State of Wisconsin
Department of Natural Resources
PO Box 7921, Madison WI 53707-7921
dnr.wi.gov

Technical Assistance, Environmental Liability Clarification or Post-Closure Modification Request

Form 4400-237 (R 9/15)

Notice: Use this form to request **a written response (on agency letterhead)** from the Department of Natural Resources (DNR) regarding technical assistance, a post-closure change to a site, a specialized agreement or liability clarification for Property with known or suspected environmental contamination. A fee will be required as is authorized by s. 292.55, Wis. Stats., and NR 749, Wis. Adm. Code., unless noted in the instructions below. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records law [ss. 19.31 - 19.39, Wis. Stats.].

Definitions

"Property" refers to the subject Property that is perceived to have been or has been impacted by the discharge of hazardous substances.

"Liability Clarification" refers to a written determination by the Department provided in response to a request made on this form. The response clarifies whether a person is or may become liable for the environmental contamination of a Property, as provided in s. 292.55, Wis. Stats.

"Technical Assistance" refers to the Department's assistance or comments on the planning and implementation of an environmental investigation or environmental cleanup on a Property in response to a request made on this form as provided in s. 292.55, Wis. Stats.

"Post-closure modification" refers to changes to Property boundaries and/or continuing obligations for Properties or sites that received closure letters for which continuing obligations have been applied or where contamination remains. Many, but not all, of these sites are included on the GIS Registry layer of RR Sites Map to provide public notice of residual contamination and continuing obligations.

Select the Correct Form

This from should be used to request the following from the DNR:

- Technical Assistance
- Liability Clarification
- Post-Closure Modifications
- Specialized Agreements (tax cancellation, negotiated agreements, etc.)

Do not use this form if one of the following applies:

- Request for an **off-site liability exemption or clarification** for Property that has been or is perceived to be contaminated by one or more hazardous substances that originated on another Property containing the source of the contamination. Use DNR's Off-Site Liability Exemption and Liability Clarification Application Form 4400-201.
- Submittal of an Environmental Assessment for the **Lender Liability Exemption**, s 292.21, Wis. Stats., **if no response or review by DNR is requested**. Use the Lender Liability Exemption Environmental Assessment Tracking Form 4400-196.
- Request for an **exemption to develop on a historic fill site** or licensed landfill. Use DNR's Form 4400-226 or 4400-226A.
- **Request for closure** for Property where the investigation and cleanup actions are completed. Use DNR's Case Closure - GIS Registry Form 4400-202.

All forms, publications and additional information are available on the internet at: dnr.wi.gov/topic/Brownfields/Pubs.html.

Instructions

1. Complete sections 1, 2, 6 and 7 for all requests. Be sure to provide adequate and complete information.
2. Select the type of assistance requested: Section 3 for technical assistance or post-closure modifications, Section 4 for a written determination or clarification of environmental liabilities; or Section 5 for a specialized agreement.
3. Include the fee payment that is listed in Section 3, 4, or 5, unless you are a "Voluntary Party" enrolled in the Voluntary Party Liability Exemption Program **and** the questions in Section 2 direct otherwise. Information on to whom and where to send the fee is found in Section 8 of this form.
4. Send the completed request, supporting materials and the fee to the appropriate DNR regional office where the Property is located. See the map on the last page of this form. A paper copy of the signed form and all reports and supporting materials shall be sent with an electronic copy of the form and supporting materials on a compact disk. For electronic document submittal requirements see: http://dnr.wi.gov/files/PDF/pubs/rr/RR690.pdf"

The time required for DNR's determination varies depending on the complexity of the site, and the clarity and completeness of the request and supporting documentation.

Section 1. Contact and Recipient Information

Requester Information

This is the person requesting technical assistance or a post-closure modification review, that his or her liability be clarified or a specialized agreement and is identified as the requester in Section 7. DNR will address its response letter to this person.

Last Name	First	MI	Organization/ Business Name		
Ladewig	Roger		Solenis, LLC		
Mailing Address			City	State	ZIP Code
5228 N. Hopkins Street			Milwaukee	WI	53209
Phone # (include area code)	Fax # (include area code)		Email		
(414) 535-6205	(414) 461-4671		RLADEWIG@SOLENIS.COM		

The requester listed above: (select all that apply)

- ☐ Is currently the owner
- ☐ Is considering selling the Property
- ☐ Is renting or leasing the Property
- ☐ Is considering acquiring the Property
- ☐ Is a lender with a mortgagee interest in the Property
- ☒ Other. Explain the status of the Property with respect to the applicant:

Site / Plant Manager

Contact Information (to be contacted with questions about this request) ☒ Select if same as requester

Contact Last Name	First	MI	Organization/ Business Name		
Ladewig	Roger		Solenis, LLC		
Mailing Address			City	State	ZIP Code
5228 N. Hopkins Street			Milwaukee	WI	53209
Phone # (include area code)	Fax # (include area code)		Email		
(414) 535-6205	(414) 461-4671		RLADEWIG@SOLENIS.COM		

Environmental Consultant (if applicable)

Contact Last Name	First	MI	Organization/ Business Name		
Wimmer	Timothy	E	The Sigma Group, Inc.		
Mailing Address			City	State	ZIP Code
1300 W. Canal Street			Milwaukee	WI	53233
Phone # (include area code)	Fax # (include area code)		Email		
(414) 643-4200	(414) 643-4210		twimmer@thesigmagroup.com		

Property Owner (if different from requester)

Contact Last Name	First	MI	Organization/ Business Name		
			Solenis, LLC		
Mailing Address			City	State	ZIP Code
5228 N. Hopkins Street			Milwaukee	WI	53209
Phone # (include area code)	Fax # (include area code)		Email		
(414) 535-6205	(414) 461-4671				

Section 2. Property Information

Property Name	FID No. (if known)
Solenis LLC	241041900

BRRTS No. (if known)	Parcel Identification Number
02-41-577350	1929981111

Street Address	City	State	ZIP Code
5228 N. Hopkins Stret	Milwaukee	WI	53209

County	Municipality where the Property is located	Property is composed of:	Property Size Acres
Milwaukee	(●) City ( ) Town ( ) Village of Milwaukee	(●) Single tax parcel ( ) Multiple tax parcels	4

1. Is a response needed by a specific date? (e.g., Property closing date) Note: Most requests are completed within 60 days. Please plan accordingly.

( ) No (●) Yes

Date requested by: 07/06/2017

Reason: The prompt review of site investigation activities completed to date and conceptual approval of the proposed additional sampling and analysis plan are critical to future construction activities at the site, which are scheduled to commence in October, 2017.

2. Is the "Requester" enrolled as a Voluntary Party in the Voluntary Party Liability Exemption (VPLE) program?

(●) No. **Include the fee that is required for your request in Section 3, 4 or 5.**

( ) Yes. **Do not include a separate fee.** This request will be billed separately through the VPLE Program.

Fill out the information in Section 3, 4 or 5 which corresponds with the type of request:
Section 3. Technical Assistance or Post-Closure Modifications;
Section 4. Liability Clarification; or Section 5. Specialized Agreement.

Section 3. Request for Technical Assistance or Post-Closure Modification

Select the type of technical assistance requested: **[Numbers in brackets are for WI DNR Use]**

- [ ] No Further Action Letter (NFA) (Immediate Actions) - NR 708.09, [183] - **Include a fee of $350.** Use for a written response to an immediate action after a discharge of a hazardous substance occurs. Generally, these are for a one-time spill event.
- [ ] Review of Site Investigation Work Plan - NR 716.09, [135] - **Include a fee of $700.**
- [ ] Review of Site Investigation Report - NR 716.15, [137] - **Include a fee of $1050.**
- [ ] Approval of a Site-Specific Soil Cleanup Standard - NR 720.10 or 12, [67] - **Include a fee of $1050.**
- [ ] Review of a Remedial Action Options Report - NR 722.13, [143] - **Include a fee of $1050.**
- [ ] Review of a Remedial Action Design Report - NR 724.09, [148] - **Include a fee of $1050.**
- [ ] Review of a Remedial Action Documentation Report - NR 724.15, [152] - **Include a fee of $350**
- [ ] Review of a Long-term Monitoring Plan - NR 724.17, [25] - **Include a fee of $425.**
- [ ] Review of an Operation and Maintenance Plan - NR 724.13, [192] - **Include a fee of $425.**

Other Technical Assistance - s. 292.55, Wis. Stats. [97] (For request to build on an abandoned landfill use Form 4400-226)

- [x] Schedule a Technical Assistance Meeting - **Include a fee of $700.**
- [ ] Hazardous Waste Determination - **Include a fee of $700.**
- [ ] Other Technical Assistance - **Include a fee of $700.** Explain your request in an attachment.

Post-Closure Modifications - NR 727, [181]

- [ ] Post-Closure Modifications: Modification to Property boundaries and/or continuing obligations of a closed site or Property; sites may be on the GIS Registry. This also includes removal of a site or Property from the GIS Registry. **Include a fee of $1050, and:**
  - [ ] Include a fee of $300 for sites with residual soil contamination; and
  - [ ] Include a fee of $350 for sites with residual groundwater contamination, monitoring wells or for vapor intrusion continuing obligations.

Attach a description of the changes you are proposing, and documentation as to why the changes are needed (if the change to a Property, site or continuing obligation will result in revised maps, maintenance plans or photographs, those documents may be submitted later in the approval process, on a case-by-case basis).

Skip Sections 4 and 5 if the technical assistance you are requesting is listed above and complete Sections 6 and 7 of this form.

Section 5. Request for a Specialized Agreement

Select the type of agreement needed. Include the appropriate draft agreements and supporting materials. Complete Sections 6 and 7 of this form. More information and model draft agreements are available at: dnr.wi.gov/topic/Brownfields/lgu.html#tabx4.

☐ Tax cancellation agreement - s. 75.105(2)(d), Wis. Stats. [654]

- ❖ **Include a fee of $700, and the information listed below:**

(1) Phase I and II Environmental Site Assessment Reports,
(2) a copy of the Property deed with the correct legal description; and,
(3) a draft 75.105 agreement based on the DNR's model (dnr.wi.gov/topic/brownfields/documents/mod75-105agrmt.pdf).

☐ Agreement for assignment of tax foreclosure judgement - s.75.106, Wis. Stats. [666]

- ❖ **Include a fee of $700, and the information listed below:**

(1) Phase I and II Environmental Site Assessment Reports,
(2) a copy of the Property deed with the correct legal description; and,
(3) a draft 75.105 agreement based on the DNR's model (dnr.wi.gov/topic/brownfields/documents/mod75-106agrmt.pdf).

☐ Negotiated agreement - Enforceable contract for non-emergency remediation - s. 292.11(7)(d) and (e), Wis. Stats. [630]

- ❖ **Include a fee of $1400, and the information listed below:**

(1) a draft schedule for remediation; and,
(2) the name, mailing address, phone and email for each party to the agreement.

Section 6. Other Information Submitted

Identify all materials that are included with this request.

Include one copy of any document from any state agency files that you want the Department to review as part of this request. The person submitting this request is responsible for contacting other state agencies to obtain appropriate reports or information.

☐ Phase I Environmental Site Assessment Report - Date: _____

☐ Phase II Environmental Site Assessment Report - Date: _____

☐ Legal Description of Property (required for all liability requests and specialized agreements)

☒ Map of the Property (required for all liability requests and specialized agreements)

Analytical results of the following sampled media: Select all that apply and include date of collection

☒ Groundwater ☒ Soil ☐ Sediment ☐ Other medium - Describe: _____

Date of Collection: _____

☐ A copy of the closure letter and submittal materials

☐ Draft tax cancellation agreement

☐ Draft agreement for assignment of tax foreclosure judgment

☒ Other report(s) or information - Describe: attached - Site Investigation Status Report, Proposed Additional Sampling...

For Property with newly identified discharges of hazardous substances only: Has a notification of a discharge of a hazardous substance been sent to the DNR as required by s. NR 706.05(1)(b), Wis. Adm. Code?

◉ Yes - Date (if known): 06/17/2016
○ No

Note: The Notification for Hazardous Substance Discharge (non-emergency) form is available at: dnr.wi.gov/files/PDF/forms/4400/4400-225.pdf.

Section 7. Certification by the Person who completed this form

☐ I am the person submitting this request (requester)

☒ I prepared this request for: Roger Ladewig
Requester Name

I certify that I am familiar with the information submitted on this request, and that the information on and included with this request is true, accurate and complete to the best of my knowledge. I also certify I have the legal authority and the applicant's permission to make this request.

Signature

6/19/17
Date Signed

Sr. Project Manager
Title

(414) 643-4139
Telephone Number (include area code)

Section 8. DNR Contacts and Addresses for Request Submittals

Send or deliver one paper copy and one electronic copy on a compact disk of the completed request, supporting materials, and fee to the region where the property is located to the address below. Contact a DNR regional brownfields specialist with any questions about this form or a specific situation involving a contaminated property. For electronic document submittal requirements see: http://dnr.wi.gov/files/PDF/pubs/rr/RR690.pdf.

DNR NORTHERN REGION
Attn: RR Program Assistant
Department of Natural Resources
223 E Steinfest Rd Antigo, WI 54409

DNR NORTHEAST REGION
Attn: RR Program Assistant
Department of Natural Resources
2984 Shawano Avenue
Green Bay WI 54313

DNR SOUTH CENTRAL REGION
Attn: RR Program Assistant
Department of Natural Resources
3911 Fish Hatchery Road
Fitchburg WI 53711

DNR SOUTHEAST REGION
Attn: RR Program Assistant
Department of Natural Resources
2300 North Martin Luther King Drive
Milwaukee WI 53212

DNR WEST CENTRAL REGION
Attn: RR Program Assistant
Department of Natural Resources
1300 Clairemont Ave
Eau Claire WI 54702

Note: These are the Remediation and Redevelopment Program's designated regions. Other DNR program regional boundaries may be different.

DNR Use Only			
Date Received	Date Assigned	BRRTS Activity Code	BRRTS No. (if used)
DNR Reviewer	Comments		
Fee Enclosed? ◯ Yes ◯ No	Fee Amount $	Date Additional Information Requested	Date Requested for DNR Response Letter
Date Approved	Final Determination		

THE SIGMA GROUP
Single Source. Sound Solutions.

July 11, 2017 Project Reference #16153

Mr. John Hnat
C/o Chue Yang
Wisconsin Department of Natural Resources
2300 N. Martin Luther King Jr. Drive
Milwaukee, WI 53212

Subject: **Site Investigation Status Report, Proposed Additional Sampling and Analysis Plan & WDNR Technical Assistance Request (Revised July 2017)**
Solenis, LLC, 5228 N. Hopkins Street, Milwaukee, WI 53209
WDNR BRRTS No. 02-41-577350
WDNR FID No. 241041900

Dear Mr. Hnat:

On behalf of Solenis LLC (Solenis), The Sigma Group, Inc. (Sigma) has prepared this Site Investigation (SI) status report to summarize and document the investigation of propylene dichloride (aka 1,2-dichloropropane [1,2-DCP]) and triethylamine (TEA) contamination identified in soil and groundwater at the Solenis industrial facility located at 5228 N. Hopkins Street, Milwaukee, Wisconsin (**Figure 1**, the "Site"). The results of a limited Phase II Environmental Site Assessment (Phase II) completed by Sigma as well as Sigma's proposed SI work plan to investigate the identified impacts were submitted to the Wisconsin Department of Natural Resources (WDNR) in Sigma's *Investigation Work Plan*[1], dated August, 2016. Sigma initiated the proposed SI activities described in the *Investigation Work Plan* in October, 2016 and based on the results of the initial SI work Sigma also completed supplemental SI work between December 2016 and February 2017.

Additionally, Sigma proposes an *Additional Site Investigation and Pre-construction Sampling and Analysis Plan* (SAP) for review in order to; 1) satisfy the site investigation requirements of WDNR Ch. NR 716 (NR 716) and develop an appropriate remedial strategy with respect to the identified impacts, and 2) assess subsurface conditions in a select area of the Site with respect to the construction of a newly proposed slab-on-grade boiler house building.

Sigma, on behalf of Solenis, submits the attached WDNR Technical Assistance Form 4400-237 and a check in the amount of $700 to:

- Request WDNR review of the following report and proposed SAP;
- Schedule a WDNR Technical Assistance Meeting for discussion and comment on the SI activities completed thus far and proposed SAP; and,
- Request a WDNR Technical Assistance Letter with respect to the SI information and SAP presented below, following the Technical Assistance Meeting.

[1] The Sigma Group, Inc. *Investigation Work Plan, Solenis, LLC, 5228 N. Hopkins Street, Milwaukee, WI 53209, WDNR BRRTS No. 02-41-577350, WDNR FID No. 241041900* dated August 2, 2016.

BACKGROUND

During the demolition of a building and the decommissioning of above ground storage tanks at the Site, a strong odor was detected from the soil in an area identified as the northeast corner of the demolition footprint (**Figures 2A and 2B**). Based on further review of historical information, it was determined that 1,2-DCP and TEA were likely stored at this location. Sigma completed Phase II activities in May 2016 to investigate the potential environmental impacts.

Five test pits, TP-1 through TP-5, were excavated in the demolition area during the Phase II activities. A total of five soil samples were collected and submitted to laboratories for analytical testing of volatile organic compounds (VOCs) and TEA. Soil sample results indicated 1,2-DCP, TEA, and petroleum hydrocarbon contamination were detected in the soil samples. Three groundwater grab samples collected from temporary wells installed in three of the test pits also reported concentrations of 1,2-DCP and TEA in the samples. Based on this information, the WDNR was notified of a release on June 17, 2016.

Sigma, on behalf of Solenis, subsequently submitted the site *Investigation Work Plan* to the WDNR in August, 2016. Sigma initiated the proposed SI activities in October, 2016 and based on the results of the initial SI work completed supplemental SI work between December 2016 and February 2017. The objective of the proposed SI activities was to evaluate the degree and extent of 1,2-DCP and TEA (primary contaminants of concern) contamination at the Site with respect to the release and proposed future building construction plans.

SITE INVESTIGATION ACTIVITIES

The following summarizes the SI activities completed since Sigma's limited Phase II in May 2016, and the results and conclusions obtained.

Soil Borings

Between October 4 and 6, 2016 Sigma completed ten Geoprobe® direct-push soil borings, SB-1 through SB-10, to depths ranging from 15 to 25 feet below ground surface (bgs). The purpose of soil borings SB-1 through SB-10 was to evaluate the degree and delineate the extent of the soil and apparent groundwater impacts identified during the initial Phase II work. In addition to the October 2016 soil borings, Sigma completed five Geoprobe® direct-push soil borings, SB-11, SB-12, PZ-6, PZ-8, and PZ-9 to a depth of 35 feet bgs on December 19 and 21, 2016 in order to further define the extent of impacts. The soil borings completed between October and December, 2016 were placed within and around the former storage tanks and demolition area (refer to **Figure 2B**). Soil samples were continuously collected at each soil boring location with a stainless steel spoon sampler lined with an acetate sleeve. The soil samples were screened in the field for the presence of VOCs with a photoionization detector (PID) equipped with an 11.7 electron volt (eV) lamp and classified in accordance with the Unified Soil Classification System. Soil classifications, descriptions, specific sampling intervals, and PID readings are presented on soil boring logs (WDNR Form 4400-122) included as **Appendix A**. Following completion and sampling, soil borings not intended for further use were promptly abandoned in accordance with NR 141. Borehole abandonment forms are also included in **Appendix A**.

Throughout the SI activities completed to date, a total of thirty-six discrete soil samples were collected from select soil boring locations and submitted for laboratory analysis of VOCs and TEA.

Monitoring Well and Piezometer Installations

Following completion and sampling, soil borings SB-1, SB-2, SB-6, and SB-8 through SB-10 were enlarged with 4-1/4 inch inside diameter hollow stem augers (HSAs) and converted to NR 141-compliant groundwater monitoring wells MW-1, MW-2, MW-6, and MW-8 through MW-10. The wells were completed to a depth of approximately 21 to 23 feet bgs. One soil boring, MW-12, was also blind drilled adjacent to soil boring SB-12 via HSA methods and subsequently converted to monitoring well MW-12. The monitoring wells were constructed with flush threaded, 2-inch diameter well casing with 10 to 15-foot-long slotted well screens positioned to intersect the shallow groundwater table. The monitoring wells were completed at the ground surface with protective stick-up or flushmount steel covers.

Following completion and sampling, soil borings PZ-6, PZ-8, PZ-9, and SB-12 were enlarged with 4-1/4 inch inside diameter HSAs to a depth of approximately 35 feet bgs and converted to NR 141-compliant piezometer wells PZ-6, PZ-8, PZ-9 and PZ-12. The piezometers were constructed with flush threaded, 2-inch diameter well casing with 5-foot-long slotted well screens positioned below the shallow groundwater table. The piezometers were completed at the ground surface with protective flushmount steel covers.

The monitoring well and piezometer locations are shown on **Figures 2A and 2B** and monitoring well and piezometer construction forms are presented in **Appendix B**.

Monitoring Well Development

Well development activities were completed in accordance with NR 141 to remove sediment from the monitoring well and piezometer filter packs and establish a hydraulic connection with the surrounding formation. Monitoring wells MW-1, MW-2, MW-6, and MW-8 through MW-10 were developed on November 2, 2016. Piezometers PZ-6, PZ-8, PZ-9, PZ-12, and monitoring well MW-12 were developed on January 4, 2017. Wells and piezometers were surged and purged with bailers or pumped until dry. Well development forms are also included in **Appendix B**.

Groundwater Sampling & Hydraulic Conductivity Tests

Groundwater samples were collected from all monitoring wells and piezometers on January 12, 2017 and submitted for laboratory analysis of VOCs and TEA. Sigma also collected hydraulic conductivity data (via slug tests) at select well locations to further evaluate shallow and deeper aquifer characteristics.

Surveying

Following installation, soil borings, monitoring wells and piezometers were surveyed for location and elevation (ground surface and top of well casing relative to mean sea level [MSL]) using GPS equipment.

Investigative Waste

Personal protective clothing, sampling equipment, and excess soil cuttings generated during Geoprobe® direct-push soil boring advancement and HSA drilling were containerized in 55-

gallon steel drums and staged at the Site. All purge water was containerized in 55-gallon steel drums and staged at the Site.

SITE INVESTIGATION RESULTS

The following summarizes the results of the site investigation activities completed to date.

Geology

The soil lithology observed at the Site during the SI activities completed to date revealed two distinct subsurface layers. A shallow layer of reworked brown to black gravelly sand and silty sand soils, and potential historic fill material extending from ground surface to approximately 4 to 5 feet bgs underlain by layers of brown and black clay to silty clay. Some peat was noted between 1.5 and 6 feet bgs at select locations across the investigation area, just below the upper fill material. The underlying layer of native material is a vertically thick massive silty clay unit, which extends from the base of the upper fill layer to at least 35 feet bgs or greater. A Well Constructor's Report (ML 21637, 1941) for a well located on the property indicates that clay extended from roughly ground surface to approximately 60 feet bgs. Although not encountered during SI activities completed to date, Silurian dolomite (limestone) bedrock is expected to be approximately 50 to 100 feet bgs at the Site. Limestone bedrock was noted at approximately 85 feet bgs on the Well Constructor's Report.

Soil lithology and general descriptions are provided on the soil boring logs in **Appendix A**. The 1941 Well Constructor's Report is also included. Geologic cross-section locations are provided on **Figure 3** and cross-sections are illustrated on **Figures 3A and 3B**.

Surface Water Flow

A site survey with the specific ground surface topography has not been created to date. Topographic information available on the Milwaukee County Automated Mapping and Land Information Office web GIS service as well as surface elevation measurements conducted at site monitoring wells shows surface topography at the site is relatively flat, sloping slightly to the east. Surface water is expected to generally flow across the site toward the railroad tracks positioned to the east and to the south, influenced by local surface features and infrastructure.

Hydrogeology

Based on the most recent groundwater measurements conducted at site monitoring wells in January 2017, groundwater is generally present at approximately 9 to 14 feet bgs. Depth to groundwater at site piezometers ranges from 22 to 32 feet bgs. Note, the shallow groundwater level recorded for monitoring well MW-12 was anomalously high (shallow) during the most recent measurement event (January 26, 2017), which may be attributed to preferential runoff accumulation and infiltration in the area around the well and drainage ditch that runs along the adjacent railroad tracks to the east.

Groundwater level data from shallow and deep monitoring wells indicate a downward vertical flow gradient at the Site.

Overall, groundwater appears to generally flow east-southeast toward the railroad tracks and southern site boundary. Water level elevation data are presented on **Table 1**. Shallow groundwater and potentiometric contour maps are presented on **Figures 4A and 4B.**

Hydraulic conductivity values determined from slug tests completed at shallow monitoring well MW-12 and piezometer PZ-9 indicate average hydraulic conductivities of 5.63 x 10^{-6} centimeters per second (cm/s) and 7.69 x 10^{-5} cm/s, respectively. Based on published values, the hydraulic conductivity test results appear to be consistent with those exhibited by low permeability silty clay to clay soils. Slug test analytical reports are provided in **Appendix C**.

Free Product

During monitoring well development activities on November 2, 2016, dense non-aqueous phase liquid (DNAPL [product]) 1,2-DCP was noted in the screen interval of monitoring wells MW-1 and MW-2, which were placed in the former storage tank and waste storage area (source area) of the Site. Measurements conducted during the November 2, 2016 development event indicate that 0.60 and 0.75 feet of product was measured in wells MW-1 and MW-2, respectively. During the December 21, 2016 monitoring, 1.5 feet of product was measured in well MW-1. Product was not observed in the other monitoring wells or piezometers outside of the source area at the Site during the monitoring and / or sampling events completed to date. Free product measurement data are presented on **Table 1**.

Free product measurements could not be completed at monitoring well MW-2 during the December 2016 event due to a blockage within the well screen at a depth of approximately 18 feet bgs. Likewise, partial to full blockage of the well screen was noted in monitoring well MW-1 at a similar depth of 18 feet bgs during monitoring events completed in January 2017. Free-phase 1,2-DCP product collecting within the well screen at these two locations may have damaged and / or reacted chemically with the well screen material (PVC), contributing to the observed blockages.

Soil Quality Results

A summary of soil quality results is provided below. Based on the zoning of the Site (heavy industrial) contaminant concentrations identified at the Site were compared to the WDNR Ch. NR 720 Residual Contaminant Levels (RCLs) for the protection of groundwater (groundwater pathway) and human health by direct contact at an industrial site (industrial direct contact), presented in the WDNR guidance document PUB-RR-890 "Soil Residual Contaminant Level Determinations Using the US EPA Regional Screening Level Web Calculator." Soil TEA concentrations were compared to the WDNR Ch. NR 720 industrial direct contact RCL and the risk-based screening level for groundwater protection (groundwater pathway) listed on the US Environmental Protection Agency (EPA) Regional Screening Level Summary Table, which utilizes a target cancer risk (TR) of 1 x 10^{-6} and target hazard quotient (HQ) of 1.0.

1,2-DCP – Concentrations of 1,2-DCP reported within soil samples collected from source area test pits range from 3.4 milligrams per kilogram (mg/kg) in sample TP-1 (3 to 5 feet bgs) to 8,600 mg/kg in sample TP-2 (2 to 4 feet bgs). The reported concentrations are greater than groundwater pathway and / or industrial direct contact RCLs. Soil samples collected from source area soil borings SB-1 and SB-2 also contained concentrations of 1,2-DCP at levels greater than groundwater pathway and / or industrial direct contact RCLs, ranging from 5.5 mg/kg in sample SB-1 (1 to 3 feet bgs) to 2,700 mg/kg in sample SB-2 (3 to 5 feet bgs).

Concentrations of 1,2-DCP reported within soil samples collected from soil borings completed outside of the source area ranged from less than the laboratory limit of

detection (LOD) up to 213 mg/kg in sample SB-7 (12.5 to 15 feet bgs). The concentrations of 1,2-DCP reported within soil samples collected from the Site appear to diminish significantly with distance from the source area contaminant mass. Furthermore, 1,2-DCP was not detected within soil samples collected from deeper sample intervals at soil boring locations PZ-6, PZ-8, PZ-9, SB-11 and SB-12.

TEA - Concentrations of TEA reported within soil samples collected from the source area test pits, TP-1 (3 to 5 feet bgs) and TP-2 (2 to 4 feet bgs), were 110 mg/kg and 210 mg/kg, respectively. The reported concentrations are greater than the groundwater pathway RCL, but below the industrial direct contact RCL. Soil samples collected from source area soil borings SB-1 and SB-2 also contained concentrations of TEA at levels greater than the groundwater pathway RCL, ranging from 3.2 mg/kg in sample SB-1 (1 to 3 feet bgs) to 83 mg/kg in sample SB-2 (3 to 5 feet bgs).

Concentrations of TEA reported within soil samples collected from soil borings completed outside of the source area ranged from less than the laboratory Method Detection Limit (MDL) up to 26 mg/kg in sample SB-10 (3 to 5 feet bgs). The concentrations of TEA reported within soil samples collected from the Site appear to diminish significantly with distance from the source area contaminant mass. Furthermore, TEA was not detected within soil samples collected from deeper sample intervals at soil boring locations PZ-6, PZ-8, PZ-9, SB-11 and SB-12.

VOCs – Several VOCs other than 1,2-DCP and TEA were also detected within various soil samples collected from the Site at concentrations greater than applicable NR 720 groundwater pathway, industrial and / or non-industrial direct contact RCLs, including; benzene, 1,4-dichlorobenzene, 1,2-dichloroethane, ethylbenzene, naphthalene, toluene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and total xylenes.

Soil analytical data collected during the Phase II and SI activities completed to date are summarized on **Table 2.** The soil laboratory reports and chains of custody for soil samples collected during SI activities are included as **Appendix D**. Soil quality across the Site is illustrated on **Figure 5**.

Groundwater Quality Results

A summary of the groundwater quality results from the groundwater sampling activities completed in January 2017 is provided below. Contaminant concentrations identified at the site were compared to WDNR Ch. NR 140 Enforcement Standards (ESs) and Preventative Action Limits (PALs). The US EPA Regional Screening Level for tap water (15 micrograms per liter [ug/L]) was used as the regulatory standard for TEA as no NR 140 ES or PAL are listed for TEA in groundwater.

1,2-DCP – The concentrations of 1,2-DCP reported within groundwater samples collected from source area monitoring wells MW-1 and MW-2 were 2,700,000 ug/L and 3,000,000 ug/L, respectively. The reported concentrations largely exceed the NR 140 ES of 5 ug/L and further substantiate presence of 1,2-DCP product within each monitoring well.

Monitoring wells MW-6 (side-gradient) and MW-10 (up-gradient) also contained concentrations of 1,2-DCP exceeding the ES and monitoring wells MW-8, MW-9, and piezometer PZ-6 contained concentrations of 1,2-DCP exceeding the PAL (0.5 ug/L).

TEA – Triethylamine was not detected above the laboratory MDL in any groundwater samples collected from the monitoring well and piezometer network across the Site, including source area wells MW-1 and MW-2.

VOCs – No other detected VOCs were reported above ESs or PALs within the groundwater samples collected from the Site.

Groundwater analytical data are summarized on **Table 3.** The groundwater laboratory report and chain of custody are included as **Appendix E**. Groundwater quality across the Site is illustrated on **Figure 6**.

CONCLUSIONS

Based on the data and information collected during SI activities completed to date, the following conclusions are presented:

- The soil at the Site generally consists of 4 to 5 feet of shallow reworked soil, underlain by layers of low permeability brown and black clay, silty clay. Some peat was noted between 1.5 and 6 feet bgs at select locations, generally within the transition zone between the loose upper material and underlying vertically thick clay unit.

- Shallow groundwater is generally present at depths of approximately 9 to 14 feet bgs within site monitoring wells and 22 to 32 feet bgs within site piezometers. Groundwater appears to flow east-southeast across the Site. Hydraulic conductivity values determined from slug test results indicate the shallow groundwater aquifer material has relatively low permeability. There appear to be two distinct hydraulic units at the Site; 1) a shallow layer of more permeable reworked soil and fill, and 2) an underlying layer of vertically thick, low permeability, massive clay. As such, surface water is expected to infiltrate more readily through the shallow surface layer until contacting the fill to upper surface of native clay-silty clay.

- Free-phase 1,2-DCP product was observed within source area monitoring wells MW-1 and MW-2 during well development and / or subsequent monitoring activities. Based on the general lithology of the Site, specifically within the former demolition and storage tank area, it is likely that the overall extent of free product is limited. Furthermore, the free product observed in wells MW-1 and MW-2 may have entered the well screen following installation and collected in the base of the well. Additional soil borings and sampling will be necessary to more precisely define the limits of the DNAPL plume.

- Elevated concentrations of 1,2-DCP and TEA were detected in soil samples collected from with the source area. Lower concentrations of 1,2-DCP, TEA, and select other VOCs were identified within soil samples collected from the peripheral soil borings surrounding the primary investigation area, demonstrating that soil quality improves with distance, both laterally and vertically, from the source area. Additional soil

borings are recommended to more precisely define the degree and extent of soil contamination across the Site.

- Groundwater analytical data indicates elevated concentrations of 1,2-DCP were detected within groundwater samples collected from source area wells MW-1 and MW-2. Groundwater collected from monitoring wells MW-6, MW-8, MW-9, MW-10, and piezometer PZ-6 also contained concentrations of 1,2-DCP exceeding the NR 140 ES and / or PAL, however the reported concentrations were significantly lower than within the source area. No other VOC constituents were reported above LODs and / or exceeding NR 140 standards. In general, significant shallow groundwater impacts were identified within the source area, but contaminant concentrations in other site wells, specifically down-gradient shallow monitoring wells and deeper piezometers, decrease considerably. Supplemental monitoring wells would be appropriate to allow recovery of free product and more precisely define the degree and extent of free product and groundwater impacts.

- TEA was not detected above the laboratory MDL in any of the groundwater samples collected from the Site. Note, the analytical method utilized by the laboratory was able to achieve a MDL of 0.99 milligrams per liter (mg/L), which is considerably greater than the US EPA Regional Screening Level of 15 ug/L for tap water. A more sensitive analytical method may be required to detect lower concentrations of dissolved TEA that may be present within groundwater at the Site.

Based on the degree and extent of soil and groundwater contamination identified across the Site to date, the apparent presence of free-phase 1,2-DCP product within the source area, and Solenis' future building construction plans, Sigma presents the following *Additional Site Investigation and Pre-construction Sampling and Analysis Plan* for review and approval:

ADDITIONAL SAMPLING AND ANALYSIS PLAN

The following SAP was designed to address two areas of concerns at the Site; 1) the site investigation and source area, which has been the target of site investigation activities completed to date, and 2) an area of proposed new building (boiler house) construction:

Source Area - Additional Investigation Services

Supplemental data collected within and around the existing source and site investigation areas will be necessary to evaluate and select the most cost effective and practical remedial solutions. Sigma presents the following recommended additional work:

Free Product Delineation

- Advance a sufficient number of soil borings within the area of the former tank system and apparent DNAPL plume to adequately define the degree and extent of free product and free product impacted material. Dual tube direct-push soil sampling techniques will be employed to minimize the potential vertical migration of DNAPL, which may be perched on the layers of clay and silty clay underlying the shallow fill. Soil borings will be advanced to a depth of approximately 15 feet bgs. A conceptual layout of the proposed soil boring locations is provided on **Figure 7**.

- At each boring location, perform continuous soil sampling for field screening using a PID and visibly screen for free product. Elevated PID readings and / or the visible

presence of free product may prompt additional soil borings or soil sampling for laboratory analysis.

- Collect and analyze select soil samples for laboratory analysis of the following parameters:
  - VOCs by EPA Method 8260B – up to three samples per soil boring (samples will be collected from within the shallow fill layer, the interval(s) displaying the greatest PID readings and / or the interval just above the shallow groundwater table interface); and,
  - TEA by EPA Method 8270C – one sample from the outermost soil boring locations. Note, a fewer number of soil samples are proposed for TEA analysis due to higher than usual analytical costs. The location of soil samples collected for TEA analysis will be determined by PID readings recorded at the outermost soil boring locations.

- Abandon all soil borings in accordance with NR 141 following the completion of soil sampling activities.

- Bail / recover free-phase product in monitoring wells MW-1 and MW-2, if accessible. Sigma will attempt to bail free product previously observed in monitoring wells MW-1 and MW-2 one-time during abandonment (see below) to attempt to remove as much free product as practicable prior to sealing the wells.

- Over-drill damaged monitoring wells MW-1 and MW-2 and abandon boreholes with bentonite slurry. Install replacement monitoring wells constructed with 10 to 15 feet of stainless steel wire wrap well screen.

- Decontaminate all non-disposable drilling and sampling equipment with an Alconox detergent (or equivalent) based wash and rinsed clean after each use to prevent cross-contamination between sampling locations.

- Containerize all investigation and decontamination derived wastes, as well as recovered free product, in appropriately labeled 55-gallon steel drums and stage at the Site until proper disposal arrangement are made.

- Using GPS methods survey all soil boring and replacement monitoring well locations for location and elevation.

- Investigate former and existing utility conduits within the site investigation area to evaluate the potential risks of contaminant preferential migration pathways.

Groundwater Sampling & Free Product Recovery

- Collect water level measurements from monitoring well / piezometer network, including the proposed replacement wells.

- Develop and / or purge all monitoring wells and piezometers in accordance with NR 141.

- Collect groundwater samples from all monitoring wells and piezometers and submit to a certified laboratory for analysis of the following parameters:
  - VOCs by EPA Method 8260B – 14 samples total (includes duplicate sample, equipment and trip blank); and,
  - TEA by EPA Method 8270C – 3 samples total from shallow, down-gradient wells.

- Based on the type of native soils observed across the Site (low permeability silty clay to clay), a free product recovery program is not recommended at this time; however, free product recovery feasibility can be evaluated following completion of the proposed activities.

- Disposable bailers will be used to collect groundwater samples. All non-disposable sampling and monitoring equipment will be decontaminated between sampling locations to prevent cross-contamination.

- Containerize all purge water and decontamination derived wastes in appropriately labeled 55-gallon steel drums and stage at the Site until proper disposal arrangement are made.

Reporting

Based on the results of the additional investigation, Sigma will prepare a Site Investigation Report in accordance with NR 716. The report will outline the scope of work completed during the investigation, the procedures followed in the field, and a summary of the results. The report will present a summary of the geologic and hydrogeologic conditions, and contaminant distribution, as well as potential remedial options to address all potential risk pathways.

Pre-Construction Subsurface Assessment for Proposed Boiler House Building

Solenis is planning to construct an approximately 80' x 80' slab-on-grade boiler house within the northwest portion of the current site investigation area. The approximate location of the proposed building is illustrated on **Figure 8**. Construction related earthwork (e.g. foundation excavation, grading, etc.) is expected to generate excess soil, which will require proper management and off-site disposal. In order to assist in characterizing soil quality conditions for future soil management during construction activities and assess subsurface vapor conditions as they relate to the identified contamination at the Site, Sigma presents the following assessment activities:

Soil Quality Evaluation and Vapor Evaluation in Building Footprint

- Survey building corners to identify the location of the proposed building footprint.

- Advance an array of 18 to 20 soil borings to a depth of 10 feet bgs within the proposed building footprint. Soil borings will be sampled continuously with a PID. A conceptual layout of the proposed soil boring locations is provided on **Figure 8**.

- Install three soil vapor points across the proposed building footprint.

- Collect and analyze select soil samples for laboratory analysis. Soil samples will be collected from select locations for the purpose of delineating the extent of 1,2-DCP

and TEA impacts identified to the southeast and general waste characterization. Soil samples will be analyzed for the following parameters:

- VOCs by EPA Method 8260B – up to two samples per soil boring;
- TEA by EPA Method 8270C – 6 samples from select locations within the southeast portion of the proposed building footprint;
- Resource Conservation and Recovery Act (RCRA) metals by EPA Method 6010B (Mercury by Method 7471) – 6 samples from select locations;
- Polycyclic aromatic hydrocarbons (PAHs) by EPA Method M8270C – 6 samples from select locations; and,
- Polychlorinated biphenyls (PCBs) by EPA Method 8082A – 1 sample

- Collect one round of vapor samples from vapor points via laboratory supplied 6-liter SUMMA canisters and analyze for VOCs by EPA Method TO-15. Prior to sampling, vapor points will be purged with a PID. Vapor samples will be collected at a rate equal to or less than 200 milliliters per minute (WDNR recommended flow-rate threshold).

- Conduct daily vapor / soil gas monitoring for one week with a PID and methane gas monitor.

- Abandon all soil borings in accordance with NR 141 following the completion of soil sampling activities.

- Using GPS methods survey all soil boring and vapor point locations for location and elevation.

- Based on the results, Sigma will prepare a summary of the completed work and provide recommendations for a soil management and vapor mitigation strategy.

Based on the information collected to date and presented in this report, Sigma believes that a practical and effective remedial strategy can be developed for the Site following the completion of the proposed SAP. Furthermore, Solenis will be able acquire a sufficient amount of valuable subsurface data for developing an appropriate soil management plan and vapor mitigation strategy (if necessary) for the proposed new construction.

TECHNICAL ASSISTANCE REQUEST

Sigma, on behalf of Solenis, politely requests that the WDNR complete a review this *Site Investigation Status Report* and proposed *Additional Site Investigation and Pre-construction Sampling and Analysis Plan* and schedule a Technical Assistance Meeting for discussion and comment. Sigma also requests that the WDNR provide a written Technical Assistance Letter, following the outcome, recommendations, and conclusions provided in the meeting.

CLOSING

We greatly appreciate the department's thorough and prompt review of this report and proposed SAP, and look forward to meeting in person to discuss the details of this project.

Please contact us at 414-643-4200 with any questions or concerns regarding the site investigation activities completed to date or proposed SAP.

Sincerely,

THE SIGMA GROUP, INC.

Cory Katzban, E.I.T.
Staff Engineer II

Mafizul Islam
Senior Engineer

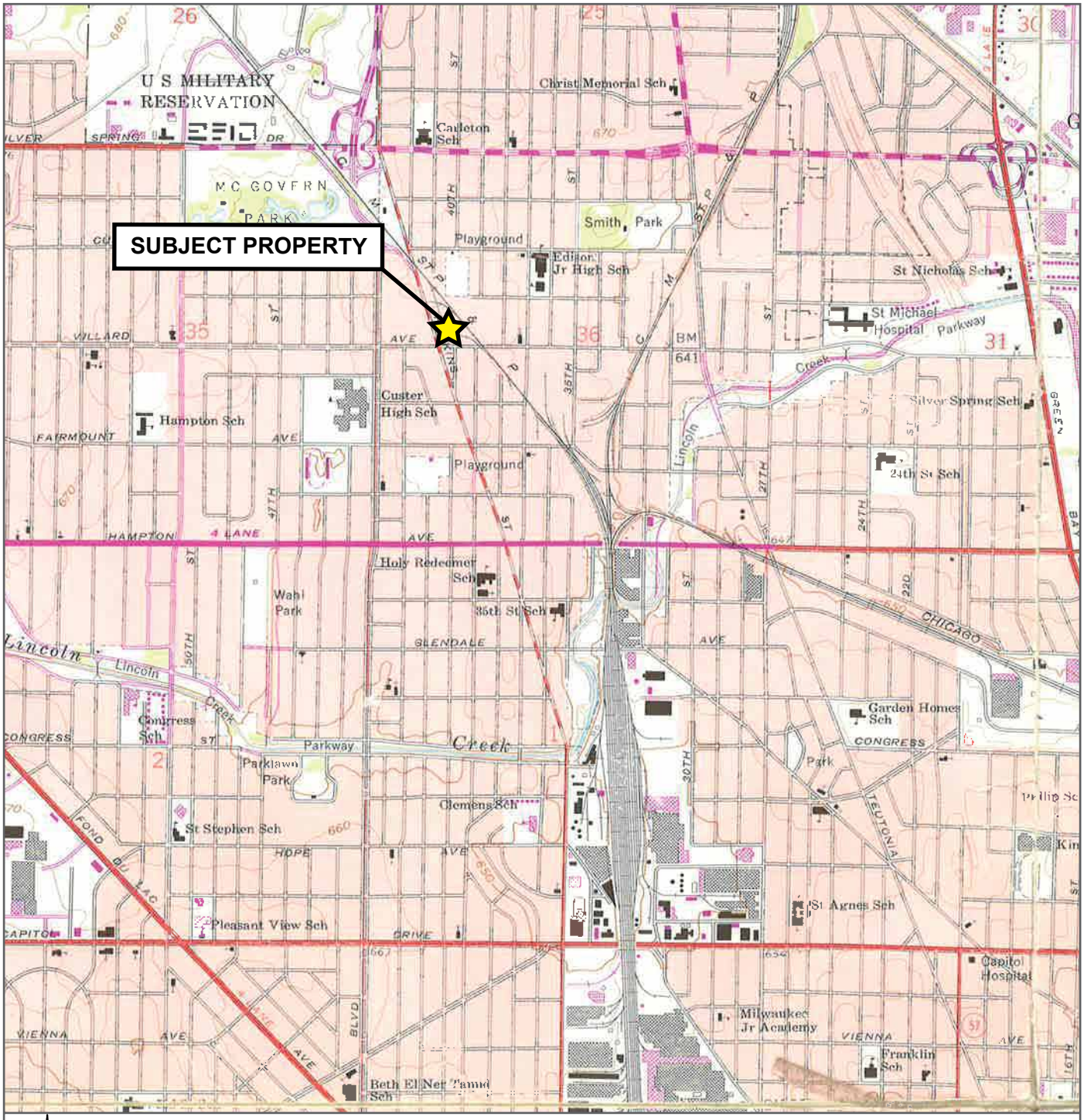
Timothy E. Wimmer, P.G
Senior Project Manager

Randy E. Boness, P.G.
Manager-Geosciences

Cc: Roger Ladewig – Solenis (electronic copy via RLADEWIG@SOLENIS.COM)
James Faulstich – Solenis (electronic copy via JFFAULSTICH@SOLENIS.COM)
WDNR RR SE Regional Mailbox – Electronic Submittals (DNRRRSER@wisconsin.gov)

Enclosure

FIGURES



Located in the SW 1/4 of the NW 1/4 of Section 36 Township 08 North Range 21 East
USGS Milwaukee, Wisconsin Quadrangle (1958, photorevised 1971)
7.5 minute, 1 : 24,000 Topographic Map Collection

N

0 2,000 ft. 4,000 ft.

GRAPHIC SCALE

THE SIGMA GROUP
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SITE LOCATION MAP

SOLENIS, LLC
5228 N. HOPKINS STREET
MILWAUKEE, WISCONSIN

FIGURE

1

Project : 16153 | Directory: CAD-Environmental | Filename: 16153 Figure 1 Site Location Map | Created By: CCK | Date: 2016-07-20

LEGEND

- Test Pit / Temporary Well Approximate Location (Sigma, May 2016)
- Geoprobe Soil Boring (Sigma, October 2016)
- NR 141 Monitoring Well (Sigma, October 2016, December 2016)
- Piezometer (Sigma, December 2016)

CONTINUES NORTH

SB-9/MW-9 PZ-9
SB-4
TP-4
SB-8/MW-8
PZ-8
SB-1/MW-1
TP-1
SB-2/MW-2
SB-7
SB-3
SB-10/MW-10
SB-11
TP-2
TP-3
MW-12
SB-12/PZ-12
TP-5
SB-6/MW-6
PZ-6
SB-5
APPROXIMATE DEMOLITION AREA (2016)
APPROXIMATE PROPERTY BOUNDARIES
SOLENIS PROPERTY
5228 N. HOPKINS STREET
NORTH HOPKINS STREET
W. Villard Avenue
3922 W. VILLARD AVE.
Railroad Tracks
SITE PLAN

THE SIGMA GROUP
Single Source. Sound Solutions.
www.thesigmagroup.com
1300 West Canal Street
Milwaukee, WI 53233
Phone: 414-643-4200
Fax: 414-643-4210

GRAPHIC SCALE
0 30' 60'

SOLENIS
5228 N. HOPKINS ST.
MILWAUKEE, WISCONSIN

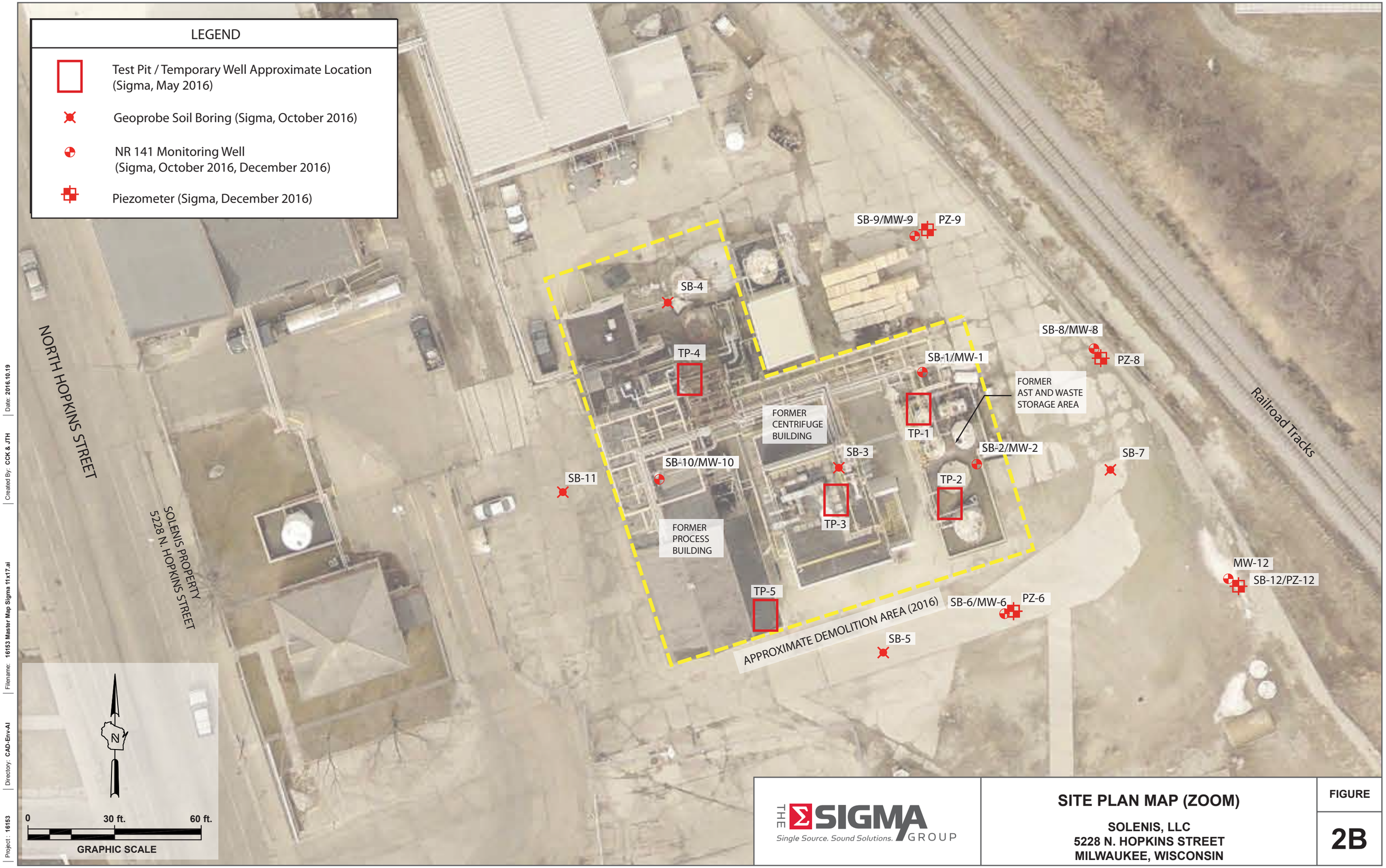
SITE PLAN MAP

NO. REVISION DATE BY

DRAWING NO.	16153-Site Area Map.dwg
DRAWN BY:	CCK / VMS ---
DATE:	1/11/17
PROJECT NO:	16153
CHECKED BY:	- - -
APPROVED BY:	

FIGURE
2A

File: I:\Solenis\16153 - Contaminated soil_water\060 CAD\E - Environmental\AI Graphics\16153-Site Area Map.dwg 1/11/2017 9:54 AM



Project: 16153 | Directory: CAD-Env-AI | Filename: 16153 Master Map Sigma 11x17.ai | Created By: CCK & JTH | Date: 2016.10.19

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SITE PLAN MAP (ZOOM)

SOLENIS, LLC
5228 N. HOPKINS STREET
MILWAUKEE, WISCONSIN

FIGURE
2B

LEGEND

- Test Pit / Temporary Well Approximate Location (Sigma, May 2016)
- Geoprobe Soil Boring (Sigma, October 2016)
- NR 141 Monitoring Well (Sigma, October 2016, December 2016)
- Piezometer (Sigma, December 2016)

NORTH HOPKINS STREET

SOLENIS PROPERTY
5228 N. HOPKINS STREET

SB-4
TP-4
SB-9/MW-9
PZ-9
B
SB-8/MW-8
PZ-8
SB-1/MW-1
FORMER AST AND WASTE STORAGE AREA
FORMER CENTRIFUGE BUILDING
TP-1
SB-2/MW-2
SB-3
SB-7
SB-10/MW-10
SB-11
A
A'
TP-2
TP-3
FORMER PROCESS BUILDING
MW-12
SB-12/PZ-12
TP-5
SB-6/MW-6
PZ-6
APPROXIMATE DEMOLITION AREA (2016)
SB-5
B'
Railroad Tracks

N

0 30 ft. 60 ft.
GRAPHIC SCALE

Project: 16153 | Directory: CAD-Env-AI | Filename: 16153 Master Map Sigma 11x17.ai | Created By: CCK & JTH | Date: 2016.10.19

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GEOLOGIC CROSS-SECTION LOCATION MAP
SOLENIS, LLC
5228 N. HOPKINS STREET
MILWAUKEE, WISCONSIN

FIGURE
3

A (WEST) — (EAST) A′

SB-10 / MW-10 | SB-3 | SB-2 / MW-2 | SB-7

GROUND SURFACE

FILL

SB-10 (3-5′)

SB-10		
Depth:	3-5	5-7.5
Date:	10/4/16	
VOCs & TEA		
1,2-DCP	{ 37 }	{ 15.6 }
TEA	26	5.3

SB-10 (5-7.5′)

CLAY-SILTY CLAY SOIL

664.65

92 ug/L > ES (1,2-DCP)

Approximate Shallow Groundwater Table
1/26/2017

EOB= 22′

FILL

SB-3 (1-3′)

SB-3 (3-5′)

SB-3		
Depth:	1-3	3-5
Date:	10/4/16	
VOCs & TEA		
1,2-DCP	{ 2.2 }	<0.025
E	17.0	0.37
T	21.5	<0.031
1,2,4-TMB	9.6	0.42
1,3,5-TMB	5.1 J	0.125 J
X	139	2.74
TEA	0.73	0.66

CLAY-SILTY CLAY SOIL

EOB=15′

ESTIMATED SOURCE AREA

660.99

Blockage in well screen
(Janurary 2017)

EOB=23′

FILL

SB-2 (3-5′)

SB-2 (10-12.5′)

3,000,000 ug/L > ES (1,2-DCP)

SB-2 / MW-2		
Depth:	3-5	10-12.5
Date:	10/4/16	
VOCs & TEA		
1,2-DCA	<6	0.127
1,2-DCP	{ 2,690 }	{ 2,400 }
TEA	83	3.4

0.75 feet measured DNAPL free product
(11/2/2016 - extent undefined)

FILL

SB-7 (3-5′)

SB-7		
Depth:	3-5	12.5-15
Date:	10/4/16	
VOCs & TEA		
1,2-DCP	0.106	{ 213 }
TEA	<0.5	<0.5

CLAY-SILTY CLAY SOIL

SB-7 (12.5-15′)

EOB=15′

ANALYTICAL KEY

B =	BENZENE
1,4-DCB =	1,4-DICHLOROBENZENE
1,2-DCA =	1,2-DICHLOROETHANE
1,2-DCP =	1,2-DICHLOROPROPANE
E =	ETHYLBENZENE
N =	NAPHTHALENE
T =	TOLUENE
1,2,4-TMB =	1,2,4-TRIMETHYLBENZENE
1,3,5-TMB =	1,3,5-TRIMETHYLBENZENE
X =	XYLENES
TEA =	TRIETHYLAMINE
BOLD =	CONCENTRATION EXCEEDS GROUNDWATER PATHWAY RCL (UNSATURATED SOIL SAMPLES)
{ } =	CONCENTRATION EXCEEDS INDUSTRIAL DIRECT CONTACT RCL (UNSATURATED SOIL SAMPLES)
"J" =	ESTIMATED CONCENTRATION REPORTED BETWEEN LIMIT OF DETECTION AND LIMIT OF QUANTITATION
NA =	NOT ANALYZED

