SOIL VAPOR EXTRACTION SYSTEM
SECOND SEMIANNUAL REPORT 2021

KUHLMAN ELECTRIC CORPORATION
CRYSTAL SPRINGS, MISSISSIPPI

Prepared by:

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EMS Project No: KUH0-21-012

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Executive Summary

This Soil Vapor Extraction (SVE) System Semiannual Report summarizes the performance of the SVE system installed by Environmental Management Services, Inc. (EMS) for Kuhlman Electric Company (KEC) located in Crystal Springs, Mississippi (the Site). This report includes a synopsis of the performance data for the second semiannual period of 2021.

The system initially began operations April 21, 2014 with normal operation attained on May 2, 2014. Routine monitoring has been performed according to the schedule described in the *SVE Final Design and Quality Assurance Project Plan* submitted to the Mississippi Department of Environmental Quality (MDEQ) on September 13, 2013.

Historical Information Summary

The Site is located at 101 Kuhlman Drive in Crystal Springs, Mississippi, as shown in Figure 1, and has operated as an electrical transformer manufacturing plant since its construction in the 1950's. In April of 2000, Polychlorinated Biphenyl (PCB)-contaminated soil was discovered on-site during subsurface construction activities. This discovery initiated several phases of environmental assessments and remediation projects, some of which are currently ongoing. During these investigations and remediation projects it was discovered that the groundwater on and off KEC property was impacted with Volatile Organic Compounds (VOCs); principally, 1,1-dichloroethene (DCE) and the semi-volatile constituent 1,4-dioxane.

An investigation was performed to determine the source of the groundwater impacts and was documented in the April 30, 2009 *Groundwater Assessment Report, Kuhlman Electric Corporation, Crystal Springs, Mississippi* prepared by Martin & Slagle Geoenvironmental Associates, LLC (Martin & Slagle) for BorgWarner (hereafter referred to as the April 2009 *Groundwater Assessment Report*). These efforts included a soil vapor study, which detected VOCs in the soil vapors from 3 to 12 feet below the plant floor. Soil samples were also collected from beneath the building from 0 to 62 feet below ground surface (bgs) and analyzed for VOCs.

The analytical results indicated that VOCs were present in the subsurface soil under portions of the plant building. This area, near the western portion of the plant building beneath the Winding Department process area, the Break Room, and a former rail pit, was identified as the source area for the groundwater impacts. The source area was first published in the April 2009 Groundwater Assessment Report and is depicted on Figure 2 of this report.

These investigations beneath the building footprint confirmed that commingled plumes of DCE and 1,4-dioxane extend from upgradient of the source area, beneath the plant building, to the southwest and off-site. The DCE plume extends off-site approximately 2,800 feet to the south and approximately 3,400 feet to the west from the property boundary based on the most recent groundwater sampling data collected in September of 2021.

DCE and 1,4-dioxane have been identified as the primary Constituents of Concern (COC) at this site. The presence of 1,4-dioxane is presumed to be related to its use as a stabilizer in 1,1,1-trichloroethane (TCA), a solvent used in the past at the KEC site. DCE is a breakdown product of TCA.

In connection with the environmental assessments at the site and in accordance with MDEQ requirements, groundwater monitoring has been performed on and off the KEC facility property since 2004. Groundwater monitoring is currently performed on a semiannual schedule. A total of forty-six permanent groundwater monitoring wells are used to monitor the groundwater plume.

As a result of the discovery of the groundwater contamination and subsequent investigations of soil and groundwater, BorgWarner submitted the Corrective Action Plan (CAP) dated March 2011 (Arcadis) to MDEQ. The CAP was approved by MDEQ on March 1, 2012. The CAP targeted an area beneath the building as the source area contributing to the groundwater impact by the COC as shown in Figure 2. It presented three objectives to mitigate impacts to the COC contaminant plume. The three objectives are listed below:

1. Ensure COC concentrations in soil and groundwater in the contaminant source area beneath the KEC manufacturing building are at levels protective of site workers.
2. Reduce COC concentrations in soil in the contaminant source area beneath the KEC manufacturing building to the extent that remaining concentrations no longer contribute to, or exacerbate COC concentrations in off-site groundwater.
3. Reduce COC concentrations in off-site groundwater to levels protective of downgradient groundwater receptors.

A pilot study was performed at the site May 12-13, 2012, to confirm the viability of soil vapor extraction as a remedial strategy. The *Soil Vapor Extraction Pilot Study Report* (revised May 1, 2013) detailing the outcome of the study and proposing the use of Soil Vapor Extraction (SVE) to reduce COC concentrations was approved by MDEQ July 12, 2013. The *Soil Vapor Extraction Final Design and Quality Assurance Project Plan* was approved by MDEQ October 4, 2013. The system was installed as described in the *SVE Installation Report* submitted to MDEQ September 18, 2014.

SVE Operations and Maintenance

Activities performed during site visits included visually inspecting the operating components, adjusting various operating parameters if warranted, collecting samples, and collecting operating data. The well vault containing SVE-OBS-06 (Figure 2) was damaged in December 2019. Due to the poor location of the well and the high likelihood of the well being damaged again in the future, SVE-OBS-06 was plugged and abandoned on February 24, 2020. In December 2021, the SVE system carbon was replaced and the SVE system's telemetry system was upgraded to a cellular system. The new telemetry system offers much higher reliability and many new notification features not found on the original system. Other than the carbon replacement and the upgraded telemetry system, there were no other significant maintenance activities performed by EMS during the 2021 second semiannual period.

Groundwater Results

Groundwater was sampled from the entire network of monitoring wells, which includes the SVE Performance Monitoring Wells MW-10A, MW-10B, MW-10C, MW-30, MW-31, and MW-35, as shown on Figure 1, in September 2021, for the required semiannual sampling event. Analytical results for MW-10A and MW-10B showed concentrations of constituents greater than the MDEQ groundwater target remediation goals (TRG). The constituents with exceedances were 1,4-dioxane and DCE. The analytical results from the semiannual groundwater monitoring indicate that the concentrations of DCE and other analytes within the source area have decreased since the start-up of the SVE unit (Figure 3). The analytical results from the September 2021 sampling event for the wells listed are presented in Table 1.

Soil Vapor Results

The observation wells, as shown on Figure 2, are monitored quarterly for relative VOC concentration in the soil vapor. Tubing is placed in the well to a depth within the screened interval, and a photoionization detection (PID) meter and a flame ionization detection (FID) meter are used to purge the wells and measure the relative VOC concentration in the soil vapor within the well. The measured relative concentrations ranged from 0.0 to 0.4 parts per million (ppm) with the PID and from 0.0 to 30 ppm with the FID. The observation well soil vapor results for September 2021 and December 2021 are summarized in Table 2.

The observation well soil vapor was also sampled and analyzed for VOCs and 1,4-dioxane during the September and December sampling events using 1-liter SUMMA canisters. The vapor samples were collected by placing tubing within the middle of the screened interval depth and the well opening was covered. A PID meter and FID meter were then used to purge and measure the relative VOC concentration in the soil vapor. After obtaining the PID and FID measurements, the SUMMA canister was connected to the tubing to collect the soil vapors within the screened interval. The observation well soil vapor analytical results are summarized in Table 3, and the laboratory results are included in Appendix A.

The SVE system exhaust and the vapor exiting each stage of carbon treatment were monitored quarterly utilizing both PID and FID meters to evaluate relative VOC concentrations. The relative VOC concentrations measured by the PID meter and the FID meter in the discharge from the SVE system prior to carbon treatment are included in Table 4.

The SVE unit exhaust and the vapor exiting each stage of carbon treatment were also sampled and analyzed for VOCs and 1,4-dioxane. Samples were collected during September 2021 and December 2021. The results are summarized in Table 5. SVE system flow rates are also measured and are summarized in Table 6. The concentrations of TCA, DCE, and 1,4-dioxane and the average flow rates are used to calculate the cumulative mass removed. Since startup of the SVE unit, approximately 4.71 pounds of TCA, 18.81 pounds of DCE, and 285.89 pounds of 1,4-dioxane have been removed through the SVE system. Upon review of this report an error was found in Soil Vapor Extraction System First Semiannual Report 2021 dated September 28, 2021 regarding the total amount of contaminants removed since the SVE startup. The total contaminant removal numbers in this report have been updated using the corrected data. Figures 4-6 show the cumulative mass removal of each constituent. Figure 7 shows the mass recovered per sampling events since the startup of the SVE unit. Laboratory results along with the cumulative mass removal calculations are included in Appendix B.

The flow rates from each individual well are also calculated and recorded during routine visits to the SVE system. The calculated flow rates from each well for the period from July to December are contained in Table 6.

Ambient Air Results

Ambient air sampling was performed quarterly utilizing 1-liter SUMMA canisters equipped with 8-hour flow valves. The air sampling locations are shown on Figure 2. The canisters are placed in the sampling location to collect samples to be analyzed for VOCs and 1,4-dioxane. Concentrations of all analytes detected were well below any published regulatory limit. The analytical results of the ambient air monitoring for the semiannual period are shown in Table 7. The analytical laboratory reports for the ambient air monitoring are contained in Appendix C.

Vacuum Measurements

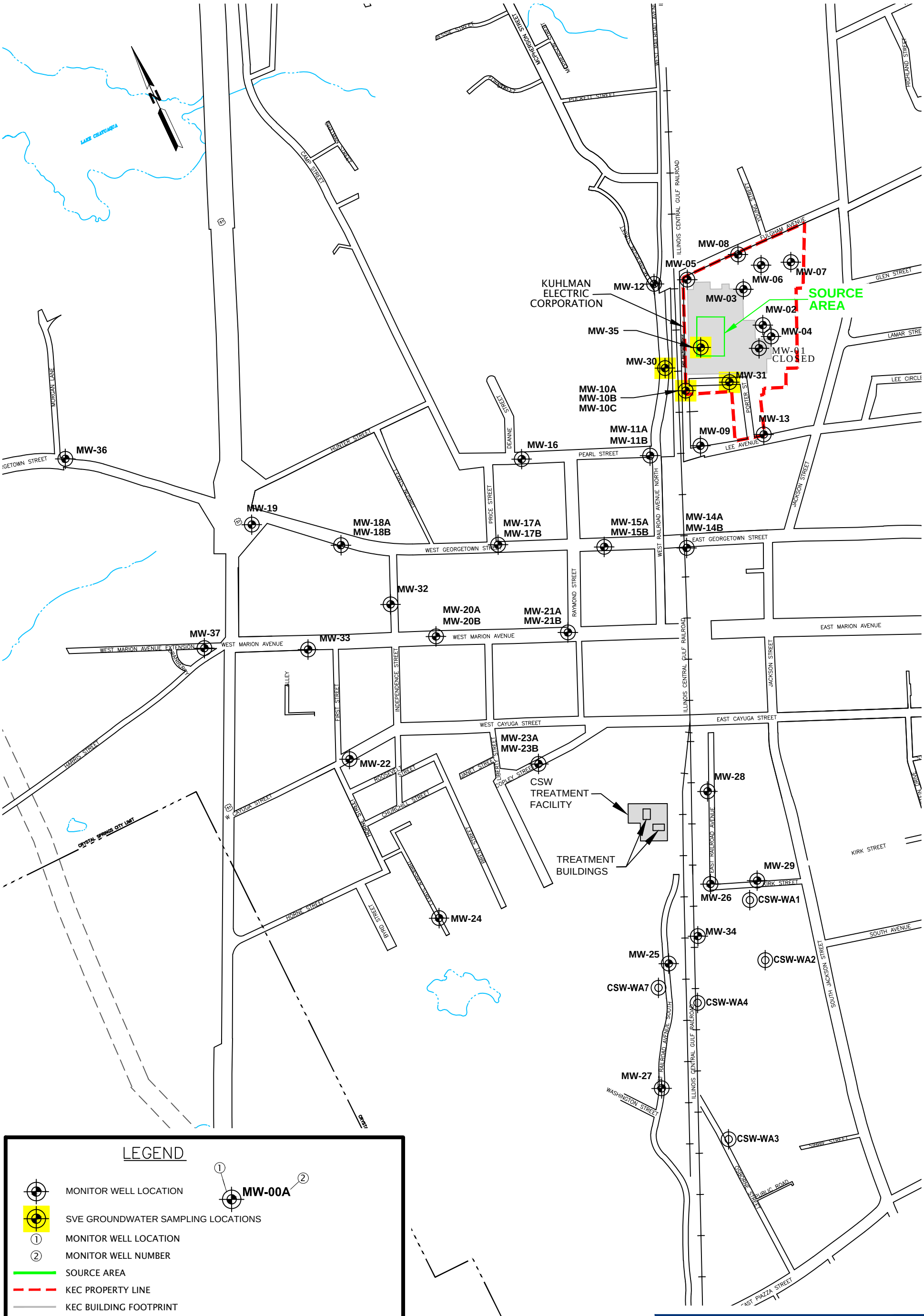
The vacuum response at each observation well is measured quarterly. At 80 feet from the nearest extraction well, the vacuum response averaged 2.15 inches of water. The vacuum response measurements for the second semiannual period in 2021 are shown in Table 8.

In addition, vacuum gauges were placed in the interstitial space on each dual-walled HDPE piping run near the extraction wells. The vacuum gauges are used to measure the vacuum or pressure of the interstitial space between the inner carrier pipe and the outer containment pipe during monthly site visits for leak detection. The gauges have shown no measureable vacuum or pressure within the interstitial space indicating no leaks within the carrier pipe.

Conclusion

The results from this monitoring period indicate that contaminants are being removed from the soil beneath the facility. The remediation activities will continue to remove contaminant mass from the soil through vapor extraction in order to remediate the defined source area. Monitoring as described in this report will continue, and monitoring events will be documented and reported semiannually.

FIGURES



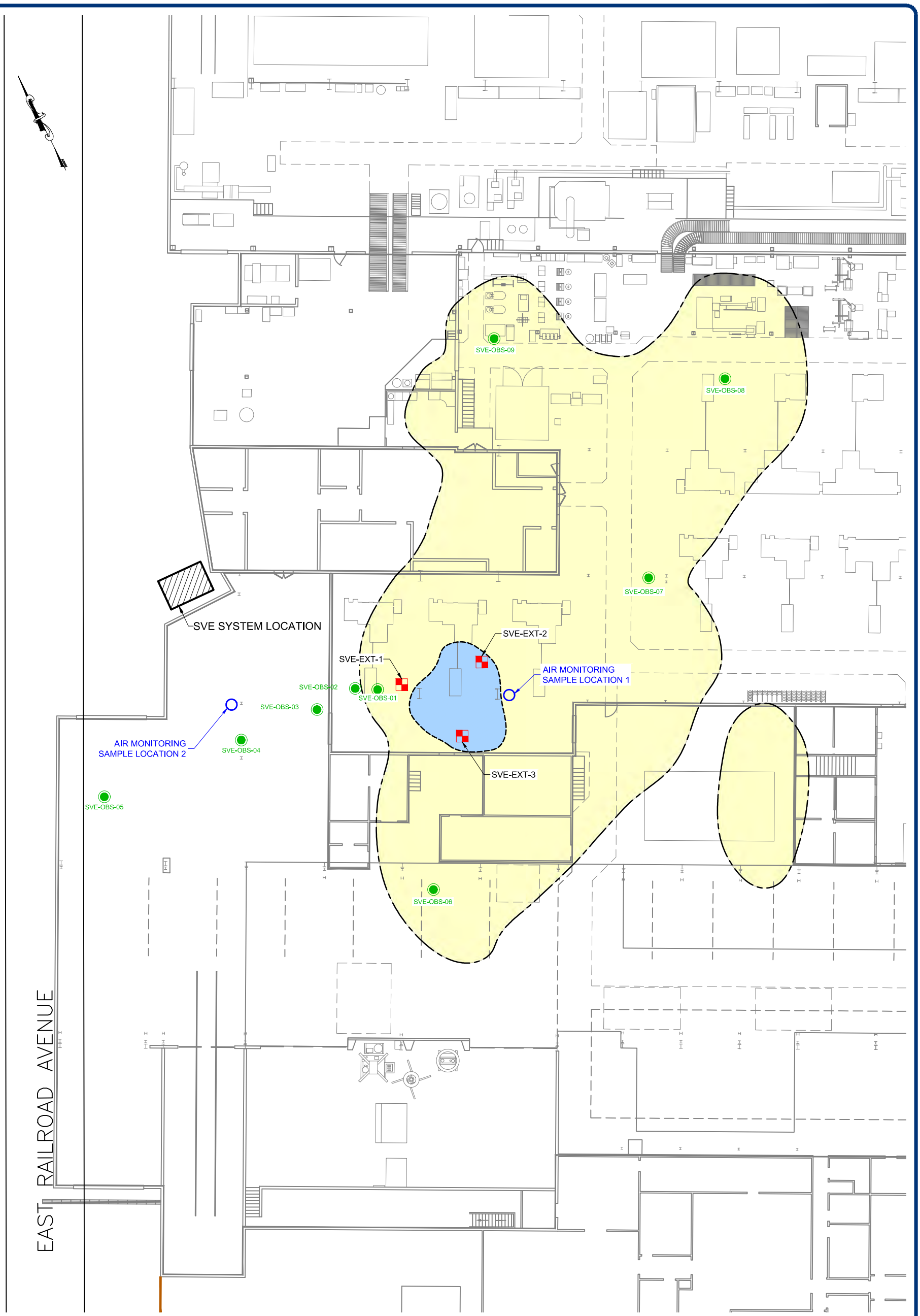
MONITOR WELL LOCATIONS WELL LAYOUT

FORMER KUHLMAN ELECTRIC FACILITY
CRYSTAL SPRINGS, MS

DATE: 3/17/2022	APPROVED: BY: CC DATE: 3/17/2022	DRAWN BY: KRK
SCALE: AS SHOWN		PROJECT NO. KUH0-21-012

ENVIRONMENTAL MANAGEMENT SERVICES, INC.

FIGURE 1



LEGEND

- KEC BUILDING FOOTPRINT
- SVE OBSERVATION WELLS
- SVE EXTRACTION WELLS
- AMBIENT AIR SAMPLE LOCATIONS
- 1,1-DICHLOROETHENE IN SOIL EXCEEDING UNRESTRICTED TIER 1 TRG (0.0772 mg/kg)
- 1,4-DIOXANE IN SOIL EXCEEDING UNRESTRICTED TIER 1 TRG (58.1 mg/kg)

SCALE 1 INCH = 25 FEET

5 10 25

0 5 10 15 20 25 50

NOTES:

1) SOIL CONCENTRATIONS ARE BASED ON EXTENT AS DEFINED IN CORRECTIVE ACTION PLAN, ARCADIS, MARCH 2010.
2) SVE-OBS-06 WAS PLUGGED AND ABANDONED ON FEBRUARY 24, 2020.

SVE SYSTEM LAYOUT

FORMER KUHLMAN ELECTRIC FACILITY
CRYSTAL SPRINGS, MS

DATE: 3/17/2022	APPROVED: BY: CC DATE: 3/17/2022	DRAWN BY: KRK/LMM
SCALE: AS SHOWN		CAD NO. KUH0-21-012

ENVIRONMENTAL MANAGEMENT SERVICES, INC.

FIGURE 2

Figure 3
MW-35 Contaminant Concentrations
Through September 2021

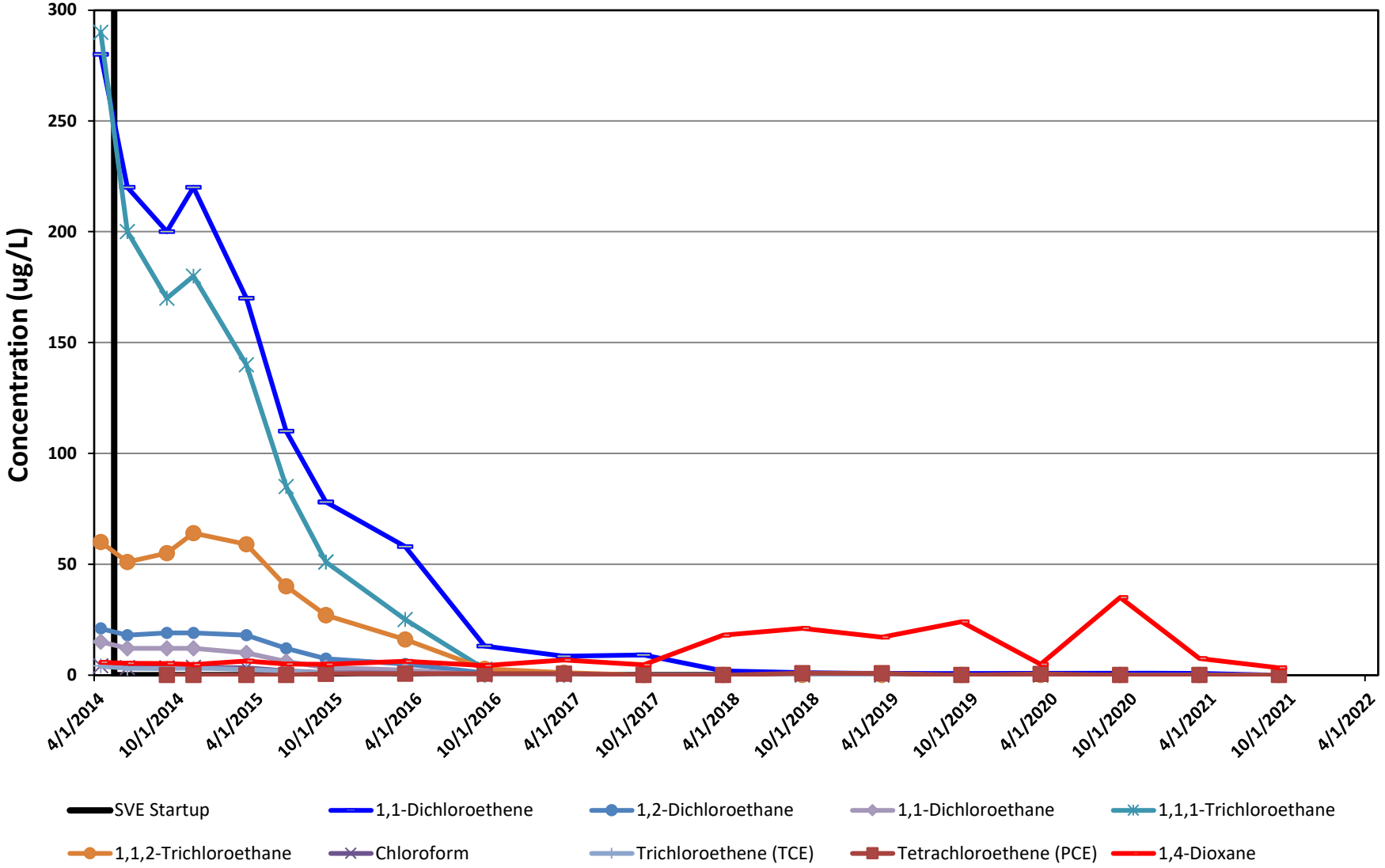


Figure 4
1,1,1-Trichloroethane Cumulative Mass Removal
Through December 2021

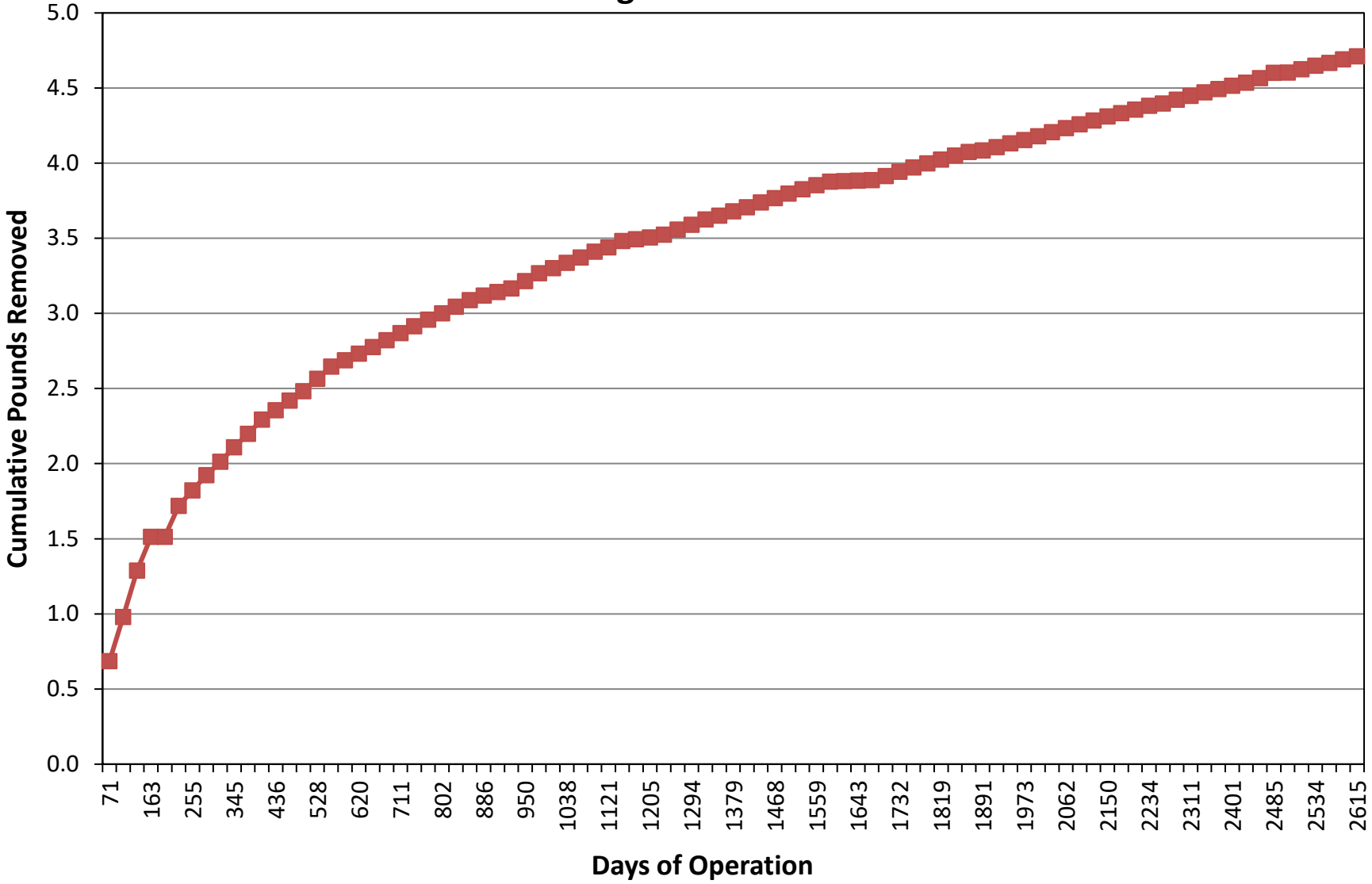


Figure 5
1,1-Dichloroethene Cumulative Mass Removal
Through December 2021

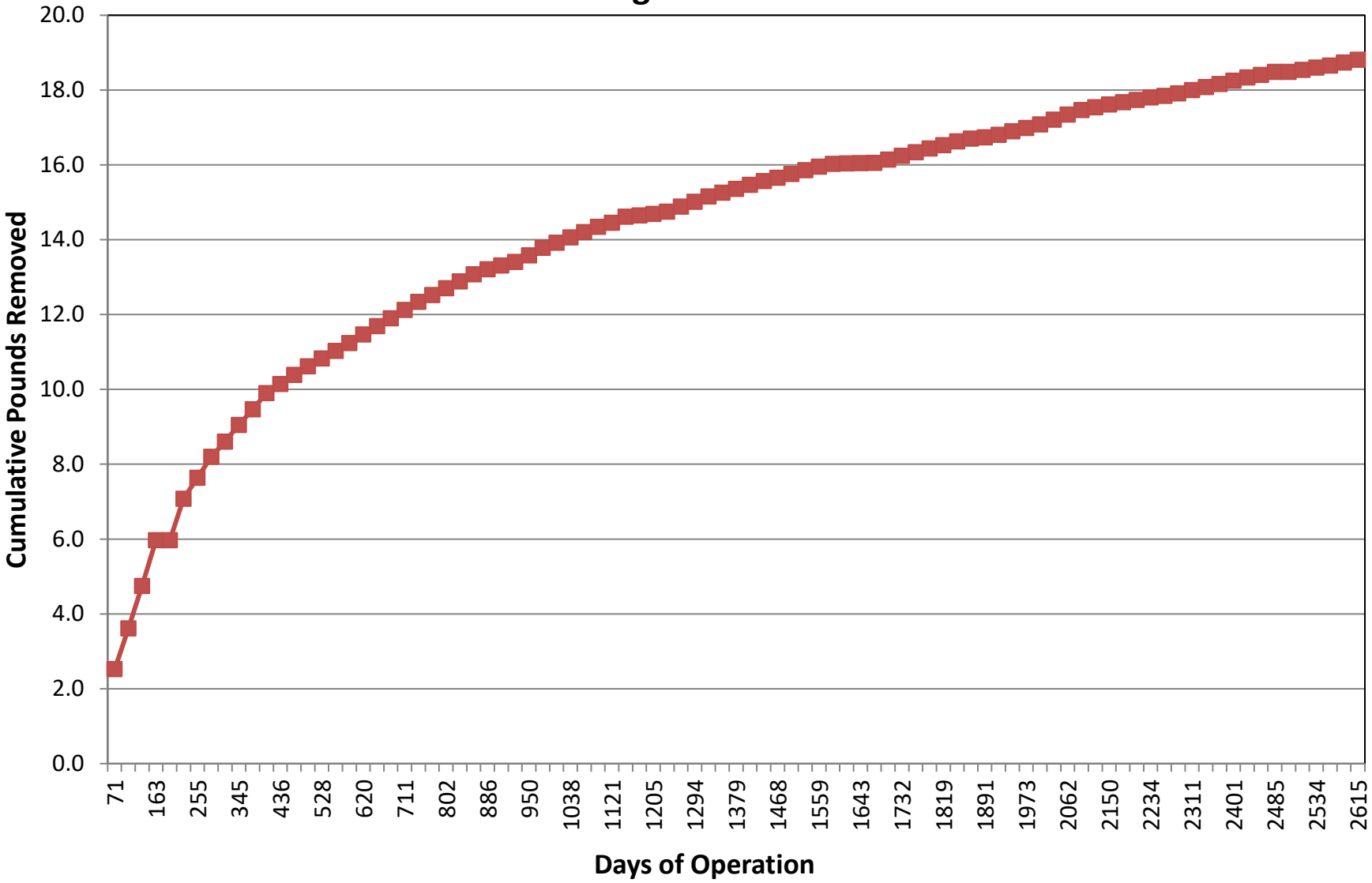


Figure 6
1,4-Dioxane Cumulative Mass Removal
Through December 2021

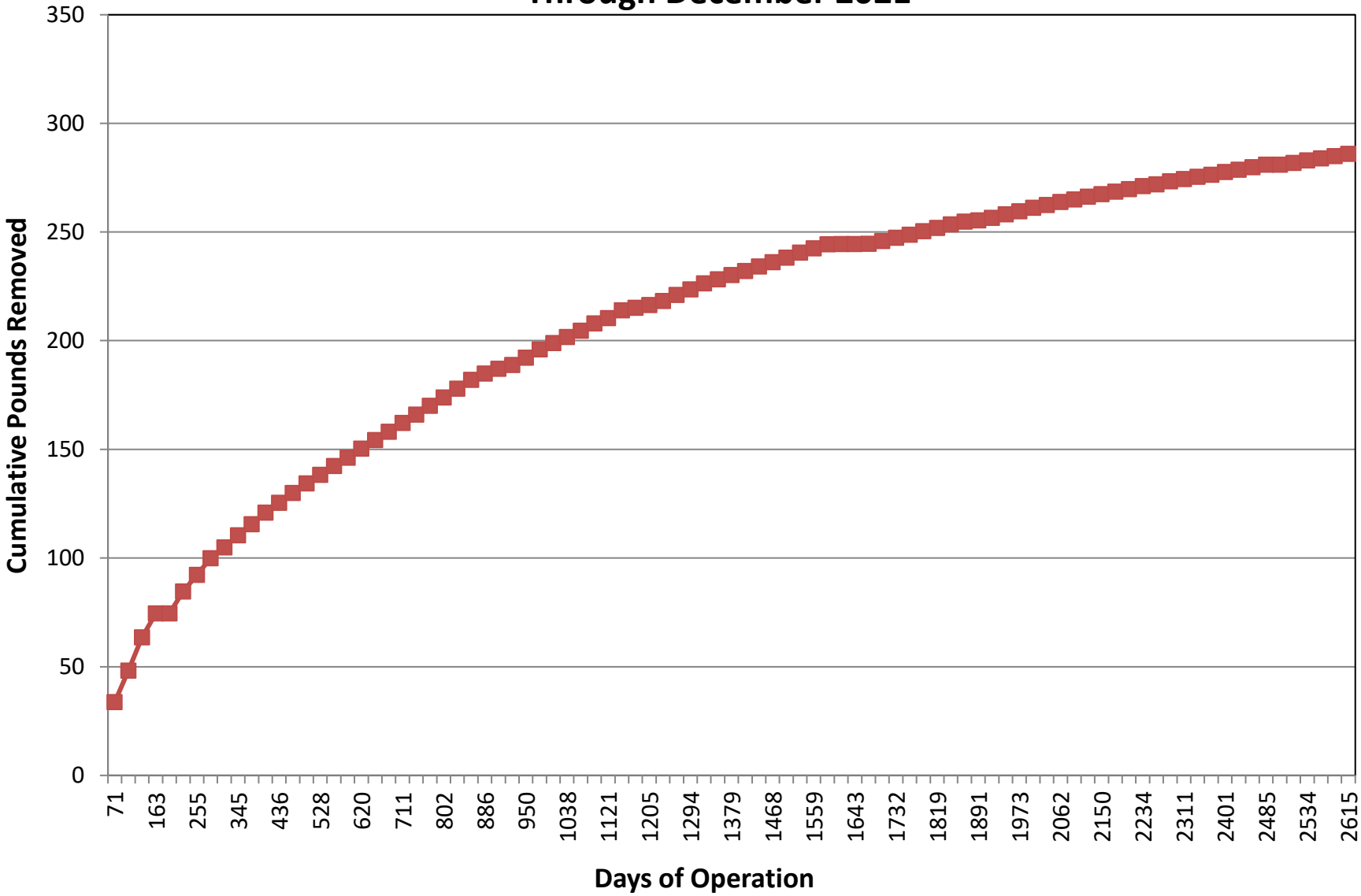
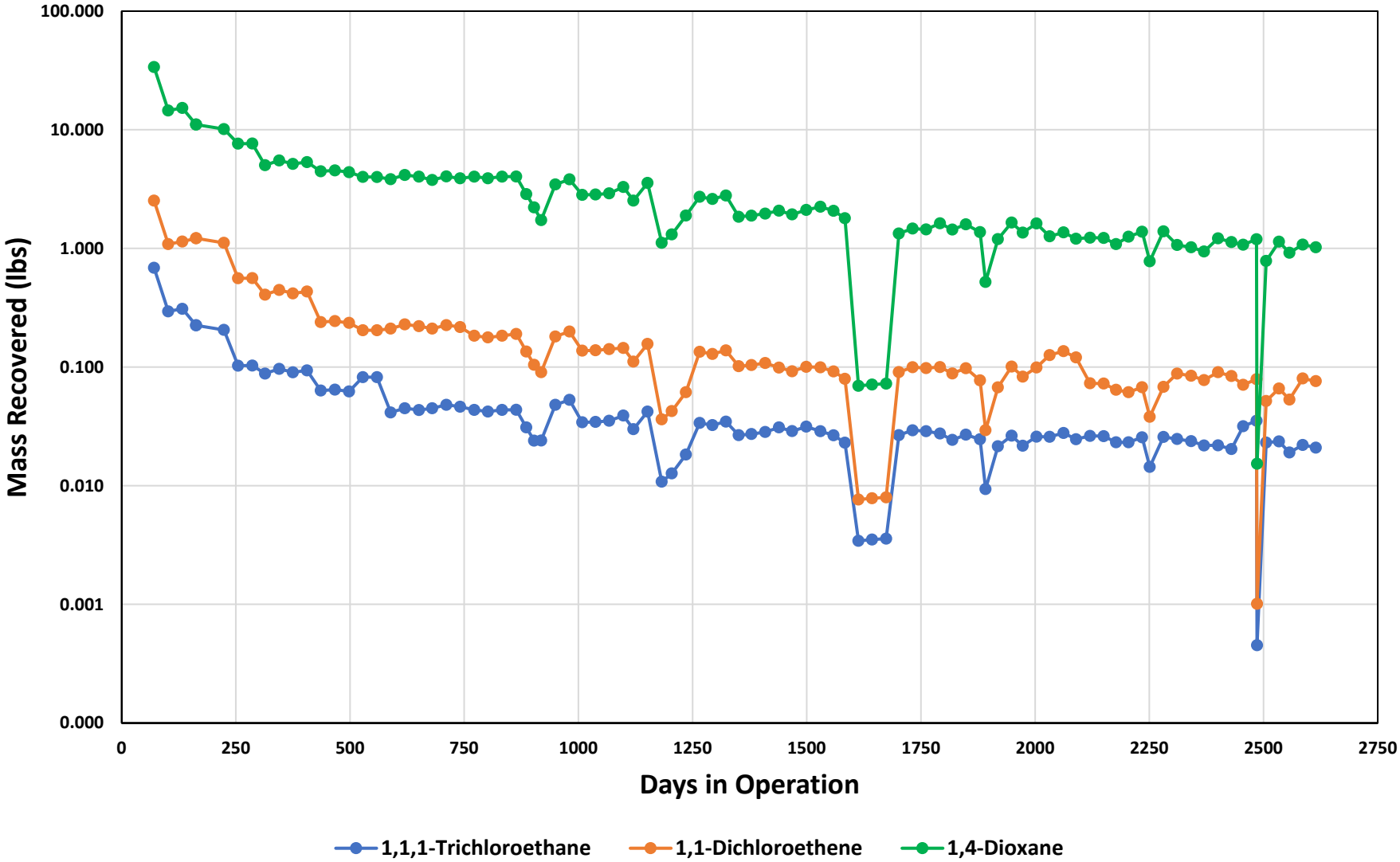


Figure 7
Mass Recovered Per Sampling Period
Through December 2021



TABLES

TABLE 1
GROUNDWATER ANALYTICAL RESULTS SUMMARY

SVE 2nd Semiannual Sampling 2021
Kuhlman Electric Corporation
Crystal Springs, MS

		MW-35	MW-10A	MW-10B	MW-10C	MW-30	MW-31
Constituent	**MDEQ Tier I TRG ***	**KEP-GW-035-019**	**KEP-GW-010A-039**	**KEP-GW-010B-039**	**KEP-GW-010C-039**	**KEP-GW-030-025**	**KEP-GW-031-025**
Sample Date		**9/22/2021**	**9/21/2021**	**9/21/2021**	**9/21/2021**	**9/20/2021**	**9/21/2021**
1,1,1-Trichloroethane (TCA)	200	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	798	<0.5	0.6	<0.5	<0.5	<0.5	<0.5
1,1-Dichloroethene (DCE)	**7.0**	<0.5	**13**	4.1	<0.5	1.1	1.4
1,2-Dichloroethane (EDC)	5.0	<0.5	0.57	<0.5	<0.5	<0.5	<0.5
1,4-Dioxane	**6.09**	3.3	**52**	**16**	<0.4	0.43	5.3
Chloroform**	0.155	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Tetrachloroethene (PCE)	5.0	<0.5	<0.5	<0.5	0.67	<0.5	<0.5
Trichloroethene (TCE)	5.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Notes:

All results/standards in units of μg/l - micrograms per liter

Bold indicates an exceedance

** MDEQ Target Remediation Goals (TRGs) for Groundwater*

*** Although the MDEQ risk based TRG for chloroform is 0.155 ug/L, the EPA Maximum Contamiant Level for Total Trihalomethanes is 80 ug/L with an individual MCL of 70 ug/L for chloroform.*

TABLE 2
OBSERVATION WELL RELATIVE VOC CONCENTRATIONS RESULTS SUMMARY

SVE 2nd Semiannual Sampling 2021
Kuhlman Electric Corporation
Crystal Springs, MS

OBSERVATION WELL PID RESULTS SUMMARY

Sample Date	SVE-OBS-1	SVE-OBS-2	SVE-OBS-3	SVE-OBS-4	SVE-OBS-5	SVE-OBS-7	SVE-OBS-8	SVE-OBS-9
9/16/2021	0.2	0.0	0.0	0.0	0.0	0.2	0.0	0.0
12/29/2021	0.2	0.3	0.3	0.4	0.2	0.1	0.1	0.1

OBSERVATION WELL FID RESULTS SUMMARY

Sample Date	SVE-OBS-1	SVE-OBS-2	SVE-OBS-3	SVE-OBS-4	SVE-OBS-5	SVE-OBS-7	SVE-OBS-8	SVE-OBS-9
9/16/2021	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12/29/2021	0.0	0.0	0.0	0.0	0.0	0.0	30.0	3.0

Notes:
All results in units of ppm - parts per million
SVE-OBS-6 has been plugged and abandoned

TABLE 3
OBSERVATION WELL SOIL VAPOR ANALYTICAL RESULTS SUMMARY

SVE 2nd Semiannual Sampling 2021
Kuhlman Electric Corporation
Crystal Springs, MS

Compound	SVE-OBS-1		SVE-OBS-2		SVE-OBS-3		SVE-OBS-4	
Sample Date	**9/16/2021**	**12/29/2021**	**9/16/2021**	**12/29/2021**	**9/16/2021**	**12/29/2021**	**9/16/2021**	**12/29/2021**
1,1,1-Trichloroethane	0.32 J	0.86	0.083 J	0.31 J	0.1 J	0.29 J	0.13 J	0.24 J
1,1,2-Trichloroethane	<0.38	<0.48	<0.38	<0.37	<0.43	<0.36	<0.36	<0.38
1,1-Dichloroethane	<0.52	<0.66	<0.53	<0.5	<0.59	<0.5	<0.49	<0.52
1,1-Dichloroethene	<0.54	0.76	<0.55	0.27 J	<0.61	0.86	<0.51	<0.54
1,2-Dichloroethane	<0.52	<0.66	<0.53	<0.5	0.12 J	<0.5	<0.49	<0.52
1,4-Dioxane	0.087 J	0.095 J	<0.58	<0.56	<0.65	0.26 J	<0.54	<0.57
Carbon Tetrachloride	0.066 J	<0.4	0.049 J	0.055 J	<0.36	0.052 J	0.057 J	0.052 J

Compound	SVE-OBS-5		SVE-OBS-7		SVE-OBS-8		SVE-OBS-9	
Sample Date	**9/16/2021**	**12/29/2021**	**9/16/2021**	**12/29/2021**	**9/16/2021**	**12/29/2021**	**9/16/2021**	**12/29/2021**
1,1,1-Trichloroethane	<0.38	0.18 J	1.2	0.39	1.2	2.2	0.8	0.75
1,1,2-Trichloroethane	<0.38	<0.45	<0.38	0.26 J	<0.26	<0.35	<0.24	<0.37
1,1-Dichloroethane	<0.52	<0.62	0.24 J	1.1	0.91	1.4	<0.33	<0.51
1,1-Dichloroethene	<0.55	<0.64	1.6	80	16	32	0.56	0.71
1,2-Dichloroethane	0.067 J	<0.62	<0.52	0.23 J	<0.35	0.28 J	<0.33	<0.51
1,4-Dioxane	0.14 J	<0.68	0.22 J	<0.56	<0.39	0.29 J	0.081 J	0.093 J
Carbon Tetrachloride	0.059 J	<0.37	0.063 J	0.1 J	0.032 J	0.057 J	0.043 J	0.058 J

Notes:

All results in units of ppb - parts per billion

SVE-OBS-6 has been plugged and abandoned

TABLE 4
SVE SYSTEM RELATIVE VOC CONCENTRATION MONITORING SUMMARY

SVE 2nd Semiannual Sampling 2021
Kuhlman Electric Corporation
Crystal Springs, MS

Sample Date	Pre Carbon	Carbon Unit 1	Carbon Unit 2
	PID ppm		
9/30/2021	0.1	0.3	0.2
12/14/2021	0.2	0.1	0.1

Sample Date	Pre Carbon	Carbon Unit 1	Carbon Unit 2
	FID ppm		
9/30/2021	0.0	0.0	0.0
12/14/2021	0.0	0.0	0.0

Notes:
All results in units of ppm - parts per million

TABLE 5
SVE SYSTEM EXHAUST ANALYTICAL SUMMARY

SVE 2nd Semiannual Sampling 2021
Kuhlman Electric Corporation
Crystal Springs, MS

Compound	Pre Carbon		Post Carbon 1		Post Carbon 2	
Sample Date	**9/30/2021**	**12/14/2021**	**9/30/2021**	**12/14/2021**	**9/30/2021**	**12/14/2021**
1,1,1-Trichloroethane	28	25	3.4	<2	<2.1	<2
1,1,2-Trichloroethane	0.81J	0.74J	<2.3	<2	<2.1	<2
1,1-Dichloroethane	2.2J	2.2	3.1	<2.1	<2.1	<2.1
1,1-Dichloroethene	79	92B	84	<2.1	63	<2.1
1,2-Dichloroethane	0.35J	0.38J	<2.3	<2.1	<2.1	<2.1
1,4-Dioxane	1400D	1200D	930D	130	11	3.1

Notes:

Results are in µg/m^3

D = The reported result is from a dilution.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

TABLE 6
SVE SYSTEM WELL FLOW RATE SUMMARY

SVE 2nd Semiannual Sampling 2021
Kuhlman Electric Corporation
Crystal Springs, MS

Date	SVE-EXT-1	SVE-EXT-2	SVE-EXT-3
	Flow Rate SCFM		
7/6/2021	94.0	NM	NM
8/17/2021	109.8	75.0	106.1
9/16/2021	113.4	77.7	126.8
9/30/2021	113.4	72.3	126.8
10/13/2021	113.4	75.0	126.8
11/3/2021	113.4	72.3	126.8
11/27/2021	120.3	80.2	133.0
12/14/2021	113.4	69.5	126.8

Notes:
NM - Not Measured
Measuring equipment was damaged during the July sampling event.

TABLE 7
QUARTERLY AMBIENT AIR MONITORING

SVE 2nd Semiannual Sampling 2021
Kuhlman Electric Corporation
Crystal Springs, MS

Contaminant	OCCUPATIONAL STANDARDS			Air Mon 01-42	Air Mon 02-42	Air Mon 03-08	Air Mon 01-43	Air Mon 02-43	Air Mon 03-09
Sample Date	OSHA	ACGIH	NIOSH	9/30/2021			12/13/2021		
1,1,1-Trichloroethane	1900000	1900000	1900000	<2.4	<2.4	<2.7	<2.4	<2.4	<2.3
1,1,2-Trichloroethane	45000	45000	45000	<2.4	<2.4	<2.7	<2.4	<2.4	<2.3
1,1-Dichloroethane	400000	400000	400000	<2.4	<2.5	<2.8	<2.5	<2.5	<2.3
1,1-Dichloroethene		19800		<2.5	<2.5	<2.8	<2.5	<2.5	<2.3
1,2-Dichloroethane	40450	40450	4000	<2.4	<2.5	<2.8	<2.5	<2.5	0.38 J
1,4-Dioxane	360000	72000		0.83 J	<2.4	0.41 J	<2.4	<2.4	<2.3
Carbon Tetrachloride	63000	31000	12600	0.39 J	0.42 J	0.41 J	0.44 J	0.44 J	0.39 J
1,2,4-Trichlorobenzene			40000	<5	<5.2	<5.8	<5.1	<5.1	<4.8
1,2,4-Trimethylbenzene		125000	125000	17	23	0.88 J	7.5	18	0.87 J
1,3,5-Trimethylbenzene		125000	125000	4.9	6.8	<2.7	2 J	5	<2.3
2-Butanone (MEK)	590000	590000	590000	34	34	4.4 J	33	30	15
2-Hexanone	410000	20480	4000	0.84 J	<5.2	<5.8	4.5 J	<5.1	0.57 J
2-Propanol (Isopropyl Alcohol)	980000	980000	980000	42	51	4.6 J	26	11	9.4
4-Ethyltoluene				4.2	5.5	<2.8	2 J	4.1	<2.3
4-Methyl-2-pentanone	410000	205000	205000	9.4	7	0.47 J	6.6	5.5	1.8 J
Acetone	2400000	1200000	590000	250	510	25 J	220	420	34
Acetonitrile	70000	70000	34000	0.87 J	<4.7	<5.3	<4.6	<4.6	0.74 J
Acrolein	250	0	250	1.7 J	0.75 J	1.5 J	2 J	1.2 J	0.87 J
Acrylonitrile	4340	4340	2170	1.3 J	<4.7	<5.3	<4.6	<4.6	<4.4
alpha-Pinene	556000	111000	556000	11	5.2	6.7	12 V	5.9 V	4.6 V
Benzene	3200	1600	320	0.64 J	1.6 J	<2.6	1.1 J	1.1 J	0.89 J
Carbon Disulfide	60000	30000	3000	3.1 J	1.1 J	14	<5.1	<5.1	4 J
Chloroethane	2600000	263700		0.39 J	<2.4	<2.7	<2.4	<2.4	<2.2
Chloromethane	207000	103000		1.1 J	1 J	1.2 J	0.99 J	0.95 J	0.84 J
Cumene	245000	245000	245000	0.86 J	1.2 J	<2.7	0.73 J	1.5 J	<2.3
Cyclohexane	1050000	344000	1050000	<5	2.1 J	<5.8	<5.1	<5.1	<4.8
Dichlorodifluoromethane (CFC 12)	4950000	4950000	4950000	2.1 J	2.1 J	2.2 J	2.6	2.4 J	2.5
d-Limonene				10	3	5	12	5.3	3.6
Ethanol	1900000	1900000	1900000	960	440	55	470	200	52
Ethyl Acetate	1400000	1400000	1400000	9.3 J	4.4 J	1.8 J	6.8 J	5.1 J	29
Ethylbenzene	435000	435000	435000	20	35	0.77 J	18	53	2.3
m,p-Xylenes	435000	435000	435000	79	160	2.3 J	72	230	8.2
Methylene Chloride	87000	174000		<2.4	<2.4	<2.7	<2.4	<2.4	0.74 J
Naphthalene	50000	50000	50000	1.7 J	3.9	<2.7	3.9	4.8	<2.3
n-Butyl Acetate	710000	710000	710000	7.4	20	0.95 J	8.5	13	7.2
n-Heptane	2000000	1640000	350000	2 J	4.3	<2.8	2.6	2.2 J	0.85 J
n-Hexane	1800000	180000	180000	2.3 J	2.4 J	<2.8	<2.5	<2.5	<2.3
n-Nonane		1050000	1050000	0.97 J	2.1 J	<2.7	2.7	2.7	0.78 J
n-Octane	2350000	1400000	350000	0.57 J	3.1	<2.8	1.5 J	2 J	0.66 J
n-Propylbenzene				3.2	4.1	<2.8	<2.5	3.8	<2.3
o-Xylene	435000	435000	435000	25	47	0.77 J	21	65	2.6
Propene				1500 D	140	4.9	940 D	150	<2.3

TABLE 7
QUARTERLY AMBIENT AIR MONITORING

SVE 2nd Semiannual Sampling 2021
Kuhlman Electric Corporation
Crystal Springs, MS

Contaminant	OCCUPATIONAL STANDARDS			Air Mon 01-42	Air Mon 02-42	Air Mon 03-08	Air Mon 01-43	Air Mon 02-43	Air Mon 03-09
Sample Date	**OSHA**	**ACGIH**	**NIOSH**	**9/30/2021**			**12/13/2021**		
Styrene	425000	85200	215000	1.7 J	1.5 J	0.86 J	1 J	1 J	<2.2
Tetrachloroethene	678000	169500		5.3	0.4 J	<2.7	<2.4	0.62 J	2.5
Tetrahydrofuran (THF)	590000	590000	590000	0.66 J	0.86 J	0.93 J	14	37	1.7 J
Toluene	750000	188000	375000	34	31	1.6 J	34	17	12
Trichloroethene	537000	268500		<2.4	<2.4	<2.7	<2.4	<2.4	<2.3
Trichlorofluoromethane (CFC 11)	5600000		5600000	1.1 J	1 J	1 J	1.2 J	1.2 J	1.2 J
Trichlorotrifluoroethane (CFC 113)	7600000	7600000	7600000	0.45 J	0.44 J	0.4 J	0.51 J	0.5 J	0.48 J
Vinyl Acetate		35000	15000	6.8 J	<24	7.9 J	<23	<23	<22

Notes:

All results/standards are in $\mu g/m^3$

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

D = The reported result is from a dilution.

V = The continuing calibration verification standard was outside (biased low) the specified limits for this compound.

TABLE 8
OBSERVATION WELL VACUUM RESPONSE SUMMARY

SVE 2nd Semiannual Sampling 2021
Kuhlman Electric Corporation
Crystal Springs, MS

Date	SVE-OBS-1	SVE-OBS-2	SVE-OBS-3	SVE-OBS-4	SVE-OBS-5	SVE-OBS-7	SVE-OBS-8	SVE-OBS-9
Distance* (feet)	**5**	**10**	**20**	**40**	**80**	**50**	**95**	**80**
8/13/2021	-16.6	-10.3	-8.95	-3.4	NM**	-6.3	-0.2	-2.7
12/14/2021	-15.13	-9.29	-7.86	-2.79	-1.36	-5.45	-0.23	-2.38

Notes:

** Distance to the nearest extraction well*

*** Access to SVE-OBS-5 was blocked during the August sampling event.*

Vacuum readings are in inches of water.

APPENDIX A

OBSERVATION WELL SOIL VAPOR LABORATORY ANALYTICAL RESULTS

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
www.alsglobal.com

LABORATORY REPORT

October 22, 2021

Collin Creel
Environmental Management Services, Inc.
PO Box 15369
Hattiesburg, MS 39402

RE: SVE Performance Monitoring / KUH0-21-010

Dear Collin:

Enclosed are the results of the samples submitted to our laboratory on October 4, 2021. For your reference, these analyses have been assigned our service request number P2105213.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

By Sue Anderson at 2:44 pm, Oct 22, 2021

Sue Anderson
Project Manager

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
www.alsglobal.com

Client: Environmental Management Services, Inc. Service Request No: P2105213
Project: SVE Performance Monitoring / KUH0-21-010

CASE NARRATIVE

The samples were received intact under chain of custody on October 4, 2021 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Volatile Organic Compound Analysis

The samples were analyzed for volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. This procedure is described in laboratory SOP VOA-TO15. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. This method is included on the laboratory's NELAP and DoD-ELAP scope of accreditation. Any analytes flagged with an X are not included on the NELAP or DoD-ELAP accreditation.

Some of the duplicate Relative Percent Difference (RPD) recoveries exceeded the acceptance critieria. All other quality controls were acceptable. The data has been flagged accordingly.

The containers were cleaned, prior to sampling, down to the method reporting limit (MRL) reported for this project. For projects requiring DoD QSM 5.3 compliance canisters were cleaned to <1/2 the MRL. Please note, projects which require reporting below the MRL could have results between the MRL and method detection limit (MDL) that are biased high.

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www.alsglobal.com

ALS Environmental – Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
Alaska DEC	http://dec.alaska.gov/eh/lab.aspx	17-019
Arizona DHS	http://www.azdhs.gov/preparedness/state-laboratory/lab-licensure-certification/index.php#laboratory-licensure-home	AZ0694
Florida DOH (NELAP)	http://www.floridahealth.gov/licensing-and-regulation/environmental-laboratories/index.html	E871020
Louisiana DEQ (NELAP)	http://www.deq.louisiana.gov/page/la-lab-accreditation	05071
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/professionals/labCert.shtml	2018027
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	1776326
New Jersey DEP (NELAP)	http://www.nj.gov/dep/enforcement/oqa.html	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://www.oregon.gov/oha/ph/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	4068-008
Pennsylvania DEP	http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx	68-03307 (Registration)
PJLA (DoD ELAP)	http://www.pjlabs.com/search-accredited-labs	65818 (Testing)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/agency/qa/env_lab_accreditation.html	T104704413-19-10
Utah DOH (NELAP)	http://health.utah.gov/lab/lab_cert_env	CA016272019-10
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: Environmental Management Services, Inc. Service Request: P2105213

Project ID: SVE Performance Monitoring / KUH0-21-010

Date Received: 10/4/2021

Time Received: 09:30

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pfl (psig)	TO-15 - VOC Cans
SVE-OBS-01	P2105213-001	Air	9/16/2021	12:26	1SC00812	-0.84	7.31	X
SVE-OBS-02	P2105213-002	Air	9/16/2021	12:34	1SC00723	-1.22	7.01	X
SVE-OBS-03	P2105213-003	Air	9/16/2021	12:38	1SC00441	-2.39	7.41	X
SVE-OBS-04	P2105213-004	Air	9/16/2021	12:45	1SC01196	-0.42	6.85	X
SVE-OBS-05	P2105213-005	Air	9/16/2021	12:53	1SS00747	-0.78	7.52	X
SVE-OBS-07	P2105213-006	Air	9/16/2021	13:08	1SC00008	-0.79	7.27	X
SVE-OBS-08	P2105213-007	Air	9/16/2021	13:14	1SC00886	-1.10	7.34	X
SVE-OBS-09	P2105213-008	Air	9/16/2021	13:20	1SS01224	-0.35	7.24	X
SVE-EXT-01	P2105213-009	Air	9/16/2021	14:00	1SC00449	-0.95	7.19	X
SVE-EXT-02	P2105213-010	Air	9/16/2021	14:08	1SC00586	-0.59	7.40	X
SVE-EXT-03	P2105213-011	Air	9/16/2021	14:13	1SS01129	-3.80	7.49	X

Air - Chain of Custody Record & Analytical Service Request

Page 1 of 1

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) (10 Day-Standard)

ALS Project No. P2105213

Company Name & Address (Reporting Information)	EMS, Inc. PO Box 15369 Hattiesburg, MS 39404
Project Name	SVE Performance Monitoring
Project Number	KUHO-21-010
Project Manager	Collin Creel
P.O. # / Billing Information	KUHO-21-010/Same as reporting
Phone	9855160142
Fax	
Email Address for Result Reporting	ccreel@env-mgt.com
Sampler (Print & Sign)	Collin Creel
ALS Contact:	

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	Analysis Method: TO-15		Comments e.g. Actual Preservative or specific instructions
SVE-OBS-01	1	9/16/21	12:26	1SC00812		-30	0	1L	X		
SVE-OBS-02	2	9/16/21	12:34	1SC00723		-30	0	1L	X		
SVE-OBS-03	3	9/16/21	12:38	1SC00441		-30	0	1L	X		
SVE-OBS-04	4	9/16/21	12:45	1SC01196		-30	0	1L	X		
SVE-OBS-05	5	9/16/21	12:53	1SC00747		-28	0	1L	X		
SVE-OBS-07	6	9/16/21	13:08	1SC00008		-30	0	1L	X		
SVE-OBS-08	7	9/16/21	13:15	1SC00886		-27	0	1L	X		
SVE-OBS-09	8	9/16/21	13:20	1SC01224		-30	0	1L	X		
SVE-EXT-01	9	9/16/21	14:00	1SC00449		-28	0	1L	X		
SVE-EXT-02	10	9/16/21	14:08	1SC00586		-25	0	1L	X		
SVE-EXT-03	11	9/16/21	14:13	1SC01129		-29	0	1L	X		

Report Tier Levels - please select

Tier I - Results (Default if not specified) ____ Tier III (Results + QC & Calibration Summaries) ____
Tier II (Results + QC Summaries) ____ Tier IV (Data Validation Package) 10% Surcharge ____

EDD required Yes / No
Type: _____ Units: _____

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date: 9/17/21	Time: 11:00	Received by: (Signature) -Fed Ex-	Date:	Time:	
Relinquished by: (Signature) -Fed Ex-	Date:	Time:	Received by: (Signature)	Date: 10-1-21	Time: 0830	Cooler / Blank Temperature ____°C

5 of 52

ALS Environmental

Sample Acceptance Check Form

Client: Environmental Management Services, Inc. Work order: P2105213

Project: SVE Performance Monitoring / KUH0-21-010

Sample(s) received on: 10/4/21 Date opened: 10/4/21 by: DENISE.POSADA

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Did **sample containers** arrive in good condition?	☒	☐	☐
3	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
4	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
5	Was **sample volume** received adequate for analysis?	☒	☐	☐
6	Are samples within specified holding times?	☒	☐	☐
7	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
8	Were **custody seals** on outside of cooler/Box/Container?	☒	☐	☐
	Location of seal(s)? Box sealing. Sealing Lid?	☒	☐	☐
	Were signature and date included?	☒	☐	☐
	Were seals intact?	☒	☐	☐
9	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
10	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
11	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P2105213-001.01	1.0 L Source Can					
P2105213-002.01	1.0 L Source Can					
P2105213-003.01	1.0 L Source Can					
P2105213-004.01	1.0 L Source Can					
P2105213-005.01	1.0 L Source Silonite Canister					
P2105213-006.01	1.0 L Source Can					
P2105213-007.01	1.0 L Source Can					
P2105213-008.01	1.0 L Source Silonite Canister					
P2105213-009.01	1.0 L Source Can					
P2105213-010.01	1.0 L Source Can					
P2105213-011.01	1.0 L Source Silonite Canister					

Explain any discrepancies: (include lab sample ID numbers):

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-OBS-01** ALS Project ID: P2105213
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2105213-001

Test Code: EPA TO-15 Date Collected: 9/16/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 10/4/21
Analyst: Wida Ang Date Analyzed: 10/14/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes: 0.040 Liter(s)
Container ID: 1SC00812

Initial Pressure (psig): -0.84 Final Pressure (psig): 7.31

Canister Dilution Factor: 1.59

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	**550**	21	5.2	**320**	12	3.0	**D**
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.1**	2.1	0.35	**0.43**	0.43	0.070	
74-87-3	Chloromethane	**0.59**	2.0	0.34	**0.29**	0.98	0.17	**J**
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.1	0.33	ND	0.31	0.048	
75-01-4	Vinyl Chloride	ND	2.1	0.23	ND	0.81	0.089	
106-99-0	1,3-Butadiene	ND	2.1	0.35	ND	0.93	0.16	
74-83-9	Bromomethane	ND	2.0	0.29	ND	0.52	0.076	
75-00-3	Chloroethane	ND	2.0	0.26	ND	0.77	0.099	
64-17-5	Ethanol	**44**	20	1.5	**24**	11	0.78	
75-05-8	Acetonitrile	ND	4.0	0.52	ND	2.4	0.31	
107-02-8	Acrolein	**3.2**	4.0	0.60	**1.4**	1.7	0.26	**J**
67-64-1	Acetone	**21**	21	4.8	**8.8**	8.7	2.0	
75-69-4	Trichlorofluoromethane (CFC 11)	**1.1**	2.1	0.32	**0.20**	0.37	0.057	**J**
67-63-0	2-Propanol (Isopropyl Alcohol)	**4.0**	4.0	0.87	**1.6**	1.6	0.36	
107-13-1	Acrylonitrile	ND	4.0	0.44	ND	1.8	0.20	
75-35-4	1,1-Dichloroethene	ND	2.1	0.29	ND	0.54	0.074	
75-09-2	Methylene Chloride	ND	2.1	0.60	ND	0.60	0.17	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.1	0.29	ND	0.67	0.091	
76-13-1	Trichlorotrifluoroethane (CFC 113)	**0.53**	2.1	0.30	**0.069**	0.28	0.039	**J**
75-15-0	Carbon Disulfide	**10**	4.4	0.64	**3.3**	1.4	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	2.1	0.29	ND	0.53	0.074	
75-34-3	1,1-Dichloroethane	ND	2.1	0.31	ND	0.52	0.077	
1634-04-4	Methyl tert-Butyl Ether	ND	2.1	0.25	ND	0.58	0.069	
108-05-4	Vinyl Acetate	**9.5**	20	4.8	**2.7**	5.6	1.4	**J**
78-93-3	2-Butanone (MEK)	**11**	4.0	0.44	**3.8**	1.3	0.15	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
D = The reported result is from a dilution.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-OBS-01** ALS Project ID: P2105213
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2105213-001

Test Code: EPA TO-15 Date Collected: 9/16/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 10/4/21
Analyst: Wida Ang Date Analyzed: 10/14/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes: 0.040 Liter(s)
Container ID: 1SC00812

Initial Pressure (psig): -0.84 Final Pressure (psig): 7.31

Canister Dilution Factor: 1.59

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.1	0.30	ND	0.52	0.075	
141-78-6	Ethyl Acetate	**4.0**	8.3	1.1	**1.1**	2.3	0.31	**J**
110-54-3	n-Hexane	**6.0**	2.1	0.44	**1.7**	0.60	0.12	
67-66-3	Chloroform	ND	2.1	0.28	ND	0.44	0.058	
109-99-9	Tetrahydrofuran (THF)	**11**	4.0	0.27	**3.8**	1.3	0.090	
107-06-2	1,2-Dichloroethane	ND	2.1	0.23	ND	0.52	0.058	
71-55-6	1,1,1-Trichloroethane	**1.7**	2.1	0.26	**0.32**	0.38	0.048	**J**
71-43-2	Benzene	**0.34**	2.0	0.31	**0.11**	0.62	0.096	**J**
56-23-5	Carbon Tetrachloride	**0.41**	2.0	0.29	**0.066**	0.32	0.047	**J**
110-82-7	Cyclohexane	**1.6**	4.4	0.60	**0.47**	1.3	0.17	**J**
78-87-5	1,2-Dichloropropane	ND	2.0	0.26	ND	0.43	0.057	
75-27-4	Bromodichloromethane	ND	2.1	0.31	ND	0.31	0.046	
79-01-6	Trichloroethene	ND	2.1	0.29	ND	0.38	0.053	
123-91-1	1,4-Dioxane	**0.31**	2.1	0.25	**0.087**	0.57	0.070	**J**
80-62-6	Methyl Methacrylate	ND	4.4	0.76	ND	1.1	0.18	
142-82-5	n-Heptane	ND	2.1	0.34	ND	0.51	0.082	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.33	ND	0.44	0.073	
108-10-1	4-Methyl-2-pentanone	**1.5**	4.4	0.29	**0.37**	1.1	0.071	**J**
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.44	ND	0.45	0.096	
79-00-5	1,1,2-Trichloroethane	ND	2.1	0.21	ND	0.38	0.039	
108-88-3	Toluene	**14**	2.1	0.26	**3.8**	0.55	0.069	
591-78-6	2-Hexanone	ND	4.4	0.26	ND	1.1	0.064	
124-48-1	Dibromochloromethane	ND	2.1	0.28	ND	0.25	0.033	
106-93-4	1,2-Dibromoethane	ND	2.1	0.25	ND	0.27	0.032	
123-86-4	n-Butyl Acetate	**3.0**	4.4	0.29	**0.64**	0.92	0.061	**J**

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **SVE-OBS-01** ALS Project ID: P2105213

Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2105213-001

Test Code:	EPA TO-15	Date Collected:	9/16/21
Instrument ID:	Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16	Date Received:	10/4/21
Analyst:	Wida Ang	Date Analyzed:	10/14/21
Sample Type:	1.0 L Summa Canister	Volume(s) Analyzed:	0.40 Liter(s)
Test Notes:			0.040 Liter(s)
Container ID:	1SC00812		

Initial Pressure (psig): -0.84 Final Pressure (psig): 7.31

Canister Dilution Factor: 1.59

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	**0.63**	2.1	0.48	**0.14**	0.45	0.10	**J**
127-18-4	Tetrachloroethene	**2.8**	2.1	0.27	**0.41**	0.30	0.040	
108-90-7	Chlorobenzene	ND	2.1	0.28	ND	0.45	0.061	
100-41-4	Ethylbenzene	**4.1**	2.1	0.30	**0.95**	0.48	0.069	
179601-23-1	m,p-Xylenes	**16**	4.4	0.56	**3.6**	1.0	0.13	
75-25-2	Bromoform	ND	2.1	0.44	ND	0.20	0.042	
100-42-5	Styrene	**2.6**	2.0	0.34	**0.62**	0.47	0.080	
95-47-6	o-Xylene	**6.1**	2.1	0.31	**1.4**	0.48	0.070	
111-84-2	n-Nonane	**0.62**	2.1	0.35	**0.12**	0.39	0.067	**J**
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	0.29	ND	0.30	0.043	
98-82-8	Cumene	ND	2.1	0.31	ND	0.42	0.062	
80-56-8	alpha-Pinene	**1.9**	2.1	0.33	**0.35**	0.39	0.059	**J**
103-65-1	n-Propylbenzene	**0.92**	2.1	0.31	**0.19**	0.43	0.062	**J**
622-96-8	4-Ethyltoluene	**1.3**	2.1	0.34	**0.26**	0.43	0.069	**J**
108-67-8	1,3,5-Trimethylbenzene	**1.6**	2.1	0.31	**0.32**	0.42	0.062	**J**
95-63-6	1,2,4-Trimethylbenzene	**5.4**	2.1	0.29	**1.1**	0.42	0.060	
100-44-7	Benzyl Chloride	ND	4.4	0.48	ND	0.84	0.092	
541-73-1	1,3-Dichlorobenzene	ND	2.1	0.32	ND	0.34	0.053	
106-46-7	1,4-Dichlorobenzene	**0.39**	2.1	0.33	**0.065**	0.34	0.054	**J**
95-50-1	1,2-Dichlorobenzene	ND	2.1	0.31	ND	0.35	0.052	
5989-27-5	d-Limonene	**14**	2.0	0.44	**2.6**	0.36	0.079	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.0	0.40	ND	0.41	0.041	
120-82-1	1,2,4-Trichlorobenzene	ND	4.4	0.52	ND	0.59	0.070	
91-20-3	Naphthalene	**0.83**	2.1	0.52	**0.16**	0.39	0.099	**J**
87-68-3	Hexachlorobutadiene	ND	2.1	0.44	ND	0.19	0.041	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-OBS-02** ALS Project ID: P2105213
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2105213-002

Test Code: EPA TO-15 Date Collected: 9/16/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 10/4/21
Analyst: Wida Ang Date Analyzed: 10/14/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes: 0.040 Liter(s)
Container ID: 1SC00723

Initial Pressure (psig): -1.22 Final Pressure (psig): 7.01

Canister Dilution Factor: 1.61

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	**650**	21	5.2	**380**	12	3.0	**D**
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.1**	2.1	0.35	**0.42**	0.43	0.071	**J**
74-87-3	Chloromethane	**1.5**	2.1	0.35	**0.75**	0.99	0.17	**J**
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.2	0.34	ND	0.31	0.048	
75-01-4	Vinyl Chloride	ND	2.1	0.23	ND	0.82	0.090	
106-99-0	1,3-Butadiene	ND	2.1	0.35	ND	0.95	0.16	
74-83-9	Bromomethane	ND	2.1	0.30	ND	0.53	0.077	
75-00-3	Chloroethane	ND	2.1	0.27	ND	0.78	0.10	
64-17-5	Ethanol	**56**	20	1.5	**30**	11	0.79	
75-05-8	Acetonitrile	**0.83**	4.0	0.52	**0.49**	2.4	0.31	**J**
107-02-8	Acrolein	**3.7**	4.0	0.60	**1.6**	1.8	0.26	**J**
67-64-1	Acetone	**61**	21	4.8	**26**	8.8	2.0	
75-69-4	Trichlorofluoromethane (CFC 11)	**1.0**	2.1	0.33	**0.18**	0.37	0.058	**J**
67-63-0	2-Propanol (Isopropyl Alcohol)	**9.5**	4.0	0.89	**3.9**	1.6	0.36	
107-13-1	Acrylonitrile	ND	4.0	0.44	ND	1.9	0.20	
75-35-4	1,1-Dichloroethene	ND	2.2	0.30	ND	0.55	0.075	
75-09-2	Methylene Chloride	ND	2.1	0.60	ND	0.60	0.17	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.1	0.29	ND	0.68	0.093	
76-13-1	Trichlorotrifluoroethane (CFC 113)	**0.47**	2.2	0.31	**0.062**	0.28	0.040	**J**
75-15-0	Carbon Disulfide	**1.8**	4.4	0.64	**0.59**	1.4	0.21	**J**
156-60-5	trans-1,2-Dichloroethene	ND	2.1	0.30	ND	0.54	0.075	
75-34-3	1,1-Dichloroethane	ND	2.1	0.31	ND	0.53	0.078	
1634-04-4	Methyl tert-Butyl Ether	ND	2.1	0.25	ND	0.59	0.070	
108-05-4	Vinyl Acetate	**15**	20	4.8	**4.2**	5.7	1.4	**J**
78-93-3	2-Butanone (MEK)	**19**	4.0	0.44	**6.3**	1.4	0.15	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
D = The reported result is from a dilution.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-OBS-02** ALS Project ID: P2105213
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2105213-002

Test Code: EPA TO-15 Date Collected: 9/16/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 10/4/21
Analyst: Wida Ang Date Analyzed: 10/14/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes: 0.040 Liter(s)
Container ID: 1SC00723

Initial Pressure (psig): -1.22 Final Pressure (psig): 7.01

Canister Dilution Factor: 1.61

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.1	0.30	ND	0.53	0.076	
141-78-6	Ethyl Acetate	**25**	8.5	1.1	**6.9**	2.3	0.31	
110-54-3	n-Hexane	**6.0**	2.1	0.44	**1.7**	0.61	0.13	
67-66-3	Chloroform	ND	2.2	0.29	ND	0.45	0.059	
109-99-9	Tetrahydrofuran (THF)	**9.6**	4.0	0.27	**3.3**	1.4	0.091	
107-06-2	1,2-Dichloroethane	ND	2.1	0.24	ND	0.53	0.059	
71-55-6	1,1,1-Trichloroethane	**0.45**	2.1	0.27	**0.083**	0.38	0.049	**J**
71-43-2	Benzene	**0.52**	2.0	0.31	**0.16**	0.63	0.097	**J**
56-23-5	Carbon Tetrachloride	**0.31**	2.0	0.30	**0.049**	0.32	0.047	**J**
110-82-7	Cyclohexane	**1.7**	4.4	0.60	**0.50**	1.3	0.18	**J**
78-87-5	1,2-Dichloropropane	ND	2.0	0.27	ND	0.44	0.058	
75-27-4	Bromodichloromethane	ND	2.1	0.31	ND	0.32	0.046	
79-01-6	Trichloroethene	**1.2**	2.1	0.29	**0.22**	0.39	0.054	**J**
123-91-1	1,4-Dioxane	ND	2.1	0.25	ND	0.58	0.070	
80-62-6	Methyl Methacrylate	ND	4.4	0.76	ND	1.1	0.19	
142-82-5	n-Heptane	**0.74**	2.1	0.34	**0.18**	0.52	0.084	**J**
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.33	ND	0.44	0.074	
108-10-1	4-Methyl-2-pentanone	**2.8**	4.4	0.29	**0.68**	1.1	0.072	**J**
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	0.44	ND	0.45	0.098	
79-00-5	1,1,2-Trichloroethane	ND	2.1	0.22	ND	0.38	0.040	
108-88-3	Toluene	**24**	2.1	0.26	**6.4**	0.56	0.069	
591-78-6	2-Hexanone	ND	4.4	0.27	ND	1.1	0.065	
124-48-1	Dibromochloromethane	ND	2.1	0.28	ND	0.25	0.033	
106-93-4	1,2-Dibromoethane	ND	2.1	0.25	ND	0.27	0.032	
123-86-4	n-Butyl Acetate	**3.5**	4.4	0.29	**0.73**	0.93	0.062	**J**

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **SVE-OBS-02** ALS Project ID: P2105213

Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2105213-002

Test Code:	EPA TO-15	Date Collected:	9/16/21
Instrument ID:	Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16	Date Received:	10/4/21
Analyst:	Wida Ang	Date Analyzed:	10/14/21
Sample Type:	1.0 L Summa Canister	Volume(s) Analyzed:	0.40 Liter(s)
Test Notes:			0.040 Liter(s)
Container ID:	1SC00723		

