May 31, 2019 Sigma Reference #16366

Ms. Linda Michalets
Wisconsin Department of Natural Resources
Remediation & Redevelopment Program
2300 N. Dr. Martin Luther King Jr. Drive
Milwaukee, WI 53212

Subject: **Remedial Soil Excavation Report**
Former Biogenesis
610 W. Rawson Ave., Oak Creek, WI
BRRTS #02-41-107191, PECFA #53154-1437-10, FID# 241020010

Dear Ms. Michalets:

On behalf of Oak Creek Rawson Industrial, LLC (OCRI), The Sigma Group, Inc. (Sigma) has prepared this letter report to document remedial soil excavation activities completed at the above-referenced property (the "Site") in April and May 2019. The remedial soil excavations were completed in accordance with Sigma's *SI&RAP*[1] and the Wisconsin Department of Natural Resources (WDNR) March 2019 letter[2] generally approving the proposed remedial action plan. Based on the completed work, no additional soil remediation work is proposed beyond management of soil as part of construction as described in the *Materials Management Plan*[3] (*MMP*) submitted for the Site.

SOIL EXCAVATION ACTIVITIES AND RESULTS

Remedial soil excavation activities were performed on April 8, April 23, April 24, May 6 and May 14 at eight locations across the site based on previous subsurface investigation activities completed at the Site and as described in Sigma's *SI&RAP*. A map depicting the areas of impact designated for remedial excavation is included as **Figure 1**. Additional description of the areas of concern and excavation details are provided below:

- SGP-14/SGP-44 Area: The SGP-14/SGP-44 area, located in the southwestern corner of the Site, contained elevated concentrations of petroleum volatile organic compounds (PVOCs), chlorinated volatile organic compounds (CVOCs) and polychlorinated biphenyls (PCBs). The approximate extent of the soil impacts within this area was defined by soil sampling completed as part of site investigation. The target remedial excavation depth in the area of each boring was as follows:
    - SGP-14 – 10 feet below ground surface (bgs);
    - SGP-44 – 10 feet bgs;

[1] *Site Investigation Report & Remedial Action Plan, Former Biogenesis, 610 W. Rawson Ave., Oak Creek, Wisconsin 53154, BRRTS #02-41-107191, PECFA #53154-1437-10, FID #241020010* by Sigma (dated February 1, 2019)
[2] *Review of Site Investigation Report and Remedial Action Plan Letter, Biogenesis (FMR), 610 W. Rawson Ave., Oak Creek, WI, FID #241020010, BRTS# 02-41-107191, PECFA# 53154-1437-10* by WDNR (dated March 26, 2019)

[3] *NR 718.12 Material Management Plan Approval Request, 610 W. Rawson Ave. Oak Creek, WI, 53154*, (dated February 13, 2019 and April 16, 2019)

- SGP-45 – 6 feet bgs;
- SGP-109 – 5 feet bgs;
- SGP-43 – 4 feet bgs; and
- SGP-77 – 4 feet bgs.

- SGP-23/SGP-24 Area: The SGP-23/SGP-24 area, located west of the west access road, contained elevated concentrations of PCBs and PVOCs. The approximate extent of the soil impacts within this area was defined by soil sampling completed as part of site investigation. Based on site investigation results a target remedial excavation depth of 4 feet bgs was determined.

- MW-14/GP-24 Area: The MW-14/GP-24 area contained elevated concentrations of PVOCs (benzene). Based on the results of site investigation activities a remedial excavation of approximately 35 feet by 17 feet by 4 feet deep was targeted.

- STP-13/SGP-7 Area: The STP-13/SGP-7 area contained elevated concentrations of PVOCs (naphthalene). Based on the results of site investigation activities a remedial excavation of approximately 70 feet by 25 feet by 6 feet deep was targeted.

- SGP-98 Area: The SGP-98 area contained elevated concentrations of PVOCs (naphthalene). Based on the results of site investigation activities a remedial excavation of approximately 35 feet by 35 feet by 4 feet deep was targeted.

- SGP-105 Area: The SGP-105 area contained elevated concentrations of PVOCs (benzene and naphthalene). Based on the results of site investigation activities a remedial excavation of approximately 50 feet by 45 feet (1/2) by 4 feet was targeted.

- SGP-25 Area: The SGP-25 area contained elevated concentrations of PVOCs (benzene and naphthalene). Based on the results of site investigation activities a remedial excavation of approximately 25 feet by 25 feet by 4 feet deep was targeted.

- STP-5/SGP-36 Area: The STP-5/SGP-36 area contained elevated concentrations of PVOCs (benzene and naphthalene). Based on the results of site investigation activities a remedial excavation of approximately 30 feet by 30 feet by 4 feet deep was targeted.

Excavation Marking. Prior to the commencement of remedial excavation activities, the boundaries of the proposed excavation areas were surveyed and staked.

Material Excavation Activities. On April 8, 2019, a total of 590.35 tons of PVOC impacted soil were excavated from the SGP-98 and SGP-105 remedial excavation areas for disposal at the Metro RDF landfill. Excavation activities removed existing subsurface material to the pre-determined remedial excavation extents within each area.

Following material removal, Sigma collected four sidewall confirmation samples and one base sample from the limits of each area for laboratory analysis of PVOCs plus naphthalene

in accordance with the *SI/RAP* and as required by the WDNR letter approving PECFA eligibility for select costs associated with remedial excavation work. Excavation load summaries are included in **Attachment A**. The remedial excavation areas were backfilled using material excavated from the areas of the proposed stormwater retention ponds located along the eastern property boundary in accordance with Sigma's *NR 718.12 MMP*.

On April 23 and 24, 2019, a total of 1,391.38 tons of PVOC impacted soil were excavated from the MW-14/GP-24, STP-13/SGP-7, SGP-25 and STP-5/SGP-36 remedial excavation areas for disposal at the Metro RDF landfill. Excavation activities removed existing subsurface material to the pre-determined remedial excavation extents within each area.

Following material removal, Sigma collected four sidewall confirmation samples and one base sample from the limits of each area for laboratory analysis of PVOCs plus naphthalene in accordance with the *SI/RAP* and as required by the WDNR letter approving PECFA eligibility for select costs associated with remedial excavation work. The only exception is that the base sample collected from the SGP-25 remedial excavation area was lost during transit to the lab. Excavation load summaries are included in **Attachment A**. The remedial excavation areas were backfilled using material excavated from the areas of the proposed stormwater retention ponds located along the eastern property boundary in accordance with Sigma's *NR 718.12 MMP.*

On April 23, and 24, 2019, a total of 273.13 tons of PVOC and PCB impacted soil were excavated from the SGP-23/SGP-24 remedial excavation area for disposal at the Metro RDF landfill. Excavation activities removed existing subsurface material to the pre-determined remedial excavation extents within each area.

Following material removal, Sigma collected four sidewall confirmation samples and one base sample from the limits of the excavation area for laboratory analysis of VOCs and PCBs in accordance with the *SI/RAP*. Excavation load summaries are included in **Attachment A.** The remedial excavation area was backfilled using material excavated from the areas of the proposed stormwater retention ponds located along the eastern property boundary in accordance with Sigma's *NR 718.12 MMP.*

On May 6, 2019, a total of 111.74 tons of CVOC, PVOC and PCB impacted soil were excavated from the shallowest portions of the SGP-14/SGP-44 remedial excavation area. The shallowest material, generally between the existing ground surface and 1.5 feet below grade, was determined by sampling during site investigation activities to be non-hazardous and therefore was disposed of at the Metro RDF landfill.

Following removal of the shallowest materials, material within the area of impacts determined to be characteristically hazardous by sampling during site investigation activities was excavated for transport, treatment and disposal at US Ecology's treatment facility in Belleville, Michigan. A total of 97.24 tons of material from depths between 1.5 feet bgs to 10 feet bgs was removed from the area of soil borings SGP-14 and SGP-44.

Preliminary confirmation samples were collected from the sidewalls of the primary excavation area and submitted for laboratory analysis of VOCs to evaluate whether

remaining material from within the limits of the targeted remedial excavation area would require management as characteristically hazardous or could be managed as non-hazardous if excavated. In addition, a confirmation sample was collected from the excavation base and submitted for laboratory analysis of VOCs as the targeted excavation depth had been reached by the primary excavation work. Based on the results of the initial sidewall confirmation samples (discussed below), the remaining material from within the limits of the targeted excavation area could be managed as non-hazardous.

On May 14, 2019, an additional 171.47 tons of CVOC, PVOC and PCB impacted soil were excavated from the remaining targeted remediation area surrounding soil borings SGP-14/SGP-44 for disposal at the Metro RDF landfill. Excavation activities removed existing subsurface material to the pre-determined remedial excavation extents. Following material removal, Sigma collected four sidewall confirmation samples from the limits of the excavation area for laboratory analysis of VOCs and PCBs in accordance with the *SI/RAP*. Excavation load summaries are included in **Attachment A.** The remedial excavation area was backfilled using material excavated from the areas of the proposed stormwater retention ponds located along the eastern property boundary in accordance with Sigma's *NR 718.12 MMP.*

Confirmation Sample Results. Confirmation soil sample laboratory analytical data is summarized in **Table 1** and the laboratory analytical reports are included as **Attachment B**. Locations of confirmation soil samples are illustrated on the attached **Figure 2**. Results of the samples are summarized according to each excavation area:

- SGP-98 Area: Review of the analytical results from confirmation samples collected from the SG-98 remedial excavation area did not contain concentrations of PVOC constituents greater than laboratory detection limits.

- SGP-105 Area: Review of the analytical results from confirmation samples collected from the SGP-105 remedial excavation area indicates that the base sample, collected at 4 feet bgs, contained concentrations of trimethylbenzenes and naphthalene greater than Residual Contaminant Levels for the protection of groundwater. Naphthalene was also reported at concentrations greater than the RCL for the protection of groundwater within the southwest sidewall sample and the northeast sidewall sample. The reported concentrations of naphthalene within the excavation base sample and northeast sidewall sample also exceeded the RCL for the non-industrial direct contact pathway. Confirmation samples collected from the northwest sidewall and southeast sidewall did not contain PVOCs at concentrations greater than applicable RCLs.

- SGP-25 Area: Review of the analytical results from confirmation samples collected from the SGP-25 remedial excavation area indicates that concentrations of benzene, naphthalene and 1,2,4-trimethylbenzene were reported greater than RCLs for the protection of groundwater pathway within the north sidewall sample. The south sidewall sample contained reported concentrations of benzene, ethylbenzene, naphthalene and 1,2,4-trimethylbenzene greater than RCLs for the protection of groundwater pathway. In addition, the reported concentrations of benzene, ethylbenzene and naphthalene within the south sidewall sample exceeded RCLs for

the direct contact pathway. Confirmation samples collected from the east and west sidewalls did not contain PVOCs at concentrations greater than applicable RCLs.

- STP-5/SGP-36 Area: Review of the analytical results from confirmation samples collected from the STP-5/SGP-36 area indicates that the excavation base sample contained concentrations of naphthalene and 1,2,4-trimethylbenzene greater than applicable RCLs for the protection of groundwater pathway. Confirmation samples collected from the excavation sidewalls did not contain PVOCs at concentrations greater than applicable RCLs.

- SGP-7/STP-13 Area: Review of the analytical results from confirmation samples collected from the SGP-7/STP-13 area indicates that 1,2,4-trimethylbenzene was reported at concentrations greater than the RCL for the protection of groundwater pathway within the excavation base and east, west and south sidewalls. The samples collected from the excavation base, west and south sidewalls also contained naphthalene at concentrations greater than the RCL for the protection of groundwater pathway, with the reported concentrations within the west and south sidewalls also exceeding the RCL for the direct contact pathway. The west sidewall sample also contained ethylbenzene and 1,3,5-trimethylbenzene at concentrations greater than RCLs for the protection of groundwater pathway. The north sidewall sample did not contain PVOCs at concentrations greater than applicable RCLs.

- MW-14/GP-24 Area: Review of the analytical results from confirmation samples collected from the MW-14/GP-24 area indicates that benzene was reported at concentrations greater than the RCL for the protection of groundwater pathway within the excavation base and north, east and south sidewalls. The sample collected from the excavation base also contained concentrations of ethylbenzene greater than the RCL for the protection of groundwater and naphthalene greater than the RCLs for the protection of groundwater and direct contact pathway. The sample collected from the north sidewall contained concentrations of ethylbenzene, naphthalene, trimethylbenzenes and xylenes greater than RCLs for the protection of groundwater pathway with the reported concentrations of ethylbenzene, naphthalene and 1,2,4-trimethylbenzene also exceeding RCLs for the direct contact pathway. The west sidewall sample did not contain PVOCs at concentrations greater than applicable RCLs.

- SGP-23/SGP-24 Area: Review of the analytical results from confirmation samples collected from the SGP-23/SGP-24 area indicates that the south sidewall sample contained reported concentrations of benzene, cis-1,2-dichloroethene, tetrachloroethene and trichloroethene greater than RCLs for the protection of groundwater. The reported concentration of trichloroethene also exceeded the RCL for the direct contact pathway. No VOCs were reported at concentrations greater than applicable RCLs within the other excavation confirmation samples.

  One or more PCB congeners were reported at concentrations greater than applicable RCLs for the protection of groundwater pathway within the excavation base and east, west and south sidewall samples. Reported concentrations of PCBs within the

east, west and south sidewall samples also exceeded applicable RCLs for the direct contact pathway.

- SGP-14/SGP-44 Area: Review of the analytical results from confirmation samples collected from the SGP-14/SGP-44 area indicates that the north sidewall sample contained cis-1,2-dichloroethene at a concentration greater than the RCL for the protection of groundwater pathway. In addition, the excavation base sample contained concentrations of trichloroethene, 1,1,1-trichloroethane, cis-1,2-dichloroethene, trans-1,2-dichloroethene and vinyl chloride greater than RCLs for the protection of groundwater pathway. No other sidewall samples contained VOCs at concentrations greater than applicable RCLs.

  The west sidewall sample contained concentrations of two PCB congeners at concentrations greater than RCLs for the protection of groundwater pathway (but also flagged by the analytical laboratory as between the limit of detection and limit of quantitation). The north sidewall sample contained a reported concentration of PCB-1254 greater than RCLs for the protection of groundwater and direct contact pathways.

Results of the confirmation soil samples are generally consistent with results of site investigation soil sampling from borings in the vicinity of the excavation areas. With the exception of the SGP-98 remedial excavation area, soil impacts greater than applicable RCLs remain at the limits of each remedial excavation area. However, the impacts are located within the limits of appropriate material management areas as described in Sigma's previously submitted *NR 718.12 MMP* for the site.

Despite the presence of soil impacts greater than applicable RCLs at the limits of the completed remedial excavation areas, the completed remedial excavation activities have undoubtedly removed a significant amount of contaminant mass from the site subsurface. The remaining impacts at excavation limits are within areas requiring fill placement as part of redevelopment and also within areas that will be covered by engineered barriers as part of site construction. The completed remedial excavation activities have reduced the potential vapor intrusion risk to the proposed site building and any remaining risk will be effectively mitigated via installation of the sub-slab venting system described in Sigma's *SI/RAP*.

Additional excavation activities associated with construction will be completed in accordance with Sigma's previously submitted *NR 718.12 MMP* for the site. The additional excavation activities may result in the removal and off-site disposal of additional impacted soil, including from the areas around the completed remedial excavations. If additional off-site disposal of soil is completed as part of site construction, the additional disposal activities will be documented in a future submittal.

MONITORING WELL ABANDONMENT

Prior to initiation of remedial excavation activities, groundwater monitoring wells MW-7, MW-14, MW-24, MW-44, and SPZ-2 were abandoned in accordance with ch. NR 141, Wisc. Admin. Code. These wells fell within the limits of the proposed remedial excavations. Monitoring well abandonment forms are included as **Attachment C**.

CONCLUSIONS AND RECOMMENDATIONS

The excavation of soil from the site has resulted in the removal of a total of 2,635.31 tons of impacted material from the eight excavation areas for off-site disposal. Based on the results of the post-excavation confirmation sampling, the select CVOC, PVOC and PCB impacts remain at concentrations greater than applicable RCLs. If additional material from within the limits of remaining impacts is excavated as part construction activities at the site, that material will be managed in accordance with Sigma's previously submitted NR *718.12 MMP*. Beyond additional material management as part of construction activities at the site, no additional remedial excavation activities are proposed at this time. Residual soil impacts that may remain at the Site within will be addressed by surface caps including building floor slabs, and paved surfaces which will be installed as part of site redevelopment.

Please contact us at (414) 643-4200 with any questions about this submittal or the project in general.

Sincerely,

THE SIGMA GROUP, INC.

Stephen Meer, P.E.
Senior Engineer

Attachments:

- Figure 1 – Remedial Excavation Map
- Figure 2 – Confirmation Sample Location Map
- Table 1 – Soil Analytical Results Table: Confirmation Samples
- Attachment A: Excavation Summaries
- Attachment B: Soil Laboratory Analytical Results
- Attachment C: Monitoring Well Abandonment Forms

TABLE

Table 1
Soil Excavation Analytical Results Table(s)
610 W. Rawson Avenue & 7045 N. 6th Street, Oak Creek, Wisconsin
Sigma Project No. 16366

Soil Sample Location:		EA-1 (SGP-98)					EA-2 (SGP-105)					Groundwater Pathway RCL [4]	Non-Industrial Direct Contact RCL [5]	Industrial Direct Contact RCL [6]	Background Threshold Value [7]
		E-SW	BASE	S-SW	W-SW	N-SW	NW-SW	E-SW (N)	BASE	SW-SW	E-SW (S)				
Sample Depth (feet bgs):		2	4	2	2	2	2	2	4	2	2				
Sample Collection Date:		4/8/19	4/8/19	4/8/19	4/8/19	4/8/19	4/8/19	4/8/19	4/8/19	4/8/19	4/8/19				
PVOCs + Naphthalene															
1,2,4-Trimethylbenzene	mg/kg	<0.0096	<0.0078	<0.0081	<0.0089	<0.013	<0.0097	<0.021	**24**	0.9	0.21	1.3821	219	219	NS
1,3,5-Trimethylbenzene	mg/kg	<0.016	<0.013	<0.013	<0.015	<0.021	<0.016	<0.035	**6.9**	0.062	0.041 J	1.3821	182	182	NS
Benzene	mg/kg	<0.0089	<0.0072	<0.0075	<0.0082	<0.012	<0.009	<0.020	<0.024	<0.0076	<0.011	0.0051	1.6	7.07	NS
Ethylbenzene	mg/kg	<0.011	<0.0088	<0.0093	<0.010	<0.015	<0.011	0.33	0.96	0.083	<0.014	1.57	8.02	35.4	NS
Methyl-tert-butyl-ether	mg/kg	<0.015	<0.012	<0.013	<0.014	<0.020	<0.015	<0.033	<0.040	<0.013	<0.019	0.027	63.8	282	NS
Naphthalene	mg/kg	<0.014	<0.012	<0.012	<0.013	<0.019	0.032 J	**[6.1]**	**[8.0]**	**4.3**	<0.018	0.6582	5.52	24.1	NS
Toluene	mg/kg	<0.014	<0.011	<0.012	<0.013	<0.019	<0.014	<0.031	<0.038	<0.012	<0.018	1.1072	818	818	NS
Xylenes (total)	mg/kg	<0.045	<0.036	<0.038	<0.041	<0.060	<0.045	<0.099	1.1	0.095 J	<0.056	3.96	260	260	NS

Notes:

1. Unsaturated/smear zone versus satured soil conditions based on: (1) measured water levels in adjacent/nearby monitoring wells, or (2) soil moisture conditions recorded on soil boring logs during drilling.
2. Analytical units: mg/kg = milligrams per kilogram (equivalent to parts per million, ppm)
3. NA = not analyzed NS = no standard established
4. Groundwater Pathway RCL = Residual Contaminant Level for protection of groundwater (dilution factor of 2) as presented on the WDNR's RCL Spreadsheet (dated June 2018) referenced in WDNR guidance document PUB-RR-890 "Soil Residual Contaminant Level Determinations Using the US EPA Regional Screening Level Web Calculator", dated June 2014.
5. Non-Industrial Direct Contact RCL = Residual Contaminant Level for protection of direct contact at a non-industrial property as presented on the WDNR's RCL Spreadsheet (dated June 2018) with default input parameters as referenced in WDNR guidance document PUB-RR-890 "Soil Residual Contaminant Level Determinations Using the US EPA Regional Screening Level Web Calculator", dated June 2014.
6. Industrial Direct Contact RCL = Residual Contaminant Level for protection of direct contact at an industrial property as presented on the WDNR's RCL Spreadsheet (dated June 2018) with default input parameters as referenced in WDNR guidance document PUB-RR-890 "Soil Residual Contaminant Level Determinations Using the US EPA Regional Screening Level Web Calculator", dated June 2014.
7. Background Threshold Value = Non-outlier trace element maximum levels in Wisconsin surface soils from USGS report "Distribution and Variation of Arsenic in Wisconsin Surface Soils, With Data on Other Trace Elements" (revised February 2013).
8. Laboratory flags: "J" = Analyte detected between Limit of Detection and Limit of Quantitation
9. Exceedances:
   BOLD = Concentration exceeds Groundwater Pathway RCL
   [ ] = Concentration exceeds Non-Industrial Direct Contact RCL (any depth)
   { } = Concentration exceeds Industrial Direct Contact RCL (any depth)
   ***** = Concentration exceeds RCL but is below Background Threshold Value or is Laboratory Artifact
   OR = Concentration is below Background Threshold Value so RCL exceedances are not marked

Table 1
Soil Excavation Analytical Results Table(s)
610 W. Rawson Avenue & 7045 N. 6th Street, Oak Creek, Wisconsin
Sigma Project No. 16366

Soil Sample Location:		EXC-1 (SGP-23/SGP-24)					EXC-2 (SGP-25)				EXC-3 (STP-5/SGP-36)					Groundwater Pathway RCL [4]	Non-Industrial Direct Contact RCL [5]	Industrial Direct Contact RCL [6]	Background Threshold Value [7]
		SWN	SWE	SWS	SWW	BASE	SWN	SWE	SWS	SWW	SWN	SWE	SWS	SWW	BASE				
Sample Depth (feet bgs):		2	2	2	2	4	2	2	2	2	2	2	2	2	4				
Sample Collection Date:		4/23/19	4/23/19	4/23/19	4/23/19	4/23/19	4/24/19	4/24/19	4/24/19	4/24/19	4/24/19	4/24/19	4/24/19	4/24/19	4/24/19				
VOCs																			
1,1,1,2-Tetrachloroethane	mg/kg	<0.025	<0.37	<0.023	<0.021	<0.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0534	2.78	12.3	NS
1,1,1-Trichloroethane	mg/kg	<0.021	<0.32	0.038 J	<0.018	<0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.1402	640	640	NS
1,1,2,2-Tetrachloroethane	mg/kg	<0.021	<0.31	<0.019	<0.018	<0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0002	0.81	3.6	NS
1,1,2-Trichloroethane	mg/kg	<0.020	<0.30	<0.018	<0.017	<0.020	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0032	1.59	7.01	NS
1,1,2-Trichlorotrifluorethane	mg/kg	<0.030	<0.44	<0.027	<0.025	<0.030	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NS
1,1-Dichloroethane	mg/kg	0.042 J	<0.26	<0.016	<0.015	<0.017	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.4834	5.06	22.2	NS
1,1-Dichloroethene	mg/kg	<0.015	<0.23	<0.014	<0.013	<0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005	320	1,190	NS
1,2,3-Trichlorobenzene	mg/kg	<0.022	<0.84	<0.020	<0.019	<0.022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	62.6	934	NS
1,2,4-Trichlorobenzene	mg/kg	<0.016	<0.79	<0.015	0.13	<0.016	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.408	24	113	NS
1,2,4-Trimethylbenzene	mg/kg	0.093	<0.51	0.4	0.13	<0.0087	**1.9**	0.031 J	**1.3**	0.074	<0.0064	<0.0074	<0.0064	<0.0063	**1.1**	1.3821	219	219	NS
1,2-Dibromo-3-chloropropane	mg/kg	<0.043	<0.65	<0.040	<0.037	<0.043	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0002	0.008	0.092	NS
EDB (1,2-Dibromoethane)	mg/kg	<0.013	<0.20	<0.012	<0.011	<0.013	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0000282	0.05	0.221	NS
1,2-Dichlorobenzene	mg/kg	<0.018	<0.27	<0.016	<0.015	<0.018	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.168	376	376	NS
1,2-Dichloroethane	mg/kg	<0.020	<1.1	<0.018	<0.017	<0.020	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0028	0.652	2.87	NS
1,2-Dichloropropane	mg/kg	<0.0082	<0.52	<0.0075	<0.007	<0.0083	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0033	3.4	15	NS
1,3,5-Trimethylbenzene	mg/kg	<0.014	<0.82	0.072	0.037 J	<0.014	0.66	<0.014	0.17 J	0.023 J	<0.011	<0.012	<0.011	<0.010	<0.11	1.3821	182	182	NS
1,3-Dichlorobenzene	mg/kg	<0.016	<0.23	<0.014	<0.013	<0.016	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1528	297	297	NS
1,3-Dichloropropane	mg/kg	<0.013	<0.20	<0.012	<0.011	<0.013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	1,490	1,490	NS
1,4-Dichlorobenzene	mg/kg	<0.011	<0.17	<0.010	<0.0097	<0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.144	3.74	16.4	NS
2,2-Dichloropropane	mg/kg	<0.019	<0.75	<0.018	<0.017	<0.019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	191	191	NS
2-Butanone	mg/kg	<0.039	<0.58	<0.035	<0.033	<0.039	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	907	907	NS
2-Chlorotoluene (,o-)	mg/kg	<0.017	<0.26	<0.016	<0.015	<0.017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NS
2-Hexanone	mg/kg	<0.023	<0.35	<0.021	<0.020	<0.023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NS
4-Chlorotoluene (,p-)	mg/kg	<0.011	<0.17	<0.010	<0.0095	<0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	253	253	NS
4-Methyl-2-pentanone	mg/kg	<0.022	<0.65	<0.020	<0.019	<0.022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NS
Acetone	mg/kg	0.17	<2.1	0.13 J	<0.042	0.090 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NS
Benzene	mg/kg	<0.0081	<0.12	**0.014 J**	<0.0069	<0.0081	**0.026 J**	<0.0081	**[4.5]**	<0.0067	<0.0059	<0.0069	<0.0059	<0.0058	<0.063	0.0051	1.6	7.07	NS
Bromobenzene	mg/kg	<0.018	<0.27	<0.017	<0.016	<0.018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	342	679	NS
Bromochloromethane	mg/kg	<0.024	<0.36	<0.022	<0.020	<0.024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NS
Bromodichloromethane	mg/kg	<0.026	<0.39	<0.024	<0.022	<0.026	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0003	0.418	1.83	NS
Bromoform	mg/kg	<0.020	<0.30	<0.018	<0.017	<0.020	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0023	25.4	113	NS
Bromomethane	mg/kg	<0.090	<1.3	<0.082	<0.077	<0.090	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NS
Carbon disulfide	mg/kg	<0.024	<0.36	<0.022	<0.021	<0.024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NS
Carbon tetrachloride	mg/kg	<0.018	<0.27	<0.017	<0.016	<0.018	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0039	0.916	4.03	NS
Chlorobenzene	mg/kg	<0.016	<0.23	<0.014	<0.013	<0.016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	370	761	NS
Chloroethane	mg/kg	<0.016	<0.69	<0.015	<0.014	<0.016	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2266	NS	NS	NS
Chloroform	mg/kg	<0.017	<0.26	<0.016	<0.015	<0.017	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0033	0.454	1.98	NS
Chloromethane	mg/kg	<0.039	<1.9	<0.036	<0.033	<0.039	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0155	159	669	NS
cis-1,2-Dichloroethene	mg/kg	<0.015	<0.22	**0.020 J**	<0.013	<0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0412	156	2,340	NS
cis-1,3-Dichloropropene	mg/kg	<0.018	<0.53	<0.016	<0.015	<0.018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NS
Cyclohexane	mg/kg	<0.015	<0.23	0.031 J	<0.013	<0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	117	117	NS
Dibromochloromethane	mg/kg	<0.026	<0.39	<0.024	<0.023	<0.026	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.032	8.28	38.9	NS
Dichlorodifluoromethane	mg/kg	<0.0098	<0.85	<0.009	<0.0084	<0.0099	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0863	126	530	NS
Di-isopropyl Ether	mg/kg	<0.0088	<0.13	<0.0081	<0.0075	<0.0088	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	2,260	2,260	NS
Ethyl acetate	mg/kg	<0.017	<0.26	<0.016	<0.015	<0.017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NS
Ethylbenzene	mg/kg	0.034 J	<0.15	0.075	0.031 J	<0.010	0.68	<0.0099	**[8.7]**	0.025 J	<0.0073	<0.0085	<0.0073	<0.0072	<0.078	1.57	8.02	35.4	NS
Hexachlorobutadiene	mg/kg	<0.042	<0.63	<0.039	<0.036	<0.042	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	1.63	7.19	NS
Isopropylbenzene	mg/kg	0.023 J	<0.21	0.026 J	<0.012	<0.014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NS
Methyl acetate	mg/kg	0.34	<0.84	0.24 J	0.19 J	0.19 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	29,000	29,000	NS
Methyl-tert-butyl-ether	mg/kg	<0.014	<0.20	<0.012	<0.012	<0.014	<0.010	<0.014	<0.11	<0.011	<0.010	<0.012	<0.010	<0.0098	<0.11	0.027	63.8	282	NS
Methylcyclohexane	mg/kg	<0.018	<0.27	<0.016	<0.015	<0.018	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	67.6	67.6	NS
Methylene chloride	mg/kg	<0.020	<1.9	<0.018	<0.017	<0.020	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0026	61.8	1,150	NS
Naphthalene	mg/kg	0.44	<1.7	0.19	0.15	0.035 J	**1.1**	<0.013	**{[54]}**	0.11 J	<0.0096	<0.011	0.014 J	<0.0094	**1.7**	0.6582	5.52	24.1	NS
n-Butylbenzene	mg/kg	<0.013	<0.51	<0.012	<0.011	<0.013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	108	108	NS
n-Propylbenzene	mg/kg	0.037 J	<0.54	0.074	<0.013	<0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	264	264	NS
p-Isopropyltoluene	mg/kg	0.053 J	<0.59	0.041 J	<0.034	<0.040	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	162	162	NS
sec-Butylbenzene	mg/kg	<0.019	<0.28	0.057	<0.016	<0.019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	145	145	NS
Styrene	mg/kg	<0.019	<0.28	<0.017	<0.016	<0.019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NS
tert-Butylbenzene	mg/kg	<0.015	<0.23	<0.014	<0.013	<0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	183	183	NS
Tetrachloroethene (PCE)	mg/kg	<0.014	<0.20	**0.13**	<0.012	<0.014	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0045	33	145	NS
Toluene	mg/kg	0.026 J	<0.19	0.2	0.016 J	<0.013	0.65	<0.013	0.35 J	<0.011	<0.0095	<0.011	<0.0095	<0.0093	<0.1	1.1072	818	818	NS
trans-1,2-Dichloroethene	mg/kg	<0.017	<0.26	<0.016	<0.015	<0.017	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0626	1,560	1,850	NS
trans-1,3-Dichloropropene	mg/kg	<0.026	<0.39	<0.024	<0.022	<0.026	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NS
Trichloroethene (TCE)	mg/kg	<0.021	<0.31	**[1.3]**	<0.018	<0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0036	1.3	8.41	NS
Trichlorofluoromethane	mg/kg	<0.024	<0.36	<0.022	<0.021	<0.024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	1,230	1,230	NS
Vinyl Chloride	mg/kg	<0.010	<0.47	<0.0092	<0.0086	<0.010	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0001	0.067	2.08	NS
Xylenes (total)	mg/kg	0.1 J	<0.93	0.51	0.099 J	<0.041	3.6	0.027 J	3.1	0.070 J	<0.030	<0.035	<0.030	<0.029	<0.32	3.96	260	260	NS
PCBs																			
PCB-1016	mg/kg	<0.083	<0.026	<0.027	<0.077	<0.030	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0094	4.11	28	NS
PCB-1221	mg/kg	<0.083	<0.026	<0.027	<0.077	<0.030	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0094	0.213	0.883	NS
PCB-1232	mg/kg	<0.083	<0.026	<0.027	<0.077	<0.030	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0094	0.19	0.792	NS
PCB-1242	mg/kg	<0.083	<0.026	<0.027	<0.077	<0.030	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0094	0.235	0.972	NS
PCB-1248	mg/kg	<0.083	<0.026	<0.027	<0.077	**0.13**	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0094	0.236	0.975	NS
PCB-1254	mg/kg	<0.068	**{[1.2]}**	**[0.46]**	**{[1.5]}**	**0.18**	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0094	0.239	0.988	NS
PCB-1260	mg/kg	<0.068	**[0.79]**	**[0.28]**	**{[1.2]}**	<0.024	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0094	0.243	1	NS
PCB-1262	mg/kg	<0.068	<0.021	<0.022	<0.063	<0.024	NA	NA	NA	NA	NA	NA	NA	NA	NA				NS
PCB-1268	mg/kg	<0.068	<0.021	<0.022	<0.063	<0.024	NA	NA	NA	NA	NA	NA	NA	NA	NA				NS

Notes:

1. Unsaturated/smear zone versus satured soil conditions based on: (1) measured water levels in adjacent/nearby monitoring wells, or (2) soil moisture conditions recorded on soil boring logs during drilling.
2. Analytical units: mg/kg = milligrams per kilogram (equivalent to parts per million, ppm)
3. NA = not analyzed NS = no standard established
4. Groundwater Pathway RCL = Residual Contaminant Level for protection of groundwater (dilution factor of 2) as presented on the WDNR's RCL Spreadsheet (dated June 2018) referenced in WDNR guidance document PUB-RR-890 "Soil Residual Contaminant Level Determinations Using the US EPA Regional Screening Level Web Calculator", dated June 2014.
5. Non-Industrial Direct Contact RCL = Residual Contaminant Level for protection of direct contact at a non-industrial property as presented on the WDNR's RCL Spreadsheet (dated June 2018) with default input parameters as referenced in WDNR guidance document PUB-RR-890 "Soil Residual Contaminant Level Determinations Using the US EPA Regional Screening Level Web Calculator", dated June 2014.
6. Industrial Direct Contact RCL = Residual Contaminant Level for protection of direct contact at an industrial property as presented on the WDNR's RCL Spreadsheet (dated June 2018) with default input parameters as referenced in WDNR guidance document PUB-RR-890 "Soil Residual Contaminant Level Determinations Using the US EPA Regional Screening Level Web Calculator", dated June 2014.
7. Background Threshold Value = Non-outlier trace element maximum levels in Wisconsin surface soils from USGS report "Distribution and Variation of Arsenic in Wisconsin Surface Soils, With Data on Other Trace Elements" (revised February 2013).
8. Laboratory flags: "J" = Analyte detected between Limit of Detection and Limit of Quantitation
9. Exceedances: **BOLD** = Concentration exceeds Groundwater Pathway RCL
   [ ] = Concentration exceeds Non-Industrial Direct Contact RCL (any depth)
   { } = Concentration exceeds Industrial Direct Contact RCL (any depth)

Table 1
Soil Excavation Analytical Results Table(s)
610 W. Rawson Avenue & 7045 N. 6th Street, Oak Creek, Wisconsin
Sigma Project No. 16366

Soil Sample Location:		EXC-4 (SGP-7/STP-13)					EXC-5 (MW-14/GP-24)					Groundwater Pathway RCL [4]	Non-Industrial Direct Contact RCL [5]	Industrial Direct Contact RCL [6]	Background Threshold Value [7]
		SWN	SWE	SWS	SWW	BASE	SWN	SWE	SWS	SWW	BASE				
Sample Depth (feet bgs):		3	3	3	3	6	2	2	2	2	4				
Sample Collection Date:		4/24/19	4/24/19	4/24/19	4/24/19	4/24/19	4/24/19	4/24/19	4/24/19	4/24/19	4/24/19				
VOCs															
1,1,1,2-Tetrachloroethane	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0534	2.78	12.3	NS
1,1,1-Trichloroethane	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.1402	640	640	NS
1,1,2,2-Tetrachloroethane	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0002	0.81	3.6	NS
1,1,2-Trichloroethane	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0032	1.59	7.01	NS
1,1,2-Trichlorotrifluorethane	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NS
1,1-Dichloroethane	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.4834	5.06	22.2	NS
1,1-Dichloroethene	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005	320	1,190	NS
1,2,3-Trichlorobenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	62.6	934	NS
1,2,4-Trichlorobenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.408	24	113	NS
1,2,4-Trimethylbenzene	mg/kg	0.018 J	**1.9**	**2.8 J**	**21**	**2.0**	**[28]**	0.023 J	<0.0072	<0.027	<0.0071	1.3821	219	219	NS
1,2-Dibromo-3-chloropropane	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0002	0.008	0.092	NS
EDB (1,2-Dibromoethane)	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0000282	0.05	0.221	NS
1,2-Dichlorobenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.168	376	376	NS
1,2-Dichloroethane	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0028	0.652	2.87	NS
1,2-Dichloropropane	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0033	3.4	15	NS
1,3,5-Trimethylbenzene	mg/kg	<0.012	<0.13	<1.3	**2.2 J**	<0.11	**4.5**	<0.012	<0.012	<0.042	<0.012	1.3821	182	182	NS
1,3-Dichlorobenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1528	297	297	NS
1,3-Dichloropropane	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	1,490	1,490	NS
1,4-Dichlorobenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.144	3.74	16.4	NS
2,2-Dichloropropane	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	191	191	NS
2-Butanone	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	907	907	NS
2-Chlorotoluene (,o-)	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NS
2-Hexanone	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NS
4-Chlorotoluene (,p-)	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	253	253	NS
4-Methyl-2-pentanone	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NS
Acetone	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NS
Benzene	mg/kg	<0.0064	<0.072	<0.71	<0.7	<0.061	**[2.0]**	**0.7**	**0.017 J**	<0.0062	**1.3**	0.0051	1.6	7.07	NS
Bromobenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	342	679	NS
Bromochloromethane	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NS
Bromodichloromethane	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0003	0.418	1.83	NS
Bromoform	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0023	25.4	113	NS
Bromomethane	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NS
Carbon disulfide	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NS
Carbon tetrachloride	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0039	0.916	4.03	NS
Chlorobenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	370	761	NS
Chloroethane	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2266	NS	NS	NS
Chloroform	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0033	0.454	1.98	NS
Chloromethane	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0155	159	669	NS
cis-1,2-Dichloroethene	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0412	156	2,340	NS
cis-1,3-Dichloropropene	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NS
Cyclohexane	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	117	117	NS
Dibromochloromethane	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.032	8.28	38.9	NS
Dichlorodifluoromethane	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0863	126	530	NS
Di-isopropyl Ether	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	2,260	2,260	NS
Ethyl acetate	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NS
Ethylbenzene	mg/kg	<0.0079	0.27 J	<0.87	**2.2 J**	0.23 J	**[11]**	0.053	<0.0082	<0.0077	**2.0**	1.57	8.02	35.4	NS
Hexachlorobutadiene	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	1.63	7.19	NS
Isopropylbenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NS
Methyl acetate	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	29,000	29,000	NS
Methyl-tert-butyl-ether	mg/kg	<0.011	<0.12	<1.2	<1.2	<0.1	<0.11	<0.011	<0.011	<0.011	<0.011	0.027	63.8	282	NS
Methylcyclohexane	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	67.6	67.6	NS
Methylene chloride	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0026	61.8	1,150	NS
Naphthalene	mg/kg	0.029 J	<0.12	**[23]**	**{[44]}**	**4.6**	**[6.8]**	<0.011	<0.011	0.15	**[20]**	0.6582	5.52	24.1	NS
n-Butylbenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	108	108	NS
n-Propylbenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	264	264	NS
p-Isopropyltoluene	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	162	162	NS
sec-Butylbenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	145	145	NS
Styrene	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NS
tert-Butylbenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	183	183	NS
Tetrachloroethene (PCE)	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0045	33	145	NS
Toluene	mg/kg	<0.010	<0.12	<1.1	<1.1	<0.098	<0.099	0.021 J	<0.011	<0.0099	0.015 J	1.1072	818	818	NS
trans-1,2-Dichloroethene	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0626	1,560	1,850	NS
trans-1,3-Dichloropropene	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NS
Trichloroethene (TCE)	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0036	1.3	8.41	NS
Trichlorofluoromethane	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	1,230	1,230	NS
Vinyl Chloride	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0001	0.067	2.08	NS
Xylenes (total)	mg/kg	<0.032	0.29 J	<3.6	<3.5	0.19 J	**12 J**	0.1 J	<0.034	<0.049	0.24	3.96	260	260	NS
PCBs															
PCB-1016	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0094	4.11	28	NS
PCB-1221	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0094	0.213	0.883	NS
PCB-1232	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0094	0.19	0.792	NS
PCB-1242	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0094	0.235	0.972	NS
PCB-1248	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0094	0.236	0.975	NS
PCB-1254	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0094	0.239	0.988	NS
PCB-1260	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0094	0.243	1	NS
PCB-1262	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				NS
PCB-1268	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				NS

Notes:

1. Unsaturated/smear zone versus satured soil conditions based on: (1) measured water levels in adjacent/nearby monitoring wells, or (2) soil moisture conditions recorded on soil boring logs during drilling.
2. Analytical units: mg/kg = milligrams per kilogram (equivalent to parts per million, ppm)
3. NA = not analyzed NS = no standard established
4. Groundwater Pathway RCL = Residual Contaminant Level for protection of groundwater (dilution factor of 2) as presented on the WDNR's RCL Spreadsheet (dated June 2018) referenced in WDNR guidance document PUB-RR-890 "Soil Residual Contaminant Level Determinations Using the US EPA Regional Screening Level Web Calculator", dated June 2014.
5. Non-Industrial Direct Contact RCL = Residual Contaminant Level for protection of direct contact at a non-industrial property as presented on the WDNR's RCL Spreadsheet (dated June 2018) with default input parameters as referenced in WDNR guidance document PUB-RR-890 "Soil Residual Contaminant Level Determinations Using the US EPA Regional Screening Level Web Calculator", dated June 2014.
6. Industrial Direct Contact RCL = Residual Contaminant Level for protection of direct contact at an industrial property as presented on the WDNR's RCL Spreadsheet (dated June 2018) with default input parameters as referenced in WDNR guidance document PUB-RR-890 "Soil Residual Contaminant Level Determinations Using the US EPA Regional Screening Level Web Calculator", dated June 2014.
7. Background Threshold Value = Non-outlier trace element maximum levels in Wisconsin surface soils from USGS report "Distribution and Variation of Arsenic in Wisconsin Surface Soils, With Data on Other Trace Elements" (revised February 2013).
8. Laboratory flags: "J" = Analyte detected between Limit of Detection and Limit of Quantitation
9. Exceedances: **BOLD** = Concentration exceeds Groundwater Pathway RCL
   [ ] = Concentration exceeds Non-Industrial Direct Contact RCL (any depth)
   { } = Concentration exceeds Industrial Direct Contact RCL (any depth)

Table 1
Soil Excavation Analytical Results Table(s)
610 W. Rawson Avenue & 7045 N. 6th Street, Oak Creek, Wisconsin
Sigma Project No. 16366

Soil Sample Location:		SGP-14 EXC	SGP-14 Excavation Area				Groundwater Pathway RCL [4]	Non-Industrial Direct Contact RCL [5]	Industrial Direct Contact RCL [6]	Background Threshold Value [7]
		BASE	S-SW	E-SW	W-SW	N-SW				
Sample Depth (feet bgs):			4	3	4	4				
Sample Collection Date:		5/6/19	5/14/19	5/14/19	5/14/19	5/14/19				
VOCs										
1,1,1,2-Tetrachloroethane	mg/kg	<0.026	<0.015	<0.021	<0.019	<0.026	0.0534	2.78	12.3	NS
1,1,1-Trichloroethane	mg/kg	**1.3**	<0.013	<0.018	0.017 J	0.11	0.1402	640	640	NS
1,1,2,2-Tetrachloroethane	mg/kg	<0.022	<0.013	<0.018	<0.016	<0.021	0.0002	0.81	3.6	NS
1,1,2-Trichloroethane	mg/kg	<0.021	<0.012	<0.017	<0.015	<0.021	0.0032	1.59	7.01	NS
1,1,2-Trichlorotrifluorethane	mg/kg	<0.032	<0.018	<0.025	<0.023	<0.031	NS	NS	NS	NS
1,1-Dichloroethane	mg/kg	0.23	<0.011	<0.014	<0.013	0.073	0.4834	5.06	22.2	NS
1,1-Dichloroethene	mg/kg	<0.016	<0.0095	<0.013	<0.012	<0.016	0.005	320	1,190	NS
1,2,3-Trichlorobenzene	mg/kg	<0.060	<0.035	<0.048	<0.043	<0.058	NS	62.6	934	NS
1,2,4-Trichlorobenzene	mg/kg	<0.057	<0.033	<0.045	<0.041	<0.055	0.408	24	113	NS
1,2,4-Trimethylbenzene	mg/kg	<0.037	<0.021	<0.029	<0.026	<0.035	1.3821	219	219	NS
1,2-Dibromo-3-chloropropane	mg/kg	<0.046	<0.027	<0.037	<0.033	<0.044	0.0002	0.008	0.092	NS
EDB (1,2-Dibromoethane)	mg/kg	<0.014	<0.0082	<0.011	<0.010	<0.014	0.0000282	0.05	0.221	NS
1,2-Dichlorobenzene	mg/kg	<0.019	<0.011	<0.015	<0.014	<0.019	1.168	376	376	NS
1,2-Dichloroethane	mg/kg	<0.075	<0.044	<0.060	<0.054	<0.072	0.0028	0.652	2.87	NS
1,2-Dichloropropane	mg/kg	<0.0037	<0.022	<0.029	<0.026	<0.0036	0.0033	3.4	15	NS
1,3,5-Trimethylbenzene	mg/kg	<0.058	<0.034	<0.046	<0.042	<0.056	1.3821	182	182	NS
1,3-Dichlorobenzene	mg/kg	<0.017	<0.0097	<0.0130	<0.012	<0.016	1.1528	297	297	NS
1,3-Dichloropropane	mg/kg	<0.014	<0.0082	<0.0110	<0.010	<0.014	NS	1,490	1,490	NS
1,4-Dichlorobenzene	mg/kg	<0.012	<0.007	<0.0096	<0.0086	<0.012	0.144	3.74	16.4	NS
2,2-Dichloropropane	mg/kg	<0.053	<0.031	<0.042	<0.038	<0.052	NS	191	191	NS
2-Butanone	mg/kg	<0.041	<0.024	<0.033	<0.029	<0.040	NS	907	907	NS
2-Chlorotoluene (,o-)	mg/kg	<0.018	<0.011	<0.015	<0.013	<0.018	NS	NS	NS	NS
2-Hexanone	mg/kg	<0.025	<0.014	<0.020	<0.018	<0.024	NS	NS	NS	NS
4-Chlorotoluene (,p-)	mg/kg	<0.012	<0.0069	<0.0094	<0.0084	<0.011	NS	253	253	NS
4-Methyl-2-pentanone	mg/kg	<0.047	<0.027	<0.037	<0.033	<0.045	NS	NS	NS	NS
Acetone	mg/kg	<0.150	<0.087	<0.120	<0.110	<0.140	NS	NS	NS	NS
Benzene	mg/kg	<0.0086	<0.005	<0.0068	<0.0061	<0.0083	0.0051	1.6	7.07	NS
Bromobenzene	mg/kg	<0.020	<0.011	<0.016	<0.014	<0.019	NS	342	679	NS
Bromochloromethane	mg/kg	<0.025	<0.015	<0.020	<0.018	<0.025	NS	NS	NS	NS
Bromodichloromethane	mg/kg	<0.028	<0.016	<0.022	<0.020	<0.027	0.0003	0.418	1.83	NS
Bromoform	mg/kg	<0.021	<0.012	<0.017	<0.015	<0.020	0.0023	25.4	113	NS
Bromomethane	mg/kg	<0.096	<0.056	<0.076	<0.069	<0.092	NS	NS	NS	NS
Carbon disulfide	mg/kg	<0.026	<0.015	<0.021	<0.019	<0.025	NS	NS	NS	NS
Carbon tetrachloride	mg/kg	<0.020	<0.011	<0.016	<0.014	<0.019	0.0039	0.916	4.03	NS
Chlorobenzene	mg/kg	<0.017	<0.0097	<0.013	<0.012	<0.016	NS	370	761	NS
Chloroethane	mg/kg	<0.049	<0.029	<0.039	<0.035	<0.048	0.2266	NS	NS	NS
Chloroform	mg/kg	<0.018	<0.011	<0.015	<0.013	<0.018	0.0033	0.454	1.98	NS
Chloromethane	mg/kg	<0.014	<0.080	<0.110	<0.098	<0.013	0.0155	159	669	NS
cis-1,2-Dichloroethene	mg/kg	**4.3**	<0.0091	<0.012	0.029 J	**1.9**	0.0412	156	2,340	NS
cis-1,3-Dichloropropene	mg/kg	<0.038	<0.022	<0.030	<0.027	<0.036	NS	NS	NS	NS
Cyclohexane	mg/kg	<0.016	<0.0095	<0.013	<0.012	<0.016	NS	117	117	NS
Dibromochloromethane	mg/kg	<0.028	<0.016	<0.022	<0.020	<0.027	0.032	8.28	38.9	NS
Dichlorodifluoromethane	mg/kg	<0.061	<0.035	<0.0048	<0.043	<0.058	3.0863	126	530	NS
Di-isopropyl Ether	mg/kg	<0.0094	<0.0055	<0.0074	<0.0067	<0.009	NS	2,260	2,260	NS
Ethyl acetate	mg/kg	<0.018	<0.011	<0.015	<0.013	<0.018	NS	NS	NS	NS
Ethylbenzene	mg/kg	<0.011	<0.0062	<0.0084	<0.0076	0.019 J	1.57	8.02	35.4	NS
Hexachlorobutadiene	mg/kg	<0.045	<0.026	<0.036	<0.032	<0.043	NS	1.63	7.19	NS
Isopropylbenzene	mg/kg	<0.015	<0.0089	<0.012	<0.011	<0.015	NS	NS	NS	NS
Methyl acetate	mg/kg	<0.060	0.064 J	0.15 J	0.062 J	0.093 J	NS	29,000	29,000	NS
Methyl-tert-butyl-ether	mg/kg	<0.014	<0.0084	<0.011	<0.010	<0.014	0.027	63.8	282	NS
Methylcyclohexane	mg/kg	<0.019	<0.011	<0.015	<0.014	<0.018	NS	67.6	67.6	NS
Methylene chloride	mg/kg	<0.130	<0.077	<0.110	<0.095	<0.130	0.0026	61.8	1,150	NS
Naphthalene	mg/kg	<0.120	<0.070	<0.095	<0.086	<0.120	0.6582	5.52	24.1	NS
n-Butylbenzene	mg/kg	<0.037	<0.021	<0.029	<0.026	<0.035	NS	108	108	NS
n-Propylbenzene	mg/kg	<0.038	<0.022	<0.030	<0.027	<0.037	NS	264	264	NS
p-Isopropyltoluene	mg/kg	<0.042	<0.025	<0.034	<0.030	<0.041	NS	162	162	NS
sec-Butylbenzene	mg/kg	<0.020	<0.011	<0.016	<0.014	<0.019	NS	145	145	NS
Styrene	mg/kg	<0.020	<0.012	<0.016	<0.014	<0.019	NS	NS	NS	NS
tert-Butylbenzene	mg/kg	<0.016	<0.0094	<0.013	<0.012	<0.016	NS	183	183	NS
Tetrachloroethene (PCE)	mg/kg	<0.015	<0.0085	<0.012	<0.010	<0.014	0.0045	33	145	NS
Toluene	mg/kg	0.059	<0.008	<0.011	<0.0098	0.066	1.1072	818	818	NS
trans-1,2-Dichloroethene	mg/kg	**0.33**	<0.011	<0.015	<0.013	<0.018	0.0626	1,560	1,850	NS
trans-1,3-Dichloropropene	mg/kg	<0.028	<0.016	<0.022	<0.020	<0.027	NS	NS	NS	NS
Trichloroethene (TCE)	mg/kg	**0.26**	<0.013	<0.018	<0.016	<0.022	0.0036	1.3	8.41	NS
Trichlorofluoromethane	mg/kg	<0.026	<0.015	<0.020	<0.018	<0.025	NS	1,230	1,230	NS
Vinyl Chloride	mg/kg	**0.16**	<0.019	<0.0026	<0.024	<0.032	0.0001	0.067	2.08	NS
Xylenes (total)	mg/kg	0.047 J	<0.039	<0.053	<0.048	0.12 J	3.96	260	260	NS
PCBs										
PCB-1016	mg/kg	NA	<0.027	<0.027	<0.026	<0.024	0.0094	4.11	28	NS
PCB-1221	mg/kg	NA	<0.027	<0.027	<0.026	<0.024	0.0094	0.213	0.883	NS
PCB-1232	mg/kg	NA	<0.027	<0.027	<0.026	<0.024	0.0094	0.19	0.792	NS
PCB-1242	mg/kg	NA	<0.027	<0.027	<0.026	<0.024	0.0094	0.235	0.972	NS
PCB-1248	mg/kg	NA	<0.027	<0.027	<0.026	<0.024	0.0094	0.236	0.975	NS
PCB-1254	mg/kg	NA	<0.022	<0.022	**0.027 J**	{[3.0]}	0.0094	0.239	0.988	NS
PCB-1260	mg/kg	NA	<0.022	<0.022	**0.040 J**	<0.020	0.0094	0.243	1	NS
PCB-1262	mg/kg	NA	<0.022	<0.022	<0.021	<0.020				NS
PCB-1268	mg/kg	NA	<0.022	<0.022	<0.021	<0.020				NS

Notes:

1. Unsaturated/smear zone versus satured soil conditions based on: (1) measured water levels in adjacent/nearby monitoring wells, or (2) soil moisture conditions recorded on soil boring logs during drilling.

2. Analytical units: mg/kg = milligrams per kilogram (equivalent to parts per million, ppm)

3. NA = not analyzed NS = no standard established

4. Groundwater Pathway RCL = Residual Contaminant Level for protection of groundwater (dilution factor of 2) as presented on the WDNR's RCL Spreadsheet (dated June 2018) referenced in WDNR guidance document PUB-RR-890 "Soil Residual Contaminant Level Determinations Using the US EPA Regional Screening Level Web Calculator", dated June 2014.

