was less than 0.1 SCFM/IWG. Consistent with field observations of highly compacted soil, the soil conditions do not appear to be conducive to vapor extraction from beneath the building slab and SVE is not considered to be cost-effective for mitigating vapor intrusion.

Considering the sub-slab and deeper zone soil conditions at the Site, to maintain continued safe tenant occupancy, Geosyntec recommends evaluating methods that address indoor air quality by directly reducing the indoor air concentrations to below the risk levels. These methods may include a combination of floor coatings, crack sealing, and/or increasing the building air exchange rate to manage the PCE concentration in the indoor air.

If you have any questions or comments on this Work Plan, please contact the undersigned at (510) 836-3034.

Sincerely,

Karina Navarro, P.E.
Engineer

REGISTERED PROFESSIONAL ENGINEER
SYED A REHAN
No. C67805
Exp. 06/30/2019
CIVIL
STATE OF CALIFORNIA

Syed Rehan, P.E., BCEE
Principal Engineer

Enclosures:

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Figure 2	Feasibility Test Layout
Figure 3	SSD Construction Details
Figure 4	SVE Construction Details
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Graph 6	SSD: Helium Test
Graph 7	SSD: Vacuum Versus Flow Rate at EP1
Graph 8	SSD: Concentration Versus Time
Graph 9	SVE: Vacuum Distribution in VMWs at 25 IWG
Graph 10	SVE: Vacuum Distribution in VMWs at 50 IWG

Graph 11	SVE: Vacuum Distribution in VMWs at 75 IWG
Graph 12	SVE: Vacuum Distribution in VMWs at 100 IWG
Graph 13	SVE: Vacuum Distribution in VMWs at 140 IWG
Graph 14	SVE: Vacuum Distribution in VPs at 25 IWG
Graph 15	SVE: Vacuum Distribution in VPs at 50 IWG
Graph 16	SVE: Vacuum Distribution in VPs at 75 IWG
Graph 17	SVE: Vacuum Distribution in VPs at 100 IWG
Graph 18	SVE: Vacuum Distribution in VPs at 140 IWG
Graph 19	SVE: Vacuum Versus Flow Rate at EW1
Graph 20	SVE: Concentration Versus Time
Attachment 1	Meteorological Data
Attachment 2	Analytical Reports

Electronic Copy to: Ms. Carey Andre, 2101 Williams Associates, LLC
Mr. Tom Graf, GrafCon

FIGURES

Legend

Subject Site Property Boundary

N

0 150 Feet

Source: P&D Environmental, 2016. Sub-Slab Soil Gas Investigation Report. September.

Site Map

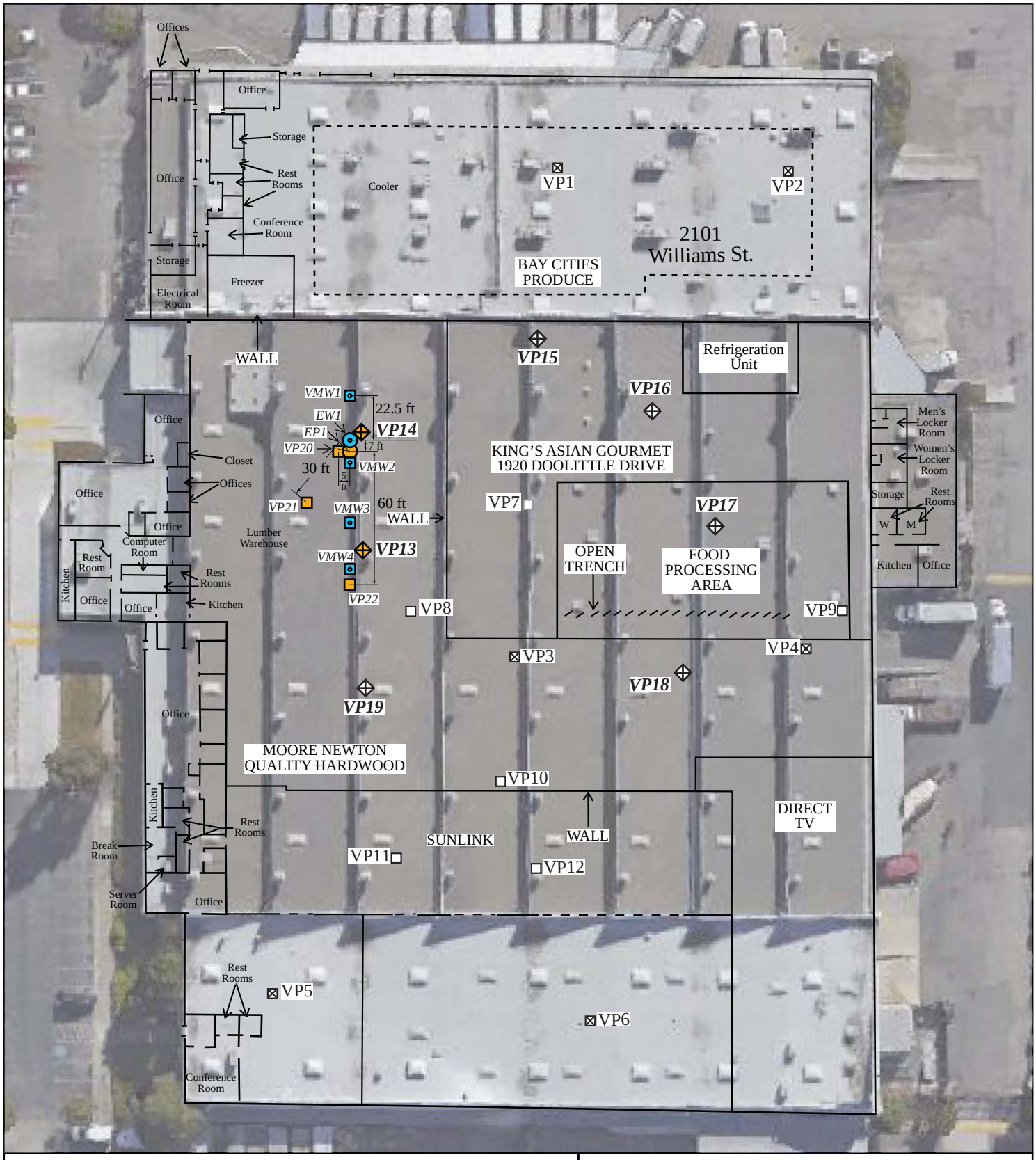
2101 Williams Street
San Leandro, California

Geosyntec consultants

WR2292 | September 2017

Figure 1

P:\GIS\SanLeandro\2101Williams\Project\2017Jan\Fig01_SiteMap.ai



Legend

- Extraction Point (EP) (Installed 5/26/2017)
- Soil Vapor Extraction (SVE) Well (Installed 5/26/2017)
- Vapor Points (VPs) (Installed 6/3/2017)
- Vapor Monitoring Well (VMWs) (Installed 5/26/2017)
- Existing Vapor Pin to be Used in Feasibility Test (Installed 4/29/2016)
- Vapor Pin Location (Installed 11/4/2014)
- Vapor Pin Location (Installed 2/3/2015)
- Vapor Pin Location (Installed 4/29/2016)

Source for Vapor Pins installed before 2017:
P&D Environmental, 2016. Sub-Slab Soil Gas Investigation Report. September.

N

0 60 Feet

Feasibility Test Layout

2101 Williams Street
San Leandro, California

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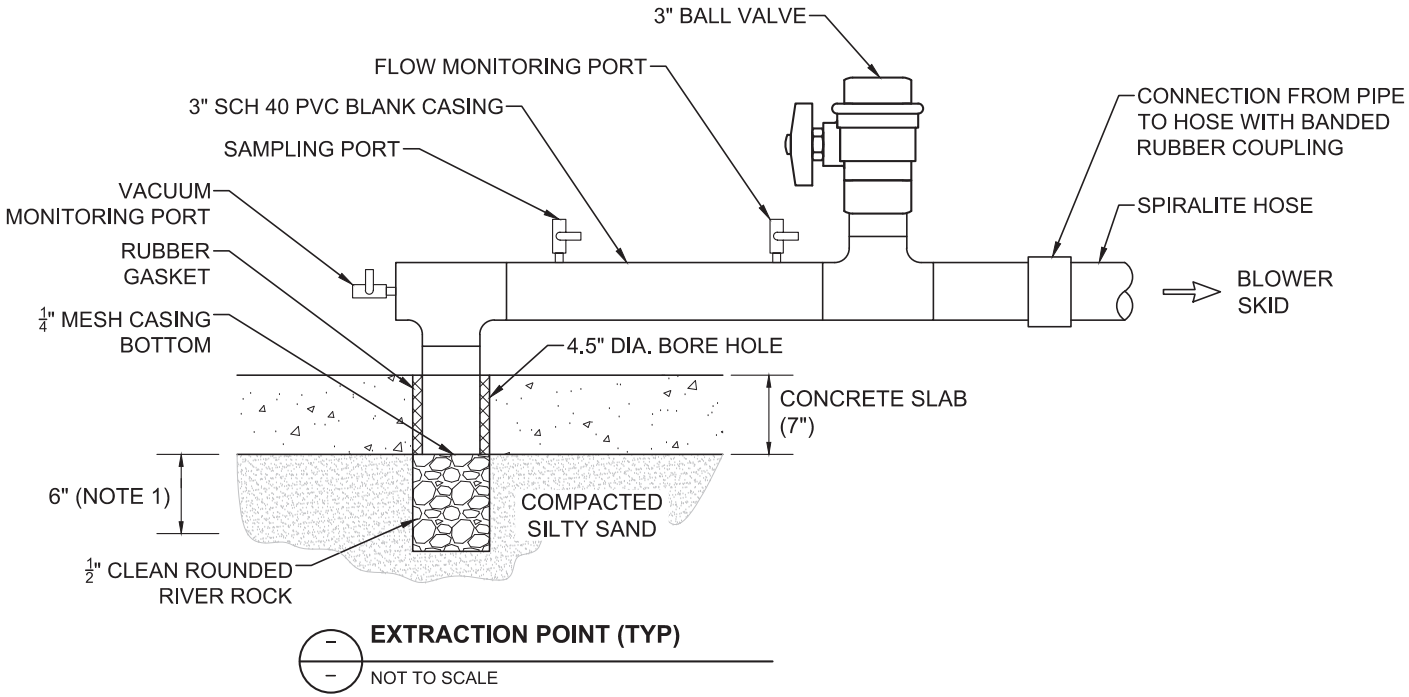
Figure 2

P:\GIS\SanLeandro\2101Williams\Project\2017May\Fig02_FeasibilityTestSystemLayout.ai



NOTES:

1. THE MATERIAL BELOW THE SLAB BOREHOLE WAS REMOVED TO 6 INCHES BELOW THE SLAB AND REPLACED WITH CLEAN ROUNDED RIVER ROCK.

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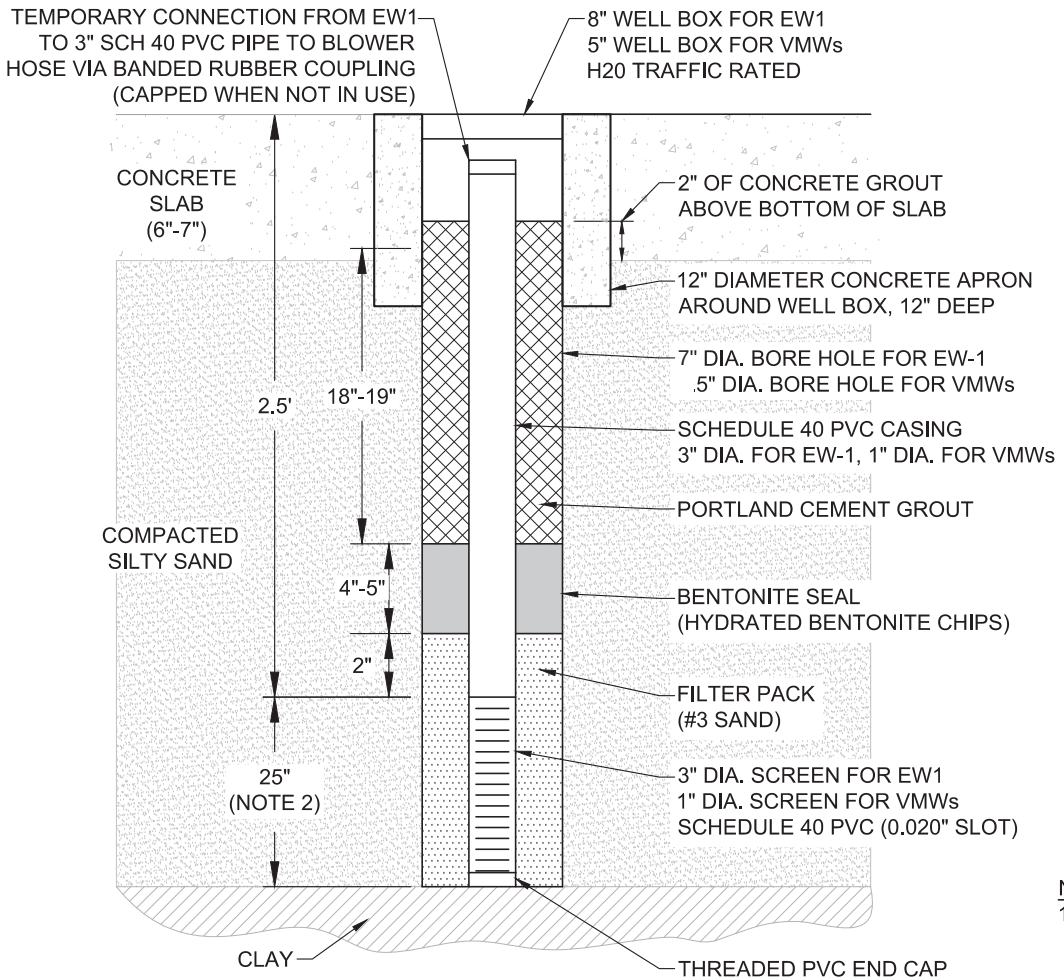
SSD CONSTRUCTION DETAILS 2101 WILLIAMS STREET SAN LEANDRO, CALIFORNIA	FIGURE NO. 3 PROJECT NO. WR2292 / 02 DATE: SEPTEMBER 2017



SOIL VAPOR WELL DETAILS

NOT TO SCALE (NOTE 1)

NOTES:

1. DIMENSIONS FOR THE EXTRACTION WELL (EW1) AND THE VAPOR MONITORING WELLS (VMWS) ARE SHOWN. VAPOR MONITORING WELLS WERE CONSTRUCTED WITH AN UPWARD-POINTING SAMPLING PORT AT THE TOP.

2. SCREEN LENGTHS WERE SELECTED TO TERMINATE AT THE TRANSITION TO THE CLAY LAYER. THE TRANSITION TO THE CLAY LAYER OCCURRED AT APPROXIMATELY 4'-7" BGS IN EACH BOREHOLE.

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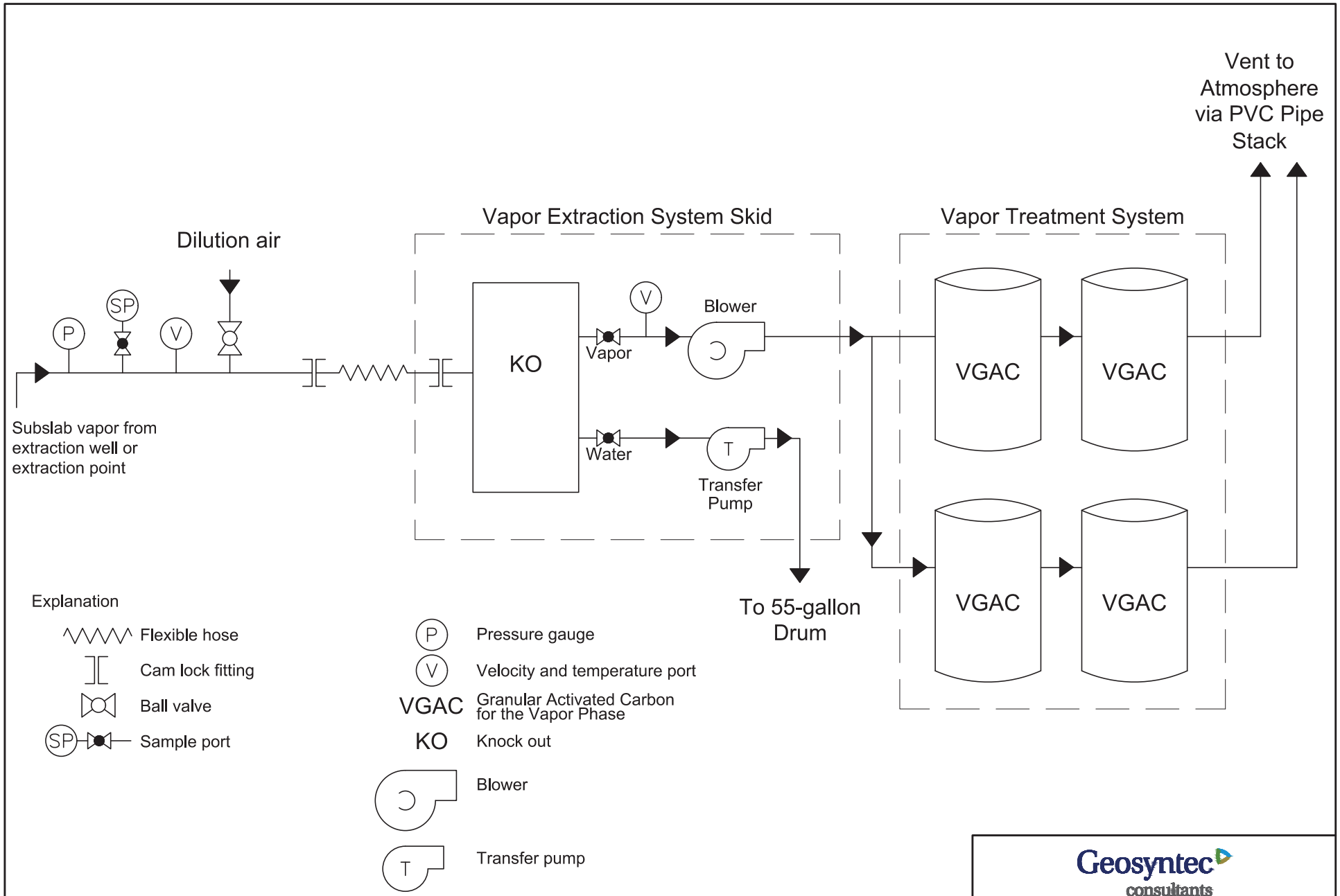
SVE CONSTRUCTION DETAILS

2101 WILLIAMS STREET
SAN LEANDRO, CALIFORNIA

FIGURE NO.	4
PROJECT NO.	WR2292 / 01
DATE:	SEPTEMBER 2017



FEASIBILITY TEST FLOW DIAGRAM

2101 WILLIAMS STREET
SAN LEANDRO, CALIFORNIA

Geosyntec consultants

FIGURE NO.	5
PROJECT NO.	WR2292 / 02
DATE:	SEPTEMBER 2017

TABLES

Table 1
SSD Step Test Data
SSD and SVE Feasibility Test
2101 Williams Street
San Leandro, California

Target Vacuum at Extraction Point [IWG]	Time [HH:MM]	ET [minutes]	Extraction Point					Monitoring Location Vacuum [IWG] (Monitoring Point Distance from Extraction Point)									
			Flow[2] [scfm]	Vacuum [IWG]	O2 [%]	CO2 [%]	PID[3] [ppm]	VWM1 (29.5 ft)	VMW2 (3 ft)	VMW3 (37 ft)	VMW4 (52.5 ft)	EW1 (7 ft)	VP13 (42.5 ft)	VP14 (9 ft)	VP20 (5 ft)	VP21 (30 ft)	VP22 (60 ft)
Baseline - 0	11:25	--	NM	0.0	NM	NM	NM	0.000	0.004	0.005	0.004	0.000	0.006	-0.009	0.003	0.000	0.003
3	11:37	0	0.25[4]	3.06	18.6	2.4	128	0.000	0.000	0.000	0.004	0.003	0.000	0.006	0.068	0.000	0.000
	11:47	10		2.95	19.2	1.8	103	0.008	0.009	0.000	0.000	0.009	0.013	0.014	0.078	0.004	0.000
	11:57	20		3.00	19.3	1.8	91	0.009	0.011	0.006	0.000	0.012	0.000	0.017	0.070	0.000	0.000
	12:07	30		2.98	19.2	1.8	85	-0.010	0.000	-0.010	-0.005	0.010	-0.009	0.003	0.070	0.000	-0.004
	12:17	40		2.89	19.3	1.7	85	-0.019	-0.010	-0.018	-0.010	0.004	-0.004	0.004	0.058	-0.007	-0.008
	12:27	50		2.85	19.3	1.8	81	-0.006	0.000	-0.003	-0.003	0.004	0.000	0.010	0.062	-0.003	-0.003
	12:37	60		2.83	19.3	1.8	79	0.000	0.009	0.007	0.000	0.000	-0.009	0.009	0.055	-0.004	0.000
6	12:41	0	0.5[4]	6.10	19.3	1.7	78	0.007	0.017	0.007	0.000	0.011	0.009	0.020	0.140	0.004	0.000
	12:51	10		6.19	19.0	2.0	104	0.005	0.014	0.005	0.000	0.016	0.000	0.025	0.133	0.000	0.000
	13:01	20		6.20	18.7	2.3	101	0.003	0.017	0.005	0.000	0.019	0.003	0.027	0.133	0.000	0.000
	13:11	30		6.15	NM	NM	NM	0.000	0.017	0.000	0.000	0.014	0.000	0.020	0.128	0.000	0.000
	13:21	40		6.18	18.9	2.1	92	0.000	0.014	0.000	0.000	0.015	0.000	0.021	0.130	0.000	-0.003
	13:31	50		6.15	NM	NM	NM	0.000	0.011	0.000	0.000	0.008	-0.012	0.018	0.128	-0.006	0.000
	13:41	60		6.05	19.2	1.8	70	0.000	0.010	0.000	0.000	0.013	0.003	0.023	0.136	0.003	0.000
15	13:48	0	1.0[5]	15.40	19.0	1.9	71	0.010	0.043	0.016	0.006	0.036	0.008	0.047	0.307	0.003	0.003
	13:58	10		15.35	NM	NM	NM	0.010	0.040	0.090	0.005	0.037	0.009	0.056	0.312	0.005	0.003
	14:08	20		15.44	NM	NM	NM	0.012	0.046	0.020	0.007	0.037	0.011	0.061	0.311	0.008	0.006
	14:18	30		15.33	18.8	2.2	80	0.010	0.035	0.003	0.000	0.035	0.010	0.055	0.306	0.005	0.003
	14:28	40		15.36	NM	NM	NM	0.008	0.046	0.017	0.012	0.034	0.004	0.052	0.300	0.003	0.005
	14:38	50		15.31	NM	NM	NM	0.000	0.025	0.000	0.000	0.039	0.010	0.063	0.312	0.002	0.000
	14:48	60		15.34	19.0	2.0	72	0.000	0.030	0.000	0.000	0.036	0.010	0.057	0.311	0.005	0.003
35	15:04	0	2.75[6]	34.50	19.0	2.0	68	0.014	0.074	0.014	0.010	0.072	0.018	0.110	0.619	0.011	0.007
	15:14	10		34.10	NM	NM	NM	0.011	0.074	0.012	0.005	0.067	0.018	0.108	0.613	0.009	0.004
	15:24	20		33.6	NM	NM	NM	0.022	0.083	0.024	0.009	0.075	0.010	0.113	0.598	0.012	0.005
	15:34	30		33.4	18.8	2.2	74	0.007	0.079	0.010	0.000	0.065	0.010	0.102	0.594	0.005	0.002
	15:44	40		33.30	NM	NM	NM	0.007	0.650	0.011	0.004	0.070	0.007	0.097	0.593	0.005	0.000
	15:54	50		33.30	NM	NM	NM	0.022	0.078	0.008	0.008	0.070	0.015	0.108	0.603	0.013	0.007
	16:04	60		33.15	18.7	2.4	72	0.010	0.067	0.007	0.007	0.069	0.016	0.107	0.604	0.010	0.003
60	17:06	0	3.2[6]	61.5	19.1	2.2	57	0.015	0.12	0.018	0.09	0.108	0.018	0.170	0.985	0.013	0.004
	17:13	7		60.0	19.3	2.0	61	0.019	0.119	0.023	0.015	0.112	0.018	0.176	0.962	0.016	0.003
	17:20	15		59.5	19.2	1.9	50	0.017	0.120	0.024	0.012	0.108	0.023	0.172	0.970	0.013	0.004

Notes:
1. Feasibility test conducted on 3 June 2017.
2. Flow rate measurements were collected using a Dwyer gauge (0-10 SCFM), a King rotameter (0.8-8 SCFM), and a TSI VelociCalc (2-200 SCFM), after other testing was complete .
3. PID measurements collected using a MiniRae 3000 calibrated with 100 ppm isobutylene.
4. Flow rate estimated based on Dwyer gauge and King rotameter.
5. King rotameter reading.
6. TSI VelociCalc reading.

Abbreviations:
ET = elapsed time
EW = soil vapor extraction well
ft = feet
IWG = inches of water, gauge
NM = not measured
PID = photoionization detector
ppm = parts per million
scfm = standard cubic feet per minute
Temp = temperature
VP = vapor pin
VWM = vapor monitoring well

Table 2
SSD Constant Rate Test Data
SSD and SVE Feasibility Test
2101 Williams Street
San Leandro, California

Target Vacuum at Extraction Point [IWG]	Time [HH:MM]	ET [minutes]	Extraction Point					Monitoring Location Vacuum [IWG] (Monitoring Point Distance from Extraction Point)									
			Flow[2] [scfm]	Vacuum [IWG]	O2 [%]	CO2 [%]	PID[3] [ppm]	VWM1 (29.5 ft)	VMW2 (3 ft)	VMW3 (37 ft)	VMW4 (52.5 ft)	EW1 (7 ft)	VP13 (42.5 ft)	VP14 (9 ft)	VP20 (5 ft)	VP21 (30 ft)	VP22 (60 ft)
	18:05	0		36.0	19.3	2.0	59	0.015	0.079	0.018	0.008	0.073	0.018	0.115	0.660	0.011	0.006
	18:15	10		36.3	19.1	2.0	62	0.007	0.078	0.014	0.008	0.072	0.016	0.115	0.647	0.007	0.000
	18:25	20		36.5	19.4	1.8	61	0.021	0.086	0.025	0.012	0.073	0.022	NM	0.635	0.015	0.008
	18:35	30		35.7	19.2	1.9	59	0.032	0.096	0.032	0.019	0.072	0.027	NM	0.648	0.008	0.008
	18:45	40		36.0	19.3	1.8	57	0.017	0.080	0.016	0.008	0.078	0.016	NM	0.628	0.014	0.007
	18:55	50		35.8	19.4	1.7	53	0.013	0.074	0.012	0.005	0.067	0.015	NM	0.637	0.010	0.000
	19:05	60		34.9	19.2	1.8	60	0.011	0.075	0.010	0.007	0.075	0.021	NM	0.644	0.010	0.000
	19:15	70		35.3	19.4	1.7	52	0.019	0.087	0.017	0.010	0.076	0.020	NM	0.661	0.018	0.013
	19:25	80		36.2	19.5	1.5	60	0.017	0.075	0.010	0.003	0.077	0.009	NM	0.647	0.010	0.004
Constant Rate: 35	19:35	90	2.75	35.6	19.3	1.9	57	0.021	0.083	0.016	0.011	0.068	0.011	NM	0.652	0.007	0.006
	19:45	100		36.1	18.3	1.9	57	0.029	0.087	0.021	0.011	0.082	0.031	NM	0.666	0.019	0.013
	19:55	110		35.8	17.6	1.9	55	0.009	0.076	0.012	0.008	0.073	0.015	NM	0.658	0.009	0.003
	20:05	120		36.4	17.4	2.0	53	0.016	0.084	0.022	0.007	0.082	0.029	NM	0.668	0.009	0.005
	20:15	130		35.9	17.4	1.9	54	0.020	0.089	0.024	0.012	0.085	0.028	NM	0.669	0.017	0.010
	20:25	140		36.0	17.7	1.6	52	0.008	0.068	0.007	0.000	0.080	0.019	NM	0.663	0.009	0.003
	20:35	150		35.4	17.4	1.9	54	0.013	0.081	0.012	0.007	0.059	0.027	NM	0.552	0.014	0.007
	20:45	160		36.0	17.5	1.9	52	0.011	0.079	0.017	0.000	0.076	0.010	NM	0.665	0.009	0.004
	20:55	170		36.5	18.8	1.9	56	0.023	0.089	0.022	0.012	0.066	0.026	NM	0.675	0.015	0.010
	21:05	180		35.8	19.2	1.9	52	0.026	0.083	0.016	0.008	0.081	0.012	NM	0.663	0.010	0.008

Notes:
1. Pilot test conducted on 4 June 2017.
2. The flow rate measurement was collected using a TSI VelociCalc instrument.
3. Field PID measurements collected using a MiniRAE 3000 calibrated with 100 ppm isobutylene.

Abbreviations:
ET = elapsed time
EW = soil vapor extraction well
ft = feet
IWG = inches of water, gauge
NM = not measured
PID = photoionization detector
ppm = parts per million
scfm = standard cubic feet per minute
Temp = temperature
VP = vapor pin
VWM = vapor monitoring well

Table 3
SVE Step Test Data
SSD and SVE Feasibility Test
2101 Williams Street
San Leandro, California

Target Vacuum at Extraction Point [IWG]	Time [HH:MM]	ET [minutes]	Extraction Well					Monitoring Location Vacuum [IWG] (Monitoring Point Distance from Extraction Point)									
			Flow[2] [scfm]	Vacuum [IWG]	O2 [%]	CO2 [%]	PID[3] [ppm]	VWM1 (22.5 ft)	VMW2 (10 ft)	VMW3 (44 ft)	VMW4 (59.5 ft)	EP1 (7 ft)	VP13 (49.5 ft)	VP14 (7 ft)	VP20 (9 ft)	VP21 (35.5 ft)	VP22 (67 ft)
Baseline - 0	10:12	--	NM	0.0	NM	NM	NM	-0.004	-0.005	-0.003	0.000	0.000	0.000	0.005	-0.005	0.002	-0.002
25	10:22	0	2.2	23.8	19.4	2.4	74	0.010	0.009	0.002	0.002	0.019	0.002	0.017	0.019	0.003	0.005
	10:32	10	2.1	23.7	19.5	2.3	79	0.015	0.017	0.006	0.000	0.015	0.003	0.020	0.023	0.005	0.002
	10:42	20	2.0	23.6	19.4	2.3	80	0.005	0.017	0.012	0.009	0.022	0.010	0.020	0.028	0.006	0.001
	10:52	30	1.9	23.5	19.5	2.1	78	0.000	0.004	0.000	0.000	NM	NM	0.013	NM	NM	NM
	11:02	40	2.3	23.3	19.3	2.3	82	0.000	0.003	-0.002	-0.006	0.008	0.000	0.011	0.015	0.000	0.000
	11:12	50	2.1	23.3	19.3	2.3	82	0.007	0.010	0.005	0.000	NM	NM	0.014	NM	NM	NM
	11:22	60	2.2	23.2	19.3	2.3	83	0.003	0.007	0.000	0.000	0.014	0.000	0.015	0.023	0.000	0.000
50	11:30	0	1.3	50	19.3	2.2	77	0.009	0.019	0.005	0.005	0.031	0.003	0.024	0.045	0.002	0.000
	11:40	10	1.4	50	NM	NM	NM	0.014	0.023	0.011	0.006	NM	NM	NM	NM	NM	NM
	11:50	20	1.2	50	19.4	2.2	77	0.014	0.024	0.011	0.008	0.040	0.010	0.032	0.055	0.005	0.003
	12:00	30	1.3	50	NM	NM	NM	0.016	0.030	0.017	0.010	NM	NM	NM	NM	NM	NM
	12:10	40	1.2	50	19.5	2.0	71	0.011	0.025	0.012	0.007	0.041	0.012	0.032	0.060	0.006	0.004
	12:20	50	1.2	50	NM	NM	NM	0.018	0.028	0.015	0.009	NM	NM	NM	NM	NM	NM
	12:30	60	1.4	50	19.6	1.8	65	0.000	0.016	0.000	0.000	0.040	0.004	0.032	0.055	0.004	0.000
75	12:34	0	1.9	74	19.2	2.2	73	0.012	0.035	0.011	0.010	0.063	0.016	0.047	0.090	0.007	0.004
	12:44	10	1.95	74	NM	NM	NM	0.007	0.032	0.004	0.000	NM	NM	NM	NM	NM	NM
	12:54	20	2.2	74	NM	NM	NM	0.020	0.045	0.022	0.012	0.073	0.013	0.059	0.106	0.007	0.009
	13:04	30	2.45	73	19.3	2.2	74	0.012	0.037	0.030	0.012	NM	NM	NM	NM	NM	NM
	13:14	40	2.55	73	NM	NM	NM	0.019	0.042	0.012	0.009	0.076	0.012	0.060	0.107	0.009	0.008
	13:24	50	2.7	72	NM	NM	NM	0.018	0.044	0.011	0.005	NM	NM	NM	NM	NM	NM
	13:34	60	2.9	72	20.0	1.6	56	0.022	0.051	0.019	0.011	0.092	0.016	0.069	0.120	0.010	0.007
100	13:38	0	3.9	100	19.4	2.2	68	0.028	0.064	0.020	0.007	0.121	0.020	0.095	0.165	0.011	0.000
	13:48	10	4.3	99	NM	NM	NM	0.017	0.063	0.013	0.003	NM	NM	NM	NM	NM	NM
	13:58	20	4.7	98	NM	NM	NM	0.028	0.078	0.023	0.017	0.148	0.020	0.107	0.204	0.014	0.006
	14:08	30	4.9	97	NM	NM	72	0.026	0.077	0.016	0.006	0.148	0.020	NM	0.212	0.013	0.004
	14:18	40	5.2	96	NM	NM	NM	0.029	0.084	0.014	0.015	0.157	0.012	0.120	0.226	0.012	0.005
	14:28	50	5.3	96	NM	NM	NM	0.036	0.095	0.024	0.013	NM	NM	NM	NM	NM	NM
	14:38	60	5.7	95	18.1	1.8	69	0.040	0.103	0.026	0.017	0.183	0.016	0.142	0.255	0.017	0.009
140	20:02	0	9.8	146	NM	NM	NM	0.062	0.206	0.042	0.020	0.405	0.044	0.296	NM	0.038	0.014
	20:07	5	9.9	143	NM	NM	NM	0.079	0.220	0.056	0.027	0.410	0.050	0.305	NM	0.038	0.013
	20:12	10	10.0	141	NM	NM	NM	0.076	0.215	0.054	0.027	0.417	0.051	0.302	NM	0.040	0.014
	20:17	15	9.9	139	NM	NM	NM	0.076	0.217	0.052	0.027	0.417	0.052	0.306	NM	0.041	0.017
	20:22	20	10.0	138	NM	NM	NM	0.082	0.230	0.055	0.027	0.421	0.050	0.313	NM	0.038	0.015
	20:27	25	9.9	137	NM	NM	NM	0.080	0.221	0.054	0.026	0.470	0.040	0.313	NM	0.038	0.010
	20:32	30	10.0	137	19.9	2.0	54	0.072	0.215	0.044	0.020	0.419	0.043	0.308	NM	0.036	0.012

Notes:
1. Pilot test conducted on 4 June 2017.
2. Flow rate measurements collected using a TSI VelociCalc instrument.
3. Field PID measurements collected using a MiniRAE 3000 calibrated with 100 ppm isobutylene.

Abbreviations:
ET = elapsed time
EW = soil vapor extraction well
ft = feet
IWG = inches of water, gauge
NM = not measured
PID = photoionization detector
ppm = parts per million
scfm = standard cubic feet per minute
Temp = temperature
VP = vapor pin
VWM = vapor monitoring well

Table 4
SVE Constant Rate Test Data
SSD and SVE Feasibility Test
2101 Williams Street
San Leandro, California

Target Vacuum at Extraction Point [IWG]	Time [HH:MM]	ET [minutes]	Extraction Well					Monitoring Location Vacuum [IWG] (Monitoring Point Distance from Extraction Well)									
			Flow[2] [scfm]	Vacuum [IWG]	O2 [%]	CO2 [%]	PID[3] [ppm]	VWM1 (22.5 ft)	VMW2 (10 ft)	VMW3 (44 ft)	VMW4 (59.5 ft)	EP1 (7 ft)	VP13 (49.5 ft)	VP14 (7 ft)	VP20 (9 ft)	VP21 (35.5 ft)	VP22 (67 ft)
Constant Rate: 100	15:43	0	6.6	100	19.5	1.8	62	0.033	0.123	0.023	0.016	0.230	0.033	0.184	0.326	0.028	0.007
	15:53	10	6.6	100	NM	NM	NM	0.051	0.133	0.032	0.014	NM	NM	NM	NM	NM	NM
	16:03	20	6.5	100	NM	NM	NM	0.047	0.132	0.028	0.016	0.244	0.029	0.185	0.349	0.024	0.009
	16:13	30	6.9	100	19.6	1.9	68	0.050	0.131	0.027	0.003	NM	NM	NM	NM	NM	NM
	16:23	40	6.8	100	NM	NM	NM	0.040	0.133	0.018	0.010	0.249	0.026	0.188	0.354	0.022	0.008
	16:43	60	6.9	100	19.8	1.8	60	0.050	0.145	0.036	0.017	0.267	0.028	0.203	0.383	0.021	0.007
	16:53	70	6.9	100	NM	NM	NM	0.049	0.141	0.028	0.014	NM	NM	NM	NM	NM	NM
	17:03	80	7.0	99	NM	NM	NM	0.046	0.150	0.031	0.014	0.279	0.030	0.208	0.396	0.027	0.009
	17:13	90	7.2	99	19.3	2.2	62	0.053	0.155	0.042	0.021	NM	NM	NM	NM	NM	NM
	17:23	100	7.2	99	NM	NM	NM	0.062	0.160	0.035	0.020	0.283	0.026	0.213	0.396	0.020	0.009
	17:33	110	7.1	99	NM	NM	NM	0.063	0.157	0.036	0.016	NM	NM	NM	NM	NM	NM
	17:43	120	7.2	99	NM	NM	62	0.047	0.151	0.032	0.014	0.290	0.032	0.215	0.402	0.026	0.010
	17:53	130	7.3	98	NM	NM	NM	0.061	0.162	0.043	0.023	NM	NM	NM	NM	NM	NM
	18:03	140	7.2	99	NM	NM	NM	0.050	0.153	0.028	0.013	0.293	0.036	0.214	0.412	0.029	0.016
	18:13	150	7.5	98	18.1	1.9	58	0.059	0.165	0.038	0.016	NM	NM	NM	NM	NM	NM
	18:23	160	7.4	98	NM	NM	NM	0.053	0.156	0.036	0.019	0.299	0.034	0.223	0.418	0.028	0.009
	18:33	170	7.3	98	NM	NM	NM	0.065	0.169	0.042	0.022	NM	NM	NM	NM	NM	NM
	18:43	180	7.6	98	19.5	1.9	59	0.056	0.163	0.041	0.022	0.309	0.038	0.227	0.426	0.030	0.012
	18:53	190	7.5	98	NM	NM	NM	0.062	0.167	0.039	0.018	NM	NM	NM	NM	NM	NM
	19:03	200	7.6	98	NM	NM	NM	0.062	0.165	0.039	0.017	0.306	0.033	0.232	0.424	0.028	0.010
	19:13	210	7.6	98	19.7	2.0	57	0.056	0.160	0.034	0.016	NM	NM	NM	NM	NM	NM
	19:23	220	7.65	98	NM	NM	NM	0.066	0.172	0.046	0.023	0.317	0.047	0.236	0.441	0.035	0.017
	19:33	230	7.8	98	NM	NM	NM	0.062	0.169	0.042	0.022	NM	NM	NM	NM	NM	NM
	19:43	240	7.8	98	19.8	1.9	54	0.067	0.174	0.050	0.027	0.324	0.045	0.243	0.447	0.033	0.014

Notes:
1. Pilot test conducted on 4 June 2017.
2. Flow rate measurements collected using a TSI VelociCalc instrument.
3. Field PID measurements collected using a MiniRAE 3000 calibrated with 100 ppm isobutylene.

Abbreviations:
ET = elapsed time
EW = soil vapor extraction well
ft = feet
IWG = inches of water, gauge
NM = not measured
PID = photoionization detector
ppm = parts per million
scfm = standard cubic feet per minute
Temp = temperature
VP = vapor pin
VWM = vapor monitoring well

Table 5
Laboratory Analytical Data
SSD and SVE Feasibility Test
2101 Williams Street
San Leandro, California

Sample ID	Sample Description	Sample Date	Sample Collection Time[5]	Vacuum at Extraction Location	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride
				IWG	($\mu g/m^3$)				
SSD Samples									
EP-1	Baseline EP	6/2/2017	20:50	--	170,000	<1,600	<1,100	<1,100	<740
EP1-3IN-0M	Step Test 1	6/3/2017	11:37	3	340,000	<3,000	<2,200	<2,200	<1,400
EP1-6IN-0M	Step Test 2	6/3/2017	12:41	6	330,000	620 J	<1,600	<1,600	<1,000
EP1-15IN-0M	Step Test 3	6/3/2017	13:48	15	340,000	<2,400	<1,800	<1,800	<1,100
EP1-35IN-0M	Step Test 4	6/3/2017	15:04	35	410,000	<3,100	<2,300	<2,300	<1,500
EP1-EXT-0M	Constant Vacuum 1	6/3/2017	18:05	35	390,000	<3,700	<2,700	<2,700	<1,700
EP1-EXT-45M	Constant Vacuum 2	6/3/2017	18:50	35	400,000	<3,600	<2,700	<2,700	<1,700
EP1-EXT-120M	Constant Vacuum 3	6/3/2017	20:05	35	310,000 / 310,000	<3,200 / <3,200	<2,400 / <2,400	<2400 / <2400	<1,500 / <1,500
IA-EP	Indoor Air	6/3/2017	11:00 - 19:34	Variable	2.7	<0.11	<0.079	<0.079	<0.051
SVE Samples									
EW-1	Baseline EW	6/2/2017	21:47	--	320,000	<3,400	<2,500	<2,500	<1,600
EW1-25IN-0M	Step Test 1	6/4/2017	10:22	25	420,000	<5,300	<3,900	<3,900	<2,500
EW1-50IN-0M	Step Test 2	6/4/2017	11:30	50	260,000	<3,400	<2,500	<2,500	<1,600
EW1-75IN-0M	Step Test 3	6/4/2017	12:34	75	250,000	<3,100	<2,300	<2,300	<1,500
EW1-100IN-0M	Step Test 4	6/4/2017	13:38	100	290,000	1,100 J	<1,100	<1,100	<680
EW1-EXT-0M	Constant Vacuum 1	6/4/2017	15:43	100	210,000	720 J	<2,000	<2,000	<1,300
EW1-EXT-45M	Constant Vacuum 2	6/4/2017	16:28	100	290,000	1,100 J	<1,900	<1,900	<1,200
EW1-EXT-120M	Constant Vacuum 3	6/4/2017	17:43	100	270,000 / 260,000	1,200 J / 1,000 J	<2,400 / <2,100	<2,400 / <2,100	<1,500 / <1,400
EW1-EXT-240M	Constant Vacuum 4	6/4/2017	19:43	100	250,000	1,100 J	<2,300	<2,300	<1,500
IA-EW	Indoor Air	6/4/2017	10:20 - 16:00	Variable	1.4	<0.11	<0.079	<0.079	<0.051

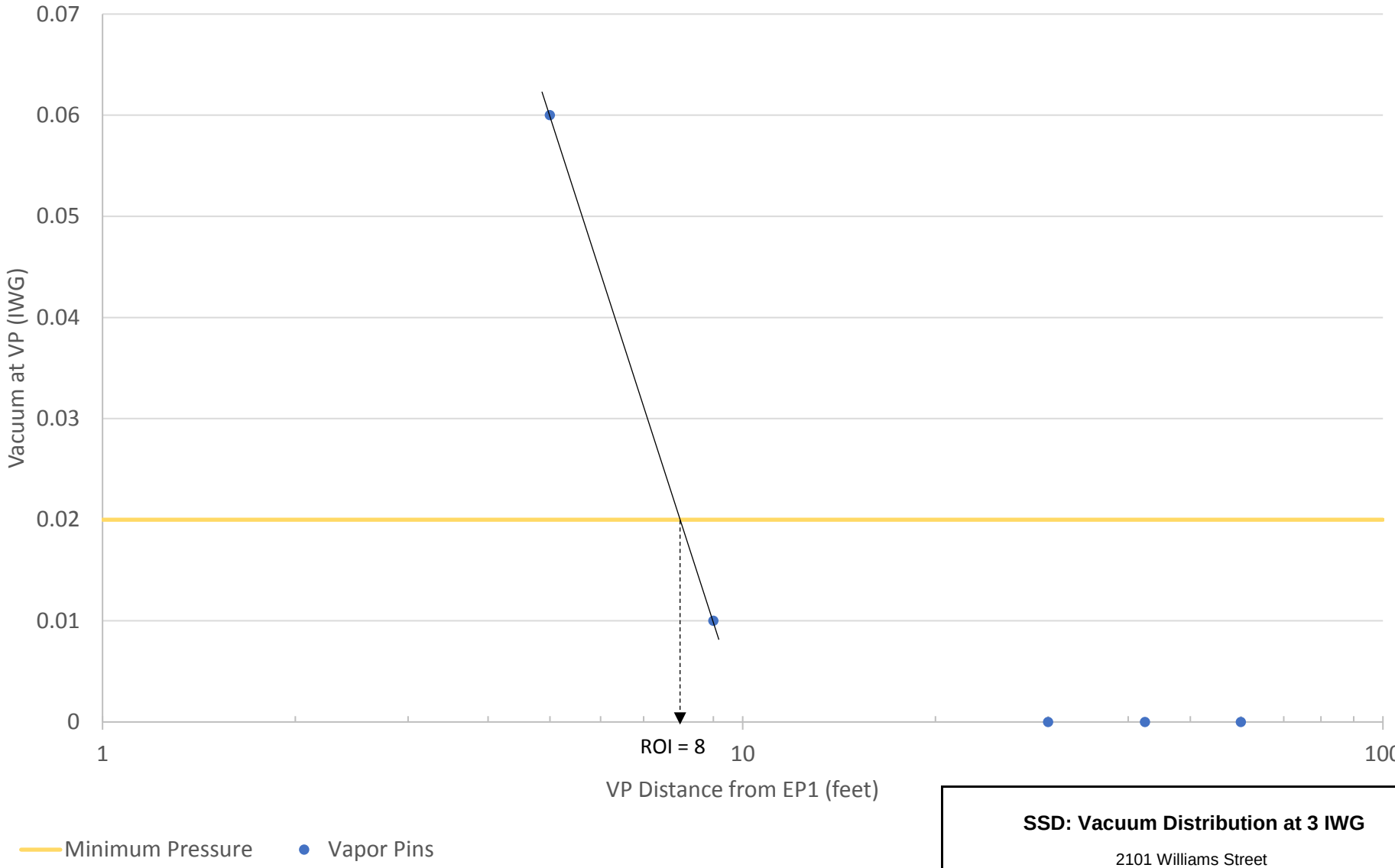
Notes:

1. Pilot test conducted on 4 June 2017.
2. Field flow rate measurements collected using a TSI VelociCalc instrument.
3. Field PID measurements collected using a MiniRAE 3000 calibrated with 100 ppm isobutylene.
4. Distance in feet from the extraction point.
5. For samples collected over a period of less than 10 minutes, the sample end time is shown. For samples collected over longer periods, the start and end times are shown.

Abbreviations:

"<" = compound not detected above reporting limit shown
" / " = duplicate samples
1,1-DCA = 1,1-dichloroethane
1,1-DCE = 1,1-dichloroethene
cis-DCE = cis-1,2-dichloroethene
ET = elapsed time
EW = soil vapor extraction well
ft = feet
IWG = inches of water, gauge
J = indicates result is less than the laboratory reporting limit but greater than or equal to the laboratory method detection limit, and therefore the concentration is an approximate value.
NM = not measured
PCE = tetrachloroethene
PID = photoionization detector
scfm = standard cubic feet per minute
TCE = trichloroethene
trans-1,2-DCE = trans-1,2-dichloroethene
$\mu g/m^3$ = micrograms per cubic meter
VP = vapor pin
VWM = vapor monitoring well

GRAPHS



SSD: Vacuum Distribution at 3 IWG

2101 Williams Street

San Leandro, California

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Graph 1

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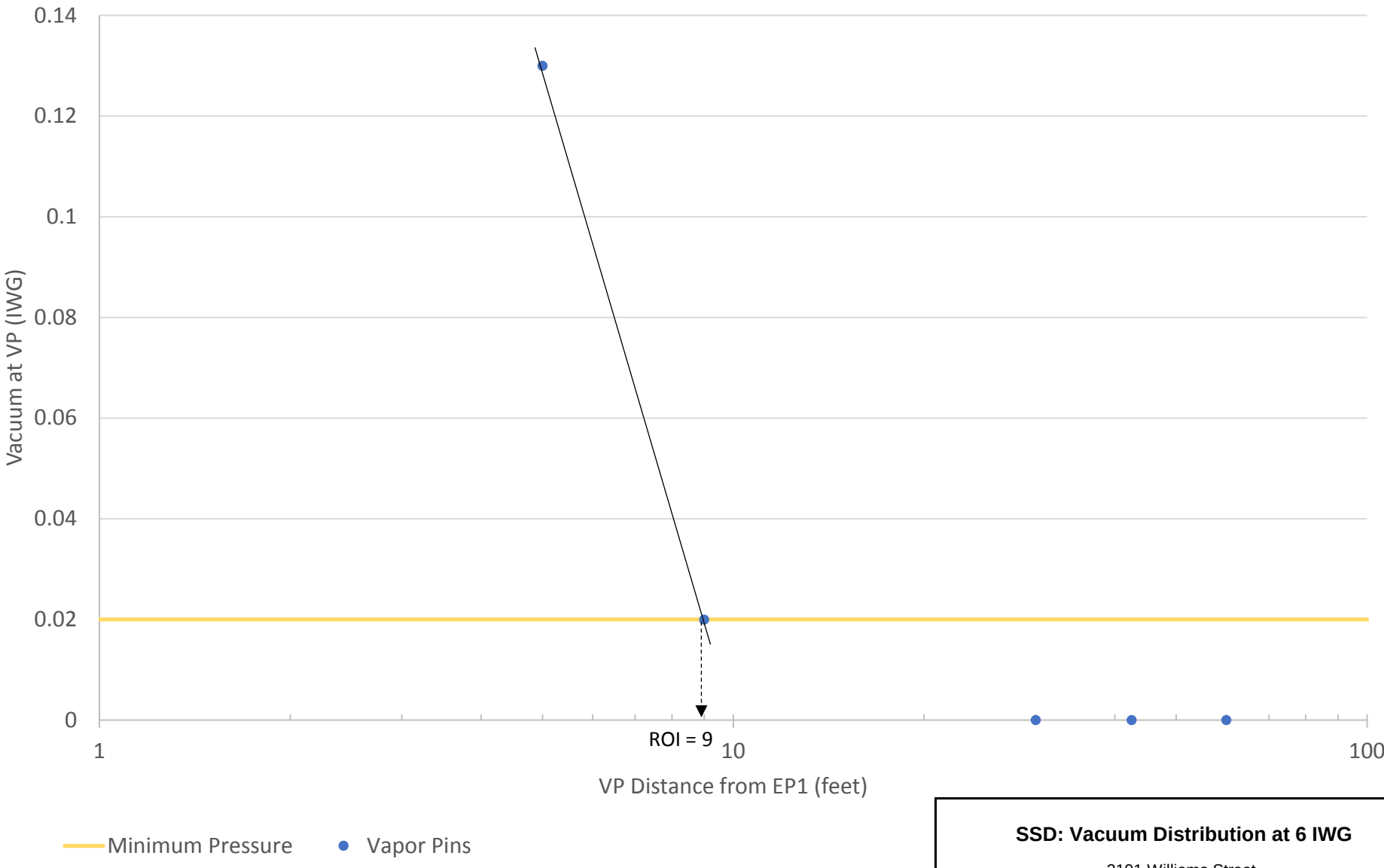

SSD: Vacuum Distribution at 6 IWG

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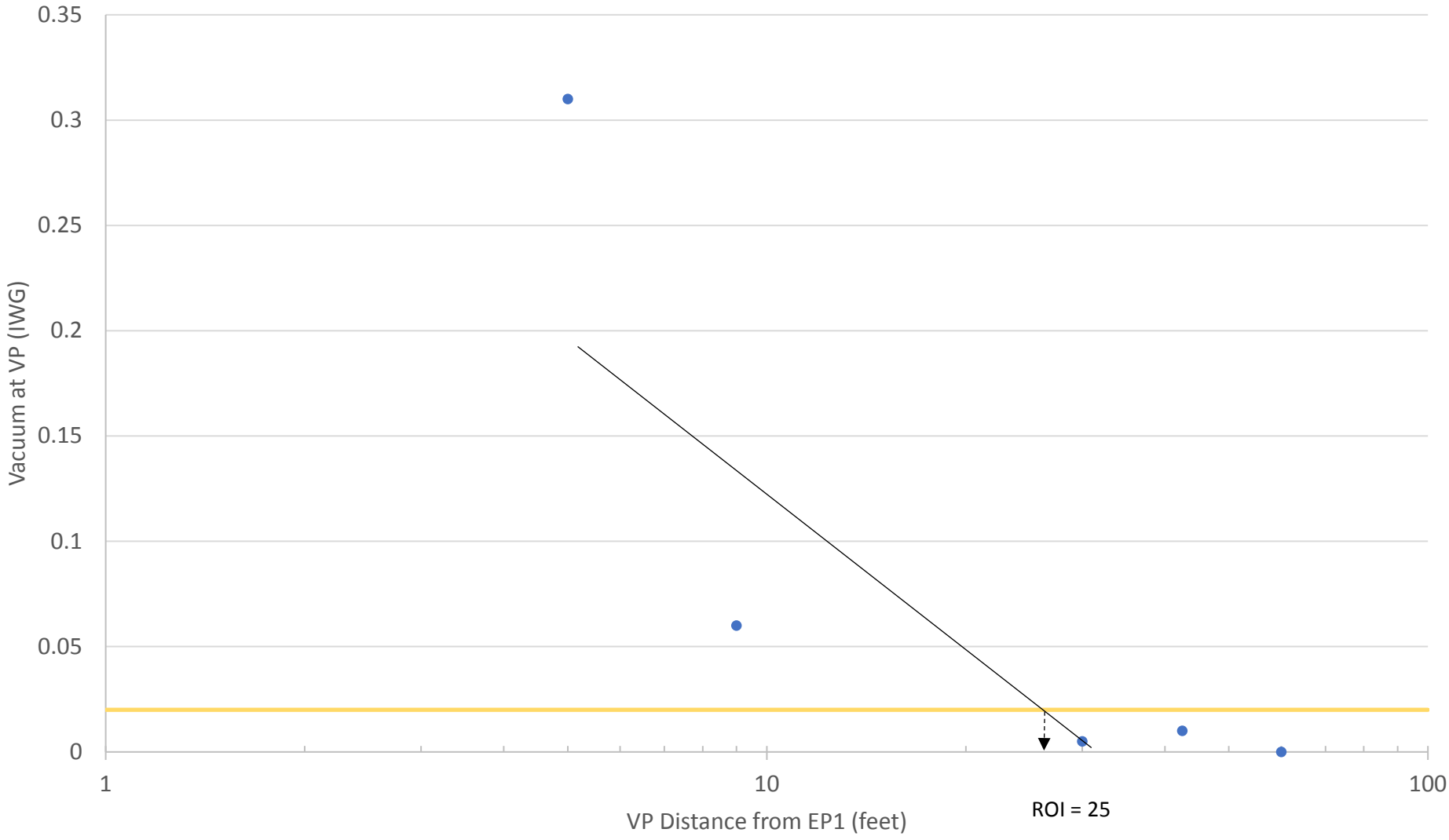
Graph 2

P:\PRJ2003REM\2101 Williams Associates\6. Deliverables\2017.08_FT Report\Graphs\[G.1-6_SSD Test.xlsx]



SSD: Vacuum Distribution at 15 IWG

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Graph 3

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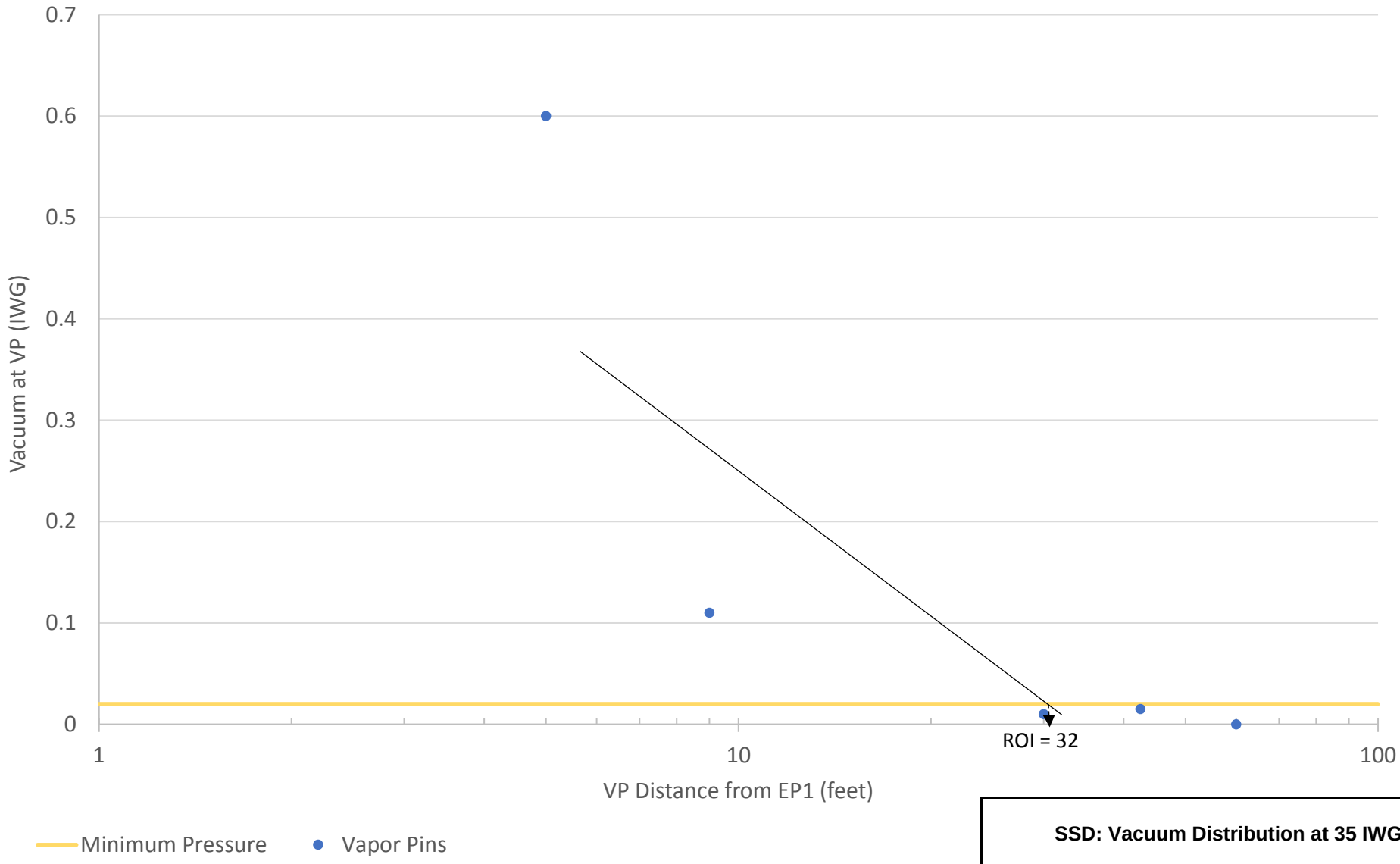

SSD: Vacuum Distribution at 35 IWG

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Graph 4

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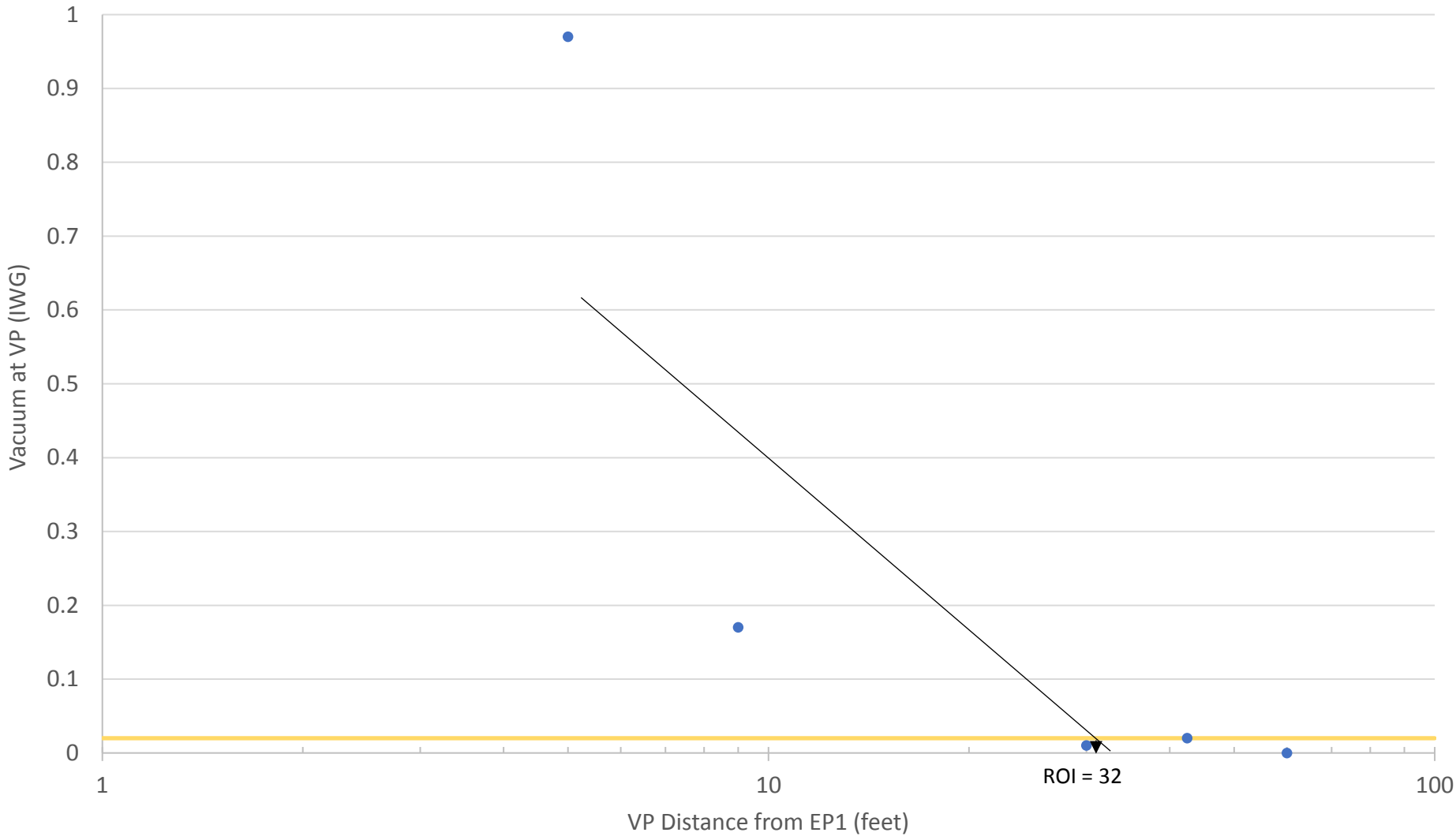

SSD: Vacuum Distribution at 60 IWG

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Graph 5

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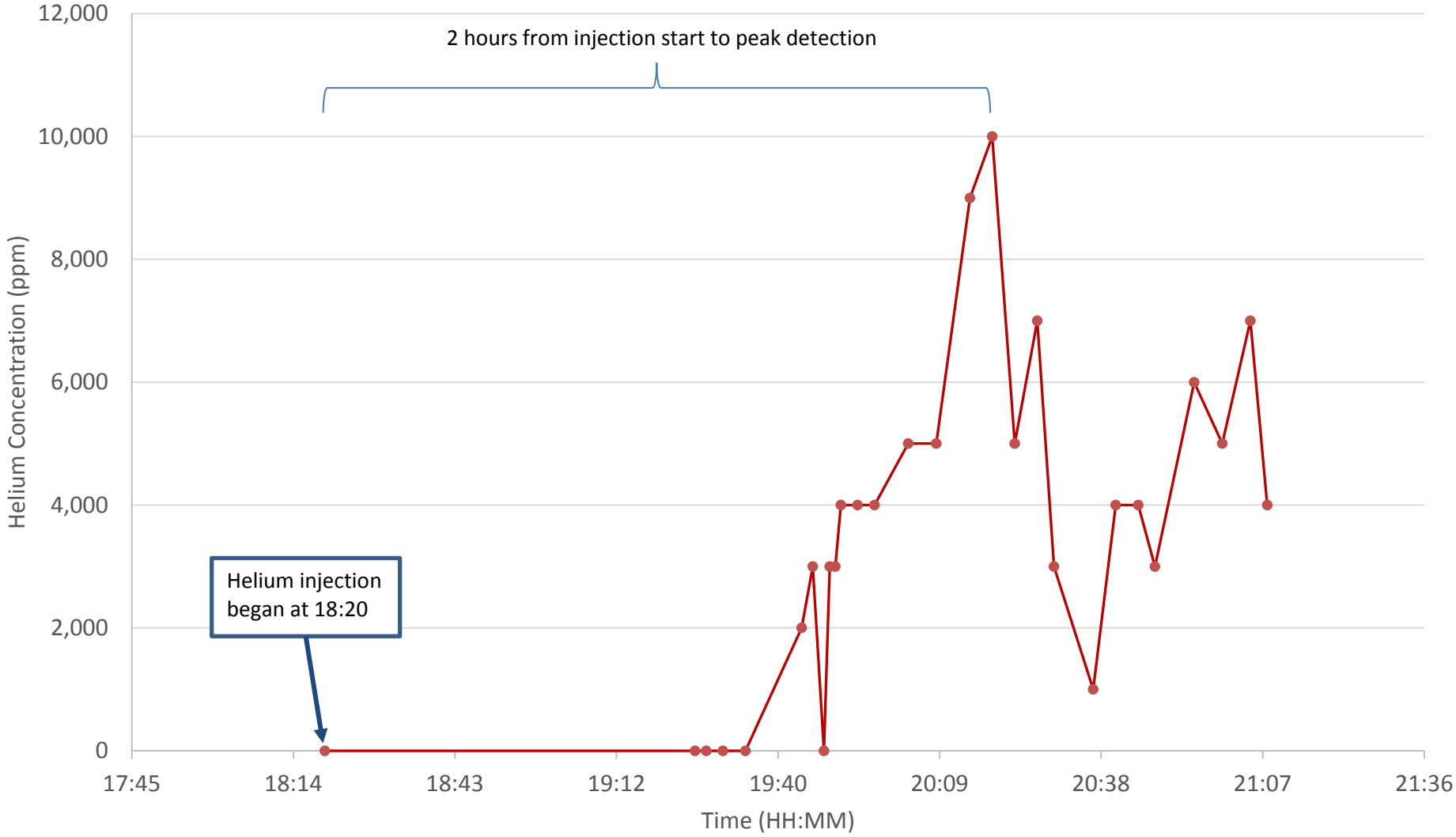

SSD: Helium Test

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Graph 6

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Note:
Zeros are non-detects.