Initial Pressure (psig): -1.22 Final Pressure (psig): 7.01

Canister Dilution Factor: 1.61

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	**0.76**	2.1	0.48	**0.16**	0.46	0.10	**J**
127-18-4	Tetrachloroethene	**3.1**	2.1	0.28	**0.46**	0.31	0.041	
108-90-7	Chlorobenzene	ND	2.1	0.29	ND	0.45	0.062	
100-41-4	Ethylbenzene	**4.8**	2.1	0.30	**1.1**	0.48	0.070	
179601-23-1	m,p-Xylenes	**18**	4.4	0.56	**4.2**	1.0	0.13	
75-25-2	Bromoform	ND	2.1	0.44	ND	0.20	0.043	
100-42-5	Styrene	**2.7**	2.0	0.35	**0.63**	0.47	0.081	
95-47-6	o-Xylene	**6.9**	2.1	0.31	**1.6**	0.48	0.071	
111-84-2	n-Nonane	**0.73**	2.1	0.36	**0.14**	0.40	0.068	**J**
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	0.30	ND	0.30	0.043	
98-82-8	Cumene	**0.33**	2.1	0.31	**0.068**	0.43	0.063	**J**
80-56-8	alpha-Pinene	**3.3**	2.2	0.33	**0.60**	0.39	0.059	
103-65-1	n-Propylbenzene	**1.0**	2.1	0.31	**0.20**	0.43	0.063	**J**
622-96-8	4-Ethyltoluene	**1.3**	2.1	0.34	**0.26**	0.43	0.070	**J**
108-67-8	1,3,5-Trimethylbenzene	**1.6**	2.1	0.31	**0.33**	0.43	0.063	**J**
95-63-6	1,2,4-Trimethylbenzene	**5.4**	2.1	0.30	**1.1**	0.43	0.061	
100-44-7	Benzyl Chloride	ND	4.4	0.48	ND	0.86	0.093	
541-73-1	1,3-Dichlorobenzene	ND	2.1	0.32	ND	0.35	0.054	
106-46-7	1,4-Dichlorobenzene	**0.36**	2.1	0.33	**0.060**	0.35	0.055	**J**
95-50-1	1,2-Dichlorobenzene	ND	2.1	0.32	ND	0.35	0.053	
5989-27-5	d-Limonene	**15**	2.0	0.44	**2.6**	0.36	0.079	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.0	0.40	ND	0.42	0.042	
120-82-1	1,2,4-Trichlorobenzene	ND	4.4	0.52	ND	0.60	0.071	
91-20-3	Naphthalene	**2.0**	2.1	0.52	**0.38**	0.40	0.10	**J**
87-68-3	Hexachlorobutadiene	ND	2.1	0.44	ND	0.20	0.042	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-OBS-03** ALS Project ID: P2105213
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2105213-003

Test Code: EPA TO-15 Date Collected: 9/16/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 10/4/21
Analyst: Wida Ang Date Analyzed: 10/14/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC00441

Initial Pressure (psig): -2.39 Final Pressure (psig): 7.41

Canister Dilution Factor: 1.80

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	**140**	2.3	0.59	**79**	1.4	0.34	
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.1**	2.4	0.39	**0.42**	0.48	0.079	**J**
74-87-3	Chloromethane	**1.1**	2.3	0.39	**0.52**	1.1	0.19	**J**
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.4	0.38	ND	0.35	0.054	
75-01-4	Vinyl Chloride	ND	2.3	0.26	ND	0.92	0.10	
106-99-0	1,3-Butadiene	ND	2.3	0.40	ND	1.1	0.18	
74-83-9	Bromomethane	ND	2.3	0.33	ND	0.59	0.086	
75-00-3	Chloroethane	**0.44**	2.3	0.30	**0.17**	0.87	0.11	**J**
64-17-5	Ethanol	**330**	23	1.7	**170**	12	0.88	
75-05-8	Acetonitrile	**2.2**	4.5	0.59	**1.3**	2.7	0.35	**J**
107-02-8	Acrolein	**3.7**	4.5	0.68	**1.6**	2.0	0.29	**J**
67-64-1	Acetone	**200**	23	5.4	**84**	9.9	2.3	
75-69-4	Trichlorofluoromethane (CFC 11)	**1.1**	2.3	0.36	**0.19**	0.42	0.065	**J**
67-63-0	2-Propanol (Isopropyl Alcohol)	**23**	4.5	0.99	**9.5**	1.8	0.40	
107-13-1	Acrylonitrile	ND	4.5	0.50	ND	2.1	0.23	
75-35-4	1,1-Dichloroethene	ND	2.4	0.33	ND	0.61	0.084	
75-09-2	Methylene Chloride	ND	2.3	0.68	ND	0.67	0.19	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.4	0.32	ND	0.76	0.10	
76-13-1	Trichlorotrifluoroethane (CFC 113)	**0.52**	2.4	0.34	**0.068**	0.32	0.045	**J**
75-15-0	Carbon Disulfide	**1.4**	5.0	0.72	**0.45**	1.6	0.23	**J**
156-60-5	trans-1,2-Dichloroethene	ND	2.4	0.33	ND	0.60	0.084	
75-34-3	1,1-Dichloroethane	ND	2.4	0.35	ND	0.59	0.087	
1634-04-4	Methyl tert-Butyl Ether	ND	2.4	0.28	ND	0.66	0.079	
108-05-4	Vinyl Acetate	**31**	23	5.4	**8.9**	6.4	1.5	
78-93-3	2-Butanone (MEK)	**80**	4.5	0.50	**27**	1.5	0.17	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-OBS-03** ALS Project ID: P2105213
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2105213-003

Test Code: EPA TO-15 Date Collected: 9/16/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 10/4/21
Analyst: Wida Ang Date Analyzed: 10/14/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC00441

Initial Pressure (psig): -2.39 Final Pressure (psig): 7.41

Canister Dilution Factor: 1.80

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.3	0.34	ND	0.59	0.085	
141-78-6	Ethyl Acetate	**570**	9.5	1.3	**160**	2.6	0.35	
110-54-3	n-Hexane	**3.4**	2.4	0.50	**0.97**	0.68	0.14	
67-66-3	Chloroform	**0.63**	2.4	0.32	**0.13**	0.50	0.065	**J**
109-99-9	Tetrahydrofuran (THF)	**9.9**	4.5	0.30	**3.4**	1.5	0.10	
107-06-2	1,2-Dichloroethane	**0.49**	2.4	0.27	**0.12**	0.59	0.066	**J**
71-55-6	1,1,1-Trichloroethane	**0.55**	2.3	0.30	**0.10**	0.43	0.054	**J**
71-43-2	Benzene	**2.9**	2.3	0.35	**0.90**	0.70	0.11	
56-23-5	Carbon Tetrachloride	ND	2.3	0.33	ND	0.36	0.053	
110-82-7	Cyclohexane	**2.4**	5.0	0.68	**0.71**	1.4	0.20	**J**
78-87-5	1,2-Dichloropropane	ND	2.3	0.30	ND	0.49	0.064	
75-27-4	Bromodichloromethane	ND	2.4	0.35	ND	0.36	0.052	
79-01-6	Trichloroethene	ND	2.3	0.32	ND	0.44	0.060	
123-91-1	1,4-Dioxane	ND	2.3	0.28	ND	0.65	0.079	
80-62-6	Methyl Methacrylate	ND	5.0	0.86	ND	1.2	0.21	
142-82-5	n-Heptane	**3.0**	2.4	0.38	**0.73**	0.58	0.093	
10061-01-5	cis-1,3-Dichloropropene	ND	2.3	0.37	ND	0.50	0.082	
108-10-1	4-Methyl-2-pentanone	**3.6**	5.0	0.33	**0.87**	1.2	0.080	**J**
10061-02-6	trans-1,3-Dichloropropene	ND	2.3	0.50	ND	0.51	0.11	
79-00-5	1,1,2-Trichloroethane	ND	2.3	0.24	ND	0.43	0.045	
108-88-3	Toluene	**69**	2.3	0.29	**18**	0.62	0.078	
591-78-6	2-Hexanone	**9.5**	5.0	0.30	**2.3**	1.2	0.073	
124-48-1	Dibromochloromethane	ND	2.4	0.32	ND	0.28	0.037	
106-93-4	1,2-Dibromoethane	ND	2.3	0.28	ND	0.30	0.036	
123-86-4	n-Butyl Acetate	**4.8**	5.0	0.33	**1.0**	1.0	0.069	**J**

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-OBS-03** ALS Project ID: P2105213
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2105213-003

Test Code: EPA TO-15 Date Collected: 9/16/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 10/4/21
Analyst: Wida Ang Date Analyzed: 10/14/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC00441

Initial Pressure (psig): -2.39 Final Pressure (psig): 7.41

Canister Dilution Factor: 1.80

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	**1.9**	2.4	0.54	**0.40**	0.51	0.12	**J**
127-18-4	Tetrachloroethene	**1.9**	2.3	0.31	**0.28**	0.35	0.046	**J**
108-90-7	Chlorobenzene	ND	2.3	0.32	ND	0.51	0.069	
100-41-4	Ethylbenzene	**4.2**	2.3	0.34	**0.96**	0.54	0.078	
179601-23-1	m,p-Xylenes	**14**	5.0	0.63	**3.1**	1.1	0.15	
75-25-2	Bromoform	ND	2.3	0.50	ND	0.23	0.048	
100-42-5	Styrene	**2.6**	2.3	0.39	**0.62**	0.53	0.091	
95-47-6	o-Xylene	**5.4**	2.3	0.35	**1.2**	0.54	0.080	
111-84-2	n-Nonane	**0.90**	2.3	0.40	**0.17**	0.45	0.076	**J**
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.3	0.33	ND	0.34	0.049	
98-82-8	Cumene	ND	2.3	0.35	ND	0.48	0.071	
80-56-8	alpha-Pinene	**5.3**	2.4	0.37	**0.95**	0.44	0.066	
103-65-1	n-Propylbenzene	**0.55**	2.4	0.35	**0.11**	0.49	0.071	**J**
622-96-8	4-Ethyltoluene	**0.59**	2.4	0.38	**0.12**	0.49	0.078	**J**
108-67-8	1,3,5-Trimethylbenzene	**0.77**	2.3	0.35	**0.16**	0.48	0.071	**J**
95-63-6	1,2,4-Trimethylbenzene	**2.0**	2.3	0.33	**0.41**	0.48	0.068	**J**
100-44-7	Benzyl Chloride	ND	5.0	0.54	ND	0.96	0.10	
541-73-1	1,3-Dichlorobenzene	ND	2.3	0.36	ND	0.39	0.060	
106-46-7	1,4-Dichlorobenzene	ND	2.3	0.37	ND	0.39	0.061	
95-50-1	1,2-Dichlorobenzene	ND	2.4	0.36	ND	0.40	0.059	
5989-27-5	d-Limonene	**5.7**	2.3	0.50	**1.0**	0.40	0.089	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.5	0.45	ND	0.47	0.047	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.59	ND	0.67	0.079	
91-20-3	Naphthalene	ND	2.3	0.59	ND	0.45	0.11	
87-68-3	Hexachlorobutadiene	ND	2.3	0.50	ND	0.22	0.046	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-OBS-04** ALS Project ID: P2105213
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2105213-004

Test Code: EPA TO-15 Date Collected: 9/16/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 10/4/21
Analyst: Wida Ang Date Analyzed: 10/14/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC01196

Initial Pressure (psig): -0.42 Final Pressure (psig): 6.85

Canister Dilution Factor: 1.51

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	**61**	2.0	0.49	**35**	1.1	0.29	
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.1**	2.0	0.33	**0.42**	0.40	0.066	
74-87-3	Chloromethane	**0.60**	1.9	0.32	**0.29**	0.93	0.16	**J**
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.0	0.32	ND	0.29	0.045	
75-01-4	Vinyl Chloride	ND	2.0	0.22	ND	0.77	0.084	
106-99-0	1,3-Butadiene	ND	2.0	0.33	ND	0.89	0.15	
74-83-9	Bromomethane	ND	1.9	0.28	ND	0.50	0.072	
75-00-3	Chloroethane	ND	1.9	0.25	ND	0.73	0.094	
64-17-5	Ethanol	**270**	19	1.4	**150**	10	0.74	
75-05-8	Acetonitrile	**0.62**	3.8	0.49	**0.37**	2.2	0.29	**J**
107-02-8	Acrolein	**1.2**	3.8	0.57	**0.53**	1.6	0.25	**J**
67-64-1	Acetone	**19**	20	4.5	**8.1**	8.3	1.9	**J**
75-69-4	Trichlorofluoromethane (CFC 11)	**1.0**	2.0	0.31	**0.18**	0.35	0.054	**J**
67-63-0	2-Propanol (Isopropyl Alcohol)	**1.9**	3.8	0.83	**0.78**	1.5	0.34	**J**
107-13-1	Acrylonitrile	ND	3.8	0.42	ND	1.7	0.19	
75-35-4	1,1-Dichloroethene	ND	2.0	0.28	ND	0.51	0.070	
75-09-2	Methylene Chloride	ND	2.0	0.57	ND	0.57	0.16	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.0	0.27	ND	0.64	0.087	
76-13-1	Trichlorotrifluoroethane (CFC 113)	**0.57**	2.0	0.29	**0.075**	0.27	0.037	**J**
75-15-0	Carbon Disulfide	**0.74**	4.2	0.60	**0.24**	1.3	0.19	**J**
156-60-5	trans-1,2-Dichloroethene	ND	2.0	0.28	ND	0.50	0.070	
75-34-3	1,1-Dichloroethane	ND	2.0	0.29	ND	0.49	0.073	
1634-04-4	Methyl tert-Butyl Ether	ND	2.0	0.24	ND	0.56	0.066	
108-05-4	Vinyl Acetate	ND	19	4.5	ND	5.4	1.3	
78-93-3	2-Butanone (MEK)	**21**	3.8	0.42	**7.2**	1.3	0.14	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-OBS-04** ALS Project ID: P2105213
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2105213-004

Test Code: EPA TO-15 Date Collected: 9/16/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 10/4/21
Analyst: Wida Ang Date Analyzed: 10/14/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC01196

Initial Pressure (psig): -0.42 Final Pressure (psig): 6.85

Canister Dilution Factor: 1.51

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.0	0.28	ND	0.50	0.071	
141-78-6	Ethyl Acetate	ND	7.9	1.1	ND	2.2	0.29	
110-54-3	n-Hexane	**1.1**	2.0	0.42	**0.31**	0.57	0.12	**J**
67-66-3	Chloroform	ND	2.0	0.27	ND	0.42	0.055	
109-99-9	Tetrahydrofuran (THF)	**7.3**	3.8	0.25	**2.5**	1.3	0.086	
107-06-2	1,2-Dichloroethane	ND	2.0	0.22	ND	0.49	0.055	
71-55-6	1,1,1-Trichloroethane	**0.73**	2.0	0.25	**0.13**	0.36	0.046	**J**
71-43-2	Benzene	**0.31**	1.9	0.29	**0.097**	0.59	0.091	**J**
56-23-5	Carbon Tetrachloride	**0.36**	1.9	0.28	**0.057**	0.30	0.044	**J**
110-82-7	Cyclohexane	ND	4.2	0.57	ND	1.2	0.16	
78-87-5	1,2-Dichloropropane	ND	1.9	0.25	ND	0.41	0.054	
75-27-4	Bromodichloromethane	ND	2.0	0.29	ND	0.30	0.043	
79-01-6	Trichloroethene	ND	2.0	0.27	ND	0.37	0.051	
123-91-1	1,4-Dioxane	ND	2.0	0.24	ND	0.54	0.066	
80-62-6	Methyl Methacrylate	ND	4.2	0.72	ND	1.0	0.18	
142-82-5	n-Heptane	**0.33**	2.0	0.32	**0.081**	0.49	0.078	**J**
10061-01-5	cis-1,3-Dichloropropene	ND	1.9	0.31	ND	0.42	0.069	
108-10-1	4-Methyl-2-pentanone	**3.4**	4.2	0.28	**0.83**	1.0	0.067	**J**
10061-02-6	trans-1,3-Dichloropropene	ND	1.9	0.42	ND	0.42	0.092	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.20	ND	0.36	0.037	
108-88-3	Toluene	**11**	2.0	0.25	**2.9**	0.52	0.065	
591-78-6	2-Hexanone	ND	4.2	0.25	ND	1.0	0.061	
124-48-1	Dibromochloromethane	ND	2.0	0.26	ND	0.23	0.031	
106-93-4	1,2-Dibromoethane	ND	2.0	0.23	ND	0.26	0.030	
123-86-4	n-Butyl Acetate	**14**	4.2	0.28	**3.0**	0.87	0.058	

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J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **SVE-OBS-04** ALS Project ID: P2105213

Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2105213-004

Test Code:	EPA TO-15	Date Collected:	9/16/21
Instrument ID:	Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16	Date Received:	10/4/21
Analyst:	Wida Ang	Date Analyzed:	10/14/21
Sample Type:	1.0 L Summa Canister	Volume(s) Analyzed:	0.40 Liter(s)
Test Notes:			
Container ID:	1SC01196		

Initial Pressure (psig): -0.42 Final Pressure (psig): 6.85

Canister Dilution Factor: 1.51

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	ND	2.0	0.45	ND	0.43	0.097	
127-18-4	Tetrachloroethene	**2.4**	2.0	0.26	**0.36**	0.29	0.038	
108-90-7	Chlorobenzene	ND	2.0	0.27	ND	0.43	0.058	
100-41-4	Ethylbenzene	**6.6**	2.0	0.28	**1.5**	0.45	0.065	
179601-23-1	m,p-Xylenes	**24**	4.2	0.53	**5.5**	0.96	0.12	
75-25-2	Bromoform	ND	2.0	0.42	ND	0.19	0.040	
100-42-5	Styrene	**1.6**	1.9	0.32	**0.39**	0.44	0.076	**J**
95-47-6	o-Xylene	**8.4**	2.0	0.29	**1.9**	0.45	0.067	
111-84-2	n-Nonane	**0.57**	2.0	0.34	**0.11**	0.37	0.064	**J**
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.28	ND	0.29	0.041	
98-82-8	Cumene	**0.45**	2.0	0.29	**0.092**	0.40	0.059	**J**
80-56-8	alpha-Pinene	**1.9**	2.0	0.31	**0.33**	0.37	0.056	**J**
103-65-1	n-Propylbenzene	**1.3**	2.0	0.29	**0.27**	0.41	0.059	**J**
622-96-8	4-Ethyltoluene	**1.8**	2.0	0.32	**0.36**	0.41	0.065	**J**
108-67-8	1,3,5-Trimethylbenzene	**2.3**	2.0	0.29	**0.47**	0.40	0.059	
95-63-6	1,2,4-Trimethylbenzene	**7.0**	2.0	0.28	**1.4**	0.40	0.057	
100-44-7	Benzyl Chloride	ND	4.2	0.45	ND	0.80	0.088	
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.30	ND	0.33	0.050	
106-46-7	1,4-Dichlorobenzene	**0.37**	2.0	0.31	**0.061**	0.33	0.052	**J**
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.30	ND	0.33	0.050	
5989-27-5	d-Limonene	**12**	1.9	0.42	**2.1**	0.34	0.075	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.8	0.38	ND	0.39	0.039	
120-82-1	1,2,4-Trichlorobenzene	**0.55**	4.2	0.49	**0.074**	0.56	0.066	**J**
91-20-3	Naphthalene	**0.92**	2.0	0.49	**0.18**	0.37	0.094	**J**
87-68-3	Hexachlorobutadiene	ND	2.0	0.42	ND	0.18	0.039	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-OBS-05** ALS Project ID: P2105213
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2105213-005

Test Code: EPA TO-15 Date Collected: 9/16/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 10/4/21
Analyst: Topacio Zavala Date Analyzed: 10/14/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SS00747

Initial Pressure (psig): -0.78 Final Pressure (psig): 7.52

Canister Dilution Factor: 1.60

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	**78**	2.1	0.52	**45**	1.2	0.30	
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.1**	2.1	0.35	**0.43**	0.43	0.070	
74-87-3	Chloromethane	**0.67**	2.0	0.34	**0.32**	0.99	0.17	**J**
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.2	0.34	ND	0.31	0.048	
75-01-4	Vinyl Chloride	ND	2.1	0.23	ND	0.81	0.089	
106-99-0	1,3-Butadiene	ND	2.1	0.35	ND	0.94	0.16	
74-83-9	Bromomethane	ND	2.0	0.30	ND	0.53	0.076	
75-00-3	Chloroethane	ND	2.0	0.26	ND	0.77	0.10	
64-17-5	Ethanol	**110**	20	1.5	**57**	11	0.79	
75-05-8	Acetonitrile	ND	4.0	0.52	ND	2.4	0.31	
107-02-8	Acrolein	**1.7**	4.0	0.60	**0.76**	1.7	0.26	**J**
67-64-1	Acetone	**39**	21	4.8	**17**	8.8	2.0	
75-69-4	Trichlorofluoromethane (CFC 11)	**1.0**	2.1	0.32	**0.18**	0.37	0.058	**J**
67-63-0	2-Propanol (Isopropyl Alcohol)	**12**	4.0	0.88	**5.0**	1.6	0.36	
107-13-1	Acrylonitrile	ND	4.0	0.44	ND	1.8	0.20	
75-35-4	1,1-Dichloroethene	ND	2.2	0.30	ND	0.55	0.075	
75-09-2	Methylene Chloride	**2.2**	2.1	0.60	**0.63**	0.60	0.17	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.1	0.29	ND	0.68	0.092	
76-13-1	Trichlorotrifluoroethane (CFC 113)	**0.45**	2.2	0.30	**0.058**	0.28	0.040	**J**
75-15-0	Carbon Disulfide	**11**	4.4	0.64	**3.4**	1.4	0.21	
156-60-5	trans-1,2-Dichloroethene	ND	2.1	0.30	ND	0.53	0.075	
75-34-3	1,1-Dichloroethane	ND	2.1	0.31	ND	0.52	0.077	
1634-04-4	Methyl tert-Butyl Ether	ND	2.1	0.25	ND	0.59	0.070	
108-05-4	Vinyl Acetate	**5.3**	20	4.8	**1.5**	5.7	1.4	**J**
78-93-3	2-Butanone (MEK)	**17**	4.0	0.44	**5.7**	1.4	0.15	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-OBS-05** ALS Project ID: P2105213
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2105213-005

Test Code: EPA TO-15 Date Collected: 9/16/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 10/4/21
Analyst: Topacio Zavala Date Analyzed: 10/14/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SS00747

Initial Pressure (psig): -0.78 Final Pressure (psig): 7.52

Canister Dilution Factor: 1.60

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.1	0.30	ND	0.52	0.076	
141-78-6	Ethyl Acetate	**35**	8.4	1.1	**9.8**	2.3	0.31	
110-54-3	n-Hexane	**1.7**	2.1	0.44	**0.47**	0.60	0.12	**J**
67-66-3	Chloroform	ND	2.2	0.28	ND	0.44	0.058	
109-99-9	Tetrahydrofuran (THF)	**8.4**	4.0	0.27	**2.8**	1.4	0.091	
107-06-2	1,2-Dichloroethane	**0.27**	2.1	0.24	**0.067**	0.52	0.058	**J**
71-55-6	1,1,1-Trichloroethane	ND	2.1	0.26	ND	0.38	0.048	
71-43-2	Benzene	**0.64**	2.0	0.31	**0.20**	0.63	0.096	**J**
56-23-5	Carbon Tetrachloride	**0.37**	2.0	0.30	**0.059**	0.32	0.047	**J**
110-82-7	Cyclohexane	**0.78**	4.4	0.60	**0.23**	1.3	0.17	**J**
78-87-5	1,2-Dichloropropane	ND	2.0	0.26	ND	0.43	0.057	
75-27-4	Bromodichloromethane	ND	2.1	0.31	ND	0.32	0.046	
79-01-6	Trichloroethene	ND	2.1	0.29	ND	0.39	0.054	
123-91-1	1,4-Dioxane	**0.50**	2.1	0.25	**0.14**	0.58	0.070	**J**
80-62-6	Methyl Methacrylate	ND	4.4	0.76	ND	1.1	0.19	
142-82-5	n-Heptane	**1.7**	2.1	0.34	**0.41**	0.52	0.083	**J**
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.33	ND	0.44	0.073	
108-10-1	4-Methyl-2-pentanone	**4.4**	4.4	0.29	**1.1**	1.1	0.071	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.44	ND	0.45	0.097	
79-00-5	1,1,2-Trichloroethane	ND	2.1	0.22	ND	0.38	0.040	
108-88-3	Toluene	**19**	2.1	0.26	**5.1**	0.55	0.069	
591-78-6	2-Hexanone	**3.2**	4.4	0.26	**0.78**	1.1	0.064	**J**
124-48-1	Dibromochloromethane	ND	2.1	0.28	ND	0.25	0.033	
106-93-4	1,2-Dibromoethane	ND	2.1	0.25	ND	0.27	0.032	
123-86-4	n-Butyl Acetate	**17**	4.4	0.29	**3.7**	0.93	0.061	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **SVE-OBS-05** ALS Project ID: P2105213

Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2105213-005

Test Code:	EPA TO-15	Date Collected:	9/16/21
Instrument ID:	Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16	Date Received:	10/4/21
Analyst:	Topacio Zavala	Date Analyzed:	10/14/21
Sample Type:	1.0 L Silonite Summa Canister	Volume(s) Analyzed:	0.40 Liter(s)
Test Notes:			
Container ID:	1SS00747		

Initial Pressure (psig): -0.78 Final Pressure (psig): 7.52

Canister Dilution Factor: 1.60

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	**1.0**	2.1	0.48	**0.21**	0.45	0.10	**J**
127-18-4	Tetrachloroethene	**5.6**	2.1	0.28	**0.83**	0.31	0.041	
108-90-7	Chlorobenzene	ND	2.1	0.28	ND	0.45	0.062	
100-41-4	Ethylbenzene	**7.0**	2.1	0.30	**1.6**	0.48	0.069	
179601-23-1	m,p-Xylenes	**23**	4.4	0.56	**5.2**	1.0	0.13	
75-25-2	Bromoform	ND	2.1	0.44	ND	0.20	0.043	
100-42-5	Styrene	**2.4**	2.0	0.34	**0.56**	0.47	0.081	
95-47-6	o-Xylene	**8.7**	2.1	0.31	**2.0**	0.48	0.071	
111-84-2	n-Nonane	**0.84**	2.1	0.36	**0.16**	0.40	0.068	**J**
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	0.30	ND	0.30	0.043	
98-82-8	Cumene	**0.48**	2.1	0.31	**0.098**	0.42	0.063	**J**
80-56-8	alpha-Pinene	**3.7**	2.2	0.33	**0.67**	0.39	0.059	
103-65-1	n-Propylbenzene	**1.1**	2.1	0.31	**0.22**	0.43	0.063	**J**
622-96-8	4-Ethyltoluene	**1.5**	2.1	0.34	**0.31**	0.43	0.069	**J**
108-67-8	1,3,5-Trimethylbenzene	**2.7**	2.1	0.31	**0.54**	0.42	0.063	
95-63-6	1,2,4-Trimethylbenzene	**5.9**	2.1	0.30	**1.2**	0.42	0.060	
100-44-7	Benzyl Chloride	ND	4.4	0.48	ND	0.85	0.093	
541-73-1	1,3-Dichlorobenzene	ND	2.1	0.32	ND	0.35	0.053	
106-46-7	1,4-Dichlorobenzene	ND	2.1	0.33	ND	0.35	0.055	
95-50-1	1,2-Dichlorobenzene	ND	2.1	0.32	ND	0.35	0.053	
5989-27-5	d-Limonene	**14**	2.0	0.44	**2.5**	0.36	0.079	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.0	0.40	ND	0.41	0.041	
120-82-1	1,2,4-Trichlorobenzene	ND	4.4	0.52	ND	0.59	0.070	
91-20-3	Naphthalene	**2.7**	2.1	0.52	**0.52**	0.40	0.099	
87-68-3	Hexachlorobutadiene	ND	2.1	0.44	ND	0.20	0.041	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-OBS-07** ALS Project ID: P2105213
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2105213-006

Test Code: EPA TO-15 Date Collected: 9/16/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 10/4/21
Analyst: Topacio Zavala Date Analyzed: 10/14/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes: 0.040 Liter(s)
Container ID: 1SC00008

Initial Pressure (psig): -0.79 Final Pressure (psig): 7.27

Canister Dilution Factor: 1.58

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	**690**	21	5.1	**400**	12	3.0	**D**
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.3**	2.1	0.34	**0.46**	0.42	0.070	
74-87-3	Chloromethane	**0.58**	2.0	0.34	**0.28**	0.98	0.16	**J**
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.1	0.33	ND	0.31	0.047	
75-01-4	Vinyl Chloride	ND	2.1	0.23	ND	0.80	0.088	
106-99-0	1,3-Butadiene	ND	2.1	0.35	ND	0.93	0.16	
74-83-9	Bromomethane	ND	2.0	0.29	ND	0.52	0.075	
75-00-3	Chloroethane	ND	2.0	0.26	ND	0.76	0.099	
64-17-5	Ethanol	**42**	20	1.5	**22**	10	0.78	
75-05-8	Acetonitrile	**0.79**	4.0	0.51	**0.47**	2.4	0.31	**J**
107-02-8	Acrolein	**2.9**	4.0	0.59	**1.3**	1.7	0.26	**J**
67-64-1	Acetone	**84**	21	4.7	**35**	8.7	2.0	
75-69-4	Trichlorofluoromethane (CFC 11)	**1.0**	2.1	0.32	**0.19**	0.37	0.057	**J**
67-63-0	2-Propanol (Isopropyl Alcohol)	**3.2**	4.0	0.87	**1.3**	1.6	0.35	**J**
107-13-1	Acrylonitrile	ND	4.0	0.43	ND	1.8	0.20	
75-35-4	1,1-Dichloroethene	**6.3**	2.1	0.29	**1.6**	0.54	0.074	
75-09-2	Methylene Chloride	ND	2.1	0.59	ND	0.59	0.17	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.1	0.28	ND	0.67	0.091	
76-13-1	Trichlorotrifluoroethane (CFC 113)	**0.45**	2.1	0.30	**0.059**	0.28	0.039	**J**
75-15-0	Carbon Disulfide	**89**	4.3	0.63	**29**	1.4	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	2.1	0.29	ND	0.53	0.074	
75-34-3	1,1-Dichloroethane	**0.95**	2.1	0.31	**0.24**	0.52	0.076	**J**
1634-04-4	Methyl tert-Butyl Ether	ND	2.1	0.25	ND	0.58	0.069	
108-05-4	Vinyl Acetate	**11**	20	4.7	**3.0**	5.6	1.3	**J**
78-93-3	2-Butanone (MEK)	**11**	4.0	0.43	**3.6**	1.3	0.15	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
D = The reported result is from a dilution.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **SVE-OBS-07** ALS Project ID: P2105213

Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2105213-006

Test Code:	EPA TO-15	Date Collected:	9/16/21
Instrument ID:	Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16	Date Received:	10/4/21
Analyst:	Topacio Zavala	Date Analyzed:	10/14/21
Sample Type:	1.0 L Summa Canister	Volume(s) Analyzed:	0.40 Liter(s)
Test Notes:			0.040 Liter(s)
Container ID:	1SC00008		

Initial Pressure (psig): -0.79 Final Pressure (psig): 7.27

Canister Dilution Factor: 1.58

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.1	0.30	ND	0.52	0.075	
141-78-6	Ethyl Acetate	**1.4**	8.3	1.1	**0.40**	2.3	0.31	**J**
110-54-3	n-Hexane	**4.1**	2.1	0.43	**1.2**	0.59	0.12	
67-66-3	Chloroform	ND	2.1	0.28	ND	0.44	0.057	
109-99-9	Tetrahydrofuran (THF)	**7.7**	4.0	0.26	**2.6**	1.3	0.090	
107-06-2	1,2-Dichloroethane	ND	2.1	0.23	ND	0.52	0.058	
71-55-6	1,1,1-Trichloroethane	**6.7**	2.1	0.26	**1.2**	0.38	0.048	
71-43-2	Benzene	**0.36**	2.0	0.30	**0.11**	0.62	0.095	**J**
56-23-5	Carbon Tetrachloride	**0.40**	2.0	0.29	**0.063**	0.31	0.046	**J**
110-82-7	Cyclohexane	**0.60**	4.3	0.59	**0.18**	1.3	0.17	**J**
78-87-5	1,2-Dichloropropane	ND	2.0	0.26	ND	0.43	0.056	
75-27-4	Bromodichloromethane	ND	2.1	0.30	ND	0.31	0.045	
79-01-6	Trichloroethene	**1.2**	2.1	0.28	**0.22**	0.38	0.053	**J**
123-91-1	1,4-Dioxane	**0.79**	2.1	0.25	**0.22**	0.57	0.069	**J**
80-62-6	Methyl Methacrylate	ND	4.3	0.75	ND	1.1	0.18	
142-82-5	n-Heptane	**0.73**	2.1	0.34	**0.18**	0.51	0.082	**J**
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.33	ND	0.44	0.072	
108-10-1	4-Methyl-2-pentanone	**2.9**	4.3	0.29	**0.71**	1.1	0.070	**J**
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.43	ND	0.44	0.096	
79-00-5	1,1,2-Trichloroethane	ND	2.1	0.21	ND	0.38	0.039	
108-88-3	Toluene	**15**	2.1	0.26	**3.9**	0.55	0.068	
591-78-6	2-Hexanone	**2.4**	4.3	0.26	**0.58**	1.1	0.064	**J**
124-48-1	Dibromochloromethane	ND	2.1	0.28	ND	0.25	0.032	
106-93-4	1,2-Dibromoethane	ND	2.1	0.24	ND	0.27	0.032	
123-86-4	n-Butyl Acetate	**1.9**	4.3	0.29	**0.40**	0.91	0.061	**J**

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **SVE-OBS-07** ALS Project ID: P2105213

Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2105213-006

Test Code:	EPA TO-15	Date Collected:	9/16/21
Instrument ID:	Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16	Date Received:	10/4/21
Analyst:	Topacio Zavala	Date Analyzed:	10/14/21
Sample Type:	1.0 L Summa Canister	Volume(s) Analyzed:	0.40 Liter(s)
Test Notes:			0.040 Liter(s)
Container ID:	1SC00008		

Initial Pressure (psig): -0.79 Final Pressure (psig): 7.27

Canister Dilution Factor: 1.58

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	**0.60**	2.1	0.47	**0.13**	0.45	0.10	**J**
127-18-4	Tetrachloroethene	**4.1**	2.1	0.27	**0.60**	0.30	0.040	
108-90-7	Chlorobenzene	ND	2.1	0.28	ND	0.45	0.061	
100-41-4	Ethylbenzene	**11**	2.1	0.30	**2.4**	0.47	0.068	
179601-23-1	m,p-Xylenes	**36**	4.3	0.55	**8.2**	1.0	0.13	
75-25-2	Bromoform	ND	2.1	0.43	ND	0.20	0.042	
100-42-5	Styrene	**0.60**	2.0	0.34	**0.14**	0.46	0.080	**J**
95-47-6	o-Xylene	**43**	2.1	0.30	**9.8**	0.47	0.070	
111-84-2	n-Nonane	**0.71**	2.1	0.35	**0.14**	0.39	0.067	**J**
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	0.29	ND	0.30	0.043	
98-82-8	Cumene	**1.8**	2.1	0.30	**0.37**	0.42	0.062	**J**
80-56-8	alpha-Pinene	**2.5**	2.1	0.32	**0.45**	0.38	0.058	
103-65-1	n-Propylbenzene	**2.9**	2.1	0.30	**0.59**	0.43	0.062	
622-96-8	4-Ethyltoluene	**3.2**	2.1	0.34	**0.66**	0.43	0.068	
108-67-8	1,3,5-Trimethylbenzene	**8.7**	2.1	0.30	**1.8**	0.42	0.062	
95-63-6	1,2,4-Trimethylbenzene	**7.8**	2.1	0.29	**1.6**	0.42	0.059	
100-44-7	Benzyl Chloride	ND	4.3	0.47	ND	0.84	0.092	
541-73-1	1,3-Dichlorobenzene	ND	2.1	0.32	ND	0.34	0.053	
106-46-7	1,4-Dichlorobenzene	ND	2.1	0.32	ND	0.34	0.054	
95-50-1	1,2-Dichlorobenzene	ND	2.1	0.31	ND	0.35	0.052	
5989-27-5	d-Limonene	**8.2**	2.0	0.43	**1.5**	0.35	0.078	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.0	0.40	ND	0.41	0.041	
120-82-1	1,2,4-Trichlorobenzene	ND	4.3	0.51	ND	0.59	0.069	
91-20-3	Naphthalene	ND	2.1	0.51	ND	0.39	0.098	
87-68-3	Hexachlorobutadiene	ND	2.1	0.43	ND	0.19	0.041	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-OBS-08** ALS Project ID: P2105213
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2105213-007

Test Code: EPA TO-15 Date Collected: 9/16/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 10/4/21
Analyst: Topacio Zavala Date Analyzed: 10/14/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC00886

Initial Pressure (psig): -1.10 Final Pressure (psig): 0.0

Canister Dilution Factor: 1.08

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	**29**	1.4	0.35	**17**	0.82	0.20	
75-71-8	Dichlorodifluoromethane (CFC 12)	**1.5**	1.4	0.23	**0.30**	0.29	0.048	
74-87-3	Chloromethane	**0.26**	1.4	0.23	**0.12**	0.67	0.11	**J**
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	1.5	0.23	ND	0.21	0.032	
75-01-4	Vinyl Chloride	ND	1.4	0.15	ND	0.55	0.060	
106-99-0	1,3-Butadiene	ND	1.4	0.24	ND	0.63	0.11	
74-83-9	Bromomethane	ND	1.4	0.20	ND	0.35	0.051	
75-00-3	Chloroethane	ND	1.4	0.18	ND	0.52	0.068	
64-17-5	Ethanol	**62**	14	1.0	**33**	7.2	0.53	
75-05-8	Acetonitrile	**0.62**	2.7	0.35	**0.37**	1.6	0.21	**J**
107-02-8	Acrolein	**1.4**	2.7	0.41	**0.63**	1.2	0.18	**J**
67-64-1	Acetone	**29**	14	3.2	**12**	5.9	1.4	
75-69-4	Trichlorofluoromethane (CFC 11)	**0.67**	1.4	0.22	**0.12**	0.25	0.039	**J**
67-63-0	2-Propanol (Isopropyl Alcohol)	**5.8**	2.7	0.59	**2.3**	1.1	0.24	
107-13-1	Acrylonitrile	ND	2.7	0.30	ND	1.2	0.14	
75-35-4	1,1-Dichloroethene	**62**	1.5	0.20	**16**	0.37	0.050	
75-09-2	Methylene Chloride	**0.66**	1.4	0.41	**0.19**	0.40	0.12	**J**
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	1.4	0.19	ND	0.46	0.062	
76-13-1	Trichlorotrifluoroethane (CFC 113)	**0.29**	1.5	0.21	**0.037**	0.19	0.027	**J**
75-15-0	Carbon Disulfide	**3.2**	3.0	0.43	**1.0**	0.95	0.14	
156-60-5	trans-1,2-Dichloroethene	ND	1.4	0.20	ND	0.36	0.050	
75-34-3	1,1-Dichloroethane	**3.7**	1.4	0.21	**0.91**	0.35	0.052	
1634-04-4	Methyl tert-Butyl Ether	ND	1.4	0.17	ND	0.40	0.047	
108-05-4	Vinyl Acetate	**6.9**	14	3.2	**2.0**	3.8	0.92	**J**
78-93-3	2-Butanone (MEK)	**6.5**	2.7	0.30	**2.2**	0.92	0.10	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-OBS-08** ALS Project ID: P2105213
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2105213-007

Test Code: EPA TO-15 Date Collected: 9/16/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 10/4/21
Analyst: Topacio Zavala Date Analyzed: 10/14/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC00886

Initial Pressure (psig): -1.10 Final Pressure (psig): 0.0

Canister Dilution Factor: 1.08

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	1.4	0.20	ND	0.35	0.051	
141-78-6	Ethyl Acetate	**12**	5.7	0.76	**3.3**	1.6	0.21	
110-54-3	n-Hexane	**0.73**	1.4	0.30	**0.21**	0.41	0.084	**J**
67-66-3	Chloroform	**0.27**	1.5	0.19	**0.055**	0.30	0.039	**J**
109-99-9	Tetrahydrofuran (THF)	**2.4**	2.7	0.18	**0.80**	0.92	0.061	**J**
107-06-2	1,2-Dichloroethane	ND	1.4	0.16	ND	0.35	0.039	
71-55-6	1,1,1-Trichloroethane	**6.7**	1.4	0.18	**1.2**	0.26	0.033	
71-43-2	Benzene	**0.62**	1.4	0.21	**0.19**	0.42	0.065	**J**
56-23-5	Carbon Tetrachloride	**0.20**	1.4	0.20	**0.032**	0.21	0.032	**J**
110-82-7	Cyclohexane	**0.59**	3.0	0.41	**0.17**	0.86	0.12	**J**
78-87-5	1,2-Dichloropropane	ND	1.4	0.18	ND	0.29	0.039	
75-27-4	Bromodichloromethane	ND	1.4	0.21	ND	0.21	0.031	
79-01-6	Trichloroethene	**0.35**	1.4	0.19	**0.065**	0.26	0.036	**J**
123-91-1	1,4-Dioxane	ND	1.4	0.17	ND	0.39	0.047	
80-62-6	Methyl Methacrylate	ND	3.0	0.51	ND	0.73	0.13	
142-82-5	n-Heptane	**0.89**	1.4	0.23	**0.22**	0.35	0.056	**J**
10061-01-5	cis-1,3-Dichloropropene	ND	1.4	0.22	ND	0.30	0.049	
108-10-1	4-Methyl-2-pentanone	**0.70**	3.0	0.20	**0.17**	0.73	0.048	**J**
10061-02-6	trans-1,3-Dichloropropene	ND	1.4	0.30	ND	0.30	0.065	
79-00-5	1,1,2-Trichloroethane	ND	1.4	0.15	ND	0.26	0.027	
108-88-3	Toluene	**11**	1.4	0.18	**2.8**	0.37	0.047	
591-78-6	2-Hexanone	**1.2**	3.0	0.18	**0.29**	0.73	0.044	**J**
124-48-1	Dibromochloromethane	ND	1.4	0.19	ND	0.17	0.022	
106-93-4	1,2-Dibromoethane	ND	1.4	0.17	ND	0.18	0.022	
123-86-4	n-Butyl Acetate	**0.76**	3.0	0.20	**0.16**	0.63	0.042	**J**

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-OBS-08** ALS Project ID: P2105213
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2105213-007

Test Code: EPA TO-15 Date Collected: 9/16/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 10/4/21
Analyst: Topacio Zavala Date Analyzed: 10/14/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC00886

Initial Pressure (psig): -1.10 Final Pressure (psig): 0.0

Canister Dilution Factor: 1.08

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	**0.62**	1.4	0.32	**0.13**	0.31	0.069	**J**
127-18-4	Tetrachloroethene	**3.7**	1.4	0.19	**0.55**	0.21	0.027	
108-90-7	Chlorobenzene	ND	1.4	0.19	ND	0.30	0.042	
100-41-4	Ethylbenzene	**1.1**	1.4	0.20	**0.25**	0.32	0.047	**J**
179601-23-1	m,p-Xylenes	**4.8**	3.0	0.38	**1.1**	0.68	0.087	
75-25-2	Bromoform	ND	1.4	0.30	ND	0.14	0.029	
100-42-5	Styrene	**0.93**	1.4	0.23	**0.22**	0.32	0.055	**J**
95-47-6	o-Xylene	**1.9**	1.4	0.21	**0.44**	0.32	0.048	
111-84-2	n-Nonane	**0.53**	1.4	0.24	**0.10**	0.27	0.046	**J**
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.4	0.20	ND	0.20	0.029	
98-82-8	Cumene	ND	1.4	0.21	ND	0.29	0.042	
80-56-8	alpha-Pinene	**1.5**	1.5	0.22	**0.27**	0.26	0.040	
103-65-1	n-Propylbenzene	**0.31**	1.4	0.21	**0.062**	0.29	0.042	**J**
622-96-8	4-Ethyltoluene	**0.45**	1.4	0.23	**0.092**	0.29	0.047	**J**
108-67-8	1,3,5-Trimethylbenzene	**0.57**	1.4	0.21	**0.12**	0.29	0.042	**J**
95-63-6	1,2,4-Trimethylbenzene	**1.9**	1.4	0.20	**0.38**	0.29	0.041	
100-44-7	Benzyl Chloride	ND	3.0	0.32	ND	0.57	0.063	
541-73-1	1,3-Dichlorobenzene	ND	1.4	0.22	ND	0.23	0.036	
106-46-7	1,4-Dichlorobenzene	ND	1.4	0.22	ND	0.23	0.037	
95-50-1	1,2-Dichlorobenzene	ND	1.4	0.21	ND	0.24	0.035	
5989-27-5	d-Limonene	**7.5**	1.4	0.30	**1.3**	0.24	0.053	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.7	0.27	ND	0.28	0.028	
120-82-1	1,2,4-Trichlorobenzene	ND	3.0	0.35	ND	0.40	0.047	
91-20-3	Naphthalene	**0.74**	1.4	0.35	**0.14**	0.27	0.067	**J**
87-68-3	Hexachlorobutadiene	ND	1.4	0.30	ND	0.13	0.028	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
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J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-OBS-09** ALS Project ID: P2105213
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2105213-008

Test Code: EPA TO-15 Date Collected: 9/16/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 10/4/21
Analyst: Topacio Zavala Date Analyzed: 10/14/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SS01224

Initial Pressure (psig): -0.35 Final Pressure (psig): 0.0

Canister Dilution Factor: 1.02

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	**160**	1.3	0.33	**94**	0.77	0.19	
75-71-8	Dichlorodifluoromethane (CFC 12)	**1.5**	1.4	0.22	**0.31**	0.27	0.045	
74-87-3	Chloromethane	ND	1.3	0.22	ND	0.63	0.11	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	1.4	0.21	ND	0.20	0.031	
75-01-4	Vinyl Chloride	ND	1.3	0.15	ND	0.52	0.057	
106-99-0	1,3-Butadiene	ND	1.3	0.22	ND	0.60	0.10	
74-83-9	Bromomethane	ND	1.3	0.19	ND	0.34	0.049	
75-00-3	Chloroethane	ND	1.3	0.17	ND	0.49	0.064	
64-17-5	Ethanol	**2.2**	13	0.94	**1.2**	6.8	0.50	**J**
75-05-8	Acetonitrile	ND	2.6	0.33	ND	1.5	0.20	
107-02-8	Acrolein	ND	2.6	0.38	ND	1.1	0.17	
67-64-1	Acetone	**11**	13	3.1	**4.6**	5.6	1.3	**J**
75-69-4	Trichlorofluoromethane (CFC 11)	**0.71**	1.3	0.21	**0.13**	0.24	0.037	**J**
67-63-0	2-Propanol (Isopropyl Alcohol)	**3.4**	2.6	0.56	**1.4**	1.0	0.23	
107-13-1	Acrylonitrile	ND	2.6	0.28	ND	1.2	0.13	
75-35-4	1,1-Dichloroethene	**2.2**	1.4	0.19	**0.56**	0.35	0.048	
75-09-2	Methylene Chloride	ND	1.3	0.38	ND	0.38	0.11	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	1.4	0.18	ND	0.43	0.059	
76-13-1	Trichlorotrifluoroethane (CFC 113)	**0.30**	1.4	0.19	**0.039**	0.18	0.025	**J**
75-15-0	Carbon Disulfide	**0.97**	2.8	0.41	**0.31**	0.90	0.13	**J**
156-60-5	trans-1,2-Dichloroethene	ND	1.4	0.19	ND	0.34	0.048	
75-34-3	1,1-Dichloroethane	ND	1.4	0.20	ND	0.33	0.049	
1634-04-4	Methyl tert-Butyl Ether	ND	1.4	0.16	ND	0.38	0.045	
108-05-4	Vinyl Acetate	ND	13	3.1	ND	3.6	0.87	
78-93-3	2-Butanone (MEK)	**3.9**	2.6	0.28	**1.3**	0.86	0.095	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
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J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **SVE-OBS-09** ALS Project ID: P2105213

Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2105213-008

Test Code:	EPA TO-15	Date Collected:	9/16/21
Instrument ID:	Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16	Date Received:	10/4/21
Analyst:	Topacio Zavala	Date Analyzed:	10/14/21
Sample Type:	1.0 L Silonite Summa Canister	Volume(s) Analyzed:	0.40 Liter(s)
Test Notes:			
Container ID:	1SS01224		

Initial Pressure (psig): -0.35 Final Pressure (psig): 0.0

Canister Dilution Factor: 1.02

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	1.3	0.19	ND	0.33	0.048	
141-78-6	Ethyl Acetate	ND	5.4	0.71	ND	1.5	0.20	
110-54-3	n-Hexane	**1.3**	1.4	0.28	**0.37**	0.38	0.080	**J**
67-66-3	Chloroform	ND	1.4	0.18	ND	0.28	0.037	
109-99-9	Tetrahydrofuran (THF)	**2.4**	2.6	0.17	**0.81**	0.86	0.058	**J**
107-06-2	1,2-Dichloroethane	ND	1.4	0.15	ND	0.33	0.037	
71-55-6	1,1,1-Trichloroethane	**4.4**	1.3	0.17	**0.80**	0.24	0.031	
71-43-2	Benzene	ND	1.3	0.20	ND	0.40	0.061	
56-23-5	Carbon Tetrachloride	**0.27**	1.3	0.19	**0.043**	0.20	0.030	**J**
110-82-7	Cyclohexane	ND	2.8	0.38	ND	0.82	0.11	
78-87-5	1,2-Dichloropropane	ND	1.3	0.17	ND	0.28	0.036	
75-27-4	Bromodichloromethane	ND	1.4	0.20	ND	0.20	0.029	
79-01-6	Trichloroethene	**0.18**	1.3	0.18	**0.034**	0.25	0.034	**J**
123-91-1	1,4-Dioxane	**0.29**	1.3	0.16	**0.081**	0.37	0.045	**J**
80-62-6	Methyl Methacrylate	ND	2.8	0.48	ND	0.69	0.12	
142-82-5	n-Heptane	ND	1.4	0.22	ND	0.33	0.053	
10061-01-5	cis-1,3-Dichloropropene	ND	1.3	0.21	ND	0.28	0.047	
108-10-1	4-Methyl-2-pentanone	**0.62**	2.8	0.19	**0.15**	0.68	0.045	**J**
10061-02-6	trans-1,3-Dichloropropene	ND	1.3	0.28	ND	0.29	0.062	
79-00-5	1,1,2-Trichloroethane	ND	1.3	0.14	ND	0.24	0.025	
108-88-3	Toluene	**4.5**	1.3	0.17	**1.2**	0.35	0.044	
591-78-6	2-Hexanone	**1.3**	2.8	0.17	**0.31**	0.69	0.041	**J**
124-48-1	Dibromochloromethane	ND	1.4	0.18	ND	0.16	0.021	
106-93-4	1,2-Dibromoethane	ND	1.3	0.16	ND	0.17	0.021	
123-86-4	n-Butyl Acetate	**0.33**	2.8	0.19	**0.070**	0.59	0.039	**J**

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Client: **Environmental Management Services, Inc.**

Client Sample ID: **SVE-OBS-09** ALS Project ID: P2105213

Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2105213-008

Test Code:	EPA TO-15	Date Collected:	9/16/21
Instrument ID:	Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16	Date Received:	10/4/21
Analyst:	Topacio Zavala	Date Analyzed:	10/14/21
Sample Type:	1.0 L Silonite Summa Canister	Volume(s) Analyzed:	0.40 Liter(s)
Test Notes:			
Container ID:	1SS01224		

Initial Pressure (psig): -0.35 Final Pressure (psig): 0.0

Canister Dilution Factor: 1.02

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	ND	1.4	0.31	ND	0.29	0.066	
127-18-4	Tetrachloroethene	**1.0**	1.3	0.18	**0.15**	0.20	0.026	**J**
108-90-7	Chlorobenzene	ND	1.3	0.18	ND	0.29	0.039	
100-41-4	Ethylbenzene	**1.4**	1.3	0.19	**0.33**	0.31	0.044	
179601-23-1	m,p-Xylenes	**5.5**	2.8	0.36	**1.3**	0.65	0.082	
75-25-2	Bromoform	ND	1.3	0.28	ND	0.13	0.027	
100-42-5	Styrene	**0.69**	1.3	0.22	**0.16**	0.30	0.052	**J**
95-47-6	o-Xylene	**3.0**	1.3	0.20	**0.69**	0.31	0.045	
111-84-2	n-Nonane	**0.29**	1.3	0.23	**0.056**	0.25	0.043	**J**
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.3	0.19	ND	0.19	0.027	
98-82-8	Cumene	ND	1.3	0.20	ND	0.27	0.040	
80-56-8	alpha-Pinene	**1.1**	1.4	0.21	**0.20**	0.25	0.038	**J**
103-65-1	n-Propylbenzene	**0.39**	1.4	0.20	**0.080**	0.28	0.040	**J**
622-96-8	4-Ethyltoluene	**0.49**	1.4	0.22	**0.10**	0.28	0.044	**J**
108-67-8	1,3,5-Trimethylbenzene	**1.7**	1.3	0.20	**0.34**	0.27	0.040	
95-63-6	1,2,4-Trimethylbenzene	**2.2**	1.3	0.19	**0.46**	0.27	0.038	
100-44-7	Benzyl Chloride	ND	2.8	0.31	ND	0.54	0.059	
541-73-1	1,3-Dichlorobenzene	ND	1.3	0.20	ND	0.22	0.034	
106-46-7	1,4-Dichlorobenzene	ND	1.3	0.21	ND	0.22	0.035	
95-50-1	1,2-Dichlorobenzene	ND	1.4	0.20	ND	0.22	0.034	
5989-27-5	d-Limonene	**4.8**	1.3	0.28	**0.86**	0.23	0.050	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.6	0.26	ND	0.26	0.026	
120-82-1	1,2,4-Trichlorobenzene	ND	2.8	0.33	ND	0.38	0.045	
91-20-3	Naphthalene	**1.6**	1.3	0.33	**0.30**	0.25	0.063	
87-68-3	Hexachlorobutadiene	ND	1.3	0.28	ND	0.12	0.026	

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J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-EXT-01** ALS Project ID: P2105213
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2105213-009

Test Code: EPA TO-15 Date Collected: 9/16/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 10/4/21
Analyst: Topacio Zavala Date Analyzed: 10/14 - 10/15/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.14 Liter(s)
Test Notes: 0.035 Liter(s)
Container ID: 1SC00449

Initial Pressure (psig): -0.95 Final Pressure (psig): 0.0

Canister Dilution Factor: 1.07

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	**210**	4.0	0.99	**120**	2.3	0.58	
75-71-8	Dichlorodifluoromethane (CFC 12)	**1.8**	4.1	0.66	**0.36**	0.82	0.13	**J**
74-87-3	Chloromethane	ND	3.9	0.66	ND	1.9	0.32	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	4.1	0.64	ND	0.59	0.092	
75-01-4	Vinyl Chloride	ND	4.0	0.44	ND	1.6	0.17	
106-99-0	1,3-Butadiene	ND	4.0	0.67	ND	1.8	0.30	
74-83-9	Bromomethane	ND	3.9	0.57	ND	1.0	0.15	
75-00-3	Chloroethane	ND	3.9	0.50	ND	1.5	0.19	
64-17-5	Ethanol	**39**	38	2.8	**21**	20	1.5	
75-05-8	Acetonitrile	ND	7.6	0.99	ND	4.6	0.59	
107-02-8	Acrolein	ND	7.6	1.1	ND	3.3	0.50	
67-64-1	Acetone	**26**	40	9.2	**11**	17	3.9	**J**
75-69-4	Trichlorofluoromethane (CFC 11)	**0.70**	4.0	0.62	**0.12**	0.71	0.11	**J**
67-63-0	2-Propanol (Isopropyl Alcohol)	**2.0**	7.6	1.7	**0.81**	3.1	0.68	**J**
107-13-1	Acrylonitrile	ND	7.6	0.84	ND	3.5	0.39	
75-35-4	1,1-Dichloroethene	**9.4**	4.1	0.57	**2.4**	1.0	0.14	
75-09-2	Methylene Chloride	ND	4.0	1.1	ND	1.1	0.33	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	4.1	0.55	ND	1.3	0.18	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	4.1	0.58	ND	0.54	0.076	
75-15-0	Carbon Disulfide	**3.0**	8.4	1.2	**0.97**	2.7	0.39	**J**
156-60-5	trans-1,2-Dichloroethene	ND	4.1	0.57	ND	1.0	0.14	
75-34-3	1,1-Dichloroethane	ND	4.1	0.60	ND	1.0	0.15	
1634-04-4	Methyl tert-Butyl Ether	ND	4.1	0.48	ND	1.1	0.13	
108-05-4	Vinyl Acetate	ND	38	9.2	ND	11	2.6	
78-93-3	2-Butanone (MEK)	**7.2**	7.6	0.84	**2.4**	2.6	0.29	**J**

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J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **SVE-EXT-01** ALS Project ID: P2105213

Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2105213-009

Test Code:	EPA TO-15	Date Collected:	9/16/21
Instrument ID:	Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16	Date Received:	10/4/21
Analyst:	Topacio Zavala	Date Analyzed:	10/14 - 10/15/21
Sample Type:	1.0 L Summa Canister	Volume(s) Analyzed:	0.14 Liter(s)
Test Notes:			0.035 Liter(s)
Container ID:	1SC00449		

Initial Pressure (psig): -0.95 Final Pressure (psig): 0.0

Canister Dilution Factor: 1.07

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	4.0	0.57	ND	1.0	0.14	
141-78-6	Ethyl Acetate	ND	16	2.1	ND	4.5	0.59	
110-54-3	n-Hexane	**5.1**	4.1	0.84	**1.4**	1.1	0.24	
67-66-3	Chloroform	ND	4.1	0.54	ND	0.85	0.11	
109-99-9	Tetrahydrofuran (THF)	**28**	7.6	0.51	**9.6**	2.6	0.17	
107-06-2	1,2-Dichloroethane	ND	4.1	0.45	ND	1.0	0.11	
71-55-6	1,1,1-Trichloroethane	**16**	4.0	0.50	**2.9**	0.73	0.092	
71-43-2	Benzene	ND	3.8	0.59	ND	1.2	0.18	
56-23-5	Carbon Tetrachloride	ND	3.8	0.57	ND	0.61	0.090	
110-82-7	Cyclohexane	**1.2**	8.4	1.1	**0.34**	2.4	0.33	**J**
78-87-5	1,2-Dichloropropane	ND	3.8	0.50	ND	0.83	0.11	
75-27-4	Bromodichloromethane	ND	4.1	0.59	ND	0.60	0.088	
79-01-6	Trichloroethene	**1.2**	4.0	0.55	**0.22**	0.74	0.10	**J**
123-91-1	1,4-Dioxane	**1,300**	16	1.9	**370**	4.4	0.53	**D**
80-62-6	Methyl Methacrylate	ND	8.4	1.5	ND	2.1	0.35	
142-82-5	n-Heptane	ND	4.1	0.65	ND	0.99	0.16	
10061-01-5	cis-1,3-Dichloropropene	ND	3.8	0.63	ND	0.84	0.14	
108-10-1	4-Methyl-2-pentanone	**1.4**	8.4	0.56	**0.35**	2.1	0.14	**J**
10061-02-6	trans-1,3-Dichloropropene	ND	3.9	0.84	ND	0.86	0.19	
79-00-5	1,1,2-Trichloroethane	ND	4.0	0.41	ND	0.73	0.076	
108-88-3	Toluene	**13**	4.0	0.50	**3.5**	1.1	0.13	
591-78-6	2-Hexanone	ND	8.4	0.50	ND	2.1	0.12	
124-48-1	Dibromochloromethane	ND	4.1	0.54	ND	0.48	0.063	
106-93-4	1,2-Dibromoethane	ND	4.0	0.47	ND	0.52	0.062	
123-86-4	n-Butyl Acetate	**2.1**	8.4	0.56	**0.44**	1.8	0.12	**J**

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
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J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
D = The reported result is from a dilution.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-EXT-01** ALS Project ID: P2105213
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2105213-009

Test Code: EPA TO-15 Date Collected: 9/16/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 10/4/21
Analyst: Topacio Zavala Date Analyzed: 10/14 - 10/15/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.14 Liter(s)
Test Notes: 0.035 Liter(s)
Container ID: 1SC00449

Initial Pressure (psig): -0.95 Final Pressure (psig): 0.0

Canister Dilution Factor: 1.07

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	**0.94**	4.1	0.92	**0.20**	0.87	0.20	**J**
127-18-4	Tetrachloroethene	**0.98**	4.0	0.53	**0.14**	0.59	0.078	**J**
108-90-7	Chlorobenzene	ND	4.0	0.54	ND	0.86	0.12	
100-41-4	Ethylbenzene	**5.4**	4.0	0.57	**1.2**	0.92	0.13	
179601-23-1	m,p-Xylenes	**22**	8.4	1.1	**5.1**	1.9	0.25	
75-25-2	Bromoform	ND	4.0	0.84	ND	0.38	0.081	
100-42-5	Styrene	**1.5**	3.8	0.66	**0.34**	0.90	0.15	**J**
95-47-6	o-Xylene	**7.4**	4.0	0.59	**1.7**	0.92	0.14	
111-84-2	n-Nonane	ND	4.0	0.68	ND	0.76	0.13	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.0	0.57	ND	0.58	0.082	
98-82-8	Cumene	ND	4.0	0.59	ND	0.81	0.12	
80-56-8	alpha-Pinene	**1.1**	4.1	0.63	**0.20**	0.74	0.11	**J**
103-65-1	n-Propylbenzene	**1.2**	4.1	0.59	**0.24**	0.82	0.12	**J**
622-96-8	4-Ethyltoluene	**1.6**	4.1	0.65	**0.33**	0.82	0.13	**J**
108-67-8	1,3,5-Trimethylbenzene	**2.0**	4.0	0.59	**0.40**	0.81	0.12	**J**
95-63-6	1,2,4-Trimethylbenzene	**7.9**	4.0	0.57	**1.6**	0.81	0.12	
100-44-7	Benzyl Chloride	ND	8.4	0.92	ND	1.6	0.18	
541-73-1	1,3-Dichlorobenzene	ND	4.0	0.61	ND	0.66	0.10	
106-46-7	1,4-Dichlorobenzene	ND	4.0	0.63	ND	0.66	0.10	
95-50-1	1,2-Dichlorobenzene	ND	4.1	0.60	ND	0.67	0.10	
5989-27-5	d-Limonene	**10**	3.8	0.84	**1.9**	0.69	0.15	
96-12-8	1,2-Dibromo-3-chloropropane	ND	7.6	0.76	ND	0.79	0.079	
120-82-1	1,2,4-Trichlorobenzene	ND	8.4	0.99	ND	1.1	0.13	
91-20-3	Naphthalene	**6.8**	4.0	0.99	**1.3**	0.76	0.19	
87-68-3	Hexachlorobutadiene	ND	4.0	0.84	ND	0.37	0.079	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-EXT-02** ALS Project ID: P2105213
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2105213-010

Test Code: EPA TO-15 Date Collected: 9/16/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 10/4/21
Analyst: Topacio Zavala Date Analyzed: 10/14 - 10/15/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.10 Liter(s)
Test Notes: 0.025 Liter(s)
Container ID: 1SC00586

Initial Pressure (psig): -0.59 Final Pressure (psig): 0.0

Canister Dilution Factor: 1.04

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	**100**	5.4	1.4	**58**	3.1	0.79	
75-71-8	Dichlorodifluoromethane (CFC 12)	**1.8**	5.5	0.90	**0.37**	1.1	0.18	**J**
74-87-3	Chloromethane	**1.4**	5.3	0.89	**0.67**	2.6	0.43	**J**
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	5.6	0.87	ND	0.80	0.13	
75-01-4	Vinyl Chloride	ND	5.4	0.59	ND	2.1	0.23	
106-99-0	1,3-Butadiene	ND	5.4	0.92	ND	2.4	0.41	
74-83-9	Bromomethane	ND	5.3	0.77	ND	1.4	0.20	
75-00-3	Chloroethane	ND	5.3	0.69	ND	2.0	0.26	
64-17-5	Ethanol	**72**	52	3.8	**38**	28	2.0	
75-05-8	Acetonitrile	ND	10	1.4	ND	6.2	0.81	
107-02-8	Acrolein	**1.9**	10	1.6	**0.83**	4.5	0.68	**J**
67-64-1	Acetone	**42**	54	12	**18**	23	5.3	**J**
75-69-4	Trichlorofluoromethane (CFC 11)	ND	5.4	0.84	ND	0.96	0.15	
67-63-0	2-Propanol (Isopropyl Alcohol)	**8.5**	10	2.3	**3.4**	4.2	0.93	**J**
107-13-1	Acrylonitrile	ND	10	1.1	ND	4.8	0.53	
75-35-4	1,1-Dichloroethene	**24**	5.6	0.77	**6.1**	1.4	0.19	
75-09-2	Methylene Chloride	ND	5.4	1.6	ND	1.6	0.45	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	5.5	0.75	ND	1.8	0.24	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	5.6	0.79	ND	0.73	0.10	
75-15-0	Carbon Disulfide	**5.9**	11	1.7	**1.9**	3.7	0.53	**J**
156-60-5	trans-1,2-Dichloroethene	ND	5.5	0.77	ND	1.4	0.19	
75-34-3	1,1-Dichloroethane	**1.2**	5.5	0.81	**0.31**	1.4	0.20	**J**
1634-04-4	Methyl tert-Butyl Ether	ND	5.5	0.66	ND	1.5	0.18	
108-05-4	Vinyl Acetate	ND	52	12	ND	15	3.5	
78-93-3	2-Butanone (MEK)	**11**	10	1.1	**3.6**	3.5	0.39	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
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J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-EXT-02** ALS Project ID: P2105213
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2105213-010

Test Code: EPA TO-15 Date Collected: 9/16/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 10/4/21
Analyst: Topacio Zavala Date Analyzed: 10/14 - 10/15/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.10 Liter(s)
Test Notes: 0.025 Liter(s)
Container ID: 1SC00586

Initial Pressure (psig): -0.59 Final Pressure (psig): 0.0

Canister Dilution Factor: 1.04

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	5.4	0.78	ND	1.4	0.20	
141-78-6	Ethyl Acetate	**32**	22	2.9	**8.8**	6.1	0.81	
110-54-3	n-Hexane	**6.0**	5.5	1.1	**1.7**	1.6	0.32	
67-66-3	Chloroform	ND	5.6	0.74	ND	1.2	0.15	
109-99-9	Tetrahydrofuran (THF)	**6.8**	10	0.70	**2.3**	3.5	0.24	**J**
107-06-2	1,2-Dichloroethane	ND	5.5	0.61	ND	1.4	0.15	
71-55-6	1,1,1-Trichloroethane	**15**	5.4	0.69	**2.7**	0.99	0.13	
71-43-2	Benzene	ND	5.2	0.80	ND	1.6	0.25	
56-23-5	Carbon Tetrachloride	ND	5.2	0.77	ND	0.83	0.12	
110-82-7	Cyclohexane	ND	11	1.6	ND	3.3	0.45	
78-87-5	1,2-Dichloropropane	ND	5.2	0.69	ND	1.1	0.15	
75-27-4	Bromodichloromethane	ND	5.5	0.80	ND	0.82	0.12	
79-01-6	Trichloroethene	**4.0**	5.4	0.75	**0.75**	1.0	0.14	**J**
123-91-1	1,4-Dioxane	**1,900**	22	2.6	**520**	6.0	0.73	**D**
80-62-6	Methyl Methacrylate	ND	11	2.0	ND	2.8	0.48	
142-82-5	n-Heptane	**0.94**	5.5	0.88	**0.23**	1.3	0.22	**J**
10061-01-5	cis-1,3-Dichloropropene	ND	5.2	0.86	ND	1.1	0.19	
108-10-1	4-Methyl-2-pentanone	**1.6**	11	0.76	**0.40**	2.8	0.19	**J**
10061-02-6	trans-1,3-Dichloropropene	ND	5.3	1.1	ND	1.2	0.25	
79-00-5	1,1,2-Trichloroethane	ND	5.4	0.56	ND	0.99	0.10	
108-88-3	Toluene	**16**	5.4	0.68	**4.2**	1.4	0.18	
591-78-6	2-Hexanone	ND	11	0.69	ND	2.8	0.17	
124-48-1	Dibromochloromethane	ND	5.5	0.73	ND	0.65	0.085	
106-93-4	1,2-Dibromoethane	ND	5.4	0.64	ND	0.70	0.084	
123-86-4	n-Butyl Acetate	**1.2**	11	0.76	**0.25**	2.4	0.16	**J**

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D = The reported result is from a dilution.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-EXT-02** ALS Project ID: P2105213
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2105213-010

Test Code: EPA TO-15 Date Collected: 9/16/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 10/4/21
Analyst: Topacio Zavala Date Analyzed: 10/14 - 10/15/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.10 Liter(s)
Test Notes: 0.025 Liter(s)
Container ID: 1SC00586

Initial Pressure (psig): -0.59 Final Pressure (psig): 0.0

Canister Dilution Factor: 1.04

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	**8.6**	5.5	1.2	**1.8**	1.2	0.27	
127-18-4	Tetrachloroethene	**3.6**	5.4	0.72	**0.53**	0.80	0.11	**J**
108-90-7	Chlorobenzene	ND	5.4	0.74	ND	1.2	0.16	
100-41-4	Ethylbenzene	**3.3**	5.4	0.78	**0.75**	1.2	0.18	**J**
179601-23-1	m,p-Xylenes	**15**	11	1.5	**3.5**	2.6	0.34	
75-25-2	Bromoform	ND	5.4	1.1	ND	0.52	0.11	
100-42-5	Styrene	**1.1**	5.2	0.89	**0.26**	1.2	0.21	**J**
95-47-6	o-Xylene	**5.5**	5.4	0.80	**1.3**	1.2	0.18	
111-84-2	n-Nonane	ND	5.4	0.93	ND	1.0	0.18	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.4	0.77	ND	0.79	0.11	
98-82-8	Cumene	ND	5.4	0.80	ND	1.1	0.16	
80-56-8	alpha-Pinene	**2.4**	5.6	0.85	**0.42**	1.0	0.15	**J**
103-65-1	n-Propylbenzene	**0.88**	5.5	0.80	**0.18**	1.1	0.16	**J**
622-96-8	4-Ethyltoluene	**1.2**	5.5	0.88	**0.25**	1.1	0.18	**J**
108-67-8	1,3,5-Trimethylbenzene	**1.5**	5.4	0.80	**0.30**	1.1	0.16	**J**
95-63-6	1,2,4-Trimethylbenzene	**6.5**	5.4	0.77	**1.3**	1.1	0.16	
100-44-7	Benzyl Chloride	ND	11	1.2	ND	2.2	0.24	
541-73-1	1,3-Dichlorobenzene	ND	5.4	0.83	ND	0.90	0.14	
106-46-7	1,4-Dichlorobenzene	ND	5.4	0.85	ND	0.90	0.14	
95-50-1	1,2-Dichlorobenzene	ND	5.5	0.82	ND	0.92	0.14	
5989-27-5	d-Limonene	**9.4**	5.2	1.1	**1.7**	0.93	0.21	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	1.0	ND	1.1	0.11	
120-82-1	1,2,4-Trichlorobenzene	ND	11	1.4	ND	1.5	0.18	
91-20-3	Naphthalene	**4.1**	5.4	1.4	**0.79**	1.0	0.26	**J**
87-68-3	Hexachlorobutadiene	ND	5.4	1.1	ND	0.51	0.11	

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ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-EXT-03** ALS Project ID: P2105213
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2105213-011

Test Code: EPA TO-15 Date Collected: 9/16/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 10/4/21
Analyst: Topacio Zavala Date Analyzed: 10/14 - 10/15/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.075 Liter(s)
Test Notes: 0.015 Liter(s)
Container ID: 1SS01129

Initial Pressure (psig): -3.80 Final Pressure (psig): 0.0

Canister Dilution Factor: 1.35

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	**170**	9.4	2.3	**100**	5.4	1.4	
75-71-8	Dichlorodifluoromethane (CFC 12)	**1.7**	9.5	1.6	**0.35**	1.9	0.32	**J**
74-87-3	Chloromethane	ND	9.2	1.5	ND	4.4	0.75	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	9.7	1.5	ND	1.4	0.22	
75-01-4	Vinyl Chloride	ND	9.4	1.0	ND	3.7	0.40	
106-99-0	1,3-Butadiene	ND	9.4	1.6	ND	4.2	0.72	
74-83-9	Bromomethane	ND	9.2	1.3	ND	2.4	0.34	
75-00-3	Chloroethane	ND	9.2	1.2	ND	3.5	0.45	
64-17-5	Ethanol	**18**	90	6.7	**9.3**	48	3.5	**J**
75-05-8	Acetonitrile	ND	18	2.3	ND	11	1.4	
107-02-8	Acrolein	ND	18	2.7	ND	7.9	1.2	
67-64-1	Acetone	ND	94	22	ND	39	9.1	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	9.4	1.5	ND	1.7	0.26	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	18	4.0	ND	7.3	1.6	
107-13-1	Acrylonitrile	ND	18	2.0	ND	8.3	0.91	
75-35-4	1,1-Dichloroethene	**7.3**	9.7	1.3	**1.8**	2.5	0.34	**J**
75-09-2	Methylene Chloride	ND	9.4	2.7	ND	2.7	0.78	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	9.5	1.3	ND	3.0	0.41	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	9.7	1.4	ND	1.3	0.18	
75-15-0	Carbon Disulfide	ND	20	2.9	ND	6.4	0.93	
156-60-5	trans-1,2-Dichloroethene	ND	9.5	1.3	ND	2.4	0.34	
75-34-3	1,1-Dichloroethane	ND	9.5	1.4	ND	2.4	0.35	
1634-04-4	Methyl tert-Butyl Ether	ND	9.5	1.1	ND	2.6	0.31	
108-05-4	Vinyl Acetate	ND	90	22	ND	26	6.1	
78-93-3	2-Butanone (MEK)	**3.3**	18	2.0	**1.1**	6.1	0.67	**J**

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **SVE-EXT-03** ALS Project ID: P2105213

Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2105213-011

Test Code:	EPA TO-15	Date Collected:	9/16/21
Instrument ID:	Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16	Date Received:	10/4/21
Analyst:	Topacio Zavala	Date Analyzed:	10/14 - 10/15/21
Sample Type:	1.0 L Silonite Summa Canister	Volume(s) Analyzed:	0.075 Liter(s)
Test Notes:			0.015 Liter(s)
Container ID:	1SS01129		

Initial Pressure (psig): -3.80 Final Pressure (psig): 0.0

Canister Dilution Factor: 1.35

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	9.4	1.4	ND	2.4	0.34	
141-78-6	Ethyl Acetate	ND	38	5.0	ND	10	1.4	
110-54-3	n-Hexane	**14**	9.5	2.0	**4.0**	2.7	0.56	
67-66-3	Chloroform	ND	9.7	1.3	ND	2.0	0.26	
109-99-9	Tetrahydrofuran (THF)	**7.1**	18	1.2	**2.4**	6.1	0.41	**J**
107-06-2	1,2-Dichloroethane	ND	9.5	1.1	ND	2.4	0.26	
71-55-6	1,1,1-Trichloroethane	**3.7**	9.4	1.2	**0.69**	1.7	0.22	**J**
71-43-2	Benzene	ND	9.0	1.4	ND	2.8	0.43	
56-23-5	Carbon Tetrachloride	ND	9.0	1.3	ND	1.4	0.21	
110-82-7	Cyclohexane	**3.2**	20	2.7	**0.94**	5.8	0.78	**J**
78-87-5	1,2-Dichloropropane	ND	9.0	1.2	ND	1.9	0.26	
75-27-4	Bromodichloromethane	ND	9.5	1.4	ND	1.4	0.21	
79-01-6	Trichloroethene	ND	9.4	1.3	ND	1.7	0.24	
123-91-1	1,4-Dioxane	**4,100**	47	5.7	**1,200**	13	1.6	**D**
80-62-6	Methyl Methacrylate	ND	20	3.4	ND	4.8	0.84	
142-82-5	n-Heptane	ND	9.5	1.5	ND	2.3	0.37	
10061-01-5	cis-1,3-Dichloropropene	ND	9.0	1.5	ND	2.0	0.33	
108-10-1	4-Methyl-2-pentanone	ND	20	1.3	ND	4.8	0.32	
10061-02-6	trans-1,3-Dichloropropene	ND	9.2	2.0	ND	2.0	0.44	
79-00-5	1,1,2-Trichloroethane	ND	9.4	0.97	ND	1.7	0.18	
108-88-3	Toluene	**17**	9.4	1.2	**4.5**	2.5	0.31	
591-78-6	2-Hexanone	ND	20	1.2	ND	4.8	0.29	
124-48-1	Dibromochloromethane	ND	9.5	1.3	ND	1.1	0.15	
106-93-4	1,2-Dibromoethane	ND	9.4	1.1	ND	1.2	0.15	
123-86-4	n-Butyl Acetate	ND	20	1.3	ND	4.2	0.28	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
D = The reported result is from a dilution.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-EXT-03** ALS Project ID: P2105213
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2105213-011

Test Code: EPA TO-15 Date Collected: 9/16/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 10/4/21
Analyst: Topacio Zavala Date Analyzed: 10/14 - 10/15/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.075 Liter(s)
Test Notes: 0.015 Liter(s)
Container ID: 1SS01129