NOTE: ALL CONCENTRATIONS REPORTED IN MILLIGRAMS PER KILOGRAM (mg/kg)

Elevation (ft): 650, 652, 654, 656, 658, 660, 662, 664, 666, 668, 670, 672, 674

Distance Along Baseline (ft): 0, 20, 40, 60, 80, 100, 120, 140, 160

SUBSURFACE DIAGRAM

- Fill (made ground)
- USCS Low Plasticity Silty Clay
- Concrete
- USCS Well-graded Gravelly Sand
- Hollow Stem Auger Blind Drill

0 ← Field-measured PID (ppm)

▼ Shallow Groundwater Level

SB-2 (3-5′) - Soil Sample Location

3,000,000 ug/L > ES (1,2-DCP) - Groundwater 1,2-DCP Concentration in micrograms per liter (ug/L). 1/12/17. ES = NR 140 Enforcement Standard

Note: Water levels shown for 1/26/2017 groundwater monitoring event

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GEOLOGIC CROSS SECTION A - A′

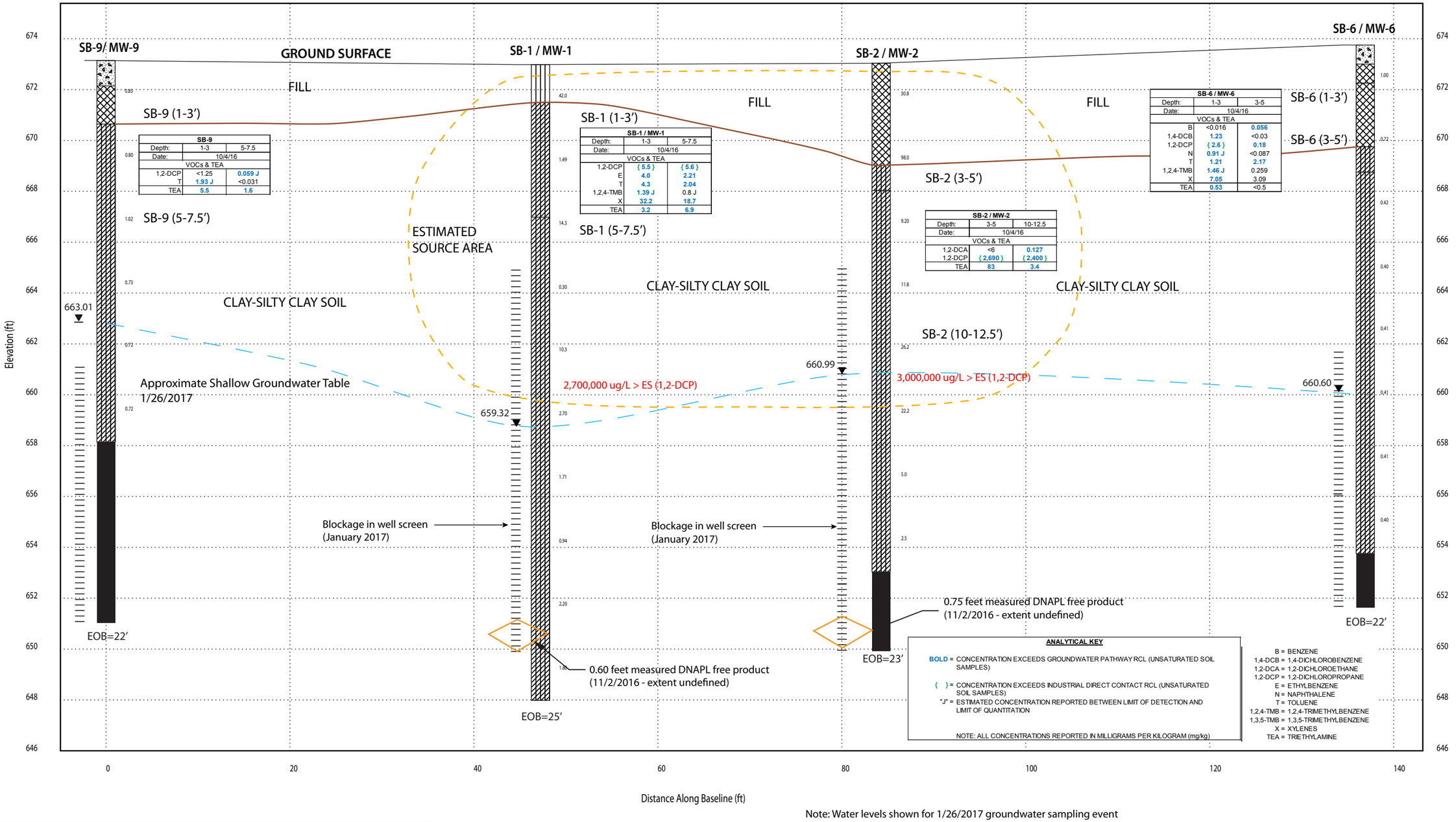
SOLENIS, LLC
5228 N. HOPKINS STREET
MILWAUKEE, WISCONSIN

FIGURE 3A

Project: 16153 | Directory: CAD | Filename: 16153_AA' XX-Section.pdf | Created By: JTH | Date: 10/26/2016

B (NORTH)

(SOUTH) B′



SB-9		
Depth:	1-3	5-7.5
Date:	10/4/16	
VOCs & TEA		
1,2-DCP	<1.25	0.059 J
T	1.93 J	<0.031
TEA	5.5	1.6

SB-1 / MW-1		
Depth:	1-3	5-7.5
Date:	10/4/16	
VOCs & TEA		
1,2-DCP	{ 5.5 }	{ 5.6 }
E	4.0	2.21
T	4.3	2.04
1,2,4-TMB	1.39 J	0.8 J
X	32.2	18.7
TEA	3.2	6.9

SB-2 / MW-2		
Depth:	3-5	10-12.5
Date:	10/4/16	
VOCs & TEA		
1,2-DCA	<6	0.127
1,2-DCP	{ 2,690 }	{ 2,400 }
TEA	83	3.4

SB-6 / MW-6		
Depth:	1-3	3-5
Date:	10/4/16	
VOCs & TEA		
B	<0.016	0.056
1,4-DCB	1.23	<0.03
1,2-DCP	{ 2.6 }	0.18
N	0.91 J	<0.087
T	1.21	2.17
1,2,4-TMB	1.46 J	0.259
X	7.05	3.09
TEA	0.53	<0.5

ANALYTICAL KEY

BOLD = CONCENTRATION EXCEEDS GROUNDWATER PATHWAY RCL (UNSATURATED SOIL SAMPLES)

{ } = CONCENTRATION EXCEEDS INDUSTRIAL DIRECT CONTACT RCL (UNSATURATED SOIL SAMPLES)

"J" = ESTIMATED CONCENTRATION REPORTED BETWEEN LIMIT OF DETECTION AND LIMIT OF QUANTITATION

NOTE: ALL CONCENTRATIONS REPORTED IN MILLIGRAMS PER KILOGRAM (mg/kg)

B = BENZENE
1,4-DCB = 1,4-DICHLOROBENZENE
1,2-DCA = 1,2-DICHLOROETHANE
1,2-DCP = 1,2-DICHLOROPROPANE
E = ETHYLBENZENE
N = NAPHTHALENE
T = TOLUENE
1,2,4-TMB = 1,2,4-TRIMETHYLBENZENE
1,3,5-TMB = 1,3,5-TRIMETHYLBENZENE
X = XYLENES
TEA = TRIETHYLAMINE

SUBSURFACE DIAGRAM

- Fill (made ground)
- USCS Low Plasticity Silty Clay
- Concrete
- USCS Well-graded Gravelly Sand
- Hollow Stem Auger Blind Drill

0 ← Field-measured PID (ppm)

▼ Shallow Groundwater Level

SB-2 (3-5′) - Soil Sample Location

3,000,000 ug/L > ES (1,2-DCP) - Groundwater 1,2-DCP Concentration in micrograms per liter (ug/L). 1/12/17. ES = NR 140 Enforcement Standard

Note: Water levels shown for 1/26/2017 groundwater sampling event

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GEOLOGIC CROSS SECTION B - B′

SOLENIS, LLC
5228 N. HOPKINS STREET
MILWAUKEE, WISCONSIN

FIGURE
3B

Date: 10/26/2016
Created By: JTH
Filename: 16153_BB' xX-Section.pdf
Directory: CAD
Project : 16153

LEGEND

- – – Shallow Groundwater Contour (January 2017, ft. MSL)
- 660.45 Shallow Groundwater Elevation (January 2017, ft. MSL)
- NR 141 Monitoring Well (Sigma, October 2016, December 2016)

NORTH HOPKINS STREET

SOLENIS PROPERTY
5228 N. HOPKINS STREET

Railroad Tracks

MW-9
663.01

MW-8
660.45

MW-1
659.32

MW-2
660.99

MW-10
664.65

MW-12
670.31

SB-6/MW-6
660.60

664.5
664.0
663.5
663.0
662.5
662.0
661.5
661.0
660.5

N

0 30 ft. 60 ft.
GRAPHIC SCALE

Project: 16153 | Directory: CAD-Env-AI | Filename: 16153 Master Map Sigma 11x17.ai | Created By: CCK & JTH | Date: 2016.10.19

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SHALLOW GROUNDWATER CONTOUR MAP (1/26/2017)

SOLENIS, LLC
5228 N. HOPKINS STREET
MILWAUKEE, WISCONSIN

FIGURE
4A

LEGEND

- Potentiometric Surface Contour (January 2017, ft. MSL)
- 660.45 — Piezometer Groundwater Elevations (January 2017, ft. MSL)
- Piezometer (Sigma, December 2016)

NORTH HOPKINS STREET

SOLENIS PROPERTY
5228 N. HOPKINS STREET

PZ-9
645.20

PZ-8
641.23

PZ-6
643.70

PZ-12
640.44

645
644
643
642
641

N

0 30 ft. 60 ft.
GRAPHIC SCALE

Created By: CCK & JTH | Date: 2016.10.19
Filename: 16153 Master Map Sigma 11x17.ai
Directory: CAD-Env-AI
Project: 16153

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POTENTIOMETRIC CONTOUR MAP (1/26/2017)

SOLENIS, LLC
5228 N. HOPKINS STREET
MILWAUKEE, WISCONSIN

FIGURE
4B

LEGEND

- Test Pit / Temporary Well Approximate Location (Sigma, May 2016)
- Geoprobe Soil Boring (Sigma, October 2016)
- NR 141 Monitoring Well (Sigma, October 2016, December 2016)
- Piezometer (Sigma, December 2016)

TP-4		
Depth:	0-2	
Date:	5/12/16	
VOCs & TEA		
B	<0.016	
1,4-DCB	<0.03	
1,2-DCA	<0.03	
1,2-DCP	1.2	
E	<0.027	
N	<0.087	
T	<0.031	
1,2,4-TMB	<0.078	
1,3,5-TMB	<0.089	
X	<0.099	
TEA	<10	

SB-4		
Depth:	3-5	7.5-10
Date:	10/4/16	
VOCs & TEA		
B	<0.016	<0.016
1,4-DCB	<0.03	<0.03
1,2-DCA	<0.03	<0.03
1,2-DCP	<0.025	0.63
E	<0.027	<0.027
N	<0.087	<0.087
T	<0.031	<0.031
1,2,4-TMB	<0.078	<0.078
1,3,5-TMB	<0.089	<0.089
X	0.039 J	<0.099
TEA	<0.5	<0.5

SB-9		
Depth:	1-3	5-7.5
Date:	10/4/16	
VOCs & TEA		
B	<0.8	<0.016
1,4-DCB	<1.5	<0.03
1,2-DCA	<1.5	<0.03
1,2-DCP	<1.25	0.059 J
E	<1.35	<0.027
N	<4.35	<0.087
T	1.93 J	<0.031
1,2,4-TMB	<3.9	0.33
1,3,5-TMB	<4.45	0.111 J
X	<4.95	0.43
TEA	5.5	1.6

PZ-9			
Depth:	5-7.5	12.5-15	22.5-25
Date:	12/19/16		
VOCs & TEA			
B	<0.010	<0.0096	<0.010
1,4-DCB	<0.012	<0.011	<0.012
1,2-DCA	<0.012	<0.012	<0.012
1,2-DCP	<0.013	<0.012	<0.012
E	<0.011	<0.0099	<0.010
N	<0.0078	<0.0072	<0.0075
T	<0.015	<0.014	<0.015
1,2,4-TMB	0.042 J	<0.0085	<0.0088
1,3,5-TMB	<0.020	<0.019	<0.019
X	<0.036	<0.033	<0.034
TEA	<3.4	<3.2	<3.3

SB-1 / MW-1		
Depth:	1-3	5-7.5
Date:	10/4/16	
VOCs & TEA		
B	<0.016	<0.016
1,4-DCB	<0.03	<0.03
1,2-DCA	<0.03	<0.03
1,2-DCP	{5.5}	{5.6}
E	4.0	2.21
N	<0.087	<0.087
T	4.3	2.04
1,2,4-TMB	1.39 J	0.8 J
1,3,5-TMB	<0.089	<0.089
X	32.2	18.7
TEA	3.2	6.9

TP-1	
Depth:	3-5
Date:	5/12/16
VOCs & TEA	
B	<0.016
1,4-DCB	<0.03
1,2-DCA	<0.03
1,2-DCP	{3.4}
E	0.050 J
N	<0.087
T	<0.031
1,2,4-TMB	0.28
1,3,5-TMB	<0.089
X	0.73
TEA	110

SB-8		
Depth:	3-5	5-7.5
Date:	10/4/16	
VOCs & TEA		
B	<0.016	<0.016
1,4-DCB	<0.03	<0.03
1,2-DCA	<0.03	<0.03
1,2-DCP	0.061 J	<0.025
E	<0.027	<0.027
N	<0.087	<0.087
T	<0.031	<0.031
1,2,4-TMB	<0.078	<0.078
1,3,5-TMB	<0.089	<0.089
X	<0.099	<0.099
TEA	<0.5	8.4

PZ-8			
Depth:	10-12.5	20-22.5	22.5-25
Date:	12/19/16		
VOCs & TEA			
B	<0.0094	<0.011	<0.010
1,4-DCB	<0.011	<0.013	<0.012
1,2-DCA	<0.011	<0.013	<0.012
1,2-DCP	<0.011	<0.014	<0.012
E	<0.0097	<0.011	<0.010
N	<0.0071	<0.0084	<0.0077
T	<0.014	<0.016	<0.015
1,2,4-TMB	<0.0083	<0.0098	<0.0090
1,3,5-TMB	<0.018	<0.021	<0.020
X	<0.032	<0.038	<0.035
TEA	<3.2	<3.5	<3.3

SB-7		
Depth:	3-5	12.5-15
Date:	10/4/16	
VOCs & TEA		
B	<0.016	<0.8
1,4-DCB	<0.03	<1.5
1,2-DCA	<0.03	<1.5
1,2-DCP	0.106	{213}
E	0.135	<1.35
N	<0.087	<4.35
T	0.045 J	<1.55
1,2,4-TMB	0.56	<3.9
1,3,5-TMB	0.35	<4.45
X	1.287	<4.95
TEA	<0.5	<0.5

SB-10		
Depth:	3-5	5-7.5
Date:	10/4/16	
VOCs & TEA		
B	<0.8	<0.8
1,4-DCB	<1.5	<1.5
1,2-DCA	<1.5	<1.5
1,2-DCP	{37}	{15.6}
E	<1.35	<1.35
N	<4.35	<4.35
T	<1.55	<1.55
1,2,4-TMB	<3.9	<3.9
1,3,5-TMB	<4.45	<4.45
X	<4.95	<4.95
TEA	26	5.3

SB-11			
Depth:	5-7.5	10-12.5	25-27.5
Date:	12/19/16		
VOCs & TEA			
B	<0.0094	<0.0096	<0.010
1,4-DCB	<0.011	<0.011	<0.012
1,2-DCA	<0.011	<0.012	<0.012
1,2-DCP	<0.011	<0.012	<0.012
E	<0.0097	<0.0099	<0.010
N	<0.0071	<0.0072	<0.0077
T	<0.014	<0.014	<0.015
1,2,4-TMB	<0.0083	<0.0085	<0.0090
1,3,5-TMB	<0.018	<0.019	<0.020
X	<0.032	<0.033	<0.035
TEA	<3.2	<3.2	<3.4

SB-3		
Depth:	1-3	3-5
Date:	10/4/16	
VOCs & TEA		
B	<0.32	<0.016
1,4-DCB	<0.6	<0.03
1,2-DCA	<0.6	<0.03
1,2-DCP	{2.2}	<0.025
E	17.0	0.37
N	<1.74	<0.087
T	21.5	<0.031
1,2,4-TMB	9.6	0.42
1,3,5-TMB	5.1 J	0.125 J
X	139	2.74
TEA	0.73	0.66

TP-3	
Depth:	2-4
Date:	5/12/16
VOCs & TEA	
B	2.82 J
1,4-DCB	<3
1,2-DCA	<3
1,2-DCP	<2.5
E	24.9
N	<8.7
T	63
1,2,4-TMB	15.5 J
1,3,5-TMB	<8.9
X	200
TEA	17

SB-12/MW-12/PZ-12			
Depth:	2.5-5	12.5-15	27.5-30
Date:	12/19/16		
VOCs & TEA			
B	<0.013	<0.0096	<0.010
1,4-DCB	{38}	<0.011	<0.012
1,2-DCA	<0.016	<0.012	<0.012
1,2-DCP	<0.016	<0.012	<0.012
E	<0.014	<0.0099	<0.010
N	0.110 J	<0.0072	<0.0075
T	<0.019	<0.014	<0.015
1,2,4-TMB	<0.012	<0.0085	<0.0088
1,3,5-TMB	<0.025	<0.019	<0.019
X	<0.045	<0.033	<0.034
TEA	<4.0	<3.2	<3.3

SB-2 / MW-2		
Depth:	3-5	10-12.5
Date:	10/4/16	
VOCs & TEA		
B	<3.2	<0.016
1,4-DCB	<6	<0.03
1,2-DCA	<6	0.127
1,2-DCP	{2,690}	{2,400}
E	<5.4	<0.027
N	<17.4	<0.087
T	<6.2	0.034 J
1,2,4-TMB	<15.6	<0.078
1,3,5-TMB	<17.8	<0.089
X	<19.8	<0.099
TEA	83	3.4

TP-2	
Depth:	2-4
Date:	5/12/16
VOCs & TEA	
B	<1.6
1,4-DCB	<3
1,2-DCA	<3
1,2-DCP	{8,600}
E	3.16 J
N	<8.7
T	6.3 J
1,2,4-TMB	<7.8
1,3,5-TMB	<8.9
X	23.3 J
TEA	210

TP-5	
Depth:	4-6
Date:	5/12/16
VOCs & TEA	
B	<0.016
1,4-DCB	<0.03
1,2-DCA	<0.03
1,2-DCP	<0.025
E	<0.027
N	<0.087
T	<0.031
1,2,4-TMB	<0.078
1,3,5-TMB	<0.089
X	<0.099
TEA	<10

SB-5		
Depth:	3-5	7.5-10
Date:	10/4/16	
VOCs & TEA		
B	<0.016	<0.016
1,4-DCB	<0.03	<0.03
1,2-DCA	<0.03	<0.03
1,2-DCP	<0.025	<0.025
E	<0.027	<0.027
N	<0.087	<0.087
T	<0.031	<0.031
1,2,4-TMB	<0.078	<0.078
1,3,5-TMB	<0.089	<0.089
X	<0.099	<0.099
TEA	<0.5	<0.5

SB-6 / MW-6		
Depth:	1-3	3-5
Date:	10/4/16	
VOCs & TEA		
B	<0.016	0.056
1,4-DCB	1.23	<0.03
1,2-DCA	<0.3	<0.03
1,2-DCP	{2.6}	0.18
E	1.05	0.42
N	0.91 J	<0.087
T	1.21	2.17
1,2,4-TMB	1.46 J	0.259
1,3,5-TMB	<0.89	0.254 J
X	7.05	3.09
TEA	0.53	<0.5

PZ-6				
Depth:	7.5-10	15-17.5	25-27.5	32.5-35
Date:	12/19/16			
VOCs & TEA				
B	<0.0094	<0.0096	<0.011	<0.010
1,4-DCB	<0.011	<0.011	<0.012	<0.012
1,2-DCA	<0.011	<0.012	<0.013	<0.012
1,2-DCP	<0.011	<0.012	<0.013	<0.012
E	<0.0097	<0.0099	<0.011	<0.010
N	<0.0071	<0.0072	<0.008	<0.0077
T	<0.014	<0.014	0.027 J	<0.015
1,2,4-TMB	<0.0083	<0.0085	<0.0094	<0.0090
1,3,5-TMB	<0.018	<0.019	<0.021	<0.020
X	<0.032	<0.033	0.041 J	<0.035
TEA	<3.2	<3.2	<3.4	<3.4

ESTIMATED EXTENT OF SOURCE AREA / DNAPL ZONE (APPROXIMATED BASED ON LOCATION OF FORMER HOLDING TANKS AND EXISTING DNAPL DATA)

ESTIMATED EXTENT OF TEA or 1,2-DCP SOIL CONTAMINATION EXCEEDING THE NR 720 GROUNDWATER PATHWAY RCLs

ESTIMATED EXTENT OF TEA or 1,2-DCP SOIL CONTAMINATION EXCEEDING THE NR 720 INDUSTRIAL DIRECT CONTACT RCLs

ANALYTICAL KEY

B = BENZENE
1,4-DCB = 1,4-DICHLOROBENZENE
1,2-DCA = 1,2-DICHLOROETHANE
1,2-DCP = 1,2-DICHLOROPROPANE
E = ETHYLBENZENE
N = NAPHTHALENE
T = TOLUENE
1,2,4-TMB = 1,2,4-TRIMETHYLBENZENE
1,3,5-TMB = 1,3,5-TRIMETHYLBENZENE
X = XYLENES
TEA = TRIETHYLAMINE
BOLD = CONCENTRATION EXCEEDS GROUNDWATER PATHWAY RCL (UNSATURATED SOIL SAMPLES)
{ } = CONCENTRATION EXCEEDS INDUSTRIAL DIRECT CONTACT RCL (UNSATURATED SOIL SAMPLES)
"J" = ESTIMATED CONCENTRATION REPORTED BETWEEN LIMIT OF DETECTION AND LIMIT OF QUANTITATION
NA = NOT ANALYZED

NOTE: ALL CONCENTRATIONS REPORTED IN MILLIGRAMS PER KILOGRAM (mg/kg)

APPROXIMATE PROPERTY BOUNDARIES

SOLENIS PROPERTY
5228 N. HOPKINS STREET

NORTH HOPKINS STREET

Railroad Tracks

GRAPHIC SCALE
0 30' 60'

THE SIGMA GROUP
Single Source. Sound Solutions.
www.thesigmagroup.com
1300 West Canal Street
Milwaukee, WI 53233
Phone: 414-643-4200
Fax: 414-643-4210

SOLENIS
5228 N. HOPKINS ST.
MILWAUKEE, WISCONSIN

SOIL QUALITY MAP

NO. REVISION DATE BY

DRAWING NO. 16153-Site Area Map.dwg
DRAWN BY: CCK / VMS ---
DATE: 1/11/17
PROJECT NO: 16153
CHECKED BY: - - -
APPROVED BY:

FIGURE
5

File: I:\Solenis\16153 - Contaminated soil_water\060 CADD\E - Environmental\AI Graphics\16153-Site Area Map.dwg 1/11/2017 9:54 AM

LEGEND

- NR 141 Monitoring Well (Sigma, October 2016, December 2016)
- Piezometer (Sigma, December 2016)

MW-9	
Date	1/12/17
VOCs (ug/L)	
1,2-DCP	*1.2*
Triethylamine (mg/L)	
TEA	<0.99

PZ-9	
Date	1/11/17
VOCs (ug/L)	
1,2-DCP	<0.25
Triethylamine (mg/L)	
TEA	<0.99

MW-1	
Date	1/12/17
VOCs (ug/L)	
1,2-DCP	**2,700,000**
Triethylamine (mg/L)	
TEA	<0.99

MW-2	
Date	1/12/17
VOCs (ug/L)	
1,2-DCP	**3,000,000**
Triethylamine (mg/L)	
TEA	<0.99

MW-8	
Date	1/12/17
VOCs (ug/L)	
1,2-DCP	*2.4*
Triethylamine (mg/L)	
TEA	<0.99

PZ-8	
Date	1/12/17
VOCs (ug/L)	
1,2-DCP	<0.25
Triethylamine (mg/L)	
TEA	<0.99

MW-10	
Date	1/11/17
VOCs (ug/L)	
1,2-DCP	**92**
Triethylamine (mg/L)	
TEA	<0.99

MW-12	
Date	1/11/17
VOCs (ug/L)	
1,2-DCP	<0.25
Triethylamine (mg/L)	
TEA	<0.99

PZ-12	
Date	1/11/17
VOCs (ug/L)	
1,2-DCP	<0.25
Triethylamine (mg/L)	
TEA	<0.99

MW-6	
Date	1/11/17
VOCs (ug/L)	
1,2-DCP	**6.7**
Triethylamine (mg/L)	
TEA	<0.99

PZ-6	
Date	1/11/17
VOCs (ug/L)	
1,2-DCP	*1.2*
Triethylamine (mg/L)	
TEA	<0.99

ESTIMATED EXTENT OF SOURCE AREA / DNAPL ZONE (APPROXIMATED BASED ON LOCATION OF FORMER HOLDING TANKS AND EXISTING DNAPL DATA)

ESTIMATED EXTENT OF GROUNDWATER CONTAMINATION EXCEEDING AN NR 140 PREVENTATIVE ACTION LIMIT

ESTIMATED EXTENT OF GROUNDWATER CONTAMINATION EXCEEDING AN NR 140 ENFORECEMENT STANDARD

APPROXIMATE PROPERTY BOUNDARIES

SOLENIS PROPERTY
5228 N HOPKINS STREET

NORTH HOPKINS STREET

W. Villard Avenue

3922 W. VILLARD AVE.

ANALYTICAL KEY

1,2-DCP = 1,2-DICHLOROPROPANE
TEA = TRIETHYLAMINE

BOLD = CONCENTRATION REPORTED ABOVE NR 140 ES
ITALICS = CONCENTRATION REPORTED ABOVE NR 140 PAL
Note ** NO LISTED NR 140 ES or PAL FOR TRIETHYLAMINE - CURRENT STANDARD PROVIDED BY WDNR = 15 micrograms per liter (ug/L)
J = ESTIMATED CONCENTRATION REPORTED BETWEEN LIMIT OF DETECTION AND LIMIT OF QUANTITATION
** = NOT A STATISTICALLY VALID PAL EXCEEDANCE PER NR 140.14(3)(c)

Note: Only triethylamine and volatile organic compounds exceeding an NR 140 ES and/or PAL are included on this figure.

General groundwater flow direction

THE SIGMA GROUP
Single Source. Sound Solutions.
www.thesigmagroup.com
1300 West Canal Street
Milwaukee, WI 53233
Phone: 414-643-4200
Fax: 414-643-4210

GRAPHIC SCALE
0 30' 60'

SOLENIS
5228 N. HOPKINS ST.
MILWAUKEE, WISCONSIN

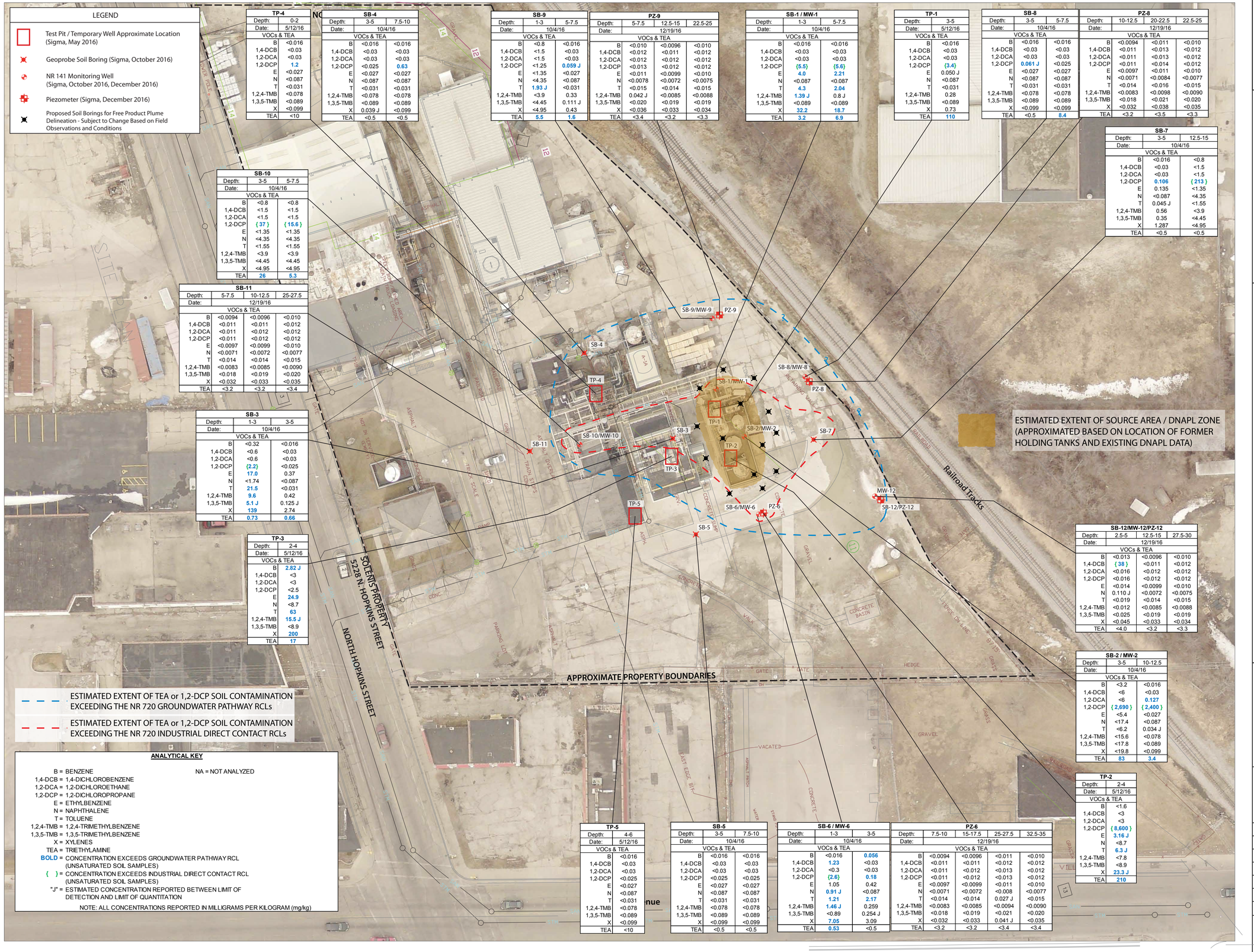
GROUNDWATER QUALITY MAP

NO.	REVISION	DATE	BY

DRAWING NO.	16153-Site Area Map.dwg
DRAWN BY:	CCK / VMS ---
DATE:	1/11/17
PROJECT NO:	16153
CHECKED BY:	- - -
APPROVED BY:	

FIGURE
6

File: I:\Solenis\16153 - Contaminated soil_water\060 CADD\E - Environmental\AI Graphics\16153-Site Area Map.dwg 1/11/2017 9:54 AM



TP-4

Depth:	0-2
Date:	5/12/16
VOCs & TEA	
B	<0.016
1,4-DCB	<0.03
1,2-DCA	<0.03
1,2-DCP	1.2
E	<0.027
N	<0.087
T	<0.031
1,2,4-TMB	<0.078
1,3,5-TMB	<0.089
X	<0.099
TEA	<10

SB-4

Depth:	3-5	7.5-10
Date:	10/4/16	
VOCs & TEA		
B	<0.016	<0.016
1,4-DCB	<0.03	<0.03
1,2-DCA	<0.03	<0.03
1,2-DCP	<0.025	0.63
E	<0.027	<0.027
N	<0.087	<0.087
T	<0.031	<0.031
1,2,4-TMB	<0.078	<0.078
1,3,5-TMB	<0.089	<0.089
X	0.039 J	<0.099
TEA	<0.5	<0.5

SB-9

Depth:	1-3	5-7.5
Date:	10/4/16	
VOCs & TEA		
B	<0.8	<0.016
1,4-DCB	<1.5	<0.03
1,2-DCA	<1.5	<0.03
1,2-DCP	<1.25	0.059 J
E	<1.35	<0.027
N	<4.35	<0.087
T	1.93 J	<0.031
1,2,4-TMB	<3.9	0.33
1,3,5-TMB	<4.45	0.111 J
X	<4.95	0.43
TEA	5.5	1.6

PZ-9

Depth:	5-7.5	12.5-15	22.5-25
Date:	12/19/16		
VOCs & TEA			
B	<0.010	<0.0096	<0.010
1,4-DCB	<0.012	<0.011	<0.012
1,2-DCA	<0.012	<0.012	<0.012
1,2-DCP	<0.013	<0.012	<0.012
E	<0.011	<0.0099	<0.010
N	<0.0078	<0.0072	<0.0075
T	<0.015	<0.014	<0.015
1,2,4-TMB	0.042 J	<0.0085	<0.0088
1,3,5-TMB	<0.020	<0.019	<0.019
X	<0.036	<0.033	<0.034
TEA	<3.4	<3.2	<3.3

SB-1 / MW-1

Depth:	1-3	5-7.5
Date:	10/4/16	
VOCs & TEA		
B	<0.016	<0.016
1,4-DCB	<0.03	<0.03
1,2-DCA	<0.03	<0.03
1,2-DCP	{5.5}	{5.6}
E	4.0	2.21
N	<0.087	<0.087
T	4.3	2.04
1,2,4-TMB	1.39 J	0.8 J
1,3,5-TMB	<0.089	<0.089
X	32.2	18.7
TEA	3.2	6.9

TP-1

Depth:	3-5
Date:	5/12/16
VOCs & TEA	
B	<0.016
1,4-DCB	<0.03
1,2-DCA	<0.03
1,2-DCP	{3.4}
E	0.050 J
N	<0.087
T	<0.031
1,2,4-TMB	0.28
1,3,5-TMB	<0.089
X	0.73
TEA	110

SB-8

Depth:	3-5	5-7.5
Date:	10/4/16	
VOCs & TEA		
B	<0.016	<0.016
1,4-DCB	<0.03	<0.03
1,2-DCA	<0.03	<0.03
1,2-DCP	0.061 J	<0.025
E	<0.027	<0.027
N	<0.087	<0.087
T	<0.031	<0.031
1,2,4-TMB	<0.078	<0.078
1,3,5-TMB	<0.089	<0.089
X	<0.099	<0.099
TEA	<0.5	8.4

PZ-8

Depth:	10-12.5	20-22.5	22.5-25
Date:	12/19/16		
VOCs & TEA			
B	<0.0094	<0.011	<0.010
1,4-DCB	<0.011	<0.013	<0.012
1,2-DCA	<0.011	<0.013	<0.012
1,2-DCP	<0.011	<0.014	<0.012
E	<0.0097	<0.011	<0.010
N	<0.0071	<0.0084	<0.0077
T	<0.014	<0.016	<0.015
1,2,4-TMB	<0.0083	<0.0098	<0.0090
1,3,5-TMB	<0.018	<0.021	<0.020
X	<0.032	<0.038	<0.035
TEA	<3.2	<3.5	<3.3

SB-7

Depth:	3-5	12.5-15
Date:	10/4/16	
VOCs & TEA		
B	<0.016	<0.8
1,4-DCB	<0.03	<1.5
1,2-DCA	<0.03	<1.5
1,2-DCP	0.106	{213}
E	0.135	<1.35
N	<0.087	<4.35
T	0.045 J	<1.55
1,2,4-TMB	0.56	<3.9
1,3,5-TMB	0.35	<4.45
X	1.287	<4.95
TEA	<0.5	<0.5

SB-10

Depth:	3-5	5-7.5
Date:	10/4/16	
VOCs & TEA		
B	<0.8	<0.8
1,4-DCB	<1.5	<1.5
1,2-DCA	<1.5	<1.5
1,2-DCP	{37}	{15.6}
E	<1.35	<1.35
N	<4.35	<4.35
T	<1.55	<1.55
1,2,4-TMB	<3.9	<3.9
1,3,5-TMB	<4.45	<4.45
X	<4.95	<4.95
TEA	26	5.3

SB-11

Depth:	5-7.5	10-12.5	25-27.5
Date:	12/19/16		
VOCs & TEA			
B	<0.0094	<0.0096	<0.010
1,4-DCB	<0.011	<0.011	<0.012
1,2-DCA	<0.011	<0.012	<0.012
1,2-DCP	<0.011	<0.012	<0.012
E	<0.0097	<0.0099	<0.010
N	<0.0071	<0.0072	<0.0077
T	<0.014	<0.014	<0.015
1,2,4-TMB	<0.0083	<0.0085	<0.0090
1,3,5-TMB	<0.018	<0.019	<0.020
X	<0.032	<0.033	<0.035
TEA	<3.2	<3.2	<3.4

SB-3

Depth:	1-3	3-5
Date:	10/4/16	
VOCs & TEA		
B	<0.32	<0.016
1,4-DCB	<0.6	<0.03
1,2-DCA	<0.6	<0.03
1,2-DCP	{2.2}	<0.025
E	17.0	0.37
N	<1.74	<0.087
T	21.5	<0.031
1,2,4-TMB	9.6	0.42
1,3,5-TMB	5.1 J	0.125 J
X	139	2.74
TEA	0.73	0.66

TP-3

Depth:	2-4
Date:	5/12/16
VOCs & TEA	
B	2.82 J
1,4-DCB	<3
1,2-DCA	<3
1,2-DCP	<2.5
E	24.9
N	<8.7
T	63
1,2,4-TMB	15.5 J
1,3,5-TMB	<8.9
X	200
TEA	17

SB-12/MW-12/PZ-12

Depth:	2.5-5	12.5-15	27.5-30
Date:	12/19/16		
VOCs & TEA			
B	<0.013	<0.0096	<0.010
1,4-DCB	{38}	<0.011	<0.012
1,2-DCA	<0.016	<0.012	<0.012
1,2-DCP	<0.016	<0.012	<0.012
E	<0.014	<0.0099	<0.010
N	0.110 J	<0.0072	<0.0075
T	<0.019	<0.014	<0.015
1,2,4-TMB	<0.012	<0.0085	<0.0088
1,3,5-TMB	<0.025	<0.019	<0.019
X	<0.045	<0.033	<0.034
TEA	<4.0	<3.2	<3.3

SB-2 / MW-2

Depth:	3-5	10-12.5
Date:	10/4/16	
VOCs & TEA		
B	<3.2	<0.016
1,4-DCB	<6	<0.03
1,2-DCA	<6	0.127
1,2-DCP	{2,690}	{2,400}
E	<5.4	<0.027
N	<17.4	<0.087
T	<6.2	0.034 J
1,2,4-TMB	<15.6	<0.078
1,3,5-TMB	<17.8	<0.089
X	<19.8	<0.099
TEA	83	3.4

TP-2

Depth:	2-4
Date:	5/12/16
VOCs & TEA	
B	<1.6
1,4-DCB	<3
1,2-DCA	<3
1,2-DCP	{8,600}
E	3.16 J
N	<8.7
T	6.3 J
1,2,4-TMB	<7.8
1,3,5-TMB	<8.9
X	23.3 J
TEA	210

TP-5

Depth:	4-6
Date:	5/12/16
VOCs & TEA	
B	<0.016
1,4-DCB	<0.03
1,2-DCA	<0.03
1,2-DCP	<0.025
E	<0.027
N	<0.087
T	<0.031
1,2,4-TMB	<0.078
1,3,5-TMB	<0.089
X	<0.099
TEA	<10

SB-5

Depth:	3-5	7.5-10
Date:	10/4/16	
VOCs & TEA		
B	<0.016	<0.016
1,4-DCB	<0.03	<0.03
1,2-DCA	<0.03	<0.03
1,2-DCP	<0.025	<0.025
E	<0.027	<0.027
N	<0.087	<0.087
T	<0.031	<0.031
1,2,4-TMB	<0.078	<0.078
1,3,5-TMB	<0.089	<0.089
X	<0.099	<0.099
TEA	<0.5	<0.5

SB-6 / MW-6

Depth:	1-3	3-5
Date:	10/4/16	
VOCs & TEA		
B	<0.016	0.056
1,4-DCB	1.23	<0.03
1,2-DCA	<0.3	<0.03
1,2-DCP	{2.6}	0.18
E	1.05	0.42
N	0.91 J	<0.087
T	1.21	2.17
1,2,4-TMB	1.46 J	0.259
1,3,5-TMB	<0.89	0.254 J
X	7.05	3.09
TEA	0.53	<0.5

PZ-6

Depth:	7.5-10	15-17.5	25-27.5	32.5-35
Date:	12/19/16			
VOCs & TEA				
B	<0.0094	<0.0096	<0.011	<0.010
1,4-DCB	<0.011	<0.011	<0.012	<0.012
1,2-DCA	<0.011	<0.012	<0.013	<0.012
1,2-DCP	<0.011	<0.012	<0.013	<0.012
E	<0.0097	<0.0099	<0.011	<0.010
N	<0.0071	<0.0072	<0.008	<0.0077
T	<0.014	<0.014	0.027 J	<0.015
1,2,4-TMB	<0.0083	<0.0085	<0.0094	<0.0090
1,3,5-TMB	<0.018	<0.019	<0.021	<0.020
X	<0.032	<0.033	0.041 J	<0.035
TEA	<3.2	<3.2	<3.4	<3.4

ANALYTICAL KEY

B = BENZENE
1,4-DCB = 1,4-DICHLOROBENZENE
1,2-DCA = 1,2-DICHLOROETHANE
1,2-DCP = 1,2-DICHLOROPROPANE
E = ETHYLBENZENE
N = NAPHTHALENE
T = TOLUENE
1,2,4-TMB = 1,2,4-TRIMETHYLBENZENE
1,3,5-TMB = 1,3,5-TRIMETHYLBENZENE
X = XYLENES
TEA = TRIETHYLAMINE
BOLD = CONCENTRATION EXCEEDS GROUNDWATER PATHWAY RCL (UNSATURATED SOIL SAMPLES)
{ } = CONCENTRATION EXCEEDS INDUSTRIAL DIRECT CONTACT RCL (UNSATURATED SOIL SAMPLES)
"J" = ESTIMATED CONCENTRATION REPORTED BETWEEN LIMIT OF DETECTION AND LIMIT OF QUANTITATION
NA = NOT ANALYZED
NOTE: ALL CONCENTRATIONS REPORTED IN MILLIGRAMS PER KILOGRAM (mg/kg)

THE SIGMA GROUP
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GRAPHIC SCALE
0 30' 60'

SOLENIS
5228 N. HOPKINS ST.
MILWAUKEE, WISCONSIN

ADDITIONAL SITE INVESTIGATION
PROPOSED SOIL BORING LOCATION MAP

NO. REVISION DATE BY

DRAWING NO. 16153-Site Area Map.dwg
DRAWN BY: CCK / VMS ---
DATE: 1/11/17
PROJECT NO: 16153
CHECKED BY: - - -
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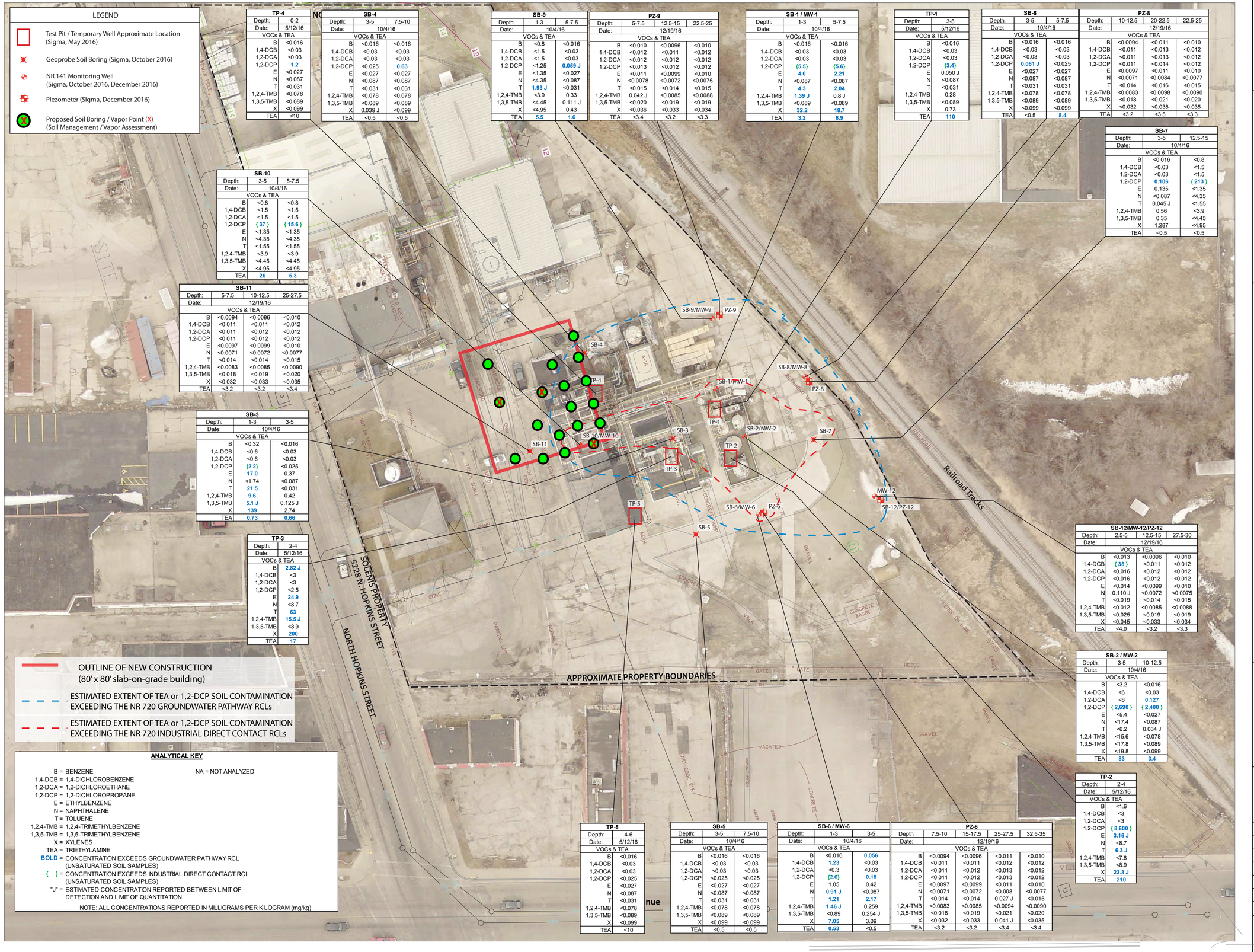
FIGURE
7

File: I:\Solenis\16153 - Contaminated soil_water\060 CADIE - Environmental\A\ Graphics\16153-Site Area Map.dwg 1/11/2017 9:54 AM



TP-4		
Depth:	0-2	
Date:	5/12/16	
VOCs & TEA		
B	<0.016	
1,4-DCB	<0.03	
1,2-DCA	<0.03	
1,2-DCP	1.2	
E	<0.027	
N	<0.087	
T	<0.031	
1,2,4-TMB	<0.078	
1,3,5-TMB	<0.089	
X	<0.099	
TEA	<10	

SB-4		
Depth:	3-5	7.5-10
Date:	10/4/16	
VOCs & TEA		
B	<0.016	<0.016
1,4-DCB	<0.03	<0.03
1,2-DCA	<0.03	<0.03
1,2-DCP	<0.025	0.63
E	<0.027	<0.027
N	<0.087	<0.087
T	<0.031	<0.031
1,2,4-TMB	<0.078	<0.078
1,3,5-TMB	<0.089	<0.089
X	0.039 J	<0.099
TEA	<0.5	<0.5

SB-9		
Depth:	1-3	5-7.5
Date:	10/4/16	
VOCs & TEA		
B	<0.8	<0.016
1,4-DCB	<1.5	<0.03
1,2-DCA	<1.5	<0.03
1,2-DCP	<1.25	0.059 J
E	<1.35	<0.027
N	<4.35	<0.087
T	1.93 J	<0.031
1,2,4-TMB	<3.9	0.33
1,3,5-TMB	<4.45	0.111 J
X	<4.95	0.43
TEA	5.5	1.6

PZ-9			
Depth:	5-7.5	12.5-15	22.5-25
Date:	12/19/16		
VOCs & TEA			
B	<0.010	<0.0096	<0.010
1,4-DCB	<0.012	<0.011	<0.012
1,2-DCA	<0.012	<0.012	<0.012
1,2-DCP	<0.013	<0.012	<0.012
E	<0.011	<0.0099	<0.010
N	<0.0078	<0.0072	<0.0075
T	<0.015	<0.014	<0.015
1,2,4-TMB	0.042 J	<0.0085	<0.0088
1,3,5-TMB	<0.020	<0.019	<0.019
X	<0.036	<0.033	<0.034
TEA	<3.4	<3.2	<3.3

SB-1 / MW-1		
Depth:	1-3	5-7.5
Date:	10/4/16	
VOCs & TEA		
B	<0.016	<0.016
1,4-DCB	<0.03	<0.03
1,2-DCA	<0.03	<0.03
1,2-DCP	{5.5}	{5.6}
E	4.0	2.21
N	<0.087	<0.087
T	4.3	2.04
1,2,4-TMB	1.39 J	0.8 J
1,3,5-TMB	<0.089	<0.089
X	32.2	18.7
TEA	3.2	6.9

TP-1	
Depth:	3-5
Date:	5/12/16
VOCs & TEA	
B	<0.016
1,4-DCB	<0.03
1,2-DCA	<0.03
1,2-DCP	{3.4}
E	0.050 J
N	<0.087
T	<0.031
1,2,4-TMB	0.28
1,3,5-TMB	<0.089
X	0.73
TEA	110

SB-8		
Depth:	3-5	5-7.5
Date:	10/4/16	
VOCs & TEA		
B	<0.016	<0.016
1,4-DCB	<0.03	<0.03
1,2-DCA	<0.03	<0.03
1,2-DCP	0.061 J	<0.025
E	<0.027	<0.027
N	<0.087	<0.087
T	<0.031	<0.031
1,2,4-TMB	<0.078	<0.078
1,3,5-TMB	<0.089	<0.089
X	<0.099	<0.099
TEA	<0.5	8.4

PZ-8			
Depth:	10-12.5	20-22.5	22.5-25
Date:	12/19/16		
VOCs & TEA			
B	<0.0094	<0.011	<0.010
1,4-DCB	<0.011	<0.013	<0.012
1,2-DCA	<0.011	<0.013	<0.012
1,2-DCP	<0.011	<0.014	<0.012
E	<0.0097	<0.011	<0.010
N	<0.0071	<0.0084	<0.0077
T	<0.014	<0.016	<0.015
1,2,4-TMB	<0.0083	<0.0098	<0.0090
1,3,5-TMB	<0.018	<0.021	<0.020
X	<0.032	<0.038	<0.035
TEA	<3.2	<3.5	<3.3

SB-7		
Depth:	3-5	12.5-15
Date:	10/4/16	
VOCs & TEA		
B	<0.016	<0.8
1,4-DCB	<0.03	<1.5
1,2-DCA	<0.03	<1.5
1,2-DCP	0.106	{213}
E	0.135	<1.35
N	<0.087	<4.35
T	0.045 J	<1.55
1,2,4-TMB	0.56	<3.9
1,3,5-TMB	0.35	<4.45
X	1.287	<4.95
TEA	<0.5	<0.5

SB-10		
Depth:	3-5	5-7.5
Date:	10/4/16	
VOCs & TEA		
B	<0.8	<0.8
1,4-DCB	<1.5	<1.5
1,2-DCA	<1.5	<1.5
1,2-DCP	{37}	{15.6}
E	<1.35	<1.35
N	<4.35	<4.35
T	<1.55	<1.55
1,2,4-TMB	<3.9	<3.9
1,3,5-TMB	<4.45	<4.45
X	<4.95	<4.95
TEA	26	5.3

SB-11			
Depth:	5-7.5	10-12.5	25-27.5
Date:	12/19/16		
VOCs & TEA			
B	<0.0094	<0.0096	<0.010
1,4-DCB	<0.011	<0.011	<0.012
1,2-DCA	<0.011	<0.012	<0.012
1,2-DCP	<0.011	<0.012	<0.012
E	<0.0097	<0.0099	<0.010
N	<0.0071	<0.0072	<0.0077
T	<0.014	<0.014	<0.015
1,2,4-TMB	<0.0083	<0.0085	<0.0090
1,3,5-TMB	<0.018	<0.019	<0.020
X	<0.032	<0.033	<0.035
TEA	<3.2	<3.2	<3.4

SB-3		
Depth:	1-3	3-5
Date:	10/4/16	
VOCs & TEA		
B	<0.32	<0.016
1,4-DCB	<0.6	<0.03
1,2-DCA	<0.6	<0.03
1,2-DCP	{2.2}	<0.025
E	17.0	0.37
N	<1.74	<0.087
T	21.5	<0.031
1,2,4-TMB	9.6	0.42
1,3,5-TMB	5.1 J	0.125 J
X	139	2.74
TEA	0.73	0.66

TP-3	
Depth:	2-4
Date:	5/12/16
VOCs & TEA	
B	2.82 J
1,4-DCB	<3
1,2-DCA	<3
1,2-DCP	<2.5
E	24.9
N	<8.7
T	63
1,2,4-TMB	15.5 J
1,3,5-TMB	<8.9
X	200
TEA	17

SB-12/MW-12/PZ-12			
Depth:	2.5-5	12.5-15	27.5-30
Date:	12/19/16		
VOCs & TEA			
B	<0.013	<0.0096	<0.010
1,4-DCB	{38}	<0.011	<0.012
1,2-DCA	<0.016	<0.012	<0.012
1,2-DCP	<0.016	<0.012	<0.012
E	<0.014	<0.0099	<0.010
N	0.110 J	<0.0072	<0.0075
T	<0.019	<0.014	<0.015
1,2,4-TMB	<0.012	<0.0085	<0.0088
1,3,5-TMB	<0.025	<0.019	<0.019
X	<0.045	<0.033	<0.034
TEA	<4.0	<3.2	<3.3

SB-2 / MW-2		
Depth:	3-5	10-12.5
Date:	10/4/16	
VOCs & TEA		
B	<3.2	<0.016
1,4-DCB	<6	<0.03
1,2-DCA	<6	0.127
1,2-DCP	{2,690}	{2,400}
E	<5.4	<0.027
N	<17.4	<0.087
T	<6.2	0.034 J
1,2,4-TMB	<15.6	<0.078
1,3,5-TMB	<17.8	<0.089
X	<19.8	<0.099
TEA	83	3.4

TP-2	
Depth:	2-4
Date:	5/12/16
VOCs & TEA	
B	<1.6
1,4-DCB	<3
1,2-DCA	<3
1,2-DCP	{8,600}
E	3.16 J
N	<8.7
T	6.3 J
1,2,4-TMB	<7.8
1,3,5-TMB	<8.9
X	23.3 J
TEA	210

TP-5	
Depth:	4-6
Date:	5/12/16
VOCs & TEA	
B	<0.016
1,4-DCB	<0.03
1,2-DCA	<0.03
1,2-DCP	<0.025
E	<0.027
N	<0.087
T	<0.031
1,2,4-TMB	<0.078
1,3,5-TMB	<0.089
X	<0.099
TEA	<10

SB-5		
Depth:	3-5	7.5-10
Date:	10/4/16	
VOCs & TEA		
B	<0.016	<0.016
1,4-DCB	<0.03	<0.03
1,2-DCA	<0.03	<0.03
1,2-DCP	<0.025	<0.025
E	<0.027	<0.027
N	<0.087	<0.087
T	<0.031	<0.031
1,2,4-TMB	<0.078	<0.078
1,3,5-TMB	<0.089	<0.089
X	<0.099	<0.099
TEA	<0.5	<0.5

SB-6 / MW-6		
Depth:	1-3	3-5
Date:	10/4/16	
VOCs & TEA		
B	<0.016	0.056
1,4-DCB	1.23	<0.03
1,2-DCA	<0.3	<0.03
1,2-DCP	{2.6}	0.18
E	1.05	0.42
N	0.91 J	<0.087
T	1.21	2.17
1,2,4-TMB	1.46 J	0.259
1,3,5-TMB	<0.89	0.254 J
X	7.05	3.09
TEA	0.53	<0.5