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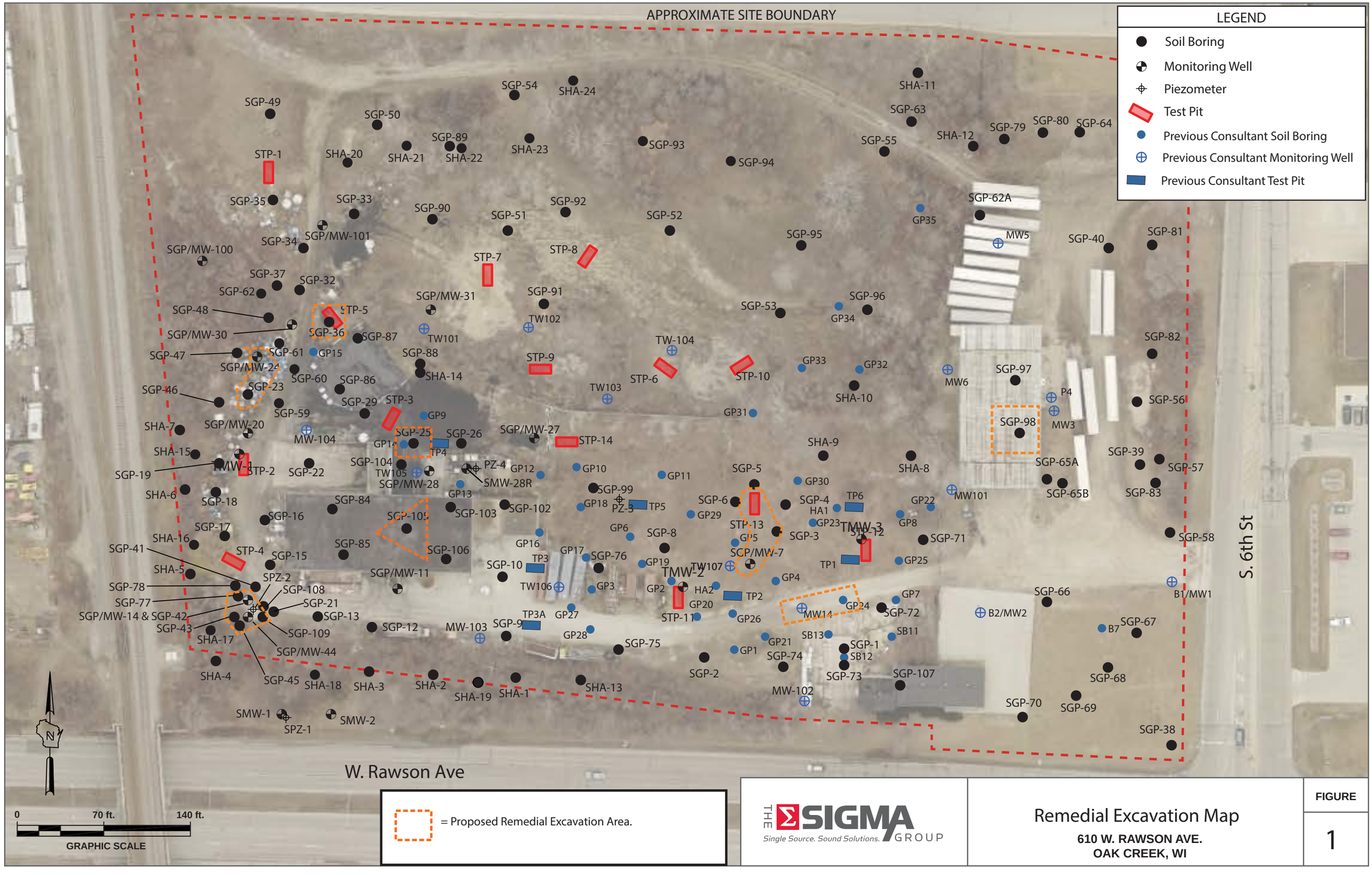
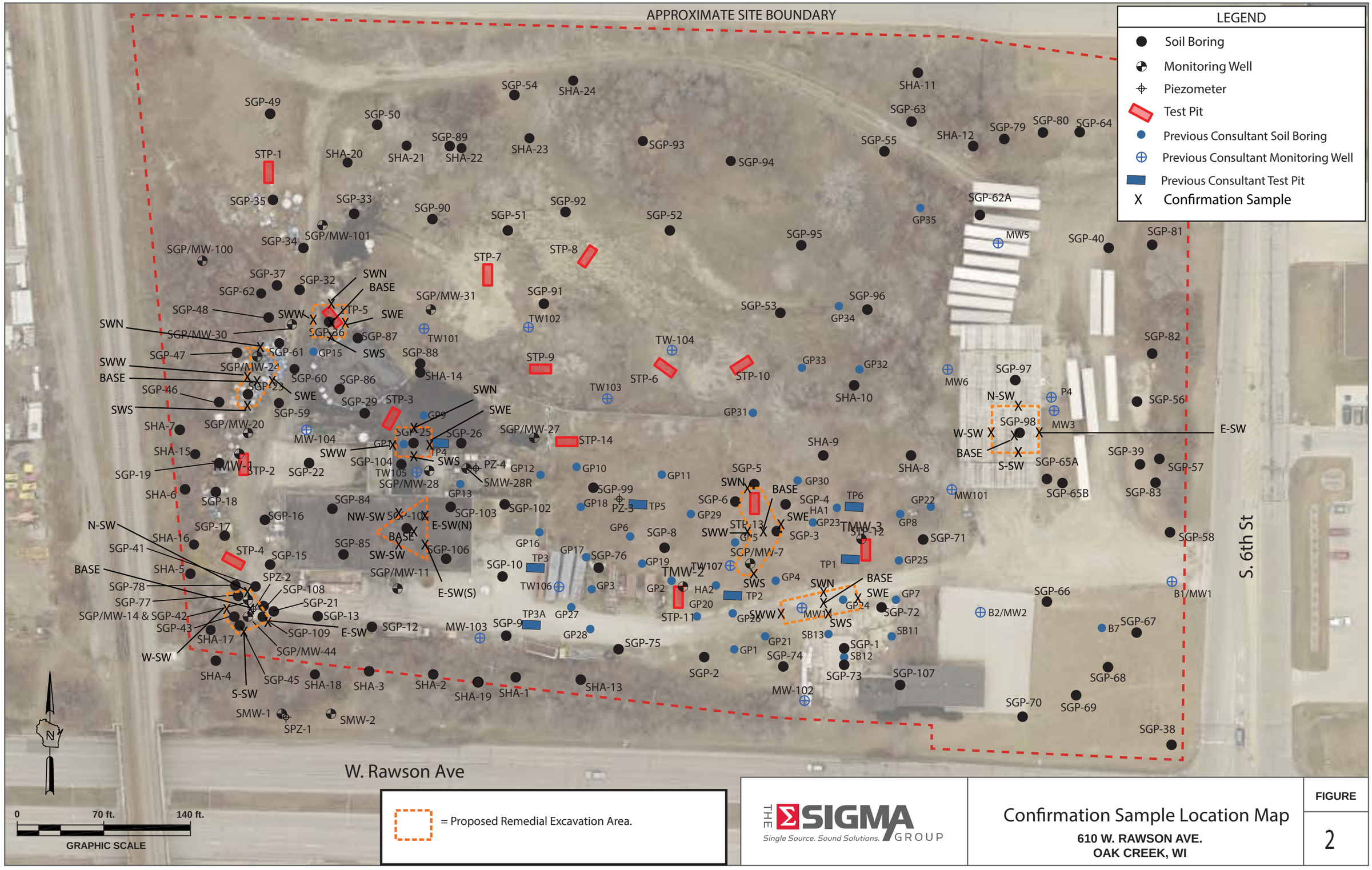
8. Laboratory flags: "J" = Analyte detected between Limit of Detection and Limit of Quantitation

9. Exceedances:
BOLD = Concentration ¢ = Concentration exceeds Groundwater Pathway RCL
[ ] = Concentration ¢ = Concentration exceeds Non-Industrial Direct Contact RCL (any depth)
{ } = Concentration ¢ = Concentration exceeds Industrial Direct Contact RCL (any depth)
***** = Concentration ¢ = Concentration exceeds RCL but is below Background Threshold Value or is Laboratory Artifact
OR = Concentration i: = Concentration is below Background Threshold Value so RCL exceedances are not marked

FIGURES


APPROXIMATE SITE BOUNDARY
LEGEND
Soil Boring
Monitoring Well
Piezometer
Test Pit
Previous Consultant Soil Boring
Previous Consultant Monitoring Well
Previous Consultant Test Pit
SGP-49
SGP-50
SGP-54
SHA-24
SHA-11
SGP-63
SGP-79
SGP-80
SGP-64
SHA-12
SGP-55
SGP-89
SHA-21
SHA-22
SHA-23
SGP-93
SGP-94
STP-1
SHA-20
SGP-35
SGP-33
SGP-90
SGP-51
SGP-92
SGP-52
GP35
SGP-62A
MW5
SGP-95
SGP-40
SGP-81
SGP-34
SGP/MW-101
SGP/MW-100
STP-8
STP-7
SGP-37
SGP-32
SGP-62
SGP-48
STP-5
SGP/MW-31
SGP-91
SGP-53
SGP-96
GP34
SGP-36
SGP-87
TW101
TW102
SGP/MW-30
SGP-47
SGP-61
GP15
SGP-88
TW-104
SGP-82
SGP/MW-24
SGP-60
SGP-86
SHA-14
STP-9
STP-6
STP-10
GP33
GP32
SGP-97
MW6
SGP-46
SGP-23
TW103
SHA-10
P4
SGP-56
SGP-29
STP-3
SGP-59
GP9
GP31
SHA-7
SGP/MW-20
SGP-25
SGP-26
SGP/MW-27
SGP-98
MW3
MW-104
GP14
TP4
STP-14
SHA-15
SHA-9
SGP-39
SGP-65A
SGP-57
SGP-104
PZ-4
GP12
GP10
GP11
SGP-5
SHA-8
SGP-19
STP-2
SGP-22
TW105
SMW-28R
GP30
SGP-65B
SGP-83
SGP/MW-28
SGP-99
MW101
SHA-6
SGP-18
GP13
SGP-102
GP18
PZ-3
TP5
SGP-6
SGP-4
TP6
GP22
SGP-84
SGP-103
GP29
HA1
GP23
STP-13
TMW-3
STP-12
GP8
SGP-16
SGP-105
SGP-3
SGP-71
SGP-58
SGP-17
GP6
SGP-8
GP5
SHA-16
SGP-85
SGP-106
GP16
GP17
SGP-76
GP19
SGP/MW-7
SGP-41
STP-4
SGP-15
SGP-10
TP3
TW107
TMW-2
TP1
GP25
SHA-5
SPZ-2
SGP/MW-11
GP4
SGP-78
SGP-108
TW106
GP3
GP2
HA2
TP2
SGP-66
B1/MW1
SGP-77
SGP-21
GP20
GP7
GP24
SGP-72
SGP/MW-14 & SGP-42
SGP-13
TP3A
GP27
STP-11
GP26
MW14
B2/MW2
SGP-67
SGP-43
SGP-12
MW-103
SGP-9
GP28
SB13
SB11
B7
SHA-17
SGP-109
SGP-75
GP21
SGP-1
SGP/MW-44
GP1
SB12
SGP-74
SHA-4
SGP-45
SHA-18
SHA-3
SHA-2
SHA-19
SHA-1
SHA-13
SGP-2
SGP-73
SGP-107
SGP-68
MW-102
SGP-70
SGP-69
SMW-1
SMW-2
SPZ-1
SGP-38
S. 6th St
W. Rawson Ave
N
0
70 ft.
140 ft.
GRAPHIC SCALE
= Proposed Remedial Excavation Area.
THE SIGMA GROUP
Single Source. Sound Solutions.
Remedial Excavation Map
610 W. RAWSON AVE.
OAK CREEK, WI
FIGURE
1


APPROXIMATE SITE BOUNDARY
LEGEND
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X Confirmation Sample
SGP-49
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SGP-79
SGP-80
SGP-64
SHA-12
SGP-55
SGP-89
SHA-21
SHA-22
SHA-23
SGP-93
SGP-94
STP-1
SHA-20
SGP-35
SGP-33
SGP-90
SGP-51
SGP-92
SGP-52
SGP-62A
GP35
MW5
SGP-95
SGP-40
SGP-81
SGP/MW-100
SGP-34
SGP/MW-101
STP-8
STP-7
SGP-37
SGP-32
SGP-62
SWN
BASE
SGP-48
SWW
STP-5
SWE
SGP/MW-31
SGP-91
SGP-53
SGP-96
GP34
SWN
SGP/MW-30
SGP-36
SGP-87
TW101
TW102
SGP-82
SGP-47
SGP-61
GP15
SWS
SGP-88
TW-104
SWW
SGP/MW-24
STP-9
GP33
GP32
BASE
SGP-23
SGP-60
SGP-86
SHA-14
STP-6
STP-10
SGP-97
MW6
SGP-46
SWE
TW103
SHA-10
N-SW
P4
SGP-56
SWS
SGP-29
STP-3
SWN
GP9
GP31
SGP-59
SWE
SHA-7
SGP/MW-20
SGP-25
SGP-26
SGP/MW-27
SGP-98
MW3
E-SW
W-SW
STP-14
MW-104
SHA-9
SHA-15
SWW
SGP-104
TP4
SWS
PZ-4
GP12
GP10
GP11
SGP-5
SHA-8
SGP-39
SGP-57
SGP-19
TMW-1
STP-2
SGP-22
TW105
SGP/MW-28
SMW-28R
GP30
BASE
S-SW
SGP-65A
SHA-6
SGP-18
SGP-84
GP13
SGP-99
SGP-4
TP6
GP22
MW101
SGP-65B
SGP-83
SGP-6
GP18
PZ-3
TP5
SGP-103
SGP-102
GP29
HA1
SWE
SGP-16
NW-SW
SGP-10
E-SW(N)
GP6
SGP-8
GP23
TMW-3
GP8
SWW
STP-13
GP5
SGP-3
STP-12
N-SW
SGP-17
SHA-16
BASE
SGP-85
SW-SW
SGP-106
GP16
GP17
SGP-76
SCP/MW-7
SGP-71
SGP-58
SGP-41
STP-4
SGP-15
SGP-10
TP3
GP19
TW107
TP1
GP25
S. 6th St
BASE
SHA-5
SPZ-2
SGP/MW-11
TW106
GP3
GP2
TMW-2
GP4
SWS
SWN
BASE
SGP-66
B1/MW1
SGP-78
SGP-108
HA2
TP2
SWE
GP7
SGP-77
SGP-21
E-SW(S)
GP20
SWW
GP24
SGP-72
SGP/MW-14 & SGP-42
SGP-13
TP3A
GP27
STP-11
MW1
SWS
B2/MW2
SGP-67
SGP-43
SGP-12
MW-103
SGP-9
GP26
SB13
SB11
B7
SHA-17
SGP-109
E-SW
GP28
SGP-75
GP21
SGP-1
SGP/MW-44
GP1
SGP-74
SB12
W-SW
SGP-2
SGP-73
SGP-107
SHA-4
SGP-45
SHA-18
SHA-3
SHA-2
SHA-19
SHA-1
SHA-13
MW-102
SGP-68
S-SW
SGP-70
SGP-69
SMW-1
SMW-2
SPZ-1
SGP-38
N
W. Rawson Ave
0
70 ft.
140 ft.
GRAPHIC SCALE
= Proposed Remedial Excavation Area.
THE SIGMA GROUP
Single Source. Sound Solutions.
Confirmation Sample Location Map
610 W. RAWSON AVE.
OAK CREEK, WI
FIGURE
2

ATTACHMENT A

EXCAVATION SUMMARIES

Date	Profile #	Manifest #	Ticket #	Facility	Carrier	Vehicle	Material Quantity	Material Unit
4/24/2019	BIO130963WI	7915320	983223	Metro RDF		610	13.99	TON
4/24/2019	BIO130963WI	7915319	983218	Metro RDF		547	15.32	TON
4/24/2019	BIO130963WI	7915318	983213	Metro RDF		611	13.67	TON
4/24/2019	BIO130963WI	7915317	983211	Metro RDF		543	14.15	TON
4/24/2019	BIO130963WI	7915316	983205	Metro RDF		608	15.8	TON
4/24/2019	BIO130963WI	7915315	983201	Metro RDF		548	18.36	TON
4/24/2019	BIO130963WI	7915314	983188	Metro RDF		15982	15.16	TON
4/24/2019	BIO130963WI	7915313	983185	Metro RDF		14101	20.62	TON
4/24/2019	BIO130963WI	7915312	983182	Metro RDF		610	17.67	TON
4/24/2019	BIO130963WI	7915311	983177	Metro RDF		547	21.56	TON
4/24/2019	BIO130963WI	7915310	983171	Metro RDF		611	22.9	TON
4/24/2019	BIO130963WI	7915309	983165	Metro RDF		543	23.26	TON
4/24/2019	BIO130963WI	7915308	983159	Metro RDF		548	22.08	TON
4/24/2019	BIO130963WI	7915307	983139	Metro RDF		15982	21.13	TON
4/24/2019	BIO130963WI	7915306	983137	Metro RDF		14101	22.45	TON
4/24/2019	BIO130963WI	7915305	983135	Metro RDF		610	23.07	TON
4/24/2019	BIO130963WI	7915304	983133	Metro RDF		547	23.24	TON
4/24/2019	BIO130963WI	7915303	983129	Metro RDF		611	22.09	TON
4/24/2019	BIO130963WI	7915302	983125	Metro RDF		573	24.11	TON
4/24/2019	BIO130963WI	7915301	983117	Metro RDF		548	18.76	TON
4/24/2019	BIO130963WI	7915300	983101	Metro RDF		15982	20.83	TON
4/24/2019	BIO130963WI	7915299	983093	Metro RDF		14101	21.42	TON
4/24/2019	BIO130963WI	7915298	983078	Metro RDF		610	19.88	TON
4/24/2019	BIO130963WI	7915297	983074	Metro RDF		547	22.45	TON
4/24/2019	BIO130963WI	7915296	983066	Metro RDF		611	18.56	TON
4/24/2019	BIO130963WI	7915295	983063	Metro RDF		543	21.74	TON
4/24/2019	BIO130963WI	7915294	983060	Metro RDF		608	19.52	TON
4/24/2019	BIO130963WI	7915293	983057	Metro RDF		548	20.63	TON
4/24/2019	BIO130963WI	7915292	983041	Metro RDF		15982	19.96	TON
4/24/2019	BIO130963WI	7915291	983040	Metro RDF		14101	18.6	TON
4/24/2019	BIO130963WI	7915290	983033	Metro RDF		610	19.33	TON
4/24/2019	BIO130963WI	7915289	983029	Metro RDF		547	21.45	TON
4/24/2019	BIO130963WI	7915288	983021	Metro RDF		611	18.67	TON
4/24/2019	BIO130963WI	7915287	983019	Metro RDF		543	20.55	TON
4/24/2019	BIO130963WI	7915286	983015	Metro RDF		608	17.93	TON
4/24/2019	BIO130963WI	7915285	983014	Metro RDF		548	20.18	TON
4/24/2019	BIO130963WI	7915284	982993	Metro RDF		15982	18.23	TON
4/24/2019	BIO130963WI	7915283	982991	Metro RDF		14101	16.4	TON
4/24/2019	BIO130963WI	7915282	982987	Metro RDF		610	18.43	TON
4/24/2019	BIO130963WI	7915281	982981	Metro RDF		547	20.25	TON
4/24/2019	BIO130963WI	7915280	982970	Metro RDF		611	17.37	TON
4/24/2019	BIO130963WI	7915279	982968	Metro RDF		543	19.68	TON
4/24/2019	BIO130963WI	7915277	982967	Metro RDF		608	18.01	TON
4/24/2019	BIO130963WI	7915278	982966	Metro RDF		548	16.91	TON
4/24/2019	BIO130963WI	7915276	982948	Metro RDF		15982	17.78	TON
4/24/2019	BIO130963WI	7915275	982946	Metro RDF		14101	16.04	TON
4/24/2019	BIO130963WI	7915274	982942	Metro RDF		610	18.08	TON
4/24/2019	BIO130963WI	7915273	982940	Metro RDF		547	19.07	TON
4/24/2019	BIO130963WI	7918272	982937	Metro RDF		611	16.34	TON
4/24/2019	BIO130963WI	7915271	982935	Metro RDF		543	17.17	TON
4/23/2019	BIO130963WI	7915270	982870	Metro RDF		548	15.16	TON
4/23/2019	BIO130963WI	7915269	982866	Metro RDF		610	16.67	TON
4/23/2019	BIO130963WI	7915268	982865	Metro RDF		611	18.74	TON

4/23/2019	BIO130963WI	7915267	982836	Metro RDF	608	18.59	TON
4/23/2019	BIO130963WI	7915266	982824	Metro RDF	548	18.14	TON
4/23/2019	BIO130963WI	7915265	982821	Metro RDF	610	21.11	TON
4/23/2019	BIO130963WI	7915264	982816	Metro RDF	611	18.55	TON
4/23/2019	BIO130963WI	7915263	982813	Metro RDF	543	20.46	TON
4/23/2019	BIO130963WI	7915262	982792	Metro RDF	608	23.06	TON
4/23/2019	BIO130963WI	7915261	982781	Metro RDF	548	22.57	TON
4/23/2019	BIO130963WI	7915260	982778	Metro RDF	610	21.68	TON
4/23/2019	BIO130963WI	7915259	982774	Metro RDF	611	21.5	TON
4/23/2019	BIO130963WI	7915258	982771	Metro RDF	543	24.57	TON
4/23/2019	BIO130963WI	7915257	982747	Metro RDF	608	19.86	TON
4/23/2019	BIO130963WI	7915256	982739	Metro RDF	548	21.22	TON
4/23/2019	BIO130963WI	7915255	982737	Metro RDF	610	21.94	TON
4/23/2019	BIO130963WI	7915254	982735	Metro RDF	611	19.11	TON
4/23/2019	BIO130963WI	7915253	982731	Metro RDF	543	21.9	TON
4/23/2019	BIO130963WI	7915252	982687	Metro RDF	610	19.38	TON
4/23/2019	BIO130963WI	7915251	982686	Metro RDF	611	22.74	TON
4/23/2019	BIO130963WI	7915250	982685	Metro RDF	543	23.58	TON
4/8/2019	BIO130963WI	7915224	979798	Metro RDF	543	21.54	TON
4/8/2019	BIO130963WI	7915249	979938	Metro RDF	609	21.98	TON
4/8/2019	BIO130963WI	7915248	979921	Metro RDF	543	18.35	TON
4/8/2019	BIO130963WI	7915247	979917	Metro RDF	610	19.1	TON
4/8/2019	BIO130963WI	7915246	979915	Metro RDF	608	18.08	TON
4/8/2019	BIO130963WI	7915245	979910	Metro RDF	609	18.73	TON
4/8/2019	BIO130963WI	7915244	979902	Metro RDF	543	20.68	TON
4/8/2019	BIO130963WI	7915243	979896	Metro RDF	610	14.58	TON
4/8/2019	BIO130963WI	7915242	979890	Metro RDF	608	18.7	TON
4/8/2019	BIO130963WI	7915241	979884	Metro RDF	609	19.41	TON
4/8/2019	BIO130963WI	7915240	979880	Metro RDF	543	19.05	TON
4/8/2019	BIO130963WI	7915239	979873	Metro RDF	610	16.99	TON
4/8/2019	BIO130963WI	7915238	979866	Metro RDF	608	18.71	TON
4/8/2019	BIO130963WI	7915237	979862	Metro RDF	609	20.01	TON
4/8/2019	BIO130963WI	7915236	979855	Metro RDF	543	19.82	TON
4/8/2019	BIO130963WI	7915235	979847	Metro RDF	610	17.64	TON
4/8/2019	BIO130963WI	7915234	979843	Metro RDF	608	16.95	TON
4/8/2019	BIO130963WI	7915233	979841	Metro RDF	609	23.01	TON
4/8/2019	BIO130963WI	7915232	979836	Metro RDF	543	17.6	TON
4/8/2019	BIO130963WI	7915231	979833	Metro RDF	609	16.74	TON
4/8/2019	BIO130963WI	7915230	979830	Metro RDF	610	20.02	TON
4/8/2019	BIO130963WI	7915229	979826	Metro RDF	608	19.77	TON
4/8/2019	BIO130963WI	7915228	979821	Metro RDF	543	19.79	TON
4/8/2019	BIO130963WI	7915227	979814	Metro RDF	609	24.15	TON
4/8/2019	BIO130963WI	7915226	979810	Metro RDF	610	20.35	TON
4/8/2019	BIO130963WI	7915225	979805	Metro RDF	608	21.92	TON
4/8/2019	BIO130963WI	7915223	979792	Metro RDF	609	24.68	TON
4/8/2019	BIO130963WI	7915222	979789	Metro RDF	608	21.04	TON
4/8/2019	BIO130963WI	7915221	979787	Metro RDF	543	21.57	TON
4/8/2019	BIO130963WI	7915220	979740	Metro RDF	610	19.39	TON
					TOTAL:	1981.73	

Date	Profile #	Manifest #	Ticket #	Facility	Carrier	Vehicle	Material Quantity	Material Unit
4/24/2019	V130461WI	7915210	982929	Metro RDF		548	20.48	TON
4/24/2019	V130461WI	7915209	982928	Metro RDF		608	19.78	TON
4/23/2019	V130461WI	7915206	982632	Metro RDF		610	19.64	TON
4/23/2019	V130461WI	7915205	982630	Metro RDF		611	19.72	TON
4/23/2019	V130461WI	7915204	982624	Metro RDF		543	20.03	TON
4/23/2019	V130461WI	7915203	982621	Metro RDF		549	21.05	TON
4/23/2019	V130461WI	7915202	982620	Metro RDF		548	18.22	TON
4/23/2019	V130461WI	7915201	982616	Metro RDF		608	17.62	TON
4/23/2019	V130461WI	7915200	982584	Metro RDF		610	17.26	TON
4/23/2019	V130461WI	7915199	982581	Metro RDF		543	20.4	TON
4/23/2019	V130461WI	7915197	982578	Metro RDF		611	17.9	TON
4/23/2019	V130461WI	7915198	982576	Metro RDF		549	19.57	TON
4/23/2019	V130461WI	7915196	982573	Metro RDF		548	19.82	TON
4/23/2019	V130461WI	7915195	982570	Metro RDF		608	21.64	TON
						Total:	273.13	

Date	Profile #	Manifest #	Ticket #	Facility	Carrier	Vehicle	Material Quantity	Material Unit
5/14/2019	V130964WI	7915384	987163	Metro RDF		610	14.33	TON
5/14/2019	V130964WI	7915383	987157	Metro RDF		608	20.84	TON
5/14/2019	V130964WI	7915382	987152	Metro RDF		548	17.35	TON
5/14/2019	V130964WI	7915381	987137	Metro RDF		610	18.19	TON
5/14/2019	V130964WI	7915380	987135	Metro RDF		608	20.57	TON
5/14/2019	V130964WI	7915379	987129	Metro RDF		548	20.27	TON
5/14/2019	V130964WI	7915378	987118	Metro RDF		610	18.52	TON
5/14/2019	V130964WI	7915377	987114	Metro RDF		608	21.38	TON
5/14/2019	V130964WI	7915376	987112	Metro RDF		548	20.02	TON
5/6/2019	V130964WI	7915375	1736957	Orchard Ri	WILLKOMM	608	12.24	TON
5/6/2019	V130964WI	7915374	1736950	Orchard Ri	WILLKOMM	610	16.75	TON
5/6/2019	V130964WI	7915373	1736947	Orchard Ri	WILLKOMM	548	16.93	TON
5/6/2019	V130964WI	7915372	1736883	Orchard Ri	WILLKOMM	610	17.8	TON
5/6/2019	V130964WI	7915371	1736879	Orchard Ri	WILLKOMM	548	24.2	TON
5/6/2019	V130964WI	7915370	1736875	Orchard Ri	WILLKOMM	608	23.82	TON
						TOTAL:	283.21	

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for Invoice 499482 Dated: 5/9/2019

OAK CREEK RAWSON INDUSTRIAL, LLC

Receipt Waste Summary

OAK CREEK RAWSON INDUSTRIAL, LLC
C/O HSA COMMERCIAL RE
100 S. WACKER DRIVE, SUITE 950
CHICAGO, IL 60606-4021

Invoice: 499482
Invoice Date: 05/09/2019
Customer ID: 600383

Facility: Michigan Disposal Waste Treatment Plant, 49350 North I-94 Service Drive, Belleville, Michigan 48111

Description	Qty.	Unit
e-Manifest Submission Fee	4.00	EACH
C198091MDI - C198091MDI CVOC Impacted Soil	97.24	TONS
Fuel Surcharge To Be Determined based on DOE weekly rate	1.00	EACH
Fuel Surcharge To Be Determined based on DOE weekly rate	1.00	EACH
Fuel Surcharge To Be Determined based on DOE weekly rate	1.00	EACH
Fuel Surcharge To Be Determined based on DOE weekly rate	1.00	EACH
Wayne Disposal Host Community Agreement Royalty Fee	97.24	TONS
Transportation per Ton	97.24	TONS

Invoice: 499482 Receipt 02-00 593737 Cod COD #2

11882948

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US ecology CERTIFICATE OF DISPOSAL

This certificate is to verify the wastes specified on Manifest # 013447415FLE

have been properly disposed of in accordance with all local, state and federal regulation.

"Disposed of" means either: 1) Burial or 2) Processed as specified in 40CFR et sea.

FACILITY NAME: (Please check one)

☒ Michigan Disposal Waste Treatment Plant (EPA I.D. # MID000724831)

☐ Wayne Disposal, Inc. (EPA I.D. # MID048090633)

ADDRESS: 49350 N. I-94 Service Drive
Bellville, Michigan 48111

PHONE NUMBER: 1-800-592-5489

FAX NUMBER: 1-800-593-5329

Authorized Signature: _____

Invoice: 499482 Receipt 02-00 593738 Cod COD #2

11878517

Page 3 of 13

US ecology CERTIFICATE OF DISPOSAL

This certificate is to verify the wastes specified on Manifest # 013447416FLE

have been properly disposed of in accordance with all local, state and federal regulation.

"Disposed of" means either: 1) Burial or 2) Processed as specified in 40CFR et seq.

FACILITY NAME: (Please check one)

☒ Michigan Disposal Waste Treatment Plant (EPA I.D. # MID000724831)

☐ Wayne Disposal, Inc. (EPA I.D. # MID048090633)

ADDRESS: 49350 N. I-94 Service Drive
Bellville, Michigan 48111

PHONE NUMBER: 1-800-592-5489

FAX NUMBER: 1-800-593-5329

Authorized Signature: _____

Invoice: 499482 Receipt 02-00 593740 Cod COD #2

11878514

Page 4 of 13

US ecology CERTIFICATE OF DISPOSAL

This certificate is to verify the wastes specified on Manifest # 013447414 FLE

have been properly disposed of in accordance with all local, state and federal regulation.

"Disposed of" means either: 1) Burial or 2) Processed as specified in 40CFR et sea.

FACILITY NAME: (Please check one)

☒ Michigan Disposal Waste Treatment Plant (EPA I.D. # MID000724831)

☐ Wayne Disposal, Inc. (EPA I.D. # MID048090633)

ADDRESS: 49350 N. I-94 Service Drive
Bellville, Michigan 48111

PHONE NUMBER: 1-800-592-5489

FAX NUMBER: 1-800-593-5329

Authorized Signature: _____

Invoice: 499482 Receipt 02-00 593745 Cod COD #2

11882951

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US ecology CERTIFICATE OF DISPOSAL

This certificate is to verify the wastes specified on Manifest # 013442413FLE

have been properly disposed of in accordance with all local, state and federal regulation.

"Disposed of" means either: 1) Burial or 2) Processed as specified in 40CFR et sea.

FACILITY NAME: (Please check one)

☒ Michigan Disposal Waste Treatment Plant (EPA I.D. # MID000724831)

☐ Wayne Disposal, Inc. (EPA I.D. # MID048090633)

ADDRESS: 49350 N. I-94 Service Drive
Bellville, Michigan 48111

PHONE NUMBER: 1-800-592-5489

FAX NUMBER: 1-800-593-5329

Authorized Signature: _____

US ecology

LAND DISPOSAL RESTRICTION AND CERTIFICATION FORM

Generator: OAK CREEK RAWSON INDUSTRIAL LLC
610 W RAWSON AVE , OAK CREEK, WI 53154

U.S. EPA ID No.: WID981529241

Manifest:

Page - Line 1 - 01

Approval: C198091MDI

NWW

Waste Code(s): D029 D040 D043

Hazardous Constituents: 72 1,1-dichloroethane, 107 Ethyl Benzene, 137 Methyl Isobutyl Ketone, 141 Naphthalene, 182 Tetrachloroethylene, 184 Toluene, 188 1,1,1-trichloroethane, 199 Xylenes, 158 Polychlorinated Biphenyls, 69 1,2-dichlorobenzene

Subcategory(s): None

Certification: GENERATORS OF CONTAMINATED SOIL.
THIS CONTAMINATED SOIL DOES NOT CONTAIN LISTED HAZARDOUS WASTE AND DOES EXHIBIT A CHARACTERISTIC OF HAZARDOUS WASTE AND IS SUBJECT TO THE SOIL TREATMENT STANDARDS AS PROVIDED BY 268.49(c) OR THE UNIVERSAL TREATMENT STANDARDS.

I hereby certify that all information submitted on this and all associated documents, is complete and accurate to the best of my knowledge and information.

Generator Signature: _____ **Title:** Senior Engineer

Printed Name: Stephen Meer on behalf of OCRZ **Date:** 5/6/19

For questions regarding this form, please call Customer Service at (800) 592-5489.

Rev. 09/12

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-967089 -

US ecology

LAND DISPOSAL RESTRICTION AND CERTIFICATION FORM

Generator: OAK CREEK RAWSON INDUSTRIAL LLC
610 W RAWSON AVE , OAK CREEK, WI 53154

U.S. EPA ID No.: WID981529241

Manifest:

Page - Line
1 - 01 **Approval:** C198091MDI NWW

Waste Code(s): D029 D040 D043

Hazardous Constituents: 72 1,1-dichloroethane, 107 Ethyl Benzene, 137 Methyl Isobutyl Ketone, 141 Naphthalene, 182 Tetrachloroethylene, 184 Toluene, 188 1,1,1-trichloroethane, 199 Xylenes, 158 Polychlorinated Biphenyls, 69 1,2-dichlorobenzene

Subcategory(s): None

Certification: GENERATORS OF CONTAMINATED SOIL.
THIS CONTAMINATED SOIL DOES NOT CONTAIN LISTED HAZARDOUS WASTE AND DOES EXHIBIT A CHARACTERISTIC OF HAZARDOUS WASTE AND IS SUBJECT TO THE SOIL TREATMENT STANDARDS AS PROVIDED BY 268.49(c) OR THE UNIVERSAL TREATMENT STANDARDS.

I hereby certify that all information submitted on this and all associated documents, is complete and accurate to the best of my knowledge and information.

Generator Signature: _____ **Title:** Senior Engineer

Printed Name: Stephen Mear on behalf of OCRI **Date:** 5/6/19

For questions regarding this form, please call Customer Service at (800) 592-5489.

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US ecology

LAND DISPOSAL RESTRICTION AND CERTIFICATION FORM

Generator: OAK CREEK RAWSON INDUSTRIAL LLC
610 W RAWSON AVE , OAK CREEK, WI 53154

U.S. EPA ID No.: WID981529241

Manifest:

Page - Line		
1 -01	**Approval:** C198091MDI	NWW
	Waste Code(s): D029 D040 D043	
	Hazardous Constituents: 72 1,1-dichloroethane, 107 Ethyl Benzene, 137 Methyl Isobutyl Ketone, 141 Naphthalene, 182 Tetrachloroethylene, 184 Toluene, 188 1,1,1-trichloroethane, 199 Xylenes, 158 Polychlorinated Biphenyls, 69 1,2-dichlorobenzene	
	Subcategory(s): None	
	Certification: GENERATORS OF CONTAMINATED SOIL. THIS CONTAMINATED SOIL DOES NOT CONTAIN LISTED HAZARDOUS WASTE AND DOES EXHIBIT A CHARACTERISTIC OF HAZARDOUS WASTE AND IS SUBJECT TO THE SOIL TREATMENT STANDARDS AS PROVIDED BY 268.49(c) OR THE UNIVERSAL TREATMENT STANDARDS.	

I hereby certify that all information submitted on this and all associated documents, is complete and accurate to the best of my knowledge and information.

Generator Signature: _____ **Title:** Senior Engineer

Printed Name: Stephen Meer on behalf of OCRI **Date:** 5/6/19

For questions regarding this form, please call Customer Service at (800) 592-5489.

US ecology

LAND DISPOSAL RESTRICTION AND CERTIFICATION FORM

Generator: OAK CREEK RAWSON INDUSTRIAL LLC
610 W RAWSON AVE , OAK CREEK, WI 53154

U.S. EPA ID No.: WID981529241

Manifest:

Page - Line
1 - 01 **Approval:** C198091MDI NWW

Waste Code(s): D029 D040 D043

Hazardous Constituents: 72 1,1-dichloroethane, 107 Ethyl Benzene, 137 Methyl Isobutyl Ketone, 141 Naphthalene, 182 Tetrachloroethylene, 184 Toluene, 188 1,1,1-trichloroethane, 199 Xylenes, 158 Polychlorinated Biphenyls, 69 1,2-dichlorobenzene

Subcategory(s): None

Certification: GENERATORS OF CONTAMINATED SOIL.
THIS CONTAMINATED SOIL DOES NOT CONTAIN LISTED HAZARDOUS WASTE AND DOES EXHIBIT A CHARACTERISTIC OF HAZARDOUS WASTE AND IS SUBJECT TO THE SOIL TREATMENT STANDARDS AS PROVIDED BY 268.49(c) OR THE UNIVERSAL TREATMENT STANDARDS.

I hereby certify that all information submitted on this and all associated documents, is complete and accurate to the best of my knowledge and information.

Generator Signature: _____ **Title:** Senior Engineer

Printed Name: Stephen Mear on behalf of OCRI **Date:** 5/6/19

For questions regarding this form, please call Customer Service at (800) 592-5489.

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78.660

Form Approved. OMB No. 2050-0039

Please print or type

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: WID 981 529 241
2. Page 1 of: 1
3. Emergency Response Phone: (800) 839-3975
4. Manifest Tracking Number: 013447415 FLE

GENERATOR

5. Generator's Name and Mailing Address: OAK CREEK RAWSON INDUSTRIAL L
100 S WACKER DR #950
CHICAGO, IL 60606
Generator's Phone: (312) 683-7242

Generator's Site Address (if different than mailing address)
610 W RAWSON AVE
OAK CREEK, WI 53154

6. Transporter 1 Company Name: US Bulk transport INC
U.S. EPA ID Number: PAD 987347 515

7. Transporter 2 Company Name
U.S. EPA ID Number:

8. Designated Facility Name and Site Address: MICHIGAN DISPOSAL WASTE TREATMEN
49350 N I-94 SERVICE DRIVE
BELLEVILLE, MI 48111
Facility's Phone: (800) 592-5489
U.S. EPA ID Number: MID 000 724 831

9a HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. NA3077, Hazardous waste, solid, n.o.s. (Trichloroethylene), PGIII, ERG #171	01	DT	Est 22	T	D040 D029 D043
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. C198091MDI / CVOC Impacted Soil SSD 5-6-19 156A

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: [illegible] Signature: [signature] Month: 5 Day: 1 Year: 19

INTL

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: Date leaving U.S.:
Transporter signature (for exports only):

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Jason Campos Signature: [signature] Month: 5 Day: 16 Year: 19
Transporter 2 Printed/Typed Name: Signature: Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☒ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
[illegible] Manifest Reference Number: U.S. EPA ID Number:

18b. Alternate Facility (or Generator)
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H070 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Jonathon Evans Signature: [signature] Month: 5 Day: 16 Year: 19

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete. **DESIGNATED FACILITY TO GENERATO**

78.000

Please print or type.

Form Approved OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: WID 981 529 241
2. Page 1 of: 1
3. Emergency Response Phone: (800) 839-3975
4. Manifest Tracking Number: 013447416 FLE

5. Generator's Name and Mailing Address: OAK CREEK RAWSON INDUSTRIAL L
100 S WACKER DR #950
CHICAGO, IL 60606
Generator's Phone: (312) 683-7242

Generator's Site Address (if different than mailing address)
610 W RAWSON AVE
OAK CREEK, WI 53154

6. Transporter 1 Company Name: U.S. Bulk transport
U.S. EPA ID Number: PAD 987 347 515

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address: MICHIGAN DISPOSAL WASTE TREATMEN
49350 N I-94 SERVICE DRIVE
BELLEVILLE, MI 48111
Facility's Phone: (800) 592-5489
U.S. EPA ID Number: MID 000 724 831

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number and Packing Group (if any))	10. Containers No	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1 NA3077, Hazardous waste, solid, n.o.s. (Trichloroethylene), 9, PGIII, ERG #171	1	DT	22 ton	Ton	D040 D029 D043
	2					
	3					
	4					

14. Special Handling Instructions and Additional Information
1 C198091MDI / CVOC Impacted Soil

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Stephen Mearon on behalf of EcRZ
Signature:
Month: 5 Day: 6 Year: 19

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Mike Nichols
Signature:
Month: 5 Day: 6 Year: 19
Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

18b. Alternate Facility (or Generator)
Manifest Reference Number:
U.S. EPA ID Number:
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems):
1. H070 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Jonathan Evans
Signature:
Month: 5 Day: 6 Year: 19

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

Please print or type.

UNIFORM HAZARDOUS WASTE MANIFEST	1 Generator ID Number	2. Page 1 of	3 Emergency Response Phone	4. Manifest Tracking Number
	WID 981 529 241	1	(800) 839-3975	013447414 FLE

Form Approved. OMB No. 2050-0039

GENERATOR

5 Generator's Name and Mailing Address: OAK CREEK RAWSON INDUSTRIAL L, 100 S WACKER DR #950, CHICAGO, IL 60606
Generator's Phone: (312) 683-7242

Generator's Site Address (if different than mailing address): 610 W RAWSON AVE, OAK CREEK, WI 53154

6 Transporter 1 Company Name: U.S. Bulk Transport Inc — U.S. EPA ID Number: IDAD 982 347 515

7 Transporter 2 Company Name — U.S. EPA ID Number:

8 Designated Facility Name and Site Address: MICHIGAN DISPOSAL WASTE TREATMEN, 49350 N I-94 SERVICE DRIVE, BELLEVILLE, MI 48111 — U.S. EPA ID Number: MID 000 724 831
Facility's Phone: (800) 592-5489

9a HM	9b U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. NA3077, Hazardous waste, solid, n.o.s. (Trichloroethylene), 9, PGIII, ERG #171	01	DT	Est 22	T	D040 D028 D04
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. C100091MDI / CVOC Impacted Soil

Trailer # 185A

15 **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Stephen Hoar Industrial OCK — Signature — Month 5 Day 6 Year 19

INTL

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: Date leaving U.S.:
Transporter signature (for exports only):

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Jeremy Cramer — Signature — Month 5 Day 6 Year 19
Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
18b. Alternate Facility (or Generator) — Manifest Reference Number: — U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1	2.	3	4.
H070			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Jonathan Evans — Signature — Month 5 Day 6 Year 19

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete

DESIGNATED FACILITY TO GENERATOR

8412

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number WID 981 529 241	2. Page 1 of 1	3. Emergency Response Phone (800) 839-3975
4. Manifest Tracking Number 013447413 FLE			

5. Generator's Name and Mailing Address: OAK CREEK RAWSON INDUSTRIAL, 100 S WACKER DR #950, CHICAGO, IL 60606

Generator's Site Address (if different than mailing address): 610 W RAWSON AVE, OAK CREEK, WI 53154

Generator's Phone: (312) 683-7242

6. Transporter 1 Company Name: U.S. Bulk Transport Inc — U.S. EPA ID Number: PAD987547515

7. Transporter 2 Company Name: — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: MICHIGAN DISPOSAL WASTE TREATMEN, 49350 N I-94 SERVICE DRIVE, BELLEVILLE, MI 48111 — U.S. EPA ID Number: MID 000 724 831

Facility's Phone: (800) 592-5489

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. NA3077, Hazardous waste, solid, n.o.s. (Trichloroethylene), 9, PGIII, ERG #171	001	DT	23	T	D040 D029 D04
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. C198091MDI / CVOC Impacted Soil

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Stephen Mc... on behalf of CRE — Signature: [signature] — Month 5 Day 6 Year 19

16. International Shipments: ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: Date leaving U.S.:
Transporter signature (for exports only):

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Derek V. Holmes — Signature: [signature] — Month 5 Day 6 Year 19
Transporter 2 Printed/Typed Name: — Signature: — Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space: ☒ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
[illegible] Manifest Reference Number: 38-79
18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H070 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Jonathan Evans — Signature: [signature] — Month 5 Day 6 Year 19

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

ATTACHMENT B

SOIL LABORATORY ANALYTICAL RESULTS

17-Apr-2019

Stephen Meer
The Sigma Group
1300 W. Canal Street
Milwaukee, WI 53233

Re: **Former Biogenesis** Work Order: **1904650**

Dear Stephen,

ALS Environmental received 11 samples on 10-Apr-2019 09:30 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental - Holland and for only the analyses requested.

Sample results are compliant with industry accepted practices and Quality Control results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 21.

If you have any questions regarding this report, please feel free to contact me:

ADDRESS: 3352 128th Avenue, Holland, MI, USA
PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Sincerely,

Electronically approved by: Chad Whelton

Chad Whelton
Project Manager

Report of Laboratory Analysis

Certificate No: WI: 399084510

ALS Group, USA

Date: 17-Apr-19

Client: The Sigma Group
Project: Former Biogenesis
Work Order: **1904650**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1904650-01	EA-1 E-SW 2'	Soil		4/8/2019 09:15	4/10/2019 09:30	☐
1904650-02	EA-1 Base 4'	Soil		4/8/2019 09:30	4/10/2019 09:30	☐
1904650-03	EA-1 S-SW 2'	Soil		4/8/2019 10:15	4/10/2019 09:30	☐
1904650-04	EA-1 W-SW 2'	Soil		4/8/2019 10:30	4/10/2019 09:30	☐
1904650-05	EA-1 N-SW 2'	Soil		4/8/2019 10:35	4/10/2019 09:30	☐
1904650-06	EA-2 NW-SW 2'	Soil		4/8/2019 12:45	4/10/2019 09:30	☐
1904650-07	EA-2 E-SW (N) 2'	Soil		4/8/2019 13:30	4/10/2019 09:30	☐
1904650-08	EA-2 BASE 4'	Soil		4/8/2019 13:45	4/10/2019 09:30	☐
1904650-09	EA-2 SW-SW 2'	Soil		4/8/2019 15:00	4/10/2019 09:30	☐
1904650-10	EA-2 E-SW (S) 2'	Soil		4/8/2019 15:15	4/10/2019 09:30	☐
1904650-11	Trip Blank	Soil		4/8/2019	4/10/2019 09:30	☐

ALS Group, USA

Date: 17-Apr-19

Client: The Sigma Group
Project: Former Biogenesis
Work Order: 1904650

Case Narrative

Samples for the above noted Work Order were received on 04/10/2019. The attached "Sample Receipt Checklist" documents the status of custody seals, container integrity, sample condition, preservation, and temperature compliance.
In order to ensure compliance with NR 149 criteria, please note the following report format:
(1) The Limit of Detection (LOD) is reported as the MDL (Method Detection Limit)
(2) The Limit of Quantitation (LOQ) is reported as the PQL (Practical Quantitation Limit)
(3) All reported concentrations, including those for the LOD and LOQ, are adjusted for any required dilutions
(4) All reported concentrations, including those for the LOD and LOQ, are adjusted for moisture content when samples are reported on a dry weight basis.

Samples were analyzed according to the analytical methodology previously documented in the "Work Order Acknowledgement". Methodologies are also documented in the "Analytical Result" section for each sample. Quality control results are listed in the "QC Report" section. Detail as to the associated samples can be found at the end of each batch summary. If applicable, results are appropriately qualified in the Analytical Result and QC Report sections. The "Qualifiers" section documents the various qualifiers, acronyms, and units utilized in reporting.

With the following exceptions, all sample analyses achieved analytical criteria.

Volatile Organics
No deviations or anomalies noted

Wet Chemistry
No deviations or anomalies noted

ALS Group, USA

Date: 17-Apr-19

Client: The Sigma Group
Project: Former Biogenesis
WorkOrder: **1904650**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
**	Estimated Value
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
Hr	BOD/CBOD - Sample was reset outside Hold Time, value should be considered estimated.
J	Analyte is present at an estimated concentration between the MDL and Report Limit
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

Acronym	Description
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

Units Reported	Description
% of sample	Percent of Sample
µg/Kg-dry	Micrograms per Kilogram Dry Weight

ALS Group, USA

Date: *17-Apr-19*

Client: The Sigma Group
Project: Former Biogenesis
Sample ID: EA-1 E-SW 2'
Collection Date: 4/8/2019 09:15 AM

Work Order: 1904650
Lab ID: 1904650-01
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 4/12/19		Analyst: **PM**
1,2,4-Trimethylbenzene	U		9.6	52	µg/Kg-dry	1	4/12/2019 22:35
1,3,5-Trimethylbenzene	U		16	52	µg/Kg-dry	1	4/12/2019 22:35
Benzene	U		8.9	52	µg/Kg-dry	1	4/12/2019 22:35
Ethylbenzene	U		11	52	µg/Kg-dry	1	4/12/2019 22:35
m,p-Xylene	U		25	100	µg/Kg-dry	1	4/12/2019 22:35
Methyl tert-butyl ether	U		15	52	µg/Kg-dry	1	4/12/2019 22:35
Naphthalene	U		14	170	µg/Kg-dry	1	4/12/2019 22:35
o-Xylene	U		20	52	µg/Kg-dry	1	4/12/2019 22:35
Toluene	U		14	52	µg/Kg-dry	1	4/12/2019 22:35
Xylenes, Total	U		45	160	µg/Kg-dry	1	4/12/2019 22:35
Surr: 1,2-Dichloroethane-d4	*99.5*			*70-130*	*%REC*	1	4/12/2019 22:35
Surr: 4-Bromofluorobenzene	*103*			*70-130*	*%REC*	1	4/12/2019 22:35
Surr: Dibromofluoromethane	*93.3*			*70-130*	*%REC*	1	4/12/2019 22:35
Surr: Toluene-d8	*98.1*			*70-130*	*%REC*	1	4/12/2019 22:35
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**14**		**0.10**	**0.10**	**% of sample**	1	4/12/2019 15:50

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *17-Apr-19*

Client: The Sigma Group
Project: Former Biogenesis
Sample ID: EA-1 Base 4'
Collection Date: 4/8/2019 09:30 AM

Work Order: 1904650
Lab ID: 1904650-02
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 4/12/19		Analyst: **PM**
1,2,4-Trimethylbenzene	U		7.8	42	µg/Kg-dry	1	4/12/2019 22:52
1,3,5-Trimethylbenzene	U		13	42	µg/Kg-dry	1	4/12/2019 22:52
Benzene	U		7.2	42	µg/Kg-dry	1	4/12/2019 22:52
Ethylbenzene	U		8.8	42	µg/Kg-dry	1	4/12/2019 22:52
m,p-Xylene	U		20	84	µg/Kg-dry	1	4/12/2019 22:52
Methyl tert-butyl ether	U		12	42	µg/Kg-dry	1	4/12/2019 22:52
Naphthalene	U		12	140	µg/Kg-dry	1	4/12/2019 22:52
o-Xylene	U		16	42	µg/Kg-dry	1	4/12/2019 22:52
Toluene	U		11	42	µg/Kg-dry	1	4/12/2019 22:52
Xylenes, Total	U		36	130	µg/Kg-dry	1	4/12/2019 22:52
Surr: 1,2-Dichloroethane-d4	*99.0*			*70-130*	*%REC*	1	4/12/2019 22:52
Surr: 4-Bromofluorobenzene	*99.0*			*70-130*	*%REC*	1	4/12/2019 22:52
Surr: Dibromofluoromethane	*96.1*			*70-130*	*%REC*	1	4/12/2019 22:52
Surr: Toluene-d8	*98.0*			*70-130*	*%REC*	1	4/12/2019 22:52
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**16**		**0.10**	**0.10**	**% of sample**	1	4/12/2019 15:50

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *17-Apr-19*

Client: The Sigma Group
Project: Former Biogenesis
Sample ID: EA-1 S-SW 2'
Collection Date: 4/8/2019 10:15 AM

Work Order: 1904650
Lab ID: 1904650-03
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 4/12/19		Analyst: **PM**
1,2,4-Trimethylbenzene	U		8.1	44	µg/Kg-dry	1	4/12/2019 23:08
1,3,5-Trimethylbenzene	U		13	44	µg/Kg-dry	1	4/12/2019 23:08
Benzene	U		7.5	44	µg/Kg-dry	1	4/12/2019 23:08
Ethylbenzene	U		9.3	44	µg/Kg-dry	1	4/12/2019 23:08
m,p-Xylene	U		21	88	µg/Kg-dry	1	4/12/2019 23:08
Methyl tert-butyl ether	U		13	44	µg/Kg-dry	1	4/12/2019 23:08
Naphthalene	U		12	150	µg/Kg-dry	1	4/12/2019 23:08
o-Xylene	U		17	44	µg/Kg-dry	1	4/12/2019 23:08
Toluene	U		12	44	µg/Kg-dry	1	4/12/2019 23:08
Xylenes, Total	U		38	130	µg/Kg-dry	1	4/12/2019 23:08
Surr: 1,2-Dichloroethane-d4	*99.7*			*70-130*	*%REC*	1	4/12/2019 23:08
Surr: 4-Bromofluorobenzene	*103*			*70-130*	*%REC*	1	4/12/2019 23:08
Surr: Dibromofluoromethane	*96.3*			*70-130*	*%REC*	1	4/12/2019 23:08
Surr: Toluene-d8	*100*			*70-130*	*%REC*	1	4/12/2019 23:08
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**15**		**0.10**	**0.10**	**% of sample**	1	4/12/2019 15:50

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *17-Apr-19*

Client: The Sigma Group
Project: Former Biogenesis
Sample ID: EA-1 W-SW 2'
Collection Date: 4/8/2019 10:30 AM

Work Order: 1904650
Lab ID: 1904650-04
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 4/12/19		Analyst: **PM**
1,2,4-Trimethylbenzene	U		8.9	48	µg/Kg-dry	1	4/12/2019 23:25
1,3,5-Trimethylbenzene	U		15	48	µg/Kg-dry	1	4/12/2019 23:25
Benzene	U		8.2	48	µg/Kg-dry	1	4/12/2019 23:25
Ethylbenzene	U		10	48	µg/Kg-dry	1	4/12/2019 23:25
m,p-Xylene	U		23	96	µg/Kg-dry	1	4/12/2019 23:25
Methyl tert-butyl ether	U		14	48	µg/Kg-dry	1	4/12/2019 23:25
Naphthalene	U		13	160	µg/Kg-dry	1	4/12/2019 23:25
o-Xylene	U		19	48	µg/Kg-dry	1	4/12/2019 23:25
Toluene	U		13	48	µg/Kg-dry	1	4/12/2019 23:25
Xylenes, Total	U		41	140	µg/Kg-dry	1	4/12/2019 23:25
Surr: 1,2-Dichloroethane-d4	*101*			*70-130*	*%REC*	1	4/12/2019 23:25
Surr: 4-Bromofluorobenzene	*102*			*70-130*	*%REC*	1	4/12/2019 23:25
Surr: Dibromofluoromethane	*93.4*			*70-130*	*%REC*	1	4/12/2019 23:25
Surr: Toluene-d8	*102*			*70-130*	*%REC*	1	4/12/2019 23:25
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**18**		**0.10**	**0.10**	**% of sample**	1	4/12/2019 15:50

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *17-Apr-19*

Client: The Sigma Group
Project: Former Biogenesis
Sample ID: EA-1 N-SW 2'
Collection Date: 4/8/2019 10:35 AM

Work Order: 1904650
Lab ID: 1904650-05
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 4/12/19		Analyst: **PM**
1,2,4-Trimethylbenzene	U		13	70	µg/Kg-dry	1	4/12/2019 23:42
1,3,5-Trimethylbenzene	U		21	70	µg/Kg-dry	1	4/12/2019 23:42
Benzene	U		12	70	µg/Kg-dry	1	4/12/2019 23:42
Ethylbenzene	U		15	70	µg/Kg-dry	1	4/12/2019 23:42
m,p-Xylene	U		33	140	µg/Kg-dry	1	4/12/2019 23:42
Methyl tert-butyl ether	U		20	70	µg/Kg-dry	1	4/12/2019 23:42
Naphthalene	U		19	230	µg/Kg-dry	1	4/12/2019 23:42
o-Xylene	U		27	70	µg/Kg-dry	1	4/12/2019 23:42
Toluene	U		19	70	µg/Kg-dry	1	4/12/2019 23:42
Xylenes, Total	U		60	210	µg/Kg-dry	1	4/12/2019 23:42
Surr: 1,2-Dichloroethane-d4	*101*			*70-130*	*%REC*	1	4/12/2019 23:42
Surr: 4-Bromofluorobenzene	*101*			*70-130*	*%REC*	1	4/12/2019 23:42
Surr: Dibromofluoromethane	*96.8*			*70-130*	*%REC*	1	4/12/2019 23:42
Surr: Toluene-d8	*98.6*			*70-130*	*%REC*	1	4/12/2019 23:42
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**12**		**0.10**	**0.10**	**% of sample**	1	4/15/2019 13:04

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *17-Apr-19*

Client: The Sigma Group
Project: Former Biogenesis
Sample ID: EA-2 NW-SW 2'
Collection Date: 4/8/2019 12:45 PM

Work Order: 1904650
Lab ID: 1904650-06
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 4/12/19		Analyst: **PM**
1,2,4-Trimethylbenzene	U		9.7	53	µg/Kg-dry	1	4/12/2019 23:58
1,3,5-Trimethylbenzene	U		16	53	µg/Kg-dry	1	4/12/2019 23:58
Benzene	U		9.0	53	µg/Kg-dry	1	4/12/2019 23:58
Ethylbenzene	U		11	53	µg/Kg-dry	1	4/12/2019 23:58
m,p-Xylene	U		25	110	µg/Kg-dry	1	4/12/2019 23:58
Methyl tert-butyl ether	U		15	53	µg/Kg-dry	1	4/12/2019 23:58
Naphthalene	**32**	J	**15**	**180**	**µg/Kg-dry**	1	4/12/2019 23:58
o-Xylene	U		20	53	µg/Kg-dry	1	4/12/2019 23:58
Toluene	U		14	53	µg/Kg-dry	1	4/12/2019 23:58
Xylenes, Total	U		45	160	µg/Kg-dry	1	4/12/2019 23:58
Surr: 1,2-Dichloroethane-d4	*97.3*			*70-130*	*%REC*	1	4/12/2019 23:58
Surr: 4-Bromofluorobenzene	*103*			*70-130*	*%REC*	1	4/12/2019 23:58
Surr: Dibromofluoromethane	*92.2*			*70-130*	*%REC*	1	4/12/2019 23:58
Surr: Toluene-d8	*101*			*70-130*	*%REC*	1	4/12/2019 23:58
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**19**		**0.10**	**0.10**	**% of sample**	1	4/15/2019 13:04