Initial Pressure (psig): -3.80 Final Pressure (psig): 0.0

Canister Dilution Factor: 1.35

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	ND	9.5	2.2	ND	2.0	0.46	
127-18-4	Tetrachloroethene	ND	9.4	1.2	ND	1.4	0.18	
108-90-7	Chlorobenzene	ND	9.4	1.3	ND	2.0	0.28	
100-41-4	Ethylbenzene	**4.4**	9.4	1.4	**1.0**	2.2	0.31	**J**
179601-23-1	m,p-Xylenes	**21**	20	2.5	**4.9**	4.6	0.58	
75-25-2	Bromoform	ND	9.4	2.0	ND	0.91	0.19	
100-42-5	Styrene	ND	9.0	1.5	ND	2.1	0.36	
95-47-6	o-Xylene	**7.9**	9.4	1.4	**1.8**	2.2	0.32	**J**
111-84-2	n-Nonane	ND	9.4	1.6	ND	1.8	0.31	
79-34-5	1,1,2,2-Tetrachloroethane	ND	9.4	1.3	ND	1.4	0.19	
98-82-8	Cumene	ND	9.4	1.4	ND	1.9	0.28	
80-56-8	alpha-Pinene	**1.7**	9.7	1.5	**0.31**	1.7	0.26	**J**
103-65-1	n-Propylbenzene	ND	9.5	1.4	ND	1.9	0.28	
622-96-8	4-Ethyltoluene	ND	9.5	1.5	ND	1.9	0.31	
108-67-8	1,3,5-Trimethylbenzene	**2.1**	9.4	1.4	**0.43**	1.9	0.28	**J**
95-63-6	1,2,4-Trimethylbenzene	**8.3**	9.4	1.3	**1.7**	1.9	0.27	**J**
100-44-7	Benzyl Chloride	ND	20	2.2	ND	3.8	0.42	
541-73-1	1,3-Dichlorobenzene	ND	9.4	1.4	ND	1.6	0.24	
106-46-7	1,4-Dichlorobenzene	ND	9.4	1.5	ND	1.6	0.25	
95-50-1	1,2-Dichlorobenzene	ND	9.5	1.4	ND	1.6	0.24	
5989-27-5	d-Limonene	**8.7**	9.0	2.0	**1.6**	1.6	0.36	**J**
96-12-8	1,2-Dibromo-3-chloropropane	ND	18	1.8	ND	1.9	0.19	
120-82-1	1,2,4-Trichlorobenzene	ND	20	2.3	ND	2.7	0.32	
91-20-3	Naphthalene	**13**	9.4	2.3	**2.4**	1.8	0.45	
87-68-3	Hexachlorobutadiene	ND	9.4	2.0	ND	0.88	0.19	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **Method Blank** ALS Project ID: P2105213

Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P211014-MB

Test Code: EPA TO-15 Date Collected: NA

Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA

Analyst: Wida Ang Date Analyzed: 10/14/21

Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	ND	0.52	0.13	ND	0.30	0.076	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.53	0.087	ND	0.11	0.018	
74-87-3	Chloromethane	ND	0.51	0.086	ND	0.25	0.042	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.54	0.084	ND	0.077	0.012	
75-01-4	Vinyl Chloride	ND	0.52	0.057	ND	0.20	0.022	
106-99-0	1,3-Butadiene	ND	0.52	0.088	ND	0.24	0.040	
74-83-9	Bromomethane	ND	0.51	0.074	ND	0.13	0.019	
75-00-3	Chloroethane	ND	0.51	0.066	ND	0.19	0.025	
64-17-5	Ethanol	ND	5.0	0.37	ND	2.7	0.20	
75-05-8	Acetonitrile	ND	1.0	0.13	ND	0.60	0.077	
107-02-8	Acrolein	ND	1.0	0.15	ND	0.44	0.065	
67-64-1	Acetone	ND	5.2	1.2	ND	2.2	0.51	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	0.52	0.081	ND	0.093	0.014	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	1.0	0.22	ND	0.41	0.090	
107-13-1	Acrylonitrile	ND	1.0	0.11	ND	0.46	0.051	
75-35-4	1,1-Dichloroethene	ND	0.54	0.074	ND	0.14	0.019	
75-09-2	Methylene Chloride	ND	0.52	0.15	ND	0.15	0.043	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.53	0.072	ND	0.17	0.023	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	0.54	0.076	ND	0.070	0.0099	
75-15-0	Carbon Disulfide	ND	1.1	0.16	ND	0.35	0.051	
156-60-5	trans-1,2-Dichloroethene	ND	0.53	0.074	ND	0.13	0.019	
75-34-3	1,1-Dichloroethane	ND	0.53	0.078	ND	0.13	0.019	
1634-04-4	Methyl tert-Butyl Ether	ND	0.53	0.063	ND	0.15	0.017	
108-05-4	Vinyl Acetate	ND	5.0	1.2	ND	1.4	0.34	
78-93-3	2-Butanone (MEK)	ND	1.0	0.11	ND	0.34	0.037	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Method Blank** ALS Project ID: P2105213
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P211014-MB

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Wida Ang Date Analyzed: 10/14/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.52	0.075	ND	0.13	0.019	
141-78-6	Ethyl Acetate	ND	2.1	0.28	ND	0.58	0.078	
110-54-3	n-Hexane	ND	0.53	0.11	ND	0.15	0.031	
67-66-3	Chloroform	ND	0.54	0.071	ND	0.11	0.015	
109-99-9	Tetrahydrofuran (THF)	ND	1.0	0.067	ND	0.34	0.023	
107-06-2	1,2-Dichloroethane	ND	0.53	0.059	ND	0.13	0.015	
71-55-6	1,1,1-Trichloroethane	ND	0.52	0.066	ND	0.095	0.012	
71-43-2	Benzene	ND	0.50	0.077	ND	0.16	0.024	
56-23-5	Carbon Tetrachloride	ND	0.50	0.074	ND	0.080	0.012	
110-82-7	Cyclohexane	ND	1.1	0.15	ND	0.32	0.044	
78-87-5	1,2-Dichloropropane	ND	0.50	0.066	ND	0.11	0.014	
75-27-4	Bromodichloromethane	ND	0.53	0.077	ND	0.079	0.011	
79-01-6	Trichloroethene	ND	0.52	0.072	ND	0.097	0.013	
123-91-1	1,4-Dioxane	ND	0.52	0.063	ND	0.14	0.017	
80-62-6	Methyl Methacrylate	ND	1.1	0.19	ND	0.27	0.046	
142-82-5	n-Heptane	ND	0.53	0.085	ND	0.13	0.021	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.083	ND	0.11	0.018	
108-10-1	4-Methyl-2-pentanone	ND	1.1	0.073	ND	0.27	0.018	
10061-02-6	trans-1,3-Dichloropropene	ND	0.51	0.11	ND	0.11	0.024	
79-00-5	1,1,2-Trichloroethane	ND	0.52	0.054	ND	0.095	0.0099	
108-88-3	Toluene	ND	0.52	0.065	ND	0.14	0.017	
591-78-6	2-Hexanone	ND	1.1	0.066	ND	0.27	0.016	
124-48-1	Dibromochloromethane	ND	0.53	0.070	ND	0.062	0.0082	
106-93-4	1,2-Dibromoethane	ND	0.52	0.062	ND	0.068	0.0081	
123-86-4	n-Butyl Acetate	ND	1.1	0.073	ND	0.23	0.015	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **Method Blank** ALS Project ID: P2105213

Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P211014-MB

Test Code:	EPA TO-15	Date Collected:	NA
Instrument ID:	Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16	Date Received:	NA
Analyst:	Wida Ang	Date Analyzed:	10/14/21
Sample Type:	1.0 L Summa Canister	Volume(s) Analyzed:	1.00 Liter(s)
Test Notes:			

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.53	0.12	ND	0.11	0.026	
127-18-4	Tetrachloroethene	ND	0.52	0.069	ND	0.077	0.010	
108-90-7	Chlorobenzene	ND	0.52	0.071	ND	0.11	0.015	
100-41-4	Ethylbenzene	ND	0.52	0.075	ND	0.12	0.017	
179601-23-1	m,p-Xylenes	ND	1.1	0.14	ND	0.25	0.032	
75-25-2	Bromoform	ND	0.52	0.11	ND	0.050	0.011	
100-42-5	Styrene	ND	0.50	0.086	ND	0.12	0.020	
95-47-6	o-Xylene	ND	0.52	0.077	ND	0.12	0.018	
111-84-2	n-Nonane	ND	0.52	0.089	ND	0.099	0.017	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.52	0.074	ND	0.076	0.011	
98-82-8	Cumene	ND	0.52	0.077	ND	0.11	0.016	
80-56-8	alpha-Pinene	ND	0.54	0.082	ND	0.097	0.015	
103-65-1	n-Propylbenzene	ND	0.53	0.077	ND	0.11	0.016	
622-96-8	4-Ethyltoluene	ND	0.53	0.085	ND	0.11	0.017	
108-67-8	1,3,5-Trimethylbenzene	ND	0.52	0.077	ND	0.11	0.016	
95-63-6	1,2,4-Trimethylbenzene	ND	0.52	0.074	ND	0.11	0.015	
100-44-7	Benzyl Chloride	ND	1.1	0.12	ND	0.21	0.023	
541-73-1	1,3-Dichlorobenzene	ND	0.52	0.080	ND	0.087	0.013	
106-46-7	1,4-Dichlorobenzene	ND	0.52	0.082	ND	0.087	0.014	
95-50-1	1,2-Dichlorobenzene	ND	0.53	0.079	ND	0.088	0.013	
5989-27-5	d-Limonene	ND	0.50	0.11	ND	0.090	0.020	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.10	ND	0.10	0.010	
120-82-1	1,2,4-Trichlorobenzene	ND	1.1	0.13	ND	0.15	0.018	
91-20-3	Naphthalene	ND	0.52	0.13	ND	0.099	0.025	
87-68-3	Hexachlorobutadiene	ND	0.52	0.11	ND	0.049	0.010	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Method Blank** ALS Project ID: P2105213
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P211015-MB

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Topacio Zavala Date Analyzed: 10/15/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	ND	0.52	0.13	ND	0.30	0.076	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.53	0.087	ND	0.11	0.018	
74-87-3	Chloromethane	ND	0.51	0.086	ND	0.25	0.042	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.54	0.084	ND	0.077	0.012	
75-01-4	Vinyl Chloride	ND	0.52	0.057	ND	0.20	0.022	
106-99-0	1,3-Butadiene	ND	0.52	0.088	ND	0.24	0.040	
74-83-9	Bromomethane	ND	0.51	0.074	ND	0.13	0.019	
75-00-3	Chloroethane	ND	0.51	0.066	ND	0.19	0.025	
64-17-5	Ethanol	ND	5.0	0.37	ND	2.7	0.20	
75-05-8	Acetonitrile	ND	1.0	0.13	ND	0.60	0.077	
107-02-8	Acrolein	ND	1.0	0.15	ND	0.44	0.065	
67-64-1	Acetone	ND	5.2	1.2	ND	2.2	0.51	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	0.52	0.081	ND	0.093	0.014	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	1.0	0.22	ND	0.41	0.090	
107-13-1	Acrylonitrile	ND	1.0	0.11	ND	0.46	0.051	
75-35-4	1,1-Dichloroethene	ND	0.54	0.074	ND	0.14	0.019	
75-09-2	Methylene Chloride	ND	0.52	0.15	ND	0.15	0.043	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.53	0.072	ND	0.17	0.023	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	0.54	0.076	ND	0.070	0.0099	
75-15-0	Carbon Disulfide	ND	1.1	0.16	ND	0.35	0.051	
156-60-5	trans-1,2-Dichloroethene	ND	0.53	0.074	ND	0.13	0.019	
75-34-3	1,1-Dichloroethane	ND	0.53	0.078	ND	0.13	0.019	
1634-04-4	Methyl tert-Butyl Ether	ND	0.53	0.063	ND	0.15	0.017	
108-05-4	Vinyl Acetate	ND	5.0	1.2	ND	1.4	0.34	
78-93-3	2-Butanone (MEK)	ND	1.0	0.11	ND	0.34	0.037	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Method Blank** ALS Project ID: P2105213
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P211015-MB

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Topacio Zavala Date Analyzed: 10/15/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.52	0.075	ND	0.13	0.019	
141-78-6	Ethyl Acetate	ND	2.1	0.28	ND	0.58	0.078	
110-54-3	n-Hexane	ND	0.53	0.11	ND	0.15	0.031	
67-66-3	Chloroform	ND	0.54	0.071	ND	0.11	0.015	
109-99-9	Tetrahydrofuran (THF)	ND	1.0	0.067	ND	0.34	0.023	
107-06-2	1,2-Dichloroethane	ND	0.53	0.059	ND	0.13	0.015	
71-55-6	1,1,1-Trichloroethane	ND	0.52	0.066	ND	0.095	0.012	
71-43-2	Benzene	ND	0.50	0.077	ND	0.16	0.024	
56-23-5	Carbon Tetrachloride	ND	0.50	0.074	ND	0.080	0.012	
110-82-7	Cyclohexane	ND	1.1	0.15	ND	0.32	0.044	
78-87-5	1,2-Dichloropropane	ND	0.50	0.066	ND	0.11	0.014	
75-27-4	Bromodichloromethane	ND	0.53	0.077	ND	0.079	0.011	
79-01-6	Trichloroethene	ND	0.52	0.072	ND	0.097	0.013	
123-91-1	1,4-Dioxane	ND	0.52	0.063	ND	0.14	0.017	
80-62-6	Methyl Methacrylate	ND	1.1	0.19	ND	0.27	0.046	
142-82-5	n-Heptane	ND	0.53	0.085	ND	0.13	0.021	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.083	ND	0.11	0.018	
108-10-1	4-Methyl-2-pentanone	ND	1.1	0.073	ND	0.27	0.018	
10061-02-6	trans-1,3-Dichloropropene	ND	0.51	0.11	ND	0.11	0.024	
79-00-5	1,1,2-Trichloroethane	ND	0.52	0.054	ND	0.095	0.0099	
108-88-3	Toluene	ND	0.52	0.065	ND	0.14	0.017	
591-78-6	2-Hexanone	ND	1.1	0.066	ND	0.27	0.016	
124-48-1	Dibromochloromethane	ND	0.53	0.070	ND	0.062	0.0082	
106-93-4	1,2-Dibromoethane	ND	0.52	0.062	ND	0.068	0.0081	
123-86-4	n-Butyl Acetate	ND	1.1	0.073	ND	0.23	0.015	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **Method Blank** ALS Project ID: P2105213

Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P211015-MB

Test Code: EPA TO-15 Date Collected: NA

Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA

Analyst: Topacio Zavala Date Analyzed: 10/15/21

Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.53	0.12	ND	0.11	0.026	
127-18-4	Tetrachloroethene	ND	0.52	0.069	ND	0.077	0.010	
108-90-7	Chlorobenzene	ND	0.52	0.071	ND	0.11	0.015	
100-41-4	Ethylbenzene	ND	0.52	0.075	ND	0.12	0.017	
179601-23-1	m,p-Xylenes	ND	1.1	0.14	ND	0.25	0.032	
75-25-2	Bromoform	ND	0.52	0.11	ND	0.050	0.011	
100-42-5	Styrene	ND	0.50	0.086	ND	0.12	0.020	
95-47-6	o-Xylene	ND	0.52	0.077	ND	0.12	0.018	
111-84-2	n-Nonane	ND	0.52	0.089	ND	0.099	0.017	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.52	0.074	ND	0.076	0.011	
98-82-8	Cumene	ND	0.52	0.077	ND	0.11	0.016	
80-56-8	alpha-Pinene	ND	0.54	0.082	ND	0.097	0.015	
103-65-1	n-Propylbenzene	ND	0.53	0.077	ND	0.11	0.016	
622-96-8	4-Ethyltoluene	ND	0.53	0.085	ND	0.11	0.017	
108-67-8	1,3,5-Trimethylbenzene	ND	0.52	0.077	ND	0.11	0.016	
95-63-6	1,2,4-Trimethylbenzene	ND	0.52	0.074	ND	0.11	0.015	
100-44-7	Benzyl Chloride	ND	1.1	0.12	ND	0.21	0.023	
541-73-1	1,3-Dichlorobenzene	ND	0.52	0.080	ND	0.087	0.013	
106-46-7	1,4-Dichlorobenzene	ND	0.52	0.082	ND	0.087	0.014	
95-50-1	1,2-Dichlorobenzene	ND	0.53	0.079	ND	0.088	0.013	
5989-27-5	d-Limonene	ND	0.50	0.11	ND	0.090	0.020	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.10	ND	0.10	0.010	
120-82-1	1,2,4-Trichlorobenzene	ND	1.1	0.13	ND	0.15	0.018	
91-20-3	Naphthalene	ND	0.52	0.13	ND	0.099	0.025	
87-68-3	Hexachlorobutadiene	ND	0.52	0.11	ND	0.049	0.010	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

SURROGATE SPIKE RECOVERY RESULTS

Client: **Environmental Management Services, Inc.**
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Project ID: P2105213

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date(s) Collected: 9/16/21
Analyst: Topacio Zavala/Wida Ang Date(s) Received: 10/4/21
Sample Type: 1.0 L Summa Canister(s) / 1.0 L Silonite Summa Canister(s) Date(s) Analyzed: 10/14 - 10/15/21
Test Notes:

Client Sample ID	ALS Sample ID	1,2-Dichloroethane-d4 Percent Recovered	Toluene-d8 Percent Recovered	Bromofluorobenzene Percent Recovered	Acceptance Limits	Data Qualifier
Method Blank	P211014-MB	**96**	**100**	**105**	70-130	
Method Blank	P211015-MB	**97**	**99**	**103**	70-130	
Lab Control Sample	P211014-LCS	**94**	**103**	**104**	70-130	
Lab Control Sample	P211015-LCS	**97**	**100**	**104**	70-130	
Duplicate Lab Control Sample	P211014-DLCS	**95**	**101**	**106**	70-130	
Duplicate Lab Control Sample	P211015-DLCS	**95**	**102**	**106**	70-130	
SVE-OBS-01	P2105213-001	**96**	**100**	**105**	70-130	
SVE-OBS-02	P2105213-002	**96**	**101**	**105**	70-130	
SVE-OBS-03	P2105213-003	**95**	**101**	**106**	70-130	
SVE-OBS-04	P2105213-004	**97**	**101**	**105**	70-130	
SVE-OBS-05	P2105213-005	**96**	**100**	**104**	70-130	
SVE-OBS-07	P2105213-006	**96**	**95**	**105**	70-130	
SVE-OBS-08	P2105213-007	**97**	**97**	**106**	70-130	
SVE-OBS-09	P2105213-008	**98**	**98**	**104**	70-130	
SVE-EXT-01	P2105213-009	**101**	**98**	**104**	70-130	
SVE-EXT-02	P2105213-010	**98**	**104**	**105**	70-130	
SVE-EXT-03	P2105213-011	**99**	**100**	**105**	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2105213
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P211014-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Wida Ang Date Analyzed: 10/14/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
115-07-1	Propene	206	210	220	**102**	**107**	56-128	5	25	
75-71-8	Dichlorodifluoromethane (CFC 12)	208	184	195	**88**	**94**	71-112	7	25	
74-87-3	Chloromethane	206	241	182	**117**	**88**	53-126	28	25	**R**
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	208	237	167	**114**	**80**	62-121	35	25	**R**
75-01-4	Vinyl Chloride	208	251	172	**121**	**83**	63-123	37	25	**R**
106-99-0	1,3-Butadiene	206	237	164	**115**	**80**	63-135	36	25	**R**
74-83-9	Bromomethane	206	204	202	**99**	**98**	71-112	1	25	
75-00-3	Chloroethane	206	197	202	**96**	**98**	66-117	2	25	
64-17-5	Ethanol	832	682	828	**82**	**100**	57-117	20	25	
75-05-8	Acetonitrile	202	178	182	**88**	**90**	59-131	2	25	
107-02-8	Acrolein	416	410	417	**99**	**100**	71-123	1	25	
67-64-1	Acetone	1,020	910	912	**89**	**89**	60-117	0	25	
75-69-4	Trichlorofluoromethane (CFC 11)	202	176	181	**87**	**90**	71-114	3	25	
67-63-0	2-Propanol (Isopropyl Alcohol)	400	340	370	**85**	**93**	61-124	9	25	
107-13-1	Acrylonitrile	402	384	389	**96**	**97**	65-130	1	25	
75-35-4	1,1-Dichloroethene	210	200	207	**95**	**99**	74-114	4	25	
75-09-2	Methylene Chloride	208	193	197	**93**	**95**	75-112	2	25	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	204	195	190	**96**	**93**	57-127	3	25	
76-13-1	Trichlorotrifluoroethane (CFC 113)	216	193	196	**89**	**91**	73-114	2	25	
75-15-0	Carbon Disulfide	414	392	380	**95**	**92**	70-113	3	25	
156-60-5	trans-1,2-Dichloroethene	208	212	211	**102**	**101**	76-119	1	25	
75-34-3	1,1-Dichloroethane	214	199	201	**93**	**94**	70-114	1	25	
1634-04-4	Methyl tert-Butyl Ether	206	208	201	**101**	**98**	72-118	3	25	
108-05-4	Vinyl Acetate	942	734	1020	**78**	**108**	56-137	32	25	**R**
78-93-3	2-Butanone (MEK)	408	408	404	**100**	**99**	74-121	1	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.
R = Duplicate precision not met.

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2105213
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P211014-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Wida Ang Date Analyzed: 10/14/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	206	202	200	**98**	**97**	73-117	1	25	
141-78-6	Ethyl Acetate	580	751	532	**129**	**92**	59-161	33	25	**R**
110-54-3	n-Hexane	208	190	189	**91**	**91**	55-130	0	25	
67-66-3	Chloroform	210	194	196	**92**	**93**	71-114	1	25	
109-99-9	Tetrahydrofuran (THF)	404	393	409	**97**	**101**	73-114	4	25	
107-06-2	1,2-Dichloroethane	210	193	194	**92**	**92**	71-119	0	25	
71-55-6	1,1,1-Trichloroethane	208	190	186	**91**	**89**	73-119	2	25	
71-43-2	Benzene	208	198	197	**95**	**95**	72-113	0	25	
56-23-5	Carbon Tetrachloride	202	192	184	**95**	**91**	67-123	4	25	
110-82-7	Cyclohexane	412	398	394	**97**	**96**	70-119	1	25	
78-87-5	1,2-Dichloropropane	206	198	201	**96**	**98**	70-118	2	25	
75-27-4	Bromodichloromethane	208	201	203	**97**	**98**	74-119	1	25	
79-01-6	Trichloroethene	204	203	206	**100**	**101**	74-115	1	25	
123-91-1	1,4-Dioxane	206	222	222	**108**	**108**	77-124	0	25	
80-62-6	Methyl Methacrylate	410	419	425	**102**	**104**	78-126	2	25	
142-82-5	n-Heptane	206	205	209	**100**	**101**	70-119	1	25	
10061-01-5	cis-1,3-Dichloropropene	208	224	229	**108**	**110**	81-126	2	25	
108-10-1	4-Methyl-2-pentanone	412	422	429	**102**	**104**	73-129	2	25	
10061-02-6	trans-1,3-Dichloropropene	200	203	208	**102**	**104**	80-127	2	25	
79-00-5	1,1,2-Trichloroethane	208	206	212	**99**	**102**	78-117	3	25	
108-88-3	Toluene	206	200	197	**97**	**96**	70-118	1	25	
591-78-6	2-Hexanone	406	413	401	**102**	**99**	74-132	3	25	
124-48-1	Dibromochloromethane	210	211	202	**100**	**96**	69-137	4	25	
106-93-4	1,2-Dibromoethane	208	217	212	**104**	**102**	76-128	2	25	
123-86-4	n-Butyl Acetate	406	400	393	**99**	**97**	75-134	2	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2105213
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P211014-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Wida Ang Date Analyzed: 10/14/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
111-65-9	n-Octane	208	202	197	**97**	**95**	68-120	2	25	
127-18-4	Tetrachloroethene	212	198	195	**93**	**92**	63-130	1	25	
108-90-7	Chlorobenzene	206	207	199	**100**	**97**	70-118	3	25	
100-41-4	Ethylbenzene	206	203	200	**99**	**97**	71-123	2	25	
179601-23-1	m,p-Xylenes	416	396	389	**95**	**94**	67-127	1	25	
75-25-2	Bromoform	210	220	212	**105**	**101**	65-149	4	25	
100-42-5	Styrene	202	210	199	**104**	**99**	76-132	5	25	
95-47-6	o-Xylene	208	200	197	**96**	**95**	69-124	1	25	
111-84-2	n-Nonane	208	203	200	**98**	**96**	64-127	2	25	
79-34-5	1,1,2,2-Tetrachloroethane	208	214	212	**103**	**102**	69-128	1	25	
98-82-8	Cumene	206	202	195	**98**	**95**	69-125	3	25	
80-56-8	alpha-Pinene	210	220	213	**105**	**101**	68-129	4	25	
103-65-1	n-Propylbenzene	208	195	188	**94**	**90**	70-127	4	25	
622-96-8	4-Ethyltoluene	208	220	209	**106**	**100**	69-127	6	25	
108-67-8	1,3,5-Trimethylbenzene	208	206	202	**99**	**97**	66-129	2	25	
95-63-6	1,2,4-Trimethylbenzene	206	212	206	**103**	**100**	63-142	3	25	
100-44-7	Benzyl Chloride	416	447	402	**107**	**97**	73-145	10	25	
541-73-1	1,3-Dichlorobenzene	208	225	212	**108**	**102**	67-136	6	25	
106-46-7	1,4-Dichlorobenzene	210	226	206	**108**	**98**	63-134	10	25	
95-50-1	1,2-Dichlorobenzene	210	218	203	**104**	**97**	64-139	7	25	
5989-27-5	d-Limonene	206	227	220	**110**	**107**	63-137	3	25	
96-12-8	1,2-Dibromo-3-chloropropane	404	398	376	**99**	**93**	72-145	6	25	
120-82-1	1,2,4-Trichlorobenzene	420	393	331	**94**	**79**	62-154	17	25	
91-20-3	Naphthalene	210	207	149	**99**	**71**	62-156	33	25	**R**
87-68-3	Hexachlorobutadiene	212	201	192	**95**	**91**	55-142	4	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2105213
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P211015-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Topacio Zavala Date Analyzed: 10/15/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
115-07-1	Propene	206	252	222	**122**	**108**	56-128	12	25	
75-71-8	Dichlorodifluoromethane (CFC 12)	208	214	192	**103**	**92**	71-112	11	25	
74-87-3	Chloromethane	206	198	254	**96**	**123**	53-126	25	25	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	208	184	209	**88**	**100**	62-121	13	25	
75-01-4	Vinyl Chloride	208	187	198	**90**	**95**	63-123	5	25	
106-99-0	1,3-Butadiene	206	179	183	**87**	**89**	63-135	2	25	
74-83-9	Bromomethane	206	208	214	**101**	**104**	71-112	3	25	
75-00-3	Chloroethane	206	208	208	**101**	**101**	66-117	0	25	
64-17-5	Ethanol	832	872	859	**105**	**103**	57-117	2	25	
75-05-8	Acetonitrile	202	190	188	**94**	**93**	59-131	1	25	
107-02-8	Acrolein	416	436	431	**105**	**104**	71-123	1	25	
67-64-1	Acetone	1,020	952	930	**93**	**91**	60-117	2	25	
75-69-4	Trichlorofluoromethane (CFC 11)	202	192	187	**95**	**93**	71-114	2	25	
67-63-0	2-Propanol (Isopropyl Alcohol)	400	385	368	**96**	**92**	61-124	4	25	
107-13-1	Acrylonitrile	402	408	401	**101**	**100**	65-130	1	25	
75-35-4	1,1-Dichloroethene	210	210	208	**100**	**99**	74-114	1	25	
75-09-2	Methylene Chloride	208	201	198	**97**	**95**	75-112	2	25	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	204	196	191	**96**	**94**	57-127	2	25	
76-13-1	Trichlorotrifluoroethane (CFC 113)	216	203	199	**94**	**92**	73-114	2	25	
75-15-0	Carbon Disulfide	414	392	384	**95**	**93**	70-113	2	25	
156-60-5	trans-1,2-Dichloroethene	208	219	213	**105**	**102**	76-119	3	25	
75-34-3	1,1-Dichloroethane	214	207	200	**97**	**93**	70-114	4	25	
1634-04-4	Methyl tert-Butyl Ether	206	207	201	**100**	**98**	72-118	2	25	
108-05-4	Vinyl Acetate	942	1030	1010	**109**	**107**	56-137	2	25	
78-93-3	2-Butanone (MEK)	408	409	400	**100**	**98**	74-121	2	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2105213
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P211015-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Topacio Zavala Date Analyzed: 10/15/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	206	205	201	**100**	**98**	73-117	2	25	
141-78-6	Ethyl Acetate	580	542	528	**93**	**91**	59-161	2	25	
110-54-3	n-Hexane	208	193	189	**93**	**91**	55-130	2	25	
67-66-3	Chloroform	210	202	196	**96**	**93**	71-114	3	25	
109-99-9	Tetrahydrofuran (THF)	404	409	408	**101**	**101**	73-114	0	25	
107-06-2	1,2-Dichloroethane	210	200	195	**95**	**93**	71-119	2	25	
71-55-6	1,1,1-Trichloroethane	208	198	191	**95**	**92**	73-119	3	25	
71-43-2	Benzene	208	203	200	**98**	**96**	72-113	2	25	
56-23-5	Carbon Tetrachloride	202	193	187	**96**	**93**	67-123	3	25	
110-82-7	Cyclohexane	412	399	392	**97**	**95**	70-119	2	25	
78-87-5	1,2-Dichloropropane	206	203	199	**99**	**97**	70-118	2	25	
75-27-4	Bromodichloromethane	208	205	202	**99**	**97**	74-119	2	25	
79-01-6	Trichloroethene	204	208	204	**102**	**100**	74-115	2	25	
123-91-1	1,4-Dioxane	206	221	219	**107**	**106**	77-124	0.9	25	
80-62-6	Methyl Methacrylate	410	417	413	**102**	**101**	78-126	1	25	
142-82-5	n-Heptane	206	204	199	**99**	**97**	70-119	2	25	
10061-01-5	cis-1,3-Dichloropropene	208	226	222	**109**	**107**	81-126	2	25	
108-10-1	4-Methyl-2-pentanone	412	424	412	**103**	**100**	73-129	3	25	
10061-02-6	trans-1,3-Dichloropropene	200	205	200	**103**	**100**	80-127	3	25	
79-00-5	1,1,2-Trichloroethane	208	208	204	**100**	**98**	78-117	2	25	
108-88-3	Toluene	206	197	197	**96**	**96**	70-118	0	25	
591-78-6	2-Hexanone	406	403	402	**99**	**99**	74-132	0	25	
124-48-1	Dibromochloromethane	210	207	205	**99**	**98**	69-137	1	25	
106-93-4	1,2-Dibromoethane	208	210	212	**101**	**102**	76-128	1	25	
123-86-4	n-Butyl Acetate	406	395	394	**97**	**97**	75-134	0	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2105213
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P211015-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Topacio Zavala Date Analyzed: 10/15/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
111-65-9	n-Octane	208	198	198	**95**	**95**	68-120	0	25	
127-18-4	Tetrachloroethene	212	196	197	**92**	**93**	63-130	1	25	
108-90-7	Chlorobenzene	206	200	200	**97**	**97**	70-118	0	25	
100-41-4	Ethylbenzene	206	201	202	**98**	**98**	71-123	0	25	
179601-23-1	m,p-Xylenes	416	391	392	**94**	**94**	67-127	0	25	
75-25-2	Bromoform	210	216	216	**103**	**103**	65-149	0	25	
100-42-5	Styrene	202	197	199	**98**	**99**	76-132	1	25	
95-47-6	o-Xylene	208	199	199	**96**	**96**	69-124	0	25	
111-84-2	n-Nonane	208	201	200	**97**	**96**	64-127	1	25	
79-34-5	1,1,2,2-Tetrachloroethane	208	213	213	**102**	**102**	69-128	0	25	
98-82-8	Cumene	206	197	198	**96**	**96**	69-125	0	25	
80-56-8	alpha-Pinene	210	213	215	**101**	**102**	68-129	1	25	
103-65-1	n-Propylbenzene	208	189	189	**91**	**91**	70-127	0	25	
622-96-8	4-Ethyltoluene	208	211	211	**101**	**101**	69-127	0	25	
108-67-8	1,3,5-Trimethylbenzene	208	204	204	**98**	**98**	66-129	0	25	
95-63-6	1,2,4-Trimethylbenzene	206	208	208	**101**	**101**	63-142	0	25	
100-44-7	Benzyl Chloride	416	407	408	**98**	**98**	73-145	0	25	
541-73-1	1,3-Dichlorobenzene	208	215	214	**103**	**103**	67-136	0	25	
106-46-7	1,4-Dichlorobenzene	210	208	208	**99**	**99**	63-134	0	25	
95-50-1	1,2-Dichlorobenzene	210	206	206	**98**	**98**	64-139	0	25	
5989-27-5	d-Limonene	206	221	222	**107**	**108**	63-137	0.9	25	
96-12-8	1,2-Dibromo-3-chloropropane	404	384	383	**95**	**95**	72-145	0	25	
120-82-1	1,2,4-Trichlorobenzene	420	335	337	**80**	**80**	62-154	0	25	
91-20-3	Naphthalene	210	150	151	**71**	**72**	62-156	1	25	
87-68-3	Hexachlorobutadiene	212	196	195	**92**	**92**	55-142	0	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

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LABORATORY REPORT

January 31, 2022

Collin Creel
Environmental Management Services, Inc.
PO Box 15369
Hattiesburg, MS 39402

RE: SVE Performance Monitoring / KUH0-21-010

Dear Collin:

Enclosed are the results of the samples submitted to our laboratory on January 20, 2022. For your reference, these analyses have been assigned our service request number P2200253.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

By Sue Anderson at 1:42 pm, Jan 31, 2022

Sue Anderson
Project Manager

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
www.alsglobal.com

Client: Environmental Management Services, Inc. Service Request No: P2200253
Project: SVE Performance Monitoring / KUH0-21-010

CASE NARRATIVE

The samples were received intact under chain of custody on January 20, 2022 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Volatile Organic Compound Analysis

The samples were analyzed for volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. This procedure is described in laboratory SOP VOA-TO15. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. This method is included on the laboratory's NELAP and DoD-ELAP scope of accreditation. Any analytes flagged with an X are not included on the NELAP or DoD-ELAP accreditation.

The upper control criteria were exceeded for benzyl chloride, 1, 2-dichlorobenzene, 1, 2-dibromo-3-chloropropane, d-Limonene and 1, 2, 4-trichlorobenzene in the Continuing Calibration Verification (CCV) analyzed on January 25, 2022. Therefore, a potential for a high bias exists for those associated sample concentrations reported with positive results. The data has been qualified accordingly.

The spike recovery of cyclohexane for the Laboratory Control Samples (LCS/DLCS) analyzed on January 25, 2022 was outside the laboratory generated control criterion. The recovery error equates to a potential high bias. However, the spike recovery of the analyte in question was within the method criteria; therefore, the data quality has not been significantly affected. No further corrective action was taken.

The containers were cleaned, prior to sampling, down to the method reporting limit (MRL) reported for this project. For projects requiring DoD QSM 5.3 compliance canisters were cleaned to <1/2 the MRL. Please note, projects which require reporting below the MRL could have results between the MRL and method detection limit (MDL) that are biased high.

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ALS Environmental – Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
Alaska DEC	http://dec.alaska.gov/eh/lab.aspx	17-019
Arizona DHS	http://www.azdhs.gov/preparedness/state-laboratory/lab-licensure-certification/index.php#laboratory-licensure-home	AZ0694
Florida DOH (NELAP)	http://www.floridahealth.gov/licensing-and-regulation/environmental-laboratories/index.html	E871020
Louisiana DEQ (NELAP)	http://www.deq.louisiana.gov/page/la-lab-accreditation	05071
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/professionals/labCert.shtml	2018027
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	1776326
New Jersey DEP (NELAP)	http://www.nj.gov/dep/enforcement/oqa.html	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://www.oregon.gov/oha/ph/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	4068-008
Pennsylvania DEP	http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx	68-03307 (Registration)
PJLA (DoD ELAP)	http://www.pjlabs.com/search-accredited-labs	65818 (Testing)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/agency/qa/env_lab_accreditation.html	T104704413-19-10
Utah DOH (NELAP)	http://health.utah.gov/lab/lab_cert_env	CA016272019-10
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: Environmental Management Services, Inc. Service Request: P2200253

Project ID: SVE Performance Monitoring / KUH0-21-010

Date Received: 1/20/2022

Time Received: 10:20

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pfl (psig)	2nd Pi (psig)	2nd Pf (psig)	TO-15 - VOC Cans
SVE-OBS-01	P2200253-001	Air	12/29/2021	12:50	1SS00887	-0.47	6.06	0.73	6.58	X
SVE-OBS-02	P2200253-002	Air	12/29/2021	13:15	1SS01444	-0.96	6.49			X
SVE-OBS-03	P2200253-003	Air	12/29/2021	13:25	1SS00033	-0.68	6.75			X
SVE-OBS-04	P2200253-004	Air	12/29/2021	13:33	1SS01441	-1.39	6.50			X
SVE-OBS-05	P2200253-005	Air	12/29/2021	13:54	1SS01460	-1.19	10.65			X
SVE-OBS-07	P2200253-006	Air	12/29/2021	12:40	1SS01324	-1.33	5.91			X
SVE-OBS-08	P2200253-007	Air	12/29/2021	12:29	1SS00169	-0.70	5.79			X
SVE-OBS-09	P2200253-008	Air	12/29/2021	12:15	1SS01439	-1.30	6.20			X
SVE-EXT-02	P2200253-009	Air	12/29/2021	14:44	1SS01443	-0.88	6.26	0.17	2.16	X
SVE-EXT-03	P2200253-010	Air	12/29/2021	14:50	1SC00711	-1.60	6.96			X

Air - Chain of Custody Record & Analytical Service Request

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day-Standard

ALS Project No. 122-0253

Company Name & Address (Reporting Information)	EMS, Inc. PO Box 15369 Hattiesburg, MS 39404
Project Manager	Collin Creel
Phone	(985) 516-0142
Fax	
Email Address for Result Reporting	ccreel@env-mgt.com
Project Name	SVE Performance Monitoring
Project Number	KUHO-21-010
P.O. # / Billing Information	KUHO-21-010 / Same as Reporting
Sampler (Print & Sign)	Collin Creel
ALS Contact:	

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	Analysis Method: TO15		Comments e.g. Actual Preservative or specific instructions
SVE-OBS-01	1	12/29/21	12:50	1SS00887		-30	0	1L	✓		
SVE-OBS-02	2	12/29/21	13:15	1SS01444		-30	0	1L	✓		
SVE-OBS-03	3	12/29/21	13:25	1SS00033		-30	0	1L	✓		
SVE-OBS-04	4	12/29/21	13:33	1SS01441		-29	0	1L	✓		
SVE-OBS-05	5	12/29/21	13:54	1SS01460		-30	0	1L	✓		
SVE-OBS-07	6	12/29/21	12:40	1SS01324		-28	0	1L	✓		
SVE-OBS-08	7	12/29/21	12:29	1SS00169		-15	0	1L	✓		
SVE-OBS-09	8	12/29/21	12:15	1SS01439		-30	0	1L	✓		
~~SVE-EXT-01~~ CG 1/14/22											
SVE-EXT-02	9	12/29/21	14:44	1SS01443		-30	0	1L	✓		
SVE-EXT-03	10	12/29/21	14:50	1SC00711		-30	0	1L	✓		

Report Tier Levels - please select

Tier I - Results (Default if not specified) ____
Tier II (Results + QC Summaries) ✓
Tier III (Results + QC & Calibration Summaries) ____
Tier IV (Data Validation Package) 10% Surcharge ____

EDD required Yes / No
Type: _____ Units: _____

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date: 1/14/22	Time: 12:00	Received by: (Signature) - Fed Ex -	Date:	Time:
Relinquished by: (Signature) - Fed Ex -	Date:	Time:	Received by: (Signature)	Date: 1-20-22	Time: 1020

Cooler / Blank Temperature ____ °C

5 of 49

ALS Environmental

Sample Acceptance Check Form

Client: Environmental Management Services, Inc. Work order: P2200253

Project: SVE Performance Monitoring / KUH0-21-010

Sample(s) received on: 1/20/22 Date opened: 1/20/22 by: ADAVID

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Did **sample containers** arrive in good condition?	☒	☐	☐
3	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
4	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
5	Was **sample volume** received adequate for analysis?	☒	☐	☐
6	Are samples within specified holding times?	☒	☐	☐
7	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
8	Were **custody seals** on outside of cooler/Box/Container?	☒	☐	☐
	Location of seal(s)? Box sealing. Sealing Lid?	☒	☐	☐
	Were signature and date included?	☒	☐	☐
	Were seals intact?	☒	☐	☐
9	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
10	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
11	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P2200253-001.01	1.0 L Source Silonite Canister					
P2200253-002.01	1.0 L Source Silonite Canister					
P2200253-003.01	1.0 L Source Silonite Canister					
P2200253-004.01	1.0 L Source Silonite Canister					
P2200253-005.01	1.0 L Source Silonite Canister					
P2200253-006.01	1.0 L Source Silonite Canister					
P2200253-007.01	1.0 L Source Silonite Canister					
P2200253-008.01	1.0 L Source Silonite Canister					
P2200253-009.01	1.0 L Source Silonite Canister					
P2200253-010.01	1.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers):

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-OBS-01** ALS Project ID: P2200253
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200253-001

Test Code: EPA TO-15 Date Collected: 12/29/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 1/20/22
Analyst: Wida Ang Date Analyzed: 1/25/22
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SS00887

Initial Pressure (psig): -0.47 Final Pressure (psig): 6.06
Initial Pressure 2 (psig): 0.73 Final Pressure 2 (psig): 6.58

Canister Dilution Factor: 2.01

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	**35**	2.6	0.65	**20**	1.5	0.38	
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.6**	2.7	0.44	**0.52**	0.54	0.088	**J**
74-87-3	Chloromethane	**0.47**	2.6	0.43	**0.23**	1.2	0.21	**J**
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.7	0.42	ND	0.39	0.060	
75-01-4	Vinyl Chloride	ND	2.6	0.29	ND	1.0	0.11	
106-99-0	1,3-Butadiene	ND	2.6	0.44	ND	1.2	0.20	
74-83-9	Bromomethane	ND	2.6	0.37	ND	0.66	0.096	
75-00-3	Chloroethane	ND	2.6	0.33	ND	0.97	0.13	
64-17-5	Ethanol	**3.1**	25	1.9	**1.7**	13	0.99	**J**
75-05-8	Acetonitrile	**1.3**	5.0	0.65	**0.77**	3.0	0.39	**J**
107-02-8	Acrolein	ND	5.0	0.75	ND	2.2	0.33	
67-64-1	Acetone	**11**	26	6.0	**4.6**	11	2.5	**J**
75-69-4	Trichlorofluoromethane (CFC 11)	**1.1**	2.6	0.41	**0.20**	0.47	0.072	**J**
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	5.0	1.1	ND	2.0	0.45	
107-13-1	Acrylonitrile	ND	5.0	0.55	ND	2.3	0.25	
75-35-4	1,1-Dichloroethene	**3.0**	2.7	0.37	**0.76**	0.68	0.094	
75-09-2	Methylene Chloride	ND	2.6	0.75	ND	0.75	0.22	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.7	0.36	ND	0.85	0.12	
76-13-1	Trichlorotrifluoroethane (CFC 113)	**0.48**	2.7	0.38	**0.063**	0.35	0.050	**J**
75-15-0	Carbon Disulfide	**0.85**	5.5	0.80	**0.27**	1.8	0.26	**J**
156-60-5	trans-1,2-Dichloroethene	ND	2.7	0.37	ND	0.67	0.094	
75-34-3	1,1-Dichloroethane	ND	2.7	0.39	ND	0.66	0.097	
1634-04-4	Methyl tert-Butyl Ether	ND	2.7	0.32	ND	0.74	0.088	
108-05-4	Vinyl Acetate	ND	25	6.0	ND	7.1	1.7	
78-93-3	2-Butanone (MEK)	**1.3**	5.0	0.55	**0.44**	1.7	0.19	**J**

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **SVE-OBS-01** ALS Project ID: P2200253

Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200253-001

Test Code: EPA TO-15 Date Collected: 12/29/21

Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 1/20/22

Analyst: Wida Ang Date Analyzed: 1/25/22

Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)

Test Notes:

Container ID: 1SS00887

Initial Pressure (psig): -0.47 Final Pressure (psig): 6.06

Initial Pressure 2 (psig): 0.73 Final Pressure 2 (psig): 6.58

Canister Dilution Factor: 2.01

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.6	0.38	ND	0.66	0.095	
141-78-6	Ethyl Acetate	**7.0**	11	1.4	**1.9**	2.9	0.39	**J**
110-54-3	n-Hexane	ND	2.7	0.55	ND	0.76	0.16	
67-66-3	Chloroform	ND	2.7	0.36	ND	0.56	0.073	
109-99-9	Tetrahydrofuran (THF)	**0.84**	5.0	0.34	**0.28**	1.7	0.11	**J**
107-06-2	1,2-Dichloroethane	ND	2.7	0.30	ND	0.66	0.073	
71-55-6	1,1,1-Trichloroethane	**4.7**	2.6	0.33	**0.86**	0.48	0.061	
71-43-2	Benzene	**1.0**	2.5	0.39	**0.32**	0.79	0.12	**J**
56-23-5	Carbon Tetrachloride	ND	2.5	0.37	ND	0.40	0.059	
110-82-7	Cyclohexane	ND	5.5	0.75	ND	1.6	0.22	
78-87-5	1,2-Dichloropropane	ND	2.5	0.33	ND	0.54	0.072	
75-27-4	Bromodichloromethane	ND	2.7	0.39	ND	0.40	0.058	
79-01-6	Trichloroethene	ND	2.6	0.36	ND	0.49	0.067	
123-91-1	1,4-Dioxane	**0.34**	2.6	0.32	**0.095**	0.73	0.088	**J**
80-62-6	Methyl Methacrylate	ND	5.5	0.95	ND	1.4	0.23	
142-82-5	n-Heptane	ND	2.7	0.43	ND	0.65	0.10	
10061-01-5	cis-1,3-Dichloropropene	ND	2.5	0.42	ND	0.55	0.092	
108-10-1	4-Methyl-2-pentanone	ND	5.5	0.37	ND	1.3	0.090	
10061-02-6	trans-1,3-Dichloropropene	ND	2.6	0.55	ND	0.56	0.12	
79-00-5	1,1,2-Trichloroethane	ND	2.6	0.27	ND	0.48	0.050	
108-88-3	Toluene	**0.51**	2.6	0.33	**0.13**	0.69	0.087	**J**
591-78-6	2-Hexanone	**0.43**	5.5	0.33	**0.11**	1.3	0.081	**J**
124-48-1	Dibromochloromethane	ND	2.7	0.35	ND	0.31	0.041	
106-93-4	1,2-Dibromoethane	ND	2.6	0.31	ND	0.34	0.041	
123-86-4	n-Butyl Acetate	ND	5.5	0.37	ND	1.2	0.077	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-OBS-01** ALS Project ID: P2200253
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200253-001

Test Code: EPA TO-15 Date Collected: 12/29/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 1/20/22
Analyst: Wida Ang Date Analyzed: 1/25/22
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SS00887

Initial Pressure (psig): -0.47 Final Pressure (psig): 6.06
Initial Pressure 2 (psig): 0.73 Final Pressure 2 (psig): 6.58

Canister Dilution Factor: 2.01

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	ND	2.7	0.60	ND	0.57	0.13	
127-18-4	Tetrachloroethene	**0.64**	2.6	0.35	**0.095**	0.39	0.051	**J**
108-90-7	Chlorobenzene	ND	2.6	0.36	ND	0.57	0.078	
100-41-4	Ethylbenzene	ND	2.6	0.38	ND	0.60	0.087	
179601-23-1	m,p-Xylenes	**0.91**	5.5	0.70	**0.21**	1.3	0.16	**J**
75-25-2	Bromoform	ND	2.6	0.55	ND	0.25	0.053	
100-42-5	Styrene	ND	2.5	0.43	ND	0.59	0.10	
95-47-6	o-Xylene	**0.45**	2.6	0.39	**0.10**	0.60	0.089	**J**
111-84-2	n-Nonane	ND	2.6	0.45	ND	0.50	0.085	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.6	0.37	ND	0.38	0.054	
98-82-8	Cumene	ND	2.6	0.39	ND	0.53	0.079	
80-56-8	alpha-Pinene	ND	2.7	0.41	ND	0.49	0.074	
103-65-1	n-Propylbenzene	ND	2.7	0.39	ND	0.54	0.079	
622-96-8	4-Ethyltoluene	ND	2.7	0.43	ND	0.54	0.087	
108-67-8	1,3,5-Trimethylbenzene	ND	2.6	0.39	ND	0.53	0.079	
95-63-6	1,2,4-Trimethylbenzene	**0.52**	2.6	0.37	**0.11**	0.53	0.076	**J**
100-44-7	Benzyl Chloride	ND	5.5	0.60	ND	1.1	0.12	
541-73-1	1,3-Dichlorobenzene	ND	2.6	0.40	ND	0.43	0.067	
106-46-7	1,4-Dichlorobenzene	ND	2.6	0.41	ND	0.43	0.069	
95-50-1	1,2-Dichlorobenzene	ND	2.7	0.40	ND	0.44	0.066	
5989-27-5	d-Limonene	**1.5**	2.5	0.55	**0.27**	0.45	0.099	**J, V**
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.50	ND	0.52	0.052	
120-82-1	1,2,4-Trichlorobenzene	ND	5.5	0.65	ND	0.74	0.088	
91-20-3	Naphthalene	**1.6**	2.6	0.65	**0.30**	0.50	0.12	**J**
87-68-3	Hexachlorobutadiene	ND	2.6	0.55	ND	0.25	0.052	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

V = The continuing calibration verification standard was outside (biased high) the specified limits for this compound.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-OBS-02** ALS Project ID: P2200253
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200253-002

Test Code: EPA TO-15 Date Collected: 12/29/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 1/20/22
Analyst: Wida Ang Date Analyzed: 1/25/22
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SS01444

Initial Pressure (psig): -0.96 Final Pressure (psig): 6.49

Canister Dilution Factor: 1.54

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	**83**	2.0	0.50	**48**	1.2	0.29	
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.4**	2.0	0.33	**0.49**	0.41	0.068	
74-87-3	Chloromethane	ND	2.0	0.33	ND	0.95	0.16	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.1	0.32	ND	0.30	0.046	
75-01-4	Vinyl Chloride	ND	2.0	0.22	ND	0.78	0.086	
106-99-0	1,3-Butadiene	ND	2.0	0.34	ND	0.91	0.15	
74-83-9	Bromomethane	ND	2.0	0.28	ND	0.51	0.073	
75-00-3	Chloroethane	ND	2.0	0.25	ND	0.74	0.096	
64-17-5	Ethanol	**3.5**	19	1.4	**1.9**	10	0.76	**J**
75-05-8	Acetonitrile	ND	3.9	0.50	ND	2.3	0.30	
107-02-8	Acrolein	ND	3.9	0.58	ND	1.7	0.25	
67-64-1	Acetone	**72**	20	4.6	**30**	8.4	1.9	
75-69-4	Trichlorofluoromethane (CFC 11)	**1.1**	2.0	0.31	**0.19**	0.36	0.056	**J**
67-63-0	2-Propanol (Isopropyl Alcohol)	**130**	3.9	0.85	**54**	1.6	0.34	
107-13-1	Acrylonitrile	ND	3.9	0.42	ND	1.8	0.20	
75-35-4	1,1-Dichloroethene	**1.1**	2.1	0.28	**0.27**	0.52	0.072	**J**
75-09-2	Methylene Chloride	ND	2.0	0.58	ND	0.58	0.17	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.0	0.28	ND	0.65	0.089	
76-13-1	Trichlorotrifluoroethane (CFC 113)	**0.47**	2.1	0.29	**0.062**	0.27	0.038	**J**
75-15-0	Carbon Disulfide	**2.0**	4.2	0.62	**0.64**	1.4	0.20	**J**
156-60-5	trans-1,2-Dichloroethene	ND	2.0	0.28	ND	0.51	0.072	
75-34-3	1,1-Dichloroethane	ND	2.0	0.30	ND	0.50	0.074	
1634-04-4	Methyl tert-Butyl Ether	ND	2.0	0.24	ND	0.57	0.067	
108-05-4	Vinyl Acetate	ND	19	4.6	ND	5.5	1.3	
78-93-3	2-Butanone (MEK)	**6.0**	3.9	0.42	**2.1**	1.3	0.14	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-OBS-02** ALS Project ID: P2200253
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200253-002

Test Code: EPA TO-15 Date Collected: 12/29/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 1/20/22
Analyst: Wida Ang Date Analyzed: 1/25/22
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SS01444

Initial Pressure (psig): -0.96 Final Pressure (psig): 6.49

Canister Dilution Factor: 1.54

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.0	0.29	ND	0.51	0.073	
141-78-6	Ethyl Acetate	ND	8.1	1.1	ND	2.2	0.30	
110-54-3	n-Hexane	ND	2.0	0.42	ND	0.58	0.12	
67-66-3	Chloroform	**0.34**	2.1	0.27	**0.069**	0.43	0.056	**J**
109-99-9	Tetrahydrofuran (THF)	**0.50**	3.9	0.26	**0.17**	1.3	0.087	**J**
107-06-2	1,2-Dichloroethane	ND	2.0	0.23	ND	0.50	0.056	
71-55-6	1,1,1-Trichloroethane	**1.7**	2.0	0.25	**0.31**	0.37	0.047	**J**
71-43-2	Benzene	**0.61**	1.9	0.30	**0.19**	0.60	0.093	**J**
56-23-5	Carbon Tetrachloride	**0.35**	1.9	0.28	**0.055**	0.31	0.045	**J**
110-82-7	Cyclohexane	ND	4.2	0.58	ND	1.2	0.17	
78-87-5	1,2-Dichloropropane	ND	1.9	0.25	ND	0.42	0.055	
75-27-4	Bromodichloromethane	ND	2.0	0.30	ND	0.30	0.044	
79-01-6	Trichloroethene	ND	2.0	0.28	ND	0.37	0.052	
123-91-1	1,4-Dioxane	ND	2.0	0.24	ND	0.56	0.067	
80-62-6	Methyl Methacrylate	ND	4.2	0.73	ND	1.0	0.18	
142-82-5	n-Heptane	ND	2.0	0.33	ND	0.50	0.080	
10061-01-5	cis-1,3-Dichloropropene	ND	1.9	0.32	ND	0.42	0.070	
108-10-1	4-Methyl-2-pentanone	ND	4.2	0.28	ND	1.0	0.069	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.42	ND	0.43	0.093	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.21	ND	0.37	0.038	
108-88-3	Toluene	**0.38**	2.0	0.25	**0.10**	0.53	0.066	**J**
591-78-6	2-Hexanone	**0.59**	4.2	0.25	**0.14**	1.0	0.062	**J**
124-48-1	Dibromochloromethane	ND	2.0	0.27	ND	0.24	0.032	
106-93-4	1,2-Dibromoethane	ND	2.0	0.24	ND	0.26	0.031	
123-86-4	n-Butyl Acetate	ND	4.2	0.28	ND	0.89	0.059	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **SVE-OBS-02** ALS Project ID: P2200253

Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200253-002

Test Code:	EPA TO-15	Date Collected:	12/29/21
Instrument ID:	Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16	Date Received:	1/20/22
Analyst:	Wida Ang	Date Analyzed:	1/25/22
Sample Type:	1.0 L Silonite Summa Canister	Volume(s) Analyzed:	0.40 Liter(s)
Test Notes:			
Container ID:	1SS01444		

Initial Pressure (psig): -0.96 Final Pressure (psig): 6.49

Canister Dilution Factor: 1.54

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	ND	2.0	0.46	ND	0.44	0.099	
127-18-4	Tetrachloroethene	**0.52**	2.0	0.27	**0.076**	0.30	0.039	**J**
108-90-7	Chlorobenzene	ND	2.0	0.27	ND	0.43	0.059	
100-41-4	Ethylbenzene	ND	2.0	0.29	ND	0.46	0.067	
179601-23-1	m,p-Xylenes	**0.86**	4.2	0.54	**0.20**	0.98	0.12	**J**
75-25-2	Bromoform	ND	2.0	0.42	ND	0.19	0.041	
100-42-5	Styrene	ND	1.9	0.33	ND	0.45	0.078	
95-47-6	o-Xylene	**0.46**	2.0	0.30	**0.11**	0.46	0.068	**J**
111-84-2	n-Nonane	ND	2.0	0.34	ND	0.38	0.065	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.28	ND	0.29	0.042	
98-82-8	Cumene	ND	2.0	0.30	ND	0.41	0.060	
80-56-8	alpha-Pinene	ND	2.1	0.32	ND	0.37	0.057	
103-65-1	n-Propylbenzene	ND	2.0	0.30	ND	0.42	0.060	
622-96-8	4-Ethyltoluene	ND	2.0	0.33	ND	0.42	0.067	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.30	ND	0.41	0.060	
95-63-6	1,2,4-Trimethylbenzene	**0.54**	2.0	0.28	**0.11**	0.41	0.058	**J**
100-44-7	Benzyl Chloride	ND	4.2	0.46	ND	0.82	0.089	
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.31	ND	0.33	0.051	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.32	ND	0.33	0.053	
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.30	ND	0.34	0.051	
5989-27-5	d-Limonene	**1.4**	1.9	0.42	**0.24**	0.35	0.076	**J, V**
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.9	0.39	ND	0.40	0.040	
120-82-1	1,2,4-Trichlorobenzene	ND	4.2	0.50	ND	0.57	0.067	
91-20-3	Naphthalene	**1.6**	2.0	0.50	**0.31**	0.38	0.096	**J**
87-68-3	Hexachlorobutadiene	ND	2.0	0.42	ND	0.19	0.040	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

V = The continuing calibration verification standard was outside (biased high) the specified limits for this compound.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-OBS-03** ALS Project ID: P2200253
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200253-003

Test Code: EPA TO-15 Date Collected: 12/29/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 1/20/22
Analyst: Wida Ang Date Analyzed: 1/25/22
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SS00033

Initial Pressure (psig): -0.68 Final Pressure (psig): 6.75

Canister Dilution Factor: 1.53

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	**3.4**	2.0	0.50	**2.0**	1.2	0.29	
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.5**	2.0	0.33	**0.51**	0.41	0.067	
74-87-3	Chloromethane	ND	2.0	0.33	ND	0.95	0.16	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.1	0.32	ND	0.30	0.046	
75-01-4	Vinyl Chloride	ND	2.0	0.22	ND	0.78	0.085	
106-99-0	1,3-Butadiene	ND	2.0	0.34	ND	0.90	0.15	
74-83-9	Bromomethane	ND	2.0	0.28	ND	0.50	0.073	
75-00-3	Chloroethane	ND	2.0	0.25	ND	0.74	0.096	
64-17-5	Ethanol	**1.8**	19	1.4	**0.96**	10	0.75	**J**
75-05-8	Acetonitrile	**1.0**	3.8	0.50	**0.60**	2.3	0.30	**J**
107-02-8	Acrolein	**1.1**	3.8	0.57	**0.48**	1.7	0.25	**J**
67-64-1	Acetone	**64**	20	4.6	**27**	8.4	1.9	
75-69-4	Trichlorofluoromethane (CFC 11)	**1.1**	2.0	0.31	**0.20**	0.35	0.055	**J**
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	3.8	0.84	ND	1.6	0.34	
107-13-1	Acrylonitrile	ND	3.8	0.42	ND	1.8	0.19	
75-35-4	1,1-Dichloroethene	**3.4**	2.1	0.28	**0.86**	0.52	0.071	
75-09-2	Methylene Chloride	ND	2.0	0.57	ND	0.57	0.17	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.0	0.28	ND	0.65	0.088	
76-13-1	Trichlorotrifluoroethane (CFC 113)	**0.73**	2.1	0.29	**0.096**	0.27	0.038	**J**
75-15-0	Carbon Disulfide	**35**	4.2	0.61	**11**	1.4	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	2.0	0.28	ND	0.51	0.071	
75-34-3	1,1-Dichloroethane	ND	2.0	0.30	ND	0.50	0.074	
1634-04-4	Methyl tert-Butyl Ether	ND	2.0	0.24	ND	0.56	0.067	
108-05-4	Vinyl Acetate	ND	19	4.6	ND	5.4	1.3	
78-93-3	2-Butanone (MEK)	**2.4**	3.8	0.42	**0.83**	1.3	0.14	**J**

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **SVE-OBS-03** ALS Project ID: P2200253

Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200253-003

Test Code: EPA TO-15 Date Collected: 12/29/21

Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 1/20/22

Analyst: Wida Ang Date Analyzed: 1/25/22

Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)

Test Notes:

Container ID: 1SS00033

Initial Pressure (psig): -0.68 Final Pressure (psig): 6.75

Canister Dilution Factor: 1.53

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.0	0.29	ND	0.50	0.072	
141-78-6	Ethyl Acetate	ND	8.0	1.1	ND	2.2	0.30	
110-54-3	n-Hexane	ND	2.0	0.42	ND	0.58	0.12	
67-66-3	Chloroform	**0.64**	2.1	0.27	**0.13**	0.42	0.056	**J**
109-99-9	Tetrahydrofuran (THF)	**0.65**	3.8	0.26	**0.22**	1.3	0.087	**J**
107-06-2	1,2-Dichloroethane	ND	2.0	0.23	ND	0.50	0.056	
71-55-6	1,1,1-Trichloroethane	**1.6**	2.0	0.25	**0.29**	0.36	0.046	**J**
71-43-2	Benzene	**0.49**	1.9	0.29	**0.15**	0.60	0.092	**J**
56-23-5	Carbon Tetrachloride	**0.33**	1.9	0.28	**0.052**	0.30	0.045	**J**
110-82-7	Cyclohexane	ND	4.2	0.57	ND	1.2	0.17	
78-87-5	1,2-Dichloropropane	ND	1.9	0.25	ND	0.41	0.055	
75-27-4	Bromodichloromethane	ND	2.0	0.29	ND	0.30	0.044	
79-01-6	Trichloroethene	**0.41**	2.0	0.28	**0.076**	0.37	0.051	**J**
123-91-1	1,4-Dioxane	**0.95**	2.0	0.24	**0.26**	0.55	0.067	**J**
80-62-6	Methyl Methacrylate	ND	4.2	0.73	ND	1.0	0.18	
142-82-5	n-Heptane	ND	2.0	0.33	ND	0.49	0.079	
10061-01-5	cis-1,3-Dichloropropene	ND	1.9	0.32	ND	0.42	0.070	
108-10-1	4-Methyl-2-pentanone	ND	4.2	0.28	ND	1.0	0.068	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.42	ND	0.43	0.093	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.21	ND	0.36	0.038	
108-88-3	Toluene	**0.51**	2.0	0.25	**0.14**	0.53	0.066	**J**
591-78-6	2-Hexanone	**0.44**	4.2	0.25	**0.11**	1.0	0.062	**J**
124-48-1	Dibromochloromethane	ND	2.0	0.27	ND	0.24	0.031	
106-93-4	1,2-Dibromoethane	ND	2.0	0.24	ND	0.26	0.031	
123-86-4	n-Butyl Acetate	**0.36**	4.2	0.28	**0.077**	0.89	0.059	**J**

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-OBS-03** ALS Project ID: P2200253
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200253-003

Test Code: EPA TO-15 Date Collected: 12/29/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 1/20/22
Analyst: Wida Ang Date Analyzed: 1/25/22
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SS00033

Initial Pressure (psig): -0.68 Final Pressure (psig): 6.75

Canister Dilution Factor: 1.53

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	ND	2.0	0.46	ND	0.43	0.098	
127-18-4	Tetrachloroethene	**3.2**	2.0	0.26	**0.47**	0.29	0.039	
108-90-7	Chlorobenzene	ND	2.0	0.27	ND	0.43	0.059	
100-41-4	Ethylbenzene	**0.32**	2.0	0.29	**0.073**	0.46	0.066	**J**
179601-23-1	m,p-Xylenes	**1.4**	4.2	0.54	**0.32**	0.97	0.12	**J**
75-25-2	Bromoform	ND	2.0	0.42	ND	0.19	0.041	
100-42-5	Styrene	ND	1.9	0.33	ND	0.45	0.077	
95-47-6	o-Xylene	**0.63**	2.0	0.29	**0.14**	0.46	0.068	**J**
111-84-2	n-Nonane	ND	2.0	0.34	ND	0.38	0.065	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.28	ND	0.29	0.041	
98-82-8	Cumene	ND	2.0	0.29	ND	0.40	0.060	
80-56-8	alpha-Pinene	ND	2.1	0.31	ND	0.37	0.056	
103-65-1	n-Propylbenzene	ND	2.0	0.29	ND	0.41	0.060	
622-96-8	4-Ethyltoluene	ND	2.0	0.33	ND	0.41	0.066	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.29	ND	0.40	0.060	
95-63-6	1,2,4-Trimethylbenzene	**0.66**	2.0	0.28	**0.13**	0.40	0.058	**J**
100-44-7	Benzyl Chloride	ND	4.2	0.46	ND	0.81	0.089	
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.31	ND	0.33	0.051	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.31	ND	0.33	0.052	
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.30	ND	0.34	0.050	
5989-27-5	d-Limonene	**1.7**	1.9	0.42	**0.31**	0.34	0.076	**J, V**
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.8	0.38	ND	0.40	0.040	
120-82-1	1,2,4-Trichlorobenzene	ND	4.2	0.50	ND	0.57	0.067	
91-20-3	Naphthalene	**0.85**	2.0	0.50	**0.16**	0.38	0.095	**J**
87-68-3	Hexachlorobutadiene	ND	2.0	0.42	ND	0.19	0.039	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

V = The continuing calibration verification standard was outside (biased high) the specified limits for this compound.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-OBS-04** ALS Project ID: P2200253
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200253-004

Test Code: EPA TO-15 Date Collected: 12/29/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 1/20/22
Analyst: Wida Ang Date Analyzed: 1/25/22
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SS01441

Initial Pressure (psig): -1.39 Final Pressure (psig): 6.50

Canister Dilution Factor: 1.59

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	**10**	2.1	0.52	**5.9**	1.2	0.30	
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.4**	2.1	0.35	**0.48**	0.43	0.070	
74-87-3	Chloromethane	ND	2.0	0.34	ND	0.98	0.17	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.1	0.33	ND	0.31	0.048	
75-01-4	Vinyl Chloride	ND	2.1	0.23	ND	0.81	0.089	
106-99-0	1,3-Butadiene	ND	2.1	0.35	ND	0.93	0.16	
74-83-9	Bromomethane	ND	2.0	0.29	ND	0.52	0.076	
75-00-3	Chloroethane	ND	2.0	0.26	ND	0.77	0.099	
64-17-5	Ethanol	**11**	20	1.5	**6.0**	11	0.78	**J**
75-05-8	Acetonitrile	ND	4.0	0.52	ND	2.4	0.31	
107-02-8	Acrolein	**1.1**	4.0	0.60	**0.47**	1.7	0.26	**J**
67-64-1	Acetone	**28**	21	4.8	**12**	8.7	2.0	
75-69-4	Trichlorofluoromethane (CFC 11)	**1.1**	2.1	0.32	**0.20**	0.37	0.057	**J**
67-63-0	2-Propanol (Isopropyl Alcohol)	**14**	4.0	0.87	**5.7**	1.6	0.36	
107-13-1	Acrylonitrile	ND	4.0	0.44	ND	1.8	0.20	
75-35-4	1,1-Dichloroethene	ND	2.1	0.29	ND	0.54	0.074	
75-09-2	Methylene Chloride	ND	2.1	0.60	ND	0.60	0.17	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.1	0.29	ND	0.67	0.091	
76-13-1	Trichlorotrifluoroethane (CFC 113)	**0.52**	2.1	0.30	**0.068**	0.28	0.039	**J**
75-15-0	Carbon Disulfide	**4.1**	4.4	0.64	**1.3**	1.4	0.20	**J**
156-60-5	trans-1,2-Dichloroethene	ND	2.1	0.29	ND	0.53	0.074	
75-34-3	1,1-Dichloroethane	ND	2.1	0.31	ND	0.52	0.077	
1634-04-4	Methyl tert-Butyl Ether	ND	2.1	0.25	ND	0.58	0.069	
108-05-4	Vinyl Acetate	ND	20	4.8	ND	5.6	1.4	
78-93-3	2-Butanone (MEK)	**7.3**	4.0	0.44	**2.5**	1.3	0.15	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-OBS-04** ALS Project ID: P2200253
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200253-004

Test Code: EPA TO-15 Date Collected: 12/29/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 1/20/22
Analyst: Wida Ang Date Analyzed: 1/25/22
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SS01441

Initial Pressure (psig): -1.39 Final Pressure (psig): 6.50

Canister Dilution Factor: 1.59

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.1	0.30	ND	0.52	0.075	
141-78-6	Ethyl Acetate	ND	8.3	1.1	ND	2.3	0.31	
110-54-3	n-Hexane	ND	2.1	0.44	ND	0.60	0.12	
67-66-3	Chloroform	ND	2.1	0.28	ND	0.44	0.058	
109-99-9	Tetrahydrofuran (THF)	**0.66**	4.0	0.27	**0.23**	1.3	0.090	**J**
107-06-2	1,2-Dichloroethane	ND	2.1	0.23	ND	0.52	0.058	
71-55-6	1,1,1-Trichloroethane	**1.3**	2.1	0.26	**0.24**	0.38	0.048	**J**
71-43-2	Benzene	**0.64**	2.0	0.31	**0.20**	0.62	0.096	**J**
56-23-5	Carbon Tetrachloride	**0.33**	2.0	0.29	**0.052**	0.32	0.047	**J**
110-82-7	Cyclohexane	ND	4.4	0.60	ND	1.3	0.17	
78-87-5	1,2-Dichloropropane	ND	2.0	0.26	ND	0.43	0.057	
75-27-4	Bromodichloromethane	ND	2.1	0.31	ND	0.31	0.046	
79-01-6	Trichloroethene	ND	2.1	0.29	ND	0.38	0.053	
123-91-1	1,4-Dioxane	ND	2.1	0.25	ND	0.57	0.070	
80-62-6	Methyl Methacrylate	ND	4.4	0.76	ND	1.1	0.18	
142-82-5	n-Heptane	ND	2.1	0.34	ND	0.51	0.082	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.33	ND	0.44	0.073	
108-10-1	4-Methyl-2-pentanone	ND	4.4	0.29	ND	1.1	0.071	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.44	ND	0.45	0.096	
79-00-5	1,1,2-Trichloroethane	ND	2.1	0.21	ND	0.38	0.039	
108-88-3	Toluene	**0.64**	2.1	0.26	**0.17**	0.55	0.069	**J**
591-78-6	2-Hexanone	**0.90**	4.4	0.26	**0.22**	1.1	0.064	**J**
124-48-1	Dibromochloromethane	ND	2.1	0.28	ND	0.25	0.033	
106-93-4	1,2-Dibromoethane	ND	2.1	0.25	ND	0.27	0.032	
123-86-4	n-Butyl Acetate	ND	4.4	0.29	ND	0.92	0.061	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **SVE-OBS-04** ALS Project ID: P2200253

Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200253-004

Test Code:	EPA TO-15	Date Collected:	12/29/21
Instrument ID:	Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16	Date Received:	1/20/22
Analyst:	Wida Ang	Date Analyzed:	1/25/22
Sample Type:	1.0 L Silonite Summa Canister	Volume(s) Analyzed:	0.40 Liter(s)
Test Notes:			
Container ID:	1SS01441		

Initial Pressure (psig): -1.39 Final Pressure (psig): 6.50

Canister Dilution Factor: 1.59

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	ND	2.1	0.48	ND	0.45	0.10	
127-18-4	Tetrachloroethene	**0.29**	2.1	0.27	**0.042**	0.30	0.040	**J**
108-90-7	Chlorobenzene	ND	2.1	0.28	ND	0.45	0.061	
100-41-4	Ethylbenzene	ND	2.1	0.30	ND	0.48	0.069	
179601-23-1	m,p-Xylenes	**0.89**	4.4	0.56	**0.20**	1.0	0.13	**J**
75-25-2	Bromoform	ND	2.1	0.44	ND	0.20	0.042	
100-42-5	Styrene	ND	2.0	0.34	ND	0.47	0.080	
95-47-6	o-Xylene	**0.40**	2.1	0.31	**0.092**	0.48	0.070	**J**
111-84-2	n-Nonane	ND	2.1	0.35	ND	0.39	0.067	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	0.29	ND	0.30	0.043	
98-82-8	Cumene	ND	2.1	0.31	ND	0.42	0.062	
80-56-8	alpha-Pinene	ND	2.1	0.33	ND	0.39	0.059	
103-65-1	n-Propylbenzene	ND	2.1	0.31	ND	0.43	0.062	
622-96-8	4-Ethyltoluene	ND	2.1	0.34	ND	0.43	0.069	
108-67-8	1,3,5-Trimethylbenzene	ND	2.1	0.31	ND	0.42	0.062	
95-63-6	1,2,4-Trimethylbenzene	**0.52**	2.1	0.29	**0.11**	0.42	0.060	**J**
100-44-7	Benzyl Chloride	ND	4.4	0.48	ND	0.84	0.092	
541-73-1	1,3-Dichlorobenzene	ND	2.1	0.32	ND	0.34	0.053	
106-46-7	1,4-Dichlorobenzene	ND	2.1	0.33	ND	0.34	0.054	
95-50-1	1,2-Dichlorobenzene	ND	2.1	0.31	ND	0.35	0.052	
5989-27-5	d-Limonene	**1.0**	2.0	0.44	**0.18**	0.36	0.079	**J, V**
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.0	0.40	ND	0.41	0.041	
120-82-1	1,2,4-Trichlorobenzene	ND	4.4	0.52	ND	0.59	0.070	
91-20-3	Naphthalene	**1.4**	2.1	0.52	**0.27**	0.39	0.099	**J**
87-68-3	Hexachlorobutadiene	ND	2.1	0.44	ND	0.19	0.041	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

V = The continuing calibration verification standard was outside (biased high) the specified limits for this compound.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-OBS-05** ALS Project ID: P2200253
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200253-005

Test Code: EPA TO-15 Date Collected: 12/29/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 1/20/22
Analyst: Wida Ang Date Analyzed: 1/25/22
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SS01460

Initial Pressure (psig): -1.19 Final Pressure (psig): 10.65

Canister Dilution Factor: 1.88

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	**13**	2.4	0.61	**7.6**	1.4	0.36	
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.5**	2.5	0.41	**0.50**	0.50	0.083	**J**
74-87-3	Chloromethane	ND	2.4	0.40	ND	1.2	0.20	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.5	0.39	ND	0.36	0.057	
75-01-4	Vinyl Chloride	ND	2.4	0.27	ND	0.96	0.10	
106-99-0	1,3-Butadiene	ND	2.4	0.41	ND	1.1	0.19	
74-83-9	Bromomethane	ND	2.4	0.35	ND	0.62	0.090	
75-00-3	Chloroethane	ND	2.4	0.31	ND	0.91	0.12	
64-17-5	Ethanol	**29**	24	1.7	**15**	12	0.92	
75-05-8	Acetonitrile	ND	4.7	0.61	ND	2.8	0.36	
107-02-8	Acrolein	**2.2**	4.7	0.71	**0.94**	2.1	0.31	**J**
67-64-1	Acetone	**30**	24	5.6	**13**	10	2.4	
75-69-4	Trichlorofluoromethane (CFC 11)	**1.1**	2.4	0.38	**0.20**	0.44	0.068	**J**
67-63-0	2-Propanol (Isopropyl Alcohol)	**30**	4.7	1.0	**12**	1.9	0.42	
107-13-1	Acrylonitrile	ND	4.7	0.52	ND	2.2	0.24	
75-35-4	1,1-Dichloroethene	ND	2.5	0.35	ND	0.64	0.088	
75-09-2	Methylene Chloride	ND	2.4	0.71	ND	0.70	0.20	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.5	0.34	ND	0.80	0.11	
76-13-1	Trichlorotrifluoroethane (CFC 113)	**0.47**	2.5	0.36	**0.061**	0.33	0.047	**J**
75-15-0	Carbon Disulfide	**1.0**	5.2	0.75	**0.33**	1.7	0.24	**J**
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.35	ND	0.63	0.088	
75-34-3	1,1-Dichloroethane	ND	2.5	0.37	ND	0.62	0.091	
1634-04-4	Methyl tert-Butyl Ether	ND	2.5	0.30	ND	0.69	0.082	
108-05-4	Vinyl Acetate	ND	24	5.6	ND	6.7	1.6	
78-93-3	2-Butanone (MEK)	**9.1**	4.7	0.52	**3.1**	1.6	0.18	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **SVE-OBS-05** ALS Project ID: P2200253

Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200253-005

Test Code:	EPA TO-15	Date Collected:	12/29/21
Instrument ID:	Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16	Date Received:	1/20/22
Analyst:	Wida Ang	Date Analyzed:	1/25/22
Sample Type:	1.0 L Silonite Summa Canister	Volume(s) Analyzed:	0.40 Liter(s)
Test Notes:			
Container ID:	1SS01460		