PZ-6				
Depth:	7.5-10	15-17.5	25-27.5	32.5-35
Date:	12/19/16			
VOCs & TEA				
B	<0.0094	<0.0096	<0.011	<0.010
1,4-DCB	<0.011	<0.011	<0.012	<0.012
1,2-DCA	<0.011	<0.012	<0.013	<0.012
1,2-DCP	<0.011	<0.012	<0.013	<0.012
E	<0.0097	<0.0099	<0.011	<0.010
N	<0.0071	<0.0072	<0.008	<0.0077
T	<0.014	<0.014	0.027 J	<0.015
1,2,4-TMB	<0.0083	<0.0085	<0.0094	<0.0090
1,3,5-TMB	<0.018	<0.019	<0.021	<0.020
X	<0.032	<0.033	0.041 J	<0.035
TEA	<3.2	<3.2	<3.4	<3.4

ANALYTICAL KEY

B = BENZENE
1,4-DCB = 1,4-DICHLOROBENZENE
1,2-DCA = 1,2-DICHLOROETHANE
1,2-DCP = 1,2-DICHLOROPROPANE
E = ETHYLBENZENE
N = NAPHTHALENE
T = TOLUENE
1,2,4-TMB = 1,2,4-TRIMETHYLBENZENE
1,3,5-TMB = 1,3,5-TRIMETHYLBENZENE
X = XYLENES
TEA = TRIETHYLAMINE
BOLD = CONCENTRATION EXCEEDS GROUNDWATER PATHWAY RCL (UNSATURATED SOIL SAMPLES)
{ } = CONCENTRATION EXCEEDS INDUSTRIAL DIRECT CONTACT RCL (UNSATURATED SOIL SAMPLES)
"J" = ESTIMATED CONCENTRATION REPORTED BETWEEN LIMIT OF DETECTION AND LIMIT OF QUANTITATION
NA = NOT ANALYZED

NOTE: ALL CONCENTRATIONS REPORTED IN MILLIGRAMS PER KILOGRAM (mg/kg)

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GRAPHIC SCALE
0 30' 60'

SOLENIS
5228 N. HOPKINS ST.
MILWAUKEE, WISCONSIN

NEW CONSTRUCTION
PROPOSED SOIL BORING / VAPOR PROBE LOCATION MAP

NO. REVISION DATE BY

DRAWING NO. 16153-Site Area Map.dwg
DRAWN BY: CCK / VMS ---
DATE: 1/11/17
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FIGURE
8

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TABLES

Table 1
Water Level Elevations
Solenis - 5228 N. Hopkins Street, Milwaukee, Wisconsin
Sigma Project No. 16153

MW-1

Ground Elev.: 672.98 (feet MSL) Screen Interval: 8.3 to 23.3 (feet bgs)
TOC Elev.: 675.76 (feet MSL) 664.7 to 649.7 (feet MSL)

Date	Depth to Free Product (feet TOC)	Depth to Groundwater (feet TOC)	Well Depth (feet TOC)	Free Product Thickness (feet)	Water Column (feet)	Water Column Difference (feet)	Groundwater Elevation (feet MSL)	Depth to Groundwater (feet bgs)	Physical Observations
11/2/16	25.60	23.45	26.20	0.60	2.15	---	652.31	20.67	DNAPL in well, development event
11/23/16	NM	19.40	NM	---	---	---	656.36	16.62	Water level measurement, odor
12/21/16	25.10	15.50	26.60	1.50	9.60	7.45	660.26	12.72	Water level measurement, odor, apparent DNAPL product
1/12/17	---	12.48	20.87	---	8.39	-1.21	663.28	9.70	Well sampling event, odor, potential DNAPL, well depth shallower than previous measurements
1/13/17	NM	NM	25.40 (WLI) / 20.85 (IP)	---	---	---	---	---	Well depth measurements, no sediment, "sticky feeling". NOTE: water level indicator able to reach original well depth, IP unable. Blockage in well screen
1/26/17	---	16.44	20.85	---	4.41	-3.98	659.32	13.66	Water level measurement. WLI & IP unable to reach original well depth

MW-2

Ground Elev.: 673.04 (feet MSL) Screen Interval: 8.3 to 23.3 (feet bgs)
TOC Elev.: 675.81 (feet MSL) 664.8 to 649.8 (feet MSL)

Date	Depth to Free Product (feet TOC)	Depth to Groundwater (feet TOC)	Well Depth (feet TOC)	Free Product Thickness (feet)	Water Column (feet)	Water Column Difference (feet)	Groundwater Elevation (feet MSL)	Depth to Groundwater (feet bgs)	Physical Observations
11/2/16	25.25	23.13	26.00	0.75	2.12	---	652.68	20.36	DNAPL in well, development event
11/23/16	NM	18.95	NM	---	---	---	656.86	16.18	Water level measurement, odor
12/21/16	---	15.10	21.10	---	6.00	3.88	660.71	12.33	Well sampling event, odor, potential DNAPL, well depth shallower than previous measurements
1/12/17	---	11.99	20.90	---	8.91	2.91	663.82	9.22	Well sampling event, odor, well depth shallower than previous measurements
1/13/17	NM	NM	21.50 (WLI) / 20.9 (IP)	---	---	---	---	---	Well depth measurements, no sediment, "sticky feeling". NOTE: Both water level indicator and IP unable to get to original well depth. Blockage in well screen
1/26/17	---	14.82	20.90	---	6.08	-2.83	660.99	12.05	Water level measurement. WLI & IP unable to reach original well depth

MW-6

Ground Elev.: 673.75 (feet MSL) Screen Interval: 11.7 to 21.7 (feet bgs)
TOC Elev.: 673.44 (feet MSL) 662.0 to 652.0 (feet MSL)

Date	Depth to Free Product (feet TOC)	Depth to Groundwater (feet TOC)	Well Depth (feet TOC)	Free Product Thickness (feet)	Water Column (feet)	Water Column Difference (feet)	Groundwater Elevation (feet MSL)	Depth to Groundwater (feet bgs)	Physical Observations
11/2/16	---	17.26	21.59	---	4.33	---	656.18	17.57	Development event
11/23/16	---	13.32	21.58	---	8.26	3.93	660.12	13.63	Water level measurement
12/21/16	---	8.10	NM	---	13.48	5.22	665.34	8.41	Water level measurement
1/12/17	---	5.93	21.60	---	15.67	2.19	667.51	6.24	Well sampling event, turbid, no odor
1/26/17	---	12.84	NM	---	8.76	-6.91	660.60	13.15	Water level measurement

MW-8

Ground Elev.: 672.82 (feet MSL) Screen Interval: 11.6 to 21.6 (feet bgs)
TOC Elev.: 672.46 (feet MSL) 661.2 to 651.2 (feet MSL)

Date	Depth to Free Product (feet TOC)	Depth to Groundwater (feet TOC)	Well Depth (feet TOC)	Free Product Thickness (feet)	Water Column (feet)	Water Column Difference (feet)	Groundwater Elevation (feet MSL)	Depth to Groundwater (feet bgs)	Physical Observations
11/2/16	---	18.25	21.40	---	3.15	---	654.21	18.61	Development event
11/23/16	---	13.15	21.40	---	8.25	5.10	659.31	13.51	Water level measurement
12/21/16	---	6.20	21.20	---	15.00	6.75	666.26	6.56	Water level measurement
1/12/17	---	5.15	21.40	---	16.25	1.25	667.31	5.51	Well sampling event, turbid, no odor
1/26/17	---	12.01	NM	---	9.39	-6.86	660.45	12.37	Water level measurement

Table 1
Water Level Elevations
Solenis - 5228 N. Hopkins Street, Milwaukee, Wisconsin
Sigma Project No. 16153

MW-9

Ground Elev.: 673.15 (feet MSL) Screen Interval: 11.7 to 21.7 (feet bgs)
TOC Elev.: 672.77 (feet MSL) 661.5 to 651.5 (feet MSL)

Date	Depth to Free Product (feet TOC)	Depth to Groundwater (feet TOC)	Well Depth (feet TOC)	Free Product Thickness (feet)	Water Column (feet)	Water Column Difference (feet)	Groundwater Elevation (feet MSL)	Depth to Groundwater (feet bgs)	Physical Observations
11/2/16	---	16.72	21.46	---	4.74	---	656.05	17.09	Development event
11/23/16	---	12.40	21.45	---	9.05	4.31	660.37	12.77	Water level measurement
12/21/16	---	3.90	NM	---	17.55	8.50	668.87	4.27	Water level measurement
1/12/17	---	3.20	21.50	---	18.30	0.75	669.57	3.57	Well sampling event, turbid, no odor
1/26/17	---	9.76	NM	---	11.74	-6.56	663.01	10.13	Water level measurement

MW-10

Ground Elev.: 673.75 (feet MSL) Screen Interval: 11.6 to 21.6 (feet bgs)
TOC Elev.: 676.37 (feet MSL) 662.2 to 652.2 (feet MSL)

Date	Depth to Free Product (feet TOC)	Depth to Groundwater (feet TOC)	Well Depth (feet TOC)	Free Product Thickness (feet)	Water Column (feet)	Water Column Difference (feet)	Groundwater Elevation (feet MSL)	Depth to Groundwater (feet bgs)	Physical Observations
11/2/16	---	21.24	24.40	---	3.16	---	655.13	18.62	Development event
11/23/16	---	11.90	24.40	---	12.50	9.34	664.47	9.28	Water level measurement
12/21/16	---	7.12	NM	---	17.28	4.78	669.25	4.50	Water level measurement
1/12/17	---	6.42	24.40	---	17.98	0.70	669.95	3.80	Well sampling event, slightly turbid, no odor
1/26/17	---	11.72	NM	---	12.68	-5.30	664.65	9.10	Water level measurement

PZ-6

Ground Elev.: 673.73 (feet MSL) Screen Interval: 30.33 to 35.33 (feet bgs)
TOC Elev.: 673.45 (feet MSL) 643.4 to 638.4 (feet MSL)

Date	Depth to Free Product (feet TOC)	Depth to Groundwater (feet TOC)	Well Depth (feet TOC)	Free Product Thickness (feet)	Water Column (feet)	Water Column Difference (feet)	Groundwater Elevation (feet MSL)	Depth to Groundwater (feet bgs)	Physical Observations
1/4/17	---	33.84	35.05	---	1.21	---	639.61	34.12	Development event
1/12/17	---	32.75	35.05	---	2.30	1.09	640.70	33.03	Well sampling event, clear, no odor
1/26/17	---	30.35	NM	---	4.70	2.40	643.10	30.63	Water level measurement

PZ-8

Ground Elev.: 672.82 (feet MSL) Screen Interval: 30.8 to 35.8 (feet bgs)
TOC Elev.: 672.08 (feet MSL) 642.03 to 637.03 (feet MSL)

Date	Depth to Free Product (feet TOC)	Depth to Groundwater (feet TOC)	Well Depth (feet TOC)	Free Product Thickness (feet)	Water Column (feet)	Water Column Difference (feet)	Groundwater Elevation (feet MSL)	Depth to Groundwater (feet bgs)	Physical Observations
1/4/17	---	30.41	35.05	---	4.64	---	641.67	31.15	Development event
1/12/17	---	30.85	35.05	---	4.20	-0.44	641.23	31.59	Well sampling event, turbid, no odor
1/26/17	NM	NM	NM	---	---	---	---	---	Measurement not taken, water up to riser TOC

Table 1
Water Level Elevations
Solenis - 5228 N. Hopkins Street, Milwaukee, Wisconsin
Sigma Project No. 16153

PZ-9

Ground Elev.: 673.17 (feet MSL) Screen Interval: 30.44 to 35.44 (feet bgs)
TOC Elev.: 672.68 (feet MSL) 642.73 to 637.73 (feet MSL)

Date	Depth to Free Product (feet TOC)	Depth to Groundwater (feet TOC)	Well Depth (feet TOC)	Free Product Thickness (feet)	Water Column (feet)	Water Column Difference (feet)	Groundwater Elevation (feet MSL)	Depth to Groundwater (feet bgs)	Physical Observations
1/4/17	---	24.57	34.95	---	10.38	---	648.11	25.06	Development event
1/12/17	---	27.48	34.95	---	7.47	-2.91	645.20	27.97	Well sampling event, slightly turbid, no odor
1/26/17	---	21.63	NM	---	13.32	5.85	651.05	22.12	Water level measurement

MW-12

Ground Elev.: 673.61 (feet MSL) Screen Interval: 7.95 to 22.95 (feet bgs)
TOC Elev.: 673.11 (feet MSL) 665.66 to 650.66 (feet MSL)

Date	Depth to Free Product (feet TOC)	Depth to Groundwater (feet TOC)	Well Depth (feet TOC)	Free Product Thickness (feet)	Water Column (feet)	Water Column Difference (feet)	Groundwater Elevation (feet MSL)	Depth to Groundwater (feet bgs)	Physical Observations
1/4/17	---	5.86	22.45	---	16.59	---	667.25	6.36	Development event
1/12/17	---	3.83	22.45	---	18.62	2.03	669.28	4.33	Well sampling event, slightly turbid, no odor
1/26/17	---	2.80	NM	---	19.65	1.03	670.31	3.30	Water level measurement

PZ-12

Ground Elev.: 673.44 (feet MSL) Screen Interval: 30.4 to 35.4 (feet bgs)
TOC Elev.: 673.24 (feet MSL) 643.04 to 638.04 (feet MSL)

Date	Depth to Free Product (feet TOC)	Depth to Groundwater (feet TOC)	Well Depth (feet TOC)	Free Product Thickness (feet)	Water Column (feet)	Water Column Difference (feet)	Groundwater Elevation (feet MSL)	Depth to Groundwater (feet bgs)	Physical Observations
1/4/17	---	33.80	35.20	---	1.40	---	639.44	34.00	Development event
1/12/17	---	32.80	35.20	---	2.40	1.00	640.44	33.00	Well sampling event, slightly turbid, no odor
1/26/17	---	31.24	NM	---	3.96	1.56	642.00	31.44	Water level measurement

Notes:
1. Montioring wells MW-1, 2, 6, 8, 9, and 10 surveyed by The Sigma Group, Inc. on October 6, 2016 with Trimble R8 GPS receiver.

   Piezometers PZ-6, 8, 9, 12, and monitoring well MW-12 surveyed by The Sigma Group, Inc. on December 22, 2016 with Trimble R8 GPS receiver.
2. Groundwater levels not adjusted for presence of DNAPL. Density of DNAPL free product assumed to be approximately 1.156 (1,2,-dichloropropane aka propylene dichloride).
3. feet MSL = feet above Mean Sea Level
4. feet bgs = feet below ground surface
5. feet TOC = feet below top of casing
6. '--- = data not available
7. NM = not measured
8. WLI = Water level indicator (electronic). IP = Interface probe

Table 2
Soil Analytical Data
Solenis - 5228 N. Hopkins Street, Milwaukee, Wisconsin
Sigma Project No. 16153

Soil Sample Location:		TP-1	TP-2	TP-3	TP-4	TP-5	SB-1		SB-2		SB-3		SB-4		Groundwater Pathway RCL [4]	Non-Industrial Direct Contact RCL [5]	Industrial Direct Contact RCL [6]
Sample Depth (feet bgs):		3-5	2-4	2-4	0-2	4-6	1-3	5-7.5	3-5	10-12.5	1-3	3-5	3-5	7.5-10			
Sample Collection Date:		5/12/16	5/12/16	5/12/16	5/12/16	5/12/16	10/4/16	10/4/16	10/4/16	10/4/16	10/4/16	10/4/16	10/4/16	10/4/16			
Depth to Groundwater (feet bgs):		NA	NA	NA	NA	NA	16.62		16.18		NA						
nsaturated/Smear Zone (U) or Saturated (S):		U	U	U	U	U	U	U	U	U	U	U	U	U			
Organic Vapor Monitor	ppm	630	94	708	10	3	42	14	98	26	2	1	1	1	NS	NS	NS
pH	su	7.08	9.50	6.21	6.39	7.59	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS
Detected VOCs																	
Benzene	mg/kg	<0.016	<1.6	[2.82 J]	<0.016	<0.016	<0.16	<0.16	<3.2	<0.016	<0.32	<0.016	<0.016	<0.016	0.0051	1.6	7.07
4-Chlorotoluene	mg/kg	<0.032	<3.2	<3.2	<0.032	<0.032	<0.32	<0.32	<6.4	<0.032	<0.64	<0.032	<0.032	<0.032	NS	253	253
Cyclohexane	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	10,100	42,600
1,4-Dichlorobenzene	mg/kg	<0.03	<3	<3	<0.03	<0.03	<0.3	<0.3	<6	<0.03	<0.6	<0.03	<0.03	<0.03	0.144	3.74	16.4
1,2-Dichloroethane	mg/kg	<0.03	<3	<3	<0.03	<0.03	<0.3	<0.3	<6	0.127	<0.6	<0.03	<0.03	<0.03	0.0028	0.652	2.87
1,2-Dichloropropane	mg/kg	{[3.4]}	{[8600]}	<2.5	1.2	<0.025	{[5.5]}	{[5.6]}	{[2690]}	{[2400]}	{[2.2]}	<0.025	<0.025	[0.63]	0.0033	0.406	1.78
Ethyl Acetate	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	964	4,090
Ethylbenzene	mg/kg	**0.050 J**	3.16 J	[24.9]	<0.027	<0.027	4.0	2.21	<5.4	<0.027	[17]	**0.37**	<0.027	<0.027	1.57	8.02	35.4
Isopropylbenzene	mg/kg	**0.228**	<3.7	**6.3 J**	<0.037	<0.037	**1.14 J**	**0.75 J**	<7.4	<0.037	**5.4**	**0.21**	<0.037	<0.037	NS	NS	NS
p-Isopropyltoluene	mg/kg	**0.39**	**20.7**	**89**	<0.056	<0.056	**36**	**16.3**	<11.2	<0.056	**150**	**1.77**	**0.13 J**	**0.083 J**	NS	162	162
Methyl Acetate	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	78,200	1,020,000
Methylcyclohexane	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS
Naphthalene	mg/kg	<0.087	<8.7	<8.7	<0.087	<0.087	<0.87	<0.87	<17.4	<0.087	<1.74	<0.087	<0.087	<0.087	0.6582	5.52	24.1
n-Propylbenzene	mg/kg	**0.143**	<3.5	**3.9 J**	<0.0035	<0.0035	**0.71 J**	**0.39 J**	<7	<0.035	**3.4**	**0.155**	<0.035	<0.035	NS	264	264
Toluene	mg/kg	<0.031	6.3 J	63	<0.031	<0.031	4.3	2.04	<6.2	**0.034 J**	21.5	**0.36**	<0.031	<0.031	1.1072	818	818
1,2,4-Trimethylbenzene	mg/kg	**0.28**	<7.8	15.5 J	<0.078	<0.078	1.39 J	**0.8 J**	<15.6	<0.078	9.6	**0.42**	<0.078	<0.078	1.3821	219	219
1,3,5-Trimethylbenzene	mg/kg	<0.089	<8.9	<8.9	<0.089	<0.089	<0.89	<0.89	<17.8	<0.089	5.1 J	**0.125 J**	<0.089	<0.089		182	182
Xylenes (total)	mg/kg	**0.73**	23.3 J	200	<0.099	<0.099	32.2	18.7	<19.8	<0.099	139	**2.74**	**0.039 J**	<0.099	3.96	260	260
Triethylamine [10]	mg/kg	110	[210]	17	<10	<10	3.2	6.9	83	3.4	0.73	0.66	<0.5	<0.5	0.0044[11]	167	700

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
4. Groundwater Pathway RCL = Residual Contaminant Level for protection of groundwater (dilution factor of 2) as presented on the WDNR's RCL Spreadsheet (dated March 2017) 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 March 2017) 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 March 2017) 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. NS = no standard established
8. Laboratory flags: "J" = Analyte detected between Limit of Detection and Limit of Quantitation
   *** Enter othe flags as needed
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)
   BOLD = Detected compound
10. Triethylamine analysis conducted by Austin Analytical, LLC in Austin, TX via EPA Method 8260M & ALS Labs via GC-FID (EPA 8015M).
11. Groundwater Pathway RCL for triethylamine based on USEPA Regional Screening Level Summary Table (TR=1E-06, HQ=1) dated May 2016.

Table 2 (cont'd)
Soil Analytical Data
Solenis - 5228 N. Hopkins Street, Milwaukee, Wisconsin
Sigma Project No. 16153

Soil Sample Location:		SB-5		SB-6		PZ-6				SB-7		SB-8		PZ-8			Groundwater Pathway RCL [4]	Non-Industrial Direct Contact RCL [5]	Industrial Direct Contact RCL [6]
Sample Depth (feet bgs):		3-5	7.5-10	1-3	3-5	7.5-10	15-17.5	25-27.5	32.5-35	3-5	12.5-15	3-5	5-7.5	10-12.5	20-22.5	22.5-25			
Sample Collection Date:		10/4/16	10/4/16	10/4/16	10/4/16	12/19/16	12/19/16	12/19/16	12/19/16	10/4/16	10/4/16	10/4/16	10/4/16	12/19/16	12/19/16	12/19/16			
Depth to Groundwater (feet bgs):		NA		13.63		33.03				NA		13.51		31.59					
aturated/Smear Zone (U) or Saturated (S):		U	U	U	U	U	U/S	S	S	U	U	U	U	U	S	S			
Organic Vapor Monitor	ppm	1	1	1	1	81	70	37	6.2	1	2	1	1	17.4	9.2	1.5	NS	NS	NS
pH	su	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS
Detected VOCs																			
Benzene	mg/kg	<0.016	<0.016	<0.16	**0.056**	<0.0094	<0.0096	<0.011	<0.010	<0.016	<0.8	<0.016	<0.016	<0.0094	<0.011	<0.010	0.0051	1.6	7.07
4-Chlorotoluene	mg/kg	<0.032	<0.032	<0.32	<0.032	<0.0091	<0.0093	**0.036 J**	<0.0099	<0.032	<1.6	<0.032	<0.032	<0.0091	<0.011	<0.0099	NS	253	253
Cyclohexane	mg/kg	NA	NA	NA	NA	<0.021	<0.021	**0.088**	<0.022	NA	NA	NA	NA	<0.021	<0.024	<0.022	NS	10,100	42,600
1,4-Dichlorobenzene	mg/kg	<0.03	<0.03	**1.23**	<0.03	<0.011	<0.011	<0.012	<0.012	<0.03	<1.5	<0.03	<0.03	<0.011	<0.013	<0.012	0.144	3.74	16.4
1,2-Dichloroethane	mg/kg	<0.03	<0.03	<0.3	<0.03	<0.011	<0.012	<0.013	<0.012	<0.03	<1.5	<0.03	<0.03	<0.011	<0.013	<0.012	0.0028	0.652	2.87
1,2-Dichloropropane	mg/kg	<0.025	<0.025	{[**2.6**]}	**0.18**	<0.011	<0.012	<0.013	<0.012	**0.106**	{[**213**]}	**0.061 J**	<0.025	<0.011	<0.014	<0.012	0.0033	0.406	1.78
Ethyl Acetate	mg/kg	NA	NA	NA	NA	<0.039	<0.040	<0.044	<0.042	NA	NA	NA	NA	<0.039	<0.046	<0.042	NS	964	4,090
Ethylbenzene	mg/kg	<0.027	<0.027	**1.05**	**0.42**	<0.0097	<0.0099	<0.011	<0.010	**0.135**	<1.35	<0.027	<0.027	<0.0097	<0.011	<0.010	1.57	8.02	35.4
Isopropylbenzene	mg/kg	<0.037	<0.037	**1.36**	**0.138**	<0.016	<0.017	<0.018	<0.018	**0.112 J**	<1.85	<0.037	<0.037	<0.016	<0.019	<0.018	NS	NS	NS
p-Isopropyltoluene	mg/kg	<0.056	<0.056	**2.6**	**7.5**	<0.016	<0.016	**0.59**	<0.017	**2.84**	<2.8	<0.056	<0.056	<0.016	<0.019	<0.017	NS	162	162
Methyl Acetate	mg/kg	NA	NA	NA	NA	<0.085	<0.087	<0.096	<0.092	NA	NA	NA	NA	<0.085	<0.100	<0.092	NS	78,200	1,020,000
Methylcyclohexane	mg/kg	NA	NA	NA	NA	<0.018	<0.018	**1.2**	<0.019	NA	NA	NA	NA	<0.018	<0.021	<0.019	NS	NS	NS
Naphthalene	mg/kg	<0.087	<0.087	**0.91 J**	<0.087	<0.0071	<0.0072	<0.008	<0.0077	<0.087	<4.35	<0.087	<0.087	<0.0071	<0.0084	<0.0077	0.6582	5.52	24.1
n-Propylbenzene	mg/kg	<0.035	<0.035	<0.35	**0.047 J**	<0.013	<0.014	<0.015	<0.014	**0.103 J**	<1.75	<0.035	<0.035	<0.013	<0.016	<0.014	NS	264	264
Toluene	mg/kg	<0.031	<0.031	**1.21**	**2.17**	<0.014	<0.014	**0.027 J**	<0.015	**0.045 J**	<1.55	<0.031	<0.031	<0.014	<0.016	<0.015	1.1072	818	818
1,2,4-Trimethylbenzene	mg/kg	<0.078	<0.078	**1.46 J**	**0.259**	<0.0083	<0.0085	<0.0094	<0.0090	**0.56**	<3.9	<0.078	<0.078	<0.0083	<0.0098	<0.0090	1.3821	219	219
1,3,5-Trimethylbenzene	mg/kg	<0.089	<0.089	<0.89	**0.254 J**	<0.018	<0.019	<0.021	<0.020	**0.32**	<4.45	<0.089	<0.089	<0.018	<0.021	<0.020		182	182
Xylenes (total)	mg/kg	<0.099	<0.099	**7.05**	**3.09**	<0.032	<0.033	**0.041 J**	<0.035	**1.287**	<4.95	<0.099	<0.099	<0.032	<0.038	<0.035	3.96	260	260
Triethylamine [10]	mg/kg	<0.5	<0.5	**0.53**	<0.5	<3.2	<3.2	<3.4	<3.4	<0.5	<0.5	<0.5	**8.4**	<3.2	<3.5	<3.3	0.0044[11]	167	700

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
4. Groundwater Pathway RCL = Residual Contaminant Level for protection of groundwater (dilution factor of 2) as presented on the WDNR's RCL Spreadsheet (dated March 2017) 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 March 2017) 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 March 2017) 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. NS = no standard established
8. Laboratory flags: "J" = Analyte detected between Limit of Detection and Limit of Quantitation
   *** Enter othe flags as needed
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)
   BOLD = Detected compound
10. Triethylamine analysis conducted by Austin Analytical, LLC in Austin, TX via EPA Method 8260M & ALS Labs via GC-FID (EPA 8015M).
11. Groundwater Pathway RCL for triethylamine based on USEPA Regional Screening Level Summary Table (TR=1E-06, HQ=1) dated May 2016.

Table 2 (cont'd)
Soil Analytical Data
Solenis - 5228 N. Hopkins Street, Milwaukee, Wisconsin
Sigma Project No. 16153

Soil Sample Location:		SB-9		PZ-9			SB-10		SB-11			SB-12 (MW/PZ-12)			Groundwater Pathway RCL [4]	Non-Industrial Direct Contact RCL [5]	Industrial Direct Contact RCL [6]
Sample Depth (feet bgs):		1-3	5-7.5	5-7.5	12.5-15	22.5-25	3-5	5-7.5	5-7.5	10-12.5	25-27.5	2.5-5	12.5-15	27.5-30			
Sample Collection Date:		10/4/16	10/4/16	12/19/16	12/19/16	12/19/16	10/4/16	10/4/16	12/19/16	12/19/16	12/19/16	12/19/16	12/19/16	12/19/16			
Depth to Groundwater (feet bgs):		12.77		27.97			3.8		NA			4.33					
Unsaturated/Smear Zone (U) or Saturated (S):		U	U/S	U	U/S	S	U	U/S	U	U	S	U	S	S			
Organic Vapor Monitor	ppm	1	1	13.9	2.02	1.71	4	4	1.49	1.68	2.6	1.8	1.6	2.03	NS	NS	NS
pH	su	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS
Detected VOCs																	
Benzene	mg/kg	<0.8	<0.016	<0.010	<0.0096	<0.010	<0.8	<0.8	<0.0094	<0.0096	<0.010	<0.013	<0.0096	<0.010	0.0051	1.6	7.07
4-Chlorotoluene	mg/kg	<1.6	<0.032	<0.010	<0.0093	<0.0097	<1.6	<1.6	<0.0091	<0.0093	<0.0099	<0.013	<0.0093	<0.0097	NS	253	253
Cyclohexane	mg/kg	NA	NA	<0.023	<0.021	<0.022	NA	NA	<0.021	<0.021	<0.022	<0.029	<0.021	<0.022	NS	10,100	42,600
1,4-Dichlorobenzene	mg/kg	<1.5	<0.03	<0.012	<0.011	<0.012	<1.5	<1.5	<0.011	<0.011	<0.012	{[**38**]}	<0.011	<0.012	0.144	3.74	16.4
1,2-Dichloroethane	mg/kg	<1.5	<0.03	<0.012	<0.012	<0.012	<1.5	<1.5	<0.011	<0.012	<0.012	<0.016	<0.012	<0.012	0.0028	0.652	2.87
1,2-Dichloropropane	mg/kg	<1.25	**0.059 J**	<0.013	<0.012	<0.012	{[**37**]}	{[**15.6**]}	<0.011	<0.012	<0.012	<0.016	<0.012	<0.012	0.0033	0.406	1.78
Ethyl Acetate	mg/kg	NA	NA	**0.110 J**	<0.040	<0.041	NA	NA	<0.039	<0.040	<0.042	<0.055	<0.040	<0.041	NS	964	4,090
Ethylbenzene	mg/kg	<1.35	<0.027	<0.011	<0.0099	<0.010	<1.35	<1.35	<0.0097	<0.0099	<0.010	<0.014	<0.0099	<0.010	1.57	8.02	35.4
Isopropylbenzene	mg/kg	<1.85	<0.037	<0.018	<0.017	<0.017	<1.85	<1.85	<0.016	<0.017	<0.018	<0.023	<0.017	<0.017	NS	NS	NS
p-Isopropyltoluene	mg/kg	56	<0.056	<0.018	<0.016	<0.017	<2.8	<2.8	<0.016	<0.016	<0.017	**3.7**	<0.016	<0.017	NS	162	162
Methyl Acetate	mg/kg	NA	NA	<0.094	<0.087	<0.090	NA	NA	<0.085	<0.087	<0.092	<0.120	<0.087	**0.099 J**	NS	78,200	1,020,000
Methylcyclohexane	mg/kg	NA	NA	**1.5**	<0.018	<0.019	NA	NA	<0.018	<0.018	<0.019	<0.025	<0.018	<0.019	NS	NS	NS
Naphthalene	mg/kg	<4.35	<0.087	<0.0078	<0.0072	<0.0075	<4.35	<4.35	<0.0071	<0.0072	<0.0077	**0.110 J**	<0.0072	<0.0075	0.6582	5.52	24.1
n-Propylbenzene	mg/kg	<1.75	<0.035	<0.015	<0.014	<0.014	<1.75	<1.75	<0.013	<0.014	<0.014	<0.019	<0.014	<0.014	NS	264	264
Toluene	mg/kg	**1.93 J**	<0.031	<0.015	<0.014	<0.015	<1.55	<1.55	<0.014	<0.014	<0.015	<0.019	<0.014	<0.015	1.1072	818	818
1,2,4-Trimethylbenzene	mg/kg	<3.9	**0.33**	**0.042 J**	<0.0085	<0.0088	<3.9	<3.9	<0.0083	<0.0085	<0.0090	<0.012	<0.0085	<0.0088	1.3821	219	219
1,3,5-Trimethylbenzene	mg/kg	<4.45	**0.111 J**	<0.020	<0.019	<0.019	<4.45	<4.45	<0.018	<0.019	<0.020	<0.025	<0.019	<0.019		182	182
Xylenes (total)	mg/kg	<4.95	**0.43**	<0.036	<0.033	<0.034	<4.95	<4.95	<0.032	<0.033	<0.035	<0.045	<0.033	<0.034	3.96	260	260
Triethylamine [10]	mg/kg	**5.5**	**1.6**	<3.4	<3.2	<3.3	**26**	**5.3**	<3.2	<3.2	<3.4	<4.0	<3.2	<3.3	0.0044[11]	167	700

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
4. Groundwater Pathway RCL = Residual Contaminant Level for protection of groundwater (dilution factor of 2) as presented on the WDNR's RCL Spreadsheet (dated March 2017) 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 March 2017) 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 March 2017) 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. NS = no standard established
8. Laboratory flags: "J" = Analyte detected between Limit of Detection and Limit of Quantitation
   *** Enter othe flags as needed
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)
   BOLD = Detected compound
10. Triethylamine analysis conducted by Austin Analytical, LLC in Austin, TX via EPA Method 8260M & ALS Labs via GC-FID (EPA 8015M).
11. Groundwater Pathway RCL for triethylamine based on USEPA Regional Screening Level Summary Table (TR=1E-06, HQ=1) dated May 2016.

Table 3
Groundwater Analytical Data
Solenis - 5228 N. Hopkins Street, Milwaukee, Wisconsin
Sigma Project No. 16153

Well Location:		MW-1	MW-2	Duplicate	MW-6	PZ-6	MW-8	PZ-8	MW-9	PZ-9	MW-10	MW-12	PZ-12	NR 140 ES	NR 140 PAL
Date:		1/12/17	1/12/17	1/12/17	1/11/17	1/11/17	1/12/17	1/12/17	1/12/17	1/11/17	1/11/17	1/11/17	1/11/17		
Water Elevation* (feet MSL):		663.28	663.82	663.82	667.51*	640.70	667.31*	641.23	669.57*	645.20*	669.95*	669.28*	640.44		
pH	su	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
PVOCs and Detected VOCs															
Benzene	µg/L	<3000	<3000	<3000	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	5	0.5
Ethylbenzene	µg/L	<4000	<4000	<4000	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	700	140
Methyl-tert-butyl-ether	µg/L	<1200	<1200	<1200	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	60	12
Toluene	µg/L	<3700	<3700	<3700	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	800	160
1,2,4-Trimethylbenzene	µg/L	<3700	<3700	<3700	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	NS	NS
1,3,5-Trimethylbenzene	µg/L	<2900	<2900	<2900	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	<0.29	NS	NS
Total Trimethylbenzene	µg/L	<6600	<6600	<6600	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	480	96
Xylenes, Total	µg/L	<13000	<13000	<13000	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	2,000	400
Acetone	µg/L	<9200	<9200	<9200	**34**	**37**	**2.1 J**	**1.8 J**	**5.8 J**	<0.92	<0.92	**9.1 J**	<0.92	9,000	1,800
Carbon Disulfide	µg/L	<2300	<2300	<2300	**1.5**	**1.2**	<0.23	<0.23	<0.23	**0.47 J**	<0.23	<0.23	<0.23	1,000	200
1,2-Dichloropropane	µg/L	**2,700,000**	**3,000,000**	**3,300,000**	**6.7**	***1.2***	***2.4***	<0.25	***1.2***	<0.25	**92**	<0.25	<0.25	5	0.5
Di-isopropyl ether	µg/L	<1300	<1300	<1300	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	**1.8 J**	<0.13	<0.13	NS	NS
Methylcyclohexane	µg/L	<2700	<2700	<2700	**1.5**	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	NS	NS
Methyl ethyl ketone (MEK or 2-butanone)	µg/L	<5800	<5800	<5800	<0.58	<0.58	<0.58	<0.58	**11**	<0.58	<0.58	<0.58	<0.58	4,000	800
Triethylamine [11]	**mg/L**	<0.99	<0.99	<0.99	<0.99	<0.99	<0.99	<0.99	<0.99	<0.99	<0.99	<0.99	<0.99	NS[12]	NS[12]

Notes:
1. NR 140 ES = Wisconsin Administrative Code, Chapter NR 140 Enforcement Standard
2. NR 140 PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit
3. NS = no standard
4. µg/L = micrograms per liter (equivalent to parts per billion, ppb)
5. NA = Not Analyzed
6. Laboratory flags: "J" = Analyte detected between Limit of Detection and Limit of Quantitation.
   Enter other flags as necessary
7. Trip blank results: 1/12/2017: Trip Blank: No VOCs detected except for chloroform (0.66 J ug/L) and methylene chloride (1.0 J ug/L). Chloroform commonly found as trace contaminant in city water. Methylene Chloride common lab solvent.
8. Equipment blank results: 1/12/2017: No equipment blank submitted.
9. Exceedances:
   BOLD = Concentration exceeds NR 140 ES
   ITALICS = Concentration exceeds NR 140 PAL
   BOLD = Concentration detected above laboratory Method Detection Limit (MDL)
10. Special notes: * = monitoring well screen submerged below water table
    ** = not a statistically valid PAL exceedance per NR 140.14(3)(c)
    primary contaminants of concern at the site

11. Triethylamine analysis conducted by Austin Analytical, LLC in Austin, TX via EPA Method 8260M and ALS Labs via GC-FID (EPA 8015M).

12. No listed NR 140 ES/PAL. Groundwater regulatory standard for triethylamine determined to be 15 ppb (micrograms per liter - ug/L) based on USEPA Regional Screening Level for "tapwater" (per WDNR email by John Hnat - SE Regional Office Aug. 24, 2016)

13. Duplicate samples: 1/12/2017: Duplicate sample collected from monitoring well MW-2

APPENDIX A

Soil Boring Logs & Borehole Abandonment Forms

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☒ Site Investigation

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Solenis - 5228 N. Hopkins		SB-1

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Fisher Horizon Construction and Exploration	10/4/2016	10/4/2016	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
VR511		MW-1	Feet MSL	673.0 Feet MSL	2.3 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E Ⓢ/C/N
SW 1/4 of NW 1/4 of Section 36, T 8 N, R 21 E
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
241041900	Milwaukee	41	Milwaukee

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1 GP	60 50	PUSH	2	SILT, dark brown to black, medium soft, moist, some organics (roots and plant material)	ML			42.0						Lab Sample (1-3') for VOCs & TEA
			4	CLAYEY SILT, dark grey, medium stiff, very moist, trace gravel and dark orange mottling	CL-ML			1.49						
2 GP	60 60	PUSH	6	Changing to greenish grey, medium soft				14.3						Lab Sample (5-7.5') for VOCs & TEA
			8	SILTY CLAY, grey, medium stiff, moist, trace gravel, little light grey mottling Changing to redish brown				0.30						
3 GP	60 36	PUSH	10					10.3						
			12											
			14					2.70						
4 GP	60 46	PUSH	16	Changing to medium soft	CL-ML			1.71						
			18	Changing to grey, fat, wet				0.94						
5 GP	60 50	PUSH	20	Very soft, saturated				2.20						
			22											
			24					1.80						
				EOB at 25' bgs. Abandoned with bentonite chips. Blind drilled with HSA on 10/6/2016 and installed MW-1 to 23' bgs with 15' screen.										

I hereby certify that the information on this form is true and correct to the best of my knowledge

Signature [signature] Firm The Sigma Group, Inc. 1300 W Canal Street Milwaukee, WI 53233 Tel: 414.643.4200 Fax: 414.643.4210

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☒ Site Investigation

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Solenis - 5228 N. Hopkins		SB-2

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Fisher Horizon Construction and Exploration	10/4/2016	10/4/2016	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
VR512		MW-2	Feet MSL	673.0 Feet MSL	2.3 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E Ⓢ/C/N
SW 1/4 of NW 1/4 of Section 36, T 8 N, R 21 E
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
241041900	Milwaukee	41	Milwaukee

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1 GP	60 38	PUSH	1.5	SILTY SAND with GRAVEL, tan and dark brown, medium dense, saturated	SW-SM			30.8						
			3.0											
			4.5	CLAYEY SILT, greenish dark grey, medium soft, moist, trace organics (roots)	CL-ML			98.0						Lab Sample (3-5') for VOCs & TEA
2 GP	60 54	PUSH	6.0	SILTY CLAY, brown, stiff to very stiff, moist, trace gravel, trace light grey mottling				9.20						
			7.5	Changing to redish brown										
			9.0					11.8						
3 GP	60 60	PUSH	10.5											
			12.0		CL-ML			26.2						Lab Sample (10-12.5') for VOCs & TEA
			13.5											
4 GP	60 18	PUSH	15.0	Wet, grey, fat				22.2						
			16.5					5.00						
			18.0											
			19.5					2.50						
			21.0	EOB at 20' bgs. Abandoned with bentonite chips. Blind drilled with HSA on 10/6/2016 and installed MW-2 to 23' bgs with 15' screen.										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature [signature] Firm The Sigma Group, Inc. 1300 W Canal Street Milwaukee, WI 53233 Tel: 414.643.4200 Fax: 414.643.4210

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between $10 and $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 be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☒ Site Investigation

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Solenis - 5228 N. Hopkins		SB-3

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Fisher Horizon Construction and Exploration	10/4/2016	10/4/2016	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	673.9 Feet MSL	2.3 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E ⓈC/N
SW 1/4 of NW 1/4 of Section 36, T 8 N, R 21 E
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
241041900	Milwaukee	41	Milwaukee

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1 GP	60 24	PUSH	1	SANDY GRAVEL with SILT and CLAY, dark tan, medium dense, moist	GW			1.51						Lab Sample (1-3') for VOCs & TEA
			2 3 4	CLAYEY SILT, black, medium soft, very moist, some organics (roots and plant material) Changing to dark brown	CL-ML			0.80						Lab Sample (3-5') for VOCs & TEA
2 GP	60 60	PUSH	5 6 7 8 9	SILTY CLAY, light grey, stiff, moist Changing to redish brown				0.37 0.35						
3 GP	60 60	PUSH	10 11 12 13 14	Little light grey mottling	CL-ML			0.42 0.40						
			15	EOB at 15' bgs. Abandoned with bentonite chips.										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature [signature] Firm The Sigma Group, Inc. 1300 W Canal Street Milwaukee, WI 53233 Tel: 414.643.4200 Fax: 414.643.4210

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between $10 and $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 be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☒ Site Investigation

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Solenis - 5228 N. Hopkins		SB-4

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Fisher Horizon Construction and Exploration	10/4/2016	10/4/2016	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	673.9 Feet MSL	2.3 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E Ⓢ/C/N
SW 1/4 of NW 1/4 of Section 36, T 8 N, R 21 E
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
241041900	Milwaukee	41	Milwaukee

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1 GP	60 20	PUSH	1–3	SILTY CLAY with SAND and GRAVEL, dark brown to black, medium soft, wet, some red and orange brick debris, trace glass and black slag	CL-ML			0.86						
			4–5	SILTY SAND with GRAVEL, light and dark brown, medium loose, wet, some brick debris, trace black slag	SW-SM			0.82						Lab Sample (3-5') for VOCs & TEA
2 GP	60 60	PUSH	6–9	SILTY CLAY, redish brown, dense, moist, trace gravel, trace light grey mottling				0.85						
			9					0.83						Lab Sample (7.5-10') for VOCs & TEA
3 GP	60 36	PUSH	10–11		CL-ML									
			12–13	Wet				0.80						
			14					0.79						
			15	EOB at 15' bgs. Abandoned with bentonite chips.										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature [signature] Firm The Sigma Group, Inc. 1300 W Canal Street Milwaukee, WI 53233 Tel: 414.643.4200 Fax: 414.643.4210

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SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☒ Site Investigation

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Solenis - 5228 N. Hopkins		SB-5

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Fisher Horizon Construction and Exploration	10/4/2016	10/4/2016	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	673.7 Feet MSL	2.3 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E Ⓢ/C/N
SW 1/4 of NW 1/4 of Section 36, T 8 N, R 21 E
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
241041900	Milwaukee	41	Milwaukee

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1 GP	60 26	PUSH	1	CONCRETE, white, dry	—									
			2	SANDY GRAVEL, tan and dark brown, dense, wet, some silt, trace brick debris	GW			0.36						
			3											
			4	SILTY CLAY, dark grey to grey, medium stiff, moist, trace gravel				0.40						Lab Sample (3-5') for VOCs & TEA
2 GP	60 34	PUSH	5											
			6					0.37						
			7	Changing to redish brown, stiff										
			8											
			9		CL-ML			0.37						Lab Sample (7.5-10') for VOCs & TEA
3 GP	60 60	PUSH	10	1" dark grey sand seam										
			11					0.37						
			12											
			13											
			14					0.37						
			15	EOB at 15' bgs. Abandoned with bentonite chips and concrete patch.										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature [signature] Firm The Sigma Group, Inc. 1300 W Canal Street Milwaukee, WI 53233 Tel: 414.643.4200 Fax: 414.643 4210

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State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☒ Site Investigation

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Solenis - 5228 N. Hopkins		SB-6

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Fisher Horizon Construction and Exploration	10/4/2016	10/4/2016	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
VR510		MW-6	Feet MSL	673.8 Feet MSL	2.3 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E Ⓢ/C/N
SW 1/4 of NW 1/4 of Section 36, T 8 N, R 21 E
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
241041900	Milwaukee	41	Milwaukee

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1 GP	60 22	PUSH	1.5	CONCRETE, white, dry SILTY, GRAVELLY SAND, dark grey to tan, medium dense, moist	SW			1.00						Lab Sample (1-3') for VOCs & TEA
			3.0	PEAT, black, medium soft, moist to wet, some organics, 1.5 - 2' bgs: black staining, trace brick debris, and slight petroleum odor	OH			0.72						Lab Sample (3-5') for VOCs & TEA
2 GP	60 48	PUSH	4.5 6.0	Changing to grey CLAYEY SILT, greyish tan, medium stiff, moist	CL-ML			0.42						
			7.5 9.0	SILTY CLAY, greyish red to brown, stiff, mosit, trace light grey mottling Changing to redish brown				0.40						
3 GP	60 55	PUSH	10.5 12.0		CL-ML			0.41						
			13.5	Some cobbles				0.41						
4 GP	60 60	PUSH	15.0 16.5					0.41						
			18.0	Changing to grey, wet				0.40						
			19.5 21.0	EOB at 20' bgs. Abandoned with bentonite chips and concrete patch. Blind drilled with HSA on 10/5/2016 and installed MW-6 to 22' bgs with 10' screen.										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature [signature] Firm The Sigma Group, Inc. 1300 W Canal Street Milwaukee, WI 53233 Tel: 414.643.4200 Fax: 414.643.4210

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State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☒ Site Investigation

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Solenis - 5228 N. Hopkins		SB-7

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Fisher Horizon Construction and Exploration	10/4/2016	10/4/2016	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	672.9 Feet MSL	2.3 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E S/C/N
SW 1/4 of NW 1/4 of Section 36, T 8 N, R 21 E
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
241041900	Milwaukee	41	Milwaukee

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1 GP	60 38	PUSH	1	CONCRETE, white, dry	—									
			2	GRAVELLY SAND, dark grey and brown, medium loose, saturated, some clay and organics (wood debris)	SW			0.60						
			3	CLAYEY SILT, greenish grey to grey, medium dense, wet, little organics (wood debris), trace gravel	CL-ML									
			4					0.61						Lab Sample (3-5') for VOCs & TEA
2 GP	60 34	PUSH	5	SILTY CLAY, greyish brown, medium soft, wet, trace gravel, little light grey mottling										
			6					0.58						
			7	Changing to redish brown, stiff, no mottling										
			8											
			9					0.58						
3 GP	60 50	PUSH	10	Very stiff, moist	CL-ML									
			11											
			12					0.58						
			13											
			14					1.46						Lab Sample (12.5-15') for VOCs & TEA
			15	EOB at 15' bgs. Abandoned with bentonite chips.										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm	Tel: 414.643.4200
	The Sigma Group, Inc. 1300 W Canal Street Milwaukee, WI 53233	Fax: 414.643.4210

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State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☒ Site Investigation

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Solenis - 5228 N. Hopkins		SB-8

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Fisher Horizon Construction and Exploration	10/4/2016	10/4/2016	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
VR579		MW-8	Feet MSL	672.8 Feet MSL	2.3 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E S/C/N
SW 1/4 of NW 1/4 of Section 36, T 8 N, R 21 E
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
241041900	Milwaukee	41	Milwaukee

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1 GP	60 28	PUSH	1.5	SANDY SILT with GRAVEL, dark brown, soft, very moist, some clay and organics (roots)	ML									
			3.0	CLAYEY SILT, greyish brown, soft, moist, little orange and black mottling, trace sand	CL-ML			0.63						
			4.5	Yellow debris with black vitreous inclusions	SW-SM			0.70						Lab Sample (3-5') for VOCs & TEA
2 GP	60 58	PUSH	6.0	SILTY SAND with GRAVEL, clay, dark tan, medium dense, moist				0.71						Lab Sample (5-7.5') for VOCs & TEA
			7.5	SILTY CLAY, redish brown, stiff, moist, trace gravel, trace orange mottling										
			9.0					0.63						
3 GP	60 60	PUSH	10.5	Little light grey mottling, wet	CL-ML									
			12.0					0.64						
			13.5					0.62						
			15.0	EOB at 15' bgs. Abandoned with bentonite chips. Blind drilled with HSA on 10/5/2016 and installed MW-8 to 22' bgs with 10' screen.										
			16.5											
			18.0											
			19.5											
			21.0											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature [signature] Firm The Sigma Group, Inc. 1300 W Canal Street Milwaukee, WI 53233 Tel: 414.643.4200 Fax: 414 643 4210

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State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☒ Site Investigation

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Solenis - 5228 N. Hopkins		SB-9

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Fisher Horizon Construction and Exploration	10/4/2016	10/4/2016	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
VR578		MW-9	Feet MSL	673.1 Feet MSL	2.3 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E ⓈC/N
SW 1/4 of NW 1/4 of Section 36, T 8 N, R 21 E
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
241041900	Milwaukee	41	Milwaukee

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1 GP	60 40	PUSH	1.5	CONCRETE, white, dry	---									
			3.0	CLAYEY SILT, dark brown stained black, very soft, very moist, some yellow crystal inclusions, some organics (wood debris), trace glass	CL-ML			0.85						Lab Sample (1-3') for VOCs & TEA
			4.5	SILTY CLAY, dark brown, soft, moist, some organics (wood debris)				0.80						
2 GP	60 40	PUSH	6.0	Changing to greenish grey with little black mottling Redish brown, stiff to very stiff				1.02						Lab Sample (5-7.5') for VOCs & TEA
			7.5											
			9.0		CL-ML			0.73						
3 GP	60 60	PUSH	10.5											
			12.0					0.72						
			13.5	Wet				0.72						
			15.0	EOB at 15' bgs. Abandoned with bentonite chips. Blind drilled with HSA on 10/5/2016 and installed MW-9 to 22' bgs with 10' screen.										
			16.5											
			18.0											
			19.5											
			21.0											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature [signature] Firm The Sigma Group, Inc. 1300 W Canal Street Milwaukee, WI 53233 Tel: 414.643.4200 Fax: 414.643.4210

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State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☒ Site Investigation

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Solenis - 5228 N. Hopkins		SB-10

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Fisher Horizon Construction and Exploration	10/4/2016	10/4/2016	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
VR577		MW-10	Feet MSL	673.8 Feet MSL	2.3 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E Ⓢ/C/N
SW 1/4 of NW 1/4 of Section 36, T 8 N, R 21 E
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
241041900	Milwaukee	41	Milwaukee

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1 GP	60 55	PUSH	1.5	SILTY SAND with GRAVEL, yellowish brown, medium dense, moist, trace clay, trace red brick debris	SW-SM			1.39						
			3.0	SILTY CLAY, brownish grey, medium dense, moist, little yellowish brown mottling, trace gravel				3.56						Lab Sample (3-5') for VOCs & TEA
			4.5	Trace cobbles										
2 GP	60 60	PUSH	6.0	Some sand and gravel, little orange mottling				3.85						Lab Sample (5-7.5') for VOCs & TEA
			7.5	Dense, very moist	CL-ML									
			9.0					0.95						
3 GP	60 60	PUSH	10.5	Wet, trace orange mottling				0.87						
			12.0											
			13.5					0.85						
			15.0	EOB at 15' bgs. Abandoned with bentonite chips. Blind drilled with HSA on 10/5/2016 and installed MW-10 to 22' bgs with 10' screen.										
			16.5											
			18.0											
			19.5											
			21.0											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature [signature] Firm The Sigma Group, Inc. 1300 W Canal Street Milwaukee, WI 53233 Tel: 414.643.4200 Fax: 414.643.4210

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☒ Site Investigation

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Solenis - 5228 N. Hopkins		PZ-6

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Fisher Horizon Construction and Exploration	12/19/2016	12/21/2016	hollow stem auger

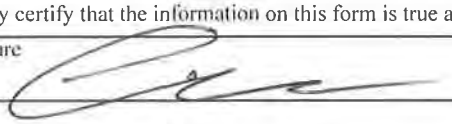
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
VR-535		PZ-6	Feet MSL	673.7 Feet MSL	8.3 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E Ⓢ/C/N
SW 1/4 of NW 1/4 of Section 36, T 8 N, R 21 E
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
241041900	Milwaukee	41	Milwaukee

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1 GP	60 / 0	PUSH	3	NO RECOVERY				NA						
								NA						
2 GP	60 / 50	PUSH	6	ORGANIC RICH SILTY CLAY, black, soft, moist	CL-MI			103						
			9	CLAY, grayish brown, dry, stiff				81						Lab Sample (7.5-10') for VOCs & TEA
3 GP	60 / 60	PUSH	12	Brown, dry, very stiff				12						
				Increasing moisture				12.0						
4 GP	60 / 24	PUSH	15	Increasing moisture and plasticity				70						Lab Sample (15-17.5') for VOCs & TEA
			18					NA						
5 GP	60 / 60	PUSH	21	Plastic, gray	CL			60						
			24					4.5						
6 GP	60 / 60	PUSH	27	Brown-gray, moist				37						Lab Sample (25-27.5') for VOCs & TEA
			30					19.02						
7 GP	60 / 60	PUSH	33	Decreasing moisture				3.4						
								6.2						Lab Sample (32.5-35') for VOCs & TEA End of Boring
				EOB at 35' bgs. Blind drilled with HSA on 12/21/2016 and installed PZ-6 to appx. 35' bgs with 5' screen.										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature  Firm The Sigma Group, Inc. Tel: Fax:

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SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☒ Site Investigation

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Solenis - 5228 N. Hopkins		PZ-8

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Fisher Horizon Construction and Exploration	12/19/2016	12/21/2016	hollow stem auger

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
VR-532		PZ-8	Feet MSL	672.8 Feet MSL	8.3 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E Ⓢ/C/N
SW 1/4 of NW 1/4 of Section 36, T 8 N, R 21 E
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
241041900	Milwaukee	41	Milwaukee

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1 GP	60 / 24	PUSH	3	SILTY SANDY CLAY w/ GRAVEL, black, damp	CLS			NA						
2 GP	60 / 60	PUSH	6					31						
			9	CLAY, brown, damp-dry, stiff				23						
3 GP	60 / 60	PUSH	12					3.4						
				Increasing moisture, decreasing stiffness				7.4						Lab Sample (10-12.5') for VOCs & TEA
4 GP	60 / 60	PUSH	15					1.6						
			18					5.0						
								2.0						
5 GP	60 / 60	PUSH	21	Very wet	CL			9.2						Lab Sample (20-22.5') for VOCs & TEA
			24					1.5						
6 GP	60 / 60	PUSH	27	Soft				8.8						Lab Sample (22.5-25') for VOCs & TEA
								2.3						
7 GP	60 / 60	PUSH	30					2.4						
			33					3.2						
				EOB at 35' bgs. Blind drilled with HSA on 12/21/2016 and installed PZ-8 to appx. 35' bgs with 5' screen.										End of Boring

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Firm The Sigma Group, Inc. Tel: Fax:

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between $10 and $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 be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☒ Site Investigation

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Solenis - 5228 N. Hopkins		PZ-9

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Fisher Horizon Construction and Exploration	12/19/2016	12/21/2016	hollow stem auger

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
VR-530		PZ-9	Feet MSL	673.2 Feet MSL	8.3 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E Ⓢ/C/N
SW 1/4 of NW 1/4 of Section 36, T 8 N, R 21 E
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
241041900	Milwaukee	41	Milwaukee

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1 GP	60 0	PUSH	3	NO RECOVERY				NA NA						
2 GP	60 60	PUSH	6	SILTY CLAY, black-brown, moist, soft-firm	CL-ML			13.9						Lab Sample (5-7.5') for VOCs & TEA
			9	CLAY, brown, firm, damp				4.8						
3 GP	60 60	PUSH	12					1.8						
4 GP	60 60	PUSH	15		CL			2.02 3.3						Lab Sample (12.5-15') for VOCs & TEA
			18	Increasing plasticity				1.31						
5 GP	60 60	PUSH	21	Plastic, moist-wet, gray				1.72						
			24					1.71						Lab Sample (22.5-25') for VOCs & TEA
6 GP	60 60	PUSH	27	CLAY, gray, saturated, very plastic				2.14						
7 GP	60 60	PUSH	30		CH			1.64 1.0+						
			33					1.0+						
				EOB at 35' bgs. Blind drilled with HSA on 12/21/2016 and installed PZ-9 to appx. 35' bgs with 5' screen.										End of Boring

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature [signature] Firm The Sigma Group, Inc. Tel: Fax:

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State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☒ Site Investigation

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Solenis - 5228 N. Hopkins		SB-11

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Fisher Horizon Construction and Exploration	12/19/2016	12/19/2016	Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	674.6 Feet MSL	2.3 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E Ⓢ/C/N
SW 1/4 of NW 1/4 of Section 36, T 8 N, R 21 E
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
241041900	Milwaukee	41	Milwaukee

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1 GP	60 / 22	PUSH	3	BASE COURSE, white, dry, loose				NA						
				SILTY CLAY w/ SAND FILL, black, damp, firm	CL-ML			2.06						
2 GP	60 / 60	PUSH	6	CLAY - SILTY CLAY, light brown, dry, stiff, lean				1.49						Lab Sample (5-7.5') for VOCs & TEA
			9					1.68						
3 GP	60 / 60	PUSH	12	Softer, firm				1.68						Lab Sample (10-12.5') for VOCs & TEA
				Increasing plasticity				1.97						
4 GP	60 / 60	PUSH	15	Medium plasticity	CL			2.01						
			18					2.69						
5 GP	60 / 60	PUSH	21	Grayish				1.45						
			24					1.28						
6 GP	60 / 60	PUSH	27	Saturated				2.60						Lab Sample (25-27.5') for VOCs & TEA
			30					2.85						
7 GP	60 / 60	PUSH	33	CLAY, grayish, saturated, very plastic	CH			1.89						
								1.35						
				EOB at 35' bgs. Abandoned with bentonite chips.										End of Boring

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Firm The Sigma Group, Inc. Tel: Fax:

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State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☒ Site Investigation

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Solenis - 5228 N. Hopkins		SB-12

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Fisher Horizon Construction and Exploration	12/19/2016	12/21/2016	hollow stem auger

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
VR-534		PZ-12	Feet MSL	673.4 Feet MSL	8.3 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E Ⓢ/C/N
SW 1/4 of NW 1/4 of Section 36, T 8 N, R 21 E
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
241041900	Milwaukee	41	Milwaukee

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1 GP	60 42	PUSH	3	SILTY SAND FILL w/ GRAVEL, black-brown, dry, loose, slag	SM			2.0						
				SILT - ORGANIC RICH SILT, black, moist, soft	OL			1.8						Lab Sample (2.5-5') for VOCs & TEA
2 GP	60 60	PUSH	6					1.7						
			9	CLAY, brown, dry, stiff				1.64						
3 GP	60 60	PUSH	12					1.88						
			15					1.6						Lab Sample (12.5-15') for VOCs & TEA
4 GP	60 60	PUSH		Increasing moisture and plasticity, gray				1.4						
			18					2.01						
5 GP	60 60	PUSH	21	Increasing plasticity	CL			2.03						
			24					2.33						
6 GP	60 60	PUSH	27					1.87						
								2.03						Lab Sample (27.5-30') for VOCs & TEA
7 GP	60 60	PUSH	30	Increasing plasticity				2.44						
			33	Decreasing plasticity				1.98						
				EOB at 35' bgs. Blind drilled with HSA on 12/21/2016 and installed PZ-12 to appx. 35' bgs with 5' screen.										End of Boring

I hereby certify that the information on this form is true and correct to the best of my knowledge

Signature [signature] Firm The Sigma Group, Inc. Tel: Fax:

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State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☒ Site Investigation

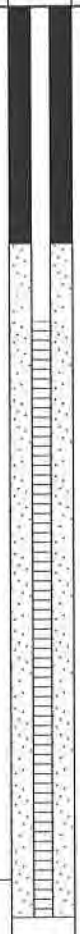
Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Solenis - 5228 N. Hopkins		MW-12

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dan Fisher Horizon Construction and Exploration	12/21/2016	12/21/2016	hollow stem auger

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
VR-533		MW-12	Feet MSL	673.6 Feet MSL	8.3 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E Ⓢ/C/N
SW 1/4 of NW 1/4 of Section 36, T 8 N, R 21 E
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
241041900	Milwaukee	41	Milwaukee

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			2 4 6 8 10 12 14 16 18 20 22	Blind drilled with HSA on 12/21/2016 and installed MW-12 to appx. 22' bgs with 15' screen. See SB-12 for soil lithology.										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature Firm The Sigma Group, Inc. Tel: Fax:

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State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT
Form 3300-5 2/2000

Notice: Please complete Form 3300-5 and return it to the appropriate DNR office and bureau. Completion of this report is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10 and $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. NOTE: See the instructions for more information.