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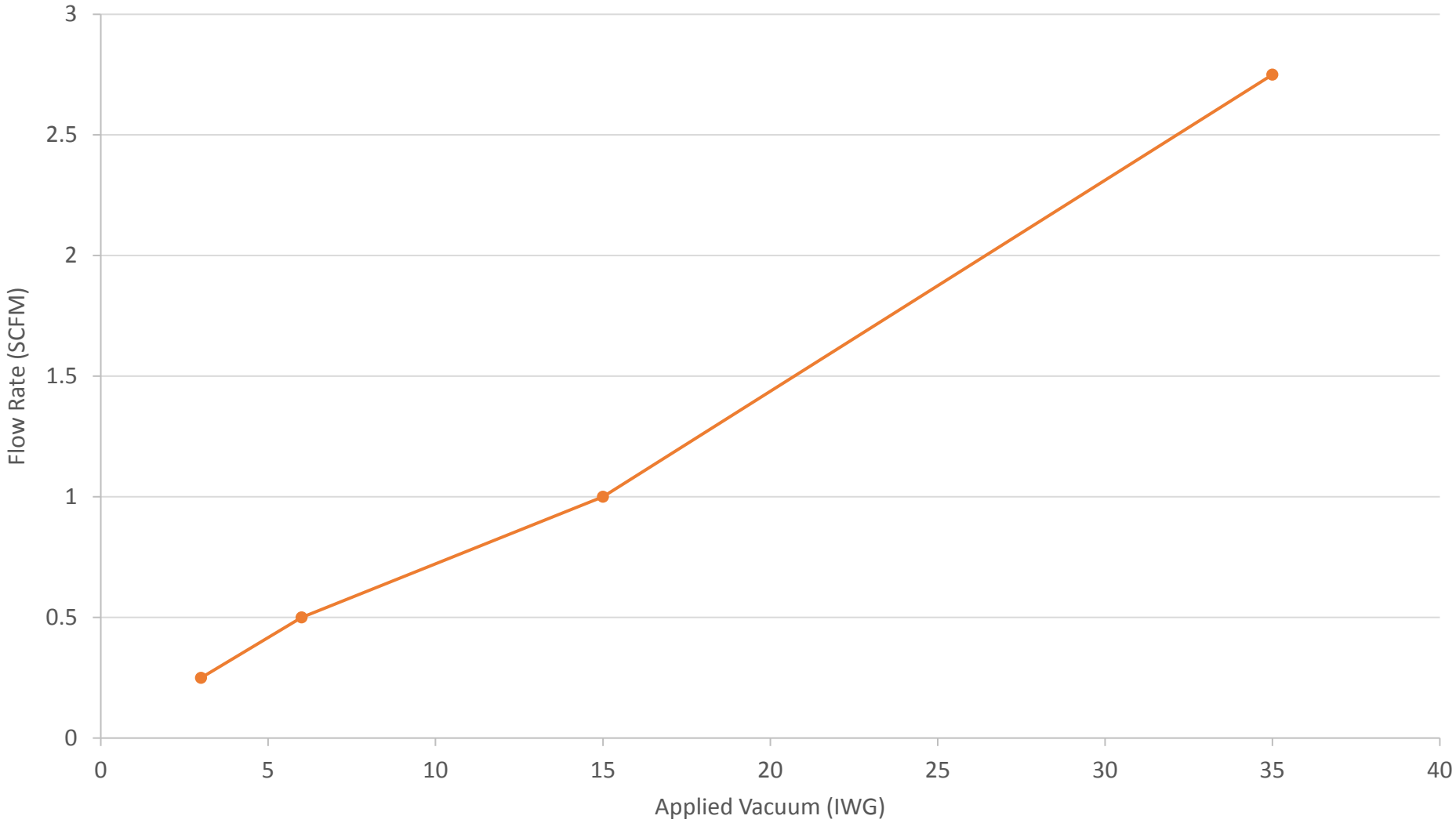

SSD: Vacuum Versus Flow Rate at EP1

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Graph 7

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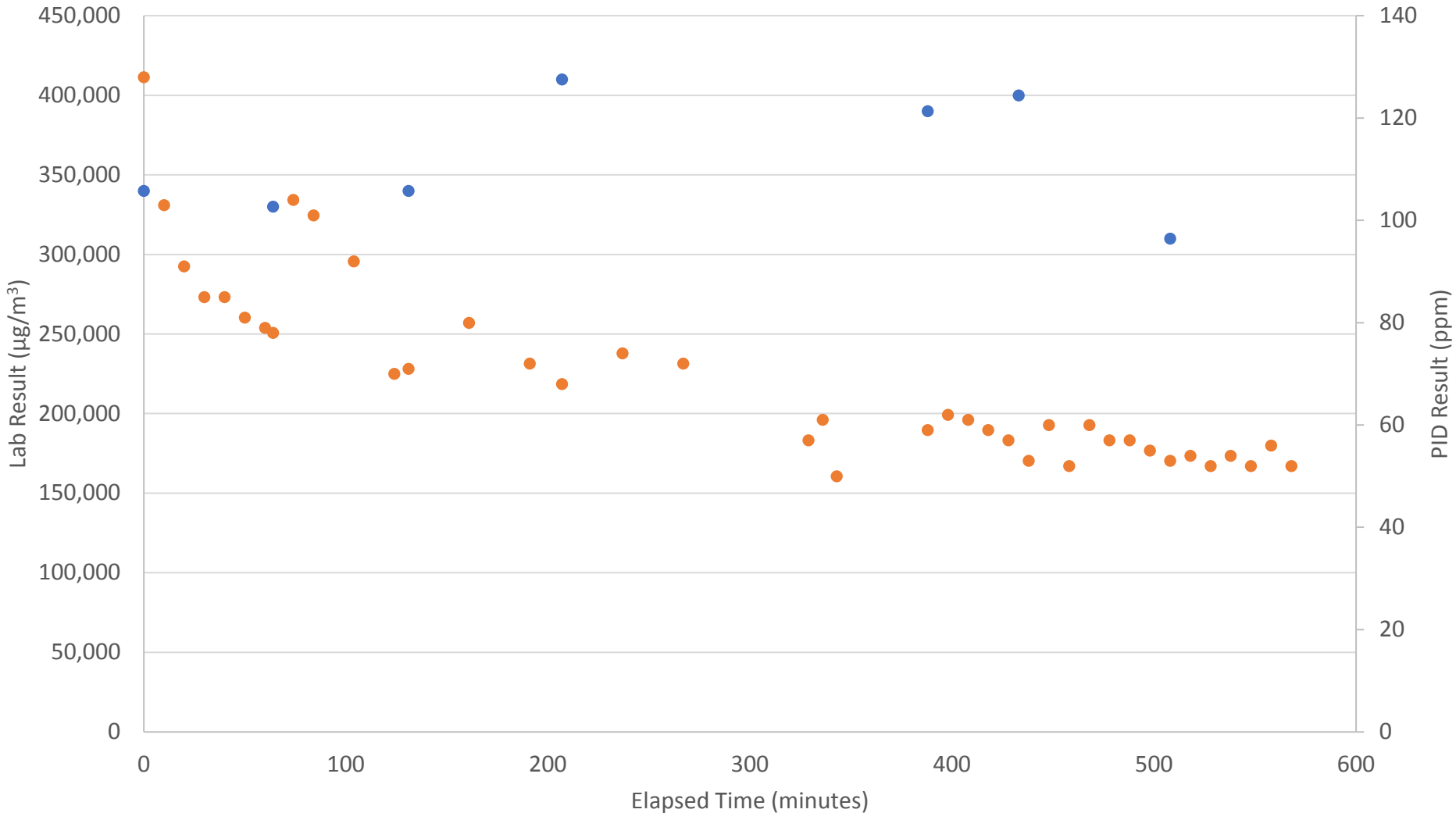

SSD: Concentration Versus Time

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Graph 8

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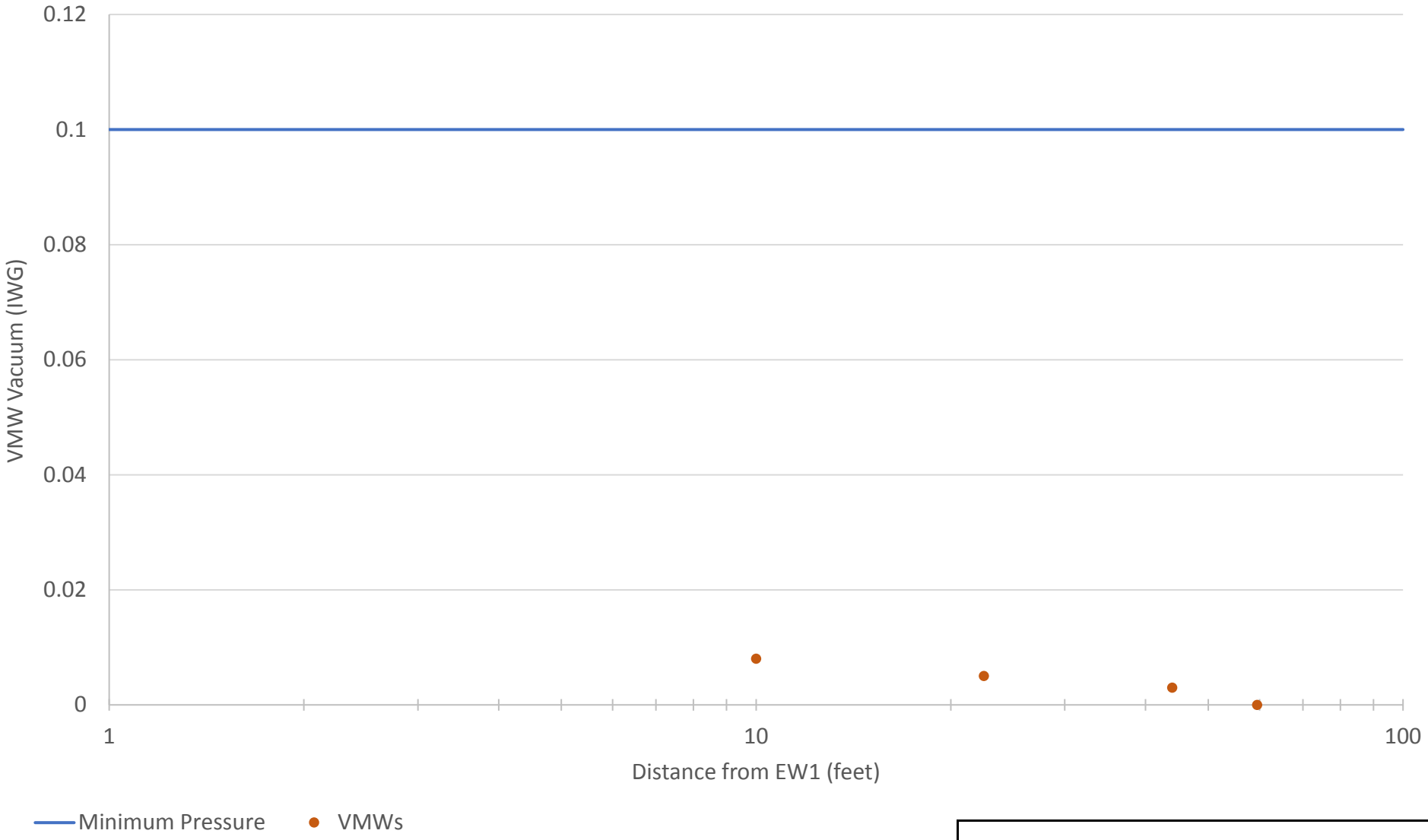

SVE: Vacuum Distribution in VMWs at 25 IWG

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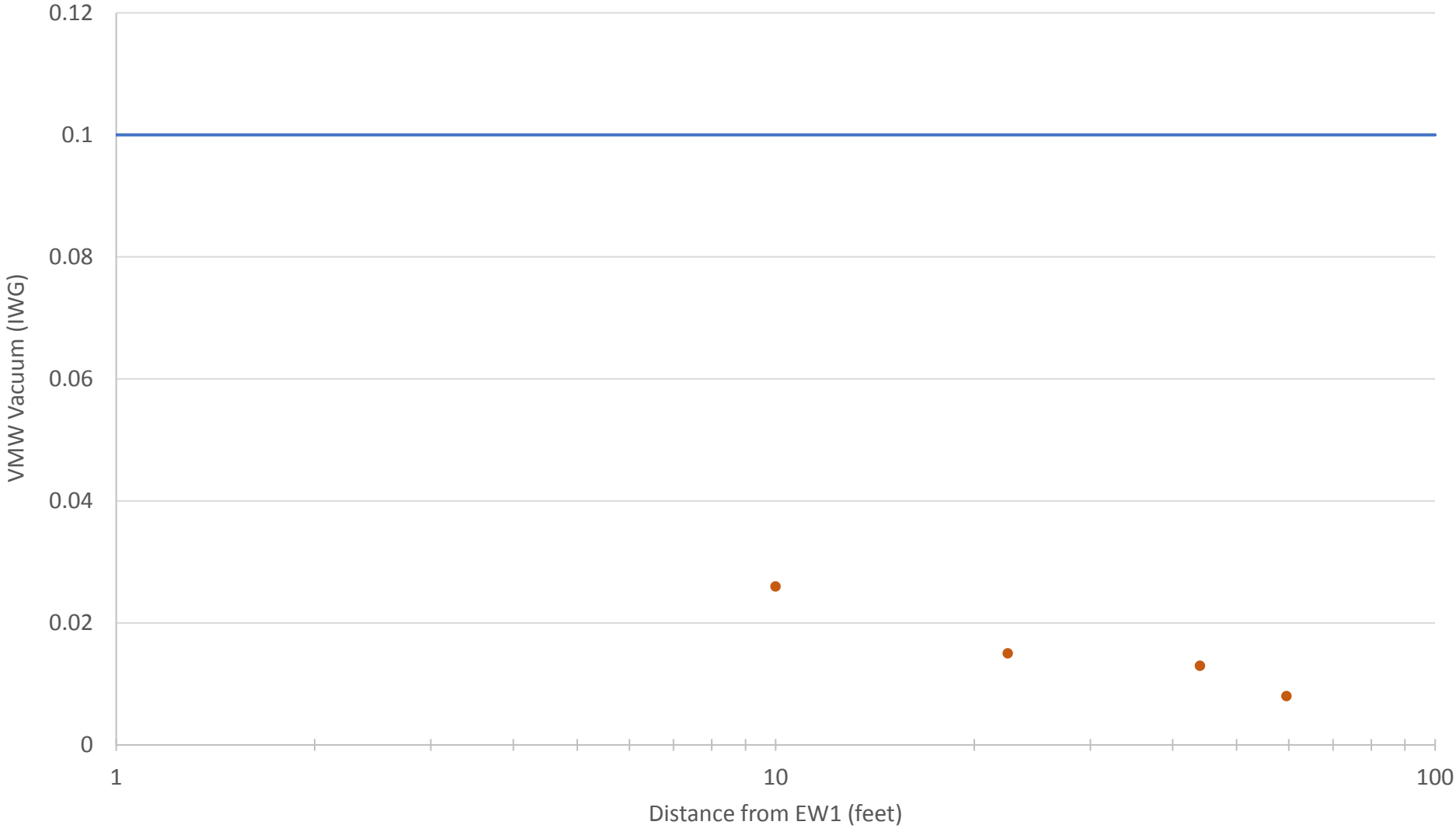
WR2292	September 2017

Graph 9

P:\PRJ2003REM\2101 Williams Associates\6. Deliverables\2017.08_FT Report\Graphs\[G.9-19_SVE Test.xlsx]



SVE: Vacuum Distribution in VMWs at 50 IWG

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WR2292	September 2017	**Graph 10**

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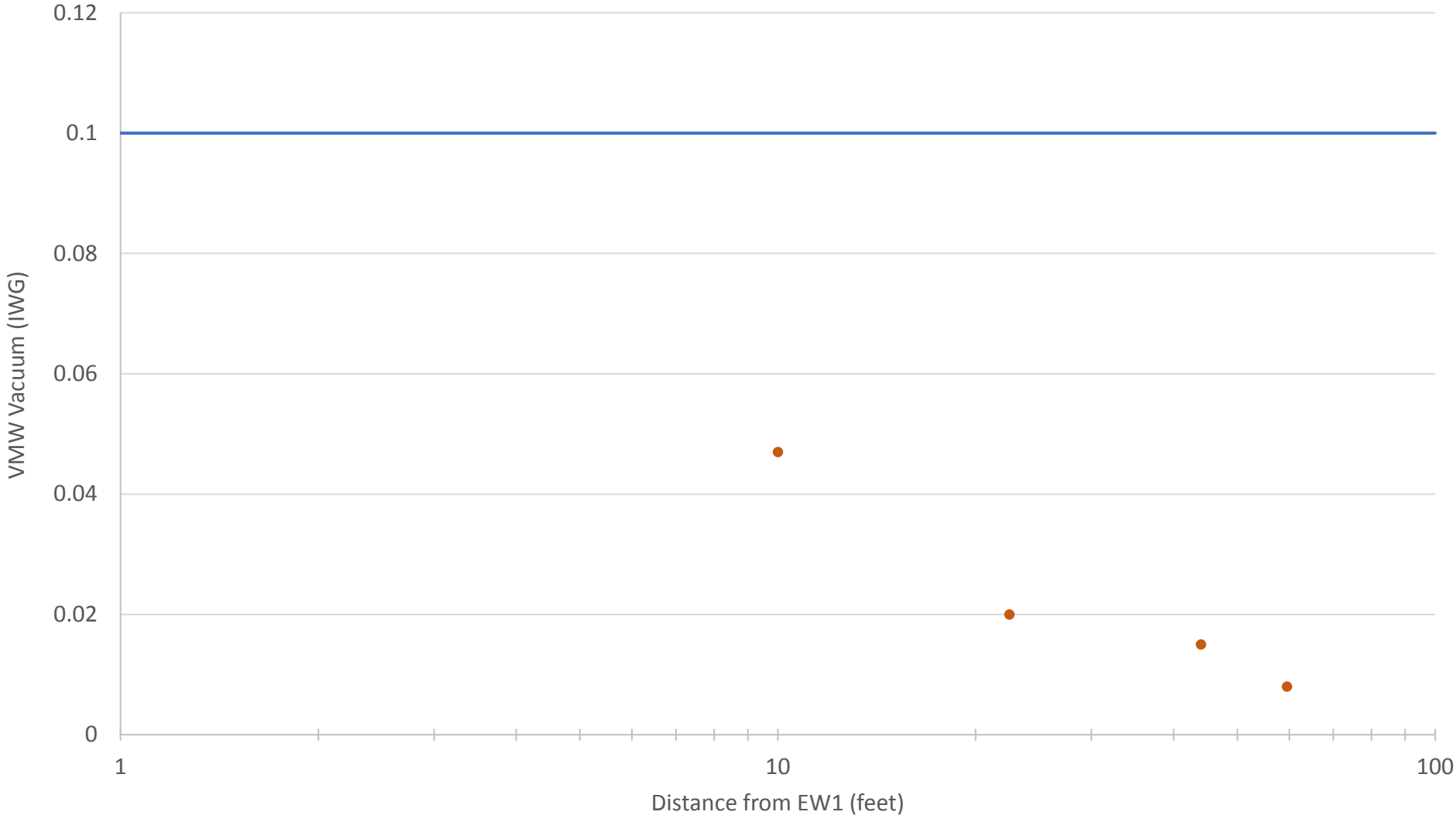

SVE: Vacuum Distribution in VMWs at 75 IWG

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Graph 11

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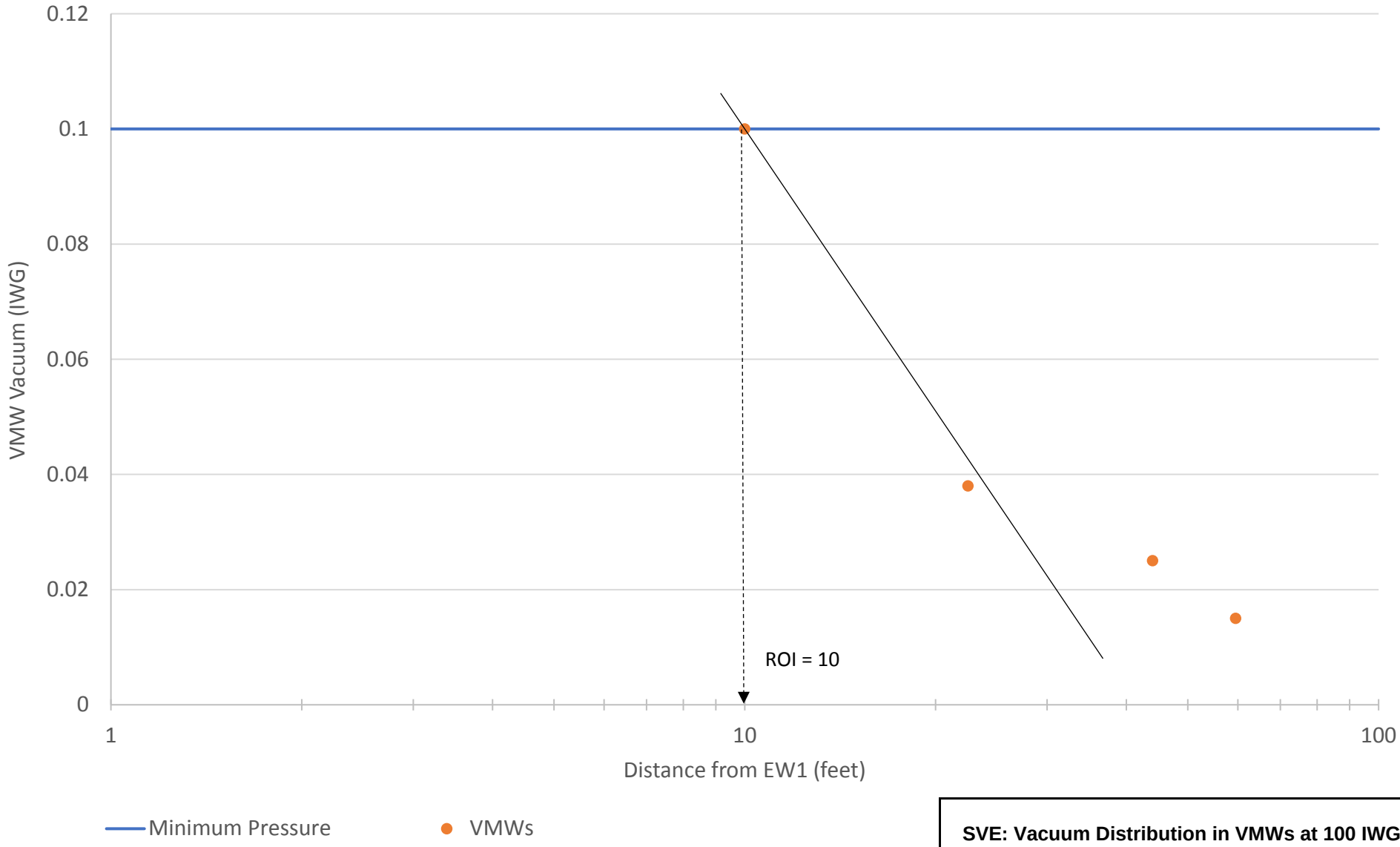

SVE: Vacuum Distribution in VMWs at 100 IWG

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Graph 12

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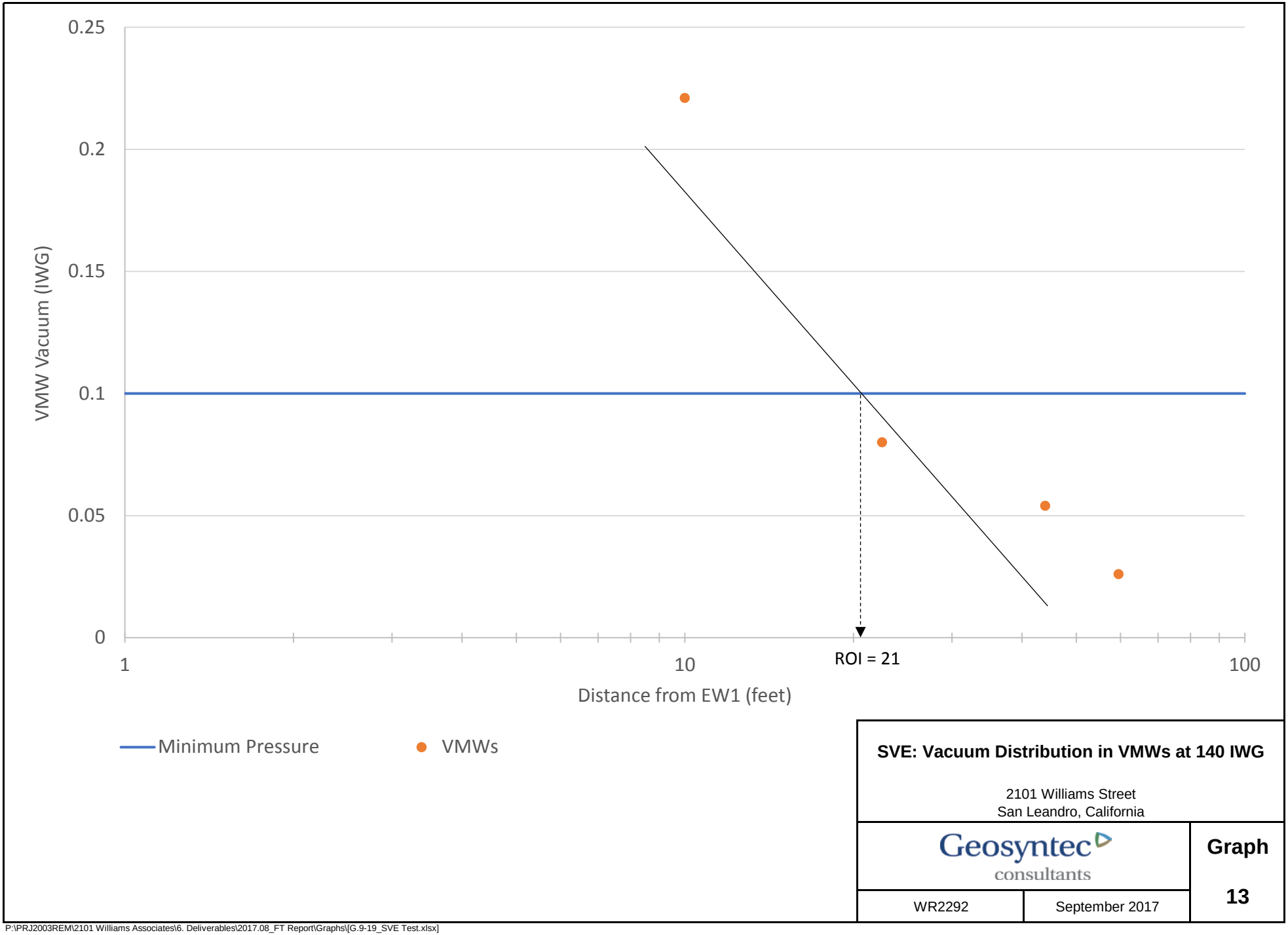

SVE: Vacuum Distribution in VMWs at 140 IWG

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Graph 13

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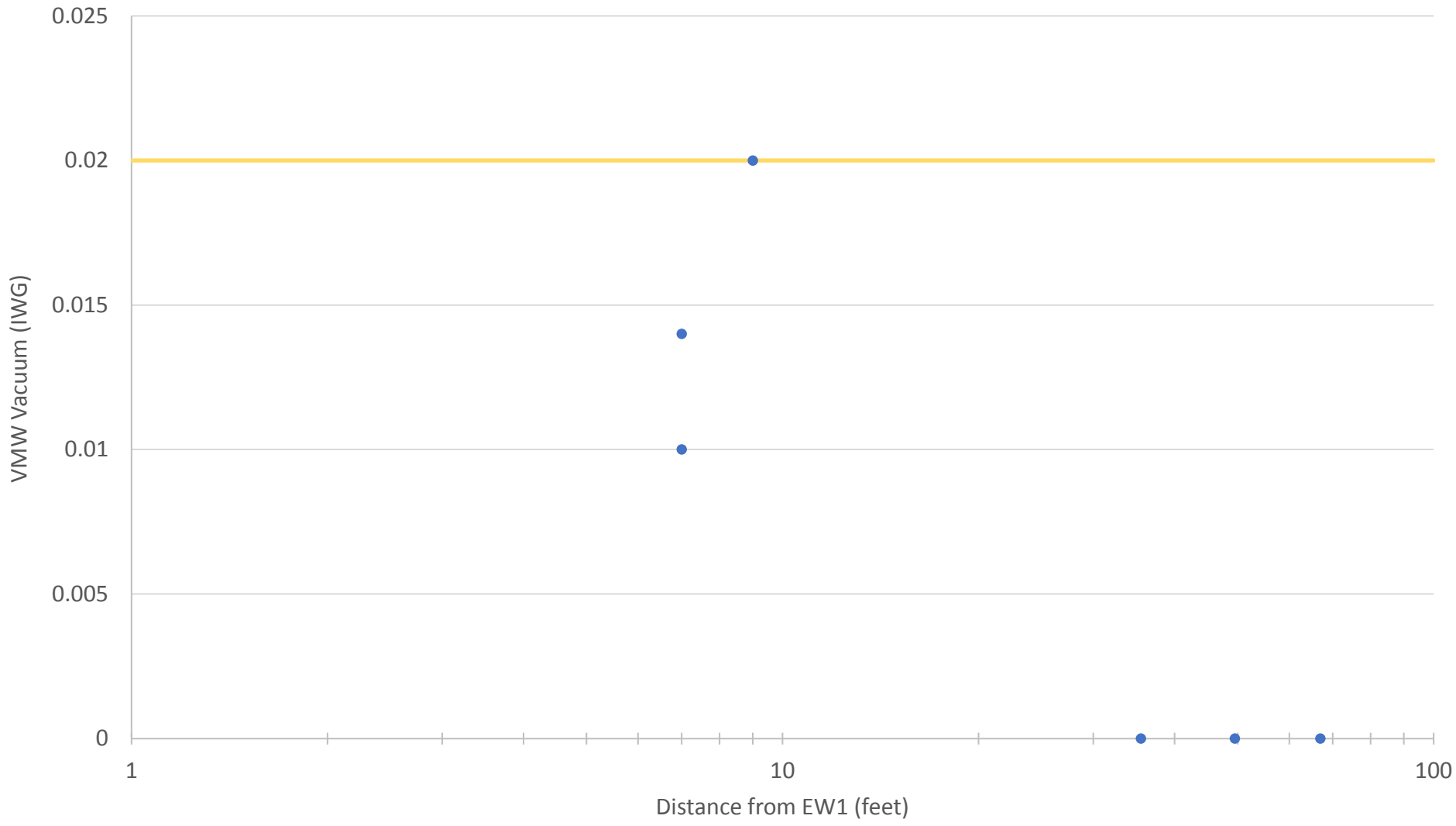

SVE: Vacuum Distribution in VPs at 25 IWG

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Graph 14

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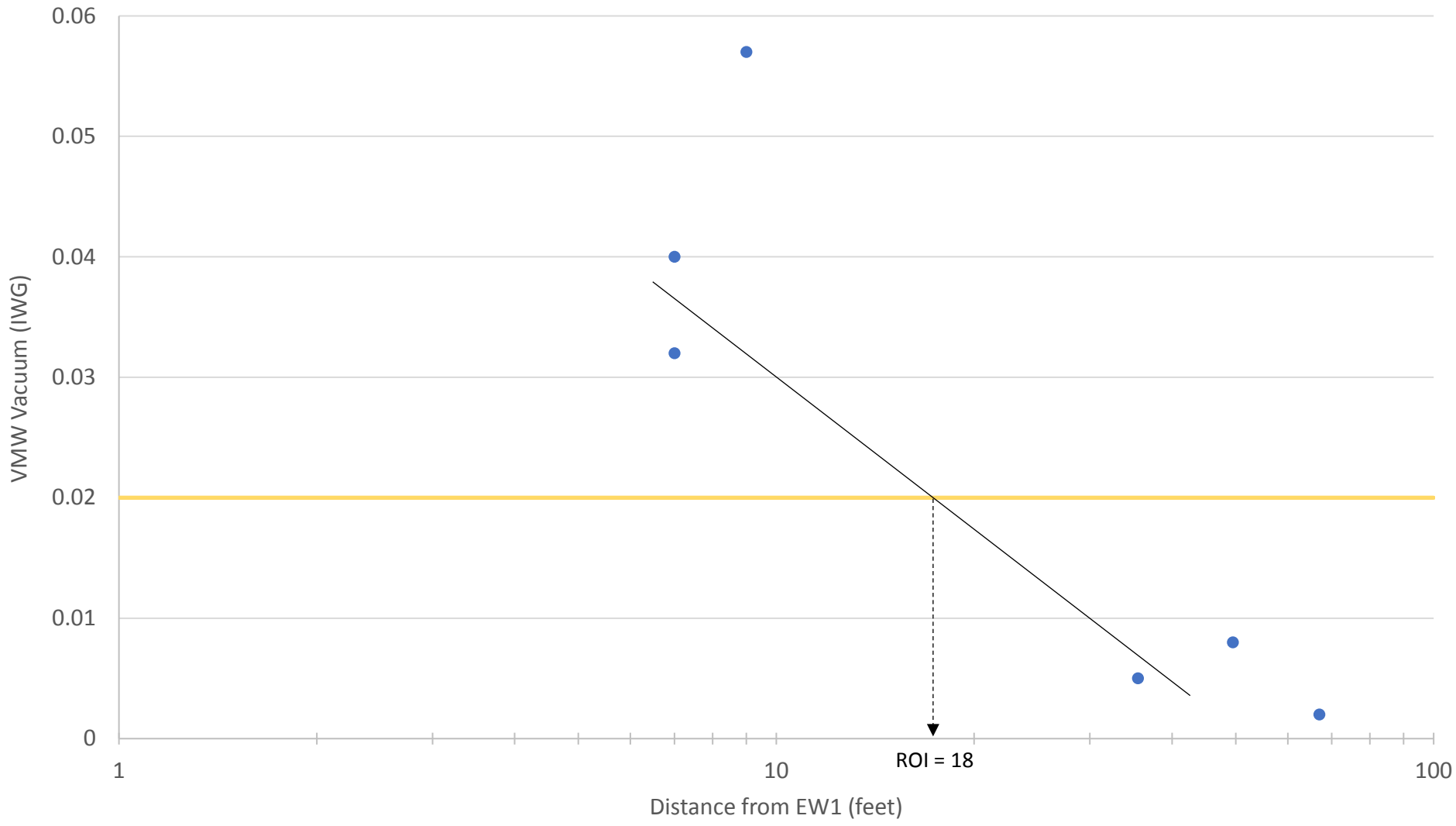

SVE: Vacuum Distribution in VPs at 50 IWG

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Graph 15

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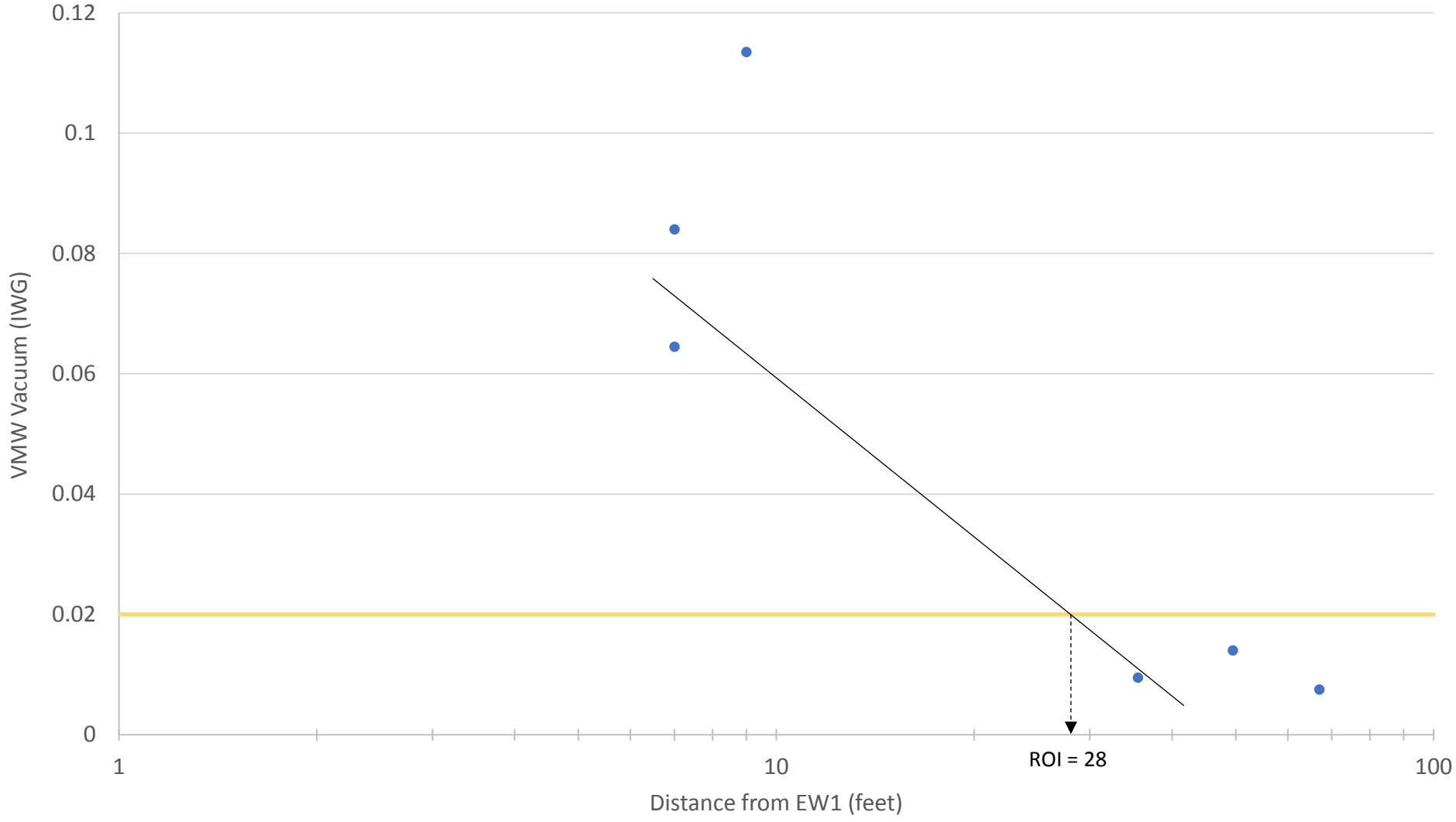

SVE: Vacuum Distribution in VPs at 75 IWG

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Graph 16

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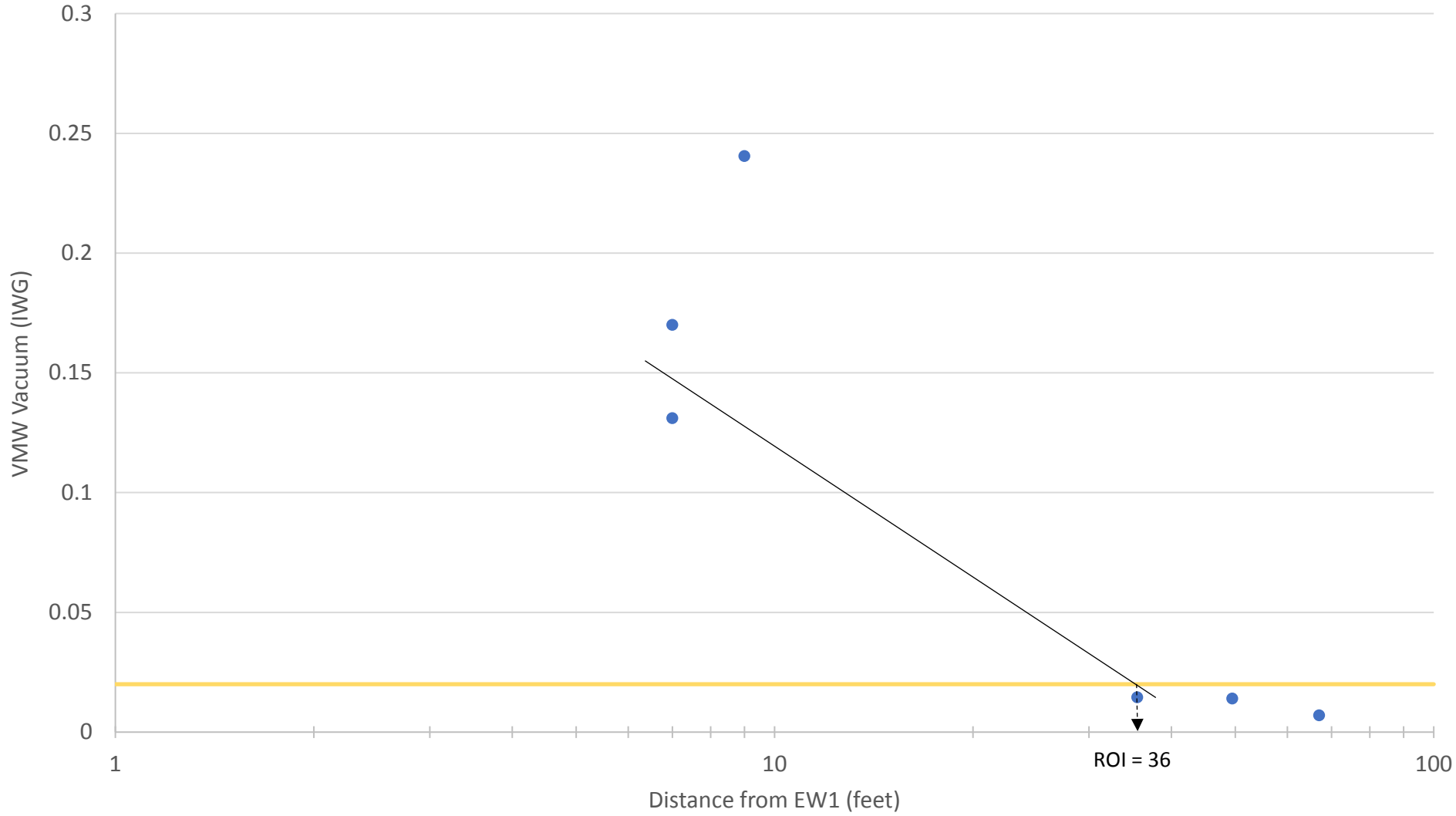

SVE: Vacuum Distribution in VPs at 100 IWG

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Graph 17

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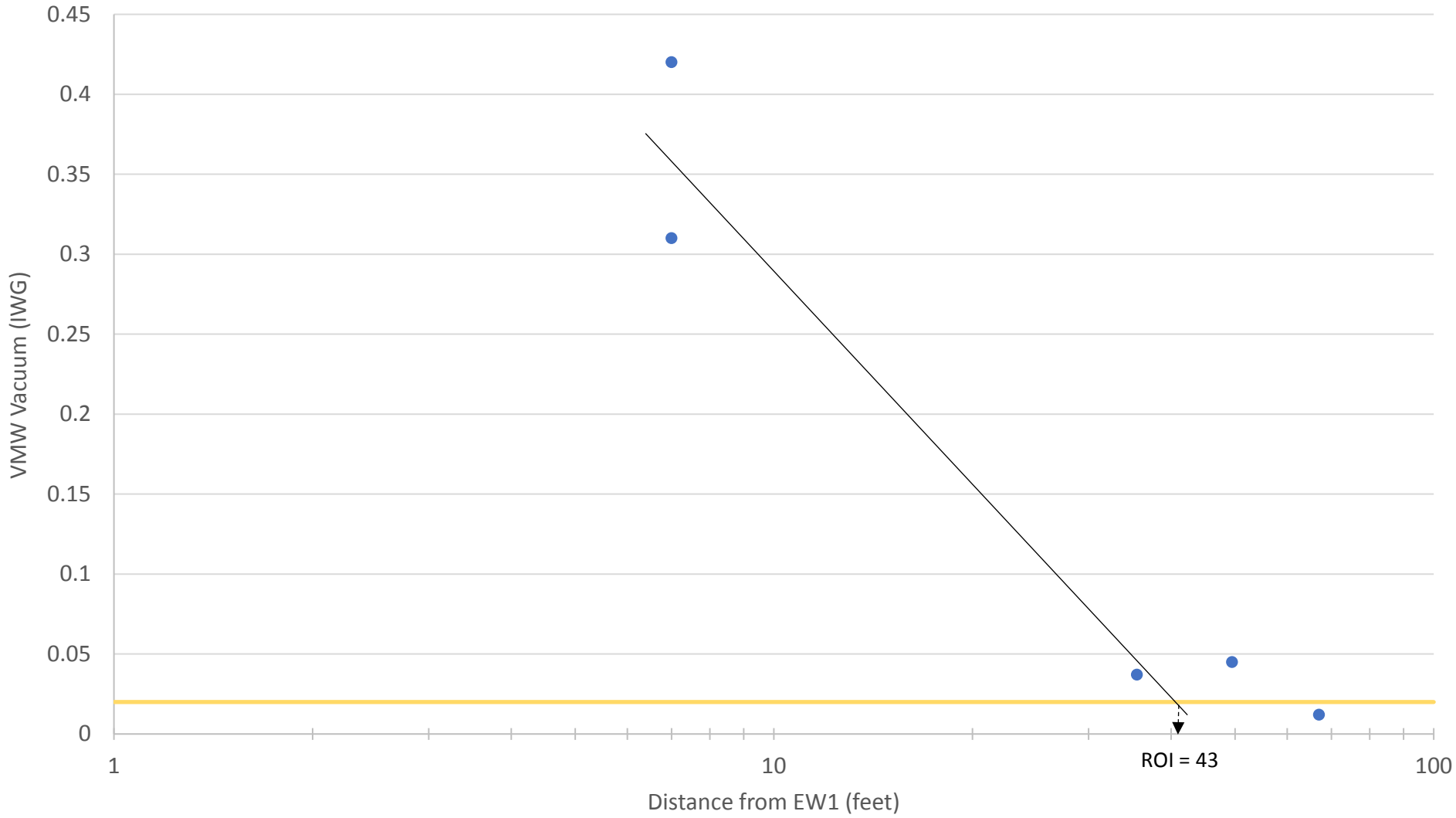

SVE: Vacuum Distribution in VPs at 140 IWG

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Graph 18

WR2292 | September 2017

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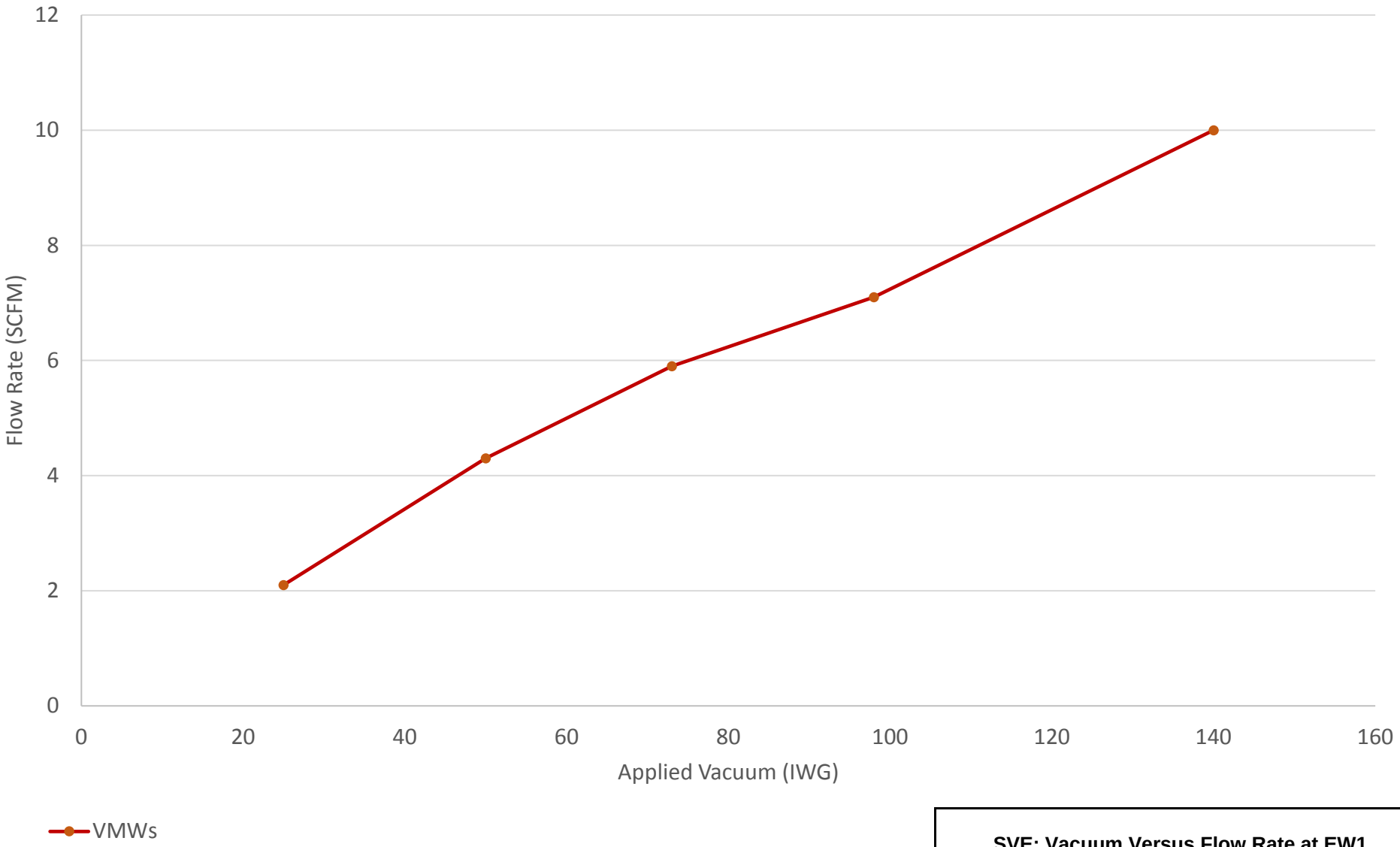

SVE: Vacuum Versus Flow Rate at EW1

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Graph 19

WR2292 | September 2017

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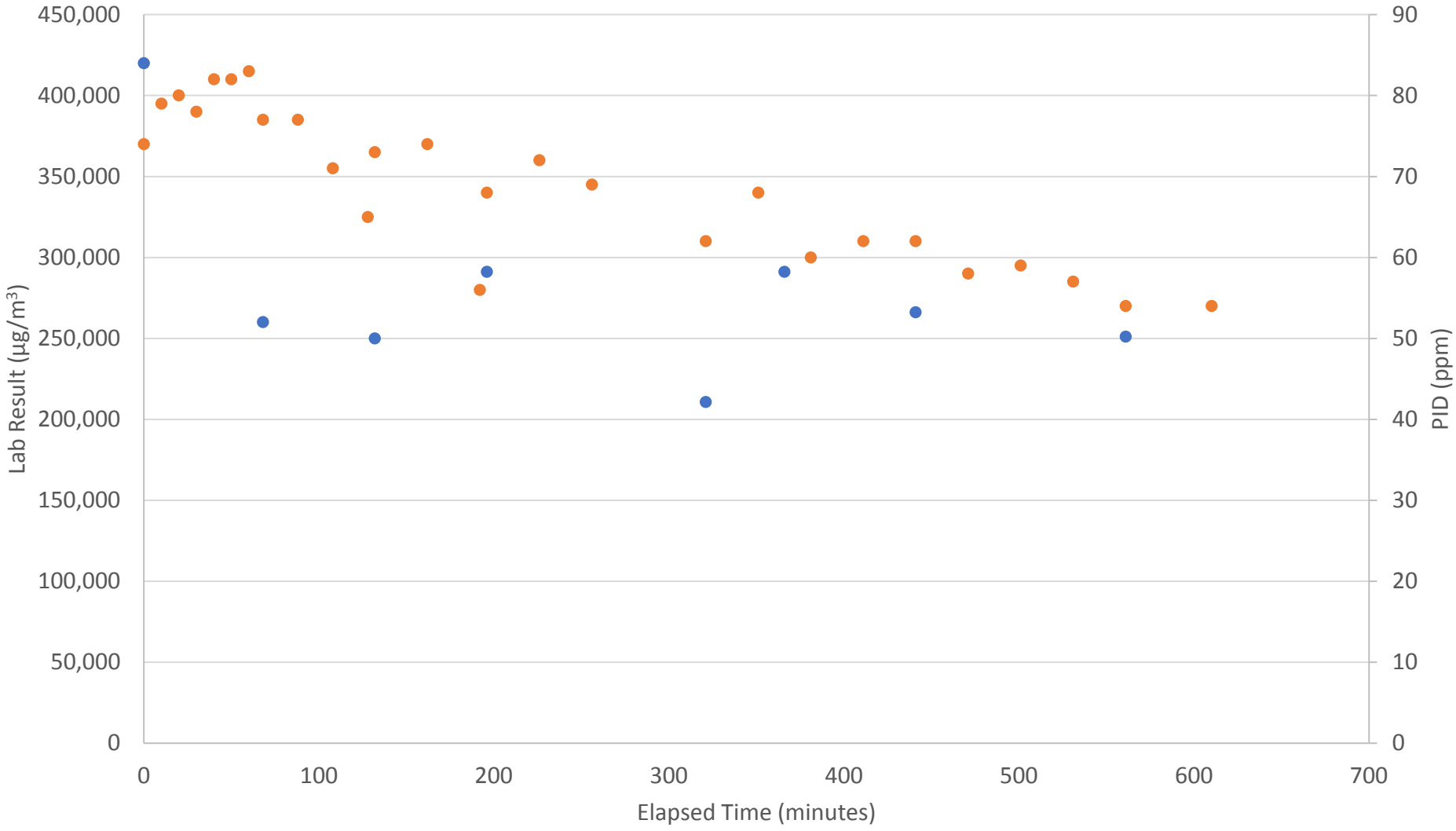

SVE: Concentration Versus Time

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Graph 20

WR2292 | September 2017

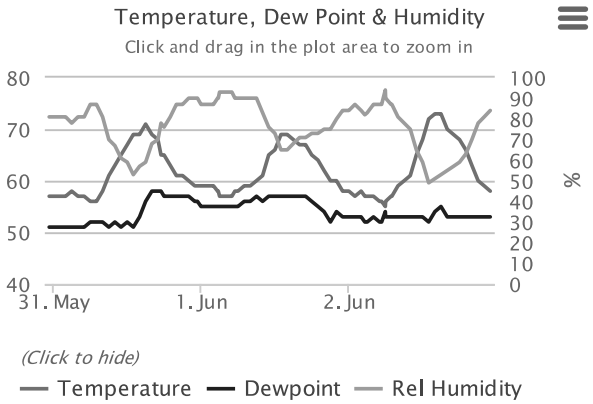
P:\PRJ2003REM\2101 Williams Associates\6. Deliverables\2017.08_FT Report\Graphs\[G.8,20_Lab Data.xlsx]

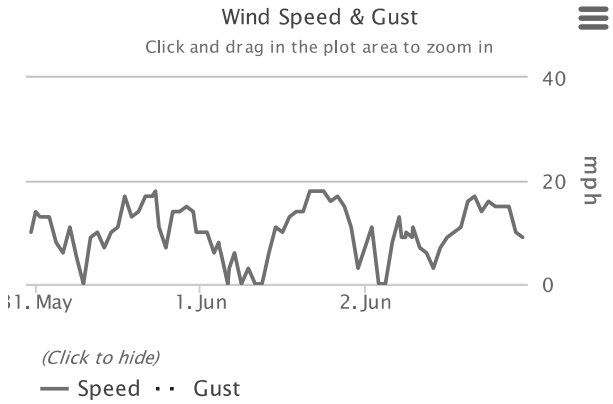
ATTACHMENT 1

Meteorological Data

Weather Conditions For:
Oakland, Metro Oakland International Airport, CA. KOAK (NWS/FAA - MTR)
Elev: 3 ft.; Lat/Lon: 37.71780/-122.23294
Current Time: Jun 2 11:32 pm PDT
Get Yearly Precip Total
Get Water Year Precip Total

swipe





Date (PDT)	Temp (F)	Dew Point (F)	Relative Humidity (%)	Wind Direction	Wind Speed (MPH)	Visibility (miles)	Clouds	Station Pressure (inches)	Sea Level Pressure (mb)	Altimeter Setting (inches)	6 Hr Max (F)	6 Hr Min (F)	24 Hr Max (F)	24 Hr Min (F)
02 Jun 10:53 pm	58	53	84	WSW	9	10.00	FEW012,SCT200	29.94	1013.7	29.94	69	58		
02 Jun 9:53 pm	59	53	81	WSW	10	10.00	BKN200	29.93	1013.6	29.93				
02 Jun 8:53 pm	60	53	78	W	15	10.00	BKN200	29.92	1013.3	29.92				
02 Jun 7:53 pm	63	53	70	W	15	10.00	BKN200	29.91	1012.9	29.91				
02 Jun 6:53 pm	66	53	63	W	15	10.00	SCT200	29.91	1012.7	29.91				
02 Jun 5:53 pm	68	53	59	W	16	10.00	FEW200	29.90	1012.6	29.90				
02 Jun 4:53 pm	69	53	57	W	14	10.00	FEW200	29.91	1012.9	29.91	74	65		
02 Jun 3:53 pm	70	53	55	WNW	17	10.00	FEW200	29.92	1013.0	29.92				
02 Jun 2:53 pm	73	55	53	W	16	10.00	CLR	29.92	1013.1	29.92				
02 Jun 1:53 pm	73	54	51	W	11	10.00	FEW180	29.93	1013.6	29.93				
02 Jun 12:53 pm	72	52	49	W	10	10.00	FEW180	29.95	1014.0	29.95				
02 Jun 11:53 am	68	53	59	NW	9	10.00	FEW180	29.96	1014.5	29.96				
02 Jun 10:53 am	65	53	65		7	10.00	FEW180	29.98	1015.0	29.98	65	56		
02 Jun 9:53 am	61	53	75		3	10.00	FEW180	29.99	1015.4	29.99				
02 Jun 8:53 am	60	53	78	SSW	6	10.00	FEW010	29.99	1015.6	29.99				
02 Jun 7:53 am	59	53	81	SW	7	10.00	FEW008,BKN010	29.99	1015.5	29.99				
02 Jun 6:53 am	57	53	87	SW	11	10.00	FEW008,BKN010	29.99	1015.4	29.99				
02 Jun 6:46 am	57	53	87	SW	9	10.00	FEW008,BKN010	29.98		29.98				
02 Jun 5:53 am	56	53	90	SW	10	10.00	FEW008,SCT010	29.98	1015.0	29.98				
02 Jun 5:49 am	55	54	94	SW	9	10.00	FEW008,SCT010	29.97		29.97				
02 Jun 5:14 am	56	52	87	SW	9	10.00	SCT011	29.97		29.97				

02 Jun 4:53 am	56	52	87	SW	13	10.00	BKN011	29.97	1014.8	29.97	59	55		
02 Jun 3:53 am	57	53	87	SW	8	10.00	BKN011	29.96	1014.5	29.96				
02 Jun 2:53 am	57	52	83	N	CALM	10.00	BKN011	29.97	1014.6	29.97				
02 Jun 2:30 am	57	52	82	N	CALM	10.00	BKN011	29.97		29.97				
02 Jun 1:53 am	58	53	84	N	CALM	10.00	SCT011	29.97	1014.6	29.97				
02 Jun 12:53 am	57	53	87	SSW	11	10.00	FEW009	29.97	1014.7	29.97			69	57
01 Jun 11:53 pm	58	53	84	SSW	7	10.00	FEW010	29.97	1014.8	29.97				
01 Jun 10:53 pm	58	53	84	WNW	3	10.00	FEW010	29.97	1014.7	29.97	67	58		
01 Jun 9:53 pm	60	54	80	W	11	10.00	FEW008	29.97	1014.8	29.97				
01 Jun 8:53 pm	60	52	75	W	15	10.00	FEW008	29.96	1014.5	29.96				
01 Jun 7:53 pm	62	54	75	W	17	10.00	FEW008	29.95	1014.2	29.95				
01 Jun 6:53 pm	64	55	73	W	16	10.00	FEW006	29.95	1014.2	29.95				
01 Jun 5:53 pm	65	56	73	W	18G29	10.00	FEW006	29.95	1014.1	29.95				
01 Jun 4:53 pm	67	57	71	W	18	10.00	FEW008,FEW030,FEW200	29.96	1014.4	29.96	69	64		
01 Jun 3:53 pm	67	57	71	WSW	18	10.00	FEW008,FEW030,FEW200	29.96	1014.4	29.96				
01 Jun 2:53 pm	68	57	68	W	14	10.00	FEW008,FEW200	29.96	1014.5	29.96				
01 Jun 1:53 pm	69	57	65	W	14	10.00	FEW010,FEW200	29.97	1014.9	29.97				
01 Jun 12:53 pm	69	57	65	W	13	10.00	FEW008,FEW012,SCT200	29.99	1015.3	29.99				
01 Jun 11:53 am	66	57	73	W	10	10.00	FEW008,BKN012	29.99	1015.3	29.99				
01 Jun 10:53 am	65	57	76	W	11	10.00	BKN008,OVC010	29.99	1015.3	29.99	65	57		
01 Jun 9:53 am	61	56	83	SW	6	10.00	BKN005,OVC007	29.99	1015.5	29.99				
01 Jun 8:53 am	60	57	90	N	CALM	10.00	BKN005,OVC007	29.99	1015.4	29.99				
01 Jun 7:53 am	59	56	90	N	CALM	7.00	OVC005	29.98	1015.3	29.98				
01 Jun 6:53 am	59	56	90	NW	3	10.00	OVC004	29.97	1014.9	29.97				
01 Jun 5:53 am	58	55	90	N	CALM	10.00	OVC004	29.97	1014.7	29.97				
01 Jun 5:22 am	58	55	90	WNW	3	10.00	OVC004	29.96		29.96				
01 Jun 4:53 am	57	55	93	WNW	6	10.00	OVC005	29.96	1014.5	29.96	59	57		
01 Jun 4:06 am	57	55	93	W	3	10.00	OVC005	29.96		29.96				
01 Jun 3:53 am	57	55	93	N	CALM	10.00	OVC004	29.96	1014.5	29.96				
01 Jun 2:53 am	57	55	93	WSW	6	10.00	OVC004	29.96	1014.3	29.96				
01 Jun 2:41 am	58	55	90	WSW	7	10.00	OVC006	29.96		29.96				
01 Jun 2:34 am	58	55	90	W	8	10.00	OVC004	29.96		29.96				
01 Jun 1:53 am	59	55	87	WSW	6	10.00	OVC006	29.95	1014.2	29.95				
01 Jun 12:53 am	59	55	87	W	10	10.00	OVC006	29.97	1014.6	29.97			71	56
31 May 11:53 pm	59	55	87	W	10	10.00	OVC005	29.96	1014.5	29.96				
31 May 11:19 pm	59	56	90	W	10	10.00	OVC004	29.97		29.97				
31 May 10:53 pm	59	56	90	W	14	10.00	OVC005	29.97	1014.8	29.97	68	59		
31 May 9:53 pm	60	57	90	W	15	10.00	FEW004,BKN005,BKN006	29.96	1014.4	29.96				
31 May 8:53 pm	61	57	87	W	14	10.00	FEW004,BKN006	29.96	1014.5	29.96				
31 May 7:53 pm	61	57	87	W	14	10.00	BKN007,BKN012	29.95	1014.2	29.95				
31 May 6:53 pm	63	57	81	W	7	10.00	BKN008	29.95	1014.2	29.95				
31 May 5:53 pm	65	57	76	W	11	10.00	BKN007	29.95	1014.1	29.95				
31 May 5:22 pm	65	58	78	W	18	10.00	BKN008	29.96		29.96				
31 May 4:53 pm	68	58	70	W	17	10.00	FEW012	29.95	1014.2	29.95	71	65		
31 May 3:53 pm	69	58	68	W	17	10.00	FEW012	29.96	1014.4	29.96				
31 May 2:53 pm	71	56	59	W	14	10.00	FEW012	29.96	1014.5	29.96				
31 May 1:53 pm	69	53	57	W	13	10.00	FEW012,FEW040	29.96	1014.6	29.96				
31 May 12:53 pm	69	51	53	W	17	10.00	FEW040,FEW150	29.97	1014.8	29.97				
31 May 11:53 am	67	52	59	W	11	10.00	FEW150	29.97	1014.6	29.97				
31 May 10:53 am	65	51	61	WSW	10	10.00	FEW015,FEW150	29.97	1014.8	29.97	65	56		
31 May 9:53 am	63	52	67	W	7	10.00	FEW150	29.97	1014.8	29.97				
31 May 8:53 am	61	51	70	W	10	10.00	FEW010,FEW150	29.97	1014.8	29.97				
31 May 7:53 am	58	52	81	WSW	9	10.00	FEW010,FEW150,SCT200	29.96	1014.5	29.96				
31 May 6:53 am	56	52	87	N	CALM	10.00	FEW010,SCT150,OVC200	29.95	1014.1	29.95				
31 May 5:53 am	56	52	87	W	5	10.00	FEW010,OVC180	29.94	1013.9	29.94				
31 May 4:53 am	57	51	81	W	11	10.00	BKN150	29.94	1013.9	29.94	58	57		
31 May 3:53 am	57	51	81	WSW	6	10.00	FEW010,BKN120	29.94	1013.7	29.94				
31 May 2:53 am	58	51	78	W	8	10.00	FEW010,BKN120	29.95	1014.0	29.95				
31 May 1:53 am	57	51	81	W	13	10.00	FEW010,OVC110	29.95	1014.1	29.95				
31 May 12:53 am	57	51	81	W	13	10.00	FEW010,SCT120,BKN150	29.96	1014.5	29.96			63	55

31 May 12:32 am	57	51	81	W	13	10.00	SCT013,BKN120	29.97		29.97
30 May 11:53 pm	57	51	81	W	14	10.00	BKN013	29.97	1015.0	29.97
30 May 11:13 pm	57	51	81	W	10	10.00	BKN014	29.98		29.98

ATTACHMENT 2

Analytical Reports

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

TestAmerica Job ID: 320-28831-1
Client Project/Site: VI Monitoring

For:
Geosyntec Consultants, Inc.
1111 Broadway 6th Floor
Oakland, California 94607

Attn: Karina Navarro

Authorized for release by:
6/19/2017 3:54:22 PM

Laura Turpen, Project Manager I
(916)374-4414
laura.turpen@testamericainc.com

Table of Contents

Definitions/Glossary

Client: Geosyntec Consultants, Inc.
Project/Site: VI Monitoring

TestAmerica Job ID: 320-28831-1

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Job ID: 320-28831-1

Laboratory: TestAmerica Sacramento

Narrative

Job Narrative
320-28831-1

Receipt
The samples were received on June 5, 2017 at 6:15 PM; the samples arrived in good condition.

Receipt Exceptions
The sample ID tag on the canister for the following sample did not have sample information on the tag: EWI-EXT-45M (320-28831-19). The sample was identified based on the canister ID.

Sample 320-28831-A-12 was received by the laboratory with the valve completely opened. Because the initial pressure of the canister was about ambient it is possible that sample is lost or compromised. The client was notified and decided to cancel the analysis for this sample.

Air - GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: VI Monitoring

TestAmerica Job ID: 320-28831-1

Client Sample ID: EP-1 — Lab Sample ID: 320-28831-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	24000		290	37	ppb v/v	724		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	170000		2000	250	ug/m3	724		TO-15	Total/NA

Client Sample ID: EW-1 — Lab Sample ID: 320-28831-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	47000		630	80	ppb v/v	1576		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	320000		4300	550	ug/m3	1576		TO-15	Total/NA

Client Sample ID: EP1-3IN-0M — Lab Sample ID: 320-28831-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	50000		550	71	ppb v/v	1386		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	340000		3800	480	ug/m3	1386		TO-15	Total/NA

Client Sample ID: EP1-6IN-0M — Lab Sample ID: 320-28831-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	48000		400	51	ppb v/v	999		TO-15	Total/NA
Trichloroethene	110	J	400	100	ppb v/v	999		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	330000		2700	350	ug/m3	999		TO-15	Total/NA
Trichloroethene	620	J	2100	560	ug/m3	999		TO-15	Total/NA

Client Sample ID: EP1-15IN-0M — Lab Sample ID: 320-28831-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	50000		440	56	ppb v/v	1105		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	340000		3000	380	ug/m3	1105		TO-15	Total/NA

Client Sample ID: EP1-35IN-0M — Lab Sample ID: 320-28831-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	61000		580	73	ppb v/v	1438		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	410000		3900	500	ug/m3	1438		TO-15	Total/NA

Client Sample ID: EP1-EXT-0M — Lab Sample ID: 320-28831-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	58000		680	87	ppb v/v	1701		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	390000		4600	590	ug/m3	1701		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: VI Monitoring

TestAmerica Job ID: 320-28831-1

Client Sample ID: EP1-EXT-45M — Lab Sample ID: 320-28831-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	59000		680	86	ppb v/v	1691		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	400000		4600	580	ug/m3	1691		TO-15	Total/NA

Client Sample ID: IA_EP — Lab Sample ID: 320-28831-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.40		0.020	0.010	ppb v/v	1		TO-15 SIM	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	2.7		0.14	0.068	ug/m3	1		TO-15 SIM	Total/NA

Client Sample ID: EP_DUP — Lab Sample ID: 320-28831-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	46000		600	77	ppb v/v	1502		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	310000		4100	520	ug/m3	1502		TO-15	Total/NA

Client Sample ID: EP-EXT-120M — Lab Sample ID: 320-28831-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	46000		590	76	ppb v/v	1486		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	310000		4000	510	ug/m3	1486		TO-15	Total/NA

Client Sample ID: EW1-25IN-0M — Lab Sample ID: 320-28831-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	61000		980	130	ppb v/v	2460		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	420000		6700	850	ug/m3	2460		TO-15	Total/NA

Client Sample ID: EW1-50IN-0M — Lab Sample ID: 320-28831-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	38000		630	81	ppb v/v	1580		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	260000		4300	550	ug/m3	1580		TO-15	Total/NA

Client Sample ID: EW1-75IN-0M — Lab Sample ID: 320-28831-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	37000		580	74	ppb v/v	1460		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	250000		4000	510	ug/m3	1460		TO-15	Total/NA

Client Sample ID: EW1-100IN-0M — Lab Sample ID: 320-28831-16

This Detection Summary does not include radiochemical test results.

Client Sample ID: EW1-100IN-0M (Continued) — Lab Sample ID: 320-28831-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	200	J	270	70	ppb v/v	668		TO-15	Total/NA
Tetrachloroethene - DL	43000		400	52	ppb v/v	1010		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1100	J	1400	380	ug/m3	668		TO-15	Total/NA
Tetrachloroethene - DL	290000		2700	350	ug/m3	1010		TO-15	Total/NA

Client Sample ID: EW1-EXT-0M — Lab Sample ID: 320-28831-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	31000		510	65	ppb v/v	1270		TO-15	Total/NA
Trichloroethene	130	J	510	130	ppb v/v	1270		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	210000		3400	440	ug/m3	1270		TO-15	Total/NA
Trichloroethene	720	J	2700	720	ug/m3	1270		TO-15	Total/NA

Client Sample ID: IA-EW — Lab Sample ID: 320-28831-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.21		0.020	0.010	ppb v/v	1		TO-15 SIM	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	1.4		0.14	0.068	ug/m3	1		TO-15 SIM	Total/NA

Client Sample ID: EW1-EXT-45M — Lab Sample ID: 320-28831-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	43000		480	62	ppb v/v	1210		TO-15	Total/NA
Trichloroethene	200	J	480	130	ppb v/v	1210		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	290000		3300	420	ug/m3	1210		TO-15	Total/NA
Trichloroethene	1100	J	2600	680	ug/m3	1210		TO-15	Total/NA

Client Sample ID: EW1-DUP — Lab Sample ID: 320-28831-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	38000		530	68	ppb v/v	1330		TO-15	Total/NA
Trichloroethene	190	J	530	140	ppb v/v	1330		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	260000		3600	460	ug/m3	1330		TO-15	Total/NA
Trichloroethene	1000	J	2900	750	ug/m3	1330		TO-15	Total/NA

Client Sample ID: EW1-EXT-120M — Lab Sample ID: 320-28831-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	40000		600	77	ppb v/v	1500		TO-15	Total/NA
Trichloroethene	220	J	600	160	ppb v/v	1500		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	270000		4100	520	ug/m3	1500		TO-15	Total/NA
Trichloroethene	1200	J	3200	850	ug/m3	1500		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: VI Monitoring

TestAmerica Job ID: 320-28831-1

Client Sample ID: EW1-EXT-240M — Lab Sample ID: 320-28831-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	38000		590	75	ppb v/v	1470		TO-15	Total/NA
Trichloroethene	200	J	590	150	ppb v/v	1470		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	250000		4000	510	ug/m3	1470		TO-15	Total/NA
Trichloroethene	1100	J	3200	830	ug/m3	1470		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: EP-1

Lab Sample ID: 320-28831-1

Date Collected: 06/02/17 20:50
Matrix: Air
Date Received: 06/05/17 18:15
Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		290	64	ppb v/v			06/13/17 18:16	724
trans-1,2-Dichloroethene	ND		290	72	ppb v/v			06/13/17 18:16	724
Tetrachloroethene	**24000**		290	37	ppb v/v			06/13/17 18:16	724
Trichloroethene	ND		290	76	ppb v/v			06/13/17 18:16	724
Vinyl chloride	ND		290	87	ppb v/v			06/13/17 18:16	724

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		1100	260	ug/m3			06/13/17 18:16	724
trans-1,2-Dichloroethene	ND		1100	290	ug/m3			06/13/17 18:16	724
Tetrachloroethene	**170000**		2000	250	ug/m3			06/13/17 18:16	724
Trichloroethene	ND		1600	410	ug/m3			06/13/17 18:16	724
Vinyl chloride	ND		740	220	ug/m3			06/13/17 18:16	724

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*		*06/13/17 18:16*	*724*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*06/13/17 18:16*	*724*
Toluene-d8 (Surr)	*99*		*70 - 130*		*06/13/17 18:16*	*724*

Client Sample ID: EW-1

Lab Sample ID: 320-28831-2

Date Collected: 06/02/17 21:47
Matrix: Air
Date Received: 06/05/17 18:15
Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		630	140	ppb v/v			06/13/17 19:02	1576
trans-1,2-Dichloroethene	ND		630	160	ppb v/v			06/13/17 19:02	1576
Tetrachloroethene	**47000**		630	80	ppb v/v			06/13/17 19:02	1576
Trichloroethene	ND		630	170	ppb v/v			06/13/17 19:02	1576
Vinyl chloride	ND		630	190	ppb v/v			06/13/17 19:02	1576

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		2500	560	ug/m3			06/13/17 19:02	1576
trans-1,2-Dichloroethene	ND		2500	620	ug/m3			06/13/17 19:02	1576
Tetrachloroethene	**320000**		4300	550	ug/m3			06/13/17 19:02	1576
Trichloroethene	ND		3400	890	ug/m3			06/13/17 19:02	1576
Vinyl chloride	ND		1600	480	ug/m3			06/13/17 19:02	1576

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*		*06/13/17 19:02*	*1576*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*06/13/17 19:02*	*1576*
Toluene-d8 (Surr)	*102*		*70 - 130*		*06/13/17 19:02*	*1576*

Client Sample ID: EP1-3IN-0M

Lab Sample ID: 320-28831-3

Date Collected: 06/03/17 11:37
Matrix: Air
Date Received: 06/05/17 18:15
Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		550	120	ppb v/v			06/13/17 19:48	1386

Client Sample ID: EP1-3IN-0M

Lab Sample ID: 320-28831-3
Matrix: Air
Date Collected: 06/03/17 11:37
Date Received: 06/05/17 18:15
Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		550	140	ppb v/v			06/13/17 19:48	1386
Tetrachloroethene	**50000**		550	71	ppb v/v			06/13/17 19:48	1386
Trichloroethene	ND		550	150	ppb v/v			06/13/17 19:48	1386
Vinyl chloride	ND		550	170	ppb v/v			06/13/17 19:48	1386

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		2200	490	ug/m3			06/13/17 19:48	1386
trans-1,2-Dichloroethene	ND		2200	550	ug/m3			06/13/17 19:48	1386
Tetrachloroethene	**340000**		3800	480	ug/m3			06/13/17 19:48	1386
Trichloroethene	ND		3000	780	ug/m3			06/13/17 19:48	1386
Vinyl chloride	ND		1400	430	ug/m3			06/13/17 19:48	1386

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*		*06/13/17 19:48*	*1386*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*06/13/17 19:48*	*1386*
Toluene-d8 (Surr)	*102*		*70 - 130*		*06/13/17 19:48*	*1386*

Client Sample ID: EP1-6IN-0M

Lab Sample ID: 320-28831-4
Matrix: Air
Date Collected: 06/03/17 12:41
Date Received: 06/05/17 18:15
Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		400	89	ppb v/v			06/13/17 20:34	999
trans-1,2-Dichloroethene	ND		400	100	ppb v/v			06/13/17 20:34	999
Tetrachloroethene	**48000**		400	51	ppb v/v			06/13/17 20:34	999
Trichloroethene	**110**	**J**	400	100	ppb v/v			06/13/17 20:34	999
Vinyl chloride	ND		400	120	ppb v/v			06/13/17 20:34	999

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		1600	350	ug/m3			06/13/17 20:34	999
trans-1,2-Dichloroethene	ND		1600	400	ug/m3			06/13/17 20:34	999
Tetrachloroethene	**330000**		2700	350	ug/m3			06/13/17 20:34	999
Trichloroethene	**620**	**J**	2100	560	ug/m3			06/13/17 20:34	999
Vinyl chloride	ND		1000	310	ug/m3			06/13/17 20:34	999

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*		*06/13/17 20:34*	*999*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*06/13/17 20:34*	*999*
Toluene-d8 (Surr)	*100*		*70 - 130*		*06/13/17 20:34*	*999*

Client Sample ID: EP1-15IN-0M

Lab Sample ID: 320-28831-5
Matrix: Air
Date Collected: 06/03/17 13:48
Date Received: 06/05/17 18:15
Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		440	98	ppb v/v			06/13/17 21:20	1105
trans-1,2-Dichloroethene	ND		440	110	ppb v/v			06/13/17 21:20	1105

Client Sample ID: EP1-15IN-0M

Lab Sample ID: 320-28831-5
Matrix: Air
Date Collected: 06/03/17 13:48
Date Received: 06/05/17 18:15
Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**50000**		440	56	ppb v/v			06/13/17 21:20	1105
Trichloroethene	ND		440	120	ppb v/v			06/13/17 21:20	1105
Vinyl chloride	ND		440	130	ppb v/v			06/13/17 21:20	1105

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		1800	390	ug/m3			06/13/17 21:20	1105
trans-1,2-Dichloroethene	ND		1800	440	ug/m3			06/13/17 21:20	1105
Tetrachloroethene	**340000**		3000	380	ug/m3			06/13/17 21:20	1105
Trichloroethene	ND		2400	620	ug/m3			06/13/17 21:20	1105
Vinyl chloride	ND		1100	340	ug/m3			06/13/17 21:20	1105

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*		*06/13/17 21:20*	*1105*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*06/13/17 21:20*	*1105*
Toluene-d8 (Surr)	*101*		*70 - 130*		*06/13/17 21:20*	*1105*

Client Sample ID: EP1-35IN-0M

Lab Sample ID: 320-28831-6
Matrix: Air
Date Collected: 06/03/17 15:04
Date Received: 06/05/17 18:15
Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		580	130	ppb v/v			06/13/17 22:05	1438
trans-1,2-Dichloroethene	ND		580	140	ppb v/v			06/13/17 22:05	1438
Tetrachloroethene	**61000**		580	73	ppb v/v			06/13/17 22:05	1438
Trichloroethene	ND		580	150	ppb v/v			06/13/17 22:05	1438
Vinyl chloride	ND		580	170	ppb v/v			06/13/17 22:05	1438

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		2300	510	ug/m3			06/13/17 22:05	1438
trans-1,2-Dichloroethene	ND		2300	570	ug/m3			06/13/17 22:05	1438
Tetrachloroethene	**410000**		3900	500	ug/m3			06/13/17 22:05	1438
Trichloroethene	ND		3100	810	ug/m3			06/13/17 22:05	1438
Vinyl chloride	ND		1500	440	ug/m3			06/13/17 22:05	1438

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*		*06/13/17 22:05*	*1438*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*06/13/17 22:05*	*1438*
Toluene-d8 (Surr)	*100*		*70 - 130*		*06/13/17 22:05*	*1438*

Client Sample ID: EP1-EXT-0M

Lab Sample ID: 320-28831-7
Matrix: Air
Date Collected: 06/03/17 18:05
Date Received: 06/05/17 18:15
Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		680	150	ppb v/v			06/13/17 22:51	1701
trans-1,2-Dichloroethene	ND		680	170	ppb v/v			06/13/17 22:51	1701
Tetrachloroethene	**58000**		680	87	ppb v/v			06/13/17 22:51	1701

Client Sample ID: EP1-EXT-0M

Lab Sample ID: 320-28831-7
Matrix: Air
Date Collected: 06/03/17 18:05
Date Received: 06/05/17 18:15
Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		680	180	ppb v/v			06/13/17 22:51	1701
Vinyl chloride	ND		680	200	ppb v/v			06/13/17 22:51	1701

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		2700	600	ug/m3			06/13/17 22:51	1701
trans-1,2-Dichloroethene	ND		2700	670	ug/m3			06/13/17 22:51	1701
Tetrachloroethene	**390000**		4600	590	ug/m3			06/13/17 22:51	1701
Trichloroethene	ND		3700	960	ug/m3			06/13/17 22:51	1701
Vinyl chloride	ND		1700	520	ug/m3			06/13/17 22:51	1701

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*		*06/13/17 22:51*	*1701*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*06/13/17 22:51*	*1701*
Toluene-d8 (Surr)	*100*		*70 - 130*		*06/13/17 22:51*	*1701*

Client Sample ID: EP1-EXT-45M

Lab Sample ID: 320-28831-8
Matrix: Air
Date Collected: 06/03/17 18:50
Date Received: 06/05/17 18:15
Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		680	150	ppb v/v			06/13/17 23:36	1691
trans-1,2-Dichloroethene	ND		680	170	ppb v/v			06/13/17 23:36	1691
Tetrachloroethene	**59000**		680	86	ppb v/v			06/13/17 23:36	1691
Trichloroethene	ND		680	180	ppb v/v			06/13/17 23:36	1691
Vinyl chloride	ND		680	200	ppb v/v			06/13/17 23:36	1691

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		2700	600	ug/m3			06/13/17 23:36	1691
trans-1,2-Dichloroethene	ND		2700	670	ug/m3			06/13/17 23:36	1691
Tetrachloroethene	**400000**		4600	580	ug/m3			06/13/17 23:36	1691
Trichloroethene	ND		3600	950	ug/m3			06/13/17 23:36	1691
Vinyl chloride	ND		1700	520	ug/m3			06/13/17 23:36	1691

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*		*06/13/17 23:36*	*1691*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*06/13/17 23:36*	*1691*
Toluene-d8 (Surr)	*102*		*70 - 130*		*06/13/17 23:36*	*1691*

Client Sample ID: IA_EP

Lab Sample ID: 320-28831-9
Matrix: Air
Date Collected: 06/03/17 19:34
Date Received: 06/05/17 18:15
Sample Container: Summa Canister 6L

Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		0.020	0.0050	ppb v/v			06/07/17 17:48	1
trans-1,2-Dichloroethene	ND		0.020	0.0050	ppb v/v			06/07/17 17:48	1
Tetrachloroethene	**0.40**		0.020	0.010	ppb v/v			06/07/17 17:48	1
Trichloroethene	ND		0.020	0.0050	ppb v/v			06/07/17 17:48	1

Client Sample ID: IA_EP

Lab Sample ID: 320-28831-9
Matrix: Air
Date Collected: 06/03/17 19:34
Date Received: 06/05/17 18:15
Sample Container: Summa Canister 6L

Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.020	0.010	ppb v/v			06/07/17 17:48	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		0.079	0.020	ug/m3			06/07/17 17:48	1
trans-1,2-Dichloroethene	ND		0.079	0.020	ug/m3			06/07/17 17:48	1
Tetrachloroethene	**2.7**		0.14	0.068	ug/m3			06/07/17 17:48	1
Trichloroethene	ND		0.11	0.027	ug/m3			06/07/17 17:48	1
Vinyl chloride	ND		0.051	0.026	ug/m3			06/07/17 17:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*		*06/07/17 17:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*119*		*70 - 130*		*06/07/17 17:48*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*06/07/17 17:48*	*1*

Client Sample ID: EP_DUP

Lab Sample ID: 320-28831-10
Matrix: Air
Date Collected: 06/03/17 20:05
Date Received: 06/05/17 18:15
Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		600	130	ppb v/v			06/14/17 00:22	1502
trans-1,2-Dichloroethene	ND		600	150	ppb v/v			06/14/17 00:22	1502
Tetrachloroethene	**46000**		600	77	ppb v/v			06/14/17 00:22	1502
Trichloroethene	ND		600	160	ppb v/v			06/14/17 00:22	1502
Vinyl chloride	ND		600	180	ppb v/v			06/14/17 00:22	1502

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		2400	530	ug/m3			06/14/17 00:22	1502
trans-1,2-Dichloroethene	ND		2400	600	ug/m3			06/14/17 00:22	1502
Tetrachloroethene	**310000**		4100	520	ug/m3			06/14/17 00:22	1502
Trichloroethene	ND		3200	850	ug/m3			06/14/17 00:22	1502
Vinyl chloride	ND		1500	460	ug/m3			06/14/17 00:22	1502

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*		*06/14/17 00:22*	*1502*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*06/14/17 00:22*	*1502*
Toluene-d8 (Surr)	*103*		*70 - 130*		*06/14/17 00:22*	*1502*

Client Sample ID: EP-EXT-120M

Lab Sample ID: 320-28831-11
Matrix: Air
Date Collected: 06/03/17 20:05
Date Received: 06/05/17 18:15
Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		590	130	ppb v/v			06/14/17 01:08	1486
trans-1,2-Dichloroethene	ND		590	150	ppb v/v			06/14/17 01:08	1486
Tetrachloroethene	**46000**		590	76	ppb v/v			06/14/17 01:08	1486
Trichloroethene	ND		590	160	ppb v/v			06/14/17 01:08	1486
Vinyl chloride	ND		590	180	ppb v/v			06/14/17 01:08	1486

Client Sample ID: EP-EXT-120M

Lab Sample ID: 320-28831-11
Matrix: Air
Date Collected: 06/03/17 20:05
Date Received: 06/05/17 18:15
Sample Container: Summa Canister 1L