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *17-Apr-19*

Client: The Sigma Group
Project: Former Biogenesis
Sample ID: EA-2 E-SW (N) 2'
Collection Date: 4/8/2019 01:30 PM

Work Order: 1904650
Lab ID: 1904650-07
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 4/12/19		Analyst: **PM**
1,2,4-Trimethylbenzene	U		21	120	µg/Kg-dry	1	4/13/2019 12:15
1,3,5-Trimethylbenzene	U		35	120	µg/Kg-dry	1	4/13/2019 12:15
Benzene	U		20	120	µg/Kg-dry	1	4/13/2019 12:15
Ethylbenzene	**330**		**24**	**120**	**µg/Kg-dry**	1	4/13/2019 12:15
m,p-Xylene	U		55	230	µg/Kg-dry	1	4/13/2019 12:15
Methyl tert-butyl ether	U		33	120	µg/Kg-dry	1	4/13/2019 12:15
Naphthalene	**6,100**		**32**	**380**	**µg/Kg-dry**	1	4/13/2019 12:15
o-Xylene	U		45	120	µg/Kg-dry	1	4/13/2019 12:15
Toluene	U		31	120	µg/Kg-dry	1	4/13/2019 12:15
Xylenes, Total	U		99	350	µg/Kg-dry	1	4/13/2019 12:15
Surr: 1,2-Dichloroethane-d4	*99.3*			*70-130*	*%REC*	1	4/13/2019 12:15
Surr: 4-Bromofluorobenzene	*121*			*70-130*	*%REC*	1	4/13/2019 12:15
Surr: Dibromofluoromethane	*93.2*			*70-130*	*%REC*	1	4/13/2019 12:15
Surr: Toluene-d8	*96.5*			*70-130*	*%REC*	1	4/13/2019 12:15
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**19**		**0.10**	**0.10**	**% of sample**	1	4/15/2019 13:04

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *17-Apr-19*

Client: The Sigma Group
Project: Former Biogenesis
Sample ID: EA-2 BASE 4'
Collection Date: 4/8/2019 01:45 PM

Work Order: 1904650
Lab ID: 1904650-08
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 4/12/19		Analyst: **BG**
1,2,4-Trimethylbenzene	**24,000**		**51**	**280**	**µg/Kg-dry**	2	4/16/2019 20:59
1,3,5-Trimethylbenzene	**6,900**		**42**	**140**	**µg/Kg-dry**	1	4/13/2019 12:31
Benzene	U		24	140	µg/Kg-dry	1	4/13/2019 12:31
Ethylbenzene	**960**		**29**	**140**	**µg/Kg-dry**	1	4/13/2019 12:31
m,p-Xylene	**1,100**		**66**	**280**	**µg/Kg-dry**	1	4/13/2019 12:31
Methyl tert-butyl ether	U		40	140	µg/Kg-dry	1	4/13/2019 12:31
Naphthalene	**8,000**		**38**	**460**	**µg/Kg-dry**	1	4/13/2019 12:31
o-Xylene	U		53	140	µg/Kg-dry	1	4/13/2019 12:31
Toluene	U		38	140	µg/Kg-dry	1	4/13/2019 12:31
Xylenes, Total	**1,100**		**120**	**410**	**µg/Kg-dry**	1	4/13/2019 12:31
Surr: 1,2-Dichloroethane-d4	*95.2*			*70-130*	*%REC*	1	4/13/2019 12:31
Surr: 1,2-Dichloroethane-d4	*81.0*			*70-130*	*%REC*	2	4/16/2019 20:59
Surr: 4-Bromofluorobenzene	*88.0*			*70-130*	*%REC*	1	4/13/2019 12:31
Surr: 4-Bromofluorobenzene	*98.8*			*70-130*	*%REC*	2	4/16/2019 20:59
Surr: Dibromofluoromethane	*91.8*			*70-130*	*%REC*	1	4/13/2019 12:31
Surr: Dibromofluoromethane	*84.2*			*70-130*	*%REC*	2	4/16/2019 20:59
Surr: Toluene-d8	*96.0*			*70-130*	*%REC*	1	4/13/2019 12:31
Surr: Toluene-d8	*90.6*			*70-130*	*%REC*	2	4/16/2019 20:59
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**22**		**0.10**	**0.10**	**% of sample**	1	4/15/2019 13:04

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *17-Apr-19*

Client: The Sigma Group
Project: Former Biogenesis
Sample ID: EA-2 SW-SW 2'
Collection Date: 4/8/2019 03:00 PM

Work Order: 1904650
Lab ID: 1904650-09
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 4/12/19		Analyst: **BG**
1,2,4-Trimethylbenzene	**900**		**8.2**	**44**	**µg/Kg-dry**	1	4/16/2019 20:36
1,3,5-Trimethylbenzene	**62**		**14**	**44**	**µg/Kg-dry**	1	4/16/2019 20:36
Benzene	U		7.6	44	µg/Kg-dry	1	4/16/2019 20:36
Ethylbenzene	**83**		**9.4**	**44**	**µg/Kg-dry**	1	4/16/2019 20:36
m,p-Xylene	**95**		**21**	**89**	**µg/Kg-dry**	1	4/16/2019 20:36
Methyl tert-butyl ether	U		13	44	µg/Kg-dry	1	4/16/2019 20:36
Naphthalene	**4,300**		**12**	**150**	**µg/Kg-dry**	1	4/16/2019 20:36
o-Xylene	U		17	44	µg/Kg-dry	1	4/16/2019 20:36
Toluene	U		12	44	µg/Kg-dry	1	4/16/2019 20:36
Xylenes, Total	**95**	J	**38**	**130**	**µg/Kg-dry**	1	4/16/2019 20:36
Surr: 1,2-Dichloroethane-d4	*81.4*			*70-130*	*%REC*	1	4/16/2019 20:36
Surr: 4-Bromofluorobenzene	*82.1*			*70-130*	*%REC*	1	4/16/2019 20:36
Surr: Dibromofluoromethane	*84.7*			*70-130*	*%REC*	1	4/16/2019 20:36
Surr: Toluene-d8	*94.0*			*70-130*	*%REC*	1	4/16/2019 20:36
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**17**		**0.10**	**0.10**	**% of sample**	1	4/15/2019 13:04

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *17-Apr-19*

Client: The Sigma Group
Project: Former Biogenesis
Sample ID: EA-2 E-SW (S) 2'
Collection Date: 4/8/2019 03:15 PM

Work Order: 1904650
Lab ID: 1904650-10
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 4/12/19		Analyst: **PM**
1,2,4-Trimethylbenzene	**210**		**12**	**65**	**µg/Kg-dry**	1	4/13/2019 12:48
1,3,5-Trimethylbenzene	**41**	J	**20**	**65**	**µg/Kg-dry**	1	4/13/2019 12:48
Benzene	U		11	65	µg/Kg-dry	1	4/13/2019 12:48
Ethylbenzene	U		14	65	µg/Kg-dry	1	4/13/2019 12:48
m,p-Xylene	U		31	130	µg/Kg-dry	1	4/13/2019 12:48
Methyl tert-butyl ether	U		19	65	µg/Kg-dry	1	4/13/2019 12:48
Naphthalene	U		18	220	µg/Kg-dry	1	4/13/2019 12:48
o-Xylene	U		25	65	µg/Kg-dry	1	4/13/2019 12:48
Toluene	U		18	65	µg/Kg-dry	1	4/13/2019 12:48
Xylenes, Total	U		56	200	µg/Kg-dry	1	4/13/2019 12:48
Surr: 1,2-Dichloroethane-d4	*98.2*			*70-130*	*%REC*	1	4/13/2019 12:48
Surr: 4-Bromofluorobenzene	*113*			*70-130*	*%REC*	1	4/13/2019 12:48
Surr: Dibromofluoromethane	*93.6*			*70-130*	*%REC*	1	4/13/2019 12:48
Surr: Toluene-d8	*97.4*			*70-130*	*%REC*	1	4/13/2019 12:48
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**13**		**0.10**	**0.10**	**% of sample**	1	4/15/2019 13:04

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *17-Apr-19*

Client: The Sigma Group
Project: Former Biogenesis
Sample ID: Trip Blank
Collection Date: 4/8/2019

Work Order: 1904650
Lab ID: 1904650-11
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 4/12/19		Analyst: **PM**
1,2,4-Trimethylbenzene	U		5.6	30	µg/Kg-dry	1	4/12/2019 21:29
1,3,5-Trimethylbenzene	U		9.2	30	µg/Kg-dry	1	4/12/2019 21:29
Benzene	U		5.1	30	µg/Kg-dry	1	4/12/2019 21:29
Ethylbenzene	U		6.3	30	µg/Kg-dry	1	4/12/2019 21:29
m,p-Xylene	U		14	60	µg/Kg-dry	1	4/12/2019 21:29
Methyl tert-butyl ether	U		8.6	30	µg/Kg-dry	1	4/12/2019 21:29
Naphthalene	U		8.3	100	µg/Kg-dry	1	4/12/2019 21:29
o-Xylene	U		12	30	µg/Kg-dry	1	4/12/2019 21:29
Toluene	U		8.2	30	µg/Kg-dry	1	4/12/2019 21:29
Xylenes, Total	U		26	90	µg/Kg-dry	1	4/12/2019 21:29
Surr: 1,2-Dichloroethane-d4	*100*			*70-130*	*%REC*	1	4/12/2019 21:29
Surr: 4-Bromofluorobenzene	*102*			*70-130*	*%REC*	1	4/12/2019 21:29
Surr: Dibromofluoromethane	*93.6*			*70-130*	*%REC*	1	4/12/2019 21:29
Surr: Toluene-d8	*101*			*70-130*	*%REC*	1	4/12/2019 21:29

Note: See Qualifiers page for a list of qualifiers and their definitions.

QC BATCH REPORT

Batch ID: **134511** Instrument ID **VMS10** Method: **SW8260C**

MBLK Sample ID: **MBLK-134511-134511** Units: **µg/Kg-dry** Analysis Date: **4/15/2019 04:27 PM**

Client ID: Run ID: **VMS10_190415A** SeqNo: **5608526** Prep Date: **4/12/2019** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2,4-Trimethylbenzene	U	30								
1,3,5-Trimethylbenzene	U	30								
Benzene	U	30								
Ethylbenzene	U	30								
m,p-Xylene	U	60								
Methyl tert-butyl ether	U	30								
Naphthalene	U	100								
o-Xylene	U	30								
Toluene	U	30								
Xylenes, Total	U	90								
Surr: 1,2-Dichloroethane-d4	*985.5*	0	*1000*	0	*98.6*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*1010*	0	*1000*	0	*101*	*70-130*	0			
Surr: Dibromofluoromethane	*958.5*	0	*1000*	0	*95.8*	*70-130*	0			
Surr: Toluene-d8	*995.5*	0	*1000*	0	*99.6*	*70-130*	0			

LCS Sample ID: **LCS-134511-134511** Units: **µg/Kg-dry** Analysis Date: **4/15/2019 03:38 PM**

Client ID: Run ID: **VMS10_190415A** SeqNo: **5608525** Prep Date: **4/12/2019** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2,4-Trimethylbenzene	942.5	30	1000	0	94.2	65-135	0			
1,3,5-Trimethylbenzene	1003	30	1000	0	100	65-135	0			
Benzene	966.5	30	1000	0	96.6	75-125	0			
Ethylbenzene	993.5	30	1000	0	99.4	75-125	0			
m,p-Xylene	1985	60	2000	0	99.2	80-125	0			
Methyl tert-butyl ether	1098	30	1000	0	110	75-125	0			
Naphthalene	909.5	100	1000	0	91	40-140	0			
o-Xylene	977	30	1000	0	97.7	75-125	0			
Toluene	970	30	1000	0	97	70-125	0			
Xylenes, Total	2962	90	3000	0	98.7	75-125	0			
Surr: 1,2-Dichloroethane-d4	*989*	0	*1000*	0	*98.9*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*1007*	0	*1000*	0	*101*	*70-130*	0			
Surr: Dibromofluoromethane	*984*	0	*1000*	0	*98.4*	*70-130*	0			
Surr: Toluene-d8	*961*	0	*1000*	0	*96.1*	*70-130*	0			

The following samples were analyzed in this batch:

1904650-01A	1904650-02A	1904650-03A
1904650-04A	1904650-05A	1904650-06A
1904650-07A	1904650-08A	1904650-09A
1904650-10A	1904650-11A	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Sigma Group
Work Order: 1904650
Project: Former Biogenesis

QC BATCH REPORT

Batch ID: **R258467** Instrument ID **MOIST** Method: **SW3550C**

MBLK Sample ID: **WBLKS-R258467** Units: **% of sample** Analysis Date: **4/12/2019 03:50 PM**
Client ID: Run ID: **MOIST_190412B** SeqNo: **5606224** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	U	0.10								

LCS Sample ID: **LCS-R258467** Units: **% of sample** Analysis Date: **4/12/2019 03:50 PM**
Client ID: Run ID: **MOIST_190412B** SeqNo: **5606223** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	100	0.10	100	0	100	98-102	0			

DUP Sample ID: **1904621-07A DUP** Units: **% of sample** Analysis Date: **4/12/2019 03:50 PM**
Client ID: Run ID: **MOIST_190412B** SeqNo: **5606212** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	19.17	0.10	0	0	0	0-0	19.34	0.883	10	

DUP Sample ID: **1904624-04B DUP** Units: **% of sample** Analysis Date: **4/12/2019 03:50 PM**
Client ID: Run ID: **MOIST_190412B** SeqNo: **5606217** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	6.64	0.10	0	0	0	0-0	6.81	2.53	10	

The following samples were analyzed in this batch:

1904650-01B 1904650-02B 1904650-03B
1904650-04B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Sigma Group
Work Order: 1904650
Project: Former Biogenesis

QC BATCH REPORT

Batch ID: **R258546** Instrument ID **MOIST** Method: **SW3550C**

MBLK Sample ID: **WBLKS-R258546** Units: **% of sample** Analysis Date: **4/15/2019 01:04 PM**
Client ID: Run ID: **MOIST_190415A** SeqNo: **5608591** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	U	0.10								

LCS Sample ID: **LCS-R258546** Units: **% of sample** Analysis Date: **4/15/2019 01:04 PM**
Client ID: Run ID: **MOIST_190415A** SeqNo: **5608590** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	100	0.10	100	0	100	98-102	0			

DUP Sample ID: **1904678-01A DUP** Units: **% of sample** Analysis Date: **4/15/2019 01:04 PM**
Client ID: Run ID: **MOIST_190415A** SeqNo: **5608576** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	19.42	0.10	0	0	0	0-0	19.15	1.4	10	

DUP Sample ID: **1904827-02B DUP** Units: **% of sample** Analysis Date: **4/15/2019 01:04 PM**
Client ID: Run ID: **MOIST_190415A** SeqNo: **5608585** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	4.71	0.10	0	0	0	0-0	4.76	1.06	10	

The following samples were analyzed in this batch:

1904650-05B	1904650-06B	1904650-07B
1904650-08B	1904650-09B	1904650-10B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Cincinnati, OH +1 513 733 5336
Fort Collins, CO +1 970 490 1511
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Holland, MI +1 616 399 6070
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Middletown, PA +1 717 944 5541
Salt Lake City, UT +1 801 266 7700
York, PA +1 717 505 5280

Chain of Custody Form

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COC ID: 44237

ALS Project Manager: | ALS Work Order #: 1904650

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order	16366	Project Name	Former Biogeresis	A	PVOCs + naphthalene
Work Order		Project Number	16366	B	
Company Name	The Sigma Group, Inc.	Bill To Company	Same	C	
Send Report To	Steve Meer	Invoice Attn	Same	D	
Address	1300 W. Canal St.	Address		E	
				F	
City/State/Zip	Milwaukee / WI / 53233	City/State/Zip		G	
Phone	414-643-4200	Phone		H	
Fax	414-643-4210	Fax		I	
e-Mail Address	smeer@thesigmagroup.com	e-Mail Address		J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	EA-1 E-SW 2'	4/8/19	9:15	soil	7,8	3											
2	EA-1 Base 4'	4/8/19	9:30	↓	7,8	↓											
3	EA-1 S-SW 2'	4/8/19	10:15	↓	↓	↓											
4	EA-1 W-SW 2'	4/8/19	10:30	↓	↓	↓											
5	EA-1 N-SW 2'	4/8/19	10:35	↓	↓	↓											
6	EA-2 NW-SW 2'	4/8/19	12:45	soil	↓	↓											
7	EA-2 E-SW(N) 2'	4/8/19	1:30	↓	↓	↓											
8	EA-2 BASE 4'	4/8/19	1:45	↓	↓	↓											
9	EA-2 SW-SW 2'	4/8/19	3:00	↓	↓	↓											
10	EA-2 E-SW(S) 2'	4/8/19	3:15	↓	↓	↓											

Sampler(s) Please Print & Sign: Stephen Meer

Shipment Method: Fed Ex

Turnaround Time in Business Days (BD): ☒ 10 BD ☐ 5 BD ☐ 3 BD ☐ 2 BD ☐ 1 BD ☐ Other

Results Due Date:

Relinquished by:	Date: 4/9/19	Time: 4:00	Received by: FedEx	
Relinquished by: FedEx	Date: 4/10/19	Time: 0930	Received by (Laboratory):	
Logged by (Laboratory): Kev	Date: 4/10/19	Time: 1125	Checked by (Laboratory):	

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Notes:

Cooler ID	Cooler Temp
SPL	3.8°C

QC Package: (Check One Box Below)
- ☐ Level II Std QC
- ☐ Level III Std QC/Raw Date
- ☐ Level IV SW846/CLP
- ☐ Other
- ☐ TRRP Checklist
- ☐ TRRP Level IV

Note:
1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

Cincinnati, OH +1 513 733 5336
Fort Collins, CO +1 970 490 1511
Everett, WA +1 425 356 2600
Holland, MI +1 616 399 6070
Houston, TX +1 281 530 5656
Spring City, PA +1 610 948 4903
South Charleston, WV +1 304 356 3168
Middletown, PA +1 717 944 5541
Salt Lake City, UT +1 801 266 7700
York, PA +1 717 505 5280

Chain of Custody Form

Page 2 of 2

COC ID: 44238

ALS Project Manager:

ALS Work Order #: 1904650

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order	16366	Project Name	Former Bibyeners	A	PVOCs + naphthalene
Work Order		Project Number	16366	B	
Company Name	The Sigma Group, Inc.	Bill To Company	Same	C	
Send Report To	Steve Meer	Invoice Attn	Same	D	
Address	1300 W. Canal St	Address		E	
				F	
City/State/Zip	Milwaukee/WI/53233	City/State/Zip		G	
Phone	414-643-4200	Phone		H	
Fax	414-643-4210	Fax		I	
e-Mail Address	smeere@thesigmagroup.com	e-Mail Address		J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	Trip Blank	4/8/19	3:50	—	7,8	1											
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign: Stephen Meer

Shipment Method: Fed Ex

Turnaround Time in Business Days (BD): ☒ 10 BD ☐ 5 BD ☐ 3 BD ☐ 2 BD ☐ 1 BD ☐ Other _____

Results Due Date:

Relinquished by:		Date: 4/9/19	Time: 4:00	Received by: FedEx
Relinquished by:	FedEx	Date: 4/10/19	Time: 0930	Received by (Laboratory):
Logged by (Laboratory):	KL	Date: 4/10/19	Time: 1125	Checked by (Laboratory):

Notes:

Cooler ID	Cooler Temp

QC Package: (Check One Box Below)

☐ Level II Std QC ☐ TRRP Checklist
☐ Level III Std QC/Raw Date ☐ TRRP Level IV
☐ Level IV SW846/CLP
☐ Other _____

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note:
1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

ALS Group, USA

Sample Receipt Checklist

Client Name: **SIGMAGROUP** Date/Time Received: **10-Apr-19 09:30**

Work Order: **1904650** Received by: **KRW**

Checklist completed by Chad Whelton (eSignature) 10-Apr-19 (Date) Reviewed by: Chad Whelton (eSignature) 10-Apr-19 (Date)

Matrices: Soil

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Sample(s) received on ice?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	3.8/3.8 C	SR2	
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	4/10/2019 12:11:10 PM		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:	-		

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

03-May-2019

Stephen Meer
The Sigma Group
1300 W. Canal Street
Milwaukee, WI 53233

Re: **16366** Work Order: **19041641**

Dear Stephen,

ALS Environmental received 24 samples on 25-Apr-2019 10:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental - Holland and for only the analyses requested.

Sample results are compliant with industry accepted practices and Quality Control results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 58.

If you have any questions regarding this report, please feel free to contact me:

ADDRESS: 3352 128th Avenue, Holland, MI, USA
PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Sincerely,

Electronically approved by: Chad Whelton

Chad Whelton
Project Manager

Report of Laboratory Analysis

Certificate No: WI: 399084510

ALS Group, USA

Date: 03-May-19

Client: The Sigma Group
Project: 16366
Work Order: **19041641**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
19041641-01	EXC-1-SWN (2')	Soil		4/23/2019	4/25/2019 10:00	☐
19041641-02	EXC-1-SWE (2')	Soil		4/23/2019	4/25/2019 10:00	☐
19041641-03	EXC-1-SWS (2')	Soil		4/23/2019	4/25/2019 10:00	☐
19041641-04	EXC-1-SWW (2')	Soil		4/23/2019	4/25/2019 10:00	☐
19041641-05	EXC-1-BASE (4')	Soil		4/23/2019	4/25/2019 10:00	☐
19041641-06	EXC-2-SWN (2')	Soil		4/24/2019	4/25/2019 10:00	☐
19041641-07	EXC-2-SWE (2')	Soil		4/24/2019	4/25/2019 10:00	☐
19041641-08	EXC-2-SWS (2')	Soil		4/24/2019	4/25/2019 10:00	☐
19041641-09	EXC-2-SWW (2')	Soil		4/24/2019	4/25/2019 10:00	☐
19041641-10	EXC-3-SWN (2')	Soil		4/24/2019	4/25/2019 10:00	☐
19041641-11	EXC-3-SWE (2')	Soil		4/24/2019	4/25/2019 10:00	☐
19041641-12	EXC-3-SWS (2')	Soil		4/24/2019	4/25/2019 10:00	☐
19041641-13	EXC-3-SWW (2')	Soil		4/24/2019	4/25/2019 10:00	☐
19041641-14	EXC-3-BASE (4')	Soil		4/24/2019	4/25/2019 10:00	☐
19041641-15	EXC-4-SWN (3')	Soil		4/24/2019	4/25/2019 10:00	☐
19041641-16	EXC-4-SWE (3')	Soil		4/24/2019	4/25/2019 10:00	☐
19041641-17	EXC-4-SWS (3')	Soil		4/24/2019	4/25/2019 10:00	☐
19041641-18	EXC-4-SWW (3')	Soil		4/24/2019	4/25/2019 10:00	☐
19041641-19	EXC-4-BASE (6')	Soil		4/24/2019	4/25/2019 10:00	☐
19041641-20	EXC-5-SWN (2')	Soil		4/24/2019	4/25/2019 10:00	☐
19041641-21	EXC-5-SWE (2')	Soil		4/24/2019	4/25/2019 10:00	☐
19041641-22	EXC-5-SWS (2')	Soil		4/24/2019	4/25/2019 10:00	☐
19041641-23	EXC-5-SWW (2')	Soil		4/24/2019	4/25/2019 10:00	☐
19041641-24	EXC-5-BASE (4')	Soil		4/24/2019	4/25/2019 10:00	☐

Client: The Sigma Group
Project: 16366
Work Order: 19041641

Case Narrative

Samples for the above noted Work Order were received on 04/25/2019. The attached "Sample Receipt Checklist" documents the status of custody seals, container integrity, sample condition, preservation, and temperature compliance.
In order to ensure compliance with NR 149 criteria, please note the following report format:
(1) The Limit of Detection (LOD) is reported as the MDL (Method Detection Limit)
(2) The Limit of Quantitation (LOQ) is reported as the PQL (Practical Quantitation Limit)
(3) All reported concentrations, including those for the LOD and LOQ, are adjusted for any required dilutions
(4) All reported concentrations, including those for the LOD and LOQ, are adjusted for moisture content when samples are reported on a dry weight basis.

Samples were analyzed according to the analytical methodology previously documented in the "Work Order Acknowledgement". Methodologies are also documented in the "Analytical Result" section for each sample. Quality control results are listed in the "QC Report" section. Detail as to the associated samples can be found at the end of each batch summary. If applicable, results are appropriately qualified in the Analytical Result and QC Report sections. The "Qualifiers" section documents the various qualifiers, acronyms, and units utilized in reporting.

With the following exceptions, all sample analyses achieved analytical criteria.

Volatile Organics

Batch 135118, Method VOC_8260_S, Sample 19041641-01A MS/MSD: The MS/MSD recovery was above the upper control limit for Bromomethane. The corresponding result in the parent sample was non-detect, therefore no qualification is required.

Batch 135118, Method VOC_8260_S, Samples 19041641-02A, -14A, -16A, -18A, -19A, and -20A: The VOC reporting limits are elevated due to dilution for high concentrations of non-target analytes.

Extractable Organics
No deviations or anomalies noted

Wet Chemistry
No deviations or anomalies noted

ALS Group, USA

Date: 03-May-19

Client: The Sigma Group
Project: 16366
WorkOrder: **19041641**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
**	Estimated Value
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
Hr	BOD/CBOD - Sample was reset outside Hold Time, value should be considered estimated.
J	Analyte is present at an estimated concentration between the MDL and Report Limit
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

Acronym	Description
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

Units Reported	Description
% of sample	Percent of Sample
µg/Kg-dry	Micrograms per Kilogram Dry Weight

ALS Group, USA

Date: *03-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: EXC-1-SWN (2')
Collection Date: 4/23/2019

Work Order: 19041641
Lab ID: 19041641-01
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS		Method: **SW8082**			Prep: SW3546 / 4/30/19		Analyst: **KB**
Aroclor 1016	U		83	240	µg/Kg-dry	1	5/1/2019 10:53
Aroclor 1221	U		83	240	µg/Kg-dry	1	5/1/2019 10:53
Aroclor 1232	U		83	240	µg/Kg-dry	1	5/1/2019 10:53
Aroclor 1242	U		83	240	µg/Kg-dry	1	5/1/2019 10:53
Aroclor 1248	U		83	240	µg/Kg-dry	1	5/1/2019 10:53
Aroclor 1254	U		68	240	µg/Kg-dry	1	5/1/2019 10:53
Aroclor 1260	U		68	240	µg/Kg-dry	1	5/1/2019 10:53
Aroclor 1262	U		68	240	µg/Kg-dry	1	5/1/2019 10:53
Aroclor 1268	U		68	240	µg/Kg-dry	1	5/1/2019 10:53
Surr: Decachlorobiphenyl	*65.9*			*40-140*	*%REC*	1	5/1/2019 10:53
Surr: Tetrachloro-m-xylene	*69.4*			*45-124*	*%REC*	1	5/1/2019 10:53
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 4/25/19		Analyst: **WH**
1,1,1,2-Tetrachloroethane	U		25	47	µg/Kg-dry	1	4/29/2019 15:16
1,1,1-Trichloroethane	U		21	47	µg/Kg-dry	1	4/29/2019 15:16
1,1,2,2-Tetrachloroethane	U		21	47	µg/Kg-dry	1	4/29/2019 15:16
1,1,2-Trichloroethane	U		20	47	µg/Kg-dry	1	4/29/2019 15:16
1,1,2-Trichlorotrifluoroethane	U		30	47	µg/Kg-dry	1	4/29/2019 15:16
1,1-Dichloroethane	**42**	J	**17**	**47**	**µg/Kg-dry**	1	4/29/2019 15:16
1,1-Dichloroethene	U		15	47	µg/Kg-dry	1	4/29/2019 15:16
1,2,3-Trichlorobenzene	U		22	47	µg/Kg-dry	1	4/29/2019 15:16
1,2,4-Trichlorobenzene	U		16	47	µg/Kg-dry	1	4/29/2019 15:16
1,2,4-Trimethylbenzene	**93**		**8.7**	**47**	**µg/Kg-dry**	1	4/29/2019 15:16
1,2-Dibromo-3-chloropropane	U		43	160	µg/Kg-dry	1	4/29/2019 15:16
1,2-Dibromoethane	U		13	47	µg/Kg-dry	1	4/29/2019 15:16
1,2-Dichlorobenzene	U		18	47	µg/Kg-dry	1	4/29/2019 15:16
1,2-Dichloroethane	U		20	47	µg/Kg-dry	1	4/29/2019 15:16
1,2-Dichloropropane	U		8.2	47	µg/Kg-dry	1	4/29/2019 15:16
1,3,5-Trimethylbenzene	U		14	47	µg/Kg-dry	1	4/29/2019 15:16
1,3-Dichlorobenzene	U		16	47	µg/Kg-dry	1	4/29/2019 15:16
1,3-Dichloropropane	U		13	47	µg/Kg-dry	1	4/29/2019 15:16
1,4-Dichlorobenzene	U		11	47	µg/Kg-dry	1	4/29/2019 15:16
2,2-Dichloropropane	U		19	47	µg/Kg-dry	1	4/29/2019 15:16
2-Butanone	U		39	310	µg/Kg-dry	1	4/29/2019 15:16
2-Chlorotoluene	U		17	47	µg/Kg-dry	1	4/29/2019 15:16
2-Hexanone	U		23	47	µg/Kg-dry	1	4/29/2019 15:16
4-Chlorotoluene	U		11	47	µg/Kg-dry	1	4/29/2019 15:16
4-Methyl-2-pentanone	U		22	47	µg/Kg-dry	1	4/29/2019 15:16
Acetone	**170**		**49**	**160**	**µg/Kg-dry**	1	4/29/2019 15:16

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *03-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: EXC-1-SWN (2')
Collection Date: 4/23/2019

Work Order: 19041641
Lab ID: 19041641-01
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Benzene	U		8.1	47	µg/Kg-dry	1	4/29/2019 15:16
Bromobenzene	U		18	47	µg/Kg-dry	1	4/29/2019 15:16
Bromochloromethane	U		24	47	µg/Kg-dry	1	4/29/2019 15:16
Bromodichloromethane	U		26	47	µg/Kg-dry	1	4/29/2019 15:16
Bromoform	U		20	47	µg/Kg-dry	1	4/29/2019 15:16
Bromomethane	U		90	160	µg/Kg-dry	1	4/29/2019 15:16
Carbon disulfide	U		24	47	µg/Kg-dry	1	4/29/2019 15:16
Carbon tetrachloride	U		18	47	µg/Kg-dry	1	4/29/2019 15:16
Chlorobenzene	U		16	47	µg/Kg-dry	1	4/29/2019 15:16
Chloroethane	U		16	160	µg/Kg-dry	1	4/29/2019 15:16
Chloroform	U		17	47	µg/Kg-dry	1	4/29/2019 15:16
Chloromethane	U		39	160	µg/Kg-dry	1	4/29/2019 15:16
cis-1,2-Dichloroethene	U		15	47	µg/Kg-dry	1	4/29/2019 15:16
cis-1,3-Dichloropropene	U		18	47	µg/Kg-dry	1	4/29/2019 15:16
Cyclohexane	U		15	47	µg/Kg-dry	1	4/29/2019 15:16
Dibromochloromethane	U		26	47	µg/Kg-dry	1	4/29/2019 15:16
Dichlorodifluoromethane	U		9.8	47	µg/Kg-dry	1	4/29/2019 15:16
Diisopropyl ether	U		8.8	47	µg/Kg-dry	1	4/29/2019 15:16
Ethyl acetate	U		17	160	µg/Kg-dry	1	4/29/2019 15:16
Ethylbenzene	**34**	J	**9.9**	**47**	**µg/Kg-dry**	1	4/29/2019 15:16
Hexachlorobutadiene	U		42	160	µg/Kg-dry	1	4/29/2019 15:16
Isopropylbenzene	**23**	J	**14**	**47**	**µg/Kg-dry**	1	4/29/2019 15:16
m,p-Xylene	**64**	J	**22**	**94**	**µg/Kg-dry**	1	4/29/2019 15:16
Methyl acetate	**340**		**21**	**310**	**µg/Kg-dry**	1	4/29/2019 15:16
Methyl tert-butyl ether	U		14	47	µg/Kg-dry	1	4/29/2019 15:16
Methylcyclohexane	U		18	47	µg/Kg-dry	1	4/29/2019 15:16
Methylene chloride	U		20	47	µg/Kg-dry	1	4/29/2019 15:16
Naphthalene	**440**		**13**	**160**	**µg/Kg-dry**	1	4/29/2019 15:16
n-Butylbenzene	U		13	47	µg/Kg-dry	1	4/29/2019 15:16
n-Propylbenzene	**37**	J	**15**	**47**	**µg/Kg-dry**	1	4/29/2019 15:16
o-Xylene	**36**	J	**18**	**47**	**µg/Kg-dry**	1	4/29/2019 15:16
p-Isopropyltoluene	**53**	J	**40**	**160**	**µg/Kg-dry**	1	4/29/2019 15:16
sec-Butylbenzene	U		19	47	µg/Kg-dry	1	4/29/2019 15:16
Styrene	U		19	47	µg/Kg-dry	1	4/29/2019 15:16
tert-Butylbenzene	U		15	47	µg/Kg-dry	1	4/29/2019 15:16
Tetrachloroethene	U		14	47	µg/Kg-dry	1	4/29/2019 15:16
Toluene	**26**	J	**13**	**47**	**µg/Kg-dry**	1	4/29/2019 15:16
trans-1,2-Dichloroethene	U		17	47	µg/Kg-dry	1	4/29/2019 15:16
trans-1,3-Dichloropropene	U		26	47	µg/Kg-dry	1	4/29/2019 15:16
Trichloroethene	U		21	47	µg/Kg-dry	1	4/29/2019 15:16

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: The Sigma Group
Project: 16366
Sample ID: EXC-1-SWN (2')
Collection Date: 4/23/2019

Work Order: 19041641
Lab ID: 19041641-01
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Trichlorofluoromethane	U		24	47	µg/Kg-dry	1	4/29/2019 15:16
Vinyl chloride	U		10	47	µg/Kg-dry	1	4/29/2019 15:16
Xylenes, Total	**100**	J	**41**	**140**	**µg/Kg-dry**	1	4/29/2019 15:16
Surr: 1,2-Dichloroethane-d4	*89.6*			*70-130*	*%REC*	1	4/29/2019 15:16
Surr: 4-Bromofluorobenzene	*99.6*			*70-130*	*%REC*	1	4/29/2019 15:16
Surr: Dibromofluoromethane	*98.6*			*70-130*	*%REC*	1	4/29/2019 15:16
Surr: Toluene-d8	*91.9*			*70-130*	*%REC*	1	4/29/2019 15:16
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**24**		**0.10**	**0.10**	**% of sample**	1	4/30/2019 12:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *03-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: EXC-1-SWE (2')
Collection Date: 4/23/2019

Work Order: 19041641
Lab ID: 19041641-02
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS		Method: **SW8082**			Prep: SW3546 / 4/29/19		Analyst: **KB**
Aroclor 1016	U		26	75	µg/Kg-dry	1	4/29/2019 23:11
Aroclor 1221	U		26	75	µg/Kg-dry	1	4/29/2019 23:11
Aroclor 1232	U		26	75	µg/Kg-dry	1	4/29/2019 23:11
Aroclor 1242	U		26	75	µg/Kg-dry	1	4/29/2019 23:11
Aroclor 1248	U		26	75	µg/Kg-dry	1	4/29/2019 23:11
Aroclor 1254	**1,200**		**21**	**75**	**µg/Kg-dry**	1	4/29/2019 23:11
Aroclor 1260	**790**		**21**	**75**	**µg/Kg-dry**	1	4/29/2019 23:11
Aroclor 1262	U		21	75	µg/Kg-dry	1	4/29/2019 23:11
Aroclor 1268	U		21	75	µg/Kg-dry	1	4/29/2019 23:11
Surr: Decachlorobiphenyl	*51.7*			*40-140*	*%REC*	1	4/29/2019 23:11
Surr: Tetrachloro-m-xylene	*53.2*			*45-124*	*%REC*	1	4/29/2019 23:11
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 4/25/19		Analyst: **WH**
1,1,1,2-Tetrachloroethane	U		370	700	µg/Kg-dry	20	4/30/2019 14:39
1,1,1-Trichloroethane	U		320	700	µg/Kg-dry	20	4/30/2019 14:39
1,1,2,2-Tetrachloroethane	U		310	700	µg/Kg-dry	20	4/30/2019 14:39
1,1,2-Trichloroethane	U		300	700	µg/Kg-dry	20	4/30/2019 14:39
1,1,2-Trichlorotrifluoroethane	U		440	700	µg/Kg-dry	20	4/30/2019 14:39
1,1-Dichloroethane	U		260	700	µg/Kg-dry	20	4/30/2019 14:39
1,1-Dichloroethene	U		230	700	µg/Kg-dry	20	4/30/2019 14:39
1,2,3-Trichlorobenzene	U		840	700	µg/Kg-dry	20	4/30/2019 14:39
1,2,4-Trichlorobenzene	U		790	2,300	µg/Kg-dry	20	4/30/2019 14:39
1,2,4-Trimethylbenzene	U		510	700	µg/Kg-dry	20	4/30/2019 14:39
1,2-Dibromo-3-chloropropane	U		650	2,300	µg/Kg-dry	20	4/30/2019 14:39
1,2-Dibromoethane	U		200	700	µg/Kg-dry	20	4/30/2019 14:39
1,2-Dichlorobenzene	U		270	700	µg/Kg-dry	20	4/30/2019 14:39
1,2-Dichloroethane	U		1,100	2,300	µg/Kg-dry	20	4/30/2019 14:39
1,2-Dichloropropane	U		520	700	µg/Kg-dry	20	4/30/2019 14:39
1,3,5-Trimethylbenzene	U		820	2,300	µg/Kg-dry	20	4/30/2019 14:39
1,3-Dichlorobenzene	U		230	700	µg/Kg-dry	20	4/30/2019 14:39
1,3-Dichloropropane	U		200	700	µg/Kg-dry	20	4/30/2019 14:39
1,4-Dichlorobenzene	U		170	700	µg/Kg-dry	20	4/30/2019 14:39
2,2-Dichloropropane	U		750	2,300	µg/Kg-dry	20	4/30/2019 14:39
2-Butanone	U		580	4,700	µg/Kg-dry	20	4/30/2019 14:39
2-Chlorotoluene	U		260	700	µg/Kg-dry	20	4/30/2019 14:39
2-Hexanone	U		350	700	µg/Kg-dry	20	4/30/2019 14:39
4-Chlorotoluene	U		170	700	µg/Kg-dry	20	4/30/2019 14:39
4-Methyl-2-pentanone	U		650	700	µg/Kg-dry	20	4/30/2019 14:39
Acetone	U		2,100	2,300	µg/Kg-dry	20	4/30/2019 14:39

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *03-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: EXC-1-SWE (2')
Collection Date: 4/23/2019

Work Order: 19041641
Lab ID: 19041641-02
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Benzene	U		120	700	µg/Kg-dry	20	4/30/2019 14:39
Bromobenzene	U		270	700	µg/Kg-dry	20	4/30/2019 14:39
Bromochloromethane	U		360	700	µg/Kg-dry	20	4/30/2019 14:39
Bromodichloromethane	U		390	700	µg/Kg-dry	20	4/30/2019 14:39
Bromoform	U		300	700	µg/Kg-dry	20	4/30/2019 14:39
Bromomethane	U		1,300	2,300	µg/Kg-dry	20	4/30/2019 14:39
Carbon disulfide	U		360	700	µg/Kg-dry	20	4/30/2019 14:39
Carbon tetrachloride	U		270	700	µg/Kg-dry	20	4/30/2019 14:39
Chlorobenzene	U		230	700	µg/Kg-dry	20	4/30/2019 14:39
Chloroethane	U		690	2,300	µg/Kg-dry	20	4/30/2019 14:39
Chloroform	U		260	700	µg/Kg-dry	20	4/30/2019 14:39
Chloromethane	U		1,900	2,300	µg/Kg-dry	20	4/30/2019 14:39
cis-1,2-Dichloroethene	U		220	700	µg/Kg-dry	20	4/30/2019 14:39
cis-1,3-Dichloropropene	U		530	700	µg/Kg-dry	20	4/30/2019 14:39
Cyclohexane	U		230	2,300	µg/Kg-dry	20	4/30/2019 14:39
Dibromochloromethane	U		390	700	µg/Kg-dry	20	4/30/2019 14:39
Dichlorodifluoromethane	U		850	2,300	µg/Kg-dry	20	4/30/2019 14:39
Diisopropyl ether	U		130	700	µg/Kg-dry	20	4/30/2019 14:39
Ethyl acetate	U		260	2,300	µg/Kg-dry	20	4/30/2019 14:39
Ethylbenzene	U		150	700	µg/Kg-dry	20	4/30/2019 14:39
Hexachlorobutadiene	U		630	2,300	µg/Kg-dry	20	4/30/2019 14:39
Isopropylbenzene	U		210	700	µg/Kg-dry	20	4/30/2019 14:39
m,p-Xylene	U		930	1,400	µg/Kg-dry	20	4/30/2019 14:39
Methyl acetate	U		840	5,800	µg/Kg-dry	20	4/30/2019 14:39
Methyl tert-butyl ether	U		200	700	µg/Kg-dry	20	4/30/2019 14:39
Methylcyclohexane	U		270	700	µg/Kg-dry	20	4/30/2019 14:39
Methylene chloride	U		1,900	5,800	µg/Kg-dry	20	4/30/2019 14:39
Naphthalene	U		1,700	2,300	µg/Kg-dry	20	4/30/2019 14:39
n-Butylbenzene	U		510	700	µg/Kg-dry	20	4/30/2019 14:39
n-Propylbenzene	U		540	700	µg/Kg-dry	20	4/30/2019 14:39
o-Xylene	U		270	700	µg/Kg-dry	20	4/30/2019 14:39
p-Isopropyltoluene	U		590	2,300	µg/Kg-dry	20	4/30/2019 14:39
sec-Butylbenzene	U		280	700	µg/Kg-dry	20	4/30/2019 14:39
Styrene	U		280	700	µg/Kg-dry	20	4/30/2019 14:39
tert-Butylbenzene	U		230	700	µg/Kg-dry	20	4/30/2019 14:39
Tetrachloroethene	U		200	700	µg/Kg-dry	20	4/30/2019 14:39
Toluene	U		190	700	µg/Kg-dry	20	4/30/2019 14:39
trans-1,2-Dichloroethene	U		260	700	µg/Kg-dry	20	4/30/2019 14:39
trans-1,3-Dichloropropene	U		390	700	µg/Kg-dry	20	4/30/2019 14:39
Trichloroethene	U		310	700	µg/Kg-dry	20	4/30/2019 14:39

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: The Sigma Group
Project: 16366
Sample ID: EXC-1-SWE (2')
Collection Date: 4/23/2019

Work Order: 19041641
Lab ID: 19041641-02
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Trichlorofluoromethane	U		360	700	µg/Kg-dry	20	4/30/2019 14:39
Vinyl chloride	U		470	700	µg/Kg-dry	20	4/30/2019 14:39
Xylenes, Total	U		930	2,100	µg/Kg-dry	20	4/30/2019 14:39
Surr: 1,2-Dichloroethane-d4	*88.2*			*70-130*	*%REC*	20	4/30/2019 14:39
Surr: 4-Bromofluorobenzene	*95.6*			*70-130*	*%REC*	20	4/30/2019 14:39
Surr: Dibromofluoromethane	*94.2*			*70-130*	*%REC*	20	4/30/2019 14:39
Surr: Toluene-d8	*90.0*			*70-130*	*%REC*	20	4/30/2019 14:39
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**12**		**0.10**	**0.10**	**% of sample**	1	4/30/2019 12:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *03-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: EXC-1-SWS (2')
Collection Date: 4/23/2019

Work Order: 19041641
Lab ID: 19041641-03
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS		Method: **SW8082**			Prep: SW3546 / 4/29/19		Analyst: **KB**
Aroclor 1016	U		27	79	µg/Kg-dry	1	4/29/2019 23:25
Aroclor 1221	U		27	79	µg/Kg-dry	1	4/29/2019 23:25
Aroclor 1232	U		27	79	µg/Kg-dry	1	4/29/2019 23:25
Aroclor 1242	U		27	79	µg/Kg-dry	1	4/29/2019 23:25
Aroclor 1248	U		27	79	µg/Kg-dry	1	4/29/2019 23:25
Aroclor 1254	**460**		**22**	**79**	**µg/Kg-dry**	1	4/29/2019 23:25
Aroclor 1260	**280**		**22**	**79**	**µg/Kg-dry**	1	4/29/2019 23:25
Aroclor 1262	U		22	79	µg/Kg-dry	1	4/29/2019 23:25
Aroclor 1268	U		22	79	µg/Kg-dry	1	4/29/2019 23:25
Surr: Decachlorobiphenyl	*65.7*			*40-140*	*%REC*	1	4/29/2019 23:25
Surr: Tetrachloro-m-xylene	*55.7*			*45-124*	*%REC*	1	4/29/2019 23:25
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 4/25/19		Analyst: **WH**
1,1,1,2-Tetrachloroethane	U		23	43	µg/Kg-dry	1	4/29/2019 15:48
1,1,1-Trichloroethane	**38**	J	**20**	**43**	**µg/Kg-dry**	1	4/29/2019 15:48
1,1,2,2-Tetrachloroethane	U		19	43	µg/Kg-dry	1	4/29/2019 15:48
1,1,2-Trichloroethane	U		18	43	µg/Kg-dry	1	4/29/2019 15:48
1,1,2-Trichlorotrifluoroethane	U		27	43	µg/Kg-dry	1	4/29/2019 15:48
1,1-Dichloroethane	U		16	43	µg/Kg-dry	1	4/29/2019 15:48
1,1-Dichloroethene	U		14	43	µg/Kg-dry	1	4/29/2019 15:48
1,2,3-Trichlorobenzene	U		20	43	µg/Kg-dry	1	4/29/2019 15:48
1,2,4-Trichlorobenzene	U		15	43	µg/Kg-dry	1	4/29/2019 15:48
1,2,4-Trimethylbenzene	**400**		**8.0**	**43**	**µg/Kg-dry**	1	4/29/2019 15:48
1,2-Dibromo-3-chloropropane	U		40	140	µg/Kg-dry	1	4/29/2019 15:48
1,2-Dibromoethane	U		12	43	µg/Kg-dry	1	4/29/2019 15:48
1,2-Dichlorobenzene	U		16	43	µg/Kg-dry	1	4/29/2019 15:48
1,2-Dichloroethane	U		18	43	µg/Kg-dry	1	4/29/2019 15:48
1,2-Dichloropropane	U		7.5	43	µg/Kg-dry	1	4/29/2019 15:48
1,3,5-Trimethylbenzene	**72**		**13**	**43**	**µg/Kg-dry**	1	4/29/2019 15:48
1,3-Dichlorobenzene	U		14	43	µg/Kg-dry	1	4/29/2019 15:48
1,3-Dichloropropane	U		12	43	µg/Kg-dry	1	4/29/2019 15:48
1,4-Dichlorobenzene	U		10	43	µg/Kg-dry	1	4/29/2019 15:48
2,2-Dichloropropane	U		18	43	µg/Kg-dry	1	4/29/2019 15:48
2-Butanone	U		35	290	µg/Kg-dry	1	4/29/2019 15:48
2-Chlorotoluene	U		16	43	µg/Kg-dry	1	4/29/2019 15:48
2-Hexanone	U		21	43	µg/Kg-dry	1	4/29/2019 15:48
4-Chlorotoluene	U		10	43	µg/Kg-dry	1	4/29/2019 15:48
4-Methyl-2-pentanone	U		20	43	µg/Kg-dry	1	4/29/2019 15:48
Acetone	**130**	J	**45**	**140**	**µg/Kg-dry**	1	4/29/2019 15:48

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *03-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: EXC-1-SWS (2')
Collection Date: 4/23/2019

Work Order: 19041641
Lab ID: 19041641-03
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Benzene	**14**	J	**7.4**	**43**	**µg/Kg-dry**	1	4/29/2019 15:48
Bromobenzene	U		17	43	µg/Kg-dry	1	4/29/2019 15:48
Bromochloromethane	U		22	43	µg/Kg-dry	1	4/29/2019 15:48
Bromodichloromethane	U		24	43	µg/Kg-dry	1	4/29/2019 15:48
Bromoform	U		18	43	µg/Kg-dry	1	4/29/2019 15:48
Bromomethane	U		82	140	µg/Kg-dry	1	4/29/2019 15:48
Carbon disulfide	U		22	43	µg/Kg-dry	1	4/29/2019 15:48
Carbon tetrachloride	U		17	43	µg/Kg-dry	1	4/29/2019 15:48
Chlorobenzene	U		14	43	µg/Kg-dry	1	4/29/2019 15:48
Chloroethane	U		15	140	µg/Kg-dry	1	4/29/2019 15:48
Chloroform	U		16	43	µg/Kg-dry	1	4/29/2019 15:48
Chloromethane	U		36	140	µg/Kg-dry	1	4/29/2019 15:48
cis-1,2-Dichloroethene	**20**	J	**13**	**43**	**µg/Kg-dry**	1	4/29/2019 15:48
cis-1,3-Dichloropropene	U		16	43	µg/Kg-dry	1	4/29/2019 15:48
Cyclohexane	**31**	J	**14**	**43**	**µg/Kg-dry**	1	4/29/2019 15:48
Dibromochloromethane	U		24	43	µg/Kg-dry	1	4/29/2019 15:48
Dichlorodifluoromethane	U		9.0	43	µg/Kg-dry	1	4/29/2019 15:48
Diisopropyl ether	U		8.1	43	µg/Kg-dry	1	4/29/2019 15:48
Ethyl acetate	U		16	140	µg/Kg-dry	1	4/29/2019 15:48
Ethylbenzene	**75**		**9.1**	**43**	**µg/Kg-dry**	1	4/29/2019 15:48
Hexachlorobutadiene	U		39	140	µg/Kg-dry	1	4/29/2019 15:48
Isopropylbenzene	**26**	J	**13**	**43**	**µg/Kg-dry**	1	4/29/2019 15:48
m,p-Xylene	**340**		**20**	**86**	**µg/Kg-dry**	1	4/29/2019 15:48
Methyl acetate	**240**	J	**19**	**290**	**µg/Kg-dry**	1	4/29/2019 15:48
Methyl tert-butyl ether	U		12	43	µg/Kg-dry	1	4/29/2019 15:48
Methylcyclohexane	U		16	43	µg/Kg-dry	1	4/29/2019 15:48
Methylene chloride	U		18	43	µg/Kg-dry	1	4/29/2019 15:48
Naphthalene	**190**		**12**	**140**	**µg/Kg-dry**	1	4/29/2019 15:48
n-Butylbenzene	U		12	43	µg/Kg-dry	1	4/29/2019 15:48
n-Propylbenzene	**74**		**14**	**43**	**µg/Kg-dry**	1	4/29/2019 15:48
o-Xylene	**170**		**17**	**43**	**µg/Kg-dry**	1	4/29/2019 15:48
p-Isopropyltoluene	**41**	J	**36**	**140**	**µg/Kg-dry**	1	4/29/2019 15:48
sec-Butylbenzene	**57**		**17**	**43**	**µg/Kg-dry**	1	4/29/2019 15:48
Styrene	U		17	43	µg/Kg-dry	1	4/29/2019 15:48
tert-Butylbenzene	U		14	43	µg/Kg-dry	1	4/29/2019 15:48
Tetrachloroethene	**130**		**13**	**43**	**µg/Kg-dry**	1	4/29/2019 15:48
Toluene	**200**		**12**	**43**	**µg/Kg-dry**	1	4/29/2019 15:48
trans-1,2-Dichloroethene	U		16	43	µg/Kg-dry	1	4/29/2019 15:48
trans-1,3-Dichloropropene	U		24	43	µg/Kg-dry	1	4/29/2019 15:48
Trichloroethene	**1,300**		**19**	**43**	**µg/Kg-dry**	1	4/29/2019 15:48

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: The Sigma Group
Project: 16366
Sample ID: EXC-1-SWS (2')
Collection Date: 4/23/2019

Work Order: 19041641
Lab ID: 19041641-03
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Trichlorofluoromethane	U		22	43	µg/Kg-dry	1	4/29/2019 15:48
Vinyl chloride	U		9.2	43	µg/Kg-dry	1	4/29/2019 15:48
Xylenes, Total	**510**		**37**	**130**	**µg/Kg-dry**	1	4/29/2019 15:48
Surr: 1,2-Dichloroethane-d4	*85.8*			*70-130*	*%REC*	1	4/29/2019 15:48
Surr: 4-Bromofluorobenzene	*95.1*			*70-130*	*%REC*	1	4/29/2019 15:48
Surr: Dibromofluoromethane	*95.6*			*70-130*	*%REC*	1	4/29/2019 15:48
Surr: Toluene-d8	*86.0*			*70-130*	*%REC*	1	4/29/2019 15:48
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**16**		**0.10**	**0.10**	**% of sample**	1	4/30/2019 12:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *03-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: EXC-1-SWW (2')
Collection Date: 4/23/2019

Work Order: 19041641
Lab ID: 19041641-04
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS		Method: **SW8082**			Prep: SW3546 / 4/30/19		Analyst: **KB**
Aroclor 1016	U		77	230	µg/Kg-dry	1	5/1/2019 11:07
Aroclor 1221	U		77	230	µg/Kg-dry	1	5/1/2019 11:07
Aroclor 1232	U		77	230	µg/Kg-dry	1	5/1/2019 11:07
Aroclor 1242	U		77	230	µg/Kg-dry	1	5/1/2019 11:07
Aroclor 1248	U		77	230	µg/Kg-dry	1	5/1/2019 11:07
Aroclor 1254	**1,500**		**63**	**230**	**µg/Kg-dry**	1	5/1/2019 11:07
Aroclor 1260	**1,200**		**63**	**230**	**µg/Kg-dry**	1	5/1/2019 11:07
Aroclor 1262	U		63	230	µg/Kg-dry	1	5/1/2019 11:07
Aroclor 1268	U		63	230	µg/Kg-dry	1	5/1/2019 11:07
Surr: Decachlorobiphenyl	*58.7*			*40-140*	*%REC*	1	5/1/2019 11:07
Surr: Tetrachloro-m-xylene	*65.8*			*45-124*	*%REC*	1	5/1/2019 11:07
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 4/25/19		Analyst: **WH**
1,1,1,2-Tetrachloroethane	U		21	40	µg/Kg-dry	1	4/29/2019 16:05
1,1,1-Trichloroethane	U		18	40	µg/Kg-dry	1	4/29/2019 16:05
1,1,2,2-Tetrachloroethane	U		18	40	µg/Kg-dry	1	4/29/2019 16:05
1,1,2-Trichloroethane	U		17	40	µg/Kg-dry	1	4/29/2019 16:05
1,1,2-Trichlorotrifluoroethane	U		25	40	µg/Kg-dry	1	4/29/2019 16:05
1,1-Dichloroethane	U		15	40	µg/Kg-dry	1	4/29/2019 16:05
1,1-Dichloroethene	U		13	40	µg/Kg-dry	1	4/29/2019 16:05
1,2,3-Trichlorobenzene	U		19	40	µg/Kg-dry	1	4/29/2019 16:05
1,2,4-Trichlorobenzene	**130**		**14**	**40**	**µg/Kg-dry**	1	4/29/2019 16:05
1,2,4-Trimethylbenzene	**130**		**7.4**	**40**	**µg/Kg-dry**	1	4/29/2019 16:05
1,2-Dibromo-3-chloropropane	U		37	130	µg/Kg-dry	1	4/29/2019 16:05
1,2-Dibromoethane	U		11	40	µg/Kg-dry	1	4/29/2019 16:05
1,2-Dichlorobenzene	U		15	40	µg/Kg-dry	1	4/29/2019 16:05
1,2-Dichloroethane	U		17	40	µg/Kg-dry	1	4/29/2019 16:05
1,2-Dichloropropane	U		7.0	40	µg/Kg-dry	1	4/29/2019 16:05
1,3,5-Trimethylbenzene	**37**	J	**12**	**40**	**µg/Kg-dry**	1	4/29/2019 16:05
1,3-Dichlorobenzene	U		13	40	µg/Kg-dry	1	4/29/2019 16:05
1,3-Dichloropropane	U		11	40	µg/Kg-dry	1	4/29/2019 16:05
1,4-Dichlorobenzene	U		9.7	40	µg/Kg-dry	1	4/29/2019 16:05
2,2-Dichloropropane	U		17	40	µg/Kg-dry	1	4/29/2019 16:05
2-Butanone	U		33	270	µg/Kg-dry	1	4/29/2019 16:05
2-Chlorotoluene	U		15	40	µg/Kg-dry	1	4/29/2019 16:05
2-Hexanone	U		20	40	µg/Kg-dry	1	4/29/2019 16:05
4-Chlorotoluene	U		9.5	40	µg/Kg-dry	1	4/29/2019 16:05
4-Methyl-2-pentanone	U		19	40	µg/Kg-dry	1	4/29/2019 16:05
Acetone	U		42	130	µg/Kg-dry	1	4/29/2019 16:05