Route to: ☐ Drinking Water ☐ Watershed/Wastewater ☒ Waste Management ☒ Remediation/Redevelopment ☒ Other Site Investigation

(1) GENERAL INFORMATION

WI Unique Well No. | DNR Well ID No. | County: Milwaukee

Common Well Name: SB-3 Gov't Lot (if applicable)

Grid Location: SW 1/4 of NW 1/4 of Sec. 36 ; T. 8 N; R 21 ☒ E ☐ W

_____ ft. ☐ N. ☐ S., _____ ft. ☐ E. ☐ W.

Local Grid Origin ☐ (estimated: ☐) or Well Location ☐

Lat ° ' " Long ° ' " or

State Plane _____ ft. N. _____ ft. E. ☒ S ☐ C ☐ N Zone

Reason For Abandonment: No Further Use | WI Unique Well No. of Replacement Well:

(2) FACILITY /OWNER INFORMATION

Facility Name: Solenis - 5228 N. Hopkins

Facility ID: 241041900 | License/Permit/Monitoring No.:

Street Address of Well: 5228 N. Hopkins Street

City, Village, or Town: Milwaukee

Present Well Owner: Solenis, LLC | Original Owner: Solenis, LLC

Street Address or Route of Owner: 5228 N. Hopkins Street

City, State, Zip Code: Milwaukee, WI 53209

(3) WELL/DRILLHOLE/BOREHOLE INFORMATION

Original Construction Date: _____

☐ Monitoring Well
☐ Water Well
☒ Drillhole / Borehole

If a Well Construction Report is available, please attach.

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (Specify) _____

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft) (From ground surface): _____ Casing Diameter (in.): _____

Casing Depth (ft.): _____

Lower Drillhole Diameter (in.): 2.3

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 & Piping Removed?	☐ Yes	☐ No	☒ Not Applicable
Liner(s) Removed?	☐ Yes	☐ No	☒ Not Applicable
Screen Removed?	☐ Yes	☐ No	☒ Not Applicable
Casing Left in Place?	☐ Yes	☒ No	
Was Casing Cut Off Below Surface?	☐ Yes	☒ No	
Did Sealing Material Rise to Surface?	☒ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☒ No	
If Yes, Was Hole Retopped?	☐ Yes	☒ No	

Required Method of Placing Sealing Material
☐ Conductor Pipe - Gravity ☐ Conductor Pipe - Pumped
☒ Screened & Poured ☐ Other (Explain)
(Bentonite Chips)

Sealing Materials
☐ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry
☐ Bentonite-Sand Slurry
☒ Chipped Bentonite

For monitoring wells and monitoring well boreholes only
☐ Bentonite Chips
☐ Granular Bentonite
☐ Bentonite-Cement Grout
☐ Bentonite - Sand Slurry

(5) Sealing Material Used	From (Ft.)	To (Ft.)		Mix Ratio or Mud Weight
3/8" Bentonite Chips	Surface	15.0		

(6) Comments: _____

(7) Name of Person or Firm Doing Sealing Work: The Sigma Group, Inc. | Date of Abandonment: 10/4/16

Signature of Person Doing Work: [signature] | Date Signed: 10/4/16

Street or Route: 1300 W. Canal Street | Telephone Number: 414-643-4200

City, State, Zip Code: Milwaukee, WI 53233

FOR DNR OR COUNTY USE ONLY

Date Received | Noted By

Comments

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT
Form 3300-5 2/2000

Notice: Please complete Form 3300-5 and return it to the appropriate DNR office and bureau. Completion of this report is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10 and $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. NOTE: See the instructions for more information.

Route to: ☐ Drinking Water ☐ Watershed/Wastewater ☒ Waste Management ☒ Remediation/Redevelopment ☒ Other Site Investigation

(1) GENERAL INFORMATION

WI Unique Well No.	DNR Well ID No.	County
		Milwaukee

Common Well Name SB-4 Gov't Lot (if applicable)

Grid Location SW 1/4 of NW 1/4 of Sec. 36 ; T. 8 N; R. 21 ☒ E ☐ W

ft. ☐ N. ☐ S., ft ☐ E. ☐ W.

Local Grid Origin ☐ (estimated: ☐) or Well Location ☐

Lat ° ' " Long ° ' " or

State Plane ft. N. ft. E. S ☒ C ☐ N ☐ Zone

Reason For Abandonment	WI Unique Well No. of Replacement Well
No Further Use	

(2) FACILITY /OWNER INFORMATION

Facility Name: Solenis - 5228 N. Hopkins

Facility ID	License/Permit/Monitoring No.
241041900	

Street Address of Well: 5228 N. Hopkins Street

City, Village, or Town: Milwaukee

Present Well Owner	Original Owner
Solenis, LLC	Solenis, LLC

Street Address or Route of Owner: 5228 N. Hopkins Street

City, State, Zip Code: Milwaukee, WI 53209

(3) WELL/DRILLHOLE/BOREHOLE INFORMATION

Original Construction Date

☐ Monitoring Well
☐ Water Well
☒ Drillhole / Borehole

If a Well Construction Report is available, please attach.

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (Specify)

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft) (From ground surface)

Casing Diameter (in.)

Casing Depth (ft.)

Lower Drillhole Diameter (in.) 2.3

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 & Piping Removed?	☐ Yes	☐ No	☒ Not Applicable
Liner(s) Removed?	☐ Yes	☐ No	☒ Not Applicable
Screen Removed?	☐ Yes	☐ No	☒ Not Applicable
Casing Left in Place?	☐ Yes	☒ No	
Was Casing Cut Off Below Surface?	☐ Yes	☒ No	
Did Sealing Material Rise to Surface?	☒ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☒ No	
If Yes, Was Hole Retopped?	☐ Yes	☒ No	

Required Method of Placing Sealing Material
☐ Conductor Pipe - Gravity ☐ Conductor Pipe - Pumped
☒ Screened & Poured ☐ Other (Explain)
(Bentonite Chips)

Sealing Materials
☐ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry
☐ Bentonite-Sand Slurry
☒ Chipped Bentonite

For monitoring wells and monitoring well boreholes only
☐ Bentonite Chips
☐ Granular Bentonite
☐ Bentonite-Cement Grout
☐ Bentonite - Sand Slurry

(5) Sealing Material Used	From (Ft.)	To (Ft.)		Mix Ratio or Mud Weight
3/8" Bentonite Chips	Surface	15.0		

(6) Comments

(7) Name of Person or Firm Doing Sealing Work: The Sigma Group, Inc.

Date of Abandonment: 10/4/16

Signature of Person Doing Work

Date Signed: 10/4/16

Street or Route: 1300 W. Canal Street

Telephone Number: 414-643-4200

City, State, Zip Code: Milwaukee, WI 53233

FOR DNR OR COUNTY USE ONLY

Date Received	Noted By

Comments

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT
Form 3300-5 2/2000 Page 1 of 2

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Route to: ☐ Drinking Water ☐ Watershed/Wastewater ☒ Waste Management ☒ Remediation/Redevelopment ☒ Other Site Investigation

(1) GENERAL INFORMATION

WI Unique Well No.	DNR Well ID No.	County
		Milwaukee

Common Well Name SB-5 Gov't Lot (if applicable)

Grid Location SW 1/4 of NW 1/4 of Sec. 36 ; T. 8 N; R. 21 ☒ E ☐ W

_____ ft. ☐ N. ☐ S., _____ ft. ☐ E. ☐ W.

Local Grid Origin ☐ (estimated: ☐) or Well Location ☐

Lat ° ' " Long ° ' " or

State Plane _____ ft. N. _____ ft. E. ☒ S ☐ C ☐ N Zone

Reason For Abandonment	WI Unique Well No. of Replacement Well
No Further Use	

(2) FACILITY/OWNER INFORMATION

Facility Name: Solenis - 5228 N. Hopkins

Facility ID	License/Permit/Monitoring No.
241041900	

Street Address of Well: 5228 N. Hopkins Street

City, Village, or Town: Milwaukee

Present Well Owner	Original Owner
Solenis, LLC	Solenis, LLC

Street Address or Route of Owner: 5228 N. Hopkins Street

City, State, Zip Code: Milwaukee, WI 53209

(3) WELL/DRILLHOLE/BOREHOLE INFORMATION

Original Construction Date _____

☐ Monitoring Well
☐ Water Well
☒ Drillhole / Borehole

If a Well Construction Report is available, please attach.

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (Specify) _____

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft) _____ (From ground surface) Casing Diameter (in.) _____

Casing Depth (ft.) _____

Lower Drillhole Diameter (in.) 2.3

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 & Piping Removed?	☐ Yes	☐ No	☒ Not Applicable
Liner(s) Removed?	☐ Yes	☐ No	☒ Not Applicable
Screen Removed?	☐ Yes	☐ No	☒ Not Applicable
Casing Left in Place?	☐ Yes	☒ No	
Was Casing Cut Off Below Surface?	☐ Yes	☒ No	
Did Sealing Material Rise to Surface?	☒ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☒ No	
If Yes, Was Hole Retopped?	☐ Yes	☒ No	

Required Method of Placing Sealing Material
☐ Conductor Pipe - Gravity ☐ Conductor Pipe - Pumped
☒ Screened & Poured ☐ Other (Explain)
(Bentonite Chips)

Sealing Materials
☐ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry
☐ Bentonite-Sand Slurry
☒ Chipped Bentonite

For monitoring wells and monitoring well boreholes only
☐ Bentonite Chips
☐ Granular Bentonite
☐ Bentonite-Cement Grout
☐ Bentonite - Sand Slurry

(5) Sealing Material Used	From (Ft.)	To (Ft.)		Mix Ratio or Mud Weight
Concrete	Surface	0.5		
3/8" Bentonite Chips	0.5	15.0		

(6) Comments _____

(7) Name of Person or Firm Doing Sealing Work	Date of Abandonment
The Sigma Group, Inc.	10/4/16
Signature of Person Doing Work	Date Signed
[signature]	10/4/16
Street or Route	Telephone Number
1300 W. Canal Street	414-643-4200
City, State, Zip Code	
Milwaukee, WI 53233	

FOR DNR OR COUNTY USE ONLY

Date Received	Noted By
Comments	

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT
Form 3300-5 2/2000

Notice: Please complete Form 3300-5 and return it to the appropriate DNR office and bureau. Completion of this report is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10 and $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. NOTE: See the instructions for more information.

Route to: ☐ Drinking Water ☐ Watershed/Wastewater ☒ Waste Management ☒ Remediation/Redevelopment ☒ Other Site Investigation

(1) GENERAL INFORMATION

WI Unique Well No. | DNR Well ID No. | County: Milwaukee

Common Well Name: SB-7 Gov't Lot (if applicable)

Grid Location: SW 1/4 of NW 1/4 of Sec. 36 ; T. 8 N; R. 21 ☒ E ☐ W

_____ ft. ☐ N. ☐ S., _____ ft. ☐ E. ☐ W.

Local Grid Origin ☐ (estimated: ☐) or Well Location ☐

Lat ° ' " Long ° ' "

State Plane _____ ft. N. _____ ft. E. ☒ S ☐ C ☐ N Zone

Reason For Abandonment: No Further Use

WI Unique Well No. of Replacement Well:

(2) FACILITY /OWNER INFORMATION

Facility Name: Solenis - 5228 N. Hopkins

Facility ID: 241041900 License/Permit/Monitoring No.:

Street Address of Well: 5228 N. Hopkins Street

City, Village, or Town: Milwaukee

Present Well Owner: Solenis, LLC Original Owner: Solenis, LLC

Street Address or Route of Owner: 5228 N. Hopkins Street

City, State, Zip Code: Milwaukee, WI 53209

(3) WELL/DRILLHOLE/BOREHOLE INFORMATION

Original Construction Date: _____

☐ Monitoring Well
☐ Water Well
☒ Drillhole / Borehole

If a Well Construction Report is available, please attach.

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (Specify) _____

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft) (From ground surface): _____ Casing Diameter (in.): _____

Casing Depth (ft.): _____

Lower Drillhole Diameter (in.): 2.3

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 & Piping Removed?	☐ Yes	☐ No	☒ Not Applicable
Liner(s) Removed?	☐ Yes	☐ No	☒ Not Applicable
Screen Removed?	☐ Yes	☐ No	☒ Not Applicable
Casing Left in Place?	☐ Yes	☒ No	
Was Casing Cut Off Below Surface?	☐ Yes	☒ No	
Did Sealing Material Rise to Surface?	☒ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☒ No	
If Yes, Was Hole Retopped?	☐ Yes	☒ No	

Required Method of Placing Sealing Material
☐ Conductor Pipe - Gravity ☐ Conductor Pipe - Pumped
☒ Screened & Poured ☐ Other (Explain)
(Bentonite Chips)

Sealing Materials
☐ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry
☐ Bentonite-Sand Slurry
☒ Chipped Bentonite

For monitoring wells and monitoring well boreholes only
☐ Bentonite Chips
☐ Granular Bentonite
☐ Bentonite-Cement Grout
☐ Bentonite - Sand Slurry

(5) Sealing Material Used	From (Ft.)	To (Ft.)		Mix Ratio or Mud Weight
3/8" Bentonite Chips	Surface	15.0		

(6) Comments: _____

(7) Name of Person or Firm Doing Sealing Work: The Sigma Group, Inc.

Date of Abandonment: 10/4/16

Signature of Person Doing Work: [signature]

Date Signed: 10/14/16

Street or Route: 1300 W. Canal Street

Telephone Number: 414-643-4200

City, State, Zip Code: Milwaukee, WI 53233

FOR DNR OR COUNTY USE ONLY

Date Received | Noted By

Comments

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT
Form 3300-5 2/2000 Page 1 of 2

Notice: Please complete Form 3300-5 and return it to the appropriate DNR office and bureau. Completion of this report is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10 and $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. NOTE: See the instructions for more information.

Route to: ☐ Drinking Water ☐ Watershed/Wastewater ☐ Waste Management ☒ Remediation/Redevelopment ☒ Other Site Investigation

(1) GENERAL INFORMATION

WI Unique Well No.	DNR Well ID No.	County
		Milwaukee

Common Well Name SB-11 ____ Gov't Lot (if applicable)

Grid Location: SW 1/4 of NW 1/4 of Sec. 36 ; T. 8 N; R. 21 ☒ E ☐ W

326612.481 ft. ☒ N. ☐ S., 591683.126 ft. ☒ E. ☐ W.

Local Grid Origin ☐ (estimated: ☐) or Well Location ☐

Lat ° ' " Long ° ' " or

State Plane ____ ft. N. ____ ft. E. ☒ S ☐ C ☐ N Zone

Reason For Abandonment	WI Unique Well No. of Replacement Well
No Further Use	

(2) FACILITY /OWNER INFORMATION

Facility Name: Solenis - 5228 N. Hopkins

Facility ID	License/Permit/Monitoring No.
241041900	

Street Address of Well: 5228 N. Hopkins Street

City, Village, or Town: Milwaukee

Present Well Owner	Original Owner
Solenis, LLC	Solenis, LLC

Street Address or Route of Owner: 5228 N. Hopkins Street

City, State, Zip Code: Milwaukee, WI 53209

(3) WELL/DRILLHOLE/BOREHOLE INFORMATION

Original Construction Date ____

☐ Monitoring Well
☐ Water Well
☒ Drillhole / Borehole

If a Well Construction Report is available, please attach.

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (Specify) ____

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft) (From ground surface) ____ Casing Diameter (in.) ____
Casing Depth (ft.) ____
Lower Drillhole Diameter (in.) 2.3
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 & Piping Removed?	☐ Yes	☐ No	☒ Not Applicable
Liner(s) Removed?	☐ Yes	☐ No	☒ Not Applicable
Screen Removed?	☐ Yes	☐ No	☒ Not Applicable
Casing Left in Place?	☐ Yes	☒ No	
Was Casing Cut Off Below Surface?	☐ Yes	☒ No	
Did Sealing Material Rise to Surface?	☒ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☒ No	
If Yes, Was Hole Retopped?	☐ Yes	☒ No	

Required Method of Placing Sealing Material
☐ Conductor Pipe - Gravity ☐ Conductor Pipe - Pumped
☒ Screened & Poured ☐ Other (Explain)
(Bentonite Chips)

Sealing Materials
☐ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry
☐ Bentonite-Sand Slurry
☒ Chipped Bentonite

For monitoring wells and monitoring well boreholes only
☐ Bentonite Chips
☐ Granular Bentonite
☐ Bentonite-Cement Grout
☐ Bentonite - Sand Slurry

(5) Sealing Material Used	From (Ft.)	To (Ft.)		Mix Ratio or Mud Weight
3/8" Bentonite Chips	Surface	35.0		

(6) Comments ____

(7) Name of Person or Firm Doing Sealing Work	Date of Abandonment
The Sigma Group, Inc.	12/19/16
Signature of Person Doing Work	Date Signed
	12/19/16
Street or Route	Telephone Number
1300 W. Canal Street	414-643-4200
City, State, Zip Code	
Milwaukee, WI 53233	

FOR DNR OR COUNTY USE ONLY

Date Received	Noted By

Comments

WELL CONSTRUCTOR'S REPORT TO WISCONSIN STATE BOARD OF HEALTH

1. County Milw. (Town / Village / City) Granville

2. Location 5341 - No. 42nd NW,SW,NW, Sec. 36 T8N R21E

3. Owner or Agent Lauton & Lauton

4. Address Milw.

5. Sewer ___ ft; drain ___ ft; septic tank ___ ft; disposal unit ___ ft; barnyard ___ ft; abandoned well ___ ft; other ___ ft. Explain on obverse side. Metropolitan

DRILLHOLE OR EXCAVATION

Dia. (in.)	From (ft.)	To (ft.)
10	0	40
6	40	112

CASING PIPE, LINER PIPE OR CURBING

Dia. (in.)	Kind	From (ft.)	To (ft.)
6	Steel Pipe	0	85

FORMATIONS

Kind	From (ft.)	To (ft.)
Red Clay	0	20
Blue "	20	60
Hard Pan	60	85
Limestone	85	112

No Pump by us

GROUT

Kind	From (ft.)	To (ft.)
Mud	0	40

Yield test: 5 Hrs. at 10 GPM.
To static water-level 40 ft.
Drawdown - - - - - - 45 ft.
Water sample was sent to the State Laboratory at Wauwatosa
Construction of the well was completed on 9/4/41 194___
The well is terminated 6 inches (above)(below) the permanent grade.
Was the well disinfected upon completion? - - - - Yes ✓ No ___
Was the well sealed watertight upon completion?- - Yes ✓ No ___
This report was prepared by or under the supervision of:

L L May
Registered Well Driller

Permit No. 159 Date 9/4 194 1

21,637 (over) (Back is Blank) p/o 1000

APPENDIX B

Monitoring Well Construction and Development Forms

State of Wisconsin
Department of Natural Resources

Route To: Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☒ Other ☒ Site Investigation

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Solenis - 5228 N. Hopkins	Local Grid Location of Well: ____ ft ☐ N. ☐ S. ____ ft ☐ E. ☐ W.	Well Name: MW-1
Facility License, Permit or Monitoring No.	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. ° ' " Long. ° ' " or St. Plane ____ ft. N, ____ ft. E. (S) C/N	Wis. Unique Well No.: VR511 / DNR Well Number:
Facility ID: 241041900		Date Well Installed: 10/06/2016
Type of Well: Well Code 11/mw	Section Location of Waste/Source: SW 1/4 of NW 1/4 of Sec. 36, T. 8 N, R. 21 ☒ E ☐ W	Well Installed By: (Person's Name and Firm): Dan Fisher; Horizon Construction and Exploration
Distance from Waste/Source ____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Gov. Lot Number

A. Protective pipe, top elevation 676.00 ft. MSL

B. Well casing, top elevation 675.76 ft. MSL

C. Land surface elevation 673.0 ft. MSL

D. Surface seal, bottom 667.0 ft. MSL or 6.0 ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☐ ML ☒ MH ☒ CL ☒ CH ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ☒ No

14. Drilling method used: Rotary ☐ 50 / Hollow Stem Auger ☒ 41 / ____ Other ☐ __

15. Drilling fluid used: Water ☐ 02 Air ☐ 01 Drilling Mud ☐ 03 None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No

Describe ____

17. Source of water (attach analysis, if required):

E. Bentonite seal, top 673.0 ft MSL or 0.0 ft.

F. Fine sand, top 667.0 ft. MSL or 6.0 ft.

G. Filter pack, top 666.0 ft. MSL or 7.0 ft.

H. Screen joint, top 664.7 ft. MSL or 8.3 ft.

I. Well bottom 649.7 ft. MSL or 23.3 ft.

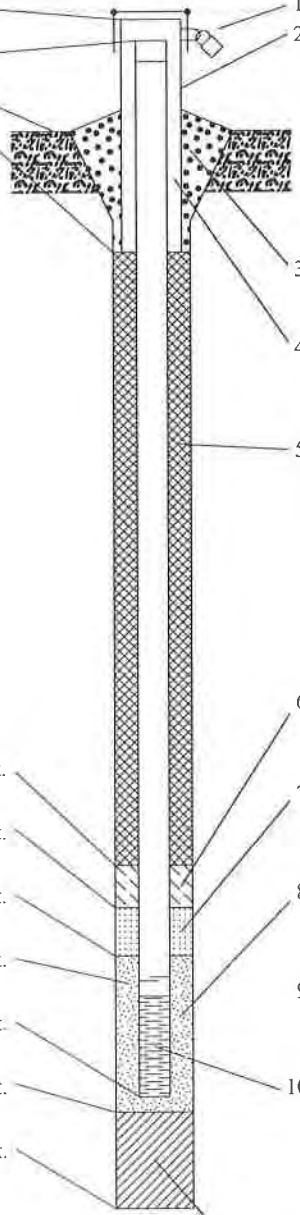
J. Filter pack, bottom 649.7 ft MSL or 23.3 ft.

K. Borehole, bottom 649.7 ft. MSL or 23.3 ft.

L. Borehole, diameter 6.3 in.

M. O.D. well casing 2.25 in.

N. I.D. well casing 2.00 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 4.0 in.
b. Length: 3.0 ft.
c. Material: Steel ☒ 04 / ____ Other ☐ __
d. Additional protection? ☐ Yes ☒ No
If yes, describe: ____

3. Surface seal: Bentonite ☒ 30 / Concrete ☐ 01 / ____ Other ☐ __

4. Material between well casing and protective pipe: Bentonite ☒ 30 / Sand Other ☐ __

5. Annular space seal: a. Granular/Chipped Bentonite ☒ 33
b. ____ Lbs/gal mud weight . . Bentonite-sand slurry ☐ 35
c. ____ Lbs/gal mud weight . . . Bentonite slurry ☐ 31
d. ____ % Bentonite . . . Bentonite-cement grout ☐ 50
e. ____ Ft^3 volume added for any of the above
f. How installed: Tremie ☐ 01 / Tremie pumped ☐ 02 / Gravity ☒ 08

6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite chips ☒ 32
c. ____ Other ☐ __

7. Fine sand material: Manufacturer, product name & mesh size
a. ____
b. Volume added ____ ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. ____
b. Volume added ____ ft^3

9. Well casing: Flush threaded PVC schedule 40 ☒ 23 / Flush threaded PVC schedule 80 ☐ 24 / ____ Other ☐ __

10. Screen material: 2" PVC, Schedule 40
a. Screen Type: Factory cut ☒ 11 / Continuous slot ☐ 01 / ____ Other ☐ __
b. Manufacturer ____
c. Slot size: 0.010 in.
d. Slotted length: 15.0 ft.

11. Backfill material (below filter pack): None ☒ 14 / ____ Other ☐ __

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: [signature] Firm: The Sigma Group, Inc., 1300 W Canal Street Milwaukee, WI 53233 Tel: 414.643.4200 Fax: 414.643.4210

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis Stats , and ch NR 141, Wis Adm Code In accordance with chs 281, 289, 291, 292, 293, 295, and 299, Wis Stats , failure to file these forms may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved Personally identifiable information on these forms is not intended to be used for any other purpose NOTE: See the instructions for more information, including where the completed forms should be sent

State of Wisconsin
Department of Natural Resources

Route To: Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☒ Other ☒ Site Investigation

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Solenis - 5228 N. Hopkins	Local Grid Location of Well: ☐ N. ☐ S. ft. ☐ E. ☐ W. ft.	Well Name: MW-2
Facility License, Permit or Monitoring No.	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. ° ' " Long. ° ' " or St. Plane ft. N, ft. E. Ⓢ/C/N	Wis. Unique Well No.: VR512 / DNR Well Number:
Facility ID: 241041900		Date Well Installed: 10/06/2016
Type of Well: Well Code 11/mw	Section Location of Waste/Source: SW 1/4 of NW 1/4 of Sec. 36, T. 8 N, R. 21 ☒ E ☐ W	Well Installed By: (Person's Name and Firm): Dan Fisher, Horizon Construction and Exploration
Distance from Waste/Source ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Gov. Lot Number

A. Protective pipe, top elevation 676.25 ft. MSL

B. Well casing, top elevation 675.81 ft. MSL

C. Land surface elevation 673.0 ft. MSL

D. Surface seal, bottom 667.0 ft. MSL or 6.0 ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☐ ML ☒ MH ☒ CL ☒ CH ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ☒ No

14. Drilling method used: Rotary ☐ 5 0 / Hollow Stem Auger ☒ 4 1 / Other ☐ __

15. Drilling fluid used: Water ☐ 0 2 Air ☐ 0 1 Drilling Mud ☐ 0 3 None ☒ 9 9

16. Drilling additives used? ☐ Yes ☒ No

Describe

17. Source of water (attach analysis, if required):

E. Bentonite seal, top 673.0 ft. MSL or 0.0 ft.

F. Fine sand, top 667.0 ft. MSL or 6.0 ft.

G. Filter pack, top 666.0 ft. MSL or 7.0 ft.

H. Screen joint, top 664.7 ft. MSL or 8.3 ft.

I. Well bottom 649.7 ft. MSL or 23.3 ft.

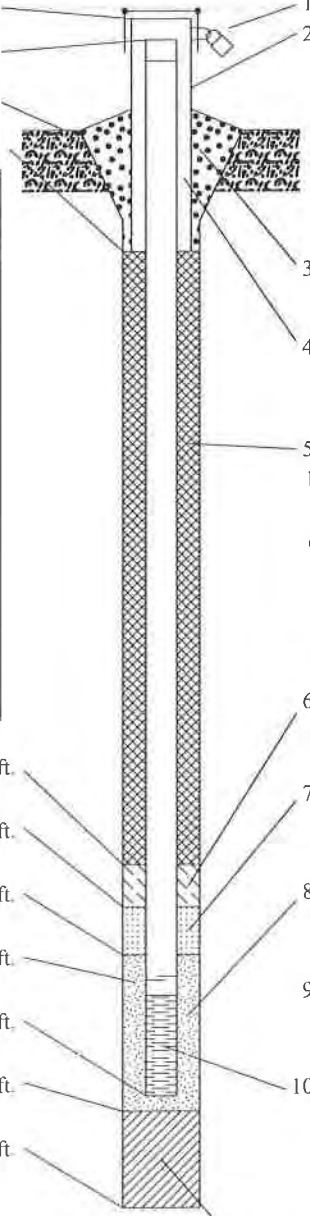
J. Filter pack, bottom 649.7 ft. MSL or 23.3 ft.

K. Borehole, bottom 649.7 ft. MSL or 23.3 ft.

L. Borehole, diameter 6.3 in.

M. O.D. well casing 2.25 in.

N. I.D. well casing 2.00 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 4.0 in.
b. Length: 3.0 ft.
c. Material: Steel ☒ 0 4 / Other ☐
d. Additional protection? ☐ Yes ☒ No
If yes, describe:

3. Surface seal: Bentonite ☒ 3 0 / Concrete ☐ 0 1 / Other ☐

4. Material between well casing and protective pipe: Bentonite ☒ 3 0 / Sand / Other ☐

5. Annular space seal: a. Granular/Chipped Bentonite ☒ 3 3
b. _____Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 3 5
c. _____Lbs/gal mud weight . . . Bentonite slurry ☐ 3 1
d. _____% Bentonite . . . Bentonite-cement grout ☐ 5 0
e. _____Ft^3 volume added for any of the above
f. How installed: Tremie ☐ 0 1 / Tremie pumped ☐ 0 2 / Gravity ☒ 0 8

6. Bentonite seal: a. Bentonite granules ☐ 3 3
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite chips ☒ 3 2
c. Other ☐

7. Fine sand material: Manufacturer, product name & mesh size
a.
b. Volume added ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a.
b. Volume added ft^3

9. Well casing: Flush threaded PVC schedule 40 ☒ 2 3 / Flush threaded PVC schedule 80 ☐ 2 4 / Other ☐

10. Screen material: 2" PVC, Schedule 40
a. Screen Type: Factory cut ☒ 1 1 / Continuous slot ☐ 0 1 / Other ☐
b. Manufacturer
c. Slot size: 0.010 in.
d. Slotted length: 15.0 ft.

11. Backfill material (below filter pack): None ☒ 1 4 / Other ☐

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature

Firm: The Sigma Group, Inc.
1300 W Canal Street Milwaukee, WI 53233
Tel: 414.643.4200
Fax: 414.643.4210

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

Route To: Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☒ Other ☒ Site Investigation

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Solenis - 5228 N. Hopkins	Local Grid Location of Well: ____ ft. ☐ N. ☐ S, ____ ft. ☐ E. ☐ W.	Well Name: MW-6
Facility License, Permit or Monitoring No.	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. ° ' " Long. ° ' " or	Wis. Unique Well No.: VR510 / DNR Well Number:
Facility ID: 241041900	St. Plane ____ ft. N, ____ ft. E. Ⓢ/C/N	Date Well Installed: 10/05/2016
Type of Well: Well Code 11/mw	Section Location of Waste/Source: SW 1/4 of NW 1/4 of Sec. 36, T. 8 N, R. 21 ☒ E ☐ W	Well Installed By: (Person's Name and Firm): Dan Fisher / Horizon Construction and Exploration
Distance from Waste/Source ____ ft. / Enf. Stds Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Gov. Lot Number:

A. Protective pipe, top elevation 673.75 ft. MSL
B. Well casing, top elevation 673.44 ft. MSL
C. Land surface elevation 673.8 ft. MSL
D. Surface seal, bottom 672.8 ft. MSL or 1.0 ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☐ ML ☒ MH ☒ CL ☒ CH ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ☒ No

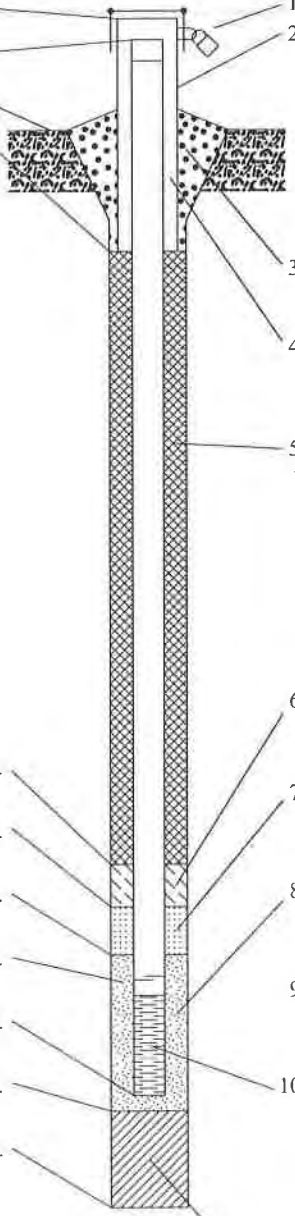
14. Drilling method used: Rotary ☐ 50 / Hollow Stem Auger ☒ 41 / Other ☐ __

15. Drilling fluid used: Water ☐ 02 Air ☐ 01 Drilling Mud ☐ 03 None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No
Describe ____

17. Source of water (attach analysis, if required):

E. Bentonite seal, top 672.8 ft. MSL or 1.0 ft.
F. Fine sand, top 663.8 ft. MSL or 10.0 ft.
G. Filter pack, top 662.8 ft. MSL or 11.0 ft.
H. Screen joint, top 662.1 ft. MSL or 11.7 ft.
I. Well bottom 652.1 ft. MSL or 21.7 ft.
J. Filter pack, bottom 652.1 ft. MSL or 21.7 ft.
K. Borehole, bottom 652.1 ft. MSL or 21.7 ft.
L. Borehole, diameter 6.3 in.
M. O.D. well casing 2.25 in.
N. I.D. well casing 2.00 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe
a. Inside diameter: 8.0 in.
b. Length: 1.0 ft.
c. Material: Steel ☒ 04 / ____ Other ☐ __
d. Additional protection? ☐ Yes ☒ No
If yes, describe: ____
3. Surface seal: Bentonite ☐ 30 / Concrete ☒ 01 / Bentonite ____ Other ☐ __
4. Material between well casing and protective pipe: Bentonite ☒ 30 / Sand ____ Other ☐ __
5. Annular space seal: a. Granular/Chipped Bentonite ☒ 33
b. ____Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 35
c. ____Lbs/gal mud weight . . . Bentonite slurry ☐ 31
d. ____% Bentonite . . . Bentonite-cement grout ☐ 50
e. ____Ft³ volume added for any of the above
f. How installed: Tremie ☐ 01 / Tremie pumped ☐ 02 / Gravity ☒ 08
6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite chips ☒ 32
c. ____ Other ☐ __
7. Fine sand material: Manufacturer, product name & mesh size
a. ____
b. Volume added ____ ft³
8. Filter pack material: Manufacturer, product name & mesh size
a. ____
b. Volume added ____ ft³
9. Well casing: Flush threaded PVC schedule 40 ☒ 23 / Flush threaded PVC schedule 80 ☐ 24 / ____ Other ☐ __
10. Screen material: 2" PVC, Schedule 40
a. Screen Type: Factory cut ☒ 11 / Continuous slot ☐ 01 / ____ Other ☐ __
b. Manufacturer ____
c. Slot size: 0.010 in.
d. Slotted length: 15.0 ft.
11. Backfill material (below filter pack): None ☒ 14 / ____ Other ☐ __

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: [signature] Firm: The Sigma Group, Inc. 1300 W Canal Street Milwaukee, WI 53233 Tel: 414.643.4200 Fax: 414.643.4210

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☒ Site Investigation

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 7-98

Facility/Project Name: Solenis - 5228 N. Hopkins	Local Grid Location of Well: ____ ft. ☐ N ☐ S, ____ ft. ☐ E. ☐ W	Well Name: MW-8
Facility License, Permit or Monitoring No.	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. ° ' " Long. ° ' " or	Wis. Unique Well No.: VR579 / DNR Well Number:
Facility ID: 241041900	St. Plane ____ ft. N, ____ ft. E. Ⓢ/C/N	Date Well Installed: 10/05/2016
Type of Well: Well Code 11/mw	Section Location of Waste/Source: SW 1/4 of NW 1/4 of Sec 36, T 8 N, R 21 ☒ E ☐ W	Well Installed By: (Person's Name and Firm): Dan Fisher / Horizon Construction and Exploration
Distance from Waste/Source ____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Gov. Lot Number:

A. Protective pipe, top elevation 672.82 ft. MSL
B. Well casing, top elevation 672.46 ft. MSL
C. Land surface elevation 672.8 ft. MSL
D. Surface seal, bottom 671.8 ft. MSL or 1.0 ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☐ ML ☒ MH ☒ CL ☒ CH ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ☒ No

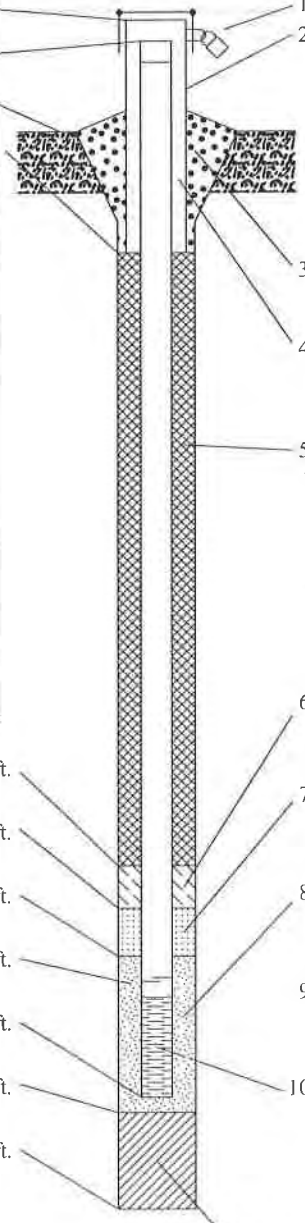
14. Drilling method used: Rotary ☐ 50 / Hollow Stem Auger ☒ 41 / ____ Other ☐ __

15. Drilling fluid used: Water ☐ 02 Air ☐ 01 Drilling Mud ☐ 03 None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No
Describe ____

17. Source of water (attach analysis, if required):
____

E. Bentonite seal, top 671.8 ft. MSL or 1.0 ft.
F. Fine sand, top 662.8 ft. MSL or 10.0 ft.
G. Filter pack, top 661.8 ft. MSL or 11.0 ft.
H. Screen joint, top 661.2 ft. MSL or 11.6 ft.
I. Well bottom 651.2 ft. MSL or 21.6 ft.
J. Filter pack, bottom 651.2 ft. MSL or 21.6 ft.
K. Borehole, bottom 651.2 ft. MSL or 21.6 ft.
L. Borehole, diameter 6.3 in.
M. O.D. well casing 2.25 in.
N. I.D. well casing 2.00 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 8.0 in.
b. Length: 1.0 ft.
c. Material: Steel ☒ 04 / ____ Other ☐ __
d. Additional protection? ☐ Yes ☒ No
If yes, describe: ____
3. Surface seal: Bentonite ☐ 30 / Concrete ☒ 01 / Bentonite Other ☐ __
4. Material between well casing and protective pipe: Bentonite ☒ 30 / Sand Other ☐ __
5. Annular space seal: a. Granular/Chipped Bentonite ☒ 33
b. ____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 35
c. ____ Lbs/gal mud weight . . . Bentonite slurry ☐ 31
d. ____ % Bentonite . . . Bentonite-cement grout ☐ 50
e. ____ Ft^3 volume added for any of the above
f. How installed: Tremie ☐ 01 / Tremie pumped ☐ 02 / Gravity ☒ 08
6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐ 1/4 in. ☒ 3/8 in ☐ 1/2 in Bentonite chips ☒ 32
c ____ Other ☐ __
7. Fine sand material: Manufacturer, product name & mesh size
a ____ __
b. Volume added ____ ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a ____ __
b. Volume added ____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 23 / Flush threaded PVC schedule 80 ☐ 24 / ____ Other ☐ __
10. Screen material: 2" PVC, Schedule 40 __
a. Screen Type: Factory cut ☒ 11 / Continuous slot ☐ 01 / ____ Other ☐ __
b. Manufacturer ____
c. Slot size: 0.010 in.
d. Slotted length: 15.0 ft.
11. Backfill material (below filter pack): None ☒ 14 / ____ Other ☐ __

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: [signature] Firm: The Sigma Group, Inc. 1300 W Canal Street Milwaukee, WI 53233 Tel: 414.643.4200 Fax: 414.643.4210

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State of Wisconsin
Department of Natural Resources

Route To: Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☒ Other ☒ Site Investigation

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Solenis - 5228 N. Hopkins	Local Grid Location of Well: ☐ N. ☐ S. ft. ☐ E. ☐ W. ft.	Well Name: MW-9
Facility License, Permit or Monitoring No.	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. ° ' " Long ° ' " or	Wis. Unique Well No.: VR578 / DNR Well Number:
Facility ID: 241041900	St. Plane ft. N, ft. E. (S) C / N	Date Well Installed: 10/05/2016
Type of Well: Well Code 11/mw	Section Location of Waste/Source: SW 1/4 of NW 1/4 of Sec. 36, T. 8 N, R. 21 ☒ E ☐ W	Well Installed By: (Person's Name and Firm): Dan Fisher / Horizon Construction and Exploration
Distance from Waste/Source ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Gov. Lot Number

A. Protective pipe, top elevation 673.15 ft. MSL
B. Well casing, top elevation 672.77 ft. MSL
C. Land surface elevation 673.1 ft. MSL
D. Surface seal, bottom 672.1 ft. MSL or 1.0 ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☐ ML ☒ MH ☒ CL ☒ CH ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ☒ No

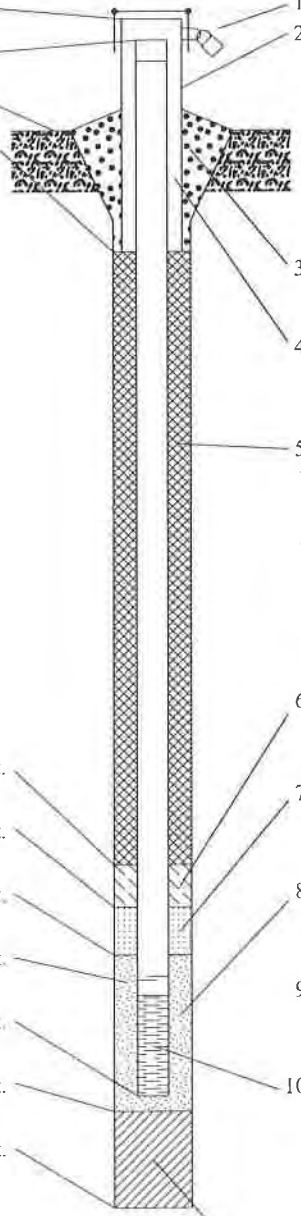
14. Drilling method used: Rotary ☐ 50 / Hollow Stem Auger ☒ 41 / Other ☐ ___

15. Drilling fluid used: Water ☐ 02 Air ☐ 01 Drilling Mud ☐ 03 None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No
Describe

17. Source of water (attach analysis, if required):

E. Bentonite seal, top 672.1 ft. MSL or 1.0 ft.
F. Fine sand, top 663.1 ft. MSL or 10.0 ft.
G. Filter pack, top 662.1 ft. MSL or 11.0 ft.
H. Screen joint, top 661.4 ft. MSL or 11.7 ft.
I. Well bottom 651.4 ft. MSL or 21.7 ft.
J. Filter pack, bottom 651.4 ft. MSL or 21.7 ft.
K. Borehole, bottom 651.4 ft. MSL or 21.7 ft.
L. Borehole, diameter 6.3 in.
M. O.D. well casing 2.25 in.
N. I.D. well casing 2.00 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 8.0 in
b. Length: 1.0 ft
c. Material: Steel ☒ 04 / Other ☐ ___
d. Additional protection? ☐ Yes ☒ No
If yes, describe:
3. Surface seal: Bentonite ☐ 30 / Concrete ☒ 01 / Other ☐ ___
Bentonite
4. Material between well casing and protective pipe: Bentonite ☒ 30 / Other ☐ ___
Sand
5. Annular space seal: a. Granular/Chipped Bentonite ☒ 33
b. _____Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 35
c. _____Lbs/gal mud weight . . . Bentonite slurry ☐ 31
d. _____% Bentonite . . . Bentonite-cement grout ☐ 50
e. _____Ft³ volume added for any of the above
f. How installed: Tremie ☐ 01 / Tremie pumped ☐ 02 / Gravity ☒ 08
6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite chips ☒ 32
c. Other ☐ ___
7. Fine sand material: Manufacturer, product name & mesh size
a.
b. Volume added ft³
8. Filter pack material: Manufacturer, product name & mesh size
a.
b. Volume added ft³
9. Well casing: Flush threaded PVC schedule 40 ☒ 23 / Flush threaded PVC schedule 80 ☐ 24 / Other ☐ ___
10. Screen material: 2" PVC, Schedule 40
a. Screen Type: Factory cut ☒ 11 / Continuous slot ☐ 01 / Other ☐ ___
b. Manufacturer
c. Slot size: 0.010 in.
d. Slotted length: 15.0 ft.
11. Backfill material (below filter pack): None ☒ 14 / Other ☐ ___

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: [signature] Firm: The Sigma Group, Inc. 1300 W Canal Street Milwaukee, WI 53233 Tel: 414.643.4200 Fax: 414.643.4210

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State of Wisconsin
Department of Natural Resources

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☒ Site Investigation

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Solenis - 5228 N. Hopkins	Local Grid Location of Well: ____ ft. ☐ N. ☐ S. ____ ft. ☐ E. ☐ W.	Well Name: MW-10
Facility License, Permit or Monitoring No.	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. ° ' " Long. ° ' " or	Wis. Unique Well No.: VR577 / DNR Well Number:
Facility ID: 241041900	St. Plane ____ ft. N, ____ ft. E. Ⓢ/C/N	Date Well Installed: 10/05/2016
Type of Well: Well Code 11/mw	Section Location of Waste/Source: SW 1/4 of NW 1/4 of Sec. 36, T. 8 N, R. 21 ☒ E ☐ W	Well Installed By: (Person's Name and Firm): Dan Fisher / Horizon Construction and Exploration
Distance from Waste/Source ____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Gov. Lot Number:

A. Protective pipe, top elevation 676.75 ft. MSL

B. Well casing, top elevation 676.37 ft. MSL

C. Land surface elevation 673.8 ft. MSL

D. Surface seal, bottom 663.8 ft. MSL or 10.0 ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☐ ML ☒ MH ☒ CL ☒ CH ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ☒ No

14. Drilling method used: Rotary ☐ 50
Hollow Stem Auger ☒ 41
____ Other ☐ __

15. Drilling fluid used: Water ☐ 02 Air ☐ 01
Drilling Mud ☐ 03 None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No
Describe ____

17 Source of water (attach analysis, if required):
____

E. Bentonite seal, top 673.8 ft. MSL or 0.0 ft.

F Fine sand, top 663.8 ft. MSL or 10.0 ft.

G. Filter pack, top 662.8 ft. MSL or 11.0 ft.

H Screen joint, top 662.2 ft. MSL or 11.6 ft.

I Well bottom 652.2 ft. MSL or 21.6 ft.

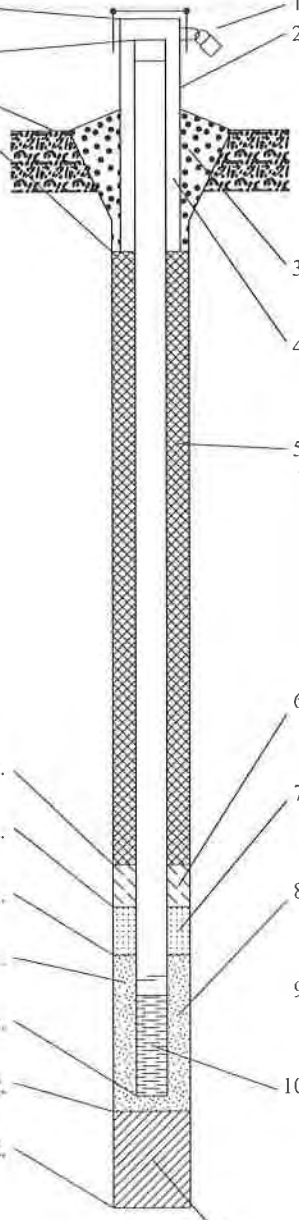
J Filter pack, bottom 652.2 ft. MSL or 21.6 ft.

K. Borehole, bottom 652.2 ft. MSL or 21.6 ft.

L. Borehole, diameter 6.3 in.

M. O.D well casing 2.25 in.

N. I.D. well casing 2.00 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 4.0 in.
b. Length: 3.0 ft.
c. Material: Steel ☒ 04
____ Other ☐ __
d. Additional protection? ☐ Yes ☒ No
If yes, describe: ____

3. Surface seal: Bentonite ☒ 30
Concrete ☐ 01
____ Other ☐ __

4. Material between well casing and protective pipe:
Bentonite ☒ 30
Sand Other ☐ __

5. Annular space seal: a. Granular/Chipped Bentonite ☒ 33
b. ____Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 35
c. ____Lbs/gal mud weight . . . Bentonite slurry ☐ 31
d. ____% Bentonite . . . Bentonite-cement grout ☐ 50
e. ____Ft^3 volume added for any of the above
f. How installed: Tremie ☐ 01
Tremie pumped ☐ 02
Gravity ☒ 08

6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite chips ☒ 32
c ____ Other ☐ __

7. Fine sand material: Manufacturer, product name & mesh size
a. ____ __
b. Volume added ____ ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. ____ __
b. Volume added ____ ft^3

9. Well casing: Flush threaded PVC schedule 40 ☒ 23
Flush threaded PVC schedule 80 ☐ 24
____ Other ☐ __

10. Screen material: 2" PVC, Schedule 40 __
a. Screen Type: Factory cut ☒ 11
Continuous slot ☐ 01
____ Other ☐ __
b. Manufacturer ____
c. Slot size: 0.010 in.
d. Slotted length: 15.0 ft.