Initial Pressure (psig): -1.19 Final Pressure (psig): 10.65

Canister Dilution Factor: 1.88

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.4	0.35	ND	0.62	0.089	
141-78-6	Ethyl Acetate	ND	9.9	1.3	ND	2.7	0.37	
110-54-3	n-Hexane	ND	2.5	0.52	ND	0.71	0.15	
67-66-3	Chloroform	ND	2.5	0.33	ND	0.52	0.068	
109-99-9	Tetrahydrofuran (THF)	**0.54**	4.7	0.31	**0.18**	1.6	0.11	**J**
107-06-2	1,2-Dichloroethane	ND	2.5	0.28	ND	0.62	0.069	
71-55-6	1,1,1-Trichloroethane	**0.96**	2.4	0.31	**0.18**	0.45	0.057	**J**
71-43-2	Benzene	ND	2.4	0.36	ND	0.74	0.11	
56-23-5	Carbon Tetrachloride	ND	2.4	0.35	ND	0.37	0.055	
110-82-7	Cyclohexane	ND	5.2	0.71	ND	1.5	0.20	
78-87-5	1,2-Dichloropropane	ND	2.4	0.31	ND	0.51	0.067	
75-27-4	Bromodichloromethane	ND	2.5	0.36	ND	0.37	0.054	
79-01-6	Trichloroethene	ND	2.4	0.34	ND	0.45	0.063	
123-91-1	1,4-Dioxane	ND	2.4	0.30	ND	0.68	0.082	
80-62-6	Methyl Methacrylate	ND	5.2	0.89	ND	1.3	0.22	
142-82-5	n-Heptane	ND	2.5	0.40	ND	0.61	0.098	
10061-01-5	cis-1,3-Dichloropropene	ND	2.4	0.39	ND	0.52	0.086	
108-10-1	4-Methyl-2-pentanone	ND	5.2	0.34	ND	1.3	0.084	
10061-02-6	trans-1,3-Dichloropropene	ND	2.4	0.52	ND	0.53	0.11	
79-00-5	1,1,2-Trichloroethane	ND	2.4	0.25	ND	0.45	0.047	
108-88-3	Toluene	**0.33**	2.4	0.31	**0.087**	0.65	0.081	**J**
591-78-6	2-Hexanone	**1.3**	5.2	0.31	**0.31**	1.3	0.076	**J**
124-48-1	Dibromochloromethane	ND	2.5	0.33	ND	0.29	0.039	
106-93-4	1,2-Dibromoethane	ND	2.4	0.29	ND	0.32	0.038	
123-86-4	n-Butyl Acetate	ND	5.2	0.34	ND	1.1	0.072	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **SVE-OBS-05** ALS Project ID: P2200253

Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200253-005

Test Code:	EPA TO-15	Date Collected:	12/29/21
Instrument ID:	Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16	Date Received:	1/20/22
Analyst:	Wida Ang	Date Analyzed:	1/25/22
Sample Type:	1.0 L Silonite Summa Canister	Volume(s) Analyzed:	0.40 Liter(s)
Test Notes:			
Container ID:	1SS01460		

Initial Pressure (psig): -1.19 Final Pressure (psig): 10.65

Canister Dilution Factor: 1.88

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	ND	2.5	0.56	ND	0.53	0.12	
127-18-4	Tetrachloroethene	**0.49**	2.4	0.32	**0.073**	0.36	0.048	**J**
108-90-7	Chlorobenzene	ND	2.4	0.33	ND	0.53	0.072	
100-41-4	Ethylbenzene	ND	2.4	0.35	ND	0.56	0.081	
179601-23-1	m,p-Xylenes	**0.84**	5.2	0.66	**0.19**	1.2	0.15	**J**
75-25-2	Bromoform	ND	2.4	0.52	ND	0.24	0.050	
100-42-5	Styrene	ND	2.4	0.40	ND	0.55	0.095	
95-47-6	o-Xylene	**0.37**	2.4	0.36	**0.084**	0.56	0.083	**J**
111-84-2	n-Nonane	ND	2.4	0.42	ND	0.47	0.080	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.4	0.35	ND	0.36	0.051	
98-82-8	Cumene	ND	2.4	0.36	ND	0.50	0.074	
80-56-8	alpha-Pinene	ND	2.5	0.39	ND	0.46	0.069	
103-65-1	n-Propylbenzene	ND	2.5	0.36	ND	0.51	0.074	
622-96-8	4-Ethyltoluene	ND	2.5	0.40	ND	0.51	0.081	
108-67-8	1,3,5-Trimethylbenzene	ND	2.4	0.36	ND	0.50	0.074	
95-63-6	1,2,4-Trimethylbenzene	**0.48**	2.4	0.35	**0.098**	0.50	0.071	**J**
100-44-7	Benzyl Chloride	ND	5.2	0.56	ND	1.0	0.11	
541-73-1	1,3-Dichlorobenzene	ND	2.4	0.38	ND	0.41	0.063	
106-46-7	1,4-Dichlorobenzene	ND	2.4	0.39	ND	0.41	0.064	
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.37	ND	0.41	0.062	
5989-27-5	d-Limonene	**0.86**	2.4	0.52	**0.15**	0.42	0.093	**J, V**
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.7	0.47	ND	0.49	0.049	
120-82-1	1,2,4-Trichlorobenzene	ND	5.2	0.61	ND	0.70	0.082	
91-20-3	Naphthalene	**1.5**	2.4	0.61	**0.29**	0.47	0.12	**J**
87-68-3	Hexachlorobutadiene	ND	2.4	0.52	ND	0.23	0.048	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

V = The continuing calibration verification standard was outside (biased high) the specified limits for this compound.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-OBS-07** ALS Project ID: P2200253
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200253-006

Test Code: EPA TO-15 Date Collected: 12/29/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 1/20/22
Analyst: Wida Ang Date Analyzed: 1/25/22
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SS01324

Initial Pressure (psig): -1.33 Final Pressure (psig): 5.91

Canister Dilution Factor: 1.54

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	**6.7**	2.0	0.50	**3.9**	1.2	0.29	
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.4**	2.0	0.33	**0.49**	0.41	0.068	
74-87-3	Chloromethane	ND	2.0	0.33	ND	0.95	0.16	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.1	0.32	ND	0.30	0.046	
75-01-4	Vinyl Chloride	ND	2.0	0.22	ND	0.78	0.086	
106-99-0	1,3-Butadiene	ND	2.0	0.34	ND	0.91	0.15	
74-83-9	Bromomethane	ND	2.0	0.28	ND	0.51	0.073	
75-00-3	Chloroethane	ND	2.0	0.25	ND	0.74	0.096	
64-17-5	Ethanol	**2.4**	19	1.4	**1.3**	10	0.76	**J**
75-05-8	Acetonitrile	ND	3.9	0.50	ND	2.3	0.30	
107-02-8	Acrolein	ND	3.9	0.58	ND	1.7	0.25	
67-64-1	Acetone	**34**	20	4.6	**14**	8.4	1.9	
75-69-4	Trichlorofluoromethane (CFC 11)	**1.2**	2.0	0.31	**0.22**	0.36	0.056	**J**
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	3.9	0.85	ND	1.6	0.34	
107-13-1	Acrylonitrile	ND	3.9	0.42	ND	1.8	0.20	
75-35-4	1,1-Dichloroethene	**320**	2.1	0.28	**80**	0.52	0.072	
75-09-2	Methylene Chloride	ND	2.0	0.58	ND	0.58	0.17	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.0	0.28	ND	0.65	0.089	
76-13-1	Trichlorotrifluoroethane (CFC 113)	**1.1**	2.1	0.29	**0.14**	0.27	0.038	**J**
75-15-0	Carbon Disulfide	ND	4.2	0.62	ND	1.4	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	2.0	0.28	ND	0.51	0.072	
75-34-3	1,1-Dichloroethane	**4.6**	2.0	0.30	**1.1**	0.50	0.074	
1634-04-4	Methyl tert-Butyl Ether	ND	2.0	0.24	ND	0.57	0.067	
108-05-4	Vinyl Acetate	ND	19	4.6	ND	5.5	1.3	
78-93-3	2-Butanone (MEK)	**2.9**	3.9	0.42	**0.98**	1.3	0.14	**J**

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **SVE-OBS-07** ALS Project ID: P2200253

Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200253-006

Test Code: EPA TO-15 Date Collected: 12/29/21

Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 1/20/22

Analyst: Wida Ang Date Analyzed: 1/25/22

Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)

Test Notes:

Container ID: 1SS01324

Initial Pressure (psig): -1.33 Final Pressure (psig): 5.91

Canister Dilution Factor: 1.54

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.0	0.29	ND	0.51	0.073	
141-78-6	Ethyl Acetate	ND	8.1	1.1	ND	2.2	0.30	
110-54-3	n-Hexane	ND	2.0	0.42	ND	0.58	0.12	
67-66-3	Chloroform	**1.2**	2.1	0.27	**0.24**	0.43	0.056	**J**
109-99-9	Tetrahydrofuran (THF)	**0.95**	3.9	0.26	**0.32**	1.3	0.087	**J**
107-06-2	1,2-Dichloroethane	**0.93**	2.0	0.23	**0.23**	0.50	0.056	**J**
71-55-6	1,1,1-Trichloroethane	**2.2**	2.0	0.25	**0.39**	0.37	0.047	
71-43-2	Benzene	**0.33**	1.9	0.30	**0.10**	0.60	0.093	**J**
56-23-5	Carbon Tetrachloride	**0.64**	1.9	0.28	**0.10**	0.31	0.045	**J**
110-82-7	Cyclohexane	ND	4.2	0.58	ND	1.2	0.17	
78-87-5	1,2-Dichloropropane	ND	1.9	0.25	ND	0.42	0.055	
75-27-4	Bromodichloromethane	ND	2.0	0.30	ND	0.30	0.044	
79-01-6	Trichloroethene	**0.91**	2.0	0.28	**0.17**	0.37	0.052	**J**
123-91-1	1,4-Dioxane	ND	2.0	0.24	ND	0.56	0.067	
80-62-6	Methyl Methacrylate	ND	4.2	0.73	ND	1.0	0.18	
142-82-5	n-Heptane	ND	2.0	0.33	ND	0.50	0.080	
10061-01-5	cis-1,3-Dichloropropene	ND	1.9	0.32	ND	0.42	0.070	
108-10-1	4-Methyl-2-pentanone	ND	4.2	0.28	ND	1.0	0.069	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.42	ND	0.43	0.093	
79-00-5	1,1,2-Trichloroethane	**1.4**	2.0	0.21	**0.26**	0.37	0.038	**J**
108-88-3	Toluene	**0.34**	2.0	0.25	**0.090**	0.53	0.066	**J**
591-78-6	2-Hexanone	**0.69**	4.2	0.25	**0.17**	1.0	0.062	**J**
124-48-1	Dibromochloromethane	ND	2.0	0.27	ND	0.24	0.032	
106-93-4	1,2-Dibromoethane	ND	2.0	0.24	ND	0.26	0.031	
123-86-4	n-Butyl Acetate	ND	4.2	0.28	ND	0.89	0.059	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **SVE-OBS-07** ALS Project ID: P2200253

Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200253-006

Test Code:	EPA TO-15	Date Collected:	12/29/21
Instrument ID:	Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16	Date Received:	1/20/22
Analyst:	Wida Ang	Date Analyzed:	1/25/22
Sample Type:	1.0 L Silonite Summa Canister	Volume(s) Analyzed:	0.40 Liter(s)
Test Notes:			
Container ID:	1SS01324		

Initial Pressure (psig): -1.33 Final Pressure (psig): 5.91

Canister Dilution Factor: 1.54

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	ND	2.0	0.46	ND	0.44	0.099	
127-18-4	Tetrachloroethene	**8.1**	2.0	0.27	**1.2**	0.30	0.039	
108-90-7	Chlorobenzene	ND	2.0	0.27	ND	0.43	0.059	
100-41-4	Ethylbenzene	ND	2.0	0.29	ND	0.46	0.067	
179601-23-1	m,p-Xylenes	**0.70**	4.2	0.54	**0.16**	0.98	0.12	**J**
75-25-2	Bromoform	ND	2.0	0.42	ND	0.19	0.041	
100-42-5	Styrene	ND	1.9	0.33	ND	0.45	0.078	
95-47-6	o-Xylene	**0.32**	2.0	0.30	**0.074**	0.46	0.068	**J**
111-84-2	n-Nonane	ND	2.0	0.34	ND	0.38	0.065	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.28	ND	0.29	0.042	
98-82-8	Cumene	ND	2.0	0.30	ND	0.41	0.060	
80-56-8	alpha-Pinene	ND	2.1	0.32	ND	0.37	0.057	
103-65-1	n-Propylbenzene	ND	2.0	0.30	ND	0.42	0.060	
622-96-8	4-Ethyltoluene	ND	2.0	0.33	ND	0.42	0.067	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.30	ND	0.41	0.060	
95-63-6	1,2,4-Trimethylbenzene	**0.59**	2.0	0.28	**0.12**	0.41	0.058	**J**
100-44-7	Benzyl Chloride	ND	4.2	0.46	ND	0.82	0.089	
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.31	ND	0.33	0.051	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.32	ND	0.33	0.053	
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.30	ND	0.34	0.051	
5989-27-5	d-Limonene	**14**	1.9	0.42	**2.6**	0.35	0.076	**V**
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.9	0.39	ND	0.40	0.040	
120-82-1	1,2,4-Trichlorobenzene	ND	4.2	0.50	ND	0.57	0.067	
91-20-3	Naphthalene	**5.7**	2.0	0.50	**1.1**	0.38	0.096	
87-68-3	Hexachlorobutadiene	ND	2.0	0.42	ND	0.19	0.040	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
V = The continuing calibration verification standard was outside (biased high) the specified limits for this compound.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-OBS-08** ALS Project ID: P2200253
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200253-007

Test Code: EPA TO-15 Date Collected: 12/29/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 1/20/22
Analyst: Wida Ang Date Analyzed: 1/25/22
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SS00169

Initial Pressure (psig): -0.70 Final Pressure (psig): 5.79

Canister Dilution Factor: 1.46

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	**20**	1.9	0.47	**12**	1.1	0.28	
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.3**	1.9	0.32	**0.47**	0.39	0.064	
74-87-3	Chloromethane	**0.58**	1.9	0.31	**0.28**	0.90	0.15	**J**
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.0	0.31	ND	0.28	0.044	
75-01-4	Vinyl Chloride	ND	1.9	0.21	ND	0.74	0.081	
106-99-0	1,3-Butadiene	ND	1.9	0.32	ND	0.86	0.15	
74-83-9	Bromomethane	ND	1.9	0.27	ND	0.48	0.070	
75-00-3	Chloroethane	ND	1.9	0.24	ND	0.71	0.091	
64-17-5	Ethanol	**150**	18	1.4	**80**	9.7	0.72	
75-05-8	Acetonitrile	**0.80**	3.7	0.47	**0.48**	2.2	0.28	**J**
107-02-8	Acrolein	**3.3**	3.7	0.55	**1.4**	1.6	0.24	**J**
67-64-1	Acetone	**79**	19	4.4	**33**	8.0	1.8	
75-69-4	Trichlorofluoromethane (CFC 11)	**1.1**	1.9	0.30	**0.20**	0.34	0.053	**J**
67-63-0	2-Propanol (Isopropyl Alcohol)	**22**	3.7	0.80	**9.2**	1.5	0.33	
107-13-1	Acrylonitrile	ND	3.7	0.40	ND	1.7	0.19	
75-35-4	1,1-Dichloroethene	**130**	2.0	0.27	**32**	0.50	0.068	
75-09-2	Methylene Chloride	**1.7**	1.9	0.55	**0.49**	0.55	0.16	**J**
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	1.9	0.26	ND	0.62	0.084	
76-13-1	Trichlorotrifluoroethane (CFC 113)	**0.43**	2.0	0.28	**0.056**	0.26	0.036	**J**
75-15-0	Carbon Disulfide	**18**	4.0	0.58	**5.7**	1.3	0.19	
156-60-5	trans-1,2-Dichloroethene	**0.42**	1.9	0.27	**0.11**	0.49	0.068	**J**
75-34-3	1,1-Dichloroethane	**5.7**	1.9	0.28	**1.4**	0.48	0.070	
1634-04-4	Methyl tert-Butyl Ether	ND	1.9	0.23	ND	0.54	0.064	
108-05-4	Vinyl Acetate	**9.2**	18	4.4	**2.6**	5.2	1.2	**J**
78-93-3	2-Butanone (MEK)	**6.5**	3.7	0.40	**2.2**	1.2	0.14	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-OBS-08** ALS Project ID: P2200253
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200253-007

Test Code: EPA TO-15 Date Collected: 12/29/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 1/20/22
Analyst: Wida Ang Date Analyzed: 1/25/22
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SS00169

Initial Pressure (psig): -0.70 Final Pressure (psig): 5.79

Canister Dilution Factor: 1.46

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	1.9	0.27	ND	0.48	0.069	
141-78-6	Ethyl Acetate	**160**	7.7	1.0	**44**	2.1	0.28	
110-54-3	n-Hexane	**13**	1.9	0.40	**3.6**	0.55	0.11	
67-66-3	Chloroform	**0.82**	2.0	0.26	**0.17**	0.40	0.053	**J**
109-99-9	Tetrahydrofuran (THF)	**4.8**	3.7	0.24	**1.6**	1.2	0.083	
107-06-2	1,2-Dichloroethane	**1.1**	1.9	0.22	**0.28**	0.48	0.053	**J**
71-55-6	1,1,1-Trichloroethane	**12**	1.9	0.24	**2.2**	0.35	0.044	
71-43-2	Benzene	**2.1**	1.8	0.28	**0.64**	0.57	0.088	
56-23-5	Carbon Tetrachloride	**0.36**	1.8	0.27	**0.057**	0.29	0.043	**J**
110-82-7	Cyclohexane	**3.6**	4.0	0.55	**1.0**	1.2	0.16	**J**
78-87-5	1,2-Dichloropropane	**0.59**	1.8	0.24	**0.13**	0.40	0.052	**J**
75-27-4	Bromodichloromethane	ND	1.9	0.28	ND	0.29	0.042	
79-01-6	Trichloroethene	**0.38**	1.9	0.26	**0.071**	0.35	0.049	**J**
123-91-1	1,4-Dioxane	**1.0**	1.9	0.23	**0.29**	0.53	0.064	**J**
80-62-6	Methyl Methacrylate	ND	4.0	0.69	ND	0.98	0.17	
142-82-5	n-Heptane	**3.1**	1.9	0.31	**0.75**	0.47	0.076	
10061-01-5	cis-1,3-Dichloropropene	ND	1.8	0.30	ND	0.40	0.067	
108-10-1	4-Methyl-2-pentanone	**0.67**	4.0	0.27	**0.16**	0.98	0.065	**J**
10061-02-6	trans-1,3-Dichloropropene	ND	1.9	0.40	ND	0.41	0.088	
79-00-5	1,1,2-Trichloroethane	ND	1.9	0.20	ND	0.35	0.036	
108-88-3	Toluene	**49**	1.9	0.24	**13**	0.50	0.063	
591-78-6	2-Hexanone	ND	4.0	0.24	ND	0.98	0.059	
124-48-1	Dibromochloromethane	ND	1.9	0.26	ND	0.23	0.030	
106-93-4	1,2-Dibromoethane	ND	1.9	0.23	ND	0.25	0.029	
123-86-4	n-Butyl Acetate	**2.3**	4.0	0.27	**0.48**	0.85	0.056	**J**

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **SVE-OBS-08** ALS Project ID: P2200253

Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200253-007

Test Code:	EPA TO-15	Date Collected:	12/29/21
Instrument ID:	Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16	Date Received:	1/20/22
Analyst:	Wida Ang	Date Analyzed:	1/25/22
Sample Type:	1.0 L Silonite Summa Canister	Volume(s) Analyzed:	0.40 Liter(s)
Test Notes:			
Container ID:	1SS00169		

Initial Pressure (psig): -0.70 Final Pressure (psig): 5.79

Canister Dilution Factor: 1.46

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	**1.5**	1.9	0.44	**0.31**	0.41	0.094	**J**
127-18-4	Tetrachloroethene	**20**	1.9	0.25	**3.0**	0.28	0.037	
108-90-7	Chlorobenzene	ND	1.9	0.26	ND	0.41	0.056	
100-41-4	Ethylbenzene	**2.2**	1.9	0.27	**0.50**	0.44	0.063	
179601-23-1	m,p-Xylenes	**6.2**	4.0	0.51	**1.4**	0.92	0.12	
75-25-2	Bromoform	ND	1.9	0.40	ND	0.18	0.039	
100-42-5	Styrene	**0.66**	1.8	0.31	**0.16**	0.43	0.074	**J**
95-47-6	o-Xylene	**2.8**	1.9	0.28	**0.65**	0.44	0.065	
111-84-2	n-Nonane	**2.4**	1.9	0.32	**0.46**	0.36	0.062	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.9	0.27	ND	0.28	0.039	
98-82-8	Cumene	ND	1.9	0.28	ND	0.39	0.057	
80-56-8	alpha-Pinene	**3.4**	2.0	0.30	**0.62**	0.35	0.054	
103-65-1	n-Propylbenzene	**0.44**	1.9	0.28	**0.089**	0.39	0.057	**J**
622-96-8	4-Ethyltoluene	**0.46**	1.9	0.31	**0.094**	0.39	0.063	**J**
108-67-8	1,3,5-Trimethylbenzene	**0.57**	1.9	0.28	**0.12**	0.39	0.057	**J**
95-63-6	1,2,4-Trimethylbenzene	**2.0**	1.9	0.27	**0.40**	0.39	0.055	
100-44-7	Benzyl Chloride	ND	4.0	0.44	ND	0.78	0.085	
541-73-1	1,3-Dichlorobenzene	ND	1.9	0.29	ND	0.32	0.049	
106-46-7	1,4-Dichlorobenzene	ND	1.9	0.30	ND	0.32	0.050	
95-50-1	1,2-Dichlorobenzene	ND	1.9	0.29	ND	0.32	0.048	
5989-27-5	d-Limonene	**14**	1.8	0.40	**2.5**	0.33	0.072	**V**
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.7	0.37	ND	0.38	0.038	
120-82-1	1,2,4-Trichlorobenzene	ND	4.0	0.47	ND	0.54	0.064	
91-20-3	Naphthalene	**1.4**	1.9	0.47	**0.27**	0.36	0.091	**J**
87-68-3	Hexachlorobutadiene	ND	1.9	0.40	ND	0.18	0.038	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
V = The continuing calibration verification standard was outside (biased high) the specified limits for this compound.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-OBS-09** ALS Project ID: P2200253
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200253-008

Test Code: EPA TO-15 Date Collected: 12/29/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 1/20/22
Analyst: Wida Ang Date Analyzed: 1/25/22
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SS01439

Initial Pressure (psig): -1.30 Final Pressure (psig): 6.20

Canister Dilution Factor: 1.56

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	**60**	2.0	0.51	**35**	1.2	0.29	
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.5**	2.1	0.34	**0.50**	0.42	0.069	
74-87-3	Chloromethane	ND	2.0	0.34	ND	0.96	0.16	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.1	0.33	ND	0.30	0.047	
75-01-4	Vinyl Chloride	ND	2.0	0.22	ND	0.79	0.087	
106-99-0	1,3-Butadiene	ND	2.0	0.34	ND	0.92	0.16	
74-83-9	Bromomethane	ND	2.0	0.29	ND	0.51	0.074	
75-00-3	Chloroethane	ND	2.0	0.26	ND	0.75	0.098	
64-17-5	Ethanol	**3.2**	20	1.4	**1.7**	10	0.77	**J**
75-05-8	Acetonitrile	ND	3.9	0.51	ND	2.3	0.30	
107-02-8	Acrolein	**1.4**	3.9	0.59	**0.59**	1.7	0.26	**J**
67-64-1	Acetone	**29**	20	4.7	**12**	8.5	2.0	
75-69-4	Trichlorofluoromethane (CFC 11)	**1.2**	2.0	0.32	**0.21**	0.36	0.056	**J**
67-63-0	2-Propanol (Isopropyl Alcohol)	**2.0**	3.9	0.86	**0.82**	1.6	0.35	**J**
107-13-1	Acrylonitrile	ND	3.9	0.43	ND	1.8	0.20	
75-35-4	1,1-Dichloroethene	**2.8**	2.1	0.29	**0.71**	0.53	0.073	
75-09-2	Methylene Chloride	ND	2.0	0.59	ND	0.58	0.17	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.1	0.28	ND	0.66	0.090	
76-13-1	Trichlorotrifluoroethane (CFC 113)	**0.47**	2.1	0.30	**0.062**	0.27	0.039	**J**
75-15-0	Carbon Disulfide	**1.6**	4.3	0.62	**0.53**	1.4	0.20	**J**
156-60-5	trans-1,2-Dichloroethene	ND	2.1	0.29	ND	0.52	0.073	
75-34-3	1,1-Dichloroethane	ND	2.1	0.30	ND	0.51	0.075	
1634-04-4	Methyl tert-Butyl Ether	ND	2.1	0.25	ND	0.57	0.068	
108-05-4	Vinyl Acetate	ND	20	4.7	ND	5.5	1.3	
78-93-3	2-Butanone (MEK)	**8.5**	3.9	0.43	**2.9**	1.3	0.15	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **SVE-OBS-09** ALS Project ID: P2200253

Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200253-008

Test Code:	EPA TO-15	Date Collected:	12/29/21
Instrument ID:	Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16	Date Received:	1/20/22
Analyst:	Wida Ang	Date Analyzed:	1/25/22
Sample Type:	1.0 L Silonite Summa Canister	Volume(s) Analyzed:	0.40 Liter(s)
Test Notes:			
Container ID:	1SS01439		

Initial Pressure (psig): -1.30 Final Pressure (psig): 6.20

Canister Dilution Factor: 1.56

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.0	0.29	ND	0.51	0.074	
141-78-6	Ethyl Acetate	**5.6**	8.2	1.1	**1.5**	2.3	0.30	**J**
110-54-3	n-Hexane	ND	2.1	0.43	ND	0.59	0.12	
67-66-3	Chloroform	ND	2.1	0.28	ND	0.43	0.057	
109-99-9	Tetrahydrofuran (THF)	**1.1**	3.9	0.26	**0.36**	1.3	0.089	**J**
107-06-2	1,2-Dichloroethane	ND	2.1	0.23	ND	0.51	0.057	
71-55-6	1,1,1-Trichloroethane	**4.1**	2.0	0.26	**0.75**	0.37	0.047	
71-43-2	Benzene	**0.76**	2.0	0.30	**0.24**	0.61	0.094	**J**
56-23-5	Carbon Tetrachloride	**0.37**	2.0	0.29	**0.058**	0.31	0.046	**J**
110-82-7	Cyclohexane	ND	4.3	0.59	ND	1.2	0.17	
78-87-5	1,2-Dichloropropane	ND	2.0	0.26	ND	0.42	0.056	
75-27-4	Bromodichloromethane	ND	2.1	0.30	ND	0.31	0.045	
79-01-6	Trichloroethene	ND	2.0	0.28	ND	0.38	0.052	
123-91-1	1,4-Dioxane	**0.34**	2.0	0.25	**0.093**	0.56	0.068	**J**
80-62-6	Methyl Methacrylate	ND	4.3	0.74	ND	1.0	0.18	
142-82-5	n-Heptane	ND	2.1	0.33	ND	0.50	0.081	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.32	ND	0.43	0.071	
108-10-1	4-Methyl-2-pentanone	ND	4.3	0.28	ND	1.0	0.069	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.43	ND	0.44	0.095	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.21	ND	0.37	0.039	
108-88-3	Toluene	**0.61**	2.0	0.25	**0.16**	0.54	0.067	**J**
591-78-6	2-Hexanone	**1.0**	4.3	0.26	**0.25**	1.0	0.063	**J**
124-48-1	Dibromochloromethane	ND	2.1	0.27	ND	0.24	0.032	
106-93-4	1,2-Dibromoethane	ND	2.0	0.24	ND	0.26	0.031	
123-86-4	n-Butyl Acetate	ND	4.3	0.28	ND	0.90	0.060	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **SVE-OBS-09** ALS Project ID: P2200253

Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200253-008

Test Code:	EPA TO-15	Date Collected:	12/29/21
Instrument ID:	Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16	Date Received:	1/20/22
Analyst:	Wida Ang	Date Analyzed:	1/25/22
Sample Type:	1.0 L Silonite Summa Canister	Volume(s) Analyzed:	0.40 Liter(s)
Test Notes:			
Container ID:	1SS01439		

Initial Pressure (psig): -1.30 Final Pressure (psig): 6.20

Canister Dilution Factor: 1.56

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	ND	2.1	0.47	ND	0.44	0.10	
127-18-4	Tetrachloroethene	**3.6**	2.0	0.27	**0.53**	0.30	0.040	
108-90-7	Chlorobenzene	ND	2.0	0.28	ND	0.44	0.060	
100-41-4	Ethylbenzene	ND	2.0	0.29	ND	0.47	0.067	
179601-23-1	m,p-Xylenes	**0.61**	4.3	0.55	**0.14**	0.99	0.13	**J**
75-25-2	Bromoform	ND	2.0	0.43	ND	0.20	0.042	
100-42-5	Styrene	ND	2.0	0.34	ND	0.46	0.079	
95-47-6	o-Xylene	**0.41**	2.0	0.30	**0.095**	0.47	0.069	**J**
111-84-2	n-Nonane	ND	2.0	0.35	ND	0.39	0.066	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.29	ND	0.30	0.042	
98-82-8	Cumene	ND	2.0	0.30	ND	0.41	0.061	
80-56-8	alpha-Pinene	ND	2.1	0.32	ND	0.38	0.057	
103-65-1	n-Propylbenzene	ND	2.1	0.30	ND	0.42	0.061	
622-96-8	4-Ethyltoluene	ND	2.1	0.33	ND	0.42	0.067	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.30	ND	0.41	0.061	
95-63-6	1,2,4-Trimethylbenzene	**0.51**	2.0	0.29	**0.10**	0.41	0.059	**J**
100-44-7	Benzyl Chloride	ND	4.3	0.47	ND	0.83	0.090	
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.31	ND	0.34	0.052	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.32	ND	0.34	0.053	
95-50-1	1,2-Dichlorobenzene	ND	2.1	0.31	ND	0.34	0.051	
5989-27-5	d-Limonene	**9.3**	2.0	0.43	**1.7**	0.35	0.077	**V**
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.9	0.39	ND	0.40	0.040	
120-82-1	1,2,4-Trichlorobenzene	ND	4.3	0.51	ND	0.58	0.068	
91-20-3	Naphthalene	**5.4**	2.0	0.51	**1.0**	0.39	0.097	
87-68-3	Hexachlorobutadiene	ND	2.0	0.43	ND	0.19	0.040	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
V = The continuing calibration verification standard was outside (biased high) the specified limits for this compound.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-EXT-02** ALS Project ID: P2200253
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200253-009

Test Code: EPA TO-15 Date Collected: 12/29/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 1/20/22
Analyst: Wida Ang Date Analyzed: 1/26/22
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes: 0.025 Liter(s)
Container ID: 1SS01443

Initial Pressure (psig): -0.88 Final Pressure (psig): 6.26
Initial Pressure 2 (psig): 0.17 Final Pressure 2 (psig): 2.16
Canister Dilution Factor: 1.72

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	**140**	7.2	1.8	**79**	4.2	1.0	
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.5**	7.3	1.2	**0.50**	1.5	0.24	**J**
74-87-3	Chloromethane	**2.6**	7.0	1.2	**1.3**	3.4	0.57	**J**
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	7.4	1.2	ND	1.1	0.17	
75-01-4	Vinyl Chloride	ND	7.2	0.78	ND	2.8	0.31	
106-99-0	1,3-Butadiene	ND	7.2	1.2	ND	3.2	0.55	
74-83-9	Bromomethane	ND	7.0	1.0	ND	1.8	0.26	
75-00-3	Chloroethane	ND	7.0	0.91	ND	2.7	0.34	
64-17-5	Ethanol	**35**	69	5.1	**19**	37	2.7	**J**
75-05-8	Acetonitrile	ND	14	1.8	ND	8.2	1.1	
107-02-8	Acrolein	**2.7**	14	2.1	**1.2**	6.0	0.90	**J**
67-64-1	Acetone	**30**	72	17	**13**	30	7.0	**J**
75-69-4	Trichlorofluoromethane (CFC 11)	ND	7.2	1.1	ND	1.3	0.20	
67-63-0	2-Propanol (Isopropyl Alcohol)	**290**	14	3.0	**120**	5.6	1.2	
107-13-1	Acrylonitrile	ND	14	1.5	ND	6.3	0.70	
75-35-4	1,1-Dichloroethene	**120**	7.4	1.0	**30**	1.9	0.26	
75-09-2	Methylene Chloride	ND	7.2	2.1	ND	2.1	0.59	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	7.3	0.99	ND	2.3	0.32	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	7.4	1.0	ND	0.97	0.14	
75-15-0	Carbon Disulfide	**3.5**	15	2.2	**1.1**	4.9	0.71	**J**
156-60-5	trans-1,2-Dichloroethene	ND	7.3	1.0	ND	1.8	0.26	
75-34-3	1,1-Dichloroethane	**2.9**	7.3	1.1	**0.71**	1.8	0.27	**J**
1634-04-4	Methyl tert-Butyl Ether	ND	7.3	0.87	ND	2.0	0.24	
108-05-4	Vinyl Acetate	ND	69	17	ND	20	4.7	
78-93-3	2-Butanone (MEK)	**11**	14	1.5	**3.7**	4.7	0.51	**J**

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **SVE-EXT-02** ALS Project ID: P2200253

Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200253-009

Test Code:	EPA TO-15	Date Collected:	12/29/21
Instrument ID:	Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16	Date Received:	1/20/22
Analyst:	Wida Ang	Date Analyzed:	1/26/22
Sample Type:	1.0 L Silonite Summa Canister	Volume(s) Analyzed:	0.125 Liter(s)
Test Notes:			0.025 Liter(s)
Container ID:	1SS01443		

Initial Pressure (psig):	-0.88	Final Pressure (psig):	6.26
Initial Pressure 2 (psig):	0.17	Final Pressure 2 (psig):	2.16

Canister Dilution Factor: 1.72

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	7.2	1.0	ND	1.8	0.26	
141-78-6	Ethyl Acetate	ND	29	3.9	ND	8.0	1.1	
110-54-3	n-Hexane	**6.5**	7.3	1.5	**1.9**	2.1	0.43	**J**
67-66-3	Chloroform	**1.3**	7.4	0.98	**0.26**	1.5	0.20	**J**
109-99-9	Tetrahydrofuran (THF)	**6.4**	14	0.92	**2.2**	4.7	0.31	**J**
107-06-2	1,2-Dichloroethane	ND	7.3	0.81	ND	1.8	0.20	
71-55-6	1,1,1-Trichloroethane	**28**	7.2	0.91	**5.1**	1.3	0.17	
71-43-2	Benzene	**10**	6.9	1.1	**3.2**	2.2	0.33	
56-23-5	Carbon Tetrachloride	ND	6.9	1.0	ND	1.1	0.16	
110-82-7	Cyclohexane	ND	15	2.1	ND	4.4	0.60	
78-87-5	1,2-Dichloropropane	ND	6.9	0.91	ND	1.5	0.20	
75-27-4	Bromodichloromethane	ND	7.3	1.1	ND	1.1	0.16	
79-01-6	Trichloroethene	**1.3**	7.2	0.99	**0.25**	1.3	0.18	**J**
123-91-1	1,4-Dioxane	**6,000**	36	4.3	**1,700**	9.9	1.2	**D**
80-62-6	Methyl Methacrylate	ND	15	2.6	ND	3.7	0.64	
142-82-5	n-Heptane	ND	7.3	1.2	ND	1.8	0.29	
10061-01-5	cis-1,3-Dichloropropene	ND	6.9	1.1	ND	1.5	0.25	
108-10-1	4-Methyl-2-pentanone	**1.5**	15	1.0	**0.37**	3.7	0.25	**J**
10061-02-6	trans-1,3-Dichloropropene	ND	7.0	1.5	ND	1.5	0.33	
79-00-5	1,1,2-Trichloroethane	**0.89**	7.2	0.74	**0.16**	1.3	0.14	**J**
108-88-3	Toluene	**4.0**	7.2	0.89	**1.1**	1.9	0.24	**J**
591-78-6	2-Hexanone	**1.2**	15	0.91	**0.28**	3.7	0.22	**J**
124-48-1	Dibromochloromethane	ND	7.3	0.96	ND	0.86	0.11	
106-93-4	1,2-Dibromoethane	ND	7.2	0.85	ND	0.93	0.11	
123-86-4	n-Butyl Acetate	**1.2**	15	1.0	**0.24**	3.2	0.21	**J**

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
D = The reported result is from a dilution.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **SVE-EXT-02** ALS Project ID: P2200253

Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200253-009

Test Code:	EPA TO-15	Date Collected:	12/29/21
Instrument ID:	Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16	Date Received:	1/20/22
Analyst:	Wida Ang	Date Analyzed:	1/26/22
Sample Type:	1.0 L Silonite Summa Canister	Volume(s) Analyzed:	0.125 Liter(s)
Test Notes:			0.025 Liter(s)
Container ID:	1SS01443		

Initial Pressure (psig):	-0.88	Final Pressure (psig):	6.26
Initial Pressure 2 (psig):	0.17	Final Pressure 2 (psig):	2.16

Canister Dilution Factor: 1.72

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	**20**	7.3	1.7	**4.3**	1.6	0.35	
127-18-4	Tetrachloroethene	**5.7**	7.2	0.95	**0.85**	1.1	0.14	**J**
108-90-7	Chlorobenzene	ND	7.2	0.98	ND	1.6	0.21	
100-41-4	Ethylbenzene	**1.9**	7.2	1.0	**0.43**	1.6	0.24	**J**
179601-23-1	m,p-Xylenes	**8.7**	15	1.9	**2.0**	3.5	0.44	**J**
75-25-2	Bromoform	ND	7.2	1.5	ND	0.69	0.15	
100-42-5	Styrene	ND	6.9	1.2	ND	1.6	0.28	
95-47-6	o-Xylene	**5.0**	7.2	1.1	**1.2**	1.6	0.24	**J**
111-84-2	n-Nonane	ND	7.2	1.2	ND	1.4	0.23	
79-34-5	1,1,2,2-Tetrachloroethane	ND	7.2	1.0	ND	1.0	0.15	
98-82-8	Cumene	ND	7.2	1.1	ND	1.5	0.22	
80-56-8	alpha-Pinene	ND	7.4	1.1	ND	1.3	0.20	
103-65-1	n-Propylbenzene	ND	7.3	1.1	ND	1.5	0.22	
622-96-8	4-Ethyltoluene	ND	7.3	1.2	ND	1.5	0.24	
108-67-8	1,3,5-Trimethylbenzene	**1.3**	7.2	1.1	**0.27**	1.5	0.22	**J**
95-63-6	1,2,4-Trimethylbenzene	**6.1**	7.2	1.0	**1.2**	1.5	0.21	**J**
100-44-7	Benzyl Chloride	ND	15	1.7	ND	2.9	0.32	
541-73-1	1,3-Dichlorobenzene	ND	7.2	1.1	ND	1.2	0.18	
106-46-7	1,4-Dichlorobenzene	ND	7.2	1.1	ND	1.2	0.19	
95-50-1	1,2-Dichlorobenzene	ND	7.3	1.1	ND	1.2	0.18	
5989-27-5	d-Limonene	**9.0**	6.9	1.5	**1.6**	1.2	0.27	
96-12-8	1,2-Dibromo-3-chloropropane	ND	14	1.4	ND	1.4	0.14	
120-82-1	1,2,4-Trichlorobenzene	ND	15	1.8	ND	2.0	0.24	
91-20-3	Naphthalene	**14**	7.2	1.8	**2.6**	1.4	0.34	
87-68-3	Hexachlorobutadiene	ND	7.2	1.5	ND	0.67	0.14	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-EXT-03** ALS Project ID: P2200253
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200253-010

Test Code: EPA TO-15 Date Collected: 12/29/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 1/20/22
Analyst: Wida Ang Date Analyzed: 1/26/22
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes: 0.025 Liter(s)
Container ID: 1SC00711

Initial Pressure (psig): -1.60 Final Pressure (psig): 6.96

Canister Dilution Factor: 1.65

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	**40**	6.9	1.7	**23**	4.0	1.0	
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.1**	7.0	1.1	**0.42**	1.4	0.23	**J**
74-87-3	Chloromethane	**1.2**	6.7	1.1	**0.59**	3.3	0.55	**J**
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	7.1	1.1	ND	1.0	0.16	
75-01-4	Vinyl Chloride	ND	6.9	0.75	ND	2.7	0.29	
106-99-0	1,3-Butadiene	ND	6.9	1.2	ND	3.1	0.53	
74-83-9	Bromomethane	ND	6.7	0.98	ND	1.7	0.25	
75-00-3	Chloroethane	ND	6.7	0.87	ND	2.6	0.33	
64-17-5	Ethanol	ND	66	4.9	ND	35	2.6	
75-05-8	Acetonitrile	ND	13	1.7	ND	7.9	1.0	
107-02-8	Acrolein	**2.6**	13	2.0	**1.1**	5.8	0.86	**J**
67-64-1	Acetone	**29**	69	16	**12**	29	6.7	**J**
75-69-4	Trichlorofluoromethane (CFC 11)	ND	6.9	1.1	ND	1.2	0.19	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	13	2.9	ND	5.4	1.2	
107-13-1	Acrylonitrile	ND	13	1.5	ND	6.1	0.67	
75-35-4	1,1-Dichloroethene	**11**	7.1	0.98	**2.7**	1.8	0.25	
75-09-2	Methylene Chloride	ND	6.9	2.0	ND	2.0	0.57	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	7.0	0.95	ND	2.2	0.30	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	7.1	1.0	ND	0.93	0.13	
75-15-0	Carbon Disulfide	**13**	15	2.1	**4.2**	4.7	0.68	**J**
156-60-5	trans-1,2-Dichloroethene	ND	7.0	0.98	ND	1.8	0.25	
75-34-3	1,1-Dichloroethane	ND	7.0	1.0	ND	1.7	0.25	
1634-04-4	Methyl tert-Butyl Ether	ND	7.0	0.83	ND	1.9	0.23	
108-05-4	Vinyl Acetate	ND	66	16	ND	19	4.5	
78-93-3	2-Butanone (MEK)	**5.5**	13	1.5	**1.8**	4.5	0.49	**J**

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-EXT-03** ALS Project ID: P2200253
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200253-010

Test Code: EPA TO-15 Date Collected: 12/29/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 1/20/22
Analyst: Wida Ang Date Analyzed: 1/26/22
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes: 0.025 Liter(s)
Container ID: 1SC00711

Initial Pressure (psig): -1.60 Final Pressure (psig): 6.96

Canister Dilution Factor: 1.65

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	6.9	0.99	ND	1.7	0.25	
141-78-6	Ethyl Acetate	**5.0**	28	3.7	**1.4**	7.7	1.0	**J**
110-54-3	n-Hexane	**2.7**	7.0	1.5	**0.76**	2.0	0.41	**J**
67-66-3	Chloroform	ND	7.1	0.94	ND	1.5	0.19	
109-99-9	Tetrahydrofuran (THF)	**1.3**	13	0.88	**0.46**	4.5	0.30	**J**
107-06-2	1,2-Dichloroethane	ND	7.0	0.78	ND	1.7	0.19	
71-55-6	1,1,1-Trichloroethane	**7.6**	6.9	0.87	**1.4**	1.3	0.16	
71-43-2	Benzene	**6.5**	6.6	1.0	**2.0**	2.1	0.32	**J**
56-23-5	Carbon Tetrachloride	ND	6.6	0.98	ND	1.0	0.16	
110-82-7	Cyclohexane	ND	15	2.0	ND	4.2	0.58	
78-87-5	1,2-Dichloropropane	ND	6.6	0.87	ND	1.4	0.19	
75-27-4	Bromodichloromethane	ND	7.0	1.0	ND	1.0	0.15	
79-01-6	Trichloroethene	ND	6.9	0.95	ND	1.3	0.18	
123-91-1	1,4-Dioxane	**4,800**	34	4.2	**1,300**	9.5	1.2	**D**
80-62-6	Methyl Methacrylate	ND	15	2.5	ND	3.5	0.61	
142-82-5	n-Heptane	ND	7.0	1.1	ND	1.7	0.27	
10061-01-5	cis-1,3-Dichloropropene	ND	6.6	1.1	ND	1.5	0.24	
108-10-1	4-Methyl-2-pentanone	ND	15	0.96	ND	3.5	0.24	
10061-02-6	trans-1,3-Dichloropropene	ND	6.7	1.5	ND	1.5	0.32	
79-00-5	1,1,2-Trichloroethane	ND	6.9	0.71	ND	1.3	0.13	
108-88-3	Toluene	**6.5**	6.9	0.86	**1.7**	1.8	0.23	**J**
591-78-6	2-Hexanone	**1.7**	15	0.87	**0.40**	3.5	0.21	**J**
124-48-1	Dibromochloromethane	ND	7.0	0.92	ND	0.82	0.11	
106-93-4	1,2-Dibromoethane	ND	6.9	0.82	ND	0.89	0.11	
123-86-4	n-Butyl Acetate	ND	15	0.96	ND	3.1	0.20	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
D = The reported result is from a dilution.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-EXT-03** ALS Project ID: P2200253
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200253-010

Test Code: EPA TO-15 Date Collected: 12/29/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 1/20/22
Analyst: Wida Ang Date Analyzed: 1/26/22
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes: 0.025 Liter(s)
Container ID: 1SC00711

Initial Pressure (psig): -1.60 Final Pressure (psig): 6.96

Canister Dilution Factor: 1.65

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	**2.7**	7.0	1.6	**0.59**	1.5	0.34	**J**
127-18-4	Tetrachloroethene	**2.3**	6.9	0.91	**0.34**	1.0	0.13	**J**
108-90-7	Chlorobenzene	ND	6.9	0.94	ND	1.5	0.20	
100-41-4	Ethylbenzene	**3.0**	6.9	0.99	**0.68**	1.6	0.23	**J**
179601-23-1	m,p-Xylenes	**15**	15	1.8	**3.3**	3.3	0.43	
75-25-2	Bromoform	ND	6.9	1.5	ND	0.66	0.14	
100-42-5	Styrene	ND	6.6	1.1	ND	1.6	0.27	
95-47-6	o-Xylene	**8.3**	6.9	1.0	**1.9**	1.6	0.23	
111-84-2	n-Nonane	ND	6.9	1.2	ND	1.3	0.22	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.9	0.98	ND	1.0	0.14	
98-82-8	Cumene	ND	6.9	1.0	ND	1.4	0.21	
80-56-8	alpha-Pinene	**1.2**	7.1	1.1	**0.21**	1.3	0.19	**J**
103-65-1	n-Propylbenzene	**1.1**	7.0	1.0	**0.21**	1.4	0.21	**J**
622-96-8	4-Ethyltoluene	**1.3**	7.0	1.1	**0.27**	1.4	0.23	**J**
108-67-8	1,3,5-Trimethylbenzene	**2.7**	6.9	1.0	**0.55**	1.4	0.21	**J**
95-63-6	1,2,4-Trimethylbenzene	**12**	6.9	0.98	**2.5**	1.4	0.20	
100-44-7	Benzyl Chloride	ND	15	1.6	ND	2.8	0.31	
541-73-1	1,3-Dichlorobenzene	ND	6.9	1.1	ND	1.1	0.18	
106-46-7	1,4-Dichlorobenzene	ND	6.9	1.1	ND	1.1	0.18	
95-50-1	1,2-Dichlorobenzene	ND	7.0	1.0	ND	1.2	0.17	
5989-27-5	d-Limonene	**3.8**	6.6	1.5	**0.68**	1.2	0.26	**J**
96-12-8	1,2-Dibromo-3-chloropropane	ND	13	1.3	ND	1.4	0.14	
120-82-1	1,2,4-Trichlorobenzene	ND	15	1.7	ND	2.0	0.23	
91-20-3	Naphthalene	**6.9**	6.9	1.7	**1.3**	1.3	0.33	
87-68-3	Hexachlorobutadiene	ND	6.9	1.5	ND	0.64	0.14	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Method Blank** ALS Project ID: P2200253
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P220125-MB

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Wida Ang Date Analyzed: 1/25/22
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	ND	0.52	0.13	ND	0.30	0.076	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.53	0.087	ND	0.11	0.018	
74-87-3	Chloromethane	ND	0.51	0.086	ND	0.25	0.042	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.54	0.084	ND	0.077	0.012	
75-01-4	Vinyl Chloride	ND	0.52	0.057	ND	0.20	0.022	
106-99-0	1,3-Butadiene	ND	0.52	0.088	ND	0.24	0.040	
74-83-9	Bromomethane	ND	0.51	0.074	ND	0.13	0.019	
75-00-3	Chloroethane	ND	0.51	0.066	ND	0.19	0.025	
64-17-5	Ethanol	ND	5.0	0.37	ND	2.7	0.20	
75-05-8	Acetonitrile	ND	1.0	0.13	ND	0.60	0.077	
107-02-8	Acrolein	ND	1.0	0.15	ND	0.44	0.065	
67-64-1	Acetone	ND	5.2	1.2	ND	2.2	0.51	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	0.52	0.081	ND	0.093	0.014	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	1.0	0.22	ND	0.41	0.090	
107-13-1	Acrylonitrile	ND	1.0	0.11	ND	0.46	0.051	
75-35-4	1,1-Dichloroethene	ND	0.54	0.074	ND	0.14	0.019	
75-09-2	Methylene Chloride	ND	0.52	0.15	ND	0.15	0.043	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.53	0.072	ND	0.17	0.023	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	0.54	0.076	ND	0.070	0.0099	
75-15-0	Carbon Disulfide	ND	1.1	0.16	ND	0.35	0.051	
156-60-5	trans-1,2-Dichloroethene	ND	0.53	0.074	ND	0.13	0.019	
75-34-3	1,1-Dichloroethane	ND	0.53	0.078	ND	0.13	0.019	
1634-04-4	Methyl tert-Butyl Ether	ND	0.53	0.063	ND	0.15	0.017	
108-05-4	Vinyl Acetate	ND	5.0	1.2	ND	1.4	0.34	
78-93-3	2-Butanone (MEK)	ND	1.0	0.11	ND	0.34	0.037	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **Method Blank** ALS Project ID: P2200253

Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P220125-MB

Test Code: EPA TO-15 Date Collected: NA

Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA

Analyst: Wida Ang Date Analyzed: 1/25/22

Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.52	0.075	ND	0.13	0.019	
141-78-6	Ethyl Acetate	ND	2.1	0.28	ND	0.58	0.078	
110-54-3	n-Hexane	ND	0.53	0.11	ND	0.15	0.031	
67-66-3	Chloroform	ND	0.54	0.071	ND	0.11	0.015	
109-99-9	Tetrahydrofuran (THF)	ND	1.0	0.067	ND	0.34	0.023	
107-06-2	1,2-Dichloroethane	ND	0.53	0.059	ND	0.13	0.015	
71-55-6	1,1,1-Trichloroethane	ND	0.52	0.066	ND	0.095	0.012	
71-43-2	Benzene	ND	0.50	0.077	ND	0.16	0.024	
56-23-5	Carbon Tetrachloride	ND	0.50	0.074	ND	0.080	0.012	
110-82-7	Cyclohexane	ND	1.1	0.15	ND	0.32	0.044	
78-87-5	1,2-Dichloropropane	ND	0.50	0.066	ND	0.11	0.014	
75-27-4	Bromodichloromethane	ND	0.53	0.077	ND	0.079	0.011	
79-01-6	Trichloroethene	ND	0.52	0.072	ND	0.097	0.013	
123-91-1	1,4-Dioxane	ND	0.52	0.063	ND	0.14	0.017	
80-62-6	Methyl Methacrylate	ND	1.1	0.19	ND	0.27	0.046	
142-82-5	n-Heptane	ND	0.53	0.085	ND	0.13	0.021	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.083	ND	0.11	0.018	
108-10-1	4-Methyl-2-pentanone	ND	1.1	0.073	ND	0.27	0.018	
10061-02-6	trans-1,3-Dichloropropene	ND	0.51	0.11	ND	0.11	0.024	
79-00-5	1,1,2-Trichloroethane	ND	0.52	0.054	ND	0.095	0.0099	
108-88-3	Toluene	ND	0.52	0.065	ND	0.14	0.017	
591-78-6	2-Hexanone	ND	1.1	0.066	ND	0.27	0.016	
124-48-1	Dibromochloromethane	ND	0.53	0.070	ND	0.062	0.0082	
106-93-4	1,2-Dibromoethane	ND	0.52	0.062	ND	0.068	0.0081	
123-86-4	n-Butyl Acetate	ND	1.1	0.073	ND	0.23	0.015	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **Method Blank** ALS Project ID: P2200253

Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P220125-MB

Test Code: EPA TO-15 Date Collected: NA

Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA

Analyst: Wida Ang Date Analyzed: 1/25/22

Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.53	0.12	ND	0.11	0.026	
127-18-4	Tetrachloroethene	ND	0.52	0.069	ND	0.077	0.010	
108-90-7	Chlorobenzene	ND	0.52	0.071	ND	0.11	0.015	
100-41-4	Ethylbenzene	ND	0.52	0.075	ND	0.12	0.017	
179601-23-1	m,p-Xylenes	ND	1.1	0.14	ND	0.25	0.032	
75-25-2	Bromoform	ND	0.52	0.11	ND	0.050	0.011	
100-42-5	Styrene	ND	0.50	0.086	ND	0.12	0.020	
95-47-6	o-Xylene	ND	0.52	0.077	ND	0.12	0.018	
111-84-2	n-Nonane	ND	0.52	0.089	ND	0.099	0.017	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.52	0.074	ND	0.076	0.011	
98-82-8	Cumene	ND	0.52	0.077	ND	0.11	0.016	
80-56-8	alpha-Pinene	ND	0.54	0.082	ND	0.097	0.015	
103-65-1	n-Propylbenzene	ND	0.53	0.077	ND	0.11	0.016	
622-96-8	4-Ethyltoluene	ND	0.53	0.085	ND	0.11	0.017	
108-67-8	1,3,5-Trimethylbenzene	ND	0.52	0.077	ND	0.11	0.016	
95-63-6	1,2,4-Trimethylbenzene	ND	0.52	0.074	ND	0.11	0.015	
100-44-7	Benzyl Chloride	ND	1.1	0.12	ND	0.21	0.023	
541-73-1	1,3-Dichlorobenzene	ND	0.52	0.080	ND	0.087	0.013	
106-46-7	1,4-Dichlorobenzene	ND	0.52	0.082	ND	0.087	0.014	
95-50-1	1,2-Dichlorobenzene	ND	0.53	0.079	ND	0.088	0.013	
5989-27-5	d-Limonene	ND	0.50	0.11	ND	0.090	0.020	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.10	ND	0.10	0.010	
120-82-1	1,2,4-Trichlorobenzene	ND	1.1	0.13	ND	0.15	0.018	
91-20-3	Naphthalene	ND	0.52	0.13	ND	0.099	0.025	
87-68-3	Hexachlorobutadiene	ND	0.52	0.11	ND	0.049	0.010	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Method Blank** ALS Project ID: P2200253
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P220126-MB

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Wida Ang Date Analyzed: 1/26/22
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	ND	0.52	0.13	ND	0.30	0.076	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.53	0.087	ND	0.11	0.018	
74-87-3	Chloromethane	ND	0.51	0.086	ND	0.25	0.042	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.54	0.084	ND	0.077	0.012	
75-01-4	Vinyl Chloride	ND	0.52	0.057	ND	0.20	0.022	
106-99-0	1,3-Butadiene	ND	0.52	0.088	ND	0.24	0.040	
74-83-9	Bromomethane	ND	0.51	0.074	ND	0.13	0.019	
75-00-3	Chloroethane	ND	0.51	0.066	ND	0.19	0.025	
64-17-5	Ethanol	ND	5.0	0.37	ND	2.7	0.20	
75-05-8	Acetonitrile	ND	1.0	0.13	ND	0.60	0.077	
107-02-8	Acrolein	ND	1.0	0.15	ND	0.44	0.065	
67-64-1	Acetone	ND	5.2	1.2	ND	2.2	0.51	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	0.52	0.081	ND	0.093	0.014	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	1.0	0.22	ND	0.41	0.090	
107-13-1	Acrylonitrile	ND	1.0	0.11	ND	0.46	0.051	
75-35-4	1,1-Dichloroethene	ND	0.54	0.074	ND	0.14	0.019	
75-09-2	Methylene Chloride	ND	0.52	0.15	ND	0.15	0.043	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.53	0.072	ND	0.17	0.023	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	0.54	0.076	ND	0.070	0.0099	
75-15-0	Carbon Disulfide	ND	1.1	0.16	ND	0.35	0.051	
156-60-5	trans-1,2-Dichloroethene	ND	0.53	0.074	ND	0.13	0.019	
75-34-3	1,1-Dichloroethane	ND	0.53	0.078	ND	0.13	0.019	
1634-04-4	Methyl tert-Butyl Ether	ND	0.53	0.063	ND	0.15	0.017	
108-05-4	Vinyl Acetate	ND	5.0	1.2	ND	1.4	0.34	
78-93-3	2-Butanone (MEK)	ND	1.0	0.11	ND	0.34	0.037	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **Method Blank** ALS Project ID: P2200253

Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P220126-MB

Test Code: EPA TO-15 Date Collected: NA

Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA

Analyst: Wida Ang Date Analyzed: 1/26/22

Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.52	0.075	ND	0.13	0.019	
141-78-6	Ethyl Acetate	ND	2.1	0.28	ND	0.58	0.078	
110-54-3	n-Hexane	ND	0.53	0.11	ND	0.15	0.031	
67-66-3	Chloroform	ND	0.54	0.071	ND	0.11	0.015	
109-99-9	Tetrahydrofuran (THF)	ND	1.0	0.067	ND	0.34	0.023	
107-06-2	1,2-Dichloroethane	ND	0.53	0.059	ND	0.13	0.015	
71-55-6	1,1,1-Trichloroethane	ND	0.52	0.066	ND	0.095	0.012	
71-43-2	Benzene	ND	0.50	0.077	ND	0.16	0.024	
56-23-5	Carbon Tetrachloride	ND	0.50	0.074	ND	0.080	0.012	
110-82-7	Cyclohexane	ND	1.1	0.15	ND	0.32	0.044	
78-87-5	1,2-Dichloropropane	ND	0.50	0.066	ND	0.11	0.014	
75-27-4	Bromodichloromethane	ND	0.53	0.077	ND	0.079	0.011	
79-01-6	Trichloroethene	ND	0.52	0.072	ND	0.097	0.013	
123-91-1	1,4-Dioxane	ND	0.52	0.063	ND	0.14	0.017	
80-62-6	Methyl Methacrylate	ND	1.1	0.19	ND	0.27	0.046	
142-82-5	n-Heptane	ND	0.53	0.085	ND	0.13	0.021	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.083	ND	0.11	0.018	
108-10-1	4-Methyl-2-pentanone	ND	1.1	0.073	ND	0.27	0.018	
10061-02-6	trans-1,3-Dichloropropene	ND	0.51	0.11	ND	0.11	0.024	
79-00-5	1,1,2-Trichloroethane	ND	0.52	0.054	ND	0.095	0.0099	
108-88-3	Toluene	ND	0.52	0.065	ND	0.14	0.017	
591-78-6	2-Hexanone	ND	1.1	0.066	ND	0.27	0.016	
124-48-1	Dibromochloromethane	ND	0.53	0.070	ND	0.062	0.0082	
106-93-4	1,2-Dibromoethane	ND	0.52	0.062	ND	0.068	0.0081	
123-86-4	n-Butyl Acetate	ND	1.1	0.073	ND	0.23	0.015	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Method Blank** ALS Project ID: P2200253
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P220126-MB

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Wida Ang Date Analyzed: 1/26/22
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.53	0.12	ND	0.11	0.026	
127-18-4	Tetrachloroethene	ND	0.52	0.069	ND	0.077	0.010	
108-90-7	Chlorobenzene	ND	0.52	0.071	ND	0.11	0.015	
100-41-4	Ethylbenzene	ND	0.52	0.075	ND	0.12	0.017	
179601-23-1	m,p-Xylenes	ND	1.1	0.14	ND	0.25	0.032	
75-25-2	Bromoform	ND	0.52	0.11	ND	0.050	0.011	
100-42-5	Styrene	ND	0.50	0.086	ND	0.12	0.020	
95-47-6	o-Xylene	ND	0.52	0.077	ND	0.12	0.018	
111-84-2	n-Nonane	ND	0.52	0.089	ND	0.099	0.017	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.52	0.074	ND	0.076	0.011	
98-82-8	Cumene	ND	0.52	0.077	ND	0.11	0.016	
80-56-8	alpha-Pinene	ND	0.54	0.082	ND	0.097	0.015	
103-65-1	n-Propylbenzene	ND	0.53	0.077	ND	0.11	0.016	
622-96-8	4-Ethyltoluene	ND	0.53	0.085	ND	0.11	0.017	
108-67-8	1,3,5-Trimethylbenzene	ND	0.52	0.077	ND	0.11	0.016	
95-63-6	1,2,4-Trimethylbenzene	ND	0.52	0.074	ND	0.11	0.015	
100-44-7	Benzyl Chloride	ND	1.1	0.12	ND	0.21	0.023	
541-73-1	1,3-Dichlorobenzene	ND	0.52	0.080	ND	0.087	0.013	
106-46-7	1,4-Dichlorobenzene	ND	0.52	0.082	ND	0.087	0.014	
95-50-1	1,2-Dichlorobenzene	ND	0.53	0.079	ND	0.088	0.013	
5989-27-5	d-Limonene	ND	0.50	0.11	ND	0.090	0.020	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.10	ND	0.10	0.010	
120-82-1	1,2,4-Trichlorobenzene	ND	1.1	0.13	ND	0.15	0.018	
91-20-3	Naphthalene	ND	0.52	0.13	ND	0.099	0.025	
87-68-3	Hexachlorobutadiene	ND	0.52	0.11	ND	0.049	0.010	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

SURROGATE SPIKE RECOVERY RESULTS

Client: **Environmental Management Services, Inc.**
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Project ID: P2200253

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date(s) Collected: 12/29/21
Analyst: Wida Ang Date(s) Received: 1/20/22
Sample Type: 1.0 L Silonite Summa Canister(s) / 1.0 L Summa Canister(s) Date(s) Analyzed: 1/25 - 1/26/22
Test Notes:

Client Sample ID	ALS Sample ID	1,2-Dichloroethane-d4 Percent Recovered	Toluene-d8 Percent Recovered	Bromofluorobenzene Percent Recovered	Acceptance Limits	Data Qualifier
Method Blank	P220125-MB	**105**	**96**	**86**	70-130	
Method Blank	P220126-MB	**105**	**96**	**91**	70-130	
Lab Control Sample	P220125-LCS	**103**	**95**	**91**	70-130	
Lab Control Sample	P220126-LCS	**102**	**95**	**95**	70-130	
Duplicate Lab Control Sample	P220125-DLCS	**101**	**97**	**92**	70-130	
Duplicate Lab Control Sample	P220126-DLCS	**101**	**95**	**94**	70-130	
SVE-OBS-01	P2200253-001	**108**	**91**	**88**	70-130	
SVE-OBS-02	P2200253-002	**106**	**91**	**89**	70-130	
SVE-OBS-03	P2200253-003	**105**	**92**	**94**	70-130	
SVE-OBS-04	P2200253-004	**104**	**93**	**95**	70-130	
SVE-OBS-05	P2200253-005	**104**	**96**	**96**	70-130	
SVE-OBS-07	P2200253-006	**105**	**95**	**94**	70-130	
SVE-OBS-08	P2200253-007	**102**	**94**	**95**	70-130	
SVE-OBS-09	P2200253-008	**103**	**95**	**95**	70-130	
SVE-EXT-02	P2200253-009	**104**	**95**	**93**	70-130	
SVE-EXT-03	P2200253-010	**104**	**95**	**93**	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2200253
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P220125-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Wida Ang Date Analyzed: 1/25/22
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
115-07-1	Propene	206	183	189	**89**	**92**	56-128	3	25	
75-71-8	Dichlorodifluoromethane (CFC 12)	208	202	212	**97**	**102**	71-112	5	25	
74-87-3	Chloromethane	206	218	223	**106**	**108**	53-126	2	25	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	208	231	230	**111**	**111**	62-121	0	25	
75-01-4	Vinyl Chloride	208	196	203	**94**	**98**	63-123	4	25	
106-99-0	1,3-Butadiene	206	198	208	**96**	**101**	63-135	5	25	
74-83-9	Bromomethane	206	197	211	**96**	**102**	71-112	6	25	
75-00-3	Chloroethane	206	200	211	**97**	**102**	66-117	5	25	
64-17-5	Ethanol	832	806	823	**97**	**99**	57-117	2	25	
75-05-8	Acetonitrile	202	164	170	**81**	**84**	59-131	4	25	
107-02-8	Acrolein	416	437	460	**105**	**111**	71-123	6	25	
67-64-1	Acetone	1,020	1020	1040	**100**	**102**	60-117	2	25	
75-69-4	Trichlorofluoromethane (CFC 11)	202	204	210	**101**	**104**	71-114	3	25	
67-63-0	2-Propanol (Isopropyl Alcohol)	400	415	425	**104**	**106**	61-124	2	25	
107-13-1	Acrylonitrile	402	395	401	**98**	**100**	65-130	2	25	
75-35-4	1,1-Dichloroethene	210	214	223	**102**	**106**	74-114	4	25	
75-09-2	Methylene Chloride	208	203	212	**98**	**102**	75-112	4	25	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	204	196	201	**96**	**99**	57-127	3	25	
76-13-1	Trichlorotrifluoroethane (CFC 113)	216	209	220	**97**	**102**	73-114	5	25	
75-15-0	Carbon Disulfide	414	444	447	**107**	**108**	70-113	0.9	25	
156-60-5	trans-1,2-Dichloroethene	208	211	219	**101**	**105**	76-119	4	25	
75-34-3	1,1-Dichloroethane	214	214	220	**100**	**103**	70-114	3	25	
1634-04-4	Methyl tert-Butyl Ether	206	216	226	**105**	**110**	72-118	5	25	
108-05-4	Vinyl Acetate	942	1210	1200	**128**	**127**	56-137	0.8	25	
78-93-3	2-Butanone (MEK)	408	430	435	**105**	**107**	74-121	2	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2200253
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P220125-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Wida Ang Date Analyzed: 1/25/22
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	206	212	214	**103**	**104**	73-117	1	25	
141-78-6	Ethyl Acetate	580	623	611	**107**	**105**	59-161	2	25	
110-54-3	n-Hexane	208	232	232	**112**	**112**	55-130	0	25	
67-66-3	Chloroform	210	227	228	**108**	**109**	71-114	0.9	25	
109-99-9	Tetrahydrofuran (THF)	404	438	441	**108**	**109**	73-114	0.9	25	
107-06-2	1,2-Dichloroethane	210	215	217	**102**	**103**	71-119	1	25	
71-55-6	1,1,1-Trichloroethane	208	214	219	**103**	**105**	73-119	2	25	
71-43-2	Benzene	208	220	221	**106**	**106**	72-113	0	25	
56-23-5	Carbon Tetrachloride	202	156	161	**77**	**80**	67-123	4	25	
110-82-7	Cyclohexane	412	500	505	**121**	**123**	70-119	2	25	**L**
78-87-5	1,2-Dichloropropane	206	217	220	**105**	**107**	70-118	2	25	
75-27-4	Bromodichloromethane	208	232	237	**112**	**114**	74-119	2	25	
79-01-6	Trichloroethene	204	229	232	**112**	**114**	74-115	2	25	
123-91-1	1,4-Dioxane	206	214	218	**104**	**106**	77-124	2	25	
80-62-6	Methyl Methacrylate	410	491	501	**120**	**122**	78-126	2	25	
142-82-5	n-Heptane	206	235	235	**114**	**114**	70-119	0	25	
10061-01-5	cis-1,3-Dichloropropene	208	237	241	**114**	**116**	81-126	2	25	
108-10-1	4-Methyl-2-pentanone	412	467	467	**113**	**113**	73-129	0	25	
10061-02-6	trans-1,3-Dichloropropene	200	220	227	**110**	**114**	80-127	4	25	
79-00-5	1,1,2-Trichloroethane	208	222	225	**107**	**108**	78-117	0.9	25	
108-88-3	Toluene	206	214	224	**104**	**109**	70-118	5	25	
591-78-6	2-Hexanone	406	388	396	**96**	**98**	74-132	2	25	
124-48-1	Dibromochloromethane	210	213	226	**101**	**108**	69-137	7	25	
106-93-4	1,2-Dibromoethane	208	205	216	**99**	**104**	76-128	5	25	
123-86-4	n-Butyl Acetate	406	393	399	**97**	**98**	75-134	1	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.
L = Laboratory control sample recovery outside the specified limits, results may be biased high.

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2200253
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P220125-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Wida Ang Date Analyzed: 1/25/22
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
111-65-9	n-Octane	208	225	232	**108**	**112**	68-120	4	25	
127-18-4	Tetrachloroethene	212	218	229	**103**	**108**	63-130	5	25	
108-90-7	Chlorobenzene	206	232	239	**113**	**116**	70-118	3	25	
100-41-4	Ethylbenzene	206	229	236	**111**	**115**	71-123	4	25	
179601-23-1	m,p-Xylenes	416	484	497	**116**	**119**	67-127	3	25	
75-25-2	Bromoform	210	207	217	**99**	**103**	65-149	4	25	
100-42-5	Styrene	202	228	236	**113**	**117**	76-132	3	25	
95-47-6	o-Xylene	208	243	249	**117**	**120**	69-124	3	25	
111-84-2	n-Nonane	208	229	231	**110**	**111**	64-127	0.9	25	
79-34-5	1,1,2,2-Tetrachloroethane	208	244	250	**117**	**120**	69-128	3	25	
98-82-8	Cumene	206	236	242	**115**	**117**	69-125	2	25	
80-56-8	alpha-Pinene	210	229	237	**109**	**113**	68-129	4	25	
103-65-1	n-Propylbenzene	208	239	244	**115**	**117**	70-127	2	25	
622-96-8	4-Ethyltoluene	208	244	250	**117**	**120**	69-127	3	25	
108-67-8	1,3,5-Trimethylbenzene	208	243	249	**117**	**120**	66-129	3	25	
95-63-6	1,2,4-Trimethylbenzene	206	267	271	**130**	**132**	63-142	2	25	
100-44-7	Benzyl Chloride	416	463	476	**111**	**114**	73-145	3	25	
541-73-1	1,3-Dichlorobenzene	208	267	274	**128**	**132**	67-136	3	25	
106-46-7	1,4-Dichlorobenzene	210	241	249	**115**	**119**	63-134	3	25	
95-50-1	1,2-Dichlorobenzene	210	273	277	**130**	**132**	64-139	2	25	
5989-27-5	d-Limonene	206	246	251	**119**	**122**	63-137	2	25	
96-12-8	1,2-Dibromo-3-chloropropane	404	499	515	**124**	**127**	72-145	2	25	
120-82-1	1,2,4-Trichlorobenzene	420	550	561	**131**	**134**	62-154	2	25	
91-20-3	Naphthalene	210	230	239	**110**	**114**	62-156	4	25	
87-68-3	Hexachlorobutadiene	212	225	234	**106**	**110**	55-142	4	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2200253
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P220126-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Wida Ang Date Analyzed: 1/26/22
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
115-07-1	Propene	206	175	179	**85**	**87**	56-128	2	25	
75-71-8	Dichlorodifluoromethane (CFC 12)	208	203	206	**98**	**99**	71-112	1	25	
74-87-3	Chloromethane	206	206	209	**100**	**101**	53-126	1	25	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	208	217	216	**104**	**104**	62-121	0	25	
75-01-4	Vinyl Chloride	208	195	199	**94**	**96**	63-123	2	25	
106-99-0	1,3-Butadiene	206	196	199	**95**	**97**	63-135	2	25	
74-83-9	Bromomethane	206	195	201	**95**	**98**	71-112	3	25	
75-00-3	Chloroethane	206	197	200	**96**	**97**	66-117	1	25	
64-17-5	Ethanol	832	762	773	**92**	**93**	57-117	1	25	
75-05-8	Acetonitrile	202	158	162	**78**	**80**	59-131	3	25	
107-02-8	Acrolein	416	428	433	**103**	**104**	71-123	1	25	
67-64-1	Acetone	1,020	974	975	**95**	**96**	60-117	1	25	
75-69-4	Trichlorofluoromethane (CFC 11)	202	202	203	**100**	**100**	71-114	0	25	
67-63-0	2-Propanol (Isopropyl Alcohol)	400	397	405	**99**	**101**	61-124	2	25	
107-13-1	Acrylonitrile	402	380	384	**95**	**96**	65-130	1	25	
75-35-4	1,1-Dichloroethene	210	213	215	**101**	**102**	74-114	1	25	
75-09-2	Methylene Chloride	208	198	200	**95**	**96**	75-112	1	25	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	204	188	189	**92**	**93**	57-127	1	25	
76-13-1	Trichlorotrifluoroethane (CFC 113)	216	208	210	**96**	**97**	73-114	1	25	
75-15-0	Carbon Disulfide	414	427	424	**103**	**102**	70-113	1	25	
156-60-5	trans-1,2-Dichloroethene	208	204	207	**98**	**100**	76-119	2	25	
75-34-3	1,1-Dichloroethane	214	208	211	**97**	**99**	70-114	2	25	
1634-04-4	Methyl tert-Butyl Ether	206	214	215	**104**	**104**	72-118	0	25	
108-05-4	Vinyl Acetate	942	1140	1150	**121**	**122**	56-137	0.8	25	
78-93-3	2-Butanone (MEK)	408	416	416	**102**	**102**	74-121	0	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2200253
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P220126-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Wida Ang Date Analyzed: 1/26/22
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	206	205	207	**100**	**100**	73-117	0	25	
141-78-6	Ethyl Acetate	580	591	582	**102**	**100**	59-161	2	25	
110-54-3	n-Hexane	208	220	218	**106**	**105**	55-130	0.9	25	
67-66-3	Chloroform	210	220	220	**105**	**105**	71-114	0	25	
109-99-9	Tetrahydrofuran (THF)	404	421	422	**104**	**104**	73-114	0	25	
107-06-2	1,2-Dichloroethane	210	209	210	**100**	**100**	71-119	0	25	
71-55-6	1,1,1-Trichloroethane	208	215	216	**103**	**104**	73-119	1	25	
71-43-2	Benzene	208	216	216	**104**	**104**	72-113	0	25	
56-23-5	Carbon Tetrachloride	202	157	158	**78**	**78**	67-123	0	25	
110-82-7	Cyclohexane	412	484	484	**117**	**117**	70-119	0	25	
78-87-5	1,2-Dichloropropane	206	213	213	**103**	**103**	70-118	0	25	
75-27-4	Bromodichloromethane	208	231	230	**111**	**111**	74-119	0	25	
79-01-6	Trichloroethene	204	227	227	**111**	**111**	74-115	0	25	
123-91-1	1,4-Dioxane	206	211	211	**102**	**102**	77-124	0	25	
80-62-6	Methyl Methacrylate	410	481	481	**117**	**117**	78-126	0	25	
142-82-5	n-Heptane	206	230	229	**112**	**111**	70-119	0.9	25	
10061-01-5	cis-1,3-Dichloropropene	208	233	233	**112**	**112**	81-126	0	25	
108-10-1	4-Methyl-2-pentanone	412	453	450	**110**	**109**	73-129	0.9	25	
10061-02-6	trans-1,3-Dichloropropene	200	218	220	**109**	**110**	80-127	0.9	25	
79-00-5	1,1,2-Trichloroethane	208	219	219	**105**	**105**	78-117	0	25	
108-88-3	Toluene	206	210	209	**102**	**101**	70-118	1	25	
591-78-6	2-Hexanone	406	374	372	**92**	**92**	74-132	0	25	
124-48-1	Dibromochloromethane	210	214	215	**102**	**102**	69-137	0	25	
106-93-4	1,2-Dibromoethane	208	203	205	**98**	**99**	76-128	1	25	
123-86-4	n-Butyl Acetate	406	379	378	**93**	**93**	75-134	0	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2200253
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P220126-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Wida Ang Date Analyzed: 1/26/22
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
111-65-9	n-Octane	208	218	217	**105**	**104**	68-120	1	25	
127-18-4	Tetrachloroethene	212	215	215	**101**	**101**	63-130	0	25	
108-90-7	Chlorobenzene	206	224	224	**109**	**109**	70-118	0	25	
100-41-4	Ethylbenzene	206	223	223	**108**	**108**	71-123	0	25	
179601-23-1	m,p-Xylenes	416	468	467	**113**	**112**	67-127	0.9	25	
75-25-2	Bromoform	210	204	205	**97**	**98**	65-149	1	25	
100-42-5	Styrene	202	223	222	**110**	**110**	76-132	0	25	
95-47-6	o-Xylene	208	236	234	**113**	**113**	69-124	0	25	
111-84-2	n-Nonane	208	217	216	**104**	**104**	64-127	0	25	
79-34-5	1,1,2,2-Tetrachloroethane	208	236	234	**113**	**113**	69-128	0	25	
98-82-8	Cumene	206	228	226	**111**	**110**	69-125	0.9	25	
80-56-8	alpha-Pinene	210	223	222	**106**	**106**	68-129	0	25	
103-65-1	n-Propylbenzene	208	231	228	**111**	**110**	70-127	0.9	25	
622-96-8	4-Ethyltoluene	208	236	234	**113**	**113**	69-127	0	25	
108-67-8	1,3,5-Trimethylbenzene	208	235	233	**113**	**112**	66-129	0.9	25	
95-63-6	1,2,4-Trimethylbenzene	206	255	251	**124**	**122**	63-142	2	25	
100-44-7	Benzyl Chloride	416	444	444	**107**	**107**	73-145	0	25	
541-73-1	1,3-Dichlorobenzene	208	257	255	**124**	**123**	67-136	0.8	25	
106-46-7	1,4-Dichlorobenzene	210	233	232	**111**	**110**	63-134	0.9	25	
95-50-1	1,2-Dichlorobenzene	210	260	257	**124**	**122**	64-139	2	25	
5989-27-5	d-Limonene	206	236	235	**115**	**114**	63-137	0.9	25	
96-12-8	1,2-Dibromo-3-chloropropane	404	484	483	**120**	**120**	72-145	0	25	
120-82-1	1,2,4-Trichlorobenzene	420	528	524	**126**	**125**	62-154	0.8	25	
91-20-3	Naphthalene	210	227	228	**108**	**109**	62-156	0.9	25	
87-68-3	Hexachlorobutadiene	212	221	222	**104**	**105**	55-142	1	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

APPENDIX B

SVE LABORATORY ANALYTICAL RESULTS AND MASS REMOVAL CALCULATIONS

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
www.alsglobal.com

LABORATORY REPORT

November 13, 2021

Collin Creel
Environmental Management Services, Inc.
P.O. Box 15369
Hattiesburg, MS 39402

RE: SVE Performance / KUH0-21-010

Dear Collin:

Enclosed are the results of the samples submitted to our laboratory on October 25, 2021. For your reference, these analyses have been assigned our service request number P2105624.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

By Sue Anderson at 9:45 am, Nov 13, 2021

Sue Anderson
Project Manager

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
www.alsglobal.com

Client: Environmental Management Services, Inc. Service Request No: P2105624
Project: SVE Performance / KUH0-21-010

CASE NARRATIVE

The samples were received intact under chain of custody on October 25, 2021 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Volatile Organic Compound Analysis

The samples were analyzed for volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. This procedure is described in laboratory SOP VOA-TO15. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. This method is included on the laboratory's NELAP and DoD-ELAP scope of accreditation. Any analytes flagged with an X are not included on the NELAP or DoD-ELAP accreditation.