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		2400	520	ug/m3			06/14/17 01:08	1486
trans-1,2-Dichloroethene	ND		2400	590	ug/m3			06/14/17 01:08	1486
Tetrachloroethene	**310000**		4000	510	ug/m3			06/14/17 01:08	1486
Trichloroethene	ND		3200	840	ug/m3			06/14/17 01:08	1486
Vinyl chloride	ND		1500	460	ug/m3			06/14/17 01:08	1486

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*		*06/14/17 01:08*	*1486*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*06/14/17 01:08*	*1486*
Toluene-d8 (Surr)	*102*		*70 - 130*		*06/14/17 01:08*	*1486*

Client Sample ID: EW1-25IN-0M

Lab Sample ID: 320-28831-13
Matrix: Air
Date Collected: 06/04/17 10:22
Date Received: 06/05/17 18:15
Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		980	220	ppb v/v			06/14/17 16:16	2460
trans-1,2-Dichloroethene	ND		980	250	ppb v/v			06/14/17 16:16	2460
Tetrachloroethene	**61000**		980	130	ppb v/v			06/14/17 16:16	2460
Trichloroethene	ND		980	260	ppb v/v			06/14/17 16:16	2460
Vinyl chloride	ND		980	300	ppb v/v			06/14/17 16:16	2460

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		3900	870	ug/m3			06/14/17 16:16	2460
trans-1,2-Dichloroethene	ND		3900	980	ug/m3			06/14/17 16:16	2460
Tetrachloroethene	**420000**		6700	850	ug/m3			06/14/17 16:16	2460
Trichloroethene	ND		5300	1400	ug/m3			06/14/17 16:16	2460
Vinyl chloride	ND		2500	750	ug/m3			06/14/17 16:16	2460

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*		*06/14/17 16:16*	*2460*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*		*06/14/17 16:16*	*2460*
Toluene-d8 (Surr)	*122*		*70 - 130*		*06/14/17 16:16*	*2460*

Client Sample ID: EW1-50IN-0M

Lab Sample ID: 320-28831-14
Matrix: Air
Date Collected: 06/04/17 11:30
Date Received: 06/05/17 18:15
Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		630	140	ppb v/v			06/14/17 17:08	1580
trans-1,2-Dichloroethene	ND		630	160	ppb v/v			06/14/17 17:08	1580
Tetrachloroethene	**38000**		630	81	ppb v/v			06/14/17 17:08	1580
Trichloroethene	ND		630	170	ppb v/v			06/14/17 17:08	1580
Vinyl chloride	ND		630	190	ppb v/v			06/14/17 17:08	1580

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		2500	560	ug/m3			06/14/17 17:08	1580
trans-1,2-Dichloroethene	ND		2500	630	ug/m3			06/14/17 17:08	1580

Client Sample ID: EW1-50IN-0M

Lab Sample ID: 320-28831-14
Matrix: Air
Date Collected: 06/04/17 11:30
Date Received: 06/05/17 18:15
Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	260000		4300	550	ug/m3			06/14/17 17:08	1580
Trichloroethene	ND		3400	890	ug/m3			06/14/17 17:08	1580
Vinyl chloride	ND		1600	480	ug/m3			06/14/17 17:08	1580

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*		*06/14/17 17:08*	*1580*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*		*06/14/17 17:08*	*1580*
Toluene-d8 (Surr)	*121*		*70 - 130*		*06/14/17 17:08*	*1580*

Client Sample ID: EW1-75IN-0M

Lab Sample ID: 320-28831-15
Matrix: Air
Date Collected: 06/04/17 12:34
Date Received: 06/05/17 18:15
Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		580	130	ppb v/v			06/14/17 18:01	1460
trans-1,2-Dichloroethene	ND		580	150	ppb v/v			06/14/17 18:01	1460
Tetrachloroethene	37000		580	74	ppb v/v			06/14/17 18:01	1460
Trichloroethene	ND		580	150	ppb v/v			06/14/17 18:01	1460
Vinyl chloride	ND		580	180	ppb v/v			06/14/17 18:01	1460

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		2300	520	ug/m3			06/14/17 18:01	1460
trans-1,2-Dichloroethene	ND		2300	580	ug/m3			06/14/17 18:01	1460
Tetrachloroethene	250000		4000	510	ug/m3			06/14/17 18:01	1460
Trichloroethene	ND		3100	820	ug/m3			06/14/17 18:01	1460
Vinyl chloride	ND		1500	450	ug/m3			06/14/17 18:01	1460

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*		*06/14/17 18:01*	*1460*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*		*06/14/17 18:01*	*1460*
Toluene-d8 (Surr)	*121*		*70 - 130*		*06/14/17 18:01*	*1460*

Client Sample ID: EW1-100IN-0M

Lab Sample ID: 320-28831-16
Matrix: Air
Date Collected: 06/04/17 13:38
Date Received: 06/05/17 18:15
Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		270	59	ppb v/v			06/14/17 18:52	668
trans-1,2-Dichloroethene	ND		270	67	ppb v/v			06/14/17 18:52	668
Trichloroethene	200	J	270	70	ppb v/v			06/14/17 18:52	668
Vinyl chloride	ND		270	80	ppb v/v			06/14/17 18:52	668

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		1100	240	ug/m3			06/14/17 18:52	668
trans-1,2-Dichloroethene	ND		1100	260	ug/m3			06/14/17 18:52	668
Trichloroethene	1100	J	1400	380	ug/m3			06/14/17 18:52	668
Vinyl chloride	ND		680	200	ug/m3			06/14/17 18:52	668

Client Sample ID: EW1-100IN-0M

Lab Sample ID: 320-28831-16
Matrix: Air
Date Collected: 06/04/17 13:38
Date Received: 06/05/17 18:15
Sample Container: Summa Canister 1L

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*		*06/14/17 18:52*	*668*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*		*06/14/17 18:52*	*668*
Toluene-d8 (Surr)	*121*		*70 - 130*		*06/14/17 18:52*	*668*

Method: TO-15 - Volatile Organic Compounds in Ambient Air - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**43000**		400	52	ppb v/v			06/15/17 08:34	1010

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**290000**		2700	350	ug/m3			06/15/17 08:34	1010

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*		*06/15/17 08:34*	*1010*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*		*06/15/17 08:34*	*1010*
Toluene-d8 (Surr)	*120*		*70 - 130*		*06/15/17 08:34*	*1010*

Client Sample ID: EW1-EXT-0M

Lab Sample ID: 320-28831-17
Matrix: Air
Date Collected: 06/04/17 15:43
Date Received: 06/05/17 18:15
Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		510	110	ppb v/v			06/14/17 19:44	1270
trans-1,2-Dichloroethene	ND		510	130	ppb v/v			06/14/17 19:44	1270
Tetrachloroethene	**31000**		510	65	ppb v/v			06/14/17 19:44	1270
Trichloroethene	**130**	**J**	510	130	ppb v/v			06/14/17 19:44	1270
Vinyl chloride	ND		510	150	ppb v/v			06/14/17 19:44	1270

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		2000	450	ug/m3			06/14/17 19:44	1270
trans-1,2-Dichloroethene	ND		2000	500	ug/m3			06/14/17 19:44	1270
Tetrachloroethene	**210000**		3400	440	ug/m3			06/14/17 19:44	1270
Trichloroethene	**720**	**J**	2700	720	ug/m3			06/14/17 19:44	1270
Vinyl chloride	ND		1300	390	ug/m3			06/14/17 19:44	1270

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*		*06/14/17 19:44*	*1270*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*		*06/14/17 19:44*	*1270*
Toluene-d8 (Surr)	*122*		*70 - 130*		*06/14/17 19:44*	*1270*

Client Sample ID: IA-EW

Lab Sample ID: 320-28831-18
Matrix: Air
Date Collected: 06/04/17 16:00
Date Received: 06/05/17 18:15
Sample Container: Summa Canister 6L

Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		0.020	0.0050	ppb v/v			06/07/17 18:44	1
trans-1,2-Dichloroethene	ND		0.020	0.0050	ppb v/v			06/07/17 18:44	1
Tetrachloroethene	**0.21**		0.020	0.010	ppb v/v			06/07/17 18:44	1
Trichloroethene	ND		0.020	0.0050	ppb v/v			06/07/17 18:44	1

Client Sample ID: IA-EW

Lab Sample ID: 320-28831-18
Matrix: Air
Date Collected: 06/04/17 16:00
Date Received: 06/05/17 18:15
Sample Container: Summa Canister 6L

Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.020	0.010	ppb v/v			06/07/17 18:44	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		0.079	0.020	ug/m3			06/07/17 18:44	1
trans-1,2-Dichloroethene	ND		0.079	0.020	ug/m3			06/07/17 18:44	1
Tetrachloroethene	**1.4**		0.14	0.068	ug/m3			06/07/17 18:44	1
Trichloroethene	ND		0.11	0.027	ug/m3			06/07/17 18:44	1
Vinyl chloride	ND		0.051	0.026	ug/m3			06/07/17 18:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*		*06/07/17 18:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*118*		*70 - 130*		*06/07/17 18:44*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*06/07/17 18:44*	*1*

Client Sample ID: EW1-EXT-45M

Lab Sample ID: 320-28831-19
Matrix: Air
Date Collected: 06/04/17 16:28
Date Received: 06/05/17 18:15
Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		480	110	ppb v/v			06/14/17 20:35	1210
trans-1,2-Dichloroethene	ND		480	120	ppb v/v			06/14/17 20:35	1210
Tetrachloroethene	**43000**		480	62	ppb v/v			06/14/17 20:35	1210
Trichloroethene	**200**	**J**	480	130	ppb v/v			06/14/17 20:35	1210
Vinyl chloride	ND		480	150	ppb v/v			06/14/17 20:35	1210

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		1900	430	ug/m3			06/14/17 20:35	1210
trans-1,2-Dichloroethene	ND		1900	480	ug/m3			06/14/17 20:35	1210
Tetrachloroethene	**290000**		3300	420	ug/m3			06/14/17 20:35	1210
Trichloroethene	**1100**	**J**	2600	680	ug/m3			06/14/17 20:35	1210
Vinyl chloride	ND		1200	370	ug/m3			06/14/17 20:35	1210

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*		*06/14/17 20:35*	*1210*
1,2-Dichloroethane-d4 (Surr)	*115*		*70 - 130*		*06/14/17 20:35*	*1210*
Toluene-d8 (Surr)	*119*		*70 - 130*		*06/14/17 20:35*	*1210*

Client Sample ID: EW1-DUP

Lab Sample ID: 320-28831-20
Matrix: Air
Date Collected: 06/04/17 17:43
Date Received: 06/05/17 18:15
Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		530	120	ppb v/v			06/14/17 21:26	1330
trans-1,2-Dichloroethene	ND		530	130	ppb v/v			06/14/17 21:26	1330
Tetrachloroethene	**38000**		530	68	ppb v/v			06/14/17 21:26	1330
Trichloroethene	**190**	**J**	530	140	ppb v/v			06/14/17 21:26	1330
Vinyl chloride	ND		530	160	ppb v/v			06/14/17 21:26	1330

Client Sample ID: EW1-DUP

Lab Sample ID: 320-28831-20

Date Collected: 06/04/17 17:43

Matrix: Air

Date Received: 06/05/17 18:15

Sample Container: Summa Canister 1L

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		2100	470	ug/m3			06/14/17 21:26	1330
trans-1,2-Dichloroethene	ND		2100	530	ug/m3			06/14/17 21:26	1330
Tetrachloroethene	**260000**		3600	460	ug/m3			06/14/17 21:26	1330
Trichloroethene	**1000**	**J**	2900	750	ug/m3			06/14/17 21:26	1330
Vinyl chloride	ND		1400	410	ug/m3			06/14/17 21:26	1330

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*		*06/14/17 21:26*	*1330*
1,2-Dichloroethane-d4 (Surr)	*115*		*70 - 130*		*06/14/17 21:26*	*1330*
Toluene-d8 (Surr)	*121*		*70 - 130*		*06/14/17 21:26*	*1330*

Client Sample ID: EW1-EXT-120M

Lab Sample ID: 320-28831-21

Date Collected: 06/04/17 17:43

Matrix: Air

Date Received: 06/05/17 18:15

Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		600	130	ppb v/v			06/14/17 22:18	1500
trans-1,2-Dichloroethene	ND		600	150	ppb v/v			06/14/17 22:18	1500
Tetrachloroethene	**40000**		600	77	ppb v/v			06/14/17 22:18	1500
Trichloroethene	**220**	**J**	600	160	ppb v/v			06/14/17 22:18	1500
Vinyl chloride	ND		600	180	ppb v/v			06/14/17 22:18	1500

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		2400	530	ug/m3			06/14/17 22:18	1500
trans-1,2-Dichloroethene	ND		2400	590	ug/m3			06/14/17 22:18	1500
Tetrachloroethene	**270000**		4100	520	ug/m3			06/14/17 22:18	1500
Trichloroethene	**1200**	**J**	3200	850	ug/m3			06/14/17 22:18	1500
Vinyl chloride	ND		1500	460	ug/m3			06/14/17 22:18	1500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*		*06/14/17 22:18*	*1500*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*		*06/14/17 22:18*	*1500*
Toluene-d8 (Surr)	*121*		*70 - 130*		*06/14/17 22:18*	*1500*

Client Sample ID: EW1-EXT-240M

Lab Sample ID: 320-28831-22

Date Collected: 06/04/17 19:43

Matrix: Air

Date Received: 06/05/17 18:15

Sample Container: Summa Canister 1L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		590	130	ppb v/v			06/14/17 23:09	1470
trans-1,2-Dichloroethene	ND		590	150	ppb v/v			06/14/17 23:09	1470
Tetrachloroethene	**38000**		590	75	ppb v/v			06/14/17 23:09	1470
Trichloroethene	**200**	**J**	590	150	ppb v/v			06/14/17 23:09	1470
Vinyl chloride	ND		590	180	ppb v/v			06/14/17 23:09	1470

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		2300	520	ug/m3			06/14/17 23:09	1470
trans-1,2-Dichloroethene	ND		2300	580	ug/m3			06/14/17 23:09	1470

Client: Geosyntec Consultants, Inc.
Project/Site: VI Monitoring

TestAmerica Job ID: 320-28831-1

Client Sample ID: EW1-EXT-240M
Date Collected: 06/04/17 19:43
Date Received: 06/05/17 18:15
Sample Container: Summa Canister 1L

Lab Sample ID: 320-28831-22
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	250000		4000	510	ug/m3			06/14/17 23:09	1470
Trichloroethene	1100	J	3200	830	ug/m3			06/14/17 23:09	1470
Vinyl chloride	ND		1500	450	ug/m3			06/14/17 23:09	1470

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*		*06/14/17 23:09*	*1470*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*		*06/14/17 23:09*	*1470*
Toluene-d8 (Surr)	*120*		*70 - 130*		*06/14/17 23:09*	*1470*

Surrogate Summary

Client: Geosyntec Consultants, Inc.
Project/Site: VI Monitoring

TestAmerica Job ID: 320-28831-1

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Matrix: Air **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	12DCE	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)
320-28831-1	EP-1	106	103	99
320-28831-2	EW-1	109	105	102
320-28831-3	EP1-3IN-0M	107	105	102
320-28831-4	EP1-6IN-0M	109	102	100
320-28831-5	EP1-15IN-0M	111	103	101
320-28831-6	EP1-35IN-0M	111	105	100
320-28831-7	EP1-EXT-0M	111	104	100
320-28831-8	EP1-EXT-45M	110	104	102
320-28831-10	EP_DUP	112	104	103
320-28831-11	EP-EXT-120M	111	104	102
320-28831-13	EW1-25IN-0M	119	113	122
320-28831-14	EW1-50IN-0M	117	112	121
320-28831-15	EW1-75IN-0M	120	113	121
320-28831-16	EW1-100IN-0M	121	112	121
320-28831-16 - DL	EW1-100IN-0M	116	112	120
320-28831-17	EW1-EXT-0M	118	114	122
320-28831-19	EW1-EXT-45M	116	115	119
320-28831-20	EW1-DUP	120	115	121
320-28831-21	EW1-EXT-120M	117	112	121
320-28831-22	EW1-EXT-240M	116	114	120
LCS 320-169100/4	Lab Control Sample	118	107	112
LCS 320-169200/3	Lab Control Sample	120	110	117
LCSD 320-169100/5	Lab Control Sample Dup	116	108	107
LCSD 320-169200/4	Lab Control Sample Dup	121	107	115
MB 320-169100/7	Method Blank	117	99	95
MB 320-169200/6	Method Blank	120	108	119

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Matrix: Air **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	12DCE	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)
320-28831-9	IA_EP	109	119	102
320-28831-18	IA-EW	107	118	100
LCS 320-168049/3	Lab Control Sample	109	118	100
LCSD 320-168049/4	Lab Control Sample Dup	110	117	101
MB 320-168049/6	Method Blank	101	119	99

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Lab Sample ID: MB 320-169100/7
Matrix: Air
Analysis Batch: 169100

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		0.40	0.089	ppb v/v			06/13/17 17:29	1
trans-1,2-Dichloroethene	ND		0.40	0.10	ppb v/v			06/13/17 17:29	1
Tetrachloroethene	ND		0.40	0.051	ppb v/v			06/13/17 17:29	1
Trichloroethene	ND		0.40	0.11	ppb v/v			06/13/17 17:29	1
Vinyl chloride	ND		0.40	0.12	ppb v/v			06/13/17 17:29	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		1.6	0.35	ug/m3			06/13/17 17:29	1
trans-1,2-Dichloroethene	ND		1.6	0.40	ug/m3			06/13/17 17:29	1
Tetrachloroethene	ND		2.7	0.35	ug/m3			06/13/17 17:29	1
Trichloroethene	ND		2.1	0.56	ug/m3			06/13/17 17:29	1
Vinyl chloride	ND		1.0	0.31	ug/m3			06/13/17 17:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*		*06/13/17 17:29*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*06/13/17 17:29*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*06/13/17 17:29*	*1*

Lab Sample ID: LCS 320-169100/4
Matrix: Air
Analysis Batch: 169100

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene	20.0	19.6		ppb v/v		98	68 - 128
trans-1,2-Dichloroethene	20.0	21.5		ppb v/v		107	70 - 130
Tetrachloroethene	20.0	19.8		ppb v/v		99	56 - 138
Trichloroethene	20.0	23.8		ppb v/v		119	64 - 127
Vinyl chloride	20.0	22.0		ppb v/v		110	69 - 129

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene	79	77.9		ug/m3		98	68 - 128
trans-1,2-Dichloroethene	79	85.1		ug/m3		107	70 - 130
Tetrachloroethene	140	134		ug/m3		99	56 - 138
Trichloroethene	110	128		ug/m3		119	64 - 127
Vinyl chloride	51	56.3		ug/m3		110	69 - 129

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*
Toluene-d8 (Surr)	*112*		*70 - 130*

Lab Sample ID: LCSD 320-169100/5
Matrix: Air
Analysis Batch: 169100

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	20.0	19.6		ppb v/v		98	68 - 128	0	25

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCSD 320-169100/5
Matrix: Air
Analysis Batch: 169100

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-1,2-Dichloroethene			20.0	21.1		ppb v/v		106	70 - 130	2	25
Tetrachloroethene			20.0	18.1		ppb v/v		90	56 - 138	9	25
Trichloroethene			20.0	23.2		ppb v/v		116	64 - 127	3	25
Vinyl chloride			20.0	21.3		ppb v/v		107	69 - 129	3	25

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene			79	77.6		ug/m3		98	68 - 128	0	25
trans-1,2-Dichloroethene			79	83.7		ug/m3		106	70 - 130	2	25
Tetrachloroethene			140	123		ug/m3		90	56 - 138	9	25
Trichloroethene			110	125		ug/m3		116	64 - 127	3	25
Vinyl chloride			51	54.5		ug/m3		107	69 - 129	3	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*
Toluene-d8 (Surr)	*107*		*70 - 130*

Lab Sample ID: MB 320-169200/6
Matrix: Air
Analysis Batch: 169200

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		0.40	0.089	ppb v/v			06/14/17 14:04	1
trans-1,2-Dichloroethene	ND		0.40	0.10	ppb v/v			06/14/17 14:04	1
Tetrachloroethene	ND		0.40	0.051	ppb v/v			06/14/17 14:04	1
Trichloroethene	ND		0.40	0.11	ppb v/v			06/14/17 14:04	1
Vinyl chloride	ND		0.40	0.12	ppb v/v			06/14/17 14:04	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		1.6	0.35	ug/m3			06/14/17 14:04	1
trans-1,2-Dichloroethene	ND		1.6	0.40	ug/m3			06/14/17 14:04	1
Tetrachloroethene	ND		2.7	0.35	ug/m3			06/14/17 14:04	1
Trichloroethene	ND		2.1	0.56	ug/m3			06/14/17 14:04	1
Vinyl chloride	ND		1.0	0.31	ug/m3			06/14/17 14:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*		*06/14/17 14:04*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*		*06/14/17 14:04*	*1*
Toluene-d8 (Surr)	*119*		*70 - 130*		*06/14/17 14:04*	*1*

Lab Sample ID: LCS 320-169200/3
Matrix: Air
Analysis Batch: 169200

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene			20.0	18.8		ppb v/v		94	68 - 128
trans-1,2-Dichloroethene			20.0	18.3		ppb v/v		91	70 - 130
Tetrachloroethene			20.0	16.6		ppb v/v		83	56 - 138

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 320-169200/3
Matrix: Air
Analysis Batch: 169200

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichloroethene	20.0	19.7		ppb v/v		99	64 - 127
Vinyl chloride	20.0	19.3		ppb v/v		96	69 - 129

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene	79	74.4		ug/m3		94	68 - 128
trans-1,2-Dichloroethene	79	72.4		ug/m3		91	70 - 130
Tetrachloroethene	140	112		ug/m3		83	56 - 138
Trichloroethene	110	106		ug/m3		99	64 - 127
Vinyl chloride	51	49.3		ug/m3		96	69 - 129

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*
Toluene-d8 (Surr)	*117*		*70 - 130*

Lab Sample ID: LCSD 320-169200/4
Matrix: Air
Analysis Batch: 169200

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	20.0	18.4		ppb v/v		92	68 - 128	2	25
trans-1,2-Dichloroethene	20.0	17.9		ppb v/v		90	70 - 130	2	25
Tetrachloroethene	20.0	16.3		ppb v/v		82	56 - 138	1	25
Trichloroethene	20.0	19.6		ppb v/v		98	64 - 127	1	25
Vinyl chloride	20.0	18.6		ppb v/v		93	69 - 129	4	25

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	79	72.9		ug/m3		92	68 - 128	2	25
trans-1,2-Dichloroethene	79	71.1		ug/m3		90	70 - 130	2	25
Tetrachloroethene	140	111		ug/m3		82	56 - 138	1	25
Trichloroethene	110	105		ug/m3		98	64 - 127	1	25
Vinyl chloride	51	47.5		ug/m3		93	69 - 129	4	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*
Toluene-d8 (Surr)	*115*		*70 - 130*

Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Lab Sample ID: MB 320-168049/6
Matrix: Air
Analysis Batch: 168049

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		0.020	0.0050	ppb v/v			06/07/17 15:30	1
trans-1,2-Dichloroethene	ND		0.020	0.0050	ppb v/v			06/07/17 15:30	1

Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 320-168049/6
Matrix: Air
Analysis Batch: 168049

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.020	0.010	ppb v/v			06/07/17 15:30	1
Trichloroethene	ND		0.020	0.0050	ppb v/v			06/07/17 15:30	1
Vinyl chloride	ND		0.020	0.010	ppb v/v			06/07/17 15:30	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		0.079	0.020	ug/m3			06/07/17 15:30	1
trans-1,2-Dichloroethene	ND		0.079	0.020	ug/m3			06/07/17 15:30	1
Tetrachloroethene	ND		0.14	0.068	ug/m3			06/07/17 15:30	1
Trichloroethene	ND		0.11	0.027	ug/m3			06/07/17 15:30	1
Vinyl chloride	ND		0.051	0.026	ug/m3			06/07/17 15:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*06/07/17 15:30*	*1*
1,2-Dichloroethane-d4 (Surr)	*119*		*70 - 130*		*06/07/17 15:30*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*06/07/17 15:30*	*1*

Lab Sample ID: LCS 320-168049/3
Matrix: Air
Analysis Batch: 168049

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene	1.20	1.11		ppb v/v		92	75 - 136
trans-1,2-Dichloroethene	1.20	1.11		ppb v/v		92	75 - 136
Tetrachloroethene	1.20	1.20		ppb v/v		100	70 - 126
Trichloroethene	1.20	1.19		ppb v/v		99	70 - 130
Vinyl chloride	1.20	1.25		ppb v/v		104	66 - 142

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene	4.8	4.40		ug/m3		92	75 - 136
trans-1,2-Dichloroethene	4.8	4.40		ug/m3		92	75 - 136
Tetrachloroethene	8.1	8.13		ug/m3		100	70 - 126
Trichloroethene	6.4	6.37		ug/m3		99	70 - 130
Vinyl chloride	3.1	3.19		ug/m3		104	66 - 142

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*118*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 320-168049/4
Matrix: Air
Analysis Batch: 168049

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	1.20	1.17		ppb v/v		97	75 - 136	5	25
trans-1,2-Dichloroethene	1.20	1.17		ppb v/v		97	75 - 136	5	25

Method: TO-15 SIM - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCSD 320-168049/4
Matrix: Air
Analysis Batch: 168049

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Tetrachloroethene			1.20	1.24		ppb v/v		103	70 - 126	3	25
Trichloroethene			1.20	1.25		ppb v/v		104	70 - 130	5	25
Vinyl chloride			1.20	1.35		ppb v/v		112	66 - 142	8	25

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene			4.8	4.62		ug/m3		97	75 - 136	5	25
trans-1,2-Dichloroethene			4.8	4.63		ug/m3		97	75 - 136	5	25
Tetrachloroethene			8.1	8.41		ug/m3		103	70 - 126	3	25
Trichloroethene			6.4	6.72		ug/m3		104	70 - 130	5	25
Vinyl chloride			3.1	3.44		ug/m3		112	66 - 142	8	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Air - GC/MS VOA

Analysis Batch: 168049

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-28831-9	IA_EP	Total/NA	Air	TO-15 SIM	
320-28831-18	IA-EW	Total/NA	Air	TO-15 SIM	
MB 320-168049/6	Method Blank	Total/NA	Air	TO-15 SIM	
LCS 320-168049/3	Lab Control Sample	Total/NA	Air	TO-15 SIM	
LCSD 320-168049/4	Lab Control Sample Dup	Total/NA	Air	TO-15 SIM	

Analysis Batch: 169100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-28831-1	EP-1	Total/NA	Air	TO-15	
320-28831-2	EW-1	Total/NA	Air	TO-15	
320-28831-3	EP1-3IN-0M	Total/NA	Air	TO-15	
320-28831-4	EP1-6IN-0M	Total/NA	Air	TO-15	
320-28831-5	EP1-15IN-0M	Total/NA	Air	TO-15	
320-28831-6	EP1-35IN-0M	Total/NA	Air	TO-15	
320-28831-7	EP1-EXT-0M	Total/NA	Air	TO-15	
320-28831-8	EP1-EXT-45M	Total/NA	Air	TO-15	
320-28831-10	EP_DUP	Total/NA	Air	TO-15	
320-28831-11	EP-EXT-120M	Total/NA	Air	TO-15	
MB 320-169100/7	Method Blank	Total/NA	Air	TO-15	
LCS 320-169100/4	Lab Control Sample	Total/NA	Air	TO-15	
LCSD 320-169100/5	Lab Control Sample Dup	Total/NA	Air	TO-15	

Analysis Batch: 169200

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-28831-13	EW1-25IN-0M	Total/NA	Air	TO-15	
320-28831-14	EW1-50IN-0M	Total/NA	Air	TO-15	
320-28831-15	EW1-75IN-0M	Total/NA	Air	TO-15	
320-28831-16	EW1-100IN-0M	Total/NA	Air	TO-15	
320-28831-16 - DL	EW1-100IN-0M	Total/NA	Air	TO-15	
320-28831-17	EW1-EXT-0M	Total/NA	Air	TO-15	
320-28831-19	EW1-EXT-45M	Total/NA	Air	TO-15	
320-28831-20	EW1-DUP	Total/NA	Air	TO-15	
320-28831-21	EW1-EXT-120M	Total/NA	Air	TO-15	
320-28831-22	EW1-EXT-240M	Total/NA	Air	TO-15	
MB 320-169200/6	Method Blank	Total/NA	Air	TO-15	
LCS 320-169200/3	Lab Control Sample	Total/NA	Air	TO-15	
LCSD 320-169200/4	Lab Control Sample Dup	Total/NA	Air	TO-15	

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: VI Monitoring

TestAmerica Job ID: 320-28831-1

Client Sample ID: EP-1
Date Collected: 06/02/17 20:50
Date Received: 06/05/17 18:15

Lab Sample ID: 320-28831-1
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		724	0.7 mL	250 mL	169100	06/13/17 18:16	AP1	TAL SAC

Client Sample ID: EW-1
Date Collected: 06/02/17 21:47
Date Received: 06/05/17 18:15

Lab Sample ID: 320-28831-2
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1576	0.3 mL	250 mL	169100	06/13/17 19:02	AP1	TAL SAC

Client Sample ID: EP1-3IN-0M
Date Collected: 06/03/17 11:37
Date Received: 06/05/17 18:15

Lab Sample ID: 320-28831-3
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1386	0.4 mL	250 mL	169100	06/13/17 19:48	AP1	TAL SAC

Client Sample ID: EP1-6IN-0M
Date Collected: 06/03/17 12:41
Date Received: 06/05/17 18:15

Lab Sample ID: 320-28831-4
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		999	0.5 mL	250 mL	169100	06/13/17 20:34	AP1	TAL SAC

Client Sample ID: EP1-15IN-0M
Date Collected: 06/03/17 13:48
Date Received: 06/05/17 18:15

Lab Sample ID: 320-28831-5
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1105	0.45 mL	250 mL	169100	06/13/17 21:20	AP1	TAL SAC

Client Sample ID: EP1-35IN-0M
Date Collected: 06/03/17 15:04
Date Received: 06/05/17 18:15

Lab Sample ID: 320-28831-6
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1438	0.35 mL	250 mL	169100	06/13/17 22:05	AP1	TAL SAC

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: VI Monitoring

TestAmerica Job ID: 320-28831-1

Client Sample ID: EP1-EXT-0M — Lab Sample ID: 320-28831-7

Date Collected: 06/03/17 18:05 — **Matrix: Air**
Date Received: 06/05/17 18:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1701	0.3 mL	250 mL	169100	06/13/17 22:51	AP1	TAL SAC

Client Sample ID: EP1-EXT-45M — Lab Sample ID: 320-28831-8

Date Collected: 06/03/17 18:50 — **Matrix: Air**
Date Received: 06/05/17 18:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1691	0.3 mL	250 mL	169100	06/13/17 23:36	AP1	TAL SAC

Client Sample ID: IA_EP — Lab Sample ID: 320-28831-9

Date Collected: 06/03/17 19:34 — **Matrix: Air**
Date Received: 06/05/17 18:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15 SIM		1	730 mL	500 mL	168049	06/07/17 17:48	AMAO	TAL SAC

Client Sample ID: EP_DUP — Lab Sample ID: 320-28831-10

Date Collected: 06/03/17 20:05 — **Matrix: Air**
Date Received: 06/05/17 18:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1502	0.344 mL	250 mL	169100	06/14/17 00:22	AP1	TAL SAC

Client Sample ID: EP-EXT-120M — Lab Sample ID: 320-28831-11

Date Collected: 06/03/17 20:05 — **Matrix: Air**
Date Received: 06/05/17 18:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1486	0.35 mL	250 mL	169100	06/14/17 01:08	AP1	TAL SAC

Client Sample ID: EW1-25IN-0M — Lab Sample ID: 320-28831-13

Date Collected: 06/04/17 10:22 — **Matrix: Air**
Date Received: 06/05/17 18:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		2460	0.2 mL	250 mL	169200	06/14/17 16:16	AP1	TAL SAC

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: VI Monitoring

TestAmerica Job ID: 320-28831-1

Client Sample ID: EW1-50IN-0M — Lab Sample ID: 320-28831-14

Date Collected: 06/04/17 11:30 — **Matrix: Air**
Date Received: 06/05/17 18:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1580	0.33 mL	250 mL	169200	06/14/17 17:08	AP1	TAL SAC

Client Sample ID: EW1-75IN-0M — Lab Sample ID: 320-28831-15

Date Collected: 06/04/17 12:34 — **Matrix: Air**
Date Received: 06/05/17 18:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1460	0.33 mL	250 mL	169200	06/14/17 18:01	AP1	TAL SAC

Client Sample ID: EW1-100IN-0M — Lab Sample ID: 320-28831-16

Date Collected: 06/04/17 13:38 — **Matrix: Air**
Date Received: 06/05/17 18:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		668	0.85 mL	250 mL	169200	06/14/17 18:52	AP1	TAL SAC
Total/NA	Analysis	TO-15	DL	1010	0.56 mL	250 mL	169200	06/15/17 08:34	AP1	TAL SAC

Client Sample ID: EW1-EXT-0M — Lab Sample ID: 320-28831-17

Date Collected: 06/04/17 15:43 — **Matrix: Air**
Date Received: 06/05/17 18:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1270	0.37 mL	250 mL	169200	06/14/17 19:44	AP1	TAL SAC

Client Sample ID: IA-EW — Lab Sample ID: 320-28831-18

Date Collected: 06/04/17 16:00 — **Matrix: Air**
Date Received: 06/05/17 18:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15 SIM		1	665 mL	500 mL	168049	06/07/17 18:44	AMAO	TAL SAC

Client Sample ID: EW1-EXT-45M — Lab Sample ID: 320-28831-19

Date Collected: 06/04/17 16:28 — **Matrix: Air**
Date Received: 06/05/17 18:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1210	0.47 mL	250 mL	169200	06/14/17 20:35	AP1	TAL SAC

Client Sample ID: EW1-DUP

Lab Sample ID: 320-28831-20

Date Collected: 06/04/17 17:43

Matrix: Air

Date Received: 06/05/17 18:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1330	0.44 mL	250 mL	169200	06/14/17 21:26	AP1	TAL SAC

Client Sample ID: EW1-EXT-120M

Lab Sample ID: 320-28831-21

Date Collected: 06/04/17 17:43

Matrix: Air

Date Received: 06/05/17 18:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1500	0.38 mL	250 mL	169200	06/14/17 22:18	AP1	TAL SAC

Client Sample ID: EW1-EXT-240M

Lab Sample ID: 320-28831-22

Date Collected: 06/04/17 19:43

Matrix: Air

Date Received: 06/05/17 18:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1470	0.39 mL	250 mL	169200	06/14/17 23:09	AP1	TAL SAC

Laboratory References:

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc.
Project/Site: VI Monitoring

TestAmerica Job ID: 320-28831-1

Laboratory: TestAmerica Sacramento

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska (UST)	State Program	10	UST-055	12-18-17
Arizona	State Program	9	AZ0708	08-11-18
Arkansas DEQ	State Program	6	88-0691	06-17-18
California	State Program	9	2897	01-31-18
Colorado	State Program	8	CA00044	08-31-17
Connecticut	State Program	1	PH-0691	06-30-19
Florida	NELAP	4	E87570	06-30-17
Hawaii	State Program	9	N/A	01-29-18
Illinois	NELAP	5	200060	03-17-18
Kansas	NELAP	7	E-10375	10-31-17
L-A-B	DoD ELAP		L2468	01-20-18
Louisiana	NELAP	6	30612	06-30-17
Maine	State Program	1	CA0004	04-18-18
Michigan	State Program	5	9947	01-31-18
Nevada	State Program	9	CA00044	07-31-17
New Hampshire	NELAP	1	2997	04-18-18
New Jersey	NELAP	2	CA005	06-30-17
New York	NELAP	2	11666	04-01-18
Oregon	NELAP	10	4040	01-28-18
Pennsylvania	NELAP	3	68-01272	03-31-18
Texas	NELAP	6	T104704399	05-31-18
US Fish & Wildlife	Federal		LE148388-0	10-31-17
USDA	Federal		P330-11-00436	12-30-17
USEPA UCMR	Federal	1	CA00044	11-06-18
Utah	NELAP	8	CA00044	02-28-18
Virginia	NELAP	3	460278	03-14-18
Washington	State Program	10	C581	05-05-18
West Virginia (DW)	State Program	3	9930C	12-31-17
Wyoming	State Program	8	8TMS-L	01-29-17 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: VI Monitoring

TestAmerica Job ID: 320-28831-1

Method	Method Description	Protocol	Laboratory
TO-15	Volatile Organic Compounds in Ambient Air	EPA	TAL SAC
TO-15 SIM	Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)	EPA-21	TAL SAC

Protocol References:

EPA = US Environmental Protection Agency

EPA-21 = "Compendium Of Methods For The Determination Of Toxic Organic Compounds In Ambient Air", Second Edition, EPA/625/R-96/010B, January 1999

Laboratory References:

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: VI Monitoring

TestAmerica Job ID: 320-28831-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-28831-1	EP-1	Air	06/02/17 20:50	06/05/17 18:15
320-28831-2	EW-1	Air	06/02/17 21:47	06/05/17 18:15
320-28831-3	EP1-3IN-0M	Air	06/03/17 11:37	06/05/17 18:15
320-28831-4	EP1-6IN-0M	Air	06/03/17 12:41	06/05/17 18:15
320-28831-5	EP1-15IN-0M	Air	06/03/17 13:48	06/05/17 18:15
320-28831-6	EP1-35IN-0M	Air	06/03/17 15:04	06/05/17 18:15
320-28831-7	EP1-EXT-0M	Air	06/03/17 18:05	06/05/17 18:15
320-28831-8	EP1-EXT-45M	Air	06/03/17 18:50	06/05/17 18:15
320-28831-9	IA_EP	Air	06/03/17 19:34	06/05/17 18:15
320-28831-10	EP_DUP	Air	06/03/17 20:05	06/05/17 18:15
320-28831-11	EP-EXT-120M	Air	06/03/17 20:05	06/05/17 18:15
320-28831-13	EW1-25IN-0M	Air	06/04/17 10:22	06/05/17 18:15
320-28831-14	EW1-50IN-0M	Air	06/04/17 11:30	06/05/17 18:15
320-28831-15	EW1-75IN-0M	Air	06/04/17 12:34	06/05/17 18:15
320-28831-16	EW1-100IN-0M	Air	06/04/17 13:38	06/05/17 18:15
320-28831-17	EW1-EXT-0M	Air	06/04/17 15:43	06/05/17 18:15
320-28831-18	IA-EW	Air	06/04/17 16:00	06/05/17 18:15
320-28831-19	EW1-EXT-45M	Air	06/04/17 16:28	06/05/17 18:15
320-28831-20	EW1-DUP	Air	06/04/17 17:43	06/05/17 18:15
320-28831-21	EW1-EXT-120M	Air	06/04/17 17:43	06/05/17 18:15
320-28831-22	EW1-EXT-240M	Air	06/04/17 19:43	06/05/17 18:15

TestAmerica Sacramento
880 Riverside Parkway

West Sacramento, CA 95605
phone 916.374.4378 fax 916.372.1059

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact Information	**Project Manager:** NAVARRO, KARINA	**Samples Collected By:** G. OMINSKIY
Company Name: GEOSYNTEC	**Phone:** 510-285-2727	COC No: 1 of 3 COCs
Address: 1111 BROADWAY	**Email:** KNAVARRO@GEOSYNTEC.COM	
City/State/Zip OAKLAND, CA		For Lab Use Only:
Phone: 510-285-2700	**Site Contact:** G. OMINSKIY	Walk-in Client:
FAX: —	**TA Contact:**	Lab Sampling:
Project Name: 2101 WILLIAMS	**Anaylsis Turnaround Time**	Job / SDG No.:
Site/Location: " "	Standard (Specific): 10-DAY	(See below for Add'l Items)
PO# WR2292	Rush (Specifiy):	

Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, 'Hg (Start)'	Canister Vacuum in Field, 'Hg (Stop)'	Flow Controller ID	Canister ID	TO-15 (Med / (Std) / Low / SIM)	MA-APH	EPA 3C	EPA 25C / 25.3	ASTM D-1946 / 1945 / 3588	EPA 15/16	TO-3	Other (Please specify in notes section)	Sample Type	Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
EP-1	6/2/17	2045	2050	>30	5.0	7121	0964	X											X			
(1) EW-1	6/2/17	2141	2147	>30	2.5	7670	0642	X											X			
EP1-3N-0M	6/3/17	1137	1137	>30	6.0	—	0665	X											X			
EP1-6N-0M	" "	1241	1241	>30	4.0	—	0335	X											X			
EP1-15N-0M	" "	1348	1348	>30	4.0	—	1074	X											X			
EP1-35N-0M	" "	1504	1504	>30	3.0	—	1246	X											X			
EP1-EXT-0M	" "	1805	1805	>30	4.0	—	0602	X											X			
EP1-EXT-45M	" "	1850	1850	>30	4.10	—	1186	X											X			
IA-EP	" "	1100	1934	>30	2.2	8855	2146	X									X					TO-15 SIM
EP-DUP	" "	2005	2005	>30	5.0	—	8442	X									~~X~~		X			

GW

Temperature (Fahrenheit)			
Start	Interior	Ambient	
Stop			

Temperature (Fahrenheit)			
Start	Interior	Ambient	
Stop			

320-28831 Chain of Custody

Special Instructions/QC Requirements & Comments:

(1) Canister added to 34000645 @ 6/6/17

Samples Shipped by:	**Date / Time:**	**Samples Received by:**
Samples Relinquished by: G. OMINSKIY	**Date / Time:** 6/5/17 1105	**Received by:**
Relinquished by:	**Date / Time:** 6/5/17 1220	**Received by:** 6/5/17 1220
Lab Use Only: **Shipper Name:**	**Opened by:**	**Condition:**

6/5/17 1815

@ Rec'd: 6/5/17 1815

Form No. CA-C-WI-003, Rev. 1, dated 05/10/2013

TestAmerica Sacramento
880 Riverside Parkway

West Sacramento, CA 95605
phone 916.374.4378 fax 916.372.1059

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact Information	Project Manager: NAVARRO, KARINA	Samples Collected By: G. UMINSKIY	COC No: 2 of 3 COCs
Company Name: GEOSYNTEC	Phone: 510-285-2727		
Address: 1111 BROADWAY	Email: KNAVARRO@GEOSYNTEC.COM		For Lab Use Only:
City/State/Zip: OAKLAND, CA			Walk-in Client:
Phone: 510-285-2700	Site Contact: G. UMINSKIY		Lab Sampling:
FAX: —	TA Contact:		
Project Name: 2101 WILLIAMS	Anaylsis Turnaround Time		Job / SDG No.:
Site/Location: — "	Standard (Specific): 10-DAY		
PO# LJR2292	Rush (Specifiy):		(See below for Add'l Items)

Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, 'Hg (Start)'	Canister Vacuum in Field, 'Hg (Stop)'	Flow Controller ID	Canister ID	TO-15 (Med / Std / Low / SIM)	MA-APH	EPA 3C	EPA 25C / 25.3	ASTM D-1946 / 1945 / 3588	EPA 15/16	TO-3	Other (Please specify in notes section)	Sample Type	Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
EP-EXT-120M	6/3/17	2005	2005	>30	5.0	—	0754	X											X			
EP1-EXT-180M	"	2105	2105	>30	5.0	—	0746	X											X			
EW1-25IN-0M	6/4/17	1022	1022	>30	4.0	—	1629	X											X			
~~EW1-25~~ (?)																						
EW1-50IN-0M	6/4/17	1130	1130	>30	5.0	—	0959	X											X			
EW1-75IN-0M	"	1234	1234	>30	2.5	—	0322	X											X			
EW1-100IN-0M	"	1338	1338	>30	7.4	—	0503	X											X			
EW1-EXT-0M	"	1543	1543	>30	2.7	—	1053	X											X			
IA-EW	"	1020	~~1400~~ 1600(?)	>30	0	8866	0124	X									X					TO-15 SIM
(1) EW1-EXT-45M	"	1628	1628	>30	7.2	—	0678	X											X			

Temperature (Fahrenheit)		
Start	Interior	Ambient
Stop		

Temperature (Fahrenheit)		
Start	Interior	Ambient
Stop		

Special Instructions/QC Requirements & Comments:
(1) There is no sample Info on sample TAG @ 6/6/17

Samples Shipped by:	Date / Time:	Samples Received by:
Samples Relinquished by: G. UMINSKIY	Date / Time: 6/5/17 1105	Received by: [signature]
Relinquished by: [signature]	Date / Time: 6/5/17 1220	Received by: [signature] 6/5/17 1220
Lab Use Only: Shipper Name:	Opened by:	Condition:

[signature] 6/5/17 1815

Rec'd: [signature] 7.E [signature] 6/5/17 1815

Form No. CA-C-WI-003, Rev. 1, dated 05/10/2013

TestAmerica Sacramento
880 Riverside Parkway

West Sacramento, CA 95605
phone 916.374.4378 fax 916.372.1059

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact Information	Project Manager: NAVARRO, KARINA	Samples Collected By: G. UMINSKIY	COC No:
Company Name: GEOSYNTEC	Phone: 510-285-2727		3 of 3 COCs
Address: 1111 BROADWAY	Email: KNAVARRO@GEOSYNTEC.COM		
City/State/Zip OAKLAND CA			For Lab Use Only:
Phone: 510-285-2700	Site Contact: G. UMINSKIY		Walk-in Client:
FAX: —	TA Contact:		Lab Sampling:
Project Name: 7101 WILLIAMS	Anaylsis Turnaround Time		Job / SDG No.:
Site/Location: " "	Standard (Specific): 10 DAY		(See below for Add'l Items)
P O # W22292	Rush (Specifiy):		

Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, 'Hg (Start)'	Canister Vacuum in Field, 'Hg (Stop)'	Flow Controller ID	Canister ID	TO-15 (Mod / Std / Low / SIM)	MA-APH	EPA 3C	EPA 25C / 25.3	ASTM D-1946 / 1945 / 3588	EPA 15/16	TO-3	Other (Please specify in notes section)	Sample Type	Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
EW1-DUP	6/4/17	1743	1743	>30	7.2	—	1796	X											X			
EW1-EXT-120M	" "	1743	1743	>30	7.2	—	0229	X											X			
EW1-EXT-240M	" "	1943	1943	>30	7.2	—	0641	X											X			
GW																						

	Temperature (Fahrenheit)		
Start	Interior	Ambient	
Stop			

	Temperature (Fahrenheit)		
Start	Interior	Ambient	
Stop			

Special Instructions/QC Requirements & Comments:

Samples Shipped by:	Date / Time:	Samples Received by:	
Samples Relinquished by: G. UMINSKIY	Date / Time: 6/5/17 1105	Received by:	
Relinquished by:	Date / Time: 6/5/17 1220	Received by: 6/5/17 1220	
Lab Use Only: Shipper Name:	Opened by:	Condition:	

6/5/17 1815

Recd: 6/5/17 1815

Form No. CA-C-WI-003, Rev. 1, dated 05/10/2013

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CANISTER FIELD DATA RECORD

Sacramento

JOB # 320-28831
Sample # 1

Client/Project:		VFR ID:		
Canister Serial #:	34000964	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD				
READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY			
READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	12.22	06/08/17	AO
FINAL PRESSURE (PSIA)	24.71	06/08/17	AO
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor = 2.02			

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			2.02		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

Date	Instr.	File #
6/13/2017	ATMS11	

Canister DF = 2.02 X Load DF = 3.5714286 X Bag DF = 100.27 = FINAL DF 724.1266367
250 BVf (mLs) 100.27
70 Bvi (mLs) 1

Date	Instr.	File #

Canister DF = 2.02 X Load DF = #DIV/0! X Bag DF = 1 = FINAL DF #DIV/0!
LVf (mLs) BVf (mLs)
LVi (mLs) Bvi (mLs)

Date	Instr.	File #

Canister DF = 2.02 X Load DF = #DIV/0! X Bag DF = 1 = FINAL DF #DIV/0!
LVf (mLs) BVf (mLs)
LVi (mLs) Bvi (mLs)

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CANISTER FIELD DATA RECORD

Sacramento

JOB # 320-28831
Sample # 2

Client/Project:		VFR ID:		
Canister Serial #:	34000645	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD				
READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY			
READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	13.40	06/08/17	AO
FINAL PRESSURE (PSIA)	25.32	06/08/17	AO
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor = 1.89			

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			1.89		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

Date	Instr.	File #
6/13/2017	ATMS11	

Canister DF = 1.89 X Load DF = 8.3333333 X Bag DF = 100.1 = FINAL DF 1576.201493
250 BVf (mLs) 100.1
30 Bvi (mLs) 1

Date	Instr.	File #

Canister DF = 1.89 X Load DF = #DIV/0! X Bag DF = 1 = FINAL DF #DIV/0!
LVf (mLs) BVf (mLs)
LVi (mLs) Bvi (mLs)

Date	Instr.	File #

Canister DF = 1.89 X Load DF = #DIV/0! X Bag DF = 1 = FINAL DF #DIV/0!
LVf (mLs) BVf (mLs)
LVi (mLs) Bvi (mLs)

CANISTER FIELD DATA RECORD

Sacramento

JOB # 320-28831
Sample # 3

Client/Project:		VFR ID:		
Canister Serial #:	34000665	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD				
READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY			
READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	11.72	06/08/17	AO
FINAL PRESSURE (PSIA)	25.99	06/08/17	AO
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor = 2.22			

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			2.22		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

Date	Instr.	File #
6/13/2017	ATMS11	

Canister DF = 2.22 X Load DF = 6.25 X Bag DF = 100 = FINAL DF 1385.985495
250 BVf (mLs) 100
40 Bvi (mLs) 1

Date	Instr.	File #

Canister DF = 2.22 X Load DF = #DIV/0! X Bag DF = 1 = FINAL DF #DIV/0!
LVf (mLs) BVf (mLs)
LVi (mLs) Bvi (mLs)

Date	Instr.	File #

Canister DF = 2.22 X Load DF = #DIV/0! X Bag DF = 1 = FINAL DF #DIV/0!
LVf (mLs) BVf (mLs)
LVi (mLs) Bvi (mLs)

JOB # 320-28831
Sample # 4

Client/Project:		VFR ID:		
Canister Serial #:	34000335	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD				
READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY			
READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	12.53	06/08/17	AO
FINAL PRESSURE (PSIA)	25.03	06/08/17	AO
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor = 2.00			

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			2.00		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

Date	Instr.	File #
6/13/2017	ATMS11	

Canister DF = 2.00 X Load DF = 5 X Bag DF = 100 = FINAL DF 998.8028731
250 BVf (mLs) 100
50 Bvi (mLs) 1

Date	Instr.	File #

Canister DF = 2.00 X Load DF = #DIV/0! X Bag DF = 1 = FINAL DF #DIV/0!
LVf (mLs) BVf (mLs)
LVi (mLs) Bvi (mLs)

Date	Instr.	File #

Canister DF = 2.00 X Load DF = #DIV/0! X Bag DF = 1 = FINAL DF #DIV/0!
LVf (mLs) BVf (mLs)
LVi (mLs) Bvi (mLs)

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CANISTER FIELD DATA RECORD

Sacramento

JOB # 320-28831
Sample # 5

Client/Project:		VFR ID:		
Canister Serial #:	34001074	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD				
READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY			
READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	12.63	06/08/17	AO
FINAL PRESSURE (PSIA)	25.13	06/08/17	AO
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor = 1.99			

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			1.99		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

							Date	Instr.	File #		
							6/13/2017	ATMS11			FINAL DF
Canister DF =	1.99	X	Load DF =	5.5555556	X	Bag DF =	100	=	1105.392804		
				250		BVf (mLs)	100				
				45		Bvi (mLs)	1				
							Date	Instr.	File #		
											FINAL DF
Canister DF =	1.99	X	Load DF =	#DIV/0!	X	Bag DF =	1	=	#DIV/0!		
			LVf (mLs)			BVf (mLs)					
			LVi (mLs)			Bvi (mLs)					
							Date	Instr.	File #		
											FINAL DF
Canister DF =	1.99	X	Load DF =	#DIV/0!	X	Bag DF =	1	=	#DIV/0!		
			LVf (mLs)			BVf (mLs)					
			LVi (mLs)			Bvi (mLs)					

CANISTER FIELD DATA RECORD

Sacramento

JOB # 320-28831
Sample # 6

Client/Project:		VFR ID:		
Canister Serial #:	34001246	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD				
READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY			
READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	12.60	06/08/17	AO
FINAL PRESSURE (PSIA)	25.34	06/08/17	AO
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor = 2.01			

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			2.01		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

Date	Instr.	File #
6/13/2017	ATMS11	

Canister DF = 2.01 X Load DF = 7.1428571 X Bag DF = 100.12 = FINAL DF 1438.231746
250 BVf (mLs) 100.12
35 Bvi (mLs) 1

Date	Instr.	File #

Canister DF = 2.01 X Load DF = #DIV/0! X Bag DF = 1 = FINAL DF #DIV/0!
LVf (mLs) BVf (mLs)
LVi (mLs) Bvi (mLs)

Date	Instr.	File #

Canister DF = 2.01 X Load DF = #DIV/0! X Bag DF = 1 = FINAL DF #DIV/0!
LVf (mLs) BVf (mLs)
LVi (mLs) Bvi (mLs)

CANISTER FIELD DATA RECORD

Sacramento

JOB # 320-28831
Sample # 7

Client/Project:		VFR ID:		
Canister Serial #:	34000602	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD				
READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY			
READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	12.46	06/08/17	AO
FINAL PRESSURE (PSIA)	25.44	06/08/17	AO
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor = 2.04			

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			2.04		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

Date	Instr.	File #
6/13/2017	ATMS11	

Canister DF = 2.04 X Load DF = 8.3333333 X Bag DF = 100 = FINAL DF 1701.444623
250 BVf (mLs) 100
30 Bvi (mLs) 1

Date	Instr.	File #

Canister DF = 2.04 X Load DF = #DIV/0! X Bag DF = 1 = FINAL DF #DIV/0!
LVf (mLs) BVf (mLs)
LVi (mLs) Bvi (mLs)

Date	Instr.	File #

Canister DF = 2.04 X Load DF = #DIV/0! X Bag DF = 1 = FINAL DF #DIV/0!
LVf (mLs) BVf (mLs)
LVi (mLs) Bvi (mLs)

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CANISTER FIELD DATA RECORD

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JOB # 320-28831
Sample # 8

Client/Project:		VFR ID:		
Canister Serial #:	34001186	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD				
READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY			
READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	12.46	06/08/17	AO
FINAL PRESSURE (PSIA)	25.25	06/08/17	AO
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor = 2.03			

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			2.03		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

Date	Instr.	File #
6/13/2017	ATMS11	

Canister DF = 2.03 X Load DF = 8.3333333 / 250 / 30 X Bag DF = 100.12, BVf (mLs) = 100.12, Bvi (mLs) = 1 = FINAL DF 1690.763777

Date	Instr.	File #

Canister DF = 2.03 X Load DF = #DIV/0!, LVf (mLs), LVi (mLs) X Bag DF = 1, BVf (mLs), Bvi (mLs) = FINAL DF #DIV/0!

Date	Instr.	File #

Canister DF = 2.03 X Load DF = #DIV/0!, LVf (mLs), LVi (mLs) X Bag DF = 1, BVf (mLs), Bvi (mLs) = FINAL DF #DIV/0!

CANISTER FIELD DATA RECORD

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JOB # 320-28831
Sample # 9

Client/Project:		VFR ID:		
Canister Serial #:	34002146	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD				
READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY			
READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	13.69	06/06/17	AO
FINAL PRESSURE (PSIA)	20.06	06/06/17	AO
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor = 1.47			

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			1.47		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

Date	Instr.	File #
6/6/2017	ATMS12	

Canister DF = 1.47 X Load DF = 0.6849315 X Bag DF = 1 = FINAL DF 1.003632288
500 BVf (mLs)
730 Bvi (mLs)

Date	Instr.	File #

Canister DF = 1.47 X Load DF = #DIV/0! X Bag DF = 1 = FINAL DF #DIV/0!
LVf (mLs) BVf (mLs)
LVi (mLs) Bvi (mLs)

Date	Instr.	File #

Canister DF = 1.47 X Load DF = #DIV/0! X Bag DF = 1 = FINAL DF #DIV/0!
LVf (mLs) BVf (mLs)
LVi (mLs) Bvi (mLs)

JOB # 320-28831
Sample # 10

Client/Project:		VFR ID:		
Canister Serial #:	8442	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD				
READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY			
READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	12.15	06/08/17	AO
FINAL PRESSURE (PSIA)	25.14	06/08/17	AO
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor = 2.07			

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			2.07		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

Date	Instr.	File #
6/13/2017	ATMS11	

Canister DF = 2.07 X Load DF = 7.1428571 / 250 / 35 X Bag DF = 101.6, BVf (mLs) 101.6, Bvi (mLs) 1 = FINAL DF 1501.601411

Date	Instr.	File #

Canister DF = 2.07 X Load DF = #DIV/0!, LVf (mLs), LVi (mLs) X Bag DF = 1, BVf (mLs), Bvi (mLs) = FINAL DF #DIV/0!

Date	Instr.	File #

Canister DF = 2.07 X Load DF = #DIV/0!, LVf (mLs), LVi (mLs) X Bag DF = 1, BVf (mLs), Bvi (mLs) = FINAL DF #DIV/0!

JOB # 320-28831
Sample # 11

Client/Project:		VFR ID:		
Canister Serial #:	34000754	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD				
READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY			
READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	12.15	06/08/17	AO
FINAL PRESSURE (PSIA)	25.27	06/08/17	AO
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor = 2.08			

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			2.08		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

Date	Instr.	File #
6/13/2017	ATMS11	

Canister DF = 2.08 X Load DF = 7.1428571 (250 / 35) X Bag DF = 100 (BVf (mLs) 100 / Bvi (mLs) 1) = FINAL DF 1485.596708

Date	Instr.	File #

Canister DF = 2.08 X Load DF = #DIV/0! (LVf (mLs) / LVi (mLs)) X Bag DF = 1 (BVf (mLs) / Bvi (mLs)) = FINAL DF #DIV/0!

Date	Instr.	File #

Canister DF = 2.08 X Load DF = #DIV/0! (LVf (mLs) / LVi (mLs)) X Bag DF = 1 (BVf (mLs) / Bvi (mLs)) = FINAL DF #DIV/0!

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CANISTER FIELD DATA RECORD

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JOB # 320-28831
Sample # 12

Client/Project:		VFR ID:		
Canister Serial #:	34000746	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD				
READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY				
READING		PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)		29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)				
INITIAL PRESSURE (PSIA)		14.75	06/08/17	AO
FINAL PRESSURE (PSIA)		25.10	06/08/17	AO
Pressurization Gas: ☐ N2 ☐ He		SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor =	1.70			

Valve opened,

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			1.70		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

								Date	Instr.	File #	
											FINAL DF
Canister DF =	1.70	X	Load DF =	#DIV/0!	X	Bag DF =	1	=	#DIV/0!		
						BVf (mLs)					
						Bvi (mLs)					
								Date	Instr.	File #	
											FINAL DF
Canister DF =	1.70	X	Load DF =	#DIV/0!	X	Bag DF =	1	=	#DIV/0!		
			LVf (mLs)			BVf (mLs)					
			LVi (mLs)			Bvi (mLs)					
								Date	Instr.	File #	
											FINAL DF
Canister DF =	1.70	X	Load DF =	#DIV/0!	X	Bag DF =	1	=	#DIV/0!		
			LVf (mLs)			BVf (mLs)					
			LVi (mLs)			Bvi (mLs)					

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CANISTER FIELD DATA RECORD

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JOB # 320-28831
Sample # 13

Client/Project:		VFR ID:		
Canister Serial #:	34001629	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD				
READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY			
READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	12.67	06/08/17	AO
FINAL PRESSURE (PSIA)	24.94	06/08/17	AO
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor = 1.97			

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			1.97		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

Date	Instr.	File #
6/14/2017	ATMS9	

Canister DF = 1.97 X Load DF = 12.5 / 250 / 20 X Bag DF = 100 / BVf (mLs) 100 / Bvi (mLs) 1 = FINAL DF 2460.536701

Date	Instr.	File #

Canister DF = 1.97 X Load DF = #DIV/0! / LVf (mLs) / LVi (mLs) X Bag DF = 1 / BVf (mLs) / Bvi (mLs) = FINAL DF #DIV/0!

Date	Instr.	File #

Canister DF = 1.97 X Load DF = #DIV/0! / LVf (mLs) / LVi (mLs) X Bag DF = 1 / BVf (mLs) / Bvi (mLs) = FINAL DF #DIV/0!

JOB # 320-28831
Sample # 14

Client/Project:		VFR ID:		
Canister Serial #:	34000959	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD				
READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY			
READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	12.15	06/08/17	AO
FINAL PRESSURE (PSIA)	25.26	06/08/17	AO
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor = 2.08			

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			2.08		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

Date	Instr.	File #
6/14/2017	ATMS9	

Canister DF = 2.08 X Load DF = 7.5757576 (250 / 33) X Bag DF = 100 (BVf (mLs) 100 / Bvi (mLs) 1) = FINAL DF 1575.009353

Date	Instr.	File #

Canister DF = 2.08 X Load DF = #DIV/0! (LVf (mLs) / LVi (mLs)) X Bag DF = 1 (BVf (mLs) / Bvi (mLs)) = FINAL DF #DIV/0!

Date	Instr.	File #

Canister DF = 2.08 X Load DF = #DIV/0! (LVf (mLs) / LVi (mLs)) X Bag DF = 1 (BVf (mLs) / Bvi (mLs)) = FINAL DF #DIV/0!

CANISTER FIELD DATA RECORD

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JOB # 320-28831
Sample # 15

Client/Project:		VFR ID:		
Canister Serial #:	34000322	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD				
READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY			
READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	13.48	06/08/17	AO
FINAL PRESSURE (PSIA)	25.96	06/08/17	AO
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor = 1.93			

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			1.93		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

Date	Instr.	File #
6/14/2017	ATMS9	

Canister DF = 1.93 X Load DF = 7.5757576 X Bag DF = 100 = FINAL DF 1458.951533
250 BVf (mLs) 100
33 Bvi (mLs) 1

Date	Instr.	File #

Canister DF = 1.93 X Load DF = #DIV/0! X Bag DF = 1 = FINAL DF #DIV/0!
LVf (mLs) BVf (mLs)
LVi (mLs) Bvi (mLs)

Date	Instr.	File #

Canister DF = 1.93 X Load DF = #DIV/0! X Bag DF = 1 = FINAL DF #DIV/0!
LVf (mLs) BVf (mLs)
LVi (mLs) Bvi (mLs)

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CANISTER FIELD DATA RECORD

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JOB # 320-28831
Sample # 16

Client/Project:		VFR ID:		
Canister Serial #:	8503	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD				
READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY			
READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	11.04	06/08/17	AO
FINAL PRESSURE (PSIA)	25.06	06/08/17	AO
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor = 2.27			

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			2.27		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

Date	Instr.	File #
6/14/2017	ATMS9	

Canister DF = 2.27 X Load DF = 2.9411765 (250 / 85) X Bag DF = 100 (BVf (mLs) 100 / Bvi (mLs) 1) = FINAL DF 667.625746

Date	Instr.	File #
6/15/2017	ATMS9	

Canister DF = 2.27 X Load DF = 4.4642857 (LVf (mLs) 250 / LVi (mLs) 56) X Bag DF = 100 (BVf (mLs) 100 / Bvi (mLs) 1) = FINAL DF 1013.360507

Date	Instr.	File #

Canister DF = 2.27 X Load DF = #DIV/0! (LVf (mLs) / LVi (mLs)) X Bag DF = 1 (BVf (mLs) / Bvi (mLs)) = FINAL DF #DIV/0!

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CANISTER FIELD DATA RECORD

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JOB # 320-28831
Sample # 17

Client/Project:		VFR ID:		
Canister Serial #:	34001053	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD				
READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY			
READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	13.36	06/08/17	AO
FINAL PRESSURE (PSIA)	25.20	06/08/17	AO
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor = 1.89			

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			1.89		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

							Date	Instr.	File #		
							6/14/2017	ATMS9			
Canister DF =	1.89	X	Load DF =	6.7567568	X	Bag DF =	100	=	FINAL DF 1274.478071		
				250		BVf (mLs)	100				
				37		Bvi (mLs)	1				
							Date	Instr.	File #		
Canister DF =	1.89	X	Load DF =	#DIV/0!	X	Bag DF =	1	=	FINAL DF #DIV/0!		
			LVf (mLs)			BVf (mLs)					
			LVi (mLs)			Bvi (mLs)					
							Date	Instr.	File #		
Canister DF =	1.89	X	Load DF =	#DIV/0!	X	Bag DF =	1	=	FINAL DF #DIV/0!		
			LVf (mLs)			BVf (mLs)					
			LVi (mLs)			Bvi (mLs)					

CANISTER FIELD DATA RECORD

Sacramento

JOB # 320-28831
Sample # 18

Client/Project:		VFR ID:		
Canister Serial #:	34000124	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD				
READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY			
READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	14.79	06/06/17	AO
FINAL PRESSURE (PSIA)	19.80	06/06/17	AO
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor = 1.34			

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			1.34		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

Date	Instr.	File #
6/6/2017	ATMS12	

Canister DF = 1.34 X Load DF = 0.7518797 X Bag DF = 1 = FINAL DF 1.006573228
500 BVf (mLs)
665 Bvi (mLs)

Date	Instr.	File #

Canister DF = 1.34 X Load DF = #DIV/0! X Bag DF = 1 = FINAL DF #DIV/0!
LVf (mLs) BVf (mLs)
LVi (mLs) Bvi (mLs)

Date	Instr.	File #

Canister DF = 1.34 X Load DF = #DIV/0! X Bag DF = 1 = FINAL DF #DIV/0!
LVf (mLs) BVf (mLs)
LVi (mLs) Bvi (mLs)

JOB # 320-28831
Sample # 19

Client/Project:		VFR ID:		
Canister Serial #:	34000678	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD				
READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY			
READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	11.12	06/08/17	AO
FINAL PRESSURE (PSIA)	25.34	06/08/17	AO
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor = 2.28			

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			2.28		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

Date	Instr.	File #
6/14/2017	ATMS9	

Canister DF = 2.28 X Load DF = 5.3191489 (250 / 47) X Bag DF = 100 (BVf (mLs) 100 / Bvi (mLs) 1) = FINAL DF 1212.115414

Date	Instr.	File #

Canister DF = 2.28 X Load DF = #DIV/0! (LVf (mLs) / LVi (mLs)) X Bag DF = 1 (BVf (mLs) / Bvi (mLs)) = FINAL DF #DIV/0!

Date	Instr.	File #

Canister DF = 2.28 X Load DF = #DIV/0! (LVf (mLs) / LVi (mLs)) X Bag DF = 1 (BVf (mLs) / Bvi (mLs)) = FINAL DF #DIV/0!

JOB # 320-28831
Sample # 20

Client/Project:		VFR ID:		
Canister Serial #:	34001796	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD				
READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY			
READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	11.03	06/08/17	AO
FINAL PRESSURE (PSIA)	25.50	06/08/17	AO
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor = 2.31			

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			2.31		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

Canister DF		Load DF		Bag DF	Date	Instr.	File #		FINAL DF
2.31	X	5.6818182	X	101	6/14/2017	ATMS9		=	1326.70197
		250		BVf (mLs) 101					
		44		Bvi (mLs) 1					

Canister DF		Load DF		Bag DF	Date	Instr.	File #		FINAL DF
2.31	X	#DIV/0!	X	1				=	#DIV/0!
		LVf (mLs)		BVf (mLs)					
		LVi (mLs)		Bvi (mLs)					

Canister DF		Load DF		Bag DF	Date	Instr.	File #		FINAL DF
2.31	X	#DIV/0!	X	1				=	#DIV/0!
		LVf (mLs)		BVf (mLs)					
		LVi (mLs)		Bvi (mLs)					

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CANISTER FIELD DATA RECORD

Sacramento

JOB # 320-28831
Sample # 21

Client/Project:		VFR ID:		
Canister Serial #:	34000229	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD				
READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY			
READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	11.05	06/08/17	AO
FINAL PRESSURE (PSIA)	24.92	06/08/17	AO
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor = 2.26			

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			2.26		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

Date	Instr.	File #
6/14/2017	ATMS9	

Canister DF = 2.26 X Load DF = 6.5789474 (250 / 38) X Bag DF = 101 (BVf (mLs) 101 / Bvi (mLs) 1) = FINAL DF 1498.523458

Date	Instr.	File #

Canister DF = 2.26 X Load DF = #DIV/0! (LVf (mLs) / LVi (mLs)) X Bag DF = 1 (BVf (mLs) / Bvi (mLs)) = FINAL DF #DIV/0!

Date	Instr.	File #

Canister DF = 2.26 X Load DF = #DIV/0! (LVf (mLs) / LVi (mLs)) X Bag DF = 1 (BVf (mLs) / Bvi (mLs)) = FINAL DF #DIV/0!

CANISTER FIELD DATA RECORD

Sacramento

JOB # 320-28831
Sample # 22

Client/Project:		VFR ID:		
Canister Serial #:	34000641	Duration:		☐ Hrs ☐ Min
Cleaning Job:		Flow:		mL/min
Client ID:		Initials:		
Site Location:				

FIELD				
READING	TIME	PRESS.	DATE	INITIALS
INITIAL FIELD VACUUM				
FINAL FIELD READING				

LABORATORY			
READING	PRESS.	DATE	INITIALS
INITIAL VACUUM CHECK (INCHES Hg)	29.8		JMT
☐ Helium Pre-dilution - Final Pressure (INCHES Hg)			
INITIAL PRESSURE (PSIA)	10.96	06/08/17	AO
FINAL PRESSURE (PSIA)	25.32	06/08/17	AO
Pressurization Gas: ☐ N2 ☐ He	SCREENED ☐	SCRN DIL. VS 250mLs:	
Initial Canister Dilution Factor = 2.31			

CANISTER REPRESSURIZATION

Date	Pi (PSIA)	Pf (PSIA)	Initial DF	Initials	NEW DF
			2.31		#DIV/0!
			#DIV/0!		#DIV/0!
			#DIV/0!		#DIV/0!

Analytical Dilution Factors

Canister DF		Load DF		Bag DF	Date	Instr.	File #	FINAL DF
2.31	X	6.25	X	102	6/14/2017	ATMS9		1472.764599
		250		BVf (mLs) 102				
		40		Bvi (mLs) 1				

Canister DF		Load DF / LVf (mLs) / LVi (mLs)		Bag DF / BVf (mLs) / Bvi (mLs)	Date	Instr.	File #	FINAL DF
2.31	X	#DIV/0!	X	1				#DIV/0!

Canister DF		Load DF / LVf (mLs) / LVi (mLs)		Bag DF / BVf (mLs) / Bvi (mLs)	Date	Instr.	File #	FINAL DF
2.31	X	#DIV/0!	X	1				#DIV/0!

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 320-28831-1

Login Number: 28831
List Number: 1
Creator: Nelson, Kym D

List Source: TestAmerica Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	N/A	
Cooler Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sacramento
Canister QC Certification
Individual Certification

Certification Type: TO15 SIM

Date Cleaned/Batch ID: 5/2/17 320-27916

Date of QC: 5.06.17

320-27916 Chain of Custody

Canister ID	Filename	Canister ID	Filename
34001477	M51050605	163130	
34001273	06		
7854	07		
34002115	—		
34000695	M510506 09		
34001283	10		
34000124	M5 50506 05	163131	
34001282	06		
34001538	07		
8426	08		
34000265	—		
34000572	M5 50506 10		

The above canisters were cleaned as a batch. This certifies this batch contains no target analyte concentration greater than or equal to the method criteria for the "*Certification Type*" indicated above.

1st level Reviewed By: _____ Date: 5.09.17

2nd level Reviewed By: _____ Date: 5/22/17

Q:\FORMS\QA-821 IND CAN QC 20130729.DOC
QA-821

ERS 7/29/2013

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sacramento
Canister QC Certification
Individual Certification

Certification Type: TO-15 SIM

Date Cleaned/Batch ID: 5.5.17 320-28047

Date of QC: 5.08.17
5.10.17

320-28047 Chain of Custody

Canister ID	Filename	Canister ID	Filename
8133	MS5050807	1638389	
34001322	↓ 08		
8118	MS051007	1638816	
8143	MS5050810		
34000019	12		
2146	13		
2100	MS1051008	1638816	
0563	09		
8040	10B		
34001465	11		
1145	12		
7907	13		

The above canisters were cleaned as a batch. This certifies this batch contains no target analyte concentration greater than or equal to the method criteria for the "*Certification Type*" indicated above.

1st level Reviewed By: _____ Date: 5-15-17

2nd level Reviewed By: _____ Date: 5/22/17

Q:\FORMS\QA-821 IND CAN QC 20130729.DOC
QA-821

ERS 7/29/2013

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sacramento
Canister QC Certification
Batch Certification

Certification Type: TO-15 SCAN

Date Cleaned/Batch ID: 5/10/17 320-28165

Date of QC: 5/11/2017

Data File Number: C:\MSDCHEM\1\DATA\170511\ → MS60511107.d

320-28165 Chain of Custody

CANISTER ID NUMBERS

34001074 *	34000642	
34000603	34000764	
34002182	34000954	
34000730	34001081	
34000325	34001092	
34000674	34000907	
34000968	34000752	
34001002	34000627	

The above canisters were cleaned as a batch. This certifies this batch contains no target analyte concentration greater than or equal to the method criteria for the "*Certification Type*" indicated above.

"*" INDICATES THE CAN OR CANS WHICH WERE SCREENED.

1st level Reviewed By: _____ Date: 5/12/17

2nd level Reviewed By: _____ Date: 5/18/17

Q:\FORMS\QA-814 BATCH CAN QC 20130729.DOC
QA-814

ERS 7/29/2013

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sacramento
Canister QC Certification
Batch Certification

Certification Type: TO-15 SCAN

Date Cleaned/Batch ID: 5/11/17 320-28210

Date of QC: 5/14/2017

Data File Number: C:\MSDCHEM\1\DATA\170514\ ms6051406.d

320-28210 Chain of Custody

CANISTER ID NUMBERS

34000641 *	34000763	
34000238	34000997	
34001100	34000235	
8512	8291	
34000915	8284	
34001670	34001111	
34001049	34000913	
34000758	34001115	

The above canisters were cleaned as a batch. This certifies this batch contains no target analyte concentration greater than or equal to the method criteria for the "*Certification Type*" indicated above.

"*" INDICATES THE CAN OR CANS WHICH WERE SCREENED.

1st level Reviewed By: _____ Date: 5/15/17

2nd level Reviewed By: _____ Date: 5/18/17

Q:\FORMS\QA-814 BATCH CAN QC 20130729.DOC
QA-814

ERS 7/29/2013

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sacramento
Canister QC Certification
Batch Certification

Certification Type: TO-15 SCAN

Date Cleaned/Batch ID: 5/19/17 320-28436

Date of QC: 5/22/17

Data File Number: MS6052207

320-28436 Chain of Custody

CANISTER ID NUMBERS

34001244 *	34001053	
34001022	34001137	
34000645	34000655	
34000321	34000678	
34000963	34001246	
34000665	34000335	
8523	34000327	
34001946	34000964	

The above canisters were cleaned as a batch. This certifies this batch contains no target analyte concentration greater than or equal to the method criteria for the "*Certification Type*" indicated above.

"*" INDICATES THE CAN OR CANS WHICH WERE SCREENED.

dw for AP — 1st level Reviewed By:

5/23/17 — Date:

2nd level Reviewed By:

6/1/17 — Date:

Q:\FORMS\QA-814 BATCH CAN QC 20130729.DOC
QA-814

ERS 7/29/2013

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sacramento
Canister QC Certification
Batch Certification

Certification Type: TO-15 SCAN

Date Cleaned/Batch ID: 5/26/17 320-28635

Date of QC: 5/30/17

Data File Number: MS053008

320-28635 Chain of Custody

CANISTER ID NUMBERS

34001912 *	34001862	
34001956	34001779	
34001869	34001922	
34001966	34001924	
34001909	34001822	
7510	34001840	
34001826	34001914	
34001902	34001876	

The above canisters were cleaned as a batch. This certifies this batch contains no target analyte concentration greater than or equal to the method criteria for the "*Certification Type*" indicated above.

"*" INDICATES THE CAN OR CANS WHICH WERE SCREENED.

BS Lee AS — 1st level Reviewed By: — 6/2/17 — Date:

2nd level Reviewed By: — 6/2/17 — Date:

Q:\FORMS\QA-814 BATCH CAN QC 20130729.DOC
QA-814

ERS 7/29/2013

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sacramento
Canister QC Certification
Batch Certification

Certification Type: TO-15 SCAN

Date Cleaned/Batch ID: 5/26/17 320-28636

Date of QC: 5/30/17

Data File Number: MS605 3009

320-28636 Chain of Custody

CANISTER ID NUMBERS

34001220 *	34001629	
8509	8442	
34000602	34000322	
8511	34000959	
34000754	34000976	
34000746	34001050	
34001186	34000229	
8503	34001796	

The above canisters were cleaned as a batch. This certifies this batch contains no target analyte concentration greater than or equal to the method criteria for the "*Certification Type*" indicated above.

"*" INDICATES THE CAN OR CANS WHICH WERE SCREENED.