11. Backfill material (below filter pack): None ☒ 14
____ Other ☐ __

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: [signature] Firm: The Sigma Group, Inc.
1300 W Canal Street Milwaukee, WI 53233
Tel: 414.643.4200
Fax: 414.643.4210

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State of Wisconsin
Department of Natural Resources

Route To: Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☒ Other ☒ Site Investigation

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 7-98

Facility/Project Name: Solenis - 5228 N. Hopkins	Local Grid Location of Well: ☐ N, ft. ☐ S, ft. ☐ E. ☐ W.	Well Name: PZ-6
Facility License, Permit or Monitoring No.	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. ° ' " Long. ° ' " or	Wis. Unique Well No.: VR-535 / DNR Well Number:
Facility ID: 241041900	St. Plane ft. N, ft. E. (S) C / N	Date Well Installed: 12/21/2016
Type of Well: Well Code 12/pz	Section Location of Waste/Source: SW 1/4 of NW 1/4 of Sec. 36, T. 8 N, R. 21 ☒ E ☐ W	Well Installed By: (Person's Name and Firm): Dan Fisher / Horizon
Distance from Waste/Source ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☑ Sidegradient d ☐ Downgradient n ☐ Not Known	Gov. Lot Number

A. Protective pipe, top elevation 673.73 ft. MSL
B. Well casing, top elevation 673.45 ft. MSL
C. Land surface elevation 673.7 ft. MSL
D. Surface seal, bottom 645.7 ft. MSL or 28.0 ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☐ ML ☒ MH ☐ CL ☒ CH ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ☒ No

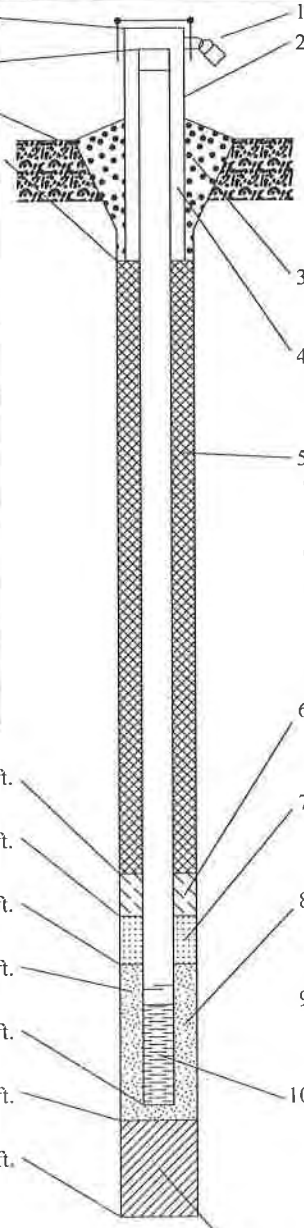
14. Drilling method used: Rotary ☐ 5 0 / Hollow Stem Auger ☒ 4 1 / _____ Other ☐ _ _

15. Drilling fluid used: Water ☐ 0 2 Air ☐ 0 1 Drilling Mud ☐ 0 3 None ☒ 9 9

16. Drilling additives used? ☐ Yes ☒ No
Describe _____

17. Source of water (attach analysis, if required):

E. Bentonite seal, top 673.2 ft. MSL or 0.5 ft.
F. Fine sand, top ft. MSL or ft.
G. Filter pack, top 645.7 ft. MSL or 28.0 ft.
H. Screen joint, top 643.4 ft. MSL or 30.3 ft.
I. Well bottom 638.4 ft. MSL or 35.3 ft.
J. Filter pack, bottom 638.4 ft. MSL or 35.3 ft.
K. Borehole, bottom 638.7 ft. MSL or 35.0 ft.
L. Borehole, diameter 8.3 in.
M. O.D. well casing 2.25 in.
N. I.D. well casing 2.00 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 8.0 in.
b. Length: 1.0 ft.
c. Material: Steel ☒ 0 4 / _____ Other ☐ _ _
d. Additional protection? ☐ Yes ☒ No
If yes, describe: _____
3. Surface seal: Bentonite ☐ 3 0 / Concrete ☒ 0 1 / Bentonite Other ☐ _ _
4. Material between well casing and protective pipe: Bentonite ☒ 3 0 / Sand/Bentonite Other ☐ _ _
5. Annular space seal: a. Granular/Chipped Bentonite ☒ 3 3
b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 3 5
c. _____ Lbs/gal mud weight . . . Bentonite slurry ☐ 3 1
d. _____ % Bentonite . . . Bentonite-cement grout ☐ 5 0
e. _____ Ft^3 volume added for any of the above
f. How installed: Tremie ☐ 0 1 / Tremie pumped ☐ 0 2 / Gravity ☒ 0 8
6. Bentonite seal: a. Bentonite granules ☐ 3 3
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite chips ☒ 3 2
c. _____ Other ☐ _ _
7. Fine sand material: Manufacturer, product name & mesh size
a. _____ _ _
b. Volume added _____ ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a. _____ _ _
b. Volume added _____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 2 3 / Flush threaded PVC schedule 80 ☐ 2 4 / _____ Other ☐ _ _
10. Screen material: 2" PVC, Schedule 40 _ _
a. Screen Type: Factory cut ☒ 1 1 / Continuous slot ☐ 0 1 / _____ Other ☐ _ _
b. Manufacturer _____
c. Slot size: 0.010 in.
d. Slotted length: 5.0 ft.
11. Backfill material (below filter pack): None ☒ 1 4 / _____ Other ☐ _ _

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature _____ Firm The Sigma Group, Inc. Tel: Fax:

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State of Wisconsin
Department of Natural Resources

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☒ Site Investigation

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Solenis - 5228 N. Hopkins	Local Grid Location of Well: ____ ft. ☐ N. ☐ S. ____ ft. ☐ E. ☐ W.	Well Name: PZ-8
Facility License, Permit or Monitoring No.	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. ° ' " Long. ° ' " or	Wis. Unique Well No.: VR-532 / DNR Well Number:
Facility ID: 241041900	St. Plane ____ ft. N, ____ ft. E. Ⓢ/C/N	Date Well Installed: 12/21/2016
Type of Well: Well Code 12/pz	Section Location of Waste/Source: SW 1/4 of NW 1/4 of Sec. 36, T. 8 N, R. 21 ☒ E ☐ W	Well Installed By: (Person's Name and Firm): Dan Fisher, Horizon
Distance from Waste/Source ____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☒ Downgradient n ☐ Not Known	Gov. Lot Number:

A. Protective pipe, top elevation 672.82 ft. MSL
B. Well casing, top elevation 672.08 ft. MSL
C. Land surface elevation 672.8 ft. MSL
D. Surface seal, bottom 644.8 ft. MSL or 28.0 ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☐ ML ☐ MH ☐ CL ☒ CH ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ☒ No

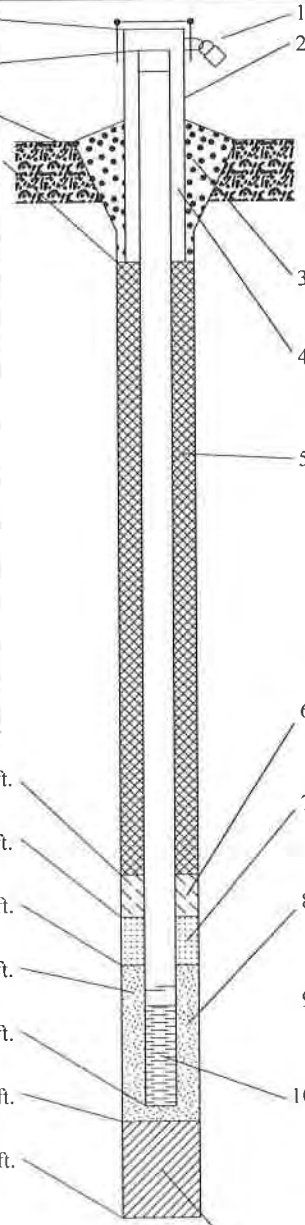
14. Drilling method used: Rotary ☐ 5 0
Hollow Stem Auger ☒ 4 1
____ Other ☐ __

15. Drilling fluid used: Water ☐ 0 2 Air ☐ 0 1
Drilling Mud ☐ 0 3 None ☒ 9 9

16. Drilling additives used? ☐ Yes ☒ No
Describe ____

17. Source of water (attach analysis, if required):
____

E. Bentonite seal, top 672.3 ft. MSL or 0.5 ft.
F. Fine sand, top ____ ft. MSL or ____ ft.
G. Filter pack, top 644.8 ft. MSL or 28.0 ft.
H. Screen joint, top 642.0 ft. MSL or 30.8 ft.
I. Well bottom 637.0 ft. MSL or 35.8 ft.
J. Filter pack, bottom 637.0 ft. MSL or 35.8 ft.
K. Borehole, bottom 637.8 ft. MSL or 35.0 ft.
L. Borehole, diameter 8.3 in.
M. O.D. well casing 2.25 in.
N. I.D. well casing 2.00 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 8.0 in.
b. Length: 1.0 ft.
c. Material: Steel ☒ 0 4
____ Other ☐ __
d. Additional protection? ☐ Yes ☒ No
If yes, describe: ____
3. Surface seal: Bentonite ☐ 3 0
Concrete ☒ 0 1
Bentonite Other ☐ __
4. Material between well casing and protective pipe:
Bentonite ☒ 3 0
Sand/Bentonite Other ☐ __
5. Annular space seal: a. Granular/Chipped Bentonite ☒ 3 3
b. ____Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 3 5
c. ____Lbs/gal mud weight . . . Bentonite slurry ☐ 3 1
d. ____% Bentonite . . . Bentonite-cement grout ☐ 5 0
e. ____ Ft^3 volume added for any of the above
f. How installed: Tremie ☐ 0 1
Tremie pumped ☐ 0 2
Gravity ☒ 0 8
6. Bentonite seal: a. Bentonite granules ☐ 3 3
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite chips ☒ 3 2
c. ____ Other ☐ __
7. Fine sand material: Manufacturer, product name & mesh size
a. ____ __
b. Volume added ____ ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a. ____ __
b. Volume added ____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 2 3
Flush threaded PVC schedule 80 ☐ 2 4
____ Other ☐ __
10. Screen material: 2" PVC, Schedule 40 __
a. Screen Type: Factory cut ☒ 1 1
Continuous slot ☐ 0 1
____ Other ☐ __
b. Manufacturer ____
c. Slot size: 0.010 in.
d. Slotted length: 5.0 ft.
11. Backfill material (below filter pack): None ☒ 1 4
____ Other ☐ __

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature ____ Firm The Sigma Group, Inc. Tel: Fax:

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis Stats., failure to file these forms may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

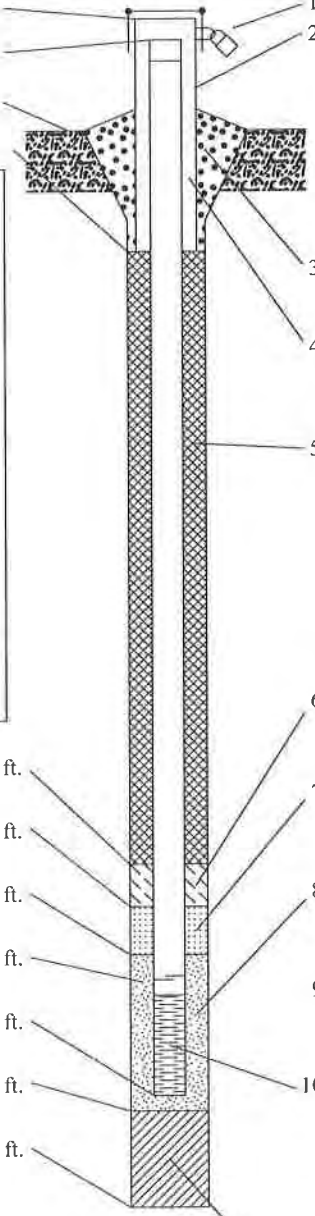
State of Wisconsin
Department of Natural Resources

Route To: Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☒ Other ☒ Site Investigation

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Solenis - 5228 N. Hopkins	Local Grid Location of Well: ☐ N. ft. ☐ S. ☐ E. ft. ☐ W.	Well Name: PZ-9
Facility License, Permit or Monitoring No.	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. ° ' " Long. ° ' " or St. Plane ft. N, ft. E. (S)/C/N	Wis. Unique Well No.: VR-530 / DNR Well Number:
Facility ID: 241041900		Date Well Installed: 12/21/2016
Type of Well: Well Code 12/pz	Section Location of Waste/Source: SW 1/4 of NW 1/4 of Sec. 36, T. 8 N, R. 21 ☒ E ☐ W	Well Installed By: (Person's Name and Firm): Dan Fisher / Horizon
Distance from Waste/Source ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☒ Sidegradient d ☐ Downgradient n ☐ Not Known	Gov. Lot Number



A. Protective pipe, top elevation 673.17 ft. MSL

B. Well casing, top elevation 672.68 ft. MSL

C. Land surface elevation 673.2 ft. MSL

D. Surface seal, bottom 645.2 ft. MSL or 28.0 ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☐ ML ☒ MH ☐ CL ☒ CH ☒
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ☒ No

14. Drilling method used: Rotary ☐ 5 0 / Hollow Stem Auger ☒ 4 1 / _____ Other ☐ _ _

15. Drilling fluid used: Water ☐ 0 2 Air ☐ 0 1 Drilling Mud ☐ 0 3 None ☒ 9 9

16. Drilling additives used? ☐ Yes ☒ No
Describe _____

17. Source of water (attach analysis, if required):

E. Bentonite seal, top 672.7 ft. MSL or 0.5 ft.

F. Fine sand, top _____ ft. MSL or _____ ft.

G. Filter pack, top 645.2 ft. MSL or 28.0 ft.

H. Screen joint, top 642.7 ft. MSL or 30.4 ft.

I. Well bottom 637.7 ft. MSL or 35.4 ft.

J. Filter pack, bottom 637.7 ft. MSL or 35.4 ft.

K. Borehole, bottom 638.2 ft. MSL or 35.0 ft.

L. Borehole, diameter 8.3 in.

M. O.D. well casing 2.25 in.

N. I.D. well casing 2.00 in.

1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 8.0 in.
b. Length: 1.0 ft.
c. Material: Steel ☒ 0 4 / _____ Other ☐ _ _
d. Additional protection? ☐ Yes ☒ No
If yes, describe: _____

3. Surface seal: Bentonite ☐ 3 0 / Concrete ☒ 0 1 / Bentonite / Other ☐ _ _

4. Material between well casing and protective pipe: Bentonite ☒ 3 0 / Sand/Bentonite / Other ☐ _ _

5. Annular space seal: a. Granular/Chipped Bentonite ☒ 3 3
b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 3 5
c. _____ Lbs/gal mud weight . . . Bentonite slurry ☐ 3 1
d. _____ % Bentonite . . . Bentonite-cement grout ☐ 5 0
e. _____ Ft^3 volume added for any of the above
f. How installed: Tremie ☐ 0 1 / Tremie pumped ☐ 0 2 / Gravity ☒ 0 8

6. Bentonite seal: a. Bentonite granules ☐ 3 3
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite chips ☒ 3 2
c. _____ Other ☐ _ _

7. Fine sand material: Manufacturer, product name & mesh size
a. _____ _ _
b. Volume added _____ ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. _____ _ _
b. Volume added _____ ft^3

9. Well casing: Flush threaded PVC schedule 40 ☒ 2 3 / Flush threaded PVC schedule 80 ☐ 2 4 / _____ Other ☐ _ _

10. Screen material: 2" PVC, Schedule 40 _ _
a. Screen Type: Factory cut ☒ 1 1 / Continuous slot ☐ 0 1 / _____ Other ☐ _ _
b. Manufacturer _____
c. Slot size: 0.010 in.
d. Slotted length: 5.0 ft.

11. Backfill material (below filter pack): None ☒ 1 4 / _____ Other ☐ _ _

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature _____ Firm The Sigma Group, Inc. Tel: Fax:

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats , and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

Route To: Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☒ Other ☒ Site Investigation

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Solenis - 5228 N. Hopkins	Local Grid Location of Well: ☐ N. ☐ S. ft. ☐ E. ☐ W. ft.	Well Name: PZ-12
Facility License, Permit or Monitoring No.	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. ° ' " Long. ° ' " or	Wis. Unique Well No.: VR-534 / DNR Well Number:
Facility ID: 241041900	St. Plane ft. N, ft. E. (S) C/N	Date Well Installed: 12/21/2016
Type of Well: Well Code 12/pz	Section Location of Waste/Source: SW 1/4 of NW 1/4 of Sec. 36, T. 8 N, R. 21 ☒ E ☐ W	Well Installed By: (Person's Name and Firm): Dan Fisher, Horizon
Distance from Waste/Source ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☒ Sidegradient d ☒ Downgradient n ☐ Not Known	Gov. Lot Number

A. Protective pipe, top elevation 673.44 ft. MSL
B. Well casing, top elevation 673.24 ft. MSL
C. Land surface elevation 673.4 ft. MSL
D. Surface seal, bottom 645.4 ft. MSL or 28.0 ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☒ SC ☐ ML ☐ MH ☐ CL ☒ CH ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ☒ No

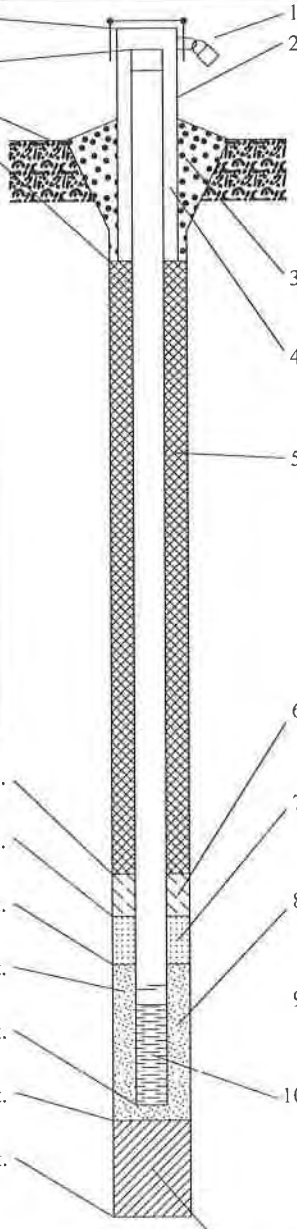
14. Drilling method used: Rotary ☐ 5 0; Hollow Stem Auger ☒ 4 1; Other ☐ _ _

15. Drilling fluid used: Water ☐ 0 2 Air ☐ 0 1 Drilling Mud ☐ 0 3 None ☒ 9 9

16. Drilling additives used? ☐ Yes ☒ No
Describe

17. Source of water (attach analysis, if required):

E. Bentonite seal, top 672.9 ft. MSL or 0.5 ft.
F. Fine sand, top ft. MSL or ft.
G. Filter pack, top 645.4 ft. MSL or 28.0 ft.
H. Screen joint, top 643.0 ft. MSL or 30.4 ft.
I. Well bottom 638.0 ft. MSL or 35.4 ft.
J. Filter pack, bottom 638.0 ft. MSL or 35.4 ft.
K. Borehole, bottom 638.4 ft. MSL or 35.0 ft.
L. Borehole, diameter 8.3 in.
M. O.D. well casing 2.25 in.
N. I.D. well casing 2.00 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 8.0 in.
b. Length: 1.0 ft.
c. Material: Steel ☒ 0 4; Other ☐ _ _
d. Additional protection? ☐ Yes ☒ No
If yes, describe:
3. Surface seal: Bentonite ☐ 3 0; Concrete ☒ 0 1; Bentonite; Other ☐ _ _
4. Material between well casing and protective pipe: Bentonite ☒ 3 0; Sand/Bentonite; Other ☐ _ _
5. Annular space seal: a. Granular/Chipped Bentonite ☒ 3 3
b. _____Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 3 5
c. _____Lbs/gal mud weight . . . Bentonite slurry ☐ 3 1
d. _____% Bentonite . . . Bentonite-cement grout ☐ 5 0
e. _____ Ft^3 volume added for any of the above
f. How installed: Tremie ☐ 0 1; Tremie pumped ☐ 0 2; Gravity ☒ 0 8
6. Bentonite seal: a. Bentonite granules ☐ 3 3
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite chips ☒ 3 2
c. Other ☐ _ _
7. Fine sand material: Manufacturer, product name & mesh size
a.
b. Volume added ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a.
b. Volume added ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 2 3; Flush threaded PVC schedule 80 ☐ 2 4; Other ☐ _ _
10. Screen material: 2" PVC, Schedule 40
a. Screen Type: Factory cut ☒ 1 1; Continuous slot ☐ 0 1; Other ☐ _ _
b. Manufacturer
c. Slot size: 0.010 in.
d. Slotted length: 5.0 ft.
11. Backfill material (below filter pack): None ☒ 1 4; Other ☐ _ _

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature | Firm: The Sigma Group, Inc. | Tel: | Fax:

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☒ Site Investigation

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 7-98

Facility/Project Name: Solenis - 5228 N. Hopkins	Local Grid Location of Well: ☐ N. ☐ S. ft. ☐ E. ☐ W. ft.	Well Name: MW-12
Facility License, Permit or Monitoring No.	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. ° ' " Long. ° ' " or	Wis. Unique Well No.: VR-533 / DNR Well Number:
Facility ID: 241041900	St. Plane ft. N, ft. E. (S)/C/N	Date Well Installed: 12/21/2016
Type of Well: Well Code 11/mw	Section Location of Waste/Source: SW 1/4 of NW 1/4 of Sec. 36, T. 8 N, R. 21 ☒ E ☐ W	Well Installed By: (Person's Name and Firm): Dan Fisher / Horizon
Distance from Waste/Source ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☒ Sidegradient d ☒ Downgradient n ☐ Not Known	Gov. Lot Number

A. Protective pipe, top elevation 673.61 ft. MSL
B. Well casing, top elevation 673.11 ft. MSL
C. Land surface elevation 673.6 ft. MSL
D. Surface seal, bottom 667.6 ft. MSL or 6.0 ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☒ SC ☐ ML ☐ MH ☐ CL ☒ CH ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ☒ No

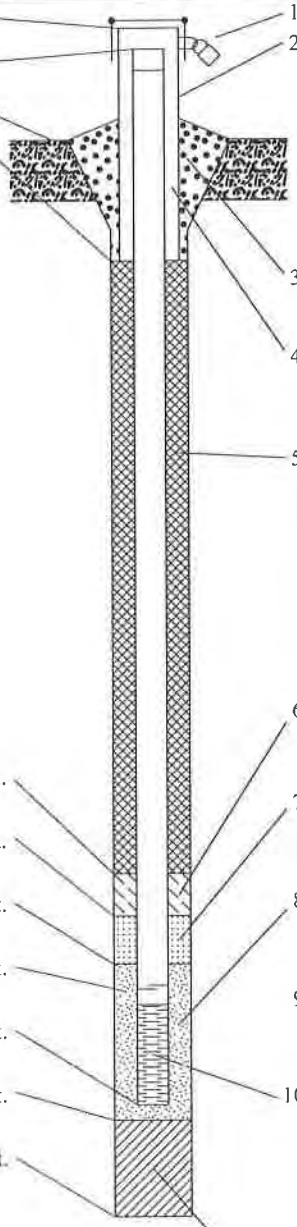
14. Drilling method used: Rotary ☐ 5 0 / Hollow Stem Auger ☒ 4 1 / Other ☐ _ _

15. Drilling fluid used: Water ☐ 0 2 Air ☐ 0 1 Drilling Mud ☐ 0 3 None ☒ 9 9

16. Drilling additives used? ☐ Yes ☒ No
Describe

17. Source of water (attach analysis, if required):

E. Bentonite seal, top 673.1 ft. MSL or 0.5 ft.
F. Fine sand, top ft. MSL or ft.
G. Filter pack, top 667.6 ft. MSL or 6.0 ft.
H. Screen joint, top 665.7 ft. MSL or 8.0 ft.
I. Well bottom 650.7 ft. MSL or 23.0 ft.
J. Filter pack, bottom 650.7 ft. MSL or 23.0 ft.
K. Borehole, bottom 651.6 ft. MSL or 22.0 ft.
L. Borehole, diameter 8.3 in.
M. O.D. well casing 2.25 in.
N. I.D. well casing 2.00 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 8.0 in.
b. Length: 1.0 ft.
c. Material: Steel ☒ 0 4 / Other ☐ _ _
d. Additional protection? ☐ Yes ☒ No
If yes, describe:
3. Surface seal: Bentonite ☐ 3 0 / Concrete ☒ 0 1 / Bentonite / Other ☐ _ _
4. Material between well casing and protective pipe: Bentonite ☒ 3 0 / Sand/Bentonite / Other ☐ _ _
5. Annular space seal: a. Granular/Chipped Bentonite ☒ 3 3
b. _____Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 3 5
c. _____Lbs/gal mud weight . . . Bentonite slurry ☐ 3 1
d. _____% Bentonite . . . Bentonite-cement grout ☐ 5 0
e. _____Ft^3 volume added for any of the above
f. How installed: Tremie ☐ 0 1 / Tremie pumped ☐ 0 2 / Gravity ☒ 0 8
6. Bentonite seal: a. Bentonite granules ☐ 3 3
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite chips ☒ 3 2
c. _____ Other ☐ _ _
7. Fine sand material: Manufacturer, product name & mesh size
a. _____
b. Volume added _____ ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a. _____
b. Volume added _____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 2 3 / Flush threaded PVC schedule 80 ☐ 2 4 / Other ☐ _ _
10. Screen material: 2" PVC, Schedule 40
a. Screen Type: Factory cut ☒ 1 1 / Continuous slot ☐ 0 1 / Other ☐ _ _
b. Manufacturer _____
c. Slot size: 0.010 in.
d. Slotted length: 15.0 ft.
11. Backfill material (below filter pack): None ☒ 1 4 / Other ☐ _ _

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature | Firm: The Sigma Group, Inc. | Tel: | Fax:

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State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐ _____

Facility/Project Name	County Name	Well Name
SOLENIS	MILWAUKEE	MW-1
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number**	**DNR Well ID Number**
	41	VR511	___

1. Can this well be purged dry? ☒ Yes ☐ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☒ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐ ___

3. Time spent developing well ___55 min.

4. Depth of well (from top of well casisng) __26.1 ft.

5. Inside diameter of well __2.00 in.

6. Volume of water in filter pack and well casing ____.__ gal.

7. Volume of water removed from well ___0.3 gal.

8. Volume of water added (if any) ____.__ gal.

9. Source of water added _____

10. Analysis performed on water added? ☐ Yes ☐ No (If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. __25.08 ft.	__25.89 ft.
Date	b. 10/25/2016 (m m d d y y y y)	10/25/2016 (m m d d y y y y)
Time	c. 12:55 ☐ a.m. ☒ p.m.	1:50 ☐ a.m. ☒ p.m.
12. Sediment in well bottom	__0.0 inches	__0.0 inches
13. Water clarity	Clear ☒ 10 Turbid ☐ 15	Clear ☒ 20 Turbid ☐ 25
	(Describe) Product, & sheen	(Describe) Product & sheen
14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

Fill in if drilling fluids were used and well is at solid waste facility:

16. Well developed by: Name (first, last) and Firm
First Name: JT Last Name: HOLCOMBE
Firm: THE SIGMA GROUP, INC.

17. Additional comments on development:
Allowed well to go dry three times.

Name and Address of Facility Contact /Owner/Responsible Party
First Name: ROGER Last Name: LADEWIG
Facility/Firm: SOLENIS
Street: 5228 N HOPKINS ST
City/State/Zip: MILWAUKEE WI 53209

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: JT Holcombe
Print Name: JT HOLCOMBE
Firm: THE SIGMA GROUP, INC

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐ _____

Facility/Project Name	County Name	Well Name
SOLENIS	MILWAUKEE	MW-2

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well ID Number
	41	VR512	___

1. Can this well be purged dry? ☒ Yes ☐ No

2. Well development method

surged with bailer and bailed	☐ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☒ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐ ___

3. Time spent developing well ___35 min.

4. Depth of well (from top of well casisng) __26.0 ft.

5. Inside diameter of well __2.00 in.

6. Volume of water in filter pack and well casing ____.__ gal.

7. Volume of water removed from well ___3.0 gal.

8. Volume of water added (if any) ____.__ gal.

9. Source of water added _____

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. __23.37 ft.	__25.31 ft.
Date	b. 10/25/2016 (m m d d y y y y)	10/25/2016 (m m d d y y y y)
Time	c. 9:50 ☒ a.m. ☐ p.m.	10:25 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	__0.0 inches	__0.0 inches
13. Water clarity	Clear ☒ 10 Turbid ☐ 15	Clear ☒ 20 Turbid ☐ 25
(Describe)	W/ PRODUCT 2' DNAPL	W/ PRODUCT ~1" DNAPL

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: JT Last Name: HOLCOMBE
Firm: THE SIGMA GROUP, INC.

17. Additional comments on development:

Name and Address of Facility Contact /Owner/Responsible Party
First Name: ROGER Last Name: LADEWIG
Facility/Firm: SOLENIS
Street: 5228 N HOPKINS ST
City/State/Zip: MILWAUKEE WI 53209

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: JT Holcombe
Print Name: JT HOLCOMBE
Firm: THE SIGMA GROUP, INC.

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐ _____

Facility/Project Name	County Name	Well Name
SOLENIS	MILWAUKEE	MW-6

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well ID Number
	41	VR510	____

1. Can this well be purged dry? ☒ Yes ☐ No

2. Well development method

surged with bailer and bailed	☐	41
surged with bailer and pumped	☐	61
surged with block and bailed	☐	42
surged with block and pumped	☐	62
surged with block, bailed and pumped	☐	70
compressed air	☐	20
bailed only	☐	10
pumped only	☒	51
pumped slowly	☐	50
Other _____	☐	___

3. Time spent developing well ___83 min.

4. Depth of well (from top of well casisng) __21.4 ft.

5. Inside diameter of well __2.00 in.

6. Volume of water in filter pack and well casing ____.__ gal.

7. Volume of water removed from well __13.5 gal.

8. Volume of water added (if any) ____.__ gal.

9. Source of water added _____

10. Analysis performed on water added? ☐ Yes ☐ No (If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. __4.46 ft.	__20.83 ft.
Date	b. 10/25/2016 (mm dd yyyy)	10/25/2016 (mm dd yyyy)
Time	c. 9:22 ☒ a.m. ☐ p.m.	10:45 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	__2.0 inches	__0.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) lt brwn	Clear ☐ 20 Turbid ☒ 25 (Describe) lt. brwn

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: JT Last Name: HOLCOMBE
Firm: THE SIGMA GROUP, INC.

17. Additional comments on development:
Allowed well to go dry three times.

Name and Address of Facility Contact /Owner/Responsible Party
First Name: ROGER Last Name: LADEWIG
Facility/Firm: SOLENIS
Street: 5228 N HOPKINS ST
City/State/Zip: MILWAUKEE WI 53209

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: JT Holcombe
Print Name: JT HOLCOMBE
Firm: THE SIGMA GROUP, INC.

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐ _____

Facility/Project Name	County Name	Well Name
SOLENIS	MILWAUKEE	MW-8

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well ID Number
	41	VR579	___

1. Can this well be purged dry? ☒ Yes ☐ No

2. Well development method

surged with bailer and bailed	☐	41
surged with bailer and pumped	☐	61
surged with block and bailed	☐	42
surged with block and pumped	☐	62
surged with block, bailed and pumped	☐	70
compressed air	☐	20
bailed only	☐	10
pumped only	☒	51
pumped slowly	☐	50
Other _____	☐	___

3. Time spent developing well ___35 min.

4. Depth of well (from top of well casisng) __21.2 ft.

5. Inside diameter of well __2.00 in.

6. Volume of water in filter pack and well casing ____.__ gal.

7. Volume of water removed from well ___3.0 gal.

8. Volume of water added (if any) ____.__ gal.

9. Source of water added _____

10. Analysis performed on water added? ☐ Yes ☐ No (If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing) a.	16.71 ft.	20.65 ft.
Date b. (m m d d y y y y)	10/25/2016	10/25/2016
Time c.	10:50 ☒ a.m. ☐ p.m.	11:25 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	0.0 inches	0.0 inches
13. Water clarity	Clear ☒ 10 Turbid ☐ 15 (Describe)	Clear ☒ 20 Turbid ☐ 25 (Describe)

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: JT Last Name: HOLCOMBE
Firm: THE SIGMA GROUP, INC.

17. Additional comments on development:
Allowed well to go dry three times

Name and Address of Facility Contact /Owner/Responsible Party
First Name: ROGER Last Name: LADEWIG
Facility/Firm: SOLENIS
Street: 5228 N HOPKINS ST
City/State/Zip: MILWAUKEE WI 53209

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: JT Holcombe
Print Name: JT HOLCOMBE
Firm: THE SIGMA GROUP, INC.

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐ _____

Facility/Project Name	County Name	Well Name
SOLENIS	MILWAUKEE	MW-9

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well ID Number
	41	VR578	___

1. Can this well be purged dry? ☒ Yes ☐ No

2. Well development method

surged with bailer and bailed	☐	41
surged with bailer and pumped	☐	61
surged with block and bailed	☐	42
surged with block and pumped	☐	62
surged with block, bailed and pumped	☐	70
compressed air	☐	20
bailed only	☐	10
pumped only	☒	51
pumped slowly	☐	50
Other _____	☐	

3. Time spent developing well ___35 min.

4. Depth of well (from top of well casisng) __21.3 ft.

5. Inside diameter of well __2.00 in.

6. Volume of water in filter pack and well casing ____.__ gal.

7. Volume of water removed from well __7.0 gal.

8. Volume of water added (if any) ____.__ gal.

9. Source of water added _____

10. Analysis performed on water added? ☐ Yes ☐ No
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 12.56 ft.	20.85 ft.
Date	b. 10/25/2016 (m m d d y y y y)	10/25/2016 (m m d d y y y y)
Time	c. 11:20 ☒ a.m. ☐ p.m.	11:59 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	0.5 inches	0.0 inches
13. Water clarity	Clear ☒ 10 Turbid ☐ 15	Clear ☒ 20 Turbid ☐ 25
(Describe)	V. Lt. brn	

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: JT Last Name: HOLCOMBE
Firm: THE SIGMA GROUP, INC.

17. Additional comments on development:
Allowed well to go dry three times.

Name and Address of Facility Contact /Owner/Responsible Party
First Name: ROGER Last Name: LADEWIG
Facility/Firm: SOLENIS
Street: 5228 N HOPKINS ST
City/State/Zip: MILWAUKEE WI 53209

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: JT Holcombe
Print Name: JT HOLCOMBE
Firm: THE SIGMA GROUP, INC.

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT
Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐ _____

Facility/Project Name	County Name	Well Name
SOLENIS	MILWAUKEE	MW-10
Facility License, Permit or Monitoring Number	**County Code**	**Wis. Unique Well Number**	**DNR Well ID Number**
	41	VR577	____

1. Can this well be purged dry? ☒ Yes ☐ No

2. Well development method

surged with bailer and bailed	☐	41
surged with bailer and pumped	☐	61
surged with block and bailed	☐	42
surged with block and pumped	☐	62
surged with block, bailed and pumped	☐	70
compressed air	☐	20
bailed only	☐	10
pumped only	☒	51
pumped slowly	☐	50
Other _____	☐	

3. Time spent developing well ___45 min.

4. Depth of well (from top of well casisng) __24.2 ft.

5. Inside diameter of well __2.00 in.

6. Volume of water in filter pack and well casing ____.__ gal.

7. Volume of water removed from well ___4.0 gal.

8. Volume of water added (if any) ____.__ gal.

9. Source of water added _____

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing) a.	18.18 ft.	23.79 ft.
Date b. (mm dd yyyy)	10/25/2016	10/25/2016
Time c.	12:50 ☐ a.m. ☒ p.m.	1:35 ☐ a.m. ☒ p.m.
12. Sediment in well bottom	0.0 inches	0.0 inches
13. Water clarity	Clear ☒ 10 Turbid ☐ 15 (Describe)	Clear ☒ 20 Turbid ☐ 25 (Describe)
14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

Fill in if drilling fluids were used and well is at solid waste facility:

16. Well developed by: Name (first, last) and Firm
First Name: JT Last Name: HOLCOMBE
Firm: THE SIGMA GROUP, INC.

17. Additional comments on development:
Allowed well to go dry three times

Name and Address of Facility Contact /Owner/Responsible Party
First Name: ROGER Last Name: LADEWIG
Facility/Firm: SOLENIS
Street: 5228 N HOPKINS ST
City/State/Zip: MILWAUKEE WI 53209

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: JT Holcombe
Print Name: JT HOLCOMBE
Firm: THE SIGMA GROUP, INC.

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐ _____

Facility/Project Name	County Name	Well Name
Solenis	Milwaukee	PZ-9

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well ID Number
	___	_____	___

1. Can this well be purged dry? ■ Yes ☐ No

2. Well development method

surged with bailer and bailed	■ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐ ▒▒

3. Time spent developing well 70 min.

4. Depth of well (from top of well casisng) 34.95 ft.

5. Inside diameter of well 2.0 in.

6. Volume of water in filter pack and well casing 15.8 gal.

7. Volume of water removed from well 5.0 gal.

8. Volume of water added (if any) None gal.

9. Source of water added None

10. Analysis perfomed on water added? ☐ Yes ■ No
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 24.57 ft.	____.__ ft.
Date	b. 01,04,2017 (m m d d y y y y)	01,04,2017 (m m d d y y y y)
Time	c. 11:15 ■ a.m. ☐ p.m.	12:25 ☐ a.m. ■ p.m.
12. Sediment in well bottom	0.0 inches	0.0 inches
13. Water clarity	Clear ■ 10 Turbid ☐ 15	Clear ☐ 20 Turbid ■ 25
(Describe)	Slight turbid	Slight turbid

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: David Last Name: Dailey
Firm: The Sigma Group

17. Additional comments on development:
Purged well dry 3 times
1st = 4.5 gals.
2nd = 0.5 gal.
3rd = ½ liter
} 20 min. intervals

Name and Address of Facility Contact/Owner/Responsible Party
First Name: _____ Last Name: _____
Facility/Firm: _____
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: David Dailey
Print Name: David Dailey
Firm: The Sigma Group

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐ _____

Facility/Project Name	County Name	Well Name
Solenis	Milwaukee	MW-12

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well ID Number

1. Can this well be purged dry? ■ Yes ☐ No

2. Well development method

surged with bailer and bailed	■ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐

3. Time spent developing well 75 min.

4. Depth of well (from top of well casisng) 22.45 ft.

5. Inside diameter of well 2.0 in.

6. Volume of water in filter pack and well casing 25.28 gal.

7. Volume of water removed from well 15.0 gal.

8. Volume of water added (if any) None gal.

9. Source of water added None

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ■ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 5.86 ft.	21.80 ft.
Date	b. 01,04,2017 (m m d d y y y y)	01,04,2017 (m m d d y y y y)
Time	c. 10:40 ■ a.m. ☐ p.m.	11:55 ☐ a.m. ■ p.m.
12. Sediment in well bottom	0.0 inches	0.0 inches
13. Water clarity	Clear ■ 10 Turbid ☐ 15 (Describe) Slight turbid lite brown	Clear ■ 20 Turbid ☐ 25 (Describe) Slight turbid

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: David Last Name: Dailey
Firm: The Sigma Group

17. Additional comments on development:
1st = 12.0 gals.
2nd = 2.0 gals.
3rd = 1.0 gal.
} 20 min. intervals
Purged well dry 3 times

Name and Address of Facility Contact/Owner/Responsible Party
First Name: _____ Last Name: _____
Facility/Firm: _____
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: David Dailey
Print Name: David Dailey
Firm: The Sigma Group

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐ _____

Facility/Project Name	County Name	Well Name
Solenis	Milwaukee	PZ-8

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well ID Number
	__	_____	___

1. Can this well be purged dry? ■ Yes ☐ No

2. Well development method

surged with bailer and bailed	■	41
surged with bailer and pumped	☐	61
surged with block and bailed	☐	42
surged with block and pumped	☐	62
surged with block, bailed and pumped	☐	70
compressed air	☐	20
bailed only	☐	10
pumped only	☐	51
pumped slowly	☐	50
Other _____	☐	▒

3. Time spent developing well: 70 min.

4. Depth of well (from top of well casisng): 35.05 ft.

5. Inside diameter of well: 2.0 in.

6. Volume of water in filter pack and well casing: 6.95 gal.

7. Volume of water removed from well: 4.75 gal.

8. Volume of water added (if any): None gal.

9. Source of water added: None

10. Analysis performed on water added? ☐ Yes ■ No (If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 30.41 ft.	Dry ft.
Date	b. 01,04,2017 (m m d d y y y y)	01,04,2017 (m m d d y y y y)
Time	c. 10:55 ■ a.m. ☐ p.m.	12:05 ☐ a.m. ■ p.m.
12. Sediment in well bottom	0.0 inches	0.0 inches
13. Water clarity	Clear ■ 10 Turbid ☐ 15 (Describe) Slight turbid	Clear ■ 20 Turbid ☐ 25 (Describe) Slight turbid

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: David Last Name: Dailey
Firm: The Sigma Group

17. Additional comments on development:
Purged well dry 3 times
1st = 3.5 gals
2nd = 1.0 gal.
3rd = 0.25 gal
} 20 min. intervals

Name and Address of Facility Contact/Owner/Responsible Party
First Name: _____ Last Name: _____
Facility/Firm: _____
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: David Dailey
Print Name: David Dailey
Firm: The Sigma Group

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐ _____

Facility/Project Name	County Name	Well Name
Solenis	Milwaukee	PZ-6

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well ID Number

1. Can this well be purged dry? ☒ Yes ☐ No

2. Well development method

surged with bailer and bailed	☒	41
surged with bailer and pumped	☐	61
surged with block and bailed	☐	42
surged with block and pumped	☐	62
surged with block, bailed and pumped	☐	70
compressed air	☐	20
bailed only	☐	10
pumped only	☐	51
pumped slowly	☐	50
Other _____	☐	

3. Time spent developing well 60 min.

4. Depth of well (from top of well casisng) 35.05 ft.

5. Inside diameter of well 2.0 in.

6. Volume of water in filter pack and well casing 1.76 gal.

7. Volume of water removed from well 0.5 gal.

8. Volume of water added (if any) None gal.

9. Source of water added None

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☒ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 33.84 ft.	Dry ft.
Date	b. 01,04,2017 (m m d d y y y y)	01,04,2017 (m m d d y y y y)
Time	c. 9:30 ☒ a.m. ☐ p.m.	10:30 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	0.0 inches	0.0 inches
13. Water clarity	Clear ☐ 10 Turbid ☒ 15 (Describe) Slight turbid	Clear ☒ 20 Turbid ☐ 25 (Describe) slight turbid

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: David Last Name: Dailey
Firm: The Sigma Group

17. Additional comments on development:
1st = ½ Liter
2nd = ¼ liter
3rd = Less then ¼ liter
} Purged well dry 3 times, 20 min. intervals

Name and Address of Facility Contact /Owner/Responsible Party
First Name: _____ Last Name: _____
Facility/Firm: _____
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: David Dailey
Print Name: David Dailey
Firm: The Sigma Group

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐ _____

Facility/Project Name	County Name	Well Name
Solenis	Milwaukee	PZ-12

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well ID Number

1. Can this well be purged dry? ☒ Yes ☐ No

2. Well development method

surged with bailer and bailed	☒	41
surged with bailer and pumped	☐	61
surged with block and bailed	☐	42
surged with block and pumped	☐	62
surged with block, bailed and pumped	☐	70
compressed air	☐	20
bailed only	☐	10
pumped only	☐	51
pumped slowly	☐	50
Other _____	☐	▒▒

3. Time spent developing well 60 min.

4. Depth of well (from top of well casisng) 35.20 ft.

5. Inside diameter of well 2.0 in.

6. Volume of water in filter pack and well casing 2.06 gal.

7. Volume of water removed from well 0.5 gal.

8. Volume of water added (if any) None gal.

9. Source of water added None

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☒ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 33.80 ft.	Dry ft.
Date	b. 01,04,2017 (m m d d y y y y)	01,04,2017 (m m d d y y y y)
Time	c. 9:45 ☒ a.m. ☐ p.m.	10:45 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	0.0 inches	0.0 inches
13. Water clarity	Clear ☒ 10 Turbid ☐ 15	Clear ☒ 20 Turbid ☐ 25
(Describe)	Slight turbid	Slight turbid

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: David Last Name: Dailey
Firm: The Sigma Group

17. Additional comments on development:
Purged well dry 3 times.
1st = ½ liter
2nd = ¼ liter
3rd = Less then ¼ liter

Name and Address of Facility Contact /Owner/Responsible Party
First Name: _____ Last Name: _____
Facility/Firm: _____
Street: _____
City/State/Zip: _____

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: David Dailey
Print Name: David Dailey
Firm: The Sigma Group

NOTE: See instructions for more information including a list of county codes and well type codes.

APPENDIX C

Slug Test Analytical Reports

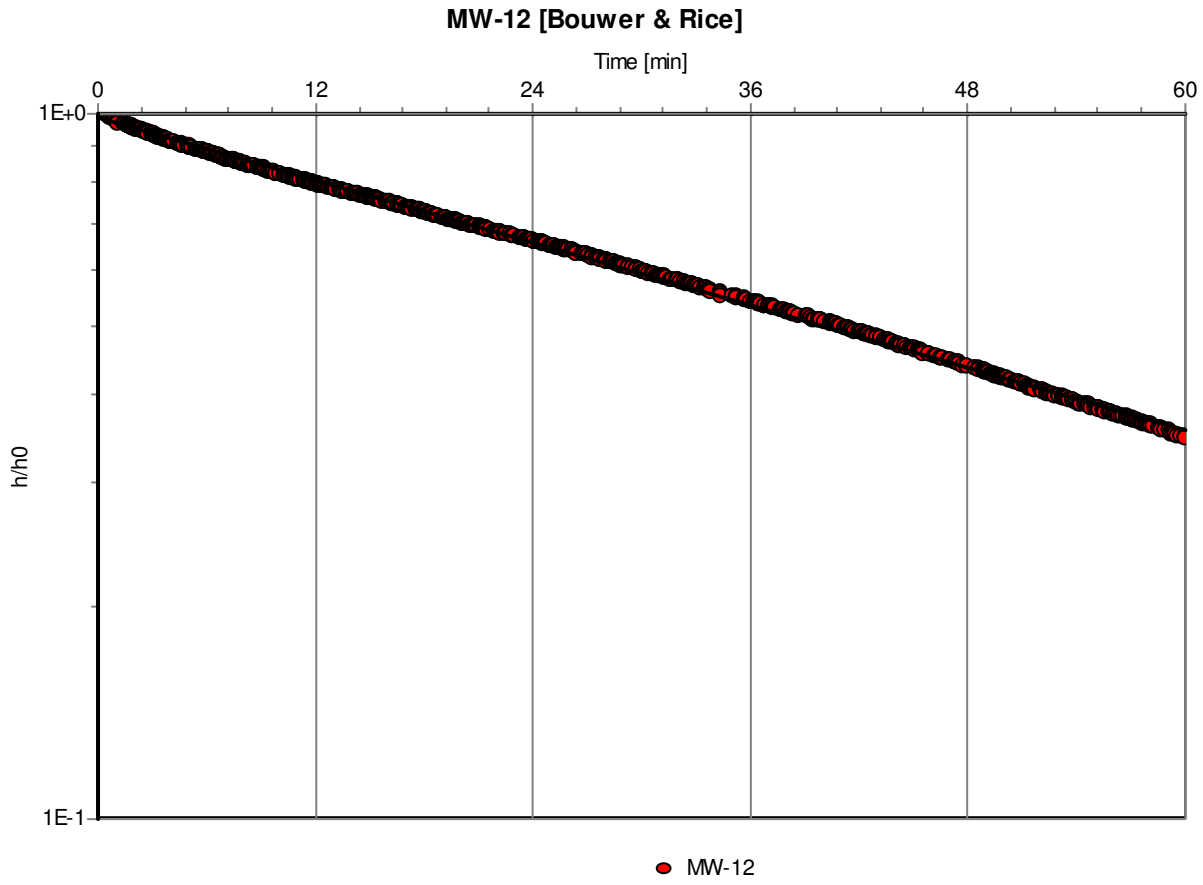
Waterloo Hydrogeologic, Inc.
460 Philip Street - Suite 101
Waterloo, Ontario, Canada
Phone: +1 519 746 1798

Slug Test Analysis Report

Project: Solenis

Number:

Client:



Slug Test: **MW-12**

Analysis Method: **Bouwer & Rice**

Analysis Results:

Conductivity: 5.63E-6 [cm/s]

Test parameters:

Test Well:	MW-12	Aquifer Thickness:	50 [ft]
Casing radius:	0.083 [ft]	Gravel Pack Porosity (%)	25
Screen length:	15 [ft]		
Boring radius:	0.41666 [ft]		
r(eff):	0.220 [ft]		

Comments:

Evaluated by:

Evaluation Date: 2/21/2017

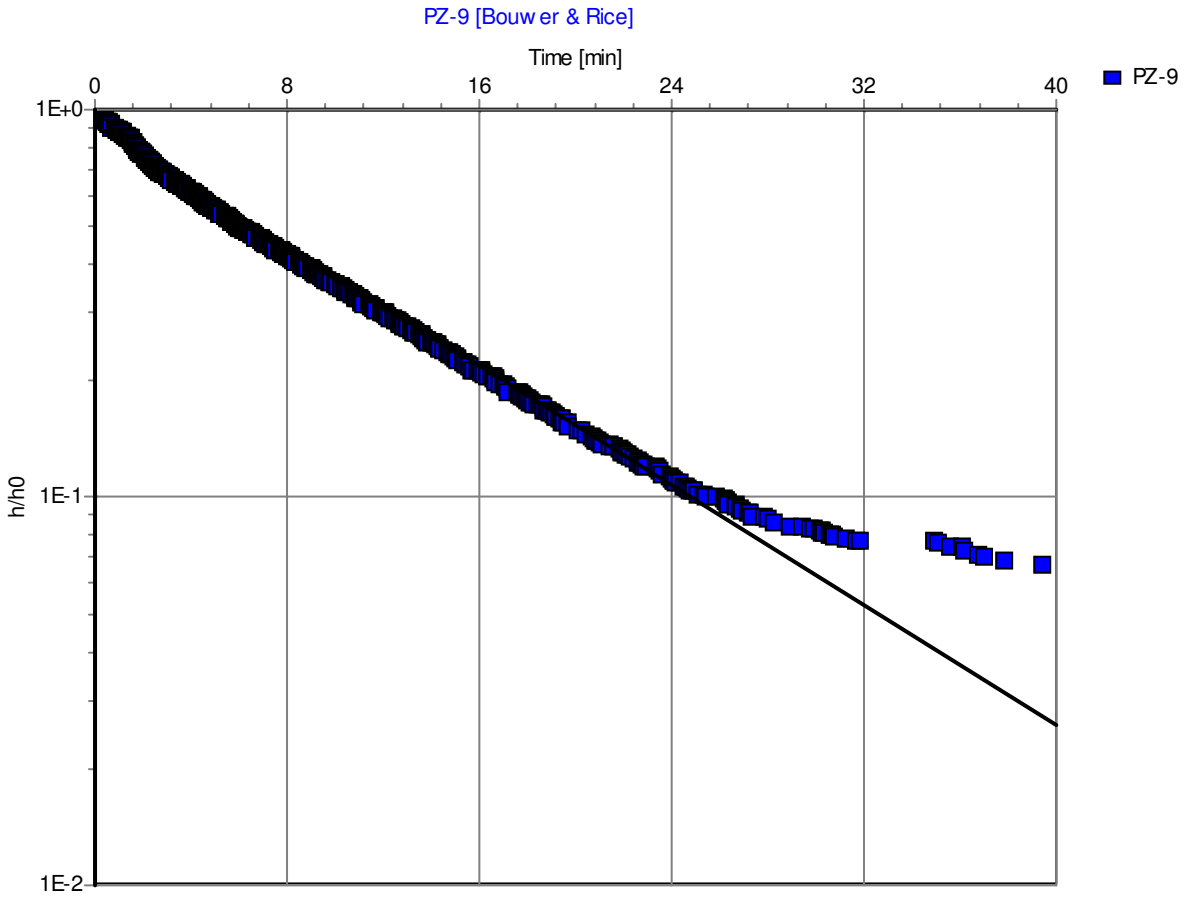
Waterloo Hydrogeologic, Inc.
460 Philip Street - Suite 101
Waterloo, Ontario, Canada
Phone: +1 519 746 1798

Slug Test Analysis Report

Project: Solenis

Number:

Client:



Slug Test: **PZ-9**

Analysis Method: **Bouwer & Rice**

Analysis Results:

Conductivity: 7.69E-5 [cm/s]

Test parameters:

Test Well:	PZ-9	Aquifer Thickness:	50 [ft]
Casing radius:	0.0833333 [ft]	Gravel Pack Porosity (%)	25
Screen length:	5 [ft]		
Boring radius:	0.416667 [ft]		
r(eff):	0.220 [ft]		

Comments:

Evaluated by:

Evaluation Date: 2/24/2017

APPENDIX D

Soil Laboratory Reports and Chains of Custody

Synergy Environmental Lab, INC.