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *03-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: EXC-1-SWW (2')
Collection Date: 4/23/2019

Work Order: 19041641
Lab ID: 19041641-04
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Benzene	U		6.9	40	µg/Kg-dry	1	4/29/2019 16:05
Bromobenzene	U		16	40	µg/Kg-dry	1	4/29/2019 16:05
Bromochloromethane	U		20	40	µg/Kg-dry	1	4/29/2019 16:05
Bromodichloromethane	U		22	40	µg/Kg-dry	1	4/29/2019 16:05
Bromoform	U		17	40	µg/Kg-dry	1	4/29/2019 16:05
Bromomethane	U		77	130	µg/Kg-dry	1	4/29/2019 16:05
Carbon disulfide	U		21	40	µg/Kg-dry	1	4/29/2019 16:05
Carbon tetrachloride	U		16	40	µg/Kg-dry	1	4/29/2019 16:05
Chlorobenzene	U		13	40	µg/Kg-dry	1	4/29/2019 16:05
Chloroethane	U		14	130	µg/Kg-dry	1	4/29/2019 16:05
Chloroform	U		15	40	µg/Kg-dry	1	4/29/2019 16:05
Chloromethane	U		33	130	µg/Kg-dry	1	4/29/2019 16:05
cis-1,2-Dichloroethene	U		13	40	µg/Kg-dry	1	4/29/2019 16:05
cis-1,3-Dichloropropene	U		15	40	µg/Kg-dry	1	4/29/2019 16:05
Cyclohexane	U		13	40	µg/Kg-dry	1	4/29/2019 16:05
Dibromochloromethane	U		23	40	µg/Kg-dry	1	4/29/2019 16:05
Dichlorodifluoromethane	U		8.4	40	µg/Kg-dry	1	4/29/2019 16:05
Diisopropyl ether	U		7.5	40	µg/Kg-dry	1	4/29/2019 16:05
Ethyl acetate	U		15	130	µg/Kg-dry	1	4/29/2019 16:05
Ethylbenzene	**31**	J	**8.5**	**40**	**µg/Kg-dry**	1	4/29/2019 16:05
Hexachlorobutadiene	U		36	130	µg/Kg-dry	1	4/29/2019 16:05
Isopropylbenzene	U		12	40	µg/Kg-dry	1	4/29/2019 16:05
m,p-Xylene	**49**	J	**19**	**80**	**µg/Kg-dry**	1	4/29/2019 16:05
Methyl acetate	**190**	J	**18**	**270**	**µg/Kg-dry**	1	4/29/2019 16:05
Methyl tert-butyl ether	U		12	40	µg/Kg-dry	1	4/29/2019 16:05
Methylcyclohexane	U		15	40	µg/Kg-dry	1	4/29/2019 16:05
Methylene chloride	U		17	40	µg/Kg-dry	1	4/29/2019 16:05
Naphthalene	**150**		**11**	**130**	**µg/Kg-dry**	1	4/29/2019 16:05
n-Butylbenzene	U		11	40	µg/Kg-dry	1	4/29/2019 16:05
n-Propylbenzene	U		13	40	µg/Kg-dry	1	4/29/2019 16:05
o-Xylene	**50**		**16**	**40**	**µg/Kg-dry**	1	4/29/2019 16:05
p-Isopropyltoluene	U		34	130	µg/Kg-dry	1	4/29/2019 16:05
sec-Butylbenzene	U		16	40	µg/Kg-dry	1	4/29/2019 16:05
Styrene	U		16	40	µg/Kg-dry	1	4/29/2019 16:05
tert-Butylbenzene	U		13	40	µg/Kg-dry	1	4/29/2019 16:05
Tetrachloroethene	U		12	40	µg/Kg-dry	1	4/29/2019 16:05
Toluene	**16**	J	**11**	**40**	**µg/Kg-dry**	1	4/29/2019 16:05
trans-1,2-Dichloroethene	U		15	40	µg/Kg-dry	1	4/29/2019 16:05
trans-1,3-Dichloropropene	U		22	40	µg/Kg-dry	1	4/29/2019 16:05
Trichloroethene	U		18	40	µg/Kg-dry	1	4/29/2019 16:05

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: The Sigma Group
Project: 16366
Sample ID: EXC-1-SWW (2')
Collection Date: 4/23/2019

Work Order: 19041641
Lab ID: 19041641-04
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Trichlorofluoromethane	U		21	40	µg/Kg-dry	1	4/29/2019 16:05
Vinyl chloride	U		8.6	40	µg/Kg-dry	1	4/29/2019 16:05
Xylenes, Total	**99**	J	**35**	**120**	**µg/Kg-dry**	1	4/29/2019 16:05
Surr: 1,2-Dichloroethane-d4	*87.4*			*70-130*	*%REC*	1	4/29/2019 16:05
Surr: 4-Bromofluorobenzene	*96.0*			*70-130*	*%REC*	1	4/29/2019 16:05
Surr: Dibromofluoromethane	*95.4*			*70-130*	*%REC*	1	4/29/2019 16:05
Surr: Toluene-d8	*88.2*			*70-130*	*%REC*	1	4/29/2019 16:05
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**16**		**0.10**	**0.10**	**% of sample**	1	4/30/2019 12:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *03-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: EXC-1-BASE (4')
Collection Date: 4/23/2019

Work Order: 19041641
Lab ID: 19041641-05
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS		Method: **SW8082**			Prep: SW3546 / 4/29/19		Analyst: **KB**
Aroclor 1016	U		30	87	µg/Kg-dry	1	4/29/2019 23:54
Aroclor 1221	U		30	87	µg/Kg-dry	1	4/29/2019 23:54
Aroclor 1232	U		30	87	µg/Kg-dry	1	4/29/2019 23:54
Aroclor 1242	U		30	87	µg/Kg-dry	1	4/29/2019 23:54
Aroclor 1248	**130**		**30**	**87**	**µg/Kg-dry**	1	4/29/2019 23:54
Aroclor 1254	**180**		**24**	**87**	**µg/Kg-dry**	1	4/29/2019 23:54
Aroclor 1260	U		24	87	µg/Kg-dry	1	4/29/2019 23:54
Aroclor 1262	U		24	87	µg/Kg-dry	1	4/29/2019 23:54
Aroclor 1268	U		24	87	µg/Kg-dry	1	4/29/2019 23:54
Surr: Decachlorobiphenyl	*40.5*			*40-140*	*%REC*	1	4/29/2019 23:54
Surr: Tetrachloro-m-xylene	*52.6*			*45-124*	*%REC*	1	4/29/2019 23:54
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 4/25/19		Analyst: **WH**
1,1,1,2-Tetrachloroethane	U		25	47	µg/Kg-dry	1	4/29/2019 16:21
1,1,1-Trichloroethane	U		21	47	µg/Kg-dry	1	4/29/2019 16:21
1,1,2,2-Tetrachloroethane	U		21	47	µg/Kg-dry	1	4/29/2019 16:21
1,1,2-Trichloroethane	U		20	47	µg/Kg-dry	1	4/29/2019 16:21
1,1,2-Trichlorotrifluoroethane	U		30	47	µg/Kg-dry	1	4/29/2019 16:21
1,1-Dichloroethane	U		17	47	µg/Kg-dry	1	4/29/2019 16:21
1,1-Dichloroethene	U		15	47	µg/Kg-dry	1	4/29/2019 16:21
1,2,3-Trichlorobenzene	U		22	47	µg/Kg-dry	1	4/29/2019 16:21
1,2,4-Trichlorobenzene	U		16	47	µg/Kg-dry	1	4/29/2019 16:21
1,2,4-Trimethylbenzene	U		8.7	47	µg/Kg-dry	1	4/29/2019 16:21
1,2-Dibromo-3-chloropropane	U		43	160	µg/Kg-dry	1	4/29/2019 16:21
1,2-Dibromoethane	U		13	47	µg/Kg-dry	1	4/29/2019 16:21
1,2-Dichlorobenzene	U		18	47	µg/Kg-dry	1	4/29/2019 16:21
1,2-Dichloroethane	U		20	47	µg/Kg-dry	1	4/29/2019 16:21
1,2-Dichloropropane	U		8.3	47	µg/Kg-dry	1	4/29/2019 16:21
1,3,5-Trimethylbenzene	U		14	47	µg/Kg-dry	1	4/29/2019 16:21
1,3-Dichlorobenzene	U		16	47	µg/Kg-dry	1	4/29/2019 16:21
1,3-Dichloropropane	U		13	47	µg/Kg-dry	1	4/29/2019 16:21
1,4-Dichlorobenzene	U		11	47	µg/Kg-dry	1	4/29/2019 16:21
2,2-Dichloropropane	U		19	47	µg/Kg-dry	1	4/29/2019 16:21
2-Butanone	U		39	310	µg/Kg-dry	1	4/29/2019 16:21
2-Chlorotoluene	U		17	47	µg/Kg-dry	1	4/29/2019 16:21
2-Hexanone	U		23	47	µg/Kg-dry	1	4/29/2019 16:21
4-Chlorotoluene	U		11	47	µg/Kg-dry	1	4/29/2019 16:21
4-Methyl-2-pentanone	U		22	47	µg/Kg-dry	1	4/29/2019 16:21
Acetone	**90**	J	**49**	**160**	**µg/Kg-dry**	1	4/29/2019 16:21

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *03-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: EXC-1-BASE (4')
Collection Date: 4/23/2019

Work Order: 19041641
Lab ID: 19041641-05
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Benzene	U		8.1	47	µg/Kg-dry	1	4/29/2019 16:21
Bromobenzene	U		18	47	µg/Kg-dry	1	4/29/2019 16:21
Bromochloromethane	U		24	47	µg/Kg-dry	1	4/29/2019 16:21
Bromodichloromethane	U		26	47	µg/Kg-dry	1	4/29/2019 16:21
Bromoform	U		20	47	µg/Kg-dry	1	4/29/2019 16:21
Bromomethane	U		90	160	µg/Kg-dry	1	4/29/2019 16:21
Carbon disulfide	U		24	47	µg/Kg-dry	1	4/29/2019 16:21
Carbon tetrachloride	U		18	47	µg/Kg-dry	1	4/29/2019 16:21
Chlorobenzene	U		16	47	µg/Kg-dry	1	4/29/2019 16:21
Chloroethane	U		16	160	µg/Kg-dry	1	4/29/2019 16:21
Chloroform	U		17	47	µg/Kg-dry	1	4/29/2019 16:21
Chloromethane	U		39	160	µg/Kg-dry	1	4/29/2019 16:21
cis-1,2-Dichloroethene	U		15	47	µg/Kg-dry	1	4/29/2019 16:21
cis-1,3-Dichloropropene	U		18	47	µg/Kg-dry	1	4/29/2019 16:21
Cyclohexane	U		15	47	µg/Kg-dry	1	4/29/2019 16:21
Dibromochloromethane	U		26	47	µg/Kg-dry	1	4/29/2019 16:21
Dichlorodifluoromethane	U		9.9	47	µg/Kg-dry	1	4/29/2019 16:21
Diisopropyl ether	U		8.8	47	µg/Kg-dry	1	4/29/2019 16:21
Ethyl acetate	U		17	160	µg/Kg-dry	1	4/29/2019 16:21
Ethylbenzene	U		10	47	µg/Kg-dry	1	4/29/2019 16:21
Hexachlorobutadiene	U		42	160	µg/Kg-dry	1	4/29/2019 16:21
Isopropylbenzene	U		14	47	µg/Kg-dry	1	4/29/2019 16:21
m,p-Xylene	U		22	94	µg/Kg-dry	1	4/29/2019 16:21
Methyl acetate	**190**	J	**21**	**310**	**µg/Kg-dry**	1	4/29/2019 16:21
Methyl tert-butyl ether	U		14	47	µg/Kg-dry	1	4/29/2019 16:21
Methylcyclohexane	U		18	47	µg/Kg-dry	1	4/29/2019 16:21
Methylene chloride	U		20	47	µg/Kg-dry	1	4/29/2019 16:21
Naphthalene	**35**	J	**13**	**160**	**µg/Kg-dry**	1	4/29/2019 16:21
n-Butylbenzene	U		13	47	µg/Kg-dry	1	4/29/2019 16:21
n-Propylbenzene	U		15	47	µg/Kg-dry	1	4/29/2019 16:21
o-Xylene	U		18	47	µg/Kg-dry	1	4/29/2019 16:21
p-Isopropyltoluene	U		40	160	µg/Kg-dry	1	4/29/2019 16:21
sec-Butylbenzene	U		19	47	µg/Kg-dry	1	4/29/2019 16:21
Styrene	U		19	47	µg/Kg-dry	1	4/29/2019 16:21
tert-Butylbenzene	U		15	47	µg/Kg-dry	1	4/29/2019 16:21
Tetrachloroethene	U		14	47	µg/Kg-dry	1	4/29/2019 16:21
Toluene	U		13	47	µg/Kg-dry	1	4/29/2019 16:21
trans-1,2-Dichloroethene	U		17	47	µg/Kg-dry	1	4/29/2019 16:21
trans-1,3-Dichloropropene	U		26	47	µg/Kg-dry	1	4/29/2019 16:21
Trichloroethene	U		21	47	µg/Kg-dry	1	4/29/2019 16:21

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: The Sigma Group
Project: 16366
Sample ID: EXC-1-BASE (4')
Collection Date: 4/23/2019

Work Order: 19041641
Lab ID: 19041641-05
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Trichlorofluoromethane	U		24	47	µg/Kg-dry	1	4/29/2019 16:21
Vinyl chloride	U		10	47	µg/Kg-dry	1	4/29/2019 16:21
Xylenes, Total	U		41	140	µg/Kg-dry	1	4/29/2019 16:21
Surr: 1,2-Dichloroethane-d4	*89.6*			*70-130*	*%REC*	1	4/29/2019 16:21
Surr: 4-Bromofluorobenzene	*97.7*			*70-130*	*%REC*	1	4/29/2019 16:21
Surr: Dibromofluoromethane	*96.2*			*70-130*	*%REC*	1	4/29/2019 16:21
Surr: Toluene-d8	*89.2*			*70-130*	*%REC*	1	4/29/2019 16:21
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**25**		**0.10**	**0.10**	**% of sample**	1	4/30/2019 12:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *03-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: EXC-2-SWN (2')
Collection Date: 4/24/2019

Work Order: 19041641
Lab ID: 19041641-06
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 4/25/19		Analyst: **SHW**
1,2,4-Trimethylbenzene	**1,900**		**6.5**	**35**	**µg/Kg-dry**	1	4/27/2019 01:11
1,3,5-Trimethylbenzene	**660**		**11**	**35**	**µg/Kg-dry**	1	4/27/2019 01:11
Benzene	**26**	J	**6.0**	**35**	**µg/Kg-dry**	1	4/27/2019 01:11
Ethylbenzene	**680**		**7.4**	**35**	**µg/Kg-dry**	1	4/27/2019 01:11
m,p-Xylene	**2,600**		**17**	**70**	**µg/Kg-dry**	1	4/27/2019 01:11
Methyl tert-butyl ether	U		10	35	µg/Kg-dry	1	4/27/2019 01:11
Naphthalene	**1,100**		**9.7**	**120**	**µg/Kg-dry**	1	4/27/2019 01:11
o-Xylene	**1,000**		**14**	**35**	**µg/Kg-dry**	1	4/27/2019 01:11
Toluene	**650**		**9.6**	**35**	**µg/Kg-dry**	1	4/27/2019 01:11
Xylenes, Total	**3,600**		**30**	**110**	**µg/Kg-dry**	1	4/27/2019 01:11
Surr: 1,2-Dichloroethane-d4	*97.8*			*70-130*	*%REC*	1	4/27/2019 01:11
Surr: 4-Bromofluorobenzene	*104*			*70-130*	*%REC*	1	4/27/2019 01:11
Surr: Dibromofluoromethane	*94.4*			*70-130*	*%REC*	1	4/27/2019 01:11
Surr: Toluene-d8	*102*			*70-130*	*%REC*	1	4/27/2019 01:11
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**14**		**0.10**	**0.10**	**% of sample**	1	4/30/2019 12:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *03-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: EXC-2-SWE (2')
Collection Date: 4/24/2019

Work Order: 19041641
Lab ID: 19041641-07
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 4/25/19		Analyst: **SHW**
1,2,4-Trimethylbenzene	**31**	J	**8.7**	**47**	**µg/Kg-dry**	1	4/27/2019 01:28
1,3,5-Trimethylbenzene	U		14	47	µg/Kg-dry	1	4/27/2019 01:28
Benzene	U		8.1	47	µg/Kg-dry	1	4/27/2019 01:28
Ethylbenzene	U		9.9	47	µg/Kg-dry	1	4/27/2019 01:28
m,p-Xylene	**27**	J	**22**	**94**	**µg/Kg-dry**	1	4/27/2019 01:28
Methyl tert-butyl ether	U		14	47	µg/Kg-dry	1	4/27/2019 01:28
Naphthalene	U		13	160	µg/Kg-dry	1	4/27/2019 01:28
o-Xylene	U		18	47	µg/Kg-dry	1	4/27/2019 01:28
Toluene	U		13	47	µg/Kg-dry	1	4/27/2019 01:28
Xylenes, Total	U		41	140	µg/Kg-dry	1	4/27/2019 01:28
Surr: 1,2-Dichloroethane-d4	*96.6*			*70-130*	*%REC*	1	4/27/2019 01:28
Surr: 4-Bromofluorobenzene	*105*			*70-130*	*%REC*	1	4/27/2019 01:28
Surr: Dibromofluoromethane	*96.8*			*70-130*	*%REC*	1	4/27/2019 01:28
Surr: Toluene-d8	*101*			*70-130*	*%REC*	1	4/27/2019 01:28
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**23**		**0.10**	**0.10**	**% of sample**	1	4/30/2019 12:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *03-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: EXC-2-SWS (2')
Collection Date: 4/24/2019

Work Order: 19041641
Lab ID: 19041641-08
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 4/25/19		Analyst: **SHW**
1,2,4-Trimethylbenzene	**1,300**		**71**	**380**	**µg/Kg-dry**	10	4/27/2019 23:27
1,3,5-Trimethylbenzene	**170**	J	**120**	**380**	**µg/Kg-dry**	10	4/27/2019 23:27
Benzene	**4,500**		**66**	**380**	**µg/Kg-dry**	10	4/27/2019 23:27
Ethylbenzene	**8,700**		**81**	**380**	**µg/Kg-dry**	10	4/27/2019 23:27
m,p-Xylene	**2,400**		**180**	**770**	**µg/Kg-dry**	10	4/27/2019 23:27
Methyl tert-butyl ether	U		110	380	µg/Kg-dry	10	4/27/2019 23:27
Naphthalene	**54,000**		**110**	**1,300**	**µg/Kg-dry**	10	4/27/2019 23:27
o-Xylene	**660**		**150**	**380**	**µg/Kg-dry**	10	4/27/2019 23:27
Toluene	**350**	J	**100**	**380**	**µg/Kg-dry**	10	4/27/2019 23:27
Xylenes, Total	**3,100**		**330**	**1,200**	**µg/Kg-dry**	10	4/27/2019 23:27
Surr: 1,2-Dichloroethane-d4	*95.6*			*70-130*	*%REC*	10	4/27/2019 23:27
Surr: 4-Bromofluorobenzene	*104*			*70-130*	*%REC*	10	4/27/2019 23:27
Surr: Dibromofluoromethane	*95.4*			*70-130*	*%REC*	10	4/27/2019 23:27
Surr: Toluene-d8	*103*			*70-130*	*%REC*	10	4/27/2019 23:27
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**14**		**0.10**	**0.10**	**% of sample**	1	4/30/2019 12:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *03-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: EXC-2-SWW (2')
Collection Date: 4/24/2019

Work Order: 19041641
Lab ID: 19041641-09
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 4/25/19		Analyst: **SHW**
1,2,4-Trimethylbenzene	**74**		**7.2**	**39**	**µg/Kg-dry**	1	4/27/2019 02:01
1,3,5-Trimethylbenzene	**23**	J	**12**	**39**	**µg/Kg-dry**	1	4/27/2019 02:01
Benzene	U		6.7	39	µg/Kg-dry	1	4/27/2019 02:01
Ethylbenzene	**25**	J	**8.3**	**39**	**µg/Kg-dry**	1	4/27/2019 02:01
m,p-Xylene	**42**	J	**19**	**78**	**µg/Kg-dry**	1	4/27/2019 02:01
Methyl tert-butyl ether	U		11	39	µg/Kg-dry	1	4/27/2019 02:01
Naphthalene	**110**	J	**11**	**130**	**µg/Kg-dry**	1	4/27/2019 02:01
o-Xylene	**28**	J	**15**	**39**	**µg/Kg-dry**	1	4/27/2019 02:01
Toluene	U		11	39	µg/Kg-dry	1	4/27/2019 02:01
Xylenes, Total	**70**	J	**34**	**120**	**µg/Kg-dry**	1	4/27/2019 02:01
Surr: 1,2-Dichloroethane-d4	*96.8*			*70-130*	*%REC*	1	4/27/2019 02:01
Surr: 4-Bromofluorobenzene	*104*			*70-130*	*%REC*	1	4/27/2019 02:01
Surr: Dibromofluoromethane	*92.0*			*70-130*	*%REC*	1	4/27/2019 02:01
Surr: Toluene-d8	*101*			*70-130*	*%REC*	1	4/27/2019 02:01
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**16**		**0.10**	**0.10**	**% of sample**	1	4/30/2019 12:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *03-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: EXC-3-SWN (2')
Collection Date: 4/24/2019

Work Order: 19041641
Lab ID: 19041641-10
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 4/25/19		Analyst: **SHW**
1,2,4-Trimethylbenzene	U		6.4	35	µg/Kg-dry	1	4/27/2019 02:17
1,3,5-Trimethylbenzene	U		11	35	µg/Kg-dry	1	4/27/2019 02:17
Benzene	U		5.9	35	µg/Kg-dry	1	4/27/2019 02:17
Ethylbenzene	U		7.3	35	µg/Kg-dry	1	4/27/2019 02:17
m,p-Xylene	U		17	70	µg/Kg-dry	1	4/27/2019 02:17
Methyl tert-butyl ether	U		10	35	µg/Kg-dry	1	4/27/2019 02:17
Naphthalene	U		9.6	120	µg/Kg-dry	1	4/27/2019 02:17
o-Xylene	U		13	35	µg/Kg-dry	1	4/27/2019 02:17
Toluene	U		9.5	35	µg/Kg-dry	1	4/27/2019 02:17
Xylenes, Total	U		30	100	µg/Kg-dry	1	4/27/2019 02:17
Surr: 1,2-Dichloroethane-d4	*97.1*			*70-130*	*%REC*	1	4/27/2019 02:17
Surr: 4-Bromofluorobenzene	*105*			*70-130*	*%REC*	1	4/27/2019 02:17
Surr: Dibromofluoromethane	*93.8*			*70-130*	*%REC*	1	4/27/2019 02:17
Surr: Toluene-d8	*101*			*70-130*	*%REC*	1	4/27/2019 02:17
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**13**		**0.10**	**0.10**	**% of sample**	1	4/30/2019 12:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *03-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: EXC-3-SWE (2')
Collection Date: 4/24/2019

Work Order: 19041641
Lab ID: 19041641-11
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 4/25/19		Analyst: **SHW**
1,2,4-Trimethylbenzene	U		7.4	40	µg/Kg-dry	1	4/28/2019 12:00
1,3,5-Trimethylbenzene	U		12	40	µg/Kg-dry	1	4/28/2019 12:00
Benzene	U		6.9	40	µg/Kg-dry	1	4/28/2019 12:00
Ethylbenzene	U		8.5	40	µg/Kg-dry	1	4/28/2019 12:00
m,p-Xylene	U		19	81	µg/Kg-dry	1	4/28/2019 12:00
Methyl tert-butyl ether	U		12	40	µg/Kg-dry	1	4/28/2019 12:00
Naphthalene	U		11	130	µg/Kg-dry	1	4/28/2019 12:00
o-Xylene	U		16	40	µg/Kg-dry	1	4/28/2019 12:00
Toluene	U		11	40	µg/Kg-dry	1	4/28/2019 12:00
Xylenes, Total	U		35	120	µg/Kg-dry	1	4/28/2019 12:00
Surr: 1,2-Dichloroethane-d4	*95.2*			*70-130*	*%REC*	1	4/28/2019 12:00
Surr: 4-Bromofluorobenzene	*97.9*			*70-130*	*%REC*	1	4/28/2019 12:00
Surr: Dibromofluoromethane	*91.8*			*70-130*	*%REC*	1	4/28/2019 12:00
Surr: Toluene-d8	*101*			*70-130*	*%REC*	1	4/28/2019 12:00
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**20**		**0.10**	**0.10**	**% of sample**	1	4/30/2019 12:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *03-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: EXC-3-SWS (2')
Collection Date: 4/24/2019

Work Order: 19041641
Lab ID: 19041641-12
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 4/25/19		Analyst: **SHW**
1,2,4-Trimethylbenzene	U		6.4	35	µg/Kg-dry	1	4/28/2019 12:17
1,3,5-Trimethylbenzene	U		11	35	µg/Kg-dry	1	4/28/2019 12:17
Benzene	U		5.9	35	µg/Kg-dry	1	4/28/2019 12:17
Ethylbenzene	U		7.3	35	µg/Kg-dry	1	4/28/2019 12:17
m,p-Xylene	U		16	69	µg/Kg-dry	1	4/28/2019 12:17
Methyl tert-butyl ether	U		10	35	µg/Kg-dry	1	4/28/2019 12:17
Naphthalene	**14**	J	**9.6**	**120**	**µg/Kg-dry**	1	4/28/2019 12:17
o-Xylene	U		13	35	µg/Kg-dry	1	4/28/2019 12:17
Toluene	U		9.5	35	µg/Kg-dry	1	4/28/2019 12:17
Xylenes, Total	U		30	100	µg/Kg-dry	1	4/28/2019 12:17
Surr: 1,2-Dichloroethane-d4	*94.0*			*70-130*	*%REC*	1	4/28/2019 12:17
Surr: 4-Bromofluorobenzene	*103*			*70-130*	*%REC*	1	4/28/2019 12:17
Surr: Dibromofluoromethane	*91.4*			*70-130*	*%REC*	1	4/28/2019 12:17
Surr: Toluene-d8	*102*			*70-130*	*%REC*	1	4/28/2019 12:17
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**14**		**0.10**	**0.10**	**% of sample**	1	4/30/2019 12:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *03-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: EXC-3-SWW (2')
Collection Date: 4/24/2019

Work Order: 19041641
Lab ID: 19041641-13
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 4/25/19		Analyst: **SHW**
1,2,4-Trimethylbenzene	U		6.3	34	µg/Kg-dry	1	4/28/2019 12:34
1,3,5-Trimethylbenzene	U		10	34	µg/Kg-dry	1	4/28/2019 12:34
Benzene	U		5.8	34	µg/Kg-dry	1	4/28/2019 12:34
Ethylbenzene	U		7.2	34	µg/Kg-dry	1	4/28/2019 12:34
m,p-Xylene	U		16	68	µg/Kg-dry	1	4/28/2019 12:34
Methyl tert-butyl ether	U		9.8	34	µg/Kg-dry	1	4/28/2019 12:34
Naphthalene	U		9.4	110	µg/Kg-dry	1	4/28/2019 12:34
o-Xylene	U		13	34	µg/Kg-dry	1	4/28/2019 12:34
Toluene	U		9.3	34	µg/Kg-dry	1	4/28/2019 12:34
Xylenes, Total	U		29	100	µg/Kg-dry	1	4/28/2019 12:34
Surr: 1,2-Dichloroethane-d4	*94.8*			*70-130*	*%REC*	1	4/28/2019 12:34
Surr: 4-Bromofluorobenzene	*102*			*70-130*	*%REC*	1	4/28/2019 12:34
Surr: Dibromofluoromethane	*93.0*			*70-130*	*%REC*	1	4/28/2019 12:34
Surr: Toluene-d8	*100*			*70-130*	*%REC*	1	4/28/2019 12:34
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**11**		**0.10**	**0.10**	**% of sample**	1	4/30/2019 12:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *03-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: EXC-3-BASE (4')
Collection Date: 4/24/2019

Work Order: 19041641
Lab ID: 19041641-14
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 4/25/19		Analyst: **PM**
1,2,4-Trimethylbenzene	**1,100**		**68**	**370**	**µg/Kg-dry**	10	4/30/2019 04:48
1,3,5-Trimethylbenzene	U		110	370	µg/Kg-dry	10	4/30/2019 04:48
Benzene	U		63	370	µg/Kg-dry	10	4/30/2019 04:48
Ethylbenzene	U		78	370	µg/Kg-dry	10	4/30/2019 04:48
m,p-Xylene	U		170	740	µg/Kg-dry	10	4/30/2019 04:48
Methyl tert-butyl ether	U		110	370	µg/Kg-dry	10	4/30/2019 04:48
Naphthalene	**1,700**		**100**	**1,200**	**µg/Kg-dry**	10	4/30/2019 04:48
o-Xylene	U		140	370	µg/Kg-dry	10	4/30/2019 04:48
Toluene	U		100	370	µg/Kg-dry	10	4/30/2019 04:48
Xylenes, Total	U		320	1,100	µg/Kg-dry	10	4/30/2019 04:48
Surr: 1,2-Dichloroethane-d4	*98.4*			*70-130*	*%REC*	10	4/30/2019 04:48
Surr: 4-Bromofluorobenzene	*91.7*			*70-130*	*%REC*	10	4/30/2019 04:48
Surr: Dibromofluoromethane	*99.4*			*70-130*	*%REC*	10	4/30/2019 04:48
Surr: Toluene-d8	*102*			*70-130*	*%REC*	10	4/30/2019 04:48
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**15**		**0.10**	**0.10**	**% of sample**	1	4/30/2019 12:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *03-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: EXC-4-SWN (3')
Collection Date: 4/24/2019

Work Order: 19041641
Lab ID: 19041641-15
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 4/25/19		Analyst: **SHW**
1,2,4-Trimethylbenzene	**18**	J	**6.9**	**38**	**µg/Kg-dry**	1	4/28/2019 01:07
1,3,5-Trimethylbenzene	U		12	38	µg/Kg-dry	1	4/28/2019 01:07
Benzene	U		6.4	38	µg/Kg-dry	1	4/28/2019 01:07
Ethylbenzene	U		7.9	38	µg/Kg-dry	1	4/28/2019 01:07
m,p-Xylene	U		18	75	µg/Kg-dry	1	4/28/2019 01:07
Methyl tert-butyl ether	U		11	38	µg/Kg-dry	1	4/28/2019 01:07
Naphthalene	**29**	J	**10**	**130**	**µg/Kg-dry**	1	4/28/2019 01:07
o-Xylene	U		15	38	µg/Kg-dry	1	4/28/2019 01:07
Toluene	U		10	38	µg/Kg-dry	1	4/28/2019 01:07
Xylenes, Total	U		32	110	µg/Kg-dry	1	4/28/2019 01:07
Surr: 1,2-Dichloroethane-d4	*94.2*			*70-130*	*%REC*	1	4/28/2019 01:07
Surr: 4-Bromofluorobenzene	*102*			*70-130*	*%REC*	1	4/28/2019 01:07
Surr: Dibromofluoromethane	*91.0*			*70-130*	*%REC*	1	4/28/2019 01:07
Surr: Toluene-d8	*103*			*70-130*	*%REC*	1	4/28/2019 01:07
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**17**		**0.10**	**0.10**	**% of sample**	1	4/30/2019 12:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *03-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: EXC-4-SWE (3')
Collection Date: 4/24/2019

Work Order: 19041641
Lab ID: 19041641-16
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 4/25/19		Analyst: **WH**
1,2,4-Trimethylbenzene	**1,900**		**78**	**420**	**µg/Kg-dry**	10	4/29/2019 14:44
1,3,5-Trimethylbenzene	U		130	420	µg/Kg-dry	10	4/29/2019 14:44
Benzene	U		72	420	µg/Kg-dry	10	4/29/2019 14:44
Ethylbenzene	**270**	J	**89**	**420**	**µg/Kg-dry**	10	4/29/2019 14:44
m,p-Xylene	**290**	J	**200**	**840**	**µg/Kg-dry**	10	4/29/2019 14:44
Methyl tert-butyl ether	U		120	420	µg/Kg-dry	10	4/29/2019 14:44
Naphthalene	U		120	1,400	µg/Kg-dry	10	4/29/2019 14:44
o-Xylene	U		160	420	µg/Kg-dry	10	4/29/2019 14:44
Toluene	U		120	420	µg/Kg-dry	10	4/29/2019 14:44
Xylenes, Total	U		360	1,300	µg/Kg-dry	10	4/29/2019 14:44
Surr: 1,2-Dichloroethane-d4	*89.6*			*70-130*	*%REC*	10	4/29/2019 14:44
Surr: 4-Bromofluorobenzene	*95.8*			*70-130*	*%REC*	10	4/29/2019 14:44
Surr: Dibromofluoromethane	*99.6*			*70-130*	*%REC*	10	4/29/2019 14:44
Surr: Toluene-d8	*91.8*			*70-130*	*%REC*	10	4/29/2019 14:44
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**22**		**0.10**	**0.10**	**% of sample**	1	4/30/2019 12:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *03-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: EXC-4-SWS (3')
Collection Date: 4/24/2019

Work Order: 19041641
Lab ID: 19041641-17
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 4/25/19		Analyst: **SHW**
1,2,4-Trimethylbenzene	**2,800**	J	**760**	**4,100**	**µg/Kg-dry**	100	4/28/2019 01:40
1,3,5-Trimethylbenzene	U		1,300	4,100	µg/Kg-dry	100	4/28/2019 01:40
Benzene	U		710	4,100	µg/Kg-dry	100	4/28/2019 01:40
Ethylbenzene	U		870	4,100	µg/Kg-dry	100	4/28/2019 01:40
m,p-Xylene	U		2,000	8,300	µg/Kg-dry	100	4/28/2019 01:40
Methyl tert-butyl ether	U		1,200	4,100	µg/Kg-dry	100	4/28/2019 01:40
Naphthalene	**23,000**		**1,100**	**14,000**	**µg/Kg-dry**	100	4/28/2019 01:40
o-Xylene	U		1,600	4,100	µg/Kg-dry	100	4/28/2019 01:40
Toluene	U		1,100	4,100	µg/Kg-dry	100	4/28/2019 01:40
Xylenes, Total	U		3,600	12,000	µg/Kg-dry	100	4/28/2019 01:40
Surr: 1,2-Dichloroethane-d4	*96.4*			*70-130*	*%REC*	100	4/28/2019 01:40
Surr: 4-Bromofluorobenzene	*99.6*			*70-130*	*%REC*	100	4/28/2019 01:40
Surr: Dibromofluoromethane	*93.4*			*70-130*	*%REC*	100	4/28/2019 01:40
Surr: Toluene-d8	*102*			*70-130*	*%REC*	100	4/28/2019 01:40
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**16**		**0.10**	**0.10**	**% of sample**	1	4/30/2019 12:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *03-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: EXC-4-SWW (3')
Collection Date: 4/24/2019

Work Order: 19041641
Lab ID: 19041641-18
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 4/25/19		Analyst: **SHW**
1,2,4-Trimethylbenzene	**21,000**		**760**	**4,100**	**µg/Kg-dry**	100	4/28/2019 01:57
1,3,5-Trimethylbenzene	**2,200**	J	**1,300**	**4,100**	**µg/Kg-dry**	100	4/28/2019 01:57
Benzene	U		700	4,100	µg/Kg-dry	100	4/28/2019 01:57
Ethylbenzene	**2,200**	J	**860**	**4,100**	**µg/Kg-dry**	100	4/28/2019 01:57
m,p-Xylene	U		1,900	8,200	µg/Kg-dry	100	4/28/2019 01:57
Methyl tert-butyl ether	U		1,200	4,100	µg/Kg-dry	100	4/28/2019 01:57
Naphthalene	**44,000**		**1,100**	**14,000**	**µg/Kg-dry**	100	4/28/2019 01:57
o-Xylene	U		1,600	4,100	µg/Kg-dry	100	4/28/2019 01:57
Toluene	U		1,100	4,100	µg/Kg-dry	100	4/28/2019 01:57
Xylenes, Total	U		3,500	12,000	µg/Kg-dry	100	4/28/2019 01:57
Surr: 1,2-Dichloroethane-d4	*95.8*			*70-130*	*%REC*	100	4/28/2019 01:57
Surr: 4-Bromofluorobenzene	*101*			*70-130*	*%REC*	100	4/28/2019 01:57
Surr: Dibromofluoromethane	*90.9*			*70-130*	*%REC*	100	4/28/2019 01:57
Surr: Toluene-d8	*102*			*70-130*	*%REC*	100	4/28/2019 01:57
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**19**		**0.10**	**0.10**	**% of sample**	1	4/30/2019 12:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *03-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: EXC-4-BASE (6')
Collection Date: 4/24/2019

Work Order: 19041641
Lab ID: 19041641-19
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 4/25/19		Analyst: **SHW**
1,2,4-Trimethylbenzene	**2,000**		**66**	**360**	**µg/Kg-dry**	10	4/28/2019 02:46
1,3,5-Trimethylbenzene	U		110	360	µg/Kg-dry	10	4/28/2019 02:46
Benzene	U		61	360	µg/Kg-dry	10	4/28/2019 02:46
Ethylbenzene	**230**	J	**75**	**360**	**µg/Kg-dry**	10	4/28/2019 02:46
m,p-Xylene	**190**	J	**170**	**710**	**µg/Kg-dry**	10	4/28/2019 02:46
Methyl tert-butyl ether	U		100	360	µg/Kg-dry	10	4/28/2019 02:46
Naphthalene	**4,600**		**99**	**1,200**	**µg/Kg-dry**	10	4/28/2019 02:46
o-Xylene	U		140	360	µg/Kg-dry	10	4/28/2019 02:46
Toluene	U		98	360	µg/Kg-dry	10	4/28/2019 02:46
Xylenes, Total	U		310	1,100	µg/Kg-dry	10	4/28/2019 02:46
Surr: 1,2-Dichloroethane-d4	*94.1*			*70-130*	*%REC*	10	4/28/2019 02:46
Surr: 4-Bromofluorobenzene	*98.6*			*70-130*	*%REC*	10	4/28/2019 02:46
Surr: Dibromofluoromethane	*91.0*			*70-130*	*%REC*	10	4/28/2019 02:46
Surr: Toluene-d8	*101*			*70-130*	*%REC*	10	4/28/2019 02:46
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**17**		**0.10**	**0.10**	**% of sample**	1	4/30/2019 12:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *03-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: EXC-5-SWN (2')
Collection Date: 4/24/2019

Work Order: 19041641
Lab ID: 19041641-20
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 4/25/19		Analyst: **SHW**
1,2,4-Trimethylbenzene	**28,000**		**67**	**360**	**µg/Kg-dry**	10	4/28/2019 03:03
1,3,5-Trimethylbenzene	**4,500**		**110**	**360**	**µg/Kg-dry**	10	4/28/2019 03:03
Benzene	**2,000**		**62**	**360**	**µg/Kg-dry**	10	4/28/2019 03:03
Ethylbenzene	**11,000**		**77**	**360**	**µg/Kg-dry**	10	4/28/2019 03:03
m,p-Xylene	**12,000**		**170**	**730**	**µg/Kg-dry**	10	4/28/2019 03:03
Methyl tert-butyl ether	U		110	360	µg/Kg-dry	10	4/28/2019 03:03
Naphthalene	**6,800**		**100**	**1,200**	**µg/Kg-dry**	10	4/28/2019 03:03
o-Xylene	**210**	J	**140**	**360**	**µg/Kg-dry**	10	4/28/2019 03:03
Toluene	U		99	360	µg/Kg-dry	10	4/28/2019 03:03
Xylenes, Total	**12,000**		**310**	**1,100**	**µg/Kg-dry**	10	4/28/2019 03:03
Surr: 1,2-Dichloroethane-d4	*96.2*			*70-130*	*%REC*	10	4/28/2019 03:03
Surr: 4-Bromofluorobenzene	*100*			*70-130*	*%REC*	10	4/28/2019 03:03
Surr: Dibromofluoromethane	*94.2*			*70-130*	*%REC*	10	4/28/2019 03:03
Surr: Toluene-d8	*102*			*70-130*	*%REC*	10	4/28/2019 03:03
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**16**		**0.10**	**0.10**	**% of sample**	1	4/30/2019 12:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *03-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: EXC-5-SWE (2')
Collection Date: 4/24/2019

Work Order: 19041641
Lab ID: 19041641-21
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 4/25/19		Analyst: **SHW**
1,2,4-Trimethylbenzene	**23**	J	**7.0**	**38**	**µg/Kg-dry**	1	4/28/2019 02:13
1,3,5-Trimethylbenzene	U		12	38	µg/Kg-dry	1	4/28/2019 02:13
Benzene	**700**		**6.5**	**38**	**µg/Kg-dry**	1	4/28/2019 02:13
Ethylbenzene	**53**		**8.0**	**38**	**µg/Kg-dry**	1	4/28/2019 02:13
m,p-Xylene	**72**	J	**18**	**76**	**µg/Kg-dry**	1	4/28/2019 02:13
Methyl tert-butyl ether	U		11	38	µg/Kg-dry	1	4/28/2019 02:13
Naphthalene	U		11	130	µg/Kg-dry	1	4/28/2019 02:13
o-Xylene	**30**	J	**15**	**38**	**µg/Kg-dry**	1	4/28/2019 02:13
Toluene	**21**	J	**10**	**38**	**µg/Kg-dry**	1	4/28/2019 02:13
Xylenes, Total	**100**	J	**33**	**110**	**µg/Kg-dry**	1	4/28/2019 02:13
Surr: 1,2-Dichloroethane-d4	*94.6*			*70-130*	*%REC*	1	4/28/2019 02:13
Surr: 4-Bromofluorobenzene	*103*			*70-130*	*%REC*	1	4/28/2019 02:13
Surr: Dibromofluoromethane	*90.4*			*70-130*	*%REC*	1	4/28/2019 02:13
Surr: Toluene-d8	*98.8*			*70-130*	*%REC*	1	4/28/2019 02:13
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**14**		**0.10**	**0.10**	**% of sample**	1	4/30/2019 13:28

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *03-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: EXC-5-SWS (2')
Collection Date: 4/24/2019

Work Order: 19041641
Lab ID: 19041641-22
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 4/25/19		Analyst: **SHW**
1,2,4-Trimethylbenzene	U		7.2	39	µg/Kg-dry	1	4/28/2019 02:30
1,3,5-Trimethylbenzene	U		12	39	µg/Kg-dry	1	4/28/2019 02:30
Benzene	**17**	J	**6.7**	**39**	**µg/Kg-dry**	1	4/28/2019 02:30
Ethylbenzene	U		8.2	39	µg/Kg-dry	1	4/28/2019 02:30
m,p-Xylene	U		19	78	µg/Kg-dry	1	4/28/2019 02:30
Methyl tert-butyl ether	U		11	39	µg/Kg-dry	1	4/28/2019 02:30
Naphthalene	U		11	130	µg/Kg-dry	1	4/28/2019 02:30
o-Xylene	U		15	39	µg/Kg-dry	1	4/28/2019 02:30
Toluene	U		11	39	µg/Kg-dry	1	4/28/2019 02:30
Xylenes, Total	U		34	120	µg/Kg-dry	1	4/28/2019 02:30
Surr: 1,2-Dichloroethane-d4	*95.4*			*70-130*	*%REC*	1	4/28/2019 02:30
Surr: 4-Bromofluorobenzene	*103*			*70-130*	*%REC*	1	4/28/2019 02:30
Surr: Dibromofluoromethane	*91.6*			*70-130*	*%REC*	1	4/28/2019 02:30
Surr: Toluene-d8	*102*			*70-130*	*%REC*	1	4/28/2019 02:30
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**19**		**0.10**	**0.10**	**% of sample**	1	4/30/2019 13:28

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *03-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: EXC-5-SWW (2')
Collection Date: 4/24/2019

Work Order: 19041641
Lab ID: 19041641-23
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 4/25/19		Analyst: **WH**
1,2,4-Trimethylbenzene	U		27	36	µg/Kg-dry	1	4/30/2019 18:14
1,3,5-Trimethylbenzene	U		42	36	µg/Kg-dry	1	4/30/2019 18:14
Benzene	U		6.2	36	µg/Kg-dry	1	4/30/2019 18:14
Ethylbenzene	U		7.7	36	µg/Kg-dry	1	4/30/2019 18:14
m,p-Xylene	U		49	73	µg/Kg-dry	1	4/30/2019 18:14
Methyl tert-butyl ether	U		11	36	µg/Kg-dry	1	4/30/2019 18:14
Naphthalene	**150**		**87**	**120**	**µg/Kg-dry**	1	4/30/2019 18:14
o-Xylene	U		14	36	µg/Kg-dry	1	4/30/2019 18:14
Toluene	U		9.9	36	µg/Kg-dry	1	4/30/2019 18:14
Xylenes, Total	U		49	110	µg/Kg-dry	1	4/30/2019 18:14
Surr: 1,2-Dichloroethane-d4	*83.2*			*70-130*	*%REC*	1	4/30/2019 18:14
Surr: 4-Bromofluorobenzene	*102*			*70-130*	*%REC*	1	4/30/2019 18:14
Surr: Dibromofluoromethane	*96.6*			*70-130*	*%REC*	1	4/30/2019 18:14
Surr: Toluene-d8	*89.2*			*70-130*	*%REC*	1	4/30/2019 18:14
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**16**		**0.10**	**0.10**	**% of sample**	1	4/30/2019 13:28

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *03-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: EXC-5-BASE (4')
Collection Date: 4/24/2019

Work Order: 19041641
Lab ID: 19041641-24
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 4/25/19		Analyst: **SHW**
1,2,4-Trimethylbenzene	U		7.1	38	µg/Kg-dry	1	4/27/2019 02:34
1,3,5-Trimethylbenzene	U		12	38	µg/Kg-dry	1	4/27/2019 02:34
Benzene	**1,300**		**6.5**	**38**	**µg/Kg-dry**	1	4/27/2019 02:34
Ethylbenzene	**2,000**		**8.0**	**38**	**µg/Kg-dry**	1	4/27/2019 02:34
m,p-Xylene	**240**		**18**	**76**	**µg/Kg-dry**	1	4/27/2019 02:34
Methyl tert-butyl ether	U		11	38	µg/Kg-dry	1	4/27/2019 02:34
Naphthalene	**20,000**		**110**	**1,300**	**µg/Kg-dry**	10	4/27/2019 23:44
o-Xylene	U		15	38	µg/Kg-dry	1	4/27/2019 02:34
Toluene	**15**	J	**10**	**38**	**µg/Kg-dry**	1	4/27/2019 02:34
Xylenes, Total	**240**		**33**	**110**	**µg/Kg-dry**	1	4/27/2019 02:34
Surr: 1,2-Dichloroethane-d4	*99.6*			*70-130*	*%REC*	1	4/27/2019 02:34
Surr: 1,2-Dichloroethane-d4	*96.2*			*70-130*	*%REC*	10	4/27/2019 23:44
Surr: 4-Bromofluorobenzene	*139*	S		*70-130*	*%REC*	1	4/27/2019 02:34
Surr: 4-Bromofluorobenzene	*102*			*70-130*	*%REC*	10	4/27/2019 23:44
Surr: Dibromofluoromethane	*95.6*			*70-130*	*%REC*	1	4/27/2019 02:34
Surr: Dibromofluoromethane	*94.0*			*70-130*	*%REC*	10	4/27/2019 23:44
Surr: Toluene-d8	*114*			*70-130*	*%REC*	1	4/27/2019 02:34
Surr: Toluene-d8	*102*			*70-130*	*%REC*	10	4/27/2019 23:44
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**20**		**0.10**	**0.10**	**% of sample**	1	4/30/2019 13:28

Note: See Qualifiers page for a list of qualifiers and their definitions.

Batch ID: **135223** Instrument ID **GC14** Method: **SW8082**

MBLK Sample ID: **PBLKS1-135223-135223** Units: **µg/Kg** Analysis Date: **4/29/2019 09:45 PM**

Client ID: Run ID: **GC14_190429B** SeqNo: **5631414** Prep Date: **4/29/2019** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	U	67								
Aroclor 1221	U	67								
Aroclor 1232	U	67								
Aroclor 1242	U	67								
Aroclor 1248	U	67								
Aroclor 1254	U	67								
Aroclor 1260	U	67								
Aroclor 1262	U	67								
Aroclor 1268	U	67								
Surr: Decachlorobiphenyl	*32.62*	0	*33.3*	0	*98*	*40-140*	0			
Surr: Tetrachloro-m-xylene	*34.53*	0	*33.3*	0	*104*	*45-124*	0			

LCS Sample ID: **PLCSS1-135223-135223** Units: **µg/Kg** Analysis Date: **4/29/2019 09:59 PM**

Client ID: Run ID: **GC14_190429B** SeqNo: **5631415** Prep Date: **4/29/2019** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	853	67	833	0	102	50-130	0			
Aroclor 1260	845	67	833	0	101	50-130	0			
Surr: Decachlorobiphenyl	*31.1*	0	*33.3*	0	*93.4*	*40-140*	0			
Surr: Tetrachloro-m-xylene	*28.15*	0	*33.3*	0	*84.5*	*45-124*	0			

MS Sample ID: **19041663-01A MS** Units: **µg/Kg** Analysis Date: **4/29/2019 10:28 PM**

Client ID: Run ID: **GC14_190429B** SeqNo: **5631417** Prep Date: **4/29/2019** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	854.4	66	830.3	0	103	40-140	0			
Aroclor 1260	840.1	66	830.3	0	101	40-140	0			
Surr: Decachlorobiphenyl	*30.57*	0	*33.19*	0	*92.1*	*40-140*	0			
Surr: Tetrachloro-m-xylene	*27.94*	0	*33.19*	0	*84.2*	*45-124*	0			

MSD Sample ID: **19041663-01A MSD** Units: **µg/Kg** Analysis Date: **4/29/2019 10:42 PM**

Client ID: Run ID: **GC14_190429B** SeqNo: **5631418** Prep Date: **4/29/2019** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	814.9	63	784.1	0	104	40-140	854.4	4.73	50	
Aroclor 1260	806.7	63	784.1	0	103	40-140	840.1	4.06	50	
Surr: Decachlorobiphenyl	*28.78*	0	*31.34*	0	*91.8*	*40-140*	30.57	*6.04*	*50*	
Surr: Tetrachloro-m-xylene	*25.86*	0	*31.34*	0	*82.5*	*45-124*	27.94	*7.74*	*50*	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Sigma Group
Work Order: 19041641
Project: 16366

QC BATCH REPORT

Batch ID: **135223** Instrument ID **GC14** Method: **SW8082**

The following samples were analyzed in this batch:

19041641-01C	19041641-02C	19041641-03C
19041641-04C	19041641-05C	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Sigma Group
Work Order: 19041641
Project: 16366

QC BATCH REPORT

Batch ID: **135320** Instrument ID **GC14** Method: **SW8082**

MBLK Sample ID: **PBLKS1-135320-135320** Units: **µg/Kg** Analysis Date: **5/1/2019 09:13 AM**
Client ID: Run ID: **GC14_190501A** SeqNo: **5634806** Prep Date: **4/30/2019** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	U	67								
Aroclor 1221	U	67								
Aroclor 1232	U	67								
Aroclor 1242	U	67								
Aroclor 1248	U	67								
Aroclor 1254	U	67								
Aroclor 1260	U	67								
Aroclor 1262	U	67								
Aroclor 1268	U	67								
Surr: Decachlorobiphenyl	*38.04*	0	*33.3*	0	*114*	*40-140*	0			
Surr: Tetrachloro-m-xylene	*38.23*	0	*33.3*	0	*115*	*45-124*	0			

LCS Sample ID: **PLCSS1-135320-135320** Units: **µg/Kg** Analysis Date: **5/1/2019 09:27 AM**
Client ID: Run ID: **GC14_190501A** SeqNo: **5634807** Prep Date: **4/30/2019** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	827.6	67	833	0	99.4	50-130	0			
Aroclor 1260	880.7	67	833	0	106	50-130	0			
Surr: Decachlorobiphenyl	*35.56*	0	*33.3*	0	*107*	*40-140*	0			
Surr: Tetrachloro-m-xylene	*29.27*	0	*33.3*	0	*87.9*	*45-124*	0			

MS Sample ID: **19041778-05A MS** Units: **µg/Kg** Analysis Date: **5/1/2019 09:56 AM**
Client ID: Run ID: **GC14_190501A** SeqNo: **5634809** Prep Date: **4/30/2019** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	847.2	65	812.4	0	104	40-140	0			
Aroclor 1260	899.9	65	812.4	0	111	40-140	0			
Surr: Decachlorobiphenyl	*34.21*	0	*32.48*	0	*105*	*40-140*	0			
Surr: Tetrachloro-m-xylene	*28.2*	0	*32.48*	0	*86.8*	*45-124*	0			

MSD Sample ID: **19041778-05A MSD** Units: **µg/Kg** Analysis Date: **5/1/2019 10:10 AM**
Client ID: Run ID: **GC14_190501A** SeqNo: **5634810** Prep Date: **4/30/2019** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	885	65	816	0	108	40-140	847.2	4.36	50	
Aroclor 1260	893	65	816	0	109	40-140	899.9	0.768	50	
Surr: Decachlorobiphenyl	*33.88*	0	*32.62*	0	*104*	*40-140*	34.21	*0.954*	*50*	
Surr: Tetrachloro-m-xylene	*28.32*	0	*32.62*	0	*86.8*	*45-124*	28.2	*0.414*	*50*	

The following samples were analyzed in this batch: 19041641-01C 19041641-04C

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Sigma Group
Work Order: 19041641
Project: 16366

QC BATCH REPORT

Batch ID: **135112** Instrument ID **VMS9** Method: **SW8260C**

MBLK Sample ID: **MBLK-135112-135112** Units: **µg/Kg-dry** Analysis Date: **4/28/2019 05:03 PM**
Client ID: Run ID: **VMS9_190428A** SeqNo: **5629681** Prep Date: **4/25/2019** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2,4-Trimethylbenzene	U	30								
1,3,5-Trimethylbenzene	U	30								
Benzene	U	30								
Ethylbenzene	U	30								
m,p-Xylene	U	60								
Methyl tert-butyl ether	U	30								
Naphthalene	U	100								
o-Xylene	U	30								
Toluene	U	30								
Xylenes, Total	U	90								
Surr: 1,2-Dichloroethane-d4	*990.5*	0	*1000*	0	*99*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*962.5*	0	*1000*	0	*96.2*	*70-130*	0			
Surr: Dibromofluoromethane	*943.5*	0	*1000*	0	*94.4*	*70-130*	0			
Surr: Toluene-d8	*938.5*	0	*1000*	0	*93.8*	*70-130*	0			

LCS Sample ID: **LCS-135112-135112** Units: **µg/Kg-dry** Analysis Date: **4/28/2019 04:17 PM**
Client ID: Run ID: **VMS9_190428A** SeqNo: **5629680** Prep Date: **4/25/2019** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2,4-Trimethylbenzene	957.5	30	1000	0	95.8	65-135	0			
1,3,5-Trimethylbenzene	1058	30	1000	0	106	65-135	0			
Benzene	1040	30	1000	0	104	75-125	0			
Ethylbenzene	1003	30	1000	0	100	75-125	0			
m,p-Xylene	2048	60	2000	0	102	80-125	0			
Methyl tert-butyl ether	1064	30	1000	0	106	75-125	0			
Naphthalene	859.5	100	1000	0	86	40-140	0			
o-Xylene	1018	30	1000	0	102	75-125	0			
Toluene	1006	30	1000	0	101	70-125	0			
Xylenes, Total	3066	90	3000	0	102	75-125	0			
Surr: 1,2-Dichloroethane-d4	*986.5*	0	*1000*	0	*98.6*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*1011*	0	*1000*	0	*101*	*70-130*	0			
Surr: Dibromofluoromethane	*1016*	0	*1000*	0	*102*	*70-130*	0			
Surr: Toluene-d8	*995.5*	0	*1000*	0	*99.6*	*70-130*	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Sigma Group
Work Order: 19041641
Project: 16366