DN for AP — 1st level Reviewed By: — 6/1/17 — Date:

2nd level Reviewed By: — 6/2/17 — Date:

Q:\FORMS\QA-814 BATCH CAN QC 20130729.DOC
QA-814

ERS 7/29/2013

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sacramento
Canister QC Certification
Batch Certification

Certification Type: TO-15 SCAN

Date Cleaned/Batch ID: 6-2-17 320-28802

Date of QC: 6/5/17

Data File Number: MS6060506

320-28802 Chain of Custody

CANISTER ID NUMBERS

7535 *	34001913	
34001866	34001705	
34001810	34001781	
34001719	34001706	
7508	34001878	
34001704	34001829	
34001834	34001916	
34001930	34001911	

The above canisters were cleaned as a batch. This certifies this batch contains no target analyte concentration greater than or equal to the method criteria for the "*Certification Type*" indicated above.

"*" INDICATES THE CAN OR CANS WHICH WERE SCREENED.

dlv for AP — 1st level Reviewed By: — 6/6/17 Date:

2nd level Reviewed By: — 6/13/17 Date:

Q:\FORMS\QA-814 BATCH CAN QC 20130729.DOC
QA-814

ERS 7/29/2013

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sacramento
Canister QC Certification
Batch Certification

Certification Type: TO-15 SCAN

Date Cleaned/Batch ID: 6/5/17 320-28820

Date of QC: 6/6/17

Data File Number: MS6060606

320-28820 Chain of Custody

CANISTER ID NUMBERS

34001959 *	34001684	
34001831	34001881	
34001900	7509	
34001934	34001928	
34001888	34001824	
34001932	34001879	
34001768	7537	
34001696	34001773	

The above canisters were cleaned as a batch. This certifies this batch contains no target analyte concentration greater than or equal to the method criteria for the "*Certification Type*" indicated above.

"*" INDICATES THE CAN OR CANS WHICH WERE SCREENED.

JW for AP — 1st level Reviewed By: — 6/7/17 — Date:

2nd level Reviewed By: — 6/13/17 — Date:

Q:\FORMS\QA-814 BATCH CAN QC 20130729.DOC
QA-814

ERS 7/29/2013

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-27916-1

SDG No.:

Client Sample ID: 34001477 Lab Sample ID: 320-27916-1

Matrix: Air Lab File ID: MS1050605.D

Analysis Method: TO-15 SIM Date Collected: 05/02/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 05/06/2017 18:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163130 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.020	0.010
100-44-7	Benzyl chloride	ND		0.10	0.010
75-27-4	Bromodichloromethane	ND		0.012	0.0050
108-90-7	Chlorobenzene	ND		0.020	0.010
75-00-3	Chloroethane	ND		0.045	0.010
67-66-3	Chloroform	ND		0.020	0.0050
74-87-3	Chloromethane	ND		0.20	0.010
124-48-1	Dibromochloromethane	ND		0.010	0.0050
106-93-4	1,2-Dibromoethane (EDB)	ND		0.0070	0.0028
95-50-1	1,2-Dichlorobenzene	ND		0.050	0.010
541-73-1	1,3-Dichlorobenzene	ND		0.10	0.010
106-46-7	1,4-Dichlorobenzene	ND		0.10	0.010
75-71-8	Dichlorodifluoromethane	ND		0.020	0.0050
75-34-3	1,1-Dichloroethane	ND		0.020	0.0050
107-06-2	1,2-Dichloroethane	ND		0.020	0.0050
75-35-4	1,1-Dichloroethene	ND		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	ND		0.020	0.0050
156-60-5	trans-1,2-Dichloroethene	ND		0.020	0.0050
78-87-5	1,2-Dichloropropane	ND		0.040	0.0050
10061-01-5	cis-1,3-Dichloropropene	ND		0.020	0.0050
10061-02-6	trans-1,3-Dichloropropene	ND		0.020	0.0050
123-91-1	1,4-Dioxane	ND		0.10	0.010
100-41-4	Ethylbenzene	ND		0.020	0.010
87-68-3	Hexachlorobutadiene	ND		0.020	0.010
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.025	0.010
75-09-2	Methylene Chloride	ND		0.20	0.10
100-42-5	Styrene	ND		0.030	0.010
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.020	0.010
127-18-4	Tetrachloroethene	ND		0.020	0.010
108-88-3	Toluene	ND		0.020	0.010
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.030	0.0050
120-82-1	1,2,4-Trichlorobenzene	0.029	J B	0.050	0.010
71-55-6	1,1,1-Trichloroethane	ND		0.020	0.0050
79-00-5	1,1,2-Trichloroethane	ND		0.050	0.0050
79-01-6	Trichloroethene	ND		0.020	0.0050

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-27916-1

SDG No.:

Client Sample ID: 34001477 Lab Sample ID: 320-27916-1

Matrix: Air Lab File ID: MS1050605.D

Analysis Method: TO-15 SIM Date Collected: 05/02/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 05/06/2017 18:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163130 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-69-4	Trichlorofluoromethane	ND		0.045	0.010
75-01-4	Vinyl chloride	ND		0.020	0.010
179601-23-1	m,p-Xylene	ND		0.040	0.020
95-47-6	o-Xylene	ND		0.020	0.010
67-64-1	Acetone	0.093	J	0.20	0.040
96-18-4	1,2,3-Trichloropropane	ND		0.040	0.010
95-63-6	1,2,4-Trimethylbenzene	ND		0.040	0.010
78-93-3	2-Butanone (MEK)	ND		0.20	0.016
110-82-7	Cyclohexane	ND		0.040	0.0050

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	119		70-130
2037-26-5	Toluene-d8 (Surr)	97		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\ATMS1\20170506-42758.b\MS1050605.D
Lims ID: 320-27916-A-1
Client ID: 34001477
Sample Type: Client
Inject. Date: 06-May-2017 18:46:30 ALS Bottle#: 2 Worklist Smp#: 5
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 320-27916-A-01
Misc. Info.: 1000ML
Operator ID: FD Instrument ID: ATMS1

Method: \\ChromNA\Sacramento\ChromData\ATMS1\20170506-42758.b\TO-15 SIM SIM.m
Limit Group: MSA - TO15_SIM - ICAL
Last Update: 19-May-2017 11:42:40 Calib Date: 18-Mar-2017 03:03:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\ATMS1\20170318-40992.b\MS1031714.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: ortizam Date: 19-May-2017 11:42:46

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.673	11.673	0.000	98	36319	2.00	
* 2 1,4-Difluorobenzene	114	13.821	13.821	0.000	100	148656	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.490	20.490	0.000	99	133368	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	12.858	12.858	0.000	68	64444	2.37	
$ 5 Toluene-d8 (Surr)	100	17.211	17.205	0.006	99	82845	1.93	
$ 6 4-Bromofluorobenzene (Surr	174	23.050	23.050	0.000	100	78648	2.07	
135 Acetone	43	7.006	6.982	0.024	100	5305	0.0926	
146 2-Butanone (MEK)	72	10.674	10.656	0.018	98	126	0.0107	
126 1,2,4-Trichlorobenzene	180	29.605	29.599	0.007	99	674	0.0286	
127 Naphthalene	128	30.050	30.044	0.006	100	1323	0.0189	

Reagents:

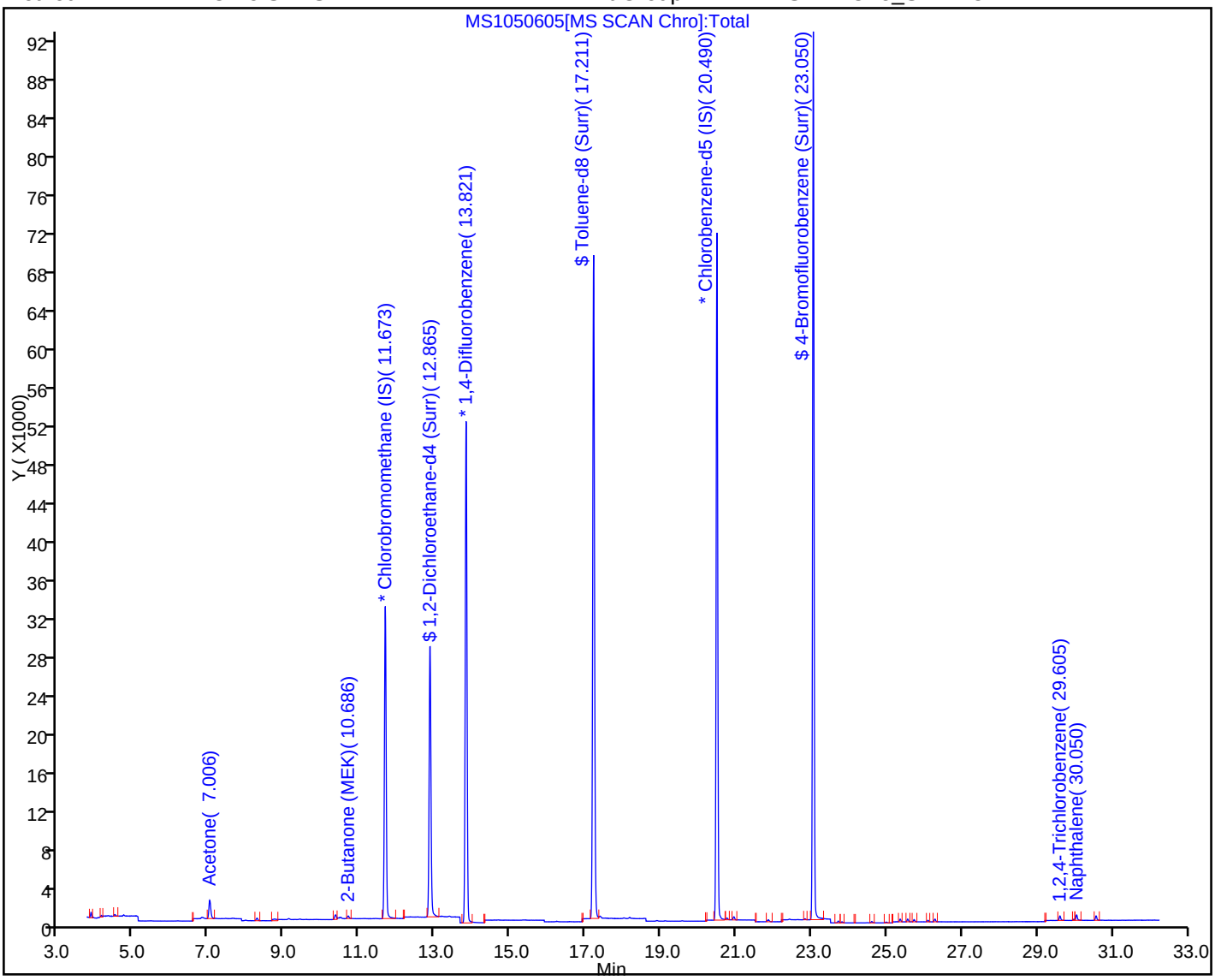
VAMSIS20_00002 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 19-May-2017 11:42:46 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS1\20170506-42758.b\MS1050605.D

Injection Date:	06-May-2017 18:46:30	Instrument ID:	ATMS1		
Lims ID:	320-27916-A-1	Lab Sample ID:	320-27916-1		
Client ID:	34001477				
Operator ID:	FD	ALS Bottle#:	2	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO-15 SIM SIM	Limit Group:	MSA - TO15_SIM - ICAL		

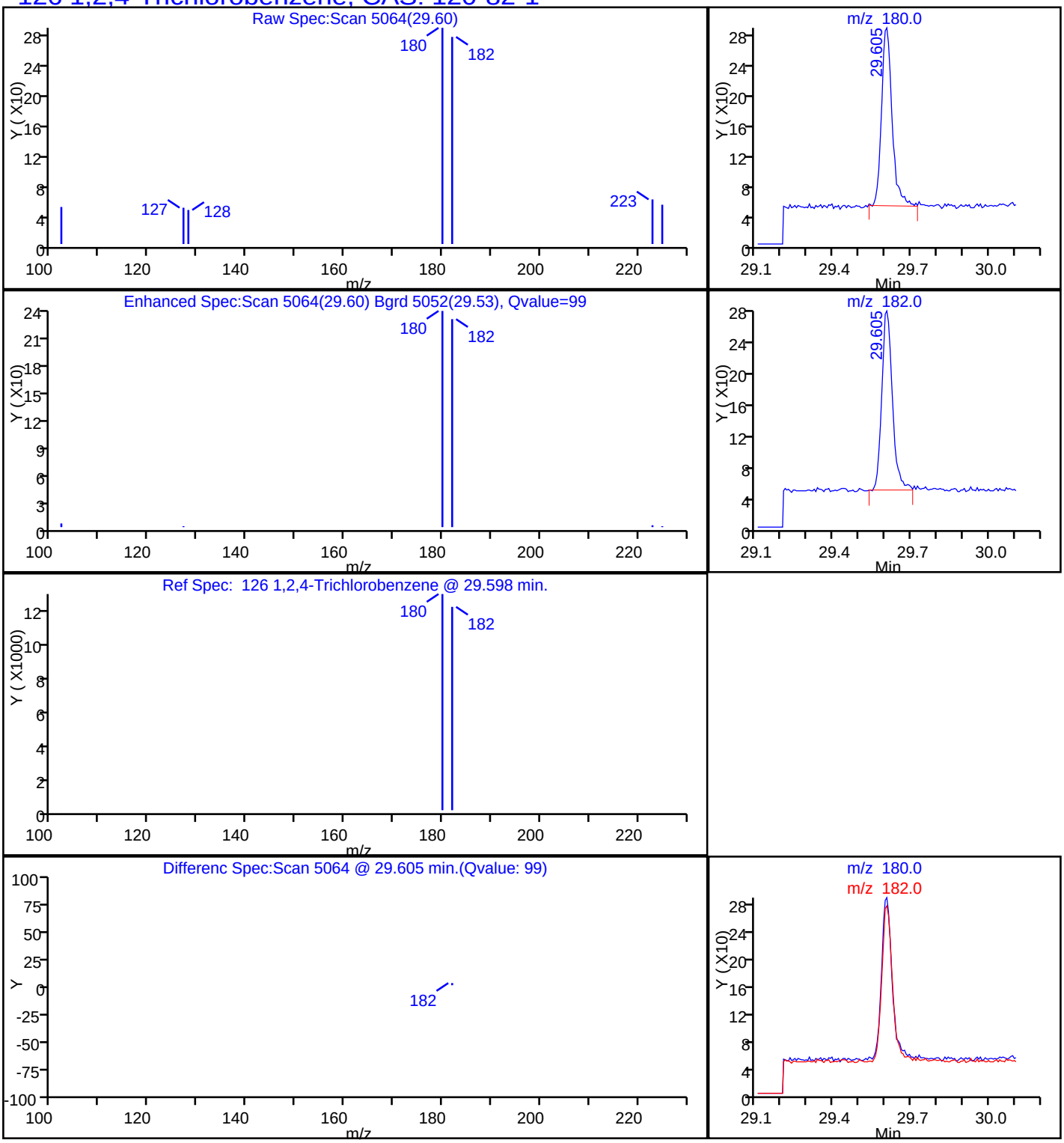


TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS1\20170506-42758.b\MS1050605.D

Injection Date:	06-May-2017 18:46:30	Instrument ID:	ATMS1		
Lims ID:	320-27916-A-1	Lab Sample ID:	320-27916-1		
Client ID:	34001477				
Operator ID:	FD	ALS Bottle#:	2	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO-15 SIM SIM	Limit Group:	MSA - TO15_SIM - ICAL		
Column:		Detector	MS SCAN		

126 1,2,4-Trichlorobenzene, CAS: 120-82-1



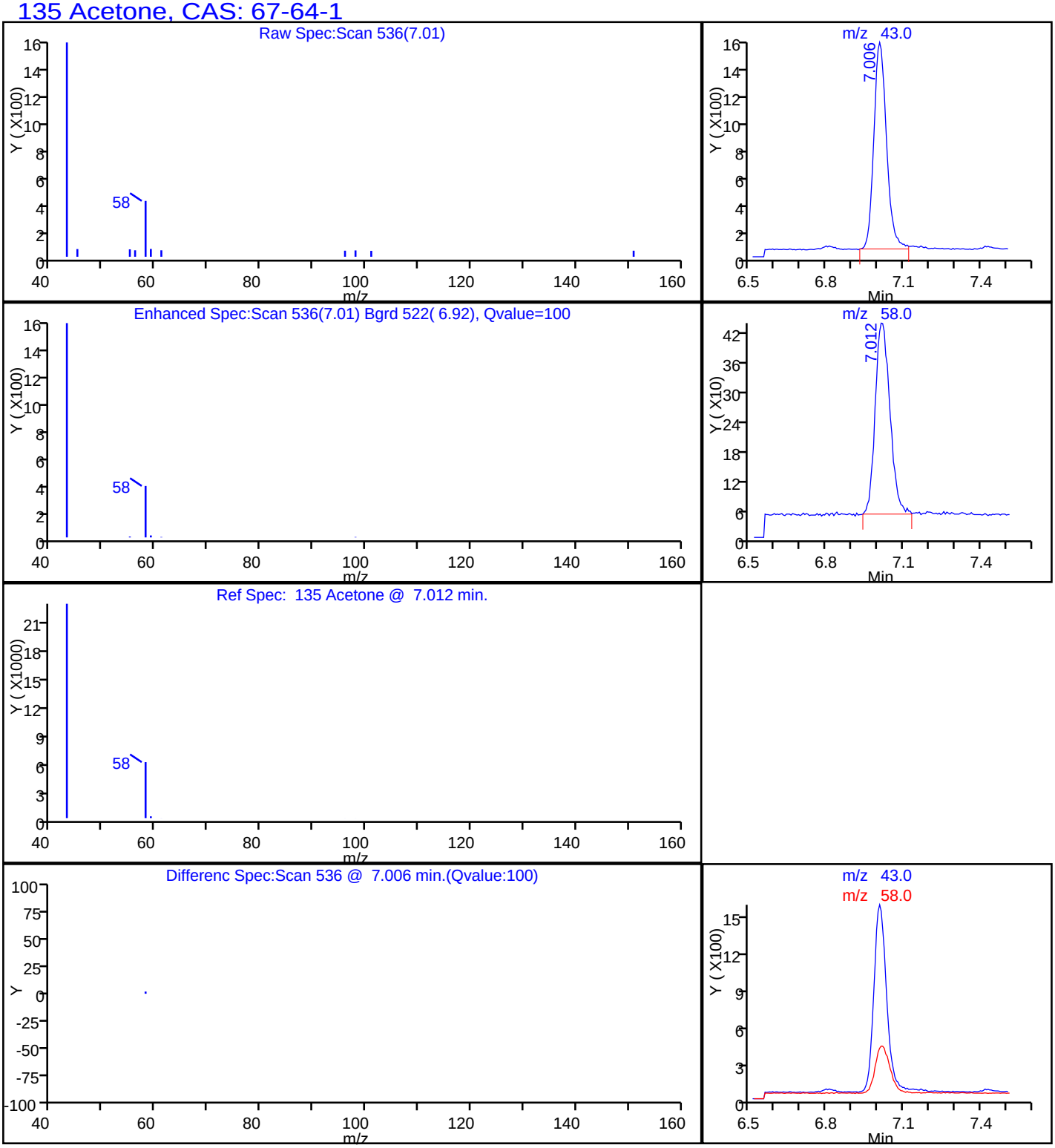
Report Date: 19-May-2017 11:42:46 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS1\20170506-42758.b\MS1050605.D

Injection Date:	06-May-2017 18:46:30	Instrument ID:	ATMS1		
Lims ID:	320-27916-A-1	Lab Sample ID:	320-27916-1		
Client ID:	34001477				
Operator ID:	FD	ALS Bottle#:	2	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO-15 SIM SIM	Limit Group:	MSA - TO15_SIM - ICAL		
Column:		Detector	MS SCAN		

135 Acetone, CAS: 67-64-1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-27916-1

SDG No.:

Client Sample ID: 34001273 Lab Sample ID: 320-27916-2

Matrix: Air Lab File ID: MS1050606.D

Analysis Method: TO-15 SIM Date Collected: 05/02/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 05/06/2017 19:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163130 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.020	0.010
100-44-7	Benzyl chloride	ND		0.10	0.010
75-27-4	Bromodichloromethane	ND		0.012	0.0050
108-90-7	Chlorobenzene	ND		0.020	0.010
75-00-3	Chloroethane	ND		0.045	0.010
67-66-3	Chloroform	ND		0.020	0.0050
74-87-3	Chloromethane	ND		0.20	0.010
124-48-1	Dibromochloromethane	ND		0.010	0.0050
106-93-4	1,2-Dibromoethane (EDB)	ND		0.0070	0.0028
95-50-1	1,2-Dichlorobenzene	ND		0.050	0.010
541-73-1	1,3-Dichlorobenzene	ND		0.10	0.010
106-46-7	1,4-Dichlorobenzene	ND		0.10	0.010
75-71-8	Dichlorodifluoromethane	ND		0.020	0.0050
75-34-3	1,1-Dichloroethane	ND		0.020	0.0050
107-06-2	1,2-Dichloroethane	ND		0.020	0.0050
75-35-4	1,1-Dichloroethene	ND		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	ND		0.020	0.0050
156-60-5	trans-1,2-Dichloroethene	ND		0.020	0.0050
78-87-5	1,2-Dichloropropane	ND		0.040	0.0050
10061-01-5	cis-1,3-Dichloropropene	ND		0.020	0.0050
10061-02-6	trans-1,3-Dichloropropene	ND		0.020	0.0050
123-91-1	1,4-Dioxane	ND		0.10	0.010
100-41-4	Ethylbenzene	ND		0.020	0.010
87-68-3	Hexachlorobutadiene	ND		0.020	0.010
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.025	0.010
75-09-2	Methylene Chloride	ND		0.20	0.10
100-42-5	Styrene	ND		0.030	0.010
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.020	0.010
127-18-4	Tetrachloroethene	ND		0.020	0.010
108-88-3	Toluene	ND		0.020	0.010
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.030	0.0050
120-82-1	1,2,4-Trichlorobenzene	ND		0.050	0.010
71-55-6	1,1,1-Trichloroethane	ND		0.020	0.0050
79-00-5	1,1,2-Trichloroethane	ND		0.050	0.0050
79-01-6	Trichloroethene	ND		0.020	0.0050

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-27916-1

SDG No.:

Client Sample ID: 34001273 Lab Sample ID: 320-27916-2

Matrix: Air Lab File ID: MS1050606.D

Analysis Method: TO-15 SIM Date Collected: 05/02/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 05/06/2017 19:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163130 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-69-4	Trichlorofluoromethane	ND		0.045	0.010
75-01-4	Vinyl chloride	ND		0.020	0.010
179601-23-1	m,p-Xylene	ND		0.040	0.020
95-47-6	o-Xylene	ND		0.020	0.010
67-64-1	Acetone	0.12	J	0.20	0.040
96-18-4	1,2,3-Trichloropropane	ND		0.040	0.010
95-63-6	1,2,4-Trimethylbenzene	ND		0.040	0.010
78-93-3	2-Butanone (MEK)	0.023	J	0.20	0.016
110-82-7	Cyclohexane	ND		0.040	0.0050

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	119		70-130
2037-26-5	Toluene-d8 (Surr)	97		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\ATMS1\20170506-42758.b\MS1050606.D
Lims ID: 320-27916-A-2
Client ID: 34001273
Sample Type: Client
Inject. Date: 06-May-2017 19:44:30 ALS Bottle#: 3 Worklist Smp#: 6
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 320-27916-A-02
Misc. Info.: 1000ML
Operator ID: FD Instrument ID: ATMS1

Method: \\ChromNA\Sacramento\ChromData\ATMS1\20170506-42758.b\TO-15 SIM SIM.m
Limit Group: MSA - TO15_SIM - ICAL
Last Update: 19-May-2017 11:42:59 Calib Date: 18-Mar-2017 03:03:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\ATMS1\20170318-40992.b\MS1031714.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: ortizam Date: 09-May-2017 11:23:45

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.674	11.673	0.001	98	35318	2.00	
* 2 1,4-Difluorobenzene	114	13.821	13.821	0.000	100	144671	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.491	20.490	0.001	100	129439	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	12.858	12.858	0.000	56	62842	2.38	
$ 5 Toluene-d8 (Surr)	100	17.205	17.205	0.000	99	80493	1.93	
$ 6 4-Bromofluorobenzene (Surr	174	23.051	23.050	0.001	98	76144	2.06	
135 Acetone	43	7.006	6.982	0.024	100	6571	0.1180	
146 2-Butanone (MEK)	72	10.681	10.656	0.025	99	264	0.0231	
127 Naphthalene	128	30.045	30.044	0.001	100	908	0.0133	

Reagents:

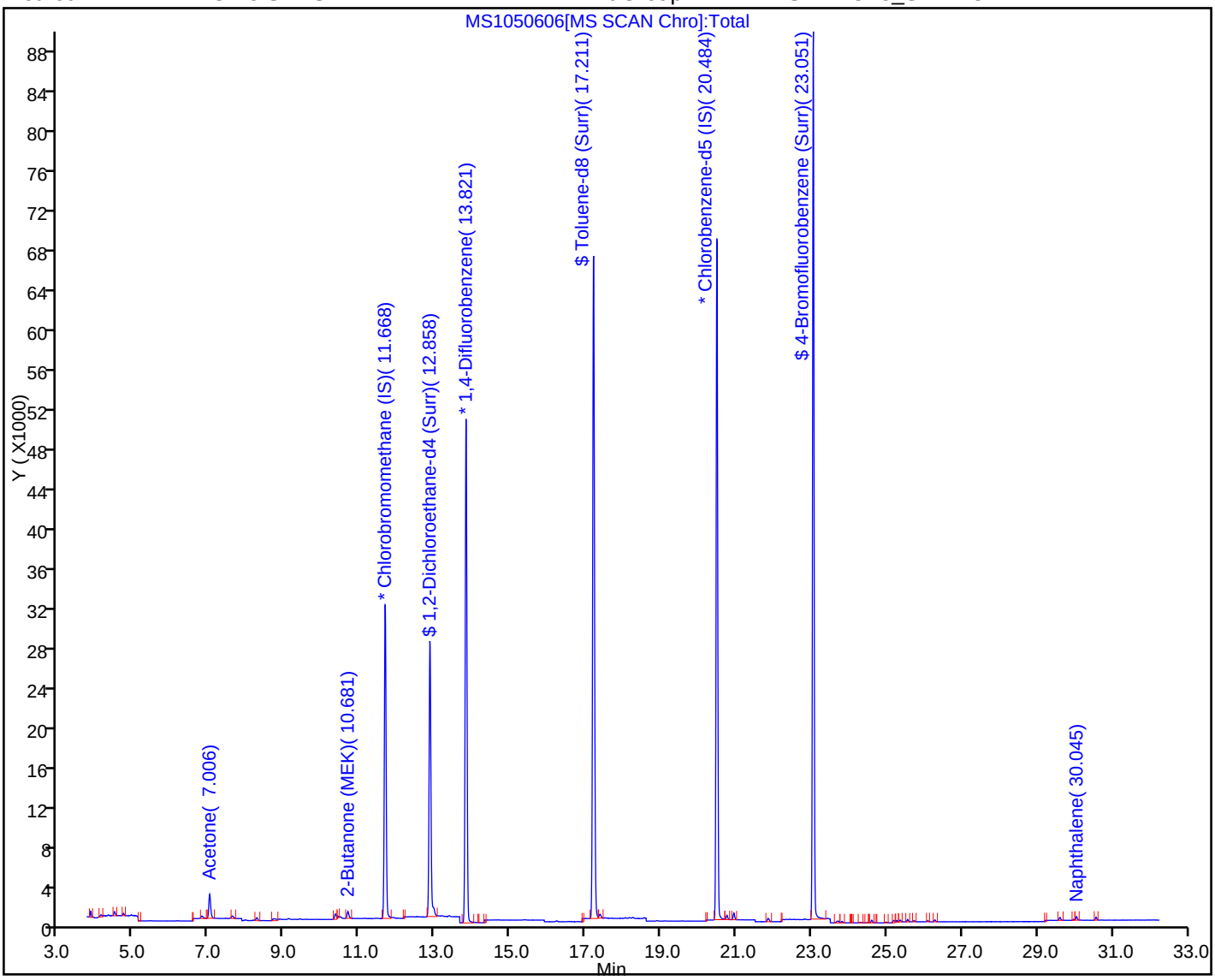
VAMSIS20_00002 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 19-May-2017 11:43:04 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS1\20170506-42758.b\MS1050606.D

Injection Date:	06-May-2017 19:44:30	Instrument ID:	ATMS1		
Lims ID:	320-27916-A-2	Lab Sample ID:	320-27916-2		
Client ID:	34001273				
Operator ID:	FD	ALS Bottle#:	3	Worklist Smp#:	6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO-15 SIM SIM	Limit Group:	MSA - TO15_SIM - ICAL		



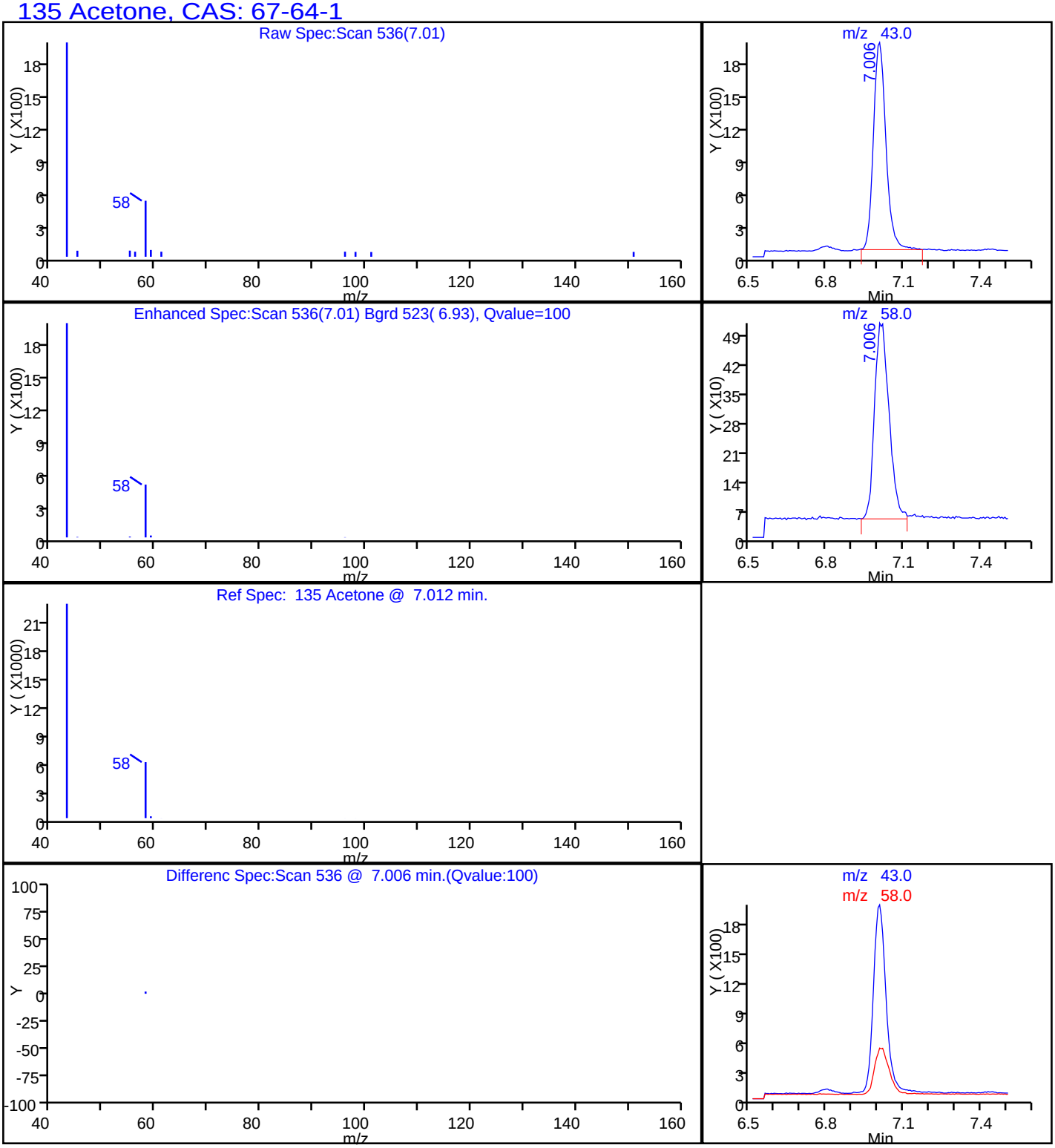
Report Date: 19-May-2017 11:43:04 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS1\20170506-42758.b\MS1050606.D

Injection Date:	06-May-2017 19:44:30	Instrument ID:	ATMS1		
Lims ID:	320-27916-A-2	Lab Sample ID:	320-27916-2		
Client ID:	34001273				
Operator ID:	FD	ALS Bottle#:	3	Worklist Smp#:	6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO-15 SIM SIM	Limit Group:	MSA - TO15_SIM - ICAL		
Column:		Detector	MS SCAN		

135 Acetone, CAS: 67-64-1



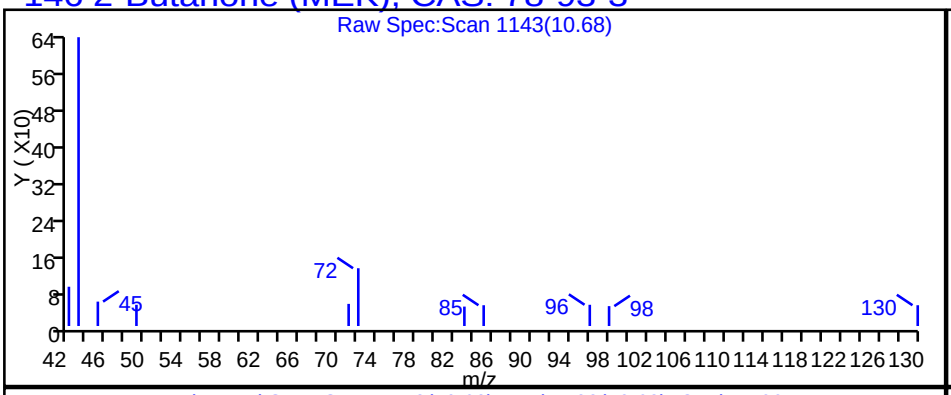
Report Date: 19-May-2017 11:43:04 Chrom Revision: 2.2 25-Apr-2017 13:27:22

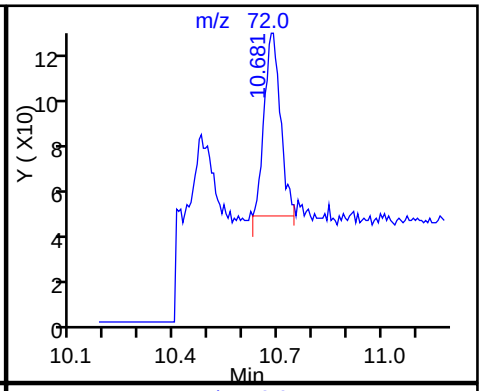
TestAmerica Sacramento

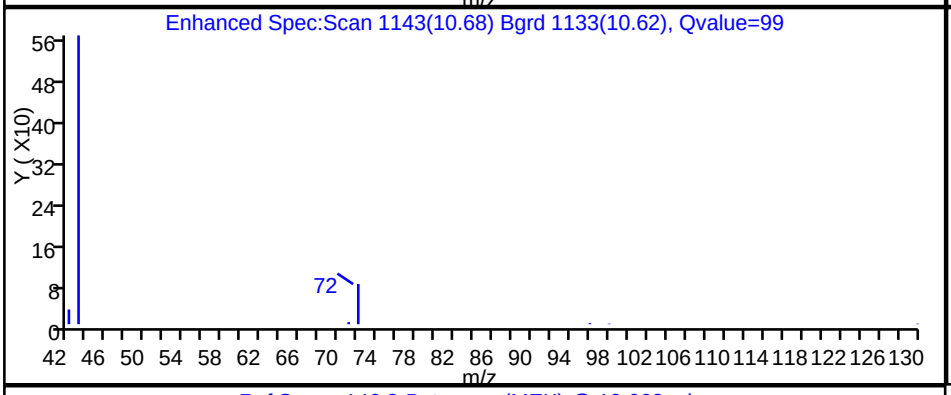
Data File: \\ChromNA\Sacramento\ChromData\ATMS1\20170506-42758.b\MS1050606.D

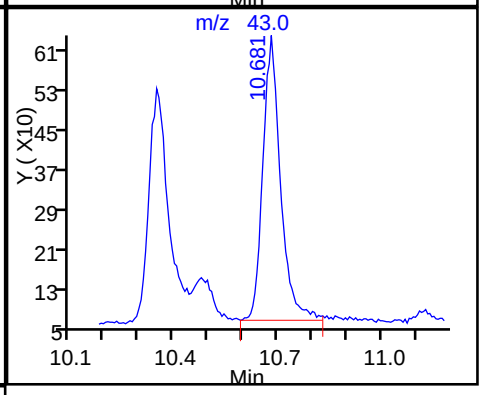
Injection Date:	06-May-2017 19:44:30	Instrument ID:	ATMS1		
Lims ID:	320-27916-A-2	Lab Sample ID:	320-27916-2		
Client ID:	34001273				
Operator ID:	FD	ALS Bottle#:	3	Worklist Smp#:	6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO-15 SIM SIM	Limit Group:	MSA - TO15_SIM - ICAL		
Column:		Detector	MS SCAN		

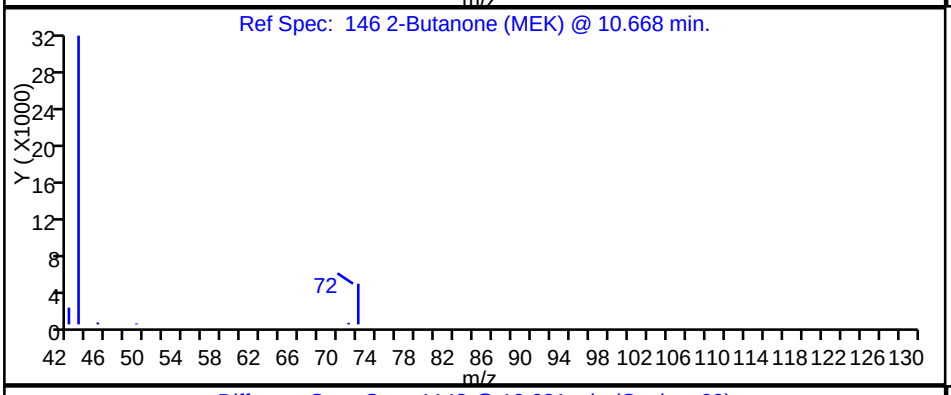
146 2-Butanone (MEK), CAS: 78-93-3

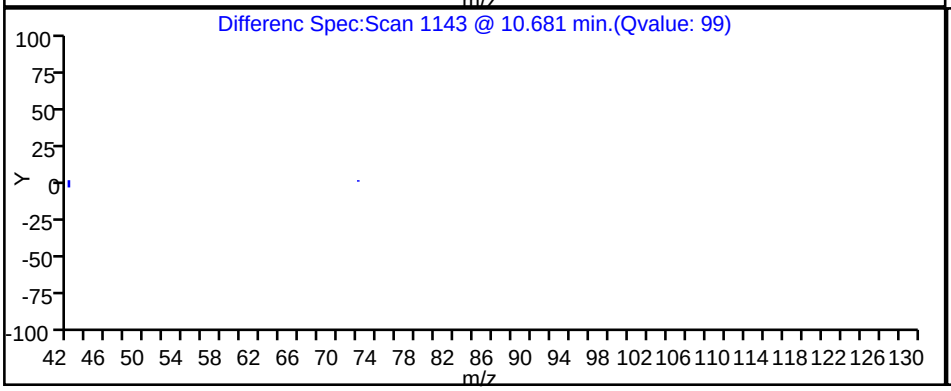


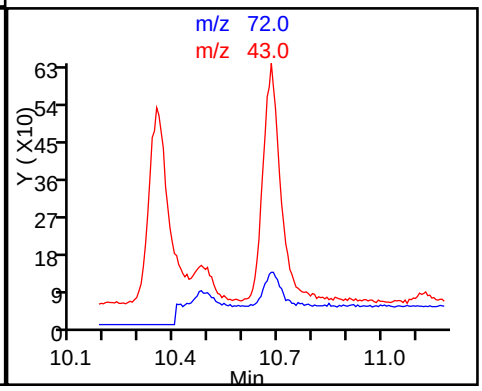












FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-27916-1

SDG No.:

Client Sample ID: 7854 Lab Sample ID: 320-27916-3

Matrix: Air Lab File ID: MS1050607.D

Analysis Method: TO-15 SIM Date Collected: 05/02/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 05/06/2017 20:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163130 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.020	0.010
100-44-7	Benzyl chloride	ND		0.10	0.010
75-27-4	Bromodichloromethane	ND		0.012	0.0050
108-90-7	Chlorobenzene	ND		0.020	0.010
75-00-3	Chloroethane	ND		0.045	0.010
67-66-3	Chloroform	ND		0.020	0.0050
74-87-3	Chloromethane	ND		0.20	0.010
124-48-1	Dibromochloromethane	ND		0.010	0.0050
106-93-4	1,2-Dibromoethane (EDB)	ND		0.0070	0.0028
95-50-1	1,2-Dichlorobenzene	ND		0.050	0.010
541-73-1	1,3-Dichlorobenzene	ND		0.10	0.010
106-46-7	1,4-Dichlorobenzene	ND		0.10	0.010
75-71-8	Dichlorodifluoromethane	ND		0.020	0.0050
75-34-3	1,1-Dichloroethane	ND		0.020	0.0050
107-06-2	1,2-Dichloroethane	ND		0.020	0.0050
75-35-4	1,1-Dichloroethene	ND		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	ND		0.020	0.0050
156-60-5	trans-1,2-Dichloroethene	ND		0.020	0.0050
78-87-5	1,2-Dichloropropane	ND		0.040	0.0050
10061-01-5	cis-1,3-Dichloropropene	ND		0.020	0.0050
10061-02-6	trans-1,3-Dichloropropene	ND		0.020	0.0050
123-91-1	1,4-Dioxane	ND		0.10	0.010
100-41-4	Ethylbenzene	ND		0.020	0.010
87-68-3	Hexachlorobutadiene	ND		0.020	0.010
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.025	0.010
75-09-2	Methylene Chloride	ND		0.20	0.10
100-42-5	Styrene	ND		0.030	0.010
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.020	0.010
127-18-4	Tetrachloroethene	ND		0.020	0.010
108-88-3	Toluene	ND		0.020	0.010
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.030	0.0050
120-82-1	1,2,4-Trichlorobenzene	ND		0.050	0.010
71-55-6	1,1,1-Trichloroethane	ND		0.020	0.0050
79-00-5	1,1,2-Trichloroethane	ND		0.050	0.0050
79-01-6	Trichloroethene	ND		0.020	0.0050

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-27916-1

SDG No.:

Client Sample ID: 7854 Lab Sample ID: 320-27916-3

Matrix: Air Lab File ID: MS1050607.D

Analysis Method: TO-15 SIM Date Collected: 05/02/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 05/06/2017 20:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163130 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-69-4	Trichlorofluoromethane	ND		0.045	0.010
75-01-4	Vinyl chloride	ND		0.020	0.010
179601-23-1	m,p-Xylene	ND		0.040	0.020
95-47-6	o-Xylene	ND		0.020	0.010
67-64-1	Acetone	0.053	J	0.20	0.040
96-18-4	1,2,3-Trichloropropane	ND		0.040	0.010
95-63-6	1,2,4-Trimethylbenzene	ND		0.040	0.010
78-93-3	2-Butanone (MEK)	ND		0.20	0.016
110-82-7	Cyclohexane	ND		0.040	0.0050

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	119		70-130
2037-26-5	Toluene-d8 (Surr)	96		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\ATMS1\20170506-42758.b\MS1050607.D
Lims ID: 320-27916-A-3
Client ID: 7854
Sample Type: Client
Inject. Date: 06-May-2017 20:43:30 ALS Bottle#: 4 Worklist Smp#: 7
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 320-27916-A-03
Misc. Info.: 1000ML
Operator ID: FD Instrument ID: ATMS1

Method: \\ChromNA\Sacramento\ChromData\ATMS1\20170506-42758.b\TO-15 SIM SIM.m
Limit Group: MSA - TO15_SIM - ICAL
Last Update: 19-May-2017 11:44:26 Calib Date: 18-Mar-2017 03:03:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\ATMS1\20170318-40992.b\MS1031714.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: ortizam Date: 09-May-2017 11:23:51

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.667	11.673	-0.006	98	33915	2.00	
* 2 1,4-Difluorobenzene	114	13.814	13.821	-0.007	100	139593	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.490	20.490	0.000	100	123600	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	12.858	12.858	0.000	55	60858	2.39	
$ 5 Toluene-d8 (Surr)	100	17.205	17.205	0.000	99	77173	1.92	
$ 6 4-Bromofluorobenzene (Surr	174	23.050	23.050	0.000	99	72395	2.05	
135 Acetone	43	6.988	6.982	0.006	100	2856	0.0534	
127 Naphthalene	128	30.044	30.044	0.000	100	706	0.0109	

Reagents:

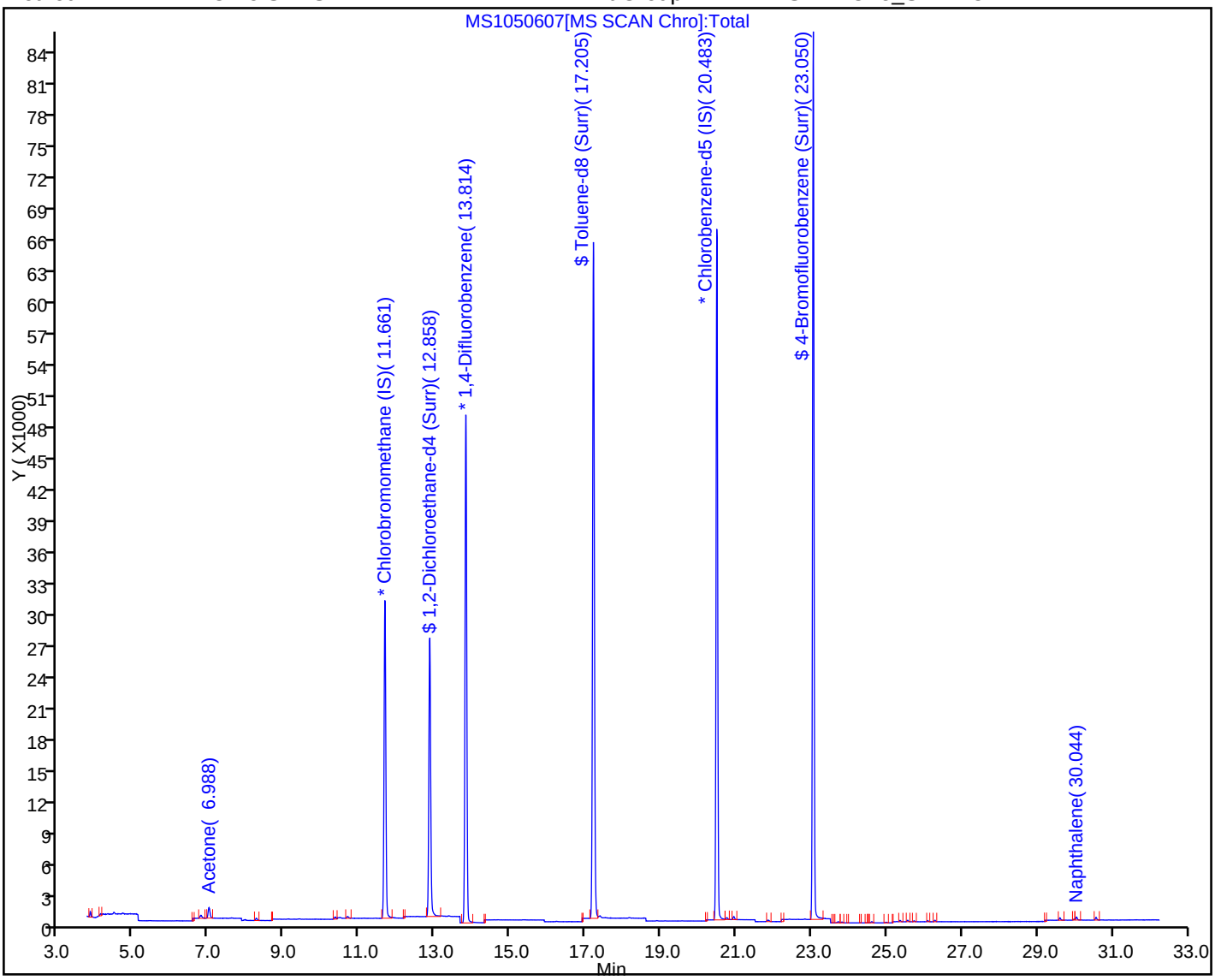
VAMSIS20_00002 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 19-May-2017 11:44:26 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS1\20170506-42758.b\MS1050607.D

Injection Date:	06-May-2017 20:43:30	Instrument ID:	ATMS1		
Lims ID:	320-27916-A-3	Lab Sample ID:	320-27916-3		
Client ID:	7854				
Operator ID:	FD	ALS Bottle#:	4	Worklist Smp#:	7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO-15 SIM SIM	Limit Group:	MSA - TO15_SIM - ICAL		



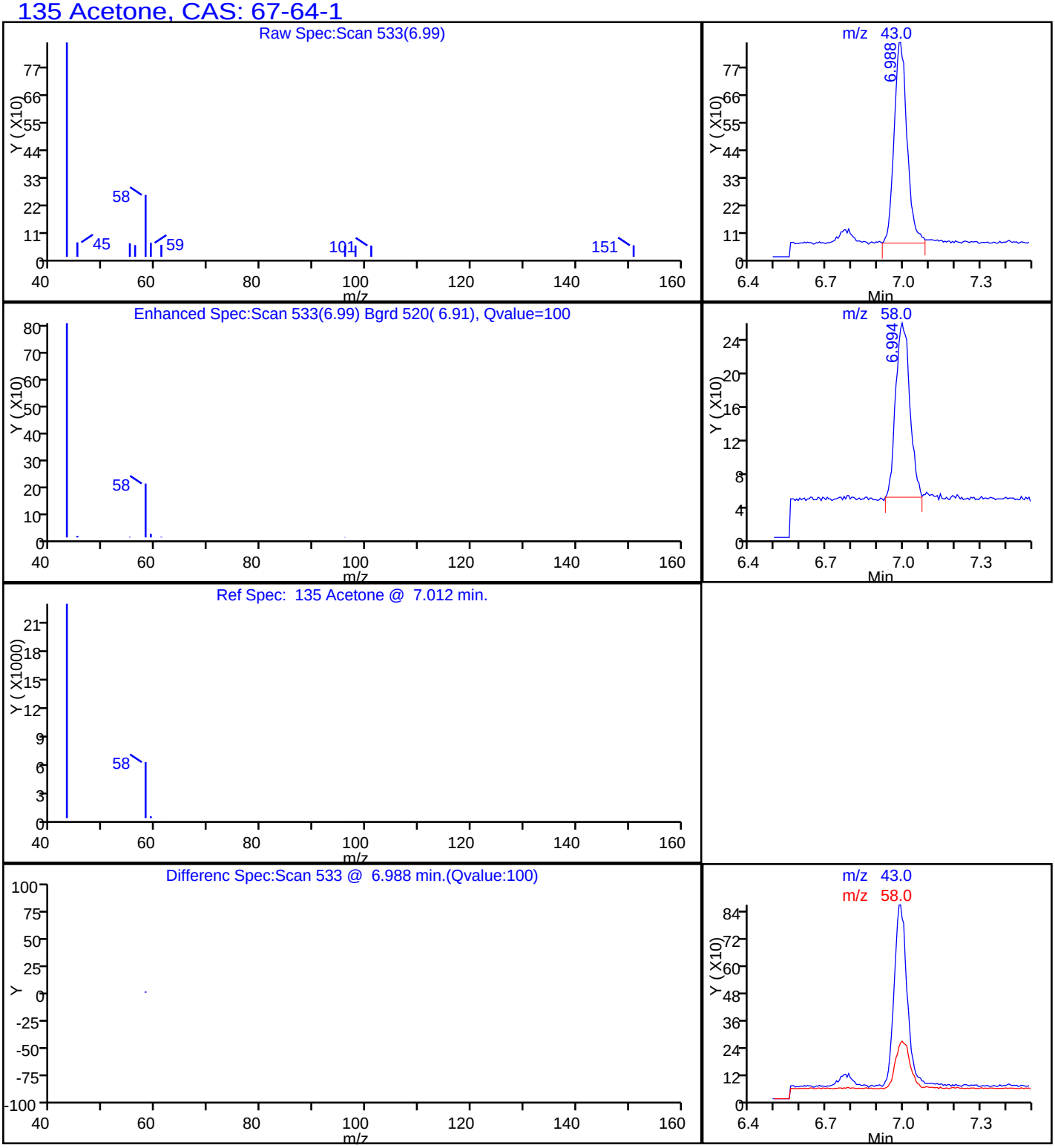
Report Date: 19-May-2017 11:44:27 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS1\20170506-42758.b\MS1050607.D

Injection Date:	06-May-2017 20:43:30	Instrument ID:	ATMS1		
Lims ID:	320-27916-A-3	Lab Sample ID:	320-27916-3		
Client ID:	7854				
Operator ID:	FD	ALS Bottle#:	4	Worklist Smp#:	7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO-15 SIM SIM	Limit Group:	MSA - TO15_SIM - ICAL		
Column:		Detector	MS SCAN		

135 Acetone, CAS: 67-64-1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-27916-1

SDG No.:

Client Sample ID: 34000695 Lab Sample ID: 320-27916-5

Matrix: Air Lab File ID: MS1050609.D

Analysis Method: TO-15 SIM Date Collected: 05/02/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 05/06/2017 22:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163130 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.020	0.010
100-44-7	Benzyl chloride	ND		0.10	0.010
75-27-4	Bromodichloromethane	ND		0.012	0.0050
108-90-7	Chlorobenzene	ND		0.020	0.010
75-00-3	Chloroethane	ND		0.045	0.010
67-66-3	Chloroform	ND		0.020	0.0050
74-87-3	Chloromethane	ND		0.20	0.010
124-48-1	Dibromochloromethane	ND		0.010	0.0050
106-93-4	1,2-Dibromoethane (EDB)	ND		0.0070	0.0028
95-50-1	1,2-Dichlorobenzene	ND		0.050	0.010
541-73-1	1,3-Dichlorobenzene	ND		0.10	0.010
106-46-7	1,4-Dichlorobenzene	ND		0.10	0.010
75-71-8	Dichlorodifluoromethane	ND		0.020	0.0050
75-34-3	1,1-Dichloroethane	ND		0.020	0.0050
107-06-2	1,2-Dichloroethane	ND		0.020	0.0050
75-35-4	1,1-Dichloroethene	ND		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	ND		0.020	0.0050
156-60-5	trans-1,2-Dichloroethene	ND		0.020	0.0050
78-87-5	1,2-Dichloropropane	ND		0.040	0.0050
10061-01-5	cis-1,3-Dichloropropene	ND		0.020	0.0050
10061-02-6	trans-1,3-Dichloropropene	ND		0.020	0.0050
123-91-1	1,4-Dioxane	ND		0.10	0.010
100-41-4	Ethylbenzene	ND		0.020	0.010
87-68-3	Hexachlorobutadiene	ND		0.020	0.010
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.025	0.010
75-09-2	Methylene Chloride	ND		0.20	0.10
91-20-3	Naphthalene	ND		0.013	0.010
100-42-5	Styrene	ND		0.030	0.010
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.020	0.010
127-18-4	Tetrachloroethene	ND		0.020	0.010
108-88-3	Toluene	ND		0.020	0.010
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.030	0.0050
120-82-1	1,2,4-Trichlorobenzene	ND		0.050	0.010
71-55-6	1,1,1-Trichloroethane	ND		0.020	0.0050
79-00-5	1,1,2-Trichloroethane	ND		0.050	0.0050

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-27916-1

SDG No.:

Client Sample ID: 34000695 Lab Sample ID: 320-27916-5

Matrix: Air Lab File ID: MS1050609.D

Analysis Method: TO-15 SIM Date Collected: 05/02/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 05/06/2017 22:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163130 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	ND		0.020	0.0050
75-69-4	Trichlorofluoromethane	ND		0.045	0.010
75-01-4	Vinyl chloride	ND		0.020	0.010
179601-23-1	m,p-Xylene	ND		0.040	0.020
95-47-6	o-Xylene	ND		0.020	0.010
67-64-1	Acetone	0.076	J	0.20	0.040
96-18-4	1,2,3-Trichloropropane	ND		0.040	0.010
95-63-6	1,2,4-Trimethylbenzene	ND		0.040	0.010
78-93-3	2-Butanone (MEK)	ND		0.20	0.016
110-82-7	Cyclohexane	ND		0.040	0.0050

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	121		70-130
2037-26-5	Toluene-d8 (Surr)	97		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\ChromNA\Sacramento\ChromData\ATMS1\20170506-42758.b\MS1050609.D				
Lims ID:	320-27916-A-5				
Client ID:	34000695				
Sample Type:	Client				
Inject. Date:	06-May-2017 22:41:30	ALS Bottle#:	6	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	320-27916-A-05				
Misc. Info.:	1000ML				
Operator ID:	FD	Instrument ID:	ATMS1		
Method:	\\ChromNA\Sacramento\ChromData\ATMS1\20170506-42758.b\TO-15 SIM SIM.m				
Limit Group:	MSA - TO15_SIM - ICAL				
Last Update:	19-May-2017 11:44:49	Calib Date:	18-Mar-2017 03:03:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Sacramento\ChromData\ATMS1\20170318-40992.b\MS1031714.D				
Column 1 :			Det: MS SCAN		
Process Host:	XAWRK005				
First Level Reviewer: ortizam		Date:	09-May-2017 11:24:06		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.668	11.673	-0.005	97	32521	2.00	
* 2 1,4-Difluorobenzene	114	13.814	13.821	-0.007	100	133557	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.490	20.490	0.000	100	119075	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	12.850	12.858	-0.008	49	59197	2.43	
$ 5 Toluene-d8 (Surr)	100	17.205	17.205	0.000	99	74694	1.94	
$ 6 4-Bromofluorobenzene (Surr	174	23.050	23.050	0.000	99	69766	2.06	
135 Acetone	43	6.982	6.982	0.000	99	3898	0.0760	

Reagents:

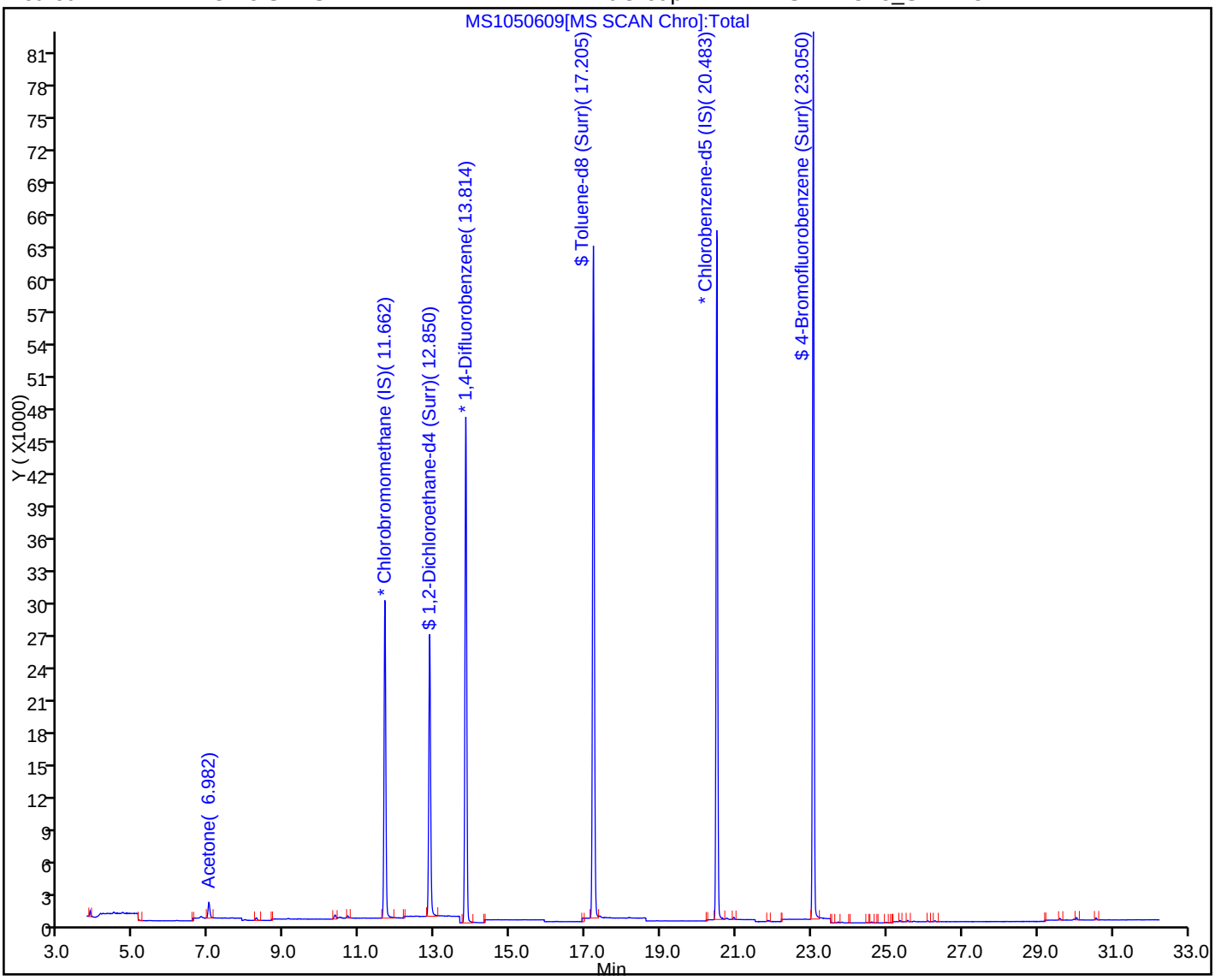
VAMSIS20_00002 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 19-May-2017 11:44:50 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS1\20170506-42758.b\MS1050609.D

Injection Date:	06-May-2017 22:41:30	Instrument ID:	ATMS1		
Lims ID:	320-27916-A-5	Lab Sample ID:	320-27916-5		
Client ID:	34000695				
Operator ID:	FD	ALS Bottle#:	6	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO-15 SIM SIM	Limit Group:	MSA - TO15_SIM - ICAL		

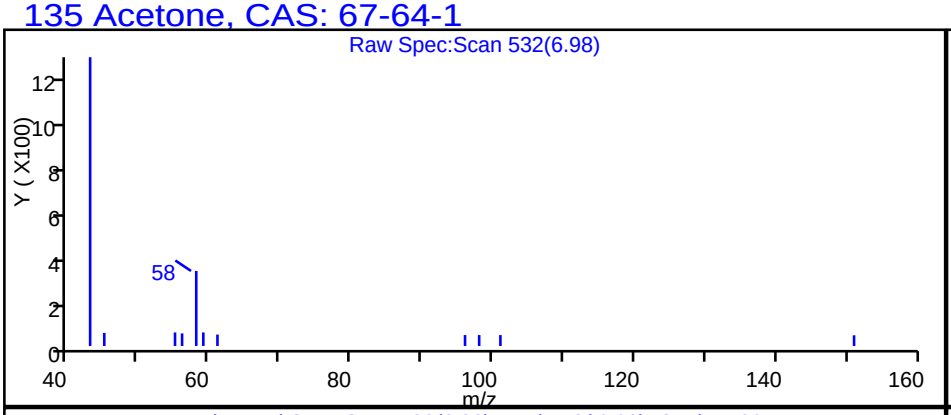


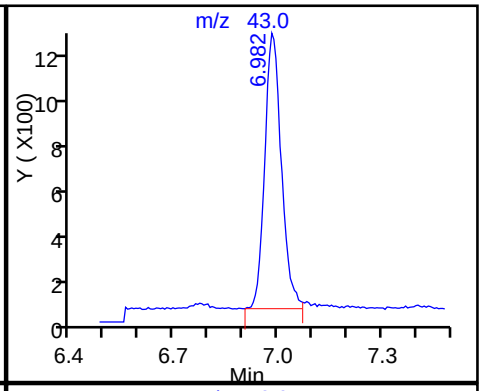
TestAmerica Sacramento

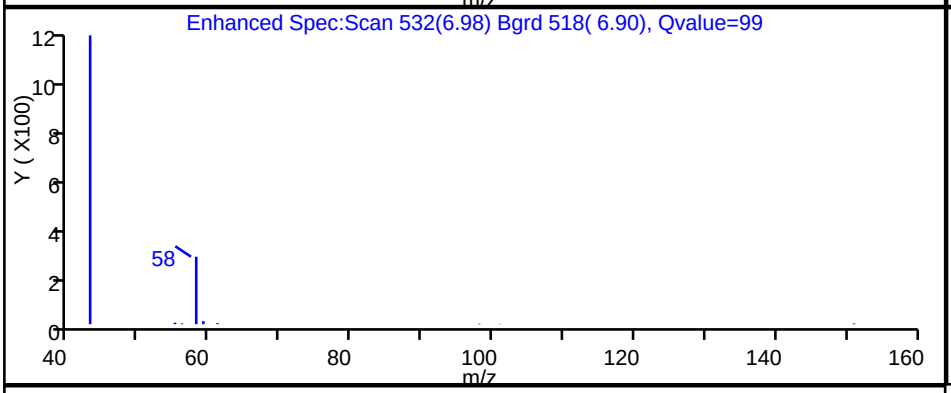
Data File: \\ChromNA\Sacramento\ChromData\ATMS1\20170506-42758.b\MS1050609.D

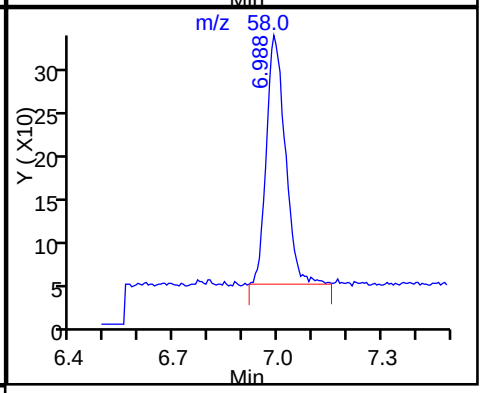
Injection Date:	06-May-2017 22:41:30	Instrument ID:	ATMS1		
Lims ID:	320-27916-A-5	Lab Sample ID:	320-27916-5		
Client ID:	34000695				
Operator ID:	FD	ALS Bottle#:	6	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO-15 SIM SIM	Limit Group:	MSA - TO15_SIM - ICAL		
Column:		Detector	MS SCAN		

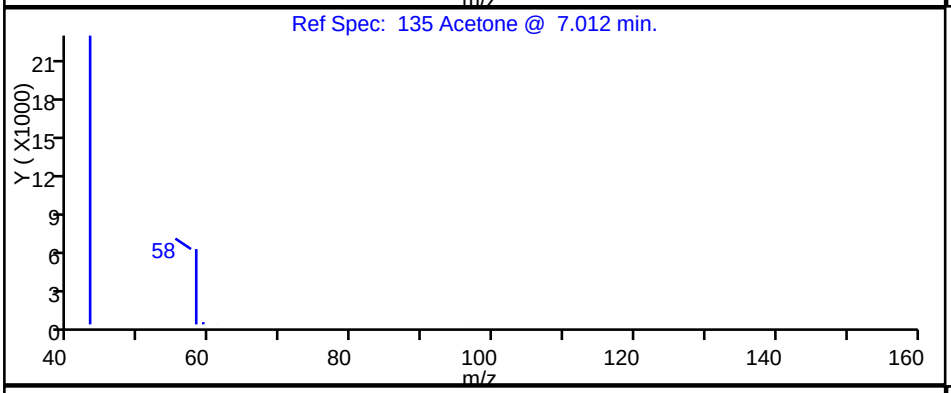
135 Acetone, CAS: 67-64-1

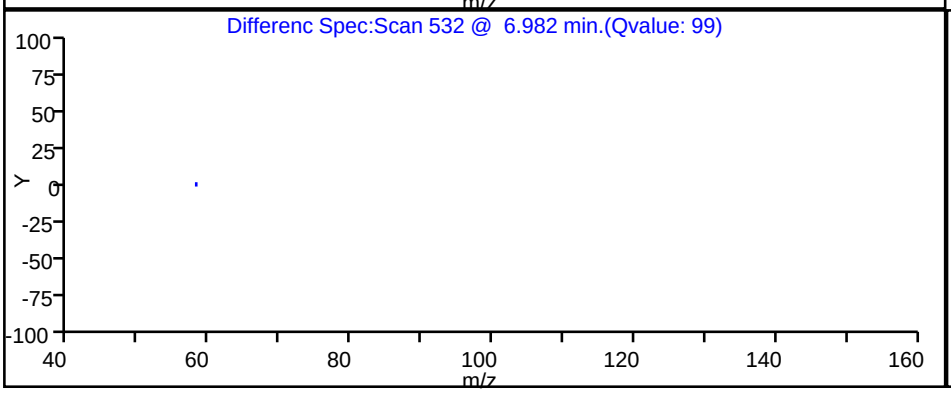


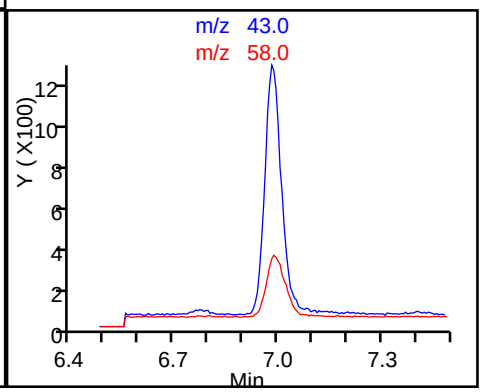












FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-27916-1

SDG No.:

Client Sample ID: 34001283 Lab Sample ID: 320-27916-6

Matrix: Air Lab File ID: MS1050610.D

Analysis Method: TO-15 SIM Date Collected: 05/02/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 05/06/2017 23:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163130 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.020	0.010
100-44-7	Benzyl chloride	ND		0.10	0.010
75-27-4	Bromodichloromethane	ND		0.012	0.0050
108-90-7	Chlorobenzene	ND		0.020	0.010
75-00-3	Chloroethane	ND		0.045	0.010
67-66-3	Chloroform	ND		0.020	0.0050
74-87-3	Chloromethane	ND		0.20	0.010
124-48-1	Dibromochloromethane	ND		0.010	0.0050
106-93-4	1,2-Dibromoethane (EDB)	ND		0.0070	0.0028
95-50-1	1,2-Dichlorobenzene	ND		0.050	0.010
541-73-1	1,3-Dichlorobenzene	ND		0.10	0.010
106-46-7	1,4-Dichlorobenzene	ND		0.10	0.010
75-71-8	Dichlorodifluoromethane	ND		0.020	0.0050
75-34-3	1,1-Dichloroethane	ND		0.020	0.0050
107-06-2	1,2-Dichloroethane	ND		0.020	0.0050
75-35-4	1,1-Dichloroethene	ND		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	ND		0.020	0.0050
156-60-5	trans-1,2-Dichloroethene	ND		0.020	0.0050
78-87-5	1,2-Dichloropropane	ND		0.040	0.0050
10061-01-5	cis-1,3-Dichloropropene	ND		0.020	0.0050
10061-02-6	trans-1,3-Dichloropropene	ND		0.020	0.0050
123-91-1	1,4-Dioxane	ND		0.10	0.010
100-41-4	Ethylbenzene	ND		0.020	0.010
87-68-3	Hexachlorobutadiene	ND		0.020	0.010
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.025	0.010
75-09-2	Methylene Chloride	ND		0.20	0.10
91-20-3	Naphthalene	ND		0.013	0.010
100-42-5	Styrene	ND		0.030	0.010
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.020	0.010
127-18-4	Tetrachloroethene	ND		0.020	0.010
108-88-3	Toluene	ND		0.020	0.010
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.030	0.0050
120-82-1	1,2,4-Trichlorobenzene	ND		0.050	0.010
71-55-6	1,1,1-Trichloroethane	ND		0.020	0.0050
79-00-5	1,1,2-Trichloroethane	ND		0.050	0.0050

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-27916-1

SDG No.:

Client Sample ID: 34001283 Lab Sample ID: 320-27916-6

Matrix: Air Lab File ID: MS1050610.D

Analysis Method: TO-15 SIM Date Collected: 05/02/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 05/06/2017 23:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163130 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	ND		0.020	0.0050
75-69-4	Trichlorofluoromethane	ND		0.045	0.010
75-01-4	Vinyl chloride	ND		0.020	0.010
179601-23-1	m,p-Xylene	ND		0.040	0.020
95-47-6	o-Xylene	ND		0.020	0.010
96-18-4	1,2,3-Trichloropropane	ND		0.040	0.010
95-63-6	1,2,4-Trimethylbenzene	ND		0.040	0.010
78-93-3	2-Butanone (MEK)	0.025	J	0.20	0.016
110-82-7	Cyclohexane	ND		0.040	0.0050

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	122		70-130
2037-26-5	Toluene-d8 (Surr)	97		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\ChromNA\Sacramento\ChromData\ATMS1\20170506-42758.b\MS1050610.D				
Lims ID:	320-27916-A-6				
Client ID:	34001283				
Sample Type:	Client				
Inject. Date:	06-May-2017 23:40:30	ALS Bottle#:	7	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	320-27916-A-06				
Misc. Info.:	1000ML				
Operator ID:	FD	Instrument ID:	ATMS1		
Method:	\\ChromNA\Sacramento\ChromData\ATMS1\20170506-42758.b\TO-15 SIM SIM.m				
Limit Group:	MSA - TO15_SIM - ICAL				
Last Update:	19-May-2017 11:45:00	Calib Date:	18-Mar-2017 03:03:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Sacramento\ChromData\ATMS1\20170318-40992.b\MS1031714.D				
Column 1 :			Det: MS SCAN		
Process Host:	XAWRK005				
First Level Reviewer: ortizam		Date:	09-May-2017 11:24:18		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.667	11.673	-0.006	98	33489	2.00	
* 2 1,4-Difluorobenzene	114	13.817	13.821	-0.004	100	134231	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.490	20.490	0.000	99	120460	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	12.857	12.858	-0.001	56	59996	2.45	
$ 5 Toluene-d8 (Surr)	100	17.210	17.205	0.005	99	74642	1.93	
$ 6 4-Bromofluorobenzene (Surr	174	23.050	23.050	0.000	100	70591	2.06	
135 Acetone	43	6.976	6.982	-0.006	99	15412	0.2919	
146 2-Butanone (MEK)	72	10.668	10.656	0.012	99	270	0.0249	

Reagents:

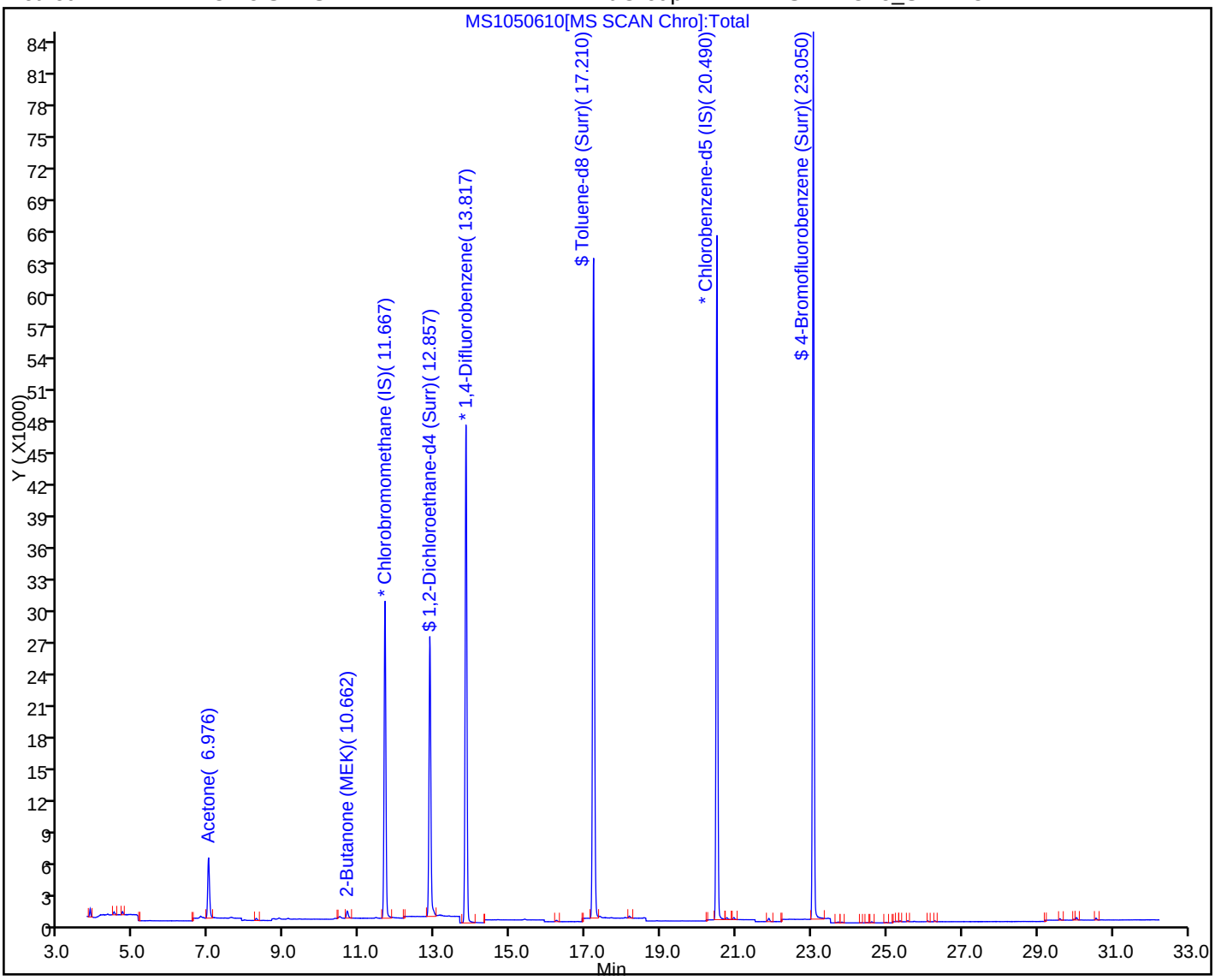
VAMSIS20_00002 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 19-May-2017 11:45:01 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS1\20170506-42758.b\MS1050610.D