The samples were received with limited hold time remaining to complete the analysis within the recommended limit. The analysis was performed as soon as possible after receipt by the laboratory and the data flagged to indicate the holding time exceedance.

The upper control criterion was exceeded for 1,2,4-trichlorobenzene in the Continuing Calibration Verification (CCV) analyzed on November 3, 2021. Since the apparent problem equates to a potential high bias and the field samples analyzed in this sequence did not contain or only yielded a trace hit of the analyte in question, the data quality has not been affected. No corrective action was required.

The upper control criteria were exceeded for 1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114) and Tetrahydrofuran (THF) in the Laboratory Control Sample (LCS) analyzed on November 3, 2021. However, the Duplicate Laboratory Control Sample (DLCS) and Relative Percent Difference (RPD) were within acceptance limits. Therefore, the sample data has not been significantly affected. The data has been flagged accordingly. No corrective action was required.

The containers were cleaned, prior to sampling, down to the method reporting limit (MRL) reported for this project. For projects requiring DoD QSM 5.3 compliance canisters were cleaned to <1/2 the MRL. Please note, projects which require reporting below the MRL could have results between the MRL and method detection limit (MDL) that are biased high.

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ALS Environmental – Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
Alaska DEC	http://dec.alaska.gov/eh/lab.aspx	17-019
Arizona DHS	http://www.azdhs.gov/preparedness/state-laboratory/lab-licensure-certification/index.php#laboratory-licensure-home	AZ0694
Florida DOH (NELAP)	http://www.floridahealth.gov/licensing-and-regulation/environmental-laboratories/index.html	E871020
Louisiana DEQ (NELAP)	http://www.deq.louisiana.gov/page/la-lab-accreditation	05071
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/professionals/labCert.shtml	2018027
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	1776326
New Jersey DEP (NELAP)	http://www.nj.gov/dep/enforcement/oqa.html	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://www.oregon.gov/oha/ph/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	4068-008
Pennsylvania DEP	http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx	68-03307 (Registration)
PJLA (DoD ELAP)	http://www.pjlabs.com/search-accredited-labs	65818 (Testing)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/agency/qa/env_lab_accreditation.html	T104704413-19-10
Utah DOH (NELAP)	http://health.utah.gov/lab/lab_cert_env	CA016272019-10
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: Environmental Management Services, Inc. Service Request: P2105624

Project ID: SVE Performance / KUH0-21-010

Date Received: 10/25/2021

Time Received: 10:00

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pfl (psig)	TO-15 - VOC Cans
Post Carbon	P2105624-001	Air	9/30/2021	15:25	1SS00814	-3.15	6.24	X
Post Carbon 1	P2105624-002	Air	9/30/2021	15:26	1SS00255	-2.53	6.63	X
Post Carbon 2	P2105624-003	Air	9/30/2021	15:27	1SS00180	-1.41	6.54	X
SVE-EXT-01@ manifold	P2105624-004	Air	9/30/2021	15:34	1SS01393	-3.88	6.61	X
SVE-EXT-02@ manifold	P2105624-005	Air	9/30/2021	15:32	1SS00543	-6.41	6.85	X
SVE-EXT-03@ manifold	P2105624-006	Air	9/30/2021	15:30	1SS00517	-4.73	6.64	X

Air - Chain of Custody Record & Analytical Service Request

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day-Standard

ALS Project No. R2105224

Company Name & Address (Reporting Information)	EMS, Inc PO Box 16369 Hattiesburg, MS 39404
Project Name	SVE Performance Monitoring
Project Number	KUHO-21-010
Project Manager	Collin Creel
P.O. # / Billing Information	KUHO-21-010 / Same as reporting
Phone	985 5160142
Fax	6015440504
Email Address for Result Reporting	ccreel@env-mgt.com
Sampler (Print & Sign)	Collin Creel
ALS Contact:	

Analysis Method: TO15

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	Analysis Method		Comments e.g. Actual Preservative or specific instructions
Pre Carbon	1	9/30/21	15:25	15500614		-29	0	1L	✓		
Post Carbon 1	2	9/30/21	15:26	15500255		-30	0	1L	✓		
Post Carbon 2	3	9/30/21	15:27	15500180		-30	0	1L	✓		
SVE-EXT-01@manifold	4	9/30/21	15:34	15501393		-30	-6	1L	✓		
SVE-EXT-02@manifold	5	9/30/21	15:32	15500543		-30	-6	1L	✓		
SVE-EXT-03@manifold	6	9/30/21	15:30	15500517		-30	-5	1L	✓		

5 of 37

Report Tier Levels - please select

Tier I - Results (Default if not specified) ____
Tier II (Results + QC Summaries) ✓
Tier III (Results + QC & Calibration Summaries) ____
Tier IV (Data Validation Package) 10% Surcharge ____

EDD required Yes / No
Type: _____ Units: _____

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)		Date: 10/19/21	Time: 12:00	Received by: (Signature)	- Fed Ex -	Date:	Time:
Relinquished by: (Signature)	- Fed Ex -	Date:	Time:	Received by: (Signature)		Date: 10-21-21	Time: 1000

Cooler / Blank Temperature ____ °C

ALS Environmental

Sample Acceptance Check Form

Client: Environmental Management Services, Inc. Work order: P2105624

Project: SVE Performance / KUH0-21-010

Sample(s) received on: 10/25/21 Date opened: 10/25/21 by: ADAVID

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Did **sample containers** arrive in good condition?	☒	☐	☐
3	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
4	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
5	Was **sample volume** received adequate for analysis?	☒	☐	☐
6	Are samples within specified holding times?	☒	☐	☐
7	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
8	Were **custody seals** on outside of cooler/Box/Container?	☒	☐	☐
	Location of seal(s)? Box sealing. Sealing Lid?	☒	☐	☐
	Were signature and date included?	☒	☐	☐
	Were seals intact?	☒	☐	☐
9	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
10	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
11	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P2105624-001.01	1.0 L Source Silonite Canister					
P2105624-002.01	1.0 L Source Silonite Canister					
P2105624-003.01	1.0 L Source Silonite Canister					
P2105624-004.01	1.0 L Source Silonite Canister					
P2105624-005.01	1.0 L Source Silonite Canister					
P2105624-006.01	1.0 L Source Silonite Canister					

Explain any discrepancies: (include lab sample ID numbers):

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Post Carbon** ALS Project ID: P2105624
Client Project ID: **SVE Performance / KUH0-21-010** ALS Sample ID: P2105624-001

Test Code: EPA TO-15 Date Collected: 9/30/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 10/25/21
Analyst: Wida Ang Date Analyzed: 11/4 - 11/5/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes: **H1** 0.040 Liter(s)
Container ID: 1SS00814

Initial Pressure (psig): -3.15 Final Pressure (psig): 6.24

Canister Dilution Factor: 1.81

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	**110**	2.4	0.59	**65**	1.4	0.34	
75-71-8	Dichlorodifluoromethane (CFC 12)	**3.9**	2.4	0.39	**0.80**	0.49	0.080	
74-87-3	Chloromethane	**0.93**	2.3	0.39	**0.45**	1.1	0.19	**J**
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	**0.81**	2.4	0.38	**0.12**	0.35	0.054	**J**
75-01-4	Vinyl Chloride	ND	2.4	0.26	ND	0.92	0.10	
106-99-0	1,3-Butadiene	ND	2.4	0.40	ND	1.1	0.18	
74-83-9	Bromomethane	**0.51**	2.3	0.33	**0.13**	0.59	0.086	**J**
75-00-3	Chloroethane	ND	2.3	0.30	ND	0.87	0.11	
64-17-5	Ethanol	**44**	23	1.7	**23**	12	0.89	
75-05-8	Acetonitrile	**3.2**	4.5	0.59	**1.9**	2.7	0.35	**J**
107-02-8	Acrolein	**2.0**	4.5	0.68	**0.89**	2.0	0.30	**J**
67-64-1	Acetone	**45**	24	5.4	**19**	9.9	2.3	
75-69-4	Trichlorofluoromethane (CFC 11)	**1.5**	2.4	0.37	**0.26**	0.42	0.065	**J**
67-63-0	2-Propanol (Isopropyl Alcohol)	**2.5**	4.5	1.0	**1.0**	1.8	0.41	**J**
107-13-1	Acrylonitrile	**0.58**	4.5	0.50	**0.27**	2.1	0.23	**J**
75-35-4	1,1-Dichloroethene	**79**	2.4	0.33	**20**	0.62	0.084	
75-09-2	Methylene Chloride	**0.95**	2.4	0.68	**0.27**	0.68	0.20	**J**
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.4	0.33	ND	0.77	0.10	
76-13-1	Trichlorotrifluoroethane (CFC 113)	**1.5**	2.4	0.34	**0.19**	0.32	0.045	**J**
75-15-0	Carbon Disulfide	ND	5.0	0.72	ND	1.6	0.23	
156-60-5	trans-1,2-Dichloroethene	ND	2.4	0.33	ND	0.61	0.084	
75-34-3	1,1-Dichloroethane	**2.2**	2.4	0.35	**0.54**	0.59	0.087	**J**
1634-04-4	Methyl tert-Butyl Ether	ND	2.4	0.29	ND	0.67	0.079	
108-05-4	Vinyl Acetate	**8.1**	23	5.4	**2.3**	6.4	1.5	**J**
78-93-3	2-Butanone (MEK)	**5.5**	4.5	0.50	**1.9**	1.5	0.17	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
H1 = Sample analysis performed past holding time. See case narrative.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **Post Carbon** ALS Project ID: P2105624

Client Project ID: **SVE Performance / KUH0-21-010** ALS Sample ID: P2105624-001

Test Code:	EPA TO-15	Date Collected:	9/30/21
Instrument ID:	Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16	Date Received:	10/25/21
Analyst:	Wida Ang	Date Analyzed:	11/4 - 11/5/21
Sample Type:	1.0 L Silonite Summa Canister	Volume(s) Analyzed:	0.40 Liter(s)
Test Notes:	**H1**		0.040 Liter(s)
Container ID:	1SS00814		

Initial Pressure (psig): -3.15 Final Pressure (psig): 6.24

Canister Dilution Factor: 1.81

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.4	0.34	ND	0.59	0.086	
141-78-6	Ethyl Acetate	ND	9.5	1.3	ND	2.6	0.35	
110-54-3	n-Hexane	ND	2.4	0.50	ND	0.68	0.14	
67-66-3	Chloroform	**2.2**	2.4	0.32	**0.45**	0.50	0.066	**J**
109-99-9	Tetrahydrofuran (THF)	**2.6**	4.5	0.30	**0.89**	1.5	0.10	**J**
107-06-2	1,2-Dichloroethane	**0.35**	2.4	0.27	**0.086**	0.59	0.066	**J**
71-55-6	1,1,1-Trichloroethane	**28**	2.4	0.30	**5.2**	0.43	0.055	
71-43-2	Benzene	**0.45**	2.3	0.35	**0.14**	0.71	0.11	**J**
56-23-5	Carbon Tetrachloride	**0.42**	2.3	0.33	**0.066**	0.36	0.053	**J**
110-82-7	Cyclohexane	ND	5.0	0.68	ND	1.4	0.20	
78-87-5	1,2-Dichloropropane	ND	2.3	0.30	ND	0.49	0.065	
75-27-4	Bromodichloromethane	ND	2.4	0.35	ND	0.36	0.052	
79-01-6	Trichloroethene	**0.95**	2.4	0.33	**0.18**	0.44	0.061	**J**
123-91-1	1,4-Dioxane	**1,400**	24	2.9	**380**	6.5	0.79	**D**
80-62-6	Methyl Methacrylate	ND	5.0	0.86	ND	1.2	0.21	
142-82-5	n-Heptane	ND	2.4	0.38	ND	0.59	0.094	
10061-01-5	cis-1,3-Dichloropropene	ND	2.3	0.38	ND	0.50	0.083	
108-10-1	4-Methyl-2-pentanone	**4.6**	5.0	0.33	**1.1**	1.2	0.081	**J**
10061-02-6	trans-1,3-Dichloropropene	ND	2.3	0.50	ND	0.51	0.11	
79-00-5	1,1,2-Trichloroethane	**0.81**	2.4	0.24	**0.15**	0.43	0.045	**J**
108-88-3	Toluene	**3.9**	2.4	0.29	**1.0**	0.62	0.078	
591-78-6	2-Hexanone	ND	5.0	0.30	ND	1.2	0.073	
124-48-1	Dibromochloromethane	ND	2.4	0.32	ND	0.28	0.037	
106-93-4	1,2-Dibromoethane	ND	2.4	0.28	ND	0.31	0.037	
123-86-4	n-Butyl Acetate	**0.74**	5.0	0.33	**0.16**	1.0	0.070	**J**

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H1 = Sample analysis performed past holding time. See case narrative.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
D = The reported result is from a dilution.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Post Carbon** ALS Project ID: P2105624
Client Project ID: **SVE Performance / KUH0-21-010** ALS Sample ID: P2105624-001

Test Code: EPA TO-15 Date Collected: 9/30/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 10/25/21
Analyst: Wida Ang Date Analyzed: 11/4 - 11/5/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes: **H1** 0.040 Liter(s)
Container ID: 1SS00814

Initial Pressure (psig): -3.15 Final Pressure (psig): 6.24

Canister Dilution Factor: 1.81

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	ND	2.4	0.54	ND	0.51	0.12	
127-18-4	Tetrachloroethene	**5.9**	2.4	0.31	**0.88**	0.35	0.046	
108-90-7	Chlorobenzene	ND	2.4	0.32	ND	0.51	0.070	
100-41-4	Ethylbenzene	**15**	2.4	0.34	**3.5**	0.54	0.078	
179601-23-1	m,p-Xylenes	**55**	5.0	0.63	**13**	1.1	0.15	
75-25-2	Bromoform	ND	2.4	0.50	ND	0.23	0.048	
100-42-5	Styrene	**0.61**	2.3	0.39	**0.14**	0.53	0.091	**J**
95-47-6	o-Xylene	**53**	2.4	0.35	**12**	0.54	0.080	
111-84-2	n-Nonane	ND	2.4	0.40	ND	0.45	0.077	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.4	0.33	ND	0.34	0.049	
98-82-8	Cumene	**0.91**	2.4	0.35	**0.19**	0.48	0.071	**J**
80-56-8	alpha-Pinene	**1.1**	2.4	0.37	**0.20**	0.44	0.067	**J**
103-65-1	n-Propylbenzene	**2.1**	2.4	0.35	**0.42**	0.49	0.071	**J**
622-96-8	4-Ethyltoluene	**2.6**	2.4	0.38	**0.53**	0.49	0.078	
108-67-8	1,3,5-Trimethylbenzene	**3.9**	2.4	0.35	**0.80**	0.48	0.071	
95-63-6	1,2,4-Trimethylbenzene	**13**	2.4	0.33	**2.6**	0.48	0.068	
100-44-7	Benzyl Chloride	ND	5.0	0.54	ND	0.96	0.10	
541-73-1	1,3-Dichlorobenzene	ND	2.4	0.36	ND	0.39	0.060	
106-46-7	1,4-Dichlorobenzene	**0.55**	2.4	0.37	**0.091**	0.39	0.062	**J**
95-50-1	1,2-Dichlorobenzene	ND	2.4	0.36	ND	0.40	0.059	
5989-27-5	d-Limonene	**5.2**	2.3	0.50	**0.93**	0.41	0.089	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.5	0.45	ND	0.47	0.047	
120-82-1	1,2,4-Trichlorobenzene	**0.84**	5.0	0.59	**0.11**	0.67	0.079	**J**
91-20-3	Naphthalene	**4.5**	2.4	0.59	**0.86**	0.45	0.11	
87-68-3	Hexachlorobutadiene	**0.57**	2.4	0.50	**0.053**	0.22	0.047	**J**

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
H1 = Sample analysis performed past holding time. See case narrative.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Post Carbon 1** ALS Project ID: P2105624
Client Project ID: **SVE Performance / KUH0-21-010** ALS Sample ID: P2105624-002

Test Code: EPA TO-15 Date Collected: 9/30/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 10/25/21
Analyst: Wida Ang Date Analyzed: 11/4 - 11/5/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes: **H1** 0.040 Liter(s)
Container ID: 1SS00255

Initial Pressure (psig): -2.53 Final Pressure (psig): 6.63

Canister Dilution Factor: 1.75

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	**210**	2.3	0.57	**120**	1.3	0.33	
75-71-8	Dichlorodifluoromethane (CFC 12)	**4.6**	2.3	0.38	**0.93**	0.47	0.077	
74-87-3	Chloromethane	**1.5**	2.2	0.38	**0.72**	1.1	0.18	**J**
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	**0.94**	2.4	0.37	**0.13**	0.34	0.053	**J**
75-01-4	Vinyl Chloride	ND	2.3	0.25	ND	0.89	0.098	
106-99-0	1,3-Butadiene	ND	2.3	0.39	ND	1.0	0.17	
74-83-9	Bromomethane	**6.6**	2.2	0.32	**1.7**	0.57	0.083	
75-00-3	Chloroethane	**0.67**	2.2	0.29	**0.26**	0.85	0.11	**J**
64-17-5	Ethanol	**41**	22	1.6	**22**	12	0.86	
75-05-8	Acetonitrile	**2.9**	4.4	0.57	**1.7**	2.6	0.34	**J**
107-02-8	Acrolein	**4.1**	4.4	0.66	**1.8**	1.9	0.29	**J**
67-64-1	Acetone	**380**	23	5.3	**160**	9.6	2.2	
75-69-4	Trichlorofluoromethane (CFC 11)	**1.5**	2.3	0.35	**0.27**	0.40	0.063	**J**
67-63-0	2-Propanol (Isopropyl Alcohol)	**8.5**	4.4	0.96	**3.5**	1.8	0.39	
107-13-1	Acrylonitrile	ND	4.4	0.48	ND	2.0	0.22	
75-35-4	1,1-Dichloroethene	**84**	2.4	0.32	**21**	0.60	0.082	
75-09-2	Methylene Chloride	**1.0**	2.3	0.66	**0.29**	0.66	0.19	**J**
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.3	0.32	ND	0.74	0.10	
76-13-1	Trichlorotrifluoroethane (CFC 113)	**3.1**	2.4	0.33	**0.41**	0.31	0.043	
75-15-0	Carbon Disulfide	**6.0**	4.8	0.70	**1.9**	1.5	0.22	
156-60-5	trans-1,2-Dichloroethene	ND	2.3	0.32	ND	0.59	0.082	
75-34-3	1,1-Dichloroethane	**3.1**	2.3	0.34	**0.76**	0.57	0.084	
1634-04-4	Methyl tert-Butyl Ether	ND	2.3	0.28	ND	0.64	0.076	
108-05-4	Vinyl Acetate	**88**	22	5.3	**25**	6.2	1.5	
78-93-3	2-Butanone (MEK)	**82**	4.4	0.48	**28**	1.5	0.16	

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H1 = Sample analysis performed past holding time. See case narrative.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Post Carbon 1** ALS Project ID: P2105624
Client Project ID: **SVE Performance / KUH0-21-010** ALS Sample ID: P2105624-002

Test Code: EPA TO-15 Date Collected: 9/30/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 10/25/21
Analyst: Wida Ang Date Analyzed: 11/4 - 11/5/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes: **H1** 0.040 Liter(s)
Container ID: 1SS00255

Initial Pressure (psig): -2.53 Final Pressure (psig): 6.63

Canister Dilution Factor: 1.75

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.3	0.33	ND	0.57	0.083	
141-78-6	Ethyl Acetate	ND	9.2	1.2	ND	2.6	0.34	
110-54-3	n-Hexane	ND	2.3	0.48	ND	0.66	0.14	
67-66-3	Chloroform	**0.46**	2.4	0.31	**0.095**	0.48	0.064	**J**
109-99-9	Tetrahydrofuran (THF)	**3.0**	4.4	0.29	**1.0**	1.5	0.099	**J**
107-06-2	1,2-Dichloroethane	ND	2.3	0.26	ND	0.57	0.064	
71-55-6	1,1,1-Trichloroethane	**3.4**	2.3	0.29	**0.63**	0.42	0.053	
71-43-2	Benzene	**0.71**	2.2	0.34	**0.22**	0.69	0.11	**J**
56-23-5	Carbon Tetrachloride	ND	2.2	0.32	ND	0.35	0.051	
110-82-7	Cyclohexane	ND	4.8	0.66	ND	1.4	0.19	
78-87-5	1,2-Dichloropropane	ND	2.2	0.29	ND	0.47	0.063	
75-27-4	Bromodichloromethane	ND	2.3	0.34	ND	0.35	0.050	
79-01-6	Trichloroethene	ND	2.3	0.32	ND	0.42	0.059	
123-91-1	1,4-Dioxane	**930**	23	2.8	**260**	6.3	0.77	**D**
80-62-6	Methyl Methacrylate	ND	4.8	0.83	ND	1.2	0.20	
142-82-5	n-Heptane	ND	2.3	0.37	ND	0.57	0.091	
10061-01-5	cis-1,3-Dichloropropene	ND	2.2	0.36	ND	0.48	0.080	
108-10-1	4-Methyl-2-pentanone	**4.4**	4.8	0.32	**1.1**	1.2	0.078	**J**
10061-02-6	trans-1,3-Dichloropropene	ND	2.2	0.48	ND	0.49	0.11	
79-00-5	1,1,2-Trichloroethane	ND	2.3	0.24	ND	0.42	0.043	
108-88-3	Toluene	**0.49**	2.3	0.28	**0.13**	0.60	0.075	**J**
591-78-6	2-Hexanone	**4.1**	4.8	0.29	**1.0**	1.2	0.071	**J**
124-48-1	Dibromochloromethane	ND	2.3	0.31	ND	0.27	0.036	
106-93-4	1,2-Dibromoethane	ND	2.3	0.27	ND	0.30	0.035	
123-86-4	n-Butyl Acetate	ND	4.8	0.32	ND	1.0	0.067	

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H1 = Sample analysis performed past holding time. See case narrative.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
D = The reported result is from a dilution.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Post Carbon 1** ALS Project ID: P2105624
Client Project ID: **SVE Performance / KUH0-21-010** ALS Sample ID: P2105624-002

Test Code: EPA TO-15 Date Collected: 9/30/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 10/25/21
Analyst: Wida Ang Date Analyzed: 11/4 - 11/5/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes: **H1** 0.040 Liter(s)
Container ID: 1SS00255

Initial Pressure (psig): -2.53 Final Pressure (psig): 6.63

Canister Dilution Factor: 1.75

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	ND	2.3	0.53	ND	0.50	0.11	
127-18-4	Tetrachloroethene	ND	2.3	0.30	ND	0.34	0.045	
108-90-7	Chlorobenzene	ND	2.3	0.31	ND	0.49	0.067	
100-41-4	Ethylbenzene	ND	2.3	0.33	ND	0.52	0.076	
179601-23-1	m,p-Xylenes	**0.91**	4.8	0.61	**0.21**	1.1	0.14	**J**
75-25-2	Bromoform	ND	2.3	0.48	ND	0.22	0.047	
100-42-5	Styrene	**0.48**	2.2	0.38	**0.11**	0.51	0.088	**J**
95-47-6	o-Xylene	**0.67**	2.3	0.34	**0.16**	0.52	0.078	**J**
111-84-2	n-Nonane	ND	2.3	0.39	ND	0.43	0.074	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.3	0.32	ND	0.33	0.047	
98-82-8	Cumene	ND	2.3	0.34	ND	0.46	0.069	
80-56-8	alpha-Pinene	**0.45**	2.4	0.36	**0.081**	0.42	0.064	**J**
103-65-1	n-Propylbenzene	ND	2.3	0.34	ND	0.47	0.069	
622-96-8	4-Ethyltoluene	ND	2.3	0.37	ND	0.47	0.076	
108-67-8	1,3,5-Trimethylbenzene	ND	2.3	0.34	ND	0.46	0.069	
95-63-6	1,2,4-Trimethylbenzene	**0.46**	2.3	0.32	**0.093**	0.46	0.066	**J**
100-44-7	Benzyl Chloride	ND	4.8	0.53	ND	0.93	0.10	
541-73-1	1,3-Dichlorobenzene	ND	2.3	0.35	ND	0.38	0.058	
106-46-7	1,4-Dichlorobenzene	ND	2.3	0.36	ND	0.38	0.060	
95-50-1	1,2-Dichlorobenzene	ND	2.3	0.35	ND	0.39	0.058	
5989-27-5	d-Limonene	**4.2**	2.2	0.48	**0.75**	0.39	0.086	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.4	0.44	ND	0.45	0.045	
120-82-1	1,2,4-Trichlorobenzene	ND	4.8	0.57	ND	0.65	0.077	
91-20-3	Naphthalene	**0.70**	2.3	0.57	**0.13**	0.43	0.11	**J**
87-68-3	Hexachlorobutadiene	ND	2.3	0.48	ND	0.21	0.045	

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MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
H1 = Sample analysis performed past holding time. See case narrative.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Post Carbon 2** ALS Project ID: P2105624
Client Project ID: **SVE Performance / KUH0-21-010** ALS Sample ID: P2105624-003

Test Code: EPA TO-15 Date Collected: 9/30/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 10/25/21
Analyst: Wida Ang Date Analyzed: 11/4 - 11/5/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes: **H1** 0.040 Liter(s)
Container ID: 1SS00180

Initial Pressure (psig): -1.41 Final Pressure (psig): 6.54

Canister Dilution Factor: 1.60

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	**800**	21	5.2	**460**	12	3.0	**D**
75-71-8	Dichlorodifluoromethane (CFC 12)	**4.4**	2.1	0.35	**0.88**	0.43	0.070	
74-87-3	Chloromethane	**0.64**	2.0	0.34	**0.31**	0.99	0.17	**J**
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	**1.0**	2.2	0.34	**0.15**	0.31	0.048	**J**
75-01-4	Vinyl Chloride	ND	2.1	0.23	ND	0.81	0.089	
106-99-0	1,3-Butadiene	ND	2.1	0.35	ND	0.94	0.16	
74-83-9	Bromomethane	ND	2.0	0.30	ND	0.53	0.076	
75-00-3	Chloroethane	ND	2.0	0.26	ND	0.77	0.10	
64-17-5	Ethanol	**160**	20	1.5	**87**	11	0.79	
75-05-8	Acetonitrile	**1.2**	4.0	0.52	**0.73**	2.4	0.31	**J**
107-02-8	Acrolein	**1.8**	4.0	0.60	**0.78**	1.7	0.26	**J**
67-64-1	Acetone	**120**	21	4.8	**51**	8.8	2.0	
75-69-4	Trichlorofluoromethane (CFC 11)	**1.9**	2.1	0.32	**0.34**	0.37	0.058	**J**
67-63-0	2-Propanol (Isopropyl Alcohol)	**3.3**	4.0	0.88	**1.3**	1.6	0.36	**J**
107-13-1	Acrylonitrile	ND	4.0	0.44	ND	1.8	0.20	
75-35-4	1,1-Dichloroethene	**63**	2.2	0.30	**16**	0.55	0.075	
75-09-2	Methylene Chloride	**1.4**	2.1	0.60	**0.39**	0.60	0.17	**J**
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.1	0.29	ND	0.68	0.092	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	2.2	0.30	ND	0.28	0.040	
75-15-0	Carbon Disulfide	**55**	4.4	0.64	**18**	1.4	0.21	
156-60-5	trans-1,2-Dichloroethene	ND	2.1	0.30	ND	0.53	0.075	
75-34-3	1,1-Dichloroethane	ND	2.1	0.31	ND	0.52	0.077	
1634-04-4	Methyl tert-Butyl Ether	ND	2.1	0.25	ND	0.59	0.070	
108-05-4	Vinyl Acetate	**4.9**	20	4.8	**1.4**	5.7	1.4	**J**
78-93-3	2-Butanone (MEK)	**3.4**	4.0	0.44	**1.2**	1.4	0.15	**J**

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
H1 = Sample analysis performed past holding time. See case narrative.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
D = The reported result is from a dilution.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **Post Carbon 2** ALS Project ID: P2105624

Client Project ID: **SVE Performance / KUH0-21-010** ALS Sample ID: P2105624-003

Test Code:	EPA TO-15	Date Collected:	9/30/21
Instrument ID:	Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16	Date Received:	10/25/21
Analyst:	Wida Ang	Date Analyzed:	11/4 - 11/5/21
Sample Type:	1.0 L Silonite Summa Canister	Volume(s) Analyzed:	0.40 Liter(s)
Test Notes:	**H1**		0.040 Liter(s)
Container ID:	1SS00180		

Initial Pressure (psig): -1.41 Final Pressure (psig): 6.54

Canister Dilution Factor: 1.60

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.1	0.30	ND	0.52	0.076	
141-78-6	Ethyl Acetate	**2.2**	8.4	1.1	**0.62**	2.3	0.31	**J**
110-54-3	n-Hexane	ND	2.1	0.44	ND	0.60	0.12	
67-66-3	Chloroform	ND	2.2	0.28	ND	0.44	0.058	
109-99-9	Tetrahydrofuran (THF)	**2.9**	4.0	0.27	**1.0**	1.4	0.091	**J**
107-06-2	1,2-Dichloroethane	ND	2.1	0.24	ND	0.52	0.058	
71-55-6	1,1,1-Trichloroethane	ND	2.1	0.26	ND	0.38	0.048	
71-43-2	Benzene	**0.73**	2.0	0.31	**0.23**	0.63	0.096	**J**
56-23-5	Carbon Tetrachloride	ND	2.0	0.30	ND	0.32	0.047	
110-82-7	Cyclohexane	ND	4.4	0.60	ND	1.3	0.17	
78-87-5	1,2-Dichloropropane	ND	2.0	0.26	ND	0.43	0.057	
75-27-4	Bromodichloromethane	ND	2.1	0.31	ND	0.32	0.046	
79-01-6	Trichloroethene	ND	2.1	0.29	ND	0.39	0.054	
123-91-1	1,4-Dioxane	**11**	2.1	0.25	**3.1**	0.58	0.070	
80-62-6	Methyl Methacrylate	ND	4.4	0.76	ND	1.1	0.19	
142-82-5	n-Heptane	ND	2.1	0.34	ND	0.52	0.083	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.33	ND	0.44	0.073	
108-10-1	4-Methyl-2-pentanone	ND	4.4	0.29	ND	1.1	0.071	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.44	ND	0.45	0.097	
79-00-5	1,1,2-Trichloroethane	ND	2.1	0.22	ND	0.38	0.040	
108-88-3	Toluene	**0.99**	2.1	0.26	**0.26**	0.55	0.069	**J**
591-78-6	2-Hexanone	**0.52**	4.4	0.26	**0.13**	1.1	0.064	**J**
124-48-1	Dibromochloromethane	ND	2.1	0.28	ND	0.25	0.033	
106-93-4	1,2-Dibromoethane	ND	2.1	0.25	ND	0.27	0.032	
123-86-4	n-Butyl Acetate	**0.36**	4.4	0.29	**0.077**	0.93	0.061	**J**

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
H1 = Sample analysis performed past holding time. See case narrative.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **Post Carbon 2** ALS Project ID: P2105624

Client Project ID: **SVE Performance / KUH0-21-010** ALS Sample ID: P2105624-003

Test Code:	EPA TO-15	Date Collected:	9/30/21
Instrument ID:	Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16	Date Received:	10/25/21
Analyst:	Wida Ang	Date Analyzed:	11/4 - 11/5/21
Sample Type:	1.0 L Silonite Summa Canister	Volume(s) Analyzed:	0.40 Liter(s)
Test Notes:	**H1**		0.040 Liter(s)
Container ID:	1SS00180		

Initial Pressure (psig): -1.41 Final Pressure (psig): 6.54

Canister Dilution Factor: 1.60

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	ND	2.1	0.48	ND	0.45	0.10	
127-18-4	Tetrachloroethene	ND	2.1	0.28	ND	0.31	0.041	
108-90-7	Chlorobenzene	ND	2.1	0.28	ND	0.45	0.062	
100-41-4	Ethylbenzene	**0.36**	2.1	0.30	**0.083**	0.48	0.069	**J**
179601-23-1	m,p-Xylenes	**1.5**	4.4	0.56	**0.34**	1.0	0.13	**J**
75-25-2	Bromoform	ND	2.1	0.44	ND	0.20	0.043	
100-42-5	Styrene	ND	2.0	0.34	ND	0.47	0.081	
95-47-6	o-Xylene	**0.90**	2.1	0.31	**0.21**	0.48	0.071	**J**
111-84-2	n-Nonane	ND	2.1	0.36	ND	0.40	0.068	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	0.30	ND	0.30	0.043	
98-82-8	Cumene	ND	2.1	0.31	ND	0.42	0.063	
80-56-8	alpha-Pinene	**0.50**	2.2	0.33	**0.089**	0.39	0.059	**J**
103-65-1	n-Propylbenzene	ND	2.1	0.31	ND	0.43	0.063	
622-96-8	4-Ethyltoluene	ND	2.1	0.34	ND	0.43	0.069	
108-67-8	1,3,5-Trimethylbenzene	ND	2.1	0.31	ND	0.42	0.063	
95-63-6	1,2,4-Trimethylbenzene	**0.84**	2.1	0.30	**0.17**	0.42	0.060	**J**
100-44-7	Benzyl Chloride	ND	4.4	0.48	ND	0.85	0.093	
541-73-1	1,3-Dichlorobenzene	ND	2.1	0.32	ND	0.35	0.053	
106-46-7	1,4-Dichlorobenzene	ND	2.1	0.33	ND	0.35	0.055	
95-50-1	1,2-Dichlorobenzene	ND	2.1	0.32	ND	0.35	0.053	
5989-27-5	d-Limonene	**4.6**	2.0	0.44	**0.83**	0.36	0.079	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.0	0.40	ND	0.41	0.041	
120-82-1	1,2,4-Trichlorobenzene	ND	4.4	0.52	ND	0.59	0.070	
91-20-3	Naphthalene	**1.0**	2.1	0.52	**0.20**	0.40	0.099	**J**
87-68-3	Hexachlorobutadiene	ND	2.1	0.44	ND	0.20	0.041	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
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H1 = Sample analysis performed past holding time. See case narrative.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-EXT-01@ manifold** ALS Project ID: P2105624
Client Project ID: **SVE Performance / KUH0-21-010** ALS Sample ID: P2105624-004

Test Code: EPA TO-15 Date Collected: 9/30/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 10/25/21
Analyst: Wida Ang Date Analyzed: 11/5/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes: **H1** 0.040 Liter(s)
Container ID: 1SS01393

Initial Pressure (psig): -3.88 Final Pressure (psig): 6.61

Canister Dilution Factor: 1.97

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	**90**	2.6	0.64	**52**	1.5	0.37	
75-71-8	Dichlorodifluoromethane (CFC 12)	**4.4**	2.6	0.43	**0.89**	0.53	0.087	
74-87-3	Chloromethane	**0.48**	2.5	0.42	**0.23**	1.2	0.21	**J**
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	**1.2**	2.7	0.41	**0.17**	0.38	0.059	**J**
75-01-4	Vinyl Chloride	ND	2.6	0.28	ND	1.0	0.11	
106-99-0	1,3-Butadiene	ND	2.6	0.43	ND	1.2	0.20	
74-83-9	Bromomethane	ND	2.5	0.36	ND	0.65	0.094	
75-00-3	Chloroethane	ND	2.5	0.33	ND	0.95	0.12	
64-17-5	Ethanol	**69**	25	1.8	**37**	13	0.97	
75-05-8	Acetonitrile	ND	4.9	0.64	ND	2.9	0.38	
107-02-8	Acrolein	**4.5**	4.9	0.74	**2.0**	2.1	0.32	**J**
67-64-1	Acetone	**65**	26	5.9	**27**	11	2.5	
75-69-4	Trichlorofluoromethane (CFC 11)	**1.4**	2.6	0.40	**0.26**	0.46	0.071	**J**
67-63-0	2-Propanol (Isopropyl Alcohol)	**4.4**	4.9	1.1	**1.8**	2.0	0.44	**J**
107-13-1	Acrylonitrile	ND	4.9	0.54	ND	2.3	0.25	
75-35-4	1,1-Dichloroethene	**41**	2.7	0.36	**10**	0.67	0.092	
75-09-2	Methylene Chloride	**0.95**	2.6	0.74	**0.27**	0.74	0.21	**J**
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.6	0.35	ND	0.83	0.11	
76-13-1	Trichlorotrifluoroethane (CFC 113)	**2.1**	2.7	0.37	**0.27**	0.35	0.049	**J**
75-15-0	Carbon Disulfide	**9.0**	5.4	0.79	**2.9**	1.7	0.25	
156-60-5	trans-1,2-Dichloroethene	ND	2.6	0.36	ND	0.66	0.092	
75-34-3	1,1-Dichloroethane	**1.3**	2.6	0.38	**0.32**	0.65	0.095	**J**
1634-04-4	Methyl tert-Butyl Ether	ND	2.6	0.31	ND	0.72	0.086	
108-05-4	Vinyl Acetate	**10**	25	5.9	**2.9**	7.0	1.7	**J**
78-93-3	2-Butanone (MEK)	**15**	4.9	0.54	**5.1**	1.7	0.18	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
H1 = Sample analysis performed past holding time. See case narrative.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-EXT-01@ manifold** ALS Project ID: P2105624
Client Project ID: **SVE Performance / KUH0-21-010** ALS Sample ID: P2105624-004

Test Code: EPA TO-15 Date Collected: 9/30/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 10/25/21
Analyst: Wida Ang Date Analyzed: 11/5/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes: **H1** 0.040 Liter(s)
Container ID: 1SS01393

Initial Pressure (psig): -3.88 Final Pressure (psig): 6.61

Canister Dilution Factor: 1.97

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.6	0.37	ND	0.65	0.093	
141-78-6	Ethyl Acetate	ND	10	1.4	ND	2.9	0.38	
110-54-3	n-Hexane	ND	2.6	0.54	ND	0.74	0.15	
67-66-3	Chloroform	**2.7**	2.7	0.35	**0.55**	0.54	0.072	
109-99-9	Tetrahydrofuran (THF)	**3.9**	4.9	0.33	**1.3**	1.7	0.11	**J**
107-06-2	1,2-Dichloroethane	ND	2.6	0.29	ND	0.65	0.072	
71-55-6	1,1,1-Trichloroethane	**36**	2.6	0.33	**6.5**	0.47	0.060	
71-43-2	Benzene	**0.43**	2.5	0.38	**0.13**	0.77	0.12	**J**
56-23-5	Carbon Tetrachloride	ND	2.5	0.36	ND	0.39	0.058	
110-82-7	Cyclohexane	ND	5.4	0.74	ND	1.6	0.21	
78-87-5	1,2-Dichloropropane	ND	2.5	0.33	ND	0.53	0.070	
75-27-4	Bromodichloromethane	ND	2.6	0.38	ND	0.39	0.057	
79-01-6	Trichloroethene	**0.58**	2.6	0.35	**0.11**	0.48	0.066	**J**
123-91-1	1,4-Dioxane	**520**	26	3.1	**150**	7.1	0.86	**D**
80-62-6	Methyl Methacrylate	ND	5.4	0.94	ND	1.3	0.23	
142-82-5	n-Heptane	ND	2.6	0.42	ND	0.64	0.10	
10061-01-5	cis-1,3-Dichloropropene	ND	2.5	0.41	ND	0.54	0.090	
108-10-1	4-Methyl-2-pentanone	**4.8**	5.4	0.36	**1.2**	1.3	0.088	**J**
10061-02-6	trans-1,3-Dichloropropene	ND	2.5	0.54	ND	0.55	0.12	
79-00-5	1,1,2-Trichloroethane	**0.48**	2.6	0.27	**0.088**	0.47	0.049	**J**
108-88-3	Toluene	**4.7**	2.6	0.32	**1.2**	0.68	0.085	
591-78-6	2-Hexanone	**2.3**	5.4	0.33	**0.57**	1.3	0.079	**J**
124-48-1	Dibromochloromethane	ND	2.6	0.34	ND	0.31	0.040	
106-93-4	1,2-Dibromoethane	ND	2.6	0.31	ND	0.33	0.040	
123-86-4	n-Butyl Acetate	ND	5.4	0.36	ND	1.1	0.076	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
H1 = Sample analysis performed past holding time. See case narrative.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
D = The reported result is from a dilution.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-EXT-01@ manifold** ALS Project ID: P2105624
Client Project ID: **SVE Performance / KUH0-21-010** ALS Sample ID: P2105624-004

Test Code: EPA TO-15 Date Collected: 9/30/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 10/25/21
Analyst: Wida Ang Date Analyzed: 11/5/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes: **H1** 0.040 Liter(s)
Container ID: 1SS01393

Initial Pressure (psig): -3.88 Final Pressure (psig): 6.61

Canister Dilution Factor: 1.97

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	ND	2.6	0.59	ND	0.56	0.13	
127-18-4	Tetrachloroethene	**4.2**	2.6	0.34	**0.62**	0.38	0.050	
108-90-7	Chlorobenzene	ND	2.6	0.35	ND	0.56	0.076	
100-41-4	Ethylbenzene	**17**	2.6	0.37	**4.0**	0.59	0.085	
179601-23-1	m,p-Xylenes	**57**	5.4	0.69	**13**	1.2	0.16	
75-25-2	Bromoform	ND	2.6	0.54	ND	0.25	0.052	
100-42-5	Styrene	**0.53**	2.5	0.42	**0.12**	0.58	0.10	**J**
95-47-6	o-Xylene	**63**	2.6	0.38	**14**	0.59	0.087	
111-84-2	n-Nonane	**0.56**	2.6	0.44	**0.11**	0.49	0.084	**J**
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.6	0.36	ND	0.37	0.053	
98-82-8	Cumene	**0.66**	2.6	0.38	**0.14**	0.52	0.077	**J**
80-56-8	alpha-Pinene	**1.2**	2.7	0.40	**0.22**	0.48	0.073	**J**
103-65-1	n-Propylbenzene	**1.7**	2.6	0.38	**0.34**	0.53	0.077	**J**
622-96-8	4-Ethyltoluene	**2.2**	2.6	0.42	**0.45**	0.53	0.085	**J**
108-67-8	1,3,5-Trimethylbenzene	**2.9**	2.6	0.38	**0.60**	0.52	0.077	
95-63-6	1,2,4-Trimethylbenzene	**8.6**	2.6	0.36	**1.7**	0.52	0.074	
100-44-7	Benzyl Chloride	ND	5.4	0.59	ND	1.0	0.11	
541-73-1	1,3-Dichlorobenzene	ND	2.6	0.39	ND	0.43	0.066	
106-46-7	1,4-Dichlorobenzene	ND	2.6	0.40	ND	0.43	0.067	
95-50-1	1,2-Dichlorobenzene	ND	2.6	0.39	ND	0.43	0.065	
5989-27-5	d-Limonene	**3.8**	2.5	0.54	**0.69**	0.44	0.097	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.9	0.49	ND	0.51	0.051	
120-82-1	1,2,4-Trichlorobenzene	ND	5.4	0.64	ND	0.73	0.086	
91-20-3	Naphthalene	**3.6**	2.6	0.64	**0.68**	0.49	0.12	
87-68-3	Hexachlorobutadiene	ND	2.6	0.54	ND	0.24	0.051	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
H1 = Sample analysis performed past holding time. See case narrative.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-EXT-02@ manifold** ALS Project ID: P2105624
Client Project ID: **SVE Performance / KUH0-21-010** ALS Sample ID: P2105624-005

Test Code: EPA TO-15 Date Collected: 9/30/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 10/25/21
Analyst: Wida Ang Date Analyzed: 11/5/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes: **H1** 0.040 Liter(s)
Container ID: 1SS00543

Initial Pressure (psig): -6.41 Final Pressure (psig): 6.85

Canister Dilution Factor: 2.60

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	**29**	3.4	0.85	**17**	2.0	0.49	
75-71-8	Dichlorodifluoromethane (CFC 12)	**4.7**	3.4	0.57	**0.94**	0.70	0.11	
74-87-3	Chloromethane	ND	3.3	0.56	ND	1.6	0.27	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	**1.1**	3.5	0.55	**0.16**	0.50	0.078	**J**
75-01-4	Vinyl Chloride	ND	3.4	0.37	ND	1.3	0.14	
106-99-0	1,3-Butadiene	ND	3.4	0.57	ND	1.5	0.26	
74-83-9	Bromomethane	ND	3.3	0.48	ND	0.85	0.12	
75-00-3	Chloroethane	ND	3.3	0.43	ND	1.3	0.16	
64-17-5	Ethanol	**31**	33	2.4	**17**	17	1.3	**J**
75-05-8	Acetonitrile	ND	6.5	0.85	ND	3.9	0.50	
107-02-8	Acrolein	ND	6.5	0.98	ND	2.8	0.43	
67-64-1	Acetone	**18**	34	7.8	**7.8**	14	3.3	**J**
75-69-4	Trichlorofluoromethane (CFC 11)	**1.8**	3.4	0.53	**0.32**	0.60	0.094	**J**
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	6.5	1.4	ND	2.6	0.58	
107-13-1	Acrylonitrile	ND	6.5	0.72	ND	3.0	0.33	
75-35-4	1,1-Dichloroethene	**230**	3.5	0.48	**57**	0.89	0.12	
75-09-2	Methylene Chloride	ND	3.4	0.98	ND	0.97	0.28	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	3.4	0.47	ND	1.1	0.15	
76-13-1	Trichlorotrifluoroethane (CFC 113)	**2.0**	3.5	0.49	**0.27**	0.46	0.064	**J**
75-15-0	Carbon Disulfide	ND	7.2	1.0	ND	2.3	0.33	
156-60-5	trans-1,2-Dichloroethene	ND	3.4	0.48	ND	0.87	0.12	
75-34-3	1,1-Dichloroethane	**6.1**	3.4	0.51	**1.5**	0.85	0.13	
1634-04-4	Methyl tert-Butyl Ether	ND	3.4	0.41	ND	0.96	0.11	
108-05-4	Vinyl Acetate	ND	33	7.8	ND	9.2	2.2	
78-93-3	2-Butanone (MEK)	**3.7**	6.5	0.72	**1.2**	2.2	0.24	**J**

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
H1 = Sample analysis performed past holding time. See case narrative.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-EXT-02@ manifold** ALS Project ID: P2105624
Client Project ID: **SVE Performance / KUH0-21-010** ALS Sample ID: P2105624-005

Test Code: EPA TO-15 Date Collected: 9/30/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 10/25/21
Analyst: Wida Ang Date Analyzed: 11/5/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes: **H1** 0.040 Liter(s)
Container ID: 1SS00543

Initial Pressure (psig): -6.41 Final Pressure (psig): 6.85

Canister Dilution Factor: 2.60

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	3.4	0.49	ND	0.85	0.12	
141-78-6	Ethyl Acetate	ND	14	1.8	ND	3.8	0.51	
110-54-3	n-Hexane	ND	3.4	0.72	ND	0.98	0.20	
67-66-3	Chloroform	**3.5**	3.5	0.46	**0.72**	0.72	0.095	
109-99-9	Tetrahydrofuran (THF)	**4.0**	6.5	0.44	**1.3**	2.2	0.15	**J**
107-06-2	1,2-Dichloroethane	**0.98**	3.4	0.38	**0.24**	0.85	0.095	**J**
71-55-6	1,1,1-Trichloroethane	**53**	3.4	0.43	**9.7**	0.62	0.079	
71-43-2	Benzene	**0.73**	3.3	0.50	**0.23**	1.0	0.16	**J**
56-23-5	Carbon Tetrachloride	ND	3.3	0.48	ND	0.52	0.076	
110-82-7	Cyclohexane	ND	7.2	0.98	ND	2.1	0.28	
78-87-5	1,2-Dichloropropane	ND	3.3	0.43	ND	0.70	0.093	
75-27-4	Bromodichloromethane	ND	3.4	0.50	ND	0.51	0.075	
79-01-6	Trichloroethene	**1.5**	3.4	0.47	**0.27**	0.63	0.087	**J**
123-91-1	1,4-Dioxane	**4,500**	34	4.1	**1,200**	9.4	1.1	**D**
80-62-6	Methyl Methacrylate	ND	7.2	1.2	ND	1.7	0.30	
142-82-5	n-Heptane	ND	3.4	0.55	ND	0.84	0.13	
10061-01-5	cis-1,3-Dichloropropene	ND	3.3	0.54	ND	0.72	0.12	
108-10-1	4-Methyl-2-pentanone	ND	7.2	0.47	ND	1.7	0.12	
10061-02-6	trans-1,3-Dichloropropene	ND	3.3	0.72	ND	0.73	0.16	
79-00-5	1,1,2-Trichloroethane	**2.1**	3.4	0.35	**0.39**	0.62	0.064	**J**
108-88-3	Toluene	**1.8**	3.4	0.42	**0.47**	0.90	0.11	**J**
591-78-6	2-Hexanone	**1.8**	7.2	0.43	**0.44**	1.7	0.10	**J**
124-48-1	Dibromochloromethane	ND	3.4	0.46	ND	0.40	0.053	
106-93-4	1,2-Dibromoethane	ND	3.4	0.40	ND	0.44	0.052	
123-86-4	n-Butyl Acetate	ND	7.2	0.47	ND	1.5	0.10	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
H1 = Sample analysis performed past holding time. See case narrative.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
D = The reported result is from a dilution.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-EXT-02@ manifold** ALS Project ID: P2105624
Client Project ID: **SVE Performance / KUH0-21-010** ALS Sample ID: P2105624-005

Test Code: EPA TO-15 Date Collected: 9/30/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 10/25/21
Analyst: Wida Ang Date Analyzed: 11/5/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes: **H1** 0.040 Liter(s)
Container ID: 1SS00543

Initial Pressure (psig): -6.41 Final Pressure (psig): 6.85

Canister Dilution Factor: 2.60

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	ND	3.4	0.78	ND	0.74	0.17	
127-18-4	Tetrachloroethene	**8.3**	3.4	0.45	**1.2**	0.50	0.066	
108-90-7	Chlorobenzene	ND	3.4	0.46	ND	0.73	0.10	
100-41-4	Ethylbenzene	**29**	3.4	0.49	**6.7**	0.78	0.11	
179601-23-1	m,p-Xylenes	**100**	7.2	0.91	**23**	1.6	0.21	
75-25-2	Bromoform	ND	3.4	0.72	ND	0.33	0.069	
100-42-5	Styrene	ND	3.3	0.56	ND	0.76	0.13	
95-47-6	o-Xylene	**93**	3.4	0.50	**21**	0.78	0.12	
111-84-2	n-Nonane	ND	3.4	0.58	ND	0.64	0.11	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.4	0.48	ND	0.49	0.070	
98-82-8	Cumene	**1.4**	3.4	0.50	**0.28**	0.69	0.10	**J**
80-56-8	alpha-Pinene	**0.73**	3.5	0.53	**0.13**	0.63	0.096	**J**
103-65-1	n-Propylbenzene	**3.0**	3.4	0.50	**0.60**	0.70	0.10	**J**
622-96-8	4-Ethyltoluene	**3.3**	3.4	0.55	**0.67**	0.70	0.11	**J**
108-67-8	1,3,5-Trimethylbenzene	**3.9**	3.4	0.50	**0.80**	0.69	0.10	
95-63-6	1,2,4-Trimethylbenzene	**11**	3.4	0.48	**2.2**	0.69	0.098	
100-44-7	Benzyl Chloride	ND	7.2	0.78	ND	1.4	0.15	
541-73-1	1,3-Dichlorobenzene	ND	3.4	0.52	ND	0.56	0.087	
106-46-7	1,4-Dichlorobenzene	ND	3.4	0.53	ND	0.56	0.089	
95-50-1	1,2-Dichlorobenzene	ND	3.4	0.51	ND	0.57	0.085	
5989-27-5	d-Limonene	**5.2**	3.3	0.72	**0.93**	0.58	0.13	
96-12-8	1,2-Dibromo-3-chloropropane	ND	6.5	0.65	ND	0.67	0.067	
120-82-1	1,2,4-Trichlorobenzene	ND	7.2	0.85	ND	0.96	0.11	
91-20-3	Naphthalene	**1.7**	3.4	0.85	**0.32**	0.65	0.16	**J**
87-68-3	Hexachlorobutadiene	ND	3.4	0.72	ND	0.32	0.067	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
H1 = Sample analysis performed past holding time. See case narrative.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-EXT-03@ manifold** ALS Project ID: P2105624
Client Project ID: **SVE Performance / KUH0-21-010** ALS Sample ID: P2105624-006

Test Code: EPA TO-15 Date Collected: 9/30/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 10/25/21
Analyst: Wida Ang Date Analyzed: 11/5/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes: **H1**
Container ID: 1SS00517

Initial Pressure (psig): -4.73 Final Pressure (psig): 6.64

Canister Dilution Factor: 2.14

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	**130**	2.8	0.70	**77**	1.6	0.40	
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.5**	2.8	0.47	**0.51**	0.57	0.094	**J**
74-87-3	Chloromethane	**0.61**	2.7	0.46	**0.30**	1.3	0.22	**J**
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.9	0.45	ND	0.41	0.064	
75-01-4	Vinyl Chloride	ND	2.8	0.30	ND	1.1	0.12	
106-99-0	1,3-Butadiene	ND	2.8	0.47	ND	1.3	0.21	
74-83-9	Bromomethane	ND	2.7	0.40	ND	0.70	0.10	
75-00-3	Chloroethane	ND	2.7	0.35	ND	1.0	0.13	
64-17-5	Ethanol	**46**	27	2.0	**24**	14	1.1	
75-05-8	Acetonitrile	ND	5.4	0.70	ND	3.2	0.41	
107-02-8	Acrolein	ND	5.4	0.80	ND	2.3	0.35	
67-64-1	Acetone	**46**	28	6.4	**19**	12	2.7	
75-69-4	Trichlorofluoromethane (CFC 11)	**1.2**	2.8	0.43	**0.21**	0.50	0.077	**J**
67-63-0	2-Propanol (Isopropyl Alcohol)	**2.8**	5.4	1.2	**1.1**	2.2	0.48	**J**
107-13-1	Acrylonitrile	ND	5.4	0.59	ND	2.5	0.27	
75-35-4	1,1-Dichloroethene	**14**	2.9	0.40	**3.5**	0.73	0.10	
75-09-2	Methylene Chloride	ND	2.8	0.80	ND	0.80	0.23	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.8	0.39	ND	0.91	0.12	
76-13-1	Trichlorotrifluoroethane (CFC 113)	**0.44**	2.9	0.41	**0.057**	0.38	0.053	**J**
75-15-0	Carbon Disulfide	**0.89**	5.9	0.86	**0.29**	1.9	0.27	**J**
156-60-5	trans-1,2-Dichloroethene	ND	2.8	0.40	ND	0.72	0.10	
75-34-3	1,1-Dichloroethane	ND	2.8	0.42	ND	0.70	0.10	
1634-04-4	Methyl tert-Butyl Ether	ND	2.8	0.34	ND	0.79	0.094	
108-05-4	Vinyl Acetate	ND	27	6.4	ND	7.6	1.8	
78-93-3	2-Butanone (MEK)	**5.7**	5.4	0.59	**1.9**	1.8	0.20	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
H1 = Sample analysis performed past holding time. See case narrative.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-EXT-03@ manifold** ALS Project ID: P2105624
Client Project ID: **SVE Performance / KUH0-21-010** ALS Sample ID: P2105624-006

Test Code: EPA TO-15 Date Collected: 9/30/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 10/25/21
Analyst: Wida Ang Date Analyzed: 11/5/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes: **H1**
Container ID: 1SS00517

Initial Pressure (psig): -4.73 Final Pressure (psig): 6.64

Canister Dilution Factor: 2.14

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.8	0.40	ND	0.70	0.10	
141-78-6	Ethyl Acetate	**1.6**	11	1.5	**0.43**	3.1	0.42	**J**
110-54-3	n-Hexane	ND	2.8	0.59	ND	0.80	0.17	
67-66-3	Chloroform	**0.58**	2.9	0.38	**0.12**	0.59	0.078	**J**
109-99-9	Tetrahydrofuran (THF)	**2.3**	5.4	0.36	**0.78**	1.8	0.12	**J**
107-06-2	1,2-Dichloroethane	ND	2.8	0.32	ND	0.70	0.078	
71-55-6	1,1,1-Trichloroethane	**4.2**	2.8	0.35	**0.77**	0.51	0.065	
71-43-2	Benzene	ND	2.7	0.41	ND	0.84	0.13	
56-23-5	Carbon Tetrachloride	ND	2.7	0.40	ND	0.43	0.063	
110-82-7	Cyclohexane	**0.95**	5.9	0.80	**0.28**	1.7	0.23	**J**
78-87-5	1,2-Dichloropropane	ND	2.7	0.35	ND	0.58	0.076	
75-27-4	Bromodichloromethane	ND	2.8	0.41	ND	0.42	0.062	
79-01-6	Trichloroethene	ND	2.8	0.39	ND	0.52	0.072	
123-91-1	1,4-Dioxane	**360**	2.8	0.34	**99**	0.77	0.094	
80-62-6	Methyl Methacrylate	ND	5.9	1.0	ND	1.4	0.25	
142-82-5	n-Heptane	ND	2.8	0.45	ND	0.69	0.11	
10061-01-5	cis-1,3-Dichloropropene	ND	2.7	0.44	ND	0.59	0.098	
108-10-1	4-Methyl-2-pentanone	**6.7**	5.9	0.39	**1.6**	1.4	0.095	
10061-02-6	trans-1,3-Dichloropropene	ND	2.7	0.59	ND	0.60	0.13	
79-00-5	1,1,2-Trichloroethane	ND	2.8	0.29	ND	0.51	0.053	
108-88-3	Toluene	**5.1**	2.8	0.35	**1.4**	0.74	0.092	
591-78-6	2-Hexanone	ND	5.9	0.35	ND	1.4	0.086	
124-48-1	Dibromochloromethane	ND	2.8	0.37	ND	0.33	0.044	
106-93-4	1,2-Dibromoethane	ND	2.8	0.33	ND	0.36	0.043	
123-86-4	n-Butyl Acetate	**0.52**	5.9	0.39	**0.11**	1.2	0.082	**J**

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
H1 = Sample analysis performed past holding time. See case narrative.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-EXT-03@ manifold** ALS Project ID: P2105624
Client Project ID: **SVE Performance / KUH0-21-010** ALS Sample ID: P2105624-006

Test Code: EPA TO-15 Date Collected: 9/30/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: 10/25/21
Analyst: Wida Ang Date Analyzed: 11/5/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes: **H1**
Container ID: 1SS00517

Initial Pressure (psig): -4.73 Final Pressure (psig): 6.64

Canister Dilution Factor: 2.14

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	ND	2.8	0.64	ND	0.61	0.14	
127-18-4	Tetrachloroethene	**5.4**	2.8	0.37	**0.79**	0.41	0.054	
108-90-7	Chlorobenzene	ND	2.8	0.38	ND	0.60	0.083	
100-41-4	Ethylbenzene	**5.7**	2.8	0.40	**1.3**	0.64	0.092	
179601-23-1	m,p-Xylenes	**28**	5.9	0.75	**6.5**	1.4	0.17	
75-25-2	Bromoform	ND	2.8	0.59	ND	0.27	0.057	
100-42-5	Styrene	**0.63**	2.7	0.46	**0.15**	0.63	0.11	**J**
95-47-6	o-Xylene	**14**	2.8	0.41	**3.3**	0.64	0.095	
111-84-2	n-Nonane	ND	2.8	0.48	ND	0.53	0.091	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.8	0.40	ND	0.41	0.058	
98-82-8	Cumene	ND	2.8	0.41	ND	0.57	0.084	
80-56-8	alpha-Pinene	**1.7**	2.9	0.44	**0.30**	0.52	0.079	**J**
103-65-1	n-Propylbenzene	**1.3**	2.8	0.41	**0.26**	0.58	0.084	**J**
622-96-8	4-Ethyltoluene	**1.9**	2.8	0.45	**0.39**	0.58	0.093	**J**
108-67-8	1,3,5-Trimethylbenzene	**3.4**	2.8	0.41	**0.69**	0.57	0.084	
95-63-6	1,2,4-Trimethylbenzene	**13**	2.8	0.40	**2.6**	0.57	0.081	
100-44-7	Benzyl Chloride	ND	5.9	0.64	ND	1.1	0.12	
541-73-1	1,3-Dichlorobenzene	ND	2.8	0.43	ND	0.46	0.071	
106-46-7	1,4-Dichlorobenzene	**0.60**	2.8	0.44	**0.10**	0.46	0.073	**J**
95-50-1	1,2-Dichlorobenzene	ND	2.8	0.42	ND	0.47	0.070	
5989-27-5	d-Limonene	**4.7**	2.7	0.59	**0.84**	0.48	0.11	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.4	0.54	ND	0.55	0.055	
120-82-1	1,2,4-Trichlorobenzene	ND	5.9	0.70	ND	0.79	0.094	
91-20-3	Naphthalene	**5.0**	2.8	0.70	**0.95**	0.53	0.13	
87-68-3	Hexachlorobutadiene	ND	2.8	0.59	ND	0.26	0.055	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
H1 = Sample analysis performed past holding time. See case narrative.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Method Blank** ALS Project ID: P2105624
Client Project ID: **SVE Performance / KUH0-21-010** ALS Sample ID: P211103-MB

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Wida Ang Date Analyzed: 11/3/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	ND	0.52	0.13	ND	0.30	0.076	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.53	0.087	ND	0.11	0.018	
74-87-3	Chloromethane	ND	0.51	0.086	ND	0.25	0.042	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.54	0.084	ND	0.077	0.012	
75-01-4	Vinyl Chloride	ND	0.52	0.057	ND	0.20	0.022	
106-99-0	1,3-Butadiene	ND	0.52	0.088	ND	0.24	0.040	
74-83-9	Bromomethane	ND	0.51	0.074	ND	0.13	0.019	
75-00-3	Chloroethane	ND	0.51	0.066	ND	0.19	0.025	
64-17-5	Ethanol	ND	5.0	0.37	ND	2.7	0.20	
75-05-8	Acetonitrile	ND	1.0	0.13	ND	0.60	0.077	
107-02-8	Acrolein	ND	1.0	0.15	ND	0.44	0.065	
67-64-1	Acetone	ND	5.2	1.2	ND	2.2	0.51	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	0.52	0.081	ND	0.093	0.014	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	1.0	0.22	ND	0.41	0.090	
107-13-1	Acrylonitrile	ND	1.0	0.11	ND	0.46	0.051	
75-35-4	1,1-Dichloroethene	ND	0.54	0.074	ND	0.14	0.019	
75-09-2	Methylene Chloride	ND	0.52	0.15	ND	0.15	0.043	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.53	0.072	ND	0.17	0.023	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	0.54	0.076	ND	0.070	0.0099	
75-15-0	Carbon Disulfide	ND	1.1	0.16	ND	0.35	0.051	
156-60-5	trans-1,2-Dichloroethene	ND	0.53	0.074	ND	0.13	0.019	
75-34-3	1,1-Dichloroethane	ND	0.53	0.078	ND	0.13	0.019	
1634-04-4	Methyl tert-Butyl Ether	ND	0.53	0.063	ND	0.15	0.017	
108-05-4	Vinyl Acetate	ND	5.0	1.2	ND	1.4	0.34	
78-93-3	2-Butanone (MEK)	ND	1.0	0.11	ND	0.34	0.037	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **Method Blank** ALS Project ID: P2105624

Client Project ID: **SVE Performance / KUH0-21-010** ALS Sample ID: P211103-MB

Test Code: EPA TO-15 Date Collected: NA

Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA

Analyst: Wida Ang Date Analyzed: 11/3/21

Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.52	0.075	ND	0.13	0.019	
141-78-6	Ethyl Acetate	ND	2.1	0.28	ND	0.58	0.078	
110-54-3	n-Hexane	ND	0.53	0.11	ND	0.15	0.031	
67-66-3	Chloroform	ND	0.54	0.071	ND	0.11	0.015	
109-99-9	Tetrahydrofuran (THF)	ND	1.0	0.067	ND	0.34	0.023	
107-06-2	1,2-Dichloroethane	ND	0.53	0.059	ND	0.13	0.015	
71-55-6	1,1,1-Trichloroethane	ND	0.52	0.066	ND	0.095	0.012	
71-43-2	Benzene	ND	0.50	0.077	ND	0.16	0.024	
56-23-5	Carbon Tetrachloride	ND	0.50	0.074	ND	0.080	0.012	
110-82-7	Cyclohexane	ND	1.1	0.15	ND	0.32	0.044	
78-87-5	1,2-Dichloropropane	ND	0.50	0.066	ND	0.11	0.014	
75-27-4	Bromodichloromethane	ND	0.53	0.077	ND	0.079	0.011	
79-01-6	Trichloroethene	ND	0.52	0.072	ND	0.097	0.013	
123-91-1	1,4-Dioxane	ND	0.52	0.063	ND	0.14	0.017	
80-62-6	Methyl Methacrylate	ND	1.1	0.19	ND	0.27	0.046	
142-82-5	n-Heptane	ND	0.53	0.085	ND	0.13	0.021	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.083	ND	0.11	0.018	
108-10-1	4-Methyl-2-pentanone	ND	1.1	0.073	ND	0.27	0.018	
10061-02-6	trans-1,3-Dichloropropene	ND	0.51	0.11	ND	0.11	0.024	
79-00-5	1,1,2-Trichloroethane	ND	0.52	0.054	ND	0.095	0.0099	
108-88-3	Toluene	ND	0.52	0.065	ND	0.14	0.017	
591-78-6	2-Hexanone	ND	1.1	0.066	ND	0.27	0.016	
124-48-1	Dibromochloromethane	ND	0.53	0.070	ND	0.062	0.0082	
106-93-4	1,2-Dibromoethane	ND	0.52	0.062	ND	0.068	0.0081	
123-86-4	n-Butyl Acetate	ND	1.1	0.073	ND	0.23	0.015	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **Method Blank** ALS Project ID: P2105624

Client Project ID: **SVE Performance / KUH0-21-010** ALS Sample ID: P211103-MB

Test Code: EPA TO-15 Date Collected: NA

Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA

Analyst: Wida Ang Date Analyzed: 11/3/21

Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.53	0.12	ND	0.11	0.026	
127-18-4	Tetrachloroethene	ND	0.52	0.069	ND	0.077	0.010	
108-90-7	Chlorobenzene	ND	0.52	0.071	ND	0.11	0.015	
100-41-4	Ethylbenzene	ND	0.52	0.075	ND	0.12	0.017	
179601-23-1	m,p-Xylenes	ND	1.1	0.14	ND	0.25	0.032	
75-25-2	Bromoform	ND	0.52	0.11	ND	0.050	0.011	
100-42-5	Styrene	ND	0.50	0.086	ND	0.12	0.020	
95-47-6	o-Xylene	ND	0.52	0.077	ND	0.12	0.018	
111-84-2	n-Nonane	ND	0.52	0.089	ND	0.099	0.017	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.52	0.074	ND	0.076	0.011	
98-82-8	Cumene	ND	0.52	0.077	ND	0.11	0.016	
80-56-8	alpha-Pinene	ND	0.54	0.082	ND	0.097	0.015	
103-65-1	n-Propylbenzene	ND	0.53	0.077	ND	0.11	0.016	
622-96-8	4-Ethyltoluene	ND	0.53	0.085	ND	0.11	0.017	
108-67-8	1,3,5-Trimethylbenzene	ND	0.52	0.077	ND	0.11	0.016	
95-63-6	1,2,4-Trimethylbenzene	ND	0.52	0.074	ND	0.11	0.015	
100-44-7	Benzyl Chloride	ND	1.1	0.12	ND	0.21	0.023	
541-73-1	1,3-Dichlorobenzene	ND	0.52	0.080	ND	0.087	0.013	
106-46-7	1,4-Dichlorobenzene	ND	0.52	0.082	ND	0.087	0.014	
95-50-1	1,2-Dichlorobenzene	ND	0.53	0.079	ND	0.088	0.013	
5989-27-5	d-Limonene	ND	0.50	0.11	ND	0.090	0.020	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.10	ND	0.10	0.010	
120-82-1	1,2,4-Trichlorobenzene	ND	1.1	0.13	ND	0.15	0.018	
91-20-3	Naphthalene	ND	0.52	0.13	ND	0.099	0.025	
87-68-3	Hexachlorobutadiene	ND	0.52	0.11	ND	0.049	0.010	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Method Blank** ALS Project ID: P2105624
Client Project ID: **SVE Performance / KUH0-21-010** ALS Sample ID: P211104-MB

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Wida Ang Date Analyzed: 11/4/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	ND	0.52	0.13	ND	0.30	0.076	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.53	0.087	ND	0.11	0.018	
74-87-3	Chloromethane	ND	0.51	0.086	ND	0.25	0.042	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.54	0.084	ND	0.077	0.012	
75-01-4	Vinyl Chloride	ND	0.52	0.057	ND	0.20	0.022	
106-99-0	1,3-Butadiene	ND	0.52	0.088	ND	0.24	0.040	
74-83-9	Bromomethane	ND	0.51	0.074	ND	0.13	0.019	
75-00-3	Chloroethane	ND	0.51	0.066	ND	0.19	0.025	
64-17-5	Ethanol	ND	5.0	0.37	ND	2.7	0.20	
75-05-8	Acetonitrile	ND	1.0	0.13	ND	0.60	0.077	
107-02-8	Acrolein	ND	1.0	0.15	ND	0.44	0.065	
67-64-1	Acetone	ND	5.2	1.2	ND	2.2	0.51	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	0.52	0.081	ND	0.093	0.014	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	1.0	0.22	ND	0.41	0.090	
107-13-1	Acrylonitrile	ND	1.0	0.11	ND	0.46	0.051	
75-35-4	1,1-Dichloroethene	ND	0.54	0.074	ND	0.14	0.019	
75-09-2	Methylene Chloride	ND	0.52	0.15	ND	0.15	0.043	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.53	0.072	ND	0.17	0.023	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	0.54	0.076	ND	0.070	0.0099	
75-15-0	Carbon Disulfide	ND	1.1	0.16	ND	0.35	0.051	
156-60-5	trans-1,2-Dichloroethene	ND	0.53	0.074	ND	0.13	0.019	
75-34-3	1,1-Dichloroethane	ND	0.53	0.078	ND	0.13	0.019	
1634-04-4	Methyl tert-Butyl Ether	ND	0.53	0.063	ND	0.15	0.017	
108-05-4	Vinyl Acetate	ND	5.0	1.2	ND	1.4	0.34	
78-93-3	2-Butanone (MEK)	ND	1.0	0.11	ND	0.34	0.037	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Method Blank** ALS Project ID: P2105624
Client Project ID: **SVE Performance / KUH0-21-010** ALS Sample ID: P211104-MB

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Wida Ang Date Analyzed: 11/4/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.52	0.075	ND	0.13	0.019	
141-78-6	Ethyl Acetate	ND	2.1	0.28	ND	0.58	0.078	
110-54-3	n-Hexane	ND	0.53	0.11	ND	0.15	0.031	
67-66-3	Chloroform	ND	0.54	0.071	ND	0.11	0.015	
109-99-9	Tetrahydrofuran (THF)	ND	1.0	0.067	ND	0.34	0.023	
107-06-2	1,2-Dichloroethane	ND	0.53	0.059	ND	0.13	0.015	
71-55-6	1,1,1-Trichloroethane	ND	0.52	0.066	ND	0.095	0.012	
71-43-2	Benzene	ND	0.50	0.077	ND	0.16	0.024	
56-23-5	Carbon Tetrachloride	ND	0.50	0.074	ND	0.080	0.012	
110-82-7	Cyclohexane	ND	1.1	0.15	ND	0.32	0.044	
78-87-5	1,2-Dichloropropane	ND	0.50	0.066	ND	0.11	0.014	
75-27-4	Bromodichloromethane	ND	0.53	0.077	ND	0.079	0.011	
79-01-6	Trichloroethene	ND	0.52	0.072	ND	0.097	0.013	
123-91-1	1,4-Dioxane	ND	0.52	0.063	ND	0.14	0.017	
80-62-6	Methyl Methacrylate	ND	1.1	0.19	ND	0.27	0.046	
142-82-5	n-Heptane	ND	0.53	0.085	ND	0.13	0.021	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.083	ND	0.11	0.018	
108-10-1	4-Methyl-2-pentanone	ND	1.1	0.073	ND	0.27	0.018	
10061-02-6	trans-1,3-Dichloropropene	ND	0.51	0.11	ND	0.11	0.024	
79-00-5	1,1,2-Trichloroethane	ND	0.52	0.054	ND	0.095	0.0099	
108-88-3	Toluene	ND	0.52	0.065	ND	0.14	0.017	
591-78-6	2-Hexanone	ND	1.1	0.066	ND	0.27	0.016	
124-48-1	Dibromochloromethane	ND	0.53	0.070	ND	0.062	0.0082	
106-93-4	1,2-Dibromoethane	ND	0.52	0.062	ND	0.068	0.0081	
123-86-4	n-Butyl Acetate	ND	1.1	0.073	ND	0.23	0.015	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **Method Blank** ALS Project ID: P2105624

Client Project ID: **SVE Performance / KUH0-21-010** ALS Sample ID: P211104-MB

Test Code: EPA TO-15 Date Collected: NA

Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA

Analyst: Wida Ang Date Analyzed: 11/4/21

Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.53	0.12	ND	0.11	0.026	
127-18-4	Tetrachloroethene	ND	0.52	0.069	ND	0.077	0.010	
108-90-7	Chlorobenzene	ND	0.52	0.071	ND	0.11	0.015	
100-41-4	Ethylbenzene	ND	0.52	0.075	ND	0.12	0.017	
179601-23-1	m,p-Xylenes	ND	1.1	0.14	ND	0.25	0.032	
75-25-2	Bromoform	ND	0.52	0.11	ND	0.050	0.011	
100-42-5	Styrene	ND	0.50	0.086	ND	0.12	0.020	
95-47-6	o-Xylene	ND	0.52	0.077	ND	0.12	0.018	
111-84-2	n-Nonane	ND	0.52	0.089	ND	0.099	0.017	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.52	0.074	ND	0.076	0.011	
98-82-8	Cumene	ND	0.52	0.077	ND	0.11	0.016	
80-56-8	alpha-Pinene	ND	0.54	0.082	ND	0.097	0.015	
103-65-1	n-Propylbenzene	ND	0.53	0.077	ND	0.11	0.016	
622-96-8	4-Ethyltoluene	ND	0.53	0.085	ND	0.11	0.017	
108-67-8	1,3,5-Trimethylbenzene	ND	0.52	0.077	ND	0.11	0.016	
95-63-6	1,2,4-Trimethylbenzene	ND	0.52	0.074	ND	0.11	0.015	
100-44-7	Benzyl Chloride	ND	1.1	0.12	ND	0.21	0.023	
541-73-1	1,3-Dichlorobenzene	ND	0.52	0.080	ND	0.087	0.013	
106-46-7	1,4-Dichlorobenzene	ND	0.52	0.082	ND	0.087	0.014	
95-50-1	1,2-Dichlorobenzene	ND	0.53	0.079	ND	0.088	0.013	
5989-27-5	d-Limonene	ND	0.50	0.11	ND	0.090	0.020	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.10	ND	0.10	0.010	
120-82-1	1,2,4-Trichlorobenzene	ND	1.1	0.13	ND	0.15	0.018	
91-20-3	Naphthalene	ND	0.52	0.13	ND	0.099	0.025	
87-68-3	Hexachlorobutadiene	ND	0.52	0.11	ND	0.049	0.010	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

SURROGATE SPIKE RECOVERY RESULTS

Client: **Environmental Management Services, Inc.**
Client Project ID: **SVE Performance / KUH0-21-010** ALS Project ID: P2105624

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date(s) Collected: 9/30/21
Analyst: Wida Ang Date(s) Received: 10/25/21
Sample Type: 1.0 L Silonite Summa Canister(s) Date(s) Analyzed: 11/3 - 11/5/21
Test Notes:

Client Sample ID	ALS Sample ID	1,2-Dichloroethane-d4 Percent Recovered	Toluene-d8 Percent Recovered	Bromofluorobenzene Percent Recovered	Acceptance Limits	Data Qualifier
Method Blank	P211103-MB	**108**	**98**	**86**	70-130	
Method Blank	P211104-MB	**102**	**98**	**92**	70-130	
Lab Control Sample	P211103-LCS	**107**	**92**	**89**	70-130	
Lab Control Sample	P211104-LCS	**103**	**94**	**93**	70-130	
Duplicate Lab Control Sample	P211103-DLCS	**102**	**97**	**94**	70-130	
Duplicate Lab Control Sample	P211104-DLCS	**100**	**95**	**95**	70-130	
Post Carbon	P2105624-001	**101**	**98**	**97**	70-130	
Post Carbon 1	P2105624-002	**103**	**96**	**94**	70-130	
Post Carbon 2	P2105624-003	**99**	**100**	**101**	70-130	
SVE-EXT-01@ manifold	P2105624-004	**99**	**100**	**100**	70-130	
SVE-EXT-02@ manifold	P2105624-005	**99**	**100**	**100**	70-130	
SVE-EXT-03@ manifold	P2105624-006	**99**	**99**	**99**	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2105624
Client Project ID: **SVE Performance / KUH0-21-010** ALS Sample ID: P211103-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Wida Ang Date Analyzed: 11/4/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
115-07-1	Propene	206	230	221	**112**	**107**	56-128	5	25	
75-71-8	Dichlorodifluoromethane (CFC 12)	208	205	198	**99**	**95**	71-112	4	25	
74-87-3	Chloromethane	206	225	213	**109**	**103**	53-126	6	25	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	208	254	240	**122**	**115**	62-121	6	25	**L**
75-01-4	Vinyl Chloride	208	238	222	**114**	**107**	63-123	6	25	
106-99-0	1,3-Butadiene	206	241	224	**117**	**109**	63-135	7	25	
74-83-9	Bromomethane	206	207	207	**100**	**100**	71-112	0	25	
75-00-3	Chloroethane	206	207	207	**100**	**100**	66-117	0	25	
64-17-5	Ethanol	832	862	839	**104**	**101**	57-117	3	25	
75-05-8	Acetonitrile	202	180	179	**89**	**89**	59-131	0	25	
107-02-8	Acrolein	416	454	446	**109**	**107**	71-123	2	25	
67-64-1	Acetone	1,020	1120	1060	**110**	**104**	60-117	6	25	
75-69-4	Trichlorofluoromethane (CFC 11)	202	208	202	**103**	**100**	71-114	3	25	
67-63-0	2-Propanol (Isopropyl Alcohol)	400	436	421	**109**	**105**	61-124	4	25	
107-13-1	Acrylonitrile	402	456	440	**113**	**109**	65-130	4	25	
75-35-4	1,1-Dichloroethene	210	223	218	**106**	**104**	74-114	2	25	
75-09-2	Methylene Chloride	208	209	203	**100**	**98**	75-112	2	25	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	204	201	196	**99**	**96**	57-127	3	25	
76-13-1	Trichlorotrifluoroethane (CFC 113)	216	213	214	**99**	**99**	73-114	0	25	
75-15-0	Carbon Disulfide	414	435	412	**105**	**100**	70-113	5	25	
156-60-5	trans-1,2-Dichloroethene	208	230	222	**111**	**107**	76-119	4	25	
75-34-3	1,1-Dichloroethane	214	219	212	**102**	**99**	70-114	3	25	
1634-04-4	Methyl tert-Butyl Ether	206	223	216	**108**	**105**	72-118	3	25	
108-05-4	Vinyl Acetate	942	1050	995	**111**	**106**	56-137	5	25	
78-93-3	2-Butanone (MEK)	408	483	463	**118**	**113**	74-121	4	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.
L = Laboratory control sample recovery outside the specified limits, results may be biased high.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2105624
Client Project ID: **SVE Performance / KUH0-21-010** ALS Sample ID: P211103-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Wida Ang Date Analyzed: 11/4/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	206	225	215	**109**	**104**	73-117	5	25	
141-78-6	Ethyl Acetate	580	699	640	**121**	**110**	59-161	10	25	
110-54-3	n-Hexane	208	239	220	**115**	**106**	55-130	8	25	
67-66-3	Chloroform	210	228	215	**109**	**102**	71-114	7	25	
109-99-9	Tetrahydrofuran (THF)	404	479	457	**119**	**113**	73-114	5	25	**L**
107-06-2	1,2-Dichloroethane	210	223	212	**106**	**101**	71-119	5	25	
71-55-6	1,1,1-Trichloroethane	208	203	199	**98**	**96**	73-119	2	25	
71-43-2	Benzene	208	211	204	**101**	**98**	72-113	3	25	
56-23-5	Carbon Tetrachloride	202	206	203	**102**	**100**	67-123	2	25	
110-82-7	Cyclohexane	412	457	438	**111**	**106**	70-119	5	25	
78-87-5	1,2-Dichloropropane	206	215	208	**104**	**101**	70-118	3	25	
75-27-4	Bromodichloromethane	208	225	217	**108**	**104**	74-119	4	25	
79-01-6	Trichloroethene	204	223	219	**109**	**107**	74-115	2	25	
123-91-1	1,4-Dioxane	206	238	230	**116**	**112**	77-124	4	25	
80-62-6	Methyl Methacrylate	410	492	475	**120**	**116**	78-126	3	25	
142-82-5	n-Heptane	206	232	222	**113**	**108**	70-119	5	25	
10061-01-5	cis-1,3-Dichloropropene	208	245	235	**118**	**113**	81-126	4	25	
108-10-1	4-Methyl-2-pentanone	412	516	489	**125**	**119**	73-129	5	25	
10061-02-6	trans-1,3-Dichloropropene	200	230	221	**115**	**111**	80-127	4	25	
79-00-5	1,1,2-Trichloroethane	208	218	209	**105**	**100**	78-117	5	25	
108-88-3	Toluene	206	196	202	**95**	**98**	70-118	3	25	
591-78-6	2-Hexanone	406	482	482	**119**	**119**	74-132	0	25	
124-48-1	Dibromochloromethane	210	210	219	**100**	**104**	69-137	4	25	
106-93-4	1,2-Dibromoethane	208	209	217	**100**	**104**	76-128	4	25	
123-86-4	n-Butyl Acetate	406	503	499	**124**	**123**	75-134	0.8	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.
L = Laboratory control sample recovery outside the specified limits, results may be biased high.