QC BATCH REPORT

Batch ID: **135112** Instrument ID **VMS9** Method: **SW8260C**

MS Sample ID: **19041642-01A MS** Units: **µg/Kg-dry** Analysis Date: **4/28/2019 10:52 PM**
Client ID: Run ID: **VMS9_190428A** SeqNo: **5629685** Prep Date: **4/25/2019** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2,4-Trimethylbenzene	1007	33	1098	0	91.7	65-135	0			
1,3,5-Trimethylbenzene	1123	33	1098	0	102	65-135	0			
Benzene	1077	33	1098	0	98	75-125	0			
Ethylbenzene	1076	33	1098	0	98	75-125	0			
m,p-Xylene	2151	66	2197	0	97.9	80-125	0			
Methyl tert-butyl ether	1122	33	1098	0	102	75-125	0			
Naphthalene	923.8	110	1098	0	84.1	40-140	0			
o-Xylene	1085	33	1098	0	98.8	75-125	0			
Toluene	1019	33	1098	0	92.8	70-125	0			
Xylenes, Total	3236	99	3295	0	98.2	75-125	0			
Surr: 1,2-Dichloroethane-d4	*1067*	0	*1098*	0	*97.2*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*1115*	0	*1098*	0	*102*	*70-130*	0			
Surr: Dibromofluoromethane	*1076*	0	*1098*	0	*98*	*70-130*	0			
Surr: Toluene-d8	*1061*	0	*1098*	0	*96.6*	*70-130*	0			

MSD Sample ID: **19041642-01A MSD** Units: **µg/Kg-dry** Analysis Date: **4/28/2019 11:07 PM**
Client ID: Run ID: **VMS9_190428A** SeqNo: **5629686** Prep Date: **4/25/2019** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2,4-Trimethylbenzene	1134	33	1104	0	103	65-135	1007	11.8	30	
1,3,5-Trimethylbenzene	1215	33	1104	0	110	65-135	1123	7.93	30	
Benzene	1125	33	1104	0	102	75-125	1077	4.39	30	
Ethylbenzene	1155	33	1104	0	105	75-125	1076	7.01	30	
m,p-Xylene	2318	66	2209	0	105	80-125	2151	7.46	30	
Methyl tert-butyl ether	1237	33	1104	0	112	75-125	1122	9.74	30	
Naphthalene	1025	110	1104	0	92.8	40-140	923.8	10.4	30	
o-Xylene	1175	33	1104	0	106	75-125	1085	8	30	
Toluene	1115	33	1104	0	101	70-125	1019	9	30	
Xylenes, Total	3493	99	3313	0	105	75-125	3236	7.64	30	
Surr: 1,2-Dichloroethane-d4	*1079*	0	*1104*	0	*97.7*	*70-130*	1067	*1.1*	*30*	
Surr: 4-Bromofluorobenzene	*1090*	0	*1104*	0	*98.7*	*70-130*	1115	*2.31*	*30*	
Surr: Dibromofluoromethane	*1065*	0	*1104*	0	*96.4*	*70-130*	1076	*1*	*30*	
Surr: Toluene-d8	*1048*	0	*1104*	0	*94.8*	*70-130*	1061	*1.29*	*30*	

The following samples were analyzed in this batch:

19041641-21A	19041641-22A	19041641-24A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Sigma Group
Work Order: 19041641
Project: 16366

QC BATCH REPORT

Batch ID: **135118** Instrument ID **VMS8** Method: **SW8260C**

MBLK Sample ID: **MBLK-135118-135118** Units: **µg/Kg-dry** Analysis Date: **4/29/2019 12:58 PM**
Client ID: Run ID: **VMS8_190429A** SeqNo: **5631931** Prep Date: **4/25/2019** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	U	30								
1,1,1-Trichloroethane	U	30								
1,1,2,2-Tetrachloroethane	U	30								
1,1,2-Trichloroethane	U	30								
1,1,2-Trichlorotrifluoroethane	U	30								
1,1-Dichloroethane	U	30								
1,1-Dichloroethene	U	30								
1,2,3-Trichlorobenzene	U	30								
1,2,4-Trichlorobenzene	U	30								
1,2,4-Trimethylbenzene	U	30								
1,2-Dibromo-3-chloropropane	U	100								
1,2-Dibromoethane	U	30								
1,2-Dichlorobenzene	U	30								
1,2-Dichloroethane	U	30								
1,2-Dichloropropane	U	30								
1,3,5-Trimethylbenzene	U	30								
1,3-Dichlorobenzene	U	30								
1,3-Dichloropropane	U	30								
1,4-Dichlorobenzene	U	30								
2,2-Dichloropropane	U	30								
2-Butanone	U	200								
2-Chlorotoluene	U	30								
2-Hexanone	U	30								
4-Chlorotoluene	U	30								
4-Methyl-2-pentanone	U	30								
Acetone	U	100								
Benzene	U	30								
Bromobenzene	U	30								
Bromochloromethane	U	30								
Bromodichloromethane	U	30								
Bromoform	U	30								
Bromomethane	U	100								
Carbon disulfide	U	30								
Carbon tetrachloride	U	30								
Chlorobenzene	U	30								
Chloroethane	U	100								
Chloroform	U	30								
Chloromethane	36	100								J
cis-1,2-Dichloroethene	U	30								
cis-1,3-Dichloropropene	U	30								
Cyclohexane	U	30								
Dibromochloromethane	U	30								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **135118** Instrument ID **VMS8** Method: **SW8260C**

Dichlorodifluoromethane	U	30					
Diisopropyl ether	U	30					
Ethyl acetate	U	100					
Ethylbenzene	U	30					
Hexachlorobutadiene	U	100					
Isopropylbenzene	U	30					
m,p-Xylene	U	60					
Methyl acetate	U	200					
Methyl tert-butyl ether	U	30					
Methylcyclohexane	U	30					
Methylene chloride	U	30					
Naphthalene	U	100					
n-Butylbenzene	U	30					
n-Propylbenzene	U	30					
o-Xylene	U	30					
p-Isopropyltoluene	U	100					
sec-Butylbenzene	U	30					
Styrene	U	30					
tert-Butylbenzene	U	30					
Tetrachloroethene	U	30					
Toluene	U	30					
trans-1,2-Dichloroethene	U	30					
trans-1,3-Dichloropropene	U	30					
Trichloroethene	U	30					
Trichlorofluoromethane	U	30					
Vinyl chloride	U	30					
Xylenes, Total	U	90					
Surr: 1,2-Dichloroethane-d4	*889*	0	*1000*	0	*88.9*	*70-130*	0
Surr: 4-Bromofluorobenzene	*940*	0	*1000*	0	*94*	*70-130*	0
Surr: Dibromofluoromethane	*976*	0	*1000*	0	*97.6*	*70-130*	0
Surr: Toluene-d8	*907.5*	0	*1000*	0	*90.8*	*70-130*	0

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Sigma Group
Work Order: 19041641
Project: 16366

QC BATCH REPORT

Batch ID: **135118** Instrument ID **VMS8** Method: **SW8260C**

LCS Sample ID: **LCS-135118-135118** Units: **µg/Kg-dry** Analysis Date: **4/29/2019 12:10 PM**
Client ID: Run ID: **VMS8_190429A** SeqNo: **5631930** Prep Date: **4/25/2019** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	1017	30	1000	0	102	75-125	0			
1,1,1-Trichloroethane	1195	30	1000	0	120	70-135	0			
1,1,2,2-Tetrachloroethane	1034	30	1000	0	103	55-130	0			
1,1,2-Trichloroethane	1012	30	1000	0	101	60-125	0			
1,1-Dichloroethane	1093	30	1000	0	109	75-125	0			
1,1-Dichloroethene	1174	30	1000	0	117	76-148	0			
1,2,3-Trichlorobenzene	1022	30	1000	0	102	60-135	0			
1,2,4-Trichlorobenzene	1042	30	1000	0	104	65-130	0			
1,2,4-Trimethylbenzene	991	30	1000	0	99.1	65-135	0			
1,2-Dibromo-3-chloropropane	991.5	100	1000	0	99.2	40-135	0			
1,2-Dibromoethane	1319	30	1000	0	132	80-195	0			
1,2-Dichlorobenzene	987	30	1000	0	98.7	75-120	0			
1,2-Dichloroethane	1117	30	1000	0	112	70-135	0			
1,2-Dichloropropane	1172	30	1000	0	117	70-120	0			
1,3,5-Trimethylbenzene	963.5	30	1000	0	96.4	65-135	0			
1,3-Dichlorobenzene	1033	30	1000	0	103	70-125	0			
1,3-Dichloropropane	958	30	1000	0	95.8	75-125	0			
1,4-Dichlorobenzene	1116	30	1000	0	112	70-125	0			
2,2-Dichloropropane	1235	30	1000	0	124	54-146	0			
2-Butanone	890.5	200	1000	0	89	30-160	0			
2-Chlorotoluene	998	30	1000	0	99.8	70-130	0			
2-Hexanone	826.5	30	1000	0	82.6	45-145	0			
4-Chlorotoluene	995	30	1000	0	99.5	75-125	0			
4-Methyl-2-pentanone	1234	30	1000	0	123	74-176	0			
Acetone	876.5	100	1000	0	87.6	20-160	0			
Benzene	1180	30	1000	0	118	75-125	0			
Bromobenzene	1042	30	1000	0	104	65-120	0			
Bromochloromethane	1165	30	1000	0	116	74-134	0			
Bromodichloromethane	1129	30	1000	0	113	70-130	0			
Bromoform	934	30	1000	0	93.4	55-135	0			
Bromomethane	1658	100	1000	0	166	50-170	0			
Carbon disulfide	1146	30	1000	0	115	45-160	0			
Carbon tetrachloride	992.5	30	1000	0	99.2	65-135	0			
Chlorobenzene	1146	30	1000	0	115	75-125	0			
Chloroethane	1006	100	1000	0	101	40-155	0			
Chloroform	1099	30	1000	0	110	70-125	0			
Chloromethane	802.5	100	1000	0	80.2	50-144	0			
cis-1,2-Dichloroethene	1091	30	1000	0	109	65-125	0			
cis-1,3-Dichloropropene	1040	30	1000	0	104	70-125	0			
Dibromochloromethane	914	30	1000	0	91.4	65-135	0			
Dichlorodifluoromethane	967	30	1000	0	96.7	35-135	0			
Diisopropyl ether	981	30	1000	0	98.1	70-130	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **135118** Instrument ID **VMS8** Method: **SW8260C**

Ethyl acetate	859	100	1000	0	85.9	70-130	0
Ethylbenzene	1032	30	1000	0	103	75-125	0
Hexachlorobutadiene	1162	100	1000	0	116	55-140	0
Isopropylbenzene	1018	30	1000	0	102	75-130	0
m,p-Xylene	1908	60	2000	0	95.4	80-125	0
Methyl tert-butyl ether	1070	30	1000	0	107	75-125	0
Methylene chloride	1018	30	1000	0	102	55-145	0
Naphthalene	919.5	100	1000	0	92	40-140	0
n-Butylbenzene	961.5	30	1000	0	96.2	65-140	0
n-Propylbenzene	944.5	30	1000	0	94.4	65-135	0
o-Xylene	968	30	1000	0	96.8	75-125	0
p-Isopropyltoluene	1022	100	1000	0	102	71-157	0
sec-Butylbenzene	1060	30	1000	0	106	65-130	0
Styrene	1152	30	1000	0	115	80-138	0
tert-Butylbenzene	1043	30	1000	0	104	65-130	0
Tetrachloroethene	1125	30	1000	0	112	67-167	0
Toluene	997.5	30	1000	0	99.8	70-125	0
trans-1,2-Dichloroethene	1130	30	1000	0	113	65-135	0
trans-1,3-Dichloropropene	895	30	1000	0	89.5	59-129	0
Trichloroethene	1230	30	1000	0	123	75-125	0
Trichlorofluoromethane	1167	30	1000	0	117	25-185	0
Vinyl chloride	1149	30	1000	0	115	60-125	0
Xylenes, Total	2876	90	3000	0	95.9	75-125	0
Surr: 1,2-Dichloroethane-d4	*884.5*	0	*1000*	0	*88.4*	*70-130*	0
Surr: 4-Bromofluorobenzene	*972.5*	0	*1000*	0	*97.2*	*70-130*	0
Surr: Dibromofluoromethane	*988.5*	0	*1000*	0	*98.8*	*70-130*	0
Surr: Toluene-d8	*887.5*	0	*1000*	0	*88.8*	*70-130*	0

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Sigma Group
Work Order: 19041641
Project: 16366

QC BATCH REPORT

Batch ID: **135118** Instrument ID **VMS8** Method: **SW8260C**

MS Sample ID: **19041641-01A MS** Units: **µg/Kg-dry** Analysis Date: **4/29/2019 07:50 PM**
Client ID: **EXC-1-SWN (2')** Run ID: **VMS8_190429A** SeqNo: **5631944** Prep Date: **4/25/2019** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	13910	490	16200	0	85.9	75-125	0			
1,1,1-Trichloroethane	16950	490	16200	0	105	70-135	0			
1,1,2,2-Tetrachloroethane	14190	490	16200	0	87.6	55-130	0			
1,1,2-Trichloroethane	14420	490	16200	0	89	60-125	0			
1,1-Dichloroethane	15360	490	16200	0	94.8	75-125	0			
1,1-Dichloroethene	17450	490	16200	0	108	76-148	0			
1,2,3-Trichlorobenzene	14660	490	16200	0	90.5	60-135	0			
1,2,4-Trichlorobenzene	14840	490	16200	0	91.6	65-130	0			
1,2,4-Trimethylbenzene	14970	490	16200	102.1	91.8	65-135	0			
1,2-Dibromo-3-chloropropane	13910	1,600	16200	0	85.9	40-135	0			
1,2-Dibromoethane	18370	490	16200	0	113	80-195	0			
1,2-Dichlorobenzene	13520	490	16200	0	83.4	75-120	0			
1,2-Dichloroethane	15900	490	16200	0	98.2	70-135	0			
1,2-Dichloropropane	16050	490	16200	0	99.1	70-120	0			
1,3,5-Trimethylbenzene	14440	490	16200	0	89.2	65-135	0			
1,3-Dichlorobenzene	14020	490	16200	0	86.6	70-125	0			
1,3-Dichloropropane	13280	490	16200	0	82	75-125	0			
1,4-Dichlorobenzene	15570	490	16200	0	96.2	70-125	0			
2,2-Dichloropropane	16980	490	16200	0	105	54-146	0			
2-Butanone	11750	3,200	16200	0	72.6	30-160	0			
2-Chlorotoluene	14140	490	16200	0	87.3	70-130	0			
2-Hexanone	10590	490	16200	0	65.4	45-145	0			
4-Chlorotoluene	13890	490	16200	0	85.8	75-125	0			
4-Methyl-2-pentanone	16660	490	16200	0	103	74-176	0			
Acetone	11620	1,600	16200	314	69.8	20-160	0			
Benzene	16590	490	16200	0	102	75-125	0			
Bromobenzene	14570	490	16200	0	90	65-120	0			
Bromochloromethane	16960	490	16200	0	105	74-134	0			
Bromodichloromethane	14700	490	16200	0	90.8	70-130	0			
Bromoform	12860	490	16200	0	79.4	55-135	0			
Bromomethane	40230	1,600	16200	0	248	50-170	0			S
Carbon disulfide	16260	490	16200	0	100	45-160	0			
Carbon tetrachloride	14280	490	16200	0	88.2	65-135	0			
Chlorobenzene	16160	490	16200	0	99.8	75-125	0			
Chloroethane	13710	1,600	16200	0	84.6	40-155	0			
Chloroform	15400	490	16200	0	95	70-125	0			
Chloromethane	9306	1,600	16200	0	57.4	50-144	0			
cis-1,2-Dichloroethene	14930	490	16200	0	92.2	65-125	0			
cis-1,3-Dichloropropene	13820	490	16200	0	85.3	70-125	0			
Dibromochloromethane	12990	490	16200	0	80.2	65-135	0			
Dichlorodifluoromethane	15950	490	16200	0	98.4	35-135	0			
Diisopropyl ether	13460	490	16200	0	83.1	70-130	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **135118** Instrument ID **VMS8** Method: **SW8260C**

Ethyl acetate	11530	1,600	16200	0	71.2	70-130	0
Ethylbenzene	15340	490	16200	0	94.7	75-125	0
Hexachlorobutadiene	16380	1,600	16200	0	101	55-140	0
Isopropylbenzene	14770	490	16200	0	91.2	75-130	0
m,p-Xylene	28100	970	32400	0	86.8	80-125	0
Methyl tert-butyl ether	14740	490	16200	0	91	75-125	0
Methylene chloride	13300	490	16200	0	82.1	55-145	0
Naphthalene	13430	1,600	16200	573.1	79.4	40-140	0
n-Butylbenzene	13640	490	16200	0	84.2	65-140	0
n-Propylbenzene	14040	490	16200	0	86.6	65-135	0
o-Xylene	13990	490	16200	0	86.4	75-125	0
p-Isopropyltoluene	14350	1,600	16200	0	88.6	71-157	0
sec-Butylbenzene	15520	490	16200	0	95.8	65-130	0
Styrene	16330	490	16200	0	101	80-138	0
tert-Butylbenzene	14910	490	16200	0	92	65-130	0
Tetrachloroethene	20910	490	16200	0	129	67-167	0
Toluene	14880	490	16200	0	91.8	70-125	0
trans-1,2-Dichloroethene	15790	490	16200	0	97.4	65-135	0
trans-1,3-Dichloropropene	12480	490	16200	0	77	59-129	0
Trichloroethene	17660	490	16200	0	109	75-125	0
Trichlorofluoromethane	17450	490	16200	0	108	25-185	0
Vinyl chloride	18390	490	16200	0	114	60-125	0
Xylenes, Total	42090	1,500	48600	0	86.6	75-125	0
Surr: 1,2-Dichloroethane-d4	*13870*	0	*16200*	0	*85.6*	*70-130*	0
Surr: 4-Bromofluorobenzene	*15660*	0	*16200*	0	*96.6*	*70-130*	0
Surr: Dibromofluoromethane	*15750*	0	*16200*	0	*97.2*	*70-130*	0
Surr: Toluene-d8	*14590*	0	*16200*	0	*90.1*	*70-130*	0

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Sigma Group
Work Order: 19041641
Project: 16366

QC BATCH REPORT

Batch ID: **135118** Instrument ID **VMS8** Method: **SW8260C**

MSD Sample ID: **19041641-01A MSD** Units: **µg/Kg-dry** Analysis Date: **4/29/2019 08:06 PM**
Client ID: **EXC-1-SWN (2')** Run ID: **VMS8_190429A** SeqNo: **5631945** Prep Date: **4/25/2019** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	13960	470	15680	0	89	75-125	13910	0.331	30	
1,1,1-Trichloroethane	17260	470	15680	0	110	70-135	16950	1.81	30	
1,1,2,2-Tetrachloroethane	14410	470	15680	0	91.9	55-130	14190	1.52	30	
1,1,2-Trichloroethane	14120	470	15680	0	90	60-125	14420	2.15	30	
1,1-Dichloroethane	15740	470	15680	0	100	75-125	15360	2.47	30	
1,1-Dichloroethene	17850	470	15680	0	114	76-148	17450	2.24	30	
1,2,3-Trichlorobenzene	15050	470	15680	0	96	60-135	14660	2.63	30	
1,2,4-Trichlorobenzene	15200	470	15680	0	97	65-130	14840	2.41	30	
1,2,4-Trimethylbenzene	14490	470	15680	102.1	91.8	65-135	14970	3.22	30	
1,2-Dibromo-3-chloropropane	14270	1,600	15680	0	91	40-135	13910	2.55	30	
1,2-Dibromoethane	18320	470	15680	0	117	80-195	18370	0.273	30	
1,2-Dichlorobenzene	14490	470	15680	0	92.4	75-120	13520	6.92	30	
1,2-Dichloroethane	15500	470	15680	0	98.9	70-135	15900	2.51	30	
1,2-Dichloropropane	16010	470	15680	0	102	70-120	16050	0.288	30	
1,3,5-Trimethylbenzene	14000	470	15680	0	89.3	65-135	14440	3.1	30	
1,3-Dichlorobenzene	14590	470	15680	0	93	70-125	14020	3.97	30	
1,3-Dichloropropane	13550	470	15680	0	86.4	75-125	13280	1.96	30	
1,4-Dichlorobenzene	16290	470	15680	0	104	70-125	15570	4.48	30	
2,2-Dichloropropane	17680	470	15680	0	113	54-146	16980	4.09	30	
2-Butanone	13150	3,100	15680	0	83.8	30-160	11750	11.2	30	
2-Chlorotoluene	13920	470	15680	0	88.8	70-130	14140	1.57	30	
2-Hexanone	11700	470	15680	0	74.6	45-145	10590	9.96	30	
4-Chlorotoluene	14040	470	15680	0	89.6	75-125	13890	1.07	30	
4-Methyl-2-pentanone	16600	470	15680	0	106	74-176	16660	0.348	30	
Acetone	14200	1,600	15680	314	88.6	20-160	11620	20	30	
Benzene	16690	470	15680	0	106	75-125	16590	0.609	30	
Bromobenzene	14490	470	15680	0	92.4	65-120	14570	0.583	30	
Bromochloromethane	16850	470	15680	0	107	74-134	16960	0.677	30	
Bromodichloromethane	15180	470	15680	0	96.8	70-130	14700	3.18	30	
Bromoform	12930	470	15680	0	82.4	55-135	12860	0.499	30	
Bromomethane	43360	1,600	15680	0	277	50-170	40230	7.48	30	S
Carbon disulfide	16590	470	15680	0	106	45-160	16260	2.02	30	
Carbon tetrachloride	14490	470	15680	0	92.4	65-135	14280	1.44	30	
Chlorobenzene	16190	470	15680	0	103	75-125	16160	0.179	30	
Chloroethane	14090	1,600	15680	0	89.9	40-155	13710	2.75	30	
Chloroform	15860	470	15680	0	101	70-125	15400	2.95	30	
Chloromethane	9618	1,600	15680	0	61.4	50-144	9306	3.3	30	
cis-1,2-Dichloroethene	15610	470	15680	0	99.6	65-125	14930	4.4	30	
cis-1,3-Dichloropropene	14070	470	15680	0	89.8	70-125	13820	1.82	30	
Dibromochloromethane	12810	470	15680	0	81.7	65-135	12990	1.42	30	
Dichlorodifluoromethane	16310	470	15680	0	104	35-135	15950	2.26	30	
Diisopropyl ether	13550	470	15680	0	86.4	70-130	13460	0.624	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **135118** Instrument ID **VMS8** Method: **SW8260C**

Ethyl acetate	11910	1,600	15680	0	76	70-130	11530	3.19	30
Ethylbenzene	15210	470	15680	0	97	75-125	15340	0.87	30
Hexachlorobutadiene	17390	1,600	15680	0	111	55-140	16380	6.03	30
Isopropylbenzene	14890	470	15680	0	95	75-130	14770	0.76	30
m,p-Xylene	27730	940	31350	0	88.4	80-125	28100	1.36	30
Methyl tert-butyl ether	15210	470	15680	0	97	75-125	14740	3.11	30
Methylene chloride	13980	470	15680	0	89.2	55-145	13300	4.97	30
Naphthalene	14220	1,600	15680	573.1	87	40-140	13430	5.72	30
n-Butylbenzene	14310	470	15680	0	91.2	65-140	13640	4.77	30
n-Propylbenzene	14090	470	15680	0	89.9	65-135	14040	0.412	30
o-Xylene	14030	470	15680	0	89.5	75-125	13990	0.313	30
p-Isopropyltoluene	14890	1,600	15680	0	95	71-157	14350	3.7	30
sec-Butylbenzene	15640	470	15680	0	99.8	65-130	15520	0.77	30
Styrene	16380	470	15680	0	104	80-138	16330	0.335	30
tert-Butylbenzene	14820	470	15680	0	94.5	65-130	14910	0.643	30
Tetrachloroethene	23170	470	15680	0	148	67-167	20910	10.2	30
Toluene	14870	470	15680	0	94.8	70-125	14880	0.056	30
trans-1,2-Dichloroethene	16680	470	15680	0	106	65-135	15790	5.52	30
trans-1,3-Dichloropropene	12310	470	15680	0	78.5	59-129	12480	1.41	30
Trichloroethene	17390	470	15680	0	111	75-125	17660	1.59	30
Trichlorofluoromethane	17930	470	15680	0	114	25-185	17450	2.72	30
Vinyl chloride	19170	470	15680	0	122	60-125	18390	4.11	30
Xylenes, Total	41760	1,400	47030	0	88.8	75-125	42090	0.799	30
Surr: 1,2-Dichloroethane-d4	*13680*	0	*15680*	0	*87.2*	*70-130*	13870	*1.36*	*30*
Surr: 4-Bromofluorobenzene	*14630*	0	*15680*	0	*93.4*	*70-130*	15660	*6.74*	*30*
Surr: Dibromofluoromethane	*15110*	0	*15680*	0	*96.4*	*70-130*	15750	*4.15*	*30*
Surr: Toluene-d8	*14290*	0	*15680*	0	*91.2*	*70-130*	14590	*2.11*	*30*

The following samples were analyzed in this batch:

19041641-01A	19041641-02A	19041641-03A
19041641-04A	19041641-05A	19041641-06A
19041641-07A	19041641-08A	19041641-09A
19041641-10A	19041641-11A	19041641-12A
19041641-13A	19041641-14A	19041641-15A
19041641-16A	19041641-17A	19041641-18A
19041641-19A	19041641-20A	19041641-23A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Sigma Group
Work Order: 19041641
Project: 16366

QC BATCH REPORT

Batch ID: **R259547** Instrument ID **MOIST** Method: **SW3550C**

MBLK Sample ID: **WBLKS-R259547** Units: **% of sample** Analysis Date: **4/30/2019 12:10 PM**
Client ID: Run ID: **MOIST_190430A** SeqNo: **5634128** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	U	0.10								

LCS Sample ID: **LCS-R259547** Units: **% of sample** Analysis Date: **4/30/2019 12:10 PM**
Client ID: Run ID: **MOIST_190430A** SeqNo: **5634127** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	100	0.10	100	0	100	98-102	0			

DUP Sample ID: **19041641-01B DUP** Units: **% of sample** Analysis Date: **4/30/2019 12:10 PM**
Client ID: **EXC-1-SWN (2')** Run ID: **MOIST_190430A** SeqNo: **5634106** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	23.25	0.10	0	0	0	0-0	23.59	1.45	10	

DUP Sample ID: **19041641-17B DUP** Units: **% of sample** Analysis Date: **4/30/2019 12:10 PM**
Client ID: **EXC-4-SWS (3')** Run ID: **MOIST_190430A** SeqNo: **5634123** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	16.17	0.10	0	0	0	0-0	16.23	0.37	10	

The following samples were analyzed in this batch:

19041641-01B	19041641-02B	19041641-03B
19041641-04B	19041641-05B	19041641-06B
19041641-07B	19041641-08B	19041641-09B
19041641-10B	19041641-11B	19041641-12B
19041641-13B	19041641-14B	19041641-15B
19041641-16B	19041641-17B	19041641-18B
19041641-19B	19041641-20B	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Sigma Group
Work Order: 19041641
Project: 16366

QC BATCH REPORT

Batch ID: **R259548** Instrument ID **MOIST** Method: **SW3550C**

MBLK Sample ID: **WBLKS-R259548** Units: **% of sample** Analysis Date: **4/30/2019 01:28 PM**
Client ID: Run ID: **MOIST_190430B** SeqNo: **5634153** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	U	0.10								

LCS Sample ID: **LCS-R259548** Units: **% of sample** Analysis Date: **4/30/2019 01:28 PM**
Client ID: Run ID: **MOIST_190430B** SeqNo: **5634152** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	100	0.10	100	0	100	98-102	0			

DUP Sample ID: **19041642-01B DUP** Units: **% of sample** Analysis Date: **4/30/2019 01:28 PM**
Client ID: Run ID: **MOIST_190430B** SeqNo: **5634135** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	6.58	0.10	0	0	0	0-0	6.66	1.21	10	

DUP Sample ID: **19041642-02B DUP** Units: **% of sample** Analysis Date: **4/30/2019 01:28 PM**
Client ID: Run ID: **MOIST_190430B** SeqNo: **5634137** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	7.67	0.10	0	0	0	0-0	7.71	0.52	10	

The following samples were analyzed in this batch:

19041641-21B	19041641-22B	19041641-23B
19041641-24B		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

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Chain of Custody Form

Page 1 of 2

COC ID: 44241

ALS Project Manager: | ALS Work Order #: 19041641

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name		A	PCBs
Work Order		Project Number	16366	B	VOCs
Company Name	same	Bill To Company	Sigma	C	
Send Report To		Invoice Attn	Steve Meer	D	
Address		Address	1300 W. Canal St.	E	
				F	
City/State/Zip		City/State/Zip	Milwaukee, WI 53233	G	
Phone		Phone	414 643 4200	H	
Fax		Fax		I	
e-Mail Address		e-Mail Address	smeer@thesigmagroup.com	J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	EXC-1-SWN (2')	~~4-24~~ 4-23		Soil	MeOH/nan	4	X	X									
2	EXC-1-SWE (2')						X	X									
3	EXC-1-SWS (2')						X	X									
4	EXC-1-SWW (2')						X	X									
5	EXC-1-BASE (4')						X	X									
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign: Jacob Krause

Shipment Method: FedEx

Turnaround Time in Business Days (BD): ☐ 10 BD ☐ 5 BD Standard TAT ☐ 3 BD ☐ 2 BD ☐ 1 BD ☐ Other

Results Due Date:

Relinquished by: Jacob Krause	Date: 4-24	Time: 5pm	Received by: FEDEX
Relinquished by: FEDEX	Date: 4/25/19	Time: 1000	Received by (Laboratory):
Logged by (Laboratory): KW	Date: 4/25/19	Time: 1250	Checked by (Laboratory):

Notes: Standard Rates Please!

Cooler ID	Cooler Temp
SEL	3.4°C

QC Package: (Check One Box Below)
☐ Level II Std QC ☐ TRRP Checklist
☐ Level III Std QC/Raw Date ☐ TRRP Level IV
☐ Level IV SW846/CLP
☐ Other

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

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Spring City, PA +1 610 948 4903
Salt Lake City, UT +1 801 266 7700
South Charleston, WV +1 304 356 3168
York, PA +1 717 505 5280

Chain of Custody Form

COC ID: 44242

ALS Project Manager: | ALS Work Order #: 19041641

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name		A	PVOC + Naphthalene (PECFA rates!!!)
Work Order		Project Number	16366	B	
Company Name	Same	Bill To Company	Sigma	C	
Send Report To	Same	Invoice Attn	Steve Meer	D	
Address	Same	Address	1300 W. Canal St	E	
				F	
City/State/Zip	Same	City/State/Zip	Milwaukee, WI 53233	G	
Phone	Same	Phone	414 643 4200	H	
Fax		Fax		I	
e-Mail Address	Same	e-Mail Address	smeer@thesigmagroup.com	J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	EXC-2-SWN (2')	4-24		Soil	MeOH	3	X										
2	EXC-2-SWE (2')						X										
3	EXC-2-SWS (2')						X										
4	EXC-2-SWW (2')						X										
5	EXC-3-SWN (2')						X										
6	EXC-3-SWE (2')						X										
7	EXC-3-SWS (2')						X										
8	EXC-3-SWW (2')						X										
9	EXC-3-BASE (4')						X										
10	EXC-4-SWN (3')	4/24					X										

Sampler(s) Please Print & Sign: Jacob Krause

Shipment Method: Fedex

Turnaround Time in Business Days (BD): ☐ 10 BD ☐ 5 BD ☐ 3 BD ☐ 2 BD ☐ 1 BD ☐ Other Standard TAT

Results Due Date:

Relinquished by:	Date:	Time:	Received by:
Jacob Krause	4.24	5pm	FEDEX
Relinquished by: FEDEX	Date: 4/25/19	Time: 1000	Received by (Laboratory):
Logged by (Laboratory): KEV	Date: 4/25/19	Time: 1250	Checked by (Laboratory):

Notes: PECFA rates please

Cooler ID	Cooler Temp
SIL	3.4°C

QC Package: (Check One Box Below)
☐ Level II Std QC ☐ TRRP Checklist
☐ Level III Std QC/Raw Date ☐ TRRP Level IV
☐ Level IV SW846/CLP
☐ Other

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

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York, PA +1 717 505 5280

Chain of Custody Form

Page 3 of 3

COC ID: 44243

ALS Project Manager: | ALS Work Order #: 19041641

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name		A	PVOC + Naphthalene (PECFA rates!)
Work Order		Project Number	11366	B	
Company Name	same	Bill To Company	Sigma	C	
Send Report To		Invoice Attn	Steve Meer	D	
Address		Address	1300 W. Canal St.	E	
				F	
City/State/Zip		City/State/Zip	Milwaukee, WI 5323	G	
Phone		Phone	414 643 4200	H	
Fax		Fax		I	
e-Mail Address		e-Mail Address	smeer@thesigmagroup.com	J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	EXC-4-SWE (3')	4/24		Soil	MeOH/NaHSO4	3	X										
2	EXC-4-SWS (3')						X										
3	EXC-4-SWW (3')						X										
4	EXC-4-BASE (6')						X										
5	EXC-5-SWN (2')						X										
6	EXC-5-SWE (2')						X										
7	EXC-5-SWS (2')						X										
8	EXC-5-SWW (2')						X										
9	EXC-5-BASE (4')						X										
10																	

Sampler(s) Please Print & Sign: Jacob Krause

Shipment Method: Fedex

Turnaround Time in Business Days (BD): ☐ 10 BD ☐ 5 BD ☐ 3 BD ☐ 2 BD ☐ 1 BD ☐ Other

Results Due Date:

Relinquished by:	Date:	Time:	Received by:
Jacob Krause	4-24	5pm	FEDEX
Relinquished by: FEDEX	Date: 4/25/19	Time: 1000	Received by (Laboratory):
Logged by (Laboratory): KR	Date: 4/25/19	Time: 1250	Checked by (Laboratory):

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Notes: PECFA rates please !!!

Cooler ID	Cooler Temp
SR2	3.4°C

QC Package: (Check One Box Below)
☐ Level II Std QC ☐ TRRP Checklist
☐ Level III Std QC/Raw Date ☐ TRRP Level IV
☐ Level IV SW846/CLP
☐ Other

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
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Salt Lake City, UT +1 801 266 7700
York, PA +1 717 505 5280

Chain of Custody Form

Page 3 of 3

COC ID: 44243

ALS Project Manager:

ALS Work Order #: 1904164

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name		A	PVOC + Naphthalene (PECFA rules)
Work Order		Project Number	11366	B	
Company Name	Same	Bill To Company	Sigma	C	
Send Report To		Invoice Attn	Steve Meer	D	
Address		Address	1300 W. Canal St.	E	
				F	
City/State/Zip		City/State/Zip	Milwaukee, WI 5323	G	
Phone		Phone	414 643 4200	H	
Fax		Fax		I	
e-Mail Address		e-Mail Address	smeer@thesigmagroup.com	J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	EXC-4-SWE (3')	4/24		Soil	Methanol	3	X										
2	EXC-4-SWS (3')		1300				X										
3	EXC-4-SWW (3')						X										
4	EXC-4-BASE (6')						X										
5	EXC-5-SWN (2')						X										
6	EXC-5-SWE (2')						X										
7	EXC-5-SWS (2')						X										
8	EXC-5-SWW (2')						X										
9	EXC-5-BASE (4')						X										
10																	

Sampler(s) Please Print & Sign: Jacob Krause

Shipment Method: FedEx

Turnaround Time in Business Days (BD): ☐ 10 BD ☐ 5 BD ☐ 3 BD ☐ 2 BD ☐ 1 BD ☐ Other

Results Due Date:

Relinquished by: Jacob Krause	Date: 4-24	Time: 5pm	Received by: FedEx	
Relinquished by: FedEx	Date: 4/25/19	Time: 1000	Received by (Laboratory):	
Logged by (Laboratory): KB	Date: 4/25/19	Time: 1250	Checked by (Laboratory):	

Notes: PECFA rules please !!!

Cooler ID	Cooler Temp
SR2	3.4°C

QC Package: (Check One Box Below)
☐ Level II Std QC ☐ TRRP Checklist
☐ Level III Std QC/Raw Date ☐ TRRP Level IV
☐ Level IV SW846/CLP
☐ Other

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note:
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ALS Group, USA

Sample Receipt Checklist

Client Name: **SIGMAGROUP** Date/Time Received: **25-Apr-19 10:00**

Work Order: **19041641** Received by: **KRW**

Checklist completed by Keith Wierenga (eSignature) 25-Apr-19 (Date) Reviewed by: Chad Whelton (eSignature) 25-Apr-19 (Date)

Matrices: Soil

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Sample(s) received on ice?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	3.4/3.4 C	SR2	
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	4/25/2019 1:01:10 PM		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:	-		

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

14-May-2019

Stephen Meer
The Sigma Group
1300 W. Canal Street
Milwaukee, WI 53233

Re: **16366** Work Order: **19050434**

Dear Stephen,

ALS Environmental received 1 sample on 07-May-2019 09:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental - Holland and for only the analyses requested.

Sample results are compliant with industry accepted practices and Quality Control results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 17.

If you have any questions regarding this report, please feel free to contact me:

ADDRESS: 3352 128th Avenue, Holland, MI, USA
PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Sincerely,

Electronically approved by: Chad Whelton

Chad Whelton
Project Manager

Report of Laboratory Analysis

ALS Group, USA

Date: 14-May-19

Client: The Sigma Group
Project: 16366
Work Order: **19050434**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
19050434-01	14-EXC-BASE	Soil		5/6/2019 10:15	5/7/2019 09:00	☐

ALS Group, USA

Date: 14-May-19

Client: The Sigma Group
Project: 16366
Work Order: 19050434

Case Narrative

Samples for the above noted Work Order were received on 05/07/2019. The attached "Sample Receipt Checklist" documents the status of custody seals, container integrity, sample condition, preservation, and temperature compliance.
In order to ensure compliance with NR 149 criteria, please note the following report format:
(1) The Limit of Detection (LOD) is reported as the MDL (Method Detection Limit)
(2) The Limit of Quantitation (LOQ) is reported as the PQL (Practical Quantitation Limit)
(3) All reported concentrations, including those for the LOD and LOQ, are adjusted for any required dilutions
(4) All reported concentrations, including those for the LOD and LOQ, are adjusted for moisture content when samples are reported on a dry weight basis.

Samples were analyzed according to the analytical methodology previously documented in the "Work Order Acknowledgement". Methodologies are also documented in the "Analytical Result" section for each sample. Quality control results are listed in the "QC Report" section. Detail as to the associated samples can be found at the end of each batch summary. If applicable, results are appropriately qualified in the Analytical Result and QC Report sections. The "Qualifiers" section documents the various qualifiers, acronyms, and units utilized in reporting.

With the following exceptions, all sample analyses achieved analytical criteria.

Volatile Organics

Batch 135670, Method VOC_8260_S, Sample LCS-135670: The LCS recovery was below the lower control limit for Ethyl Acetate. The sample results for this batch may be biased low.

Wet Chemistry
No deviations or anomalies noted

ALS Group, USA

Date: 14-May-19

Client: The Sigma Group
Project: 16366
WorkOrder: **19050434**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
**	Estimated Value
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
Hr	BOD/CBOD - Sample was reset outside Hold Time, value should be considered estimated.
J	Analyte is present at an estimated concentration between the MDL and Report Limit
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

Acronym	Description
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

Units Reported	Description
% of sample	Percent of Sample
µg/Kg-dry	Micrograms per Kilogram Dry Weight

ALS Group, USA

Date: *14-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: 14-EXC-BASE
Collection Date: 5/6/2019 10:15 AM

Work Order: 19050434
Lab ID: 19050434-01
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 5/7/19		Analyst: **WH**
1,1,1,2-Tetrachloroethane	U		26	50	µg/Kg-dry	1	5/9/2019 02:15
1,1,1-Trichloroethane	**1,300**		**23**	**50**	**µg/Kg-dry**	1	5/9/2019 02:15
1,1,2,2-Tetrachloroethane	U		22	50	µg/Kg-dry	1	5/9/2019 02:15
1,1,2-Trichloroethane	U		21	50	µg/Kg-dry	1	5/9/2019 02:15
1,1,2-Trichlorotrifluoroethane	U		32	50	µg/Kg-dry	1	5/9/2019 02:15
1,1-Dichloroethane	**230**		**18**	**50**	**µg/Kg-dry**	1	5/9/2019 02:15
1,1-Dichloroethene	U		16	50	µg/Kg-dry	1	5/9/2019 02:15
1,2,3-Trichlorobenzene	U		60	50	µg/Kg-dry	1	5/9/2019 02:15
1,2,4-Trichlorobenzene	U		57	170	µg/Kg-dry	1	5/9/2019 02:15
1,2,4-Trimethylbenzene	U		37	50	µg/Kg-dry	1	5/9/2019 02:15
1,2-Dibromo-3-chloropropane	U		46	170	µg/Kg-dry	1	5/9/2019 02:15
1,2-Dibromoethane	U		14	50	µg/Kg-dry	1	5/9/2019 02:15
1,2-Dichlorobenzene	U		19	50	µg/Kg-dry	1	5/9/2019 02:15
1,2-Dichloroethane	U		75	170	µg/Kg-dry	1	5/9/2019 02:15
1,2-Dichloropropane	U		37	50	µg/Kg-dry	1	5/9/2019 02:15
1,3,5-Trimethylbenzene	U		58	170	µg/Kg-dry	1	5/9/2019 02:15
1,3-Dichlorobenzene	U		17	50	µg/Kg-dry	1	5/9/2019 02:15
1,3-Dichloropropane	U		14	50	µg/Kg-dry	1	5/9/2019 02:15
1,4-Dichlorobenzene	U		12	50	µg/Kg-dry	1	5/9/2019 02:15
2,2-Dichloropropane	U		53	170	µg/Kg-dry	1	5/9/2019 02:15
2-Butanone	U		41	330	µg/Kg-dry	1	5/9/2019 02:15
2-Chlorotoluene	U		18	50	µg/Kg-dry	1	5/9/2019 02:15
2-Hexanone	U		25	50	µg/Kg-dry	1	5/9/2019 02:15
4-Chlorotoluene	U		12	50	µg/Kg-dry	1	5/9/2019 02:15
4-Methyl-2-pentanone	U		47	50	µg/Kg-dry	1	5/9/2019 02:15
Acetone	U		150	170	µg/Kg-dry	1	5/9/2019 02:15
Benzene	U		8.6	50	µg/Kg-dry	1	5/9/2019 02:15
Bromobenzene	U		20	50	µg/Kg-dry	1	5/9/2019 02:15
Bromochloromethane	U		25	50	µg/Kg-dry	1	5/9/2019 02:15
Bromodichloromethane	U		28	50	µg/Kg-dry	1	5/9/2019 02:15
Bromoform	U		21	50	µg/Kg-dry	1	5/9/2019 02:15
Bromomethane	U		96	170	µg/Kg-dry	1	5/9/2019 02:15
Carbon disulfide	U		26	50	µg/Kg-dry	1	5/9/2019 02:15
Carbon tetrachloride	U		20	50	µg/Kg-dry	1	5/9/2019 02:15
Chlorobenzene	U		17	50	µg/Kg-dry	1	5/9/2019 02:15
Chloroethane	U		49	170	µg/Kg-dry	1	5/9/2019 02:15
Chloroform	U		18	50	µg/Kg-dry	1	5/9/2019 02:15
Chloromethane	U		140	170	µg/Kg-dry	1	5/9/2019 02:15

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *14-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: 14-EXC-BASE
Collection Date: 5/6/2019 10:15 AM

Work Order: 19050434
Lab ID: 19050434-01
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
cis-1,2-Dichloroethene	**4,300**		**16**	**50**	**µg/Kg-dry**	1	5/9/2019 02:15
cis-1,3-Dichloropropene	U		38	50	µg/Kg-dry	1	5/9/2019 02:15
Cyclohexane	U		16	170	µg/Kg-dry	1	5/9/2019 02:15
Dibromochloromethane	U		28	50	µg/Kg-dry	1	5/9/2019 02:15
Dichlorodifluoromethane	U		61	170	µg/Kg-dry	1	5/9/2019 02:15
Diisopropyl ether	U		9.4	50	µg/Kg-dry	1	5/9/2019 02:15
Ethyl acetate	U		18	170	µg/Kg-dry	1	5/9/2019 02:15
Ethylbenzene	U		11	50	µg/Kg-dry	1	5/9/2019 02:15
Hexachlorobutadiene	U		45	170	µg/Kg-dry	1	5/9/2019 02:15
Isopropylbenzene	U		15	50	µg/Kg-dry	1	5/9/2019 02:15
m,p-Xylene	U		67	100	µg/Kg-dry	1	5/9/2019 02:15
Methyl acetate	U		60	420	µg/Kg-dry	1	5/9/2019 02:15
Methyl tert-butyl ether	U		14	50	µg/Kg-dry	1	5/9/2019 02:15
Methylcyclohexane	U		19	50	µg/Kg-dry	1	5/9/2019 02:15
Methylene chloride	U		130	420	µg/Kg-dry	1	5/9/2019 02:15
Naphthalene	U		120	170	µg/Kg-dry	1	5/9/2019 02:15
n-Butylbenzene	U		37	50	µg/Kg-dry	1	5/9/2019 02:15
n-Propylbenzene	U		38	50	µg/Kg-dry	1	5/9/2019 02:15
o-Xylene	**47**	J	**19**	**50**	**µg/Kg-dry**	1	5/9/2019 02:15
p-Isopropyltoluene	U		42	170	µg/Kg-dry	1	5/9/2019 02:15
sec-Butylbenzene	U		20	50	µg/Kg-dry	1	5/9/2019 02:15
Styrene	U		20	50	µg/Kg-dry	1	5/9/2019 02:15
tert-Butylbenzene	U		16	50	µg/Kg-dry	1	5/9/2019 02:15
Tetrachloroethene	U		15	50	µg/Kg-dry	1	5/9/2019 02:15
Toluene	**59**		**14**	**50**	**µg/Kg-dry**	1	5/9/2019 02:15
trans-1,2-Dichloroethene	**330**		**18**	**50**	**µg/Kg-dry**	1	5/9/2019 02:15
trans-1,3-Dichloropropene	U		28	50	µg/Kg-dry	1	5/9/2019 02:15
Trichloroethene	**260**		**22**	**50**	**µg/Kg-dry**	1	5/9/2019 02:15
Trichlorofluoromethane	U		26	50	µg/Kg-dry	1	5/9/2019 02:15
Vinyl chloride	**160**		**33**	**50**	**µg/Kg-dry**	1	5/9/2019 02:15
Xylenes, Total	U		67	150	µg/Kg-dry	1	5/9/2019 02:15
Surr: 1,2-Dichloroethane-d4	*101*			*70-130*	*%REC*	1	5/9/2019 02:15
Surr: 4-Bromofluorobenzene	*94.2*			*70-130*	*%REC*	1	5/9/2019 02:15
Surr: Dibromofluoromethane	*97.2*			*70-130*	*%REC*	1	5/9/2019 02:15
Surr: Toluene-d8	*98.0*			*70-130*	*%REC*	1	5/9/2019 02:15
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**14**		**0.10**	**0.10**	**% of sample**	1	5/7/2019 16:01

Note: See Qualifiers page for a list of qualifiers and their definitions.

Batch ID: **135670** Instrument ID **VMS9** Method: **SW8260C**

MBLK Sample ID: **MBLK-135670-135670** Units: **µg/Kg-dry** Analysis Date: **5/7/2019 11:46 PM**

Client ID: Run ID: **VMS9_190507B** SeqNo: **5647149** Prep Date: **5/7/2019** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	U	30								
1,1,1-Trichloroethane	U	30								
1,1,2,2-Tetrachloroethane	U	30								
1,1,2-Trichloroethane	U	30								
1,1,2-Trichlorotrifluoroethane	U	30								
1,1-Dichloroethane	U	30								
1,1-Dichloroethene	U	30								
1,2,3-Trichlorobenzene	U	30								
1,2,4-Trichlorobenzene	U	100								
1,2,4-Trimethylbenzene	U	30								
1,2-Dibromo-3-chloropropane	U	100								
1,2-Dibromoethane	U	30								
1,2-Dichlorobenzene	U	30								
1,2-Dichloroethane	U	100								
1,2-Dichloropropane	U	30								
1,3,5-Trimethylbenzene	U	100								
1,3-Dichlorobenzene	U	30								
1,3-Dichloropropane	U	30								
1,4-Dichlorobenzene	U	30								
2,2-Dichloropropane	U	100								
2-Butanone	U	200								
2-Chlorotoluene	U	30								
2-Hexanone	U	30								
4-Chlorotoluene	U	30								
4-Methyl-2-pentanone	U	30								
Acetone	U	100								
Benzene	U	30								
Bromobenzene	U	30								
Bromochloromethane	U	30								
Bromodichloromethane	U	30								
Bromoform	U	30								
Bromomethane	U	100								
Carbon disulfide	U	30								
Carbon tetrachloride	U	30								
Chlorobenzene	U	30								
Chloroethane	U	100								
Chloroform	U	30								
Chloromethane	U	100								
cis-1,2-Dichloroethene	U	30								
cis-1,3-Dichloropropene	U	30								
Cyclohexane	U	100								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **135670** Instrument ID **VMS9** Method: **SW8260C**

Dibromochloromethane	U	30						
Dichlorodifluoromethane	U	100						
Diisopropyl ether	U	30						
Ethyl acetate	U	100						
Ethylbenzene	U	30						
Hexachlorobutadiene	U	100						
Isopropylbenzene	U	30						
m,p-Xylene	U	60						
Methyl acetate	U	250						
Methyl tert-butyl ether	U	30						
Methylcyclohexane	U	30						
Methylene chloride	U	250						
Naphthalene	U	100						
n-Butylbenzene	U	30						
n-Propylbenzene	U	30						
o-Xylene	U	30						
p-Isopropyltoluene	U	100						
sec-Butylbenzene	12.5	30						J
Styrene	U	30						
tert-Butylbenzene	U	30						
Tetrachloroethene	U	30						
Toluene	U	30						
trans-1,2-Dichloroethene	U	30						
trans-1,3-Dichloropropene	U	30						
Trichloroethene	U	30						
Trichlorofluoromethane	U	30						
Vinyl chloride	U	30						
Xylenes, Total	U	90						
Surr: 1,2-Dichloroethane-d4	*984*	0	*1000*	0	*98.4*	*70-130*	0	
Surr: 4-Bromofluorobenzene	*916*	0	*1000*	0	*91.6*	*70-130*	0	
Surr: Dibromofluoromethane	*919.5*	0	*1000*	0	*92*	*70-130*	0	
Surr: Toluene-d8	*1002*	0	*1000*	0	*100*	*70-130*	0	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Sigma Group
Work Order: 19050434
Project: 16366

QC BATCH REPORT

Batch ID: **135670** Instrument ID **VMS9** Method: **SW8260C**

LCS Sample ID: **LCS-135670-135670** Units: **µg/Kg-dry** Analysis Date: **5/7/2019 11:00 PM**
Client ID: Run ID: **VMS9_190507B** SeqNo: **5647148** Prep Date: **5/7/2019** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	854.5	30	1000	0	85.4	75-125	0			
1,1,1-Trichloroethane	1006	30	1000	0	101	70-135	0			
1,1,2,2-Tetrachloroethane	948	30	1000	0	94.8	55-130	0			
1,1,2-Trichloroethane	936.5	30	1000	0	93.6	60-125	0			
1,1-Dichloroethane	939	30	1000	0	93.9	75-125	0			
1,1-Dichloroethene	1020	30	1000	0	102	76-148	0			
1,2,3-Trichlorobenzene	936.5	30	1000	0	93.6	60-135	0			
1,2,4-Trichlorobenzene	955	100	1000	0	95.5	65-130	0			
1,2,4-Trimethylbenzene	871	30	1000	0	87.1	65-135	0			
1,2-Dibromo-3-chloropropane	849	100	1000	0	84.9	40-135	0			
1,2-Dibromoethane	867	30	1000	0	86.7	80-195	0			
1,2-Dichlorobenzene	979	30	1000	0	97.9	75-120	0			
1,2-Dichloroethane	933	100	1000	0	93.3	70-135	0			
1,2-Dichloropropane	965	30	1000	0	96.5	70-120	0			
1,3,5-Trimethylbenzene	952	100	1000	0	95.2	65-135	0			
1,3-Dichlorobenzene	961	30	1000	0	96.1	70-125	0			
1,3-Dichloropropane	935	30	1000	0	93.5	75-125	0			
1,4-Dichlorobenzene	983.5	30	1000	0	98.4	70-125	0			
2,2-Dichloropropane	856	100	1000	0	85.6	54-146	0			
2-Butanone	921.5	200	1000	0	92.2	30-160	0			
2-Chlorotoluene	919.5	30	1000	0	92	70-130	0			
2-Hexanone	857	30	1000	0	85.7	45-145	0			
4-Chlorotoluene	912	30	1000	0	91.2	75-125	0			
4-Methyl-2-pentanone	1336	30	1000	0	134	74-176	0			
Acetone	971.5	100	1000	0	97.2	20-160	0			
Benzene	987	30	1000	0	98.7	75-125	0			
Bromobenzene	902	30	1000	0	90.2	65-120	0			
Bromochloromethane	950.5	30	1000	0	95	74-134	0			
Bromodichloromethane	931	30	1000	0	93.1	70-130	0			
Bromoform	796	30	1000	0	79.6	55-135	0			
Bromomethane	1604	100	1000	0	160	50-170	0			
Carbon disulfide	1102	30	1000	0	110	45-160	0			
Carbon tetrachloride	848	30	1000	0	84.8	65-135	0			
Chlorobenzene	913	30	1000	0	91.3	75-125	0			
Chloroethane	824.5	100	1000	0	82.4	40-155	0			
Chloroform	889.5	30	1000	0	89	70-125	0			
Chloromethane	674.5	100	1000	0	67.4	50-144	0			
cis-1,2-Dichloroethene	943	30	1000	0	94.3	65-125	0			
cis-1,3-Dichloropropene	939.5	30	1000	0	94	70-125	0			
Dibromochloromethane	787	30	1000	0	78.7	65-135	0			
Dichlorodifluoromethane	680	100	1000	0	68	35-135	0			
Diisopropyl ether	898	30	1000	0	89.8	70-130	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **135670** Instrument ID **VMS9** Method: **SW8260C**

Ethyl acetate	691	100	1000	0	69.1	70-130	0	S
Ethylbenzene	947	30	1000	0	94.7	75-125	0	
Hexachlorobutadiene	970.5	100	1000	0	97	55-140	0	
Isopropylbenzene	928.5	30	1000	0	92.8	75-130	0	
m,p-Xylene	1878	60	2000	0	93.9	80-125	0	
Methyl tert-butyl ether	1055	30	1000	0	106	75-125	0	
Methylene chloride	894.5	250	1000	0	89.4	55-145	0	
Naphthalene	900	100	1000	0	90	40-140	0	
n-Butylbenzene	993.5	30	1000	0	99.4	65-140	0	
n-Propylbenzene	964	30	1000	0	96.4	65-135	0	
o-Xylene	928.5	30	1000	0	92.8	75-125	0	
p-Isopropyltoluene	1111	100	1000	0	111	71-157	0	
sec-Butylbenzene	946	30	1000	0	94.6	65-130	0	
Styrene	930.5	30	1000	0	93	80-138	0	
tert-Butylbenzene	993	30	1000	0	99.3	65-130	0	
Tetrachloroethene	1016	30	1000	0	102	67-167	0	
Toluene	958.5	30	1000	0	95.8	70-125	0	
trans-1,2-Dichloroethene	934.5	30	1000	0	93.4	65-135	0	
trans-1,3-Dichloropropene	835	30	1000	0	83.5	59-129	0	
Trichloroethene	960.5	30	1000	0	96	75-125	0	
Trichlorofluoromethane	836	30	1000	0	83.6	25-185	0	
Vinyl chloride	873.5	30	1000	0	87.4	60-125	0	
Xylenes, Total	2806	90	3000	0	93.5	75-125	0	
Surr: 1,2-Dichloroethane-d4	*939.5*	0	*1000*	0	*94*	*70-130*	0	
Surr: 4-Bromofluorobenzene	*926*	0	*1000*	0	*92.6*	*70-130*	0	
Surr: Dibromofluoromethane	*1004*	0	*1000*	0	*100*	*70-130*	0	
Surr: Toluene-d8	*1006*	0	*1000*	0	*101*	*70-130*	0	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Sigma Group
Work Order: 19050434
Project: 16366

QC BATCH REPORT

Batch ID: **135670** Instrument ID **VMS9** Method: **SW8260C**

MS Sample ID: **19050448-04A MS** Units: **µg/Kg-dry** Analysis Date: **5/8/2019 05:41 AM**