Injection Date:	06-May-2017 23:40:30	Instrument ID:	ATMS1		
Lims ID:	320-27916-A-6	Lab Sample ID:	320-27916-6		
Client ID:	34001283				
Operator ID:	FD	ALS Bottle#:	7	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO-15 SIM SIM	Limit Group:	MSA - TO15_SIM - ICAL		



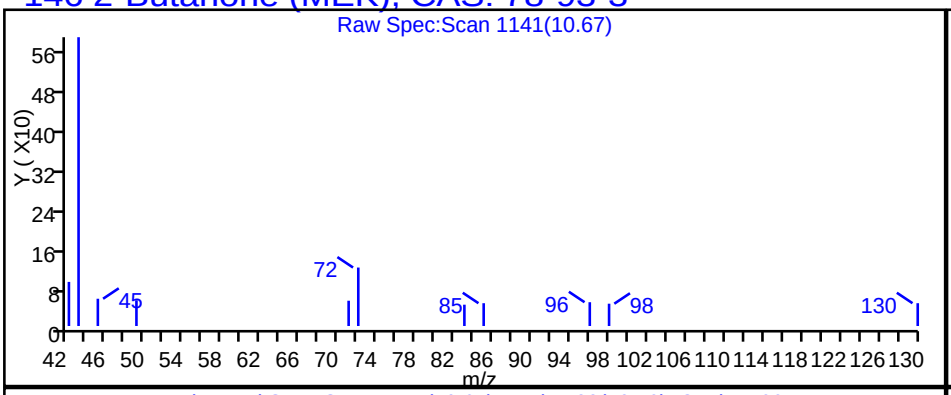
Report Date: 19-May-2017 11:45:01 Chrom Revision: 2.2 25-Apr-2017 13:27:22

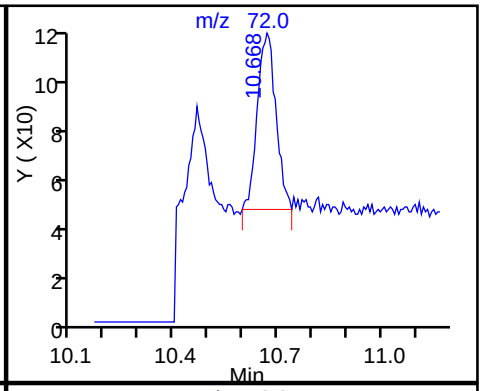
TestAmerica Sacramento

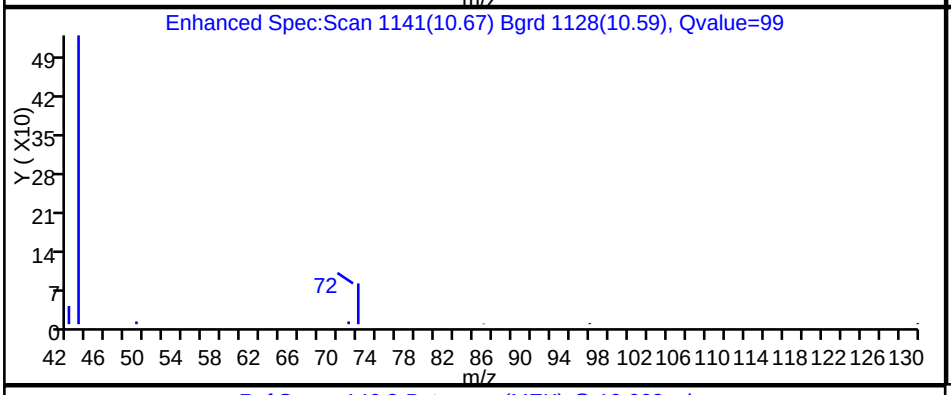
Data File: \\ChromNA\Sacramento\ChromData\ATMS1\20170506-42758.b\MS1050610.D

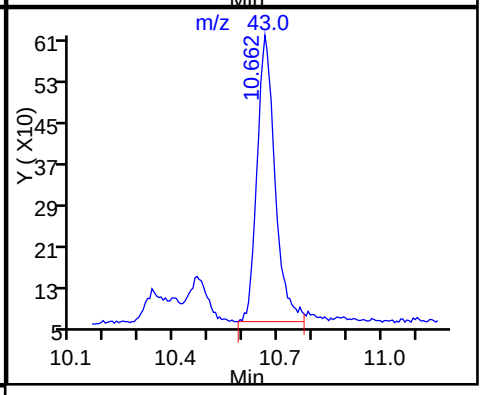
Injection Date:	06-May-2017 23:40:30	Instrument ID:	ATMS1		
Lims ID:	320-27916-A-6	Lab Sample ID:	320-27916-6		
Client ID:	34001283				
Operator ID:	FD	ALS Bottle#:	7	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO-15 SIM SIM	Limit Group:	MSA - TO15_SIM - ICAL		
Column:		Detector	MS SCAN		

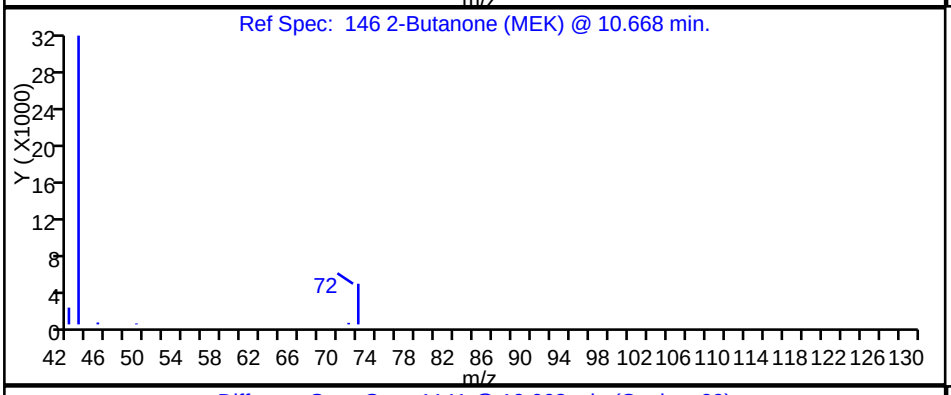
146 2-Butanone (MEK), CAS: 78-93-3

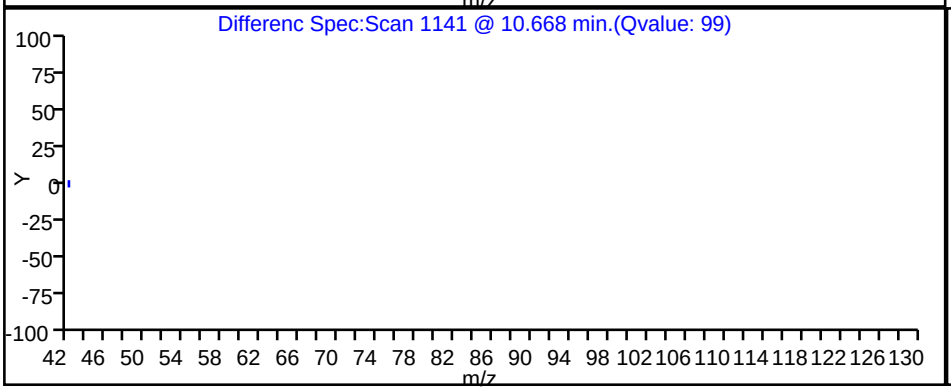


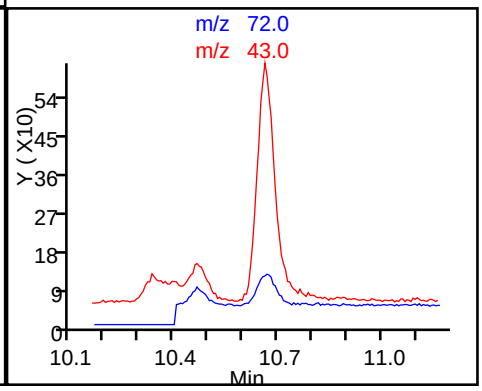












FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-27916-1

SDG No.:

Client Sample ID: 34000124 Lab Sample ID: 320-27916-7

Matrix: Air Lab File ID: MS5050605.D

Analysis Method: TO-15 SIM Date Collected: 05/02/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 05/06/2017 19:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163131 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.020	0.010
100-44-7	Benzyl chloride	ND		0.10	0.010
75-27-4	Bromodichloromethane	ND		0.012	0.0050
56-23-5	Carbon tetrachloride	ND		0.010	0.0050
108-90-7	Chlorobenzene	ND		0.020	0.010
75-00-3	Chloroethane	ND		0.045	0.010
67-66-3	Chloroform	ND		0.020	0.0050
74-87-3	Chloromethane	ND		0.20	0.010
124-48-1	Dibromochloromethane	ND		0.010	0.0050
106-93-4	1,2-Dibromoethane (EDB)	ND		0.0070	0.0028
95-50-1	1,2-Dichlorobenzene	ND		0.050	0.010
541-73-1	1,3-Dichlorobenzene	ND		0.10	0.010
106-46-7	1,4-Dichlorobenzene	ND		0.10	0.010
75-71-8	Dichlorodifluoromethane	ND		0.020	0.0050
75-34-3	1,1-Dichloroethane	ND		0.020	0.0050
107-06-2	1,2-Dichloroethane	ND		0.020	0.0050
75-35-4	1,1-Dichloroethene	ND		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	ND		0.020	0.0050
156-60-5	trans-1,2-Dichloroethene	ND		0.020	0.0050
78-87-5	1,2-Dichloropropane	ND		0.040	0.0050
10061-01-5	cis-1,3-Dichloropropene	ND		0.020	0.0050
10061-02-6	trans-1,3-Dichloropropene	ND		0.020	0.0050
123-91-1	1,4-Dioxane	ND		0.10	0.010
100-41-4	Ethylbenzene	ND		0.020	0.010
87-68-3	Hexachlorobutadiene	ND		0.020	0.010
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.025	0.010
75-09-2	Methylene Chloride	ND		0.20	0.10
91-20-3	Naphthalene	ND		0.013	0.010
100-42-5	Styrene	ND		0.030	0.010
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.020	0.010
127-18-4	Tetrachloroethene	ND		0.020	0.010
108-88-3	Toluene	ND		0.020	0.010
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.030	0.0050
120-82-1	1,2,4-Trichlorobenzene	ND		0.050	0.010
71-55-6	1,1,1-Trichloroethane	ND		0.020	0.0050

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-27916-1

SDG No.:

Client Sample ID: 34000124 Lab Sample ID: 320-27916-7

Matrix: Air Lab File ID: MS5050605.D

Analysis Method: TO-15 SIM Date Collected: 05/02/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 05/06/2017 19:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163131 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-00-5	1,1,2-Trichloroethane	ND		0.050	0.0050
79-01-6	Trichloroethene	ND		0.020	0.0050
75-69-4	Trichlorofluoromethane	ND		0.045	0.010
75-01-4	Vinyl chloride	ND		0.020	0.010
179601-23-1	m,p-Xylene	ND		0.040	0.020
95-47-6	o-Xylene	ND		0.020	0.010
67-64-1	Acetone	0.054	J B	0.20	0.040
96-18-4	1,2,3-Trichloropropane	ND		0.040	0.010
95-63-6	1,2,4-Trimethylbenzene	ND		0.040	0.010
78-93-3	2-Butanone (MEK)	ND		0.20	0.016
110-82-7	Cyclohexane	ND		0.040	0.0050

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	95		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		70-130
2037-26-5	Toluene-d8 (Surr)	100		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\ATMS5\20170506-42759.b\MS5050605.D
Lims ID: 320-27916-A-7
Client ID: 34000124
Sample Type: Client
Inject. Date: 06-May-2017 19:06:30 ALS Bottle#: 2 Worklist Smp#: 5
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 320-27916-A-07
Misc. Info.: 1000ML
Operator ID: FD Instrument ID: ATMS5

Method: \\ChromNA\Sacramento\ChromData\ATMS5\20170506-42759.b\TO15 SIM.m
Limit Group: MSA - TO15_SIM - ICAL
Last Update: 18-May-2017 12:03:19 Calib Date: 05-May-2017 05:20:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\ATMS5\20170505-42704.b\MS5050414.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: ortizam Date: 19-May-2017 11:45:31

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.565	11.574	-0.009	97	39651	2.00	
* 2 1,4-Difluorobenzene	114	13.715	13.724	-0.009	100	157346	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.360	20.362	-0.002	100	139271	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	12.742	12.757	-0.015	86	51316	1.95	
$ 5 Toluene-d8 (Surr)	100	17.092	17.100	-0.008	100	90013	2.01	
$ 6 4-Bromofluorobenzene (Surr	95	22.919	22.920	-0.001	100	89600	1.90	
18 Acetone	43	7.016	7.009	0.007	98	1978	0.0539	
22 Methylene Chloride	49	8.176	8.196	-0.020	98	289	0.0106	7

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

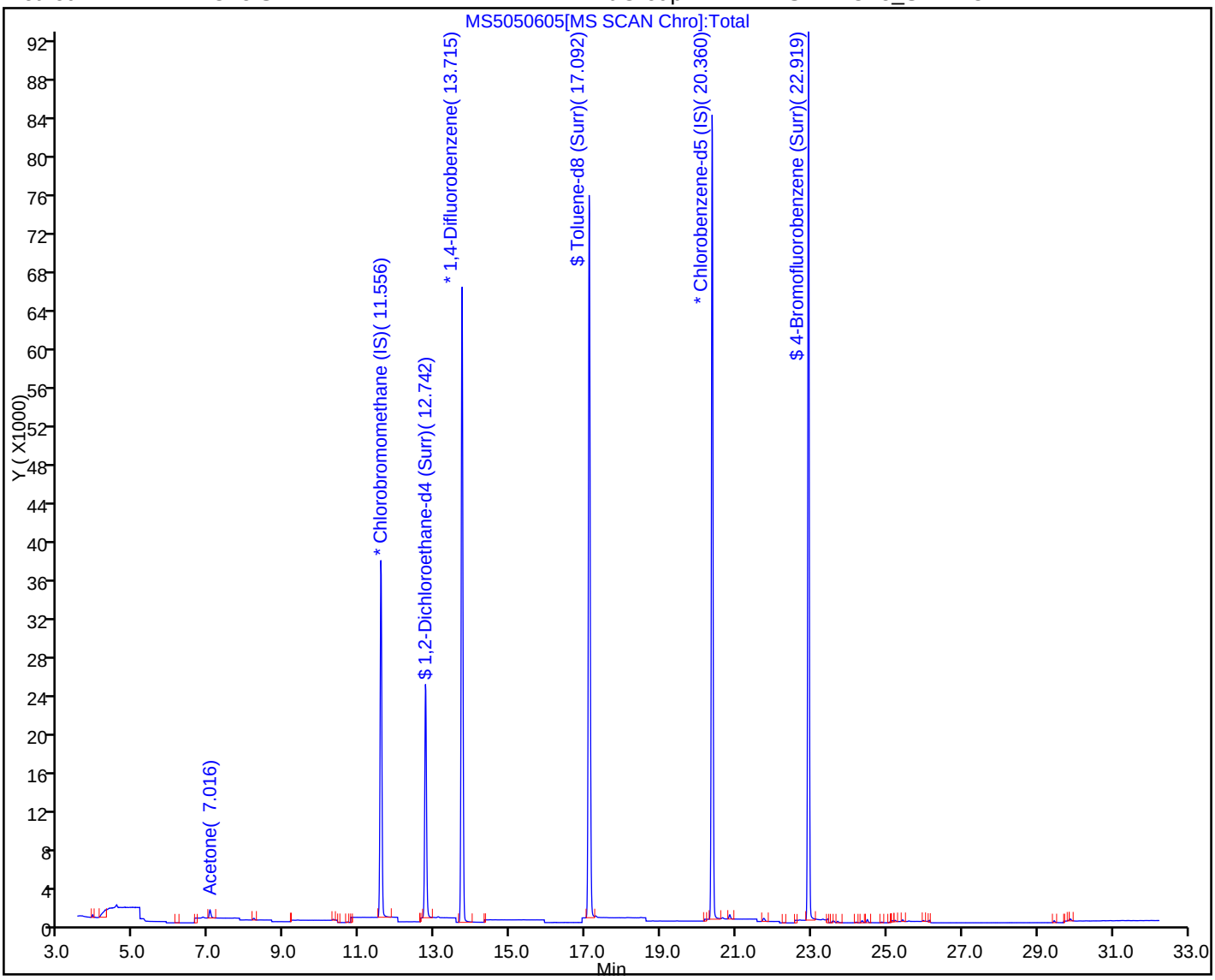
VAMSIS20_00002 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 19-May-2017 11:45:33 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS5\20170506-42759.b\MS5050605.D

Injection Date:	06-May-2017 19:06:30	Instrument ID:	ATMS5		
Lims ID:	320-27916-A-7	Lab Sample ID:	320-27916-7		
Client ID:	34000124				
Operator ID:	FD	ALS Bottle#:	2	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO15_SIM - ICAL		



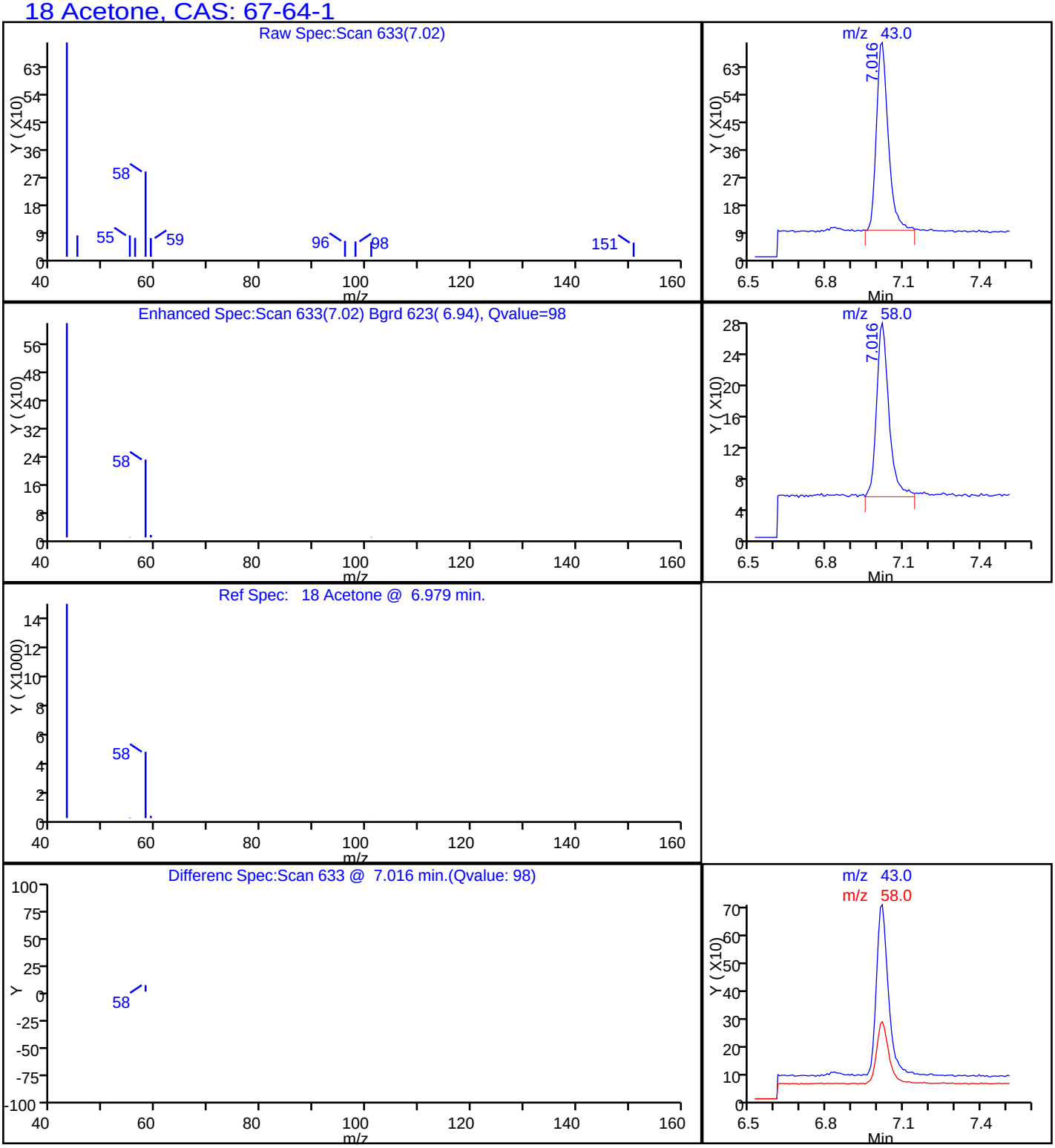
Report Date: 19-May-2017 11:45:33 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS5\20170506-42759.b\MS5050605.D

Injection Date:	06-May-2017 19:06:30	Instrument ID:	ATMS5		
Lims ID:	320-27916-A-7	Lab Sample ID:	320-27916-7		
Client ID:	34000124				
Operator ID:	FD	ALS Bottle#:	2	Worklist Smp#:	5
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO15_SIM - ICAL		
Column:		Detector	MS SCAN		

18 Acetone, CAS: 67-64-1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-27916-1

SDG No.:

Client Sample ID: 34001282 Lab Sample ID: 320-27916-8

Matrix: Air Lab File ID: MS5050606.D

Analysis Method: TO-15 SIM Date Collected: 05/02/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 05/06/2017 20:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163131 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.020	0.010
100-44-7	Benzyl chloride	ND		0.10	0.010
75-27-4	Bromodichloromethane	ND		0.012	0.0050
56-23-5	Carbon tetrachloride	ND		0.010	0.0050
108-90-7	Chlorobenzene	ND		0.020	0.010
75-00-3	Chloroethane	ND		0.045	0.010
67-66-3	Chloroform	ND		0.020	0.0050
74-87-3	Chloromethane	ND		0.20	0.010
124-48-1	Dibromochloromethane	ND		0.010	0.0050
106-93-4	1,2-Dibromoethane (EDB)	ND		0.0070	0.0028
95-50-1	1,2-Dichlorobenzene	ND		0.050	0.010
541-73-1	1,3-Dichlorobenzene	ND		0.10	0.010
106-46-7	1,4-Dichlorobenzene	ND		0.10	0.010
75-71-8	Dichlorodifluoromethane	ND		0.020	0.0050
75-34-3	1,1-Dichloroethane	ND		0.020	0.0050
107-06-2	1,2-Dichloroethane	ND		0.020	0.0050
75-35-4	1,1-Dichloroethene	ND		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	ND		0.020	0.0050
156-60-5	trans-1,2-Dichloroethene	ND		0.020	0.0050
78-87-5	1,2-Dichloropropane	ND		0.040	0.0050
10061-01-5	cis-1,3-Dichloropropene	ND		0.020	0.0050
10061-02-6	trans-1,3-Dichloropropene	ND		0.020	0.0050
123-91-1	1,4-Dioxane	0.020	J	0.10	0.010
100-41-4	Ethylbenzene	ND		0.020	0.010
87-68-3	Hexachlorobutadiene	ND		0.020	0.010
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.025	0.010
75-09-2	Methylene Chloride	ND		0.20	0.10
100-42-5	Styrene	ND		0.030	0.010
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.020	0.010
127-18-4	Tetrachloroethene	ND		0.020	0.010
108-88-3	Toluene	ND		0.020	0.010
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.030	0.0050
120-82-1	1,2,4-Trichlorobenzene	ND		0.050	0.010
71-55-6	1,1,1-Trichloroethane	ND		0.020	0.0050
79-00-5	1,1,2-Trichloroethane	ND		0.050	0.0050

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-27916-1

SDG No.:

Client Sample ID: 34001282 Lab Sample ID: 320-27916-8

Matrix: Air Lab File ID: MS5050606.D

Analysis Method: TO-15 SIM Date Collected: 05/02/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 05/06/2017 20:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163131 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	ND		0.020	0.0050
75-69-4	Trichlorofluoromethane	ND		0.045	0.010
75-01-4	Vinyl chloride	ND		0.020	0.010
179601-23-1	m,p-Xylene	ND		0.040	0.020
95-47-6	o-Xylene	ND		0.020	0.010
67-64-1	Acetone	0.16	J B	0.20	0.040
96-18-4	1,2,3-Trichloropropane	ND		0.040	0.010
95-63-6	1,2,4-Trimethylbenzene	ND		0.040	0.010
78-93-3	2-Butanone (MEK)	0.033	J	0.20	0.016
110-82-7	Cyclohexane	ND		0.040	0.0050

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	95		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		70-130
2037-26-5	Toluene-d8 (Surr)	100		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\ATMS5\20170506-42759.b\MS5050606.D
Lims ID: 320-27916-A-8
Client ID: 34001282
Sample Type: Client
Inject. Date: 06-May-2017 20:04:30 ALS Bottle#: 3 Worklist Smp#: 6
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 320-27916-A-08
Misc. Info.: 1000ML
Operator ID: FD Instrument ID: ATMS5

Method: \\ChromNA\Sacramento\ChromData\ATMS5\20170506-42759.b\TO15 SIM.m
Limit Group: MSA - TO15_SIM - ICAL
Last Update: 18-May-2017 12:03:19 Calib Date: 05-May-2017 05:20:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\ATMS5\20170505-42704.b\MS5050414.D

Column 1 : Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: ortizam Date: 09-May-2017 11:26:01

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.556	11.574	-0.018	99	40059	2.00	
* 2 1,4-Difluorobenzene	114	13.711	13.724	-0.013	100	158794	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.363	20.362	0.001	99	139751	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	12.742	12.757	-0.015	86	52434	1.97	
$ 5 Toluene-d8 (Surr)	100	17.094	17.100	-0.006	100	90559	2.00	
$ 6 4-Bromofluorobenzene (Surr	95	22.919	22.920	-0.001	100	89820	1.89	
18 Acetone	43	7.001	7.009	-0.008	99	6009	0.1620	
22 Methylene Chloride	49	8.176	8.196	-0.020	99	308	0.0112	7
29 2-Butanone (MEK)	72	10.647	10.620	0.027	100	383	0.0332	
43 1,4-Dioxane	88	15.358	15.314	0.044	99	338	0.0205	
70 Naphthalene	128	29.883	29.875	0.008	100	736	0.0104	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

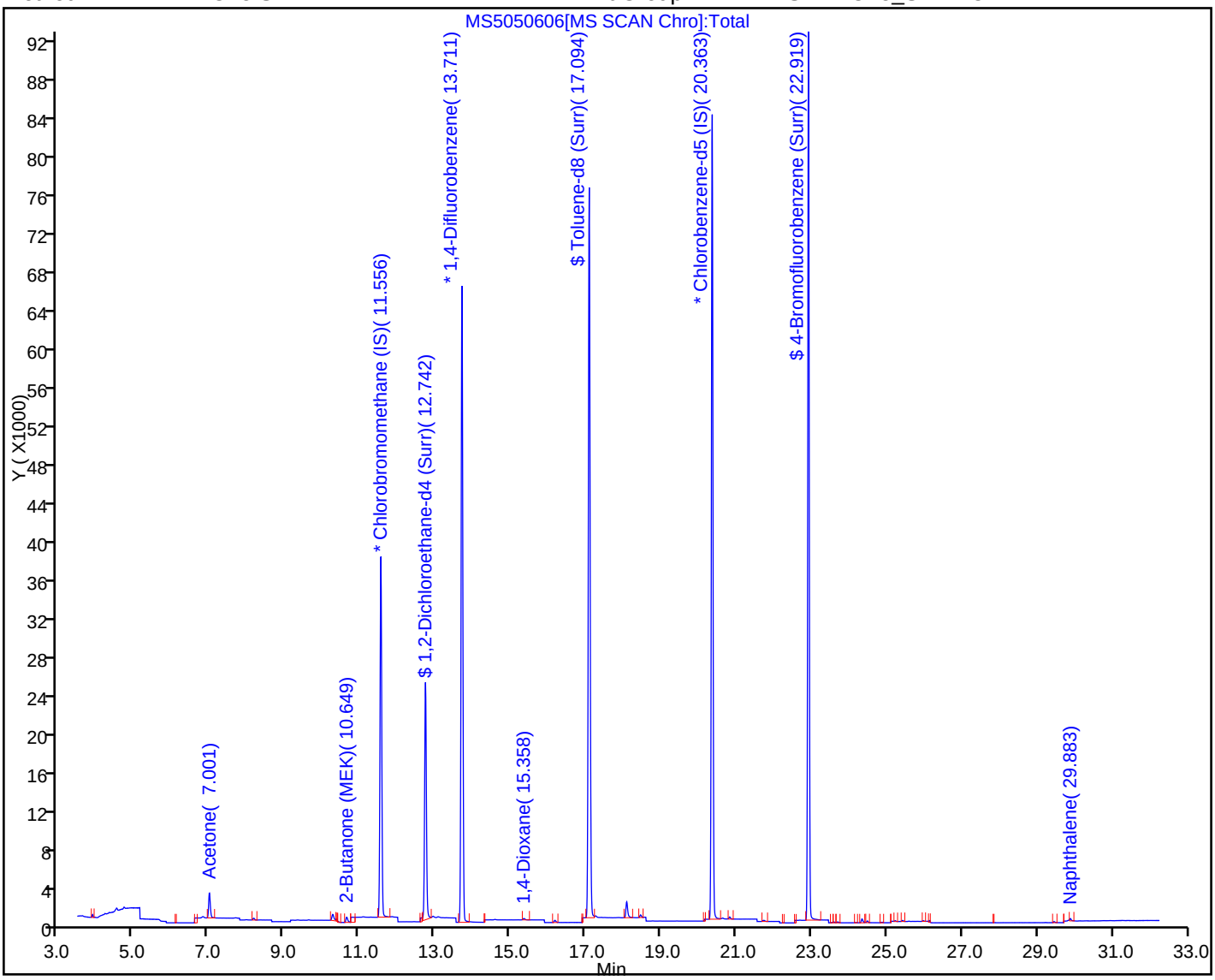
VAMSIS20_00002 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 18-May-2017 12:21:03 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS5\20170506-42759.b\MS5050606.D

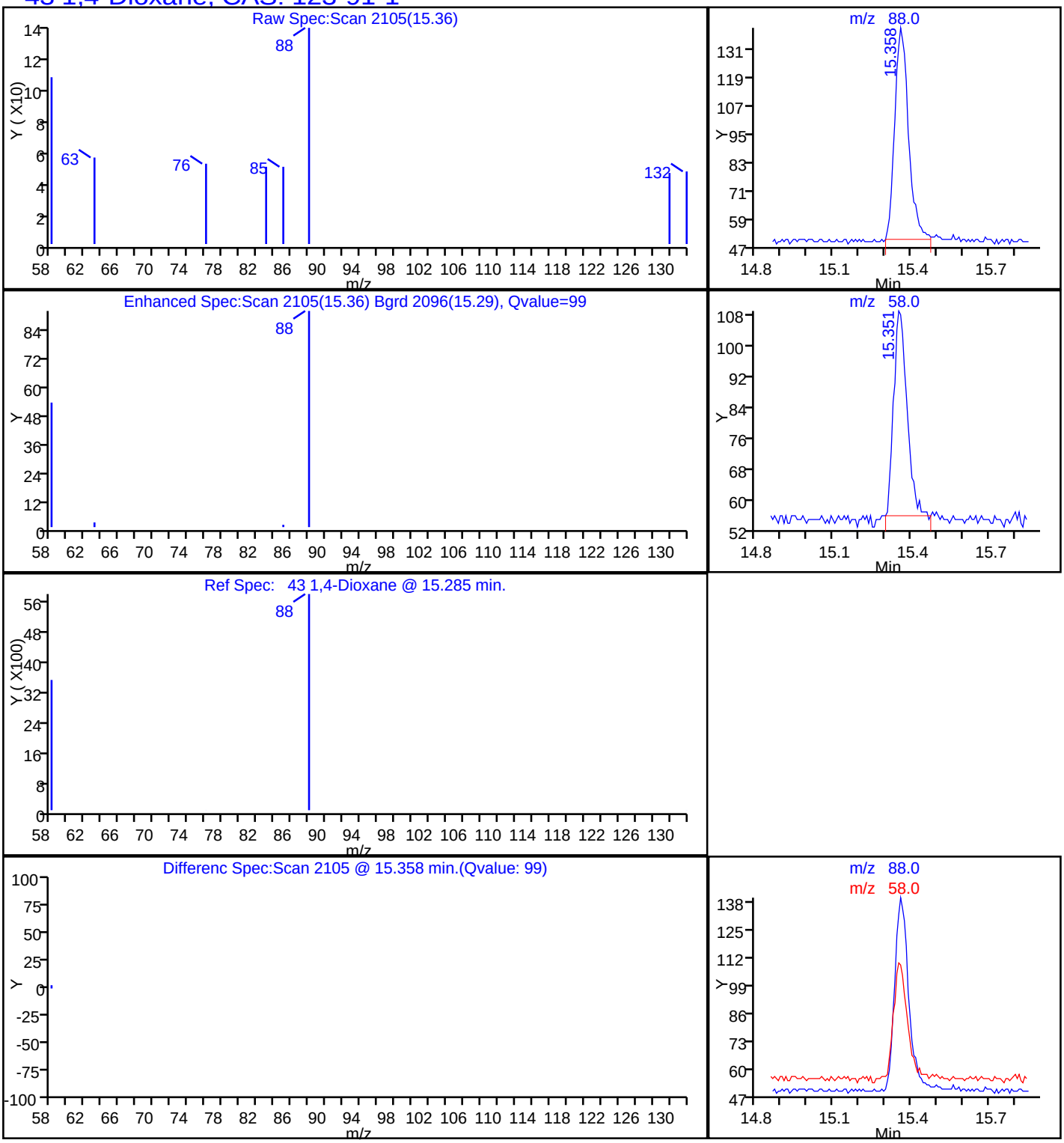
Injection Date:	06-May-2017 20:04:30	Instrument ID:	ATMS5		
Lims ID:	320-27916-A-8	Lab Sample ID:	320-27916-8		
Client ID:	34001282				
Operator ID:	FD	ALS Bottle#:	3	Worklist Smp#:	6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO15_SIM - ICAL		



TestAmerica Sacramento

Data File:	\\ChromNA\Sacramento\ChromData\ATMS5\20170506-42759.b\MS5050606.D				
Injection Date:	06-May-2017 20:04:30	Instrument ID:	ATMS5		
Lims ID:	320-27916-A-8	Lab Sample ID:	320-27916-8		
Client ID:	34001282				
Operator ID:	FD	ALS Bottle#:	3	Worklist Smp#:	6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO15_SIM - ICAL		
Column:		Detector	MS SCAN		

43 1,4-Dioxane, CAS: 123-91-1



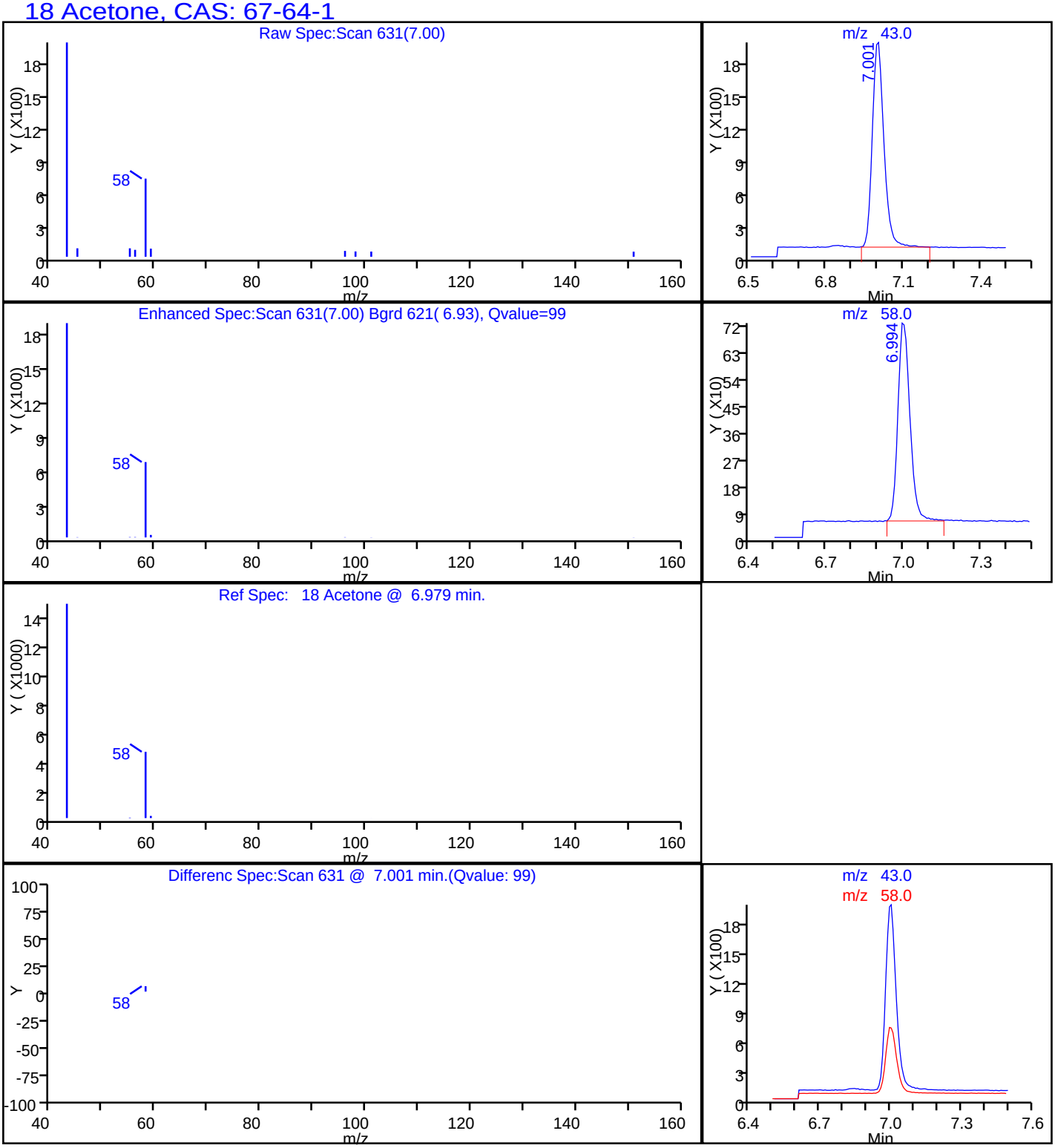
Report Date: 18-May-2017 12:21:03 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS5\20170506-42759.b\MS5050606.D

Injection Date:	06-May-2017 20:04:30	Instrument ID:	ATMS5		
Lims ID:	320-27916-A-8	Lab Sample ID:	320-27916-8		
Client ID:	34001282				
Operator ID:	FD	ALS Bottle#:	3	Worklist Smp#:	6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO15_SIM - ICAL		
Column:		Detector	MS SCAN		

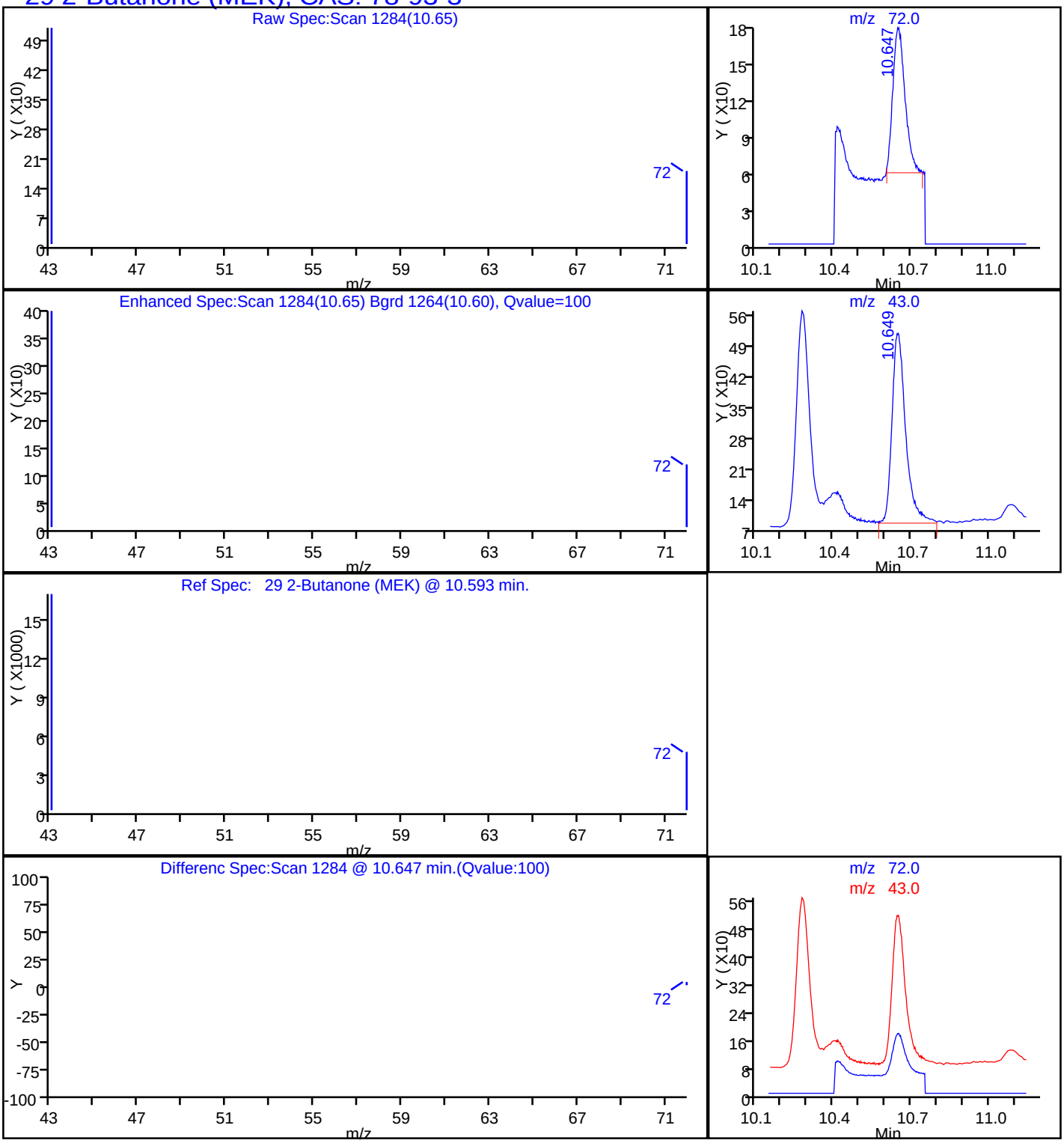
18 Acetone, CAS: 67-64-1



TestAmerica Sacramento

Data File:	\\ChromNA\Sacramento\ChromData\ATMS5\20170506-42759.b\MS5050606.D				
Injection Date:	06-May-2017 20:04:30	Instrument ID:	ATMS5		
Lims ID:	320-27916-A-8	Lab Sample ID:	320-27916-8		
Client ID:	34001282				
Operator ID:	FD	ALS Bottle#:	3	Worklist Smp#:	6
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO15_SIM - ICAL		
Column:		Detector	MS SCAN		

29 2-Butanone (MEK), CAS: 78-93-3



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-27916-1

SDG No.:

Client Sample ID: 34001538 Lab Sample ID: 320-27916-9

Matrix: Air Lab File ID: MS5050607.D

Analysis Method: TO-15 SIM Date Collected: 05/02/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 05/06/2017 21:03

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163131 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.020	0.010
100-44-7	Benzyl chloride	ND		0.10	0.010
75-27-4	Bromodichloromethane	ND		0.012	0.0050
56-23-5	Carbon tetrachloride	ND		0.010	0.0050
108-90-7	Chlorobenzene	ND		0.020	0.010
75-00-3	Chloroethane	ND		0.045	0.010
67-66-3	Chloroform	ND		0.020	0.0050
74-87-3	Chloromethane	ND		0.20	0.010
124-48-1	Dibromochloromethane	ND		0.010	0.0050
106-93-4	1,2-Dibromoethane (EDB)	ND		0.0070	0.0028
95-50-1	1,2-Dichlorobenzene	ND		0.050	0.010
541-73-1	1,3-Dichlorobenzene	ND		0.10	0.010
106-46-7	1,4-Dichlorobenzene	ND		0.10	0.010
75-71-8	Dichlorodifluoromethane	ND		0.020	0.0050
75-34-3	1,1-Dichloroethane	ND		0.020	0.0050
107-06-2	1,2-Dichloroethane	ND		0.020	0.0050
75-35-4	1,1-Dichloroethene	ND		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	ND		0.020	0.0050
156-60-5	trans-1,2-Dichloroethene	ND		0.020	0.0050
78-87-5	1,2-Dichloropropane	ND		0.040	0.0050
10061-01-5	cis-1,3-Dichloropropene	ND		0.020	0.0050
10061-02-6	trans-1,3-Dichloropropene	ND		0.020	0.0050
123-91-1	1,4-Dioxane	ND		0.10	0.010
100-41-4	Ethylbenzene	ND		0.020	0.010
87-68-3	Hexachlorobutadiene	ND		0.020	0.010
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.025	0.010
75-09-2	Methylene Chloride	ND		0.20	0.10
91-20-3	Naphthalene	ND		0.013	0.010
100-42-5	Styrene	ND		0.030	0.010
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.020	0.010
127-18-4	Tetrachloroethene	ND		0.020	0.010
108-88-3	Toluene	ND		0.020	0.010
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.030	0.0050
120-82-1	1,2,4-Trichlorobenzene	ND		0.050	0.010
71-55-6	1,1,1-Trichloroethane	ND		0.020	0.0050

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-27916-1

SDG No.:

Client Sample ID: 34001538 Lab Sample ID: 320-27916-9

Matrix: Air Lab File ID: MS5050607.D

Analysis Method: TO-15 SIM Date Collected: 05/02/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 05/06/2017 21:03

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163131 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-00-5	1,1,2-Trichloroethane	ND		0.050	0.0050
79-01-6	Trichloroethene	ND		0.020	0.0050
75-69-4	Trichlorofluoromethane	ND		0.045	0.010
75-01-4	Vinyl chloride	ND		0.020	0.010
179601-23-1	m,p-Xylene	ND		0.040	0.020
95-47-6	o-Xylene	ND		0.020	0.010
67-64-1	Acetone	0.047	J B	0.20	0.040
96-18-4	1,2,3-Trichloropropane	ND		0.040	0.010
95-63-6	1,2,4-Trimethylbenzene	ND		0.040	0.010
78-93-3	2-Butanone (MEK)	ND		0.20	0.016
110-82-7	Cyclohexane	ND		0.040	0.0050

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	95		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		70-130
2037-26-5	Toluene-d8 (Surr)	101		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\ATMS5\20170506-42759.b\MS5050607.D
Lims ID: 320-27916-A-9
Client ID: 34001538
Sample Type: Client
Inject. Date: 06-May-2017 21:03:30 ALS Bottle#: 4 Worklist Smp#: 7
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 320-27916-A-09
Misc. Info.: 1000ML
Operator ID: FD Instrument ID: ATMS5

Method: \\ChromNA\Sacramento\ChromData\ATMS5\20170506-42759.b\TO15 SIM.m
Limit Group: MSA - TO15_SIM - ICAL
Last Update: 18-May-2017 12:03:19 Calib Date: 05-May-2017 05:20:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\ATMS5\20170505-42704.b\MS5050414.D

Column 1 : Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: ortizam Date: 09-May-2017 11:26:17

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.565	11.574	-0.009	99	39430	2.00	
* 2 1,4-Difluorobenzene	114	13.721	13.724	-0.003	100	156960	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.363	20.362	0.001	100	138763	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	12.749	12.757	-0.008	86	51945	1.97	
$ 5 Toluene-d8 (Surr)	100	17.094	17.100	-0.006	100	89885	2.01	
$ 6 4-Bromofluorobenzene (Surr	95	22.919	22.920	-0.001	100	89231	1.90	
18 Acetone	43	7.039	7.009	0.030	98	1703	0.0466	
22 Methylene Chloride	49	8.196	8.196	0.000	98	321	0.0118	7
56 m-Xylene & p-Xylene	91	20.832	20.825	0.007	100	1194	0.0127	7

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

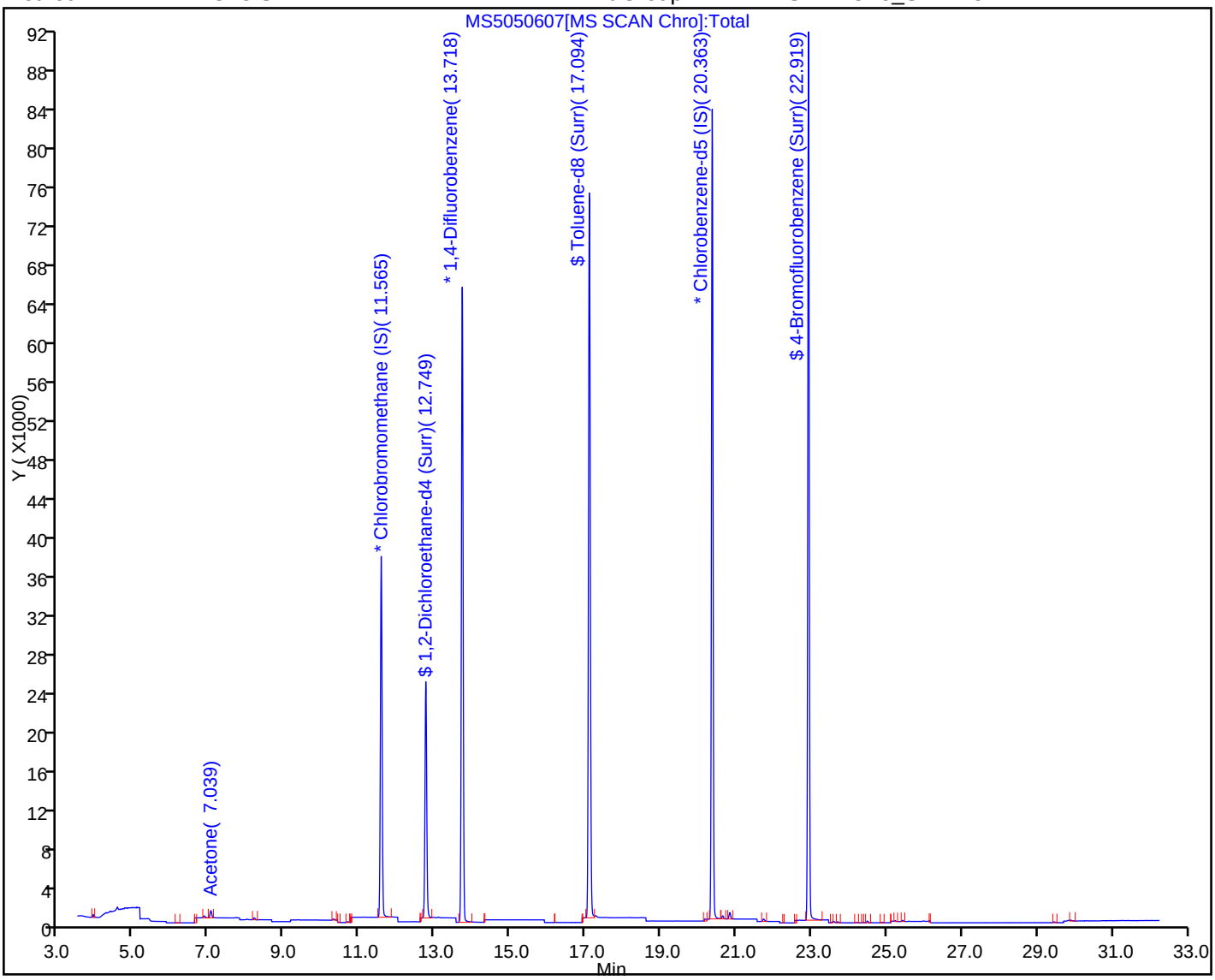
VAMSIS20_00002 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 18-May-2017 12:21:05 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS5\20170506-42759.b\MS5050607.D

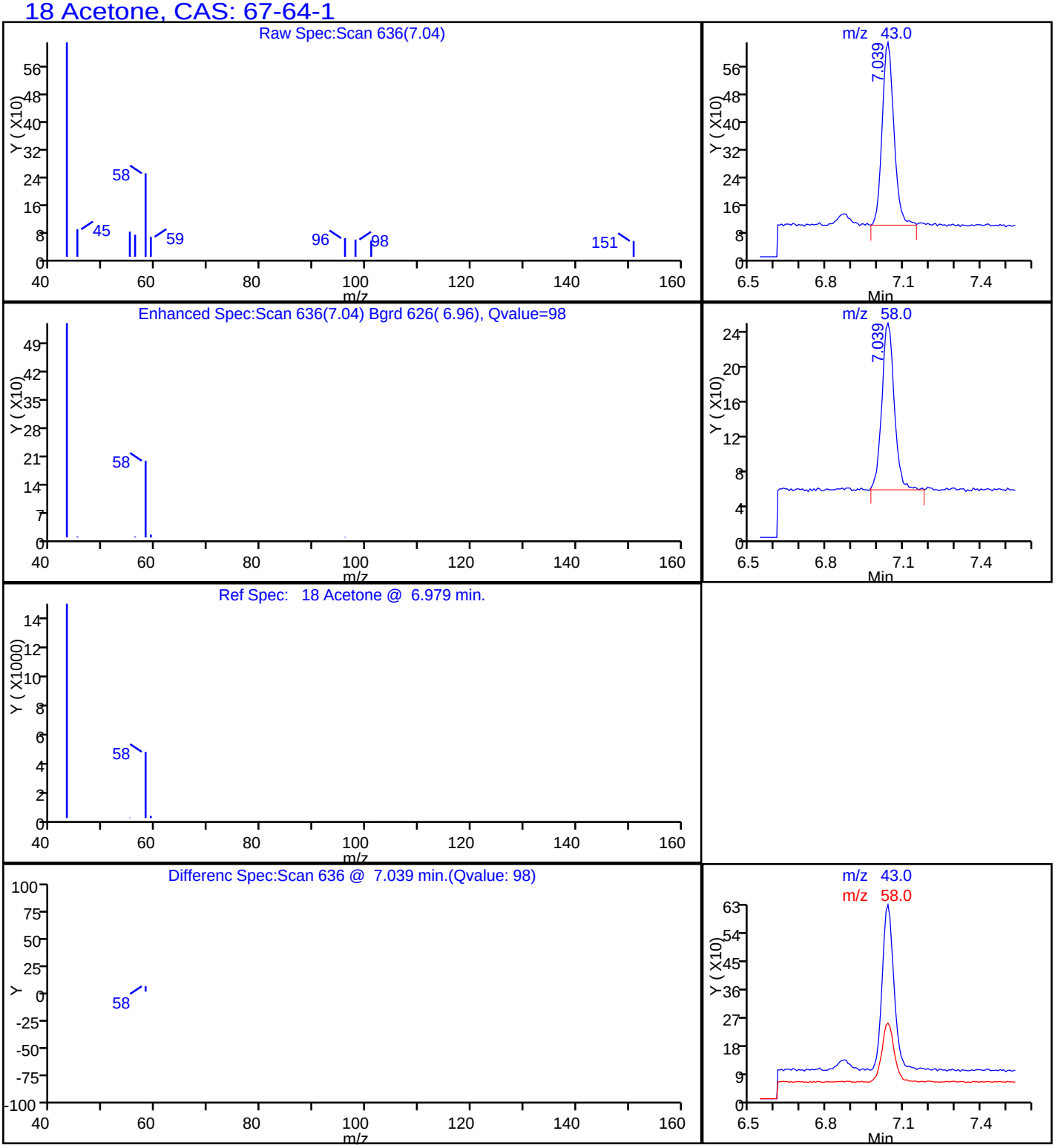
Injection Date:	06-May-2017 21:03:30	Instrument ID:	ATMS5		
Lims ID:	320-27916-A-9	Lab Sample ID:	320-27916-9		
Client ID:	34001538				
Operator ID:	FD	ALS Bottle#:	4	Worklist Smp#:	7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO15_SIM - ICAL		



TestAmerica Sacramento

Data File:	\\ChromNA\Sacramento\ChromData\ATMS5\20170506-42759.b\MS5050607.D				
Injection Date:	06-May-2017 21:03:30	Instrument ID:	ATMS5		
Lims ID:	320-27916-A-9	Lab Sample ID:	320-27916-9		
Client ID:	34001538				
Operator ID:	FD	ALS Bottle#:	4	Worklist Smp#:	7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO15_SIM - ICAL		
Column:		Detector	MS SCAN		

18 Acetone, CAS: 67-64-1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-27916-1

SDG No.:

Client Sample ID: 8426 Lab Sample ID: 320-27916-10

Matrix: Air Lab File ID: MS5050608.D

Analysis Method: TO-15 SIM Date Collected: 05/02/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 05/06/2017 22:07

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163131 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.020	0.010
100-44-7	Benzyl chloride	ND		0.10	0.010
75-27-4	Bromodichloromethane	ND		0.012	0.0050
56-23-5	Carbon tetrachloride	ND		0.010	0.0050
108-90-7	Chlorobenzene	ND		0.020	0.010
75-00-3	Chloroethane	ND		0.045	0.010
67-66-3	Chloroform	ND		0.020	0.0050
124-48-1	Dibromochloromethane	ND		0.010	0.0050
106-93-4	1,2-Dibromoethane (EDB)	ND		0.0070	0.0028
95-50-1	1,2-Dichlorobenzene	ND		0.050	0.010
541-73-1	1,3-Dichlorobenzene	ND		0.10	0.010
106-46-7	1,4-Dichlorobenzene	ND		0.10	0.010
75-34-3	1,1-Dichloroethane	ND		0.020	0.0050
107-06-2	1,2-Dichloroethane	ND		0.020	0.0050
75-35-4	1,1-Dichloroethene	ND		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	ND		0.020	0.0050
156-60-5	trans-1,2-Dichloroethene	ND		0.020	0.0050
78-87-5	1,2-Dichloropropane	ND		0.040	0.0050
10061-01-5	cis-1,3-Dichloropropene	ND		0.020	0.0050
10061-02-6	trans-1,3-Dichloropropene	ND		0.020	0.0050
123-91-1	1,4-Dioxane	ND		0.10	0.010
100-41-4	Ethylbenzene	ND		0.020	0.010
87-68-3	Hexachlorobutadiene	ND		0.020	0.010
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.025	0.010
91-20-3	Naphthalene	ND		0.013	0.010
100-42-5	Styrene	ND		0.030	0.010
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.020	0.010
127-18-4	Tetrachloroethene	ND		0.020	0.010
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.030	0.0050
120-82-1	1,2,4-Trichlorobenzene	ND		0.050	0.010
71-55-6	1,1,1-Trichloroethane	ND		0.020	0.0050
79-00-5	1,1,2-Trichloroethane	ND		0.050	0.0050
79-01-6	Trichloroethene	ND		0.020	0.0050
75-01-4	Vinyl chloride	ND		0.020	0.010
179601-23-1	m,p-Xylene	ND		0.040	0.020

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-27916-1

SDG No.:

Client Sample ID: 8426 Lab Sample ID: 320-27916-10

Matrix: Air Lab File ID: MS5050608.D

Analysis Method: TO-15 SIM Date Collected: 05/02/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 05/06/2017 22:07

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163131 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-47-6	o-Xylene	ND		0.020	0.010
96-18-4	1,2,3-Trichloropropane	ND		0.040	0.010
95-63-6	1,2,4-Trimethylbenzene	ND		0.040	0.010
110-82-7	Cyclohexane	ND		0.040	0.0050

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	95		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		70-130
2037-26-5	Toluene-d8 (Surr)	100		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\ATMS5\20170506-42759.b\MS5050608.D
Lims ID: 320-27916-A-10
Client ID: 8426
Sample Type: Client
Inject. Date: 06-May-2017 22:07:30 ALS Bottle#: 5 Worklist Smp#: 8
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 320-27916-A-10
Misc. Info.: 1000ML
Operator ID: FD Instrument ID: ATMS5

Method: \\ChromNA\Sacramento\ChromData\ATMS5\20170506-42759.b\TO15 SIM.m
Limit Group: MSA - TO15_SIM - ICAL
Last Update: 18-May-2017 12:03:19 Calib Date: 05-May-2017 05:20:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\ATMS5\20170505-42704.b\MS5050414.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: ortizam Date: 09-May-2017 11:27:21

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.574	11.574	0.000	100	40597	2.00	
* 2 1,4-Difluorobenzene	114	13.721	13.724	-0.003	100	157655	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.363	20.362	0.001	100	140420	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	12.749	12.757	-0.008	86	52499	1.99	
$ 5 Toluene-d8 (Surr)	100	17.102	17.100	0.002	100	89798	2.00	
$ 6 4-Bromofluorobenzene (Surr	95	22.919	22.920	-0.001	99	90192	1.89	
8 Dichlorodifluoromethane	85	3.978	3.971	0.007	99	1451	0.0206	
10 Chloromethane	50	4.365	4.351	0.014	100	810	0.0326	
15 Trichlorofluoromethane	101	6.154	6.147	0.008	100	908	0.0133	
18 Acetone	43	7.046	7.009	0.037	99	11021	0.2931	
22 Methylene Chloride	49	8.195	8.196	-0.001	98	3831	0.1371	
29 2-Butanone (MEK)	72	10.687	10.620	0.067	100	410	0.0351	
46 Toluene	91	17.273	17.271	0.002	100	2292	0.0246	

Reagents:

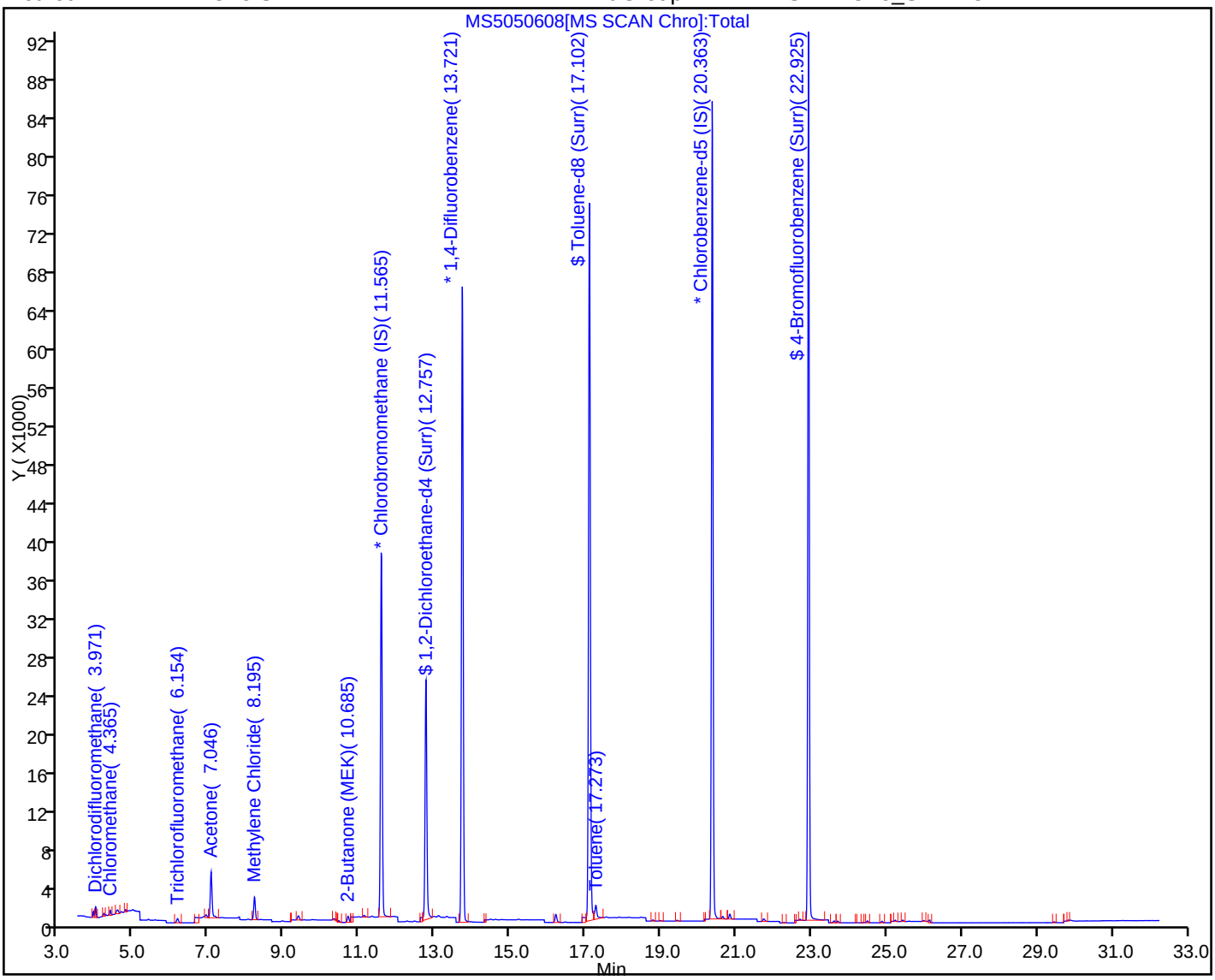
VAMSIS20_00002 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 19-May-2017 11:46:31 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS5\20170506-42759.b\MS5050608.D

Injection Date:	06-May-2017 22:07:30	Instrument ID:	ATMS5		
Lims ID:	320-27916-A-10	Lab Sample ID:	320-27916-10		
Client ID:	8426				
Operator ID:	FD	ALS Bottle#:	5	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO15_SIM - ICAL		



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-27916-1

SDG No.:

Client Sample ID: 34000572 Lab Sample ID: 320-27916-12

Matrix: Air Lab File ID: MS5050610.D

Analysis Method: TO-15 SIM Date Collected: 05/02/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 05/07/2017 00:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163131 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.020	0.010
100-44-7	Benzyl chloride	ND		0.10	0.010
75-27-4	Bromodichloromethane	ND		0.012	0.0050
56-23-5	Carbon tetrachloride	ND		0.010	0.0050
108-90-7	Chlorobenzene	ND		0.020	0.010
75-00-3	Chloroethane	ND		0.045	0.010
67-66-3	Chloroform	ND		0.020	0.0050
74-87-3	Chloromethane	ND		0.20	0.010
124-48-1	Dibromochloromethane	ND		0.010	0.0050
106-93-4	1,2-Dibromoethane (EDB)	ND		0.0070	0.0028
95-50-1	1,2-Dichlorobenzene	ND		0.050	0.010
541-73-1	1,3-Dichlorobenzene	ND		0.10	0.010
106-46-7	1,4-Dichlorobenzene	ND		0.10	0.010
75-71-8	Dichlorodifluoromethane	ND		0.020	0.0050
75-34-3	1,1-Dichloroethane	ND		0.020	0.0050
107-06-2	1,2-Dichloroethane	ND		0.020	0.0050
75-35-4	1,1-Dichloroethene	ND		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	ND		0.020	0.0050
156-60-5	trans-1,2-Dichloroethene	ND		0.020	0.0050
78-87-5	1,2-Dichloropropane	ND		0.040	0.0050
10061-01-5	cis-1,3-Dichloropropene	ND		0.020	0.0050
10061-02-6	trans-1,3-Dichloropropene	ND		0.020	0.0050
123-91-1	1,4-Dioxane	ND		0.10	0.010
100-41-4	Ethylbenzene	ND		0.020	0.010
87-68-3	Hexachlorobutadiene	ND		0.020	0.010
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.025	0.010
75-09-2	Methylene Chloride	ND		0.20	0.10
91-20-3	Naphthalene	ND		0.013	0.010
100-42-5	Styrene	ND		0.030	0.010
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.020	0.010
127-18-4	Tetrachloroethene	ND		0.020	0.010
108-88-3	Toluene	ND		0.020	0.010
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.030	0.0050
120-82-1	1,2,4-Trichlorobenzene	ND		0.050	0.010
71-55-6	1,1,1-Trichloroethane	ND		0.020	0.0050

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-27916-1

SDG No.:

Client Sample ID: 34000572 Lab Sample ID: 320-27916-12

Matrix: Air Lab File ID: MS5050610.D

Analysis Method: TO-15 SIM Date Collected: 05/02/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 05/07/2017 00:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163131 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-00-5	1,1,2-Trichloroethane	ND		0.050	0.0050
79-01-6	Trichloroethene	ND		0.020	0.0050
75-69-4	Trichlorofluoromethane	ND		0.045	0.010
75-01-4	Vinyl chloride	ND		0.020	0.010
179601-23-1	m,p-Xylene	ND		0.040	0.020
95-47-6	o-Xylene	ND		0.020	0.010
67-64-1	Acetone	0.11	J B	0.20	0.040
96-18-4	1,2,3-Trichloropropane	ND		0.040	0.010
95-63-6	1,2,4-Trimethylbenzene	ND		0.040	0.010
78-93-3	2-Butanone (MEK)	ND		0.20	0.016
110-82-7	Cyclohexane	ND		0.040	0.0050

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		70-130
2037-26-5	Toluene-d8 (Surr)	100		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\ATMS5\20170506-42759.b\MS5050610.D
Lims ID: 320-27916-A-12
Client ID: 34000572
Sample Type: Client
Inject. Date: 07-May-2017 00:04:30 ALS Bottle#: 7 Worklist Smp#: 10
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 320-27916-A-12
Misc. Info.: 1000ML
Operator ID: FD Instrument ID: ATMS5

Method: \\ChromNA\Sacramento\ChromData\ATMS5\20170506-42759.b\TO15 SIM.m
Limit Group: MSA - TO15_SIM - ICAL
Last Update: 18-May-2017 12:03:19 Calib Date: 05-May-2017 05:20:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\ATMS5\20170505-42704.b\MS5050414.D

Column 1 : Det: MS SCAN
Process Host: XAWRK005

First Level Reviewer: ortizam Date: 09-May-2017 11:28:00

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.574	11.574	0.000	100	38994	2.00	
* 2 1,4-Difluorobenzene	114	13.724	13.724	0.000	100	150566	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.369	20.362	0.007	99	131397	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	12.757	12.757	0.000	85	51324	2.03	
$ 5 Toluene-d8 (Surr)	100	17.100	17.100	0.000	100	85430	1.99	
$ 6 4-Bromofluorobenzene (Surr	95	22.918	22.920	-0.002	99	81054	1.82	
18 Acetone	43	7.054	7.009	0.045	98	4066	0.1126	
22 Methylene Chloride	49	8.196	8.196	0.000	97	386	0.0144	7

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

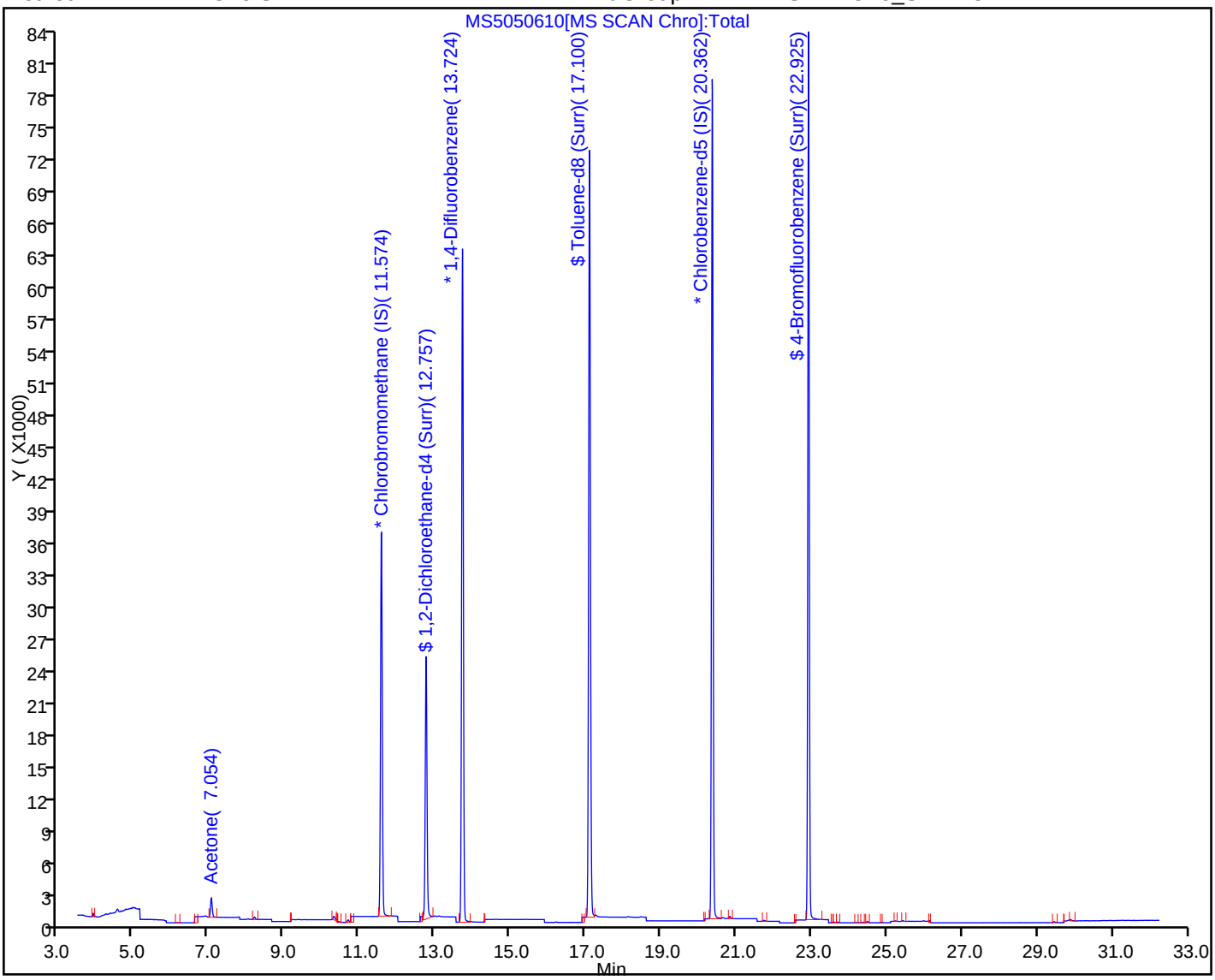
VAMSIS20_00002 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 19-May-2017 11:46:28 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS5\20170506-42759.b\MS5050610.D

Injection Date:	07-May-2017 00:04:30	Instrument ID:	ATMS5		
Lims ID:	320-27916-A-12	Lab Sample ID:	320-27916-12		
Client ID:	34000572				
Operator ID:	FD	ALS Bottle#:	7	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO15_SIM - ICAL		