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2105624
Client Project ID: **SVE Performance / KUH0-21-010** ALS Sample ID: P211103-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Wida Ang Date Analyzed: 11/4/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
111-65-9	n-Octane	208	215	219	**103**	**105**	68-120	2	25	
127-18-4	Tetrachloroethene	212	199	209	**94**	**99**	63-130	5	25	
108-90-7	Chlorobenzene	206	209	212	**101**	**103**	70-118	2	25	
100-41-4	Ethylbenzene	206	212	215	**103**	**104**	71-123	1	25	
179601-23-1	m,p-Xylenes	416	441	444	**106**	**107**	67-127	0.9	25	
75-25-2	Bromoform	210	214	225	**102**	**107**	65-149	5	25	
100-42-5	Styrene	202	222	227	**110**	**112**	76-132	2	25	
95-47-6	o-Xylene	208	218	220	**105**	**106**	69-124	0.9	25	
111-84-2	n-Nonane	208	226	223	**109**	**107**	64-127	2	25	
79-34-5	1,1,2,2-Tetrachloroethane	208	223	225	**107**	**108**	69-128	0.9	25	
98-82-8	Cumene	206	220	223	**107**	**108**	69-125	0.9	25	
80-56-8	alpha-Pinene	210	229	233	**109**	**111**	68-129	2	25	
103-65-1	n-Propylbenzene	208	220	221	**106**	**106**	70-127	0	25	
622-96-8	4-Ethyltoluene	208	231	234	**111**	**113**	69-127	2	25	
108-67-8	1,3,5-Trimethylbenzene	208	230	233	**111**	**112**	66-129	0.9	25	
95-63-6	1,2,4-Trimethylbenzene	206	252	249	**122**	**121**	63-142	0.8	25	
100-44-7	Benzyl Chloride	416	440	441	**106**	**106**	73-145	0	25	
541-73-1	1,3-Dichlorobenzene	208	241	241	**116**	**116**	67-136	0	25	
106-46-7	1,4-Dichlorobenzene	210	217	220	**103**	**105**	63-134	2	25	
95-50-1	1,2-Dichlorobenzene	210	240	239	**114**	**114**	64-139	0	25	
5989-27-5	d-Limonene	206	262	259	**127**	**126**	63-137	0.8	25	
96-12-8	1,2-Dibromo-3-chloropropane	404	456	460	**113**	**114**	72-145	0.9	25	
120-82-1	1,2,4-Trichlorobenzene	420	496	492	**118**	**117**	62-154	0.9	25	
91-20-3	Naphthalene	210	221	223	**105**	**106**	62-156	0.9	25	
87-68-3	Hexachlorobutadiene	212	217	219	**102**	**103**	55-142	1	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2105624
Client Project ID: **SVE Performance / KUH0-21-010** ALS Sample ID: P211104-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Wida Ang Date Analyzed: 11/4/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
115-07-1	Propene	206	210	227	**102**	**110**	56-128	8	25	
75-71-8	Dichlorodifluoromethane (CFC 12)	208	190	203	**91**	**98**	71-112	7	25	
74-87-3	Chloromethane	206	210	207	**102**	**100**	53-126	2	25	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	208	239	236	**115**	**113**	62-121	2	25	
75-01-4	Vinyl Chloride	208	219	218	**105**	**105**	63-123	0	25	
106-99-0	1,3-Butadiene	206	221	220	**107**	**107**	63-135	0	25	
74-83-9	Bromomethane	206	205	209	**100**	**101**	71-112	1	25	
75-00-3	Chloroethane	206	205	208	**100**	**101**	66-117	1	25	
64-17-5	Ethanol	832	850	839	**102**	**101**	57-117	1	25	
75-05-8	Acetonitrile	202	178	179	**88**	**89**	59-131	1	25	
107-02-8	Acrolein	416	442	444	**106**	**107**	71-123	0.9	25	
67-64-1	Acetone	1,020	1060	1040	**104**	**102**	60-117	2	25	
75-69-4	Trichlorofluoromethane (CFC 11)	202	203	202	**100**	**100**	71-114	0	25	
67-63-0	2-Propanol (Isopropyl Alcohol)	400	422	416	**106**	**104**	61-124	2	25	
107-13-1	Acrylonitrile	402	442	442	**110**	**110**	65-130	0	25	
75-35-4	1,1-Dichloroethene	210	217	216	**103**	**103**	74-114	0	25	
75-09-2	Methylene Chloride	208	204	202	**98**	**97**	75-112	1	25	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	204	196	193	**96**	**95**	57-127	1	25	
76-13-1	Trichlorotrifluoroethane (CFC 113)	216	215	216	**100**	**100**	73-114	0	25	
75-15-0	Carbon Disulfide	414	414	405	**100**	**98**	70-113	2	25	
156-60-5	trans-1,2-Dichloroethene	208	222	219	**107**	**105**	76-119	2	25	
75-34-3	1,1-Dichloroethane	214	213	210	**100**	**98**	70-114	2	25	
1634-04-4	Methyl tert-Butyl Ether	206	219	217	**106**	**105**	72-118	0.9	25	
108-05-4	Vinyl Acetate	942	1010	992	**107**	**105**	56-137	2	25	
78-93-3	2-Butanone (MEK)	408	461	451	**113**	**111**	74-121	2	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2105624
Client Project ID: **SVE Performance / KUH0-21-010** ALS Sample ID: P211104-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Wida Ang Date Analyzed: 11/4/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	206	217	213	**105**	**103**	73-117	2	25	
141-78-6	Ethyl Acetate	580	645	622	**111**	**107**	59-161	4	25	
110-54-3	n-Hexane	208	223	216	**107**	**104**	55-130	3	25	
67-66-3	Chloroform	210	216	211	**103**	**100**	71-114	3	25	
109-99-9	Tetrahydrofuran (THF)	404	456	446	**113**	**110**	73-114	3	25	
107-06-2	1,2-Dichloroethane	210	213	208	**101**	**99**	71-119	2	25	
71-55-6	1,1,1-Trichloroethane	208	202	201	**97**	**97**	73-119	0	25	
71-43-2	Benzene	208	207	205	**100**	**99**	72-113	1	25	
56-23-5	Carbon Tetrachloride	202	204	204	**101**	**101**	67-123	0	25	
110-82-7	Cyclohexane	412	439	433	**107**	**105**	70-119	2	25	
78-87-5	1,2-Dichloropropane	206	211	209	**102**	**101**	70-118	1	25	
75-27-4	Bromodichloromethane	208	219	217	**105**	**104**	74-119	1	25	
79-01-6	Trichloroethene	204	219	218	**107**	**107**	74-115	0	25	
123-91-1	1,4-Dioxane	206	232	229	**113**	**111**	77-124	2	25	
80-62-6	Methyl Methacrylate	410	478	473	**117**	**115**	78-126	2	25	
142-82-5	n-Heptane	206	223	221	**108**	**107**	70-119	0.9	25	
10061-01-5	cis-1,3-Dichloropropene	208	237	234	**114**	**113**	81-126	0.9	25	
108-10-1	4-Methyl-2-pentanone	412	497	485	**121**	**118**	73-129	3	25	
10061-02-6	trans-1,3-Dichloropropene	200	223	221	**112**	**111**	80-127	0.9	25	
79-00-5	1,1,2-Trichloroethane	208	212	209	**102**	**100**	78-117	2	25	
108-88-3	Toluene	206	195	198	**95**	**96**	70-118	1	25	
591-78-6	2-Hexanone	406	474	472	**117**	**116**	74-132	0.9	25	
124-48-1	Dibromochloromethane	210	211	216	**100**	**103**	69-137	3	25	
106-93-4	1,2-Dibromoethane	208	210	215	**101**	**103**	76-128	2	25	
123-86-4	n-Butyl Acetate	406	493	489	**121**	**120**	75-134	0.8	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2105624
Client Project ID: **SVE Performance / KUH0-21-010** ALS Sample ID: P211104-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Cinert/6890N/MS16 Date Received: NA
Analyst: Wida Ang Date Analyzed: 11/4/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
111-65-9	n-Octane	208	215	216	**103**	**104**	68-120	1	25	
127-18-4	Tetrachloroethene	212	203	209	**96**	**99**	63-130	3	25	
108-90-7	Chlorobenzene	206	206	207	**100**	**100**	70-118	0	25	
100-41-4	Ethylbenzene	206	209	211	**101**	**102**	71-123	1	25	
179601-23-1	m,p-Xylenes	416	431	432	**104**	**104**	67-127	0	25	
75-25-2	Bromoform	210	216	224	**103**	**107**	65-149	4	25	
100-42-5	Styrene	202	219	221	**108**	**109**	76-132	0.9	25	
95-47-6	o-Xylene	208	215	214	**103**	**103**	69-124	0	25	
111-84-2	n-Nonane	208	222	218	**107**	**105**	64-127	2	25	
79-34-5	1,1,2,2-Tetrachloroethane	208	220	220	**106**	**106**	69-128	0	25	
98-82-8	Cumene	206	215	216	**104**	**105**	69-125	1	25	
80-56-8	alpha-Pinene	210	226	227	**108**	**108**	68-129	0	25	
103-65-1	n-Propylbenzene	208	215	214	**103**	**103**	70-127	0	25	
622-96-8	4-Ethyltoluene	208	227	227	**109**	**109**	69-127	0	25	
108-67-8	1,3,5-Trimethylbenzene	208	226	226	**109**	**109**	66-129	0	25	
95-63-6	1,2,4-Trimethylbenzene	206	244	240	**118**	**117**	63-142	0.9	25	
100-44-7	Benzyl Chloride	416	432	432	**104**	**104**	73-145	0	25	
541-73-1	1,3-Dichlorobenzene	208	234	232	**113**	**112**	67-136	0.9	25	
106-46-7	1,4-Dichlorobenzene	210	213	213	**101**	**101**	63-134	0	25	
95-50-1	1,2-Dichlorobenzene	210	233	231	**111**	**110**	64-139	0.9	25	
5989-27-5	d-Limonene	206	255	252	**124**	**122**	63-137	2	25	
96-12-8	1,2-Dibromo-3-chloropropane	404	445	446	**110**	**110**	72-145	0	25	
120-82-1	1,2,4-Trichlorobenzene	420	476	473	**113**	**113**	62-154	0	25	
91-20-3	Naphthalene	210	214	215	**102**	**102**	62-156	0	25	
87-68-3	Hexachlorobutadiene	212	213	215	**100**	**101**	55-142	1	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

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LABORATORY REPORT

January 14, 2022

Collin Creel
Environmental Management Services, Inc.
PO Box 15369
Hattiesburg, MS 39402

RE: SVE Performance Monitoring / KUH0-21-010

Dear Collin:

Enclosed are the results of the samples submitted to our laboratory on January 3, 2022. For your reference, these analyses have been assigned our service request number P2200013.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

By Sue Anderson at 3:30 pm, Jan 14, 2022

Sue Anderson
Project Manager

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
www.alsglobal.com

Client: Environmental Management Services, Inc. Service Request No: P2200013
Project: SVE Performance Monitoring / KUH0-21-010

CASE NARRATIVE

The samples were received intact under chain of custody on January 3, 2022 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Volatile Organic Compound Analysis

The samples were analyzed for volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. This procedure is described in laboratory SOP VOA-TO15. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. This method is included on the laboratory's NELAP and DoD-ELAP scope of accreditation. Any analytes flagged with an X are not included on the NELAP or DoD-ELAP accreditation.

The upper control criterion was exceeded for alpha-pinene in the Laboratory Control Sample (LCS) and Duplicate Laboratory Sample (DLCS) analyzed on January 4, 2022 and in the Continuing Calibration Verification (CCV), Laboratory Control Samples (LCS) and Duplicate Laboratory Samples (DLCS) analyzed on January 5, 2022. Therefore, a potential for a high bias exists for those associated sample concentrations reported with positive results. The data has been qualified accordingly.

The containers were cleaned, prior to sampling, down to the method reporting limit (MRL) reported for this project. For projects requiring DoD QSM 5.3 compliance canisters were cleaned to <1/2 the MRL. Please note, projects which require reporting below the MRL could have results between the MRL and method detection limit (MDL) that are biased high.

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ALS Environmental – Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
Alaska DEC	http://dec.alaska.gov/eh/lab.aspx	17-019
Arizona DHS	http://www.azdhs.gov/preparedness/state-laboratory/lab-licensure-certification/index.php#laboratory-licensure-home	AZ0694
Florida DOH (NELAP)	http://www.floridahealth.gov/licensing-and-regulation/environmental-laboratories/index.html	E871020
Louisiana DEQ (NELAP)	http://www.deq.louisiana.gov/page/la-lab-accreditation	05071
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/professionals/labCert.shtml	2018027
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	1776326
New Jersey DEP (NELAP)	http://www.nj.gov/dep/enforcement/oqa.html	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://www.oregon.gov/oha/ph/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	4068-008
Pennsylvania DEP	http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx	68-03307 (Registration)
PJLA (DoD ELAP)	http://www.pjlabs.com/search-accredited-labs	65818 (Testing)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/agency/qa/env_lab_accreditation.html	T104704413-19-10
Utah DOH (NELAP)	http://health.utah.gov/lab/lab_cert_env	CA016272019-10
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: Environmental Management Services, Inc. Service Request: P2200013

Project ID: SVE Performance Monitoring / KUH0-21-010

Date Received: 1/3/2022

Time Received: 09:00

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pfl (psig)	TO-15 - VOC Cans
Pre Carbon	P2200013-001	Air	12/14/2021	12:14	1SC00546	-0.62	6.73	X
Pre Carbon 1	P2200013-002	Air	12/14/2021	12:16	1SC01294	-1.20	6.55	X
Post Carbon 2	P2200013-003	Air	12/14/2021	12:18	1SS00721	-1.24	6.34	X
SVE-EXT-01 @ manifold	P2200013-004	Air	12/14/2021	12:53	1SC01023	-3.04	6.68	X
SVE-EXT-02 @ manifold	P2200013-005	Air	12/14/2021	12:55	1SC01125	-4.83	6.00	X
SVE-EXT-03 @ manifold	P2200013-006	Air	12/14/2021	12:58	1SC00005	-4.05	6.95	X

Air - Chain of Custody Record & Analytical Service Request

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day-Standard

ALS Project No. R22-00013

Company Name & Address (Reporting Information)
EMS, Inc.
PO Box 1536
Hattiesburg, MS 39404

Project Name: SVE Performance Monitoring
Project Number: KUHO-21-010
P.O. # / Billing Information: KUHO-21-010/Same as reporting

Project Manager: Collin Creel
Phone: 9855160142
Fax:
Email Address for Result Reporting: ccreel@env-mgt.com
Sampler (Print & Sign): Collin Creel

ALS Contact:

Analysis Method

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	TO15		Comments e.g. Actual Preservative or specific instructions
Pre Carbon	1	12/14/21	12:14	ISC06916		-30	0	1L	X		
Post Carbon 1	2	12/14/21	12:16	ISC01794		-30	0	1L	X		
Post Carbon 2	3	12/14/21	12:18	ISC00721		-28	0	1L	X		
SVE-EXT-01@manifold	4	12/14/21	12:53	ISC01023		-30	-6	1L	X		
SVE-EXT-02@manifold	5	12/14/21	12:55	ISC01125		-30	-6	1L	X		
SVE-EXT-03@manifold	6	12/14/21	12:58	ISC00005		-30	-6	1L	X		

Report Tier Levels - please select
Tier I - Results (Default if not specified) ____ Tier III (Results + QC & Calibration Summaries) ____
Tier II (Results + QC Summaries) ____ Tier IV (Data Validation Package) 10% Surcharge ____

EDD required Yes / No
Type: _____ Units: _____

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	12/09/21	12:00	- Fed Ex -		
Relinquished by: (Signature) - Fed Ex -	Date:	Time:	Received by: (Signature)	Date: 12-13-21	Time: 0800

Cooler / Blank Temperature ____ °C

ALS Environmental

Sample Acceptance Check Form

Client: Environmental Management Services, Inc. Work order: P2200013

Project: SVE Performance Monitoring / KUH0-21-010

Sample(s) received on: 1/3/22 Date opened: 1/3/22 by: ADAVID

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Did **sample containers** arrive in good condition?	☒	☐	☐
3	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
4	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
5	Was **sample volume** received adequate for analysis?	☒	☐	☐
6	Are samples within specified holding times?	☒	☐	☐
7	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
8	Were **custody seals** on outside of cooler/Box/Container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
9	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
10	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
11	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P2200013-001.01	1.0 L Source Can					
P2200013-002.01	1.0 L Source Can					
P2200013-003.01	1.0 L Source Silonite Canister					
P2200013-004.01	1.0 L Source Can					
P2200013-005.01	1.0 L Source Can					
P2200013-006.01	1.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers):

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Pre Carbon** ALS Project ID: P2200013
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200013-001

Test Code: EPA TO-15 Date Collected: 12/14/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 1/3/22
Analyst: Simon Cao Date Analyzed: 1/4 - 1/5/22
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes: 0.040 Liter(s)
Container ID: 1SC00546

Initial Pressure (psig): -0.62 Final Pressure (psig): 6.73

Canister Dilution Factor: 1.52

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	**91**	2.0	0.49	**53**	1.1	0.29	
75-71-8	Dichlorodifluoromethane (CFC 12)	**3.3**	2.0	0.33	**0.68**	0.41	0.067	**B**
74-87-3	Chloromethane	**2.7**	1.9	0.33	**1.3**	0.94	0.16	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	**0.49**	2.1	0.32	**0.070**	0.29	0.046	**J**
75-01-4	Vinyl Chloride	ND	2.0	0.22	ND	0.77	0.085	
106-99-0	1,3-Butadiene	ND	2.0	0.33	ND	0.89	0.15	
74-83-9	Bromomethane	**0.83**	1.9	0.28	**0.21**	0.50	0.072	**J**
75-00-3	Chloroethane	**0.54**	1.9	0.25	**0.20**	0.73	0.095	**J**
64-17-5	Ethanol	**77**	19	1.4	**41**	10	0.75	
75-05-8	Acetonitrile	**0.95**	3.8	0.49	**0.56**	2.3	0.29	**J**
107-02-8	Acrolein	**3.4**	3.8	0.57	**1.5**	1.7	0.25	**J**
67-64-1	Acetone	**79**	20	4.6	**33**	8.3	1.9	
75-69-4	Trichlorofluoromethane (CFC 11)	**1.4**	2.0	0.31	**0.25**	0.35	0.055	**J**
67-63-0	2-Propanol (Isopropyl Alcohol)	**5.6**	3.8	0.84	**2.3**	1.5	0.34	
107-13-1	Acrylonitrile	ND	3.8	0.42	ND	1.8	0.19	
75-35-4	1,1-Dichloroethene	**92**	2.1	0.28	**23**	0.52	0.071	**B**
75-09-2	Methylene Chloride	ND	2.0	0.57	ND	0.57	0.16	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.0	0.27	ND	0.64	0.087	
76-13-1	Trichlorotrifluoroethane (CFC 113)	**1.3**	2.1	0.29	**0.17**	0.27	0.038	**J**
75-15-0	Carbon Disulfide	**3.7**	4.2	0.61	**1.2**	1.3	0.20	**J**
156-60-5	trans-1,2-Dichloroethene	ND	2.0	0.28	ND	0.51	0.071	
75-34-3	1,1-Dichloroethane	**2.2**	2.0	0.30	**0.54**	0.50	0.073	
1634-04-4	Methyl tert-Butyl Ether	ND	2.0	0.24	ND	0.56	0.066	
108-05-4	Vinyl Acetate	ND	19	4.6	ND	5.4	1.3	
78-93-3	2-Butanone (MEK)	**19**	3.8	0.42	**6.6**	1.3	0.14	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

B = Analyte detected in both the sample and associated method blank.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Pre Carbon** ALS Project ID: P2200013
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200013-001

Test Code: EPA TO-15 Date Collected: 12/14/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 1/3/22
Analyst: Simon Cao Date Analyzed: 1/4 - 1/5/22
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes: 0.040 Liter(s)
Container ID: 1SC00546

Initial Pressure (psig): -0.62 Final Pressure (psig): 6.73

Canister Dilution Factor: 1.52

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.0	0.29	ND	0.50	0.072	
141-78-6	Ethyl Acetate	**1.2**	8.0	1.1	**0.34**	2.2	0.30	**J**
110-54-3	n-Hexane	ND	2.0	0.42	ND	0.57	0.12	
67-66-3	Chloroform	**1.5**	2.1	0.27	**0.31**	0.42	0.055	**J**
109-99-9	Tetrahydrofuran (THF)	**4.4**	3.8	0.25	**1.5**	1.3	0.086	
107-06-2	1,2-Dichloroethane	**0.38**	2.0	0.22	**0.095**	0.50	0.055	**J**
71-55-6	1,1,1-Trichloroethane	**25**	2.0	0.25	**4.6**	0.36	0.046	
71-43-2	Benzene	**1.5**	1.9	0.29	**0.47**	0.59	0.092	**J**
56-23-5	Carbon Tetrachloride	**0.48**	1.9	0.28	**0.076**	0.30	0.045	**J**
110-82-7	Cyclohexane	ND	4.2	0.57	ND	1.2	0.17	
78-87-5	1,2-Dichloropropane	ND	1.9	0.25	ND	0.41	0.054	
75-27-4	Bromodichloromethane	ND	2.0	0.29	ND	0.30	0.044	
79-01-6	Trichloroethene	ND	2.0	0.27	ND	0.37	0.051	
123-91-1	1,4-Dioxane	**1,200**	20	2.4	**340**	5.5	0.66	**D**
80-62-6	Methyl Methacrylate	ND	4.2	0.72	ND	1.0	0.18	
142-82-5	n-Heptane	**1.3**	2.0	0.32	**0.32**	0.49	0.079	**J**
10061-01-5	cis-1,3-Dichloropropene	ND	1.9	0.32	ND	0.42	0.070	
108-10-1	4-Methyl-2-pentanone	**3.0**	4.2	0.28	**0.72**	1.0	0.068	**J**
10061-02-6	trans-1,3-Dichloropropene	ND	1.9	0.42	ND	0.43	0.092	
79-00-5	1,1,2-Trichloroethane	**0.74**	2.0	0.21	**0.14**	0.36	0.038	**J**
108-88-3	Toluene	**8.4**	2.0	0.25	**2.2**	0.52	0.066	
591-78-6	2-Hexanone	**1.2**	4.2	0.25	**0.30**	1.0	0.061	**J**
124-48-1	Dibromochloromethane	ND	2.0	0.27	ND	0.24	0.031	
106-93-4	1,2-Dibromoethane	ND	2.0	0.24	ND	0.26	0.031	
123-86-4	n-Butyl Acetate	**1.6**	4.2	0.28	**0.34**	0.88	0.058	**J**

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
D = The reported result is from a dilution.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Pre Carbon** ALS Project ID: P2200013
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200013-001

Test Code: EPA TO-15 Date Collected: 12/14/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 1/3/22
Analyst: Simon Cao Date Analyzed: 1/4 - 1/5/22
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes: 0.040 Liter(s)
Container ID: 1SC00546

Initial Pressure (psig): -0.62 Final Pressure (psig): 6.73

Canister Dilution Factor: 1.52

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	**0.93**	2.0	0.46	**0.20**	0.43	0.098	**J**
127-18-4	Tetrachloroethene	**5.5**	2.0	0.26	**0.81**	0.29	0.039	
108-90-7	Chlorobenzene	ND	2.0	0.27	ND	0.43	0.059	
100-41-4	Ethylbenzene	**4.0**	2.0	0.29	**0.92**	0.46	0.066	
179601-23-1	m,p-Xylenes	**17**	4.2	0.53	**4.0**	0.96	0.12	
75-25-2	Bromoform	ND	2.0	0.42	ND	0.19	0.040	
100-42-5	Styrene	**0.33**	1.9	0.33	**0.079**	0.45	0.077	**J**
95-47-6	o-Xylene	**6.6**	2.0	0.29	**1.5**	0.46	0.067	
111-84-2	n-Nonane	**0.78**	2.0	0.34	**0.15**	0.38	0.064	**J**
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.28	ND	0.29	0.041	
98-82-8	Cumene	**0.41**	2.0	0.29	**0.083**	0.40	0.060	**J**
80-56-8	alpha-Pinene	**2.5**	2.1	0.31	**0.45**	0.37	0.056	
103-65-1	n-Propylbenzene	**0.70**	2.0	0.29	**0.14**	0.41	0.060	**J**
622-96-8	4-Ethyltoluene	**0.84**	2.0	0.32	**0.17**	0.41	0.066	**J**
108-67-8	1,3,5-Trimethylbenzene	**1.2**	2.0	0.29	**0.23**	0.40	0.060	**J**
95-63-6	1,2,4-Trimethylbenzene	**4.3**	2.0	0.28	**0.88**	0.40	0.057	
100-44-7	Benzyl Chloride	ND	4.2	0.46	ND	0.81	0.088	
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.30	ND	0.33	0.051	
106-46-7	1,4-Dichlorobenzene	**0.57**	2.0	0.31	**0.094**	0.33	0.052	**J**
95-50-1	1,2-Dichlorobenzene	ND	2.0	0.30	ND	0.34	0.050	
5989-27-5	d-Limonene	**4.4**	1.9	0.42	**0.78**	0.34	0.075	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.8	0.38	ND	0.39	0.039	
120-82-1	1,2,4-Trichlorobenzene	ND	4.2	0.49	ND	0.56	0.067	
91-20-3	Naphthalene	**2.8**	2.0	0.49	**0.53**	0.38	0.094	
87-68-3	Hexachlorobutadiene	ND	2.0	0.42	ND	0.19	0.039	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Pre Carbon 1** ALS Project ID: P2200013
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200013-002

Test Code: EPA TO-15 Date Collected: 12/14/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 1/3/22
Analyst: Simon Cao Date Analyzed: 1/4/22
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC01294

Initial Pressure (psig): -1.20 Final Pressure (psig): 6.55

Canister Dilution Factor: 1.57

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	**340**	2.0	0.51	**200**	1.2	0.30	
75-71-8	Dichlorodifluoromethane (CFC 12)	**3.7**	2.1	0.34	**0.74**	0.42	0.069	**B**
74-87-3	Chloromethane	**0.71**	2.0	0.34	**0.35**	0.97	0.16	**J**
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.1	0.33	ND	0.30	0.047	
75-01-4	Vinyl Chloride	ND	2.0	0.22	ND	0.80	0.088	
106-99-0	1,3-Butadiene	ND	2.0	0.35	ND	0.92	0.16	
74-83-9	Bromomethane	ND	2.0	0.29	ND	0.52	0.075	
75-00-3	Chloroethane	ND	2.0	0.26	ND	0.76	0.098	
64-17-5	Ethanol	**41**	20	1.5	**22**	10	0.77	
75-05-8	Acetonitrile	**0.66**	3.9	0.51	**0.39**	2.3	0.30	**J**
107-02-8	Acrolein	**1.1**	3.9	0.59	**0.50**	1.7	0.26	**J**
67-64-1	Acetone	**80**	20	4.7	**34**	8.6	2.0	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	2.0	0.32	ND	0.36	0.057	
67-63-0	2-Propanol (Isopropyl Alcohol)	**1.5**	3.9	0.86	**0.61**	1.6	0.35	**J**
107-13-1	Acrylonitrile	ND	3.9	0.43	ND	1.8	0.20	
75-35-4	1,1-Dichloroethene	ND	2.1	0.29	ND	0.53	0.073	
75-09-2	Methylene Chloride	**4.6**	2.0	0.59	**1.3**	0.59	0.17	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.1	0.28	ND	0.66	0.090	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	2.1	0.30	ND	0.28	0.039	
75-15-0	Carbon Disulfide	**2.3**	4.3	0.63	**0.73**	1.4	0.20	**J**
156-60-5	trans-1,2-Dichloroethene	ND	2.1	0.29	ND	0.52	0.073	
75-34-3	1,1-Dichloroethane	ND	2.1	0.31	ND	0.51	0.076	
1634-04-4	Methyl tert-Butyl Ether	ND	2.1	0.25	ND	0.58	0.069	
108-05-4	Vinyl Acetate	ND	20	4.7	ND	5.6	1.3	
78-93-3	2-Butanone (MEK)	**3.6**	3.9	0.43	**1.2**	1.3	0.15	**J**

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

B = Analyte detected in both the sample and associated method blank.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Pre Carbon 1** ALS Project ID: P2200013
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200013-002

Test Code: EPA TO-15 Date Collected: 12/14/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 1/3/22
Analyst: Simon Cao Date Analyzed: 1/4/22
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC01294

Initial Pressure (psig): -1.20 Final Pressure (psig): 6.55

Canister Dilution Factor: 1.57

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.0	0.29	ND	0.51	0.074	
141-78-6	Ethyl Acetate	ND	8.2	1.1	ND	2.3	0.31	
110-54-3	n-Hexane	ND	2.1	0.43	ND	0.59	0.12	
67-66-3	Chloroform	ND	2.1	0.28	ND	0.43	0.057	
109-99-9	Tetrahydrofuran (THF)	ND	3.9	0.26	ND	1.3	0.089	
107-06-2	1,2-Dichloroethane	ND	2.1	0.23	ND	0.51	0.057	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.26	ND	0.37	0.047	
71-43-2	Benzene	**230**	2.0	0.30	**72**	0.61	0.095	
56-23-5	Carbon Tetrachloride	ND	2.0	0.29	ND	0.31	0.046	
110-82-7	Cyclohexane	**23**	4.3	0.59	**6.7**	1.3	0.17	
78-87-5	1,2-Dichloropropane	ND	2.0	0.26	ND	0.42	0.056	
75-27-4	Bromodichloromethane	ND	2.1	0.30	ND	0.31	0.045	
79-01-6	Trichloroethene	ND	2.0	0.28	ND	0.38	0.053	
123-91-1	1,4-Dioxane	**130**	2.0	0.25	**36**	0.57	0.069	
80-62-6	Methyl Methacrylate	ND	4.3	0.75	ND	1.1	0.18	
142-82-5	n-Heptane	**0.85**	2.1	0.33	**0.21**	0.51	0.081	**J**
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.33	ND	0.43	0.072	
108-10-1	4-Methyl-2-pentanone	ND	4.3	0.29	ND	1.1	0.070	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.43	ND	0.44	0.095	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.21	ND	0.37	0.039	
108-88-3	Toluene	**1.9**	2.0	0.26	**0.51**	0.54	0.068	**J**
591-78-6	2-Hexanone	ND	4.3	0.26	ND	1.1	0.063	
124-48-1	Dibromochloromethane	ND	2.1	0.27	ND	0.24	0.032	
106-93-4	1,2-Dibromoethane	ND	2.0	0.24	ND	0.27	0.032	
123-86-4	n-Butyl Acetate	ND	4.3	0.29	ND	0.91	0.060	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **Pre Carbon 1** ALS Project ID: P2200013

Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200013-002

Test Code:	EPA TO-15	Date Collected:	12/14/21
Instrument ID:	Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9	Date Received:	1/3/22
Analyst:	Simon Cao	Date Analyzed:	1/4/22
Sample Type:	1.0 L Summa Canister	Volume(s) Analyzed:	0.40 Liter(s)
Test Notes:			
Container ID:	1SC01294		

Initial Pressure (psig): -1.20 Final Pressure (psig): 6.55

Canister Dilution Factor: 1.57

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	ND	2.1	0.47	ND	0.45	0.10	
127-18-4	Tetrachloroethene	**33**	2.0	0.27	**4.9**	0.30	0.040	
108-90-7	Chlorobenzene	ND	2.0	0.28	ND	0.44	0.061	
100-41-4	Ethylbenzene	ND	2.0	0.29	ND	0.47	0.068	
179601-23-1	m,p-Xylenes	ND	4.3	0.55	ND	0.99	0.13	
75-25-2	Bromoform	ND	2.0	0.43	ND	0.20	0.042	
100-42-5	Styrene	ND	2.0	0.34	ND	0.46	0.079	
95-47-6	o-Xylene	ND	2.0	0.30	ND	0.47	0.070	
111-84-2	n-Nonane	ND	2.0	0.35	ND	0.39	0.067	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.29	ND	0.30	0.042	
98-82-8	Cumene	ND	2.0	0.30	ND	0.42	0.062	
80-56-8	alpha-Pinene	**1.0**	2.1	0.32	**0.18**	0.38	0.058	**J**
103-65-1	n-Propylbenzene	ND	2.1	0.30	ND	0.42	0.062	
622-96-8	4-Ethyltoluene	ND	2.1	0.33	ND	0.42	0.068	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.30	ND	0.42	0.062	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.29	ND	0.42	0.059	
100-44-7	Benzyl Chloride	ND	4.3	0.47	ND	0.83	0.091	
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.31	ND	0.34	0.052	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.32	ND	0.34	0.054	
95-50-1	1,2-Dichlorobenzene	ND	2.1	0.31	ND	0.35	0.052	
5989-27-5	d-Limonene	**1.7**	2.0	0.43	**0.31**	0.35	0.078	**J**
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.9	0.39	ND	0.41	0.041	
120-82-1	1,2,4-Trichlorobenzene	ND	4.3	0.51	ND	0.58	0.069	
91-20-3	Naphthalene	ND	2.0	0.51	ND	0.39	0.097	
87-68-3	Hexachlorobutadiene	ND	2.0	0.43	ND	0.19	0.040	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Post Carbon 2** ALS Project ID: P2200013
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200013-003

Test Code: EPA TO-15 Date Collected: 12/14/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 1/3/22
Analyst: Simon Cao Date Analyzed: 1/5/22
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SS00721

Initial Pressure (psig): -1.24 Final Pressure (psig): 6.34

Canister Dilution Factor: 1.56

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	**250**	2.0	0.51	**140**	1.2	0.29	
75-71-8	Dichlorodifluoromethane (CFC 12)	**3.0**	2.1	0.34	**0.61**	0.42	0.069	
74-87-3	Chloromethane	**0.59**	2.0	0.34	**0.29**	0.96	0.16	**J**
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.1	0.33	ND	0.30	0.047	
75-01-4	Vinyl Chloride	ND	2.0	0.22	ND	0.79	0.087	
106-99-0	1,3-Butadiene	ND	2.0	0.34	ND	0.92	0.16	
74-83-9	Bromomethane	ND	2.0	0.29	ND	0.51	0.074	
75-00-3	Chloroethane	ND	2.0	0.26	ND	0.75	0.098	
64-17-5	Ethanol	**150**	20	1.4	**82**	10	0.77	
75-05-8	Acetonitrile	**2.5**	3.9	0.51	**1.5**	2.3	0.30	**J**
107-02-8	Acrolein	**1.0**	3.9	0.59	**0.44**	1.7	0.26	**J**
67-64-1	Acetone	ND	20	4.7	ND	8.5	2.0	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	2.0	0.32	ND	0.36	0.056	
67-63-0	2-Propanol (Isopropyl Alcohol)	**2.5**	3.9	0.86	**1.0**	1.6	0.35	**J**
107-13-1	Acrylonitrile	ND	3.9	0.43	ND	1.8	0.20	
75-35-4	1,1-Dichloroethene	ND	2.1	0.29	ND	0.53	0.073	
75-09-2	Methylene Chloride	ND	2.0	0.59	ND	0.58	0.17	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.1	0.28	ND	0.66	0.090	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	2.1	0.30	ND	0.27	0.039	
75-15-0	Carbon Disulfide	**9.9**	4.3	0.62	**3.2**	1.4	0.20	
156-60-5	trans-1,2-Dichloroethene	ND	2.1	0.29	ND	0.52	0.073	
75-34-3	1,1-Dichloroethane	ND	2.1	0.30	ND	0.51	0.075	
1634-04-4	Methyl tert-Butyl Ether	ND	2.1	0.25	ND	0.57	0.068	
108-05-4	Vinyl Acetate	ND	20	4.7	ND	5.5	1.3	
78-93-3	2-Butanone (MEK)	**1.6**	3.9	0.43	**0.55**	1.3	0.15	**J**

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **Post Carbon 2** ALS Project ID: P2200013

Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200013-003

Test Code:	EPA TO-15	Date Collected:	12/14/21
Instrument ID:	Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9	Date Received:	1/3/22
Analyst:	Simon Cao	Date Analyzed:	1/5/22
Sample Type:	1.0 L Silonite Summa Canister	Volume(s) Analyzed:	0.40 Liter(s)
Test Notes:			
Container ID:	1SS00721		

Initial Pressure (psig): -1.24 Final Pressure (psig): 6.34

Canister Dilution Factor: 1.56

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.0	0.29	ND	0.51	0.074	
141-78-6	Ethyl Acetate	**7.0**	8.2	1.1	**1.9**	2.3	0.30	**J**
110-54-3	n-Hexane	ND	2.1	0.43	ND	0.59	0.12	
67-66-3	Chloroform	ND	2.1	0.28	ND	0.43	0.057	
109-99-9	Tetrahydrofuran (THF)	**0.98**	3.9	0.26	**0.33**	1.3	0.089	**J**
107-06-2	1,2-Dichloroethane	ND	2.1	0.23	ND	0.51	0.057	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.26	ND	0.37	0.047	
71-43-2	Benzene	**120**	2.0	0.30	**38**	0.61	0.094	
56-23-5	Carbon Tetrachloride	ND	2.0	0.29	ND	0.31	0.046	
110-82-7	Cyclohexane	**55**	4.3	0.59	**16**	1.2	0.17	
78-87-5	1,2-Dichloropropane	ND	2.0	0.26	ND	0.42	0.056	
75-27-4	Bromodichloromethane	ND	2.1	0.30	ND	0.31	0.045	
79-01-6	Trichloroethene	**0.67**	2.0	0.28	**0.12**	0.38	0.052	**J**
123-91-1	1,4-Dioxane	**3.1**	2.0	0.25	**0.86**	0.56	0.068	
80-62-6	Methyl Methacrylate	ND	4.3	0.74	ND	1.0	0.18	
142-82-5	n-Heptane	ND	2.1	0.33	ND	0.50	0.081	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.32	ND	0.43	0.071	
108-10-1	4-Methyl-2-pentanone	ND	4.3	0.28	ND	1.0	0.069	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.43	ND	0.44	0.095	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.21	ND	0.37	0.039	
108-88-3	Toluene	**1.5**	2.0	0.25	**0.39**	0.54	0.067	**J**
591-78-6	2-Hexanone	ND	4.3	0.26	ND	1.0	0.063	
124-48-1	Dibromochloromethane	ND	2.1	0.27	ND	0.24	0.032	
106-93-4	1,2-Dibromoethane	ND	2.0	0.24	ND	0.26	0.031	
123-86-4	n-Butyl Acetate	ND	4.3	0.28	ND	0.90	0.060	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Post Carbon 2** ALS Project ID: P2200013
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200013-003

Test Code: EPA TO-15 Date Collected: 12/14/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 1/3/22
Analyst: Simon Cao Date Analyzed: 1/5/22
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SS00721

Initial Pressure (psig): -1.24 Final Pressure (psig): 6.34

Canister Dilution Factor: 1.56

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	ND	2.1	0.47	ND	0.44	0.10	
127-18-4	Tetrachloroethene	**2.2**	2.0	0.27	**0.32**	0.30	0.040	
108-90-7	Chlorobenzene	ND	2.0	0.28	ND	0.44	0.060	
100-41-4	Ethylbenzene	ND	2.0	0.29	ND	0.47	0.067	
179601-23-1	m,p-Xylenes	ND	4.3	0.55	ND	0.99	0.13	
75-25-2	Bromoform	ND	2.0	0.43	ND	0.20	0.042	
100-42-5	Styrene	ND	2.0	0.34	ND	0.46	0.079	
95-47-6	o-Xylene	ND	2.0	0.30	ND	0.47	0.069	
111-84-2	n-Nonane	ND	2.0	0.35	ND	0.39	0.066	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.29	ND	0.30	0.042	
98-82-8	Cumene	ND	2.0	0.30	ND	0.41	0.061	
80-56-8	alpha-Pinene	**0.56**	2.1	0.32	**0.10**	0.38	0.057	**J, V**
103-65-1	n-Propylbenzene	ND	2.1	0.30	ND	0.42	0.061	
622-96-8	4-Ethyltoluene	ND	2.1	0.33	ND	0.42	0.067	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.30	ND	0.41	0.061	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.29	ND	0.41	0.059	
100-44-7	Benzyl Chloride	ND	4.3	0.47	ND	0.83	0.090	
541-73-1	1,3-Dichlorobenzene	ND	2.0	0.31	ND	0.34	0.052	
106-46-7	1,4-Dichlorobenzene	ND	2.0	0.32	ND	0.34	0.053	
95-50-1	1,2-Dichlorobenzene	ND	2.1	0.31	ND	0.34	0.051	
5989-27-5	d-Limonene	**2.5**	2.0	0.43	**0.44**	0.35	0.077	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.9	0.39	ND	0.40	0.040	
120-82-1	1,2,4-Trichlorobenzene	ND	4.3	0.51	ND	0.58	0.068	
91-20-3	Naphthalene	**1.0**	2.0	0.51	**0.20**	0.39	0.097	**J**
87-68-3	Hexachlorobutadiene	ND	2.0	0.43	ND	0.19	0.040	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
V = The continuing calibration verification standard was outside (biased high) the specified limits for this compound.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-EXT-01 @ manifold** ALS Project ID: P2200013
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200013-004

Test Code: EPA TO-15 Date Collected: 12/14/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 1/3/22
Analyst: Simon Cao Date Analyzed: 1/5/22
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC01023

Initial Pressure (psig): -3.04 Final Pressure (psig): 6.68

Canister Dilution Factor: 1.83

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	**39**	2.4	0.59	**23**	1.4	0.35	
75-71-8	Dichlorodifluoromethane (CFC 12)	**3.6**	2.4	0.40	**0.72**	0.49	0.081	
74-87-3	Chloromethane	**0.44**	2.3	0.39	**0.21**	1.1	0.19	**J**
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.5	0.38	ND	0.35	0.055	
75-01-4	Vinyl Chloride	ND	2.4	0.26	ND	0.93	0.10	
106-99-0	1,3-Butadiene	ND	2.4	0.40	ND	1.1	0.18	
74-83-9	Bromomethane	ND	2.3	0.34	ND	0.60	0.087	
75-00-3	Chloroethane	ND	2.3	0.30	ND	0.88	0.11	
64-17-5	Ethanol	**63**	23	1.7	**34**	12	0.90	
75-05-8	Acetonitrile	ND	4.6	0.59	ND	2.7	0.35	
107-02-8	Acrolein	**1.1**	4.6	0.69	**0.48**	2.0	0.30	**J**
67-64-1	Acetone	**37**	24	5.5	**15**	10	2.3	
75-69-4	Trichlorofluoromethane (CFC 11)	**1.3**	2.4	0.37	**0.24**	0.42	0.066	**J**
67-63-0	2-Propanol (Isopropyl Alcohol)	**13**	4.6	1.0	**5.3**	1.9	0.41	
107-13-1	Acrylonitrile	ND	4.6	0.50	ND	2.1	0.23	
75-35-4	1,1-Dichloroethene	**39**	2.5	0.34	**9.9**	0.62	0.085	
75-09-2	Methylene Chloride	ND	2.4	0.69	ND	0.69	0.20	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.4	0.33	ND	0.77	0.11	
76-13-1	Trichlorotrifluoroethane (CFC 113)	**1.6**	2.5	0.35	**0.21**	0.32	0.045	**J**
75-15-0	Carbon Disulfide	**2.6**	5.0	0.73	**0.84**	1.6	0.24	**J**
156-60-5	trans-1,2-Dichloroethene	ND	2.4	0.34	ND	0.61	0.085	
75-34-3	1,1-Dichloroethane	**0.93**	2.4	0.36	**0.23**	0.60	0.088	**J**
1634-04-4	Methyl tert-Butyl Ether	ND	2.4	0.29	ND	0.67	0.080	
108-05-4	Vinyl Acetate	ND	23	5.5	ND	6.5	1.6	
78-93-3	2-Butanone (MEK)	**11**	4.6	0.50	**3.8**	1.6	0.17	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-EXT-01 @ manifold** ALS Project ID: P2200013
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200013-004

Test Code: EPA TO-15 Date Collected: 12/14/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 1/3/22
Analyst: Simon Cao Date Analyzed: 1/5/22
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC01023

Initial Pressure (psig): -3.04 Final Pressure (psig): 6.68

Canister Dilution Factor: 1.83

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.4	0.34	ND	0.60	0.087	
141-78-6	Ethyl Acetate	**21**	9.6	1.3	**5.9**	2.7	0.36	
110-54-3	n-Hexane	ND	2.4	0.50	ND	0.69	0.14	
67-66-3	Chloroform	**0.85**	2.5	0.32	**0.17**	0.51	0.067	**J**
109-99-9	Tetrahydrofuran (THF)	**4.2**	4.6	0.31	**1.4**	1.6	0.10	**J**
107-06-2	1,2-Dichloroethane	ND	2.4	0.27	ND	0.60	0.067	
71-55-6	1,1,1-Trichloroethane	**27**	2.4	0.30	**4.9**	0.44	0.055	
71-43-2	Benzene	**1.0**	2.3	0.35	**0.33**	0.72	0.11	**J**
56-23-5	Carbon Tetrachloride	**0.40**	2.3	0.34	**0.064**	0.36	0.054	**J**
110-82-7	Cyclohexane	ND	5.0	0.69	ND	1.5	0.20	
78-87-5	1,2-Dichloropropane	ND	2.3	0.30	ND	0.50	0.065	
75-27-4	Bromodichloromethane	ND	2.4	0.35	ND	0.36	0.053	
79-01-6	Trichloroethene	ND	2.4	0.33	ND	0.44	0.061	
123-91-1	1,4-Dioxane	**360**	2.4	0.29	**100**	0.66	0.080	
80-62-6	Methyl Methacrylate	ND	5.0	0.87	ND	1.2	0.21	
142-82-5	n-Heptane	**1.2**	2.4	0.39	**0.29**	0.59	0.095	**J**
10061-01-5	cis-1,3-Dichloropropene	ND	2.3	0.38	ND	0.50	0.084	
108-10-1	4-Methyl-2-pentanone	**1.8**	5.0	0.33	**0.45**	1.2	0.082	**J**
10061-02-6	trans-1,3-Dichloropropene	ND	2.3	0.50	ND	0.51	0.11	
79-00-5	1,1,2-Trichloroethane	**0.29**	2.4	0.25	**0.053**	0.44	0.045	**J**
108-88-3	Toluene	**12**	2.4	0.30	**3.2**	0.63	0.079	
591-78-6	2-Hexanone	ND	5.0	0.30	ND	1.2	0.074	
124-48-1	Dibromochloromethane	ND	2.4	0.32	ND	0.28	0.038	
106-93-4	1,2-Dibromoethane	ND	2.4	0.28	ND	0.31	0.037	
123-86-4	n-Butyl Acetate	**1.7**	5.0	0.33	**0.36**	1.1	0.070	**J**

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-EXT-01 @ manifold** ALS Project ID: P2200013
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200013-004

Test Code: EPA TO-15 Date Collected: 12/14/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 1/3/22
Analyst: Simon Cao Date Analyzed: 1/5/22
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC01023

Initial Pressure (psig): -3.04 Final Pressure (psig): 6.68

Canister Dilution Factor: 1.83

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	**0.63**	2.4	0.55	**0.13**	0.52	0.12	**J**
127-18-4	Tetrachloroethene	**9.0**	2.4	0.32	**1.3**	0.35	0.047	
108-90-7	Chlorobenzene	ND	2.4	0.32	ND	0.52	0.071	
100-41-4	Ethylbenzene	**3.9**	2.4	0.34	**0.89**	0.55	0.079	
179601-23-1	m,p-Xylenes	**16**	5.0	0.64	**3.7**	1.2	0.15	
75-25-2	Bromoform	ND	2.4	0.50	ND	0.23	0.049	
100-42-5	Styrene	**0.50**	2.3	0.39	**0.12**	0.54	0.092	**J**
95-47-6	o-Xylene	**5.8**	2.4	0.35	**1.3**	0.55	0.081	
111-84-2	n-Nonane	**0.67**	2.4	0.41	**0.13**	0.45	0.078	**J**
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.4	0.34	ND	0.35	0.049	
98-82-8	Cumene	ND	2.4	0.35	ND	0.48	0.072	
80-56-8	alpha-Pinene	**2.5**	2.5	0.38	**0.45**	0.44	0.067	**V**
103-65-1	n-Propylbenzene	**0.54**	2.4	0.35	**0.11**	0.49	0.072	**J**
622-96-8	4-Ethyltoluene	**0.54**	2.4	0.39	**0.11**	0.49	0.079	**J**
108-67-8	1,3,5-Trimethylbenzene	**0.80**	2.4	0.35	**0.16**	0.48	0.072	**J**
95-63-6	1,2,4-Trimethylbenzene	**3.1**	2.4	0.34	**0.62**	0.48	0.069	
100-44-7	Benzyl Chloride	ND	5.0	0.55	ND	0.97	0.11	
541-73-1	1,3-Dichlorobenzene	ND	2.4	0.37	ND	0.40	0.061	
106-46-7	1,4-Dichlorobenzene	ND	2.4	0.38	ND	0.40	0.062	
95-50-1	1,2-Dichlorobenzene	ND	2.4	0.36	ND	0.40	0.060	
5989-27-5	d-Limonene	**4.5**	2.3	0.50	**0.82**	0.41	0.090	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.6	0.46	ND	0.47	0.047	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.59	ND	0.68	0.080	
91-20-3	Naphthalene	**2.7**	2.4	0.59	**0.51**	0.45	0.11	
87-68-3	Hexachlorobutadiene	ND	2.4	0.50	ND	0.22	0.047	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
V = The continuing calibration verification standard was outside (biased high) the specified limits for this compound.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-EXT-02 @ manifold** ALS Project ID: P2200013
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200013-005

Test Code: EPA TO-15 Date Collected: 12/14/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 1/3/22
Analyst: Simon Cao Date Analyzed: 1/5/22
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.040 Liter(s)
Test Notes:
Container ID: 1SC01125

Initial Pressure (psig): -4.83 Final Pressure (psig): 6.00

Canister Dilution Factor: 2.10

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	**20**	27	6.8	**11**	16	4.0	**J**
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	28	4.6	ND	5.6	0.92	
74-87-3	Chloromethane	ND	27	4.5	ND	13	2.2	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	28	4.4	ND	4.1	0.63	
75-01-4	Vinyl Chloride	ND	27	3.0	ND	11	1.2	
106-99-0	1,3-Butadiene	ND	27	4.6	ND	12	2.1	
74-83-9	Bromomethane	ND	27	3.9	ND	6.9	1.0	
75-00-3	Chloroethane	ND	27	3.5	ND	10	1.3	
64-17-5	Ethanol	ND	260	19	ND	140	10	
75-05-8	Acetonitrile	ND	53	6.8	ND	31	4.1	
107-02-8	Acrolein	ND	53	7.9	ND	23	3.4	
67-64-1	Acetone	ND	270	63	ND	110	27	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	27	4.3	ND	4.9	0.76	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	53	12	ND	21	4.7	
107-13-1	Acrylonitrile	ND	53	5.8	ND	24	2.7	
75-35-4	1,1-Dichloroethene	**290**	28	3.9	**74**	7.2	0.98	
75-09-2	Methylene Chloride	ND	27	7.9	ND	7.9	2.3	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	28	3.8	ND	8.9	1.2	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	28	4.0	ND	3.7	0.52	
75-15-0	Carbon Disulfide	**100**	58	8.4	**34**	19	2.7	
156-60-5	trans-1,2-Dichloroethene	ND	28	3.9	ND	7.0	0.98	
75-34-3	1,1-Dichloroethane	**6.7**	28	4.1	**1.7**	6.9	1.0	**J**
1634-04-4	Methyl tert-Butyl Ether	ND	28	3.3	ND	7.7	0.92	
108-05-4	Vinyl Acetate	ND	260	63	ND	75	18	
78-93-3	2-Butanone (MEK)	**8.0**	53	5.8	**2.7**	18	2.0	**J**

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-EXT-02 @ manifold** ALS Project ID: P2200013
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200013-005

Test Code: EPA TO-15 Date Collected: 12/14/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 1/3/22
Analyst: Simon Cao Date Analyzed: 1/5/22
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.040 Liter(s)
Test Notes:
Container ID: 1SC01125

Initial Pressure (psig): -4.83 Final Pressure (psig): 6.00

Canister Dilution Factor: 2.10

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	27	3.9	ND	6.9	0.99	
141-78-6	Ethyl Acetate	ND	110	15	ND	31	4.1	
110-54-3	n-Hexane	ND	28	5.8	ND	7.9	1.6	
67-66-3	Chloroform	ND	28	3.7	ND	5.8	0.76	
109-99-9	Tetrahydrofuran (THF)	ND	53	3.5	ND	18	1.2	
107-06-2	1,2-Dichloroethane	ND	28	3.1	ND	6.9	0.77	
71-55-6	1,1,1-Trichloroethane	**51**	27	3.5	**9.3**	5.0	0.64	
71-43-2	Benzene	**39**	26	4.0	**12**	8.2	1.3	
56-23-5	Carbon Tetrachloride	ND	26	3.9	ND	4.2	0.62	
110-82-7	Cyclohexane	ND	58	7.9	ND	17	2.3	
78-87-5	1,2-Dichloropropane	ND	26	3.5	ND	5.7	0.75	
75-27-4	Bromodichloromethane	ND	28	4.0	ND	4.2	0.60	
79-01-6	Trichloroethene	ND	27	3.8	ND	5.1	0.70	
123-91-1	1,4-Dioxane	**4,700**	27	3.3	**1,300**	7.6	0.92	
80-62-6	Methyl Methacrylate	ND	58	10	ND	14	2.4	
142-82-5	n-Heptane	ND	28	4.5	ND	6.8	1.1	
10061-01-5	cis-1,3-Dichloropropene	ND	26	4.4	ND	5.8	0.96	
108-10-1	4-Methyl-2-pentanone	ND	58	3.8	ND	14	0.94	
10061-02-6	trans-1,3-Dichloropropene	ND	27	5.8	ND	5.9	1.3	
79-00-5	1,1,2-Trichloroethane	ND	27	2.8	ND	5.0	0.52	
108-88-3	Toluene	ND	27	3.4	ND	7.2	0.91	
591-78-6	2-Hexanone	ND	58	3.5	ND	14	0.85	
124-48-1	Dibromochloromethane	ND	28	3.7	ND	3.3	0.43	
106-93-4	1,2-Dibromoethane	ND	27	3.3	ND	3.6	0.42	
123-86-4	n-Butyl Acetate	ND	58	3.8	ND	12	0.81	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-EXT-02 @ manifold** ALS Project ID: P2200013
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200013-005

Test Code: EPA TO-15 Date Collected: 12/14/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 1/3/22
Analyst: Simon Cao Date Analyzed: 1/5/22
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.040 Liter(s)
Test Notes:
Container ID: 1SC01125

Initial Pressure (psig): -4.83 Final Pressure (psig): 6.00

Canister Dilution Factor: 2.10

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	ND	28	6.3	ND	6.0	1.3	
127-18-4	Tetrachloroethene	**11**	27	3.6	**1.6**	4.0	0.53	**J**
108-90-7	Chlorobenzene	ND	27	3.7	ND	5.9	0.81	
100-41-4	Ethylbenzene	ND	27	3.9	ND	6.3	0.91	
179601-23-1	m,p-Xylenes	ND	58	7.4	ND	13	1.7	
75-25-2	Bromoform	ND	27	5.8	ND	2.6	0.56	
100-42-5	Styrene	ND	26	4.5	ND	6.2	1.1	
95-47-6	o-Xylene	ND	27	4.0	ND	6.3	0.93	
111-84-2	n-Nonane	ND	27	4.7	ND	5.2	0.89	
79-34-5	1,1,2,2-Tetrachloroethane	ND	27	3.9	ND	4.0	0.57	
98-82-8	Cumene	ND	27	4.0	ND	5.6	0.82	
80-56-8	alpha-Pinene	ND	28	4.3	ND	5.1	0.77	
103-65-1	n-Propylbenzene	ND	28	4.0	ND	5.7	0.82	
622-96-8	4-Ethyltoluene	ND	28	4.5	ND	5.7	0.91	
108-67-8	1,3,5-Trimethylbenzene	ND	27	4.0	ND	5.6	0.82	
95-63-6	1,2,4-Trimethylbenzene	ND	27	3.9	ND	5.6	0.79	
100-44-7	Benzyl Chloride	ND	58	6.3	ND	11	1.2	
541-73-1	1,3-Dichlorobenzene	ND	27	4.2	ND	4.5	0.70	
106-46-7	1,4-Dichlorobenzene	ND	27	4.3	ND	4.5	0.72	
95-50-1	1,2-Dichlorobenzene	ND	28	4.1	ND	4.6	0.69	
5989-27-5	d-Limonene	ND	26	5.8	ND	4.7	1.0	
96-12-8	1,2-Dibromo-3-chloropropane	ND	53	5.3	ND	5.4	0.54	
120-82-1	1,2,4-Trichlorobenzene	ND	58	6.8	ND	7.8	0.92	
91-20-3	Naphthalene	ND	27	6.8	ND	5.2	1.3	
87-68-3	Hexachlorobutadiene	ND	27	5.8	ND	2.6	0.54	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-EXT-03 @ manifold** ALS Project ID: P2200013
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200013-006

Test Code: EPA TO-15 Date Collected: 12/14/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 1/3/22
Analyst: Simon Cao Date Analyzed: 1/5/22
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC00005

Initial Pressure (psig): -4.05 Final Pressure (psig): 6.95

Canister Dilution Factor: 2.03

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	**50**	2.6	0.66	**29**	1.5	0.38	
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.4**	2.7	0.44	**0.49**	0.54	0.089	**J**
74-87-3	Chloromethane	**1.3**	2.6	0.44	**0.62**	1.3	0.21	**J**
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.7	0.43	ND	0.39	0.061	
75-01-4	Vinyl Chloride	ND	2.6	0.29	ND	1.0	0.11	
106-99-0	1,3-Butadiene	ND	2.6	0.45	ND	1.2	0.20	
74-83-9	Bromomethane	ND	2.6	0.38	ND	0.67	0.097	
75-00-3	Chloroethane	ND	2.6	0.33	ND	0.98	0.13	
64-17-5	Ethanol	**140**	25	1.9	**74**	13	1.0	
75-05-8	Acetonitrile	**0.84**	5.1	0.66	**0.50**	3.0	0.39	**J**
107-02-8	Acrolein	**3.3**	5.1	0.76	**1.5**	2.2	0.33	**J**
67-64-1	Acetone	**83**	26	6.1	**35**	11	2.6	
75-69-4	Trichlorofluoromethane (CFC 11)	**1.2**	2.6	0.41	**0.21**	0.47	0.073	**J**
67-63-0	2-Propanol (Isopropyl Alcohol)	**12**	5.1	1.1	**4.9**	2.1	0.45	
107-13-1	Acrylonitrile	ND	5.1	0.56	ND	2.3	0.26	
75-35-4	1,1-Dichloroethene	**11**	2.7	0.38	**2.8**	0.69	0.095	
75-09-2	Methylene Chloride	ND	2.6	0.76	ND	0.76	0.22	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.7	0.37	ND	0.86	0.12	
76-13-1	Trichlorotrifluoroethane (CFC 113)	**0.45**	2.7	0.39	**0.058**	0.36	0.050	**J**
75-15-0	Carbon Disulfide	**1.8**	5.6	0.81	**0.58**	1.8	0.26	**J**
156-60-5	trans-1,2-Dichloroethene	ND	2.7	0.38	ND	0.68	0.095	
75-34-3	1,1-Dichloroethane	ND	2.7	0.40	ND	0.66	0.098	
1634-04-4	Methyl tert-Butyl Ether	ND	2.7	0.32	ND	0.75	0.089	
108-05-4	Vinyl Acetate	ND	25	6.1	ND	7.2	1.7	
78-93-3	2-Butanone (MEK)	**27**	5.1	0.56	**9.3**	1.7	0.19	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-EXT-03 @ manifold** ALS Project ID: P2200013
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200013-006

Test Code: EPA TO-15 Date Collected: 12/14/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 1/3/22
Analyst: Simon Cao Date Analyzed: 1/5/22
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC00005

Initial Pressure (psig): -4.05 Final Pressure (psig): 6.95

Canister Dilution Factor: 2.03

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.6	0.38	ND	0.67	0.096	
141-78-6	Ethyl Acetate	**53**	11	1.4	**15**	3.0	0.39	
110-54-3	n-Hexane	**17**	2.7	0.56	**4.9**	0.76	0.16	
67-66-3	Chloroform	**0.78**	2.7	0.36	**0.16**	0.56	0.074	**J**
109-99-9	Tetrahydrofuran (THF)	**5.5**	5.1	0.34	**1.9**	1.7	0.12	
107-06-2	1,2-Dichloroethane	ND	2.7	0.30	ND	0.66	0.074	
71-55-6	1,1,1-Trichloroethane	**3.1**	2.6	0.33	**0.56**	0.48	0.061	
71-43-2	Benzene	**1.3**	2.5	0.39	**0.40**	0.79	0.12	**J**
56-23-5	Carbon Tetrachloride	ND	2.5	0.38	ND	0.40	0.060	
110-82-7	Cyclohexane	ND	5.6	0.76	ND	1.6	0.22	
78-87-5	1,2-Dichloropropane	ND	2.5	0.33	ND	0.55	0.073	
75-27-4	Bromodichloromethane	ND	2.7	0.39	ND	0.40	0.058	
79-01-6	Trichloroethene	ND	2.6	0.37	ND	0.49	0.068	
123-91-1	1,4-Dioxane	**260**	2.6	0.32	**72**	0.73	0.089	
80-62-6	Methyl Methacrylate	ND	5.6	0.96	ND	1.4	0.24	
142-82-5	n-Heptane	**2.1**	2.7	0.43	**0.51**	0.66	0.11	**J**
10061-01-5	cis-1,3-Dichloropropene	ND	2.5	0.42	ND	0.56	0.093	
108-10-1	4-Methyl-2-pentanone	**4.1**	5.6	0.37	**0.99**	1.4	0.090	**J**
10061-02-6	trans-1,3-Dichloropropene	ND	2.6	0.56	ND	0.57	0.12	
79-00-5	1,1,2-Trichloroethane	ND	2.6	0.27	ND	0.48	0.050	
108-88-3	Toluene	**20**	2.6	0.33	**5.2**	0.70	0.088	
591-78-6	2-Hexanone	**1.9**	5.6	0.33	**0.45**	1.4	0.082	**J**
124-48-1	Dibromochloromethane	ND	2.7	0.36	ND	0.32	0.042	
106-93-4	1,2-Dibromoethane	ND	2.6	0.31	ND	0.34	0.041	
123-86-4	n-Butyl Acetate	**2.3**	5.6	0.37	**0.49**	1.2	0.078	**J**

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **SVE-EXT-03 @ manifold** ALS Project ID: P2200013
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P2200013-006

Test Code: EPA TO-15 Date Collected: 12/14/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 1/3/22
Analyst: Simon Cao Date Analyzed: 1/5/22
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC00005

Initial Pressure (psig): -4.05 Final Pressure (psig): 6.95

Canister Dilution Factor: 2.03

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	**1.0**	2.7	0.61	**0.22**	0.58	0.13	**J**
127-18-4	Tetrachloroethene	**4.1**	2.6	0.35	**0.60**	0.39	0.052	
108-90-7	Chlorobenzene	ND	2.6	0.36	ND	0.57	0.078	
100-41-4	Ethylbenzene	**6.3**	2.6	0.38	**1.4**	0.61	0.088	
179601-23-1	m,p-Xylenes	**25**	5.6	0.71	**5.8**	1.3	0.16	
75-25-2	Bromoform	ND	2.6	0.56	ND	0.26	0.054	
100-42-5	Styrene	**0.52**	2.5	0.44	**0.12**	0.60	0.10	**J**
95-47-6	o-Xylene	**9.1**	2.6	0.39	**2.1**	0.61	0.090	
111-84-2	n-Nonane	**1.2**	2.6	0.45	**0.23**	0.50	0.086	**J**
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.6	0.38	ND	0.38	0.055	
98-82-8	Cumene	**0.42**	2.6	0.39	**0.086**	0.54	0.080	**J**
80-56-8	alpha-Pinene	**3.6**	2.7	0.42	**0.64**	0.49	0.075	**V**
103-65-1	n-Propylbenzene	ND	2.7	0.39	ND	0.55	0.080	
622-96-8	4-Ethyltoluene	**1.1**	2.7	0.43	**0.22**	0.55	0.088	**J**
108-67-8	1,3,5-Trimethylbenzene	**1.4**	2.6	0.39	**0.29**	0.54	0.080	**J**
95-63-6	1,2,4-Trimethylbenzene	**5.3**	2.6	0.38	**1.1**	0.54	0.076	
100-44-7	Benzyl Chloride	ND	5.6	0.61	ND	1.1	0.12	
541-73-1	1,3-Dichlorobenzene	ND	2.6	0.41	ND	0.44	0.068	
106-46-7	1,4-Dichlorobenzene	**0.85**	2.6	0.42	**0.14**	0.44	0.069	**J**
95-50-1	1,2-Dichlorobenzene	ND	2.7	0.40	ND	0.45	0.067	
5989-27-5	d-Limonene	**4.6**	2.5	0.56	**0.82**	0.46	0.10	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.1	0.51	ND	0.53	0.053	
120-82-1	1,2,4-Trichlorobenzene	ND	5.6	0.66	ND	0.75	0.089	
91-20-3	Naphthalene	**2.3**	2.6	0.66	**0.44**	0.50	0.13	**J**
87-68-3	Hexachlorobutadiene	ND	2.6	0.56	ND	0.25	0.052	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
V = The continuing calibration verification standard was outside (biased high) the specified limits for this compound.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Method Blank** ALS Project ID: P2200013
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P220104-MB

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Simon Cao Date Analyzed: 1/4/22
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	ND	0.52	0.13	ND	0.30	0.076	
75-71-8	Dichlorodifluoromethane (CFC 12)	**0.12**	0.53	0.087	**0.023**	0.11	0.018	**J**
74-87-3	Chloromethane	ND	0.51	0.086	ND	0.25	0.042	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.54	0.084	ND	0.077	0.012	
75-01-4	Vinyl Chloride	ND	0.52	0.057	ND	0.20	0.022	
106-99-0	1,3-Butadiene	ND	0.52	0.088	ND	0.24	0.040	
74-83-9	Bromomethane	ND	0.51	0.074	ND	0.13	0.019	
75-00-3	Chloroethane	ND	0.51	0.066	ND	0.19	0.025	
64-17-5	Ethanol	ND	5.0	0.37	ND	2.7	0.20	
75-05-8	Acetonitrile	ND	1.0	0.13	ND	0.60	0.077	
107-02-8	Acrolein	ND	1.0	0.15	ND	0.44	0.065	
67-64-1	Acetone	ND	5.2	1.2	ND	2.2	0.51	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	0.52	0.081	ND	0.093	0.014	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	1.0	0.22	ND	0.41	0.090	
107-13-1	Acrylonitrile	ND	1.0	0.11	ND	0.46	0.051	
75-35-4	1,1-Dichloroethene	**0.15**	0.54	0.074	**0.038**	0.14	0.019	**J**
75-09-2	Methylene Chloride	ND	0.52	0.15	ND	0.15	0.043	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.53	0.072	ND	0.17	0.023	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	0.54	0.076	ND	0.070	0.0099	
75-15-0	Carbon Disulfide	ND	1.1	0.16	ND	0.35	0.051	
156-60-5	trans-1,2-Dichloroethene	ND	0.53	0.074	ND	0.13	0.019	
75-34-3	1,1-Dichloroethane	ND	0.53	0.078	ND	0.13	0.019	
1634-04-4	Methyl tert-Butyl Ether	ND	0.53	0.063	ND	0.15	0.017	
108-05-4	Vinyl Acetate	ND	5.0	1.2	ND	1.4	0.34	
78-93-3	2-Butanone (MEK)	ND	1.0	0.11	ND	0.34	0.037	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **Method Blank** ALS Project ID: P2200013

Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P220104-MB

Test Code: EPA TO-15 Date Collected: NA

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA

Analyst: Simon Cao Date Analyzed: 1/4/22

Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.52	0.075	ND	0.13	0.019	
141-78-6	Ethyl Acetate	ND	2.1	0.28	ND	0.58	0.078	
110-54-3	n-Hexane	ND	0.53	0.11	ND	0.15	0.031	
67-66-3	Chloroform	ND	0.54	0.071	ND	0.11	0.015	
109-99-9	Tetrahydrofuran (THF)	ND	1.0	0.067	ND	0.34	0.023	
107-06-2	1,2-Dichloroethane	ND	0.53	0.059	ND	0.13	0.015	
71-55-6	1,1,1-Trichloroethane	ND	0.52	0.066	ND	0.095	0.012	
71-43-2	Benzene	ND	0.50	0.077	ND	0.16	0.024	
56-23-5	Carbon Tetrachloride	ND	0.50	0.074	ND	0.080	0.012	
110-82-7	Cyclohexane	ND	1.1	0.15	ND	0.32	0.044	
78-87-5	1,2-Dichloropropane	ND	0.50	0.066	ND	0.11	0.014	
75-27-4	Bromodichloromethane	ND	0.53	0.077	ND	0.079	0.011	
79-01-6	Trichloroethene	ND	0.52	0.072	ND	0.097	0.013	
123-91-1	1,4-Dioxane	ND	0.52	0.063	ND	0.14	0.017	
80-62-6	Methyl Methacrylate	ND	1.1	0.19	ND	0.27	0.046	
142-82-5	n-Heptane	ND	0.53	0.085	ND	0.13	0.021	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.083	ND	0.11	0.018	
108-10-1	4-Methyl-2-pentanone	ND	1.1	0.073	ND	0.27	0.018	
10061-02-6	trans-1,3-Dichloropropene	ND	0.51	0.11	ND	0.11	0.024	
79-00-5	1,1,2-Trichloroethane	ND	0.52	0.054	ND	0.095	0.0099	
108-88-3	Toluene	ND	0.52	0.065	ND	0.14	0.017	
591-78-6	2-Hexanone	ND	1.1	0.066	ND	0.27	0.016	
124-48-1	Dibromochloromethane	ND	0.53	0.070	ND	0.062	0.0082	
106-93-4	1,2-Dibromoethane	ND	0.52	0.062	ND	0.068	0.0081	
123-86-4	n-Butyl Acetate	ND	1.1	0.073	ND	0.23	0.015	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **Method Blank** ALS Project ID: P2200013

Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P220104-MB

Test Code: EPA TO-15 Date Collected: NA

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA

Analyst: Simon Cao Date Analyzed: 1/4/22

Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.53	0.12	ND	0.11	0.026	
127-18-4	Tetrachloroethene	ND	0.52	0.069	ND	0.077	0.010	
108-90-7	Chlorobenzene	ND	0.52	0.071	ND	0.11	0.015	
100-41-4	Ethylbenzene	ND	0.52	0.075	ND	0.12	0.017	
179601-23-1	m,p-Xylenes	ND	1.1	0.14	ND	0.25	0.032	
75-25-2	Bromoform	ND	0.52	0.11	ND	0.050	0.011	
100-42-5	Styrene	ND	0.50	0.086	ND	0.12	0.020	
95-47-6	o-Xylene	ND	0.52	0.077	ND	0.12	0.018	
111-84-2	n-Nonane	ND	0.52	0.089	ND	0.099	0.017	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.52	0.074	ND	0.076	0.011	
98-82-8	Cumene	ND	0.52	0.077	ND	0.11	0.016	
80-56-8	alpha-Pinene	ND	0.54	0.082	ND	0.097	0.015	
103-65-1	n-Propylbenzene	ND	0.53	0.077	ND	0.11	0.016	
622-96-8	4-Ethyltoluene	ND	0.53	0.085	ND	0.11	0.017	
108-67-8	1,3,5-Trimethylbenzene	ND	0.52	0.077	ND	0.11	0.016	
95-63-6	1,2,4-Trimethylbenzene	ND	0.52	0.074	ND	0.11	0.015	
100-44-7	Benzyl Chloride	ND	1.1	0.12	ND	0.21	0.023	
541-73-1	1,3-Dichlorobenzene	ND	0.52	0.080	ND	0.087	0.013	
106-46-7	1,4-Dichlorobenzene	ND	0.52	0.082	ND	0.087	0.014	
95-50-1	1,2-Dichlorobenzene	ND	0.53	0.079	ND	0.088	0.013	
5989-27-5	d-Limonene	ND	0.50	0.11	ND	0.090	0.020	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.10	ND	0.10	0.010	
120-82-1	1,2,4-Trichlorobenzene	ND	1.1	0.13	ND	0.15	0.018	
91-20-3	Naphthalene	ND	0.52	0.13	ND	0.099	0.025	
87-68-3	Hexachlorobutadiene	ND	0.52	0.11	ND	0.049	0.010	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Method Blank** ALS Project ID: P2200013
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P220105-MB

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Simon Cao Date Analyzed: 1/5/22
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	ND	0.52	0.13	ND	0.30	0.076	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.53	0.087	ND	0.11	0.018	
74-87-3	Chloromethane	ND	0.51	0.086	ND	0.25	0.042	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.54	0.084	ND	0.077	0.012	
75-01-4	Vinyl Chloride	ND	0.52	0.057	ND	0.20	0.022	
106-99-0	1,3-Butadiene	ND	0.52	0.088	ND	0.24	0.040	
74-83-9	Bromomethane	ND	0.51	0.074	ND	0.13	0.019	
75-00-3	Chloroethane	ND	0.51	0.066	ND	0.19	0.025	
64-17-5	Ethanol	ND	5.0	0.37	ND	2.7	0.20	
75-05-8	Acetonitrile	ND	1.0	0.13	ND	0.60	0.077	
107-02-8	Acrolein	ND	1.0	0.15	ND	0.44	0.065	
67-64-1	Acetone	ND	5.2	1.2	ND	2.2	0.51	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	0.52	0.081	ND	0.093	0.014	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	1.0	0.22	ND	0.41	0.090	
107-13-1	Acrylonitrile	ND	1.0	0.11	ND	0.46	0.051	
75-35-4	1,1-Dichloroethene	ND	0.54	0.074	ND	0.14	0.019	
75-09-2	Methylene Chloride	ND	0.52	0.15	ND	0.15	0.043	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.53	0.072	ND	0.17	0.023	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	0.54	0.076	ND	0.070	0.0099	
75-15-0	Carbon Disulfide	ND	1.1	0.16	ND	0.35	0.051	
156-60-5	trans-1,2-Dichloroethene	ND	0.53	0.074	ND	0.13	0.019	
75-34-3	1,1-Dichloroethane	ND	0.53	0.078	ND	0.13	0.019	
1634-04-4	Methyl tert-Butyl Ether	ND	0.53	0.063	ND	0.15	0.017	
108-05-4	Vinyl Acetate	ND	5.0	1.2	ND	1.4	0.34	
78-93-3	2-Butanone (MEK)	ND	1.0	0.11	ND	0.34	0.037	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Method Blank** ALS Project ID: P2200013
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P220105-MB

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Simon Cao Date Analyzed: 1/5/22
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.52	0.075	ND	0.13	0.019	
141-78-6	Ethyl Acetate	ND	2.1	0.28	ND	0.58	0.078	
110-54-3	n-Hexane	ND	0.53	0.11	ND	0.15	0.031	
67-66-3	Chloroform	ND	0.54	0.071	ND	0.11	0.015	
109-99-9	Tetrahydrofuran (THF)	ND	1.0	0.067	ND	0.34	0.023	
107-06-2	1,2-Dichloroethane	ND	0.53	0.059	ND	0.13	0.015	
71-55-6	1,1,1-Trichloroethane	ND	0.52	0.066	ND	0.095	0.012	
71-43-2	Benzene	ND	0.50	0.077	ND	0.16	0.024	
56-23-5	Carbon Tetrachloride	ND	0.50	0.074	ND	0.080	0.012	
110-82-7	Cyclohexane	ND	1.1	0.15	ND	0.32	0.044	
78-87-5	1,2-Dichloropropane	ND	0.50	0.066	ND	0.11	0.014	
75-27-4	Bromodichloromethane	ND	0.53	0.077	ND	0.079	0.011	
79-01-6	Trichloroethene	ND	0.52	0.072	ND	0.097	0.013	
123-91-1	1,4-Dioxane	ND	0.52	0.063	ND	0.14	0.017	
80-62-6	Methyl Methacrylate	ND	1.1	0.19	ND	0.27	0.046	
142-82-5	n-Heptane	ND	0.53	0.085	ND	0.13	0.021	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.083	ND	0.11	0.018	
108-10-1	4-Methyl-2-pentanone	ND	1.1	0.073	ND	0.27	0.018	
10061-02-6	trans-1,3-Dichloropropene	ND	0.51	0.11	ND	0.11	0.024	
79-00-5	1,1,2-Trichloroethane	ND	0.52	0.054	ND	0.095	0.0099	
108-88-3	Toluene	ND	0.52	0.065	ND	0.14	0.017	
591-78-6	2-Hexanone	ND	1.1	0.066	ND	0.27	0.016	
124-48-1	Dibromochloromethane	ND	0.53	0.070	ND	0.062	0.0082	
106-93-4	1,2-Dibromoethane	ND	0.52	0.062	ND	0.068	0.0081	
123-86-4	n-Butyl Acetate	ND	1.1	0.073	ND	0.23	0.015	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **Method Blank** ALS Project ID: P2200013

Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P220105-MB

Test Code: EPA TO-15 Date Collected: NA

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA

Analyst: Simon Cao Date Analyzed: 1/5/22

Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.53	0.12	ND	0.11	0.026	
127-18-4	Tetrachloroethene	ND	0.52	0.069	ND	0.077	0.010	
108-90-7	Chlorobenzene	ND	0.52	0.071	ND	0.11	0.015	
100-41-4	Ethylbenzene	ND	0.52	0.075	ND	0.12	0.017	
179601-23-1	m,p-Xylenes	ND	1.1	0.14	ND	0.25	0.032	
75-25-2	Bromoform	ND	0.52	0.11	ND	0.050	0.011	
100-42-5	Styrene	ND	0.50	0.086	ND	0.12	0.020	
95-47-6	o-Xylene	ND	0.52	0.077	ND	0.12	0.018	
111-84-2	n-Nonane	ND	0.52	0.089	ND	0.099	0.017	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.52	0.074	ND	0.076	0.011	
98-82-8	Cumene	ND	0.52	0.077	ND	0.11	0.016	
80-56-8	alpha-Pinene	ND	0.54	0.082	ND	0.097	0.015	
103-65-1	n-Propylbenzene	ND	0.53	0.077	ND	0.11	0.016	
622-96-8	4-Ethyltoluene	ND	0.53	0.085	ND	0.11	0.017	
108-67-8	1,3,5-Trimethylbenzene	ND	0.52	0.077	ND	0.11	0.016	
95-63-6	1,2,4-Trimethylbenzene	ND	0.52	0.074	ND	0.11	0.015	
100-44-7	Benzyl Chloride	ND	1.1	0.12	ND	0.21	0.023	
541-73-1	1,3-Dichlorobenzene	ND	0.52	0.080	ND	0.087	0.013	
106-46-7	1,4-Dichlorobenzene	ND	0.52	0.082	ND	0.087	0.014	
95-50-1	1,2-Dichlorobenzene	ND	0.53	0.079	ND	0.088	0.013	
5989-27-5	d-Limonene	ND	0.50	0.11	ND	0.090	0.020	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.10	ND	0.10	0.010	
120-82-1	1,2,4-Trichlorobenzene	ND	1.1	0.13	ND	0.15	0.018	
91-20-3	Naphthalene	ND	0.52	0.13	ND	0.099	0.025	
87-68-3	Hexachlorobutadiene	ND	0.52	0.11	ND	0.049	0.010	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

SURROGATE SPIKE RECOVERY RESULTS

Client: **Environmental Management Services, Inc.**
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Project ID: P2200013

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date(s) Collected: 12/14/21
Analyst: Simon Cao Date(s) Received: 1/3/22
Sample Type: 1.0 L Summa Canister(s) / 1.0 L Silonite Summa Canister(s) Date(s) Analyzed: 1/4 - 1/5/22
Test Notes:

Client Sample ID	ALS Sample ID	1,2-Dichloroethane-d4 Percent Recovered	Toluene-d8 Percent Recovered	Bromofluorobenzene Percent Recovered	Acceptance Limits	Data Qualifier
Method Blank	P220104-MB	**113**	**89**	**100**	70-130	
Method Blank	P220105-MB	**110**	**92**	**105**	70-130	
Lab Control Sample	P220104-LCS	**112**	**87**	**101**	70-130	
Lab Control Sample	P220105-LCS	**108**	**89**	**104**	70-130	
Duplicate Lab Control Sample	P220104-DLCS	**112**	**87**	**100**	70-130	
Duplicate Lab Control Sample	P220105-DLCS	**107**	**89**	**104**	70-130	
Pre Carbon	P2200013-001	**107**	**91**	**107**	70-130	
Pre Carbon 1	P2200013-002	**108**	**92**	**108**	70-130	
Post Carbon 2	P2200013-003	**108**	**89**	**109**	70-130	
SVE-EXT-01 @ manifold	P2200013-004	**107**	**90**	**109**	70-130	
SVE-EXT-02 @ manifold	P2200013-005	**107**	**89**	**110**	70-130	
SVE-EXT-03 @ manifold	P2200013-006	**109**	**89**	**110**	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2200013
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P220104-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Simon Cao Date Analyzed: 1/4/22
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
115-07-1	Propene	206	210	217	**102**	**105**	56-128	3	25	
75-71-8	Dichlorodifluoromethane (CFC 12)	208	208	213	**100**	**102**	71-112	2	25	
74-87-3	Chloromethane	206	195	206	**95**	**100**	53-126	5	25	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	208	204	209	**98**	**100**	62-121	2	25	
75-01-4	Vinyl Chloride	208	220	226	**106**	**109**	63-123	3	25	
106-99-0	1,3-Butadiene	206	202	216	**98**	**105**	63-135	7	25	
74-83-9	Bromomethane	206	202	213	**98**	**103**	71-112	5	25	
75-00-3	Chloroethane	206	215	222	**104**	**108**	66-117	4	25	
64-17-5	Ethanol	832	839	884	**101**	**106**	57-117	5	25	
75-05-8	Acetonitrile	202	187	199	**93**	**99**	59-131	6	25	
107-02-8	Acrolein	416	420	446	**101**	**107**	71-123	6	25	
67-64-1	Acetone	1,020	997	1050	**98**	**103**	60-117	5	25	
75-69-4	Trichlorofluoromethane (CFC 11)	202	203	207	**100**	**102**	71-114	2	25	
67-63-0	2-Propanol (Isopropyl Alcohol)	400	443	463	**111**	**116**	61-124	4	25	
107-13-1	Acrylonitrile	402	412	436	**102**	**108**	65-130	6	25	
75-35-4	1,1-Dichloroethene	210	207	215	**99**	**102**	74-114	3	25	
75-09-2	Methylene Chloride	208	198	208	**95**	**100**	75-112	5	25	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	204	196	208	**96**	**102**	57-127	6	25	
76-13-1	Trichlorotrifluoroethane (CFC 113)	216	200	208	**93**	**96**	73-114	3	25	
75-15-0	Carbon Disulfide	414	404	421	**98**	**102**	70-113	4	25	
156-60-5	trans-1,2-Dichloroethene	208	219	228	**105**	**110**	76-119	5	25	
75-34-3	1,1-Dichloroethane	214	215	224	**100**	**105**	70-114	5	25	
1634-04-4	Methyl tert-Butyl Ether	206	182	194	**88**	**94**	72-118	7	25	
108-05-4	Vinyl Acetate	942	994	1040	**106**	**110**	56-137	4	25	
78-93-3	2-Butanone (MEK)	408	409	429	**100**	**105**	74-121	5	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2200013
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P220104-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Simon Cao Date Analyzed: 1/4/22
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	206	213	223	**103**	**108**	73-117	5	25	
141-78-6	Ethyl Acetate	580	550	571	**95**	**98**	59-161	3	25	
110-54-3	n-Hexane	208	205	214	**99**	**103**	55-130	4	25	
67-66-3	Chloroform	210	213	219	**101**	**104**	71-114	3	25	
109-99-9	Tetrahydrofuran (THF)	404	403	420	**100**	**104**	73-114	4	25	
107-06-2	1,2-Dichloroethane	210	220	225	**105**	**107**	71-119	2	25	
71-55-6	1,1,1-Trichloroethane	208	208	210	**100**	**101**	73-119	1	25	
71-43-2	Benzene	208	188	192	**90**	**92**	72-113	2	25	
56-23-5	Carbon Tetrachloride	202	198	200	**98**	**99**	67-123	1	25	
110-82-7	Cyclohexane	412	379	388	**92**	**94**	70-119	2	25	
78-87-5	1,2-Dichloropropane	206	204	209	**99**	**101**	70-118	2	25	
75-27-4	Bromodichloromethane	208	214	217	**103**	**104**	74-119	1	25	
79-01-6	Trichloroethene	204	196	202	**96**	**99**	74-115	3	25	
123-91-1	1,4-Dioxane	206	201	206	**98**	**100**	77-124	2	25	
80-62-6	Methyl Methacrylate	410	420	427	**102**	**104**	78-126	2	25	
142-82-5	n-Heptane	206	204	208	**99**	**101**	70-119	2	25	
10061-01-5	cis-1,3-Dichloropropene	208	214	218	**103**	**105**	81-126	2	25	
108-10-1	4-Methyl-2-pentanone	412	422	438	**102**	**106**	73-129	4	25	
10061-02-6	trans-1,3-Dichloropropene	200	214	217	**107**	**109**	80-127	2	25	
79-00-5	1,1,2-Trichloroethane	208	208	212	**100**	**102**	78-117	2	25	
108-88-3	Toluene	206	168	173	**82**	**84**	70-118	2	25	
591-78-6	2-Hexanone	406	378	390	**93**	**96**	74-132	3	25	
124-48-1	Dibromochloromethane	210	176	179	**84**	**85**	69-137	1	25	
106-93-4	1,2-Dibromoethane	208	178	181	**86**	**87**	76-128	1	25	
123-86-4	n-Butyl Acetate	406	384	396	**95**	**98**	75-134	3	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2200013
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P220104-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Simon Cao Date Analyzed: 1/4/22
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
111-65-9	n-Octane	208	185	190	**89**	**91**	68-120	2	25	
127-18-4	Tetrachloroethene	212	170	172	**80**	**81**	63-130	1	25	
108-90-7	Chlorobenzene	206	170	174	**83**	**84**	70-118	1	25	
100-41-4	Ethylbenzene	206	176	180	**85**	**87**	71-123	2	25	
179601-23-1	m,p-Xylenes	416	352	362	**85**	**87**	67-127	2	25	
75-25-2	Bromoform	210	180	183	**86**	**87**	65-149	1	25	
100-42-5	Styrene	202	180	184	**89**	**91**	76-132	2	25	
95-47-6	o-Xylene	208	179	183	**86**	**88**	69-124	2	25	
111-84-2	n-Nonane	208	191	198	**92**	**95**	64-127	3	25	
79-34-5	1,1,2,2-Tetrachloroethane	208	181	186	**87**	**89**	69-128	2	25	
98-82-8	Cumene	206	170	174	**83**	**84**	69-125	1	25	
80-56-8	alpha-Pinene	210	273	280	**130**	**133**	68-129	2	25	**L**
103-65-1	n-Propylbenzene	208	176	179	**85**	**86**	70-127	1	25	
622-96-8	4-Ethyltoluene	208	174	178	**84**	**86**	69-127	2	25	
108-67-8	1,3,5-Trimethylbenzene	208	181	184	**87**	**88**	66-129	1	25	
95-63-6	1,2,4-Trimethylbenzene	206	181	184	**88**	**89**	63-142	1	25	
100-44-7	Benzyl Chloride	416	399	412	**96**	**99**	73-145	3	25	
541-73-1	1,3-Dichlorobenzene	208	175	177	**84**	**85**	67-136	1	25	
106-46-7	1,4-Dichlorobenzene	210	175	179	**83**	**85**	63-134	2	25	
95-50-1	1,2-Dichlorobenzene	210	173	175	**82**	**83**	64-139	1	25	
5989-27-5	d-Limonene	206	203	207	**99**	**100**	63-137	1	25	
96-12-8	1,2-Dibromo-3-chloropropane	404	325	334	**80**	**83**	72-145	4	25	
120-82-1	1,2,4-Trichlorobenzene	420	361	375	**86**	**89**	62-154	3	25	
91-20-3	Naphthalene	210	191	200	**91**	**95**	62-156	4	25	
87-68-3	Hexachlorobutadiene	212	160	163	**75**	**77**	55-142	3	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.
L = Laboratory control sample recovery outside the specified limits, results may be biased high.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2200013
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P220105-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Simon Cao Date Analyzed: 1/5/22
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
115-07-1	Propene	206	219	222	**106**	**108**	56-128	2	25	
75-71-8	Dichlorodifluoromethane (CFC 12)	208	204	204	**98**	**98**	71-112	0	25	
74-87-3	Chloromethane	206	207	205	**100**	**100**	53-126	0	25	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	208	202	205	**97**	**99**	62-121	2	25	
75-01-4	Vinyl Chloride	208	227	225	**109**	**108**	63-123	0.9	25	
106-99-0	1,3-Butadiene	206	219	226	**106**	**110**	63-135	4	25	
74-83-9	Bromomethane	206	214	217	**104**	**105**	71-112	1	25	
75-00-3	Chloroethane	206	223	225	**108**	**109**	66-117	0.9	25	
64-17-5	Ethanol	832	873	886	**105**	**106**	57-117	0.9	25	
75-05-8	Acetonitrile	202	200	203	**99**	**100**	59-131	1	25	
107-02-8	Acrolein	416	446	453	**107**	**109**	71-123	2	25	
67-64-1	Acetone	1,020	1040	1060	**102**	**104**	60-117	2	25	
75-69-4	Trichlorofluoromethane (CFC 11)	202	198	199	**98**	**99**	71-114	1	25	
67-63-0	2-Propanol (Isopropyl Alcohol)	400	452	456	**113**	**114**	61-124	0.9	25	
107-13-1	Acrylonitrile	402	436	440	**108**	**109**	65-130	0.9	25	
75-35-4	1,1-Dichloroethene	210	210	215	**100**	**102**	74-114	2	25	
75-09-2	Methylene Chloride	208	204	208	**98**	**100**	75-112	2	25	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	204	204	204	**100**	**100**	57-127	0	25	
76-13-1	Trichlorotrifluoroethane (CFC 113)	216	199	204	**92**	**94**	73-114	2	25	
75-15-0	Carbon Disulfide	414	412	417	**100**	**101**	70-113	1	25	
156-60-5	trans-1,2-Dichloroethene	208	224	226	**108**	**109**	76-119	0.9	25	
75-34-3	1,1-Dichloroethane	214	220	221	**103**	**103**	70-114	0	25	
1634-04-4	Methyl tert-Butyl Ether	206	188	189	**91**	**92**	72-118	1	25	
108-05-4	Vinyl Acetate	942	1030	1040	**109**	**110**	56-137	0.9	25	
78-93-3	2-Butanone (MEK)	408	420	426	**103**	**104**	74-121	1	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2200013
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P220105-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Simon Cao Date Analyzed: 1/5/22
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	206	218	220	**106**	**107**	73-117	0.9	25	
141-78-6	Ethyl Acetate	580	568	573	**98**	**99**	59-161	1	25	
110-54-3	n-Hexane	208	212	215	**102**	**103**	55-130	1	25	
67-66-3	Chloroform	210	211	213	**100**	**101**	71-114	1	25	
109-99-9	Tetrahydrofuran (THF)	404	416	418	**103**	**103**	73-114	0	25	
107-06-2	1,2-Dichloroethane	210	214	216	**102**	**103**	71-119	1	25	
71-55-6	1,1,1-Trichloroethane	208	201	203	**97**	**98**	73-119	1	25	
71-43-2	Benzene	208	190	192	**91**	**92**	72-113	1	25	
56-23-5	Carbon Tetrachloride	202	190	192	**94**	**95**	67-123	1	25	
110-82-7	Cyclohexane	412	384	390	**93**	**95**	70-119	2	25	
78-87-5	1,2-Dichloropropane	206	208	210	**101**	**102**	70-118	1	25	
75-27-4	Bromodichloromethane	208	209	211	**100**	**101**	74-119	1	25	
79-01-6	Trichloroethene	204	196	200	**96**	**98**	74-115	2	25	
123-91-1	1,4-Dioxane	206	204	206	**99**	**100**	77-124	1	25	
80-62-6	Methyl Methacrylate	410	423	428	**103**	**104**	78-126	1	25	
142-82-5	n-Heptane	206	205	210	**100**	**102**	70-119	2	25	
10061-01-5	cis-1,3-Dichloropropene	208	213	217	**102**	**104**	81-126	2	25	
108-10-1	4-Methyl-2-pentanone	412	429	438	**104**	**106**	73-129	2	25	
10061-02-6	trans-1,3-Dichloropropene	200	212	215	**106**	**108**	80-127	2	25	
79-00-5	1,1,2-Trichloroethane	208	209	212	**100**	**102**	78-117	2	25	
108-88-3	Toluene	206	171	174	**83**	**84**	70-118	1	25	
591-78-6	2-Hexanone	406	387	395	**95**	**97**	74-132	2	25	
124-48-1	Dibromochloromethane	210	176	179	**84**	**85**	69-137	1	25	
106-93-4	1,2-Dibromoethane	208	178	181	**86**	**87**	76-128	1	25	
123-86-4	n-Butyl Acetate	406	392	401	**97**	**99**	75-134	2	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2200013
Client Project ID: **SVE Performance Monitoring / KUH0-21-010** ALS Sample ID: P220105-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Simon Cao Date Analyzed: 1/5/22
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
111-65-9	n-Octane	208	189	196	**91**	**94**	68-120	3	25	
127-18-4	Tetrachloroethene	212	169	172	**80**	**81**	63-130	1	25	
108-90-7	Chlorobenzene	206	173	176	**84**	**85**	70-118	1	25	
100-41-4	Ethylbenzene	206	177	181	**86**	**88**	71-123	2	25	
179601-23-1	m,p-Xylenes	416	355	363	**85**	**87**	67-127	2	25	
75-25-2	Bromoform	210	176	180	**84**	**86**	65-149	2	25	
100-42-5	Styrene	202	183	186	**91**	**92**	76-132	1	25	
95-47-6	o-Xylene	208	180	184	**87**	**88**	69-124	1	25	
111-84-2	n-Nonane	208	197	201	**95**	**97**	64-127	2	25	
79-34-5	1,1,2,2-Tetrachloroethane	208	184	188	**88**	**90**	69-128	2	25	
98-82-8	Cumene	206	172	175	**83**	**85**	69-125	2	25	
80-56-8	alpha-Pinene	210	282	286	**134**	**136**	68-129	1	25	**L**
103-65-1	n-Propylbenzene	208	177	179	**85**	**86**	70-127	1	25	
622-96-8	4-Ethyltoluene	208	174	178	**84**	**86**	69-127	2	25	
108-67-8	1,3,5-Trimethylbenzene	208	180	183	**87**	**88**	66-129	1	25	
95-63-6	1,2,4-Trimethylbenzene	206	180	183	**87**	**89**	63-142	2	25	
100-44-7	Benzyl Chloride	416	399	411	**96**	**99**	73-145	3	25	
541-73-1	1,3-Dichlorobenzene	208	174	178	**84**	**86**	67-136	2	25	
106-46-7	1,4-Dichlorobenzene	210	174	179	**83**	**85**	63-134	2	25	
95-50-1	1,2-Dichlorobenzene	210	171	175	**81**	**83**	64-139	2	25	
5989-27-5	d-Limonene	206	204	209	**99**	**101**	63-137	2	25	
96-12-8	1,2-Dibromo-3-chloropropane	404	324	333	**80**	**82**	72-145	2	25	
120-82-1	1,2,4-Trichlorobenzene	420	362	372	**86**	**89**	62-154	3	25	
91-20-3	Naphthalene	210	194	203	**92**	**97**	62-156	5	25	
87-68-3	Hexachlorobutadiene	212	156	159	**74**	**75**	55-142	1	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.
L = Laboratory control sample recovery outside the specified limits, results may be biased high.

Calculation of Mass Recovery Per Day and Per Month
SVE system
Kuhlman Electric Corporation
Crystal Springs, MS

OPERATING PARAMETER	UNITS	1,1,1-Trichloroethane	1,1-Dichloroethene	1,4-Dioxane
Constituent concentration	ppmv	**0.00780**	**0.02400**	**0.40000**
enter avg flow rate in ACFM air	cubic ft/min	**94.05**	94.05	94.05
ave flow rate in cubic ft per day	ft3/day	135432	135432	135432
enter avg vapor temperature	degrees F	70	70	70
enter nominal pressure in psig	lb/in2	**0.38**	0.38	0.38
temp in degrees rankin	degrees R	529.67	529.67	529.67
Ru = universal gas constant	psi ft3/(lbmol deg R)	10.73	10.73	10.73
R = specific gas constant air (R=Ru/mw)	(ft3 psi mol)/(R lbmol g)	0.37	0.37	0.37
molecular weight of air	lbm/lbmol	29	29	29
molecular weight of constituent	lbm/lbmol	133.4	96.94	88.11
density of air = P/(RT)= (psi R lbm)/(ft3 psi R) =lbm/ft3	lbm/ft3	0.0769	0.0769	0.0769
mass of air recovered per day= flow (ft3/day)*density (lb/ft3)	lbm/day	10420.4	10420.4	10420.4
moles of air recovered per day = mass air/day (lb/day) / mw (lbm/lbmol)	lbmol/ day	359.32	359.32	359.32
moles of constituent recovered per day = ppmv/(10^6)* (lb mol/ day)	lbmol/day	2.80273E-06	8.62377E-06	0.00014373
mass of constituent recovered per day = (lbmol/day) * lbm/lbmol = lb/day	lbm/day	**0.0004**	**0.0008**	**0.0127**
July 2021 Recovery		**0.000**	**0.001**	**0.015**

Calculation of Mass Recovery Per Day and Per Month
SVE system
Kuhlman Electric Corporation
Crystal Springs, MS

OPERATING PARAMETER	UNITS	1,1,1-Trichloroethane	1,1-Dichloroethene	1,4-Dioxane
Constituent concentration	ppmv	**0.008**	**0.02**	**0.40**
enter avg flow rate in ACFM air	cubic ft/min	**290.95**	290.95	290.95
ave flow rate in cubic ft per day	ft3/day	418974	418974	418974
enter avg vapor temperature	degrees F	70	70	70
enter nominal pressure in psig	lb/in2	**0.38**	0.38	0.38
temp in degrees rankin	degrees R	529.67	529.67	529.67
Ru = universal gas constant	psi ft3/(lbmol deg R)	10.73	10.73	10.73
R = specific gas constant air (R=Ru/mw)	(ft3 psi)/(R lbm)	0.37	0.37	0.37
molecular weight of air	lbm/lbmol	29	29	29
molecular weight of constituent	lbm/lbmol	133.4	96.94	88.11
density of air = P/(RT)= (psi R lbm)/(ft3 psi R) =lbm/ft3	lbm/ft3	0.0769	0.0769	0.0769
mass of air recovered per day= flow (ft3/day)*density (lb/ft3)	lbm/day	32236.8	32236.8	32236.8
moles of air recovered per day = mass air/day (lb/day) / mw (lbm/lbmol)	lbmol/ day	1111.61	1111.61	1111.61
moles of constituent recovered per day = ppmv/(10^6)* (lb mol/ day)	lbmol/day	8.67058E-06	2.66787E-05	0.000444645
mass of constituent recovered per day = (lbmol/day) * lbm/lbmol = lb/day	lbm/day	**0.001**	**0.003**	**0.039**
August 2021 Recovery		**0.023**	**0.052**	**0.782**

Calculation of Mass Recovery Per Day and Per Month
SVE system
Kuhlman Electric Corporation
Crystal Springs, MS

OPERATING PARAMETER	UNITS	1,1,1-Trichloroethane	1,1-Dichloroethene	1,4-Dioxane
Constituent concentration	ppmv	**0.005**	**0.02**	**0.38**
enter avg flow rate in ACFM air	cubic ft/min	**315.22**	315.22	315.22
ave flow rate in cubic ft per day	ft3/day	453920	453920	453920
enter avg vapor temperature	degrees F	70	70	70
enter nominal pressure in psig	lb/in2	**0.38**	0.38	0.38
temp in degrees rankin	degrees R	529.67	529.67	529.67
Ru = universal gas constant	psi ft3/(lbmol deg R)	10.73	10.73	10.73
R = specific gas constant air (R=Ru/mw)	(ft3 psi)/(R lbm)	0.37	0.37	0.37
molecular weight of air	lbm/lbmol	29	29	29
molecular weight of constituent	lbm/lbmol	133.4	96.94	88.11
density of air = P/(RT)= (psi R lbm)/(ft3 psi R) =lbm/ft3	lbm/ft3	0.0769	0.0769	0.0769
mass of air recovered per day= flow (ft3/day)*density (lb/ft3)	lbm/day	34925.6	34925.6	34925.6
moles of air recovered per day = mass air/day (lb/day) / mw (lbm/lbmol)	lbmol/ day	1204.33	1204.33	1204.33
moles of constituent recovered per day = ppmv/(10^6)* (lb mol/ day)	lbmol/day	6.26252E-06	2.40866E-05	0.000457646
mass of constituent recovered per day = (lbmol/day) * lbm/lbmol = lb/day	lbm/day	**0.001**	**0.002**	**0.040**
September 2021 Recovery		**0.024**	**0.066**	**1.138**

Calculation of Mass Recovery Per Day and Per Month
SVE system
Kuhlman Electric Corporation
Crystal Springs, MS

OPERATING PARAMETER	UNITS	1,1,1-Trichloroethane	1,1-Dichloroethene	1,4-Dioxane
Constituent concentration	ppmv	**0.005**	**0.02**	**0.38**
enter avg flow rate in ACFM air	cubic ft/min	**315.22**	315.22	315.22
ave flow rate in cubic ft per day	ft3/day	453920	453920	453920
enter avg vapor temperature	degrees F	70	70	70
enter nominal pressure in psig	lb/in2	**0.38**	0.38	0.38
temp in degrees rankin	degrees R	529.67	529.67	529.67
Ru = universal gas constant	psi ft3/(lbmol deg R)	10.73	10.73	10.73
R = specific gas constant air (R=Ru/mw)	(ft3 psi)/(R lbm)	0.37	0.37	0.37
molecular weight of air	lbm/lbmol	29	29	29
molecular weight of constituent	lbm/lbmol	133.4	96.94	88.11
density of air = P/(RT)= (psi R lbm)/(ft3 psi R) =lbm/ft3	lbm/ft3	0.0769	0.0769	0.0769
mass of air recovered per day= flow (ft3/day)*density (lb/ft3)	lbm/day	34925.6	34925.6	34925.6
moles of air recovered per day = mass air/day (lb/day) / mw (lbm/lbmol)	lbmol/ day	1204.33	1204.33	1204.33
moles of constituent recovered per day = ppmv/(10^6)* (lb mol/ day)	lbmol/day	6.26252E-06	2.40866E-05	0.000457646
mass of constituent recovered per day = (lbmol/day) * lbm/lbmol = lb/day	lbm/day	**0.001**	**0.002**	**0.040**
October 2021 Recovery		**0.019**	**0.053**	**0.917**

Calculation of Mass Recovery Per Day and Per Month
SVE system
Kuhlman Electric Corporation
Crystal Springs, MS

OPERATING PARAMETER	UNITS	1,1,1-Trichloroethane	1,1-Dichloroethene	1,4-Dioxane
Constituent concentration	ppmv	**0.005**	**0.023**	**0.34**
enter avg flow rate in ACFM air	cubic ft/min	**323.03**	323.03	323.03
ave flow rate in cubic ft per day	ft3/day	465165	465165	465165
enter avg vapor temperature	degrees F	70	70	70
enter nominal pressure in psig	lb/in2	**0.38**	0.38	0.38
temp in degrees rankin	degrees R	529.67	529.67	529.67
Ru = universal gas constant	psi ft3/(lbmol deg R)	10.73	10.73	10.73
R = specific gas constant air (R=Ru/mw)	(ft3 psi)/(R lbm)	0.37	0.37	0.37
molecular weight of air	lbm/lbmol	29	29	29
molecular weight of constituent	lbm/lbmol	133.4	96.94	88.11
density of air = P/(RT)= (psi R lbm)/(ft3 psi R) =lbm/ft3	lbm/ft3	0.0769	0.0769	0.0769
mass of air recovered per day= flow (ft3/day)*density (lb/ft3)	lbm/day	35790.8	35790.8	35790.8
moles of air recovered per day = mass air/day (lb/day) / mw (lbm/lbmol)	lbmol/ day	1234.16	1234.16	1234.16
moles of constituent recovered per day = ppmv/(10^6)* (lb mol/ day)	lbmol/day	5.67716E-06	2.83858E-05	0.000419616
mass of constituent recovered per day = (lbmol/day) * lbm/lbmol = lb/day	lbm/day	**0.001**	**0.003**	**0.04**
November 2021 Recovery		**0.022**	**0.080**	**1.076**

Calculation of Mass Recovery Per Day and Per Month
SVE system
Kuhlman Electric Corporation
Crystal Springs, MS

OPERATING PARAMETER	UNITS	1,1,1-Trichloroethane	1,1-Dichloroethene	1,4-Dioxane
Constituent concentration	ppmv	**0.005**	**0.023**	**0.34**
enter avg flow rate in ACFM air	cubic ft/min	**309.70**	309.70	309.70
ave flow rate in cubic ft per day	ft3/day	445975	445975	445975
enter avg vapor temperature	degrees F	70	70	70
enter nominal pressure in psig	lb/in2	**0.38**	0.38	0.38
temp in degrees rankin	degrees R	529.67	529.67	529.67
Ru = universal gas constant	psi ft3/(lbmol deg R)	10.73	10.73	10.73
R = specific gas constant air (R=Ru/mw)	(ft3 psi)/(R lbm)	0.37	0.37	0.37
molecular weight of air	lbm/lbmol	29	29	29
molecular weight of constituent	lbm/lbmol	133.4	96.94	88.11
density of air = P/(RT)= (psi R lbm)/(ft3 psi R) =lbm/ft3	lbm/ft3	0.0769	0.0769	0.0769
mass of air recovered per day= flow (ft3/day)*density (lb/ft3)	lbm/day	34314.3	34314.3	34314.3
moles of air recovered per day = mass air/day (lb/day) / mw (lbm/lbmol)	lbmol/ day	1183.25	1183.25	1183.25
moles of constituent recovered per day = ppmv/(10^6)* (lb mol/ day)	lbmol/day	5.44296E-06	2.72148E-05	0.000402305
mass of constituent recovered per day = (lbmol/day) * lbm/lbmol = lb/day	lbm/day	**0.0007**	**0.0026**	**0.0354**
December 2021 Recovery		**0.0209**	**0.0760**	**1.0205**

APPENDIX C

AMBIENT AIR SAMPLING LABORATORY ANALYTICAL RESULTS

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
www.alsglobal.com

LABORATORY REPORT

November 13, 2021

Collin Creel
Environmental Management Services, Inc.
PO Box 15369
Hattiesburg, MS 39402

RE: In-Plant Monitoring / KUH0-21-011

Dear Collin:

Enclosed are the results of the samples submitted to our laboratory on October 25, 2021. For your reference, these analyses have been assigned our service request number P2105625.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

By Sue Anderson at 9:53 am, Nov 13, 2021

Sue Anderson
Project Manager

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
www.alsglobal.com

Client: Environmental Management Services, Inc. Service Request No: P2105625
Project: In-Plant Monitoring / KUH0-21-011

CASE NARRATIVE

The samples were received intact under chain of custody on October 25, 2021 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Volatile Organic Compound Analysis

The samples were analyzed for volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. This procedure is described in laboratory SOP VOA-TO15. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. This method is included on the laboratory's NELAP and DoD-ELAP scope of accreditation. Any analytes flagged with an X are not included on the NELAP or DoD-ELAP accreditation.

The samples were received with limited hold time remaining to complete the analysis within the recommended limit. The analysis was performed as soon as possible after receipt by the laboratory and the data flagged to indicate the holding time exceedance.

The containers were cleaned, prior to sampling, down to the method reporting limit (MRL) reported for this project. For projects requiring DoD QSM 5.3 compliance canisters were cleaned to <1/2 the MRL. Please note, projects which require reporting below the MRL could have results between the MRL and method detection limit (MDL) that are biased high.

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
www.alsglobal.com

ALS Environmental – Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
Alaska DEC	http://dec.alaska.gov/eh/lab.aspx	17-019
Arizona DHS	http://www.azdhs.gov/preparedness/state-laboratory/lab-licensure-certification/index.php#laboratory-licensure-home	AZ0694
Florida DOH (NELAP)	http://www.floridahealth.gov/licensing-and-regulation/environmental-laboratories/index.html	E871020
Louisiana DEQ (NELAP)	http://www.deq.louisiana.gov/page/la-lab-accreditation	05071
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/professionals/labCert.shtml	2018027
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	1776326
New Jersey DEP (NELAP)	http://www.nj.gov/dep/enforcement/oqa.html	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://www.oregon.gov/oha/ph/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	4068-008
Pennsylvania DEP	http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx	68-03307 (Registration)
PJLA (DoD ELAP)	http://www.pjlabs.com/search-accredited-labs	65818 (Testing)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/agency/qa/env_lab_accreditation.html	T104704413-19-10
Utah DOH (NELAP)	http://health.utah.gov/lab/lab_cert_env	CA016272019-10
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: Environmental Management Services, Inc. Service Request: P2105625

Project ID: In-Plant Monitoring / KUH0-21-011

Date Received: 10/25/2021

Time Received: 09:30

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	TO-15 - VOC Cans
Location 1	P2105625-001	Air	9/30/2021	08:03	1SC01047	-2.85	6.82	X
Location 2	P2105625-002	Air	9/30/2021	08:03	1SS00787	-2.96	7.39	X
Location 3	P2105625-003	Air	9/30/2021	08:04	1SS00088	-4.34	7.08	X

Air - Chain of Custody Record & Analytical Service Request

Page 1 of 1

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day-Standard

ALS Project No. P210562

Company Name & Address (Reporting Information)	EMS, Inc. PO Box 15369 Hattiesburg, MS 39404
Project Manager	Collin Creel
Phone	9855160142
Fax	6015440504
Email Address for Result Reporting	ccreel@env-mgt.com
Project Name	In-Plant Monitoring
Project Number	KUHO-21-011
P.O. # / Billing Information	KUHO-21-011 / Same as reporting
Sampler (Print & Sign)	Collin Creel
ALS Contact:	

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	Analysis Method: TO15		Comments e.g. Actual Preservative or specific instructions
Location 1		9/30/21	08:02	1SC01647	0A00880	-30	-6	1L	✓		
Location 2		9/30/21	08:03	1SC00787	0A01128	-30	-6	1L	✓		
Location 3		9/30/21	08:04	1SC00888	0A01204	-30	-6	1L	✓		

5 of 31

Report Tier Levels - please select

Tier I - Results (Default if not specified) ____
Tier II (Results + QC Summaries) ✓
Tier III (Results + QC & Calibration Summaries) ____
Tier IV (Data Validation Package) 10% Surcharge ____

EDD required Yes / No
Type: _____ Units: _____

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date: 10/19/21	Time: 12:00	Received by: (Signature) Fed Ex	Date:	Time:	
Relinquished by: (Signature) Fed Ex	Date:	Time:	Received by: (Signature)	Date: 10-21-21	Time: 0930	Cooler / Blank Temperature ____ °C

ALS Environmental

Sample Acceptance Check Form

Client: Environmental Management Services, Inc. Work order: P2105625

Project: In-Plant Monitoring / KUH0-21-011

Sample(s) received on: 10/27/21 Date opened: 10/27/21 by: ADAVID

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Did **sample containers** arrive in good condition?	☒	☐	☐
3	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
4	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
5	Was **sample volume** received adequate for analysis?	☒	☐	☐
6	Are samples within specified holding times?	☒	☐	☐
7	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
8	Were **custody seals** on outside of cooler/Box/Container?	☒	☐	☐
	Location of seal(s)? Box sealing. Sealing Lid?	☒	☐	☐
	Were signature and date included?	☒	☐	☐
	Were seals intact?	☒	☐	☐
9	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
10	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
11	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P2105625-001.01	1.0 L Source Can					
P2105625-002.01	1.0 L Source Silonite Canister					
P2105625-003.01	1.0 L Source Silonite Canister					

Explain any discrepancies: (include lab sample ID numbers):

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Location 1** ALS Project ID: P2105625
Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P2105625-001

Test Code: EPA TO-15 Date Collected: 9/30/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 10/25/21
Analyst: Jessie Macaluso Date Analyzed: 11/4 - 11/5/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes: **H1** 0.040 Liter(s)
Container ID: 1SC01047

Initial Pressure (psig): -2.85 Final Pressure (psig): 6.82

Canister Dilution Factor: 1.82

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	**1,500**	24	5.9	**880**	14	3.4	**D**
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.1**	2.4	0.40	**0.43**	0.49	0.080	**J**
74-87-3	Chloromethane	**1.1**	2.3	0.39	**0.55**	1.1	0.19	**J**
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.5	0.38	ND	0.35	0.055	
75-01-4	Vinyl Chloride	ND	2.4	0.26	ND	0.93	0.10	
106-99-0	1,3-Butadiene	ND	2.4	0.40	ND	1.1	0.18	
74-83-9	Bromomethane	ND	2.3	0.34	ND	0.60	0.087	
75-00-3	Chloroethane	**0.39**	2.3	0.30	**0.15**	0.88	0.11	**J**
64-17-5	Ethanol	**960**	23	1.7	**510**	12	0.89	
75-05-8	Acetonitrile	**0.87**	4.6	0.59	**0.52**	2.7	0.35	**J**
107-02-8	Acrolein	**1.7**	4.6	0.68	**0.74**	2.0	0.30	**J**
67-64-1	Acetone	**250**	24	5.5	**100**	10	2.3	
75-69-4	Trichlorofluoromethane (CFC 11)	**1.1**	2.4	0.37	**0.19**	0.42	0.066	**J**
67-63-0	2-Propanol (Isopropyl Alcohol)	**42**	4.6	1.0	**17**	1.9	0.41	
107-13-1	Acrylonitrile	**1.3**	4.6	0.50	**0.59**	2.1	0.23	**J**
75-35-4	1,1-Dichloroethene	ND	2.5	0.34	ND	0.62	0.085	
75-09-2	Methylene Chloride	ND	2.4	0.68	ND	0.68	0.20	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.4	0.33	ND	0.77	0.10	
76-13-1	Trichlorotrifluoroethane (CFC 113)	**0.45**	2.5	0.35	**0.058**	0.32	0.045	**J**
75-15-0	Carbon Disulfide	**3.1**	5.0	0.73	**0.99**	1.6	0.23	**J**
156-60-5	trans-1,2-Dichloroethene	ND	2.4	0.34	ND	0.61	0.085	
75-34-3	1,1-Dichloroethane	ND	2.4	0.35	ND	0.60	0.088	
1634-04-4	Methyl tert-Butyl Ether	ND	2.4	0.29	ND	0.67	0.080	
108-05-4	Vinyl Acetate	**6.8**	23	5.5	**1.9**	6.5	1.6	**J**
78-93-3	2-Butanone (MEK)	**34**	4.6	0.50	**11**	1.5	0.17	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
H1 = Sample analysis performed past holding time. See case narrative.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
D = The reported result is from a dilution.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **Location 1** ALS Project ID: P2105625

Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P2105625-001

Test Code:	EPA TO-15	Date Collected:	9/30/21
Instrument ID:	Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13	Date Received:	10/25/21
Analyst:	Jessie Macaluso	Date Analyzed:	11/4 - 11/5/21
Sample Type:	1.0 L Summa Canister	Volume(s) Analyzed:	0.40 Liter(s)
Test Notes:	**H1**		0.040 Liter(s)
Container ID:	1SC01047		

Initial Pressure (psig): -2.85 Final Pressure (psig): 6.82

Canister Dilution Factor: 1.82

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.4	0.34	ND	0.60	0.086	
141-78-6	Ethyl Acetate	**9.3**	9.6	1.3	**2.6**	2.7	0.35	**J**
110-54-3	n-Hexane	**2.3**	2.4	0.50	**0.66**	0.68	0.14	**J**
67-66-3	Chloroform	ND	2.5	0.32	ND	0.50	0.066	
109-99-9	Tetrahydrofuran (THF)	**0.66**	4.6	0.30	**0.22**	1.5	0.10	**J**
107-06-2	1,2-Dichloroethane	ND	2.4	0.27	ND	0.60	0.066	
71-55-6	1,1,1-Trichloroethane	ND	2.4	0.30	ND	0.43	0.055	
71-43-2	Benzene	**0.64**	2.3	0.35	**0.20**	0.71	0.11	**J**
56-23-5	Carbon Tetrachloride	**0.39**	2.3	0.34	**0.062**	0.36	0.054	**J**
110-82-7	Cyclohexane	ND	5.0	0.68	ND	1.5	0.20	
78-87-5	1,2-Dichloropropane	ND	2.3	0.30	ND	0.49	0.065	
75-27-4	Bromodichloromethane	ND	2.4	0.35	ND	0.36	0.052	
79-01-6	Trichloroethene	ND	2.4	0.33	ND	0.44	0.061	
123-91-1	1,4-Dioxane	**0.83**	2.4	0.29	**0.23**	0.66	0.080	**J**
80-62-6	Methyl Methacrylate	ND	5.0	0.86	ND	1.2	0.21	
142-82-5	n-Heptane	**2.0**	2.4	0.39	**0.49**	0.59	0.094	**J**
10061-01-5	cis-1,3-Dichloropropene	ND	2.3	0.38	ND	0.50	0.083	
108-10-1	4-Methyl-2-pentanone	**9.4**	5.0	0.33	**2.3**	1.2	0.081	
10061-02-6	trans-1,3-Dichloropropene	ND	2.3	0.50	ND	0.51	0.11	
79-00-5	1,1,2-Trichloroethane	ND	2.4	0.25	ND	0.43	0.045	
108-88-3	Toluene	**34**	2.4	0.30	**8.9**	0.63	0.079	
591-78-6	2-Hexanone	**0.84**	5.0	0.30	**0.20**	1.2	0.073	**J**
124-48-1	Dibromochloromethane	ND	2.4	0.32	ND	0.28	0.037	
106-93-4	1,2-Dibromoethane	ND	2.4	0.28	ND	0.31	0.037	
123-86-4	n-Butyl Acetate	**7.4**	5.0	0.33	**1.6**	1.1	0.070	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
H1 = Sample analysis performed past holding time. See case narrative.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Location 1** ALS Project ID: P2105625
Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P2105625-001

Test Code: EPA TO-15 Date Collected: 9/30/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 10/25/21
Analyst: Jessie Macaluso Date Analyzed: 11/4 - 11/5/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes: **H1** 0.040 Liter(s)
Container ID: 1SC01047

Initial Pressure (psig): -2.85 Final Pressure (psig): 6.82

Canister Dilution Factor: 1.82

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	**0.57**	2.4	0.55	**0.12**	0.52	0.12	**J**
127-18-4	Tetrachloroethene	**5.3**	2.4	0.31	**0.78**	0.35	0.046	
108-90-7	Chlorobenzene	ND	2.4	0.32	ND	0.51	0.070	
100-41-4	Ethylbenzene	**20**	2.4	0.34	**4.6**	0.54	0.079	
179601-23-1	m,p-Xylenes	**79**	5.0	0.64	**18**	1.2	0.15	
75-25-2	Bromoform	ND	2.4	0.50	ND	0.23	0.048	
100-42-5	Styrene	**1.7**	2.3	0.39	**0.40**	0.53	0.092	**J**
95-47-6	o-Xylene	**25**	2.4	0.35	**5.8**	0.54	0.081	
111-84-2	n-Nonane	**0.97**	2.4	0.40	**0.19**	0.45	0.077	**J**
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.4	0.34	ND	0.34	0.049	
98-82-8	Cumene	**0.86**	2.4	0.35	**0.17**	0.48	0.071	**J**
80-56-8	alpha-Pinene	**11**	2.5	0.37	**1.9**	0.44	0.067	
103-65-1	n-Propylbenzene	**3.2**	2.4	0.35	**0.65**	0.49	0.071	
622-96-8	4-Ethyltoluene	**4.2**	2.4	0.39	**0.86**	0.49	0.079	
108-67-8	1,3,5-Trimethylbenzene	**4.9**	2.4	0.35	**1.0**	0.48	0.071	
95-63-6	1,2,4-Trimethylbenzene	**17**	2.4	0.34	**3.5**	0.48	0.069	
100-44-7	Benzyl Chloride	ND	5.0	0.55	ND	0.97	0.11	
541-73-1	1,3-Dichlorobenzene	ND	2.4	0.36	ND	0.39	0.061	
106-46-7	1,4-Dichlorobenzene	ND	2.4	0.37	ND	0.39	0.062	
95-50-1	1,2-Dichlorobenzene	ND	2.4	0.36	ND	0.40	0.060	
5989-27-5	d-Limonene	**10**	2.3	0.50	**1.8**	0.41	0.090	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.6	0.46	ND	0.47	0.047	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.59	ND	0.67	0.080	
91-20-3	Naphthalene	**1.7**	2.4	0.59	**0.33**	0.45	0.11	**J**
87-68-3	Hexachlorobutadiene	ND	2.4	0.50	ND	0.22	0.047	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
H1 = Sample analysis performed past holding time. See case narrative.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Location 2** ALS Project ID: P2105625
Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P2105625-002

Test Code: EPA TO-15 Date Collected: 9/30/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 10/25/21
Analyst: Jessie Macaluso Date Analyzed: 11/4/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes: **H1**
Container ID: 1SS00787

Initial Pressure (psig): -2.96 Final Pressure (psig): 7.39

Canister Dilution Factor: 1.88

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	**140**	2.4	0.61	**83**	1.4	0.36	
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.1**	2.5	0.41	**0.42**	0.50	0.083	**J**
74-87-3	Chloromethane	**1.0**	2.4	0.40	**0.49**	1.2	0.20	**J**
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.5	0.39	ND	0.36	0.057	
75-01-4	Vinyl Chloride	ND	2.4	0.27	ND	0.96	0.10	
106-99-0	1,3-Butadiene	ND	2.4	0.41	ND	1.1	0.19	
74-83-9	Bromomethane	ND	2.4	0.35	ND	0.62	0.090	
75-00-3	Chloroethane	ND	2.4	0.31	ND	0.91	0.12	
64-17-5	Ethanol	**440**	24	1.7	**230**	12	0.92	
75-05-8	Acetonitrile	ND	4.7	0.61	ND	2.8	0.36	
107-02-8	Acrolein	**0.75**	4.7	0.71	**0.33**	2.1	0.31	**J**
67-64-1	Acetone	**510**	24	5.6	**220**	10	2.4	
75-69-4	Trichlorofluoromethane (CFC 11)	**1.0**	2.4	0.38	**0.18**	0.44	0.068	**J**
67-63-0	2-Propanol (Isopropyl Alcohol)	**51**	4.7	1.0	**21**	1.9	0.42	
107-13-1	Acrylonitrile	ND	4.7	0.52	ND	2.2	0.24	
75-35-4	1,1-Dichloroethene	ND	2.5	0.35	ND	0.64	0.088	
75-09-2	Methylene Chloride	ND	2.4	0.71	ND	0.70	0.20	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.5	0.34	ND	0.80	0.11	
76-13-1	Trichlorotrifluoroethane (CFC 113)	**0.44**	2.5	0.36	**0.057**	0.33	0.047	**J**
75-15-0	Carbon Disulfide	**1.1**	5.2	0.75	**0.35**	1.7	0.24	**J**
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.35	ND	0.63	0.088	
75-34-3	1,1-Dichloroethane	ND	2.5	0.37	ND	0.62	0.091	
1634-04-4	Methyl tert-Butyl Ether	ND	2.5	0.30	ND	0.69	0.082	
108-05-4	Vinyl Acetate	ND	24	5.6	ND	6.7	1.6	
78-93-3	2-Butanone (MEK)	**34**	4.7	0.52	**12**	1.6	0.18	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
H1 = Sample analysis performed past holding time. See case narrative.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Location 2** ALS Project ID: P2105625
Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P2105625-002

Test Code: EPA TO-15 Date Collected: 9/30/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 10/25/21
Analyst: Jessie Macaluso Date Analyzed: 11/4/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes: **H1**
Container ID: 1SS00787

Initial Pressure (psig): -2.96 Final Pressure (psig): 7.39

Canister Dilution Factor: 1.88

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.4	0.35	ND	0.62	0.089	
141-78-6	Ethyl Acetate	**4.4**	9.9	1.3	**1.2**	2.7	0.37	**J**
110-54-3	n-Hexane	**2.4**	2.5	0.52	**0.67**	0.71	0.15	**J**
67-66-3	Chloroform	ND	2.5	0.33	ND	0.52	0.068	
109-99-9	Tetrahydrofuran (THF)	**0.86**	4.7	0.31	**0.29**	1.6	0.11	**J**
107-06-2	1,2-Dichloroethane	ND	2.5	0.28	ND	0.62	0.069	
71-55-6	1,1,1-Trichloroethane	ND	2.4	0.31	ND	0.45	0.057	
71-43-2	Benzene	**1.6**	2.4	0.36	**0.51**	0.74	0.11	**J**
56-23-5	Carbon Tetrachloride	**0.42**	2.4	0.35	**0.067**	0.37	0.055	**J**
110-82-7	Cyclohexane	**2.1**	5.2	0.71	**0.61**	1.5	0.20	**J**
78-87-5	1,2-Dichloropropane	ND	2.4	0.31	ND	0.51	0.067	
75-27-4	Bromodichloromethane	ND	2.5	0.36	ND	0.37	0.054	
79-01-6	Trichloroethene	ND	2.4	0.34	ND	0.45	0.063	
123-91-1	1,4-Dioxane	ND	2.4	0.30	ND	0.68	0.082	
80-62-6	Methyl Methacrylate	ND	5.2	0.89	ND	1.3	0.22	
142-82-5	n-Heptane	**4.3**	2.5	0.40	**1.0**	0.61	0.098	
10061-01-5	cis-1,3-Dichloropropene	ND	2.4	0.39	ND	0.52	0.086	
108-10-1	4-Methyl-2-pentanone	**7.0**	5.2	0.34	**1.7**	1.3	0.084	
10061-02-6	trans-1,3-Dichloropropene	ND	2.4	0.52	ND	0.53	0.11	
79-00-5	1,1,2-Trichloroethane	ND	2.4	0.25	ND	0.45	0.047	
108-88-3	Toluene	**31**	2.4	0.31	**8.3**	0.65	0.081	
591-78-6	2-Hexanone	ND	5.2	0.31	ND	1.3	0.076	
124-48-1	Dibromochloromethane	ND	2.5	0.33	ND	0.29	0.039	
106-93-4	1,2-Dibromoethane	ND	2.4	0.29	ND	0.32	0.038	
123-86-4	n-Butyl Acetate	**20**	5.2	0.34	**4.2**	1.1	0.072	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
H1 = Sample analysis performed past holding time. See case narrative.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Location 2** ALS Project ID: P2105625
Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P2105625-002

Test Code: EPA TO-15 Date Collected: 9/30/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 10/25/21
Analyst: Jessie Macaluso Date Analyzed: 11/4/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes: **H1**
Container ID: 1SS00787

Initial Pressure (psig): -2.96 Final Pressure (psig): 7.39

Canister Dilution Factor: 1.88

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	**3.1**	2.5	0.56	**0.66**	0.53	0.12	
127-18-4	Tetrachloroethene	**0.40**	2.4	0.32	**0.060**	0.36	0.048	**J**
108-90-7	Chlorobenzene	ND	2.4	0.33	ND	0.53	0.072	
100-41-4	Ethylbenzene	**35**	2.4	0.35	**8.2**	0.56	0.081	
179601-23-1	m,p-Xylenes	**160**	5.2	0.66	**36**	1.2	0.15	
75-25-2	Bromoform	ND	2.4	0.52	ND	0.24	0.050	
100-42-5	Styrene	**1.5**	2.4	0.40	**0.36**	0.55	0.095	**J**
95-47-6	o-Xylene	**47**	2.4	0.36	**11**	0.56	0.083	
111-84-2	n-Nonane	**2.1**	2.4	0.42	**0.40**	0.47	0.080	**J**
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.4	0.35	ND	0.36	0.051	
98-82-8	Cumene	**1.2**	2.4	0.36	**0.25**	0.50	0.074	**J**
80-56-8	alpha-Pinene	**5.2**	2.5	0.39	**0.94**	0.46	0.069	
103-65-1	n-Propylbenzene	**4.1**	2.5	0.36	**0.83**	0.51	0.074	
622-96-8	4-Ethyltoluene	**5.5**	2.5	0.40	**1.1**	0.51	0.081	
108-67-8	1,3,5-Trimethylbenzene	**6.8**	2.4	0.36	**1.4**	0.50	0.074	
95-63-6	1,2,4-Trimethylbenzene	**23**	2.4	0.35	**4.7**	0.50	0.071	
100-44-7	Benzyl Chloride	ND	5.2	0.56	ND	1.0	0.11	
541-73-1	1,3-Dichlorobenzene	ND	2.4	0.38	ND	0.41	0.063	
106-46-7	1,4-Dichlorobenzene	ND	2.4	0.39	ND	0.41	0.064	
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.37	ND	0.41	0.062	
5989-27-5	d-Limonene	**3.0**	2.4	0.52	**0.54**	0.42	0.093	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.7	0.47	ND	0.49	0.049	
120-82-1	1,2,4-Trichlorobenzene	ND	5.2	0.61	ND	0.70	0.082	
91-20-3	Naphthalene	**3.9**	2.4	0.61	**0.74**	0.47	0.12	
87-68-3	Hexachlorobutadiene	ND	2.4	0.52	ND	0.23	0.048	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
H1 = Sample analysis performed past holding time. See case narrative.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Location 3** ALS Project ID: P2105625
Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P2105625-003

Test Code: EPA TO-15 Date Collected: 9/30/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 10/25/21
Analyst: Jessie Macaluso Date Analyzed: 11/4/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes: **H1**
Container ID: 1SS00088

Initial Pressure (psig): -4.34 Final Pressure (psig): 7.08

Canister Dilution Factor: 2.10

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	**4.9**	2.7	0.68	**2.9**	1.6	0.40	
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.2**	2.8	0.46	**0.44**	0.56	0.092	**J**
74-87-3	Chloromethane	**1.2**	2.7	0.45	**0.56**	1.3	0.22	**J**
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.8	0.44	ND	0.41	0.063	
75-01-4	Vinyl Chloride	ND	2.7	0.30	ND	1.1	0.12	
106-99-0	1,3-Butadiene	ND	2.7	0.46	ND	1.2	0.21	
74-83-9	Bromomethane	ND	2.7	0.39	ND	0.69	0.10	
75-00-3	Chloroethane	ND	2.7	0.35	ND	1.0	0.13	
64-17-5	Ethanol	**55**	26	1.9	**29**	14	1.0	
75-05-8	Acetonitrile	ND	5.3	0.68	ND	3.1	0.41	
107-02-8	Acrolein	**1.5**	5.3	0.79	**0.64**	2.3	0.34	**J**
67-64-1	Acetone	**25**	27	6.3	**11**	11	2.7	**J**
75-69-4	Trichlorofluoromethane (CFC 11)	**1.0**	2.7	0.43	**0.18**	0.49	0.076	**J**
67-63-0	2-Propanol (Isopropyl Alcohol)	**4.6**	5.3	1.2	**1.9**	2.1	0.47	**J**
107-13-1	Acrylonitrile	ND	5.3	0.58	ND	2.4	0.27	
75-35-4	1,1-Dichloroethene	ND	2.8	0.39	ND	0.72	0.098	
75-09-2	Methylene Chloride	ND	2.7	0.79	ND	0.79	0.23	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.8	0.38	ND	0.89	0.12	
76-13-1	Trichlorotrifluoroethane (CFC 113)	**0.40**	2.8	0.40	**0.052**	0.37	0.052	**J**
75-15-0	Carbon Disulfide	**14**	5.8	0.84	**4.5**	1.9	0.27	
156-60-5	trans-1,2-Dichloroethene	ND	2.8	0.39	ND	0.70	0.098	
75-34-3	1,1-Dichloroethane	ND	2.8	0.41	ND	0.69	0.10	
1634-04-4	Methyl tert-Butyl Ether	ND	2.8	0.33	ND	0.77	0.092	
108-05-4	Vinyl Acetate	**7.9**	26	6.3	**2.2**	7.5	1.8	**J**
78-93-3	2-Butanone (MEK)	**4.4**	5.3	0.58	**1.5**	1.8	0.20	**J**

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
H1 = Sample analysis performed past holding time. See case narrative.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **Location 3** ALS Project ID: P2105625

Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P2105625-003

Test Code:	EPA TO-15	Date Collected:	9/30/21
Instrument ID:	Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13	Date Received:	10/25/21
Analyst:	Jessie Macaluso	Date Analyzed:	11/4/21
Sample Type:	1.0 L Silonite Summa Canister	Volume(s) Analyzed:	0.40 Liter(s)
Test Notes:	**H1**		
Container ID:	1SS00088		

Initial Pressure (psig): -4.34 Final Pressure (psig): 7.08

Canister Dilution Factor: 2.10

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.7	0.39	ND	0.69	0.099	
141-78-6	Ethyl Acetate	**1.8**	11	1.5	**0.51**	3.1	0.41	**J**
110-54-3	n-Hexane	ND	2.8	0.58	ND	0.79	0.16	
67-66-3	Chloroform	ND	2.8	0.37	ND	0.58	0.076	
109-99-9	Tetrahydrofuran (THF)	**0.93**	5.3	0.35	**0.32**	1.8	0.12	**J**
107-06-2	1,2-Dichloroethane	ND	2.8	0.31	ND	0.69	0.077	
71-55-6	1,1,1-Trichloroethane	ND	2.7	0.35	ND	0.50	0.064	
71-43-2	Benzene	ND	2.6	0.40	ND	0.82	0.13	
56-23-5	Carbon Tetrachloride	**0.41**	2.6	0.39	**0.066**	0.42	0.062	**J**
110-82-7	Cyclohexane	ND	5.8	0.79	ND	1.7	0.23	
78-87-5	1,2-Dichloropropane	ND	2.6	0.35	ND	0.57	0.075	
75-27-4	Bromodichloromethane	ND	2.8	0.40	ND	0.42	0.060	
79-01-6	Trichloroethene	ND	2.7	0.38	ND	0.51	0.070	
123-91-1	1,4-Dioxane	**0.41**	2.7	0.33	**0.12**	0.76	0.092	**J**
80-62-6	Methyl Methacrylate	ND	5.8	1.0	ND	1.4	0.24	
142-82-5	n-Heptane	ND	2.8	0.45	ND	0.68	0.11	
10061-01-5	cis-1,3-Dichloropropene	ND	2.6	0.44	ND	0.58	0.096	
108-10-1	4-Methyl-2-pentanone	**0.47**	5.8	0.38	**0.11**	1.4	0.094	**J**
10061-02-6	trans-1,3-Dichloropropene	ND	2.7	0.58	ND	0.59	0.13	
79-00-5	1,1,2-Trichloroethane	ND	2.7	0.28	ND	0.50	0.052	
108-88-3	Toluene	**1.6**	2.7	0.34	**0.42**	0.72	0.091	**J**
591-78-6	2-Hexanone	ND	5.8	0.35	ND	1.4	0.085	
124-48-1	Dibromochloromethane	ND	2.8	0.37	ND	0.33	0.043	
106-93-4	1,2-Dibromoethane	ND	2.7	0.33	ND	0.36	0.042	
123-86-4	n-Butyl Acetate	**0.95**	5.8	0.38	**0.20**	1.2	0.081	**J**

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
H1 = Sample analysis performed past holding time. See case narrative.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Location 3** ALS Project ID: P2105625
Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P2105625-003

Test Code: EPA TO-15 Date Collected: 9/30/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 10/25/21
Analyst: Jessie Macaluso Date Analyzed: 11/4/21
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes: **H1**
Container ID: 1SS00088

Initial Pressure (psig): -4.34 Final Pressure (psig): 7.08

Canister Dilution Factor: 2.10

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	ND	2.8	0.63	ND	0.60	0.13	
127-18-4	Tetrachloroethene	ND	2.7	0.36	ND	0.40	0.053	
108-90-7	Chlorobenzene	ND	2.7	0.37	ND	0.59	0.081	
100-41-4	Ethylbenzene	**0.77**	2.7	0.39	**0.18**	0.63	0.091	**J**
179601-23-1	m,p-Xylenes	**2.3**	5.8	0.74	**0.53**	1.3	0.17	**J**
75-25-2	Bromoform	ND	2.7	0.58	ND	0.26	0.056	
100-42-5	Styrene	**0.86**	2.6	0.45	**0.20**	0.62	0.11	**J**
95-47-6	o-Xylene	**0.77**	2.7	0.40	**0.18**	0.63	0.093	**J**
111-84-2	n-Nonane	ND	2.7	0.47	ND	0.52	0.089	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.7	0.39	ND	0.40	0.057	
98-82-8	Cumene	ND	2.7	0.40	ND	0.56	0.082	
80-56-8	alpha-Pinene	**6.7**	2.8	0.43	**1.2**	0.51	0.077	
103-65-1	n-Propylbenzene	ND	2.8	0.40	ND	0.57	0.082	
622-96-8	4-Ethyltoluene	ND	2.8	0.45	ND	0.57	0.091	
108-67-8	1,3,5-Trimethylbenzene	ND	2.7	0.40	ND	0.56	0.082	
95-63-6	1,2,4-Trimethylbenzene	**0.88**	2.7	0.39	**0.18**	0.56	0.079	**J**
100-44-7	Benzyl Chloride	ND	5.8	0.63	ND	1.1	0.12	
541-73-1	1,3-Dichlorobenzene	ND	2.7	0.42	ND	0.45	0.070	
106-46-7	1,4-Dichlorobenzene	ND	2.7	0.43	ND	0.45	0.072	
95-50-1	1,2-Dichlorobenzene	ND	2.8	0.41	ND	0.46	0.069	
5989-27-5	d-Limonene	**5.0**	2.6	0.58	**0.89**	0.47	0.10	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.3	0.53	ND	0.54	0.054	
120-82-1	1,2,4-Trichlorobenzene	ND	5.8	0.68	ND	0.78	0.092	
91-20-3	Naphthalene	ND	2.7	0.68	ND	0.52	0.13	
87-68-3	Hexachlorobutadiene	ND	2.7	0.58	ND	0.26	0.054	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
H1 = Sample analysis performed past holding time. See case narrative.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **Method Blank** ALS Project ID: P2105625

Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P211104-MB

Test Code: EPA TO-15 Date Collected: NA

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA

Analyst: Jessie Macaluso Date Analyzed: 11/4/21

Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	ND	0.52	0.13	ND	0.30	0.076	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.53	0.087	ND	0.11	0.018	
74-87-3	Chloromethane	ND	0.51	0.086	ND	0.25	0.042	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.54	0.084	ND	0.077	0.012	
75-01-4	Vinyl Chloride	ND	0.52	0.057	ND	0.20	0.022	
106-99-0	1,3-Butadiene	ND	0.52	0.088	ND	0.24	0.040	
74-83-9	Bromomethane	ND	0.51	0.074	ND	0.13	0.019	
75-00-3	Chloroethane	ND	0.51	0.066	ND	0.19	0.025	
64-17-5	Ethanol	ND	5.0	0.37	ND	2.7	0.20	
75-05-8	Acetonitrile	ND	1.0	0.13	ND	0.60	0.077	
107-02-8	Acrolein	ND	1.0	0.15	ND	0.44	0.065	
67-64-1	Acetone	ND	5.2	1.2	ND	2.2	0.51	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	0.52	0.081	ND	0.093	0.014	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	1.0	0.22	ND	0.41	0.090	
107-13-1	Acrylonitrile	ND	1.0	0.11	ND	0.46	0.051	
75-35-4	1,1-Dichloroethene	ND	0.54	0.074	ND	0.14	0.019	
75-09-2	Methylene Chloride	ND	0.52	0.15	ND	0.15	0.043	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.53	0.072	ND	0.17	0.023	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	0.54	0.076	ND	0.070	0.0099	
75-15-0	Carbon Disulfide	ND	1.1	0.16	ND	0.35	0.051	
156-60-5	trans-1,2-Dichloroethene	ND	0.53	0.074	ND	0.13	0.019	
75-34-3	1,1-Dichloroethane	ND	0.53	0.078	ND	0.13	0.019	
1634-04-4	Methyl tert-Butyl Ether	ND	0.53	0.063	ND	0.15	0.017	
108-05-4	Vinyl Acetate	ND	5.0	1.2	ND	1.4	0.34	
78-93-3	2-Butanone (MEK)	ND	1.0	0.11	ND	0.34	0.037	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **Method Blank** ALS Project ID: P2105625

Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P211104-MB

Test Code: EPA TO-15 Date Collected: NA

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA

Analyst: Jessie Macaluso Date Analyzed: 11/4/21

Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.52	0.075	ND	0.13	0.019	
141-78-6	Ethyl Acetate	ND	2.1	0.28	ND	0.58	0.078	
110-54-3	n-Hexane	ND	0.53	0.11	ND	0.15	0.031	
67-66-3	Chloroform	ND	0.54	0.071	ND	0.11	0.015	
109-99-9	Tetrahydrofuran (THF)	ND	1.0	0.067	ND	0.34	0.023	
107-06-2	1,2-Dichloroethane	ND	0.53	0.059	ND	0.13	0.015	
71-55-6	1,1,1-Trichloroethane	ND	0.52	0.066	ND	0.095	0.012	
71-43-2	Benzene	ND	0.50	0.077	ND	0.16	0.024	
56-23-5	Carbon Tetrachloride	ND	0.50	0.074	ND	0.080	0.012	
110-82-7	Cyclohexane	ND	1.1	0.15	ND	0.32	0.044	
78-87-5	1,2-Dichloropropane	ND	0.50	0.066	ND	0.11	0.014	
75-27-4	Bromodichloromethane	ND	0.53	0.077	ND	0.079	0.011	
79-01-6	Trichloroethene	ND	0.52	0.072	ND	0.097	0.013	
123-91-1	1,4-Dioxane	ND	0.52	0.063	ND	0.14	0.017	
80-62-6	Methyl Methacrylate	ND	1.1	0.19	ND	0.27	0.046	
142-82-5	n-Heptane	ND	0.53	0.085	ND	0.13	0.021	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.083	ND	0.11	0.018	
108-10-1	4-Methyl-2-pentanone	ND	1.1	0.073	ND	0.27	0.018	
10061-02-6	trans-1,3-Dichloropropene	ND	0.51	0.11	ND	0.11	0.024	
79-00-5	1,1,2-Trichloroethane	ND	0.52	0.054	ND	0.095	0.0099	
108-88-3	Toluene	ND	0.52	0.065	ND	0.14	0.017	
591-78-6	2-Hexanone	ND	1.1	0.066	ND	0.27	0.016	
124-48-1	Dibromochloromethane	ND	0.53	0.070	ND	0.062	0.0082	
106-93-4	1,2-Dibromoethane	ND	0.52	0.062	ND	0.068	0.0081	
123-86-4	n-Butyl Acetate	ND	1.1	0.073	ND	0.23	0.015	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **Method Blank** ALS Project ID: P2105625

Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P211104-MB

Test Code:	EPA TO-15	Date Collected:	NA
Instrument ID:	Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13	Date Received:	NA
Analyst:	Jessie Macaluso	Date Analyzed:	11/4/21
Sample Type:	1.0 L Summa Canister	Volume(s) Analyzed:	1.00 Liter(s)
Test Notes:			

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.53	0.12	ND	0.11	0.026	
127-18-4	Tetrachloroethene	ND	0.52	0.069	ND	0.077	0.010	
108-90-7	Chlorobenzene	ND	0.52	0.071	ND	0.11	0.015	
100-41-4	Ethylbenzene	ND	0.52	0.075	ND	0.12	0.017	
179601-23-1	m,p-Xylenes	ND	1.1	0.14	ND	0.25	0.032	
75-25-2	Bromoform	ND	0.52	0.11	ND	0.050	0.011	
100-42-5	Styrene	ND	0.50	0.086	ND	0.12	0.020	
95-47-6	o-Xylene	ND	0.52	0.077	ND	0.12	0.018	
111-84-2	n-Nonane	ND	0.52	0.089	ND	0.099	0.017	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.52	0.074	ND	0.076	0.011	
98-82-8	Cumene	ND	0.52	0.077	ND	0.11	0.016	
80-56-8	alpha-Pinene	ND	0.54	0.082	ND	0.097	0.015	
103-65-1	n-Propylbenzene	ND	0.53	0.077	ND	0.11	0.016	
622-96-8	4-Ethyltoluene	ND	0.53	0.085	ND	0.11	0.017	
108-67-8	1,3,5-Trimethylbenzene	ND	0.52	0.077	ND	0.11	0.016	
95-63-6	1,2,4-Trimethylbenzene	ND	0.52	0.074	ND	0.11	0.015	
100-44-7	Benzyl Chloride	ND	1.1	0.12	ND	0.21	0.023	
541-73-1	1,3-Dichlorobenzene	ND	0.52	0.080	ND	0.087	0.013	
106-46-7	1,4-Dichlorobenzene	ND	0.52	0.082	ND	0.087	0.014	
95-50-1	1,2-Dichlorobenzene	ND	0.53	0.079	ND	0.088	0.013	
5989-27-5	d-Limonene	ND	0.50	0.11	ND	0.090	0.020	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.10	ND	0.10	0.010	
120-82-1	1,2,4-Trichlorobenzene	ND	1.1	0.13	ND	0.15	0.018	
91-20-3	Naphthalene	ND	0.52	0.13	ND	0.099	0.025	
87-68-3	Hexachlorobutadiene	ND	0.52	0.11	ND	0.049	0.010	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Method Blank** ALS Project ID: P2105625
Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P211105-MB