Client ID: Run ID: **VMS9_190507B** SeqNo: **5647167** Prep Date: **5/7/2019** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	712	30	1000	0	71.2	75-125	0			S
1,1,1-Trichloroethane	780.5	30	1000	0	78	70-135	0			
1,1,2,2-Tetrachloroethane	740.5	30	1000	0	74	55-130	0			
1,1,2-Trichloroethane	846	30	1000	0	84.6	60-125	0			
1,1-Dichloroethane	689.5	30	1000	0	69	75-125	0			S
1,1-Dichloroethene	877.5	30	1000	0	87.8	76-148	0			
1,2,3-Trichlorobenzene	780	30	1000	0	78	60-135	0			
1,2,4-Trichlorobenzene	822.5	100	1000	0	82.2	65-130	0			
1,2,4-Trimethylbenzene	754.5	30	1000	0	75.4	65-135	0			
1,2-Dibromo-3-chloropropane	664	100	1000	0	66.4	40-135	0			
1,2-Dibromoethane	760	30	1000	0	76	80-195	0			S
1,2-Dichlorobenzene	819.5	30	1000	0	82	75-120	0			
1,2-Dichloroethane	791	100	1000	0	79.1	70-135	0			
1,2-Dichloropropane	783.5	30	1000	0	78.4	70-120	0			
1,3,5-Trimethylbenzene	815	100	1000	0	81.5	65-135	0			
1,3-Dichlorobenzene	822	30	1000	0	82.2	70-125	0			
1,3-Dichloropropane	792.5	30	1000	0	79.2	75-125	0			
1,4-Dichlorobenzene	826	30	1000	0	82.6	70-125	0			
2,2-Dichloropropane	589	100	1000	0	58.9	54-146	0			
2-Butanone	546	200	1000	0	54.6	30-160	0			
2-Chlorotoluene	801	30	1000	0	80.1	70-130	0			
2-Hexanone	728.5	30	1000	0	72.8	45-145	0			
4-Chlorotoluene	794	30	1000	0	79.4	75-125	0			
4-Methyl-2-pentanone	984.5	30	1000	0	98.4	74-176	0			
Acetone	841.5	100	1000	0	84.2	20-160	0			
Benzene	785	30	1000	0	78.5	75-125	0			
Bromobenzene	803.5	30	1000	0	80.4	65-120	0			
Bromochloromethane	867.5	30	1000	0	86.8	74-134	0			
Bromodichloromethane	742.5	30	1000	0	74.2	70-130	0			
Bromoform	651	30	1000	0	65.1	55-135	0			
Bromomethane	1006	100	1000	0	101	50-170	0			
Carbon disulfide	834.5	30	1000	0	83.4	45-160	0			
Carbon tetrachloride	647	30	1000	0	64.7	65-135	0			S
Chlorobenzene	805	30	1000	0	80.5	75-125	0			
Chloroethane	338.5	100	1000	0	33.8	40-155	0			S
Chloroform	749.5	30	1000	0	75	70-125	0			
Chloromethane	518	100	1000	0	51.8	50-144	0			
cis-1,2-Dichloroethene	909	30	1000	0	90.9	65-125	0			
cis-1,3-Dichloropropene	754.5	30	1000	0	75.4	70-125	0			
Dibromochloromethane	614	30	1000	0	61.4	65-135	0			S
Dichlorodifluoromethane	600	100	1000	0	60	35-135	0			
Diisopropyl ether	759	30	1000	0	75.9	70-130	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **135670** Instrument ID **VMS9** Method: **SW8260C**

Ethyl acetate	839	100	1000	0	83.9	70-130	0	
Ethylbenzene	788	30	1000	0	78.8	75-125	0	
Hexachlorobutadiene	881.5	100	1000	0	88.2	55-140	0	
Isopropylbenzene	799	30	1000	0	79.9	75-130	0	
m,p-Xylene	1595	60	2000	0	79.8	80-125	0	S
Methyl tert-butyl ether	883.5	30	1000	0	88.4	75-125	0	
Methylene chloride	744.5	250	1000	0	74.4	55-145	0	
Naphthalene	800	100	1000	0	80	40-140	0	
n-Butylbenzene	852.5	30	1000	0	85.2	65-140	0	
n-Propylbenzene	804	30	1000	0	80.4	65-135	0	
o-Xylene	793	30	1000	0	79.3	75-125	0	
p-Isopropyltoluene	795.5	100	1000	0	79.6	71-157	0	
sec-Butylbenzene	801	30	1000	0	80.1	65-130	0	
Styrene	784	30	1000	0	78.4	80-138	0	S
tert-Butylbenzene	850	30	1000	0	85	65-130	0	
Tetrachloroethene	1464	30	1000	0	146	67-167	0	
Toluene	766	30	1000	0	76.6	70-125	0	
trans-1,2-Dichloroethene	799.5	30	1000	0	80	65-135	0	
trans-1,3-Dichloropropene	704.5	30	1000	0	70.4	59-129	0	
Trichloroethene	842.5	30	1000	0	84.2	75-125	0	
Trichlorofluoromethane	694	30	1000	0	69.4	25-185	0	
Vinyl chloride	794.5	30	1000	0	79.4	60-125	0	
Xylenes, Total	2388	90	3000	0	79.6	75-125	0	
Surr: 1,2-Dichloroethane-d4	*987.5*	0	*1000*	0	*98.8*	*70-130*	0	
Surr: 4-Bromofluorobenzene	*996*	0	*1000*	0	*99.6*	*70-130*	0	
Surr: Dibromofluoromethane	*958*	0	*1000*	0	*95.8*	*70-130*	0	
Surr: Toluene-d8	*938.5*	0	*1000*	0	*93.8*	*70-130*	0	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Sigma Group
Work Order: 19050434
Project: 16366

QC BATCH REPORT

Batch ID: **135670** Instrument ID **VMS9** Method: **SW8260C**

MSD Sample ID: **19050448-04A MSD** Units: **µg/Kg-dry** Analysis Date: **5/8/2019 05:56 AM**
Client ID: Run ID: **VMS9_190507B** SeqNo: **5647169** Prep Date: **5/7/2019** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	819.9	30	995	0	82.4	75-125	712	14.1	30	
1,1,1-Trichloroethane	841.3	30	995	0	84.6	70-135	780.5	7.5	30	
1,1,2,2-Tetrachloroethane	827.9	30	995	0	83.2	55-130	740.5	11.1	30	
1,1,2-Trichloroethane	957.2	30	995	0	96.2	60-125	846	12.3	30	
1,1-Dichloroethane	776.1	30	995	0	78	75-125	689.5	11.8	30	
1,1-Dichloroethene	926.9	30	995	0	93.2	76-148	877.5	5.47	30	
1,2,3-Trichlorobenzene	854.7	30	995	0	85.9	60-135	780	9.14	30	
1,2,4-Trichlorobenzene	955.7	100	995	0	96	65-130	822.5	15	30	
1,2,4-Trimethylbenzene	877.1	30	995	0	88.2	65-135	754.5	15	30	
1,2-Dibromo-3-chloropropane	744.3	100	995	0	74.8	40-135	664	11.4	30	
1,2-Dibromoethane	871.1	30	995	0	87.6	80-195	760	13.6	30	
1,2-Dichlorobenzene	949.8	30	995	0	95.4	75-120	819.5	14.7	30	
1,2-Dichloroethane	904.5	100	995	0	90.9	70-135	791	13.4	30	
1,2-Dichloropropane	910	30	995	0	91.4	70-120	783.5	14.9	30	
1,3,5-Trimethylbenzene	936.3	100	995	0	94.1	65-135	815	13.9	30	
1,3-Dichlorobenzene	933.3	30	995	0	93.8	70-125	822	12.7	30	
1,3-Dichloropropane	955.7	30	995	0	96	75-125	792.5	18.7	30	
1,4-Dichlorobenzene	937.8	30	995	0	94.2	70-125	826	12.7	30	
2,2-Dichloropropane	628.9	100	995	0	63.2	54-146	589	6.55	30	
2-Butanone	951.7	200	995	0	95.6	30-160	546	54.2	30	R
2-Chlorotoluene	920.9	30	995	0	92.6	70-130	801	13.9	30	
2-Hexanone	998.5	30	995	0	100	45-145	728.5	31.3	30	R
4-Chlorotoluene	912.9	30	995	0	91.8	75-125	794	13.9	30	
4-Methyl-2-pentanone	1143	30	995	0	115	74-176	984.5	14.9	30	
Acetone	1344	100	995	0	135	20-160	841.5	46	30	R
Benzene	900	30	995	0	90.4	75-125	785	13.6	30	
Bromobenzene	876.1	30	995	0	88	65-120	803.5	8.65	30	
Bromochloromethane	958.7	30	995	0	96.4	74-134	867.5	9.99	30	
Bromodichloromethane	836.3	30	995	0	84	70-130	742.5	11.9	30	
Bromoform	779.6	30	995	0	78.4	55-135	651	18	30	
Bromomethane	1198	100	995	0	120	50-170	1006	17.5	30	
Carbon disulfide	876.1	30	995	0	88	45-160	834.5	4.87	30	
Carbon tetrachloride	711.4	30	995	0	71.5	65-135	647	9.49	30	
Chlorobenzene	888.1	30	995	0	89.2	75-125	805	9.81	30	
Chloroethane	348.8	100	995	0	35	40-155	338.5	2.98	30	S
Chloroform	859.7	30	995	0	86.4	70-125	749.5	13.7	30	
Chloromethane	575.6	100	995	0	57.8	50-144	518	10.5	30	
cis-1,2-Dichloroethene	1051	30	995	0	106	65-125	909	14.5	30	
cis-1,3-Dichloropropene	859.2	30	995	0	86.4	70-125	754.5	13	30	
Dibromochloromethane	690.5	30	995	0	69.4	65-135	614	11.7	30	
Dichlorodifluoromethane	645.3	100	995	0	64.8	35-135	600	7.27	30	
Diisopropyl ether	851.7	30	995	0	85.6	70-130	759	11.5	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Sigma Group
Work Order: 19050434
Project: 16366

QC BATCH REPORT

Batch ID: **135670** Instrument ID **VMS9** Method: **SW8260C**

Ethyl acetate	953.7	100	995	0	95.8	70-130	839	12.8	30
Ethylbenzene	912.4	30	995	0	91.7	75-125	788	14.6	30
Hexachlorobutadiene	1007	100	995	0	101	55-140	881.5	13.3	30
Isopropylbenzene	933.8	30	995	0	93.8	75-130	799	15.6	30
m,p-Xylene	1814	60	1990	0	91.2	80-125	1595	12.8	30
Methyl tert-butyl ether	1011	30	995	0	102	75-125	883.5	13.5	30
Methylene chloride	846.3	250	995	0	85	55-145	744.5	12.8	30
Naphthalene	889.1	100	995	0	89.4	40-140	800	10.5	30
n-Butylbenzene	979.6	30	995	0	98.4	65-140	852.5	13.9	30
n-Propylbenzene	931.8	30	995	0	93.6	65-135	804	14.7	30
o-Xylene	934.3	30	995	0	93.9	75-125	793	16.4	30
p-Isopropyltoluene	913.9	100	995	0	91.8	71-157	795.5	13.9	30
sec-Butylbenzene	910.4	30	995	0	91.5	65-130	801	12.8	30
Styrene	900	30	995	0	90.4	80-138	784	13.8	30
tert-Butylbenzene	988.6	30	995	0	99.4	65-130	850	15.1	30
Tetrachloroethene	1593	30	995	0	160	67-167	1464	8.44	30
Toluene	874.1	30	995	0	87.8	70-125	766	13.2	30
trans-1,2-Dichloroethene	893	30	995	0	89.8	65-135	799.5	11.1	30
trans-1,3-Dichloropropene	797	30	995	0	80.1	59-129	704.5	12.3	30
Trichloroethene	937.3	30	995	0	94.2	75-125	842.5	10.7	30
Trichlorofluoromethane	745.3	30	995	0	74.9	25-185	694	7.12	30
Vinyl chloride	840.8	30	995	0	84.5	60-125	794.5	5.66	30
Xylenes, Total	2748	90	2985	0	92.1	75-125	2388	14	30
Surr: 1,2-Dichloroethane-d4	*974.6*	0	*995*	0	*98*	*70-130*	987.5	*1.31*	*30*
Surr: 4-Bromofluorobenzene	*949.8*	0	*995*	0	*95.4*	*70-130*	996	*4.75*	*30*
Surr: Dibromofluoromethane	*939.8*	0	*995*	0	*94.4*	*70-130*	958	*1.92*	*30*
Surr: Toluene-d8	*965.2*	0	*995*	0	*97*	*70-130*	938.5	*2.8*	*30*

The following samples were analyzed in this batch: 19050434-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Sigma Group
Work Order: 19050434
Project: 16366

QC BATCH REPORT

Batch ID: **R260000** Instrument ID **MOIST** Method: **SW3550C**

MBLK Sample ID: **WBLKS-R260000** Units: **% of sample** Analysis Date: **5/7/2019 04:01 PM**
Client ID: Run ID: **MOIST_190507D** SeqNo: **5646107** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	U	0.10								

LCS Sample ID: **LCS-R260000** Units: **% of sample** Analysis Date: **5/7/2019 04:01 PM**
Client ID: Run ID: **MOIST_190507D** SeqNo: **5646106** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	100	0.10	100	0	100	98-102	0			

DUP Sample ID: **19050325-04A DUP** Units: **% of sample** Analysis Date: **5/7/2019 04:01 PM**
Client ID: Run ID: **MOIST_190507D** SeqNo: **5646093** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	17.46	0.10	0	0	0	0-0	17.54	0.457	10	

DUP Sample ID: **19050325-09A DUP** Units: **% of sample** Analysis Date: **5/7/2019 04:01 PM**
Client ID: Run ID: **MOIST_190507D** SeqNo: **5646099** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	18.13	0.10	0	0	0	0-0	17.67	2.57	10	

The following samples were analyzed in this batch: 19050434-01B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Cincinnati, OH +1 513 733 5336
Fort Collins, CO +1 970 490 1511
Everett, WA +1 425 356 2600
Holland, MI +1 616 399 6070
Houston, TX +1 281 530 5656
Spring City, PA +1 610 948 4903
South Charleston, WV +1 304 356 3168
Middletown, PA +1 717 944 5541
Salt Lake City, UT +1 801 266 7700
York, PA +1 717 505 5280

Chain of Custody Form

Page 1 of 1

COC ID: 44239

ALS Project Manager: | ALS Work Order #: 1905434

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name		A	VOCs
Work Order		Project Number	16366	B	
Company Name	The Sigma Group	Bill To Company	The Sigma Group	C	
Send Report To	Stephen Meer	Invoice Attn	Accounts Payable	D	
Address	1300 W. Canal St.	Address	1300 W. Canal St.	E	
				F	
City/State/Zip	Milwaukee, WI 53233	City/State/Zip	Milwaukee WI 53233	G	
Phone	414-643-4124	Phone	414 643-4124	H	
Fax	414-643-4210	Fax	414-643-4210	I	
e-Mail Address		e-Mail Address		J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	14-EXC-BASE	5/6/19	1015	Soil	7	3	X										
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign: Stephen Meer

Shipment Method: Fed Ex

Turnaround Time in Business Days (BD): ☐ 10 BD ☒ 5 BD ☐ 3 BD ☐ 2 BD ☐ 1 BD ☐ Other

Results Due Date:

	Date:	Time:	
Relinquished by:	5/6/19	4:00pm	Received by: FEDEX
Relinquished by: FED EX	5/7/19	0900	Received by (Laboratory):
Logged by (Laboratory): DFS	5/7/19	1430	Checked by (Laboratory):

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Notes:

Cooler ID	Cooler Temp
SR2	4.4°C

QC Package: (Check One Box Below)
☐ Level II Std QC ☐ TRRP Checklist
☐ Level III Std QC/Raw Date ☐ TRRP Level IV
☐ Level IV SW846/CLP
☐ Other

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

ALS Group, USA

Sample Receipt Checklist

Client Name: **SIGMAGROUP** Date/Time Received: **07-May-19 09:00**

Work Order: **19050434** Received by: **DS**

Checklist completed by Diane Shaw (eSignature) 07-May-19 (Date) Reviewed by: Chad Whitton (eSignature) 07-May-19 (Date)

Matrices: Soil

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Sample(s) received on ice?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	4.4/4.4 c	SR2	
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	5/7/2019 2:29:31 PM		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:	-		

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

10-May-2019

Stephen Meer
The Sigma Group
1300 W. Canal Street
Milwaukee, WI 53233

Re: **16366** Work Order: **19050438**

Dear Stephen,

ALS Environmental received 5 samples on 07-May-2019 09:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental - Holland and for only the analyses requested.

Sample results are compliant with industry accepted practices and Quality Control results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 26.

If you have any questions regarding this report, please feel free to contact me:

ADDRESS: 3352 128th Avenue, Holland, MI, USA
PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Sincerely,

Electronically approved by: Chad Whelton

Chad Whelton
Project Manager

Report of Laboratory Analysis

Certificate No: WI: 399084510

ALS Group, USA

Date: 10-May-19

Client: The Sigma Group
Project: 16366
Work Order: **19050438**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
19050438-01	14-E-SW	Soil		5/6/2019 10:30	5/7/2019 09:00	☐
19050438-02	14-S-SW	Soil		5/6/2019 10:45	5/7/2019 09:00	☐
19050438-03	14-W-SW	Soil		5/6/2019 11:00	5/7/2019 09:00	☐
19050438-04	14-N-SW	Soil		5/6/2019 11:15	5/7/2019 09:00	☐
19050438-05	Trip Blank	Soil		5/6/2019	5/7/2019 09:00	☐

ALS Group, USA

Date: 10-May-19

Client: The Sigma Group
Project: 16366
Work Order: 19050438

Case Narrative

Samples for the above noted Work Order were received on 05/07/2019. The attached "Sample Receipt Checklist" documents the status of custody seals, container integrity, sample condition, preservation, and temperature compliance.
In order to ensure compliance with NR 149 criteria, please note the following report format:
(1) The Limit of Detection (LOD) is reported as the MDL (Method Detection Limit)
(2) The Limit of Quantitation (LOQ) is reported as the PQL (Practical Quantitation Limit)
(3) All reported concentrations, including those for the LOD and LOQ, are adjusted for any required dilutions
(4) All reported concentrations, including those for the LOD and LOQ, are adjusted for moisture content when samples are reported on a dry weight basis.

Samples were analyzed according to the analytical methodology previously documented in the "Work Order Acknowledgement". Methodologies are also documented in the "Analytical Result" section for each sample. Quality control results are listed in the "QC Report" section. Detail as to the associated samples can be found at the end of each batch summary. If applicable, results are appropriately qualified in the Analytical Result and QC Report sections. The "Qualifiers" section documents the various qualifiers, acronyms, and units utilized in reporting.

With the following exceptions, all sample analyses achieved analytical criteria.

Volatile Organics

Batch 135670, Method VOC_8260_S, Sample LCS-135670: The LCS recovery was below the lower control limit for Ethyl Acetate. The sample results for this batch may be biased low.

Wet Chemistry
No deviations or anomalies noted

ALS Group, USA

Date: 10-May-19

Client: The Sigma Group
Project: 16366
WorkOrder: **19050438**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
**	Estimated Value
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
Hr	BOD/CBOD - Sample was reset outside Hold Time, value should be considered estimated.
J	Analyte is present at an estimated concentration between the MDL and Report Limit
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

Acronym	Description
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

Units Reported	Description
% of sample	Percent of Sample
µg/Kg-dry	Micrograms per Kilogram Dry Weight

ALS Group, USA

Date: *10-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: 14-E-SW
Collection Date: 5/6/2019 10:30 AM

Work Order: 19050438
Lab ID: 19050438-01
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 5/7/19		Analyst: **JEB**
1,1,1,2-Tetrachloroethane	U		19	37	µg/Kg-dry	1	5/8/2019 01:49
1,1,1-Trichloroethane	U		17	37	µg/Kg-dry	1	5/8/2019 01:49
1,1,2,2-Tetrachloroethane	U		16	37	µg/Kg-dry	1	5/8/2019 01:49
1,1,2-Trichloroethane	U		16	37	µg/Kg-dry	1	5/8/2019 01:49
1,1,2-Trichlorotrifluoroethane	U		23	37	µg/Kg-dry	1	5/8/2019 01:49
1,1-Dichloroethane	U		13	37	µg/Kg-dry	1	5/8/2019 01:49
1,1-Dichloroethene	U		12	37	µg/Kg-dry	1	5/8/2019 01:49
1,2,3-Trichlorobenzene	U		44	37	µg/Kg-dry	1	5/8/2019 01:49
1,2,4-Trichlorobenzene	U		42	120	µg/Kg-dry	1	5/8/2019 01:49
1,2,4-Trimethylbenzene	U		27	37	µg/Kg-dry	1	5/8/2019 01:49
1,2-Dibromo-3-chloropropane	U		34	120	µg/Kg-dry	1	5/8/2019 01:49
1,2-Dibromoethane	U		10	37	µg/Kg-dry	1	5/8/2019 01:49
1,2-Dichlorobenzene	**20**	J	**14**	**37**	**µg/Kg-dry**	1	5/8/2019 01:49
1,2-Dichloroethane	U		55	120	µg/Kg-dry	1	5/8/2019 01:49
1,2-Dichloropropane	U		27	37	µg/Kg-dry	1	5/8/2019 01:49
1,3,5-Trimethylbenzene	U		43	120	µg/Kg-dry	1	5/8/2019 01:49
1,3-Dichlorobenzene	U		12	37	µg/Kg-dry	1	5/8/2019 01:49
1,3-Dichloropropane	U		10	37	µg/Kg-dry	1	5/8/2019 01:49
1,4-Dichlorobenzene	U		8.8	37	µg/Kg-dry	1	5/8/2019 01:49
2,2-Dichloropropane	U		39	120	µg/Kg-dry	1	5/8/2019 01:49
2-Butanone	U		30	240	µg/Kg-dry	1	5/8/2019 01:49
2-Chlorotoluene	U		13	37	µg/Kg-dry	1	5/8/2019 01:49
2-Hexanone	U		18	37	µg/Kg-dry	1	5/8/2019 01:49
4-Chlorotoluene	U		8.6	37	µg/Kg-dry	1	5/8/2019 01:49
4-Methyl-2-pentanone	U		34	37	µg/Kg-dry	1	5/8/2019 01:49
Acetone	U		110	120	µg/Kg-dry	1	5/8/2019 01:49
Benzene	U		6.3	37	µg/Kg-dry	1	5/8/2019 01:49
Bromobenzene	U		14	37	µg/Kg-dry	1	5/8/2019 01:49
Bromochloromethane	U		19	37	µg/Kg-dry	1	5/8/2019 01:49
Bromodichloromethane	U		21	37	µg/Kg-dry	1	5/8/2019 01:49
Bromoform	U		15	37	µg/Kg-dry	1	5/8/2019 01:49
Bromomethane	U		70	120	µg/Kg-dry	1	5/8/2019 01:49
Carbon disulfide	U		19	37	µg/Kg-dry	1	5/8/2019 01:49
Carbon tetrachloride	U		14	37	µg/Kg-dry	1	5/8/2019 01:49
Chlorobenzene	U		12	37	µg/Kg-dry	1	5/8/2019 01:49
Chloroethane	U		36	120	µg/Kg-dry	1	5/8/2019 01:49
Chloroform	U		13	37	µg/Kg-dry	1	5/8/2019 01:49
Chloromethane	U		100	120	µg/Kg-dry	1	5/8/2019 01:49

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *10-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: 14-E-SW
Collection Date: 5/6/2019 10:30 AM

Work Order: 19050438
Lab ID: 19050438-01
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
cis-1,2-Dichloroethene	**300**		**11**	**37**	**µg/Kg-dry**	1	5/8/2019 01:49
cis-1,3-Dichloropropene	U		28	37	µg/Kg-dry	1	5/8/2019 01:49
Cyclohexane	U		12	120	µg/Kg-dry	1	5/8/2019 01:49
Dibromochloromethane	U		21	37	µg/Kg-dry	1	5/8/2019 01:49
Dichlorodifluoromethane	U		44	120	µg/Kg-dry	1	5/8/2019 01:49
Diisopropyl ether	U		6.9	37	µg/Kg-dry	1	5/8/2019 01:49
Ethyl acetate	U		13	120	µg/Kg-dry	1	5/8/2019 01:49
Ethylbenzene	U		7.7	37	µg/Kg-dry	1	5/8/2019 01:49
Hexachlorobutadiene	U		33	120	µg/Kg-dry	1	5/8/2019 01:49
Isopropylbenzene	U		11	37	µg/Kg-dry	1	5/8/2019 01:49
m,p-Xylene	U		49	73	µg/Kg-dry	1	5/8/2019 01:49
Methyl acetate	U		44	310	µg/Kg-dry	1	5/8/2019 01:49
Methyl tert-butyl ether	U		11	37	µg/Kg-dry	1	5/8/2019 01:49
Methylcyclohexane	U		14	37	µg/Kg-dry	1	5/8/2019 01:49
Methylene chloride	U		97	310	µg/Kg-dry	1	5/8/2019 01:49
Naphthalene	U		88	120	µg/Kg-dry	1	5/8/2019 01:49
n-Butylbenzene	U		27	37	µg/Kg-dry	1	5/8/2019 01:49
n-Propylbenzene	U		28	37	µg/Kg-dry	1	5/8/2019 01:49
o-Xylene	U		14	37	µg/Kg-dry	1	5/8/2019 01:49
p-Isopropyltoluene	U		31	120	µg/Kg-dry	1	5/8/2019 01:49
sec-Butylbenzene	U		14	37	µg/Kg-dry	1	5/8/2019 01:49
Styrene	U		15	37	µg/Kg-dry	1	5/8/2019 01:49
tert-Butylbenzene	U		12	37	µg/Kg-dry	1	5/8/2019 01:49
Tetrachloroethene	U		11	37	µg/Kg-dry	1	5/8/2019 01:49
Toluene	U		10	37	µg/Kg-dry	1	5/8/2019 01:49
trans-1,2-Dichloroethene	U		13	37	µg/Kg-dry	1	5/8/2019 01:49
trans-1,3-Dichloropropene	U		20	37	µg/Kg-dry	1	5/8/2019 01:49
Trichloroethene	U		16	37	µg/Kg-dry	1	5/8/2019 01:49
Trichlorofluoromethane	U		19	37	µg/Kg-dry	1	5/8/2019 01:49
Vinyl chloride	U		24	37	µg/Kg-dry	1	5/8/2019 01:49
Xylenes, Total	U		49	110	µg/Kg-dry	1	5/8/2019 01:49
Surr: 1,2-Dichloroethane-d4	*95.4*			*70-130*	*%REC*	1	5/8/2019 01:49
Surr: 4-Bromofluorobenzene	*91.4*			*70-130*	*%REC*	1	5/8/2019 01:49
Surr: Dibromofluoromethane	*89.1*			*70-130*	*%REC*	1	5/8/2019 01:49
Surr: Toluene-d8	*100*			*70-130*	*%REC*	1	5/8/2019 01:49
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**19**		**0.10**	**0.10**	**% of sample**	1	5/7/2019 16:01

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *10-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: 14-S-SW
Collection Date: 5/6/2019 10:45 AM

Work Order: 19050438
Lab ID: 19050438-02
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 5/7/19		Analyst: **JEB**
1,1,1,2-Tetrachloroethane	U		34	64	µg/Kg-dry	1	5/8/2019 02:04
1,1,1-Trichloroethane	**280**		**29**	**64**	**µg/Kg-dry**	1	5/8/2019 02:04
1,1,2,2-Tetrachloroethane	U		28	64	µg/Kg-dry	1	5/8/2019 02:04
1,1,2-Trichloroethane	U		27	64	µg/Kg-dry	1	5/8/2019 02:04
1,1,2-Trichlorotrifluoroethane	U		41	64	µg/Kg-dry	1	5/8/2019 02:04
1,1-Dichloroethane	**95**		**23**	**64**	**µg/Kg-dry**	1	5/8/2019 02:04
1,1-Dichloroethene	U		21	64	µg/Kg-dry	1	5/8/2019 02:04
1,2,3-Trichlorobenzene	U		77	64	µg/Kg-dry	1	5/8/2019 02:04
1,2,4-Trichlorobenzene	U		72	210	µg/Kg-dry	1	5/8/2019 02:04
1,2,4-Trimethylbenzene	**170**		**47**	**64**	**µg/Kg-dry**	1	5/8/2019 02:04
1,2-Dibromo-3-chloropropane	U		59	210	µg/Kg-dry	1	5/8/2019 02:04
1,2-Dibromoethane	U		18	64	µg/Kg-dry	1	5/8/2019 02:04
1,2-Dichlorobenzene	**86**		**24**	**64**	**µg/Kg-dry**	1	5/8/2019 02:04
1,2-Dichloroethane	U		96	210	µg/Kg-dry	1	5/8/2019 02:04
1,2-Dichloropropane	U		47	64	µg/Kg-dry	1	5/8/2019 02:04
1,3,5-Trimethylbenzene	U		75	210	µg/Kg-dry	1	5/8/2019 02:04
1,3-Dichlorobenzene	U		21	64	µg/Kg-dry	1	5/8/2019 02:04
1,3-Dichloropropane	U		18	64	µg/Kg-dry	1	5/8/2019 02:04
1,4-Dichlorobenzene	U		15	64	µg/Kg-dry	1	5/8/2019 02:04
2,2-Dichloropropane	U		68	210	µg/Kg-dry	1	5/8/2019 02:04
2-Butanone	U		53	430	µg/Kg-dry	1	5/8/2019 02:04
2-Chlorotoluene	U		23	64	µg/Kg-dry	1	5/8/2019 02:04
2-Hexanone	U		32	64	µg/Kg-dry	1	5/8/2019 02:04
4-Chlorotoluene	U		15	64	µg/Kg-dry	1	5/8/2019 02:04
4-Methyl-2-pentanone	U		60	64	µg/Kg-dry	1	5/8/2019 02:04
Acetone	U		190	210	µg/Kg-dry	1	5/8/2019 02:04
Benzene	U		11	64	µg/Kg-dry	1	5/8/2019 02:04
Bromobenzene	U		25	64	µg/Kg-dry	1	5/8/2019 02:04
Bromochloromethane	U		33	64	µg/Kg-dry	1	5/8/2019 02:04
Bromodichloromethane	U		36	64	µg/Kg-dry	1	5/8/2019 02:04
Bromoform	U		27	64	µg/Kg-dry	1	5/8/2019 02:04
Bromomethane	U		120	210	µg/Kg-dry	1	5/8/2019 02:04
Carbon disulfide	U		33	64	µg/Kg-dry	1	5/8/2019 02:04
Carbon tetrachloride	U		25	64	µg/Kg-dry	1	5/8/2019 02:04
Chlorobenzene	U		21	64	µg/Kg-dry	1	5/8/2019 02:04
Chloroethane	U		63	210	µg/Kg-dry	1	5/8/2019 02:04
Chloroform	U		23	64	µg/Kg-dry	1	5/8/2019 02:04
Chloromethane	U		170	210	µg/Kg-dry	1	5/8/2019 02:04

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *10-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: 14-S-SW
Collection Date: 5/6/2019 10:45 AM

Work Order: 19050438
Lab ID: 19050438-02
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
cis-1,2-Dichloroethene	**690**		**20**	**64**	**µg/Kg-dry**	1	5/8/2019 02:04
cis-1,3-Dichloropropene	U		48	64	µg/Kg-dry	1	5/8/2019 02:04
Cyclohexane	**87**	J	**21**	**210**	**µg/Kg-dry**	1	5/8/2019 02:04
Dibromochloromethane	U		36	64	µg/Kg-dry	1	5/8/2019 02:04
Dichlorodifluoromethane	U		77	210	µg/Kg-dry	1	5/8/2019 02:04
Diisopropyl ether	U		12	64	µg/Kg-dry	1	5/8/2019 02:04
Ethyl acetate	U		23	210	µg/Kg-dry	1	5/8/2019 02:04
Ethylbenzene	**84**		**13**	**64**	**µg/Kg-dry**	1	5/8/2019 02:04
Hexachlorobutadiene	U		58	210	µg/Kg-dry	1	5/8/2019 02:04
Isopropylbenzene	U		20	64	µg/Kg-dry	1	5/8/2019 02:04
m,p-Xylene	**170**		**85**	**130**	**µg/Kg-dry**	1	5/8/2019 02:04
Methyl acetate	**200**	J	**77**	**530**	**µg/Kg-dry**	1	5/8/2019 02:04
Methyl tert-butyl ether	U		18	64	µg/Kg-dry	1	5/8/2019 02:04
Methylcyclohexane	**270**		**24**	**64**	**µg/Kg-dry**	1	5/8/2019 02:04
Methylene chloride	U		170	530	µg/Kg-dry	1	5/8/2019 02:04
Naphthalene	**230**		**150**	**210**	**µg/Kg-dry**	1	5/8/2019 02:04
n-Butylbenzene	**260**		**47**	**64**	**µg/Kg-dry**	1	5/8/2019 02:04
n-Propylbenzene	**110**		**49**	**64**	**µg/Kg-dry**	1	5/8/2019 02:04
o-Xylene	**75**		**25**	**64**	**µg/Kg-dry**	1	5/8/2019 02:04
p-Isopropyltoluene	U		54	210	µg/Kg-dry	1	5/8/2019 02:04
sec-Butylbenzene	**120**		**25**	**64**	**µg/Kg-dry**	1	5/8/2019 02:04
Styrene	U		25	64	µg/Kg-dry	1	5/8/2019 02:04
tert-Butylbenzene	U		21	64	µg/Kg-dry	1	5/8/2019 02:04
Tetrachloroethene	U		19	64	µg/Kg-dry	1	5/8/2019 02:04
Toluene	U		17	64	µg/Kg-dry	1	5/8/2019 02:04
trans-1,2-Dichloroethene	U		24	64	µg/Kg-dry	1	5/8/2019 02:04
trans-1,3-Dichloropropene	U		36	64	µg/Kg-dry	1	5/8/2019 02:04
Trichloroethene	**650**		**29**	**64**	**µg/Kg-dry**	1	5/8/2019 02:04
Trichlorofluoromethane	**82**		**33**	**64**	**µg/Kg-dry**	1	5/8/2019 02:04
Vinyl chloride	U		43	64	µg/Kg-dry	1	5/8/2019 02:04
Xylenes, Total	**240**		**85**	**190**	**µg/Kg-dry**	1	5/8/2019 02:04
Surr: 1,2-Dichloroethane-d4	*98.7*			*70-130*	*%REC*	1	5/8/2019 02:04
Surr: 4-Bromofluorobenzene	*98.6*			*70-130*	*%REC*	1	5/8/2019 02:04
Surr: Dibromofluoromethane	*92.0*			*70-130*	*%REC*	1	5/8/2019 02:04
Surr: Toluene-d8	*102*			*70-130*	*%REC*	1	5/8/2019 02:04
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**23**		**0.10**	**0.10**	**% of sample**	1	5/7/2019 16:01

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *10-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: 14-W-SW
Collection Date: 5/6/2019 11:00 AM

Work Order: 19050438
Lab ID: 19050438-03
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 5/7/19		Analyst: **JEB**
1,1,1,2-Tetrachloroethane	U		30	56	µg/Kg-dry	1	5/8/2019 02:20
1,1,1-Trichloroethane	**70**		**25**	**56**	**µg/Kg-dry**	1	5/8/2019 02:20
1,1,2,2-Tetrachloroethane	U		25	56	µg/Kg-dry	1	5/8/2019 02:20
1,1,2-Trichloroethane	U		24	56	µg/Kg-dry	1	5/8/2019 02:20
1,1,2-Trichlorotrifluoroethane	U		36	56	µg/Kg-dry	1	5/8/2019 02:20
1,1-Dichloroethane	U		20	56	µg/Kg-dry	1	5/8/2019 02:20
1,1-Dichloroethene	U		18	56	µg/Kg-dry	1	5/8/2019 02:20
1,2,3-Trichlorobenzene	U		67	56	µg/Kg-dry	1	5/8/2019 02:20
1,2,4-Trichlorobenzene	U		64	190	µg/Kg-dry	1	5/8/2019 02:20
1,2,4-Trimethylbenzene	U		41	56	µg/Kg-dry	1	5/8/2019 02:20
1,2-Dibromo-3-chloropropane	U		52	190	µg/Kg-dry	1	5/8/2019 02:20
1,2-Dibromoethane	U		16	56	µg/Kg-dry	1	5/8/2019 02:20
1,2-Dichlorobenzene	U		21	56	µg/Kg-dry	1	5/8/2019 02:20
1,2-Dichloroethane	U		84	190	µg/Kg-dry	1	5/8/2019 02:20
1,2-Dichloropropane	U		41	56	µg/Kg-dry	1	5/8/2019 02:20
1,3,5-Trimethylbenzene	U		65	190	µg/Kg-dry	1	5/8/2019 02:20
1,3-Dichlorobenzene	U		19	56	µg/Kg-dry	1	5/8/2019 02:20
1,3-Dichloropropane	U		16	56	µg/Kg-dry	1	5/8/2019 02:20
1,4-Dichlorobenzene	U		14	56	µg/Kg-dry	1	5/8/2019 02:20
2,2-Dichloropropane	U		60	190	µg/Kg-dry	1	5/8/2019 02:20
2-Butanone	U		46	370	µg/Kg-dry	1	5/8/2019 02:20
2-Chlorotoluene	U		21	56	µg/Kg-dry	1	5/8/2019 02:20
2-Hexanone	U		28	56	µg/Kg-dry	1	5/8/2019 02:20
4-Chlorotoluene	U		13	56	µg/Kg-dry	1	5/8/2019 02:20
4-Methyl-2-pentanone	U		52	56	µg/Kg-dry	1	5/8/2019 02:20
Acetone	U		170	190	µg/Kg-dry	1	5/8/2019 02:20
Benzene	U		9.6	56	µg/Kg-dry	1	5/8/2019 02:20
Bromobenzene	U		22	56	µg/Kg-dry	1	5/8/2019 02:20
Bromochloromethane	U		29	56	µg/Kg-dry	1	5/8/2019 02:20
Bromodichloromethane	U		31	56	µg/Kg-dry	1	5/8/2019 02:20
Bromoform	U		24	56	µg/Kg-dry	1	5/8/2019 02:20
Bromomethane	U		110	190	µg/Kg-dry	1	5/8/2019 02:20
Carbon disulfide	U		29	56	µg/Kg-dry	1	5/8/2019 02:20
Carbon tetrachloride	U		22	56	µg/Kg-dry	1	5/8/2019 02:20
Chlorobenzene	U		19	56	µg/Kg-dry	1	5/8/2019 02:20
Chloroethane	U		55	190	µg/Kg-dry	1	5/8/2019 02:20
Chloroform	U		21	56	µg/Kg-dry	1	5/8/2019 02:20
Chloromethane	U		150	190	µg/Kg-dry	1	5/8/2019 02:20

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *10-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: 14-W-SW
Collection Date: 5/6/2019 11:00 AM

Work Order: 19050438
Lab ID: 19050438-03
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
cis-1,2-Dichloroethene	**1,000**		**18**	**56**	**µg/Kg-dry**	1	5/8/2019 02:20
cis-1,3-Dichloropropene	U		42	56	µg/Kg-dry	1	5/8/2019 02:20
Cyclohexane	U		18	190	µg/Kg-dry	1	5/8/2019 02:20
Dibromochloromethane	U		31	56	µg/Kg-dry	1	5/8/2019 02:20
Dichlorodifluoromethane	U		68	190	µg/Kg-dry	1	5/8/2019 02:20
Diisopropyl ether	U		11	56	µg/Kg-dry	1	5/8/2019 02:20
Ethyl acetate	U		21	190	µg/Kg-dry	1	5/8/2019 02:20
Ethylbenzene	U		12	56	µg/Kg-dry	1	5/8/2019 02:20
Hexachlorobutadiene	U		50	190	µg/Kg-dry	1	5/8/2019 02:20
Isopropylbenzene	U		17	56	µg/Kg-dry	1	5/8/2019 02:20
m,p-Xylene	U		75	110	µg/Kg-dry	1	5/8/2019 02:20
Methyl acetate	U		67	470	µg/Kg-dry	1	5/8/2019 02:20
Methyl tert-butyl ether	U		16	56	µg/Kg-dry	1	5/8/2019 02:20
Methylcyclohexane	U		21	56	µg/Kg-dry	1	5/8/2019 02:20
Methylene chloride	U		150	470	µg/Kg-dry	1	5/8/2019 02:20
Naphthalene	U		130	190	µg/Kg-dry	1	5/8/2019 02:20
n-Butylbenzene	U		41	56	µg/Kg-dry	1	5/8/2019 02:20
n-Propylbenzene	U		43	56	µg/Kg-dry	1	5/8/2019 02:20
o-Xylene	U		22	56	µg/Kg-dry	1	5/8/2019 02:20
p-Isopropyltoluene	U		47	190	µg/Kg-dry	1	5/8/2019 02:20
sec-Butylbenzene	U		22	56	µg/Kg-dry	1	5/8/2019 02:20
Styrene	U		22	56	µg/Kg-dry	1	5/8/2019 02:20
tert-Butylbenzene	U		18	56	µg/Kg-dry	1	5/8/2019 02:20
Tetrachloroethene	U		16	56	µg/Kg-dry	1	5/8/2019 02:20
Toluene	U		15	56	µg/Kg-dry	1	5/8/2019 02:20
trans-1,2-Dichloroethene	U		21	56	µg/Kg-dry	1	5/8/2019 02:20
trans-1,3-Dichloropropene	U		31	56	µg/Kg-dry	1	5/8/2019 02:20
Trichloroethene	U		25	56	µg/Kg-dry	1	5/8/2019 02:20
Trichlorofluoromethane	U		29	56	µg/Kg-dry	1	5/8/2019 02:20
Vinyl chloride	U		37	56	µg/Kg-dry	1	5/8/2019 02:20
Xylenes, Total	U		75	170	µg/Kg-dry	1	5/8/2019 02:20
Surr: 1,2-Dichloroethane-d4	*96.7*			*70-130*	*%REC*	1	5/8/2019 02:20
Surr: 4-Bromofluorobenzene	*94.3*			*70-130*	*%REC*	1	5/8/2019 02:20
Surr: Dibromofluoromethane	*94.8*			*70-130*	*%REC*	1	5/8/2019 02:20
Surr: Toluene-d8	*102*			*70-130*	*%REC*	1	5/8/2019 02:20
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**15**		**0.10**	**0.10**	**% of sample**	1	5/7/2019 16:01

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *10-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: 14-N-SW
Collection Date: 5/6/2019 11:15 AM

Work Order: 19050438
Lab ID: 19050438-04
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 5/7/19		Analyst: **JEB**
1,1,1,2-Tetrachloroethane	U		16	30	µg/Kg-dry	1	5/8/2019 02:35
1,1,1-Trichloroethane	**580**		**14**	**30**	**µg/Kg-dry**	1	5/8/2019 02:35
1,1,2,2-Tetrachloroethane	U		13	30	µg/Kg-dry	1	5/8/2019 02:35
1,1,2-Trichloroethane	U		13	30	µg/Kg-dry	1	5/8/2019 02:35
1,1,2-Trichlorotrifluoroethane	U		19	30	µg/Kg-dry	1	5/8/2019 02:35
1,1-Dichloroethane	**1,300**		**11**	**30**	**µg/Kg-dry**	1	5/8/2019 02:35
1,1-Dichloroethene	U		9.7	30	µg/Kg-dry	1	5/8/2019 02:35
1,2,3-Trichlorobenzene	U		36	30	µg/Kg-dry	1	5/8/2019 02:35
1,2,4-Trichlorobenzene	U		34	100	µg/Kg-dry	1	5/8/2019 02:35
1,2,4-Trimethylbenzene	**740**		**22**	**30**	**µg/Kg-dry**	1	5/8/2019 02:35
1,2-Dibromo-3-chloropropane	U		28	100	µg/Kg-dry	1	5/8/2019 02:35
1,2-Dibromoethane	U		8.4	30	µg/Kg-dry	1	5/8/2019 02:35
1,2-Dichlorobenzene	**230**		**11**	**30**	**µg/Kg-dry**	1	5/8/2019 02:35
1,2-Dichloroethane	U		45	100	µg/Kg-dry	1	5/8/2019 02:35
1,2-Dichloropropane	U		22	30	µg/Kg-dry	1	5/8/2019 02:35
1,3,5-Trimethylbenzene	**210**		**35**	**100**	**µg/Kg-dry**	1	5/8/2019 02:35
1,3-Dichlorobenzene	U		10	30	µg/Kg-dry	1	5/8/2019 02:35
1,3-Dichloropropane	U		8.4	30	µg/Kg-dry	1	5/8/2019 02:35
1,4-Dichlorobenzene	U		7.2	30	µg/Kg-dry	1	5/8/2019 02:35
2,2-Dichloropropane	U		32	100	µg/Kg-dry	1	5/8/2019 02:35
2-Butanone	**130**	J	**25**	**200**	**µg/Kg-dry**	1	5/8/2019 02:35
2-Chlorotoluene	U		11	30	µg/Kg-dry	1	5/8/2019 02:35
2-Hexanone	U		15	30	µg/Kg-dry	1	5/8/2019 02:35
4-Chlorotoluene	U		7.1	30	µg/Kg-dry	1	5/8/2019 02:35
4-Methyl-2-pentanone	**330**		**28**	**30**	**µg/Kg-dry**	1	5/8/2019 02:35
Acetone	**360**		**89**	**100**	**µg/Kg-dry**	1	5/8/2019 02:35
Benzene	**49**		**5.1**	**30**	**µg/Kg-dry**	1	5/8/2019 02:35
Bromobenzene	U		12	30	µg/Kg-dry	1	5/8/2019 02:35
Bromochloromethane	U		15	30	µg/Kg-dry	1	5/8/2019 02:35
Bromodichloromethane	U		17	30	µg/Kg-dry	1	5/8/2019 02:35
Bromoform	U		13	30	µg/Kg-dry	1	5/8/2019 02:35
Bromomethane	U		57	100	µg/Kg-dry	1	5/8/2019 02:35
Carbon disulfide	U		16	30	µg/Kg-dry	1	5/8/2019 02:35
Carbon tetrachloride	U		12	30	µg/Kg-dry	1	5/8/2019 02:35
Chlorobenzene	U		10	30	µg/Kg-dry	1	5/8/2019 02:35
Chloroethane	U		30	100	µg/Kg-dry	1	5/8/2019 02:35
Chloroform	U		11	30	µg/Kg-dry	1	5/8/2019 02:35
Chloromethane	U		82	100	µg/Kg-dry	1	5/8/2019 02:35

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *10-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: 14-N-SW
Collection Date: 5/6/2019 11:15 AM

Work Order: 19050438
Lab ID: 19050438-04
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
cis-1,2-Dichloroethene	**2,500**		**9.4**	**30**	**µg/Kg-dry**	1	5/8/2019 02:35
cis-1,3-Dichloropropene	U		23	30	µg/Kg-dry	1	5/8/2019 02:35
Cyclohexane	**160**		**9.8**	**100**	**µg/Kg-dry**	1	5/8/2019 02:35
Dibromochloromethane	U		17	30	µg/Kg-dry	1	5/8/2019 02:35
Dichlorodifluoromethane	U		36	100	µg/Kg-dry	1	5/8/2019 02:35
Diisopropyl ether	U		5.6	30	µg/Kg-dry	1	5/8/2019 02:35
Ethyl acetate	U		11	100	µg/Kg-dry	1	5/8/2019 02:35
Ethylbenzene	**210**		**6.3**	**30**	**µg/Kg-dry**	1	5/8/2019 02:35
Hexachlorobutadiene	U		27	100	µg/Kg-dry	1	5/8/2019 02:35
Isopropylbenzene	**52**		**9.2**	**30**	**µg/Kg-dry**	1	5/8/2019 02:35
m,p-Xylene	**860**		**40**	**60**	**µg/Kg-dry**	1	5/8/2019 02:35
Methyl acetate	**60**	J	**36**	**250**	**µg/Kg-dry**	1	5/8/2019 02:35
Methyl tert-butyl ether	U		8.6	30	µg/Kg-dry	1	5/8/2019 02:35
Methylcyclohexane	**370**		**11**	**30**	**µg/Kg-dry**	1	5/8/2019 02:35
Methylene chloride	U		80	250	µg/Kg-dry	1	5/8/2019 02:35
Naphthalene	**2,500**		**72**	**100**	**µg/Kg-dry**	1	5/8/2019 02:35
n-Butylbenzene	**990**		**22**	**30**	**µg/Kg-dry**	1	5/8/2019 02:35
n-Propylbenzene	**84**		**23**	**30**	**µg/Kg-dry**	1	5/8/2019 02:35
o-Xylene	**450**		**12**	**30**	**µg/Kg-dry**	1	5/8/2019 02:35
p-Isopropyltoluene	**40**	J	**25**	**100**	**µg/Kg-dry**	1	5/8/2019 02:35
sec-Butylbenzene	**98**		**12**	**30**	**µg/Kg-dry**	1	5/8/2019 02:35
Styrene	U		12	30	µg/Kg-dry	1	5/8/2019 02:35
tert-Butylbenzene	**53**		**9.7**	**30**	**µg/Kg-dry**	1	5/8/2019 02:35
Tetrachloroethene	U		8.7	30	µg/Kg-dry	1	5/8/2019 02:35
Toluene	**460**		**8.2**	**30**	**µg/Kg-dry**	1	5/8/2019 02:35
trans-1,2-Dichloroethene	**39**		**11**	**30**	**µg/Kg-dry**	1	5/8/2019 02:35
trans-1,3-Dichloropropene	U		17	30	µg/Kg-dry	1	5/8/2019 02:35
Trichloroethene	U		13	30	µg/Kg-dry	1	5/8/2019 02:35
Trichlorofluoromethane	U		15	30	µg/Kg-dry	1	5/8/2019 02:35
Vinyl chloride	**1,400**		**20**	**30**	**µg/Kg-dry**	1	5/8/2019 02:35
Xylenes, Total	**1,300**		**40**	**90**	**µg/Kg-dry**	1	5/8/2019 02:35
Surr: 1,2-Dichloroethane-d4	*96.0*			*70-130*	*%REC*	1	5/8/2019 02:35
Surr: 4-Bromofluorobenzene	*91.0*			*70-130*	*%REC*	1	5/8/2019 02:35
Surr: Dibromofluoromethane	*90.2*			*70-130*	*%REC*	1	5/8/2019 02:35
Surr: Toluene-d8	*97.9*			*70-130*	*%REC*	1	5/8/2019 02:35
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**18**		**0.10**	**0.10**	**% of sample**	1	5/8/2019 12:28

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *10-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: Trip Blank
Collection Date: 5/6/2019

Work Order: 19050438
Lab ID: 19050438-05
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 5/7/19		Analyst: **JEB**
1,1,1,2-Tetrachloroethane	U		16	30	µg/Kg-dry	1	5/8/2019 12:17
1,1,1-Trichloroethane	U		14	30	µg/Kg-dry	1	5/8/2019 12:17
1,1,2,2-Tetrachloroethane	U		13	30	µg/Kg-dry	1	5/8/2019 12:17
1,1,2-Trichloroethane	U		13	30	µg/Kg-dry	1	5/8/2019 12:17
1,1,2-Trichlorotrifluoroethane	U		19	30	µg/Kg-dry	1	5/8/2019 12:17
1,1-Dichloroethane	U		11	30	µg/Kg-dry	1	5/8/2019 12:17
1,1-Dichloroethene	U		9.7	30	µg/Kg-dry	1	5/8/2019 12:17
1,2,3-Trichlorobenzene	U		36	30	µg/Kg-dry	1	5/8/2019 12:17
1,2,4-Trichlorobenzene	U		34	100	µg/Kg-dry	1	5/8/2019 12:17
1,2,4-Trimethylbenzene	U		22	30	µg/Kg-dry	1	5/8/2019 12:17
1,2-Dibromo-3-chloropropane	U		28	100	µg/Kg-dry	1	5/8/2019 12:17
1,2-Dibromoethane	U		8.4	30	µg/Kg-dry	1	5/8/2019 12:17
1,2-Dichlorobenzene	U		11	30	µg/Kg-dry	1	5/8/2019 12:17
1,2-Dichloroethane	U		45	100	µg/Kg-dry	1	5/8/2019 12:17
1,2-Dichloropropane	U		22	30	µg/Kg-dry	1	5/8/2019 12:17
1,3,5-Trimethylbenzene	U		35	100	µg/Kg-dry	1	5/8/2019 12:17
1,3-Dichlorobenzene	U		10	30	µg/Kg-dry	1	5/8/2019 12:17
1,3-Dichloropropane	U		8.4	30	µg/Kg-dry	1	5/8/2019 12:17
1,4-Dichlorobenzene	U		7.2	30	µg/Kg-dry	1	5/8/2019 12:17
2,2-Dichloropropane	U		32	100	µg/Kg-dry	1	5/8/2019 12:17
2-Butanone	U		25	200	µg/Kg-dry	1	5/8/2019 12:17
2-Chlorotoluene	U		11	30	µg/Kg-dry	1	5/8/2019 12:17
2-Hexanone	U		15	30	µg/Kg-dry	1	5/8/2019 12:17
4-Chlorotoluene	U		7.1	30	µg/Kg-dry	1	5/8/2019 12:17
4-Methyl-2-pentanone	U		28	30	µg/Kg-dry	1	5/8/2019 12:17
Acetone	U		89	100	µg/Kg-dry	1	5/8/2019 12:17
Benzene	U		5.1	30	µg/Kg-dry	1	5/8/2019 12:17
Bromobenzene	U		12	30	µg/Kg-dry	1	5/8/2019 12:17
Bromochloromethane	U		15	30	µg/Kg-dry	1	5/8/2019 12:17
Bromodichloromethane	U		17	30	µg/Kg-dry	1	5/8/2019 12:17
Bromoform	U		13	30	µg/Kg-dry	1	5/8/2019 12:17
Bromomethane	U		57	100	µg/Kg-dry	1	5/8/2019 12:17
Carbon disulfide	U		16	30	µg/Kg-dry	1	5/8/2019 12:17
Carbon tetrachloride	U		12	30	µg/Kg-dry	1	5/8/2019 12:17
Chlorobenzene	U		10	30	µg/Kg-dry	1	5/8/2019 12:17
Chloroethane	U		30	100	µg/Kg-dry	1	5/8/2019 12:17
Chloroform	U		11	30	µg/Kg-dry	1	5/8/2019 12:17
Chloromethane	U		82	100	µg/Kg-dry	1	5/8/2019 12:17

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *10-May-19*

Client: The Sigma Group
Project: 16366
Sample ID: Trip Blank
Collection Date: 5/6/2019

Work Order: 19050438
Lab ID: 19050438-05
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
cis-1,2-Dichloroethene	U		9.4	30	µg/Kg-dry	1	5/8/2019 12:17
cis-1,3-Dichloropropene	U		23	30	µg/Kg-dry	1	5/8/2019 12:17
Cyclohexane	U		9.8	100	µg/Kg-dry	1	5/8/2019 12:17
Dibromochloromethane	U		17	30	µg/Kg-dry	1	5/8/2019 12:17
Dichlorodifluoromethane	U		36	100	µg/Kg-dry	1	5/8/2019 12:17
Diisopropyl ether	U		5.6	30	µg/Kg-dry	1	5/8/2019 12:17
Ethyl acetate	U		11	100	µg/Kg-dry	1	5/8/2019 12:17
Ethylbenzene	U		6.3	30	µg/Kg-dry	1	5/8/2019 12:17
Hexachlorobutadiene	U		27	100	µg/Kg-dry	1	5/8/2019 12:17
Isopropylbenzene	U		9.2	30	µg/Kg-dry	1	5/8/2019 12:17
m,p-Xylene	U		40	60	µg/Kg-dry	1	5/8/2019 12:17
Methyl acetate	**46**	J	**36**	**250**	**µg/Kg-dry**	1	5/8/2019 12:17
Methyl tert-butyl ether	U		8.6	30	µg/Kg-dry	1	5/8/2019 12:17
Methylcyclohexane	U		11	30	µg/Kg-dry	1	5/8/2019 12:17
Methylene chloride	U		80	250	µg/Kg-dry	1	5/8/2019 12:17
Naphthalene	U		72	100	µg/Kg-dry	1	5/8/2019 12:17
n-Butylbenzene	U		22	30	µg/Kg-dry	1	5/8/2019 12:17
n-Propylbenzene	U		23	30	µg/Kg-dry	1	5/8/2019 12:17
o-Xylene	U		12	30	µg/Kg-dry	1	5/8/2019 12:17
p-Isopropyltoluene	U		25	100	µg/Kg-dry	1	5/8/2019 12:17
sec-Butylbenzene	U		12	30	µg/Kg-dry	1	5/8/2019 12:17
Styrene	U		12	30	µg/Kg-dry	1	5/8/2019 12:17
tert-Butylbenzene	U		9.7	30	µg/Kg-dry	1	5/8/2019 12:17
Tetrachloroethene	U		8.7	30	µg/Kg-dry	1	5/8/2019 12:17
Toluene	U		8.2	30	µg/Kg-dry	1	5/8/2019 12:17
trans-1,2-Dichloroethene	U		11	30	µg/Kg-dry	1	5/8/2019 12:17
trans-1,3-Dichloropropene	U		17	30	µg/Kg-dry	1	5/8/2019 12:17
Trichloroethene	U		13	30	µg/Kg-dry	1	5/8/2019 12:17
Trichlorofluoromethane	U		15	30	µg/Kg-dry	1	5/8/2019 12:17
Vinyl chloride	U		20	30	µg/Kg-dry	1	5/8/2019 12:17
Xylenes, Total	U		40	90	µg/Kg-dry	1	5/8/2019 12:17
Surr: 1,2-Dichloroethane-d4	*97.4*			*70-130*	*%REC*	1	5/8/2019 12:17
Surr: 4-Bromofluorobenzene	*93.0*			*70-130*	*%REC*	1	5/8/2019 12:17
Surr: Dibromofluoromethane	*90.0*			*70-130*	*%REC*	1	5/8/2019 12:17
Surr: Toluene-d8	*95.2*			*70-130*	*%REC*	1	5/8/2019 12:17

Note: See Qualifiers page for a list of qualifiers and their definitions.