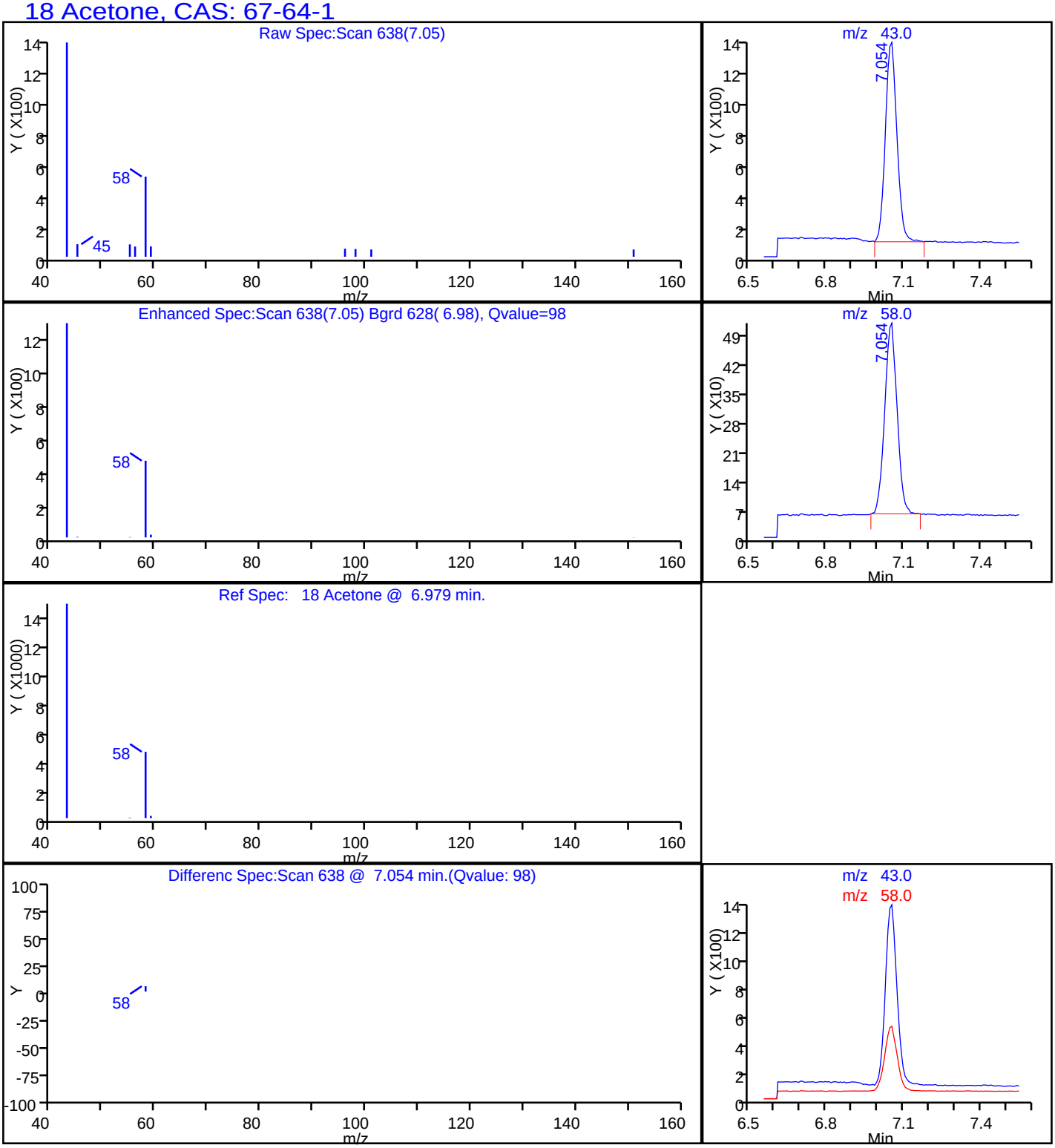


TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS5\20170506-42759.b\MS5050610.D

Injection Date:	07-May-2017 00:04:30	Instrument ID:	ATMS5		
Lims ID:	320-27916-A-12	Lab Sample ID:	320-27916-12		
Client ID:	34000572				
Operator ID:	FD	ALS Bottle#:	7	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO15_SIM - ICAL		
Column:		Detector	MS SCAN		

18 Acetone, CAS: 67-64-1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28047-1

SDG No.:

Client Sample ID: 8133 Lab Sample ID: 320-28047-1

Matrix: Air Lab File ID: MS5050807.D

Analysis Method: TO-15 SIM Date Collected: 05/05/2017 00:00

Sample wt/vol: 500(mL) Date Analyzed: 05/08/2017 19:59

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163389 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.020	0.010
100-44-7	Benzyl chloride	ND		0.10	0.010
75-27-4	Bromodichloromethane	ND		0.012	0.0050
56-23-5	Carbon tetrachloride	ND		0.010	0.0050
108-90-7	Chlorobenzene	ND		0.020	0.010
75-00-3	Chloroethane	ND		0.045	0.010
67-66-3	Chloroform	ND		0.020	0.0050
74-87-3	Chloromethane	ND		0.20	0.010
124-48-1	Dibromochloromethane	ND		0.010	0.0050
106-93-4	1,2-Dibromoethane (EDB)	ND		0.0070	0.0028
95-50-1	1,2-Dichlorobenzene	ND		0.050	0.010
541-73-1	1,3-Dichlorobenzene	ND		0.10	0.010
106-46-7	1,4-Dichlorobenzene	ND		0.10	0.010
75-71-8	Dichlorodifluoromethane	ND		0.020	0.0050
75-34-3	1,1-Dichloroethane	ND		0.020	0.0050
107-06-2	1,2-Dichloroethane	ND		0.020	0.0050
75-35-4	1,1-Dichloroethene	ND		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	ND		0.020	0.0050
156-60-5	trans-1,2-Dichloroethene	ND		0.020	0.0050
78-87-5	1,2-Dichloropropane	ND		0.040	0.0050
10061-01-5	cis-1,3-Dichloropropene	ND		0.020	0.0050
10061-02-6	trans-1,3-Dichloropropene	ND		0.020	0.0050
123-91-1	1,4-Dioxane	ND		0.10	0.010
100-41-4	Ethylbenzene	ND		0.020	0.010
87-68-3	Hexachlorobutadiene	ND		0.020	0.010
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.025	0.010
75-09-2	Methylene Chloride	ND		0.20	0.10
91-20-3	Naphthalene	ND		0.013	0.010
100-42-5	Styrene	ND		0.030	0.010
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.020	0.010
127-18-4	Tetrachloroethene	ND		0.020	0.010
108-88-3	Toluene	ND		0.020	0.010
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.030	0.0050
120-82-1	1,2,4-Trichlorobenzene	ND		0.050	0.010
71-55-6	1,1,1-Trichloroethane	ND		0.020	0.0050

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28047-1

SDG No.:

Client Sample ID: 8133 Lab Sample ID: 320-28047-1

Matrix: Air Lab File ID: MS5050807.D

Analysis Method: TO-15 SIM Date Collected: 05/05/2017 00:00

Sample wt/vol: 500(mL) Date Analyzed: 05/08/2017 19:59

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163389 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-00-5	1,1,2-Trichloroethane	ND		0.050	0.0050
79-01-6	Trichloroethene	ND		0.020	0.0050
75-69-4	Trichlorofluoromethane	ND		0.045	0.010
75-01-4	Vinyl chloride	ND		0.020	0.010
179601-23-1	m,p-Xylene	ND		0.040	0.020
95-47-6	o-Xylene	ND		0.020	0.010
67-64-1	Acetone	0.062	J B	0.20	0.040
96-18-4	1,2,3-Trichloropropane	ND		0.040	0.010

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	95		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		70-130
2037-26-5	Toluene-d8 (Surr)	100		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\ATMS5\20170508-42807.b\MS5050807.D
Lims ID: 320-28047-A-1
Client ID: 8133
Sample Type: Client
Inject. Date: 08-May-2017 19:59:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 320-28047-A-01
Operator ID: AO Instrument ID: ATMS5

Method: \\ChromNA\Sacramento\ChromData\ATMS5\20170508-42807.b\TO15 SIM.m
Limit Group: MSA - TO15_SIM - ICAL
Last Update: 09-May-2017 13:51:07 Calib Date: 05-May-2017 05:20:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\ATMS5\20170505-42704.b\MS5050414.D

Column 1 : Det: MS SCAN
Process Host: XAWRK002

First Level Reviewer: ortizam Date: 09-May-2017 13:51:07

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.574	11.574	0.000	100	38938	2.00	
* 2 1,4-Difluorobenzene	114	13.721	13.721	0.000	100	152338	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.363	20.363	0.000	100	134119	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	12.757	12.750	0.007	86	51171	2.00	
$ 5 Toluene-d8 (Surr)	100	17.102	17.094	0.008	100	87123	2.01	
$ 6 4-Bromofluorobenzene (Surr	95	22.919	22.919	0.000	99	86320	1.90	
18 Acetone	43	7.053	7.001	0.052	96	2240	0.0621	
22 Methylene Chloride	49	8.196	8.189	0.007	99	515	0.0192	7

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

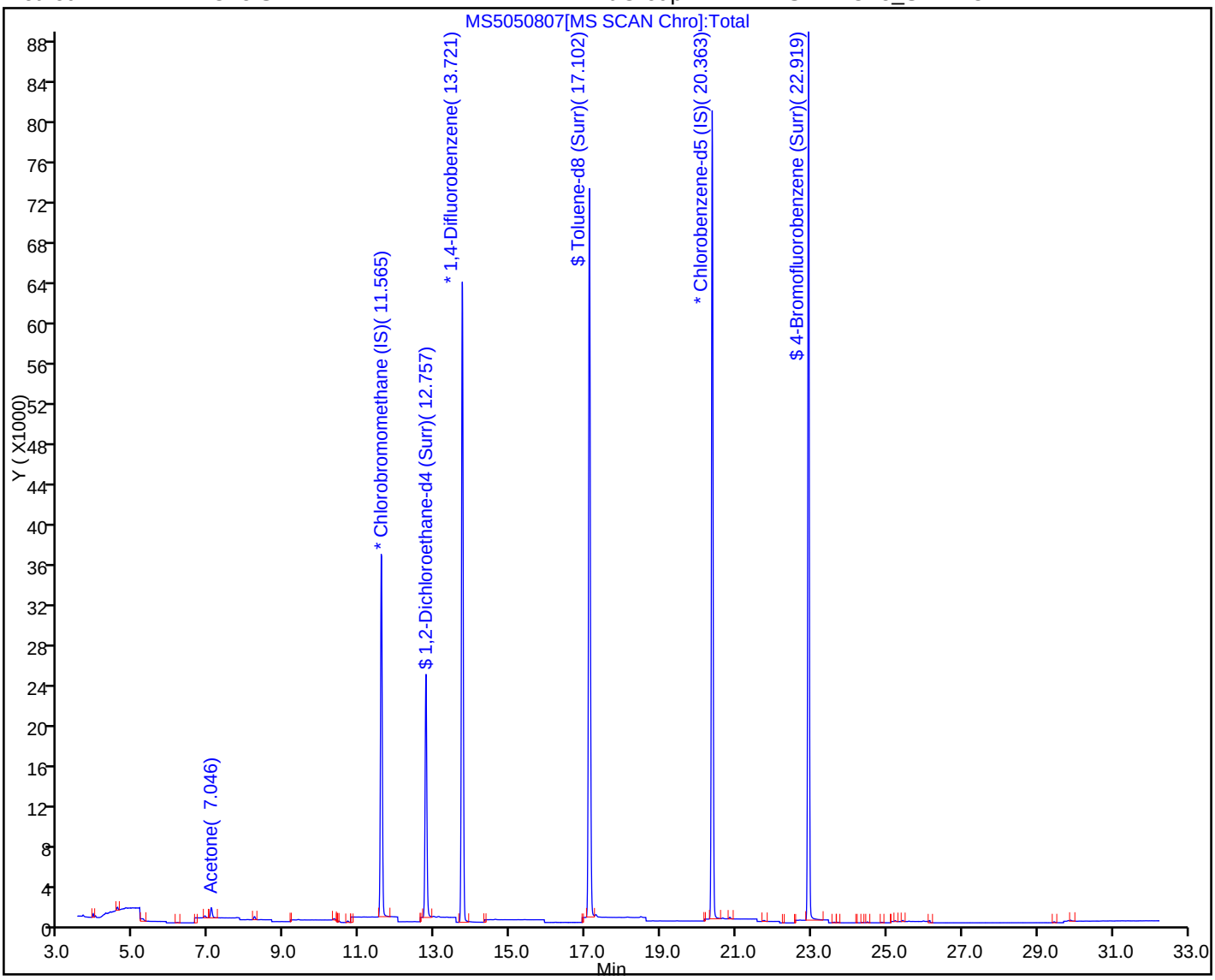
VAMSIS20_00002 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 09-May-2017 13:51:07 Chrom Revision: 2.2 08-May-2017 08:06:58

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS5\20170508-42807.b\MS5050807.D

Injection Date:	08-May-2017 19:59:30	Instrument ID:	ATMS5		
Lims ID:	320-28047-A-1	Lab Sample ID:	320-28047-1		
Client ID:	8133				
Operator ID:	AO	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO15_SIM - ICAL		

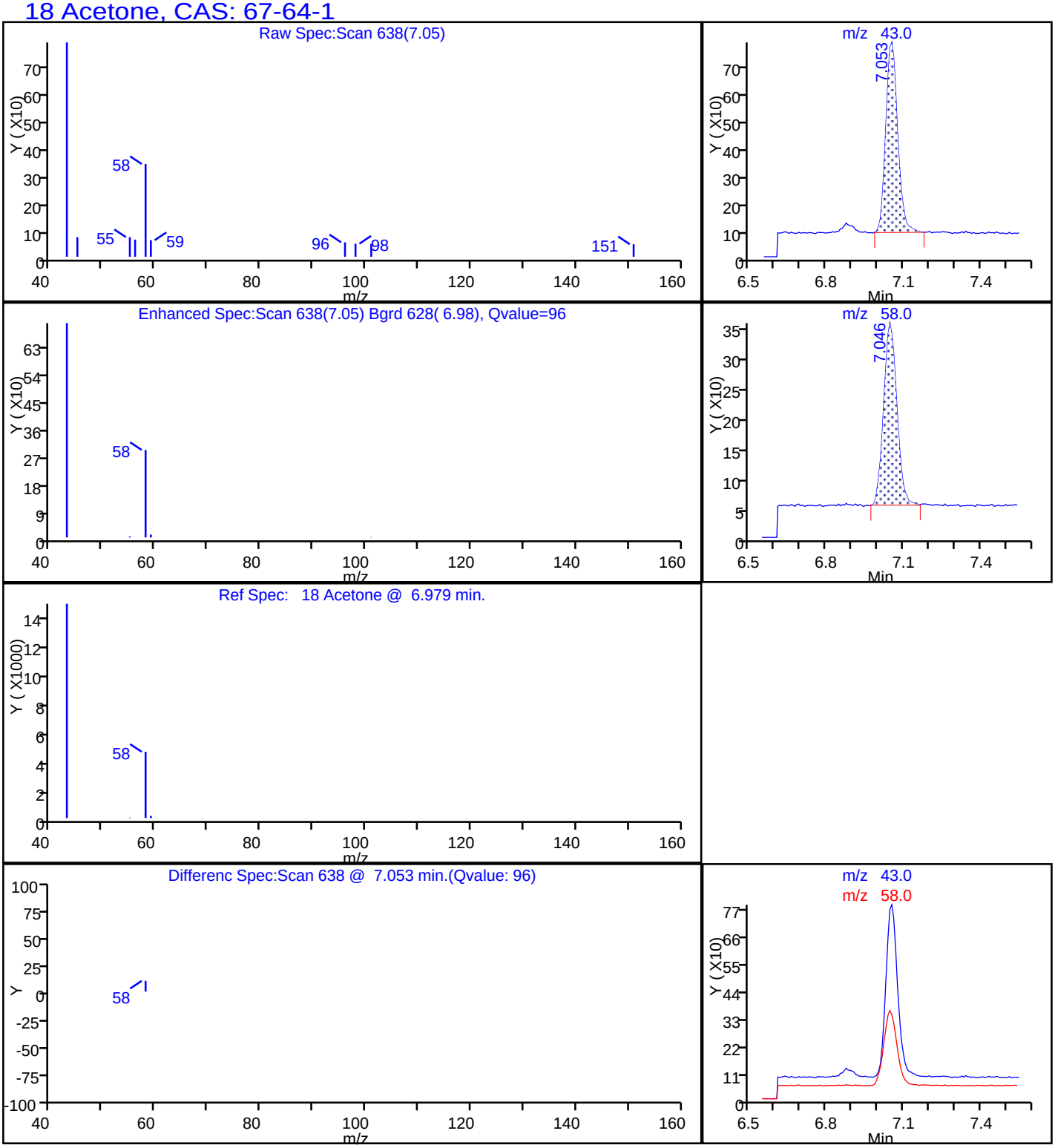


TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS5\20170508-42807.b\MS5050807.D

Injection Date:	08-May-2017 19:59:30	Instrument ID:	ATMS5		
Lims ID:	320-28047-A-1	Lab Sample ID:	320-28047-1		
Client ID:	8133				
Operator ID:	AO	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO15_SIM - ICAL		
Column:		Detector	MS SCAN		

18 Acetone, CAS: 67-64-1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28047-1

SDG No.:

Client Sample ID: 34001322 Lab Sample ID: 320-28047-2

Matrix: Air Lab File ID: MS5050808.D

Analysis Method: TO-15 SIM Date Collected: 05/05/2017 00:00

Sample wt/vol: 500(mL) Date Analyzed: 05/08/2017 20:58

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163389 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.020	0.010
100-44-7	Benzyl chloride	ND		0.10	0.010
75-27-4	Bromodichloromethane	ND		0.012	0.0050
56-23-5	Carbon tetrachloride	ND		0.010	0.0050
108-90-7	Chlorobenzene	ND		0.020	0.010
75-00-3	Chloroethane	ND		0.045	0.010
67-66-3	Chloroform	ND		0.020	0.0050
74-87-3	Chloromethane	ND		0.20	0.010
124-48-1	Dibromochloromethane	ND		0.010	0.0050
106-93-4	1,2-Dibromoethane (EDB)	ND		0.0070	0.0028
95-50-1	1,2-Dichlorobenzene	ND		0.050	0.010
541-73-1	1,3-Dichlorobenzene	ND		0.10	0.010
106-46-7	1,4-Dichlorobenzene	ND		0.10	0.010
75-71-8	Dichlorodifluoromethane	ND		0.020	0.0050
75-34-3	1,1-Dichloroethane	ND		0.020	0.0050
107-06-2	1,2-Dichloroethane	ND		0.020	0.0050
75-35-4	1,1-Dichloroethene	ND		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	ND		0.020	0.0050
156-60-5	trans-1,2-Dichloroethene	ND		0.020	0.0050
78-87-5	1,2-Dichloropropane	ND		0.040	0.0050
10061-01-5	cis-1,3-Dichloropropene	ND		0.020	0.0050
10061-02-6	trans-1,3-Dichloropropene	ND		0.020	0.0050
123-91-1	1,4-Dioxane	ND		0.10	0.010
100-41-4	Ethylbenzene	ND		0.020	0.010
87-68-3	Hexachlorobutadiene	ND		0.020	0.010
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.025	0.010
75-09-2	Methylene Chloride	ND		0.20	0.10
91-20-3	Naphthalene	ND		0.013	0.010
100-42-5	Styrene	ND		0.030	0.010
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.020	0.010
127-18-4	Tetrachloroethene	ND		0.020	0.010
108-88-3	Toluene	ND		0.020	0.010
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.030	0.0050
120-82-1	1,2,4-Trichlorobenzene	ND		0.050	0.010
71-55-6	1,1,1-Trichloroethane	ND		0.020	0.0050

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28047-1

SDG No.:

Client Sample ID: 34001322 Lab Sample ID: 320-28047-2

Matrix: Air Lab File ID: MS5050808.D

Analysis Method: TO-15 SIM Date Collected: 05/05/2017 00:00

Sample wt/vol: 500(mL) Date Analyzed: 05/08/2017 20:58

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163389 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-00-5	1,1,2-Trichloroethane	ND		0.050	0.0050
79-01-6	Trichloroethene	ND		0.020	0.0050
75-69-4	Trichlorofluoromethane	ND		0.045	0.010
75-01-4	Vinyl chloride	ND		0.020	0.010
179601-23-1	m,p-Xylene	ND		0.040	0.020
95-47-6	o-Xylene	ND		0.020	0.010
67-64-1	Acetone	0.077	J B	0.20	0.040
96-18-4	1,2,3-Trichloropropane	ND		0.040	0.010

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	93		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		70-130
2037-26-5	Toluene-d8 (Surr)	101		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\ATMS5\20170508-42807.b\MS5050808.D
Lims ID: 320-28047-A-2
Client ID: 34001322
Sample Type: Client
Inject. Date: 08-May-2017 20:58:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 320-28047-A-02
Operator ID: AO Instrument ID: ATMS5

Method: \\ChromNA\Sacramento\ChromData\ATMS5\20170508-42807.b\TO15 SIM.m
Limit Group: MSA - TO15_SIM - ICAL
Last Update: 09-May-2017 13:51:20 Calib Date: 05-May-2017 05:20:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\ATMS5\20170505-42704.b\MS5050414.D

Column 1 : Det: MS SCAN
Process Host: XAWRK002

First Level Reviewer: ortizam Date: 09-May-2017 13:51:20

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.574	11.574	0.000	99	37942	2.00	
* 2 1,4-Difluorobenzene	114	13.725	13.721	0.004	100	147995	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.363	20.363	0.000	100	130093	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	12.757	12.750	0.007	85	49588	2.00	
$ 5 Toluene-d8 (Surr)	100	17.102	17.094	0.008	100	84855	2.01	
$ 6 4-Bromofluorobenzene (Surr	95	22.919	22.919	0.000	99	82185	1.86	
18 Acetone	43	7.068	7.001	0.067	99	2692	0.0766	
22 Methylene Chloride	49	8.196	8.189	0.007	99	461	0.0177	7

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

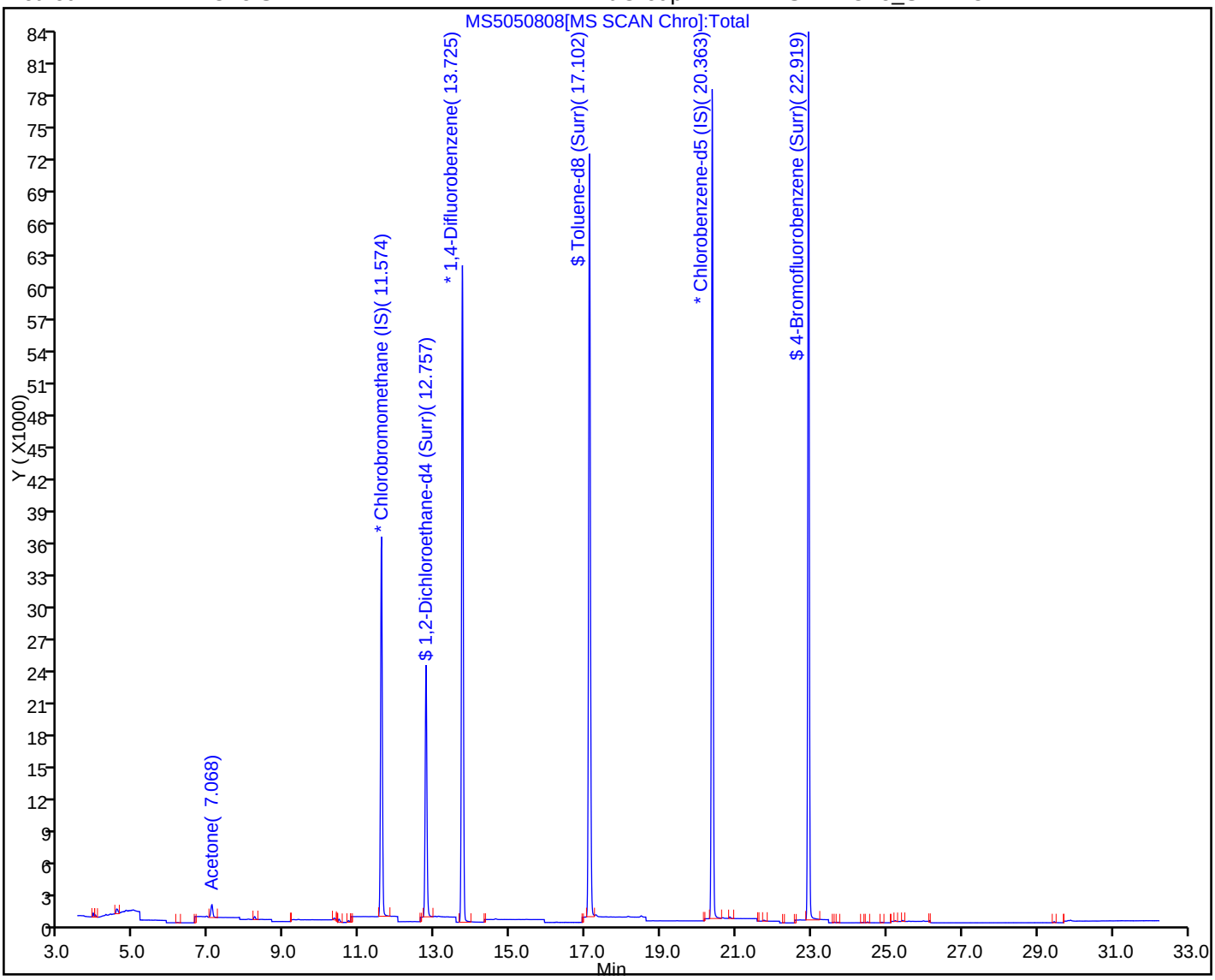
VAMSIS20_00002 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 09-May-2017 13:51:20 Chrom Revision: 2.2 08-May-2017 08:06:58

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS5\20170508-42807.b\MS5050808.D

Injection Date:	08-May-2017 20:58:30	Instrument ID:	ATMS5		
Lims ID:	320-28047-A-2	Lab Sample ID:	320-28047-2		
Client ID:	34001322				
Operator ID:	AO	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO15_SIM - ICAL		

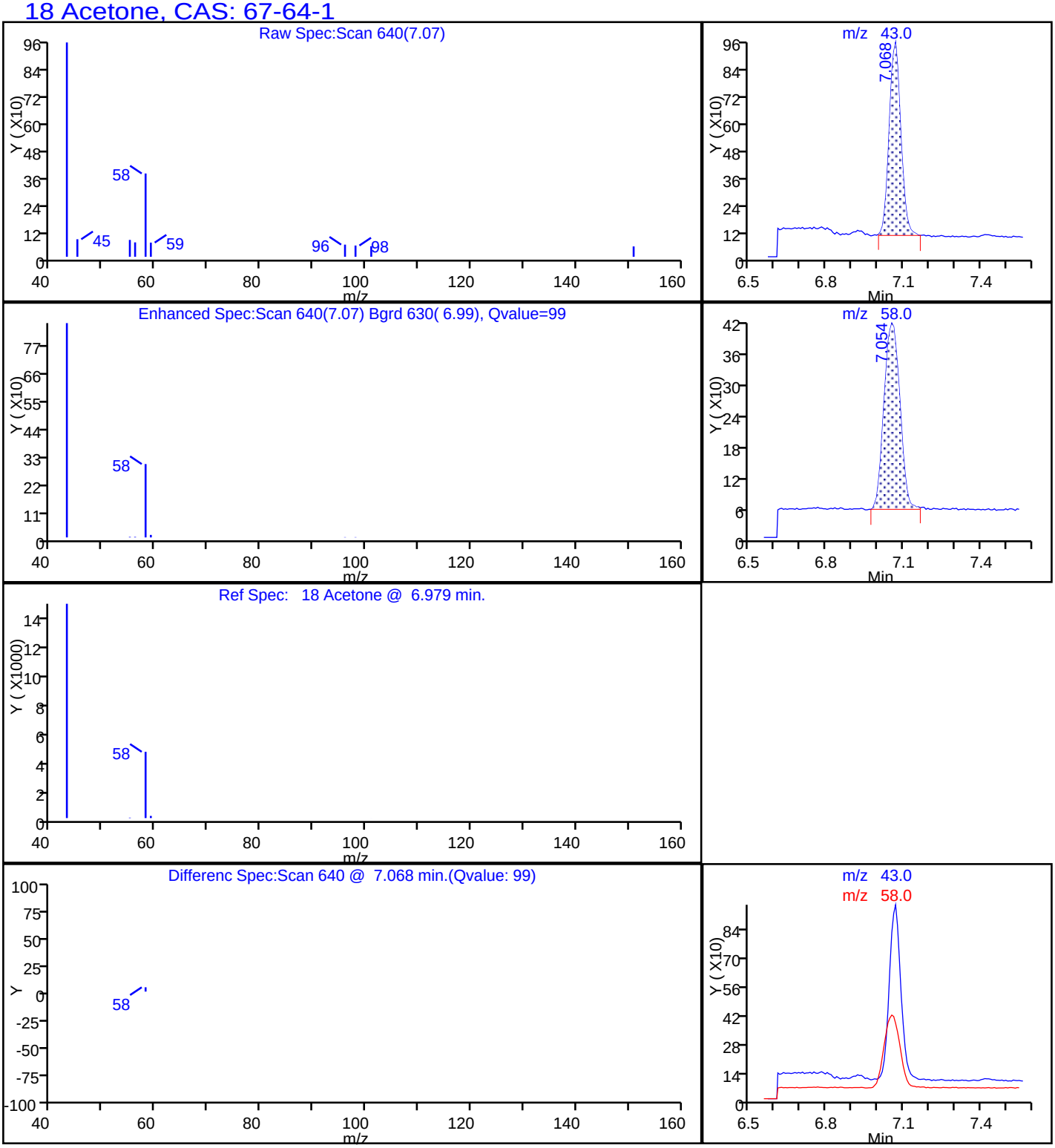


TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS5\20170508-42807.b\MS5050808.D

Injection Date:	08-May-2017 20:58:30	Instrument ID:	ATMS5		
Lims ID:	320-28047-A-2	Lab Sample ID:	320-28047-2		
Client ID:	34001322				
Operator ID:	AO	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO15_SIM - ICAL		
Column:		Detector	MS SCAN		

18 Acetone, CAS: 67-64-1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28047-1

SDG No.:

Client Sample ID: 8118 Lab Sample ID: 320-28047-3

Matrix: Air Lab File ID: MS1051007.D

Analysis Method: TO-15 SIM Date Collected: 05/05/2017 00:00

Sample wt/vol: 500(mL) Date Analyzed: 05/10/2017 20:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163816 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.020	0.010
75-27-4	Bromodichloromethane	ND		0.012	0.0050
108-90-7	Chlorobenzene	ND		0.020	0.010
75-00-3	Chloroethane	ND		0.045	0.010
67-66-3	Chloroform	ND		0.020	0.0050
74-87-3	Chloromethane	ND		0.20	0.010
124-48-1	Dibromochloromethane	ND		0.010	0.0050
106-93-4	1,2-Dibromoethane (EDB)	ND		0.0070	0.0028
75-71-8	Dichlorodifluoromethane	ND		0.020	0.0050
75-34-3	1,1-Dichloroethane	ND		0.020	0.0050
107-06-2	1,2-Dichloroethane	ND		0.020	0.0050
75-35-4	1,1-Dichloroethene	ND		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	ND		0.020	0.0050
156-60-5	trans-1,2-Dichloroethene	ND		0.020	0.0050
78-87-5	1,2-Dichloropropane	ND		0.040	0.0050
10061-01-5	cis-1,3-Dichloropropene	ND		0.020	0.0050
10061-02-6	trans-1,3-Dichloropropene	ND		0.020	0.0050
123-91-1	1,4-Dioxane	ND		0.10	0.010
100-41-4	Ethylbenzene	ND		0.020	0.010
87-68-3	Hexachlorobutadiene	ND		0.020	0.010
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.025	0.010
75-09-2	Methylene Chloride	ND		0.20	0.10
100-42-5	Styrene	ND		0.030	0.010
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.020	0.010
127-18-4	Tetrachloroethene	ND		0.020	0.010
108-88-3	Toluene	ND		0.020	0.010
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.030	0.0050
71-55-6	1,1,1-Trichloroethane	ND		0.020	0.0050
79-00-5	1,1,2-Trichloroethane	ND		0.050	0.0050
79-01-6	Trichloroethene	ND		0.020	0.0050
75-69-4	Trichlorofluoromethane	ND		0.045	0.010
75-01-4	Vinyl chloride	ND		0.020	0.010
179601-23-1	m,p-Xylene	ND		0.040	0.020
95-47-6	o-Xylene	ND		0.020	0.010
67-64-1	Acetone	ND		0.20	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28047-1

SDG No.:

Client Sample ID: 8118 Lab Sample ID: 320-28047-3

Matrix: Air Lab File ID: MS1051007.D

Analysis Method: TO-15 SIM Date Collected: 05/05/2017 00:00

Sample wt/vol: 500(mL) Date Analyzed: 05/10/2017 20:05

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163816 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
96-18-4	1,2,3-Trichloropropane	ND		0.040	0.010

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	122		70-130
2037-26-5	Toluene-d8 (Surr)	97		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\ATMS1\20170510-42908.b\MS1051007.D
Lims ID: 320-28047-A-3
Client ID: 8118
Sample Type: Client
Inject. Date: 10-May-2017 20:05:30 ALS Bottle#: 2 Worklist Smp#: 7
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 320-28047-A-03
Operator ID: AZ Instrument ID: ATMS1

Method: \\ChromNA\Sacramento\ChromData\ATMS1\20170510-42908.b\TO-15 SIM SIM.m
Limit Group: MSA - TO15_SIM - ICAL
Last Update: 15-May-2017 16:49:57 Calib Date: 18-Mar-2017 03:03:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\ATMS1\20170318-40992.b\MS1031714.D

Column 1 : Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: zeighamia Date: 11-May-2017 12:11:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.661	11.673	-0.012	98	31266	2.00	
* 2 1,4-Difluorobenzene	114	13.810	13.821	-0.011	100	128108	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.483	20.490	-0.007	99	114736	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	12.850	12.858	-0.008	68	57134	2.44	
$ 5 Toluene-d8 (Surr)	100	17.205	17.205	0.000	99	71355	1.93	
$ 6 4-Bromofluorobenzene (Surr	174	23.043	23.043	0.000	100	67643	2.07	
149 1,2,3-Trichloropropane	110	23.121	23.121	0.000	84	83	0.005210	
117 1,3-Dichlorobenzene	146	25.356	25.352	0.004	100	507	0.0103	
120 1,4-Dichlorobenzene	146	25.553	25.553	0.000	96	534	0.0123	
118 Benzyl chloride	91	25.727	25.724	0.003	100	618	0.0119	
122 1,2-Dichlorobenzene	146	26.274	26.278	-0.004	100	554	0.0110	
126 1,2,4-Trichlorobenzene	180	29.598	29.598	0.000	100	862	0.0424	
127 Naphthalene	128	30.044	30.044	0.000	100	1721	0.0285	

Reagents:

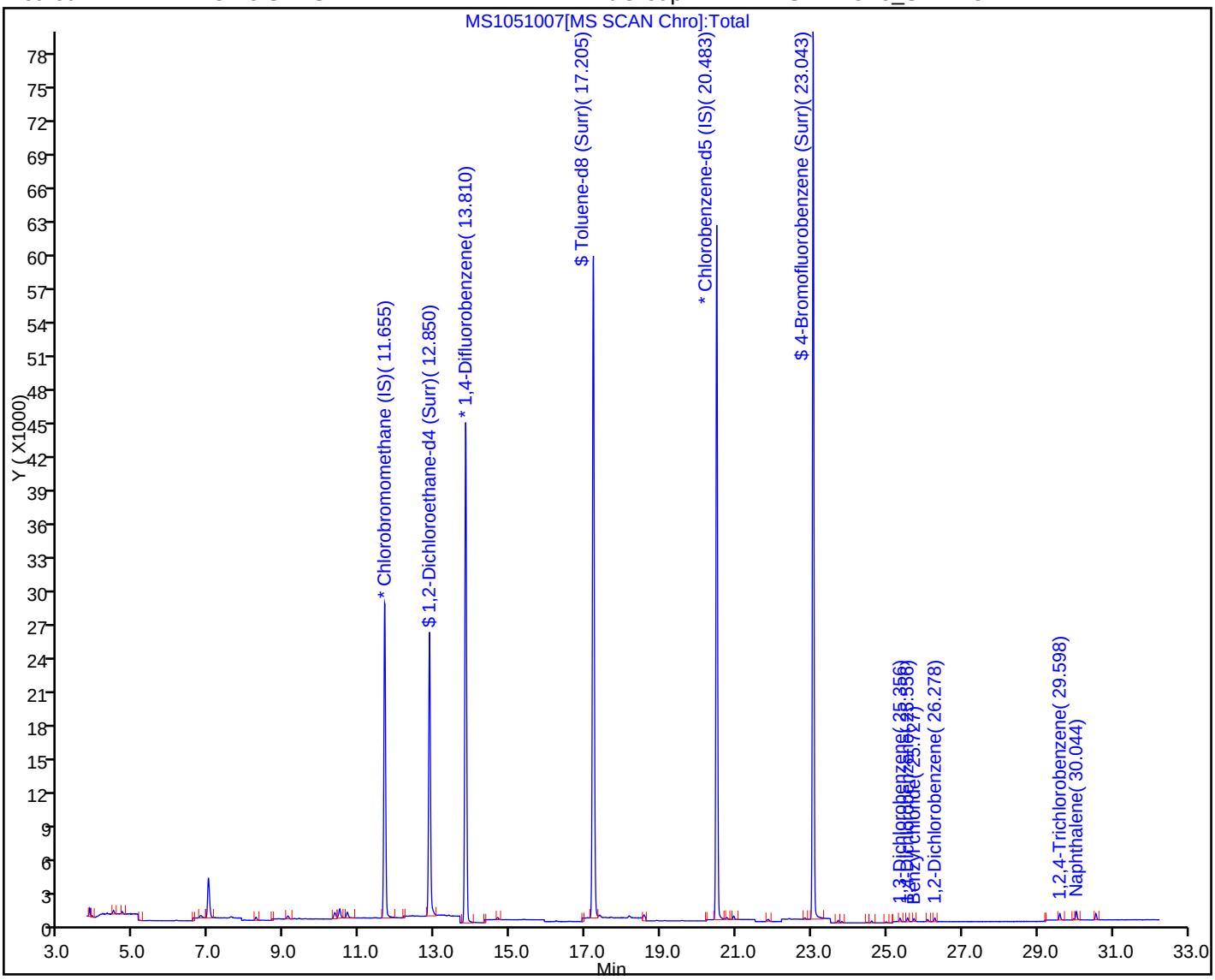
VAMSIS20_00002 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 15-May-2017 16:49:58 Chrom Revision: 2.2 08-May-2017 08:06:58

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS1\20170510-42908.b\MS1051007.D

Injection Date:	10-May-2017 20:05:30	Instrument ID:	ATMS1		
Lims ID:	320-28047-A-3	Lab Sample ID:	Client 320-163816/7-A		
Client ID:	8118				
Operator ID:	AZ	ALS Bottle#:	2	Worklist Smp#:	7
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO-15 SIM SIM	Limit Group:	MSA - TO15_SIM - ICAL		



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28047-1

SDG No.:

Client Sample ID: 8143 Lab Sample ID: 320-28047-4

Matrix: Air Lab File ID: MS5050810.D

Analysis Method: TO-15 SIM Date Collected: 05/05/2017 00:00

Sample wt/vol: 500(mL) Date Analyzed: 05/08/2017 23:11

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163389 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.020	0.010
100-44-7	Benzyl chloride	ND		0.10	0.010
75-27-4	Bromodichloromethane	ND		0.012	0.0050
56-23-5	Carbon tetrachloride	ND		0.010	0.0050
108-90-7	Chlorobenzene	ND		0.020	0.010
75-00-3	Chloroethane	ND		0.045	0.010
67-66-3	Chloroform	ND		0.020	0.0050
74-87-3	Chloromethane	ND		0.20	0.010
124-48-1	Dibromochloromethane	ND		0.010	0.0050
106-93-4	1,2-Dibromoethane (EDB)	ND		0.0070	0.0028
95-50-1	1,2-Dichlorobenzene	ND		0.050	0.010
541-73-1	1,3-Dichlorobenzene	ND		0.10	0.010
106-46-7	1,4-Dichlorobenzene	ND		0.10	0.010
75-71-8	Dichlorodifluoromethane	ND		0.020	0.0050
75-34-3	1,1-Dichloroethane	ND		0.020	0.0050
107-06-2	1,2-Dichloroethane	ND		0.020	0.0050
75-35-4	1,1-Dichloroethene	ND		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	ND		0.020	0.0050
156-60-5	trans-1,2-Dichloroethene	ND		0.020	0.0050
78-87-5	1,2-Dichloropropane	ND		0.040	0.0050
10061-01-5	cis-1,3-Dichloropropene	ND		0.020	0.0050
10061-02-6	trans-1,3-Dichloropropene	ND		0.020	0.0050
123-91-1	1,4-Dioxane	ND		0.10	0.010
100-41-4	Ethylbenzene	ND		0.020	0.010
87-68-3	Hexachlorobutadiene	ND		0.020	0.010
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.025	0.010
75-09-2	Methylene Chloride	ND		0.20	0.10
91-20-3	Naphthalene	ND		0.013	0.010
100-42-5	Styrene	ND		0.030	0.010
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.020	0.010
127-18-4	Tetrachloroethene	ND		0.020	0.010
108-88-3	Toluene	ND		0.020	0.010
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.030	0.0050
120-82-1	1,2,4-Trichlorobenzene	ND		0.050	0.010
71-55-6	1,1,1-Trichloroethane	ND		0.020	0.0050

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28047-1

SDG No.:

Client Sample ID: 8143 Lab Sample ID: 320-28047-4

Matrix: Air Lab File ID: MS5050810.D

Analysis Method: TO-15 SIM Date Collected: 05/05/2017 00:00

Sample wt/vol: 500(mL) Date Analyzed: 05/08/2017 23:11

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163389 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-00-5	1,1,2-Trichloroethane	ND		0.050	0.0050
79-01-6	Trichloroethene	ND		0.020	0.0050
75-69-4	Trichlorofluoromethane	ND		0.045	0.010
75-01-4	Vinyl chloride	ND		0.020	0.010
179601-23-1	m,p-Xylene	ND		0.040	0.020
95-47-6	o-Xylene	ND		0.020	0.010
67-64-1	Acetone	0.12	J B	0.20	0.040
96-18-4	1,2,3-Trichloropropane	ND		0.040	0.010

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		70-130
2037-26-5	Toluene-d8 (Surr)	101		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\ATMS5\20170508-42807.b\MS5050810.D
Lims ID: 320-28047-A-4
Client ID: 8143
Sample Type: Client
Inject. Date: 08-May-2017 23:11:30 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 320-28047-A-04
Operator ID: AO Instrument ID: ATMS5

Method: \\ChromNA\Sacramento\ChromData\ATMS5\20170508-42807.b\TO15 SIM.m
Limit Group: MSA - TO15_SIM - ICAL
Last Update: 09-May-2017 13:53:37 Calib Date: 05-May-2017 05:20:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\ATMS5\20170505-42704.b\MS5050414.D

Column 1 : Det: MS SCAN
Process Host: XAWRK002

First Level Reviewer: ortizam Date: 09-May-2017 13:53:37

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.556	11.574	-0.018	98	37959	2.00	
* 2 1,4-Difluorobenzene	114	13.711	13.721	-0.010	100	150896	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.361	20.363	-0.002	100	134428	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	12.742	12.750	-0.008	86	49401	1.95	
$ 5 Toluene-d8 (Surr)	100	17.092	17.094	-0.002	100	86478	2.01	
$ 6 4-Bromofluorobenzene (Surr	95	22.919	22.919	0.000	100	84327	1.85	
18 Acetone	43	7.002	7.001	0.001	89	4097	0.1165	
22 Methylene Chloride	49	8.183	8.189	-0.006	99	427	0.0163	7

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

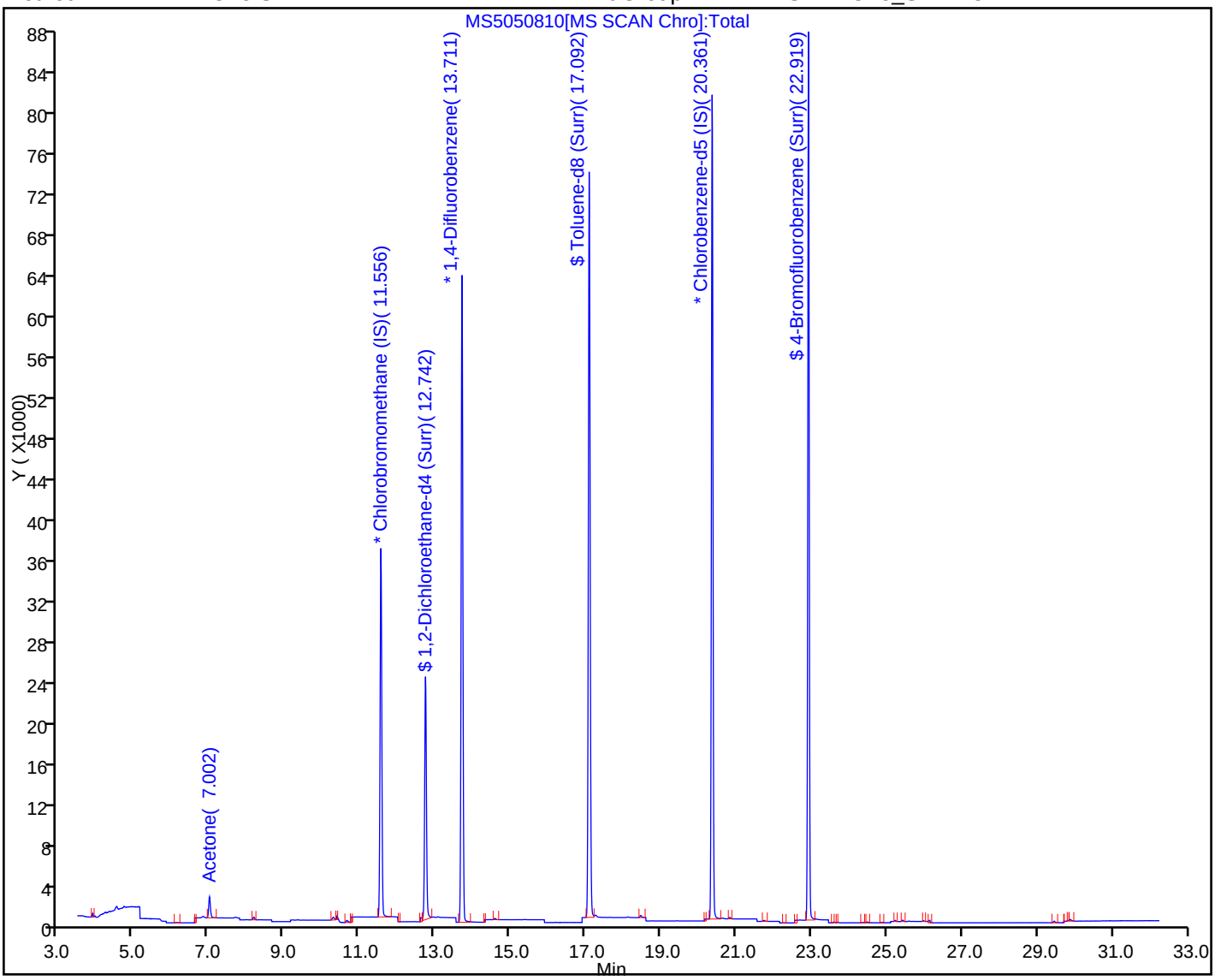
VAMSIS20_00002 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 09-May-2017 13:53:38 Chrom Revision: 2.2 08-May-2017 08:06:58

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS5\20170508-42807.b\MS5050810.D

Injection Date:	08-May-2017 23:11:30	Instrument ID:	ATMS5		
Lims ID:	320-28047-A-4	Lab Sample ID:	Client 320-163389/10-A		
Client ID:	8143				
Operator ID:	AO	ALS Bottle#:	10	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO15_SIM - ICAL		

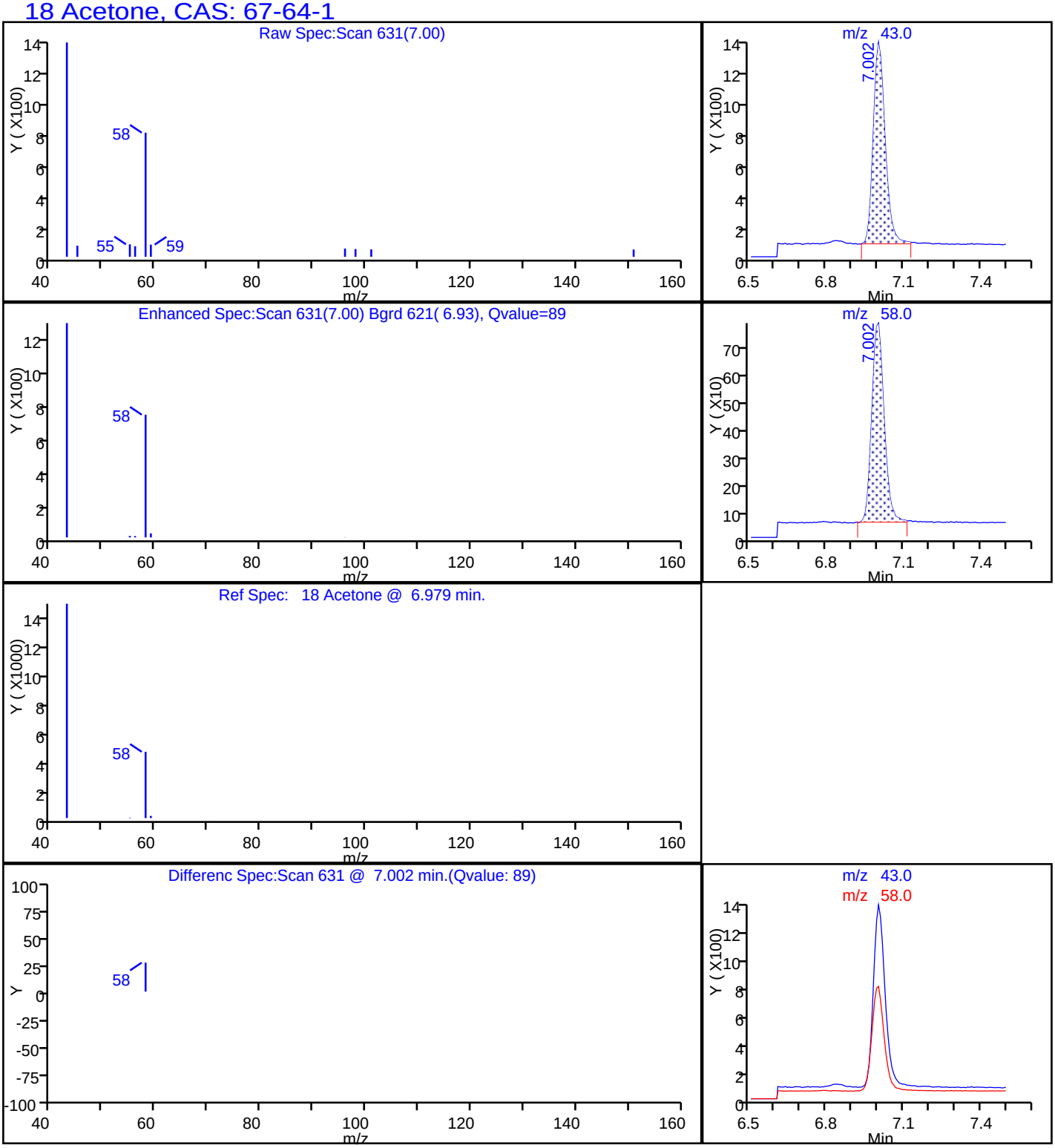


TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS5\20170508-42807.b\MS5050810.D

Injection Date:	08-May-2017 23:11:30	Instrument ID:	ATMS5		
Lims ID:	320-28047-A-4	Lab Sample ID:	Client 320-163389/10-A		
Client ID:	8143				
Operator ID:	AO	ALS Bottle#:	10	Worklist Smp#:	10
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO15_SIM - ICAL		
Column:		Detector	MS SCAN		

18 Acetone, CAS: 67-64-1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28047-1

SDG No.:

Client Sample ID: 34000019 Lab Sample ID: 320-28047-5

Matrix: Air Lab File ID: MS5050812.D

Analysis Method: TO-15 SIM Date Collected: 05/05/2017 00:00

Sample wt/vol: 500(mL) Date Analyzed: 05/09/2017 01:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163389 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.020	0.010
100-44-7	Benzyl chloride	ND		0.10	0.010
75-27-4	Bromodichloromethane	ND		0.012	0.0050
56-23-5	Carbon tetrachloride	ND		0.010	0.0050
108-90-7	Chlorobenzene	ND		0.020	0.010
75-00-3	Chloroethane	ND		0.045	0.010
67-66-3	Chloroform	ND		0.020	0.0050
74-87-3	Chloromethane	ND		0.20	0.010
124-48-1	Dibromochloromethane	ND		0.010	0.0050
106-93-4	1,2-Dibromoethane (EDB)	ND		0.0070	0.0028
95-50-1	1,2-Dichlorobenzene	ND		0.050	0.010
541-73-1	1,3-Dichlorobenzene	ND		0.10	0.010
106-46-7	1,4-Dichlorobenzene	ND		0.10	0.010
75-71-8	Dichlorodifluoromethane	ND		0.020	0.0050
75-34-3	1,1-Dichloroethane	ND		0.020	0.0050
107-06-2	1,2-Dichloroethane	ND		0.020	0.0050
75-35-4	1,1-Dichloroethene	ND		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	ND		0.020	0.0050
156-60-5	trans-1,2-Dichloroethene	ND		0.020	0.0050
78-87-5	1,2-Dichloropropane	ND		0.040	0.0050
10061-01-5	cis-1,3-Dichloropropene	ND		0.020	0.0050
10061-02-6	trans-1,3-Dichloropropene	ND		0.020	0.0050
100-41-4	Ethylbenzene	ND		0.020	0.010
87-68-3	Hexachlorobutadiene	ND		0.020	0.010
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.025	0.010
75-09-2	Methylene Chloride	ND		0.20	0.10
91-20-3	Naphthalene	ND		0.013	0.010
100-42-5	Styrene	ND		0.030	0.010
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.020	0.010
127-18-4	Tetrachloroethene	ND		0.020	0.010
108-88-3	Toluene	ND		0.020	0.010
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.030	0.0050
120-82-1	1,2,4-Trichlorobenzene	ND		0.050	0.010
71-55-6	1,1,1-Trichloroethane	ND		0.020	0.0050
79-00-5	1,1,2-Trichloroethane	ND		0.050	0.0050

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28047-1

SDG No.:

Client Sample ID: 34000019 Lab Sample ID: 320-28047-5

Matrix: Air Lab File ID: MS5050812.D

Analysis Method: TO-15 SIM Date Collected: 05/05/2017 00:00

Sample wt/vol: 500(mL) Date Analyzed: 05/09/2017 01:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163389 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	ND		0.020	0.0050
75-69-4	Trichlorofluoromethane	ND		0.045	0.010
75-01-4	Vinyl chloride	ND		0.020	0.010
179601-23-1	m,p-Xylene	ND		0.040	0.020
95-47-6	o-Xylene	ND		0.020	0.010
96-18-4	1,2,3-Trichloropropane	ND		0.040	0.010

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	93		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		70-130
2037-26-5	Toluene-d8 (Surr)	101		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\ATMS5\20170508-42807.b\MS5050812.D
Lims ID: 320-28047-A-5
Client ID: 34000019
Sample Type: Client
Inject. Date: 09-May-2017 01:06:30 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 320-28047-A-05
Operator ID: AO Instrument ID: ATMS5

Method: \\ChromNA\Sacramento\ChromData\ATMS5\20170508-42807.b\TO15 SIM.m
Limit Group: MSA - TO15_SIM - ICAL
Last Update: 09-May-2017 13:50:28 Calib Date: 05-May-2017 05:20:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\ATMS5\20170505-42704.b\MS5050414.D

Column 1 : Det: MS SCAN
Process Host: XAWRK002

First Level Reviewer: ortizam Date: 09-May-2017 13:50:28

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
*	1 Chlorobromomethane (IS)	130	11.556	11.574	-0.018	97	38692	2.00	
*	2 1,4-Difluorobenzene	114	13.711	13.721	-0.010	100	153957	2.00	
*	3 Chlorobenzene-d5 (IS)	117	20.363	20.363	-0.001	99	137466	2.00	
$	4 1,2-Dichloroethane-d4 (Sur	65	12.742	12.750	-0.008	86	50194	1.94	
$	5 Toluene-d8 (Surr)	100	17.094	17.094	0.000	100	88407	2.02	
$	6 4-Bromofluorobenzene (Surr	95	22.919	22.919	0.000	100	86775	1.86	
	18 Acetone	43	7.001	7.001	0.000	86	4808	0.1342	
	22 Methylene Chloride	49	8.182	8.189	-0.007	99	432	0.0162	7
	43 1,4-Dioxane	88	15.358	15.314	0.044	99	277	0.0173	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

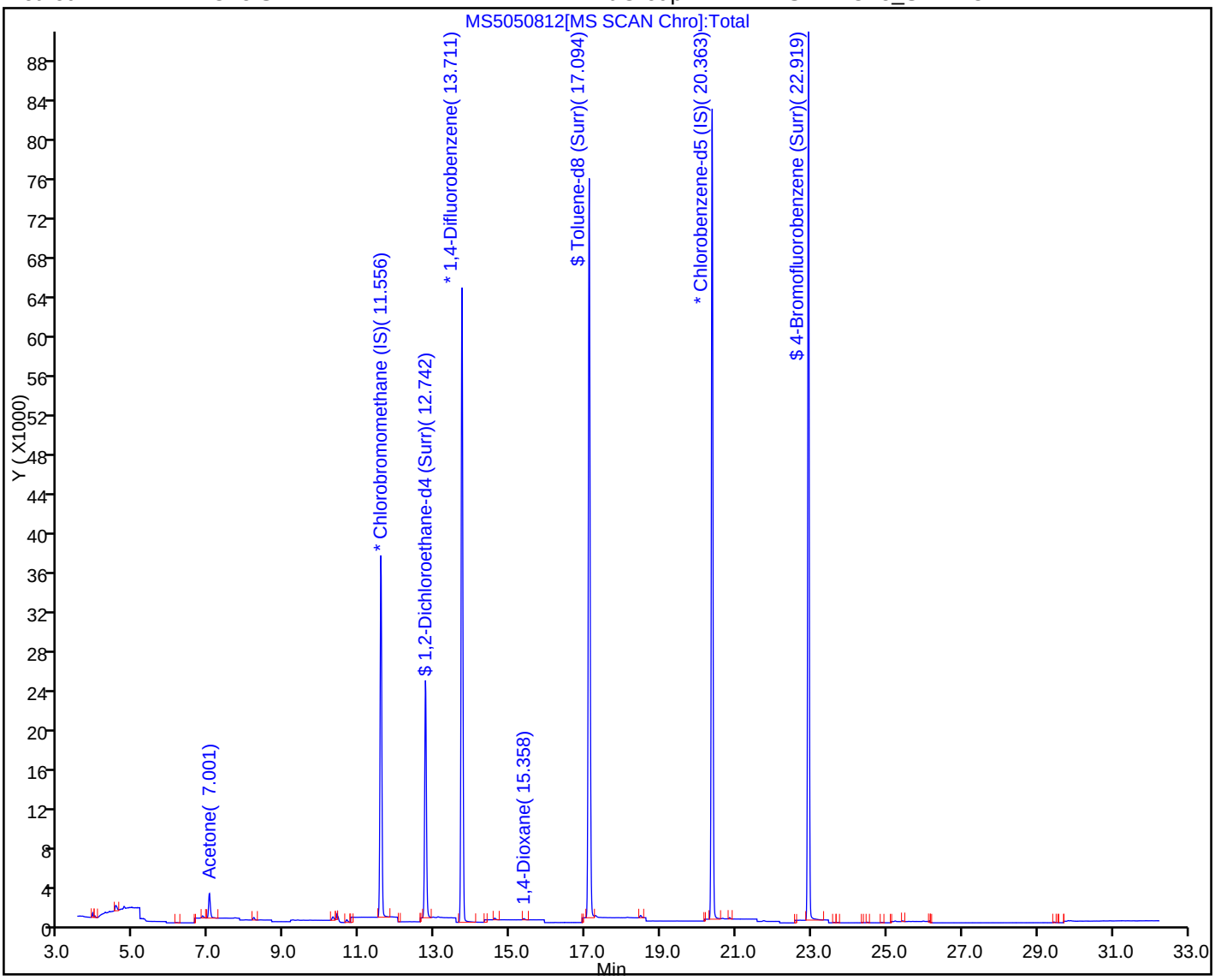
VAMSIS20_00002 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 09-May-2017 13:50:28 Chrom Revision: 2.2 08-May-2017 08:06:58

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS5\20170508-42807.b\MS5050812.D

Injection Date:	09-May-2017 01:06:30	Instrument ID:	ATMS5		
Lims ID:	320-28047-A-5	Lab Sample ID:	320-28047-5		
Client ID:	34000019				
Operator ID:	AO	ALS Bottle#:	12	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO15_SIM - ICAL		



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28047-1

SDG No.:

Client Sample ID: 34002146 Lab Sample ID: 320-28047-6

Matrix: Air Lab File ID: MS5050813.D

Analysis Method: TO-15 SIM Date Collected: 05/05/2017 00:00

Sample wt/vol: 500(mL) Date Analyzed: 05/09/2017 02:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163389 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.020	0.010
100-44-7	Benzyl chloride	ND		0.10	0.010
75-27-4	Bromodichloromethane	ND		0.012	0.0050
56-23-5	Carbon tetrachloride	ND		0.010	0.0050
108-90-7	Chlorobenzene	ND		0.020	0.010
75-00-3	Chloroethane	ND		0.045	0.010
67-66-3	Chloroform	ND		0.020	0.0050
74-87-3	Chloromethane	ND		0.20	0.010
124-48-1	Dibromochloromethane	ND		0.010	0.0050
106-93-4	1,2-Dibromoethane (EDB)	ND		0.0070	0.0028
95-50-1	1,2-Dichlorobenzene	ND		0.050	0.010
541-73-1	1,3-Dichlorobenzene	ND		0.10	0.010
106-46-7	1,4-Dichlorobenzene	ND		0.10	0.010
75-71-8	Dichlorodifluoromethane	ND		0.020	0.0050
75-34-3	1,1-Dichloroethane	ND		0.020	0.0050
107-06-2	1,2-Dichloroethane	ND		0.020	0.0050
75-35-4	1,1-Dichloroethene	ND		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	ND		0.020	0.0050
156-60-5	trans-1,2-Dichloroethene	ND		0.020	0.0050
78-87-5	1,2-Dichloropropane	ND		0.040	0.0050
10061-01-5	cis-1,3-Dichloropropene	ND		0.020	0.0050
10061-02-6	trans-1,3-Dichloropropene	ND		0.020	0.0050
123-91-1	1,4-Dioxane	ND		0.10	0.010
100-41-4	Ethylbenzene	ND		0.020	0.010
87-68-3	Hexachlorobutadiene	ND		0.020	0.010
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.025	0.010
75-09-2	Methylene Chloride	ND		0.20	0.10
91-20-3	Naphthalene	ND		0.013	0.010
100-42-5	Styrene	ND		0.030	0.010
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.020	0.010
127-18-4	Tetrachloroethene	ND		0.020	0.010
108-88-3	Toluene	ND		0.020	0.010
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.030	0.0050
120-82-1	1,2,4-Trichlorobenzene	ND		0.050	0.010
71-55-6	1,1,1-Trichloroethane	ND		0.020	0.0050

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28047-1

SDG No.:

Client Sample ID: 34002146 Lab Sample ID: 320-28047-6

Matrix: Air Lab File ID: MS5050813.D

Analysis Method: TO-15 SIM Date Collected: 05/05/2017 00:00

Sample wt/vol: 500(mL) Date Analyzed: 05/09/2017 02:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163389 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-00-5	1,1,2-Trichloroethane	ND		0.050	0.0050
79-01-6	Trichloroethene	ND		0.020	0.0050
75-69-4	Trichlorofluoromethane	ND		0.045	0.010
75-01-4	Vinyl chloride	ND		0.020	0.010
179601-23-1	m,p-Xylene	ND		0.040	0.020
95-47-6	o-Xylene	ND		0.020	0.010
67-64-1	Acetone	0.38	B	0.20	0.040
96-18-4	1,2,3-Trichloropropane	ND		0.040	0.010

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		70-130
2037-26-5	Toluene-d8 (Surr)	100		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\ChromNA\Sacramento\ChromData\ATMS5\20170508-42807.b\MS5050813.D				
Lims ID:	320-28047-A-6				
Client ID:	34002146				
Sample Type:	Client				
Inject. Date:	09-May-2017 02:06:30	ALS Bottle#:	15	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	320-28047-A-06				
Operator ID:	AO	Instrument ID:	ATMS5		
Method:	\\ChromNA\Sacramento\ChromData\ATMS5\20170508-42807.b\TO15 SIM.m				
Limit Group:	MSA - TO15_SIM - ICAL				
Last Update:	09-May-2017 13:50:48	Calib Date:	05-May-2017 05:20:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Sacramento\ChromData\ATMS5\20170505-42704.b\MS5050414.D				
Column 1 :			Det: MS SCAN		
Process Host:	XAWRK002				
First Level Reviewer: ortizam		Date:	09-May-2017 13:50:48		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.565	11.574	-0.009	100	36754	2.00	
* 2 1,4-Difluorobenzene	114	13.718	13.721	-0.003	100	145384	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.363	20.363	0.000	100	127057	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	12.749	12.750	-0.001	86	47196	1.94	
$ 5 Toluene-d8 (Surr)	100	17.094	17.094	0.000	100	82599	1.99	
$ 6 4-Bromofluorobenzene (Surr	95	22.919	22.919	0.000	100	79332	1.84	
18 Acetone	43	7.024	7.001	0.023	96	13057	0.3836	
22 Methylene Chloride	49	8.189	8.189	0.000	97	341	0.0135	7

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

Reagents:

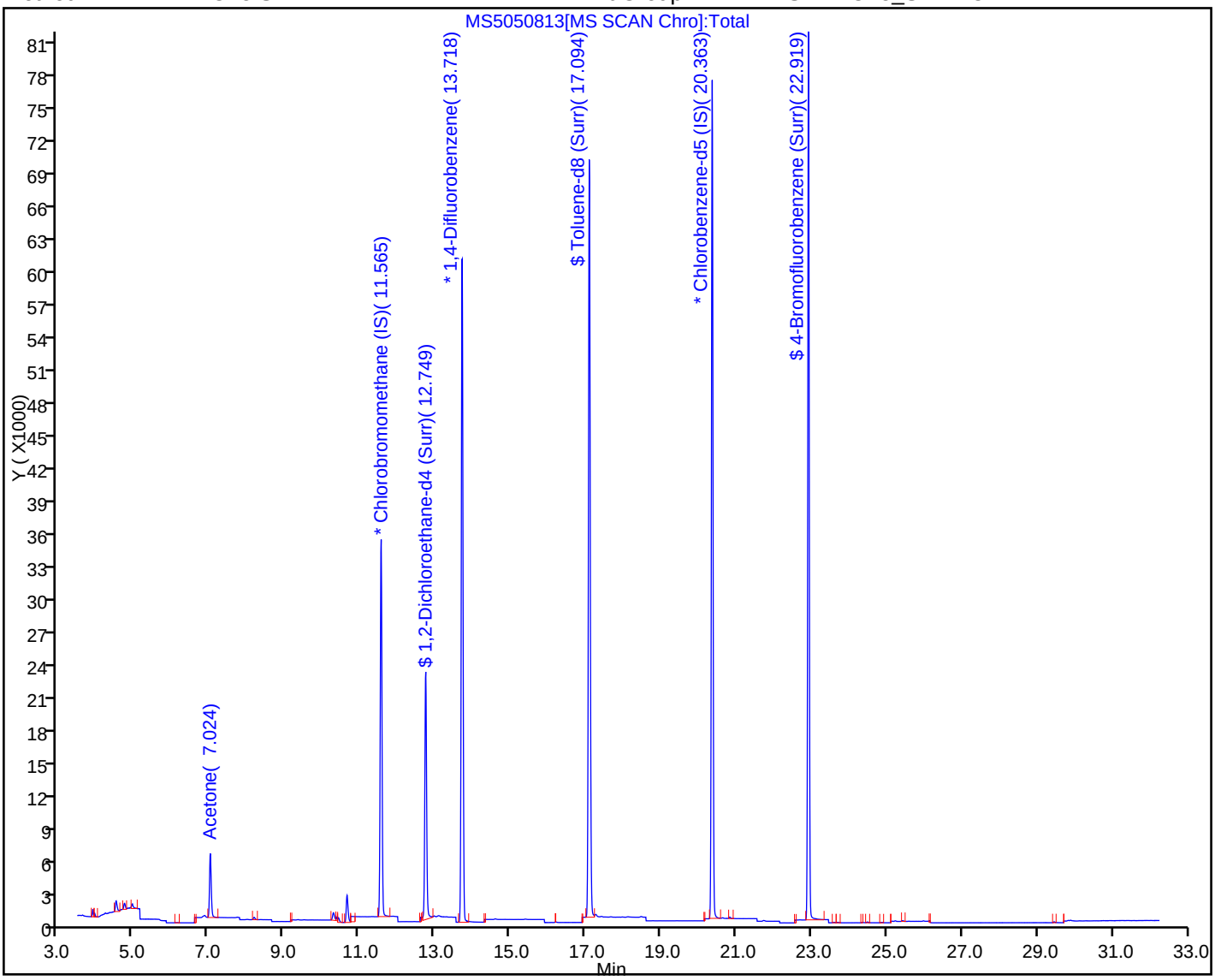
VAMSIS20_00002 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 09-May-2017 13:50:49 Chrom Revision: 2.2 08-May-2017 08:06:58

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS5\20170508-42807.b\MS5050813.D

Injection Date:	09-May-2017 02:06:30	Instrument ID:	ATMS5		
Lims ID:	320-28047-A-6	Lab Sample ID:	320-28047-6		
Client ID:	34002146				
Operator ID:	AO	ALS Bottle#:	15	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO15_SIM - ICAL		

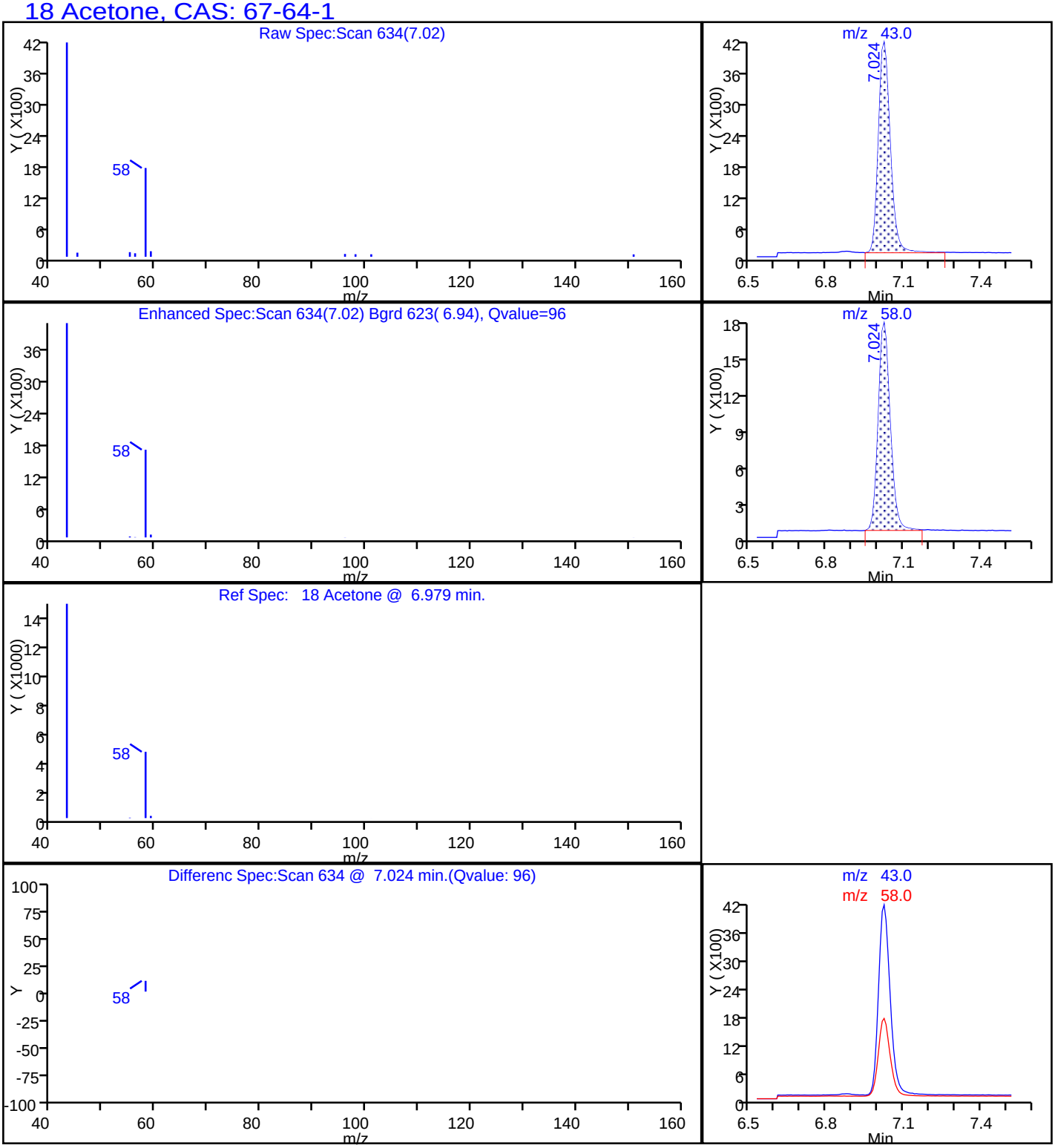


TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS5\20170508-42807.b\MS5050813.D

Injection Date:	09-May-2017 02:06:30	Instrument ID:	ATMS5		
Lims ID:	320-28047-A-6	Lab Sample ID:	320-28047-6		
Client ID:	34002146				
Operator ID:	AO	ALS Bottle#:	15	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO15 SIM	Limit Group:	MSA - TO15_SIM - ICAL		
Column:		Detector	MS SCAN		

18 Acetone, CAS: 67-64-1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28047-1

SDG No.:

Client Sample ID: 34002100 Lab Sample ID: 320-28047-7

Matrix: Air Lab File ID: MS1051008.D

Analysis Method: TO-15 SIM Date Collected: 05/05/2017 00:00

Sample wt/vol: 500(mL) Date Analyzed: 05/10/2017 21:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163816 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.020	0.010
75-27-4	Bromodichloromethane	ND		0.012	0.0050
108-90-7	Chlorobenzene	ND		0.020	0.010
75-00-3	Chloroethane	ND		0.045	0.010
67-66-3	Chloroform	ND		0.020	0.0050
74-87-3	Chloromethane	ND		0.20	0.010
124-48-1	Dibromochloromethane	ND		0.010	0.0050
106-93-4	1,2-Dibromoethane (EDB)	ND		0.0070	0.0028
95-50-1	1,2-Dichlorobenzene	ND		0.050	0.010
541-73-1	1,3-Dichlorobenzene	ND		0.10	0.010
106-46-7	1,4-Dichlorobenzene	ND		0.10	0.010
75-71-8	Dichlorodifluoromethane	ND		0.020	0.0050
75-34-3	1,1-Dichloroethane	ND		0.020	0.0050
107-06-2	1,2-Dichloroethane	ND		0.020	0.0050
75-35-4	1,1-Dichloroethene	ND		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	ND		0.020	0.0050
156-60-5	trans-1,2-Dichloroethene	ND		0.020	0.0050
78-87-5	1,2-Dichloropropane	ND		0.040	0.0050
10061-01-5	cis-1,3-Dichloropropene	ND		0.020	0.0050
10061-02-6	trans-1,3-Dichloropropene	ND		0.020	0.0050
123-91-1	1,4-Dioxane	ND		0.10	0.010
100-41-4	Ethylbenzene	ND		0.020	0.010
87-68-3	Hexachlorobutadiene	ND		0.020	0.010
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.025	0.010
75-09-2	Methylene Chloride	ND		0.20	0.10
100-42-5	Styrene	ND		0.030	0.010
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.020	0.010
127-18-4	Tetrachloroethene	ND		0.020	0.010
108-88-3	Toluene	ND		0.020	0.010
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.030	0.0050
71-55-6	1,1,1-Trichloroethane	ND		0.020	0.0050
79-00-5	1,1,2-Trichloroethane	ND		0.050	0.0050
79-01-6	Trichloroethene	ND		0.020	0.0050
75-69-4	Trichlorofluoromethane	ND		0.045	0.010
75-01-4	Vinyl chloride	ND		0.020	0.010

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28047-1

SDG No.:

Client Sample ID: 34002100 Lab Sample ID: 320-28047-7

Matrix: Air Lab File ID: MS1051008.D

Analysis Method: TO-15 SIM Date Collected: 05/05/2017 00:00

Sample wt/vol: 500(mL) Date Analyzed: 05/10/2017 21:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163816 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
179601-23-1	m,p-Xylene	ND		0.040	0.020
95-47-6	o-Xylene	ND		0.020	0.010
96-18-4	1,2,3-Trichloropropane	ND		0.040	0.010

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	123		70-130
2037-26-5	Toluene-d8 (Surr)	97		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\ATMS1\20170510-42908.b\MS1051008.D
Lims ID: 320-28047-A-7
Client ID: 34002100
Sample Type: Client
Inject. Date: 10-May-2017 21:04:30 ALS Bottle#: 3 Worklist Smp#: 8
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 320-28047-A-07
Operator ID: AZ Instrument ID: ATMS1

Method: \\ChromNA\Sacramento\ChromData\ATMS1\20170510-42908.b\TO-15 SIM SIM.m
Limit Group: MSA - TO15_SIM - ICAL
Last Update: 15-May-2017 16:50:24 Calib Date: 18-Mar-2017 03:03:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\ATMS1\20170318-40992.b\MS1031714.D

Column 1 : Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: zeighamia Date: 11-May-2017 12:11:35

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.673	11.673	0.000	98	30962	2.00	
* 2 1,4-Difluorobenzene	114	13.821	13.821	0.000	100	125914	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.490	20.490	0.000	100	112854	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	12.858	12.858	0.000	62	56417	2.45	
$ 5 Toluene-d8 (Surr)	100	17.205	17.205	0.000	99	70393	1.94	
$ 6 4-Bromofluorobenzene (Surr	174	23.050	23.043	0.007	99	65827	2.05	
135 Acetone	43	7.006	6.982	0.024	100	5431	0.1112	
126 1,2,4-Trichlorobenzene	180	29.599	29.598	0.001	100	575	0.0288	
127 Naphthalene	128	30.044	30.044	0.000	100	1133	0.0191	