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA
Analyst: Jessie Macaluso Date Analyzed: 11/5/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	ND	0.52	0.13	ND	0.30	0.076	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.53	0.087	ND	0.11	0.018	
74-87-3	Chloromethane	ND	0.51	0.086	ND	0.25	0.042	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.54	0.084	ND	0.077	0.012	
75-01-4	Vinyl Chloride	ND	0.52	0.057	ND	0.20	0.022	
106-99-0	1,3-Butadiene	ND	0.52	0.088	ND	0.24	0.040	
74-83-9	Bromomethane	ND	0.51	0.074	ND	0.13	0.019	
75-00-3	Chloroethane	ND	0.51	0.066	ND	0.19	0.025	
64-17-5	Ethanol	ND	5.0	0.37	ND	2.7	0.20	
75-05-8	Acetonitrile	ND	1.0	0.13	ND	0.60	0.077	
107-02-8	Acrolein	ND	1.0	0.15	ND	0.44	0.065	
67-64-1	Acetone	ND	5.2	1.2	ND	2.2	0.51	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	0.52	0.081	ND	0.093	0.014	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	1.0	0.22	ND	0.41	0.090	
107-13-1	Acrylonitrile	ND	1.0	0.11	ND	0.46	0.051	
75-35-4	1,1-Dichloroethene	ND	0.54	0.074	ND	0.14	0.019	
75-09-2	Methylene Chloride	ND	0.52	0.15	ND	0.15	0.043	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.53	0.072	ND	0.17	0.023	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	0.54	0.076	ND	0.070	0.0099	
75-15-0	Carbon Disulfide	ND	1.1	0.16	ND	0.35	0.051	
156-60-5	trans-1,2-Dichloroethene	ND	0.53	0.074	ND	0.13	0.019	
75-34-3	1,1-Dichloroethane	ND	0.53	0.078	ND	0.13	0.019	
1634-04-4	Methyl tert-Butyl Ether	ND	0.53	0.063	ND	0.15	0.017	
108-05-4	Vinyl Acetate	ND	5.0	1.2	ND	1.4	0.34	
78-93-3	2-Butanone (MEK)	ND	1.0	0.11	ND	0.34	0.037	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Method Blank** ALS Project ID: P2105625
Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P211105-MB

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA
Analyst: Jessie Macaluso Date Analyzed: 11/5/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.52	0.075	ND	0.13	0.019	
141-78-6	Ethyl Acetate	ND	2.1	0.28	ND	0.58	0.078	
110-54-3	n-Hexane	ND	0.53	0.11	ND	0.15	0.031	
67-66-3	Chloroform	ND	0.54	0.071	ND	0.11	0.015	
109-99-9	Tetrahydrofuran (THF)	**0.071**	1.0	0.067	**0.024**	0.34	0.023	**J**
107-06-2	1,2-Dichloroethane	ND	0.53	0.059	ND	0.13	0.015	
71-55-6	1,1,1-Trichloroethane	ND	0.52	0.066	ND	0.095	0.012	
71-43-2	Benzene	ND	0.50	0.077	ND	0.16	0.024	
56-23-5	Carbon Tetrachloride	ND	0.50	0.074	ND	0.080	0.012	
110-82-7	Cyclohexane	ND	1.1	0.15	ND	0.32	0.044	
78-87-5	1,2-Dichloropropane	ND	0.50	0.066	ND	0.11	0.014	
75-27-4	Bromodichloromethane	ND	0.53	0.077	ND	0.079	0.011	
79-01-6	Trichloroethene	ND	0.52	0.072	ND	0.097	0.013	
123-91-1	1,4-Dioxane	ND	0.52	0.063	ND	0.14	0.017	
80-62-6	Methyl Methacrylate	ND	1.1	0.19	ND	0.27	0.046	
142-82-5	n-Heptane	ND	0.53	0.085	ND	0.13	0.021	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.083	ND	0.11	0.018	
108-10-1	4-Methyl-2-pentanone	ND	1.1	0.073	ND	0.27	0.018	
10061-02-6	trans-1,3-Dichloropropene	ND	0.51	0.11	ND	0.11	0.024	
79-00-5	1,1,2-Trichloroethane	ND	0.52	0.054	ND	0.095	0.0099	
108-88-3	Toluene	ND	0.52	0.065	ND	0.14	0.017	
591-78-6	2-Hexanone	ND	1.1	0.066	ND	0.27	0.016	
124-48-1	Dibromochloromethane	ND	0.53	0.070	ND	0.062	0.0082	
106-93-4	1,2-Dibromoethane	ND	0.52	0.062	ND	0.068	0.0081	
123-86-4	n-Butyl Acetate	ND	1.1	0.073	ND	0.23	0.015	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **Method Blank** ALS Project ID: P2105625

Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P211105-MB

Test Code:	EPA TO-15	Date Collected:	NA
Instrument ID:	Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13	Date Received:	NA
Analyst:	Jessie Macaluso	Date Analyzed:	11/5/21
Sample Type:	1.0 L Summa Canister	Volume(s) Analyzed:	1.00 Liter(s)
Test Notes:			

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.53	0.12	ND	0.11	0.026	
127-18-4	Tetrachloroethene	ND	0.52	0.069	ND	0.077	0.010	
108-90-7	Chlorobenzene	ND	0.52	0.071	ND	0.11	0.015	
100-41-4	Ethylbenzene	ND	0.52	0.075	ND	0.12	0.017	
179601-23-1	m,p-Xylenes	ND	1.1	0.14	ND	0.25	0.032	
75-25-2	Bromoform	ND	0.52	0.11	ND	0.050	0.011	
100-42-5	Styrene	ND	0.50	0.086	ND	0.12	0.020	
95-47-6	o-Xylene	ND	0.52	0.077	ND	0.12	0.018	
111-84-2	n-Nonane	ND	0.52	0.089	ND	0.099	0.017	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.52	0.074	ND	0.076	0.011	
98-82-8	Cumene	ND	0.52	0.077	ND	0.11	0.016	
80-56-8	alpha-Pinene	ND	0.54	0.082	ND	0.097	0.015	
103-65-1	n-Propylbenzene	ND	0.53	0.077	ND	0.11	0.016	
622-96-8	4-Ethyltoluene	ND	0.53	0.085	ND	0.11	0.017	
108-67-8	1,3,5-Trimethylbenzene	ND	0.52	0.077	ND	0.11	0.016	
95-63-6	1,2,4-Trimethylbenzene	ND	0.52	0.074	ND	0.11	0.015	
100-44-7	Benzyl Chloride	ND	1.1	0.12	ND	0.21	0.023	
541-73-1	1,3-Dichlorobenzene	ND	0.52	0.080	ND	0.087	0.013	
106-46-7	1,4-Dichlorobenzene	ND	0.52	0.082	ND	0.087	0.014	
95-50-1	1,2-Dichlorobenzene	ND	0.53	0.079	ND	0.088	0.013	
5989-27-5	d-Limonene	ND	0.50	0.11	ND	0.090	0.020	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.10	ND	0.10	0.010	
120-82-1	1,2,4-Trichlorobenzene	ND	1.1	0.13	ND	0.15	0.018	
91-20-3	Naphthalene	ND	0.52	0.13	ND	0.099	0.025	
87-68-3	Hexachlorobutadiene	ND	0.52	0.11	ND	0.049	0.010	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

SURROGATE SPIKE RECOVERY RESULTS

Client: **Environmental Management Services, Inc.**
Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Project ID: P2105625

Test Code: EPA TO-15 Date(s) Collected: 9/30 - 11/1/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date(s) Received: 10/25 - 11/1/21
Analyst: Jessie Macaluso Date(s) Analyzed: 11/4 - 11/5/21
Sample Type: 1.0 L Summa Canister(s) / 1.0 L Silonite Summa Canister(s) / 6.0 L Silonite Canister(s)
Test Notes:

Client Sample ID	ALS Sample ID	1,2-Dichloroethane-d4 Percent Recovered	Toluene-d8 Percent Recovered	Bromofluorobenzene Percent Recovered	Acceptance Limits	Data Qualifier
Method Blank	P211104-MB	**85**	**96**	**98**	70-130	
Method Blank	P211105-MB	**88**	**95**	**93**	70-130	
Lab Control Sample	P211104-LCS	**91**	**96**	**99**	70-130	
Lab Control Sample	P211105-LCS	**94**	**90**	**90**	70-130	
Duplicate Lab Control Sample	P211104-DLCS	**90**	**95**	**99**	70-130	
Location 1	P2105625-001	**91**	**94**	**100**	70-130	
Location 2	P2105625-002	**89**	**96**	**99**	70-130	
Location 3	P2105625-003	**92**	**94**	**99**	70-130	
Batch QC	P2105750-004DUP	**88**	**94**	**89**	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2105625
Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P211104-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA
Analyst: Jessie Macaluso Date Analyzed: 11/4/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
115-07-1	Propene	206	195	194	**95**	**94**	56-128	1	25	
75-71-8	Dichlorodifluoromethane (CFC 12)	208	183	185	**88**	**89**	71-112	1	25	
74-87-3	Chloromethane	206	235	235	**114**	**114**	53-126	0	25	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	208	206	209	**99**	**100**	62-121	1	25	
75-01-4	Vinyl Chloride	208	240	244	**115**	**117**	63-123	2	25	
106-99-0	1,3-Butadiene	206	217	218	**105**	**106**	63-135	0.9	25	
74-83-9	Bromomethane	206	198	201	**96**	**98**	71-112	2	25	
75-00-3	Chloroethane	206	186	187	**90**	**91**	66-117	1	25	
64-17-5	Ethanol	832	851	856	**102**	**103**	57-117	1	25	
75-05-8	Acetonitrile	202	181	182	**90**	**90**	59-131	0	25	
107-02-8	Acrolein	416	410	416	**99**	**100**	71-123	1	25	
67-64-1	Acetone	1,020	983	997	**96**	**98**	60-117	2	25	
75-69-4	Trichlorofluoromethane (CFC 11)	202	178	179	**88**	**89**	71-114	1	25	
67-63-0	2-Propanol (Isopropyl Alcohol)	400	427	432	**107**	**108**	61-124	0.9	25	
107-13-1	Acrylonitrile	402	381	385	**95**	**96**	65-130	1	25	
75-35-4	1,1-Dichloroethene	210	202	203	**96**	**97**	74-114	1	25	
75-09-2	Methylene Chloride	208	192	194	**92**	**93**	75-112	1	25	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	204	206	209	**101**	**102**	57-127	1	25	
76-13-1	Trichlorotrifluoroethane (CFC 113)	216	203	204	**94**	**94**	73-114	0	25	
75-15-0	Carbon Disulfide	414	356	361	**86**	**87**	70-113	1	25	
156-60-5	trans-1,2-Dichloroethene	208	198	199	**95**	**96**	76-119	1	25	
75-34-3	1,1-Dichloroethane	214	192	193	**90**	**90**	70-114	0	25	
1634-04-4	Methyl tert-Butyl Ether	206	201	204	**98**	**99**	72-118	1	25	
108-05-4	Vinyl Acetate	942	1050	1070	**111**	**114**	56-137	3	25	
78-93-3	2-Butanone (MEK)	408	406	413	**100**	**101**	74-121	1	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2105625
Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P211104-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA
Analyst: Jessie Macaluso Date Analyzed: 11/4/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	206	194	197	**94**	**96**	73-117	2	25	
141-78-6	Ethyl Acetate	580	619	630	**107**	**109**	59-161	2	25	
110-54-3	n-Hexane	208	215	218	**103**	**105**	55-130	2	25	
67-66-3	Chloroform	210	195	198	**93**	**94**	71-114	1	25	
109-99-9	Tetrahydrofuran (THF)	404	380	386	**94**	**96**	73-114	2	25	
107-06-2	1,2-Dichloroethane	210	190	192	**90**	**91**	71-119	1	25	
71-55-6	1,1,1-Trichloroethane	208	185	189	**89**	**91**	73-119	2	25	
71-43-2	Benzene	208	201	204	**97**	**98**	72-113	1	25	
56-23-5	Carbon Tetrachloride	202	183	187	**91**	**93**	67-123	2	25	
110-82-7	Cyclohexane	412	436	443	**106**	**108**	70-119	2	25	
78-87-5	1,2-Dichloropropane	206	199	203	**97**	**99**	70-118	2	25	
75-27-4	Bromodichloromethane	208	201	203	**97**	**98**	74-119	1	25	
79-01-6	Trichloroethene	204	206	211	**101**	**103**	74-115	2	25	
123-91-1	1,4-Dioxane	206	200	205	**97**	**100**	77-124	3	25	
80-62-6	Methyl Methacrylate	410	430	437	**105**	**107**	78-126	2	25	
142-82-5	n-Heptane	206	213	217	**103**	**105**	70-119	2	25	
10061-01-5	cis-1,3-Dichloropropene	208	214	218	**103**	**105**	81-126	2	25	
108-10-1	4-Methyl-2-pentanone	412	421	431	**102**	**105**	73-129	3	25	
10061-02-6	trans-1,3-Dichloropropene	200	205	208	**103**	**104**	80-127	1	25	
79-00-5	1,1,2-Trichloroethane	208	198	202	**95**	**97**	78-117	2	25	
108-88-3	Toluene	206	192	195	**93**	**95**	70-118	2	25	
591-78-6	2-Hexanone	406	414	424	**102**	**104**	74-132	2	25	
124-48-1	Dibromochloromethane	210	196	200	**93**	**95**	69-137	2	25	
106-93-4	1,2-Dibromoethane	208	197	201	**95**	**97**	76-128	2	25	
123-86-4	n-Butyl Acetate	406	419	429	**103**	**106**	75-134	3	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2105625
Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P211104-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA
Analyst: Jessie Macaluso Date Analyzed: 11/4/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
111-65-9	n-Octane	208	200	204	**96**	**98**	68-120	2	25	
127-18-4	Tetrachloroethene	212	200	202	**94**	**95**	63-130	1	25	
108-90-7	Chlorobenzene	206	193	196	**94**	**95**	70-118	1	25	
100-41-4	Ethylbenzene	206	196	200	**95**	**97**	71-123	2	25	
179601-23-1	m,p-Xylenes	416	394	401	**95**	**96**	67-127	1	25	
75-25-2	Bromoform	210	210	215	**100**	**102**	65-149	2	25	
100-42-5	Styrene	202	205	209	**101**	**103**	76-132	2	25	
95-47-6	o-Xylene	208	197	200	**95**	**96**	69-124	1	25	
111-84-2	n-Nonane	208	227	230	**109**	**111**	64-127	2	25	
79-34-5	1,1,2,2-Tetrachloroethane	208	210	215	**101**	**103**	69-128	2	25	
98-82-8	Cumene	206	196	200	**95**	**97**	69-125	2	25	
80-56-8	alpha-Pinene	210	211	215	**100**	**102**	68-129	2	25	
103-65-1	n-Propylbenzene	208	199	202	**96**	**97**	70-127	1	25	
622-96-8	4-Ethyltoluene	208	202	207	**97**	**100**	69-127	3	25	
108-67-8	1,3,5-Trimethylbenzene	208	200	204	**96**	**98**	66-129	2	25	
95-63-6	1,2,4-Trimethylbenzene	206	207	211	**100**	**102**	63-142	2	25	
100-44-7	Benzyl Chloride	416	431	439	**104**	**106**	73-145	2	25	
541-73-1	1,3-Dichlorobenzene	208	202	208	**97**	**100**	67-136	3	25	
106-46-7	1,4-Dichlorobenzene	210	199	204	**95**	**97**	63-134	2	25	
95-50-1	1,2-Dichlorobenzene	210	201	207	**96**	**99**	64-139	3	25	
5989-27-5	d-Limonene	206	223	228	**108**	**111**	63-137	3	25	
96-12-8	1,2-Dibromo-3-chloropropane	404	393	404	**97**	**100**	72-145	3	25	
120-82-1	1,2,4-Trichlorobenzene	420	382	397	**91**	**95**	62-154	4	25	
91-20-3	Naphthalene	210	177	186	**84**	**89**	62-156	6	25	
87-68-3	Hexachlorobutadiene	212	159	164	**75**	**77**	55-142	3	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Lab Control Sample** ALS Project ID: P2105625
Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P211105-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA
Analyst: Jessie Macaluso Date Analyzed: 11/5/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount µg/m³	Result µg/m³	% Recovery	ALS Acceptance Limits	Data Qualifier
115-07-1	Propene	206	**197**	**96**	56-128	
75-71-8	Dichlorodifluoromethane (CFC 12)	208	**178**	**86**	71-112	
74-87-3	Chloromethane	206	**205**	**100**	53-126	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	208	**200**	**96**	62-121	
75-01-4	Vinyl Chloride	208	**245**	**118**	63-123	
106-99-0	1,3-Butadiene	206	**214**	**104**	63-135	
74-83-9	Bromomethane	206	**189**	**92**	71-112	
75-00-3	Chloroethane	206	**179**	**87**	66-117	
64-17-5	Ethanol	832	**871**	**105**	57-117	
75-05-8	Acetonitrile	202	**186**	**92**	59-131	
107-02-8	Acrolein	416	**416**	**100**	71-123	
67-64-1	Acetone	1,020	**1020**	**100**	60-117	
75-69-4	Trichlorofluoromethane (CFC 11)	202	**177**	**88**	71-114	
67-63-0	2-Propanol (Isopropyl Alcohol)	400	**434**	**109**	61-124	
107-13-1	Acrylonitrile	402	**393**	**98**	65-130	
75-35-4	1,1-Dichloroethene	210	**201**	**96**	74-114	
75-09-2	Methylene Chloride	208	**194**	**93**	75-112	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	204	**215**	**105**	57-127	
76-13-1	Trichlorotrifluoroethane (CFC 113)	216	**191**	**88**	73-114	
75-15-0	Carbon Disulfide	414	**368**	**89**	70-113	
156-60-5	trans-1,2-Dichloroethene	208	**201**	**97**	76-119	
75-34-3	1,1-Dichloroethane	214	**195**	**91**	70-114	
1634-04-4	Methyl tert-Butyl Ether	206	**170**	**83**	72-118	
108-05-4	Vinyl Acetate	942	**1070**	**114**	56-137	
78-93-3	2-Butanone (MEK)	408	**416**	**102**	74-121	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Lab Control Sample** ALS Project ID: P2105625
Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P211105-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA
Analyst: Jessie Macaluso Date Analyzed: 11/5/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount µg/m³	Result µg/m³	% Recovery	ALS Acceptance Limits	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	206	**199**	**97**	73-117	
141-78-6	Ethyl Acetate	580	**664**	**114**	59-161	
110-54-3	n-Hexane	208	**230**	**111**	55-130	
67-66-3	Chloroform	210	**199**	**95**	71-114	
109-99-9	Tetrahydrofuran (THF)	404	**393**	**97**	73-114	
107-06-2	1,2-Dichloroethane	210	**198**	**94**	71-119	
71-55-6	1,1,1-Trichloroethane	208	**189**	**91**	73-119	
71-43-2	Benzene	208	**209**	**100**	72-113	
56-23-5	Carbon Tetrachloride	202	**186**	**92**	67-123	
110-82-7	Cyclohexane	412	**444**	**108**	70-119	
78-87-5	1,2-Dichloropropane	206	**209**	**101**	70-118	
75-27-4	Bromodichloromethane	208	**209**	**100**	74-119	
79-01-6	Trichloroethene	204	**208**	**102**	74-115	
123-91-1	1,4-Dioxane	206	**207**	**100**	77-124	
80-62-6	Methyl Methacrylate	410	**435**	**106**	78-126	
142-82-5	n-Heptane	206	**223**	**108**	70-119	
10061-01-5	cis-1,3-Dichloropropene	208	**226**	**109**	81-126	
108-10-1	4-Methyl-2-pentanone	412	**452**	**110**	73-129	
10061-02-6	trans-1,3-Dichloropropene	200	**215**	**108**	80-127	
79-00-5	1,1,2-Trichloroethane	208	**206**	**99**	78-117	
108-88-3	Toluene	206	**182**	**88**	70-118	
591-78-6	2-Hexanone	406	**418**	**103**	74-132	
124-48-1	Dibromochloromethane	210	**185**	**88**	69-137	
106-93-4	1,2-Dibromoethane	208	**186**	**89**	76-128	
123-86-4	n-Butyl Acetate	406	**424**	**104**	75-134	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Lab Control Sample** ALS Project ID: P2105625
Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P211105-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: NA
Analyst: Jessie Macaluso Date Analyzed: 11/5/21
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount µg/m³	Result µg/m³	% Recovery	ALS Acceptance Limits	Data Qualifier
111-65-9	n-Octane	208	**196**	**94**	68-120	
127-18-4	Tetrachloroethene	212	**177**	**83**	63-130	
108-90-7	Chlorobenzene	206	**182**	**88**	70-118	
100-41-4	Ethylbenzene	206	**188**	**91**	71-123	
179601-23-1	m,p-Xylenes	416	**382**	**92**	67-127	
75-25-2	Bromoform	210	**192**	**91**	65-149	
100-42-5	Styrene	202	**196**	**97**	76-132	
95-47-6	o-Xylene	208	**191**	**92**	69-124	
111-84-2	n-Nonane	208	**230**	**111**	64-127	
79-34-5	1,1,2,2-Tetrachloroethane	208	**208**	**100**	69-128	
98-82-8	Cumene	206	**189**	**92**	69-125	
80-56-8	alpha-Pinene	210	**205**	**98**	68-129	
103-65-1	n-Propylbenzene	208	**196**	**94**	70-127	
622-96-8	4-Ethyltoluene	208	**198**	**95**	69-127	
108-67-8	1,3,5-Trimethylbenzene	208	**196**	**94**	66-129	
95-63-6	1,2,4-Trimethylbenzene	206	**206**	**100**	63-142	
100-44-7	Benzyl Chloride	416	**434**	**104**	73-145	
541-73-1	1,3-Dichlorobenzene	208	**195**	**94**	67-136	
106-46-7	1,4-Dichlorobenzene	210	**190**	**90**	63-134	
95-50-1	1,2-Dichlorobenzene	210	**196**	**93**	64-139	
5989-27-5	d-Limonene	206	**228**	**111**	63-137	
96-12-8	1,2-Dibromo-3-chloropropane	404	**379**	**94**	72-145	
120-82-1	1,2,4-Trichlorobenzene	420	**369**	**88**	62-154	
91-20-3	Naphthalene	210	**175**	**83**	62-156	
87-68-3	Hexachlorobutadiene	212	**154**	**73**	55-142	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY DUPLICATE SUMMARY RESULTS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Batch QC** ALS Project ID: P2105625
Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P2105750-004DUP

Test Code: EPA TO-15 Date Collected: 11/1/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 11/1/21
Analyst: Jessie Macaluso Date Analyzed: 11/5/21
Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: GEO00170

Initial Pressure (psig): -1.69 Final Pressure (psig): 4.00

Canister Dilution Factor: 1.44

Compound	Sample Result µg/m³	Sample Result ppbV	Duplicate Sample Result µg/m³	Duplicate Sample Result ppbV	Average µg/m³	% RPD	RPD Limit	Data Qualifier
Propene	0.451	0.262	0.403	0.234	0.427	**11**	25	**J**
Dichlorodifluoromethane (CFC 12)	2.07	0.420	2.02	0.410	2.045	**2**	25	
Chloromethane	0.432	0.209	0.367	0.178	0.3995	**16**	25	**J**
1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	ND	ND	ND	-	-	25	
Vinyl Chloride	ND	ND	ND	ND	-	-	25	
1,3-Butadiene	ND	ND	ND	ND	-	-	25	
Bromomethane	ND	ND	ND	ND	-	-	25	
Chloroethane	ND	ND	ND	ND	-	-	25	
Ethanol	4.29	2.28	4.33	2.30	4.31	**0.9**	25	**J**
Acetonitrile	ND	ND	ND	ND	-	-	25	
Acrolein	ND	ND	ND	ND	-	-	25	
Acetone	5.13	2.16	5.15	2.17	5.14	**0.4**	25	**J**
Trichlorofluoromethane	1.11	0.198	1.13	0.200	1.12	**2**	25	
2-Propanol (Isopropyl Alcohol)	0.841	0.342	0.841	0.342	0.841	**0**	25	**J**
Acrylonitrile	ND	ND	ND	ND	-	-	25	
1,1-Dichloroethene	ND	ND	ND	ND	-	-	25	
Methylene Chloride	0.301	0.0867	0.312	0.0900	0.3065	**4**	25	**J**
3-Chloro-1-propene (Allyl Chloride)	ND	ND	ND	ND	-	-	25	
Trichlorotrifluoroethane	0.510	0.0665	0.475	0.0620	0.4925	**7**	25	**J**
Carbon Disulfide	ND	ND	ND	ND	-	-	25	
trans-1,2-Dichloroethene	ND	ND	ND	ND	-	-	25	
1,1-Dichloroethane	ND	ND	ND	ND	-	-	25	
Methyl tert-Butyl Ether	ND	ND	ND	ND	-	-	25	
Vinyl Acetate	ND	ND	ND	ND	-	-	25	
2-Butanone (MEK)	0.379	0.128	0.341	0.116	0.36	**11**	25	**J**

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

LABORATORY DUPLICATE SUMMARY RESULTS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Batch QC** ALS Project ID: P2105625
Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P2105750-004DUP

Test Code: EPA TO-15 Date Collected: 11/1/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 11/1/21
Analyst: Jessie Macaluso Date Analyzed: 11/5/21
Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: GEO00170

Initial Pressure (psig): -1.69 Final Pressure (psig): 4.00

Canister Dilution Factor: 1.44

Compound	Sample Result µg/m³	Sample Result ppbV	Duplicate Sample Result µg/m³	Duplicate Sample Result ppbV	Average µg/m³	% RPD	RPD Limit	Data Qualifier
cis-1,2-Dichloroethene	ND	ND	ND	ND	-	-	25	
Ethyl Acetate	5.98	1.66	6.14	1.70	6.06	**3**	25	
n-Hexane	0.210	0.0597	0.219	0.0621	0.2145	**4**	25	**J**
Chloroform	0.228	0.0466	0.233	0.0478	0.2305	**2**	25	**J**
Tetrahydrofuran (THF)	ND	ND	ND	ND	-	-	25	
1,2-Dichloroethane	ND	ND	ND	ND	-	-	25	
1,1,1-Trichloroethane	ND	ND	ND	ND	-	-	25	
Benzene	0.328	0.103	0.327	0.102	0.3275	**0.3**	25	**J**
Carbon Tetrachloride	0.416	0.0662	0.396	0.0630	0.406	**5**	25	**J**
Cyclohexane	ND	ND	ND	ND	-	-	25	
1,2-Dichloropropane	ND	ND	ND	ND	-	-	25	
Bromodichloromethane	ND	ND	ND	ND	-	-	25	
Trichloroethene	ND	ND	ND	ND	-	-	25	
1,4-Dioxane	ND	ND	ND	ND	-	-	25	
Methyl Methacrylate	ND	ND	ND	ND	-	-	25	
n-Heptane	0.127	0.0309	ND	ND	-	-	25	
cis-1,3-Dichloropropene	ND	ND	ND	ND	-	-	25	
4-Methyl-2-pentanone	ND	ND	ND	ND	-	-	25	
trans-1,3-Dichloropropene	ND	ND	ND	ND	-	-	25	
1,1,2-Trichloroethane	ND	ND	ND	ND	-	-	25	
Toluene	0.703	0.187	0.696	0.185	0.6995	**1**	25	**J**
2-Hexanone	ND	ND	ND	ND	-	-	25	
Dibromochloromethane	ND	ND	ND	ND	-	-	25	
1,2-Dibromoethane	ND	ND	ND	ND	-	-	25	
n-Butyl Acetate	ND	ND	ND	ND	-	-	25	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

LABORATORY DUPLICATE SUMMARY RESULTS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Batch QC** ALS Project ID: P2105625
Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P2105750-004DUP

Test Code: EPA TO-15 Date Collected: 11/1/21
Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13 Date Received: 11/1/21
Analyst: Jessie Macaluso Date Analyzed: 11/5/21
Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: GEO00170

Initial Pressure (psig): -1.69 Final Pressure (psig): 4.00

Canister Dilution Factor: 1.44

Compound	Sample Result µg/m³	Sample Result ppbV	Duplicate Sample Result µg/m³	Duplicate Sample Result ppbV	Average µg/m³	% RPD	RPD Limit	Data Qualifier
n-Octane	ND	ND	ND	ND	-	-	25	
Tetrachloroethene	ND	ND	ND	ND	-	-	25	
Chlorobenzene	ND	ND	ND	ND	-	-	25	
Ethylbenzene	0.120	0.0275	0.120	0.0275	0.12	**0**	25	**J**
m,p-Xylenes	0.366	0.0842	0.369	0.0849	0.3675	**0.8**	25	**J**
Bromoform	ND	ND	ND	ND	-	-	25	
Styrene	ND	ND	ND	ND	-	-	25	
o-Xylene	0.137	0.0315	0.141	0.0325	0.139	**3**	25	**J**
n-Nonane	ND	ND	ND	ND	-	-	25	
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	-	-	25	
Cumene	ND	ND	ND	ND	-	-	25	
alpha-Pinene	0.143	0.0256	0.145	0.0261	0.144	**1**	25	**J**
n-Propylbenzene	ND	ND	ND	ND	-	-	25	
4-Ethyltoluene	ND	ND	ND	ND	-	-	25	
1,3,5-Trimethylbenzene	ND	ND	ND	ND	-	-	25	
1,2,4-Trimethylbenzene	0.115	0.0234	0.114	0.0231	0.1145	**0.9**	25	**J**
Benzyl Chloride	ND	ND	ND	ND	-	-	25	
1,3-Dichlorobenzene	ND	ND	ND	ND	-	-	25	
1,4-Dichlorobenzene	ND	ND	ND	ND	-	-	25	
1,2-Dichlorobenzene	ND	ND	ND	ND	-	-	25	
d-Limonene	0.204	0.0367	0.184	0.0331	0.194	**10**	25	**J**
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	-	-	25	
1,2,4-Trichlorobenzene	ND	ND	ND	ND	-	-	25	
Naphthalene	ND	ND	ND	ND	-	-	25	
Hexachlorobutadiene	ND	ND	ND	ND	-	-	25	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

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LABORATORY REPORT

January 14, 2022

Collin Creel
Environmental Management Services, Inc.
PO Box 15369
Hattiesburg, MS 39402

RE: In-Plant Monitoring / KUH0-21-011

Dear Collin:

Enclosed are the results of the samples submitted to our laboratory on January 3, 2022. For your reference, these analyses have been assigned our service request number P2200015.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

By Sue Anderson at 3:35 pm, Jan 14, 2022

Sue Anderson
Project Manager

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
www.alsglobal.com

Client: Environmental Management Services, Inc. Service Request No: P2200015
Project: In-Plant Monitoring / KUH0-21-011

CASE NARRATIVE

The samples were received intact under chain of custody on January 3, 2022 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Volatile Organic Compound Analysis

The samples were analyzed for volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. This procedure is described in laboratory SOP VOA-TO15. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. This method is included on the laboratory's NELAP and DoD-ELAP scope of accreditation. Any analytes flagged with an X are not included on the NELAP or DoD-ELAP accreditation.

The upper control criterion was exceeded for alpha-pinene in the Continuing Calibration Verification (CCV) and Laboratory Control Samples (LCS) analyzed on January 6, 2022. Therefore, a potential for a high bias exists for those associated sample concentrations reported with positive results. The data has been qualified accordingly.

The spike recovery of methyl tert-butyl ether for the Laboratory Control Sample (LCS) and Duplicate Laboratory Control Sample (DLCS) analyzed on January 6, 2022 was outside the laboratory generated control criterion. The recovery errors equate to a potential low bias. However, the spike recovery of the analyte in question was within the method criteria; therefore, the data quality has not been significantly affected. No corrective action was taken.

The containers were cleaned, prior to sampling, down to the method reporting limit (MRL) reported for this project. For projects requiring DoD QSM 5.3 compliance canisters were cleaned to <1/2 the MRL. Please note, projects which require reporting below the MRL could have results between the MRL and method detection limit (MDL) that are biased high.

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ALS Environmental – Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
Alaska DEC	http://dec.alaska.gov/eh/lab.aspx	17-019
Arizona DHS	http://www.azdhs.gov/preparedness/state-laboratory/lab-licensure-certification/index.php#laboratory-licensure-home	AZ0694
Florida DOH (NELAP)	http://www.floridahealth.gov/licensing-and-regulation/environmental-laboratories/index.html	E871020
Louisiana DEQ (NELAP)	http://www.deq.louisiana.gov/page/la-lab-accreditation	05071
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/professionals/labCert.shtml	2018027
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	1776326
New Jersey DEP (NELAP)	http://www.nj.gov/dep/enforcement/oqa.html	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://www.oregon.gov/oha/ph/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	4068-008
Pennsylvania DEP	http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx	68-03307 (Registration)
PJLA (DoD ELAP)	http://www.pjlabs.com/search-accredited-labs	65818 (Testing)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/agency/qa/env_lab_accreditation.html	T104704413-19-10
Utah DOH (NELAP)	http://health.utah.gov/lab/lab_cert_env	CA016272019-10
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: Environmental Management Services, Inc. Service Request: P2200015

Project ID: In-Plant Monitoring / KUH0-21-011

Date Received: 1/3/2022

Time Received: 09:00

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	TO-15 - VOC Cans
Location 1	P2200015-001	Air	12/13/2021	16:12	1SS01389	-3.41	6.22	X
Location 2	P2200015-002	Air	12/13/2021	16:10	1SS00513	-3.40	6.22	X
Location 3	P2200015-003	Air	12/13/2021	16:10	1SC00397	-2.59	6.37	X

Air - Chain of Custody Record & Analytical Service Request

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day-Standard

ALS Project No. P2200615

ALS Contact:

Company Name & Address (Reporting Information)	Project Name	Analysis Method	Comments e.g. Actual Preservative or specific instructions
EMS, Inc PO Box 15369 Hattiesburg, MS 39404	In-Plant Monitoring		
Project Manager: Collin Creel	Project Number: KUHO-21-011		
Phone: 985 516 0142 / Fax:	P.O. # / Billing Information: KUHO-21-011 / Soneas reporting	TO15	
Email Address for Result Reporting: ccreel@ew-mgt.com	Sampler (Print & Sign): Collin Creel		

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	Analysis Method		Comments
Location 1	1	12/13/21	08:34-16:12	1SS01389	GA00486	-30	-7	1L	X		
Location 2	2	12/13/21	08:34-16:10	1SS00513	GA00080	-30	-8	1L	X		
Location 3	3	12/13/21	08:34-16:10	1SC00397	GA01204	-30	-6	1L	X		

5 of 22

Report Tier Levels - please select

Tier I - Results (Default if not specified) ____ Tier III (Results + QC & Calibration Summaries) ____
Tier II (Results + QC Summaries) ____ Tier IV (Data Validation Package) 10% Surcharge ____

EDD required Yes / No
Type: _____ Units: _____

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Collin Creel	12/20/21	12:00	- Fed Ex -		
- Fed Ex -	Date:	Time:	Received by: (Signature)	Date: 1-8-22	Time: 0900

Cooler / Blank Temperature ____ °C

ALS Environmental

Sample Acceptance Check Form

Client: Environmental Management Services, Inc. Work order: P2200015

Project: In-Plant Monitoring / KUH0-21-011

Sample(s) received on: 1/3/22 Date opened: 1/3/22 by: ADAVID

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Did **sample containers** arrive in good condition?	☒	☐	☐
3	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
4	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
5	Was **sample volume** received adequate for analysis?	☒	☐	☐
6	Are samples within specified holding times?	☒	☐	☐
7	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
8	Were **custody seals** on outside of cooler/Box/Container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
9	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
10	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
11	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P2200015-001.01	1.0 L Source Silonite Canister					
P2200015-002.01	1.0 L Source Silonite Canister					
P2200015-003.01	1.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers): _____

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Location 1** ALS Project ID: P2200015
Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P2200015-001

Test Code: EPA TO-15 Date Collected: 12/13/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 1/3/22
Analyst: Simon Cao Date Analyzed: 1/7/22
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes: 0.040 Liter(s)
Container ID: 1SS01389

Initial Pressure (psig): -3.41 Final Pressure (psig): 6.22

Canister Dilution Factor: 1.85

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	**940**	24	6.0	**550**	14	3.5	**D**
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.6**	2.5	0.40	**0.52**	0.50	0.081	
74-87-3	Chloromethane	**0.99**	2.4	0.40	**0.48**	1.1	0.19	**J**
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.5	0.39	ND	0.36	0.056	
75-01-4	Vinyl Chloride	ND	2.4	0.26	ND	0.94	0.10	
106-99-0	1,3-Butadiene	ND	2.4	0.41	ND	1.1	0.18	
74-83-9	Bromomethane	ND	2.4	0.34	ND	0.61	0.088	
75-00-3	Chloroethane	ND	2.4	0.31	ND	0.89	0.12	
64-17-5	Ethanol	**470**	23	1.7	**250**	12	0.91	
75-05-8	Acetonitrile	ND	4.6	0.60	ND	2.8	0.36	
107-02-8	Acrolein	**2.0**	4.6	0.69	**0.86**	2.0	0.30	**J**
67-64-1	Acetone	**220**	24	5.6	**91**	10	2.3	
75-69-4	Trichlorofluoromethane (CFC 11)	**1.2**	2.4	0.37	**0.21**	0.43	0.067	**J**
67-63-0	2-Propanol (Isopropyl Alcohol)	**26**	4.6	1.0	**11**	1.9	0.41	
107-13-1	Acrylonitrile	ND	4.6	0.51	ND	2.1	0.23	
75-35-4	1,1-Dichloroethene	ND	2.5	0.34	ND	0.63	0.086	
75-09-2	Methylene Chloride	ND	2.4	0.69	ND	0.69	0.20	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.5	0.33	ND	0.78	0.11	
76-13-1	Trichlorotrifluoroethane (CFC 113)	**0.51**	2.5	0.35	**0.066**	0.33	0.046	**J**
75-15-0	Carbon Disulfide	ND	5.1	0.74	ND	1.6	0.24	
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.34	ND	0.62	0.086	
75-34-3	1,1-Dichloroethane	ND	2.5	0.36	ND	0.61	0.089	
1634-04-4	Methyl tert-Butyl Ether	ND	2.5	0.29	ND	0.68	0.081	
108-05-4	Vinyl Acetate	ND	23	5.6	ND	6.6	1.6	
78-93-3	2-Butanone (MEK)	**33**	4.6	0.51	**11**	1.6	0.17	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
D = The reported result is from a dilution.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **Location 1** ALS Project ID: P2200015

Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P2200015-001

Test Code:	EPA TO-15	Date Collected:	12/13/21
Instrument ID:	Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9	Date Received:	1/3/22
Analyst:	Simon Cao	Date Analyzed:	1/7/22
Sample Type:	1.0 L Silonite Summa Canister	Volume(s) Analyzed:	0.40 Liter(s)
Test Notes:			0.040 Liter(s)
Container ID:	1SS01389		

Initial Pressure (psig): -3.41 Final Pressure (psig): 6.22

Canister Dilution Factor: 1.85

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.4	0.35	ND	0.61	0.088	
141-78-6	Ethyl Acetate	**6.8**	9.7	1.3	**1.9**	2.7	0.36	**J**
110-54-3	n-Hexane	ND	2.5	0.51	ND	0.70	0.14	
67-66-3	Chloroform	ND	2.5	0.33	ND	0.51	0.067	
109-99-9	Tetrahydrofuran (THF)	**14**	4.6	0.31	**4.6**	1.6	0.11	
107-06-2	1,2-Dichloroethane	ND	2.5	0.27	ND	0.61	0.067	
71-55-6	1,1,1-Trichloroethane	ND	2.4	0.31	ND	0.44	0.056	
71-43-2	Benzene	**1.1**	2.3	0.36	**0.35**	0.72	0.11	**J**
56-23-5	Carbon Tetrachloride	**0.44**	2.3	0.34	**0.070**	0.37	0.054	**J**
110-82-7	Cyclohexane	ND	5.1	0.69	ND	1.5	0.20	
78-87-5	1,2-Dichloropropane	ND	2.3	0.31	ND	0.50	0.066	
75-27-4	Bromodichloromethane	ND	2.5	0.36	ND	0.37	0.053	
79-01-6	Trichloroethene	ND	2.4	0.33	ND	0.45	0.062	
123-91-1	1,4-Dioxane	ND	2.4	0.29	ND	0.67	0.081	
80-62-6	Methyl Methacrylate	ND	5.1	0.88	ND	1.2	0.21	
142-82-5	n-Heptane	**2.6**	2.5	0.39	**0.64**	0.60	0.096	
10061-01-5	cis-1,3-Dichloropropene	ND	2.3	0.38	ND	0.51	0.085	
108-10-1	4-Methyl-2-pentanone	**6.6**	5.1	0.34	**1.6**	1.2	0.082	
10061-02-6	trans-1,3-Dichloropropene	ND	2.4	0.51	ND	0.52	0.11	
79-00-5	1,1,2-Trichloroethane	ND	2.4	0.25	ND	0.44	0.046	
108-88-3	Toluene	**34**	2.4	0.30	**9.2**	0.64	0.080	
591-78-6	2-Hexanone	**4.5**	5.1	0.31	**1.1**	1.2	0.075	**J**
124-48-1	Dibromochloromethane	ND	2.5	0.32	ND	0.29	0.038	
106-93-4	1,2-Dibromoethane	ND	2.4	0.29	ND	0.31	0.037	
123-86-4	n-Butyl Acetate	**8.5**	5.1	0.34	**1.8**	1.1	0.071	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Location 1** ALS Project ID: P2200015
Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P2200015-001

Test Code: EPA TO-15 Date Collected: 12/13/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 1/3/22
Analyst: Simon Cao Date Analyzed: 1/7/22
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes: 0.040 Liter(s)
Container ID: 1SS01389

Initial Pressure (psig): -3.41 Final Pressure (psig): 6.22

Canister Dilution Factor: 1.85

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	**1.5**	2.5	0.56	**0.31**	0.52	0.12	**J**
127-18-4	Tetrachloroethene	ND	2.4	0.32	ND	0.35	0.047	
108-90-7	Chlorobenzene	ND	2.4	0.33	ND	0.52	0.071	
100-41-4	Ethylbenzene	**18**	2.4	0.35	**4.0**	0.55	0.080	
179601-23-1	m,p-Xylenes	**72**	5.1	0.65	**17**	1.2	0.15	
75-25-2	Bromoform	ND	2.4	0.51	ND	0.23	0.049	
100-42-5	Styrene	**1.0**	2.3	0.40	**0.24**	0.54	0.093	**J**
95-47-6	o-Xylene	**21**	2.4	0.36	**4.9**	0.55	0.082	
111-84-2	n-Nonane	**2.7**	2.4	0.41	**0.51**	0.46	0.078	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.4	0.34	ND	0.35	0.050	
98-82-8	Cumene	**0.73**	2.4	0.36	**0.15**	0.49	0.072	**J**
80-56-8	alpha-Pinene	**12**	2.5	0.38	**2.1**	0.45	0.068	**V**
103-65-1	n-Propylbenzene	ND	2.5	0.36	ND	0.50	0.072	
622-96-8	4-Ethyltoluene	**2.0**	2.5	0.39	**0.40**	0.50	0.080	**J**
108-67-8	1,3,5-Trimethylbenzene	**2.0**	2.4	0.36	**0.41**	0.49	0.072	**J**
95-63-6	1,2,4-Trimethylbenzene	**7.5**	2.4	0.34	**1.5**	0.49	0.070	
100-44-7	Benzyl Chloride	ND	5.1	0.56	ND	0.98	0.11	
541-73-1	1,3-Dichlorobenzene	ND	2.4	0.37	ND	0.40	0.062	
106-46-7	1,4-Dichlorobenzene	ND	2.4	0.38	ND	0.40	0.063	
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.37	ND	0.41	0.061	
5989-27-5	d-Limonene	**12**	2.3	0.51	**2.1**	0.42	0.091	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.6	0.46	ND	0.48	0.048	
120-82-1	1,2,4-Trichlorobenzene	ND	5.1	0.60	ND	0.69	0.081	
91-20-3	Naphthalene	**3.9**	2.4	0.60	**0.74**	0.46	0.11	
87-68-3	Hexachlorobutadiene	ND	2.4	0.51	ND	0.23	0.048	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
V = The continuing calibration verification standard was outside (biased high) the specified limits for this compound.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Location 2** ALS Project ID: P2200015
Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P2200015-002

Test Code: EPA TO-15 Date Collected: 12/13/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 1/3/22
Analyst: Simon Cao Date Analyzed: 1/7/22
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SS00513

Initial Pressure (psig): -3.40 Final Pressure (psig): 6.22

Canister Dilution Factor: 1.85

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	**150**	2.4	0.60	**86**	1.4	0.35	
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.4**	2.5	0.40	**0.48**	0.50	0.081	**J**
74-87-3	Chloromethane	**0.95**	2.4	0.40	**0.46**	1.1	0.19	**J**
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.5	0.39	ND	0.36	0.056	
75-01-4	Vinyl Chloride	ND	2.4	0.26	ND	0.94	0.10	
106-99-0	1,3-Butadiene	ND	2.4	0.41	ND	1.1	0.18	
74-83-9	Bromomethane	ND	2.4	0.34	ND	0.61	0.088	
75-00-3	Chloroethane	ND	2.4	0.31	ND	0.89	0.12	
64-17-5	Ethanol	**200**	23	1.7	**110**	12	0.91	
75-05-8	Acetonitrile	ND	4.6	0.60	ND	2.8	0.36	
107-02-8	Acrolein	**1.2**	4.6	0.69	**0.51**	2.0	0.30	**J**
67-64-1	Acetone	**420**	24	5.6	**180**	10	2.3	
75-69-4	Trichlorofluoromethane (CFC 11)	**1.2**	2.4	0.37	**0.21**	0.43	0.067	**J**
67-63-0	2-Propanol (Isopropyl Alcohol)	**11**	4.6	1.0	**4.5**	1.9	0.41	
107-13-1	Acrylonitrile	ND	4.6	0.51	ND	2.1	0.23	
75-35-4	1,1-Dichloroethene	ND	2.5	0.34	ND	0.63	0.086	
75-09-2	Methylene Chloride	ND	2.4	0.69	ND	0.69	0.20	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.5	0.33	ND	0.78	0.11	
76-13-1	Trichlorotrifluoroethane (CFC 113)	**0.50**	2.5	0.35	**0.066**	0.33	0.046	**J**
75-15-0	Carbon Disulfide	ND	5.1	0.74	ND	1.6	0.24	
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.34	ND	0.62	0.086	
75-34-3	1,1-Dichloroethane	ND	2.5	0.36	ND	0.61	0.089	
1634-04-4	Methyl tert-Butyl Ether	ND	2.5	0.29	ND	0.68	0.081	
108-05-4	Vinyl Acetate	ND	23	5.6	ND	6.6	1.6	
78-93-3	2-Butanone (MEK)	**30**	4.6	0.51	**10**	1.6	0.17	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Location 2** ALS Project ID: P2200015
Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P2200015-002

Test Code: EPA TO-15 Date Collected: 12/13/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 1/3/22
Analyst: Simon Cao Date Analyzed: 1/7/22
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SS00513

Initial Pressure (psig): -3.40 Final Pressure (psig): 6.22

Canister Dilution Factor: 1.85

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.4	0.35	ND	0.61	0.088	
141-78-6	Ethyl Acetate	**5.1**	9.7	1.3	**1.4**	2.7	0.36	**J**
110-54-3	n-Hexane	ND	2.5	0.51	ND	0.70	0.14	
67-66-3	Chloroform	ND	2.5	0.33	ND	0.51	0.067	
109-99-9	Tetrahydrofuran (THF)	**37**	4.6	0.31	**13**	1.6	0.11	
107-06-2	1,2-Dichloroethane	ND	2.5	0.27	ND	0.61	0.067	
71-55-6	1,1,1-Trichloroethane	ND	2.4	0.31	ND	0.44	0.056	
71-43-2	Benzene	**1.1**	2.3	0.36	**0.34**	0.72	0.11	**J**
56-23-5	Carbon Tetrachloride	**0.44**	2.3	0.34	**0.071**	0.37	0.054	**J**
110-82-7	Cyclohexane	ND	5.1	0.69	ND	1.5	0.20	
78-87-5	1,2-Dichloropropane	ND	2.3	0.31	ND	0.50	0.066	
75-27-4	Bromodichloromethane	ND	2.5	0.36	ND	0.37	0.053	
79-01-6	Trichloroethene	ND	2.4	0.33	ND	0.45	0.062	
123-91-1	1,4-Dioxane	ND	2.4	0.29	ND	0.67	0.081	
80-62-6	Methyl Methacrylate	ND	5.1	0.88	ND	1.2	0.21	
142-82-5	n-Heptane	**2.2**	2.5	0.39	**0.55**	0.60	0.096	**J**
10061-01-5	cis-1,3-Dichloropropene	ND	2.3	0.38	ND	0.51	0.085	
108-10-1	4-Methyl-2-pentanone	**5.5**	5.1	0.34	**1.3**	1.2	0.082	
10061-02-6	trans-1,3-Dichloropropene	ND	2.4	0.51	ND	0.52	0.11	
79-00-5	1,1,2-Trichloroethane	ND	2.4	0.25	ND	0.44	0.046	
108-88-3	Toluene	**17**	2.4	0.30	**4.5**	0.64	0.080	
591-78-6	2-Hexanone	ND	5.1	0.31	ND	1.2	0.075	
124-48-1	Dibromochloromethane	ND	2.5	0.32	ND	0.29	0.038	
106-93-4	1,2-Dibromoethane	ND	2.4	0.29	ND	0.31	0.037	
123-86-4	n-Butyl Acetate	**13**	5.1	0.34	**2.7**	1.1	0.071	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Location 2** ALS Project ID: P2200015
Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P2200015-002

Test Code: EPA TO-15 Date Collected: 12/13/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 1/3/22
Analyst: Simon Cao Date Analyzed: 1/7/22
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SS00513

Initial Pressure (psig): -3.40 Final Pressure (psig): 6.22

Canister Dilution Factor: 1.85

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	**2.0**	2.5	0.56	**0.42**	0.52	0.12	**J**
127-18-4	Tetrachloroethene	**0.62**	2.4	0.32	**0.092**	0.35	0.047	**J**
108-90-7	Chlorobenzene	ND	2.4	0.33	ND	0.52	0.071	
100-41-4	Ethylbenzene	**53**	2.4	0.35	**12**	0.55	0.080	
179601-23-1	m,p-Xylenes	**230**	5.1	0.65	**52**	1.2	0.15	
75-25-2	Bromoform	ND	2.4	0.51	ND	0.23	0.049	
100-42-5	Styrene	**1.0**	2.3	0.40	**0.24**	0.54	0.093	**J**
95-47-6	o-Xylene	**65**	2.4	0.36	**15**	0.55	0.082	
111-84-2	n-Nonane	**2.7**	2.4	0.41	**0.52**	0.46	0.078	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.4	0.34	ND	0.35	0.050	
98-82-8	Cumene	**1.5**	2.4	0.36	**0.31**	0.49	0.072	**J**
80-56-8	alpha-Pinene	**5.9**	2.5	0.38	**1.1**	0.45	0.068	**V**
103-65-1	n-Propylbenzene	**3.8**	2.5	0.36	**0.77**	0.50	0.072	
622-96-8	4-Ethyltoluene	**4.1**	2.5	0.39	**0.83**	0.50	0.080	
108-67-8	1,3,5-Trimethylbenzene	**5.0**	2.4	0.36	**1.0**	0.49	0.072	
95-63-6	1,2,4-Trimethylbenzene	**18**	2.4	0.34	**3.6**	0.49	0.070	
100-44-7	Benzyl Chloride	ND	5.1	0.56	ND	0.98	0.11	
541-73-1	1,3-Dichlorobenzene	ND	2.4	0.37	ND	0.40	0.062	
106-46-7	1,4-Dichlorobenzene	ND	2.4	0.38	ND	0.40	0.063	
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.37	ND	0.41	0.061	
5989-27-5	d-Limonene	**5.3**	2.3	0.51	**0.95**	0.42	0.091	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.6	0.46	ND	0.48	0.048	
120-82-1	1,2,4-Trichlorobenzene	ND	5.1	0.60	ND	0.69	0.081	
91-20-3	Naphthalene	**4.8**	2.4	0.60	**0.92**	0.46	0.11	
87-68-3	Hexachlorobutadiene	ND	2.4	0.51	ND	0.23	0.048	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
V = The continuing calibration verification standard was outside (biased high) the specified limits for this compound.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Location 3** ALS Project ID: P2200015
Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P2200015-003

Test Code: EPA TO-15 Date Collected: 12/13/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 1/3/22
Analyst: Simon Cao Date Analyzed: 1/7/22
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC00397

Initial Pressure (psig): -2.59 Final Pressure (psig): 6.37

Canister Dilution Factor: 1.74

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	ND	2.3	0.57	ND	1.3	0.33	
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.5**	2.3	0.38	**0.50**	0.47	0.077	
74-87-3	Chloromethane	**0.84**	2.2	0.37	**0.41**	1.1	0.18	**J**
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.3	0.37	ND	0.34	0.052	
75-01-4	Vinyl Chloride	ND	2.3	0.25	ND	0.89	0.097	
106-99-0	1,3-Butadiene	ND	2.3	0.38	ND	1.0	0.17	
74-83-9	Bromomethane	ND	2.2	0.32	ND	0.57	0.083	
75-00-3	Chloroethane	ND	2.2	0.29	ND	0.84	0.11	
64-17-5	Ethanol	**52**	22	1.6	**28**	12	0.85	
75-05-8	Acetonitrile	**0.74**	4.4	0.57	**0.44**	2.6	0.34	**J**
107-02-8	Acrolein	**0.87**	4.4	0.65	**0.38**	1.9	0.28	**J**
67-64-1	Acetone	**34**	23	5.2	**14**	9.5	2.2	
75-69-4	Trichlorofluoromethane (CFC 11)	**1.2**	2.3	0.35	**0.22**	0.40	0.063	**J**
67-63-0	2-Propanol (Isopropyl Alcohol)	**9.4**	4.4	0.96	**3.8**	1.8	0.39	
107-13-1	Acrylonitrile	ND	4.4	0.48	ND	2.0	0.22	
75-35-4	1,1-Dichloroethene	ND	2.3	0.32	ND	0.59	0.081	
75-09-2	Methylene Chloride	**0.74**	2.3	0.65	**0.21**	0.65	0.19	**J**
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.3	0.31	ND	0.74	0.10	
76-13-1	Trichlorotrifluoroethane (CFC 113)	**0.48**	2.3	0.33	**0.062**	0.31	0.043	**J**
75-15-0	Carbon Disulfide	**4.0**	4.8	0.70	**1.3**	1.5	0.22	**J**
156-60-5	trans-1,2-Dichloroethene	ND	2.3	0.32	ND	0.58	0.081	
75-34-3	1,1-Dichloroethane	ND	2.3	0.34	ND	0.57	0.084	
1634-04-4	Methyl tert-Butyl Ether	ND	2.3	0.27	ND	0.64	0.076	
108-05-4	Vinyl Acetate	ND	22	5.2	ND	6.2	1.5	
78-93-3	2-Butanone (MEK)	**15**	4.4	0.48	**5.2**	1.5	0.16	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **Location 3** ALS Project ID: P2200015

Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P2200015-003

Test Code: EPA TO-15 Date Collected: 12/13/21

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 1/3/22

Analyst: Simon Cao Date Analyzed: 1/7/22

Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)

Test Notes:

Container ID: 1SC00397

Initial Pressure (psig): -2.59 Final Pressure (psig): 6.37

Canister Dilution Factor: 1.74

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.3	0.33	ND	0.57	0.082	
141-78-6	Ethyl Acetate	**29**	9.1	1.2	**8.2**	2.5	0.34	
110-54-3	n-Hexane	ND	2.3	0.48	ND	0.65	0.14	
67-66-3	Chloroform	ND	2.3	0.31	ND	0.48	0.063	
109-99-9	Tetrahydrofuran (THF)	**1.7**	4.4	0.29	**0.56**	1.5	0.099	**J**
107-06-2	1,2-Dichloroethane	**0.38**	2.3	0.26	**0.094**	0.57	0.063	**J**
71-55-6	1,1,1-Trichloroethane	ND	2.3	0.29	ND	0.41	0.053	
71-43-2	Benzene	**0.89**	2.2	0.33	**0.28**	0.68	0.10	**J**
56-23-5	Carbon Tetrachloride	**0.39**	2.2	0.32	**0.062**	0.35	0.051	**J**
110-82-7	Cyclohexane	ND	4.8	0.65	ND	1.4	0.19	
78-87-5	1,2-Dichloropropane	ND	2.2	0.29	ND	0.47	0.062	
75-27-4	Bromodichloromethane	ND	2.3	0.33	ND	0.34	0.050	
79-01-6	Trichloroethene	ND	2.3	0.31	ND	0.42	0.058	
123-91-1	1,4-Dioxane	ND	2.3	0.27	ND	0.63	0.076	
80-62-6	Methyl Methacrylate	ND	4.8	0.83	ND	1.2	0.20	
142-82-5	n-Heptane	**0.85**	2.3	0.37	**0.21**	0.56	0.090	**J**
10061-01-5	cis-1,3-Dichloropropene	ND	2.2	0.36	ND	0.48	0.080	
108-10-1	4-Methyl-2-pentanone	**1.8**	4.8	0.32	**0.44**	1.2	0.078	**J**
10061-02-6	trans-1,3-Dichloropropene	ND	2.2	0.48	ND	0.49	0.11	
79-00-5	1,1,2-Trichloroethane	ND	2.3	0.23	ND	0.41	0.043	
108-88-3	Toluene	**12**	2.3	0.28	**3.1**	0.60	0.075	
591-78-6	2-Hexanone	**0.57**	4.8	0.29	**0.14**	1.2	0.070	**J**
124-48-1	Dibromochloromethane	ND	2.3	0.30	ND	0.27	0.036	
106-93-4	1,2-Dibromoethane	ND	2.3	0.27	ND	0.29	0.035	
123-86-4	n-Butyl Acetate	**7.2**	4.8	0.32	**1.5**	1.0	0.067	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Location 3** ALS Project ID: P2200015
Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P2200015-003

Test Code: EPA TO-15 Date Collected: 12/13/21
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 1/3/22
Analyst: Simon Cao Date Analyzed: 1/7/22
Sample Type: 1.0 L Summa Canister Volume(s) Analyzed: 0.40 Liter(s)
Test Notes:
Container ID: 1SC00397

Initial Pressure (psig): -2.59 Final Pressure (psig): 6.37

Canister Dilution Factor: 1.74

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	**0.66**	2.3	0.52	**0.14**	0.49	0.11	**J**
127-18-4	Tetrachloroethene	**2.5**	2.3	0.30	**0.37**	0.33	0.044	
108-90-7	Chlorobenzene	ND	2.3	0.31	ND	0.49	0.067	
100-41-4	Ethylbenzene	**2.3**	2.3	0.33	**0.53**	0.52	0.075	
179601-23-1	m,p-Xylenes	**8.2**	4.8	0.61	**1.9**	1.1	0.14	
75-25-2	Bromoform	ND	2.3	0.48	ND	0.22	0.046	
100-42-5	Styrene	ND	2.2	0.37	ND	0.51	0.088	
95-47-6	o-Xylene	**2.6**	2.3	0.33	**0.60**	0.52	0.077	
111-84-2	n-Nonane	**0.78**	2.3	0.39	**0.15**	0.43	0.074	**J**
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.3	0.32	ND	0.33	0.047	
98-82-8	Cumene	ND	2.3	0.33	ND	0.46	0.068	
80-56-8	alpha-Pinene	**4.6**	2.3	0.36	**0.83**	0.42	0.064	**V**
103-65-1	n-Propylbenzene	ND	2.3	0.33	ND	0.47	0.068	
622-96-8	4-Ethyltoluene	ND	2.3	0.37	ND	0.47	0.075	
108-67-8	1,3,5-Trimethylbenzene	ND	2.3	0.33	ND	0.46	0.068	
95-63-6	1,2,4-Trimethylbenzene	**0.87**	2.3	0.32	**0.18**	0.46	0.066	**J**
100-44-7	Benzyl Chloride	ND	4.8	0.52	ND	0.92	0.10	
541-73-1	1,3-Dichlorobenzene	ND	2.3	0.35	ND	0.38	0.058	
106-46-7	1,4-Dichlorobenzene	ND	2.3	0.36	ND	0.38	0.059	
95-50-1	1,2-Dichlorobenzene	ND	2.3	0.34	ND	0.38	0.057	
5989-27-5	d-Limonene	**3.6**	2.2	0.48	**0.64**	0.39	0.086	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.4	0.44	ND	0.45	0.045	
120-82-1	1,2,4-Trichlorobenzene	ND	4.8	0.57	ND	0.64	0.076	
91-20-3	Naphthalene	ND	2.3	0.57	ND	0.43	0.11	
87-68-3	Hexachlorobutadiene	ND	2.3	0.48	ND	0.21	0.045	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
V = The continuing calibration verification standard was outside (biased high) the specified limits for this compound.

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Method Blank** ALS Project ID: P2200015
Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P220106-MB

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Simon Cao Date Analyzed: 1/6/22
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
115-07-1	Propene	ND	0.52	0.13	ND	0.30	0.076	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.53	0.087	ND	0.11	0.018	
74-87-3	Chloromethane	ND	0.51	0.086	ND	0.25	0.042	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.54	0.084	ND	0.077	0.012	
75-01-4	Vinyl Chloride	ND	0.52	0.057	ND	0.20	0.022	
106-99-0	1,3-Butadiene	ND	0.52	0.088	ND	0.24	0.040	
74-83-9	Bromomethane	ND	0.51	0.074	ND	0.13	0.019	
75-00-3	Chloroethane	ND	0.51	0.066	ND	0.19	0.025	
64-17-5	Ethanol	ND	5.0	0.37	ND	2.7	0.20	
75-05-8	Acetonitrile	ND	1.0	0.13	ND	0.60	0.077	
107-02-8	Acrolein	ND	1.0	0.15	ND	0.44	0.065	
67-64-1	Acetone	ND	5.2	1.2	ND	2.2	0.51	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	0.52	0.081	ND	0.093	0.014	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	1.0	0.22	ND	0.41	0.090	
107-13-1	Acrylonitrile	ND	1.0	0.11	ND	0.46	0.051	
75-35-4	1,1-Dichloroethene	ND	0.54	0.074	ND	0.14	0.019	
75-09-2	Methylene Chloride	ND	0.52	0.15	ND	0.15	0.043	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.53	0.072	ND	0.17	0.023	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	0.54	0.076	ND	0.070	0.0099	
75-15-0	Carbon Disulfide	ND	1.1	0.16	ND	0.35	0.051	
156-60-5	trans-1,2-Dichloroethene	ND	0.53	0.074	ND	0.13	0.019	
75-34-3	1,1-Dichloroethane	ND	0.53	0.078	ND	0.13	0.019	
1634-04-4	Methyl tert-Butyl Ether	ND	0.53	0.063	ND	0.15	0.017	
108-05-4	Vinyl Acetate	ND	5.0	1.2	ND	1.4	0.34	
78-93-3	2-Butanone (MEK)	ND	1.0	0.11	ND	0.34	0.037	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **Method Blank** ALS Project ID: P2200015

Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P220106-MB

Test Code: EPA TO-15 Date Collected: NA

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA

Analyst: Simon Cao Date Analyzed: 1/6/22

Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.52	0.075	ND	0.13	0.019	
141-78-6	Ethyl Acetate	ND	2.1	0.28	ND	0.58	0.078	
110-54-3	n-Hexane	ND	0.53	0.11	ND	0.15	0.031	
67-66-3	Chloroform	ND	0.54	0.071	ND	0.11	0.015	
109-99-9	Tetrahydrofuran (THF)	ND	1.0	0.067	ND	0.34	0.023	
107-06-2	1,2-Dichloroethane	ND	0.53	0.059	ND	0.13	0.015	
71-55-6	1,1,1-Trichloroethane	ND	0.52	0.066	ND	0.095	0.012	
71-43-2	Benzene	ND	0.50	0.077	ND	0.16	0.024	
56-23-5	Carbon Tetrachloride	ND	0.50	0.074	ND	0.080	0.012	
110-82-7	Cyclohexane	ND	1.1	0.15	ND	0.32	0.044	
78-87-5	1,2-Dichloropropane	ND	0.50	0.066	ND	0.11	0.014	
75-27-4	Bromodichloromethane	ND	0.53	0.077	ND	0.079	0.011	
79-01-6	Trichloroethene	ND	0.52	0.072	ND	0.097	0.013	
123-91-1	1,4-Dioxane	ND	0.52	0.063	ND	0.14	0.017	
80-62-6	Methyl Methacrylate	ND	1.1	0.19	ND	0.27	0.046	
142-82-5	n-Heptane	ND	0.53	0.085	ND	0.13	0.021	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.083	ND	0.11	0.018	
108-10-1	4-Methyl-2-pentanone	ND	1.1	0.073	ND	0.27	0.018	
10061-02-6	trans-1,3-Dichloropropene	ND	0.51	0.11	ND	0.11	0.024	
79-00-5	1,1,2-Trichloroethane	ND	0.52	0.054	ND	0.095	0.0099	
108-88-3	Toluene	ND	0.52	0.065	ND	0.14	0.017	
591-78-6	2-Hexanone	ND	1.1	0.066	ND	0.27	0.016	
124-48-1	Dibromochloromethane	ND	0.53	0.070	ND	0.062	0.0082	
106-93-4	1,2-Dibromoethane	ND	0.52	0.062	ND	0.068	0.0081	
123-86-4	n-Butyl Acetate	ND	1.1	0.073	ND	0.23	0.015	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **Environmental Management Services, Inc.**

Client Sample ID: **Method Blank** ALS Project ID: P2200015

Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P220106-MB

Test Code:	EPA TO-15	Date Collected:	NA
Instrument ID:	Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9	Date Received:	NA
Analyst:	Simon Cao	Date Analyzed:	1/6/22
Sample Type:	1.0 L Silonite Summa Canister	Volume(s) Analyzed:	1.00 Liter(s)
Test Notes:			

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.53	0.12	ND	0.11	0.026	
127-18-4	Tetrachloroethene	ND	0.52	0.069	ND	0.077	0.010	
108-90-7	Chlorobenzene	ND	0.52	0.071	ND	0.11	0.015	
100-41-4	Ethylbenzene	ND	0.52	0.075	ND	0.12	0.017	
179601-23-1	m,p-Xylenes	ND	1.1	0.14	ND	0.25	0.032	
75-25-2	Bromoform	ND	0.52	0.11	ND	0.050	0.011	
100-42-5	Styrene	ND	0.50	0.086	ND	0.12	0.020	
95-47-6	o-Xylene	ND	0.52	0.077	ND	0.12	0.018	
111-84-2	n-Nonane	ND	0.52	0.089	ND	0.099	0.017	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.52	0.074	ND	0.076	0.011	
98-82-8	Cumene	ND	0.52	0.077	ND	0.11	0.016	
80-56-8	alpha-Pinene	ND	0.54	0.082	ND	0.097	0.015	
103-65-1	n-Propylbenzene	ND	0.53	0.077	ND	0.11	0.016	
622-96-8	4-Ethyltoluene	ND	0.53	0.085	ND	0.11	0.017	
108-67-8	1,3,5-Trimethylbenzene	ND	0.52	0.077	ND	0.11	0.016	
95-63-6	1,2,4-Trimethylbenzene	ND	0.52	0.074	ND	0.11	0.015	
100-44-7	Benzyl Chloride	ND	1.1	0.12	ND	0.21	0.023	
541-73-1	1,3-Dichlorobenzene	ND	0.52	0.080	ND	0.087	0.013	
106-46-7	1,4-Dichlorobenzene	ND	0.52	0.082	ND	0.087	0.014	
95-50-1	1,2-Dichlorobenzene	ND	0.53	0.079	ND	0.088	0.013	
5989-27-5	d-Limonene	ND	0.50	0.11	ND	0.090	0.020	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.10	ND	0.10	0.010	
120-82-1	1,2,4-Trichlorobenzene	ND	1.1	0.13	ND	0.15	0.018	
91-20-3	Naphthalene	ND	0.52	0.13	ND	0.099	0.025	
87-68-3	Hexachlorobutadiene	ND	0.52	0.11	ND	0.049	0.010	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

SURROGATE SPIKE RECOVERY RESULTS

Client: **Environmental Management Services, Inc.**
Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Project ID: P2200015

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date(s) Collected: 12/13/21
Analyst: Simon Cao Date(s) Received: 1/3/22
Sample Type: 1.0 L Silonite Summa Canister(s) / 1.0 L Summa Canister(s) Date(s) Analyzed: 1/6 - 1/7/22
Test Notes:

Client Sample ID	ALS Sample ID	1,2-Dichloroethane-d4 Percent Recovered	Toluene-d8 Percent Recovered	Bromofluorobenzene Percent Recovered	Acceptance Limits	Data Qualifier
Method Blank	P220106-MB	**112**	**88**	**105**	70-130	
Lab Control Sample	P220106-LCS	**109**	**85**	**105**	70-130	
Duplicate Lab Control Sample	P220106-DLCS	**108**	**86**	**105**	70-130	
Location 1	P2200015-001	**111**	**88**	**109**	70-130	
Location 2	P2200015-002	**109**	**89**	**110**	70-130	
Location 3	P2200015-003	**110**	**89**	**109**	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2200015
Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P220106-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Simon Cao Date Analyzed: 1/6/22
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
115-07-1	Propene	206	231	224	**112**	**109**	56-128	3	25	
75-71-8	Dichlorodifluoromethane (CFC 12)	208	207	201	**100**	**97**	71-112	3	25	
74-87-3	Chloromethane	206	214	207	**104**	**100**	53-126	4	25	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	208	201	198	**97**	**95**	62-121	2	25	
75-01-4	Vinyl Chloride	208	228	221	**110**	**106**	63-123	4	25	
106-99-0	1,3-Butadiene	206	220	220	**107**	**107**	63-135	0	25	
74-83-9	Bromomethane	206	219	213	**106**	**103**	71-112	3	25	
75-00-3	Chloroethane	206	230	223	**112**	**108**	66-117	4	25	
64-17-5	Ethanol	832	900	887	**108**	**107**	57-117	0.9	25	
75-05-8	Acetonitrile	202	207	205	**102**	**101**	59-131	1	25	
107-02-8	Acrolein	416	455	450	**109**	**108**	71-123	0.9	25	
67-64-1	Acetone	1,020	1060	1050	**104**	**103**	60-117	1	25	
75-69-4	Trichlorofluoromethane (CFC 11)	202	199	195	**99**	**97**	71-114	2	25	
67-63-0	2-Propanol (Isopropyl Alcohol)	400	462	454	**116**	**114**	61-124	2	25	
107-13-1	Acrylonitrile	402	448	441	**111**	**110**	65-130	0.9	25	
75-35-4	1,1-Dichloroethene	210	212	209	**101**	**100**	74-114	1	25	
75-09-2	Methylene Chloride	208	206	204	**99**	**98**	75-112	1	25	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	204	208	208	**102**	**102**	57-127	0	25	
76-13-1	Trichlorotrifluoroethane (CFC 113)	216	198	197	**92**	**91**	73-114	1	25	
75-15-0	Carbon Disulfide	414	420	414	**101**	**100**	70-113	1	25	
156-60-5	trans-1,2-Dichloroethene	208	227	224	**109**	**108**	76-119	0.9	25	
75-34-3	1,1-Dichloroethane	214	223	219	**104**	**102**	70-114	2	25	
1634-04-4	Methyl tert-Butyl Ether	206	141	139	**68**	**67**	72-118	1	25	**L**
108-05-4	Vinyl Acetate	942	1040	1020	**110**	**108**	56-137	2	25	
78-93-3	2-Butanone (MEK)	408	428	421	**105**	**103**	74-121	2	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.
L = Laboratory control sample recovery outside the specified limits, results may be biased low.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2200015
Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P220106-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Simon Cao Date Analyzed: 1/6/22
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	206	222	217	**108**	**105**	73-117	3	25	
141-78-6	Ethyl Acetate	580	581	581	**100**	**100**	59-161	0	25	
110-54-3	n-Hexane	208	218	214	**105**	**103**	55-130	2	25	
67-66-3	Chloroform	210	213	210	**101**	**100**	71-114	1	25	
109-99-9	Tetrahydrofuran (THF)	404	418	415	**103**	**103**	73-114	0	25	
107-06-2	1,2-Dichloroethane	210	217	213	**103**	**101**	71-119	2	25	
71-55-6	1,1,1-Trichloroethane	208	201	198	**97**	**95**	73-119	2	25	
71-43-2	Benzene	208	193	190	**93**	**91**	72-113	2	25	
56-23-5	Carbon Tetrachloride	202	191	186	**95**	**92**	67-123	3	25	
110-82-7	Cyclohexane	412	386	382	**94**	**93**	70-119	1	25	
78-87-5	1,2-Dichloropropane	206	214	210	**104**	**102**	70-118	2	25	
75-27-4	Bromodichloromethane	208	212	208	**102**	**100**	74-119	2	25	
79-01-6	Trichloroethene	204	197	193	**97**	**95**	74-115	2	25	
123-91-1	1,4-Dioxane	206	205	201	**100**	**98**	77-124	2	25	
80-62-6	Methyl Methacrylate	410	424	417	**103**	**102**	78-126	1	25	
142-82-5	n-Heptane	206	209	207	**101**	**100**	70-119	1	25	
10061-01-5	cis-1,3-Dichloropropene	208	218	214	**105**	**103**	81-126	2	25	
108-10-1	4-Methyl-2-pentanone	412	440	434	**107**	**105**	73-129	2	25	
10061-02-6	trans-1,3-Dichloropropene	200	215	212	**108**	**106**	80-127	2	25	
79-00-5	1,1,2-Trichloroethane	208	210	207	**101**	**100**	78-117	1	25	
108-88-3	Toluene	206	164	163	**80**	**79**	70-118	1	25	
591-78-6	2-Hexanone	406	376	373	**93**	**92**	74-132	1	25	
124-48-1	Dibromochloromethane	210	168	165	**80**	**79**	69-137	1	25	
106-93-4	1,2-Dibromoethane	208	171	169	**82**	**81**	76-128	1	25	
123-86-4	n-Butyl Acetate	406	383	380	**94**	**94**	75-134	0	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environmental Management Services, Inc.**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P2200015
Client Project ID: **In-Plant Monitoring / KUH0-21-011** ALS Sample ID: P220106-DLCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Simon Cao Date Analyzed: 1/6/22
Sample Type: 1.0 L Silonite Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS µg/m³	Result LCS µg/m³	Result DLCS µg/m³	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
111-65-9	n-Octane	208	187	186	**90**	**89**	68-120	1	25	
127-18-4	Tetrachloroethene	212	158	157	**75**	**74**	63-130	1	25	
108-90-7	Chlorobenzene	206	165	164	**80**	**80**	70-118	0	25	
100-41-4	Ethylbenzene	206	170	168	**83**	**82**	71-123	1	25	
179601-23-1	m,p-Xylenes	416	340	336	**82**	**81**	67-127	1	25	
75-25-2	Bromoform	210	166	165	**79**	**79**	65-149	0	25	
100-42-5	Styrene	202	174	173	**86**	**86**	76-132	0	25	
95-47-6	o-Xylene	208	172	170	**83**	**82**	69-124	1	25	
111-84-2	n-Nonane	208	193	191	**93**	**92**	64-127	1	25	
79-34-5	1,1,2,2-Tetrachloroethane	208	177	176	**85**	**85**	69-128	0	25	
98-82-8	Cumene	206	164	163	**80**	**79**	69-125	1	25	
80-56-8	alpha-Pinene	210	275	271	**131**	**129**	68-129	2	25	**L**
103-65-1	n-Propylbenzene	208	169	167	**81**	**80**	70-127	1	25	
622-96-8	4-Ethyltoluene	208	167	165	**80**	**79**	69-127	1	25	
108-67-8	1,3,5-Trimethylbenzene	208	171	170	**82**	**82**	66-129	0	25	
95-63-6	1,2,4-Trimethylbenzene	206	172	170	**83**	**83**	63-142	0	25	
100-44-7	Benzyl Chloride	416	382	380	**92**	**91**	73-145	1	25	
541-73-1	1,3-Dichlorobenzene	208	164	163	**79**	**78**	67-136	1	25	
106-46-7	1,4-Dichlorobenzene	210	164	164	**78**	**78**	63-134	0	25	
95-50-1	1,2-Dichlorobenzene	210	162	160	**77**	**76**	64-139	1	25	
5989-27-5	d-Limonene	206	197	196	**96**	**95**	63-137	1	25	
96-12-8	1,2-Dibromo-3-chloropropane	404	306	307	**76**	**76**	72-145	0	25	
120-82-1	1,2,4-Trichlorobenzene	420	345	345	**82**	**82**	62-154	0	25	
91-20-3	Naphthalene	210	187	189	**89**	**90**	62-156	1	25	
87-68-3	Hexachlorobutadiene	212	147	147	**69**	**69**	55-142	0	25	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.
L = Laboratory control sample recovery outside the specified limits, results may be biased high.