Batch ID: **135670** Instrument ID **VMS9** Method: **SW8260C**

MBLK Sample ID: **MBLK-135670-135670** Units: **µg/Kg-dry** Analysis Date: **5/7/2019 11:46 PM**

Client ID: Run ID: **VMS9_190507B** SeqNo: **5647149** Prep Date: **5/7/2019** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	U	30								
1,1,1-Trichloroethane	U	30								
1,1,2,2-Tetrachloroethane	U	30								
1,1,2-Trichloroethane	U	30								
1,1,2-Trichlorotrifluoroethane	U	30								
1,1-Dichloroethane	U	30								
1,1-Dichloroethene	U	30								
1,2,3-Trichlorobenzene	U	30								
1,2,4-Trichlorobenzene	U	100								
1,2,4-Trimethylbenzene	U	30								
1,2-Dibromo-3-chloropropane	U	100								
1,2-Dibromoethane	U	30								
1,2-Dichlorobenzene	U	30								
1,2-Dichloroethane	U	100								
1,2-Dichloropropane	U	30								
1,3,5-Trimethylbenzene	U	100								
1,3-Dichlorobenzene	U	30								
1,3-Dichloropropane	U	30								
1,4-Dichlorobenzene	U	30								
2,2-Dichloropropane	U	100								
2-Butanone	U	200								
2-Chlorotoluene	U	30								
2-Hexanone	U	30								
4-Chlorotoluene	U	30								
4-Methyl-2-pentanone	U	30								
Acetone	U	100								
Benzene	U	30								
Bromobenzene	U	30								
Bromochloromethane	U	30								
Bromodichloromethane	U	30								
Bromoform	U	30								
Bromomethane	U	100								
Carbon disulfide	U	30								
Carbon tetrachloride	U	30								
Chlorobenzene	U	30								
Chloroethane	U	100								
Chloroform	U	30								
Chloromethane	U	100								
cis-1,2-Dichloroethene	U	30								
cis-1,3-Dichloropropene	U	30								
Cyclohexane	U	100								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **135670** Instrument ID **VMS9** Method: **SW8260C**

Dibromochloromethane	U	30						
Dichlorodifluoromethane	U	100						
Diisopropyl ether	U	30						
Ethyl acetate	U	100						
Ethylbenzene	U	30						
Hexachlorobutadiene	U	100						
Isopropylbenzene	U	30						
m,p-Xylene	U	60						
Methyl acetate	U	250						
Methyl tert-butyl ether	U	30						
Methylcyclohexane	U	30						
Methylene chloride	U	250						
Naphthalene	U	100						
n-Butylbenzene	U	30						
n-Propylbenzene	U	30						
o-Xylene	U	30						
p-Isopropyltoluene	U	100						
sec-Butylbenzene	12.5	30						J
Styrene	U	30						
tert-Butylbenzene	U	30						
Tetrachloroethene	U	30						
Toluene	U	30						
trans-1,2-Dichloroethene	U	30						
trans-1,3-Dichloropropene	U	30						
Trichloroethene	U	30						
Trichlorofluoromethane	U	30						
Vinyl chloride	U	30						
Xylenes, Total	U	90						
Surr: 1,2-Dichloroethane-d4	*984*	0	*1000*	0	*98.4*	*70-130*	0	
Surr: 4-Bromofluorobenzene	*916*	0	*1000*	0	*91.6*	*70-130*	0	
Surr: Dibromofluoromethane	*919.5*	0	*1000*	0	*92*	*70-130*	0	
Surr: Toluene-d8	*1002*	0	*1000*	0	*100*	*70-130*	0	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Sigma Group
Work Order: 19050438
Project: 16366

QC BATCH REPORT

Batch ID: **135670** Instrument ID **VMS9** Method: **SW8260C**

LCS Sample ID: **LCS-135670-135670** Units: **µg/Kg-dry** Analysis Date: **5/7/2019 11:00 PM**
Client ID: Run ID: **VMS9_190507B** SeqNo: **5647148** Prep Date: **5/7/2019** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	854.5	30	1000	0	85.4	75-125	0			
1,1,1-Trichloroethane	1006	30	1000	0	101	70-135	0			
1,1,2,2-Tetrachloroethane	948	30	1000	0	94.8	55-130	0			
1,1,2-Trichloroethane	936.5	30	1000	0	93.6	60-125	0			
1,1-Dichloroethane	939	30	1000	0	93.9	75-125	0			
1,1-Dichloroethene	1020	30	1000	0	102	76-148	0			
1,2,3-Trichlorobenzene	936.5	30	1000	0	93.6	60-135	0			
1,2,4-Trichlorobenzene	955	100	1000	0	95.5	65-130	0			
1,2,4-Trimethylbenzene	871	30	1000	0	87.1	65-135	0			
1,2-Dibromo-3-chloropropane	849	100	1000	0	84.9	40-135	0			
1,2-Dibromoethane	867	30	1000	0	86.7	80-195	0			
1,2-Dichlorobenzene	979	30	1000	0	97.9	75-120	0			
1,2-Dichloroethane	933	100	1000	0	93.3	70-135	0			
1,2-Dichloropropane	965	30	1000	0	96.5	70-120	0			
1,3,5-Trimethylbenzene	952	100	1000	0	95.2	65-135	0			
1,3-Dichlorobenzene	961	30	1000	0	96.1	70-125	0			
1,3-Dichloropropane	935	30	1000	0	93.5	75-125	0			
1,4-Dichlorobenzene	983.5	30	1000	0	98.4	70-125	0			
2,2-Dichloropropane	856	100	1000	0	85.6	54-146	0			
2-Butanone	921.5	200	1000	0	92.2	30-160	0			
2-Chlorotoluene	919.5	30	1000	0	92	70-130	0			
2-Hexanone	857	30	1000	0	85.7	45-145	0			
4-Chlorotoluene	912	30	1000	0	91.2	75-125	0			
4-Methyl-2-pentanone	1336	30	1000	0	134	74-176	0			
Acetone	971.5	100	1000	0	97.2	20-160	0			
Benzene	987	30	1000	0	98.7	75-125	0			
Bromobenzene	902	30	1000	0	90.2	65-120	0			
Bromochloromethane	950.5	30	1000	0	95	74-134	0			
Bromodichloromethane	931	30	1000	0	93.1	70-130	0			
Bromoform	796	30	1000	0	79.6	55-135	0			
Bromomethane	1604	100	1000	0	160	50-170	0			
Carbon disulfide	1102	30	1000	0	110	45-160	0			
Carbon tetrachloride	848	30	1000	0	84.8	65-135	0			
Chlorobenzene	913	30	1000	0	91.3	75-125	0			
Chloroethane	824.5	100	1000	0	82.4	40-155	0			
Chloroform	889.5	30	1000	0	89	70-125	0			
Chloromethane	674.5	100	1000	0	67.4	50-144	0			
cis-1,2-Dichloroethene	943	30	1000	0	94.3	65-125	0			
cis-1,3-Dichloropropene	939.5	30	1000	0	94	70-125	0			
Dibromochloromethane	787	30	1000	0	78.7	65-135	0			
Dichlorodifluoromethane	680	100	1000	0	68	35-135	0			
Diisopropyl ether	898	30	1000	0	89.8	70-130	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **135670** Instrument ID **VMS9** Method: **SW8260C**

Ethyl acetate	691	100	1000	0	69.1	70-130	0	S
Ethylbenzene	947	30	1000	0	94.7	75-125	0	
Hexachlorobutadiene	970.5	100	1000	0	97	55-140	0	
Isopropylbenzene	928.5	30	1000	0	92.8	75-130	0	
m,p-Xylene	1878	60	2000	0	93.9	80-125	0	
Methyl tert-butyl ether	1055	30	1000	0	106	75-125	0	
Methylene chloride	894.5	250	1000	0	89.4	55-145	0	
Naphthalene	900	100	1000	0	90	40-140	0	
n-Butylbenzene	993.5	30	1000	0	99.4	65-140	0	
n-Propylbenzene	964	30	1000	0	96.4	65-135	0	
o-Xylene	928.5	30	1000	0	92.8	75-125	0	
p-Isopropyltoluene	1111	100	1000	0	111	71-157	0	
sec-Butylbenzene	946	30	1000	0	94.6	65-130	0	
Styrene	930.5	30	1000	0	93	80-138	0	
tert-Butylbenzene	993	30	1000	0	99.3	65-130	0	
Tetrachloroethene	1016	30	1000	0	102	67-167	0	
Toluene	958.5	30	1000	0	95.8	70-125	0	
trans-1,2-Dichloroethene	934.5	30	1000	0	93.4	65-135	0	
trans-1,3-Dichloropropene	835	30	1000	0	83.5	59-129	0	
Trichloroethene	960.5	30	1000	0	96	75-125	0	
Trichlorofluoromethane	836	30	1000	0	83.6	25-185	0	
Vinyl chloride	873.5	30	1000	0	87.4	60-125	0	
Xylenes, Total	2806	90	3000	0	93.5	75-125	0	
Surr: 1,2-Dichloroethane-d4	*939.5*	0	*1000*	0	*94*	*70-130*	0	
Surr: 4-Bromofluorobenzene	*926*	0	*1000*	0	*92.6*	*70-130*	0	
Surr: Dibromofluoromethane	*1004*	0	*1000*	0	*100*	*70-130*	0	
Surr: Toluene-d8	*1006*	0	*1000*	0	*101*	*70-130*	0	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Sigma Group
Work Order: 19050438
Project: 16366

QC BATCH REPORT

Batch ID: **135670** Instrument ID **VMS9** Method: **SW8260C**

MS Sample ID: **19050448-04A MS** Units: **µg/Kg-dry** Analysis Date: **5/8/2019 05:41 AM**

Client ID: Run ID: **VMS9_190507B** SeqNo: **5647167** Prep Date: **5/7/2019** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	712	30	1000	0	71.2	75-125	0			S
1,1,1-Trichloroethane	780.5	30	1000	0	78	70-135	0			
1,1,2,2-Tetrachloroethane	740.5	30	1000	0	74	55-130	0			
1,1,2-Trichloroethane	846	30	1000	0	84.6	60-125	0			
1,1-Dichloroethane	689.5	30	1000	0	69	75-125	0			S
1,1-Dichloroethene	877.5	30	1000	0	87.8	76-148	0			
1,2,3-Trichlorobenzene	780	30	1000	0	78	60-135	0			
1,2,4-Trichlorobenzene	822.5	100	1000	0	82.2	65-130	0			
1,2,4-Trimethylbenzene	754.5	30	1000	0	75.4	65-135	0			
1,2-Dibromo-3-chloropropane	664	100	1000	0	66.4	40-135	0			
1,2-Dibromoethane	760	30	1000	0	76	80-195	0			S
1,2-Dichlorobenzene	819.5	30	1000	0	82	75-120	0			
1,2-Dichloroethane	791	100	1000	0	79.1	70-135	0			
1,2-Dichloropropane	783.5	30	1000	0	78.4	70-120	0			
1,3,5-Trimethylbenzene	815	100	1000	0	81.5	65-135	0			
1,3-Dichlorobenzene	822	30	1000	0	82.2	70-125	0			
1,3-Dichloropropane	792.5	30	1000	0	79.2	75-125	0			
1,4-Dichlorobenzene	826	30	1000	0	82.6	70-125	0			
2,2-Dichloropropane	589	100	1000	0	58.9	54-146	0			
2-Butanone	546	200	1000	0	54.6	30-160	0			
2-Chlorotoluene	801	30	1000	0	80.1	70-130	0			
2-Hexanone	728.5	30	1000	0	72.8	45-145	0			
4-Chlorotoluene	794	30	1000	0	79.4	75-125	0			
4-Methyl-2-pentanone	984.5	30	1000	0	98.4	74-176	0			
Acetone	841.5	100	1000	0	84.2	20-160	0			
Benzene	785	30	1000	0	78.5	75-125	0			
Bromobenzene	803.5	30	1000	0	80.4	65-120	0			
Bromochloromethane	867.5	30	1000	0	86.8	74-134	0			
Bromodichloromethane	742.5	30	1000	0	74.2	70-130	0			
Bromoform	651	30	1000	0	65.1	55-135	0			
Bromomethane	1006	100	1000	0	101	50-170	0			
Carbon disulfide	834.5	30	1000	0	83.4	45-160	0			
Carbon tetrachloride	647	30	1000	0	64.7	65-135	0			S
Chlorobenzene	805	30	1000	0	80.5	75-125	0			
Chloroethane	338.5	100	1000	0	33.8	40-155	0			S
Chloroform	749.5	30	1000	0	75	70-125	0			
Chloromethane	518	100	1000	0	51.8	50-144	0			
cis-1,2-Dichloroethene	909	30	1000	0	90.9	65-125	0			
cis-1,3-Dichloropropene	754.5	30	1000	0	75.4	70-125	0			
Dibromochloromethane	614	30	1000	0	61.4	65-135	0			S
Dichlorodifluoromethane	600	100	1000	0	60	35-135	0			
Diisopropyl ether	759	30	1000	0	75.9	70-130	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **135670** Instrument ID **VMS9** Method: **SW8260C**

Ethyl acetate	839	100	1000	0	83.9	70-130	0	
Ethylbenzene	788	30	1000	0	78.8	75-125	0	
Hexachlorobutadiene	881.5	100	1000	0	88.2	55-140	0	
Isopropylbenzene	799	30	1000	0	79.9	75-130	0	
m,p-Xylene	1595	60	2000	0	79.8	80-125	0	S
Methyl tert-butyl ether	883.5	30	1000	0	88.4	75-125	0	
Methylene chloride	744.5	250	1000	0	74.4	55-145	0	
Naphthalene	800	100	1000	0	80	40-140	0	
n-Butylbenzene	852.5	30	1000	0	85.2	65-140	0	
n-Propylbenzene	804	30	1000	0	80.4	65-135	0	
o-Xylene	793	30	1000	0	79.3	75-125	0	
p-Isopropyltoluene	795.5	100	1000	0	79.6	71-157	0	
sec-Butylbenzene	801	30	1000	0	80.1	65-130	0	
Styrene	784	30	1000	0	78.4	80-138	0	S
tert-Butylbenzene	850	30	1000	0	85	65-130	0	
Tetrachloroethene	1464	30	1000	0	146	67-167	0	
Toluene	766	30	1000	0	76.6	70-125	0	
trans-1,2-Dichloroethene	799.5	30	1000	0	80	65-135	0	
trans-1,3-Dichloropropene	704.5	30	1000	0	70.4	59-129	0	
Trichloroethene	842.5	30	1000	0	84.2	75-125	0	
Trichlorofluoromethane	694	30	1000	0	69.4	25-185	0	
Vinyl chloride	794.5	30	1000	0	79.4	60-125	0	
Xylenes, Total	2388	90	3000	0	79.6	75-125	0	
Surr: 1,2-Dichloroethane-d4	*987.5*	0	*1000*	0	*98.8*	*70-130*	0	
Surr: 4-Bromofluorobenzene	*996*	0	*1000*	0	*99.6*	*70-130*	0	
Surr: Dibromofluoromethane	*958*	0	*1000*	0	*95.8*	*70-130*	0	
Surr: Toluene-d8	*938.5*	0	*1000*	0	*93.8*	*70-130*	0	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Sigma Group
Work Order: 19050438
Project: 16366

QC BATCH REPORT

Batch ID: **135670** Instrument ID **VMS9** Method: **SW8260C**

MSD Sample ID: **19050448-04A MSD** Units: **µg/Kg-dry** Analysis Date: **5/8/2019 05:56 AM**
Client ID: Run ID: **VMS9_190507B** SeqNo: **5647169** Prep Date: **5/7/2019** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	819.9	30	995	0	82.4	75-125	712	14.1	30	
1,1,1-Trichloroethane	841.3	30	995	0	84.6	70-135	780.5	7.5	30	
1,1,2,2-Tetrachloroethane	827.9	30	995	0	83.2	55-130	740.5	11.1	30	
1,1,2-Trichloroethane	957.2	30	995	0	96.2	60-125	846	12.3	30	
1,1-Dichloroethane	776.1	30	995	0	78	75-125	689.5	11.8	30	
1,1-Dichloroethene	926.9	30	995	0	93.2	76-148	877.5	5.47	30	
1,2,3-Trichlorobenzene	854.7	30	995	0	85.9	60-135	780	9.14	30	
1,2,4-Trichlorobenzene	955.7	100	995	0	96	65-130	822.5	15	30	
1,2,4-Trimethylbenzene	877.1	30	995	0	88.2	65-135	754.5	15	30	
1,2-Dibromo-3-chloropropane	744.3	100	995	0	74.8	40-135	664	11.4	30	
1,2-Dibromoethane	871.1	30	995	0	87.6	80-195	760	13.6	30	
1,2-Dichlorobenzene	949.8	30	995	0	95.4	75-120	819.5	14.7	30	
1,2-Dichloroethane	904.5	100	995	0	90.9	70-135	791	13.4	30	
1,2-Dichloropropane	910	30	995	0	91.4	70-120	783.5	14.9	30	
1,3,5-Trimethylbenzene	936.3	100	995	0	94.1	65-135	815	13.9	30	
1,3-Dichlorobenzene	933.3	30	995	0	93.8	70-125	822	12.7	30	
1,3-Dichloropropane	955.7	30	995	0	96	75-125	792.5	18.7	30	
1,4-Dichlorobenzene	937.8	30	995	0	94.2	70-125	826	12.7	30	
2,2-Dichloropropane	628.9	100	995	0	63.2	54-146	589	6.55	30	
2-Butanone	951.7	200	995	0	95.6	30-160	546	54.2	30	R
2-Chlorotoluene	920.9	30	995	0	92.6	70-130	801	13.9	30	
2-Hexanone	998.5	30	995	0	100	45-145	728.5	31.3	30	R
4-Chlorotoluene	912.9	30	995	0	91.8	75-125	794	13.9	30	
4-Methyl-2-pentanone	1143	30	995	0	115	74-176	984.5	14.9	30	
Acetone	1344	100	995	0	135	20-160	841.5	46	30	R
Benzene	900	30	995	0	90.4	75-125	785	13.6	30	
Bromobenzene	876.1	30	995	0	88	65-120	803.5	8.65	30	
Bromochloromethane	958.7	30	995	0	96.4	74-134	867.5	9.99	30	
Bromodichloromethane	836.3	30	995	0	84	70-130	742.5	11.9	30	
Bromoform	779.6	30	995	0	78.4	55-135	651	18	30	
Bromomethane	1198	100	995	0	120	50-170	1006	17.5	30	
Carbon disulfide	876.1	30	995	0	88	45-160	834.5	4.87	30	
Carbon tetrachloride	711.4	30	995	0	71.5	65-135	647	9.49	30	
Chlorobenzene	888.1	30	995	0	89.2	75-125	805	9.81	30	
Chloroethane	348.8	100	995	0	35	40-155	338.5	2.98	30	S
Chloroform	859.7	30	995	0	86.4	70-125	749.5	13.7	30	
Chloromethane	575.6	100	995	0	57.8	50-144	518	10.5	30	
cis-1,2-Dichloroethene	1051	30	995	0	106	65-125	909	14.5	30	
cis-1,3-Dichloropropene	859.2	30	995	0	86.4	70-125	754.5	13	30	
Dibromochloromethane	690.5	30	995	0	69.4	65-135	614	11.7	30	
Dichlorodifluoromethane	645.3	100	995	0	64.8	35-135	600	7.27	30	
Diisopropyl ether	851.7	30	995	0	85.6	70-130	759	11.5	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Sigma Group
Work Order: 19050438
Project: 16366

QC BATCH REPORT

Batch ID: **135670** Instrument ID **VMS9** Method: **SW8260C**

Ethyl acetate	953.7	100	995	0	95.8	70-130	839	12.8	30
Ethylbenzene	912.4	30	995	0	91.7	75-125	788	14.6	30
Hexachlorobutadiene	1007	100	995	0	101	55-140	881.5	13.3	30
Isopropylbenzene	933.8	30	995	0	93.8	75-130	799	15.6	30
m,p-Xylene	1814	60	1990	0	91.2	80-125	1595	12.8	30
Methyl tert-butyl ether	1011	30	995	0	102	75-125	883.5	13.5	30
Methylene chloride	846.3	250	995	0	85	55-145	744.5	12.8	30
Naphthalene	889.1	100	995	0	89.4	40-140	800	10.5	30
n-Butylbenzene	979.6	30	995	0	98.4	65-140	852.5	13.9	30
n-Propylbenzene	931.8	30	995	0	93.6	65-135	804	14.7	30
o-Xylene	934.3	30	995	0	93.9	75-125	793	16.4	30
p-Isopropyltoluene	913.9	100	995	0	91.8	71-157	795.5	13.9	30
sec-Butylbenzene	910.4	30	995	0	91.5	65-130	801	12.8	30
Styrene	900	30	995	0	90.4	80-138	784	13.8	30
tert-Butylbenzene	988.6	30	995	0	99.4	65-130	850	15.1	30
Tetrachloroethene	1593	30	995	0	160	67-167	1464	8.44	30
Toluene	874.1	30	995	0	87.8	70-125	766	13.2	30
trans-1,2-Dichloroethene	893	30	995	0	89.8	65-135	799.5	11.1	30
trans-1,3-Dichloropropene	797	30	995	0	80.1	59-129	704.5	12.3	30
Trichloroethene	937.3	30	995	0	94.2	75-125	842.5	10.7	30
Trichlorofluoromethane	745.3	30	995	0	74.9	25-185	694	7.12	30
Vinyl chloride	840.8	30	995	0	84.5	60-125	794.5	5.66	30
Xylenes, Total	2748	90	2985	0	92.1	75-125	2388	14	30
Surr: 1,2-Dichloroethane-d4	*974.6*	0	*995*	0	*98*	*70-130*	987.5	*1.31*	*30*
Surr: 4-Bromofluorobenzene	*949.8*	0	*995*	0	*95.4*	*70-130*	996	*4.75*	*30*
Surr: Dibromofluoromethane	*939.8*	0	*995*	0	*94.4*	*70-130*	958	*1.92*	*30*
Surr: Toluene-d8	*965.2*	0	*995*	0	*97*	*70-130*	938.5	*2.8*	*30*

The following samples were analyzed in this batch:

19050438-01A	19050438-02A	19050438-03A
19050438-04A	19050438-05A	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Sigma Group
Work Order: 19050438
Project: 16366

QC BATCH REPORT

Batch ID: **R260000** Instrument ID **MOIST** Method: **SW3550C**

MBLK Sample ID: **WBLKS-R260000** Units: **% of sample** Analysis Date: **5/7/2019 04:01 PM**
Client ID: Run ID: **MOIST_190507D** SeqNo: **5646107** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	U	0.10								

LCS Sample ID: **LCS-R260000** Units: **% of sample** Analysis Date: **5/7/2019 04:01 PM**
Client ID: Run ID: **MOIST_190507D** SeqNo: **5646106** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	100	0.10	100	0	100	98-102	0			

DUP Sample ID: **19050325-04A DUP** Units: **% of sample** Analysis Date: **5/7/2019 04:01 PM**
Client ID: Run ID: **MOIST_190507D** SeqNo: **5646093** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	17.46	0.10	0	0	0	0-0	17.54	0.457	10	

DUP Sample ID: **19050325-09A DUP** Units: **% of sample** Analysis Date: **5/7/2019 04:01 PM**
Client ID: Run ID: **MOIST_190507D** SeqNo: **5646099** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	18.13	0.10	0	0	0	0-0	17.67	2.57	10	

The following samples were analyzed in this batch:

19050438-01B	19050438-02B	19050438-03B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Sigma Group
Work Order: 19050438
Project: 16366

QC BATCH REPORT

Batch ID: **R260094** Instrument ID **MOIST** Method: **SW3550C**

MBLK Sample ID: **WBLKS-R260094** Units: **% of sample** Analysis Date: **5/8/2019 12:28 PM**
Client ID: Run ID: **MOIST_190508A** SeqNo: **5648633** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	U	0.10								

LCS Sample ID: **LCS-R260094** Units: **% of sample** Analysis Date: **5/8/2019 12:28 PM**
Client ID: Run ID: **MOIST_190508A** SeqNo: **5648632** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	100	0.10	100	0	100	98-102	0			

DUP Sample ID: **19050325-14A DUP** Units: **% of sample** Analysis Date: **5/8/2019 12:28 PM**
Client ID: Run ID: **MOIST_190508A** SeqNo: **5648613** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	17.6	0.10	0	0	0	0-0	17.62	0.114	10	

DUP Sample ID: **19050325-17A DUP** Units: **% of sample** Analysis Date: **5/8/2019 12:28 PM**
Client ID: Run ID: **MOIST_190508A** SeqNo: **5648617** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	13.44	0.10	0	0	0	0-0	13.16	2.11	10	

The following samples were analyzed in this batch: 19050438-04B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Cincinnati, OH +1 513 733 5336
Everett, WA +1 425 356 2600
Fort Collins, CO +1 970 490 1511
Holland, MI +1 616 399 6070
Houston, TX +1 281 530 5656
Middletown, PA +1 717 944 5541
Spring City, PA +1 610 948 4903
Salt Lake City, UT +1 801 266 7700
South Charleston, WV +1 304 356 3168
York, PA +1 717 505 5280

Chain of Custody Form

Page 1 of 1

COC ID: 44240

ALS Project Manager:

ALS Work Order #: 19050438

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name		A	VOC
Work Order		Project Number	16366	B	
Company Name	The Sigma Group	Bill To Company	The Sigma Group	C	
Send Report To	Stephen Mear	Invoice Attn	Accounts Payable	D	
Address	1300 W. Canal St.	Address	1300 W. Canal St.	E	
				F	
City/State/Zip	Milwaukee, WI 53233	City/State/Zip	Milwaukee WI 53233	G	
Phone	414-643-4124	Phone	414-643-4124	H	
Fax	414-643-4210	Fax	414-643-4210	I	
e-Mail Address		e-Mail Address		J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	14-E-SW	5/6/19	10:30	Soil	7	3	X										
2	14-S-SW	5/6/19	10:45	↓	↓	↓	X										
3	14-W-SW	5/6/19	11:00				X										
4	14-N-SW	5/6/19	11:15				X										
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign: Stephen Mear

Shipment Method: Fed EX

Turnaround Time in Business Days (BD): ☐ 10 BD ☐ 5 BD ☒ 3 BD ☐ 2 BD ☐ 1 BD ☐ Other

Results Due Date:

Relinquished by: Date: 5/6/19 Time: 400 Received by: FED EX

Relinquished by: FED EX Date: 5/7/19 Time: 0900 Received by (Laboratory):

Logged by (Laboratory): Date: 5/7/19 Time: 1430 Checked by (Laboratory):

Notes:

Cooler ID	Cooler Temp
502	4.4.6

QC Package: (Check One Box Below)
☐ Level II Std QC ☐ TRRP Checklist
☐ Level III Std QC/Raw Date ☐ TRRP Level IV
☐ Level IV SW846/CLP
☐ Other

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

ote:
1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

ALS Group, USA

Sample Receipt Checklist

Client Name: **SIGMAGROUP** Date/Time Received: **07-May-19 09:00**

Work Order: **19050438** Received by: **DS**

Checklist completed by Diane Shaw (eSignature) 07-May-19 (Date) Reviewed by: Chad Whelton (eSignature) 07-May-19 (Date)

Matrices: Soil

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Sample(s) received on ice?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	4.4/4.4 c	SR2	
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	5/7/2019 2:37:19 PM		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:	-		

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

24-May-2019

Stephen Meer
The Sigma Group
1300 W. Canal Street
Milwaukee, WI 53233

Re: **Former Biogenesis (16366)** Work Order: **19051039**

Dear Stephen,

ALS Environmental received 5 samples on 15-May-2019 09:45 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental - Holland and for only the analyses requested.

Sample results are compliant with industry accepted practices and Quality Control results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 31.

If you have any questions regarding this report, please feel free to contact me:

ADDRESS: 3352 128th Avenue, Holland, MI, USA
PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Sincerely,

Electronically approved by: Chad Whelton

Chad Whelton
Project Manager

Report of Laboratory Analysis

Certificate No: WI: 399084510

ALS Group, USA

Date: 24-May-19

Client: The Sigma Group
Project: Former Biogenesis (16366)
Work Order: **19051039**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
19051039-01	14-S-SW (4')	Soil		5/14/2019 08:30	5/15/2019 09:45	☐
19051039-02	14-E-SW (3')	Soil		5/14/2019 10:00	5/15/2019 09:45	☐
19051039-03	14-W-SW (4')	Soil		5/14/2019 09:00	5/15/2019 09:45	☐
19051039-04	14-N-SW (4')	Soil		5/14/2019 09:30	5/15/2019 09:45	☐
19051039-05	Trip Blank	Soil		5/14/2019	5/15/2019 09:45	☐

ALS Group, USA

Date: 24-May-19

Client: The Sigma Group
Project: Former Biogenesis (16366)
Work Order: 19051039

Case Narrative

Samples for the above noted Work Order were received on 05/15/2019. The attached "Sample Receipt Checklist" documents the status of custody seals, container integrity, sample condition, preservation, and temperature compliance.
In order to ensure compliance with NR 149 criteria, please note the following report format:
(1) The Limit of Detection (LOD) is reported as the MDL (Method Detection Limit)
(2) The Limit of Quantitation (LOQ) is reported as the PQL (Practical Quantitation Limit)
(3) All reported concentrations, including those for the LOD and LOQ, are adjusted for any required dilutions
(4) All reported concentrations, including those for the LOD and LOQ, are adjusted for moisture content when samples are reported on a dry weight basis.

Samples were analyzed according to the analytical methodology previously documented in the "Work Order Acknowledgement". Methodologies are also documented in the "Analytical Result" section for each sample. Quality control results are listed in the "QC Report" section. Detail as to the associated samples can be found at the end of each batch summary. If applicable, results are appropriately qualified in the Analytical Result and QC Report sections. The "Qualifiers" section documents the various qualifiers, acronyms, and units utilized in reporting.

With the following exceptions, all sample analyses achieved analytical criteria.

Volatile Organics
No deviations or anomalies noted

Extractable Organics

Batch 136095, Method PCBLVI_8082_S, Sample 19051039-04C MSD: The RPD between the MS and MSD was outside the control limit for Aroclor 1260. The corresponding result in the parent sample should be considered estimated.

Metals
No deviations or anomalies noted

Wet Chemistry
No deviations or anomalies noted

ALS Group, USA

Date: 24-May-19

Client: The Sigma Group
Project: Former Biogenesis (16366)
WorkOrder: **19051039**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
**	Estimated Value
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
Hr	BOD/CBOD - Sample was reset outside Hold Time, value should be considered estimated.
J	Analyte is present at an estimated concentration between the MDL and Report Limit
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

Acronym	Description
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

Units Reported	Description
% of sample	Percent of Sample
µg/Kg-dry	Micrograms per Kilogram Dry Weight

ALS Group, USA

Date: *24-May-19*

Client: The Sigma Group
Project: Former Biogenesis (16366)
Sample ID: 14-S-SW (4')
Collection Date: 5/14/2019 08:30 AM

Work Order: 19051039
Lab ID: 19051039-01
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS		Method: **SW8082**			Prep: SW3546 / 5/16/19		Analyst: **KB**
Aroclor 1016	U		27	80	µg/Kg-dry	1	5/16/2019 16:48
Aroclor 1221	U		27	80	µg/Kg-dry	1	5/16/2019 16:48
Aroclor 1232	U		27	80	µg/Kg-dry	1	5/16/2019 16:48
Aroclor 1242	U		27	80	µg/Kg-dry	1	5/16/2019 16:48
Aroclor 1248	U		27	80	µg/Kg-dry	1	5/16/2019 16:48
Aroclor 1254	U		22	80	µg/Kg-dry	1	5/16/2019 16:48
Aroclor 1260	U		22	80	µg/Kg-dry	1	5/16/2019 16:48
Aroclor 1262	U		22	80	µg/Kg-dry	1	5/16/2019 16:48
Aroclor 1268	U		22	80	µg/Kg-dry	1	5/16/2019 16:48
Surr: Decachlorobiphenyl	*58.3*			*40-140*	*%REC*	1	5/16/2019 16:48
Surr: Tetrachloro-m-xylene	*73.0*			*45-124*	*%REC*	1	5/16/2019 16:48
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 5/17/19		Analyst: **WH**
1,1,1,2-Tetrachloroethane	U		15	29	µg/Kg-dry	1	5/17/2019 15:00
1,1,1-Trichloroethane	U		13	29	µg/Kg-dry	1	5/17/2019 15:00
1,1,2,2-Tetrachloroethane	U		13	29	µg/Kg-dry	1	5/17/2019 15:00
1,1,2-Trichloroethane	U		12	29	µg/Kg-dry	1	5/17/2019 15:00
1,1,2-Trichlorotrifluoroethane	U		18	29	µg/Kg-dry	1	5/17/2019 15:00
1,1-Dichloroethane	U		11	29	µg/Kg-dry	1	5/17/2019 15:00
1,1-Dichloroethene	U		9.5	29	µg/Kg-dry	1	5/17/2019 15:00
1,2,3-Trichlorobenzene	U		35	29	µg/Kg-dry	1	5/17/2019 15:00
1,2,4-Trichlorobenzene	U		33	97	µg/Kg-dry	1	5/17/2019 15:00
1,2,4-Trimethylbenzene	U		21	29	µg/Kg-dry	1	5/17/2019 15:00
1,2-Dibromo-3-chloropropane	U		27	97	µg/Kg-dry	1	5/17/2019 15:00
1,2-Dibromoethane	U		8.2	29	µg/Kg-dry	1	5/17/2019 15:00
1,2-Dichlorobenzene	U		11	29	µg/Kg-dry	1	5/17/2019 15:00
1,2-Dichloroethane	U		44	97	µg/Kg-dry	1	5/17/2019 15:00
1,2-Dichloropropane	U		22	29	µg/Kg-dry	1	5/17/2019 15:00
1,3,5-Trimethylbenzene	U		34	97	µg/Kg-dry	1	5/17/2019 15:00
1,3-Dichlorobenzene	U		9.7	29	µg/Kg-dry	1	5/17/2019 15:00
1,3-Dichloropropane	U		8.2	29	µg/Kg-dry	1	5/17/2019 15:00
1,4-Dichlorobenzene	U		7.0	29	µg/Kg-dry	1	5/17/2019 15:00
2,2-Dichloropropane	U		31	97	µg/Kg-dry	1	5/17/2019 15:00
2-Butanone	U		24	190	µg/Kg-dry	1	5/17/2019 15:00
2-Chlorotoluene	U		11	29	µg/Kg-dry	1	5/17/2019 15:00
2-Hexanone	U		14	29	µg/Kg-dry	1	5/17/2019 15:00
4-Chlorotoluene	U		6.9	29	µg/Kg-dry	1	5/17/2019 15:00
4-Methyl-2-pentanone	U		27	29	µg/Kg-dry	1	5/17/2019 15:00
Acetone	U		87	97	µg/Kg-dry	1	5/17/2019 15:00

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *24-May-19*

Client: The Sigma Group
Project: Former Biogenesis (16366)
Sample ID: 14-S-SW (4')
Collection Date: 5/14/2019 08:30 AM

Work Order: 19051039
Lab ID: 19051039-01
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Benzene	U		5.0	29	µg/Kg-dry	1	5/17/2019 15:00
Bromobenzene	U		11	29	µg/Kg-dry	1	5/17/2019 15:00
Bromochloromethane	U		15	29	µg/Kg-dry	1	5/17/2019 15:00
Bromodichloromethane	U		16	29	µg/Kg-dry	1	5/17/2019 15:00
Bromoform	U		12	29	µg/Kg-dry	1	5/17/2019 15:00
Bromomethane	U		56	97	µg/Kg-dry	1	5/17/2019 15:00
Carbon disulfide	U		15	29	µg/Kg-dry	1	5/17/2019 15:00
Carbon tetrachloride	U		11	29	µg/Kg-dry	1	5/17/2019 15:00
Chlorobenzene	U		9.7	29	µg/Kg-dry	1	5/17/2019 15:00
Chloroethane	U		29	97	µg/Kg-dry	1	5/17/2019 15:00
Chloroform	U		11	29	µg/Kg-dry	1	5/17/2019 15:00
Chloromethane	U		80	97	µg/Kg-dry	1	5/17/2019 15:00
cis-1,2-Dichloroethene	U		9.1	29	µg/Kg-dry	1	5/17/2019 15:00
cis-1,3-Dichloropropene	U		22	29	µg/Kg-dry	1	5/17/2019 15:00
Cyclohexane	U		9.5	97	µg/Kg-dry	1	5/17/2019 15:00
Dibromochloromethane	U		16	29	µg/Kg-dry	1	5/17/2019 15:00
Dichlorodifluoromethane	U		35	97	µg/Kg-dry	1	5/17/2019 15:00
Diisopropyl ether	U		5.5	29	µg/Kg-dry	1	5/17/2019 15:00
Ethyl acetate	U		11	97	µg/Kg-dry	1	5/17/2019 15:00
Ethylbenzene	U		6.2	29	µg/Kg-dry	1	5/17/2019 15:00
Hexachlorobutadiene	U		26	97	µg/Kg-dry	1	5/17/2019 15:00
Isopropylbenzene	U		8.9	29	µg/Kg-dry	1	5/17/2019 15:00
m,p-Xylene	U		39	58	µg/Kg-dry	1	5/17/2019 15:00
Methyl acetate	**64**	J	**35**	**240**	**µg/Kg-dry**	1	5/17/2019 15:00
Methyl tert-butyl ether	U		8.4	29	µg/Kg-dry	1	5/17/2019 15:00
Methylcyclohexane	U		11	29	µg/Kg-dry	1	5/17/2019 15:00
Methylene chloride	U		77	240	µg/Kg-dry	1	5/17/2019 15:00
Naphthalene	U		70	97	µg/Kg-dry	1	5/17/2019 15:00
n-Butylbenzene	U		21	29	µg/Kg-dry	1	5/17/2019 15:00
n-Propylbenzene	U		22	29	µg/Kg-dry	1	5/17/2019 15:00
o-Xylene	U		11	29	µg/Kg-dry	1	5/17/2019 15:00
p-Isopropyltoluene	U		25	97	µg/Kg-dry	1	5/17/2019 15:00
sec-Butylbenzene	U		11	29	µg/Kg-dry	1	5/17/2019 15:00
Styrene	U		12	29	µg/Kg-dry	1	5/17/2019 15:00
tert-Butylbenzene	U		9.4	29	µg/Kg-dry	1	5/17/2019 15:00
Tetrachloroethene	U		8.5	29	µg/Kg-dry	1	5/17/2019 15:00
Toluene	U		8.0	29	µg/Kg-dry	1	5/17/2019 15:00
trans-1,2-Dichloroethene	U		11	29	µg/Kg-dry	1	5/17/2019 15:00
trans-1,3-Dichloropropene	U		16	29	µg/Kg-dry	1	5/17/2019 15:00
Trichloroethene	U		13	29	µg/Kg-dry	1	5/17/2019 15:00

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: The Sigma Group
Project: Former Biogenesis (16366)
Sample ID: 14-S-SW (4')
Collection Date: 5/14/2019 08:30 AM

Work Order: 19051039
Lab ID: 19051039-01
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Trichlorofluoromethane	U		15	29	µg/Kg-dry	1	5/17/2019 15:00
Vinyl chloride	U		19	29	µg/Kg-dry	1	5/17/2019 15:00
Xylenes, Total	U		39	88	µg/Kg-dry	1	5/17/2019 15:00
Surr: 1,2-Dichloroethane-d4	*101*			*70-130*	*%REC*	1	5/17/2019 15:00
Surr: 4-Bromofluorobenzene	*101*			*70-130*	*%REC*	1	5/17/2019 15:00
Surr: Dibromofluoromethane	*94.0*			*70-130*	*%REC*	1	5/17/2019 15:00
Surr: Toluene-d8	*100*			*70-130*	*%REC*	1	5/17/2019 15:00
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**17**		**0.10**	**0.10**	**% of sample**	1	5/21/2019 13:25

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *24-May-19*

Client: The Sigma Group
Project: Former Biogenesis (16366)
Sample ID: 14-E-SW (3')
Collection Date: 5/14/2019 10:00 AM

Work Order: 19051039
Lab ID: 19051039-02
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS		Method: **SW8082**			Prep: SW3546 / 5/16/19		Analyst: **KB**
Aroclor 1016	U		27	80	µg/Kg-dry	1	5/16/2019 17:03
Aroclor 1221	U		27	80	µg/Kg-dry	1	5/16/2019 17:03
Aroclor 1232	U		27	80	µg/Kg-dry	1	5/16/2019 17:03
Aroclor 1242	U		27	80	µg/Kg-dry	1	5/16/2019 17:03
Aroclor 1248	U		27	80	µg/Kg-dry	1	5/16/2019 17:03
Aroclor 1254	U		22	80	µg/Kg-dry	1	5/16/2019 17:03
Aroclor 1260	U		22	80	µg/Kg-dry	1	5/16/2019 17:03
Aroclor 1262	U		22	80	µg/Kg-dry	1	5/16/2019 17:03
Aroclor 1268	U		22	80	µg/Kg-dry	1	5/16/2019 17:03
Surr: Decachlorobiphenyl	*61.7*			*40-140*	*%REC*	1	5/16/2019 17:03
Surr: Tetrachloro-m-xylene	*76.0*			*45-124*	*%REC*	1	5/16/2019 17:03
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 5/17/19		Analyst: **WH**
1,1,1,2-Tetrachloroethane	U		21	40	µg/Kg-dry	1	5/17/2019 15:17
1,1,1-Trichloroethane	U		18	40	µg/Kg-dry	1	5/17/2019 15:17
1,1,2,2-Tetrachloroethane	U		18	40	µg/Kg-dry	1	5/17/2019 15:17
1,1,2-Trichloroethane	U		17	40	µg/Kg-dry	1	5/17/2019 15:17
1,1,2-Trichlorotrifluoroethane	U		25	40	µg/Kg-dry	1	5/17/2019 15:17
1,1-Dichloroethane	U		14	40	µg/Kg-dry	1	5/17/2019 15:17
1,1-Dichloroethene	U		13	40	µg/Kg-dry	1	5/17/2019 15:17
1,2,3-Trichlorobenzene	U		48	40	µg/Kg-dry	1	5/17/2019 15:17
1,2,4-Trichlorobenzene	U		45	130	µg/Kg-dry	1	5/17/2019 15:17
1,2,4-Trimethylbenzene	U		29	40	µg/Kg-dry	1	5/17/2019 15:17
1,2-Dibromo-3-chloropropane	U		37	130	µg/Kg-dry	1	5/17/2019 15:17
1,2-Dibromoethane	U		11	40	µg/Kg-dry	1	5/17/2019 15:17
1,2-Dichlorobenzene	U		15	40	µg/Kg-dry	1	5/17/2019 15:17
1,2-Dichloroethane	U		60	130	µg/Kg-dry	1	5/17/2019 15:17
1,2-Dichloropropane	U		29	40	µg/Kg-dry	1	5/17/2019 15:17
1,3,5-Trimethylbenzene	U		46	130	µg/Kg-dry	1	5/17/2019 15:17
1,3-Dichlorobenzene	U		13	40	µg/Kg-dry	1	5/17/2019 15:17
1,3-Dichloropropane	U		11	40	µg/Kg-dry	1	5/17/2019 15:17
1,4-Dichlorobenzene	U		9.6	40	µg/Kg-dry	1	5/17/2019 15:17
2,2-Dichloropropane	U		42	130	µg/Kg-dry	1	5/17/2019 15:17
2-Butanone	U		33	260	µg/Kg-dry	1	5/17/2019 15:17
2-Chlorotoluene	U		15	40	µg/Kg-dry	1	5/17/2019 15:17
2-Hexanone	U		20	40	µg/Kg-dry	1	5/17/2019 15:17
4-Chlorotoluene	U		9.4	40	µg/Kg-dry	1	5/17/2019 15:17
4-Methyl-2-pentanone	U		37	40	µg/Kg-dry	1	5/17/2019 15:17
Acetone	U		120	130	µg/Kg-dry	1	5/17/2019 15:17

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *24-May-19*

Client: The Sigma Group
Project: Former Biogenesis (16366)
Sample ID: 14-E-SW (3')
Collection Date: 5/14/2019 10:00 AM

Work Order: 19051039
Lab ID: 19051039-02
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Benzene	U		6.8	40	µg/Kg-dry	1	5/17/2019 15:17
Bromobenzene	U		16	40	µg/Kg-dry	1	5/17/2019 15:17
Bromochloromethane	U		20	40	µg/Kg-dry	1	5/17/2019 15:17
Bromodichloromethane	U		22	40	µg/Kg-dry	1	5/17/2019 15:17
Bromoform	U		17	40	µg/Kg-dry	1	5/17/2019 15:17
Bromomethane	U		76	130	µg/Kg-dry	1	5/17/2019 15:17
Carbon disulfide	U		21	40	µg/Kg-dry	1	5/17/2019 15:17
Carbon tetrachloride	U		16	40	µg/Kg-dry	1	5/17/2019 15:17
Chlorobenzene	U		13	40	µg/Kg-dry	1	5/17/2019 15:17
Chloroethane	U		39	130	µg/Kg-dry	1	5/17/2019 15:17
Chloroform	U		15	40	µg/Kg-dry	1	5/17/2019 15:17
Chloromethane	U		110	130	µg/Kg-dry	1	5/17/2019 15:17
cis-1,2-Dichloroethene	U		12	40	µg/Kg-dry	1	5/17/2019 15:17
cis-1,3-Dichloropropene	U		30	40	µg/Kg-dry	1	5/17/2019 15:17
Cyclohexane	U		13	130	µg/Kg-dry	1	5/17/2019 15:17
Dibromochloromethane	U		22	40	µg/Kg-dry	1	5/17/2019 15:17
Dichlorodifluoromethane	U		48	130	µg/Kg-dry	1	5/17/2019 15:17
Diisopropyl ether	U		7.4	40	µg/Kg-dry	1	5/17/2019 15:17
Ethyl acetate	U		15	130	µg/Kg-dry	1	5/17/2019 15:17
Ethylbenzene	U		8.4	40	µg/Kg-dry	1	5/17/2019 15:17
Hexachlorobutadiene	U		36	130	µg/Kg-dry	1	5/17/2019 15:17
Isopropylbenzene	U		12	40	µg/Kg-dry	1	5/17/2019 15:17
m,p-Xylene	U		53	79	µg/Kg-dry	1	5/17/2019 15:17
Methyl acetate	**150**	J	**48**	**330**	**µg/Kg-dry**	1	5/17/2019 15:17
Methyl tert-butyl ether	U		11	40	µg/Kg-dry	1	5/17/2019 15:17
Methylcyclohexane	U		15	40	µg/Kg-dry	1	5/17/2019 15:17
Methylene chloride	U		110	330	µg/Kg-dry	1	5/17/2019 15:17
Naphthalene	U		95	130	µg/Kg-dry	1	5/17/2019 15:17
n-Butylbenzene	U		29	40	µg/Kg-dry	1	5/17/2019 15:17
n-Propylbenzene	U		30	40	µg/Kg-dry	1	5/17/2019 15:17
o-Xylene	U		15	40	µg/Kg-dry	1	5/17/2019 15:17
p-Isopropyltoluene	U		34	130	µg/Kg-dry	1	5/17/2019 15:17
sec-Butylbenzene	U		16	40	µg/Kg-dry	1	5/17/2019 15:17
Styrene	U		16	40	µg/Kg-dry	1	5/17/2019 15:17
tert-Butylbenzene	U		13	40	µg/Kg-dry	1	5/17/2019 15:17
Tetrachloroethene	U		12	40	µg/Kg-dry	1	5/17/2019 15:17
Toluene	U		11	40	µg/Kg-dry	1	5/17/2019 15:17
trans-1,2-Dichloroethene	U		15	40	µg/Kg-dry	1	5/17/2019 15:17
trans-1,3-Dichloropropene	U		22	40	µg/Kg-dry	1	5/17/2019 15:17
Trichloroethene	U		18	40	µg/Kg-dry	1	5/17/2019 15:17

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: The Sigma Group
Project: Former Biogenesis (16366)
Sample ID: 14-E-SW (3')
Collection Date: 5/14/2019 10:00 AM

Work Order: 19051039
Lab ID: 19051039-02
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Trichlorofluoromethane	U		20	40	µg/Kg-dry	1	5/17/2019 15:17
Vinyl chloride	U		26	40	µg/Kg-dry	1	5/17/2019 15:17
Xylenes, Total	U		53	120	µg/Kg-dry	1	5/17/2019 15:17
Surr: 1,2-Dichloroethane-d4	*102*			*70-130*	*%REC*	1	5/17/2019 15:17
Surr: 4-Bromofluorobenzene	*102*			*70-130*	*%REC*	1	5/17/2019 15:17
Surr: Dibromofluoromethane	*93.4*			*70-130*	*%REC*	1	5/17/2019 15:17
Surr: Toluene-d8	*99.5*			*70-130*	*%REC*	1	5/17/2019 15:17
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**17**		**0.10**	**0.10**	**% of sample**	1	5/21/2019 13:25

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *24-May-19*

Client: The Sigma Group
Project: Former Biogenesis (16366)
Sample ID: 14-W-SW (4')
Collection Date: 5/14/2019 09:00 AM

Work Order: 19051039
Lab ID: 19051039-03
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS		Method: **SW8082**			Prep: SW3546 / 5/16/19		Analyst: **KB**
Aroclor 1016	U		26	77	µg/Kg-dry	1	5/16/2019 17:18
Aroclor 1221	U		26	77	µg/Kg-dry	1	5/16/2019 17:18
Aroclor 1232	U		26	77	µg/Kg-dry	1	5/16/2019 17:18
Aroclor 1242	U		26	77	µg/Kg-dry	1	5/16/2019 17:18
Aroclor 1248	U		26	77	µg/Kg-dry	1	5/16/2019 17:18
Aroclor 1254	**27**	J	**21**	**77**	**µg/Kg-dry**	1	5/16/2019 17:18
Aroclor 1260	**40**	J	**21**	**77**	**µg/Kg-dry**	1	5/16/2019 17:18
Aroclor 1262	U		21	77	µg/Kg-dry	1	5/16/2019 17:18
Aroclor 1268	U		21	77	µg/Kg-dry	1	5/16/2019 17:18
Surr: Decachlorobiphenyl	*54.9*			*40-140*	*%REC*	1	5/16/2019 17:18
Surr: Tetrachloro-m-xylene	*67.8*			*45-124*	*%REC*	1	5/16/2019 17:18
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 5/17/19		Analyst: **WH**
1,1,1,2-Tetrachloroethane	U		19	36	µg/Kg-dry	1	5/17/2019 15:34
1,1,1-Trichloroethane	**17**	J	**16**	**36**	**µg/Kg-dry**	1	5/17/2019 15:34
1,1,2,2-Tetrachloroethane	U		16	36	µg/Kg-dry	1	5/17/2019 15:34
1,1,2-Trichloroethane	U		15	36	µg/Kg-dry	1	5/17/2019 15:34
1,1,2-Trichlorotrifluoroethane	U		23	36	µg/Kg-dry	1	5/17/2019 15:34
1,1-Dichloroethane	U		13	36	µg/Kg-dry	1	5/17/2019 15:34
1,1-Dichloroethene	U		12	36	µg/Kg-dry	1	5/17/2019 15:34
1,2,3-Trichlorobenzene	U		43	36	µg/Kg-dry	1	5/17/2019 15:34
1,2,4-Trichlorobenzene	U		41	120	µg/Kg-dry	1	5/17/2019 15:34
1,2,4-Trimethylbenzene	U		26	36	µg/Kg-dry	1	5/17/2019 15:34
1,2-Dibromo-3-chloropropane	U		33	120	µg/Kg-dry	1	5/17/2019 15:34
1,2-Dibromoethane	U		10	36	µg/Kg-dry	1	5/17/2019 15:34
1,2-Dichlorobenzene	U		14	36	µg/Kg-dry	1	5/17/2019 15:34
1,2-Dichloroethane	U		54	120	µg/Kg-dry	1	5/17/2019 15:34
1,2-Dichloropropane	U		26	36	µg/Kg-dry	1	5/17/2019 15:34
1,3,5-Trimethylbenzene	U		42	120	µg/Kg-dry	1	5/17/2019 15:34
1,3-Dichlorobenzene	U		12	36	µg/Kg-dry	1	5/17/2019 15:34
1,3-Dichloropropane	U		10	36	µg/Kg-dry	1	5/17/2019 15:34
1,4-Dichlorobenzene	U		8.6	36	µg/Kg-dry	1	5/17/2019 15:34
2,2-Dichloropropane	U		38	120	µg/Kg-dry	1	5/17/2019 15:34
2-Butanone	U		29	240	µg/Kg-dry	1	5/17/2019 15:34
2-Chlorotoluene	U		13	36	µg/Kg-dry	1	5/17/2019 15:34
2-Hexanone	U		18	36	µg/Kg-dry	1	5/17/2019 15:34
4-Chlorotoluene	U		8.4	36	µg/Kg-dry	1	5/17/2019 15:34
4-Methyl-2-pentanone	U		33	36	µg/Kg-dry	1	5/17/2019 15:34
Acetone	U		110	120	µg/Kg-dry	1	5/17/2019 15:34

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: The Sigma Group
Project: Former Biogenesis (16366)
Sample ID: 14-W-SW (4')
Collection Date: 5/14/2019 09:00 AM

Work Order: 19051039
Lab ID: 19051039-03
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Benzene	U		6.1	36	µg/Kg-dry	1	5/17/2019 15:34
Bromobenzene	U		14	36	µg/Kg-dry	1	5/17/2019 15:34
Bromochloromethane	U		18	36	µg/Kg-dry	1	5/17/2019 15:34
Bromodichloromethane	U		20	36	µg/Kg-dry	1	5/17/2019 15:34
Bromoform	U		15	36	µg/Kg-dry	1	5/17/2019 15:34
Bromomethane	U		69	120	µg/Kg-dry	1	5/17/2019 15:34
Carbon disulfide	U		19	36	µg/Kg-dry	1	5/17/2019 15:34
Carbon tetrachloride	U		14	36	µg/Kg-dry	1	5/17/2019 15:34
Chlorobenzene	U		12	36	µg/Kg-dry	1	5/17/2019 15:34
Chloroethane	U		35	120	µg/Kg-dry	1	5/17/2019 15:34
Chloroform	U		13	36	µg/Kg-dry	1	5/17/2019 15:34
Chloromethane	U		98	120	µg/Kg-dry	1	5/17/2019 15:34
cis-1,2-Dichloroethene	**29**	J	**11**	**36**	**µg/Kg-dry**	1	5/17/2019 15:34
cis-1,3-Dichloropropene	U		27	36	µg/Kg-dry	1	5/17/2019 15:34
Cyclohexane	U		12	120	µg/Kg-dry	1	5/17/2019 15:34
Dibromochloromethane	U		20	36	µg/Kg-dry	1	5/17/2019 15:34
Dichlorodifluoromethane	U		43	120	µg/Kg-dry	1	5/17/2019 15:34
Diisopropyl ether	U		6.7	36	µg/Kg-dry	1	5/17/2019 15:34
Ethyl acetate	U		13	120	µg/Kg-dry	1	5/17/2019 15:34
Ethylbenzene	U		7.6	36	µg/Kg-dry	1	5/17/2019 15:34
Hexachlorobutadiene	U		32	120	µg/Kg-dry	1	5/17/2019 15:34
Isopropylbenzene	U		11	36	µg/Kg-dry	1	5/17/2019 15:34
m,p-Xylene	U		48	72	µg/Kg-dry	1	5/17/2019 15:34
Methyl acetate	**62**	J	**43**	**300**	**µg/Kg-dry**	1	5/17/2019 15:34
Methyl tert-butyl ether	U		10	36	µg/Kg-dry	1	5/17/2019 15:34
Methylcyclohexane	U		14	36	µg/Kg-dry	1	5/17/2019 15:34
Methylene chloride	U		95	300	µg/Kg-dry	1	5/17/2019 15:34
Naphthalene	U		86	120	µg/Kg-dry	1	5/17/2019 15:34
n-Butylbenzene	U		26	36	µg/Kg-dry	1	5/17/2019 15:34
n-Propylbenzene	U		27	36	µg/Kg-dry	1	5/17/2019 15:34
o-Xylene	U		14	36	µg/Kg-dry	1	5/17/2019 15:34
p-Isopropyltoluene	U		30	120	µg/Kg-dry	1	5/17/2019 15:34
sec-Butylbenzene	U		14	36	µg/Kg-dry	1	5/17/2019 15:34
Styrene	U		14	36	µg/Kg-dry	1	5/17/2019 15:34
tert-Butylbenzene	U		12	36	µg/Kg-dry	1	5/17/2019 15:34
Tetrachloroethene	U		10	36	µg/Kg-dry	1	5/17/2019 15:34
Toluene	U		9.8	36	µg/Kg-dry	1	5/17/2019 15:34
trans-1,2-Dichloroethene	U		13	36	µg/Kg-dry	1	5/17/2019 15:34
trans-1,3-Dichloropropene	U		20	36	µg/Kg-dry	1	5/17/2019 15:34
Trichloroethene	U		16	36	µg/Kg-dry	1	5/17/2019 15:34