1990 Prospect Ct., Appleton, WI 54914 *P 920-830-2455 * F 920-733-0631

CORY KATZBAN
THE SIGMA GROUP, INC.
1300 W. CANAL STREET
MILWAUKEE, WI 53233

Report Date *24-Oct-16*

Project Name SOLENIS
Project # 16153

Invoice # E31856

Lab Code 5031856A
Sample ID SB-1 1-3
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	73.3	%			1	5021		10/10/2016	NJC	1
Organic										
VOC's										
Benzene	< 0.16	mg/kg	0.16	0.49	10	8260B		10/14/2016	CJR	1
Bromobenzene	< 0.39	mg/kg	0.39	1.2	10	8260B		10/14/2016	CJR	1
Bromodichloromethane	< 0.15	mg/kg	0.15	0.48	10	8260B		10/14/2016	CJR	1
Bromoform	< 0.23	mg/kg	0.23	0.73	10	8260B		10/14/2016	CJR	1
tert-Butylbenzene	< 0.35	mg/kg	0.35	1.1	10	8260B		10/14/2016	CJR	1
sec-Butylbenzene	< 0.36	mg/kg	0.36	1.1	10	8260B		10/14/2016	CJR	1
n-Butylbenzene	< 0.86	mg/kg	0.86	2.7	10	8260B		10/14/2016	CJR	1
Carbon Tetrachloride	< 0.21	mg/kg	0.21	0.67	10	8260B		10/14/2016	CJR	1
Chlorobenzene	< 0.39	mg/kg	0.39	1.2	10	8260B		10/14/2016	CJR	1
Chloroethane	< 0.45	mg/kg	0.45	1.4	10	8260B		10/14/2016	CJR	1
Chloroform	< 0.26	mg/kg	0.26	0.81	10	8260B		10/14/2016	CJR	1
Chloromethane	< 2.5	mg/kg	2.5	7.8	10	8260B		10/14/2016	CJR	1
2-Chlorotoluene	< 0.29	mg/kg	0.29	0.93	10	8260B		10/14/2016	CJR	1
4-Chlorotoluene	< 0.32	mg/kg	0.32	1	10	8260B		10/14/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 0.78	mg/kg	0.78	2.5	10	8260B		10/14/2016	CJR	1
Dibromochloromethane	< 0.31	mg/kg	0.31	0.98	10	8260B		10/14/2016	CJR	1
1,4-Dichlorobenzene	< 0.3	mg/kg	0.3	0.96	10	8260B		10/14/2016	CJR	1
1,3-Dichlorobenzene	< 0.3	mg/kg	0.3	0.97	10	8260B		10/14/2016	CJR	1
1,2-Dichlorobenzene	< 0.39	mg/kg	0.39	1.2	10	8260B		10/14/2016	CJR	1
Dichlorodifluoromethane	< 0.43	mg/kg	0.43	1.4	10	8260B		10/14/2016	CJR	1
1,2-Dichloroethane	< 0.3	mg/kg	0.3	0.96	10	8260B		10/14/2016	CJR	1
1,1-Dichloroethane	< 0.25	mg/kg	0.25	0.79	10	8260B		10/14/2016	CJR	1
1,1-Dichloroethene	< 0.29	mg/kg	0.29	0.93	10	8260B		10/14/2016	CJR	1
cis-1,2-Dichloroethene	< 0.21	mg/kg	0.21	0.68	10	8260B		10/14/2016	CJR	1
trans-1,2-Dichloroethene	< 0.24	mg/kg	0.24	0.76	10	8260B		10/14/2016	CJR	1
1,2-Dichloropropane	5.5	mg/kg	0.25	0.78	10	8260B		10/14/2016	CJR	1
2,2-Dichloropropane	< 1	mg/kg	1	3.3	10	8260B		10/14/2016	CJR	1
1,3-Dichloropropane	< 0.31	mg/kg	0.31	0.97	10	8260B		10/14/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856A
Sample ID SB-1 1-3
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Di-isopropyl ether	< 0.12	mg/kg	0.12	0.4	10	8260B		10/14/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.35	mg/kg	0.35	1.1	10	8260B		10/14/2016	CJR	1
Ethylbenzene	4.0	mg/kg	0.27	0.86	10	8260B		10/14/2016	CJR	1
Hexachlorobutadiene	< 1.1	mg/kg	1.1	3.6	10	8260B		10/14/2016	CJR	1
Isopropylbenzene	1.14 "J"	mg/kg	0.37	1.2	10	8260B		10/14/2016	CJR	1
p-Isopropyltoluene	36	mg/kg	0.56	1.8	10	8260B		10/14/2016	CJR	1
Methylene chloride	< 2.2	mg/kg	2.2	7	10	8260B		10/14/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.25	mg/kg	0.25	0.78	10	8260B		10/14/2016	CJR	1
Naphthalene	< 0.87	mg/kg	0.87	2.8	10	8260B		10/14/2016	CJR	1
n-Propylbenzene	0.71 "J"	mg/kg	0.35	1.1	10	8260B		10/14/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.13	mg/kg	0.13	0.4	10	8260B		10/14/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.29	mg/kg	0.29	0.93	10	8260B		10/14/2016	CJR	1
Tetrachloroethene	< 0.54	mg/kg	0.54	1.7	10	8260B		10/14/2016	CJR	1
Toluene	4.3	mg/kg	0.31	0.99	10	8260B		10/14/2016	CJR	1
1,2,4-Trichlorobenzene	< 0.85	mg/kg	0.85	2.7	10	8260B		10/14/2016	CJR	1
1,2,3-Trichlorobenzene	< 1.2	mg/kg	1.2	3.8	10	8260B		10/14/2016	CJR	1
1,1,1-Trichloroethane	< 0.4	mg/kg	0.4	1.3	10	8260B		10/14/2016	CJR	1
1,1,2-Trichloroethane	< 0.33	mg/kg	0.33	1.1	10	8260B		10/14/2016	CJR	1
Trichloroethene (TCE)	< 0.42	mg/kg	0.42	1.3	10	8260B		10/14/2016	CJR	1
Trichlorofluoromethane	< 0.6	mg/kg	0.6	1.9	10	8260B		10/14/2016	CJR	1
1,2,4-Trimethylbenzene	1.39 "J"	mg/kg	0.78	2.5	10	8260B		10/14/2016	CJR	1
1,3,5-Trimethylbenzene	< 0.89	mg/kg	0.89	2.8	10	8260B		10/14/2016	CJR	1
Vinyl Chloride	< 0.1	mg/kg	0.1	0.31	10	8260B		10/14/2016	CJR	1
m&p-Xylene	25.9	mg/kg	0.7	2.2	10	8260B		10/14/2016	CJR	1
o-Xylene	6.3	mg/kg	0.29	0.92	10	8260B		10/14/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	109	Rec %			10	8260B		10/14/2016	CJR	1
SUR - Toluene-d8	106	Rec %			10	8260B		10/14/2016	CJR	1
SUR - Dibromofluoromethane	105	Rec %			10	8260B		10/14/2016	CJR	1
SUR - 4-Bromofluorobenzene	112	Rec %			10	8260B		10/14/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856B
Sample ID SB-1 5-7.5
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	75.7	%			1	5021		10/10/2016	NJC	1
Organic										
VOC's										
Benzene	< 0.16	mg/kg	0.16	0.49	10	8260B		10/14/2016	CJR	1
Bromobenzene	< 0.39	mg/kg	0.39	1.2	10	8260B		10/14/2016	CJR	1
Bromodichloromethane	< 0.15	mg/kg	0.15	0.48	10	8260B		10/14/2016	CJR	1
Bromoform	< 0.23	mg/kg	0.23	0.73	10	8260B		10/14/2016	CJR	1
tert-Butylbenzene	< 0.35	mg/kg	0.35	1.1	10	8260B		10/14/2016	CJR	1
sec-Butylbenzene	< 0.36	mg/kg	0.36	1.1	10	8260B		10/14/2016	CJR	1
n-Butylbenzene	< 0.86	mg/kg	0.86	2.7	10	8260B		10/14/2016	CJR	1
Carbon Tetrachloride	< 0.21	mg/kg	0.21	0.67	10	8260B		10/14/2016	CJR	1
Chlorobenzene	< 0.39	mg/kg	0.39	1.2	10	8260B		10/14/2016	CJR	1
Chloroethane	< 0.45	mg/kg	0.45	1.4	10	8260B		10/14/2016	CJR	1
Chloroform	< 0.26	mg/kg	0.26	0.81	10	8260B		10/14/2016	CJR	1
Chloromethane	< 2.5	mg/kg	2.5	7.8	10	8260B		10/14/2016	CJR	1
2-Chlorotoluene	< 0.29	mg/kg	0.29	0.93	10	8260B		10/14/2016	CJR	1
4-Chlorotoluene	< 0.32	mg/kg	0.32	1	10	8260B		10/14/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 0.78	mg/kg	0.78	2.5	10	8260B		10/14/2016	CJR	1
Dibromochloromethane	< 0.31	mg/kg	0.31	0.98	10	8260B		10/14/2016	CJR	1
1,4-Dichlorobenzene	< 0.3	mg/kg	0.3	0.96	10	8260B		10/14/2016	CJR	1
1,3-Dichlorobenzene	< 0.3	mg/kg	0.3	0.97	10	8260B		10/14/2016	CJR	1
1,2-Dichlorobenzene	< 0.39	mg/kg	0.39	1.2	10	8260B		10/14/2016	CJR	1
Dichlorodifluoromethane	< 0.43	mg/kg	0.43	1.4	10	8260B		10/14/2016	CJR	1
1,2-Dichloroethane	< 0.3	mg/kg	0.3	0.96	10	8260B		10/14/2016	CJR	1
1,1-Dichloroethane	< 0.25	mg/kg	0.25	0.79	10	8260B		10/14/2016	CJR	1
1,1-Dichloroethene	< 0.29	mg/kg	0.29	0.93	10	8260B		10/14/2016	CJR	1
cis-1,2-Dichloroethene	< 0.21	mg/kg	0.21	0.68	10	8260B		10/14/2016	CJR	1
trans-1,2-Dichloroethene	< 0.24	mg/kg	0.24	0.76	10	8260B		10/14/2016	CJR	1
1,2-Dichloropropane	5.6	mg/kg	0.25	0.78	10	8260B		10/14/2016	CJR	1
2,2-Dichloropropane	< 1	mg/kg	1	3.3	10	8260B		10/14/2016	CJR	1
1,3-Dichloropropane	< 0.31	mg/kg	0.31	0.97	10	8260B		10/14/2016	CJR	1
Di-isopropyl ether	< 0.12	mg/kg	0.12	0.4	10	8260B		10/14/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.35	mg/kg	0.35	1.1	10	8260B		10/14/2016	CJR	1
Ethylbenzene	2.21	mg/kg	0.27	0.86	10	8260B		10/14/2016	CJR	1
Hexachlorobutadiene	< 1.1	mg/kg	1.1	3.6	10	8260B		10/14/2016	CJR	1
Isopropylbenzene	0.75 "J"	mg/kg	0.37	1.2	10	8260B		10/14/2016	CJR	1
p-Isopropyltoluene	16.3	mg/kg	0.56	1.8	10	8260B		10/14/2016	CJR	1
Methylene chloride	< 2.2	mg/kg	2.2	7	10	8260B		10/14/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.25	mg/kg	0.25	0.78	10	8260B		10/14/2016	CJR	1
Naphthalene	< 0.87	mg/kg	0.87	2.8	10	8260B		10/14/2016	CJR	1
n-Propylbenzene	0.39 "J"	mg/kg	0.35	1.1	10	8260B		10/14/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.13	mg/kg	0.13	0.4	10	8260B		10/14/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.29	mg/kg	0.29	0.93	10	8260B		10/14/2016	CJR	1
Tetrachloroethene	< 0.54	mg/kg	0.54	1.7	10	8260B		10/14/2016	CJR	1
Toluene	2.04	mg/kg	0.31	0.99	10	8260B		10/14/2016	CJR	1
1,2,4-Trichlorobenzene	< 0.85	mg/kg	0.85	2.7	10	8260B		10/14/2016	CJR	1
1,2,3-Trichlorobenzene	< 1.2	mg/kg	1.2	3.8	10	8260B		10/14/2016	CJR	1
1,1,1-Trichloroethane	< 0.4	mg/kg	0.4	1.3	10	8260B		10/14/2016	CJR	1
1,1,2-Trichloroethane	< 0.33	mg/kg	0.33	1.1	10	8260B		10/14/2016	CJR	1
Trichloroethene (TCE)	< 0.42	mg/kg	0.42	1.3	10	8260B		10/14/2016	CJR	1
Trichlorofluoromethane	< 0.6	mg/kg	0.6	1.9	10	8260B		10/14/2016	CJR	1
1,2,4-Trimethylbenzene	0.8 "J"	mg/kg	0.78	2.5	10	8260B		10/14/2016	CJR	1
1,3,5-Trimethylbenzene	< 0.89	mg/kg	0.89	2.8	10	8260B		10/14/2016	CJR	1
Vinyl Chloride	< 0.1	mg/kg	0.1	0.31	10	8260B		10/14/2016	CJR	1
m&p-Xylene	15	mg/kg	0.7	2.2	10	8260B		10/14/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856B
Sample ID SB-1 5-7.5
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
o-Xylene	3.7	mg/kg	0.29	0.92	10	8260B		10/14/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	113	Rec %			10	8260B		10/14/2016	CJR	1
SUR - 4-Bromofluorobenzene	103	Rec %			10	8260B		10/14/2016	CJR	1
SUR - Dibromofluoromethane	104	Rec %			10	8260B		10/14/2016	CJR	1
SUR - Toluene-d8	102	Rec %			10	8260B		10/14/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856C
Sample ID SB-2 3-5
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	71.8	%			1	5021		10/10/2016	NJC	1
Organic										
VOC's										
Benzene	< 3.2	mg/kg	3.2	9.8	200	8260B		10/18/2016	CJR	1
Bromobenzene	< 7.8	mg/kg	7.8	24	200	8260B		10/18/2016	CJR	1
Bromodichloromethane	< 3	mg/kg	3	9.6	200	8260B		10/18/2016	CJR	1
Bromoform	< 4.6	mg/kg	4.6	14.6	200	8260B		10/18/2016	CJR	1
tert-Butylbenzene	< 7	mg/kg	7	22	200	8260B		10/18/2016	CJR	1
sec-Butylbenzene	< 7.2	mg/kg	7.2	22	200	8260B		10/18/2016	CJR	1
n-Butylbenzene	< 17.2	mg/kg	17.2	54	200	8260B		10/18/2016	CJR	1
Carbon Tetrachloride	< 4.2	mg/kg	4.2	13.4	200	8260B		10/18/2016	CJR	1
Chlorobenzene	< 7.8	mg/kg	7.8	24	200	8260B		10/18/2016	CJR	1
Chloroethane	< 9	mg/kg	9	28	200	8260B		10/18/2016	CJR	1
Chloroform	< 5.2	mg/kg	5.2	16.2	200	8260B		10/18/2016	CJR	1
Chloromethane	< 50	mg/kg	50	156	200	8260B		10/18/2016	CJR	1
2-Chlorotoluene	< 5.8	mg/kg	5.8	18.6	200	8260B		10/18/2016	CJR	1
4-Chlorotoluene	< 6.4	mg/kg	6.4	20	200	8260B		10/18/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 15.6	mg/kg	15.6	50	200	8260B		10/18/2016	CJR	1
Dibromochloromethane	< 6.2	mg/kg	6.2	19.6	200	8260B		10/18/2016	CJR	1
1,4-Dichlorobenzene	< 6	mg/kg	6	19.2	200	8260B		10/18/2016	CJR	1
1,3-Dichlorobenzene	< 6	mg/kg	6	19.4	200	8260B		10/18/2016	CJR	1
1,2-Dichlorobenzene	< 7.8	mg/kg	7.8	24	200	8260B		10/18/2016	CJR	1
Dichlorodifluoromethane	< 8.6	mg/kg	8.6	28	200	8260B		10/18/2016	CJR	1
1,2-Dichloroethane	< 6	mg/kg	6	19.2	200	8260B		10/18/2016	CJR	1
1,1-Dichloroethane	< 5	mg/kg	5	15.8	200	8260B		10/18/2016	CJR	1
1,1-Dichloroethene	< 5.8	mg/kg	5.8	18.6	200	8260B		10/18/2016	CJR	1
cis-1,2-Dichloroethene	< 4.2	mg/kg	4.2	13.6	200	8260B		10/18/2016	CJR	1
trans-1,2-Dichloroethene	< 4.8	mg/kg	4.8	15.2	200	8260B		10/18/2016	CJR	1
1,2-Dichloropropane	2690	mg/kg	5	15.6	200	8260B		10/18/2016	CJR	1
2,2-Dichloropropane	< 20	mg/kg	20	66	200	8260B		10/18/2016	CJR	1
1,3-Dichloropropane	< 6.2	mg/kg	6.2	19.4	200	8260B		10/18/2016	CJR	1
Di-isopropyl ether	< 2.4	mg/kg	2.4	8	200	8260B		10/18/2016	CJR	1
EDB (1,2-Dibromoethane)	< 7	mg/kg	7	22	200	8260B		10/18/2016	CJR	1
Ethylbenzene	< 5.4	mg/kg	5.4	17.2	200	8260B		10/18/2016	CJR	1
Hexachlorobutadiene	< 22	mg/kg	22	72	200	8260B		10/18/2016	CJR	1
Isopropylbenzene	< 7.4	mg/kg	7.4	24	200	8260B		10/18/2016	CJR	1
p-Isopropyltoluene	< 11.2	mg/kg	11.2	36	200	8260B		10/18/2016	CJR	1
Methylene chloride	< 44	mg/kg	44	140	200	8260B		10/18/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 5	mg/kg	5	15.6	200	8260B		10/18/2016	CJR	1
Naphthalene	< 17.4	mg/kg	17.4	56	200	8260B		10/18/2016	CJR	1
n-Propylbenzene	< 7	mg/kg	7	22	200	8260B		10/18/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 2.6	mg/kg	2.6	8	200	8260B		10/18/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 5.8	mg/kg	5.8	18.6	200	8260B		10/18/2016	CJR	1
Tetrachloroethene	< 10.8	mg/kg	10.8	34	200	8260B		10/18/2016	CJR	1
Toluene	< 6.2	mg/kg	6.2	19.8	200	8260B		10/18/2016	CJR	1
1,2,4-Trichlorobenzene	< 17	mg/kg	17	54	200	8260B		10/18/2016	CJR	1
1,2,3-Trichlorobenzene	< 24	mg/kg	24	76	200	8260B		10/18/2016	CJR	1
1,1,1-Trichloroethane	< 8	mg/kg	8	26	200	8260B		10/18/2016	CJR	1
1,1,2-Trichloroethane	< 6.6	mg/kg	6.6	22	200	8260B		10/18/2016	CJR	1
Trichloroethene (TCE)	< 8.4	mg/kg	8.4	26	200	8260B		10/18/2016	CJR	1
Trichlorofluoromethane	< 12	mg/kg	12	38	200	8260B		10/18/2016	CJR	1
1,2,4-Trimethylbenzene	< 15.6	mg/kg	15.6	50	200	8260B		10/18/2016	CJR	1
1,3,5-Trimethylbenzene	< 17.8	mg/kg	17.8	56	200	8260B		10/18/2016	CJR	1
Vinyl Chloride	< 2	mg/kg	2	6.2	200	8260B		10/18/2016	CJR	1
m&p-Xylene	< 14	mg/kg	14	44	200	8260B		10/18/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856C
Sample ID SB-2 3-5
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
o-Xylene	< 5.8	mg/kg	5.8	18.4	200	8260B		10/18/2016	CJR	1
SUR - 4-Bromofluorobenzene	97	Rec %			200	8260B		10/18/2016	CJR	1
SUR - Dibromofluoromethane	100	Rec %			200	8260B		10/18/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	93	Rec %			200	8260B		10/18/2016	CJR	1
SUR - Toluene-d8	96	Rec %			200	8260B		10/18/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856D
Sample ID SB-2 10-12.5
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	76.5	%			1	5021		10/10/2016	NJC	1
Organic										
VOC's										
Benzene	< 0.016	mg/kg	0.016	0.049	1	8260B		10/14/2016	CJR	1
Bromobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		10/14/2016	CJR	1
Bromodichloromethane	< 0.015	mg/kg	0.015	0.048	1	8260B		10/14/2016	CJR	1
Bromoform	< 0.023	mg/kg	0.023	0.073	1	8260B		10/14/2016	CJR	1
tert-Butylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		10/14/2016	CJR	1
sec-Butylbenzene	< 0.036	mg/kg	0.036	0.11	1	8260B		10/14/2016	CJR	1
n-Butylbenzene	< 0.086	mg/kg	0.086	0.27	1	8260B		10/14/2016	CJR	1
Carbon Tetrachloride	< 0.021	mg/kg	0.021	0.067	1	8260B		10/14/2016	CJR	1
Chlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		10/14/2016	CJR	1
Chloroethane	< 0.045	mg/kg	0.045	0.14	1	8260B		10/14/2016	CJR	1
Chloroform	< 0.026	mg/kg	0.026	0.081	1	8260B		10/14/2016	CJR	1
Chloromethane	< 0.25	mg/kg	0.25	0.78	1	8260B		10/14/2016	CJR	1
2-Chlorotoluene	< 0.029	mg/kg	0.029	0.093	1	8260B		10/14/2016	CJR	1
4-Chlorotoluene	< 0.032	mg/kg	0.032	0.1	1	8260B		10/14/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 0.078	mg/kg	0.078	0.25	1	8260B		10/14/2016	CJR	1
Dibromochloromethane	< 0.031	mg/kg	0.031	0.098	1	8260B		10/14/2016	CJR	1
1,4-Dichlorobenzene	< 0.03	mg/kg	0.03	0.096	1	8260B		10/14/2016	CJR	1
1,3-Dichlorobenzene	< 0.03	mg/kg	0.03	0.097	1	8260B		10/14/2016	CJR	1
1,2-Dichlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		10/14/2016	CJR	1
Dichlorodifluoromethane	< 0.043	mg/kg	0.043	0.14	1	8260B		10/14/2016	CJR	1
1,2-Dichloroethane	0.127	mg/kg	0.03	0.096	1	8260B		10/14/2016	CJR	1
1,1-Dichloroethane	< 0.025	mg/kg	0.025	0.079	1	8260B		10/14/2016	CJR	1
1,1-Dichloroethene	< 0.029	mg/kg	0.029	0.093	1	8260B		10/14/2016	CJR	1
cis-1,2-Dichloroethene	< 0.021	mg/kg	0.021	0.068	1	8260B		10/14/2016	CJR	1
trans-1,2-Dichloroethene	< 0.024	mg/kg	0.024	0.076	1	8260B		10/14/2016	CJR	1
1,2-Dichloropropane	2400	mg/kg	5	15.6	200	8260B		10/21/2016	CJR	1
2,2-Dichloropropane	< 0.1	mg/kg	0.1	0.33	1	8260B		10/14/2016	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.097	1	8260B		10/14/2016	CJR	1
Di-isopropyl ether	< 0.012	mg/kg	0.012	0.04	1	8260B		10/14/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.035	mg/kg	0.035	0.11	1	8260B		10/14/2016	CJR	1
Ethylbenzene	< 0.027	mg/kg	0.027	0.086	1	8260B		10/14/2016	CJR	1
Hexachlorobutadiene	< 0.11	mg/kg	0.11	0.36	1	8260B		10/14/2016	CJR	1
Isopropylbenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		10/14/2016	CJR	1
p-Isopropyltoluene	< 0.056	mg/kg	0.056	0.18	1	8260B		10/14/2016	CJR	1
Methylene chloride	< 0.22	mg/kg	0.22	0.7	1	8260B		10/14/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.025	0.078	1	8260B		10/14/2016	CJR	1
Naphthalene	< 0.087	mg/kg	0.087	0.28	1	8260B		10/14/2016	CJR	1
n-Propylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		10/14/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.013	mg/kg	0.013	0.04	1	8260B		10/14/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.029	mg/kg	0.029	0.093	1	8260B		10/14/2016	CJR	1
Tetrachloroethene	< 0.054	mg/kg	0.054	0.17	1	8260B		10/14/2016	CJR	1
Toluene	0.034 "J"	mg/kg	0.031	0.099	1	8260B		10/14/2016	CJR	1
1,2,4-Trichlorobenzene	< 0.085	mg/kg	0.085	0.27	1	8260B		10/14/2016	CJR	1
1,2,3-Trichlorobenzene	< 0.12	mg/kg	0.12	0.38	1	8260B		10/14/2016	CJR	1
1,1,1-Trichloroethane	< 0.04	mg/kg	0.04	0.13	1	8260B		10/14/2016	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B		10/14/2016	CJR	1
Trichloroethene (TCE)	< 0.042	mg/kg	0.042	0.13	1	8260B		10/14/2016	CJR	1
Trichlorofluoromethane	< 0.06	mg/kg	0.06	0.19	1	8260B		10/14/2016	CJR	1
1,2,4-Trimethylbenzene	< 0.078	mg/kg	0.078	0.25	1	8260B		10/14/2016	CJR	1
1,3,5-Trimethylbenzene	< 0.089	mg/kg	0.089	0.28	1	8260B		10/14/2016	CJR	1
Vinyl Chloride	< 0.01	mg/kg	0.01	0.031	1	8260B		10/14/2016	CJR	1
m&p-Xylene	< 0.07	mg/kg	0.07	0.22	1	8260B		10/14/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856D
Sample ID SB-2 10-12.5
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
o-Xylene	< 0.029	mg/kg	0.029	0.092	1	8260B		10/14/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	114	Rec %			1	8260B		10/14/2016	CJR	1
SUR - 4-Bromofluorobenzene	100	Rec %			1	8260B		10/14/2016	CJR	1
SUR - Dibromofluoromethane	107	Rec %			1	8260B		10/14/2016	CJR	1
SUR - Toluene-d8	98	Rec %			1	8260B		10/14/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856E
Sample ID SB-3 1-3
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	76.1	%			1	5021		10/10/2016	NJC	1
Organic										
VOC's										
Benzene	< 0.32	mg/kg	0.32	0.98	20	8260B		10/21/2016	CJR	1
Bromobenzene	< 0.78	mg/kg	0.78	2.4	20	8260B		10/21/2016	CJR	1
Bromodichloromethane	< 0.3	mg/kg	0.3	0.96	20	8260B		10/21/2016	CJR	1
Bromoform	< 0.46	mg/kg	0.46	1.46	20	8260B		10/21/2016	CJR	1
tert-Butylbenzene	< 0.7	mg/kg	0.7	2.2	20	8260B		10/21/2016	CJR	1
sec-Butylbenzene	< 0.72	mg/kg	0.72	2.2	20	8260B		10/21/2016	CJR	1
n-Butylbenzene	< 1.72	mg/kg	1.72	5.4	20	8260B		10/21/2016	CJR	1
Carbon Tetrachloride	< 0.42	mg/kg	0.42	1.34	20	8260B		10/21/2016	CJR	1
Chlorobenzene	< 0.78	mg/kg	0.78	2.4	20	8260B		10/21/2016	CJR	1
Chloroethane	< 0.9	mg/kg	0.9	2.8	20	8260B		10/21/2016	CJR	1
Chloroform	< 0.52	mg/kg	0.52	1.62	20	8260B		10/21/2016	CJR	1
Chloromethane	< 5	mg/kg	5	15.6	20	8260B		10/21/2016	CJR	1
2-Chlorotoluene	< 0.58	mg/kg	0.58	1.86	20	8260B		10/21/2016	CJR	1
4-Chlorotoluene	< 0.64	mg/kg	0.64	2	20	8260B		10/21/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 1.56	mg/kg	1.56	5	20	8260B		10/21/2016	CJR	1
Dibromochloromethane	< 0.62	mg/kg	0.62	1.96	20	8260B		10/21/2016	CJR	1
1,4-Dichlorobenzene	< 0.6	mg/kg	0.6	1.92	20	8260B		10/21/2016	CJR	1
1,3-Dichlorobenzene	< 0.6	mg/kg	0.6	1.94	20	8260B		10/21/2016	CJR	1
1,2-Dichlorobenzene	< 0.78	mg/kg	0.78	2.4	20	8260B		10/21/2016	CJR	1
Dichlorodifluoromethane	< 0.86	mg/kg	0.86	2.8	20	8260B		10/21/2016	CJR	1
1,2-Dichloroethane	< 0.6	mg/kg	0.6	1.92	20	8260B		10/21/2016	CJR	1
1,1-Dichloroethane	< 0.5	mg/kg	0.5	1.58	20	8260B		10/21/2016	CJR	1
1,1-Dichloroethene	< 0.58	mg/kg	0.58	1.86	20	8260B		10/21/2016	CJR	1
cis-1,2-Dichloroethene	< 0.42	mg/kg	0.42	1.36	20	8260B		10/21/2016	CJR	1
trans-1,2-Dichloroethene	< 0.48	mg/kg	0.48	1.52	20	8260B		10/21/2016	CJR	1
1,2-Dichloropropane	2.2	mg/kg	0.5	1.56	20	8260B		10/21/2016	CJR	1
2,2-Dichloropropane	< 2	mg/kg	2	6.6	20	8260B		10/21/2016	CJR	1
1,3-Dichloropropane	< 0.62	mg/kg	0.62	1.94	20	8260B		10/21/2016	CJR	1
Di-isopropyl ether	< 0.24	mg/kg	0.24	0.8	20	8260B		10/21/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.7	mg/kg	0.7	2.2	20	8260B		10/21/2016	CJR	1
Ethylbenzene	17	mg/kg	0.54	1.72	20	8260B		10/21/2016	CJR	1
Hexachlorobutadiene	< 2.2	mg/kg	2.2	7.2	20	8260B		10/21/2016	CJR	1
Isopropylbenzene	5.4	mg/kg	0.74	2.4	20	8260B		10/21/2016	CJR	1
p-Isopropyltoluene	150	mg/kg	1.12	3.6	20	8260B		10/21/2016	CJR	1
Methylene chloride	< 4.4	mg/kg	4.4	14	20	8260B		10/21/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.5	mg/kg	0.5	1.56	20	8260B		10/21/2016	CJR	1
Naphthalene	< 1.74	mg/kg	1.74	5.6	20	8260B		10/21/2016	CJR	1
n-Propylbenzene	3.4	mg/kg	0.7	2.2	20	8260B		10/21/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.26	mg/kg	0.26	0.8	20	8260B		10/21/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.58	mg/kg	0.58	1.86	20	8260B		10/21/2016	CJR	1
Tetrachloroethene	< 1.08	mg/kg	1.08	3.4	20	8260B		10/21/2016	CJR	1
Toluene	21.5	mg/kg	0.62	1.98	20	8260B		10/21/2016	CJR	1
1,2,4-Trichlorobenzene	< 1.7	mg/kg	1.7	5.4	20	8260B		10/21/2016	CJR	1
1,2,3-Trichlorobenzene	< 2.4	mg/kg	2.4	7.6	20	8260B		10/21/2016	CJR	1
1,1,1-Trichloroethane	< 0.8	mg/kg	0.8	2.6	20	8260B		10/21/2016	CJR	1
1,1,2-Trichloroethane	< 0.66	mg/kg	0.66	2.2	20	8260B		10/21/2016	CJR	1
Trichloroethene (TCE)	< 0.84	mg/kg	0.84	2.6	20	8260B		10/21/2016	CJR	1
Trichlorofluoromethane	< 1.2	mg/kg	1.2	3.8	20	8260B		10/21/2016	CJR	1
1,2,4-Trimethylbenzene	9.6	mg/kg	1.56	5	20	8260B		10/21/2016	CJR	1
1,3,5-Trimethylbenzene	5.1 "J"	mg/kg	1.78	5.6	20	8260B		10/21/2016	CJR	1
Vinyl Chloride	< 0.2	mg/kg	0.2	0.62	20	8260B		10/21/2016	CJR	1
m&p-Xylene	103	mg/kg	1.4	4.4	20	8260B		10/21/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856E
Sample ID SB-3 1-3
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
o-Xylene	36	mg/kg	0.58	1.84	20	8260B		10/21/2016	CJR	1
SUR - Toluene-d8	111	Rec %			20	8260B		10/21/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	116	Rec %			20	8260B		10/21/2016	CJR	1
SUR - 4-Bromofluorobenzene	106	Rec %			20	8260B		10/21/2016	CJR	1
SUR - Dibromofluoromethane	102	Rec %			20	8260B		10/21/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856F
Sample ID SB-3 3-5
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	77.1	%			1	5021		10/10/2016	NJC	1
Organic										
VOC's										
Benzene	< 0.016	mg/kg	0.016	0.049	1	8260B		10/18/2016	CJR	1
Bromobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		10/18/2016	CJR	1
Bromodichloromethane	< 0.015	mg/kg	0.015	0.048	1	8260B		10/18/2016	CJR	1
Bromoform	< 0.023	mg/kg	0.023	0.073	1	8260B		10/18/2016	CJR	1
tert-Butylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		10/18/2016	CJR	1
sec-Butylbenzene	< 0.036	mg/kg	0.036	0.11	1	8260B		10/18/2016	CJR	1
n-Butylbenzene	< 0.086	mg/kg	0.086	0.27	1	8260B		10/18/2016	CJR	1
Carbon Tetrachloride	< 0.021	mg/kg	0.021	0.067	1	8260B		10/18/2016	CJR	1
Chlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		10/18/2016	CJR	1
Chloroethane	< 0.045	mg/kg	0.045	0.14	1	8260B		10/18/2016	CJR	1
Chloroform	< 0.026	mg/kg	0.026	0.081	1	8260B		10/18/2016	CJR	1
Chloromethane	< 0.25	mg/kg	0.25	0.78	1	8260B		10/18/2016	CJR	1
2-Chlorotoluene	< 0.029	mg/kg	0.029	0.093	1	8260B		10/18/2016	CJR	1
4-Chlorotoluene	< 0.032	mg/kg	0.032	0.1	1	8260B		10/18/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 0.078	mg/kg	0.078	0.25	1	8260B		10/18/2016	CJR	1
Dibromochloromethane	< 0.031	mg/kg	0.031	0.098	1	8260B		10/18/2016	CJR	1
1,4-Dichlorobenzene	< 0.03	mg/kg	0.03	0.096	1	8260B		10/18/2016	CJR	1
1,3-Dichlorobenzene	< 0.03	mg/kg	0.03	0.097	1	8260B		10/18/2016	CJR	1
1,2-Dichlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		10/18/2016	CJR	1
Dichlorodifluoromethane	< 0.043	mg/kg	0.043	0.14	1	8260B		10/18/2016	CJR	1
1,2-Dichloroethane	< 0.03	mg/kg	0.03	0.096	1	8260B		10/18/2016	CJR	1
1,1-Dichloroethane	< 0.025	mg/kg	0.025	0.079	1	8260B		10/18/2016	CJR	1
1,1-Dichloroethene	< 0.029	mg/kg	0.029	0.093	1	8260B		10/18/2016	CJR	1
cis-1,2-Dichloroethene	< 0.021	mg/kg	0.021	0.068	1	8260B		10/18/2016	CJR	1
trans-1,2-Dichloroethene	< 0.024	mg/kg	0.024	0.076	1	8260B		10/18/2016	CJR	1
1,2-Dichloropropane	< 0.025	mg/kg	0.025	0.078	1	8260B		10/18/2016	CJR	1
2,2-Dichloropropane	< 0.1	mg/kg	0.1	0.33	1	8260B		10/18/2016	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.097	1	8260B		10/18/2016	CJR	1
Di-isopropyl ether	< 0.012	mg/kg	0.012	0.04	1	8260B		10/18/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.035	mg/kg	0.035	0.11	1	8260B		10/18/2016	CJR	1
Ethylbenzene	0.37	mg/kg	0.027	0.086	1	8260B		10/18/2016	CJR	1
Hexachlorobutadiene	< 0.11	mg/kg	0.11	0.36	1	8260B		10/18/2016	CJR	1
Isopropylbenzene	0.21	mg/kg	0.037	0.12	1	8260B		10/18/2016	CJR	1
p-Isopropyltoluene	1.77	mg/kg	0.056	0.18	1	8260B		10/18/2016	CJR	1
Methylene chloride	< 0.22	mg/kg	0.22	0.7	1	8260B		10/18/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.025	0.078	1	8260B		10/18/2016	CJR	1
Naphthalene	< 0.087	mg/kg	0.087	0.28	1	8260B		10/18/2016	CJR	1
n-Propylbenzene	0.155	mg/kg	0.035	0.11	1	8260B		10/18/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.013	mg/kg	0.013	0.04	1	8260B		10/18/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.029	mg/kg	0.029	0.093	1	8260B		10/18/2016	CJR	1
Tetrachloroethene	< 0.054	mg/kg	0.054	0.17	1	8260B		10/18/2016	CJR	1
Toluene	0.36	mg/kg	0.031	0.099	1	8260B		10/18/2016	CJR	1
1,2,4-Trichlorobenzene	< 0.085	mg/kg	0.085	0.27	1	8260B		10/18/2016	CJR	1
1,2,3-Trichlorobenzene	< 0.12	mg/kg	0.12	0.38	1	8260B		10/18/2016	CJR	1
1,1,1-Trichloroethane	< 0.04	mg/kg	0.04	0.13	1	8260B		10/18/2016	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B		10/18/2016	CJR	1
Trichloroethene (TCE)	< 0.042	mg/kg	0.042	0.13	1	8260B		10/18/2016	CJR	1
Trichlorofluoromethane	< 0.06	mg/kg	0.06	0.19	1	8260B		10/18/2016	CJR	1
1,2,4-Trimethylbenzene	0.42	mg/kg	0.078	0.25	1	8260B		10/18/2016	CJR	1
1,3,5-Trimethylbenzene	0.125 "J"	mg/kg	0.089	0.28	1	8260B		10/18/2016	CJR	1
Vinyl Chloride	< 0.01	mg/kg	0.01	0.031	1	8260B		10/18/2016	CJR	1
m&p-Xylene	2.11	mg/kg	0.07	0.22	1	8260B		10/18/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856F
Sample ID SB-3 3-5
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
o-Xylene	0.63	mg/kg	0.029	0.092	1	8260B		10/18/2016	CJR	1
SUR - Toluene-d8	99	Rec %			1	8260B		10/18/2016	CJR	1
SUR - Dibromofluoromethane	110	Rec %			1	8260B		10/18/2016	CJR	1
SUR - 4-Bromofluorobenzene	101	Rec %			1	8260B		10/18/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	114	Rec %			1	8260B		10/18/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856G
Sample ID SB-4 3-5
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	77.1	%			1	5021		10/10/2016	NJC	1
Organic										
VOC's										
Benzene	< 0.016	mg/kg	0.016	0.049	1	8260B		10/18/2016	CJR	1
Bromobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		10/18/2016	CJR	1
Bromodichloromethane	< 0.015	mg/kg	0.015	0.048	1	8260B		10/18/2016	CJR	1
Bromoform	< 0.023	mg/kg	0.023	0.073	1	8260B		10/18/2016	CJR	1
tert-Butylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		10/18/2016	CJR	1
sec-Butylbenzene	< 0.036	mg/kg	0.036	0.11	1	8260B		10/18/2016	CJR	1
n-Butylbenzene	< 0.086	mg/kg	0.086	0.27	1	8260B		10/18/2016	CJR	1
Carbon Tetrachloride	< 0.021	mg/kg	0.021	0.067	1	8260B		10/18/2016	CJR	1
Chlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		10/18/2016	CJR	1
Chloroethane	< 0.045	mg/kg	0.045	0.14	1	8260B		10/18/2016	CJR	1
Chloroform	< 0.026	mg/kg	0.026	0.081	1	8260B		10/18/2016	CJR	1
Chloromethane	< 0.25	mg/kg	0.25	0.78	1	8260B		10/18/2016	CJR	1
2-Chlorotoluene	< 0.029	mg/kg	0.029	0.093	1	8260B		10/18/2016	CJR	1
4-Chlorotoluene	< 0.032	mg/kg	0.032	0.1	1	8260B		10/18/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 0.078	mg/kg	0.078	0.25	1	8260B		10/18/2016	CJR	1
Dibromochloromethane	< 0.031	mg/kg	0.031	0.098	1	8260B		10/18/2016	CJR	1
1,4-Dichlorobenzene	< 0.03	mg/kg	0.03	0.096	1	8260B		10/18/2016	CJR	1
1,3-Dichlorobenzene	< 0.03	mg/kg	0.03	0.097	1	8260B		10/18/2016	CJR	1
1,2-Dichlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		10/18/2016	CJR	1
Dichlorodifluoromethane	< 0.043	mg/kg	0.043	0.14	1	8260B		10/18/2016	CJR	1
1,2-Dichloroethane	< 0.03	mg/kg	0.03	0.096	1	8260B		10/18/2016	CJR	1
1,1-Dichloroethane	< 0.025	mg/kg	0.025	0.079	1	8260B		10/18/2016	CJR	1
1,1-Dichloroethene	< 0.029	mg/kg	0.029	0.093	1	8260B		10/18/2016	CJR	1
cis-1,2-Dichloroethene	< 0.021	mg/kg	0.021	0.068	1	8260B		10/18/2016	CJR	1
trans-1,2-Dichloroethene	< 0.024	mg/kg	0.024	0.076	1	8260B		10/18/2016	CJR	1
1,2-Dichloropropane	< 0.025	mg/kg	0.025	0.078	1	8260B		10/18/2016	CJR	1
2,2-Dichloropropane	< 0.1	mg/kg	0.1	0.33	1	8260B		10/18/2016	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.097	1	8260B		10/18/2016	CJR	1
Di-isopropyl ether	< 0.012	mg/kg	0.012	0.04	1	8260B		10/18/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.035	mg/kg	0.035	0.11	1	8260B		10/18/2016	CJR	1
Ethylbenzene	< 0.027	mg/kg	0.027	0.086	1	8260B		10/18/2016	CJR	1
Hexachlorobutadiene	< 0.11	mg/kg	0.11	0.36	1	8260B		10/18/2016	CJR	1
Isopropylbenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		10/18/2016	CJR	1
p-Isopropyltoluene	0.13 "J"	mg/kg	0.056	0.18	1	8260B		10/18/2016	CJR	1
Methylene chloride	< 0.22	mg/kg	0.22	0.7	1	8260B		10/18/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.025	0.078	1	8260B		10/18/2016	CJR	1
Naphthalene	< 0.087	mg/kg	0.087	0.28	1	8260B		10/18/2016	CJR	1
n-Propylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		10/18/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.013	mg/kg	0.013	0.04	1	8260B		10/18/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.029	mg/kg	0.029	0.093	1	8260B		10/18/2016	CJR	1
Tetrachloroethene	< 0.054	mg/kg	0.054	0.17	1	8260B		10/18/2016	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.099	1	8260B		10/18/2016	CJR	1
1,2,4-Trichlorobenzene	< 0.085	mg/kg	0.085	0.27	1	8260B		10/18/2016	CJR	1
1,2,3-Trichlorobenzene	< 0.12	mg/kg	0.12	0.38	1	8260B		10/18/2016	CJR	1
1,1,1-Trichloroethane	< 0.04	mg/kg	0.04	0.13	1	8260B		10/18/2016	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B		10/18/2016	CJR	1
Trichloroethene (TCE)	< 0.042	mg/kg	0.042	0.13	1	8260B		10/18/2016	CJR	1
Trichlorofluoromethane	< 0.06	mg/kg	0.06	0.19	1	8260B		10/18/2016	CJR	1
1,2,4-Trimethylbenzene	< 0.078	mg/kg	0.078	0.25	1	8260B		10/18/2016	CJR	1
1,3,5-Trimethylbenzene	< 0.089	mg/kg	0.089	0.28	1	8260B		10/18/2016	CJR	1
Vinyl Chloride	< 0.01	mg/kg	0.01	0.031	1	8260B		10/18/2016	CJR	1
m&p-Xylene	< 0.07	mg/kg	0.07	0.22	1	8260B		10/18/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856G
Sample ID SB-4 3-5
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
o-Xylene	0.039 "J"	mg/kg	0.029	0.092	1	8260B		10/18/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	100	Rec %			1	8260B		10/18/2016	CJR	1
SUR - 4-Bromofluorobenzene	105	Rec %			1	8260B		10/18/2016	CJR	1
SUR - Dibromofluoromethane	98	Rec %			1	8260B		10/18/2016	CJR	1
SUR - Toluene-d8	96	Rec %			1	8260B		10/18/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856H
Sample ID SB-4 7.5-10
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	75.5	%			1	5021		10/10/2016	NJC	1
Organic										
VOC's										
Benzene	< 0.016	mg/kg	0.016	0.049	1	8260B		10/14/2016	CJR	1
Bromobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		10/14/2016	CJR	1
Bromodichloromethane	< 0.015	mg/kg	0.015	0.048	1	8260B		10/14/2016	CJR	1
Bromoform	< 0.023	mg/kg	0.023	0.073	1	8260B		10/14/2016	CJR	1
tert-Butylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		10/14/2016	CJR	1
sec-Butylbenzene	< 0.036	mg/kg	0.036	0.11	1	8260B		10/14/2016	CJR	1
n-Butylbenzene	< 0.086	mg/kg	0.086	0.27	1	8260B		10/14/2016	CJR	1
Carbon Tetrachloride	< 0.021	mg/kg	0.021	0.067	1	8260B		10/14/2016	CJR	1
Chlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		10/14/2016	CJR	1
Chloroethane	< 0.045	mg/kg	0.045	0.14	1	8260B		10/14/2016	CJR	1
Chloroform	< 0.026	mg/kg	0.026	0.081	1	8260B		10/14/2016	CJR	1
Chloromethane	< 0.25	mg/kg	0.25	0.78	1	8260B		10/14/2016	CJR	1
2-Chlorotoluene	< 0.029	mg/kg	0.029	0.093	1	8260B		10/14/2016	CJR	1
4-Chlorotoluene	< 0.032	mg/kg	0.032	0.1	1	8260B		10/14/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 0.078	mg/kg	0.078	0.25	1	8260B		10/14/2016	CJR	1
Dibromochloromethane	< 0.031	mg/kg	0.031	0.098	1	8260B		10/14/2016	CJR	1
1,4-Dichlorobenzene	< 0.03	mg/kg	0.03	0.096	1	8260B		10/14/2016	CJR	1
1,3-Dichlorobenzene	< 0.03	mg/kg	0.03	0.097	1	8260B		10/14/2016	CJR	1
1,2-Dichlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		10/14/2016	CJR	1
Dichlorodifluoromethane	< 0.043	mg/kg	0.043	0.14	1	8260B		10/14/2016	CJR	1
1,2-Dichloroethane	< 0.03	mg/kg	0.03	0.096	1	8260B		10/14/2016	CJR	1
1,1-Dichloroethane	< 0.025	mg/kg	0.025	0.079	1	8260B		10/14/2016	CJR	1
1,1-Dichloroethene	< 0.029	mg/kg	0.029	0.093	1	8260B		10/14/2016	CJR	1
cis-1,2-Dichloroethene	< 0.021	mg/kg	0.021	0.068	1	8260B		10/14/2016	CJR	1
trans-1,2-Dichloroethene	< 0.024	mg/kg	0.024	0.076	1	8260B		10/14/2016	CJR	1
1,2-Dichloropropane	0.63	mg/kg	0.025	0.078	1	8260B		10/14/2016	CJR	1
2,2-Dichloropropane	< 0.1	mg/kg	0.1	0.33	1	8260B		10/14/2016	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.097	1	8260B		10/14/2016	CJR	1
Di-isopropyl ether	< 0.012	mg/kg	0.012	0.04	1	8260B		10/14/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.035	mg/kg	0.035	0.11	1	8260B		10/14/2016	CJR	1
Ethylbenzene	< 0.027	mg/kg	0.027	0.086	1	8260B		10/14/2016	CJR	1
Hexachlorobutadiene	< 0.11	mg/kg	0.11	0.36	1	8260B		10/14/2016	CJR	1
Isopropylbenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		10/14/2016	CJR	1
p-Isopropyltoluene	0.083 "J"	mg/kg	0.056	0.18	1	8260B		10/14/2016	CJR	1
Methylene chloride	< 0.22	mg/kg	0.22	0.7	1	8260B		10/14/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.025	0.078	1	8260B		10/14/2016	CJR	1
Naphthalene	< 0.087	mg/kg	0.087	0.28	1	8260B		10/14/2016	CJR	1
n-Propylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		10/14/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.013	mg/kg	0.013	0.04	1	8260B		10/14/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.029	mg/kg	0.029	0.093	1	8260B		10/14/2016	CJR	1
Tetrachloroethene	< 0.054	mg/kg	0.054	0.17	1	8260B		10/14/2016	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.099	1	8260B		10/14/2016	CJR	1
1,2,4-Trichlorobenzene	< 0.085	mg/kg	0.085	0.27	1	8260B		10/14/2016	CJR	1
1,2,3-Trichlorobenzene	< 0.12	mg/kg	0.12	0.38	1	8260B		10/14/2016	CJR	1
1,1,1-Trichloroethane	< 0.04	mg/kg	0.04	0.13	1	8260B		10/14/2016	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B		10/14/2016	CJR	1
Trichloroethene (TCE)	< 0.042	mg/kg	0.042	0.13	1	8260B		10/14/2016	CJR	1
Trichlorofluoromethane	< 0.06	mg/kg	0.06	0.19	1	8260B		10/14/2016	CJR	1
1,2,4-Trimethylbenzene	< 0.078	mg/kg	0.078	0.25	1	8260B		10/14/2016	CJR	1
1,3,5-Trimethylbenzene	< 0.089	mg/kg	0.089	0.28	1	8260B		10/14/2016	CJR	1
Vinyl Chloride	< 0.01	mg/kg	0.01	0.031	1	8260B		10/14/2016	CJR	1
m&p-Xylene	< 0.07	mg/kg	0.07	0.22	1	8260B		10/14/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856H
Sample ID SB-4 7.5-10
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
o-Xylene	< 0.029	mg/kg	0.029	0.092	1	8260B		10/14/2016	CJR	1
SUR - 4-Bromofluorobenzene	102	Rec %			1	8260B		10/14/2016	CJR	1
SUR - Dibromofluoromethane	102	Rec %			1	8260B		10/14/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	110	Rec %			1	8260B		10/14/2016	CJR	1
SUR - Toluene-d8	98	Rec %			1	8260B		10/14/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856I
Sample ID SB-5 3-5
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	78.2	%			1	5021		10/10/2016	NJC	1
Organic										
VOC's										
Benzene	< 0.016	mg/kg	0.016	0.049	1	8260B		10/14/2016	CJR	1
Bromobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		10/14/2016	CJR	1
Bromodichloromethane	< 0.015	mg/kg	0.015	0.048	1	8260B		10/14/2016	CJR	1
Bromoform	< 0.023	mg/kg	0.023	0.073	1	8260B		10/14/2016	CJR	1
tert-Butylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		10/14/2016	CJR	1
sec-Butylbenzene	< 0.036	mg/kg	0.036	0.11	1	8260B		10/14/2016	CJR	1
n-Butylbenzene	< 0.086	mg/kg	0.086	0.27	1	8260B		10/14/2016	CJR	1
Carbon Tetrachloride	< 0.021	mg/kg	0.021	0.067	1	8260B		10/14/2016	CJR	1
Chlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		10/14/2016	CJR	1
Chloroethane	< 0.045	mg/kg	0.045	0.14	1	8260B		10/14/2016	CJR	1
Chloroform	< 0.026	mg/kg	0.026	0.081	1	8260B		10/14/2016	CJR	1
Chloromethane	< 0.25	mg/kg	0.25	0.78	1	8260B		10/14/2016	CJR	1
2-Chlorotoluene	< 0.029	mg/kg	0.029	0.093	1	8260B		10/14/2016	CJR	1
4-Chlorotoluene	< 0.032	mg/kg	0.032	0.1	1	8260B		10/14/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 0.078	mg/kg	0.078	0.25	1	8260B		10/14/2016	CJR	1
Dibromochloromethane	< 0.031	mg/kg	0.031	0.098	1	8260B		10/14/2016	CJR	1
1,4-Dichlorobenzene	< 0.03	mg/kg	0.03	0.096	1	8260B		10/14/2016	CJR	1
1,3-Dichlorobenzene	< 0.03	mg/kg	0.03	0.097	1	8260B		10/14/2016	CJR	1
1,2-Dichlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		10/14/2016	CJR	1
Dichlorodifluoromethane	< 0.043	mg/kg	0.043	0.14	1	8260B		10/14/2016	CJR	1
1,2-Dichloroethane	< 0.03	mg/kg	0.03	0.096	1	8260B		10/14/2016	CJR	1
1,1-Dichloroethane	< 0.025	mg/kg	0.025	0.079	1	8260B		10/14/2016	CJR	1
1,1-Dichloroethene	< 0.029	mg/kg	0.029	0.093	1	8260B		10/14/2016	CJR	1
cis-1,2-Dichloroethene	< 0.021	mg/kg	0.021	0.068	1	8260B		10/14/2016	CJR	1
trans-1,2-Dichloroethene	< 0.024	mg/kg	0.024	0.076	1	8260B		10/14/2016	CJR	1
1,2-Dichloropropane	< 0.025	mg/kg	0.025	0.078	1	8260B		10/14/2016	CJR	1
2,2-Dichloropropane	< 0.1	mg/kg	0.1	0.33	1	8260B		10/14/2016	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.097	1	8260B		10/14/2016	CJR	1
Di-isopropyl ether	< 0.012	mg/kg	0.012	0.04	1	8260B		10/14/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.035	mg/kg	0.035	0.11	1	8260B		10/14/2016	CJR	1
Ethylbenzene	< 0.027	mg/kg	0.027	0.086	1	8260B		10/14/2016	CJR	1
Hexachlorobutadiene	< 0.11	mg/kg	0.11	0.36	1	8260B		10/14/2016	CJR	1
Isopropylbenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		10/14/2016	CJR	1
p-Isopropyltoluene	< 0.056	mg/kg	0.056	0.18	1	8260B		10/14/2016	CJR	1
Methylene chloride	< 0.22	mg/kg	0.22	0.7	1	8260B		10/14/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.025	0.078	1	8260B		10/14/2016	CJR	1
Naphthalene	< 0.087	mg/kg	0.087	0.28	1	8260B		10/14/2016	CJR	1
n-Propylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		10/14/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.013	mg/kg	0.013	0.04	1	8260B		10/14/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.029	mg/kg	0.029	0.093	1	8260B		10/14/2016	CJR	1
Tetrachloroethene	< 0.054	mg/kg	0.054	0.17	1	8260B		10/14/2016	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.099	1	8260B		10/14/2016	CJR	1
1,2,4-Trichlorobenzene	< 0.085	mg/kg	0.085	0.27	1	8260B		10/14/2016	CJR	1
1,2,3-Trichlorobenzene	< 0.12	mg/kg	0.12	0.38	1	8260B		10/14/2016	CJR	1
1,1,1-Trichloroethane	< 0.04	mg/kg	0.04	0.13	1	8260B		10/14/2016	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B		10/14/2016	CJR	1
Trichloroethene (TCE)	< 0.042	mg/kg	0.042	0.13	1	8260B		10/14/2016	CJR	1
Trichlorofluoromethane	< 0.06	mg/kg	0.06	0.19	1	8260B		10/14/2016	CJR	1
1,2,4-Trimethylbenzene	< 0.078	mg/kg	0.078	0.25	1	8260B		10/14/2016	CJR	1
1,3,5-Trimethylbenzene	< 0.089	mg/kg	0.089	0.28	1	8260B		10/14/2016	CJR	1
Vinyl Chloride	< 0.01	mg/kg	0.01	0.031	1	8260B		10/14/2016	CJR	1
m&p-Xylene	< 0.07	mg/kg	0.07	0.22	1	8260B		10/14/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856I
Sample ID SB-5 3-5
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
o-Xylene	< 0.029	mg/kg	0.029	0.092	1	8260B		10/14/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	107	Rec %			1	8260B		10/14/2016	CJR	1
SUR - 4-Bromofluorobenzene	99	Rec %			1	8260B		10/14/2016	CJR	1
SUR - Dibromofluoromethane	103	Rec %			1	8260B		10/14/2016	CJR	1
SUR - Toluene-d8	98	Rec %			1	8260B		10/14/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856J
Sample ID SB-5 7.5-10
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	73.5	%			1	5021		10/10/2016	NJC	1
Organic										
VOC's										
Benzene	< 0.016	mg/kg	0.016	0.049	1	8260B		10/14/2016	CJR	1
Bromobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		10/14/2016	CJR	1
Bromodichloromethane	< 0.015	mg/kg	0.015	0.048	1	8260B		10/14/2016	CJR	1
Bromoform	< 0.023	mg/kg	0.023	0.073	1	8260B		10/14/2016	CJR	1
tert-Butylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		10/14/2016	CJR	1
sec-Butylbenzene	< 0.036	mg/kg	0.036	0.11	1	8260B		10/14/2016	CJR	1
n-Butylbenzene	< 0.086	mg/kg	0.086	0.27	1	8260B		10/14/2016	CJR	1
Carbon Tetrachloride	< 0.021	mg/kg	0.021	0.067	1	8260B		10/14/2016	CJR	1
Chlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		10/14/2016	CJR	1
Chloroethane	< 0.045	mg/kg	0.045	0.14	1	8260B		10/14/2016	CJR	1
Chloroform	< 0.026	mg/kg	0.026	0.081	1	8260B		10/14/2016	CJR	1
Chloromethane	< 0.25	mg/kg	0.25	0.78	1	8260B		10/14/2016	CJR	1
2-Chlorotoluene	< 0.029	mg/kg	0.029	0.093	1	8260B		10/14/2016	CJR	1
4-Chlorotoluene	< 0.032	mg/kg	0.032	0.1	1	8260B		10/14/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 0.078	mg/kg	0.078	0.25	1	8260B		10/14/2016	CJR	1
Dibromochloromethane	< 0.031	mg/kg	0.031	0.098	1	8260B		10/14/2016	CJR	1
1,4-Dichlorobenzene	< 0.03	mg/kg	0.03	0.096	1	8260B		10/14/2016	CJR	1
1,3-Dichlorobenzene	< 0.03	mg/kg	0.03	0.097	1	8260B		10/14/2016	CJR	1
1,2-Dichlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		10/14/2016	CJR	1
Dichlorodifluoromethane	< 0.043	mg/kg	0.043	0.14	1	8260B		10/14/2016	CJR	1
1,2-Dichloroethane	< 0.03	mg/kg	0.03	0.096	1	8260B		10/14/2016	CJR	1
1,1-Dichloroethane	< 0.025	mg/kg	0.025	0.079	1	8260B		10/14/2016	CJR	1
1,1-Dichloroethene	< 0.029	mg/kg	0.029	0.093	1	8260B		10/14/2016	CJR	1
cis-1,2-Dichloroethene	< 0.021	mg/kg	0.021	0.068	1	8260B		10/14/2016	CJR	1
trans-1,2-Dichloroethene	< 0.024	mg/kg	0.024	0.076	1	8260B		10/14/2016	CJR	1
1,2-Dichloropropane	< 0.025	mg/kg	0.025	0.078	1	8260B		10/14/2016	CJR	1
2,2-Dichloropropane	< 0.1	mg/kg	0.1	0.33	1	8260B		10/14/2016	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.097	1	8260B		10/14/2016	CJR	1
Di-isopropyl ether	< 0.012	mg/kg	0.012	0.04	1	8260B		10/14/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.035	mg/kg	0.035	0.11	1	8260B		10/14/2016	CJR	1
Ethylbenzene	< 0.027	mg/kg	0.027	0.086	1	8260B		10/14/2016	CJR	1
Hexachlorobutadiene	< 0.11	mg/kg	0.11	0.36	1	8260B		10/14/2016	CJR	1
Isopropylbenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		10/14/2016	CJR	1
p-Isopropyltoluene	< 0.056	mg/kg	0.056	0.18	1	8260B		10/14/2016	CJR	1
Methylene chloride	< 0.22	mg/kg	0.22	0.7	1	8260B		10/14/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.025	0.078	1	8260B		10/14/2016	CJR	1
Naphthalene	< 0.087	mg/kg	0.087	0.28	1	8260B		10/14/2016	CJR	1
n-Propylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		10/14/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.013	mg/kg	0.013	0.04	1	8260B		10/14/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.029	mg/kg	0.029	0.093	1	8260B		10/14/2016	CJR	1
Tetrachloroethene	< 0.054	mg/kg	0.054	0.17	1	8260B		10/14/2016	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.099	1	8260B		10/14/2016	CJR	1
1,2,4-Trichlorobenzene	< 0.085	mg/kg	0.085	0.27	1	8260B		10/14/2016	CJR	1
1,2,3-Trichlorobenzene	< 0.12	mg/kg	0.12	0.38	1	8260B		10/14/2016	CJR	1
1,1,1-Trichloroethane	< 0.04	mg/kg	0.04	0.13	1	8260B		10/14/2016	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B		10/14/2016	CJR	1
Trichloroethene (TCE)	< 0.042	mg/kg	0.042	0.13	1	8260B		10/14/2016	CJR	1
Trichlorofluoromethane	< 0.06	mg/kg	0.06	0.19	1	8260B		10/14/2016	CJR	1
1,2,4-Trimethylbenzene	< 0.078	mg/kg	0.078	0.25	1	8260B		10/14/2016	CJR	1
1,3,5-Trimethylbenzene	< 0.089	mg/kg	0.089	0.28	1	8260B		10/14/2016	CJR	1
Vinyl Chloride	< 0.01	mg/kg	0.01	0.031	1	8260B		10/14/2016	CJR	1
m&p-Xylene	< 0.07	mg/kg	0.07	0.22	1	8260B		10/14/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856J
Sample ID SB-5 7.5-10
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
o-Xylene	< 0.029	mg/kg	0.029	0.092	1	8260B		10/14/2016	CJR	1
SUR - Dibromofluoromethane	103	Rec %			1	8260B		10/14/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	108	Rec %			1	8260B		10/14/2016	CJR	1
SUR - 4-Bromofluorobenzene	105	Rec %			1	8260B		10/14/2016	CJR	1
SUR - Toluene-d8	102	Rec %			1	8260B		10/14/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856K
Sample ID SB-6 1-3
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	78.3	%			1	5021		10/10/2016	NJC	1
Organic										
VOC's										
Benzene	< 0.16	mg/kg	0.16	0.49	10	8260B		10/19/2016	CJR	1
Bromobenzene	< 0.39	mg/kg	0.39	1.2	10	8260B		10/19/2016	CJR	1
Bromodichloromethane	< 0.15	mg/kg	0.15	0.48	10	8260B		10/19/2016	CJR	1
Bromoform	< 0.23	mg/kg	0.23	0.73	10	8260B		10/19/2016	CJR	1
tert-Butylbenzene	< 0.35	mg/kg	0.35	1.1	10	8260B		10/19/2016	CJR	1
sec-Butylbenzene	< 0.36	mg/kg	0.36	1.1	10	8260B		10/19/2016	CJR	1
n-Butylbenzene	< 0.86	mg/kg	0.86	2.7	10	8260B		10/19/2016	CJR	1
Carbon Tetrachloride	< 0.21	mg/kg	0.21	0.67	10	8260B		10/19/2016	CJR	1
Chlorobenzene	< 0.39	mg/kg	0.39	1.2	10	8260B		10/19/2016	CJR	1
Chloroethane	< 0.45	mg/kg	0.45	1.4	10	8260B		10/19/2016	CJR	1
Chloroform	< 0.26	mg/kg	0.26	0.81	10	8260B		10/19/2016	CJR	1
Chloromethane	< 2.5	mg/kg	2.5	7.8	10	8260B		10/19/2016	CJR	1
2-Chlorotoluene	< 0.29	mg/kg	0.29	0.93	10	8260B		10/19/2016	CJR	1
4-Chlorotoluene	< 0.32	mg/kg	0.32	1	10	8260B		10/19/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 0.78	mg/kg	0.78	2.5	10	8260B		10/19/2016	CJR	1
Dibromochloromethane	< 0.31	mg/kg	0.31	0.98	10	8260B		10/19/2016	CJR	1
1,4-Dichlorobenzene	1.23	mg/kg	0.3	0.96	10	8260B		10/19/2016	CJR	1
1,3-Dichlorobenzene	< 0.3	mg/kg	0.3	0.97	10	8260B		10/19/2016	CJR	1
1,2-Dichlorobenzene	< 0.39	mg/kg	0.39	1.2	10	8260B		10/19/2016	CJR	1
Dichlorodifluoromethane	< 0.43	mg/kg	0.43	1.4	10	8260B		10/19/2016	CJR	1
1,2-Dichloroethane	< 0.3	mg/kg	0.3	0.96	10	8260B		10/19/2016	CJR	1
1,1-Dichloroethane	< 0.25	mg/kg	0.25	0.79	10	8260B		10/19/2016	CJR	1
1,1-Dichloroethene	< 0.29	mg/kg	0.29	0.93	10	8260B		10/19/2016	CJR	1
cis-1,2-Dichloroethene	< 0.21	mg/kg	0.21	0.68	10	8260B		10/19/2016	CJR	1
trans-1,2-Dichloroethene	< 0.24	mg/kg	0.24	0.76	10	8260B		10/19/2016	CJR	1
1,2-Dichloropropane	2.6	mg/kg	0.25	0.78	10	8260B		10/19/2016	CJR	1
2,2-Dichloropropane	< 1	mg/kg	1	3.3	10	8260B		10/19/2016	CJR	1
1,3-Dichloropropane	< 0.31	mg/kg	0.31	0.97	10	8260B		10/19/2016	CJR	1
Di-isopropyl ether	< 0.12	mg/kg	0.12	0.4	10	8260B		10/19/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.35	mg/kg	0.35	1.1	10	8260B		10/19/2016	CJR	1
Ethylbenzene	1.05	mg/kg	0.27	0.86	10	8260B		10/19/2016	CJR	1
Hexachlorobutadiene	< 1.1	mg/kg	1.1	3.6	10	8260B		10/19/2016	CJR	1
Isopropylbenzene	1.36	mg/kg	0.37	1.2	10	8260B		10/19/2016	CJR	1
p-Isopropyltoluene	2.6	mg/kg	0.56	1.8	10	8260B		10/19/2016	CJR	1
Methylene chloride	< 2.2	mg/kg	2.2	7	10	8260B		10/19/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.25	mg/kg	0.25	0.78	10	8260B		10/19/2016	CJR	1
Naphthalene	0.91 "J"	mg/kg	0.87	2.8	10	8260B		10/19/2016	CJR	1
n-Propylbenzene	< 0.35	mg/kg	0.35	1.1	10	8260B		10/19/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.13	mg/kg	0.13	0.4	10	8260B		10/19/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.29	mg/kg	0.29	0.93	10	8260B		10/19/2016	CJR	1
Tetrachloroethene	< 0.54	mg/kg	0.54	1.7	10	8260B		10/19/2016	CJR	1
Toluene	1.21	mg/kg	0.31	0.99	10	8260B		10/19/2016	CJR	1
1,2,4-Trichlorobenzene	< 0.85	mg/kg	0.85	2.7	10	8260B		10/19/2016	CJR	1
1,2,3-Trichlorobenzene	< 1.2	mg/kg	1.2	3.8	10	8260B		10/19/2016	CJR	1
1,1,1-Trichloroethane	< 0.4	mg/kg	0.4	1.3	10	8260B		10/19/2016	CJR	1
1,1,2-Trichloroethane	< 0.33	mg/kg	0.33	1.1	10	8260B		10/19/2016	CJR	1
Trichloroethene (TCE)	< 0.42	mg/kg	0.42	1.3	10	8260B		10/19/2016	CJR	1
Trichlorofluoromethane	< 0.6	mg/kg	0.6	1.9	10	8260B		10/19/2016	CJR	1
1,2,4-Trimethylbenzene	1.46 "J"	mg/kg	0.78	2.5	10	8260B		10/19/2016	CJR	1
1,3,5-Trimethylbenzene	< 0.89	mg/kg	0.89	2.8	10	8260B		10/19/2016	CJR	1
Vinyl Chloride	< 0.1	mg/kg	0.1	0.31	10	8260B		10/19/2016	CJR	1
m&p-Xylene	5.0	mg/kg	0.7	2.2	10	8260B		10/19/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856K
Sample ID SB-6 1-3
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
o-Xylene	2.05	mg/kg	0.29	0.92	10	8260B		10/19/2016	CJR	1
SUR - Toluene-d8	99	Rec %			10	8260B		10/19/2016	CJR	1
SUR - Dibromofluoromethane	100	Rec %			10	8260B		10/19/2016	CJR	1
SUR - 4-Bromofluorobenzene	100	Rec %			10	8260B		10/19/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	103	Rec %			10	8260B		10/19/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856L
Sample ID SB-6 3-5
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	68.3	%			1	5021		10/10/2016	NJC	1
Organic										
VOC's										
Benzene	0.056	mg/kg	0.016	0.049	1	8260B		10/19/2016	CJR	1
Bromobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		10/19/2016	CJR	1
Bromodichloromethane	< 0.015	mg/kg	0.015	0.048	1	8260B		10/19/2016	CJR	1
Bromoform	< 0.023	mg/kg	0.023	0.073	1	8260B		10/19/2016	CJR	1
tert-Butylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		10/19/2016	CJR	1
sec-Butylbenzene	< 0.036	mg/kg	0.036	0.11	1	8260B		10/19/2016	CJR	1
n-Butylbenzene	< 0.086	mg/kg	0.086	0.27	1	8260B		10/19/2016	CJR	1
Carbon Tetrachloride	< 0.021	mg/kg	0.021	0.067	1	8260B		10/19/2016	CJR	1
Chlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		10/19/2016	CJR	1
Chloroethane	< 0.045	mg/kg	0.045	0.14	1	8260B		10/19/2016	CJR	1
Chloroform	< 0.026	mg/kg	0.026	0.081	1	8260B		10/19/2016	CJR	1
Chloromethane	< 0.25	mg/kg	0.25	0.78	1	8260B		10/19/2016	CJR	1
2-Chlorotoluene	< 0.029	mg/kg	0.029	0.093	1	8260B		10/19/2016	CJR	1
4-Chlorotoluene	< 0.032	mg/kg	0.032	0.1	1	8260B		10/19/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 0.078	mg/kg	0.078	0.25	1	8260B		10/19/2016	CJR	1
Dibromochloromethane	< 0.031	mg/kg	0.031	0.098	1	8260B		10/19/2016	CJR	1
1,4-Dichlorobenzene	< 0.03	mg/kg	0.03	0.096	1	8260B		10/19/2016	CJR	1
1,3-Dichlorobenzene	< 0.03	mg/kg	0.03	0.097	1	8260B		10/19/2016	CJR	1
1,2-Dichlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		10/19/2016	CJR	1
Dichlorodifluoromethane	< 0.043	mg/kg	0.043	0.14	1	8260B		10/19/2016	CJR	1
1,2-Dichloroethane	< 0.03	mg/kg	0.03	0.096	1	8260B		10/19/2016	CJR	1
1,1-Dichloroethane	< 0.025	mg/kg	0.025	0.079	1	8260B		10/19/2016	CJR	1
1,1-Dichloroethene	< 0.029	mg/kg	0.029	0.093	1	8260B		10/19/2016	CJR	1
cis-1,2-Dichloroethene	< 0.021	mg/kg	0.021	0.068	1	8260B		10/19/2016	CJR	1
trans-1,2-Dichloroethene	< 0.024	mg/kg	0.024	0.076	1	8260B		10/19/2016	CJR	1
1,2-Dichloropropane	0.18	mg/kg	0.025	0.078	1	8260B		10/19/2016	CJR	1
2,2-Dichloropropane	< 0.1	mg/kg	0.1	0.33	1	8260B		10/19/2016	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.097	1	8260B		10/19/2016	CJR	1
Di-isopropyl ether	< 0.012	mg/kg	0.012	0.04	1	8260B		10/19/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.035	mg/kg	0.035	0.11	1	8260B		10/19/2016	CJR	1
Ethylbenzene	0.42	mg/kg	0.027	0.086	1	8260B		10/19/2016	CJR	1
Hexachlorobutadiene	< 0.11	mg/kg	0.11	0.36	1	8260B		10/19/2016	CJR	1
Isopropylbenzene	0.138	mg/kg	0.037	0.12	1	8260B		10/19/2016	CJR	1
p-Isopropyltoluene	7.5	mg/kg	0.056	0.18	1	8260B		10/19/2016	CJR	1
Methylene chloride	< 0.22	mg/kg	0.22	0.7	1	8260B		10/19/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.025	0.078	1	8260B		10/19/2016	CJR	1
Naphthalene	< 0.087	mg/kg	0.087	0.28	1	8260B		10/19/2016	CJR	1
n-Propylbenzene	0.047 "J"	mg/kg	0.035	0.11	1	8260B		10/19/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.013	mg/kg	0.013	0.04	1	8260B		10/19/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.029	mg/kg	0.029	0.093	1	8260B		10/19/2016	CJR	1
Tetrachloroethene	< 0.054	mg/kg	0.054	0.17	1	8260B		10/19/2016	CJR	1
Toluene	2.17	mg/kg	0.031	0.099	1	8260B		10/19/2016	CJR	1
1,2,4-Trichlorobenzene	< 0.085	mg/kg	0.085	0.27	1	8260B		10/19/2016	CJR	1
1,2,3-Trichlorobenzene	< 0.12	mg/kg	0.12	0.38	1	8260B		10/19/2016	CJR	1
1,1,1-Trichloroethane	< 0.04	mg/kg	0.04	0.13	1	8260B		10/19/2016	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B		10/19/2016	CJR	1
Trichloroethene (TCE)	< 0.042	mg/kg	0.042	0.13	1	8260B		10/19/2016	CJR	1
Trichlorofluoromethane	< 0.06	mg/kg	0.06	0.19	1	8260B		10/19/2016	CJR	1
1,2,4-Trimethylbenzene	0.259	mg/kg	0.078	0.25	1	8260B		10/19/2016	CJR	1
1,3,5-Trimethylbenzene	0.254 "J"	mg/kg	0.089	0.28	1	8260B		10/19/2016	CJR	1
Vinyl Chloride	< 0.01	mg/kg	0.01	0.031	1	8260B		10/19/2016	CJR	1
m&p-Xylene	2.31	mg/kg	0.07	0.22	1	8260B		10/19/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856L
Sample ID SB-6 3-5
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
o-Xylene	0.78	mg/kg	0.029	0.092	1	8260B		10/19/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	108	Rec %			1	8260B		10/19/2016	CJR	1
SUR - 4-Bromofluorobenzene	108	Rec %			1	8260B		10/19/2016	CJR	1
SUR - Dibromofluoromethane	103	Rec %			1	8260B		10/19/2016	CJR	1
SUR - Toluene-d8	104	Rec %			1	8260B		10/19/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856M
Sample ID SB-7 3-5
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	79.3	%			1	5021		10/10/2016	NJC	1
Organic										
VOC's										
Benzene	< 0.016	mg/kg	0.016	0.049	1	8260B		10/14/2016	CJR	1
Bromobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		10/14/2016	CJR	1
Bromodichloromethane	< 0.015	mg/kg	0.015	0.048	1	8260B		10/14/2016	CJR	1
Bromoform	< 0.023	mg/kg	0.023	0.073	1	8260B		10/14/2016	CJR	1
tert-Butylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		10/14/2016	CJR	1
sec-Butylbenzene	< 0.036	mg/kg	0.036	0.11	1	8260B		10/14/2016	CJR	1
n-Butylbenzene	< 0.086	mg/kg	0.086	0.27	1	8260B		10/14/2016	CJR	1
Carbon Tetrachloride	< 0.021	mg/kg	0.021	0.067	1	8260B		10/14/2016	CJR	1
Chlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		10/14/2016	CJR	1
Chloroethane	< 0.045	mg/kg	0.045	0.14	1	8260B		10/14/2016	CJR	1
Chloroform	< 0.026	mg/kg	0.026	0.081	1	8260B		10/14/2016	CJR	1
Chloromethane	< 0.25	mg/kg	0.25	0.78	1	8260B		10/14/2016	CJR	1
2-Chlorotoluene	< 0.029	mg/kg	0.029	0.093	1	8260B		10/14/2016	CJR	1
4-Chlorotoluene	< 0.032	mg/kg	0.032	0.1	1	8260B		10/14/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 0.078	mg/kg	0.078	0.25	1	8260B		10/14/2016	CJR	1
Dibromochloromethane	< 0.031	mg/kg	0.031	0.098	1	8260B		10/14/2016	CJR	1
1,4-Dichlorobenzene	< 0.03	mg/kg	0.03	0.096	1	8260B		10/14/2016	CJR	1
1,3-Dichlorobenzene	< 0.03	mg/kg	0.03	0.097	1	8260B		10/14/2016	CJR	1
1,2-Dichlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		10/14/2016	CJR	1
Dichlorodifluoromethane	< 0.043	mg/kg	0.043	0.14	1	8260B		10/14/2016	CJR	1
1,2-Dichloroethane	< 0.03	mg/kg	0.03	0.096	1	8260B		10/14/2016	CJR	1
1,1-Dichloroethane	< 0.025	mg/kg	0.025	0.079	1	8260B		10/14/2016	CJR	1
1,1-Dichloroethene	< 0.029	mg/kg	0.029	0.093	1	8260B		10/14/2016	CJR	1
cis-1,2-Dichloroethene	< 0.021	mg/kg	0.021	0.068	1	8260B		10/14/2016	CJR	1
trans-1,2-Dichloroethene	< 0.024	mg/kg	0.024	0.076	1	8260B		10/14/2016	CJR	1
1,2-Dichloropropane	0.106	mg/kg	0.025	0.078	1	8260B		10/14/2016	CJR	1
2,2-Dichloropropane	< 0.1	mg/kg	0.1	0.33	1	8260B		10/14/2016	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.097	1	8260B		10/14/2016	CJR	1
Di-isopropyl ether	< 0.012	mg/kg	0.012	0.04	1	8260B		10/14/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.035	mg/kg	0.035	0.11	1	8260B		10/14/2016	CJR	1
Ethylbenzene	0.135	mg/kg	0.027	0.086	1	8260B		10/14/2016	CJR	1
Hexachlorobutadiene	< 0.11	mg/kg	0.11	0.36	1	8260B		10/14/2016	CJR	1
Isopropylbenzene	0.112 "J"	mg/kg	0.037	0.12	1	8260B		10/14/2016	CJR	1
p-Isopropyltoluene	2.84	mg/kg	0.056	0.18	1	8260B		10/14/2016	CJR	1
Methylene chloride	< 0.22	mg/kg	0.22	0.7	1	8260B		10/14/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.025	0.078	1	8260B		10/14/2016	CJR	1
Naphthalene	< 0.087	mg/kg	0.087	0.28	1	8260B		10/14/2016	CJR	1
n-Propylbenzene	0.103 "J"	mg/kg	0.035	0.11	1	8260B		10/14/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.013	mg/kg	0.013	0.04	1	8260B		10/14/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.029	mg/kg	0.029	0.093	1	8260B		10/14/2016	CJR	1
Tetrachloroethene	< 0.054	mg/kg	0.054	0.17	1	8260B		10/14/2016	CJR	1
Toluene	0.045 "J"	mg/kg	0.031	0.099	1	8260B		10/14/2016	CJR	1
1,2,4-Trichlorobenzene	< 0.085	mg/kg	0.085	0.27	1	8260B		10/14/2016	CJR	1
1,2,3-Trichlorobenzene	< 0.12	mg/kg	0.12	0.38	1	8260B		10/14/2016	CJR	1
1,1,1-Trichloroethane	< 0.04	mg/kg	0.04	0.13	1	8260B		10/14/2016	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B		10/14/2016	CJR	1
Trichloroethene (TCE)	< 0.042	mg/kg	0.042	0.13	1	8260B		10/14/2016	CJR	1
Trichlorofluoromethane	< 0.06	mg/kg	0.06	0.19	1	8260B		10/14/2016	CJR	1
1,2,4-Trimethylbenzene	0.56	mg/kg	0.078	0.25	1	8260B		10/14/2016	CJR	1
1,3,5-Trimethylbenzene	0.32	mg/kg	0.089	0.28	1	8260B		10/14/2016	CJR	1
Vinyl Chloride	< 0.01	mg/kg	0.01	0.031	1	8260B		10/14/2016	CJR	1
m&p-Xylene	1.04	mg/kg	0.07	0.22	1	8260B		10/14/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856M
Sample ID SB-7 3-5
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
o-Xylene	0.247	mg/kg	0.029	0.092	1	8260B		10/14/2016	CJR	1
SUR - 4-Bromofluorobenzene	112	Rec %			1	8260B		10/14/2016	CJR	1
SUR - Dibromofluoromethane	96	Rec %			1	8260B		10/14/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	96	Rec %			1	8260B		10/14/2016	CJR	1
SUR - Toluene-d8	113	Rec %			1	8260B		10/14/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856N
Sample ID SB-7 12.5-15
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	72.5	%			1	5021		10/10/2016	NJC	1
Organic										
VOC's										
Benzene	< 0.8	mg/kg	0.8	2.45	50	8260B		10/18/2016	CJR	1
Bromobenzene	< 1.95	mg/kg	1.95	6	50	8260B		10/18/2016	CJR	1
Bromodichloromethane	< 0.75	mg/kg	0.75	2.4	50	8260B		10/18/2016	CJR	1
Bromoform	< 1.15	mg/kg	1.15	3.65	50	8260B		10/18/2016	CJR	1
tert-Butylbenzene	< 1.75	mg/kg	1.75	5.5	50	8260B		10/18/2016	CJR	1
sec-Butylbenzene	< 1.8	mg/kg	1.8	5.5	50	8260B		10/18/2016	CJR	1
n-Butylbenzene	< 4.3	mg/kg	4.3	13.5	50	8260B		10/18/2016	CJR	1
Carbon Tetrachloride	< 1.05	mg/kg	1.05	3.35	50	8260B		10/18/2016	CJR	1
Chlorobenzene	< 1.95	mg/kg	1.95	6	50	8260B		10/18/2016	CJR	1
Chloroethane	< 2.25	mg/kg	2.25	7	50	8260B		10/18/2016	CJR	1
Chloroform	< 1.3	mg/kg	1.3	4.05	50	8260B		10/18/2016	CJR	1
Chloromethane	< 12.5	mg/kg	12.5	39	50	8260B		10/18/2016	CJR	1
2-Chlorotoluene	< 1.45	mg/kg	1.45	4.65	50	8260B		10/18/2016	CJR	1
4-Chlorotoluene	< 1.6	mg/kg	1.6	5	50	8260B		10/18/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 3.9	mg/kg	3.9	12.5	50	8260B		10/18/2016	CJR	1
Dibromochloromethane	< 1.55	mg/kg	1.55	4.9	50	8260B		10/18/2016	CJR	1
1,4-Dichlorobenzene	< 1.5	mg/kg	1.5	4.8	50	8260B		10/18/2016	CJR	1
1,3-Dichlorobenzene	< 1.5	mg/kg	1.5	4.85	50	8260B		10/18/2016	CJR	1
1,2-Dichlorobenzene	< 1.95	mg/kg	1.95	6	50	8260B		10/18/2016	CJR	1
Dichlorodifluoromethane	< 2.15	mg/kg	2.15	7	50	8260B		10/18/2016	CJR	1
1,2-Dichloroethane	< 1.5	mg/kg	1.5	4.8	50	8260B		10/18/2016	CJR	1
1,1-Dichloroethane	< 1.25	mg/kg	1.25	3.95	50	8260B		10/18/2016	CJR	1
1,1-Dichloroethene	< 1.45	mg/kg	1.45	4.65	50	8260B		10/18/2016	CJR	1
cis-1,2-Dichloroethene	< 1.05	mg/kg	1.05	3.4	50	8260B		10/18/2016	CJR	1
trans-1,2-Dichloroethene	< 1.2	mg/kg	1.2	3.8	50	8260B		10/18/2016	CJR	1
1,2-Dichloropropane	213	mg/kg	1.25	3.9	50	8260B		10/18/2016	CJR	1
2,2-Dichloropropane	< 5	mg/kg	5	16.5	50	8260B		10/18/2016	CJR	1
1,3-Dichloropropane	< 1.55	mg/kg	1.55	4.85	50	8260B		10/18/2016	CJR	1
Di-isopropyl ether	< 0.6	mg/kg	0.6	2	50	8260B		10/18/2016	CJR	1
EDB (1,2-Dibromoethane)	< 1.75	mg/kg	1.75	5.5	50	8260B		10/18/2016	CJR	1
Ethylbenzene	< 1.35	mg/kg	1.35	4.3	50	8260B		10/18/2016	CJR	1
Hexachlorobutadiene	< 5.5	mg/kg	5.5	18	50	8260B		10/18/2016	CJR	1
Isopropylbenzene	< 1.85	mg/kg	1.85	6	50	8260B		10/18/2016	CJR	1
p-Isopropyltoluene	< 2.8	mg/kg	2.8	9	50	8260B		10/18/2016	CJR	1
Methylene chloride	< 11	mg/kg	11	35	50	8260B		10/18/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.25	mg/kg	1.25	3.9	50	8260B		10/18/2016	CJR	1
Naphthalene	< 4.35	mg/kg	4.35	14	50	8260B		10/18/2016	CJR	1
n-Propylbenzene	< 1.75	mg/kg	1.75	5.5	50	8260B		10/18/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.65	mg/kg	0.65	2	50	8260B		10/18/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 1.45	mg/kg	1.45	4.65	50	8260B		10/18/2016	CJR	1
Tetrachloroethene	< 2.7	mg/kg	2.7	8.5	50	8260B		10/18/2016	CJR	1
Toluene	< 1.55	mg/kg	1.55	4.95	50	8260B		10/18/2016	CJR	1
1,2,4-Trichlorobenzene	< 4.25	mg/kg	4.25	13.5	50	8260B		10/18/2016	CJR	1
1,2,3-Trichlorobenzene	< 6	mg/kg	6	19	50	8260B		10/18/2016	CJR	1
1,1,1-Trichloroethane	< 2	mg/kg	2	6.5	50	8260B		10/18/2016	CJR	1
1,1,2-Trichloroethane	< 1.65	mg/kg	1.65	5.5	50	8260B		10/18/2016	CJR	1
Trichloroethene (TCE)	< 2.1	mg/kg	2.1	6.5	50	8260B		10/18/2016	CJR	1
Trichlorofluoromethane	< 3	mg/kg	3	9.5	50	8260B		10/18/2016	CJR	1
1,2,4-Trimethylbenzene	< 3.9	mg/kg	3.9	12.5	50	8260B		10/18/2016	CJR	1
1,3,5-Trimethylbenzene	< 4.45	mg/kg	4.45	14	50	8260B		10/18/2016	CJR	1
Vinyl Chloride	< 0.5	mg/kg	0.5	1.55	50	8260B		10/18/2016	CJR	1
m&p-Xylene	< 3.5	mg/kg	3.5	11	50	8260B		10/18/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856N
Sample ID SB-7 12.5-15
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
o-Xylene	< 1.45	mg/kg	1.45	4.6	50	8260B		10/18/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	96	Rec %			50	8260B		10/18/2016	CJR	1
SUR - 4-Bromofluorobenzene	100	Rec %			50	8260B		10/18/2016	CJR	1
SUR - Dibromofluoromethane	101	Rec %			50	8260B		10/18/2016	CJR	1
SUR - Toluene-d8	100	Rec %			50	8260B		10/18/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856O
Sample ID SB-8 3-5
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	74.5	%			1	5021		10/10/2016	NJC	1
Organic										
VOC's										
Benzene	< 0.016	mg/kg	0.016	0.049	1	8260B		10/20/2016	CJR	1
Bromobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		10/20/2016	CJR	1
Bromodichloromethane	< 0.015	mg/kg	0.015	0.048	1	8260B		10/20/2016	CJR	1
Bromoform	< 0.023	mg/kg	0.023	0.073	1	8260B		10/20/2016	CJR	1
tert-Butylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		10/20/2016	CJR	1
sec-Butylbenzene	< 0.036	mg/kg	0.036	0.11	1	8260B		10/20/2016	CJR	1
n-Butylbenzene	< 0.086	mg/kg	0.086	0.27	1	8260B		10/20/2016	CJR	1
Carbon Tetrachloride	< 0.021	mg/kg	0.021	0.067	1	8260B		10/20/2016	CJR	1
Chlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		10/20/2016	CJR	1
Chloroethane	< 0.045	mg/kg	0.045	0.14	1	8260B		10/20/2016	CJR	1
Chloroform	< 0.026	mg/kg	0.026	0.081	1	8260B		10/20/2016	CJR	1
Chloromethane	< 0.25	mg/kg	0.25	0.78	1	8260B		10/20/2016	CJR	1
2-Chlorotoluene	< 0.029	mg/kg	0.029	0.093	1	8260B		10/20/2016	CJR	1
4-Chlorotoluene	< 0.032	mg/kg	0.032	0.1	1	8260B		10/20/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 0.078	mg/kg	0.078	0.25	1	8260B		10/20/2016	CJR	1
Dibromochloromethane	< 0.031	mg/kg	0.031	0.098	1	8260B		10/20/2016	CJR	1
1,4-Dichlorobenzene	< 0.03	mg/kg	0.03	0.096	1	8260B		10/20/2016	CJR	1
1,3-Dichlorobenzene	< 0.03	mg/kg	0.03	0.097	1	8260B		10/20/2016	CJR	1
1,2-Dichlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		10/20/2016	CJR	1
Dichlorodifluoromethane	< 0.043	mg/kg	0.043	0.14	1	8260B		10/20/2016	CJR	1
1,2-Dichloroethane	< 0.03	mg/kg	0.03	0.096	1	8260B		10/20/2016	CJR	1
1,1-Dichloroethane	< 0.025	mg/kg	0.025	0.079	1	8260B		10/20/2016	CJR	1
1,1-Dichloroethene	< 0.029	mg/kg	0.029	0.093	1	8260B		10/20/2016	CJR	1
cis-1,2-Dichloroethene	< 0.021	mg/kg	0.021	0.068	1	8260B		10/20/2016	CJR	1
trans-1,2-Dichloroethene	< 0.024	mg/kg	0.024	0.076	1	8260B		10/20/2016	CJR	1
1,2-Dichloropropane	0.061 "J"	mg/kg	0.025	0.078	1	8260B		10/20/2016	CJR	1
2,2-Dichloropropane	< 0.1	mg/kg	0.1	0.33	1	8260B		10/20/2016	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.097	1	8260B		10/20/2016	CJR	1
Di-isopropyl ether	< 0.012	mg/kg	0.012	0.04	1	8260B		10/20/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.035	mg/kg	0.035	0.11	1	8260B		10/20/2016	CJR	1
Ethylbenzene	< 0.027	mg/kg	0.027	0.086	1	8260B		10/20/2016	CJR	1
Hexachlorobutadiene	< 0.11	mg/kg	0.11	0.36	1	8260B		10/20/2016	CJR	1
Isopropylbenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		10/20/2016	CJR	1
p-Isopropyltoluene	< 0.056	mg/kg	0.056	0.18	1	8260B		10/20/2016	CJR	1
Methylene chloride	< 0.22	mg/kg	0.22	0.7	1	8260B		10/20/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.025	0.078	1	8260B		10/20/2016	CJR	1
Naphthalene	< 0.087	mg/kg	0.087	0.28	1	8260B		10/20/2016	CJR	1
n-Propylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		10/20/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.013	mg/kg	0.013	0.04	1	8260B		10/20/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.029	mg/kg	0.029	0.093	1	8260B		10/20/2016	CJR	1
Tetrachloroethene	< 0.054	mg/kg	0.054	0.17	1	8260B		10/20/2016	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.099	1	8260B		10/20/2016	CJR	1
1,2,4-Trichlorobenzene	< 0.085	mg/kg	0.085	0.27	1	8260B		10/20/2016	CJR	1
1,2,3-Trichlorobenzene	< 0.12	mg/kg	0.12	0.38	1	8260B		10/20/2016	CJR	1
1,1,1-Trichloroethane	< 0.04	mg/kg	0.04	0.13	1	8260B		10/20/2016	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B		10/20/2016	CJR	1
Trichloroethene (TCE)	< 0.042	mg/kg	0.042	0.13	1	8260B		10/20/2016	CJR	1
Trichlorofluoromethane	< 0.06	mg/kg	0.06	0.19	1	8260B		10/20/2016	CJR	1
1,2,4-Trimethylbenzene	< 0.078	mg/kg	0.078	0.25	1	8260B		10/20/2016	CJR	1
1,3,5-Trimethylbenzene	< 0.089	mg/kg	0.089	0.28	1	8260B		10/20/2016	CJR	1
Vinyl Chloride	< 0.01	mg/kg	0.01	0.031	1	8260B		10/20/2016	CJR	1
m&p-Xylene	< 0.07	mg/kg	0.07	0.22	1	8260B		10/20/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856O
Sample ID SB-8 3-5
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
o-Xylene	< 0.029	mg/kg	0.029	0.092	1	8260B		10/20/2016	CJR	1
SUR - Toluene-d8	97	Rec %			1	8260B		10/20/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	104	Rec %			1	8260B		10/20/2016	CJR	1
SUR - 4-Bromofluorobenzene	107	Rec %			1	8260B		10/20/2016	CJR	1
SUR - Dibromofluoromethane	104	Rec %			1	8260B		10/20/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856P
Sample ID SB-8 5-7.5
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	76.6	%			1	5021		10/10/2016	NJC	1
Organic										
VOC's										
Benzene	< 0.016	mg/kg	0.016	0.049	1	8260B		10/20/2016	CJR	1
Bromobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		10/20/2016	CJR	1
Bromodichloromethane	< 0.015	mg/kg	0.015	0.048	1	8260B		10/20/2016	CJR	1
Bromoform	< 0.023	mg/kg	0.023	0.073	1	8260B		10/20/2016	CJR	1
tert-Butylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		10/20/2016	CJR	1
sec-Butylbenzene	< 0.036	mg/kg	0.036	0.11	1	8260B		10/20/2016	CJR	1
n-Butylbenzene	< 0.086	mg/kg	0.086	0.27	1	8260B		10/20/2016	CJR	1
Carbon Tetrachloride	< 0.021	mg/kg	0.021	0.067	1	8260B		10/20/2016	CJR	1
Chlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		10/20/2016	CJR	1
Chloroethane	< 0.045	mg/kg	0.045	0.14	1	8260B		10/20/2016	CJR	1
Chloroform	< 0.026	mg/kg	0.026	0.081	1	8260B		10/20/2016	CJR	1
Chloromethane	< 0.25	mg/kg	0.25	0.78	1	8260B		10/20/2016	CJR	1
2-Chlorotoluene	< 0.029	mg/kg	0.029	0.093	1	8260B		10/20/2016	CJR	1
4-Chlorotoluene	< 0.032	mg/kg	0.032	0.1	1	8260B		10/20/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 0.078	mg/kg	0.078	0.25	1	8260B		10/20/2016	CJR	1
Dibromochloromethane	< 0.031	mg/kg	0.031	0.098	1	8260B		10/20/2016	CJR	1
1,4-Dichlorobenzene	< 0.03	mg/kg	0.03	0.096	1	8260B		10/20/2016	CJR	1
1,3-Dichlorobenzene	< 0.03	mg/kg	0.03	0.097	1	8260B		10/20/2016	CJR	1
1,2-Dichlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		10/20/2016	CJR	1
Dichlorodifluoromethane	< 0.043	mg/kg	0.043	0.14	1	8260B		10/20/2016	CJR	1
1,2-Dichloroethane	< 0.03	mg/kg	0.03	0.096	1	8260B		10/20/2016	CJR	1
1,1-Dichloroethane	< 0.025	mg/kg	0.025	0.079	1	8260B		10/20/2016	CJR	1
1,1-Dichloroethene	< 0.029	mg/kg	0.029	0.093	1	8260B		10/20/2016	CJR	1
cis-1,2-Dichloroethene	< 0.021	mg/kg	0.021	0.068	1	8260B		10/20/2016	CJR	1
trans-1,2-Dichloroethene	< 0.024	mg/kg	0.024	0.076	1	8260B		10/20/2016	CJR	1
1,2-Dichloropropane	< 0.025	mg/kg	0.025	0.078	1	8260B		10/20/2016	CJR	1
2,2-Dichloropropane	< 0.1	mg/kg	0.1	0.33	1	8260B		10/20/2016	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.097	1	8260B		10/20/2016	CJR	1
Di-isopropyl ether	< 0.012	mg/kg	0.012	0.04	1	8260B		10/20/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.035	mg/kg	0.035	0.11	1	8260B		10/20/2016	CJR	1
Ethylbenzene	< 0.027	mg/kg	0.027	0.086	1	8260B		10/20/2016	CJR	1
Hexachlorobutadiene	< 0.11	mg/kg	0.11	0.36	1	8260B		10/20/2016	CJR	1
Isopropylbenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		10/20/2016	CJR	1
p-Isopropyltoluene	< 0.056	mg/kg	0.056	0.18	1	8260B		10/20/2016	CJR	1
Methylene chloride	< 0.22	mg/kg	0.22	0.7	1	8260B		10/20/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.025	0.078	1	8260B		10/20/2016	CJR	1
Naphthalene	< 0.087	mg/kg	0.087	0.28	1	8260B		10/20/2016	CJR	1
n-Propylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		10/20/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.013	mg/kg	0.013	0.04	1	8260B		10/20/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.029	mg/kg	0.029	0.093	1	8260B		10/20/2016	CJR	1
Tetrachloroethene	< 0.054	mg/kg	0.054	0.17	1	8260B		10/20/2016	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.099	1	8260B		10/20/2016	CJR	1
1,2,4-Trichlorobenzene	< 0.085	mg/kg	0.085	0.27	1	8260B		10/20/2016	CJR	1
1,2,3-Trichlorobenzene	< 0.12	mg/kg	0.12	0.38	1	8260B		10/20/2016	CJR	1
1,1,1-Trichloroethane	< 0.04	mg/kg	0.04	0.13	1	8260B		10/20/2016	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B		10/20/2016	CJR	1
Trichloroethene (TCE)	< 0.042	mg/kg	0.042	0.13	1	8260B		10/20/2016	CJR	1
Trichlorofluoromethane	< 0.06	mg/kg	0.06	0.19	1	8260B		10/20/2016	CJR	1
1,2,4-Trimethylbenzene	< 0.078	mg/kg	0.078	0.25	1	8260B		10/20/2016	CJR	1
1,3,5-Trimethylbenzene	< 0.089	mg/kg	0.089	0.28	1	8260B		10/20/2016	CJR	1
Vinyl Chloride	< 0.01	mg/kg	0.01	0.031	1	8260B		10/20/2016	CJR	1
m&p-Xylene	< 0.07	mg/kg	0.07	0.22	1	8260B		10/20/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856P
Sample ID SB-8 5-7.5
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
o-Xylene	< 0.029	mg/kg	0.029	0.092	1	8260B		10/20/2016	CJR	1
SUR - Toluene-d8	98	Rec %			1	8260B		10/20/2016	CJR	1
SUR - Dibromofluoromethane	96	Rec %			1	8260B		10/20/2016	CJR	1
SUR - 4-Bromofluorobenzene	95	Rec %			1	8260B		10/20/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	101	Rec %			1	8260B		10/20/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856Q
Sample ID SB-9 1-3
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	65.0	%			1	5021		10/10/2016	NJC	1
Organic										
VOC's										
Benzene	< 0.8	mg/kg	0.8	2.45	50	8260B		10/18/2016	CJR	1
Bromobenzene	< 1.95	mg/kg	1.95	6	50	8260B		10/18/2016	CJR	1
Bromodichloromethane	< 0.75	mg/kg	0.75	2.4	50	8260B		10/18/2016	CJR	1
Bromoform	< 1.15	mg/kg	1.15	3.65	50	8260B		10/18/2016	CJR	1
tert-Butylbenzene	< 1.75	mg/kg	1.75	5.5	50	8260B		10/18/2016	CJR	1
sec-Butylbenzene	< 1.8	mg/kg	1.8	5.5	50	8260B		10/18/2016	CJR	1
n-Butylbenzene	< 4.3	mg/kg	4.3	13.5	50	8260B		10/18/2016	CJR	1
Carbon Tetrachloride	< 1.05	mg/kg	1.05	3.35	50	8260B		10/18/2016	CJR	1
Chlorobenzene	< 1.95	mg/kg	1.95	6	50	8260B		10/18/2016	CJR	1
Chloroethane	< 2.25	mg/kg	2.25	7	50	8260B		10/18/2016	CJR	1
Chloroform	< 1.3	mg/kg	1.3	4.05	50	8260B		10/18/2016	CJR	1
Chloromethane	< 12.5	mg/kg	12.5	39	50	8260B		10/18/2016	CJR	1
2-Chlorotoluene	< 1.45	mg/kg	1.45	4.65	50	8260B		10/18/2016	CJR	1
4-Chlorotoluene	< 1.6	mg/kg	1.6	5	50	8260B		10/18/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 3.9	mg/kg	3.9	12.5	50	8260B		10/18/2016	CJR	1
Dibromochloromethane	< 1.55	mg/kg	1.55	4.9	50	8260B		10/18/2016	CJR	1
1,4-Dichlorobenzene	< 1.5	mg/kg	1.5	4.8	50	8260B		10/18/2016	CJR	1
1,3-Dichlorobenzene	< 1.5	mg/kg	1.5	4.85	50	8260B		10/18/2016	CJR	1
1,2-Dichlorobenzene	< 1.95	mg/kg	1.95	6	50	8260B		10/18/2016	CJR	1
Dichlorodifluoromethane	< 2.15	mg/kg	2.15	7	50	8260B		10/18/2016	CJR	1
1,2-Dichloroethane	< 1.5	mg/kg	1.5	4.8	50	8260B		10/18/2016	CJR	1
1,1-Dichloroethane	< 1.25	mg/kg	1.25	3.95	50	8260B		10/18/2016	CJR	1
1,1-Dichloroethene	< 1.45	mg/kg	1.45	4.65	50	8260B		10/18/2016	CJR	1
cis-1,2-Dichloroethene	< 1.05	mg/kg	1.05	3.4	50	8260B		10/18/2016	CJR	1
trans-1,2-Dichloroethene	< 1.2	mg/kg	1.2	3.8	50	8260B		10/18/2016	CJR	1
1,2-Dichloropropane	< 1.25	mg/kg	1.25	3.9	50	8260B		10/18/2016	CJR	1
2,2-Dichloropropane	< 5	mg/kg	5	16.5	50	8260B		10/18/2016	CJR	1
1,3-Dichloropropane	< 1.55	mg/kg	1.55	4.85	50	8260B		10/18/2016	CJR	1
Di-isopropyl ether	< 0.6	mg/kg	0.6	2	50	8260B		10/18/2016	CJR	1
EDB (1,2-Dibromoethane)	< 1.75	mg/kg	1.75	5.5	50	8260B		10/18/2016	CJR	1
Ethylbenzene	< 1.35	mg/kg	1.35	4.3	50	8260B		10/18/2016	CJR	1
Hexachlorobutadiene	< 5.5	mg/kg	5.5	18	50	8260B		10/18/2016	CJR	1
Isopropylbenzene	< 1.85	mg/kg	1.85	6	50	8260B		10/18/2016	CJR	1
p-Isopropyltoluene	56	mg/kg	2.8	9	50	8260B		10/18/2016	CJR	1
Methylene chloride	< 11	mg/kg	11	35	50	8260B		10/18/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.25	mg/kg	1.25	3.9	50	8260B		10/18/2016	CJR	1
Naphthalene	< 4.35	mg/kg	4.35	14	50	8260B		10/18/2016	CJR	1
n-Propylbenzene	< 1.75	mg/kg	1.75	5.5	50	8260B		10/18/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.65	mg/kg	0.65	2	50	8260B		10/18/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 1.45	mg/kg	1.45	4.65	50	8260B		10/18/2016	CJR	1
Tetrachloroethene	< 2.7	mg/kg	2.7	8.5	50	8260B		10/18/2016	CJR	1
Toluene	1.93 "J"	mg/kg	1.55	4.95	50	8260B		10/18/2016	CJR	1
1,2,4-Trichlorobenzene	< 4.25	mg/kg	4.25	13.5	50	8260B		10/18/2016	CJR	1
1,2,3-Trichlorobenzene	< 6	mg/kg	6	19	50	8260B		10/18/2016	CJR	1
1,1,1-Trichloroethane	< 2	mg/kg	2	6.5	50	8260B		10/18/2016	CJR	1
1,1,2-Trichloroethane	< 1.65	mg/kg	1.65	5.5	50	8260B		10/18/2016	CJR	1
Trichloroethene (TCE)	< 2.1	mg/kg	2.1	6.5	50	8260B		10/18/2016	CJR	1
Trichlorofluoromethane	< 3	mg/kg	3	9.5	50	8260B		10/18/2016	CJR	1
1,2,4-Trimethylbenzene	< 3.9	mg/kg	3.9	12.5	50	8260B		10/18/2016	CJR	1
1,3,5-Trimethylbenzene	< 4.45	mg/kg	4.45	14	50	8260B		10/18/2016	CJR	1
Vinyl Chloride	< 0.5	mg/kg	0.5	1.55	50	8260B		10/18/2016	CJR	1
m&p-Xylene	< 3.5	mg/kg	3.5	11	50	8260B		10/18/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856Q
Sample ID SB-9 1-3
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
o-Xylene	< 1.45	mg/kg	1.45	4.6	50	8260B		10/18/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	101	Rec %			50	8260B		10/18/2016	CJR	1
SUR - 4-Bromofluorobenzene	98	Rec %			50	8260B		10/18/2016	CJR	1
SUR - Dibromofluoromethane	99	Rec %			50	8260B		10/18/2016	CJR	1
SUR - Toluene-d8	100	Rec %			50	8260B		10/18/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856R
Sample ID SB-9 5-7.5
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	77.6	%			1	5021		10/10/2016	NJC	1
Organic										
VOC's										
Benzene	< 0.016	mg/kg	0.016	0.049	1	8260B		10/20/2016	CJR	1
Bromobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		10/20/2016	CJR	1
Bromodichloromethane	< 0.015	mg/kg	0.015	0.048	1	8260B		10/20/2016	CJR	1
Bromoform	< 0.023	mg/kg	0.023	0.073	1	8260B		10/20/2016	CJR	1
tert-Butylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		10/20/2016	CJR	1
sec-Butylbenzene	< 0.036	mg/kg	0.036	0.11	1	8260B		10/20/2016	CJR	1
n-Butylbenzene	< 0.086	mg/kg	0.086	0.27	1	8260B		10/20/2016	CJR	1
Carbon Tetrachloride	< 0.021	mg/kg	0.021	0.067	1	8260B		10/20/2016	CJR	1
Chlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		10/20/2016	CJR	1
Chloroethane	< 0.045	mg/kg	0.045	0.14	1	8260B		10/20/2016	CJR	1
Chloroform	< 0.026	mg/kg	0.026	0.081	1	8260B		10/20/2016	CJR	1
Chloromethane	< 0.25	mg/kg	0.25	0.78	1	8260B		10/20/2016	CJR	1
2-Chlorotoluene	< 0.029	mg/kg	0.029	0.093	1	8260B		10/20/2016	CJR	1
4-Chlorotoluene	< 0.032	mg/kg	0.032	0.1	1	8260B		10/20/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 0.078	mg/kg	0.078	0.25	1	8260B		10/20/2016	CJR	1
Dibromochloromethane	< 0.031	mg/kg	0.031	0.098	1	8260B		10/20/2016	CJR	1
1,4-Dichlorobenzene	< 0.03	mg/kg	0.03	0.096	1	8260B		10/20/2016	CJR	1
1,3-Dichlorobenzene	< 0.03	mg/kg	0.03	0.097	1	8260B		10/20/2016	CJR	1
1,2-Dichlorobenzene	< 0.039	mg/kg	0.039	0.12	1	8260B		10/20/2016	CJR	1
Dichlorodifluoromethane	< 0.043	mg/kg	0.043	0.14	1	8260B		10/20/2016	CJR	1
1,2-Dichloroethane	< 0.03	mg/kg	0.03	0.096	1	8260B		10/20/2016	CJR	1
1,1-Dichloroethane	< 0.025	mg/kg	0.025	0.079	1	8260B		10/20/2016	CJR	1
1,1-Dichloroethene	< 0.029	mg/kg	0.029	0.093	1	8260B		10/20/2016	CJR	1
cis-1,2-Dichloroethene	< 0.021	mg/kg	0.021	0.068	1	8260B		10/20/2016	CJR	1
trans-1,2-Dichloroethene	< 0.024	mg/kg	0.024	0.076	1	8260B		10/20/2016	CJR	1
1,2-Dichloropropane	0.059 "J"	mg/kg	0.025	0.078	1	8260B		10/20/2016	CJR	1
2,2-Dichloropropane	< 0.1	mg/kg	0.1	0.33	1	8260B		10/20/2016	CJR	1
1,3-Dichloropropane	< 0.031	mg/kg	0.031	0.097	1	8260B		10/20/2016	CJR	1
Di-isopropyl ether	< 0.012	mg/kg	0.012	0.04	1	8260B		10/20/2016	CJR	1
EDB (1,2-Dibromoethane)	< 0.035	mg/kg	0.035	0.11	1	8260B		10/20/2016	CJR	1
Ethylbenzene	< 0.027	mg/kg	0.027	0.086	1	8260B		10/20/2016	CJR	1
Hexachlorobutadiene	< 0.11	mg/kg	0.11	0.36	1	8260B		10/20/2016	CJR	1
Isopropylbenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		10/20/2016	CJR	1
p-Isopropyltoluene	< 0.056	mg/kg	0.056	0.18	1	8260B		10/20/2016	CJR	1
Methylene chloride	< 0.22	mg/kg	0.22	0.7	1	8260B		10/20/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.025	0.078	1	8260B		10/20/2016	CJR	1
Naphthalene	< 0.087	mg/kg	0.087	0.28	1	8260B		10/20/2016	CJR	1
n-Propylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		10/20/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.013	mg/kg	0.013	0.04	1	8260B		10/20/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 0.029	mg/kg	0.029	0.093	1	8260B		10/20/2016	CJR	1
Tetrachloroethene	< 0.054	mg/kg	0.054	0.17	1	8260B		10/20/2016	CJR	1
Toluene	< 0.031	mg/kg	0.031	0.099	1	8260B		10/20/2016	CJR	1
1,2,4-Trichlorobenzene	< 0.085	mg/kg	0.085	0.27	1	8260B		10/20/2016	CJR	1
1,2,3-Trichlorobenzene	< 0.12	mg/kg	0.12	0.38	1	8260B		10/20/2016	CJR	1
1,1,1-Trichloroethane	< 0.04	mg/kg	0.04	0.13	1	8260B		10/20/2016	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B		10/20/2016	CJR	1
Trichloroethene (TCE)	< 0.042	mg/kg	0.042	0.13	1	8260B		10/20/2016	CJR	1
Trichlorofluoromethane	< 0.06	mg/kg	0.06	0.19	1	8260B		10/20/2016	CJR	1
1,2,4-Trimethylbenzene	0.33	mg/kg	0.078	0.25	1	8260B		10/20/2016	CJR	1
1,3,5-Trimethylbenzene	0.111 "J"	mg/kg	0.089	0.28	1	8260B		10/20/2016	CJR	1
Vinyl Chloride	< 0.01	mg/kg	0.01	0.031	1	8260B		10/20/2016	CJR	1
m&p-Xylene	0.43	mg/kg	0.07	0.22	1	8260B		10/20/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856R
Sample ID SB-9 5-7.5
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
o-Xylene	< 0.029	mg/kg	0.029	0.092	1	8260B		10/20/2016	CJR	1
SUR - 4-Bromofluorobenzene	104	Rec %			1	8260B		10/20/2016	CJR	1
SUR - Dibromofluoromethane	104	Rec %			1	8260B		10/20/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	108	Rec %			1	8260B		10/20/2016	CJR	1
SUR - Toluene-d8	96	Rec %			1	8260B		10/20/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856S
Sample ID SB-10 3-5
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	73.8	%			1	5021		10/10/2016	NJC	1
Organic										
VOC's										
Benzene	< 0.8	mg/kg	0.8	2.45	50	8260B		10/18/2016	CJR	1
Bromobenzene	< 1.95	mg/kg	1.95	6	50	8260B		10/18/2016	CJR	1
Bromodichloromethane	< 0.75	mg/kg	0.75	2.4	50	8260B		10/18/2016	CJR	1
Bromoform	< 1.15	mg/kg	1.15	3.65	50	8260B		10/18/2016	CJR	1
tert-Butylbenzene	< 1.75	mg/kg	1.75	5.5	50	8260B		10/18/2016	CJR	1
sec-Butylbenzene	< 1.8	mg/kg	1.8	5.5	50	8260B		10/18/2016	CJR	1
n-Butylbenzene	< 4.3	mg/kg	4.3	13.5	50	8260B		10/18/2016	CJR	1
Carbon Tetrachloride	< 1.05	mg/kg	1.05	3.35	50	8260B		10/18/2016	CJR	1
Chlorobenzene	< 1.95	mg/kg	1.95	6	50	8260B		10/18/2016	CJR	1
Chloroethane	< 2.25	mg/kg	2.25	7	50	8260B		10/18/2016	CJR	1
Chloroform	< 1.3	mg/kg	1.3	4.05	50	8260B		10/18/2016	CJR	1
Chloromethane	< 12.5	mg/kg	12.5	39	50	8260B		10/18/2016	CJR	1
2-Chlorotoluene	< 1.45	mg/kg	1.45	4.65	50	8260B		10/18/2016	CJR	1
4-Chlorotoluene	< 1.6	mg/kg	1.6	5	50	8260B		10/18/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 3.9	mg/kg	3.9	12.5	50	8260B		10/18/2016	CJR	1
Dibromochloromethane	< 1.55	mg/kg	1.55	4.9	50	8260B		10/18/2016	CJR	1
1,4-Dichlorobenzene	< 1.5	mg/kg	1.5	4.8	50	8260B		10/18/2016	CJR	1
1,3-Dichlorobenzene	< 1.5	mg/kg	1.5	4.85	50	8260B		10/18/2016	CJR	1
1,2-Dichlorobenzene	< 1.95	mg/kg	1.95	6	50	8260B		10/18/2016	CJR	1
Dichlorodifluoromethane	< 2.15	mg/kg	2.15	7	50	8260B		10/18/2016	CJR	1
1,2-Dichloroethane	< 1.5	mg/kg	1.5	4.8	50	8260B		10/18/2016	CJR	1
1,1-Dichloroethane	< 1.25	mg/kg	1.25	3.95	50	8260B		10/18/2016	CJR	1
1,1-Dichloroethene	< 1.45	mg/kg	1.45	4.65	50	8260B		10/18/2016	CJR	1
cis-1,2-Dichloroethene	< 1.05	mg/kg	1.05	3.4	50	8260B		10/18/2016	CJR	1
trans-1,2-Dichloroethene	< 1.2	mg/kg	1.2	3.8	50	8260B		10/18/2016	CJR	1
1,2-Dichloropropane	37	mg/kg	1.25	3.9	50	8260B		10/18/2016	CJR	1
2,2-Dichloropropane	< 5	mg/kg	5	16.5	50	8260B		10/18/2016	CJR	1
1,3-Dichloropropane	< 1.55	mg/kg	1.55	4.85	50	8260B		10/18/2016	CJR	1
Di-isopropyl ether	< 0.6	mg/kg	0.6	2	50	8260B		10/18/2016	CJR	1
EDB (1,2-Dibromoethane)	< 1.75	mg/kg	1.75	5.5	50	8260B		10/18/2016	CJR	1
Ethylbenzene	< 1.35	mg/kg	1.35	4.3	50	8260B		10/18/2016	CJR	1
Hexachlorobutadiene	< 5.5	mg/kg	5.5	18	50	8260B		10/18/2016	CJR	1
Isopropylbenzene	< 1.85	mg/kg	1.85	6	50	8260B		10/18/2016	CJR	1
p-Isopropyltoluene	< 2.8	mg/kg	2.8	9	50	8260B		10/18/2016	CJR	1
Methylene chloride	< 11	mg/kg	11	35	50	8260B		10/18/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.25	mg/kg	1.25	3.9	50	8260B		10/18/2016	CJR	1
Naphthalene	< 4.35	mg/kg	4.35	14	50	8260B		10/18/2016	CJR	1
n-Propylbenzene	< 1.75	mg/kg	1.75	5.5	50	8260B		10/18/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.65	mg/kg	0.65	2	50	8260B		10/18/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 1.45	mg/kg	1.45	4.65	50	8260B		10/18/2016	CJR	1
Tetrachloroethene	< 2.7	mg/kg	2.7	8.5	50	8260B		10/18/2016	CJR	1
Toluene	< 1.55	mg/kg	1.55	4.95	50	8260B		10/18/2016	CJR	1
1,2,4-Trichlorobenzene	< 4.25	mg/kg	4.25	13.5	50	8260B		10/18/2016	CJR	1
1,2,3-Trichlorobenzene	< 6	mg/kg	6	19	50	8260B		10/18/2016	CJR	1
1,1,1-Trichloroethane	< 2	mg/kg	2	6.5	50	8260B		10/18/2016	CJR	1
1,1,2-Trichloroethane	< 1.65	mg/kg	1.65	5.5	50	8260B		10/18/2016	CJR	1
Trichloroethene (TCE)	< 2.1	mg/kg	2.1	6.5	50	8260B		10/18/2016	CJR	1
Trichlorofluoromethane	< 3	mg/kg	3	9.5	50	8260B		10/18/2016	CJR	1
1,2,4-Trimethylbenzene	< 3.9	mg/kg	3.9	12.5	50	8260B		10/18/2016	CJR	1
1,3,5-Trimethylbenzene	< 4.45	mg/kg	4.45	14	50	8260B		10/18/2016	CJR	1
Vinyl Chloride	< 0.5	mg/kg	0.5	1.55	50	8260B		10/18/2016	CJR	1
m&p-Xylene	< 3.5	mg/kg	3.5	11	50	8260B		10/18/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856S
Sample ID SB-10 3-5
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
o-Xylene	< 1.45	mg/kg	1.45	4.6	50	8260B		10/18/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	111	Rec %			50	8260B		10/18/2016	CJR	1
SUR - 4-Bromofluorobenzene	95	Rec %			50	8260B		10/18/2016	CJR	1
SUR - Dibromofluoromethane	111	Rec %			50	8260B		10/18/2016	CJR	1
SUR - Toluene-d8	98	Rec %			50	8260B		10/18/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856T
Sample ID SB-10 5-7.5
Sample Matrix Soil
Sample Date 10/4/2016