Reagents:

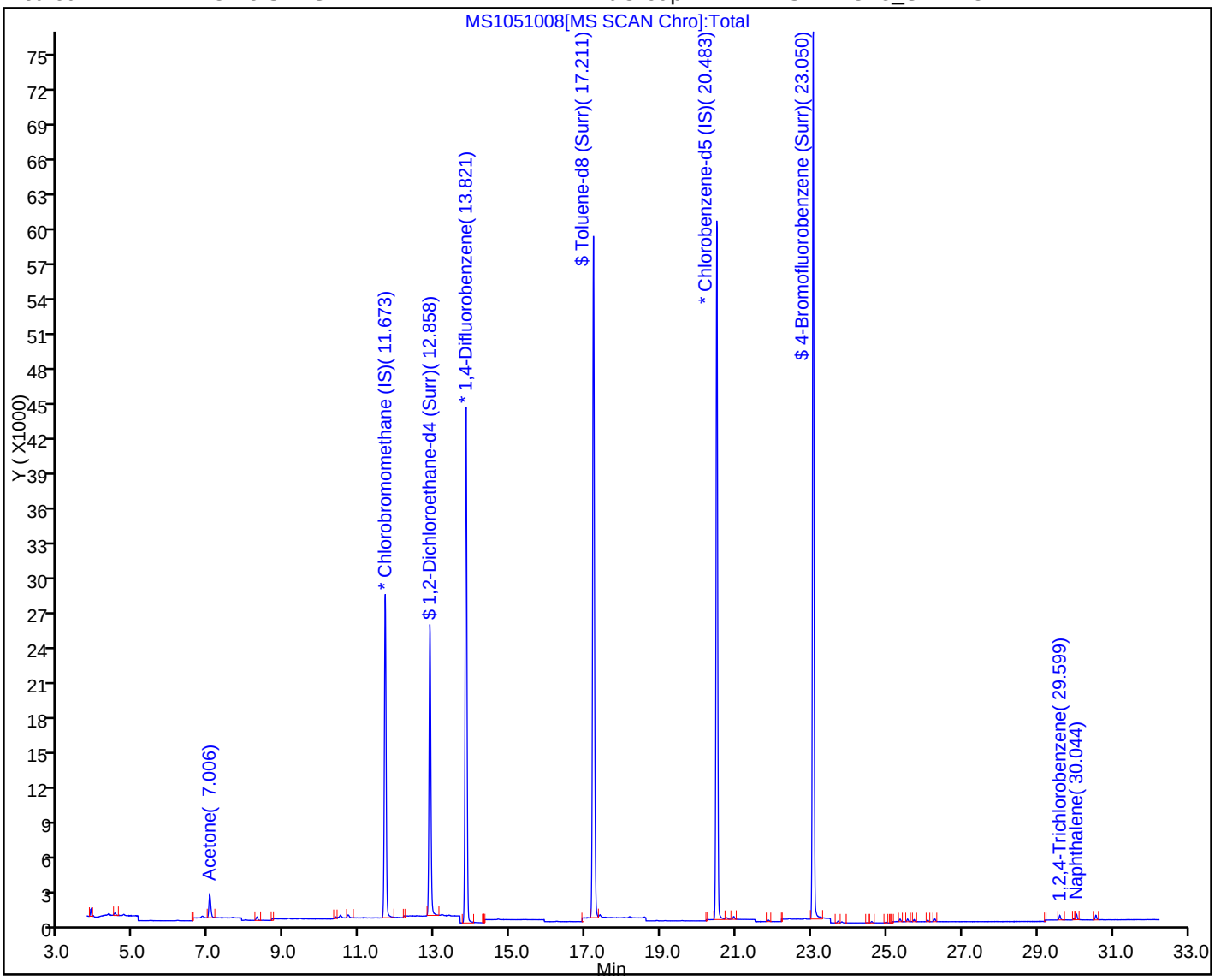
VAMSIS20_00002 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 15-May-2017 16:50:25 Chrom Revision: 2.2 08-May-2017 08:06:58

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS1\20170510-42908.b\MS1051008.D

Injection Date:	10-May-2017 21:04:30	Instrument ID:	ATMS1		
Lims ID:	320-28047-A-7	Lab Sample ID:	Client 320-163816/8-A		
Client ID:	34002100				
Operator ID:	AZ	ALS Bottle#:	3	Worklist Smp#:	8
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO-15 SIM SIM	Limit Group:	MSA - TO15_SIM - ICAL		



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28047-1

SDG No.:

Client Sample ID: 34000563 Lab Sample ID: 320-28047-8

Matrix: Air Lab File ID: MS1051009.D

Analysis Method: TO-15 SIM Date Collected: 05/05/2017 00:00

Sample wt/vol: 500(mL) Date Analyzed: 05/10/2017 22:03

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163816 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.020	0.010
75-27-4	Bromodichloromethane	ND		0.012	0.0050
108-90-7	Chlorobenzene	ND		0.020	0.010
75-00-3	Chloroethane	ND		0.045	0.010
67-66-3	Chloroform	ND		0.020	0.0050
74-87-3	Chloromethane	ND		0.20	0.010
124-48-1	Dibromochloromethane	ND		0.010	0.0050
106-93-4	1,2-Dibromoethane (EDB)	ND		0.0070	0.0028
95-50-1	1,2-Dichlorobenzene	ND		0.050	0.010
541-73-1	1,3-Dichlorobenzene	ND		0.10	0.010
106-46-7	1,4-Dichlorobenzene	ND		0.10	0.010
75-71-8	Dichlorodifluoromethane	ND		0.020	0.0050
75-34-3	1,1-Dichloroethane	ND		0.020	0.0050
107-06-2	1,2-Dichloroethane	ND		0.020	0.0050
75-35-4	1,1-Dichloroethene	ND		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	ND		0.020	0.0050
156-60-5	trans-1,2-Dichloroethene	ND		0.020	0.0050
78-87-5	1,2-Dichloropropane	ND		0.040	0.0050
10061-01-5	cis-1,3-Dichloropropene	ND		0.020	0.0050
10061-02-6	trans-1,3-Dichloropropene	ND		0.020	0.0050
100-41-4	Ethylbenzene	ND		0.020	0.010
87-68-3	Hexachlorobutadiene	ND		0.020	0.010
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.025	0.010
75-09-2	Methylene Chloride	ND		0.20	0.10
100-42-5	Styrene	ND		0.030	0.010
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.020	0.010
127-18-4	Tetrachloroethene	ND		0.020	0.010
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.030	0.0050
71-55-6	1,1,1-Trichloroethane	ND		0.020	0.0050
79-01-6	Trichloroethene	ND		0.020	0.0050
75-69-4	Trichlorofluoromethane	ND		0.045	0.010
75-01-4	Vinyl chloride	ND		0.020	0.010
95-47-6	o-Xylene	ND		0.020	0.010
96-18-4	1,2,3-Trichloropropane	ND		0.040	0.010

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28047-1

SDG No.:

Client Sample ID: 34000563 Lab Sample ID: 320-28047-8

Matrix: Air Lab File ID: MS1051009.D

Analysis Method: TO-15 SIM Date Collected: 05/05/2017 00:00

Sample wt/vol: 500(mL) Date Analyzed: 05/10/2017 22:03

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163816 Units: ppb v/v

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	122		70-130
2037-26-5	Toluene-d8 (Surr)	97		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\ATMS1\20170510-42908.b\MS1051009.D
Lims ID: 320-28047-A-8
Client ID: 34000563
Sample Type: Client
Inject. Date: 10-May-2017 22:03:30 ALS Bottle#: 4 Worklist Smp#: 9
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 320-28047-A-08
Operator ID: AZ Instrument ID: ATMS1

Method: \\ChromNA\Sacramento\ChromData\ATMS1\20170510-42908.b\TO-15 SIM SIM.m
Limit Group: MSA - TO15_SIM - ICAL
Last Update: 15-May-2017 16:50:24 Calib Date: 18-Mar-2017 03:03:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\ATMS1\20170318-40992.b\MS1031714.D

Column 1 : Det: MS SCAN
Process Host: XAWRK025

First Level Reviewer: zeighamia Date: 11-May-2017 12:12:47

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.673	11.673	0.000	98	30084	2.00	
* 2 1,4-Difluorobenzene	114	13.821	13.821	0.000	100	123269	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.490	20.490	0.000	100	109996	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	12.865	12.858	0.007	56	54980	2.44	
$ 5 Toluene-d8 (Surr)	100	17.205	17.205	0.000	99	69151	1.95	
$ 6 4-Bromofluorobenzene (Surr	174	23.050	23.043	0.007	99	63909	2.04	
135 Acetone	43	7.000	6.982	0.018	99	20776	0.4380	
72 1,4-Dioxane	88	15.383	15.354	0.029	18	148	0.0103	
85 Toluene	91	17.384	17.378	0.006	99	1604	0.0210	
86 1,1,2-Trichloroethane	97	18.101	18.012	0.089	48	143	0.006263	
98 m-Xylene & p-Xylene	91	20.937	20.937	0.000	100	1765	0.0230	
126 1,2,4-Trichlorobenzene	180	29.598	29.598	0.000	99	446	0.0229	
127 Naphthalene	128	30.043	30.044	-0.001	100	886	0.0153	

Reagents:

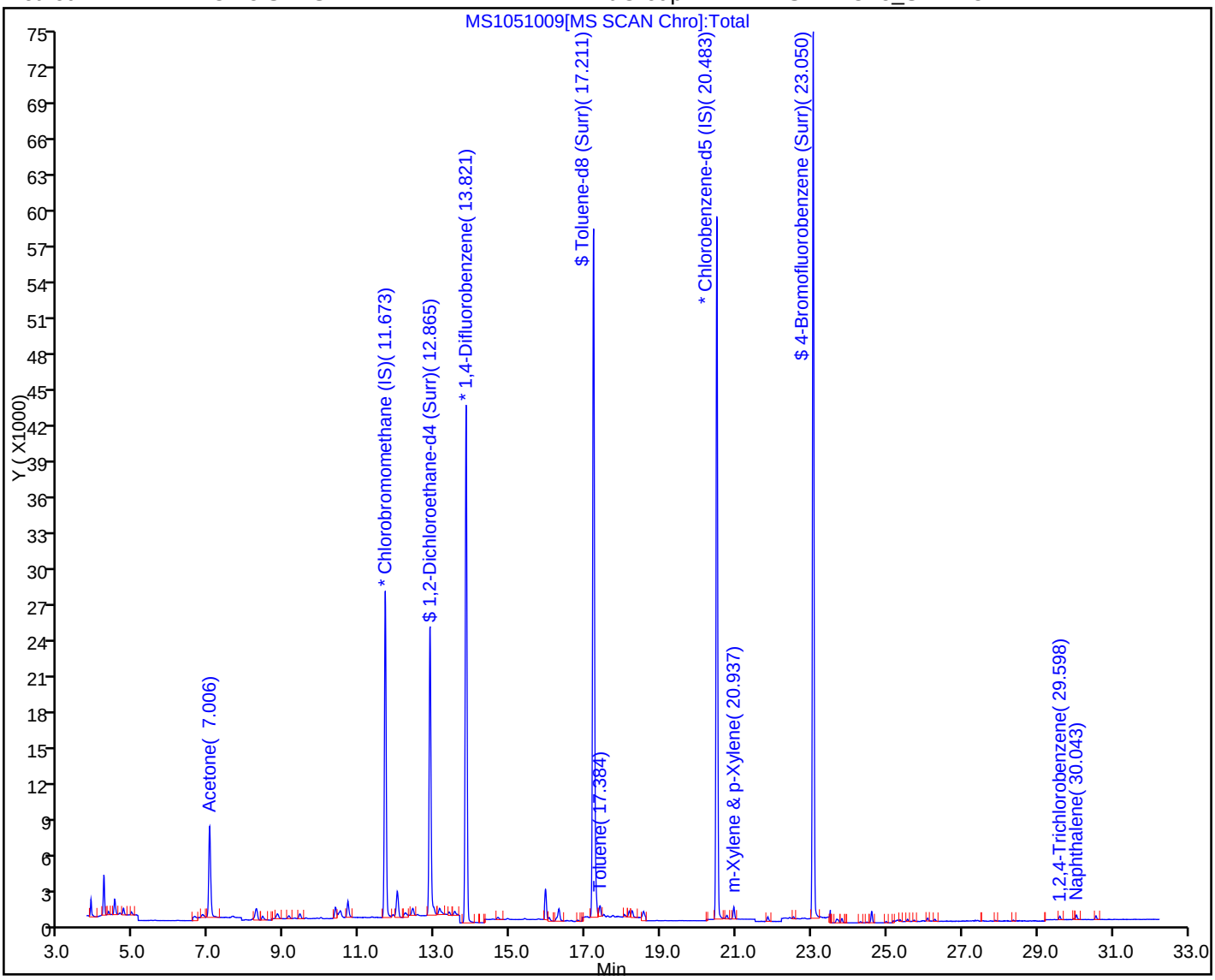
VAMSIS20_00002 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 15-May-2017 16:50:46 Chrom Revision: 2.2 08-May-2017 08:06:58

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS1\20170510-42908.b\MS1051009.D

Injection Date:	10-May-2017 22:03:30	Instrument ID:	ATMS1		
Lims ID:	320-28047-A-8	Lab Sample ID:	Client 320-163816/9-A		
Client ID:	34000563				
Operator ID:	AZ	ALS Bottle#:	4	Worklist Smp#:	9
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO-15 SIM SIM	Limit Group:	MSA - TO15_SIM - ICAL		



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28047-1

SDG No.:

Client Sample ID: 8040 Lab Sample ID: 320-28047-9

Matrix: Air Lab File ID: MS1051010B.D

Analysis Method: TO-15 SIM Date Collected: 05/05/2017 00:00

Sample wt/vol: 500(mL) Date Analyzed: 05/10/2017 23:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163816 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.020	0.010
75-27-4	Bromodichloromethane	ND		0.012	0.0050
108-90-7	Chlorobenzene	ND		0.020	0.010
75-00-3	Chloroethane	ND		0.045	0.010
67-66-3	Chloroform	ND		0.020	0.0050
74-87-3	Chloromethane	ND		0.20	0.010
124-48-1	Dibromochloromethane	ND		0.010	0.0050
106-93-4	1,2-Dibromoethane (EDB)	ND		0.0070	0.0028
95-50-1	1,2-Dichlorobenzene	ND		0.050	0.010
541-73-1	1,3-Dichlorobenzene	ND		0.10	0.010
106-46-7	1,4-Dichlorobenzene	ND		0.10	0.010
75-71-8	Dichlorodifluoromethane	ND		0.020	0.0050
75-34-3	1,1-Dichloroethane	ND		0.020	0.0050
107-06-2	1,2-Dichloroethane	ND		0.020	0.0050
75-35-4	1,1-Dichloroethene	ND		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	ND		0.020	0.0050
156-60-5	trans-1,2-Dichloroethene	ND		0.020	0.0050
78-87-5	1,2-Dichloropropane	ND		0.040	0.0050
10061-01-5	cis-1,3-Dichloropropene	ND		0.020	0.0050
10061-02-6	trans-1,3-Dichloropropene	ND		0.020	0.0050
123-91-1	1,4-Dioxane	ND		0.10	0.010
100-41-4	Ethylbenzene	ND		0.020	0.010
87-68-3	Hexachlorobutadiene	ND		0.020	0.010
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.025	0.010
75-09-2	Methylene Chloride	ND		0.20	0.10
91-20-3	Naphthalene	ND		0.013	0.010
100-42-5	Styrene	ND		0.030	0.010
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.020	0.010
127-18-4	Tetrachloroethene	ND		0.020	0.010
108-88-3	Toluene	ND		0.020	0.010
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.030	0.0050
120-82-1	1,2,4-Trichlorobenzene	ND		0.050	0.010
71-55-6	1,1,1-Trichloroethane	ND		0.020	0.0050
79-00-5	1,1,2-Trichloroethane	ND		0.050	0.0050
79-01-6	Trichloroethene	ND		0.020	0.0050

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28047-1

SDG No.:

Client Sample ID: 8040 Lab Sample ID: 320-28047-9

Matrix: Air Lab File ID: MS1051010B.D

Analysis Method: TO-15 SIM Date Collected: 05/05/2017 00:00

Sample wt/vol: 500(mL) Date Analyzed: 05/10/2017 23:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163816 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-69-4	Trichlorofluoromethane	ND		0.045	0.010
75-01-4	Vinyl chloride	ND		0.020	0.010
179601-23-1	m,p-Xylene	ND		0.040	0.020
95-47-6	o-Xylene	ND		0.020	0.010
96-18-4	1,2,3-Trichloropropane	ND		0.040	0.010

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	123		70-130
2037-26-5	Toluene-d8 (Surr)	97		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\ChromNA\Sacramento\ChromData\ATMS1\20170510-42908.b\MS1051010B.D				
Lims ID:	320-28047-A-9				
Client ID:	8040				
Sample Type:	Client				
Inject. Date:	10-May-2017 23:01:30	ALS Bottle#:	5	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	320-28047-A-09				
Operator ID:	AZ	Instrument ID:	ATMS1		
Method:	\\ChromNA\Sacramento\ChromData\ATMS1\20170510-42908.b\TO-15 SIM SIM.m				
Limit Group:	MSA - TO15_SIM - ICAL				
Last Update:	15-May-2017 17:00:33	Calib Date:	18-Mar-2017 03:03:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Sacramento\ChromData\ATMS1\20170318-40992.b\MS1031714.D				
Column 1 :			Det: MS SCAN		
Process Host:	XAWRK025				
First Level Reviewer: ortizam		Date:	15-May-2017 17:00:45		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.655	11.673	-0.018	98	30666	2.00	
* 2 1,4-Difluorobenzene	114	13.810	13.821	-0.011	100	125660	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.483	20.490	-0.007	99	111239	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	12.842	12.858	-0.016	68	56359	2.46	
$ 5 Toluene-d8 (Surr)	100	17.199	17.205	-0.006	99	69941	1.93	
$ 6 4-Bromofluorobenzene (Surr	174	23.043	23.043	0.000	100	62776	1.98	
135 Acetone	43	6.964	6.982	-0.018	99	12451	0.2575	

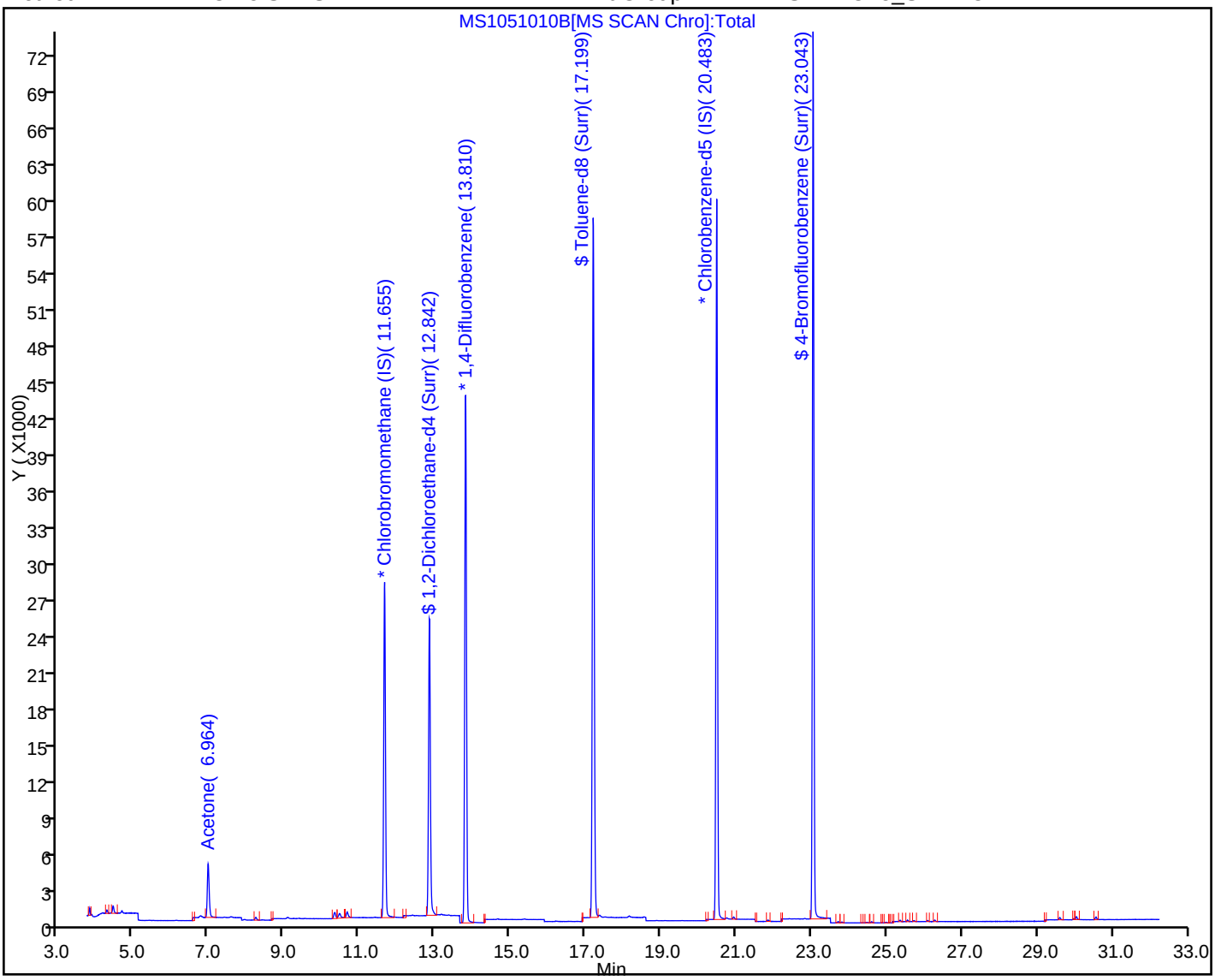
Reagents:

VAMSIS20_00002 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 15-May-2017 17:00:46 Chrom Revision: 2.2 08-May-2017 08:06:58

TestAmerica Sacramento

Data File:	\\ChromNA\Sacramento\ChromData\ATMS1\20170510-42908.b\MS1051010B.D				
Injection Date:	10-May-2017 23:01:30	Instrument ID:	ATMS1		
Lims ID:	320-28047-A-9	Lab Sample ID:	320-28047-9		
Client ID:	8040				
Operator ID:	AZ	ALS Bottle#:	5	Worklist Smp#:	17
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO-15 SIM SIM	Limit Group:	MSA - TO15_SIM - ICAL		



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28047-1

SDG No.:

Client Sample ID: 34001465 Lab Sample ID: 320-28047-10

Matrix: Air Lab File ID: MS1051011.D

Analysis Method: TO-15 SIM Date Collected: 05/05/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 05/11/2017 00:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163816 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.020	0.010
75-27-4	Bromodichloromethane	ND		0.012	0.0050
108-90-7	Chlorobenzene	ND		0.020	0.010
75-00-3	Chloroethane	ND		0.045	0.010
67-66-3	Chloroform	ND		0.020	0.0050
74-87-3	Chloromethane	ND		0.20	0.010
124-48-1	Dibromochloromethane	ND		0.010	0.0050
106-93-4	1,2-Dibromoethane (EDB)	ND		0.0070	0.0028
95-50-1	1,2-Dichlorobenzene	ND		0.050	0.010
541-73-1	1,3-Dichlorobenzene	ND		0.10	0.010
106-46-7	1,4-Dichlorobenzene	ND		0.10	0.010
75-71-8	Dichlorodifluoromethane	ND		0.020	0.0050
75-34-3	1,1-Dichloroethane	ND		0.020	0.0050
107-06-2	1,2-Dichloroethane	ND		0.020	0.0050
75-35-4	1,1-Dichloroethene	ND		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	ND		0.020	0.0050
156-60-5	trans-1,2-Dichloroethene	ND		0.020	0.0050
78-87-5	1,2-Dichloropropane	ND		0.040	0.0050
10061-01-5	cis-1,3-Dichloropropene	ND		0.020	0.0050
10061-02-6	trans-1,3-Dichloropropene	ND		0.020	0.0050
100-41-4	Ethylbenzene	ND		0.020	0.010
87-68-3	Hexachlorobutadiene	ND		0.020	0.010
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.025	0.010
75-09-2	Methylene Chloride	ND		0.20	0.10
100-42-5	Styrene	ND		0.030	0.010
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.020	0.010
127-18-4	Tetrachloroethene	ND		0.020	0.010
108-88-3	Toluene	ND		0.020	0.010
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.030	0.0050
120-82-1	1,2,4-Trichlorobenzene	ND		0.050	0.010
71-55-6	1,1,1-Trichloroethane	ND		0.020	0.0050
79-00-5	1,1,2-Trichloroethane	ND		0.050	0.0050
79-01-6	Trichloroethene	ND		0.020	0.0050
75-69-4	Trichlorofluoromethane	ND		0.045	0.010
75-01-4	Vinyl chloride	ND		0.020	0.010

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28047-1

SDG No.:

Client Sample ID: 34001465 Lab Sample ID: 320-28047-10

Matrix: Air Lab File ID: MS1051011.D

Analysis Method: TO-15 SIM Date Collected: 05/05/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 05/11/2017 00:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163816 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
179601-23-1	m,p-Xylene	ND		0.040	0.020
95-47-6	o-Xylene	ND		0.020	0.010
96-18-4	1,2,3-Trichloropropane	ND		0.040	0.010

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	125		70-130
2037-26-5	Toluene-d8 (Surr)	97		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\ChromNA\Sacramento\ChromData\ATMS1\20170510-42908.b\MS1051011.D				
Lims ID:	320-28047-A-10				
Client ID:	34001465				
Sample Type:	Client				
Inject. Date:	11-May-2017 00:00:30	ALS Bottle#:	6	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	320-28047-A-10				
Operator ID:	AZ	Instrument ID:	ATMS1		
Method:	\\ChromNA\Sacramento\ChromData\ATMS1\20170510-42908.b\TO-15 SIM SIM.m				
Limit Group:	MSA - TO15_SIM - ICAL				
Last Update:	11-May-2017 12:05:57	Calib Date:	18-Mar-2017 03:03:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Sacramento\ChromData\ATMS1\20170318-40992.b\MS1031714.D				
Column 1 :			Det: MS SCAN		
Process Host:	XAWRK029				
First Level Reviewer: zeighamia		Date:	11-May-2017 12:06:18		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.662	11.673	-0.011	98	30057	2.00	
* 2 1,4-Difluorobenzene	114	13.814	13.821	-0.007	100	121530	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.483	20.490	-0.007	99	108472	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	12.851	12.858	-0.007	62	55276	2.49	
$ 5 Toluene-d8 (Surr)	100	17.205	17.205	0.000	99	68026	1.94	
$ 6 4-Bromofluorobenzene (Surr	174	23.044	23.043	0.001	99	61798	2.00	
135 Acetone	43	6.970	6.982	-0.012	99	35577	0.7507	
72 1,4-Dioxane	88	15.384	15.354	0.030	17	157	0.0111	
127 Naphthalene	128	30.044	30.044	0.000	100	718	0.0126	

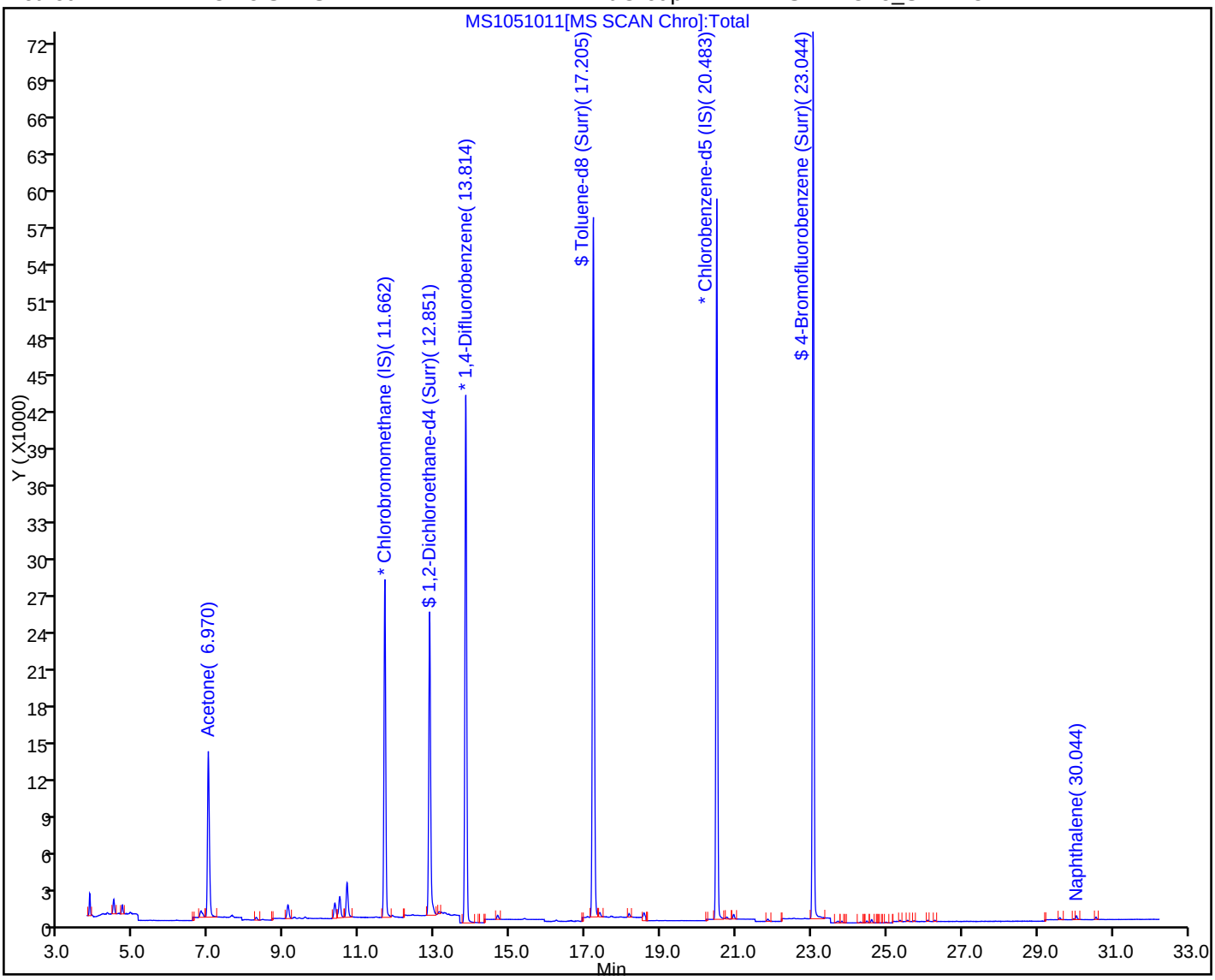
Reagents:

VAMSIS20_00002 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 11-May-2017 12:06:18 Chrom Revision: 2.2 08-May-2017 08:06:58

TestAmerica Sacramento

Data File:	\\ChromNA\Sacramento\ChromData\ATMS1\20170510-42908.b\MS1051011.D				
Injection Date:	11-May-2017 00:00:30	Instrument ID:	ATMS1		
Lims ID:	320-28047-A-10	Lab Sample ID:	320-28047-10		
Client ID:	34001465				
Operator ID:	AZ	ALS Bottle#:	6	Worklist Smp#:	11
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO-15 SIM SIM	Limit Group:	MSA - TO15_SIM - ICAL		



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28047-1

SDG No.:

Client Sample ID: 34001145 Lab Sample ID: 320-28047-11

Matrix: Air Lab File ID: MS1051012.D

Analysis Method: TO-15 SIM Date Collected: 05/05/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 05/11/2017 00:59

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163816 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.020	0.010
75-27-4	Bromodichloromethane	ND		0.012	0.0050
108-90-7	Chlorobenzene	ND		0.020	0.010
75-00-3	Chloroethane	ND		0.045	0.010
67-66-3	Chloroform	ND		0.020	0.0050
74-87-3	Chloromethane	ND		0.20	0.010
124-48-1	Dibromochloromethane	ND		0.010	0.0050
106-93-4	1,2-Dibromoethane (EDB)	ND		0.0070	0.0028
95-50-1	1,2-Dichlorobenzene	ND		0.050	0.010
541-73-1	1,3-Dichlorobenzene	ND		0.10	0.010
106-46-7	1,4-Dichlorobenzene	ND		0.10	0.010
75-71-8	Dichlorodifluoromethane	ND		0.020	0.0050
75-34-3	1,1-Dichloroethane	ND		0.020	0.0050
107-06-2	1,2-Dichloroethane	ND		0.020	0.0050
75-35-4	1,1-Dichloroethene	ND		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	ND		0.020	0.0050
156-60-5	trans-1,2-Dichloroethene	ND		0.020	0.0050
78-87-5	1,2-Dichloropropane	ND		0.040	0.0050
10061-01-5	cis-1,3-Dichloropropene	ND		0.020	0.0050
10061-02-6	trans-1,3-Dichloropropene	ND		0.020	0.0050
123-91-1	1,4-Dioxane	ND		0.10	0.010
100-41-4	Ethylbenzene	ND		0.020	0.010
87-68-3	Hexachlorobutadiene	ND		0.020	0.010
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.025	0.010
75-09-2	Methylene Chloride	ND		0.20	0.10
91-20-3	Naphthalene	ND		0.013	0.010
100-42-5	Styrene	ND		0.030	0.010
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.020	0.010
127-18-4	Tetrachloroethene	ND		0.020	0.010
108-88-3	Toluene	ND		0.020	0.010
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.030	0.0050
120-82-1	1,2,4-Trichlorobenzene	ND		0.050	0.010
71-55-6	1,1,1-Trichloroethane	ND		0.020	0.0050
79-00-5	1,1,2-Trichloroethane	ND		0.050	0.0050
79-01-6	Trichloroethene	ND		0.020	0.0050

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28047-1

SDG No.:

Client Sample ID: 34001145 Lab Sample ID: 320-28047-11

Matrix: Air Lab File ID: MS1051012.D

Analysis Method: TO-15 SIM Date Collected: 05/05/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 05/11/2017 00:59

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163816 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-69-4	Trichlorofluoromethane	ND		0.045	0.010
75-01-4	Vinyl chloride	ND		0.020	0.010
179601-23-1	m,p-Xylene	ND		0.040	0.020
95-47-6	o-Xylene	ND		0.020	0.010
67-64-1	Acetone	ND		0.20	0.040
96-18-4	1,2,3-Trichloropropane	ND		0.040	0.010

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	125		70-130
2037-26-5	Toluene-d8 (Surr)	97		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\ChromNA\Sacramento\ChromData\ATMS1\20170510-42908.b\MS1051012.D				
Lims ID:	320-28047-A-11				
Client ID:	34001145				
Sample Type:	Client				
Inject. Date:	11-May-2017 00:59:30	ALS Bottle#:	7	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	320-28047-A-11				
Operator ID:	AZ	Instrument ID:	ATMS1		
Method:	\\ChromNA\Sacramento\ChromData\ATMS1\20170510-42908.b\TO-15 SIM SIM.m				
Limit Group:	MSA - TO15_SIM - ICAL				
Last Update:	11-May-2017 12:05:57	Calib Date:	18-Mar-2017 03:03:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Sacramento\ChromData\ATMS1\20170318-40992.b\MS1031714.D				
Column 1 :			Det: MS SCAN		
Process Host:	XAWRK029				
First Level Reviewer: zeighamia		Date:	11-May-2017 12:07:36		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.661	11.673	-0.012	98	29755	2.00	
* 2 1,4-Difluorobenzene	114	13.813	13.821	-0.008	100	120176	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.483	20.490	-0.007	98	107087	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	12.850	12.858	-0.008	55	54787	2.50	
$ 5 Toluene-d8 (Surr)	100	17.205	17.205	0.000	99	66955	1.93	
$ 6 4-Bromofluorobenzene (Surr	174	23.043	23.043	0.000	100	62482	2.05	

Reagents:

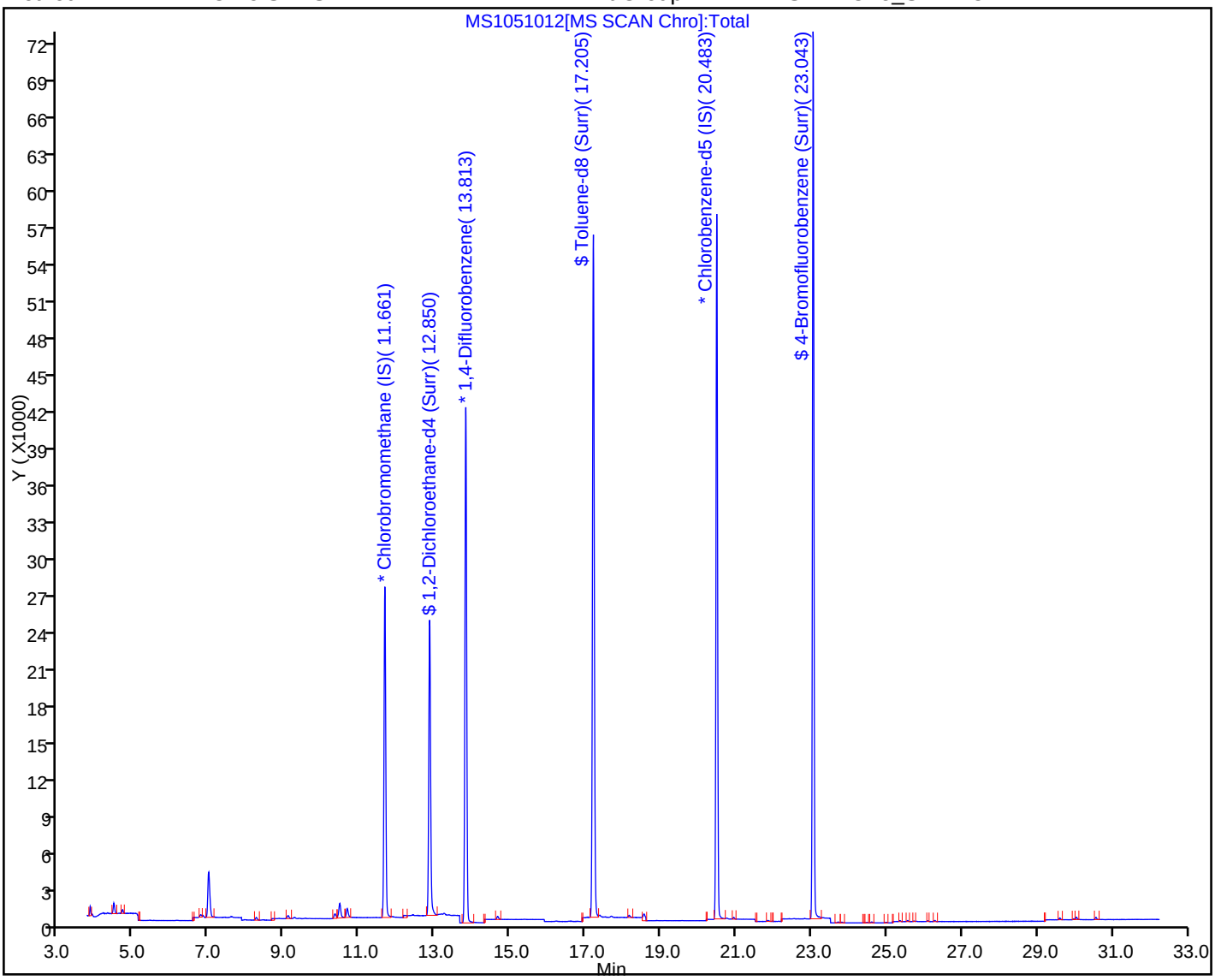
VAMSIS20_00002 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 11-May-2017 12:07:37 Chrom Revision: 2.2 08-May-2017 08:06:58

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS1\20170510-42908.b\MS1051012.D

Injection Date:	11-May-2017 00:59:30	Instrument ID:	ATMS1		
Lims ID:	320-28047-A-11	Lab Sample ID:	320-28047-11		
Client ID:	34001145				
Operator ID:	AZ	ALS Bottle#:	7	Worklist Smp#:	12
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO-15 SIM SIM	Limit Group:	MSA - TO15_SIM - ICAL		



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28047-1

SDG No.:

Client Sample ID: 7907 Lab Sample ID: 320-28047-12

Matrix: Air Lab File ID: MS1051013.D

Analysis Method: TO-15 SIM Date Collected: 05/05/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 05/11/2017 01:58

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163816 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-43-2	Benzene	ND		0.020	0.010
75-27-4	Bromodichloromethane	ND		0.012	0.0050
108-90-7	Chlorobenzene	ND		0.020	0.010
75-00-3	Chloroethane	ND		0.045	0.010
67-66-3	Chloroform	ND		0.020	0.0050
74-87-3	Chloromethane	ND		0.20	0.010
124-48-1	Dibromochloromethane	ND		0.010	0.0050
106-93-4	1,2-Dibromoethane (EDB)	ND		0.0070	0.0028
95-50-1	1,2-Dichlorobenzene	ND		0.050	0.010
541-73-1	1,3-Dichlorobenzene	ND		0.10	0.010
106-46-7	1,4-Dichlorobenzene	ND		0.10	0.010
75-71-8	Dichlorodifluoromethane	ND		0.020	0.0050
75-34-3	1,1-Dichloroethane	ND		0.020	0.0050
107-06-2	1,2-Dichloroethane	ND		0.020	0.0050
75-35-4	1,1-Dichloroethene	ND		0.020	0.0050
156-59-2	cis-1,2-Dichloroethene	ND		0.020	0.0050
156-60-5	trans-1,2-Dichloroethene	ND		0.020	0.0050
78-87-5	1,2-Dichloropropane	ND		0.040	0.0050
10061-01-5	cis-1,3-Dichloropropene	ND		0.020	0.0050
10061-02-6	trans-1,3-Dichloropropene	ND		0.020	0.0050
123-91-1	1,4-Dioxane	ND		0.10	0.010
100-41-4	Ethylbenzene	ND		0.020	0.010
87-68-3	Hexachlorobutadiene	ND		0.020	0.010
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.025	0.010
75-09-2	Methylene Chloride	ND		0.20	0.10
91-20-3	Naphthalene	ND		0.013	0.010
100-42-5	Styrene	ND		0.030	0.010
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.020	0.010
127-18-4	Tetrachloroethene	ND		0.020	0.010
108-88-3	Toluene	ND		0.020	0.010
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.030	0.0050
120-82-1	1,2,4-Trichlorobenzene	ND		0.050	0.010
71-55-6	1,1,1-Trichloroethane	ND		0.020	0.0050
79-00-5	1,1,2-Trichloroethane	ND		0.050	0.0050
79-01-6	Trichloroethene	ND		0.020	0.0050

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28047-1

SDG No.:

Client Sample ID: 7907 Lab Sample ID: 320-28047-12

Matrix: Air Lab File ID: MS1051013.D

Analysis Method: TO-15 SIM Date Collected: 05/05/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 05/11/2017 01:58

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 163816 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-69-4	Trichlorofluoromethane	ND		0.045	0.010
75-01-4	Vinyl chloride	ND		0.020	0.010
179601-23-1	m,p-Xylene	ND		0.040	0.020
95-47-6	o-Xylene	ND		0.020	0.010
67-64-1	Acetone	0.15	J B	0.20	0.040
96-18-4	1,2,3-Trichloropropane	ND		0.040	0.010

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	126		70-130
2037-26-5	Toluene-d8 (Surr)	97		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\ChromNA\Sacramento\ChromData\ATMS1\20170510-42908.b\MS1051013.D				
Lims ID:	320-28047-A-12				
Client ID:	7907				
Sample Type:	Client				
Inject. Date:	11-May-2017 01:58:30	ALS Bottle#:	9	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Sample Info:	320-28047-A-12				
Operator ID:	AZ	Instrument ID:	ATMS1		
Method:	\\ChromNA\Sacramento\ChromData\ATMS1\20170510-42908.b\TO-15 SIM SIM.m				
Limit Group:	MSA - TO15_SIM - ICAL				
Last Update:	11-May-2017 12:05:57	Calib Date:	18-Mar-2017 03:03:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Sacramento\ChromData\ATMS1\20170318-40992.b\MS1031714.D				
Column 1 :			Det: MS SCAN		
Process Host:	XAWRK029				
First Level Reviewer: zeighamia		Date:	11-May-2017 12:07:47		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	11.674	11.673	0.001	98	28642	2.00	
* 2 1,4-Difluorobenzene	114	13.818	13.821	-0.003	100	116017	2.00	
* 3 Chlorobenzene-d5 (IS)	117	20.483	20.490	-0.007	98	104290	2.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	12.858	12.858	0.000	62	53260	2.51	
$ 5 Toluene-d8 (Surr)	100	17.205	17.205	0.000	99	64776	1.94	
$ 6 4-Bromofluorobenzene (Surr	174	23.044	23.043	0.001	99	60886	2.05	
135 Acetone	43	7.000	6.982	0.018	99	6853	0.1517	

Reagents:

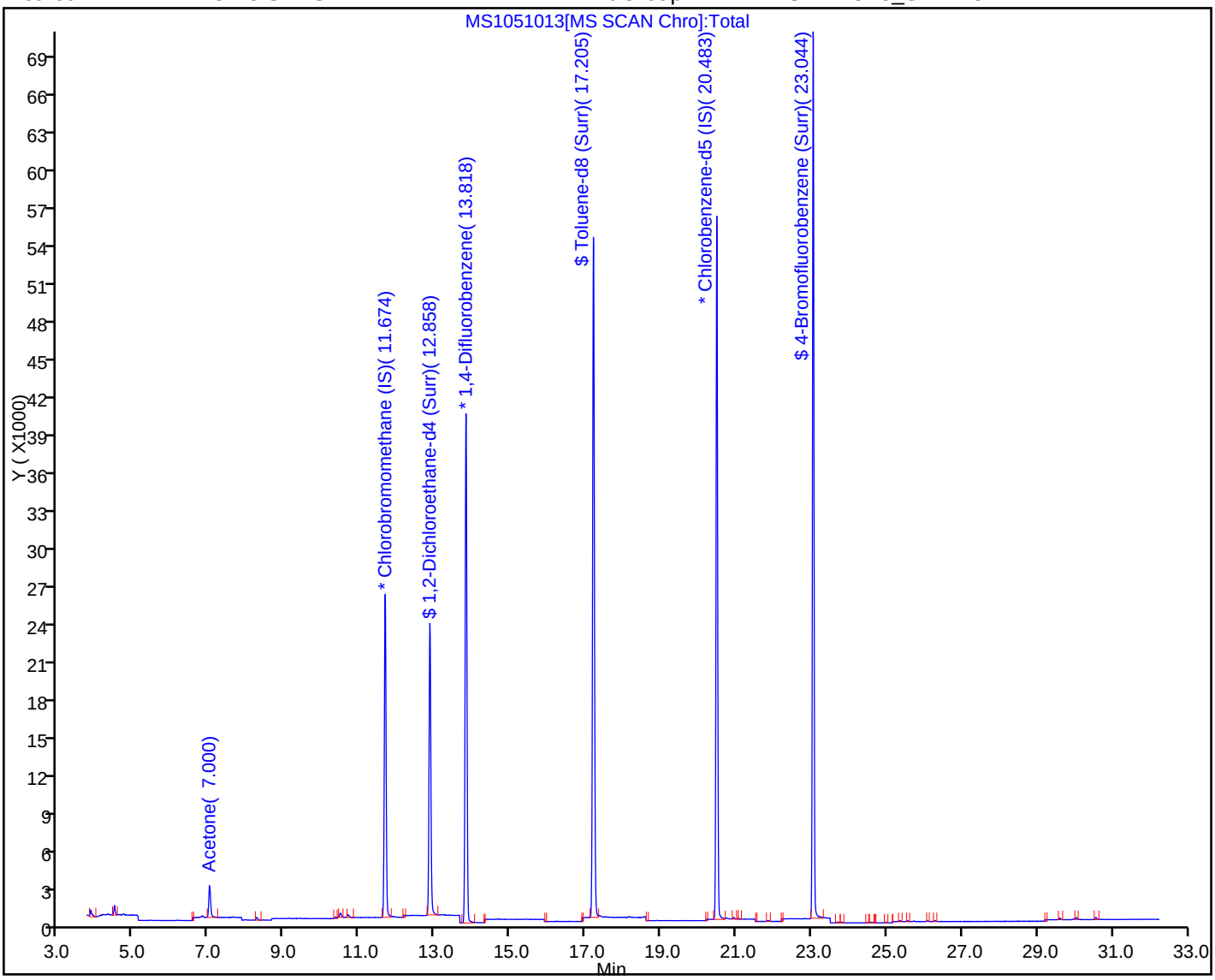
VAMSIS20_00002 Amount Added: 50.00 Units: mL Run Reagent

Report Date: 11-May-2017 12:07:47 Chrom Revision: 2.2 08-May-2017 08:06:58

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS1\20170510-42908.b\MS1051013.D

Injection Date:	11-May-2017 01:58:30	Instrument ID:	ATMS1		
Lims ID:	320-28047-A-12	Lab Sample ID:	320-28047-12		
Client ID:	7907				
Operator ID:	AZ	ALS Bottle#:	9	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO-15 SIM SIM	Limit Group:	MSA - TO15_SIM - ICAL		



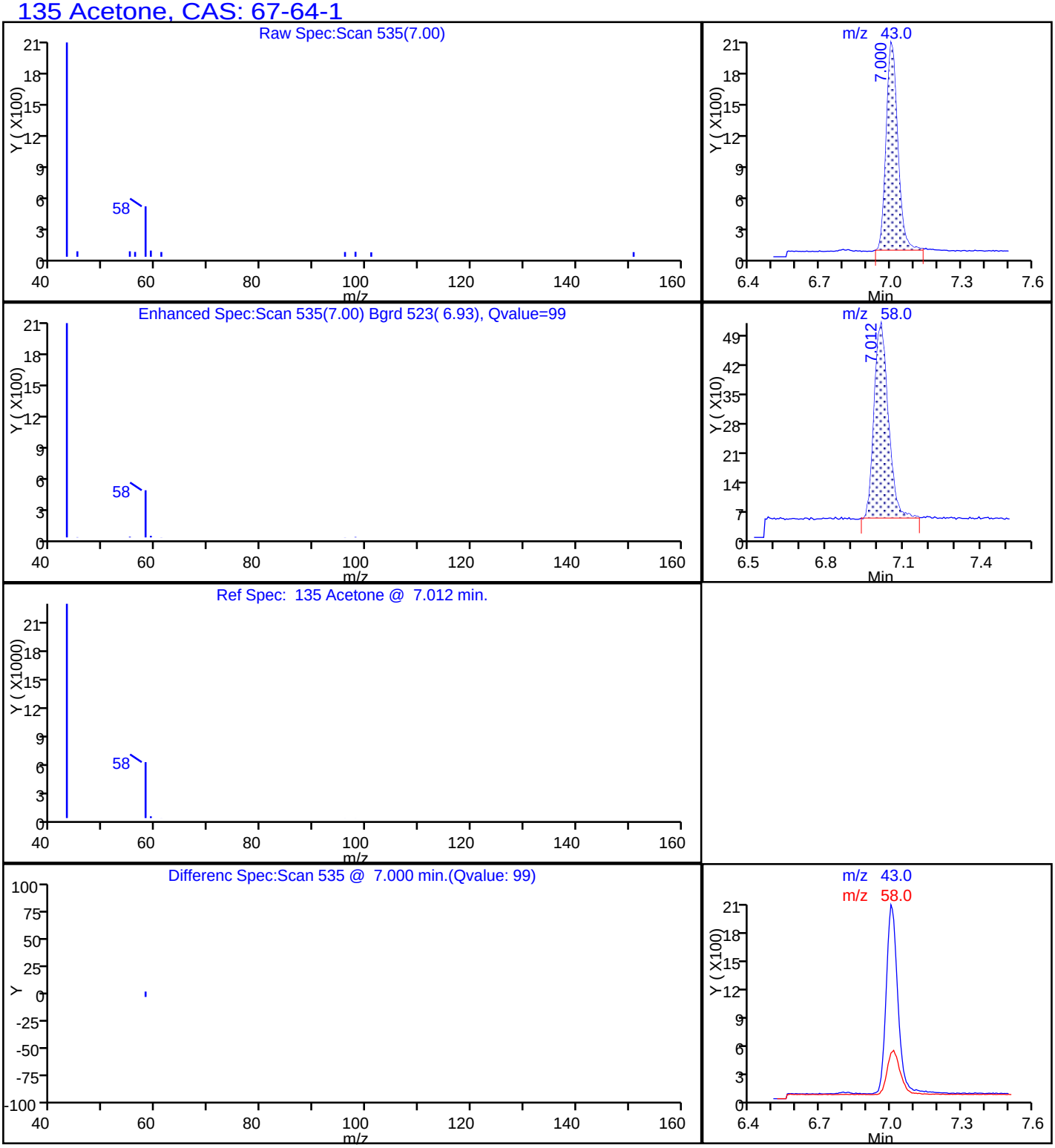
Report Date: 11-May-2017 12:07:47 Chrom Revision: 2.2 08-May-2017 08:06:58

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS1\20170510-42908.b\MS1051013.D

Injection Date:	11-May-2017 01:58:30	Instrument ID:	ATMS1		
Lims ID:	320-28047-A-12	Lab Sample ID:	320-28047-12		
Client ID:	7907				
Operator ID:	AZ	ALS Bottle#:	9	Worklist Smp#:	13
Purge Vol:	500.000 mL	Dil. Factor:	1.0000		
Method:	TO-15 SIM SIM	Limit Group:	MSA - TO15_SIM - ICAL		
Column:		Detector	MS SCAN		

135 Acetone, CAS: 67-64-1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28165-1

SDG No.:

Client Sample ID: 34001074 Lab Sample ID: 320-28165-1

Matrix: Air Lab File ID: MS6051107.D

Analysis Method: TO-15 Date Collected: 05/10/2017 00:00

Sample wt/vol: 500(mL) Date Analyzed: 05/11/2017 21:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 164022 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	0.33	J	5.0	0.18
107-02-8	Acrolein	ND		2.0	0.22
107-13-1	Acrylonitrile	ND		2.0	0.19
107-05-1	Allyl chloride	ND		0.80	0.11
71-43-2	Benzene	ND		0.40	0.079
100-44-7	Benzyl chloride	ND		0.80	0.16
75-27-4	Bromodichloromethane	ND		0.30	0.066
75-25-2	Bromoform	ND		0.40	0.070
74-83-9	Bromomethane	ND		0.80	0.34
106-99-0	1,3-Butadiene	ND		0.80	0.15
106-97-8	n-Butane	ND		0.40	0.15
78-93-3	2-Butanone (MEK)	ND		0.80	0.20
75-65-0	tert-Butyl alcohol (TBA)	ND		2.0	0.11
104-51-8	n-Butylbenzene	ND		0.40	0.18
135-98-8	sec-Butylbenzene	ND		0.40	0.070
98-06-6	tert-Butylbenzene	ND		0.80	0.068
75-15-0	Carbon disulfide	ND		0.80	0.078
56-23-5	Carbon tetrachloride	ND		0.80	0.064
108-90-7	Chlorobenzene	ND		0.30	0.064
75-45-6	Chlorodifluoromethane	ND		0.80	0.27
75-00-3	Chloroethane	ND		0.80	0.31
67-66-3	Chloroform	ND		0.30	0.095
74-87-3	Chloromethane	ND		0.80	0.20
95-49-8	2-Chlorotoluene	ND		0.40	0.080
110-82-7	Cyclohexane	ND		0.40	0.084
124-48-1	Dibromochloromethane	ND		0.40	0.079
106-93-4	1,2-Dibromoethane (EDB)	ND		0.80	0.075
74-95-3	Dibromomethane	ND		0.40	0.057
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.40	0.16
95-50-1	1,2-Dichlorobenzene	ND		0.40	0.13
541-73-1	1,3-Dichlorobenzene	ND		0.40	0.11
106-46-7	1,4-Dichlorobenzene	ND		0.40	0.15
75-71-8	Dichlorodifluoromethane	ND		0.40	0.15
75-34-3	1,1-Dichloroethane	ND		0.30	0.072
107-06-2	1,2-Dichloroethane	ND		0.80	0.088

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28165-1

SDG No.:

Client Sample ID: 34001074 Lab Sample ID: 320-28165-1

Matrix: Air Lab File ID: MS6051107.D

Analysis Method: TO-15 Date Collected: 05/10/2017 00:00

Sample wt/vol: 500(mL) Date Analyzed: 05/11/2017 21:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 164022 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	ND		0.80	0.13
156-59-2	cis-1,2-Dichloroethene	ND		0.40	0.089
156-60-5	trans-1,2-Dichloroethene	ND		0.40	0.10
78-87-5	1,2-Dichloropropane	ND		0.40	0.24
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.40	0.088
123-91-1	1,4-Dioxane	ND		0.80	0.10
141-78-6	Ethyl acetate	ND		0.30	0.18
100-41-4	Ethylbenzene	ND		0.40	0.063
622-96-8	4-Ethyltoluene	ND		0.40	0.19
142-82-5	n-Heptane	ND		0.80	0.063
87-68-3	Hexachlorobutadiene	ND		2.0	0.43
110-54-3	n-Hexane	ND		0.80	0.075
591-78-6	2-Hexanone	ND		0.40	0.087
98-82-8	Isopropylbenzene	ND		0.80	0.10
99-87-6	4-Isopropyltoluene	ND		0.80	0.12
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.80	0.12
80-62-6	Methyl methacrylate	ND		0.80	0.16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		0.40	0.14
75-09-2	Methylene Chloride	ND		0.40	0.072
98-83-9	alpha-Methylstyrene	ND		0.40	0.065
91-20-3	Naphthalene	ND		0.80	0.56
111-65-9	n-Octane	ND		0.40	0.055
109-66-0	n-Pentane	ND		0.80	0.26
115-07-1	Propylene	ND		0.40	0.099
103-65-1	N-Propylbenzene	ND		0.40	0.059
100-42-5	Styrene	ND		0.40	0.059
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.40	0.069
127-18-4	Tetrachloroethene	ND		0.40	0.051
109-99-9	Tetrahydrofuran	ND		0.80	0.21
108-88-3	Toluene	ND		0.40	0.051
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.40	0.16
120-82-1	1,2,4-Trichlorobenzene	ND		2.0	0.43
71-55-6	1,1,1-Trichloroethane	ND		0.30	0.065
79-00-5	1,1,2-Trichloroethane	ND		0.40	0.067

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28165-1

SDG No.:

Client Sample ID: 34001074 Lab Sample ID: 320-28165-1

Matrix: Air Lab File ID: MS6051107.D

Analysis Method: TO-15 Date Collected: 05/10/2017 00:00

Sample wt/vol: 500(mL) Date Analyzed: 05/11/2017 21:29

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 164022 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	ND		0.40	0.11
75-69-4	Trichlorofluoromethane	ND		0.40	0.20
96-18-4	1,2,3-Trichloropropane	ND		0.40	0.17
95-63-6	1,2,4-Trimethylbenzene	ND		0.80	0.16
108-67-8	1,3,5-Trimethylbenzene	ND		0.40	0.13
540-84-1	2,2,4-Trimethylpentane	ND		0.40	0.071
108-05-4	Vinyl acetate	ND		0.80	0.15
593-60-2	Vinyl bromide	ND		0.80	0.26
75-01-4	Vinyl chloride	ND		0.40	0.12
179601-23-1	m,p-Xylene	ND		0.80	0.10
95-47-6	o-Xylene	ND		0.40	0.054

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	103		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		70-130
2037-26-5	Toluene-d8 (Surr)	98		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\ATMS6\20170511-42962.b\MS6051107.D
Lims ID: 320-28165-A-1
Client ID: 34001074
Sample Type: Client
Inject. Date: 11-May-2017 21:29:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 320-28165-A-1
Misc. Info.: 500 mL CAN CERT
Operator ID: LHS Instrument ID: ATMS6

Method: \\ChromNA\Sacramento\ChromData\ATMS6\20170511-42962.b\TO15_ATMS6.m
Limit Group: MSA - TO15 - ICAL
Last Update: 12-May-2017 07:15:11 Calib Date: 11-May-2017 16:57:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\ATMS6\20170511-42962.b\MS6051103.D

Column 1 : RTX Volatiles (0.32 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: phanthasena Date: 12-May-2017 12:30:38

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	13.106	13.088	0.018	95	35934	4.00	
* 2 1,4-Difluorobenzene	114	15.248	15.242	0.006	96	135588	4.00	
* 3 Chlorobenzene-d5 (IS)	117	21.988	21.988	0.000	89	125003	4.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	14.311	14.299	0.012	98	68205	4.03	
$ 5 Toluene-d8 (Surr)	100	18.703	18.697	0.006	97	82459	3.94	
$ 6 4-Bromofluorobenzene (Surr	95	24.556	24.556	0.000	87	84516	4.11	
17 Butane	43	5.307	5.307	0.000	1	730	0.0357	
32 Acetone	43	8.258	8.239	0.019	97	7019	0.3261	

Reagents:

VAMSIS20_00002 Amount Added: 50.00 Units: mL Run Reagent

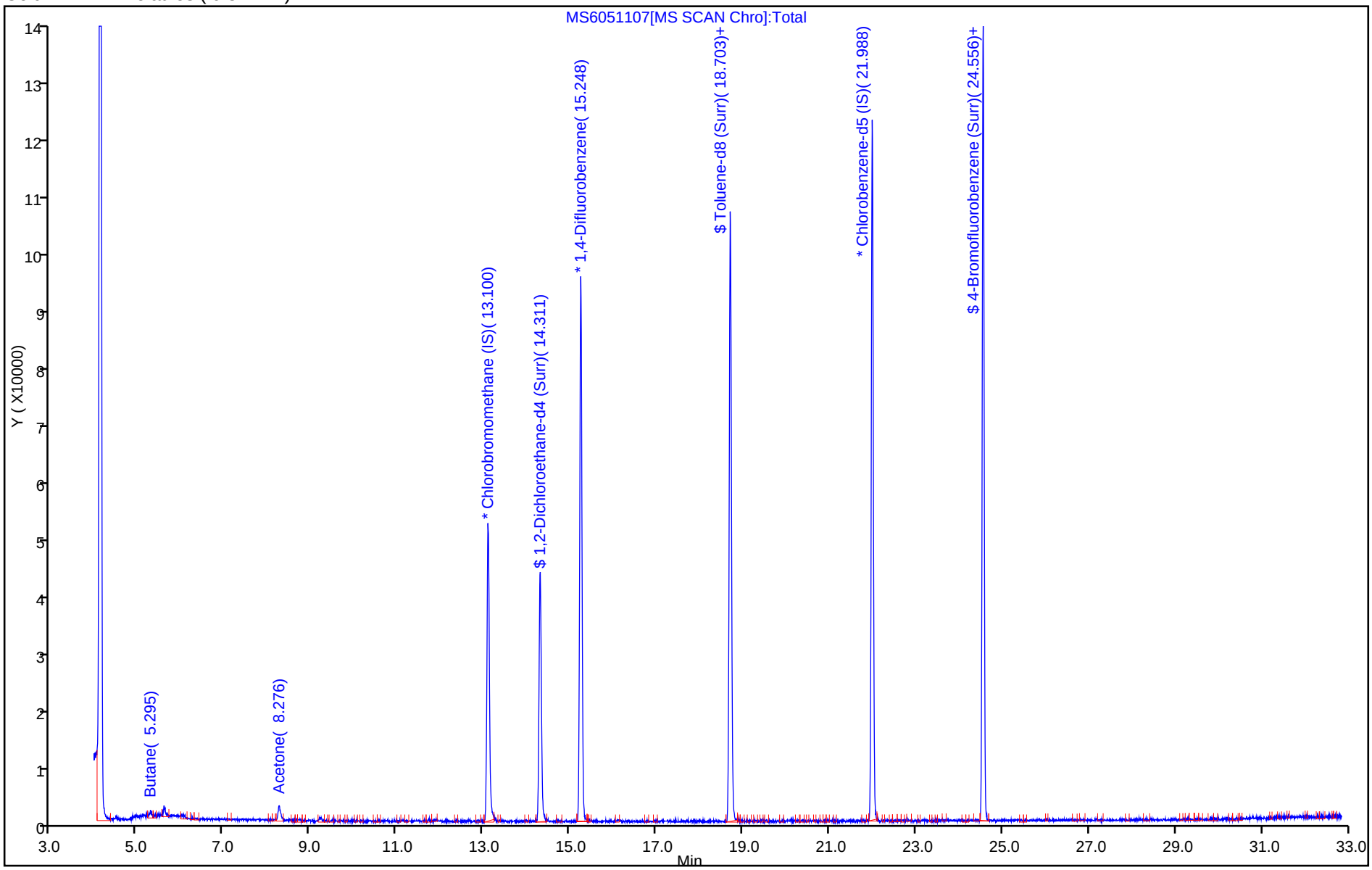
Report Date: 12-May-2017 07:15:49 Chrom Revision: 2.2 08-May-2017 08:06:58

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS6\20170511-42962.b\MS6051107.D

Injection Date:	11-May-2017 21:29:30	Instrument ID:	ATMS6	Operator ID:	LHS
Lims ID:	320-28165-A-1	Lab Sample ID:	320-28165-1	Worklist Smp#:	7
Client ID:	34001074				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	TO15_ATMS6	Limit Group:	MSA - TO15 - ICAL		

Column: RTX Volatiles (0.32 mm)



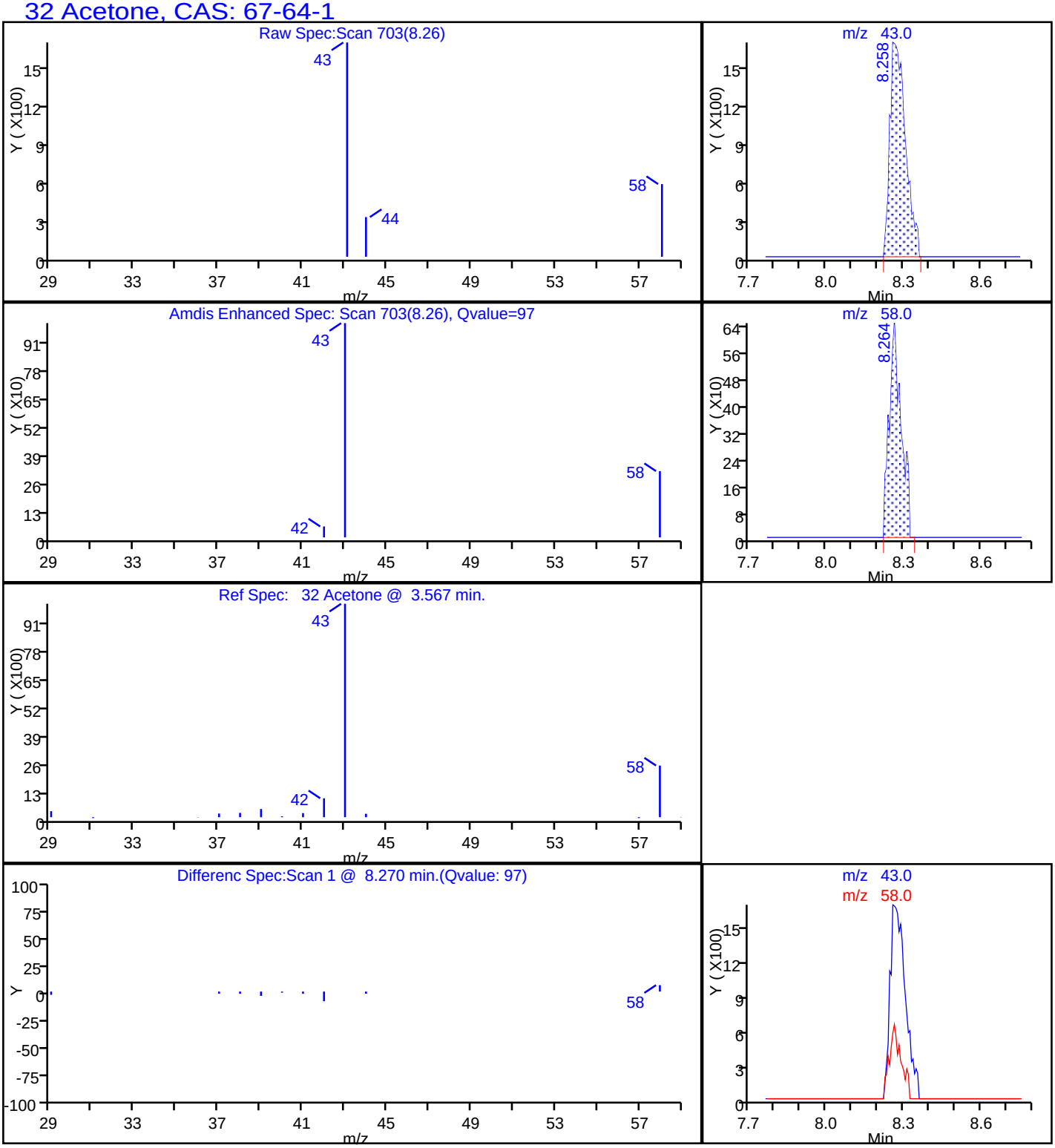
Report Date: 12-May-2017 07:15:49 Chrom Revision: 2.2 08-May-2017 08:06:58

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS6\20170511-42962.b\MS6051107.D

Injection Date:	11-May-2017 21:29:30	Instrument ID:	ATMS6		
Lims ID:	320-28165-A-1	Lab Sample ID:	320-28165-1		
Client ID:	34001074				
Operator ID:	LHS	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS6	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

32 Acetone, CAS: 67-64-1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28210-1

SDG No.:

Client Sample ID: 34000641 Lab Sample ID: 320-28210-1

Matrix: Air Lab File ID: MS6051406.D

Analysis Method: TO-15 Date Collected: 05/11/2017 00:00

Sample wt/vol: 500(mL) Date Analyzed: 05/14/2017 16:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 164424 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	0.18	J	5.0	0.18
107-02-8	Acrolein	ND		2.0	0.22
107-13-1	Acrylonitrile	ND		2.0	0.19
107-05-1	Allyl chloride	ND		0.80	0.11
71-43-2	Benzene	ND		0.40	0.079
100-44-7	Benzyl chloride	ND		0.80	0.16
75-27-4	Bromodichloromethane	ND		0.30	0.066
75-25-2	Bromoform	ND		0.40	0.070
74-83-9	Bromomethane	ND		0.80	0.34
106-99-0	1,3-Butadiene	ND		0.80	0.15
106-97-8	n-Butane	ND		0.40	0.15
78-93-3	2-Butanone (MEK)	ND		0.80	0.20
75-65-0	tert-Butyl alcohol (TBA)	ND		2.0	0.11
104-51-8	n-Butylbenzene	ND		0.40	0.18
135-98-8	sec-Butylbenzene	ND		0.40	0.070
98-06-6	tert-Butylbenzene	ND		0.80	0.068
75-15-0	Carbon disulfide	ND		0.80	0.078
56-23-5	Carbon tetrachloride	ND		0.80	0.064
108-90-7	Chlorobenzene	ND		0.30	0.064
75-45-6	Chlorodifluoromethane	ND		0.80	0.27
75-00-3	Chloroethane	ND		0.80	0.31
67-66-3	Chloroform	ND		0.30	0.095
74-87-3	Chloromethane	ND		0.80	0.20
95-49-8	2-Chlorotoluene	ND		0.40	0.080
110-82-7	Cyclohexane	ND		0.40	0.084
124-48-1	Dibromochloromethane	ND		0.40	0.079
106-93-4	1,2-Dibromoethane (EDB)	ND		0.80	0.075
74-95-3	Dibromomethane	ND		0.40	0.057
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.40	0.16
95-50-1	1,2-Dichlorobenzene	ND		0.40	0.13
541-73-1	1,3-Dichlorobenzene	ND		0.40	0.11
106-46-7	1,4-Dichlorobenzene	ND		0.40	0.15
75-71-8	Dichlorodifluoromethane	ND		0.40	0.15
75-34-3	1,1-Dichloroethane	ND		0.30	0.072
107-06-2	1,2-Dichloroethane	ND		0.80	0.088

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28210-1

SDG No.:

Client Sample ID: 34000641 Lab Sample ID: 320-28210-1

Matrix: Air Lab File ID: MS6051406.D

Analysis Method: TO-15 Date Collected: 05/11/2017 00:00

Sample wt/vol: 500(mL) Date Analyzed: 05/14/2017 16:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 164424 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	ND		0.80	0.13
156-59-2	cis-1,2-Dichloroethene	ND		0.40	0.089
156-60-5	trans-1,2-Dichloroethene	ND		0.40	0.10
78-87-5	1,2-Dichloropropane	ND		0.40	0.24
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.40	0.088
123-91-1	1,4-Dioxane	ND		0.80	0.10
141-78-6	Ethyl acetate	ND		0.30	0.18
100-41-4	Ethylbenzene	ND		0.40	0.063
622-96-8	4-Ethyltoluene	ND		0.40	0.19
142-82-5	n-Heptane	ND		0.80	0.063
87-68-3	Hexachlorobutadiene	ND		2.0	0.43
110-54-3	n-Hexane	ND		0.80	0.075
591-78-6	2-Hexanone	ND		0.40	0.087
98-82-8	Isopropylbenzene	ND		0.80	0.10
99-87-6	4-Isopropyltoluene	ND		0.80	0.12
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.80	0.12
80-62-6	Methyl methacrylate	ND		0.80	0.16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		0.40	0.14
75-09-2	Methylene Chloride	ND		0.40	0.072
98-83-9	alpha-Methylstyrene	ND		0.40	0.065
91-20-3	Naphthalene	ND		0.80	0.56
111-65-9	n-Octane	ND		0.40	0.055
109-66-0	n-Pentane	ND		0.80	0.26
115-07-1	Propylene	ND		0.40	0.099
103-65-1	N-Propylbenzene	ND		0.40	0.059
100-42-5	Styrene	ND		0.40	0.059
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.40	0.069
127-18-4	Tetrachloroethene	ND		0.40	0.051
109-99-9	Tetrahydrofuran	ND		0.80	0.21
108-88-3	Toluene	ND		0.40	0.051
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.40	0.16
120-82-1	1,2,4-Trichlorobenzene	ND		2.0	0.43
71-55-6	1,1,1-Trichloroethane	ND		0.30	0.065
79-00-5	1,1,2-Trichloroethane	ND		0.40	0.067

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28210-1

SDG No.:

Client Sample ID: 34000641 Lab Sample ID: 320-28210-1

Matrix: Air Lab File ID: MS6051406.D

Analysis Method: TO-15 Date Collected: 05/11/2017 00:00

Sample wt/vol: 500(mL) Date Analyzed: 05/14/2017 16:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 164424 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	ND		0.40	0.11
75-69-4	Trichlorofluoromethane	ND		0.40	0.20
96-18-4	1,2,3-Trichloropropane	ND		0.40	0.17
95-63-6	1,2,4-Trimethylbenzene	ND		0.80	0.16
108-67-8	1,3,5-Trimethylbenzene	ND		0.40	0.13
540-84-1	2,2,4-Trimethylpentane	ND		0.40	0.071
108-05-4	Vinyl acetate	ND		0.80	0.15
593-60-2	Vinyl bromide	ND		0.80	0.26
75-01-4	Vinyl chloride	ND		0.40	0.12
179601-23-1	m,p-Xylene	ND		0.80	0.10
95-47-6	o-Xylene	ND		0.40	0.054

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	94		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		70-130
2037-26-5	Toluene-d8 (Surr)	97		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\ATMS6\20170514-43067.b\MS6051406.D
Lims ID: 320-28210-A-1
Client ID: 34000641
Sample Type: Client
Inject. Date: 14-May-2017 16:46:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 320-28210-A-1
Misc. Info.: 500 mL CAN CERT
Operator ID: LHS Instrument ID: ATMS6

Method: \\ChromNA\Sacramento\ChromData\ATMS6\20170514-43067.b\TO15_ATMS6.m
Limit Group: MSA - TO15 - ICAL
Last Update: 15-May-2017 11:22:44 Calib Date: 14-May-2017 13:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\ATMS6\20170514-43067.b\MS6051403.D

Column 1 : RTX Volatiles (0.32 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: phanthasena Date: 15-May-2017 11:22:44

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	13.119	13.106	0.012	94	35150	4.00	
* 2 1,4-Difluorobenzene	114	15.254	15.248	0.006	95	132146	4.00	
* 3 Chlorobenzene-d5 (IS)	117	21.994	21.988	0.006	90	123676	4.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	14.317	14.311	0.006	98	66253	4.12	
$ 5 Toluene-d8 (Surr)	100	18.703	18.703	0.000	97	80170	3.89	
$ 6 4-Bromofluorobenzene (Surr	95	24.556	24.549	0.007	87	86955	3.76	
32 Acetone	43	8.288	8.288	0.000	96	4622	0.1777	
39 Methylene Chloride	49	9.547	9.535	0.012	1	518	0.0322	

Reagents:

VAMSIS20_00002 Amount Added: 50.00 Units: mL Run Reagent

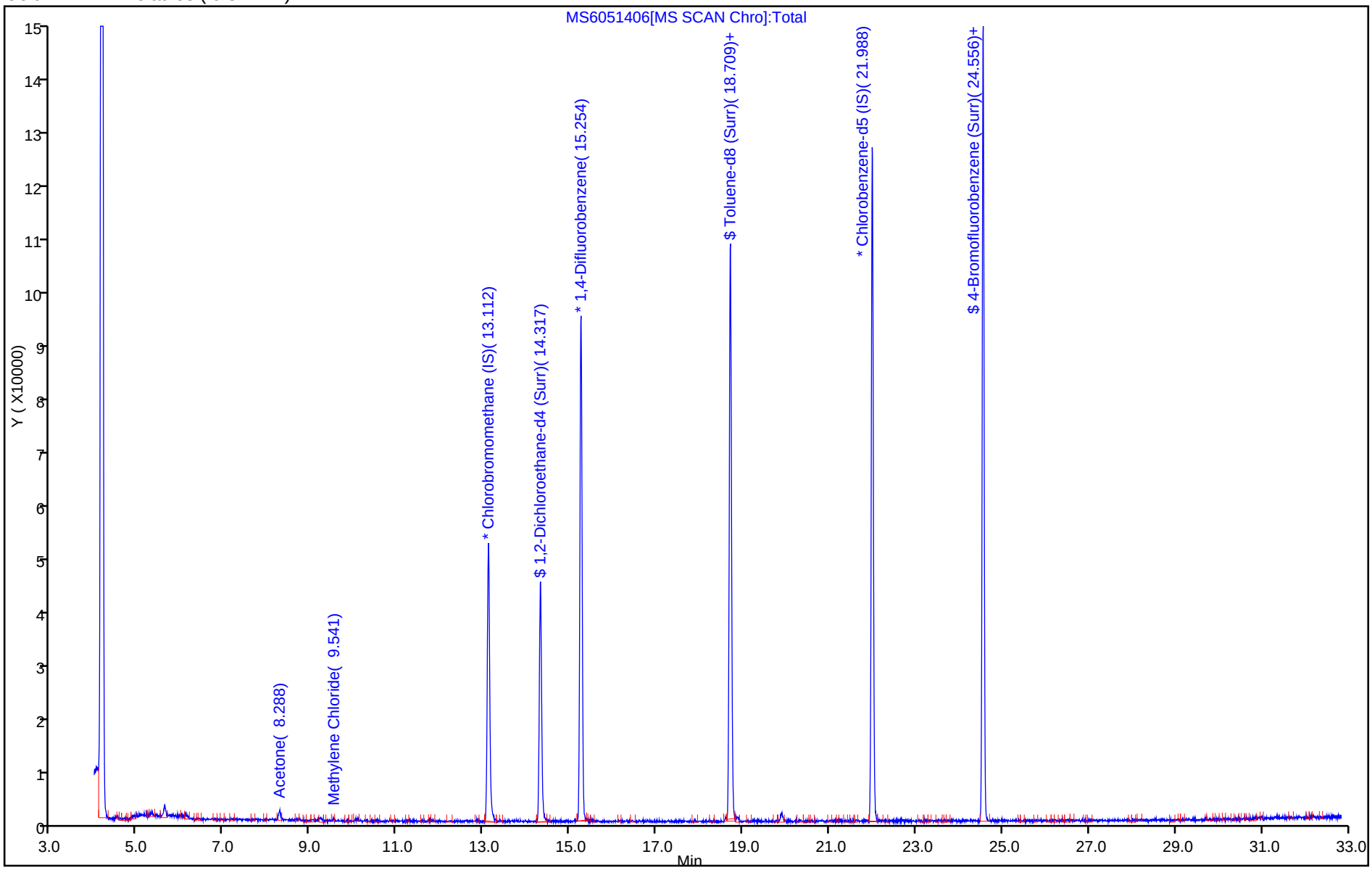
Report Date: 15-May-2017 11:22:44 Chrom Revision: 2.2 08-May-2017 08:06:58

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS6\20170514-43067.b\MS6051406.D

Injection Date:	14-May-2017 16:46:30	Instrument ID:	ATMS6	Operator ID:	LHS
Lims ID:	320-28210-A-1	Lab Sample ID:	320-28210-1	Worklist Smp#:	6
Client ID:	34000641				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	TO15_ATMS6	Limit Group:	MSA - TO15 - ICAL		

Column: RTX Volatiles (0.32 mm)

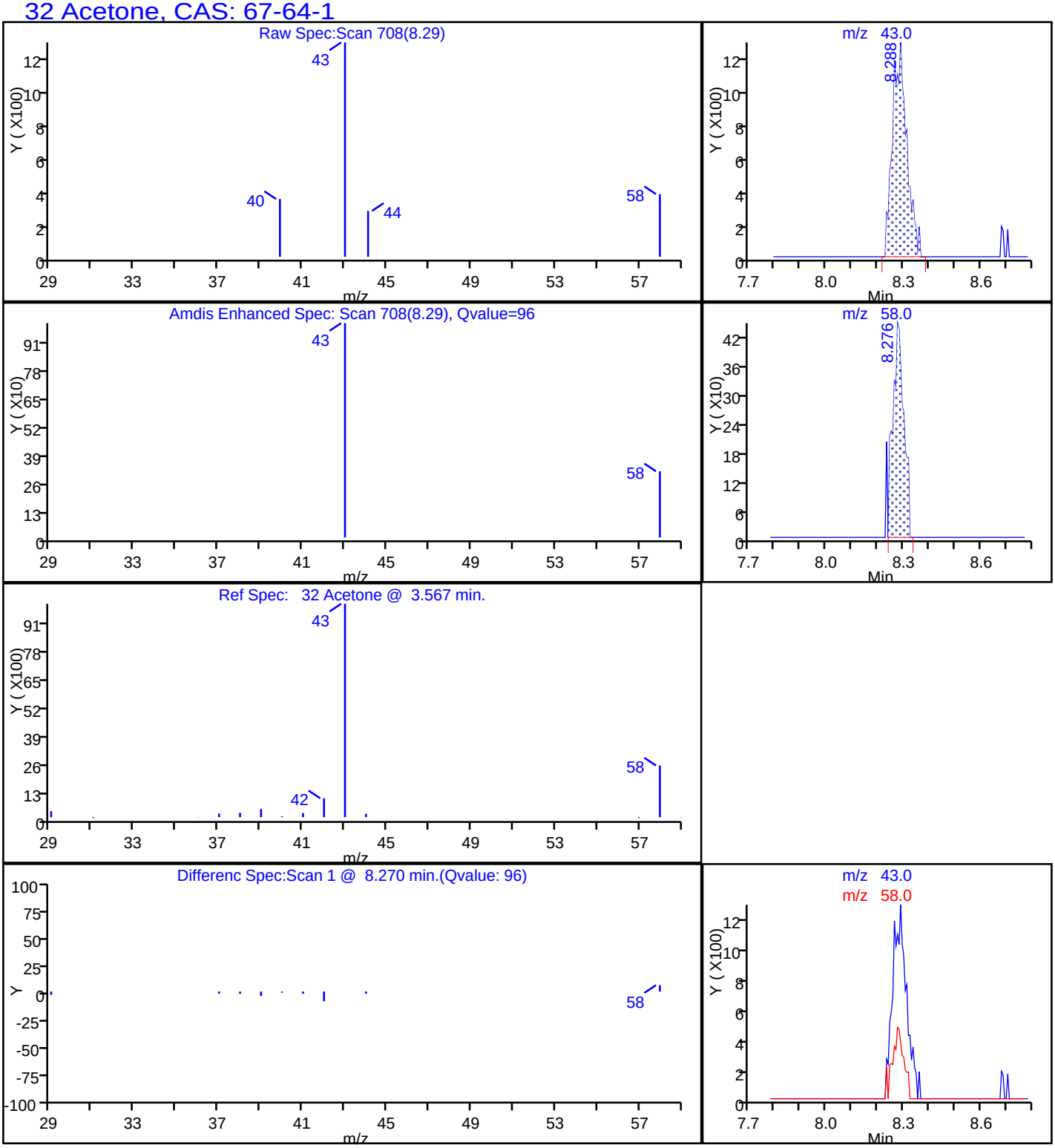


Report Date: 15-May-2017 11:22:44 Chrom Revision: 2.2 08-May-2017 08:06:58

TestAmerica Sacramento

Data File:	\\ChromNA\Sacramento\ChromData\ATMS6\20170514-43067.b\MS6051406.D				
Injection Date:	14-May-2017 16:46:30	Instrument ID:	ATMS6		
Lims ID:	320-28210-A-1	Lab Sample ID:	320-28210-1		
Client ID:	34000641				
Operator ID:	LHS	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS6	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

32 Acetone, CAS: 67-64-1



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28436-1

SDG No.:

Client Sample ID: 34001244 Lab Sample ID: 320-28436-1

Matrix: Air Lab File ID: MS6052207.D

Analysis Method: TO-15 Date Collected: 05/19/2017 00:00

Sample wt/vol: 250(mL) Date Analyzed: 05/22/2017 15:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 165474 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		5.0	0.18
107-02-8	Acrolein	ND		2.0	0.22
107-13-1	Acrylonitrile	ND		2.0	0.19
107-05-1	Allyl chloride	ND		0.80	0.11
71-43-2	Benzene	ND		0.40	0.079
100-44-7	Benzyl chloride	ND		0.80	0.16
75-27-4	Bromodichloromethane	ND		0.30	0.066
75-25-2	Bromoform	ND		0.40	0.070
74-83-9	Bromomethane	ND		0.80	0.34
106-99-0	1,3-Butadiene	ND		0.80	0.15
106-97-8	n-Butane	ND		0.40	0.15
78-93-3	2-Butanone (MEK)	ND		0.80	0.20
75-65-0	tert-Butyl alcohol (TBA)	ND		2.0	0.11
104-51-8	n-Butylbenzene	ND		0.40	0.18
135-98-8	sec-Butylbenzene	ND		0.40	0.070
98-06-6	tert-Butylbenzene	ND		0.80	0.068
75-15-0	Carbon disulfide	ND		0.80	0.078
56-23-5	Carbon tetrachloride	ND		0.80	0.064
108-90-7	Chlorobenzene	ND		0.30	0.064
75-45-6	Chlorodifluoromethane	ND		0.80	0.27
75-00-3	Chloroethane	ND		0.80	0.31
67-66-3	Chloroform	ND		0.30	0.095
74-87-3	Chloromethane	ND		0.80	0.20
95-49-8	2-Chlorotoluene	ND		0.40	0.080
110-82-7	Cyclohexane	ND		0.40	0.084
124-48-1	Dibromochloromethane	ND		0.40	0.079
106-93-4	1,2-Dibromoethane (EDB)	ND		0.80	0.075
74-95-3	Dibromomethane	ND		0.40	0.057
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.40	0.16
95-50-1	1,2-Dichlorobenzene	ND		0.40	0.13
541-73-1	1,3-Dichlorobenzene	ND		0.40	0.11
106-46-7	1,4-Dichlorobenzene	ND		0.40	0.15
75-71-8	Dichlorodifluoromethane	ND		0.40	0.15
75-34-3	1,1-Dichloroethane	ND		0.30	0.072
107-06-2	1,2-Dichloroethane	ND		0.80	0.088

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28436-1

SDG No.:

Client Sample ID: 34001244 Lab Sample ID: 320-28436-1

Matrix: Air Lab File ID: MS6052207.D

Analysis Method: TO-15 Date Collected: 05/19/2017 00:00

Sample wt/vol: 250(mL) Date Analyzed: 05/22/2017 15:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 165474 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	ND		0.80	0.13
156-59-2	cis-1,2-Dichloroethene	ND		0.40	0.089
156-60-5	trans-1,2-Dichloroethene	ND		0.40	0.10
78-87-5	1,2-Dichloropropane	ND		0.40	0.24
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.40	0.088
123-91-1	1,4-Dioxane	ND		0.80	0.10
141-78-6	Ethyl acetate	ND		0.30	0.18
100-41-4	Ethylbenzene	ND		0.40	0.063
622-96-8	4-Ethyltoluene	ND		0.40	0.19
142-82-5	n-Heptane	ND		0.80	0.063
87-68-3	Hexachlorobutadiene	ND		2.0	0.43
110-54-3	n-Hexane	ND		0.80	0.075
591-78-6	2-Hexanone	ND		0.40	0.087
98-82-8	Isopropylbenzene	ND		0.80	0.10
99-87-6	4-Isopropyltoluene	ND		0.80	0.12
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.80	0.12
80-62-6	Methyl methacrylate	ND		0.80	0.16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		0.40	0.14
75-09-2	Methylene Chloride	ND		0.40	0.072
98-83-9	alpha-Methylstyrene	ND		0.40	0.065
91-20-3	Naphthalene	ND		0.80	0.56
111-65-9	n-Octane	ND		0.40	0.055
109-66-0	n-Pentane	ND		0.80	0.26
115-07-1	Propylene	ND		0.40	0.099
103-65-1	N-Propylbenzene	ND		0.40	0.059
100-42-5	Styrene	ND		0.40	0.059
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.40	0.069
127-18-4	Tetrachloroethene	ND		0.40	0.051
109-99-9	Tetrahydrofuran	ND		0.80	0.21
108-88-3	Toluene	ND		0.40	0.051
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.40	0.16
120-82-1	1,2,4-Trichlorobenzene	ND		2.0	0.43
71-55-6	1,1,1-Trichloroethane	ND		0.30	0.065
79-00-5	1,1,2-Trichloroethane	ND		0.40	0.067

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28436-1

SDG No.:

Client Sample ID: 34001244 Lab Sample ID: 320-28436-1

Matrix: Air Lab File ID: MS6052207.D

Analysis Method: TO-15 Date Collected: 05/19/2017 00:00

Sample wt/vol: 250(mL) Date Analyzed: 05/22/2017 15:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 165474 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	ND		0.40	0.11
75-69-4	Trichlorofluoromethane	ND		0.40	0.20
96-18-4	1,2,3-Trichloropropane	ND		0.40	0.17
95-63-6	1,2,4-Trimethylbenzene	ND		0.80	0.16
108-67-8	1,3,5-Trimethylbenzene	ND		0.40	0.13
540-84-1	2,2,4-Trimethylpentane	ND		0.40	0.071
108-05-4	Vinyl acetate	ND		0.80	0.15
593-60-2	Vinyl bromide	ND		0.80	0.26
75-01-4	Vinyl chloride	ND		0.40	0.12
179601-23-1	m,p-Xylene	ND		0.80	0.10
95-47-6	o-Xylene	ND		0.40	0.054

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	101		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		70-130
2037-26-5	Toluene-d8 (Surr)	106		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\ATMS6\20170522-43325.b\MS6052207.D
Lims ID: 320-28436-A-1
Client ID: 34001244
Sample Type: Client
Inject. Date: 22-May-2017 15:46:30 ALS Bottle#: 4 Worklist Smp#: 7
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 320-28436-A-1
Misc. Info.: 500 CAN CERT
Operator ID: SV Instrument ID: ATMS6

Method: \\ChromNA\Sacramento\ChromData\ATMS6\20170522-43325.b\TO15_ATMS6.m
Limit Group: MSA - TO15 - ICAL
Last Update: 23-May-2017 10:31:46 Calib Date: 22-May-2017 11:28:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\ATMS6\20170522-43325.b\MS6052203.D

Column 1 : RTX Volatiles (0.32 mm) Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: phanthasena Date: 23-May-2017 10:31:46

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	13.100	13.106	-0.006	94	35132	4.00	
* 2 1,4-Difluorobenzene	114	15.242	15.248	-0.006	95	130225	4.00	
* 3 Chlorobenzene-d5 (IS)	117	21.982	21.988	-0.006	90	121328	4.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	14.299	14.305	-0.006	98	64558	4.15	
$ 5 Toluene-d8 (Surr)	100	18.703	18.703	0.000	97	80065	4.24	
$ 6 4-Bromofluorobenzene (Surr	95	24.556	24.550	0.006	86	85705	4.03	

Reagents:

VAMSIS20_00002 Amount Added: 50.00 Units: mL Run Reagent

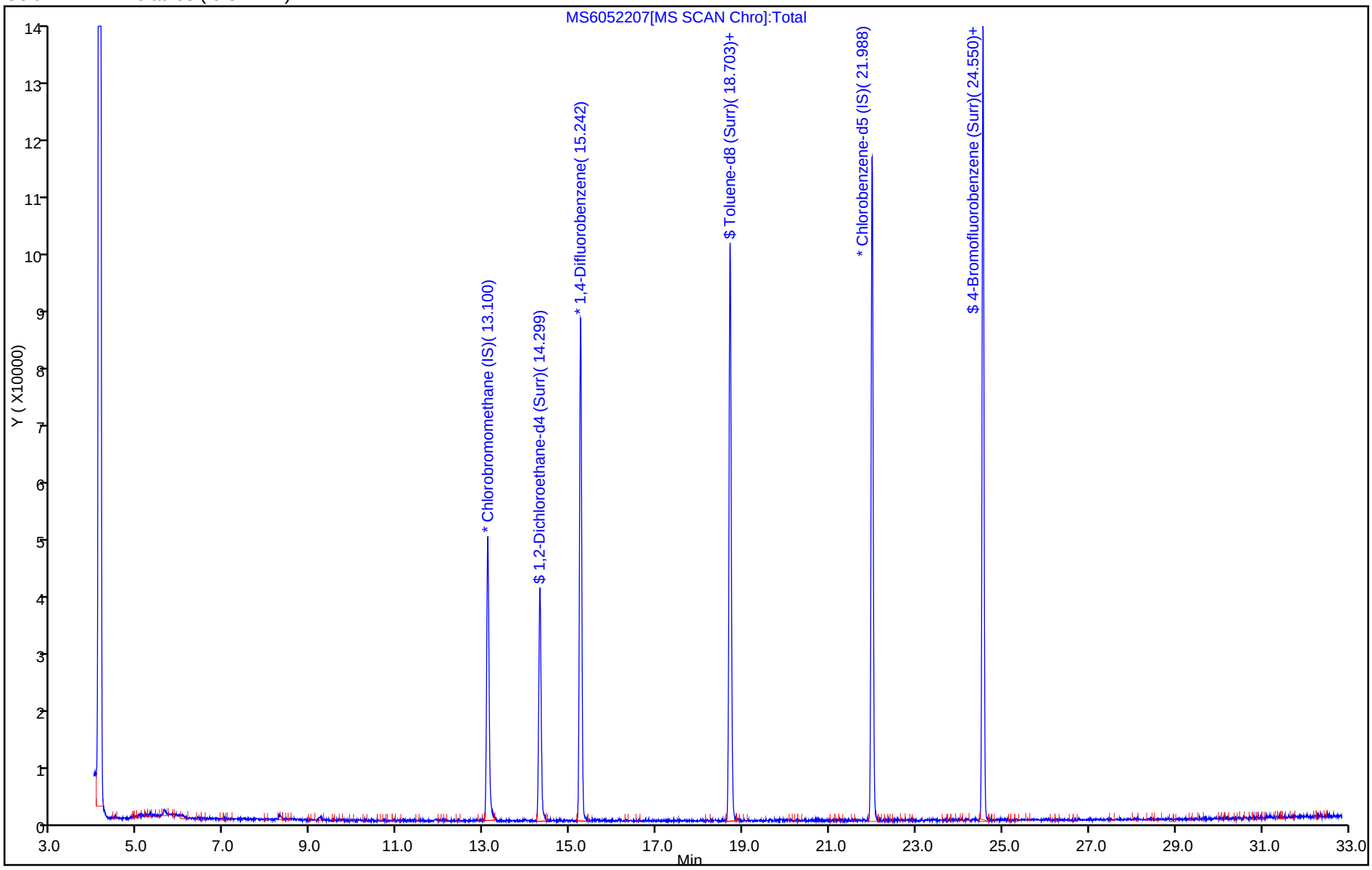
Report Date: 23-May-2017 10:31:46 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS6\20170522-43325.b\MS6052207.D

Injection Date:	22-May-2017 15:46:30	Instrument ID:	ATMS6	Operator ID:	SV
Lims ID:	320-28436-A-1	Lab Sample ID:	320-28436-1	Worklist Smp#:	7
Client ID:	34001244				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	TO15_ATMS6	Limit Group:	MSA - TO15 - ICAL		

Column: RTX Volatiles (0.32 mm)



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28635-1

SDG No.:

Client Sample ID: 34001912 Lab Sample ID: 320-28635-1

Matrix: Air Lab File ID: MS6053008.D

Analysis Method: TO-15 Date Collected: 05/26/2017 00:00

Sample wt/vol: 500(mL) Date Analyzed: 05/30/2017 17:11

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 166626 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		5.0	0.18
107-02-8	Acrolein	ND		2.0	0.22
107-13-1	Acrylonitrile	ND		2.0	0.19
107-05-1	Allyl chloride	ND		0.80	0.11
71-43-2	Benzene	ND		0.40	0.079
100-44-7	Benzyl chloride	ND		0.80	0.16
75-27-4	Bromodichloromethane	ND		0.30	0.066
75-25-2	Bromoform	ND		0.40	0.070
74-83-9	Bromomethane	ND		0.80	0.34
106-99-0	1,3-Butadiene	ND		0.80	0.15
106-97-8	n-Butane	ND		0.40	0.15
78-93-3	2-Butanone (MEK)	ND		0.80	0.20
75-65-0	tert-Butyl alcohol (TBA)	ND		2.0	0.11
104-51-8	n-Butylbenzene	ND		0.40	0.18
135-98-8	sec-Butylbenzene	ND		0.40	0.070
98-06-6	tert-Butylbenzene	ND		0.80	0.068
75-15-0	Carbon disulfide	ND		0.80	0.078
56-23-5	Carbon tetrachloride	ND		0.80	0.064
108-90-7	Chlorobenzene	ND		0.30	0.064
75-45-6	Chlorodifluoromethane	ND		0.80	0.27
75-00-3	Chloroethane	ND		0.80	0.31
67-66-3	Chloroform	ND		0.30	0.095
74-87-3	Chloromethane	ND		0.80	0.20
95-49-8	2-Chlorotoluene	ND		0.40	0.080
110-82-7	Cyclohexane	ND		0.40	0.084
124-48-1	Dibromochloromethane	ND		0.40	0.079
106-93-4	1,2-Dibromoethane (EDB)	ND		0.80	0.075
74-95-3	Dibromomethane	ND		0.40	0.057
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.40	0.16
95-50-1	1,2-Dichlorobenzene	ND		0.40	0.13
541-73-1	1,3-Dichlorobenzene	ND		0.40	0.11
106-46-7	1,4-Dichlorobenzene	ND		0.40	0.15
75-71-8	Dichlorodifluoromethane	ND		0.40	0.15
75-34-3	1,1-Dichloroethane	ND		0.30	0.072
107-06-2	1,2-Dichloroethane	ND		0.80	0.088

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28635-1

SDG No.:

Client Sample ID: 34001912 Lab Sample ID: 320-28635-1

Matrix: Air Lab File ID: MS6053008.D

Analysis Method: TO-15 Date Collected: 05/26/2017 00:00

Sample wt/vol: 500(mL) Date Analyzed: 05/30/2017 17:11

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 166626 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	ND		0.80	0.13
156-59-2	cis-1,2-Dichloroethene	ND		0.40	0.089
156-60-5	trans-1,2-Dichloroethene	ND		0.40	0.10
78-87-5	1,2-Dichloropropane	ND		0.40	0.24
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.40	0.088
123-91-1	1,4-Dioxane	ND		0.80	0.10
141-78-6	Ethyl acetate	ND		0.30	0.18
100-41-4	Ethylbenzene	ND		0.40	0.063
622-96-8	4-Ethyltoluene	ND		0.40	0.19
142-82-5	n-Heptane	ND		0.80	0.063
87-68-3	Hexachlorobutadiene	ND		2.0	0.43
110-54-3	n-Hexane	ND		0.80	0.075
591-78-6	2-Hexanone	ND		0.40	0.087
98-82-8	Isopropylbenzene	ND		0.80	0.10
99-87-6	4-Isopropyltoluene	ND		0.80	0.12
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.80	0.12
80-62-6	Methyl methacrylate	ND		0.80	0.16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		0.40	0.14
75-09-2	Methylene Chloride	ND		0.40	0.072
98-83-9	alpha-Methylstyrene	ND		0.40	0.065
91-20-3	Naphthalene	ND		0.80	0.56
111-65-9	n-Octane	ND		0.40	0.055
109-66-0	n-Pentane	ND		0.80	0.26
115-07-1	Propylene	ND		0.40	0.099
103-65-1	N-Propylbenzene	ND		0.40	0.059
100-42-5	Styrene	ND		0.40	0.059
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.40	0.069
127-18-4	Tetrachloroethene	ND		0.40	0.051
109-99-9	Tetrahydrofuran	ND		0.80	0.21
108-88-3	Toluene	ND		0.40	0.051
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.40	0.16
120-82-1	1,2,4-Trichlorobenzene	ND		2.0	0.43
71-55-6	1,1,1-Trichloroethane	ND		0.30	0.065
79-00-5	1,1,2-Trichloroethane	ND		0.40	0.067

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28635-1

SDG No.:

Client Sample ID: 34001912 Lab Sample ID: 320-28635-1

Matrix: Air Lab File ID: MS6053008.D

Analysis Method: TO-15 Date Collected: 05/26/2017 00:00

Sample wt/vol: 500(mL) Date Analyzed: 05/30/2017 17:11

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 166626 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	ND		0.40	0.11
75-69-4	Trichlorofluoromethane	ND		0.40	0.20
96-18-4	1,2,3-Trichloropropane	ND		0.40	0.17
95-63-6	1,2,4-Trimethylbenzene	ND		0.80	0.16
108-67-8	1,3,5-Trimethylbenzene	ND		0.40	0.13
540-84-1	2,2,4-Trimethylpentane	ND		0.40	0.071
108-05-4	Vinyl acetate	ND		0.80	0.15
593-60-2	Vinyl bromide	ND		0.80	0.26
75-01-4	Vinyl chloride	ND		0.40	0.12
179601-23-1	m,p-Xylene	ND		0.80	0.10
95-47-6	o-Xylene	ND		0.40	0.054

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	99		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		70-130
2037-26-5	Toluene-d8 (Surr)	102		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\ChromNA\Sacramento\ChromData\ATMS6\20170530-43626.b\MS6053008.D				
Lims ID:	320-28635-A-1				
Client ID:	34001912				
Sample Type:	Client				
Inject. Date:	30-May-2017 17:11:30	ALS Bottle#:	4	Worklist Smp#:	7
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	320-28635-A-1				
Misc. Info.:	500 CAN CERT				
Operator ID:	SV	Instrument ID:	ATMS6		
Method:	\\ChromNA\Sacramento\ChromData\ATMS6\20170530-43626.b\TO15_ATMS6.m				
Limit Group:	MSA - TO15 - ICAL				
Last Update:	31-May-2017 10:55:53	Calib Date:	30-May-2017 13:30:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Sacramento\ChromData\ATMS6\20170530-43626.b\MS6053005.D				
Column 1 :	RTX Volatiles (0.32 mm)		Det: MS SCAN		
Process Host:	XAWRK024				
First Level Reviewer: phanthasena		Date:	31-May-2017 10:55:53		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	13.106	13.106	0.000	93	26987	4.00	
* 2 1,4-Difluorobenzene	114	15.260	15.254	0.006	96	107060	4.00	
* 3 Chlorobenzene-d5 (IS)	117	21.988	21.988	0.000	89	107490	4.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	14.305	14.311	-0.006	98	52853	4.01	
$ 5 Toluene-d8 (Surr)	100	18.709	18.703	0.006	97	68838	4.07	
$ 6 4-Bromofluorobenzene (Surr	95	24.550	24.549	0.001	87	79057	3.95	

Reagents:

VAMSIS20_00002 Amount Added: 50.00 Units: mL Run Reagent

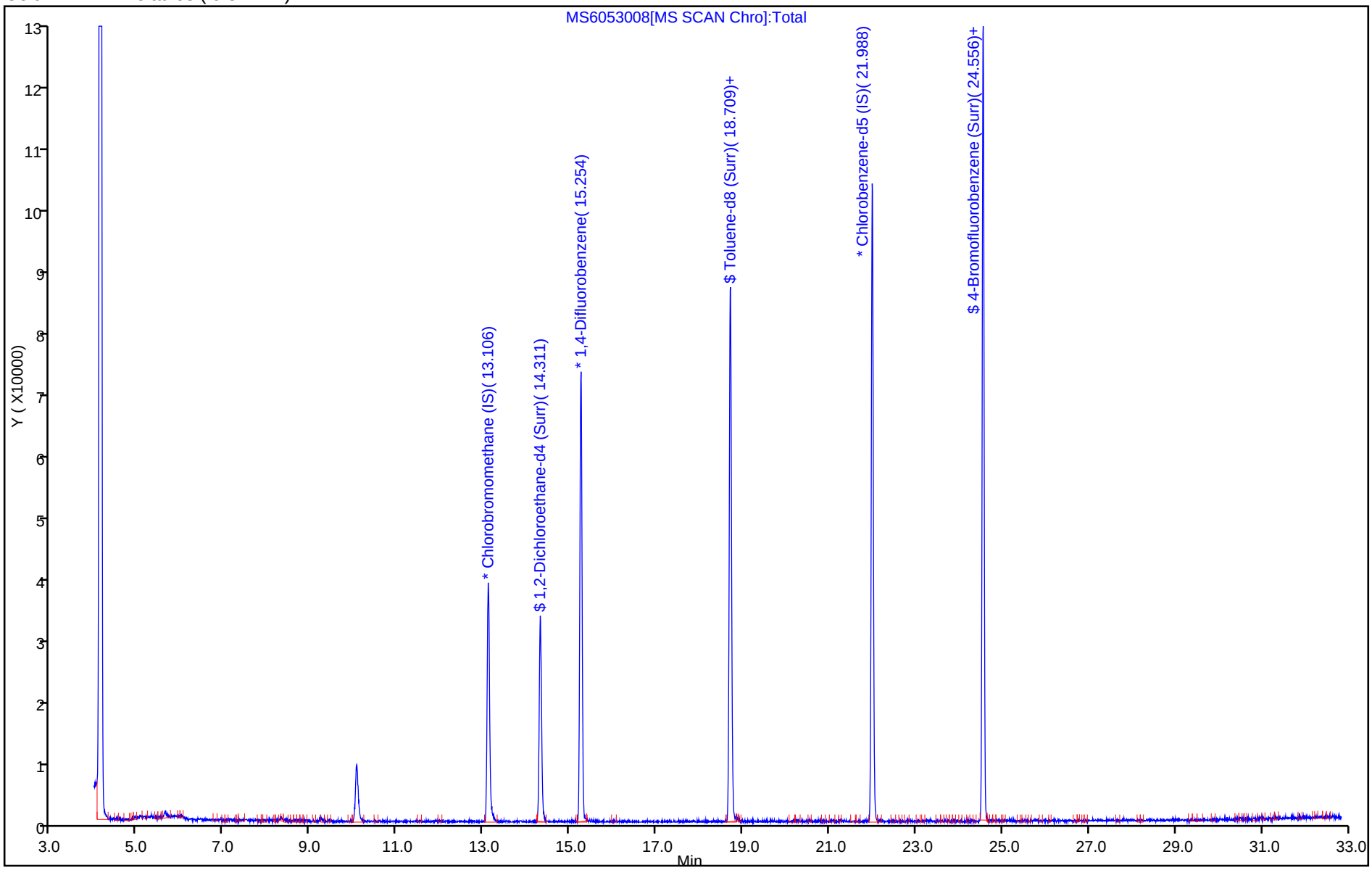
Report Date: 31-May-2017 10:55:53 Chrom Revision: 2.2 25-May-2017 18:29:58

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS6\20170530-43626.b\MS6053008.D

Injection Date:	30-May-2017 17:11:30	Instrument ID:	ATMS6	Operator ID:	SV
Lims ID:	320-28635-A-1	Lab Sample ID:	320-28635-1	Worklist Smp#:	7
Client ID:	34001912				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	TO15_ATMS6	Limit Group:	MSA - TO15 - ICAL		

Column: RTX Volatiles (0.32 mm)



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28636-1

SDG No.:

Client Sample ID: 34001220 Lab Sample ID: 320-28636-1

Matrix: Air Lab File ID: MS6053009.D

Analysis Method: TO-15 Date Collected: 05/26/2017 00:00

Sample wt/vol: 500(mL) Date Analyzed: 05/30/2017 18:11

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 166626 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	0.74	J	5.0	0.18
107-02-8	Acrolein	ND		2.0	0.22
107-13-1	Acrylonitrile	ND		2.0	0.19
107-05-1	Allyl chloride	ND		0.80	0.11
71-43-2	Benzene	ND		0.40	0.079
100-44-7	Benzyl chloride	ND		0.80	0.16
75-27-4	Bromodichloromethane	ND		0.30	0.066
75-25-2	Bromoform	ND		0.40	0.070
74-83-9	Bromomethane	ND		0.80	0.34
106-99-0	1,3-Butadiene	ND		0.80	0.15
106-97-8	n-Butane	ND		0.40	0.15
78-93-3	2-Butanone (MEK)	ND		0.80	0.20
75-65-0	tert-Butyl alcohol (TBA)	ND		2.0	0.11
104-51-8	n-Butylbenzene	ND		0.40	0.18
135-98-8	sec-Butylbenzene	ND		0.40	0.070
98-06-6	tert-Butylbenzene	ND		0.80	0.068
75-15-0	Carbon disulfide	0.44	J	0.80	0.078
56-23-5	Carbon tetrachloride	ND		0.80	0.064
108-90-7	Chlorobenzene	ND		0.30	0.064
75-45-6	Chlorodifluoromethane	ND		0.80	0.27
75-00-3	Chloroethane	ND		0.80	0.31
67-66-3	Chloroform	ND		0.30	0.095
74-87-3	Chloromethane	ND		0.80	0.20
95-49-8	2-Chlorotoluene	ND		0.40	0.080
110-82-7	Cyclohexane	ND		0.40	0.084
124-48-1	Dibromochloromethane	ND		0.40	0.079
106-93-4	1,2-Dibromoethane (EDB)	ND		0.80	0.075
74-95-3	Dibromomethane	ND		0.40	0.057
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.40	0.16
95-50-1	1,2-Dichlorobenzene	ND		0.40	0.13
541-73-1	1,3-Dichlorobenzene	ND		0.40	0.11
106-46-7	1,4-Dichlorobenzene	ND		0.40	0.15
75-71-8	Dichlorodifluoromethane	ND		0.40	0.15
75-34-3	1,1-Dichloroethane	ND		0.30	0.072
107-06-2	1,2-Dichloroethane	ND		0.80	0.088

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28636-1

SDG No.:

Client Sample ID: 34001220 Lab Sample ID: 320-28636-1

Matrix: Air Lab File ID: MS6053009.D

Analysis Method: TO-15 Date Collected: 05/26/2017 00:00

Sample wt/vol: 500(mL) Date Analyzed: 05/30/2017 18:11

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 166626 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	ND		0.80	0.13
156-59-2	cis-1,2-Dichloroethene	ND		0.40	0.089
156-60-5	trans-1,2-Dichloroethene	ND		0.40	0.10
78-87-5	1,2-Dichloropropane	ND		0.40	0.24
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.40	0.088
123-91-1	1,4-Dioxane	ND		0.80	0.10
141-78-6	Ethyl acetate	ND		0.30	0.18
100-41-4	Ethylbenzene	ND		0.40	0.063
622-96-8	4-Ethyltoluene	ND		0.40	0.19
142-82-5	n-Heptane	ND		0.80	0.063
87-68-3	Hexachlorobutadiene	ND		2.0	0.43
110-54-3	n-Hexane	ND		0.80	0.075
591-78-6	2-Hexanone	ND		0.40	0.087
98-82-8	Isopropylbenzene	ND		0.80	0.10
99-87-6	4-Isopropyltoluene	ND		0.80	0.12
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.80	0.12
80-62-6	Methyl methacrylate	ND		0.80	0.16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		0.40	0.14
75-09-2	Methylene Chloride	ND		0.40	0.072
98-83-9	alpha-Methylstyrene	ND		0.40	0.065
91-20-3	Naphthalene	ND		0.80	0.56
111-65-9	n-Octane	ND		0.40	0.055
109-66-0	n-Pentane	ND		0.80	0.26
115-07-1	Propylene	ND		0.40	0.099
103-65-1	N-Propylbenzene	ND		0.40	0.059
100-42-5	Styrene	ND		0.40	0.059
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.40	0.069
127-18-4	Tetrachloroethene	ND		0.40	0.051
109-99-9	Tetrahydrofuran	ND		0.80	0.21
108-88-3	Toluene	ND		0.40	0.051
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.40	0.16
120-82-1	1,2,4-Trichlorobenzene	ND		2.0	0.43
71-55-6	1,1,1-Trichloroethane	ND		0.30	0.065
79-00-5	1,1,2-Trichloroethane	ND		0.40	0.067

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28636-1

SDG No.:

Client Sample ID: 34001220 Lab Sample ID: 320-28636-1

Matrix: Air Lab File ID: MS6053009.D

Analysis Method: TO-15 Date Collected: 05/26/2017 00:00

Sample wt/vol: 500(mL) Date Analyzed: 05/30/2017 18:11

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 166626 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	ND		0.40	0.11
75-69-4	Trichlorofluoromethane	ND		0.40	0.20
96-18-4	1,2,3-Trichloropropane	ND		0.40	0.17
95-63-6	1,2,4-Trimethylbenzene	ND		0.80	0.16
108-67-8	1,3,5-Trimethylbenzene	ND		0.40	0.13
540-84-1	2,2,4-Trimethylpentane	ND		0.40	0.071
108-05-4	Vinyl acetate	ND		0.80	0.15
593-60-2	Vinyl bromide	ND		0.80	0.26
75-01-4	Vinyl chloride	ND		0.40	0.12
179601-23-1	m,p-Xylene	ND		0.80	0.10
95-47-6	o-Xylene	ND		0.40	0.054
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.40	0.091

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		70-130
2037-26-5	Toluene-d8 (Surr)	101		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File: \\ChromNA\Sacramento\ChromData\ATMS6\20170530-43626.b\MS6053009.D
Lims ID: 320-28636-A-1
Client ID: 34001220
Sample Type: Client
Inject. Date: 30-May-2017 18:11:30 ALS Bottle#: 5 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 320-28636-A-1
Misc. Info.: 500 CAN CERT
Operator ID: SV Instrument ID: ATMS6

Method: \\ChromNA\Sacramento\ChromData\ATMS6\20170530-43626.b\TO15_ATMS6.m
Limit Group: MSA - TO15 - ICAL
Last Update: 31-May-2017 11:04:31 Calib Date: 30-May-2017 13:30:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Sacramento\ChromData\ATMS6\20170530-43626.b\MS6053005.D

Column 1 : RTX Volatiles (0.32 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: phanthasena Date: 31-May-2017 10:57:22

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	13.106	13.106	0.000	92	28209	4.00	
* 2 1,4-Difluorobenzene	114	15.248	15.254	-0.006	95	109249	4.00	
* 3 Chlorobenzene-d5 (IS)	117	21.989	21.988	0.000	89	110552	4.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	14.305	14.311	-0.006	98	54186	4.03	
$ 5 Toluene-d8 (Surr)	100	18.703	18.703	0.000	97	69478	4.03	
$ 6 4-Bromofluorobenzene (Surr	95	24.550	24.549	0.001	86	82243	4.00	
32 Acetone	43	8.264	8.270	-0.006	99	14841	0.7352	
40 Carbon disulfide	76	9.590	9.590	0.000	96	10244	0.4418	

Reagents:

VAMSIS20_00002 Amount Added: 50.00 Units: mL Run Reagent

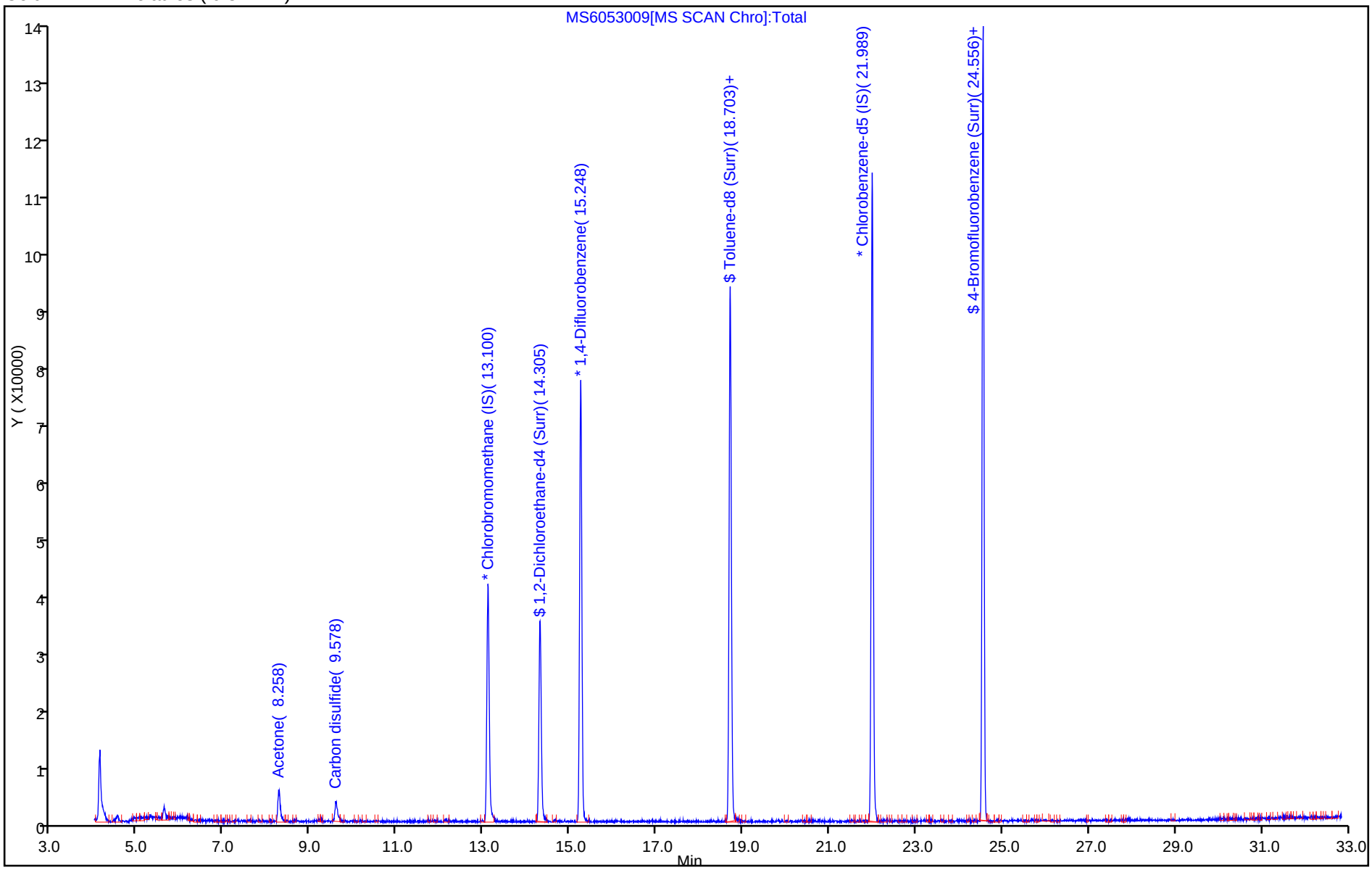
Report Date: 31-May-2017 13:01:59 Chrom Revision: 2.2 25-May-2017 18:29:58

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS6\20170530-43626.b\MS6053009.D

Injection Date:	30-May-2017 18:11:30	Instrument ID:	ATMS6	Operator ID:	SV
Lims ID:	320-28636-A-1	Lab Sample ID:	320-28636-1	Worklist Smp#:	8
Client ID:	34001220				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	TO15_ATMS6	Limit Group:	MSA - TO15 - ICAL		

Column: RTX Volatiles (0.32 mm)



Report Date: 31-May-2017 13:01:59 Chrom Revision: 2.2 25-May-2017 18:29:58

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS6\20170530-43626.b\MS6053009.D

Injection Date: 30-May-2017 18:11:30 Instrument ID: ATMS6

Lims ID: 320-28636-A-1 Lab Sample ID: 320-28636-1

Client ID: 34001220

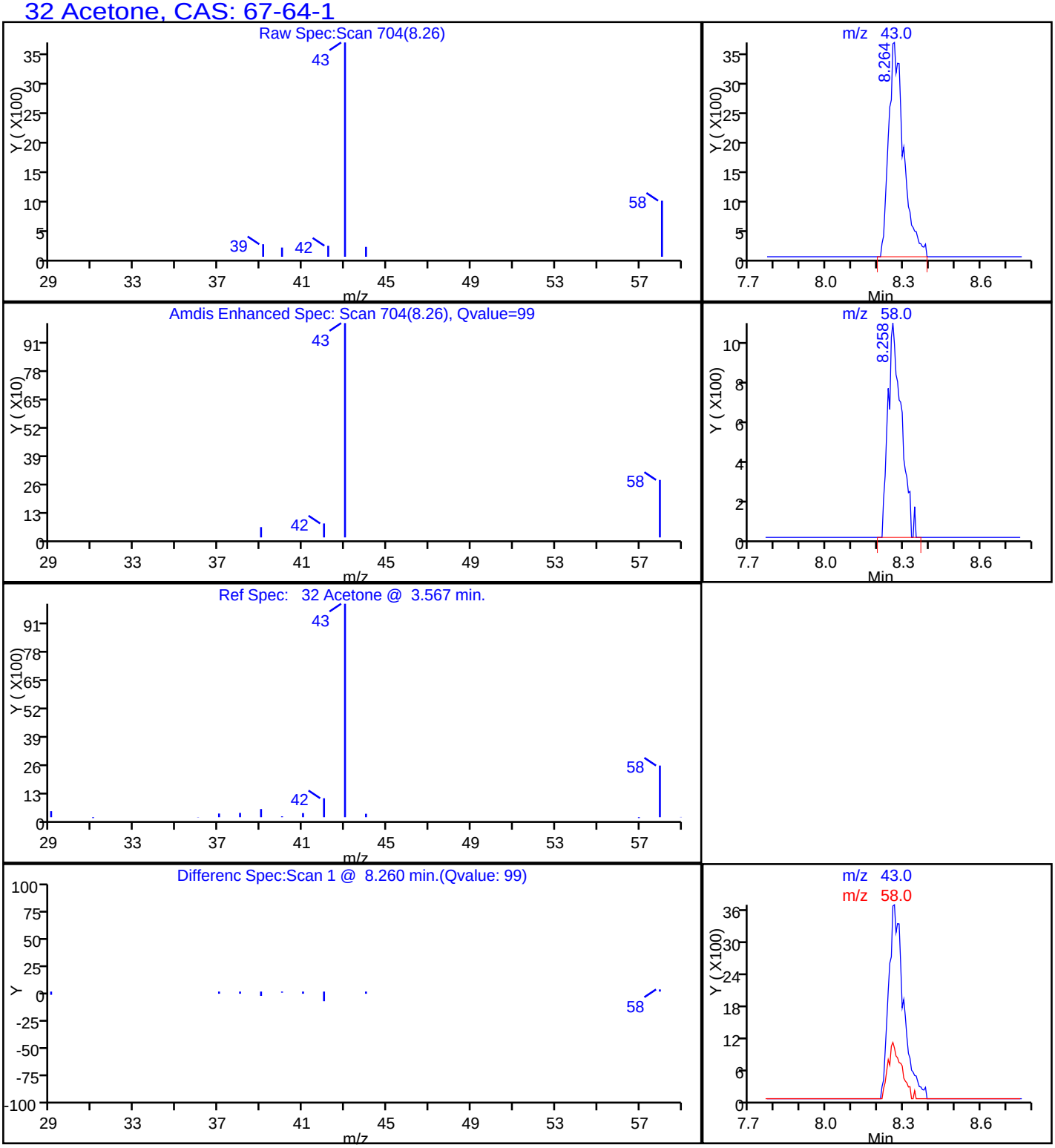
Operator ID: SV ALS Bottle#: 5 Worklist Smp#: 8

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: TO15_ATMS6 Limit Group: MSA - TO15 - ICAL

Column: RTX Volatiles (0.32 mm) Detector MS SCAN

32 Acetone, CAS: 67-64-1



Report Date: 31-May-2017 13:01:59 Chrom Revision: 2.2 25-May-2017 18:29:58

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS6\20170530-43626.b\MS6053009.D

Injection Date: 30-May-2017 18:11:30 Instrument ID: ATMS6

Lims ID: 320-28636-A-1 Lab Sample ID: 320-28636-1

Client ID: 34001220

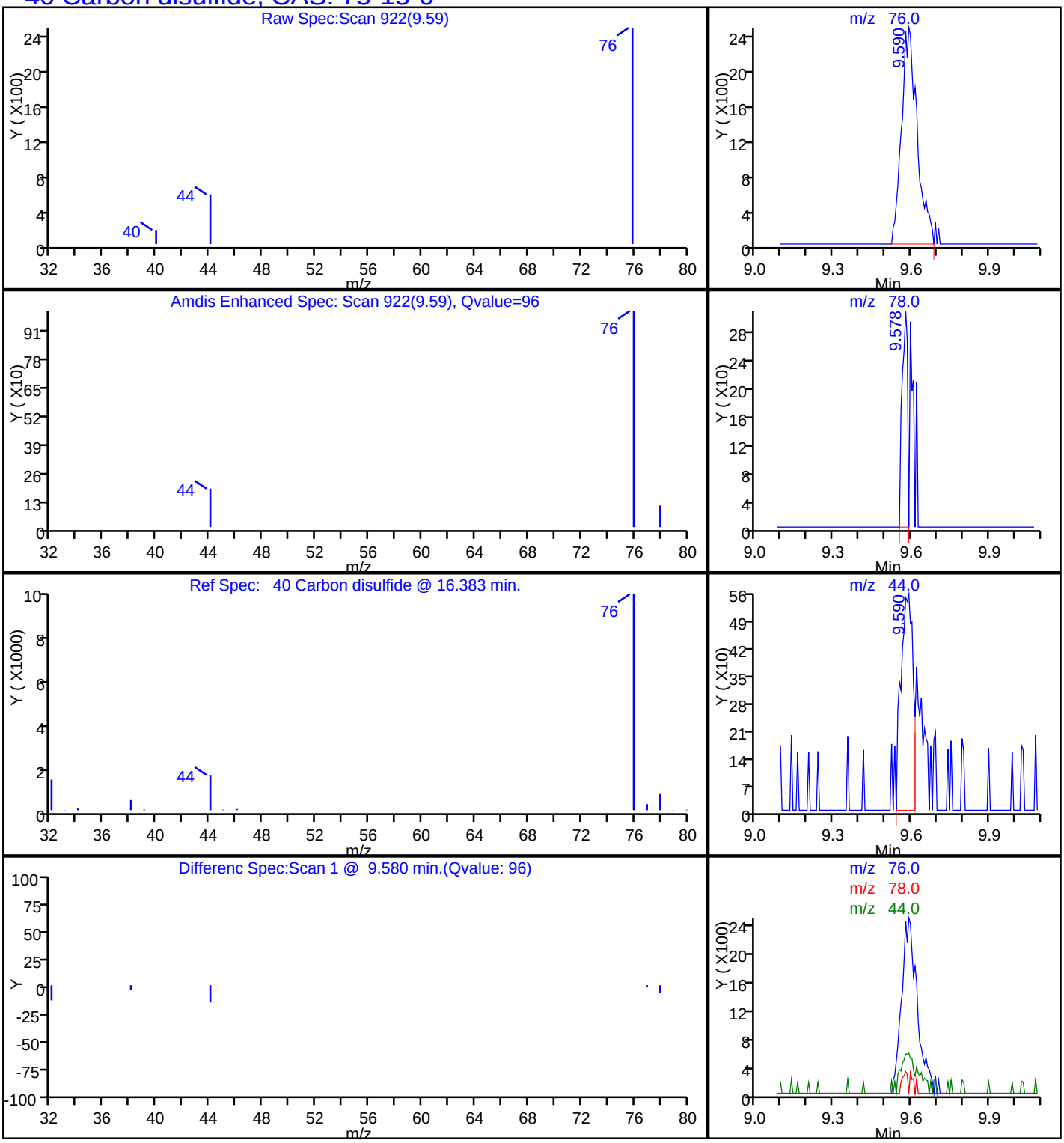
Operator ID: SV ALS Bottle#: 5 Worklist Smp#: 8

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: TO15_ATMS6 Limit Group: MSA - TO15 - ICAL

Column: RTX Volatiles (0.32 mm) Detector MS SCAN

40 Carbon disulfide, CAS: 75-15-0



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28802-1

SDG No.:

Client Sample ID: 7535 Lab Sample ID: 320-28802-1

Matrix: Air Lab File ID: MS6060506.D

Analysis Method: TO-15 Date Collected: 06/02/2017 00:00

Sample wt/vol: 250(mL) Date Analyzed: 06/05/2017 17:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 167541 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	ND		5.0	0.18
107-02-8	Acrolein	ND		2.0	0.22
107-13-1	Acrylonitrile	ND		2.0	0.19
107-05-1	Allyl chloride	ND		0.80	0.11
71-43-2	Benzene	ND		0.40	0.079
100-44-7	Benzyl chloride	ND		0.80	0.16
75-27-4	Bromodichloromethane	ND		0.30	0.066
75-25-2	Bromoform	ND		0.40	0.070
74-83-9	Bromomethane	ND		0.80	0.34
106-99-0	1,3-Butadiene	ND		0.80	0.15
106-97-8	n-Butane	ND		0.40	0.15
78-93-3	2-Butanone (MEK)	ND		0.80	0.20
75-65-0	tert-Butyl alcohol (TBA)	ND		2.0	0.11
104-51-8	n-Butylbenzene	ND		0.40	0.18
135-98-8	sec-Butylbenzene	ND		0.40	0.070
98-06-6	tert-Butylbenzene	ND		0.80	0.068
75-15-0	Carbon disulfide	ND		0.80	0.078
56-23-5	Carbon tetrachloride	ND		0.80	0.064
108-90-7	Chlorobenzene	ND		0.30	0.064
75-45-6	Chlorodifluoromethane	ND		0.80	0.27
75-00-3	Chloroethane	ND		0.80	0.31
67-66-3	Chloroform	ND		0.30	0.095
74-87-3	Chloromethane	ND		0.80	0.20
95-49-8	2-Chlorotoluene	ND		0.40	0.080
110-82-7	Cyclohexane	ND		0.40	0.084
124-48-1	Dibromochloromethane	ND		0.40	0.079
106-93-4	1,2-Dibromoethane (EDB)	ND		0.80	0.075
74-95-3	Dibromomethane	ND		0.40	0.057
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.40	0.16
95-50-1	1,2-Dichlorobenzene	ND		0.40	0.13
541-73-1	1,3-Dichlorobenzene	ND		0.40	0.11
106-46-7	1,4-Dichlorobenzene	ND		0.40	0.15
75-71-8	Dichlorodifluoromethane	ND		0.40	0.15
75-34-3	1,1-Dichloroethane	ND		0.30	0.072
107-06-2	1,2-Dichloroethane	ND		0.80	0.088

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28802-1

SDG No.:

Client Sample ID: 7535 Lab Sample ID: 320-28802-1

Matrix: Air Lab File ID: MS6060506.D

Analysis Method: TO-15 Date Collected: 06/02/2017 00:00

Sample wt/vol: 250(mL) Date Analyzed: 06/05/2017 17:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 167541 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	ND		0.80	0.13
156-59-2	cis-1,2-Dichloroethene	ND		0.40	0.089
156-60-5	trans-1,2-Dichloroethene	ND		0.40	0.10
78-87-5	1,2-Dichloropropane	ND		0.40	0.24
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.40	0.088
123-91-1	1,4-Dioxane	ND		0.80	0.10
141-78-6	Ethyl acetate	ND		0.30	0.18
100-41-4	Ethylbenzene	ND		0.40	0.063
622-96-8	4-Ethyltoluene	ND		0.40	0.19
142-82-5	n-Heptane	ND		0.80	0.063
87-68-3	Hexachlorobutadiene	ND		2.0	0.43
110-54-3	n-Hexane	ND		0.80	0.075
591-78-6	2-Hexanone	ND		0.40	0.087
98-82-8	Isopropylbenzene	ND		0.80	0.10
99-87-6	4-Isopropyltoluene	ND		0.80	0.12
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.80	0.12
80-62-6	Methyl methacrylate	ND		0.80	0.16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		0.40	0.14
75-09-2	Methylene Chloride	ND		0.40	0.072
98-83-9	alpha-Methylstyrene	ND		0.40	0.065
91-20-3	Naphthalene	ND		0.80	0.56
111-65-9	n-Octane	ND		0.40	0.055
109-66-0	n-Pentane	ND		0.80	0.26
115-07-1	Propylene	ND		0.40	0.099
103-65-1	N-Propylbenzene	ND		0.40	0.059
100-42-5	Styrene	ND		0.40	0.059
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.40	0.069
127-18-4	Tetrachloroethene	ND		0.40	0.051
109-99-9	Tetrahydrofuran	ND		0.80	0.21
108-88-3	Toluene	ND		0.40	0.051
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.40	0.16
120-82-1	1,2,4-Trichlorobenzene	ND		2.0	0.43
71-55-6	1,1,1-Trichloroethane	ND		0.30	0.065
79-00-5	1,1,2-Trichloroethane	ND		0.40	0.067

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28802-1

SDG No.:

Client Sample ID: 7535 Lab Sample ID: 320-28802-1

Matrix: Air Lab File ID: MS6060506.D

Analysis Method: TO-15 Date Collected: 06/02/2017 00:00

Sample wt/vol: 250(mL) Date Analyzed: 06/05/2017 17:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 167541 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	ND		0.40	0.11
75-69-4	Trichlorofluoromethane	ND		0.40	0.20
96-18-4	1,2,3-Trichloropropane	ND		0.40	0.17
95-63-6	1,2,4-Trimethylbenzene	ND		0.80	0.16
108-67-8	1,3,5-Trimethylbenzene	ND		0.40	0.13
540-84-1	2,2,4-Trimethylpentane	ND		0.40	0.071
108-05-4	Vinyl acetate	ND		0.80	0.15
593-60-2	Vinyl bromide	ND		0.80	0.26
75-01-4	Vinyl chloride	ND		0.40	0.12
179601-23-1	m,p-Xylene	ND		0.80	0.10
95-47-6	o-Xylene	ND		0.40	0.054

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	97		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		70-130
2037-26-5	Toluene-d8 (Surr)	102		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\ChromNA\Sacramento\ChromData\ATMS6\20170605-43842.b\MS6060506.D				
Lims ID:	320-28802-A-1				
Client ID:	7535				
Sample Type:	Client				
Inject. Date:	05-Jun-2017 17:32:30	ALS Bottle#:	4	Worklist Smp#:	6
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	320-28802-A-1				
Misc. Info.:	500 CAN CERT				
Operator ID:	SV	Instrument ID:	ATMS6		
Method:	\\ChromNA\Sacramento\ChromData\ATMS6\20170605-43842.b\TO15_ATMS6.m				
Limit Group:	MSA - TO15 - ICAL				
Last Update:	06-Jun-2017 13:37:09	Calib Date:	05-Jun-2017 14:38:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Sacramento\ChromData\ATMS6\20170605-43842.b\MS6060503.D				
Column 1 :	RTX Volatiles (0.32 mm)		Det: MS SCAN		
Process Host:	XAWRK021				
First Level Reviewer: vanommens		Date:	06-Jun-2017 13:37:15		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	13.094	13.106	-0.012	91	30592	4.00	
* 2 1,4-Difluorobenzene	114	15.242	15.248	-0.006	95	115000	4.00	
* 3 Chlorobenzene-d5 (IS)	117	21.989	21.988	0.001	89	110302	4.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	14.299	14.311	-0.012	98	57102	4.05	
$ 5 Toluene-d8 (Surr)	100	18.704	18.697	0.007	97	73166	4.06	
$ 6 4-Bromofluorobenzene (Surr	95	24.550	24.556	-0.006	86	76687	3.87	

Reagents:

VAMSIS20_00002 Amount Added: 50.00 Units: mL Run Reagent

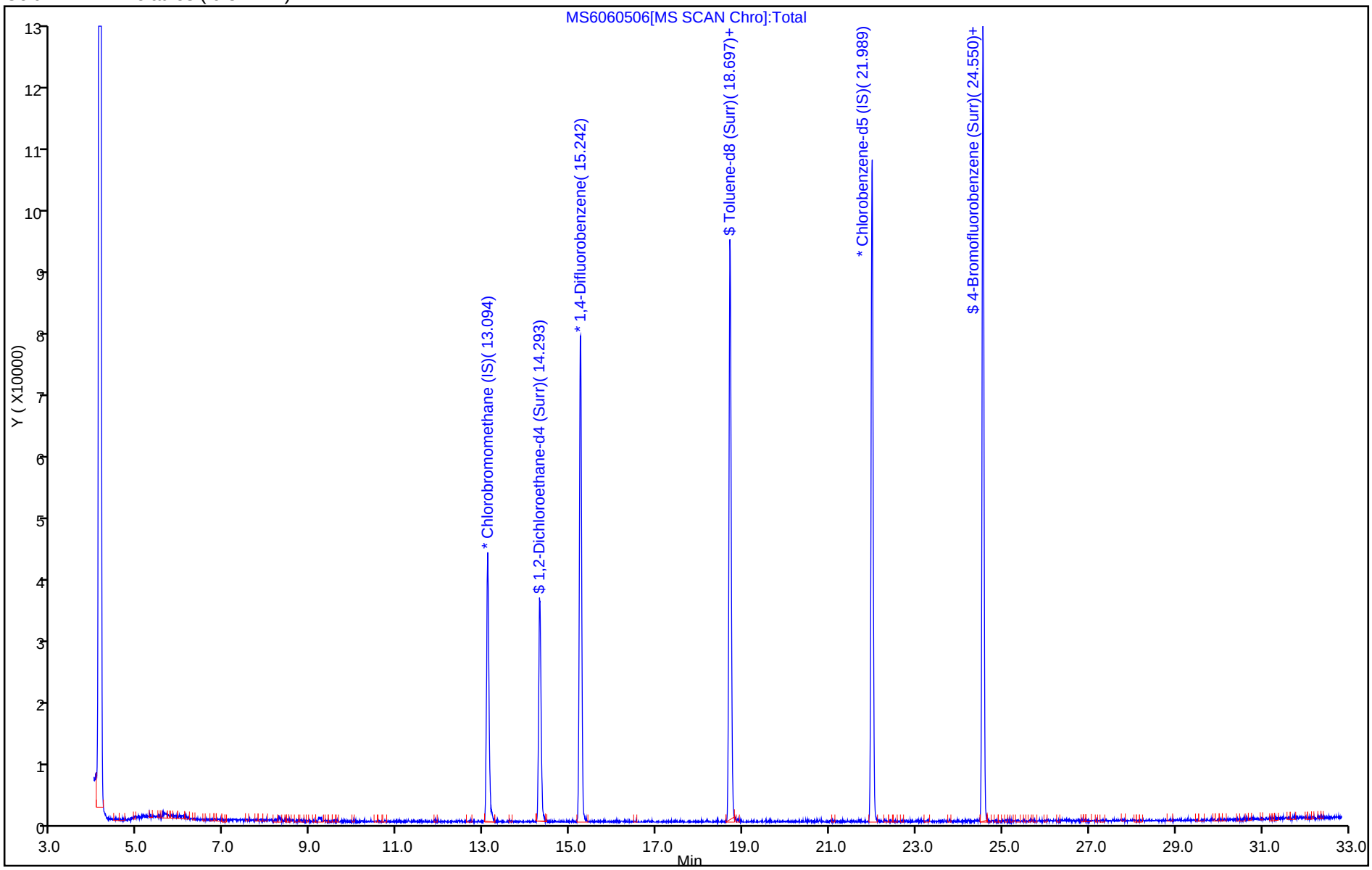
Report Date: 06-Jun-2017 13:37:16 Chrom Revision: 2.2 25-May-2017 18:29:58

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS6\20170605-43842.b\MS6060506.D

Injection Date:	05-Jun-2017 17:32:30	Instrument ID:	ATMS6	Operator ID:	SV
Lims ID:	320-28802-A-1	Lab Sample ID:	320-28802-1	Worklist Smp#:	6
Client ID:	7535				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	TO15_ATMS6	Limit Group:	MSA - TO15 - ICAL		

Column: RTX Volatiles (0.32 mm)



FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28820-1

SDG No.:

Client Sample ID: 34001959 Lab Sample ID: 320-28820-1

Matrix: Air Lab File ID: MS6060606.D

Analysis Method: TO-15 Date Collected: 06/05/2017 00:00

Sample wt/vol: 250(mL) Date Analyzed: 06/06/2017 18:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 167759 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	0.28	J	5.0	0.18
107-02-8	Acrolein	ND		2.0	0.22
107-13-1	Acrylonitrile	ND		2.0	0.19
107-05-1	Allyl chloride	ND		0.80	0.11
71-43-2	Benzene	ND		0.40	0.079
100-44-7	Benzyl chloride	ND		0.80	0.16
75-27-4	Bromodichloromethane	ND		0.30	0.066
75-25-2	Bromoform	ND		0.40	0.070
74-83-9	Bromomethane	ND		0.80	0.34
106-99-0	1,3-Butadiene	ND		0.80	0.15
106-97-8	n-Butane	ND		0.40	0.15
78-93-3	2-Butanone (MEK)	ND		0.80	0.20
75-65-0	tert-Butyl alcohol (TBA)	ND		2.0	0.11
104-51-8	n-Butylbenzene	ND		0.40	0.18
135-98-8	sec-Butylbenzene	ND		0.40	0.070
98-06-6	tert-Butylbenzene	ND		0.80	0.068
75-15-0	Carbon disulfide	ND		0.80	0.078
56-23-5	Carbon tetrachloride	ND		0.80	0.064
108-90-7	Chlorobenzene	ND		0.30	0.064
75-45-6	Chlorodifluoromethane	ND		0.80	0.27
75-00-3	Chloroethane	ND		0.80	0.31
67-66-3	Chloroform	ND		0.30	0.095
74-87-3	Chloromethane	ND		0.80	0.20
95-49-8	2-Chlorotoluene	ND		0.40	0.080
110-82-7	Cyclohexane	ND		0.40	0.084
124-48-1	Dibromochloromethane	ND		0.40	0.079
106-93-4	1,2-Dibromoethane (EDB)	ND		0.80	0.075
74-95-3	Dibromomethane	ND		0.40	0.057
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.40	0.16
95-50-1	1,2-Dichlorobenzene	ND		0.40	0.13
541-73-1	1,3-Dichlorobenzene	ND		0.40	0.11
106-46-7	1,4-Dichlorobenzene	ND		0.40	0.15
75-71-8	Dichlorodifluoromethane	ND		0.40	0.15
75-34-3	1,1-Dichloroethane	ND		0.30	0.072
107-06-2	1,2-Dichloroethane	ND		0.80	0.088

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28820-1

SDG No.:

Client Sample ID: 34001959 Lab Sample ID: 320-28820-1

Matrix: Air Lab File ID: MS6060606.D

Analysis Method: TO-15 Date Collected: 06/05/2017 00:00

Sample wt/vol: 250(mL) Date Analyzed: 06/06/2017 18:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 167759 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	ND		0.80	0.13
156-59-2	cis-1,2-Dichloroethene	ND		0.40	0.089
156-60-5	trans-1,2-Dichloroethene	ND		0.40	0.10
78-87-5	1,2-Dichloropropane	ND		0.40	0.24
10061-01-5	cis-1,3-Dichloropropene	ND		0.40	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.40	0.088
123-91-1	1,4-Dioxane	ND		0.80	0.10
141-78-6	Ethyl acetate	ND		0.30	0.18
100-41-4	Ethylbenzene	ND		0.40	0.063
622-96-8	4-Ethyltoluene	ND		0.40	0.19
142-82-5	n-Heptane	ND		0.80	0.063
87-68-3	Hexachlorobutadiene	ND		2.0	0.43
110-54-3	n-Hexane	ND		0.80	0.075
591-78-6	2-Hexanone	ND		0.40	0.087
98-82-8	Isopropylbenzene	ND		0.80	0.10
99-87-6	4-Isopropyltoluene	ND		0.80	0.12
1634-04-4	Methyl-t-Butyl Ether (MTBE)	ND		0.80	0.12
80-62-6	Methyl methacrylate	ND		0.80	0.16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		0.40	0.14
75-09-2	Methylene Chloride	ND		0.40	0.072
98-83-9	alpha-Methylstyrene	ND		0.40	0.065
91-20-3	Naphthalene	ND		0.80	0.56
111-65-9	n-Octane	ND		0.40	0.055
109-66-0	n-Pentane	ND		0.80	0.26
115-07-1	Propylene	ND		0.40	0.099
103-65-1	N-Propylbenzene	ND		0.40	0.059
100-42-5	Styrene	ND		0.40	0.059
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.40	0.069
127-18-4	Tetrachloroethene	ND		0.40	0.051
109-99-9	Tetrahydrofuran	ND		0.80	0.21
108-88-3	Toluene	ND		0.40	0.051
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.40	0.16
120-82-1	1,2,4-Trichlorobenzene	ND		2.0	0.43
71-55-6	1,1,1-Trichloroethane	ND		0.30	0.065
79-00-5	1,1,2-Trichloroethane	ND		0.40	0.067

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Sacramento Job No.: 320-28820-1

SDG No.:

Client Sample ID: 34001959 Lab Sample ID: 320-28820-1

Matrix: Air Lab File ID: MS6060606.D

Analysis Method: TO-15 Date Collected: 06/05/2017 00:00

Sample wt/vol: 250(mL) Date Analyzed: 06/06/2017 18:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-Volatiles ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 167759 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	ND		0.40	0.11
75-69-4	Trichlorofluoromethane	ND		0.40	0.20
96-18-4	1,2,3-Trichloropropane	ND		0.40	0.17
95-63-6	1,2,4-Trimethylbenzene	ND		0.80	0.16
108-67-8	1,3,5-Trimethylbenzene	ND		0.40	0.13
540-84-1	2,2,4-Trimethylpentane	ND		0.40	0.071
108-05-4	Vinyl acetate	ND		0.80	0.15
593-60-2	Vinyl bromide	ND		0.80	0.26
75-01-4	Vinyl chloride	ND		0.40	0.12
179601-23-1	m,p-Xylene	ND		0.80	0.10
95-47-6	o-Xylene	ND		0.40	0.054

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	102		70-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		70-130
2037-26-5	Toluene-d8 (Surr)	102		70-130

TestAmerica Sacramento
Target Compound Quantitation Report

Data File:	\\ChromNA\Sacramento\ChromData\ATMS6\20170606-43898.b\MS6060606.D				
Lims ID:	320-28820-A-1				
Client ID:	34001959				
Sample Type:	Client				
Inject. Date:	06-Jun-2017 18:22:30	ALS Bottle#:	4	Worklist Smp#:	6
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	320-28820-A-1				
Misc. Info.:	500 CAN CERT				
Operator ID:	SV	Instrument ID:	ATMS6		
Method:	\\ChromNA\Sacramento\ChromData\ATMS6\20170606-43898.b\TO15_ATMS6.m				
Limit Group:	MSA - TO15 - ICAL				
Last Update:	07-Jun-2017 13:53:37	Calib Date:	06-Jun-2017 15:27:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Sacramento\ChromData\ATMS6\20170606-43898.b\MS6060603.D				
Column 1 :	RTX Volatiles (0.32 mm)		Det: MS SCAN		
Process Host:	XAWRK031				
First Level Reviewer: phanthasena		Date:	07-Jun-2017 13:53:37		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	130	13.100	13.094	0.006	93	29991	4.00	
* 2 1,4-Difluorobenzene	114	15.248	15.242	0.006	95	113960	4.00	
* 3 Chlorobenzene-d5 (IS)	117	21.994	21.988	0.006	89	106813	4.00	
$ 4 1,2-Dichloroethane-d4 (Sur	65	14.299	14.299	0.000	98	56967	4.13	
$ 5 Toluene-d8 (Surr)	100	18.703	18.697	0.006	98	70275	4.08	
$ 6 4-Bromofluorobenzene (Surr	95	24.549	24.550	-0.001	87	78788	4.06	
17 Butane	43	5.295	5.283	0.012	7	426	0.0270	
32 Acetone	43	8.276	8.258	0.018	97	5284	0.2813	

Reagents:

VAMSIS20_00002 Amount Added: 50.00 Units: mL Run Reagent

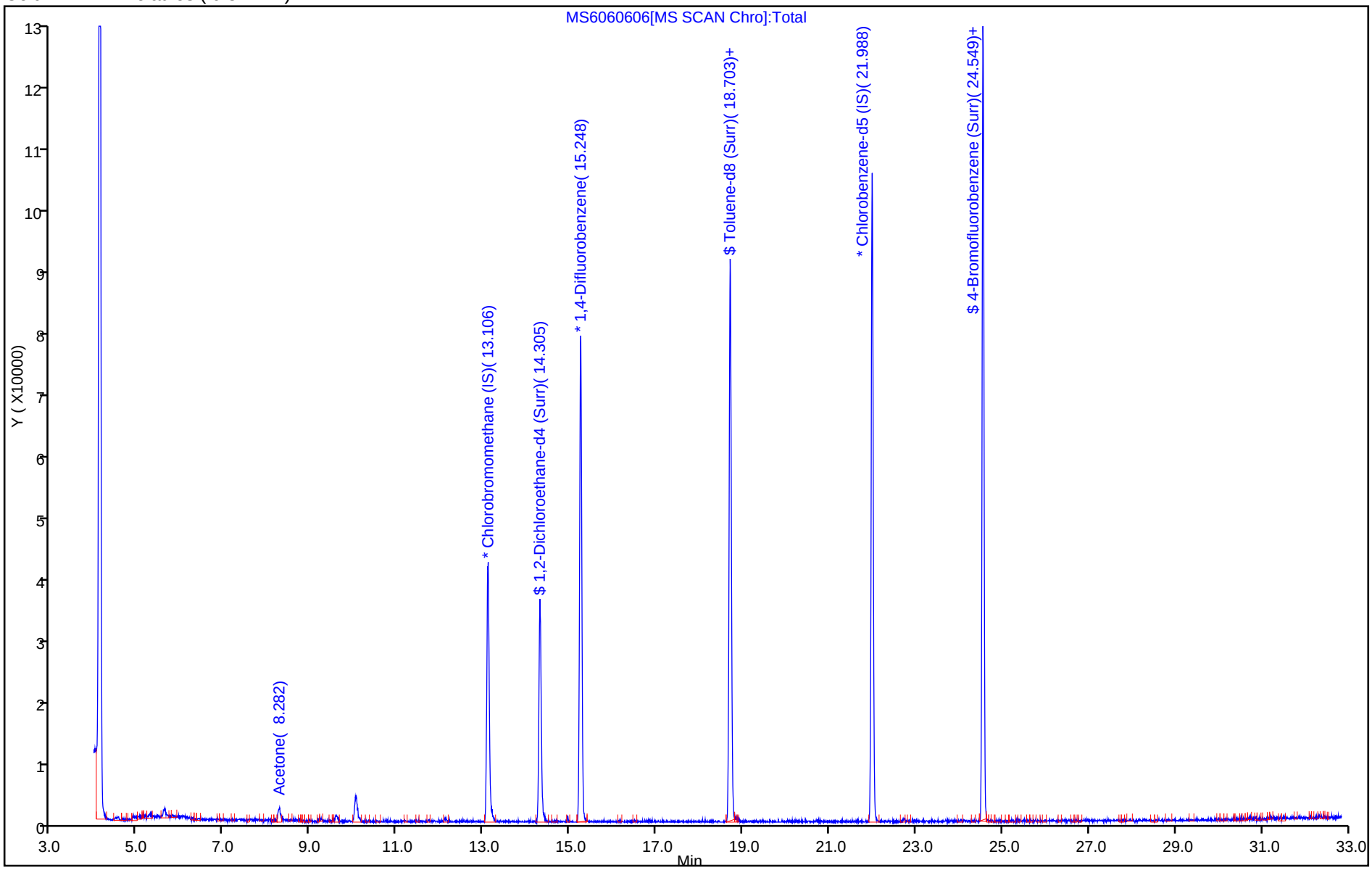
Report Date: 07-Jun-2017 13:53:38 Chrom Revision: 2.2 25-May-2017 18:29:58

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS6\20170606-43898.b\MS6060606.D

Injection Date:	06-Jun-2017 18:22:30	Instrument ID:	ATMS6	Operator ID:	SV
Lims ID:	320-28820-A-1	Lab Sample ID:	320-28820-1	Worklist Smp#:	6
Client ID:	34001959				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	TO15_ATMS6	Limit Group:	MSA - TO15 - ICAL		

Column: RTX Volatiles (0.32 mm)



Report Date: 07-Jun-2017 13:53:38 Chrom Revision: 2.2 25-May-2017 18:29:58

TestAmerica Sacramento

Data File: \\ChromNA\Sacramento\ChromData\ATMS6\20170606-43898.b\MS6060606.D

Injection Date:	06-Jun-2017 18:22:30	Instrument ID:	ATMS6		
Lims ID:	320-28820-A-1	Lab Sample ID:	320-28820-1		
Client ID:	34001959				
Operator ID:	SV	ALS Bottle#:	4	Worklist Smp#:	6
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	TO15_ATMS6	Limit Group:	MSA - TO15 - ICAL		
Column:	RTX Volatiles (0.32 mm)	Detector	MS SCAN		

32 Acetone, CAS: 67-64-1