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: The Sigma Group
Project: Former Biogenesis (16366)
Sample ID: 14-W-SW (4')
Collection Date: 5/14/2019 09:00 AM

Work Order: 19051039
Lab ID: 19051039-03
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Trichlorofluoromethane	U		18	36	µg/Kg-dry	1	5/17/2019 15:34
Vinyl chloride	U		24	36	µg/Kg-dry	1	5/17/2019 15:34
Xylenes, Total	U		48	110	µg/Kg-dry	1	5/17/2019 15:34
Surr: 1,2-Dichloroethane-d4	*99.2*			*70-130*	*%REC*	1	5/17/2019 15:34
Surr: 4-Bromofluorobenzene	*102*			*70-130*	*%REC*	1	5/17/2019 15:34
Surr: Dibromofluoromethane	*94.2*			*70-130*	*%REC*	1	5/17/2019 15:34
Surr: Toluene-d8	*102*			*70-130*	*%REC*	1	5/17/2019 15:34
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**15**		**0.10**	**0.10**	**% of sample**	1	5/21/2019 13:25

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *24-May-19*

Client: The Sigma Group
Project: Former Biogenesis (16366)
Sample ID: 14-N-SW (4')
Collection Date: 5/14/2019 09:30 AM

Work Order: 19051039
Lab ID: 19051039-04
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS		Method: **SW8082**			Prep: SW3546 / 5/16/19		Analyst: **KB**
Aroclor 1016	U		24	71	µg/Kg-dry	1	5/16/2019 16:03
Aroclor 1221	U		24	71	µg/Kg-dry	1	5/16/2019 16:03
Aroclor 1232	U		24	71	µg/Kg-dry	1	5/16/2019 16:03
Aroclor 1242	U		24	71	µg/Kg-dry	1	5/16/2019 16:03
Aroclor 1248	U		24	71	µg/Kg-dry	1	5/16/2019 16:03
Aroclor 1254	**3,000**		**200**	**710**	**µg/Kg-dry**	10	5/17/2019 09:15
Aroclor 1260	U		20	71	µg/Kg-dry	1	5/16/2019 16:03
Aroclor 1262	U		20	71	µg/Kg-dry	1	5/16/2019 16:03
Aroclor 1268	U		20	71	µg/Kg-dry	1	5/16/2019 16:03
Surr: Decachlorobiphenyl	*61.8*			*40-140*	*%REC*	1	5/16/2019 16:03
Surr: Tetrachloro-m-xylene	*59.2*			*45-124*	*%REC*	1	5/16/2019 16:03
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 5/17/19		Analyst: **WH**
1,1,1,2-Tetrachloroethane	U		26	48	µg/Kg-dry	1	5/17/2019 15:51
1,1,1-Trichloroethane	**110**		**22**	**48**	**µg/Kg-dry**	1	5/17/2019 15:51
1,1,2,2-Tetrachloroethane	U		21	48	µg/Kg-dry	1	5/17/2019 15:51
1,1,2-Trichloroethane	U		21	48	µg/Kg-dry	1	5/17/2019 15:51
1,1,2-Trichlorotrifluoroethane	U		31	48	µg/Kg-dry	1	5/17/2019 15:51
1,1-Dichloroethane	**73**		**18**	**48**	**µg/Kg-dry**	1	5/17/2019 15:51
1,1-Dichloroethene	U		16	48	µg/Kg-dry	1	5/17/2019 15:51
1,2,3-Trichlorobenzene	U		58	48	µg/Kg-dry	1	5/17/2019 15:51
1,2,4-Trichlorobenzene	U		55	160	µg/Kg-dry	1	5/17/2019 15:51
1,2,4-Trimethylbenzene	U		35	48	µg/Kg-dry	1	5/17/2019 15:51
1,2-Dibromo-3-chloropropane	U		44	160	µg/Kg-dry	1	5/17/2019 15:51
1,2-Dibromoethane	U		14	48	µg/Kg-dry	1	5/17/2019 15:51
1,2-Dichlorobenzene	U		18	48	µg/Kg-dry	1	5/17/2019 15:51
1,2-Dichloroethane	U		72	160	µg/Kg-dry	1	5/17/2019 15:51
1,2-Dichloropropane	U		36	48	µg/Kg-dry	1	5/17/2019 15:51
1,3,5-Trimethylbenzene	U		56	160	µg/Kg-dry	1	5/17/2019 15:51
1,3-Dichlorobenzene	U		16	48	µg/Kg-dry	1	5/17/2019 15:51
1,3-Dichloropropane	U		14	48	µg/Kg-dry	1	5/17/2019 15:51
1,4-Dichlorobenzene	U		12	48	µg/Kg-dry	1	5/17/2019 15:51
2,2-Dichloropropane	U		52	160	µg/Kg-dry	1	5/17/2019 15:51
2-Butanone	U		40	320	µg/Kg-dry	1	5/17/2019 15:51
2-Chlorotoluene	U		18	48	µg/Kg-dry	1	5/17/2019 15:51
2-Hexanone	U		24	48	µg/Kg-dry	1	5/17/2019 15:51
4-Chlorotoluene	U		11	48	µg/Kg-dry	1	5/17/2019 15:51
4-Methyl-2-pentanone	U		45	48	µg/Kg-dry	1	5/17/2019 15:51
Acetone	U		140	160	µg/Kg-dry	1	5/17/2019 15:51

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *24-May-19*

Client: The Sigma Group
Project: Former Biogenesis (16366)
Sample ID: 14-N-SW (4')
Collection Date: 5/14/2019 09:30 AM

Work Order: 19051039
Lab ID: 19051039-04
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Benzene	U		8.3	48	µg/Kg-dry	1	5/17/2019 15:51
Bromobenzene	U		19	48	µg/Kg-dry	1	5/17/2019 15:51
Bromochloromethane	U		25	48	µg/Kg-dry	1	5/17/2019 15:51
Bromodichloromethane	U		27	48	µg/Kg-dry	1	5/17/2019 15:51
Bromoform	U		20	48	µg/Kg-dry	1	5/17/2019 15:51
Bromomethane	U		92	160	µg/Kg-dry	1	5/17/2019 15:51
Carbon disulfide	U		25	48	µg/Kg-dry	1	5/17/2019 15:51
Carbon tetrachloride	U		19	48	µg/Kg-dry	1	5/17/2019 15:51
Chlorobenzene	U		16	48	µg/Kg-dry	1	5/17/2019 15:51
Chloroethane	U		48	160	µg/Kg-dry	1	5/17/2019 15:51
Chloroform	U		18	48	µg/Kg-dry	1	5/17/2019 15:51
Chloromethane	U		130	160	µg/Kg-dry	1	5/17/2019 15:51
cis-1,2-Dichloroethene	**1,900**		**15**	**48**	**µg/Kg-dry**	1	5/17/2019 15:51
cis-1,3-Dichloropropene	U		36	48	µg/Kg-dry	1	5/17/2019 15:51
Cyclohexane	U		16	160	µg/Kg-dry	1	5/17/2019 15:51
Dibromochloromethane	U		27	48	µg/Kg-dry	1	5/17/2019 15:51
Dichlorodifluoromethane	U		58	160	µg/Kg-dry	1	5/17/2019 15:51
Diisopropyl ether	U		9.0	48	µg/Kg-dry	1	5/17/2019 15:51
Ethyl acetate	U		18	160	µg/Kg-dry	1	5/17/2019 15:51
Ethylbenzene	**19**	J	**10**	**48**	**µg/Kg-dry**	1	5/17/2019 15:51
Hexachlorobutadiene	U		43	160	µg/Kg-dry	1	5/17/2019 15:51
Isopropylbenzene	U		15	48	µg/Kg-dry	1	5/17/2019 15:51
m,p-Xylene	**82**	J	**64**	**97**	**µg/Kg-dry**	1	5/17/2019 15:51
Methyl acetate	**93**	J	**58**	**400**	**µg/Kg-dry**	1	5/17/2019 15:51
Methyl tert-butyl ether	U		14	48	µg/Kg-dry	1	5/17/2019 15:51
Methylcyclohexane	U		18	48	µg/Kg-dry	1	5/17/2019 15:51
Methylene chloride	U		130	400	µg/Kg-dry	1	5/17/2019 15:51
Naphthalene	U		120	160	µg/Kg-dry	1	5/17/2019 15:51
n-Butylbenzene	U		35	48	µg/Kg-dry	1	5/17/2019 15:51
n-Propylbenzene	U		37	48	µg/Kg-dry	1	5/17/2019 15:51
o-Xylene	**38**	J	**19**	**48**	**µg/Kg-dry**	1	5/17/2019 15:51
p-Isopropyltoluene	U		41	160	µg/Kg-dry	1	5/17/2019 15:51
sec-Butylbenzene	U		19	48	µg/Kg-dry	1	5/17/2019 15:51
Styrene	U		19	48	µg/Kg-dry	1	5/17/2019 15:51
tert-Butylbenzene	U		16	48	µg/Kg-dry	1	5/17/2019 15:51
Tetrachloroethene	U		14	48	µg/Kg-dry	1	5/17/2019 15:51
Toluene	**66**		**13**	**48**	**µg/Kg-dry**	1	5/17/2019 15:51
trans-1,2-Dichloroethene	U		18	48	µg/Kg-dry	1	5/17/2019 15:51
trans-1,3-Dichloropropene	U		27	48	µg/Kg-dry	1	5/17/2019 15:51
Trichloroethene	U		22	48	µg/Kg-dry	1	5/17/2019 15:51

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *24-May-19*

Client: The Sigma Group
Project: Former Biogenesis (16366)
Sample ID: 14-N-SW (4')
Collection Date: 5/14/2019 09:30 AM

Work Order: 19051039
Lab ID: 19051039-04
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Trichlorofluoromethane	U		25	48	µg/Kg-dry	1	5/17/2019 15:51
Vinyl chloride	U		32	48	µg/Kg-dry	1	5/17/2019 15:51
Xylenes, Total	**120**	J	**64**	**140**	**µg/Kg-dry**	1	5/17/2019 15:51
Surr: 1,2-Dichloroethane-d4	*100*			*70-130*	*%REC*	1	5/17/2019 15:51
Surr: 4-Bromofluorobenzene	*101*			*70-130*	*%REC*	1	5/17/2019 15:51
Surr: Dibromofluoromethane	*93.2*			*70-130*	*%REC*	1	5/17/2019 15:51
Surr: Toluene-d8	*101*			*70-130*	*%REC*	1	5/17/2019 15:51
MOISTURE		Method: **SW3550C**					Analyst: **KTP**
Moisture	**11**		**0.10**	**0.10**	**% of sample**	1	5/21/2019 13:25

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *24-May-19*

Client: The Sigma Group
Project: Former Biogenesis (16366)
Sample ID: Trip Blank
Collection Date: 5/14/2019

Work Order: 19051039
Lab ID: 19051039-05
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260C**			Prep: SW5035 / 5/17/19		Analyst: **WH**
1,1,1,2-Tetrachloroethane	U		16	30	µg/Kg-dry	1	5/17/2019 16:07
1,1,1-Trichloroethane	U		14	30	µg/Kg-dry	1	5/17/2019 16:07
1,1,2,2-Tetrachloroethane	U		13	30	µg/Kg-dry	1	5/17/2019 16:07
1,1,2-Trichloroethane	U		13	30	µg/Kg-dry	1	5/17/2019 16:07
1,1,2-Trichlorotrifluoroethane	U		19	30	µg/Kg-dry	1	5/17/2019 16:07
1,1-Dichloroethane	U		11	30	µg/Kg-dry	1	5/17/2019 16:07
1,1-Dichloroethene	U		9.7	30	µg/Kg-dry	1	5/17/2019 16:07
1,2,3-Trichlorobenzene	U		36	30	µg/Kg-dry	1	5/17/2019 16:07
1,2,4-Trichlorobenzene	U		34	100	µg/Kg-dry	1	5/17/2019 16:07
1,2,4-Trimethylbenzene	U		22	30	µg/Kg-dry	1	5/17/2019 16:07
1,2-Dibromo-3-chloropropane	U		28	100	µg/Kg-dry	1	5/17/2019 16:07
1,2-Dibromoethane	U		8.4	30	µg/Kg-dry	1	5/17/2019 16:07
1,2-Dichlorobenzene	U		11	30	µg/Kg-dry	1	5/17/2019 16:07
1,2-Dichloroethane	U		45	100	µg/Kg-dry	1	5/17/2019 16:07
1,2-Dichloropropane	U		22	30	µg/Kg-dry	1	5/17/2019 16:07
1,3,5-Trimethylbenzene	U		35	100	µg/Kg-dry	1	5/17/2019 16:07
1,3-Dichlorobenzene	U		10	30	µg/Kg-dry	1	5/17/2019 16:07
1,3-Dichloropropane	U		8.4	30	µg/Kg-dry	1	5/17/2019 16:07
1,4-Dichlorobenzene	U		7.2	30	µg/Kg-dry	1	5/17/2019 16:07
2,2-Dichloropropane	U		32	100	µg/Kg-dry	1	5/17/2019 16:07
2-Butanone	U		25	200	µg/Kg-dry	1	5/17/2019 16:07
2-Chlorotoluene	U		11	30	µg/Kg-dry	1	5/17/2019 16:07
2-Hexanone	U		15	30	µg/Kg-dry	1	5/17/2019 16:07
4-Chlorotoluene	U		7.1	30	µg/Kg-dry	1	5/17/2019 16:07
4-Methyl-2-pentanone	U		28	30	µg/Kg-dry	1	5/17/2019 16:07
Acetone	U		89	100	µg/Kg-dry	1	5/17/2019 16:07
Benzene	U		5.1	30	µg/Kg-dry	1	5/17/2019 16:07
Bromobenzene	U		12	30	µg/Kg-dry	1	5/17/2019 16:07
Bromochloromethane	U		15	30	µg/Kg-dry	1	5/17/2019 16:07
Bromodichloromethane	U		17	30	µg/Kg-dry	1	5/17/2019 16:07
Bromoform	U		13	30	µg/Kg-dry	1	5/17/2019 16:07
Bromomethane	U		57	100	µg/Kg-dry	1	5/17/2019 16:07
Carbon disulfide	U		16	30	µg/Kg-dry	1	5/17/2019 16:07
Carbon tetrachloride	U		12	30	µg/Kg-dry	1	5/17/2019 16:07
Chlorobenzene	U		10	30	µg/Kg-dry	1	5/17/2019 16:07
Chloroethane	U		30	100	µg/Kg-dry	1	5/17/2019 16:07
Chloroform	U		11	30	µg/Kg-dry	1	5/17/2019 16:07
Chloromethane	U		82	100	µg/Kg-dry	1	5/17/2019 16:07

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *24-May-19*

Client: The Sigma Group
Project: Former Biogenesis (16366)
Sample ID: Trip Blank
Collection Date: 5/14/2019

Work Order: 19051039
Lab ID: 19051039-05
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
cis-1,2-Dichloroethene	U		9.4	30	µg/Kg-dry	1	5/17/2019 16:07
cis-1,3-Dichloropropene	U		23	30	µg/Kg-dry	1	5/17/2019 16:07
Cyclohexane	U		9.8	100	µg/Kg-dry	1	5/17/2019 16:07
Dibromochloromethane	U		17	30	µg/Kg-dry	1	5/17/2019 16:07
Dichlorodifluoromethane	U		36	100	µg/Kg-dry	1	5/17/2019 16:07
Diisopropyl ether	U		5.6	30	µg/Kg-dry	1	5/17/2019 16:07
Ethyl acetate	U		11	100	µg/Kg-dry	1	5/17/2019 16:07
Ethylbenzene	U		6.3	30	µg/Kg-dry	1	5/17/2019 16:07
Hexachlorobutadiene	U		27	100	µg/Kg-dry	1	5/17/2019 16:07
Isopropylbenzene	U		9.2	30	µg/Kg-dry	1	5/17/2019 16:07
m,p-Xylene	U		40	60	µg/Kg-dry	1	5/17/2019 16:07
Methyl acetate	**60**	J	**36**	**250**	**µg/Kg-dry**	1	5/17/2019 16:07
Methyl tert-butyl ether	U		8.6	30	µg/Kg-dry	1	5/17/2019 16:07
Methylcyclohexane	U		11	30	µg/Kg-dry	1	5/17/2019 16:07
Methylene chloride	U		80	250	µg/Kg-dry	1	5/17/2019 16:07
Naphthalene	U		72	100	µg/Kg-dry	1	5/17/2019 16:07
n-Butylbenzene	U		22	30	µg/Kg-dry	1	5/17/2019 16:07
n-Propylbenzene	U		23	30	µg/Kg-dry	1	5/17/2019 16:07
o-Xylene	U		12	30	µg/Kg-dry	1	5/17/2019 16:07
p-Isopropyltoluene	U		25	100	µg/Kg-dry	1	5/17/2019 16:07
sec-Butylbenzene	U		12	30	µg/Kg-dry	1	5/17/2019 16:07
Styrene	U		12	30	µg/Kg-dry	1	5/17/2019 16:07
tert-Butylbenzene	U		9.7	30	µg/Kg-dry	1	5/17/2019 16:07
Tetrachloroethene	U		8.7	30	µg/Kg-dry	1	5/17/2019 16:07
Toluene	U		8.2	30	µg/Kg-dry	1	5/17/2019 16:07
trans-1,2-Dichloroethene	U		11	30	µg/Kg-dry	1	5/17/2019 16:07
trans-1,3-Dichloropropene	U		17	30	µg/Kg-dry	1	5/17/2019 16:07
Trichloroethene	U		13	30	µg/Kg-dry	1	5/17/2019 16:07
Trichlorofluoromethane	U		15	30	µg/Kg-dry	1	5/17/2019 16:07
Vinyl chloride	U		20	30	µg/Kg-dry	1	5/17/2019 16:07
Xylenes, Total	U		40	90	µg/Kg-dry	1	5/17/2019 16:07
Surr: 1,2-Dichloroethane-d4	*98.2*			*70-130*	*%REC*	1	5/17/2019 16:07
Surr: 4-Bromofluorobenzene	*102*			*70-130*	*%REC*	1	5/17/2019 16:07
Surr: Dibromofluoromethane	*92.8*			*70-130*	*%REC*	1	5/17/2019 16:07
Surr: Toluene-d8	*99.6*			*70-130*	*%REC*	1	5/17/2019 16:07

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 24-May-19

Client: The Sigma Group

Work Order: 19051039

Project: Former Biogenesis (16366)

QC BATCH REPORT

Batch ID: **136095** Instrument ID **GC14** Method: **SW8082**

MBLK Sample ID: **PBLKS1-136095-136095** Units: **µg/Kg** Analysis Date: **5/16/2019 03:33 PM**

Client ID: Run ID: **GC14_190516A** SeqNo: **5662451** Prep Date: **5/16/2019** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	U	67								
Aroclor 1221	U	67								
Aroclor 1232	U	67								
Aroclor 1242	U	67								
Aroclor 1248	U	67								
Aroclor 1254	U	67								
Aroclor 1260	U	67								
Aroclor 1262	U	67								
Aroclor 1268	U	67								
Surr: Decachlorobiphenyl	*37.98*	0	*33.3*	0	*114*	*40-140*	0			
Surr: Tetrachloro-m-xylene	*31.33*	0	*33.3*	0	*94.1*	*45-124*	0			

LCS Sample ID: **PLCSS1-136095-136095** Units: **µg/Kg** Analysis Date: **5/16/2019 03:48 PM**

Client ID: Run ID: **GC14_190516A** SeqNo: **5662452** Prep Date: **5/16/2019** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	533.5	67	833	0	64	50-130	0			
Aroclor 1260	643.5	67	833	0	77.3	50-130	0			
Surr: Decachlorobiphenyl	*32.96*	0	*33.3*	0	*99*	*40-140*	0			
Surr: Tetrachloro-m-xylene	*16.29*	0	*33.3*	0	*48.9*	*45-124*	0			

MS Sample ID: **19051039-04C MS** Units: **µg/Kg** Analysis Date: **5/16/2019 04:18 PM**

Client ID: **14-N-SW (4')** Run ID: **GC14_190516A** SeqNo: **5662454** Prep Date: **5/16/2019** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	853.7	66	825.7	0	103	40-140	0			
Aroclor 1260	1296	66	825.7	0	157	40-140	0			S
Surr: Decachlorobiphenyl	*20.51*	0	*33.01*	0	*62.1*	*40-140*	0			
Surr: Tetrachloro-m-xylene	*15*	0	*33.01*	0	*45.4*	*45-124*	0			

MSD Sample ID: **19051039-04C MSD** Units: **µg/Kg** Analysis Date: **5/16/2019 04:32 PM**

Client ID: **14-N-SW (4')** Run ID: **GC14_190516A** SeqNo: **5662455** Prep Date: **5/16/2019** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	588.8	65	816.6	0	72.1	40-140	853.7	36.7	50	
Aroclor 1260	611	65	816.6	0	74.8	40-140	1296	71.9	50	R
Surr: Decachlorobiphenyl	*21.04*	0	*32.64*	0	*64.5*	*40-140*	20.51	*2.58*	*50*	
Surr: Tetrachloro-m-xylene	*16.05*	0	*32.64*	0	*49.2*	*45-124*	15	*6.78*	*50*	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Sigma Group
Work Order: 19051039
Project: Former Biogenesis (16366)

QC BATCH REPORT

Batch ID: **136095** Instrument ID **GC14** Method: **SW8082**

The following samples were analyzed in this batch:

19051039-01C	19051039-02C	19051039-03C
19051039-04C		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Sigma Group
Work Order: 19051039
Project: Former Biogenesis (16366)

QC BATCH REPORT

Batch ID: **136167** Instrument ID **VMS10** Method: **SW8260C**

MBLK Sample ID: **MBLK-136167-136167** Units: **µg/Kg-dry** Analysis Date: **5/17/2019 01:59 PM**
Client ID: Run ID: **VMS10_190517B** SeqNo: **5665934** Prep Date: **5/17/2019** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	U	30								
1,1,1-Trichloroethane	U	30								
1,1,2,2-Tetrachloroethane	U	30								
1,1,2-Trichloroethane	U	30								
1,1,2-Trichlorotrifluoroethane	U	30								
1,1-Dichloroethane	U	30								
1,1-Dichloroethene	U	30								
1,2,3-Trichlorobenzene	U	30								
1,2,4-Trichlorobenzene	U	100								
1,2,4-Trimethylbenzene	U	30								
1,2-Dibromo-3-chloropropane	U	100								
1,2-Dibromoethane	U	30								
1,2-Dichlorobenzene	U	30								
1,2-Dichloroethane	U	100								
1,2-Dichloropropane	U	30								
1,3,5-Trimethylbenzene	U	100								
1,3-Dichlorobenzene	U	30								
1,3-Dichloropropane	U	30								
1,4-Dichlorobenzene	U	30								
2,2-Dichloropropane	U	100								
2-Butanone	U	200								
2-Chlorotoluene	U	30								
2-Hexanone	U	30								
4-Chlorotoluene	U	30								
4-Methyl-2-pentanone	U	30								
Acetone	U	100								
Benzene	U	30								
Bromobenzene	U	30								
Bromochloromethane	U	30								
Bromodichloromethane	U	30								
Bromoform	U	30								
Bromomethane	U	100								
Carbon disulfide	U	30								
Carbon tetrachloride	U	30								
Chlorobenzene	U	30								
Chloroethane	U	100								
Chloroform	U	30								
Chloromethane	U	100								
cis-1,2-Dichloroethene	U	30								
cis-1,3-Dichloropropene	U	30								
Cyclohexane	U	100								
Dibromochloromethane	U	30								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Batch ID: **136167** Instrument ID **VMS10** Method: **SW8260C**

Dichlorodifluoromethane	U	100					
Diisopropyl ether	U	30					
Ethyl acetate	U	100					
Ethylbenzene	U	30					
Hexachlorobutadiene	U	100					
Isopropylbenzene	U	30					
m,p-Xylene	U	60					
Methyl acetate	U	250					
Methyl tert-butyl ether	U	30					
Methylcyclohexane	U	30					
Methylene chloride	U	250					
Naphthalene	U	100					
n-Butylbenzene	U	30					
n-Propylbenzene	U	30					
o-Xylene	U	30					
p-Isopropyltoluene	U	100					
sec-Butylbenzene	U	30					
Styrene	U	30					
tert-Butylbenzene	U	30					
Tetrachloroethene	U	30					
Toluene	U	30					
trans-1,2-Dichloroethene	U	30					
trans-1,3-Dichloropropene	U	30					
Trichloroethene	U	30					
Trichlorofluoromethane	U	30					
Vinyl chloride	U	30					
Xylenes, Total	U	90					
Surr: 1,2-Dichloroethane-d4	*997.5*	0	*1000*	0	*99.8*	*70-130*	0
Surr: 4-Bromofluorobenzene	*1036*	0	*1000*	0	*104*	*70-130*	0
Surr: Dibromofluoromethane	*966*	0	*1000*	0	*96.6*	*70-130*	0
Surr: Toluene-d8	*1027*	0	*1000*	0	*103*	*70-130*	0

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Sigma Group
Work Order: 19051039
Project: Former Biogenesis (16366)

QC BATCH REPORT

Batch ID: **136167** Instrument ID **VMS10** Method: **SW8260C**

LCS Sample ID: **LCS-136167-136167** Units: **µg/Kg-dry** Analysis Date: **5/17/2019 12:52 PM**
Client ID: Run ID: **VMS10_190517B** SeqNo: **5665933** Prep Date: **5/17/2019** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	1133	30	1000	0	113	75-125	0			
1,1,1-Trichloroethane	1256	30	1000	0	126	70-135	0			
1,1,2,2-Tetrachloroethane	1196	30	1000	0	120	55-130	0			
1,1,2-Trichloroethane	1113	30	1000	0	111	60-125	0			
1,1-Dichloroethane	1134	30	1000	0	113	75-125	0			
1,1-Dichloroethene	1274	30	1000	0	127	76-148	0			
1,2,3-Trichlorobenzene	867	30	1000	0	86.7	60-135	0			
1,2,4-Trichlorobenzene	911	100	1000	0	91.1	65-130	0			
1,2,4-Trimethylbenzene	1082	30	1000	0	108	65-135	0			
1,2-Dibromo-3-chloropropane	987.5	100	1000	0	98.8	40-135	0			
1,2-Dibromoethane	1251	30	1000	0	125	80-195	0			
1,2-Dichlorobenzene	1100	30	1000	0	110	75-120	0			
1,2-Dichloroethane	1130	100	1000	0	113	70-135	0			
1,2-Dichloropropane	1165	30	1000	0	116	70-120	0			
1,3,5-Trimethylbenzene	1161	100	1000	0	116	65-135	0			
1,3-Dichlorobenzene	1015	30	1000	0	102	70-125	0			
1,3-Dichloropropane	1122	30	1000	0	112	75-125	0			
1,4-Dichlorobenzene	1108	30	1000	0	111	70-125	0			
2,2-Dichloropropane	1268	100	1000	0	127	54-146	0			
2-Butanone	969.5	200	1000	0	97	30-160	0			
2-Chlorotoluene	1160	30	1000	0	116	70-130	0			
2-Hexanone	890	30	1000	0	89	45-145	0			
4-Chlorotoluene	1122	30	1000	0	112	75-125	0			
4-Methyl-2-pentanone	1352	30	1000	0	135	74-176	0			
Acetone	935	100	1000	0	93.5	20-160	0			
Benzene	1122	30	1000	0	112	75-125	0			
Bromobenzene	1138	30	1000	0	114	65-120	0			
Bromochloromethane	1171	30	1000	0	117	74-134	0			
Bromodichloromethane	1104	30	1000	0	110	70-130	0			
Bromoform	962	30	1000	0	96.2	55-135	0			
Bromomethane	1002	100	1000	0	100	50-170	0			
Carbon disulfide	1206	30	1000	0	121	45-160	0			
Carbon tetrachloride	1248	30	1000	0	125	65-135	0			
Chlorobenzene	1067	30	1000	0	107	75-125	0			
Chloroethane	1074	100	1000	0	107	40-155	0			
Chloroform	1042	30	1000	0	104	70-125	0			
Chloromethane	1050	100	1000	0	105	50-144	0			
cis-1,2-Dichloroethene	1196	30	1000	0	120	65-125	0			
cis-1,3-Dichloropropene	1100	30	1000	0	110	70-125	0			
Dibromochloromethane	989	30	1000	0	98.9	65-135	0			
Dichlorodifluoromethane	775	100	1000	0	77.5	35-135	0			
Diisopropyl ether	1141	30	1000	0	114	70-130	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Batch ID: **136167** Instrument ID **VMS10** Method: **SW8260C**

Ethyl acetate	969	100	1000	0	96.9	70-130	0
Ethylbenzene	1166	30	1000	0	117	75-125	0
Hexachlorobutadiene	1356	100	1000	0	136	55-140	0
Isopropylbenzene	1197	30	1000	0	120	75-130	0
m,p-Xylene	2338	60	2000	0	117	80-125	0
Methyl tert-butyl ether	1104	30	1000	0	110	75-125	0
Methylene chloride	1116	250	1000	0	112	55-145	0
Naphthalene	818	100	1000	0	81.8	40-140	0
n-Butylbenzene	1172	30	1000	0	117	65-140	0
n-Propylbenzene	1170	30	1000	0	117	65-135	0
o-Xylene	1144	30	1000	0	114	75-125	0
p-Isopropyltoluene	1128	100	1000	0	113	71-157	0
sec-Butylbenzene	1114	30	1000	0	111	65-130	0
Styrene	1102	30	1000	0	110	80-138	0
tert-Butylbenzene	1172	30	1000	0	117	65-130	0
Tetrachloroethene	1273	30	1000	0	127	67-167	0
Toluene	1169	30	1000	0	117	70-125	0
trans-1,2-Dichloroethene	1248	30	1000	0	125	65-135	0
trans-1,3-Dichloropropene	1078	30	1000	0	108	59-129	0
Trichloroethene	1186	30	1000	0	119	75-125	0
Trichlorofluoromethane	1046	30	1000	0	105	25-185	0
Vinyl chloride	994	30	1000	0	99.4	60-125	0
Xylenes, Total	3482	90	3000	0	116	75-125	0
Surr: 1,2-Dichloroethane-d4	*981*	0	*1000*	0	*98.1*	*70-130*	0
Surr: 4-Bromofluorobenzene	*997*	0	*1000*	0	*99.7*	*70-130*	0
Surr: Dibromofluoromethane	*1020*	0	*1000*	0	*102*	*70-130*	0
Surr: Toluene-d8	*996*	0	*1000*	0	*99.6*	*70-130*	0

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Sigma Group
Work Order: 19051039
Project: Former Biogenesis (16366)

QC BATCH REPORT

Batch ID: **136167** Instrument ID **VMS10** Method: **SW8260C**

MS Sample ID: **19051154-01A MS** Units: **µg/Kg-dry** Analysis Date: **5/17/2019 08:19 PM**
Client ID: Run ID: **VMS10_190517B** SeqNo: **5665945** Prep Date: **5/17/2019** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	1213	40	1342	0	90.4	75-125	0			
1,1,1-Trichloroethane	1457	40	1342	0	109	70-135	0			
1,1,2,2-Tetrachloroethane	1330	40	1342	0	99.1	55-130	0			
1,1,2-Trichloroethane	1353	40	1342	0	101	60-125	0			
1,1-Dichloroethane	1362	40	1342	0	101	75-125	0			
1,1-Dichloroethene	1459	40	1342	0	109	76-148	0			
1,2,3-Trichlorobenzene	1373	40	1342	0	102	60-135	0			
1,2,4-Trichlorobenzene	1322	130	1342	0	98.4	65-130	0			
1,2,4-Trimethylbenzene	1876	40	1342	0	140	65-135	0			S
1,2-Dibromo-3-chloropropane	1094	130	1342	0	81.5	40-135	0			
1,2-Dibromoethane	1557	40	1342	0	116	80-195	0			
1,2-Dichlorobenzene	1368	40	1342	0	102	75-120	0			
1,2-Dichloroethane	1336	130	1342	0	99.6	70-135	0			
1,2-Dichloropropane	1389	40	1342	0	104	70-120	0			
1,3,5-Trimethylbenzene	1665	130	1342	0	124	65-135	0			
1,3-Dichlorobenzene	1226	40	1342	0	91.3	70-125	0			
1,3-Dichloropropane	1381	40	1342	0	103	75-125	0			
1,4-Dichlorobenzene	1373	40	1342	0	102	70-125	0			
2,2-Dichloropropane	1353	130	1342	0	101	54-146	0			
2-Butanone	2015	270	1342	0	150	30-160	0			
2-Chlorotoluene	1522	40	1342	0	113	70-130	0			
2-Hexanone	1573	40	1342	0	117	45-145	0			
4-Chlorotoluene	1454	40	1342	0	108	75-125	0			
4-Methyl-2-pentanone	1726	40	1342	0	129	74-176	0			
Acetone	2763	130	1342	0	206	20-160	0			S
Benzene	1426	40	1342	0	106	75-125	0			
Bromobenzene	1437	40	1342	0	107	65-120	0			
Bromochloromethane	1334	40	1342	0	99.4	74-134	0			
Bromodichloromethane	1086	40	1342	0	80.9	70-130	0			
Bromoform	920.3	40	1342	0	68.6	55-135	0			
Bromomethane	545	130	1342	0	40.6	50-170	0			S
Carbon disulfide	1158	40	1342	0	86.2	45-160	0			
Carbon tetrachloride	1327	40	1342	0	98.8	65-135	0			
Chlorobenzene	1309	40	1342	0	97.5	75-125	0			
Chloroethane	481.9	130	1342	0	35.9	40-155	0			S
Chloroform	1206	40	1342	0	89.8	70-125	0			
Chloromethane	1085	130	1342	0	80.8	50-144	0			
cis-1,2-Dichloroethene	1371	40	1342	0	102	65-125	0			
cis-1,3-Dichloropropene	1224	40	1342	0	91.2	70-125	0			
Dibromochloromethane	951.1	40	1342	0	70.8	65-135	0			
Dichlorodifluoromethane	985.4	130	1342	0	73.4	35-135	0			
Diisopropyl ether	1347	40	1342	0	100	70-130	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **136167** Instrument ID **VMS10** Method: **SW8260C**

Ethyl acetate	1465	130	1342	169.2	96.5	70-130	0	
Ethylbenzene	1549	40	1342	0	115	75-125	0	
Hexachlorobutadiene	1516	130	1342	0	113	55-140	0	
Isopropylbenzene	1541	40	1342	0	115	75-130	0	
m,p-Xylene	3491	81	2685	0	130	80-125	0	S
Methyl tert-butyl ether	1353	40	1342	0	101	75-125	0	
Methylene chloride	1297	340	1342	0	96.6	55-145	0	
Naphthalene	1520	130	1342	0	113	40-140	0	
n-Butylbenzene	1498	40	1342	0	112	65-140	0	
n-Propylbenzene	1544	40	1342	0	115	65-135	0	
o-Xylene	1593	40	1342	0	119	75-125	0	
p-Isopropyltoluene	1377	130	1342	0	103	71-157	0	
sec-Butylbenzene	1468	40	1342	0	109	65-130	0	
Styrene	1438	40	1342	0	107	80-138	0	
tert-Butylbenzene	1538	40	1342	0	115	65-130	0	
Tetrachloroethene	2664	40	1342	0	198	67-167	0	S
Toluene	1801	40	1342	0	134	70-125	0	S
trans-1,2-Dichloroethene	1491	40	1342	0	111	65-135	0	
trans-1,3-Dichloropropene	1245	40	1342	0	92.8	59-129	0	
Trichloroethene	1549	40	1342	0	115	75-125	0	
Trichlorofluoromethane	1079	40	1342	0	80.4	25-185	0	
Vinyl chloride	1148	40	1342	0	85.5	60-125	0	
Xylenes, Total	5085	120	4027	0	126	75-125	0	S
Surr: 1,2-Dichloroethane-d4	*1254*	0	*1342*	0	*93.4*	*70-130*	0	
Surr: 4-Bromofluorobenzene	*1424*	0	*1342*	0	*106*	*70-130*	0	
Surr: Dibromofluoromethane	*1236*	0	*1342*	0	*92.1*	*70-130*	0	
Surr: Toluene-d8	*1334*	0	*1342*	0	*99.4*	*70-130*	0	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Sigma Group
Work Order: 19051039
Project: Former Biogenesis (16366)

QC BATCH REPORT

Batch ID: **136167** Instrument ID **VMS10** Method: **SW8260C**

MSD Sample ID: **19051154-01A MSD** Units: **µg/Kg-dry** Analysis Date: **5/17/2019 08:35 PM**
Client ID: Run ID: **VMS10_190517B** SeqNo: **5665946** Prep Date: **5/17/2019** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	1257	40	1342	0	93.6	75-125	1213	3.53	30	
1,1,1-Trichloroethane	1532	40	1342	0	114	70-135	1457	4.99	30	
1,1,2,2-Tetrachloroethane	1312	40	1342	0	97.7	55-130	1330	1.42	30	
1,1,2-Trichloroethane	1362	40	1342	0	101	60-125	1353	0.643	30	
1,1-Dichloroethane	1375	40	1342	0	102	75-125	1362	0.981	30	
1,1-Dichloroethene	1511	40	1342	0	113	76-148	1459	3.48	30	
1,2,3-Trichlorobenzene	1381	40	1342	0	103	60-135	1373	0.536	30	
1,2,4-Trichlorobenzene	1370	130	1342	0	102	65-130	1322	3.59	30	
1,2,4-Trimethylbenzene	1602	40	1342	0	119	65-135	1876	15.8	30	
1,2-Dibromo-3-chloropropane	1081	130	1342	0	80.5	40-135	1094	1.23	30	
1,2-Dibromoethane	1480	40	1342	0	110	80-195	1557	5.08	30	
1,2-Dichlorobenzene	1383	40	1342	0	103	75-120	1368	1.12	30	
1,2-Dichloroethane	1364	130	1342	0	102	70-135	1336	2.04	30	
1,2-Dichloropropane	1403	40	1342	0	104	70-120	1389	0.962	30	
1,3,5-Trimethylbenzene	1578	130	1342	0	118	65-135	1665	5.34	30	
1,3-Dichlorobenzene	1260	40	1342	0	93.8	70-125	1226	2.75	30	
1,3-Dichloropropane	1346	40	1342	0	100	75-125	1381	2.56	30	
1,4-Dichlorobenzene	1362	40	1342	0	101	70-125	1373	0.834	30	
2,2-Dichloropropane	1390	130	1342	0	104	54-146	1353	2.69	30	
2-Butanone	1873	270	1342	0	140	30-160	2015	7.32	30	
2-Chlorotoluene	1535	40	1342	0	114	70-130	1522	0.878	30	
2-Hexanone	1564	40	1342	0	116	45-145	1573	0.556	30	
4-Chlorotoluene	1467	40	1342	0	109	75-125	1454	0.919	30	
4-Methyl-2-pentanone	1726	40	1342	0	129	74-176	1726	0.0389	30	
Acetone	2747	130	1342	0	205	20-160	2763	0.585	30	S
Benzene	1415	40	1342	0	105	75-125	1426	0.803	30	
Bromobenzene	1454	40	1342	0	108	65-120	1437	1.16	30	
Bromochloromethane	1344	40	1342	0	100	74-134	1334	0.752	30	
Bromodichloromethane	1124	40	1342	0	83.8	70-130	1086	3.46	30	
Bromoform	945.8	40	1342	0	70.4	55-135	920.3	2.73	30	
Bromomethane	558.5	130	1342	0	41.6	50-170	545	2.43	30	S
Carbon disulfide	1260	40	1342	0	93.8	45-160	1158	8.44	30	
Carbon tetrachloride	1405	40	1342	0	105	65-135	1327	5.7	30	
Chlorobenzene	1328	40	1342	0	99	75-125	1309	1.48	30	
Chloroethane	508.8	130	1342	0	37.9	40-155	481.9	5.42	30	S
Chloroform	1252	40	1342	0	93.2	70-125	1206	3.71	30	
Chloromethane	1199	130	1342	0	89.3	50-144	1085	9.99	30	
cis-1,2-Dichloroethene	1369	40	1342	0	102	65-125	1371	0.147	30	
cis-1,3-Dichloropropene	1218	40	1342	0	90.7	70-125	1224	0.55	30	
Dibromochloromethane	965.2	40	1342	0	71.9	65-135	951.1	1.47	30	
Dichlorodifluoromethane	1057	130	1342	0	78.7	35-135	985.4	6.97	30	
Diisopropyl ether	1396	40	1342	0	104	70-130	1347	3.57	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Sigma Group
Work Order: 19051039
Project: Former Biogenesis (16366)

QC BATCH REPORT

Batch ID: **136167** Instrument ID **VMS10** Method: **SW8260C**

Ethyl acetate	1632	130	1342	169.2	109	70-130	1465	10.8	30	
Ethylbenzene	1526	40	1342	0	114	75-125	1549	1.53	30	
Hexachlorobutadiene	1655	130	1342	0	123	55-140	1516	8.72	30	
Isopropylbenzene	1581	40	1342	0	118	75-130	1541	2.58	30	
m,p-Xylene	3249	81	2685	0	121	80-125	3491	7.17	30	
Methyl tert-butyl ether	1341	40	1342	0	99.9	75-125	1353	0.897	30	
Methylene chloride	1329	340	1342	0	99	55-145	1297	2.4	30	
Naphthalene	1375	130	1342	0	102	40-140	1520	10.1	30	
n-Butylbenzene	1494	40	1342	0	111	65-140	1498	0.224	30	
n-Propylbenzene	1548	40	1342	0	115	65-135	1544	0.261	30	
o-Xylene	1530	40	1342	0	114	75-125	1593	4.04	30	
p-Isopropyltoluene	1379	130	1342	0	103	71-157	1377	0.195	30	
sec-Butylbenzene	1518	40	1342	0	113	65-130	1468	3.37	30	
Styrene	1421	40	1342	0	106	80-138	1438	1.22	30	
tert-Butylbenzene	1576	40	1342	0	117	65-130	1538	2.41	30	
Tetrachloroethene	2676	40	1342	0	199	67-167	2664	0.452	30	S
Toluene	1663	40	1342	0	124	70-125	1801	7.98	30	
trans-1,2-Dichloroethene	1561	40	1342	0	116	65-135	1491	4.62	30	
trans-1,3-Dichloropropene	1259	40	1342	0	93.8	59-129	1245	1.13	30	
Trichloroethene	1602	40	1342	0	119	75-125	1549	3.41	30	
Trichlorofluoromethane	1138	40	1342	0	84.8	25-185	1079	5.27	30	
Vinyl chloride	1252	40	1342	0	93.2	60-125	1148	8.67	30	
Xylenes, Total	4780	120	4027	0	119	75-125	5085	6.18	30	
Surr: 1,2-Dichloroethane-d4	*1314*	0	*1342*	0	*97.9*	*70-130*	1254	*4.7*	*30*	
Surr: 4-Bromofluorobenzene	*1401*	0	*1342*	0	*104*	*70-130*	1424	*1.66*	*30*	
Surr: Dibromofluoromethane	*1230*	0	*1342*	0	*91.6*	*70-130*	1236	*0.544*	*30*	
Surr: Toluene-d8	*1329*	0	*1342*	0	*99*	*70-130*	1334	*0.353*	*30*	

The following samples were analyzed in this batch:

19051039-01A	19051039-02A	19051039-03A
19051039-04A	19051039-05A	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: The Sigma Group
Work Order: 19051039
Project: Former Biogenesis (16366)

QC BATCH REPORT

Batch ID: **R260986** Instrument ID **MOIST** Method: **SW3550C**

MBLK Sample ID: **WBLKS-R260986** Units: **% of sample** Analysis Date: **5/21/2019 01:25 PM**
Client ID: Run ID: **MOIST_190521B** SeqNo: **5670552** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	U	0.10								

LCS Sample ID: **LCS-R260986** Units: **% of sample** Analysis Date: **5/21/2019 01:25 PM**
Client ID: Run ID: **MOIST_190521B** SeqNo: **5670551** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	100	0.10	100	0	100	98-102	0			

DUP Sample ID: **19051106-42B DUP** Units: **% of sample** Analysis Date: **5/21/2019 01:25 PM**
Client ID: Run ID: **MOIST_190521B** SeqNo: **5670542** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	17.46	0.10	0	0	0	0-0	19.37	10.4	10	R

DUP Sample ID: **19051210-02B DUP** Units: **% of sample** Analysis Date: **5/21/2019 01:25 PM**
Client ID: Run ID: **MOIST_190521B** SeqNo: **5670548** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	5.07	0.10	0	0	0	0-0	5.11	0.786	10	

The following samples were analyzed in this batch:

19051039-01B	19051039-02B	19051039-03B
19051039-04B		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Cincinnati, OH +1 513 733 5336
Everett, WA +1 425 356 2600
Fort Collins, CO +1 970 490 1511
Holland, MI +1 616 399 6070
Houston, TX +1 281 530 5656
Middletown, PA +1 717 944 5541
Spring City, PA +1 610 948 4903
Salt Lake City, UT +1 801 266 7700
South Charleston, WV +1 304 356 3168
York, PA +1 717 505 5280

Chain of Custody Form

Page 1 of 1

COC ID: 189255

ALS Project Manager:

ALS Work Order #: 19051039

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Former Biogeresis	A	VOCs
Work Order		Project Number	16366	B	PCBs
Company Name	The Sigma Group	Bill To Company	The Sigma Group	C	
Send Report To	Stephen Meer	Invoice Attn	Accounts Payable	D	
Address	1300 W Canal Street	Address	1300 W Canal Street	E	
				F	
City/State/Zip	Milwaukee, WI 53233	City/State/Zip	Milwaukee, WI 53233	G	
Phone	(414) 643-4124	Phone	(414) 643-4124	H	
Fax	(414) 643-4210	Fax	(414) 643-4210	I	
e-Mail Address		e-Mail Address		J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	14-S-SW (4')	5/14/19	8:30	soil	7,8	4	X	X									
2	14-E-SW (3')	5/14/19	10:00	↓	↓	4	X	X									
3	14-W-SW (4')	5/14/19	9:00			4	X	X									
4	14-N-SW (4')	5/14/19	9:30			4	X	X									
5	Trip Blank					1	X										
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign: Stephen Meer

Shipment Method: Fed Ex

Required Turnaround Time: (Check Box) [X] Std 10 WK Days [ ] 5 WK Days [ ] 2 WK Days [ ] 24 Hour [ ] Other

Results Due Date:

Relinquished by:	Date: 5/14/19	Time: 4:00	Received by: FED EX	Notes:
Relinquished by: FED EX	Date: 5/15/19	Time: 0945	Received by (Laboratory):	
Logged by (Laboratory): DFS	Date: 5/15/19	Time: 1530	Checked by (Laboratory):	

Cooler ID	Cooler Temp.
SR2	3.4°C

QC Package: (Check One Box Below)
- [ ] Level II Std QC
- [ ] Level III Std QC/Raw Data
- [ ] Level IV SW846/CLP
- [ ] TRRP CheckList
- [ ] TRRP Level IV
- [ ] Other

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note:
1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

ALS Group, USA

Sample Receipt Checklist

Client Name: **SIGMAGROUP** Date/Time Received: **15-May-19 09:45**

Work Order: **19051039** Received by: **DS**

Checklist completed by Diane Shaw (eSignature) 15-May-19 (Date) Reviewed by: Chad Whelton (eSignature) 15-May-19 (Date)

Matrices: Soil

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Sample(s) received on ice?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	3.4/3.4 c	SR2	
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	5/15/2019 3:25:29 PM		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:	-		

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

ATTACHMENT C

MONITORING WELL ABANDONMENT FORMS

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☒ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other:

1. Well Location Information

County	WI Unique Well # of Removed Well	~~Hicap #~~
Milwaukee		MW-7

Latitude / Longitude (see instructions) ____ N ____ W | Format Code: ☐ DD ☐ DDM | Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
or Gov't Lot #			N	☐ E ☐ W

Well Street Address: 610 W. Rawson Ave.

Well City, Village or Town	Well ZIP Code
Oak Creek	53154

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
excavation	

2. Facility / Owner Information

Facility Name: Former Biogeresis

Facility ID (FID or PWS): 241020010

License/Permit/Monitoring #:

Original Well Owner:

Present Well Owner:

Mailing Address of Present Owner:

City of Present Owner	State	ZIP Code

3. Filled & Sealed Well / Drillhole / Borehole Information

☒ Monitoring Well ☐ Water Well ☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 5/7/2018

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (specify): direct push

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
11.5	1.0
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**
2.0	11.5

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☒ Yes	☐ No	☐ N/A
Casing left in place?	☐ Yes	☒ No	☐ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☐ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☐ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☐ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain):

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☐ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☒ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
granular bentonite	Surface	11.5		

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
The Sigma Group, Inc.		03/29/2019

Street or Route	Telephone Number
1300 W. Canal St.	(414) 643-4200

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Milwaukee	WI	53233		3/29/19

DNR Use Only

Date Received	Noted By
Comments	

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☒ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other:

1. Well Location Information

County	WI Unique Well # of Removed Well	Hiedp #
Milwaukee		MW-14

Latitude / Longitude (see instructions) N / W — Format Code: ☐ DD ☐ DDM — Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
or Gov't Lot #			N	☐ E ☐ W

Well Street Address: 610 W. Rawson Ave.

Well City, Village or Town	Well ZIP Code
Oak Creek	53154

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
excavation	

2. Facility / Owner Information

Facility Name: Former Biogenesis

Facility ID (FID or PWS): 241020010

License/Permit/Monitoring #:

Original Well Owner:

Present Well Owner:

Mailing Address of Present Owner:

City of Present Owner	State	ZIP Code

3. Filled & Sealed Well / Drillhole / Borehole Information

☒ Monitoring Well ☐ Water Well ☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 5/8/2018

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (specify): direct push

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
8.5	1.0
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**
2.0	8.5

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☒ Yes	☐ No	☐ N/A
Casing left in place?	☐ Yes	☒ No	☐ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☐ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☐ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☐ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain):

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☐ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☒ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Surface	8.5		

granular bentonite

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
The Sigma Group, Inc.		05/06/2019

Street or Route	Telephone Number
1300 W. Canal St.	(414) 643-4200

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Milwaukee	WI	53233		5/6/2019

DNR Use Only

Date Received	Noted By
Comments	

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☒ **Verification Only of Fill and Seal**

Route to DNR Bureau: ☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment ☐ Waste Management ☐ Other:

1. Well Location Information

County	WI Unique Well # of Removed Well	~~Hicap #~~
Milwaukee		MW-24

Latitude / Longitude (see instructions)	Format Code	Method Code
N	☐ DD	☐ GPS008
W	☐ DDM	☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
or Gov't Lot #			N	☐ E ☐ W

Well Street Address: 610 W. Rawson Ave.

Well City, Village or Town	Well ZIP Code
Oak Creek	53154

Subdivision Name	Lot #

Reason for Removal from Service	WI Unique Well # of Replacement Well
excavation	

2. Facility / Owner Information

Facility Name: Former Biogeresis

Facility ID (FID or PWS): 241020010

License/Permit/Monitoring #:

Original Well Owner:

Present Well Owner:

Mailing Address of Present Owner:

City of Present Owner	State	ZIP Code

3. Filled & Sealed Well / Drillhole / Borehole Information

☒ Monitoring Well ☐ Water Well ☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 5/9/2018

If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug ☒ Other (specify): direct push

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
11	1.0

Lower Drillhole Diameter (in.)	Casing Depth (ft.)
2.0	11

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☒ Yes	☐ No	☐ N/A
Casing left in place?	☐ Yes	☒ No	☐ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☐ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☐ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☐ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain):

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☐ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☒ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
granular bentonite	Surface	11		

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
The Sigma Group, Inc.		3/29/2019

Street or Route	Telephone Number
1300 W. Canal St.	(414) 643-4200

City	State	ZIP Code	Signature of Person Doing Work	Date Signed
Milwaukee	WI	53233		3/29/19

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☒ **Verification Only of Fill and Seal**

Route to DNR Bureau:
☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment
☐ Waste Management ☐ Other: _____

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Milwaukee		MW-44

Latitude / Longitude (see instructions) _____ N _____ W
Format Code: ☐ DD ☐ DDM
Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
or Gov't Lot #			N	☐ E ☐ W

Well Street Address: 610 W. Rawson Ave.
Well City, Village or Town: Oak Creek
Well ZIP Code: 53154
Subdivision Name:
Lot #:
Reason for Removal from Service: excavation
WI Unique Well # of Replacement Well:

2. Facility / Owner Information

Facility Name: Former Biogeresis
Facility ID (FID or PWS): 241020010
License/Permit/Monitoring #:
Original Well Owner:
Present Well Owner:
Mailing Address of Present Owner:
City of Present Owner:
State:
ZIP Code:

3. Filled & Sealed Well / Drillhole / Borehole Information

☒ Monitoring Well ☐ Water Well ☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 5/16/2018
If a Well Construction Report is available, please attach.

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (specify): direct push

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
12	1.0
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**
2.0	12

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown
If yes, to what depth (feet)?
Depth to Water (feet)

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☒ Yes	☐ No	☐ N/A
Casing left in place?	☐ Yes	☒ No	☐ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☐ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☐ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☐ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain): _____

Sealing Materials
☐ Neat Cement Grout ☐ Concrete
☐ Sand-Cement (Concrete) Grout ☐ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☐ Bentonite Chips ☐ Bentonite - Cement Grout
☒ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
granular bentonite	Surface	12		

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
The Sigma Group, Inc.		5/6/19

Street or Route: 1300 W. Canal St.
Telephone Number: (414) 643-4200
City: Milwaukee
State: WI
ZIP Code: 53233
Signature of Person Doing Work:
Date Signed: 5/6/19

DNR Use Only
Date Received:
Noted By:
Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing Report

Form 3300-005 (R 4/2015)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☒ **Verification Only of Fill and Seal**

Route to DNR Bureau: ☐ Drinking Water ☐ Watershed/Wastewater ☒ Remediation/Redevelopment ☐ Waste Management ☐ Other:

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Milwaukee		SP2-2

Latitude / Longitude (see instructions) ____ N ____ W — Format Code: ☐ DD ☐ DDM — Method Code: ☐ GPS008 ☐ SCR002 ☐ OTH001

¼ / ¼	¼	Section	Township	Range
or Gov't Lot #			N	☐ E ☐ W

Well Street Address: 610 W. Rawson Ave.

Well City, Village or Town: Oak Creek — Well ZIP Code: 53154

Subdivision Name — Lot #

Reason for Removal from Service: excavation — WI Unique Well # of Replacement Well

2. Facility / Owner Information

Facility Name: Former Biogeresis

Facility ID (FID or PWS): 241020010

License/Permit/Monitoring #

Original Well Owner

Present Well Owner

Mailing Address of Present Owner

City of Present Owner — State — ZIP Code

3. Filled & Sealed Well / Drillhole / Borehole Information

☒ Monitoring Well ☐ Water Well ☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): 6/14/2018

If a Well Construction Report is available, please attach.

Construction Type: ☐ Drilled ☐ Driven (Sandpoint) ☐ Dug ☒ Other (specify): direct push

Formation Type: ☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
30	1.0
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**
2.0	30

Was well annular space grouted? ☐ Yes ☐ No ☐ Unknown

If yes, to what depth (feet)? — Depth to Water (feet)

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Liner(s) perforated?	☐ Yes	☐ No	☒ N/A
Screen removed?	☒ Yes	☐ No	☐ N/A
Casing left in place?	☐ Yes	☒ No	☐ N/A
Was casing cut off below surface?	☐ Yes	☐ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☐ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☐ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☐ N/A

Required Method of Placing Sealing Material: ☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped ☒ Screened & Poured (Bentonite Chips) ☐ Other (Explain):

Sealing Materials: ☐ Neat Cement Grout ☐ Concrete ☐ Sand-Cement (Concrete) Grout ☐ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only: ☐ Bentonite Chips ☐ Bentonite - Cement Grout ☒ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used to Fill Well / Drillhole

	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
granular bentonite	Surface	30		

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)
The Sigma Group, Inc.		5/6/19

Street or Route: 1300 W. Canal St. — Telephone Number: (414) 643-4200

City: Milwaukee — State: WI — ZIP Code: 53233 — Signature of Person Doing Work — Date Signed: 5/6/19

DNR Use Only

Date Received	Noted By
Comments	