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	78.6	%			1	5021		10/10/2016	NJC	1
Organic										
VOC's										
Benzene	< 0.8	mg/kg	0.8	2.45	50	8260B		10/18/2016	CJR	1
Bromobenzene	< 1.95	mg/kg	1.95	6	50	8260B		10/18/2016	CJR	1
Bromodichloromethane	< 0.75	mg/kg	0.75	2.4	50	8260B		10/18/2016	CJR	1
Bromoform	< 1.15	mg/kg	1.15	3.65	50	8260B		10/18/2016	CJR	1
tert-Butylbenzene	< 1.75	mg/kg	1.75	5.5	50	8260B		10/18/2016	CJR	1
sec-Butylbenzene	< 1.8	mg/kg	1.8	5.5	50	8260B		10/18/2016	CJR	1
n-Butylbenzene	< 4.3	mg/kg	4.3	13.5	50	8260B		10/18/2016	CJR	1
Carbon Tetrachloride	< 1.05	mg/kg	1.05	3.35	50	8260B		10/18/2016	CJR	1
Chlorobenzene	< 1.95	mg/kg	1.95	6	50	8260B		10/18/2016	CJR	1
Chloroethane	< 2.25	mg/kg	2.25	7	50	8260B		10/18/2016	CJR	1
Chloroform	< 1.3	mg/kg	1.3	4.05	50	8260B		10/18/2016	CJR	1
Chloromethane	< 12.5	mg/kg	12.5	39	50	8260B		10/18/2016	CJR	1
2-Chlorotoluene	< 1.45	mg/kg	1.45	4.65	50	8260B		10/18/2016	CJR	1
4-Chlorotoluene	< 1.6	mg/kg	1.6	5	50	8260B		10/18/2016	CJR	1
1,2-Dibromo-3-chloropropane	< 3.9	mg/kg	3.9	12.5	50	8260B		10/18/2016	CJR	1
Dibromochloromethane	< 1.55	mg/kg	1.55	4.9	50	8260B		10/18/2016	CJR	1
1,4-Dichlorobenzene	< 1.5	mg/kg	1.5	4.8	50	8260B		10/18/2016	CJR	1
1,3-Dichlorobenzene	< 1.5	mg/kg	1.5	4.85	50	8260B		10/18/2016	CJR	1
1,2-Dichlorobenzene	< 1.95	mg/kg	1.95	6	50	8260B		10/18/2016	CJR	1
Dichlorodifluoromethane	< 2.15	mg/kg	2.15	7	50	8260B		10/18/2016	CJR	1
1,2-Dichloroethane	< 1.5	mg/kg	1.5	4.8	50	8260B		10/18/2016	CJR	1
1,1-Dichloroethane	< 1.25	mg/kg	1.25	3.95	50	8260B		10/18/2016	CJR	1
1,1-Dichloroethene	< 1.45	mg/kg	1.45	4.65	50	8260B		10/18/2016	CJR	1
cis-1,2-Dichloroethene	< 1.05	mg/kg	1.05	3.4	50	8260B		10/18/2016	CJR	1
trans-1,2-Dichloroethene	< 1.2	mg/kg	1.2	3.8	50	8260B		10/18/2016	CJR	1
1,2-Dichloropropane	15.6	mg/kg	1.25	3.9	50	8260B		10/18/2016	CJR	1
2,2-Dichloropropane	< 5	mg/kg	5	16.5	50	8260B		10/18/2016	CJR	1
1,3-Dichloropropane	< 1.55	mg/kg	1.55	4.85	50	8260B		10/18/2016	CJR	1
Di-isopropyl ether	< 0.6	mg/kg	0.6	2	50	8260B		10/18/2016	CJR	1
EDB (1,2-Dibromoethane)	< 1.75	mg/kg	1.75	5.5	50	8260B		10/18/2016	CJR	1
Ethylbenzene	< 1.35	mg/kg	1.35	4.3	50	8260B		10/18/2016	CJR	1
Hexachlorobutadiene	< 5.5	mg/kg	5.5	18	50	8260B		10/18/2016	CJR	1
Isopropylbenzene	< 1.85	mg/kg	1.85	6	50	8260B		10/18/2016	CJR	1
p-Isopropyltoluene	< 2.8	mg/kg	2.8	9	50	8260B		10/18/2016	CJR	1
Methylene chloride	< 11	mg/kg	11	35	50	8260B		10/18/2016	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.25	mg/kg	1.25	3.9	50	8260B		10/18/2016	CJR	1
Naphthalene	< 4.35	mg/kg	4.35	14	50	8260B		10/18/2016	CJR	1
n-Propylbenzene	< 1.75	mg/kg	1.75	5.5	50	8260B		10/18/2016	CJR	1
1,1,2,2-Tetrachloroethane	< 0.65	mg/kg	0.65	2	50	8260B		10/18/2016	CJR	1
1,1,1,2-Tetrachloroethane	< 1.45	mg/kg	1.45	4.65	50	8260B		10/18/2016	CJR	1
Tetrachloroethene	< 2.7	mg/kg	2.7	8.5	50	8260B		10/18/2016	CJR	1
Toluene	< 1.55	mg/kg	1.55	4.95	50	8260B		10/18/2016	CJR	1
1,2,4-Trichlorobenzene	< 4.25	mg/kg	4.25	13.5	50	8260B		10/18/2016	CJR	1
1,2,3-Trichlorobenzene	< 6	mg/kg	6	19	50	8260B		10/18/2016	CJR	1
1,1,1-Trichloroethane	< 2	mg/kg	2	6.5	50	8260B		10/18/2016	CJR	1
1,1,2-Trichloroethane	< 1.65	mg/kg	1.65	5.5	50	8260B		10/18/2016	CJR	1
Trichloroethene (TCE)	< 2.1	mg/kg	2.1	6.5	50	8260B		10/18/2016	CJR	1
Trichlorofluoromethane	< 3	mg/kg	3	9.5	50	8260B		10/18/2016	CJR	1
1,2,4-Trimethylbenzene	< 3.9	mg/kg	3.9	12.5	50	8260B		10/18/2016	CJR	1
1,3,5-Trimethylbenzene	< 4.45	mg/kg	4.45	14	50	8260B		10/18/2016	CJR	1
Vinyl Chloride	< 0.5	mg/kg	0.5	1.55	50	8260B		10/18/2016	CJR	1
m&p-Xylene	< 3.5	mg/kg	3.5	11	50	8260B		10/18/2016	CJR	1

Project Name SOLENIS **Invoice #** E31856
Project # 16153

Lab Code 5031856T
Sample ID SB-10 5-7.5
Sample Matrix Soil
Sample Date 10/4/2016

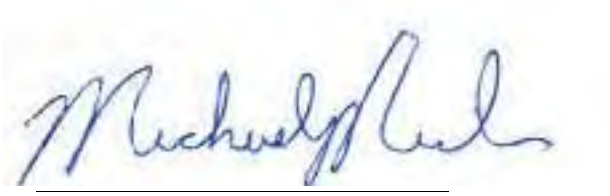
	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
o-Xylene	< 1.45	mg/kg	1.45	4.6	50	8260B		10/18/2016	CJR	1
SUR - Toluene-d8	98	Rec %			50	8260B		10/18/2016	CJR	1
SUR - 1,2-Dichloroethane-d4	108	Rec %			50	8260B		10/18/2016	CJR	1
SUR - 4-Bromofluorobenzene	105	Rec %			50	8260B		10/18/2016	CJR	1
SUR - Dibromofluoromethane	112	Rec %			50	8260B		10/18/2016	CJR	1

"J" Flag: Analyte detected between LOD and LOQ LOD Limit of Detection LOQ Limit of Quantitation

Code	*Comment*
1	Laboratory QC within limits.

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight. Subcontracted results are denoted by SUB in the analyst field.

Authorized Signature



CHAIN OF CUSTODY RECORD

Synergy Environmental Lab, Inc.

1990 Prospect Ct. • Appleton, WI 54914
920-830-2455 • FAX 920-733-0631

Chain # Nº 2864

Page 1 of 2

Sample Handling Request
____ Rush Analysis Date Required ____
(Rushes accepted only with prior authorization)
X Normal Turn Around

Lab I.D. #

Account No. : **Quote No.:**

Project #: 16153

Sampler: (signature) JJ Hlavka

Project (Name / Location): SOLENIS / 5228 N. HOPKINS ST, MILWAUKEE WI

Reports To: CORY KATZBAN	Invoice To:
Company SIGMA	Company
Address 1300 W CANAL ST	Address SAME
City State Zip MILWAUKEE WI 53233	City State Zip
Phone 414.643.4200	Phone
FAX	FAX

Lab I.D.	Sample I.D.	Collection Date	Collection Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation	DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	LEAD	NITRATE/NITRITE	OIL & GREASE	PAH (EPA 8270)	PCB	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	TOTAL SUSPENDED SOLIDS	VOC DW (EPA 542.2)	VOC (EPA 8260)	8-RCRA METALS	PID/FID
503856A	SB-1 (1-3)	10/4/16	2:10P		X		2	SOIL	1-meth													X		42
B	SB-1 (5-7.5)		2:10P																			X		14
C	SB-2 (3-5)		3:10P																			X		98
D	SB-2 (10-12.5)		3:10P																			X		26
E	SB-3 (1-3)		1:30P																			X		2
F	SB-3 (3-5)		1:30P																			X		1
G	SB-4 (3-5)		9:30A																			X		1
H	SB-4 (7.5-10)		9:30A																			X		1
I	SB-5 (3-5)		1:05P																			X		1
J	SB-5 (7.5-10)		1:05P																			X		1

Comments/Special Instructions (*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

*CORRECT PROJECT # IS 16153, SOME CONTAINERS INCORRECTLY LABELED.

Sample Integrity - To be completed by receiving lab.

Method of Shipment: Sm

Temp. of Temp. Blank ____ °C On Ice: X

Cooler seal intact upon receipt: X Yes ____ No

Relinquished By: (sign)	Time	Date	Received By: (sign)	Time	Date
JJ Hlavka	11:00	10/7/2016			

Received in Laboratory By: [signature] Time: 10:00 Date: 10/8/16

CHAIN OF CUSTODY RECORD

Synergy

Environmental Lab, Inc.

1990 Prospect Ct. • Appleton, WI 54914
920-830-2455 • FAX 920-733-0631

Chain # Nº 2864

Page 2 of 2

Sample Handling Request
____ Rush Analysis Date Required ____
(Rushes accepted only with prior authorization)
X Normal Turn Around

Lab I.D. #	
Account No. :	**Quote No.:**
Project #: 16153	
Sampler: (signature)	
Project (Name / Location): SOLENIS / 5228 N. HOPKINS ST, MILWAUKEE, WI	
Reports To: CORY KATZBAN	Invoice To:
Company SIGMA	Company
Address 1300 W CANAL ST	Address SAME
City State Zip MILWAUKEE WI 53233	City State Zip
Phone 414.643.4200	Phone
FAX	FAX

Lab I.D.	Sample I.D.	Collection Date	Collection Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation	DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	LEAD	NITRATE/NITRITE	OIL & GREASE	PAH (EPA 8270)	PCB	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	TOTAL SUSPENDED SOLIDS	VOC DW (EPA 542.2)	VOC (EPA 8260)	8-RCRA METALS	PID/FID
503/856K	SB-6 (1-3)	10/4/16	12:15P		X		2	SOIL	1-meth													X		1
L	SB-6 (3-5)		12:45P																			X		1
M	SB-7 (3-5)		11:00A																			X		1
N	SB-7 (12.5-15)		11:00A																			X		2
O	SB-8 (3-5)		10:30A																			X		1
P	SB-8 (5-7.5)		10:30A																			X		1
Q	SB-9 (1-3)		9:55A																			X		1
R	SB-9 (5-7.5)		9:55A																			X		1
S	SB-10 (3-5)		8:55A																			X		4
T	SB-10 (5-7.5)		8:55A																			X		4

Analysis Requested | **Other Analysis**

Comments/Special Instructions (*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

Sample Integrity - To be completed by receiving lab.
Method of Shipment: Sun
Temp. of Temp. Blank ___ °C On Ice: X
Cooler seal intact upon receipt: X Yes ___ No

Relinquished By: (sign)	Time	Date	Received By: (sign)	Time	Date
	11:00A	10/7/2016			

Received in Laboratory By: Time: 10:00 Date: 10/8/16

Krause Analytical Invoice

J.H. Holcombe
The Sigma Group
1300 W. Canal Street
Milwaukee, WI 53233

Invoice # 16581
Date 11/22/2016

Project #16153 Solenis
P.O. #
COC 130065

Item	Quantity	Price	Surcharge	Discount	Subtotal
Triethylamine analysis, per quotation	20	$295.00	$0.00	$0.00	$5900.00

Total Amount Due $5900.00

Invoices are payable upon receipt unless prior arrangements have been made

Please Remit To:

Krause Analytical
8127 Mesa Drive, Suite B-206
Austin, TX 78759
(512) 569-9586
EIN 81-0998582

Thank you for your business!!

J.H. Holcombe
The Sigma Group
1300 W. Canal Street
Milwaukee, WI 53233

Control # 110920

Project #16153 Solenis
Sample SB-1 (1-3)
Date/Time Taken Oct 4, 2016 14:10

Matrix soil
Date/Time Rec'd Oct 13, 2016 15:10

Report of Analytical Data

Analyte	Result	Units	Date/Time Run	By	Method	RPD	Limit	MS	MSD	Limit	LCS	LCSD	Limit
Triethylamine	3.2	mg/Kg	10/31/16 9:17	MCK	8260M	12.4	30	96.3	109.2	60-140	89.9	86.6	70-130

RPD - MS/MSD precision MS - matrix spike recovery MSD - matrix spike duplicate recovery
LCS/LCSD- laboratory control standard/duplicate recovery

Methods from laboratory SOP based on reference method unless otherwise noted.

Respectfully submitted,

Mark C. Krause

J.H. Holcombe
The Sigma Group
1300 W. Canal Street
Milwaukee, WI 53233

Control # 110921

Project #16153 Solenis
Sample SB-1 (5-7.5)
Date/Time Taken Oct 4, 2016 14:10

Matrix soil
Date/Time Rec'd Oct 13, 2016 15:10

Report of Analytical Data

Analyte	Result	Units	Date/Time Run	By	Method	RPD	Limit	MS	MSD	Limit	LCS	LCSD	Limit
Triethylamine	6.9	mg/Kg	10/31/16 9:30	MCK	8260M	12.4	30	96.3	109.2	60-140	89.9	86.6	70-130

RPD - MS/MSD precision MS - matrix spike recovery MSD - matrix spike duplicate recovery
LCS/LCSD- laboratory control standard/duplicate recovery

Methods from laboratory SOP based on reference method unless otherwise noted.

Respectfully submitted,

Mark C. Krause

J.H. Holcombe
The Sigma Group
1300 W. Canal Street
Milwaukee, WI 53233

Control # 110922

Project #16153 Solenis
Sample SB-2 (3-5)
Date/Time Taken Oct 4, 2016 15:10

Matrix soil
Date/Time Rec'd Oct 13, 2016 15:10

Report of Analytical Data

Analyte	Result	Units	Date/Time Run	By	Method	RPD	Limit	MS	MSD	Limit	LCS	LCSD	Limit
Triethylamine	83	mg/Kg	10/31/16 9:43	MCK	8260M	12.4	30	96.3	109.2	60-140	89.9	86.6	70-130

RPD - MS/MSD precision MS - matrix spike recovery MSD - matrix spike duplicate recovery
LCS/LCSD- laboratory control standard/duplicate recovery

Methods from laboratory SOP based on reference method unless otherwise noted.

Respectfully submitted,

Mark C. Krause

J.H. Holcombe
The Sigma Group
1300 W. Canal Street
Milwaukee, WI 53233

Control # 110923

Project #16153 Solenis
Sample SB-2 (10-12.5)
Date/Time Taken Oct 4, 2016 15:10

Matrix soil
Date/Time Rec'd Oct 13, 2016 15:10

Report of Analytical Data

Analyte	Result	Units	Date/Time Run	By	Method	RPD	Limit	MS	MSD	Limit	LCS	LCSD	Limit
Triethylamine	3.4	mg/Kg	10/31/16 9:56	MCK	8260M	12.4	30	96.3	109.2	60-140	89.9	86.6	70-130

RPD - MS/MSD precision MS - matrix spike recovery MSD - matrix spike duplicate recovery
LCS/LCSD- laboratory control standard/duplicate recovery

Methods from laboratory SOP based on reference method unless otherwise noted.

Respectfully submitted,

Mark C. Krause

J.H. Holcombe
The Sigma Group
1300 W. Canal Street
Milwaukee, WI 53233

Control # 110924

Project #16153 Solenis
Sample SB-3 (1-3)
Date/Time Taken Oct 4, 2016 13:30

Matrix soil
Date/Time Rec'd Oct 13, 2016 15:10

Report of Analytical Data

Analyte	Result	Units	Date/Time Run	By	Method	RPD	Limit	MS	MSD	Limit	LCS	LCSD	Limit
Triethylamine	0.73	mg/Kg	10/31/16 10:09	MCK	8260M	12.4	30	96.3	109.2	60-140	89.9	86.6	70-130

RPD - MS/MSD precision MS - matrix spike recovery MSD - matrix spike duplicate recovery
LCS/LCSD- laboratory control standard/duplicate recovery

Methods from laboratory SOP based on reference method unless otherwise noted.

Respectfully submitted,

Mark C. Krause

J.H. Holcombe
The Sigma Group
1300 W. Canal Street
Milwaukee, WI 53233

Control # 110925

Project #16153 Solenis
Sample SB-3 (3-5)
Date/Time Taken Oct 4, 2016 13:30

Matrix soil
Date/Time Rec'd Oct 13, 2016 15:10

Report of Analytical Data

Analyte	Result	Units	Date/Time Run	By	Method	RPD	Limit	MS	MSD	Limit	LCS	LCSD	Limit
Triethylamine	0.66	mg/Kg	10/31/16 10:22	MCK	8260M	12.4	30	96.3	109.2	60-140	89.9	86.6	70-130

RPD - MS/MSD precision MS - matrix spike recovery MSD - matrix spike duplicate recovery
LCS/LCSD- laboratory control standard/duplicate recovery

Methods from laboratory SOP based on reference method unless otherwise noted.

Respectfully submitted,

Mark C. Krause

J.H. Holcombe
The Sigma Group
1300 W. Canal Street
Milwaukee, WI 53233

Control # 110926

Project #16153 Solenis
Sample SB-4 (3-5)
Date/Time Taken Oct 4, 2016 9:30

Matrix soil
Date/Time Rec'd Oct 13, 2016 15:10

Report of Analytical Data

Analyte	Result	Units	Date/Time Run	By	Method	RPD	Limit	MS	MSD	Limit	LCS	LCSD	Limit
Triethylamine	<0.5	mg/Kg	10/31/16 10:35	MCK	8260M	12.4	30	96.3	109.2	60-140	89.9	86.6	70-130

RPD - MS/MSD precision MS - matrix spike recovery MSD - matrix spike duplicate recovery
LCS/LCSD- laboratory control standard/duplicate recovery

Methods from laboratory SOP based on reference method unless otherwise noted.

Respectfully submitted,

Mark C. Krause

J.H. Holcombe
The Sigma Group
1300 W. Canal Street
Milwaukee, WI 53233

Control # 110927

Project #16153 Solenis
Sample SB-4 (7.5-10)
Date/Time Taken Oct 4, 2016 9:30

Matrix soil
Date/Time Rec'd Oct 13, 2016 15:10

Report of Analytical Data

Analyte	Result	Units	Date/Time Run	By	Method	RPD	Limit	MS	MSD	Limit	LCS	LCSD	Limit
Triethylamine	<0.5	mg/Kg	10/31/16 10:48	MCK	8260M	12.4	30	96.3	109.2	60-140	89.9	86.6	70-130

RPD - MS/MSD precision MS - matrix spike recovery MSD - matrix spike duplicate recovery
LCS/LCSD- laboratory control standard/duplicate recovery

Methods from laboratory SOP based on reference method unless otherwise noted.

Respectfully submitted,

Mark C. Krause

J.H. Holcombe
The Sigma Group
1300 W. Canal Street
Milwaukee, WI 53233

Control # 110928

Project #16153 Solenis
Sample SB-5 (3-5)
Date/Time Taken Oct 4, 2016 13:05

Matrix soil
Date/Time Rec'd Oct 13, 2016 15:10

Report of Analytical Data

Analyte	Result	Units	Date/Time Run	By	Method	RPD	Limit	MS	MSD	Limit	LCS	LCSD	Limit
Triethylamine	<0.5	mg/Kg	10/31/16 11:01	MCK	8260M	12.4	30	96.3	109.2	60-140	89.9	86.6	70-130

RPD - MS/MSD precision MS - matrix spike recovery MSD - matrix spike duplicate recovery
LCS/LCSD- laboratory control standard/duplicate recovery

Methods from laboratory SOP based on reference method unless otherwise noted.

Respectfully submitted,

Mark C. Krause

J.H. Holcombe
The Sigma Group
1300 W. Canal Street
Milwaukee, WI 53233

Control # 110929

Project #16153 Solenis
Sample SB-5 (7.5-10)
Date/Time Taken Oct 4, 2016 13:05

Matrix soil
Date/Time Rec'd Oct 13, 2016 15:10

Report of Analytical Data

Analyte	Result	Units	Date/Time Run	By	Method	RPD	Limit	MS	MSD	Limit	LCS	LCSD	Limit
Triethylamine	<0.5	mg/Kg	10/31/16 11:14	MCK	8260M	12.4	30	96.3	109.2	60-140	89.9	86.6	70-130

RPD - MS/MSD precision MS - matrix spike recovery MSD - matrix spike duplicate recovery
LCS/LCSD- laboratory control standard/duplicate recovery

Methods from laboratory SOP based on reference method unless otherwise noted.

Respectfully submitted,

Mark C. Krause

J.H. Holcombe
The Sigma Group
1300 W. Canal Street
Milwaukee, WI 53233

Control # 110930

Project #16153 Solenis
Sample SB-6 (1-3)
Date/Time Taken Oct 4, 2016 12:15

Matrix soil
Date/Time Rec'd Oct 13, 2016 15:10

Report of Analytical Data

Analyte	Result	Units	Date/Time Run	By	Method	RPD	Limit	MS	MSD	Limit	LCS	LCSD	Limit
Triethylamine	0.53	mg/Kg	10/31/16 11:27	MCK	8260M	12.4	30	96.3	109.2	60-140	89.9	86.6	70-130

RPD - MS/MSD precision MS - matrix spike recovery MSD - matrix spike duplicate recovery
LCS/LCSD- laboratory control standard/duplicate recovery

Methods from laboratory SOP based on reference method unless otherwise noted.

Respectfully submitted,

Mark C. Krause

J.H. Holcombe
The Sigma Group
1300 W. Canal Street
Milwaukee, WI 53233

Control # 110931

Project #16153 Solenis
Sample SB-6 (3-5)
Date/Time Taken Oct 4, 2016 12:15

Matrix soil
Date/Time Rec'd Oct 13, 2016 15:10

Report of Analytical Data

Analyte	Result	Units	Date/Time Run	By	Method	RPD	Limit	MS	MSD	Limit	LCS	LCSD	Limit
Triethylamine	<0.5	mg/Kg	10/31/16 11:40	MCK	8260M	12.4	30	96.3	109.2	60-140	89.9	86.6	70-130

RPD - MS/MSD precision MS - matrix spike recovery MSD - matrix spike duplicate recovery
LCS/LCSD- laboratory control standard/duplicate recovery

Methods from laboratory SOP based on reference method unless otherwise noted.

Respectfully submitted,

Mark C. Krause

J.H. Holcombe
The Sigma Group
1300 W. Canal Street
Milwaukee, WI 53233

Control # 110932

Project #16153 Solenis
Sample SB-7 (3-5)
Date/Time Taken Oct 4, 2016 11:00

Matrix soil
Date/Time Rec'd Oct 13, 2016 15:10

Report of Analytical Data

Analyte	Result	Units	Date/Time Run	By	Method	RPD	Limit	MS	MSD	Limit	LCS	LCSD	Limit
Triethylamine	<0.5	mg/Kg	10/31/16 11:53	MCK	8260M	12.4	30	96.3	109.2	60-140	89.9	86.6	70-130

RPD - MS/MSD precision MS - matrix spike recovery MSD - matrix spike duplicate recovery
LCS/LCSD- laboratory control standard/duplicate recovery

Methods from laboratory SOP based on reference method unless otherwise noted.

Respectfully submitted,

Mark C. Krause

J.H. Holcombe
The Sigma Group
1300 W. Canal Street
Milwaukee, WI 53233

Control # 110933

Project #16153 Solenis
Sample SB-7 (12.5-15)
Date/Time Taken Oct 4, 2016 11:00

Matrix soil
Date/Time Rec'd Oct 13, 2016 15:10

Report of Analytical Data

Analyte	Result	Units	Date/Time Run	By	Method	RPD	Limit	MS	MSD	Limit	LCS	LCSD	Limit
Triethylamine	<0.5	mg/Kg	10/31/16 12:06	MCK	8260M	12.4	30	96.3	109.2	60-140	89.9	86.6	70-130

RPD - MS/MSD precision MS - matrix spike recovery MSD - matrix spike duplicate recovery
LCS/LCSD- laboratory control standard/duplicate recovery

Methods from laboratory SOP based on reference method unless otherwise noted.

Respectfully submitted,

Mark C. Krause

J.H. Holcombe
The Sigma Group
1300 W. Canal Street
Milwaukee, WI 53233

Control # 110934

Project #16153 Solenis
Sample SB-8 (3-5)
Date/Time Taken Oct 4, 2016 10:30

Matrix soil
Date/Time Rec'd Oct 13, 2016 15:10

Report of Analytical Data

Analyte	Result	Units	Date/Time Run	By	Method	RPD	Limit	MS	MSD	Limit	LCS	LCSD	Limit
Triethylamine	<0.5	mg/Kg	10/31/16 12:19	MCK	8260M	12.4	30	96.3	109.2	60-140	89.9	86.6	70-130

RPD - MS/MSD precision MS - matrix spike recovery MSD - matrix spike duplicate recovery
LCS/LCSD- laboratory control standard/duplicate recovery

Methods from laboratory SOP based on reference method unless otherwise noted.

Respectfully submitted,

Mark C. Krause

J.H. Holcombe
The Sigma Group
1300 W. Canal Street
Milwaukee, WI 53233

Control # 110935

Project #16153 Solenis
Sample SB-8 (5-7.5)
Date/Time Taken Oct 4, 2016 10:30

Matrix soil
Date/Time Rec'd Oct 13, 2016 15:10

Report of Analytical Data

Analyte	Result	Units	Date/Time Run	By	Method	RPD	Limit	MS	MSD	Limit	LCS	LCSD	Limit
Triethylamine	8.4	mg/Kg	10/31/16 12:32	MCK	8260M	12.4	30	96.3	109.2	60-140	89.9	86.6	70-130

RPD - MS/MSD precision MS - matrix spike recovery MSD - matrix spike duplicate recovery
LCS/LCSD- laboratory control standard/duplicate recovery

Methods from laboratory SOP based on reference method unless otherwise noted.

Respectfully submitted,

Mark C. Krause

J.H. Holcombe
The Sigma Group
1300 W. Canal Street
Milwaukee, WI 53233

Control # 110936

Project #16153 Solenis
Sample SB-9 (1-3)
Date/Time Taken Oct 4, 2016 9:55

Matrix soil
Date/Time Rec'd Oct 13, 2016 15:10

Report of Analytical Data

Analyte	Result	Units	Date/Time Run	By	Method	RPD	Limit	MS	MSD	Limit	LCS	LCSD	Limit
Triethylamine	5.5	mg/Kg	10/31/16 12:45	MCK	8260M	12.4	30	96.3	109.2	60-140	89.9	86.6	70-130

RPD - MS/MSD precision MS - matrix spike recovery MSD - matrix spike duplicate recovery
LCS/LCSD- laboratory control standard/duplicate recovery

Methods from laboratory SOP based on reference method unless otherwise noted.

Respectfully submitted,

Mark C. Krause

J.H. Holcombe
The Sigma Group
1300 W. Canal Street
Milwaukee, WI 53233

Control # 110937

Project #16153 Solenis
Sample SB-9 (5-7.5)
Date/Time Taken Oct 4, 2016 9:55

Matrix soil
Date/Time Rec'd Oct 13, 2016 15:10

Report of Analytical Data

Analyte	Result	Units	Date/Time Run	By	Method	RPD	Limit	MS	MSD	Limit	LCS	LCSD	Limit
Triethylamine	1.6	mg/Kg	10/31/16 12:58	MCK	8260M	12.4	30	96.3	109.2	60-140	89.9	86.6	70-130

RPD - MS/MSD precision MS - matrix spike recovery MSD - matrix spike duplicate recovery
LCS/LCSD- laboratory control standard/duplicate recovery

Methods from laboratory SOP based on reference method unless otherwise noted.

Respectfully submitted,

Mark C. Krause

J.H. Holcombe
The Sigma Group
1300 W. Canal Street
Milwaukee, WI 53233

Control # 110938

Project #16153 Solenis
Sample SB-10 (3-5)
Date/Time Taken Oct 4, 2016 8:55

Matrix soil
Date/Time Rec'd Oct 13, 2016 15:10

Report of Analytical Data

Analyte	Result	Units	Date/Time Run	By	Method	RPD	Limit	MS	MSD	Limit	LCS	LCSD	Limit
Triethylamine	26	mg/Kg	10/31/16 13:11	MCK	8260M	12.4	30	96.3	109.2	60-140	89.9	86.6	70-130

RPD - MS/MSD precision MS - matrix spike recovery MSD - matrix spike duplicate recovery
LCS/LCSD- laboratory control standard/duplicate recovery

Methods from laboratory SOP based on reference method unless otherwise noted.

Respectfully submitted,

Mark C. Krause

J.H. Holcombe
The Sigma Group
1300 W. Canal Street
Milwaukee, WI 53233

Control # 110939

Project #16153 Solenis
Sample SB-10 (5-7.5)
Date/Time Taken Oct 4, 2016 8:55

Matrix soil
Date/Time Rec'd Oct 13, 2016 15:10

Report of Analytical Data

Analyte	Result	Units	Date/Time Run	By	Method	RPD	Limit	MS	MSD	Limit	LCS	LCSD	Limit
Triethylamine	5.3	mg/Kg	10/31/16 13:24	MCK	8260M	12.4	30	96.3	109.2	60-140	89.9	86.6	70-130

RPD - MS/MSD precision MS - matrix spike recovery MSD - matrix spike duplicate recovery
LCS/LCSD- laboratory control standard/duplicate recovery

Methods from laboratory SOP based on reference method unless otherwise noted.

Respectfully submitted,

Mark C. Krause

Chain of Custody

Austin Analytical LLC

COC Number 130065

Name	JT HOLCOMBE
Company	THE SIGMA GROUP, INC.
Address	1300 W CANAL ST
City/State/Zip	MILWAUKEE, WI 53233
Phone	414.643.4200
FAX	414.643.4210
e-mail	JHolcombe@thesigmagroup.com
Project	#16153
Site Location	SOLENIS
Reference	

QAPP attached? Y / N

Analytical Method attached? Y / N

Sample Description	Date	Time	Matrix	By	Lab #
SB-1 (1-3)	10/4/2016	2:10 P	SOIL	JTH	110920
SB-1 (5-7.5)		2:10 P			110921
SB-2 (3-5)		3:10 P			110922
SB-2 (10-12.5)		3:10 P			110923
SB-3 (1-3)		1:30 P			110924
SB-3 (3-5)		1:30 P			110925
SB-4 (3-5)		9:30 A			110926
SB-4 (7.5-10)		9:30 A			110927
SB-5 (3-5)		1:05 P			110928
SB-5 (7.5-10)		1:05 P			110929
SB-6 (1-3)		12:15 P			110930
SB-6 (3-5)		12:15 P			110931

# of Sample Containers								Tests Assigned												
VOA	4 oz	Bags	Customer Supplied	Other	Sample Flags	BTEX/MTBE	TPH	RRC package 1	Metals	Anions	TCLP Metals	TCLP Full	RCI		Pesticide Screen	Color	Pathogen Screen			Rush turnaround

Relinquished By	Date	Time	Received By	Date	Time	Notes:
JT Holcombe	10/7/2016	11:00A				
Relinquished By	Date	Time	Received By Lab	Date	Time	Ice present X / N; Temperature C; Intact Y / N; Headspace Y / N; Therm #
			Letticia Krause	10/13/16	3:10	

Submittal of this Chain of Custody indicates the client's acceptance of Austin Analytical LLC standard terms and conditions

[ ] Client supplied information [ ] Laboratory use only

8900 Shoal Creek Blvd. #111 Austin, TX 78757

(512) 569-9586

mckrause@austinanalytical.com

Chain of Custody

Austin Analytical LLC

COC Number 130065

Name	JT HOLCOMBE
Company	THE SIGMA GROUP, INC.
Address	1300 W CANAL ST
City/State/Zip	MILWAUKEE, WI 53233
Phone	414.643.4200
FAX	414.643.4210
e-mail	Jholcombe@thesigmagroup.com
Project	#16153
Site Location	SOLENIS
Reference	

QAPP attached? Y / N

Analytical Method attached? Y / N

Sample Description	Date	Time	Matrix	By	Lab #
SB-7 (3-5)	10/4/2016	11:00A	SOIL	JTH	110932
SB-7 (12.5-15)		11:00A			110933
SB-8 (3-5)		10:30A			110934
SB-8 (5-7.5)		10:30A			110935
SB-9 (1-3)		9:55A			110936
SB-9 (5-7.5)		9:55A			110937
SB-10 (3-5)		8:55A			110938
SB-10 (5-7.5)		8:55A			110939

# of Sample Containers						Tests Assigned															
VOA	4 oz	Bags	Customer Supplied	Other	Sample Flags	BTEX/MTBE	TPH	RRC package 1	Metals	Anions	TCLP Metals	TCLP Full	RCI		Pesticide Screen	Color	Pathogen Screen				Rush turnaround

Relinquished By	Date	Time	Received By	Date	Time	Notes:
JT Holcomb	10/7/2016	11:00A				

Relinquished By	Date	Time	Received By Lab	Date	Time				
			LaTonia Krause	10/13/16	3:10	Ice present X / N	Intact Y / N	Therm #
						Temperature C	Headspace Y / N	

Submittal of this Chain of Custody indicates the client's acceptance of Austin Analytical LLC standard terms and conditions

☐ Client supplied information ☐ Laboratory use only

8900 Shoal Creek Blvd. #111 Austin, TX 78757

(512) 569-9586

mckrause@austinanalytical.com

29-Dec-2016

Cory Katzban
The Sigma Group
1300 W. Canal Street
Milwaukee, WI 53233

Re: **Solenis (16153)** Work Order: **16121255**

Dear Cory,

ALS Environmental received 17 samples on 21-Dec-2016 12:00 PM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental 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 55.

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

Sincerely,

Electronically approved by: Chad Whelton

Chad Whelton
Project Manager

Certificate No: WI: 399084510

ADDRESS 3352 128th Ave Holland, Michigan 49424 | PHONE (616) 399-6070 | FAX (616) 399-6185
ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

ALS Group, USA

Date: 29-Dec-16

Client: The Sigma Group
Project: Solenis (16153)
Work Order: **16121255**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
16121255-01	SB-11 (5-7.5')	Soil		12/19/2016 08:30	12/21/2016 12:00	☐
16121255-02	SB-11 (10-12.5')	Soil		12/19/2016 08:30	12/21/2016 12:00	☐
16121255-03	SB-11 (25-27.5')	Soil		12/19/2016 08:30	12/21/2016 12:00	☐
16121255-04	PZ-9 (5-7.5')	Soil		12/19/2016 10:00	12/21/2016 12:00	☐
16121255-05	PZ-9 (12.5-15')	Soil		12/19/2016 10:00	12/21/2016 12:00	☐
16121255-06	PZ-9 (22.5-25')	Soil		12/19/2016 10:00	12/21/2016 12:00	☐
16121255-07	PZ-8 (10-12.5')	Soil		12/19/2016 11:00	12/21/2016 12:00	☐
16121255-08	PZ-8 (20-22.5')	Soil		12/19/2016 11:00	12/21/2016 12:00	☐
16121255-09	PZ-8 (22.5-25')	Soil		12/19/2016 11:00	12/21/2016 12:00	☐
16121255-10	PZ-6 (7.5-10')	Soil		12/19/2016 12:00	12/21/2016 12:00	☐
16121255-11	PZ-6 (15-17.5')	Soil		12/19/2016 12:00	12/21/2016 12:00	☐
16121255-12	PZ-6 (25-27.5')	Soil		12/19/2016 12:00	12/21/2016 12:00	☐
16121255-13	PZ-6 (32.5-35')	Soil		12/19/2016 12:00	12/21/2016 12:00	☐
16121255-14	SB-12 (2.5-5')	Soil		12/19/2016 13:15	12/21/2016 12:00	☐
16121255-15	SB-12 (12.5-15')	Soil		12/19/2016 13:15	12/21/2016 12:00	☐
16121255-16	SB-12 (27.5-30')	Soil		12/19/2016 13:15	12/21/2016 12:00	☐
16121255-17	Trip Blank	Soil		12/19/2016	12/21/2016 12:00	☐

Client: The Sigma Group
Project: Solenis (16153)
Work Order: 16121255

Case Narrative

Samples for the above noted Work Order were received on 12/21/2016. 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 96173, Method VOC_8260_S, Sample 16121255-03A MS/MSD: The MS and MSD recovery was below the lower control limit for Bromomethane. The corresponding result in the parent sample may be biased low.

Batch 96173, Method VOC_8260_S, Sample 16121255-03A MS/MSD: The MS and MSD recoveries were above the upper control limits for Acetone and Tetrachloroethene. The corresponding results in the parent sample were non-detect, therefore no qualification is required.

Batch 96173, Method VOC_8260_S, Sample 16121255-03A MSD: The MSD recovery was above the upper control limit for Trichloroethene. However, the MS recovery and the RPD between the MS and MSD were within control limits. No qualification is required.

Wet Chemistry

Batch R203075, Method MOISTURE, Sample 16121255-15B DUP: RPD is outside of test

defined limits for Moisture. Results should be considered estimated.

ALS Group, USA

Date: 29-Dec-16

Client: The Sigma Group
Project: Solenis (16153)
WorkOrder: **16121255**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
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
mg/Kg-dry	Milligrams per Kilogram Dry Weight

ALS Group, USA

Date: *29-Dec-16*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: SB-11 (5-7.5')
Collection Date: 12/19/2016 08:30 AM

Work Order: 16121255
Lab ID: 16121255-01
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
ORGANIC COMPOUNDS BY GC-FID		Method: **SW8015M**					Analyst: **KYM**
Triethylamine	U		3.2	30	mg/Kg-dry	1	12/28/2016 20:31
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260B**			Prep: SW5035 / 12/22/16		Analyst: **BG**
1,1,1,2-Tetrachloroethane	U		11	41	µg/Kg-dry	1	12/23/2016 12:47
1,1,1-Trichloroethane	U		12	41	µg/Kg-dry	1	12/23/2016 12:47
1,1,2,2-Tetrachloroethane	U		10	41	µg/Kg-dry	1	12/23/2016 12:47
1,1,2-Trichloroethane	U		12	41	µg/Kg-dry	1	12/23/2016 12:47
1,1,2-Trichlorotrifluoroethane	U		9.3	41	µg/Kg-dry	1	12/23/2016 12:47
1,1-Dichloroethane	U		11	41	µg/Kg-dry	1	12/23/2016 12:47
1,1-Dichloroethene	U		11	41	µg/Kg-dry	1	12/23/2016 12:47
1,2,3-Trichlorobenzene	U		18	41	µg/Kg-dry	1	12/23/2016 12:47
1,2,4-Trichlorobenzene	U		31	41	µg/Kg-dry	1	12/23/2016 12:47
1,2,4-Trimethylbenzene	U		8.3	41	µg/Kg-dry	1	12/23/2016 12:47
1,2-Dibromo-3-chloropropane	U		17	41	µg/Kg-dry	1	12/23/2016 12:47
1,2-Dibromoethane	U		14	41	µg/Kg-dry	1	12/23/2016 12:47
1,2-Dichlorobenzene	U		12	41	µg/Kg-dry	1	12/23/2016 12:47
1,2-Dichloroethane	U		11	41	µg/Kg-dry	1	12/23/2016 12:47
1,2-Dichloropropane	U		11	41	µg/Kg-dry	1	12/23/2016 12:47
1,3,5-Trimethylbenzene	U		18	41	µg/Kg-dry	1	12/23/2016 12:47
1,3-Dichlorobenzene	U		13	41	µg/Kg-dry	1	12/23/2016 12:47
1,3-Dichloropropane	U		12	41	µg/Kg-dry	1	12/23/2016 12:47
1,4-Dichlorobenzene	U		11	41	µg/Kg-dry	1	12/23/2016 12:47
2,2-Dichloropropane	U		15	41	µg/Kg-dry	1	12/23/2016 12:47
2-Butanone	U		56	280	µg/Kg-dry	1	12/23/2016 12:47
2-Chlorotoluene	U		12	41	µg/Kg-dry	1	12/23/2016 12:47
2-Hexanone	U		27	41	µg/Kg-dry	1	12/23/2016 12:47
4-Chlorotoluene	U		9.1	41	µg/Kg-dry	1	12/23/2016 12:47
4-Methyl-2-pentanone	U		30	41	µg/Kg-dry	1	12/23/2016 12:47
Acetone	U		75	140	µg/Kg-dry	1	12/23/2016 12:47
Benzene	U		9.4	41	µg/Kg-dry	1	12/23/2016 12:47
Bromobenzene	U		19	41	µg/Kg-dry	1	12/23/2016 12:47
Bromochloromethane	U		19	41	µg/Kg-dry	1	12/23/2016 12:47
Bromodichloromethane	U		11	41	µg/Kg-dry	1	12/23/2016 12:47
Bromoform	U		15	41	µg/Kg-dry	1	12/23/2016 12:47
Bromomethane	U		18	100	µg/Kg-dry	1	12/23/2016 12:47
Carbon disulfide	U		14	41	µg/Kg-dry	1	12/23/2016 12:47
Carbon tetrachloride	U		7.3	41	µg/Kg-dry	1	12/23/2016 12:47
Chlorobenzene	U		12	41	µg/Kg-dry	1	12/23/2016 12:47
Chloroethane	U		26	140	µg/Kg-dry	1	12/23/2016 12:47

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

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: SB-11 (5-7.5')
Collection Date: 12/19/2016 08:30 AM

Work Order: 16121255
Lab ID: 16121255-01
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloroform	U		14	41	µg/Kg-dry	1	12/23/2016 12:47
Chloromethane	U		17	140	µg/Kg-dry	1	12/23/2016 12:47
cis-1,2-Dichloroethene	U		12	41	µg/Kg-dry	1	12/23/2016 12:47
cis-1,3-Dichloropropene	U		16	41	µg/Kg-dry	1	12/23/2016 12:47
Cyclohexane	U		21	41	µg/Kg-dry	1	12/23/2016 12:47
Dibromochloromethane	U		9.4	41	µg/Kg-dry	1	12/23/2016 12:47
Dichlorodifluoromethane	U		18	41	µg/Kg-dry	1	12/23/2016 12:47
Diisopropyl ether	U		14	41	µg/Kg-dry	1	12/23/2016 12:47
Ethyl acetate	U		39	280	µg/Kg-dry	1	12/23/2016 12:47
Ethylbenzene	U		9.7	41	µg/Kg-dry	1	12/23/2016 12:47
Hexachlorobutadiene	U		26	140	µg/Kg-dry	1	12/23/2016 12:47
Isopropylbenzene	U		16	41	µg/Kg-dry	1	12/23/2016 12:47
m,p-Xylene	U		19	83	µg/Kg-dry	1	12/23/2016 12:47
Methyl acetate	U		85	280	µg/Kg-dry	1	12/23/2016 12:47
Methyl tert-butyl ether	U		13	41	µg/Kg-dry	1	12/23/2016 12:47
Methylcyclohexane	U		18	41	µg/Kg-dry	1	12/23/2016 12:47
Methylene chloride	U		19	41	µg/Kg-dry	1	12/23/2016 12:47
Naphthalene	U		7.1	140	µg/Kg-dry	1	12/23/2016 12:47
n-Butylbenzene	U		11	41	µg/Kg-dry	1	12/23/2016 12:47
n-Propylbenzene	U		13	41	µg/Kg-dry	1	12/23/2016 12:47
o-Xylene	U		13	41	µg/Kg-dry	1	12/23/2016 12:47
p-Isopropyltoluene	U		16	41	µg/Kg-dry	1	12/23/2016 12:47
sec-Butylbenzene	U		16	41	µg/Kg-dry	1	12/23/2016 12:47
Styrene	U		29	41	µg/Kg-dry	1	12/23/2016 12:47
tert-Butylbenzene	U		18	41	µg/Kg-dry	1	12/23/2016 12:47
Tetrachloroethene	U		20	41	µg/Kg-dry	1	12/23/2016 12:47
Toluene	U		14	41	µg/Kg-dry	1	12/23/2016 12:47
trans-1,2-Dichloroethene	U		12	41	µg/Kg-dry	1	12/23/2016 12:47
trans-1,3-Dichloropropene	U		7.4	41	µg/Kg-dry	1	12/23/2016 12:47
Trichloroethene	U		11	41	µg/Kg-dry	1	12/23/2016 12:47
Trichlorofluoromethane	U		8.0	41	µg/Kg-dry	1	12/23/2016 12:47
Vinyl chloride	U		13	41	µg/Kg-dry	1	12/23/2016 12:47
Xylenes, Total	U		32	120	µg/Kg-dry	1	12/23/2016 12:47
Surr: 1,2-Dichloroethane-d4	*94.0*			*70-130*	*%REC*	1	12/23/2016 12:47
Surr: 4-Bromofluorobenzene	*97.6*			*70-130*	*%REC*	1	12/23/2016 12:47
Surr: Dibromofluoromethane	*92.5*			*70-130*	*%REC*	1	12/23/2016 12:47
Surr: Toluene-d8	*98.4*			*70-130*	*%REC*	1	12/23/2016 12:47
MOISTURE		Method:	**SW3550C**				Analyst: **EDL**
Moisture	**16**		**0.025**	**0.050**	**% of sample**	1	12/21/2016 19:17

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

ALS Group, USA

Date: *29-Dec-16*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: SB-11 (10-12.5')
Collection Date: 12/19/2016 08:30 AM

Work Order: 16121255
Lab ID: 16121255-02
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
ORGANIC COMPOUNDS BY GC-FID		Method: **SW8015M**					Analyst: **KYM**
Triethylamine	U		3.2	30	mg/Kg-dry	1	12/28/2016 20:42
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260B**			Prep: SW5035 / 12/22/16		Analyst: **BG**
1,1,1,2-Tetrachloroethane	U		11	42	µg/Kg-dry	1	12/23/2016 01:12
1,1,1-Trichloroethane	U		12	42	µg/Kg-dry	1	12/23/2016 01:12
1,1,2,2-Tetrachloroethane	U		10	42	µg/Kg-dry	1	12/23/2016 01:12
1,1,2-Trichloroethane	U		13	42	µg/Kg-dry	1	12/23/2016 01:12
1,1,2-Trichlorotrifluoroethane	U		9.5	42	µg/Kg-dry	1	12/23/2016 01:12
1,1-Dichloroethane	U		11	42	µg/Kg-dry	1	12/23/2016 01:12
1,1-Dichloroethene	U		11	42	µg/Kg-dry	1	12/23/2016 01:12
1,2,3-Trichlorobenzene	U		19	42	µg/Kg-dry	1	12/23/2016 01:12
1,2,4-Trichlorobenzene	U		31	42	µg/Kg-dry	1	12/23/2016 01:12
1,2,4-Trimethylbenzene	U		8.5	42	µg/Kg-dry	1	12/23/2016 01:12
1,2-Dibromo-3-chloropropane	U		17	42	µg/Kg-dry	1	12/23/2016 01:12
1,2-Dibromoethane	U		14	42	µg/Kg-dry	1	12/23/2016 01:12
1,2-Dichlorobenzene	U		13	42	µg/Kg-dry	1	12/23/2016 01:12
1,2-Dichloroethane	U		12	42	µg/Kg-dry	1	12/23/2016 01:12
1,2-Dichloropropane	U		12	42	µg/Kg-dry	1	12/23/2016 01:12
1,3,5-Trimethylbenzene	U		19	42	µg/Kg-dry	1	12/23/2016 01:12
1,3-Dichlorobenzene	U		14	42	µg/Kg-dry	1	12/23/2016 01:12
1,3-Dichloropropane	U		12	42	µg/Kg-dry	1	12/23/2016 01:12
1,4-Dichlorobenzene	U		11	42	µg/Kg-dry	1	12/23/2016 01:12
2,2-Dichloropropane	U		15	42	µg/Kg-dry	1	12/23/2016 01:12
2-Butanone	U		57	280	µg/Kg-dry	1	12/23/2016 01:12
2-Chlorotoluene	U		13	42	µg/Kg-dry	1	12/23/2016 01:12
2-Hexanone	U		28	42	µg/Kg-dry	1	12/23/2016 01:12
4-Chlorotoluene	U		9.3	42	µg/Kg-dry	1	12/23/2016 01:12
4-Methyl-2-pentanone	U		31	42	µg/Kg-dry	1	12/23/2016 01:12
Acetone	U		77	140	µg/Kg-dry	1	12/23/2016 01:12
Benzene	U		9.6	42	µg/Kg-dry	1	12/23/2016 01:12
Bromobenzene	U		19	42	µg/Kg-dry	1	12/23/2016 01:12
Bromochloromethane	U		19	42	µg/Kg-dry	1	12/23/2016 01:12
Bromodichloromethane	U		11	42	µg/Kg-dry	1	12/23/2016 01:12
Bromoform	U		15	42	µg/Kg-dry	1	12/23/2016 01:12
Bromomethane	U		18	110	µg/Kg-dry	1	12/23/2016 01:12
Carbon disulfide	U		14	42	µg/Kg-dry	1	12/23/2016 01:12
Carbon tetrachloride	U		7.5	42	µg/Kg-dry	1	12/23/2016 01:12
Chlorobenzene	U		13	42	µg/Kg-dry	1	12/23/2016 01:12
Chloroethane	U		27	140	µg/Kg-dry	1	12/23/2016 01:12

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

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: SB-11 (10-12.5')
Collection Date: 12/19/2016 08:30 AM

Work Order: 16121255
Lab ID: 16121255-02
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloroform	U		14	42	µg/Kg-dry	1	12/23/2016 01:12
Chloromethane	U		17	140	µg/Kg-dry	1	12/23/2016 01:12
cis-1,2-Dichloroethene	U		12	42	µg/Kg-dry	1	12/23/2016 01:12
cis-1,3-Dichloropropene	U		16	42	µg/Kg-dry	1	12/23/2016 01:12
Cyclohexane	U		21	42	µg/Kg-dry	1	12/23/2016 01:12
Dibromochloromethane	U		9.6	42	µg/Kg-dry	1	12/23/2016 01:12
Dichlorodifluoromethane	U		19	42	µg/Kg-dry	1	12/23/2016 01:12
Diisopropyl ether	U		15	42	µg/Kg-dry	1	12/23/2016 01:12
Ethyl acetate	U		40	280	µg/Kg-dry	1	12/23/2016 01:12
Ethylbenzene	U		9.9	42	µg/Kg-dry	1	12/23/2016 01:12
Hexachlorobutadiene	U		27	140	µg/Kg-dry	1	12/23/2016 01:12
Isopropylbenzene	U		17	42	µg/Kg-dry	1	12/23/2016 01:12
m,p-Xylene	U		19	85	µg/Kg-dry	1	12/23/2016 01:12
Methyl acetate	U		87	280	µg/Kg-dry	1	12/23/2016 01:12
Methyl tert-butyl ether	U		14	42	µg/Kg-dry	1	12/23/2016 01:12
Methylcyclohexane	U		18	42	µg/Kg-dry	1	12/23/2016 01:12
Methylene chloride	U		19	42	µg/Kg-dry	1	12/23/2016 01:12
Naphthalene	U		7.2	140	µg/Kg-dry	1	12/23/2016 01:12
n-Butylbenzene	U		11	42	µg/Kg-dry	1	12/23/2016 01:12
n-Propylbenzene	U		14	42	µg/Kg-dry	1	12/23/2016 01:12
o-Xylene	U		14	42	µg/Kg-dry	1	12/23/2016 01:12
p-Isopropyltoluene	U		16	42	µg/Kg-dry	1	12/23/2016 01:12
sec-Butylbenzene	U		17	42	µg/Kg-dry	1	12/23/2016 01:12
Styrene	U		30	42	µg/Kg-dry	1	12/23/2016 01:12
tert-Butylbenzene	U		19	42	µg/Kg-dry	1	12/23/2016 01:12
Tetrachloroethene	U		21	42	µg/Kg-dry	1	12/23/2016 01:12
Toluene	U		14	42	µg/Kg-dry	1	12/23/2016 01:12
trans-1,2-Dichloroethene	U		12	42	µg/Kg-dry	1	12/23/2016 01:12
trans-1,3-Dichloropropene	U		7.6	42	µg/Kg-dry	1	12/23/2016 01:12
Trichloroethene	U		11	42	µg/Kg-dry	1	12/23/2016 01:12
Trichlorofluoromethane	U		8.1	42	µg/Kg-dry	1	12/23/2016 01:12
Vinyl chloride	U		13	42	µg/Kg-dry	1	12/23/2016 01:12
Xylenes, Total	U		33	130	µg/Kg-dry	1	12/23/2016 01:12
Surr: 1,2-Dichloroethane-d4	*93.2*			*70-130*	*%REC*	1	12/23/2016 01:12
Surr: 4-Bromofluorobenzene	*95.8*			*70-130*	*%REC*	1	12/23/2016 01:12
Surr: Dibromofluoromethane	*87.9*			*70-130*	*%REC*	1	12/23/2016 01:12
Surr: Toluene-d8	*96.6*			*70-130*	*%REC*	1	12/23/2016 01:12
MOISTURE		Method: **SW3550C**					Analyst: **EDL**
Moisture	**17**		**0.025**	**0.050**	**% of sample**	1	12/21/2016 19:17

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

ALS Group, USA

Date: *29-Dec-16*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: SB-11 (25-27.5')
Collection Date: 12/19/2016 08:30 AM

Work Order: 16121255
Lab ID: 16121255-03
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
ORGANIC COMPOUNDS BY GC-FID		Method: **SW8015M**					Analyst: **KYM**
Triethylamine	U		3.4	31	mg/Kg-dry	1	12/28/2016 20:54
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260B**			Prep: SW5035 / 12/22/16		Analyst: **BG**
1,1,1,2-Tetrachloroethane	U		12	45	µg/Kg-dry	1	12/23/2016 01:36
1,1,1-Trichloroethane	U		13	45	µg/Kg-dry	1	12/23/2016 01:36
1,1,2,2-Tetrachloroethane	U		11	45	µg/Kg-dry	1	12/23/2016 01:36
1,1,2-Trichloroethane	U		13	45	µg/Kg-dry	1	12/23/2016 01:36
1,1,2-Trichlorotrifluoroethane	U		10	45	µg/Kg-dry	1	12/23/2016 01:36
1,1-Dichloroethane	U		11	45	µg/Kg-dry	1	12/23/2016 01:36
1,1-Dichloroethene	U		12	45	µg/Kg-dry	1	12/23/2016 01:36
1,2,3-Trichlorobenzene	U		20	45	µg/Kg-dry	1	12/23/2016 01:36
1,2,4-Trichlorobenzene	U		33	45	µg/Kg-dry	1	12/23/2016 01:36
1,2,4-Trimethylbenzene	U		9.0	45	µg/Kg-dry	1	12/23/2016 01:36
1,2-Dibromo-3-chloropropane	U		18	45	µg/Kg-dry	1	12/23/2016 01:36
1,2-Dibromoethane	U		15	45	µg/Kg-dry	1	12/23/2016 01:36
1,2-Dichlorobenzene	U		13	45	µg/Kg-dry	1	12/23/2016 01:36
1,2-Dichloroethane	U		12	45	µg/Kg-dry	1	12/23/2016 01:36
1,2-Dichloropropane	U		12	45	µg/Kg-dry	1	12/23/2016 01:36
1,3,5-Trimethylbenzene	U		20	45	µg/Kg-dry	1	12/23/2016 01:36
1,3-Dichlorobenzene	U		14	45	µg/Kg-dry	1	12/23/2016 01:36
1,3-Dichloropropane	U		13	45	µg/Kg-dry	1	12/23/2016 01:36
1,4-Dichlorobenzene	U		12	45	µg/Kg-dry	1	12/23/2016 01:36
2,2-Dichloropropane	U		16	45	µg/Kg-dry	1	12/23/2016 01:36
2-Butanone	U		61	300	µg/Kg-dry	1	12/23/2016 01:36
2-Chlorotoluene	U		14	45	µg/Kg-dry	1	12/23/2016 01:36
2-Hexanone	U		30	45	µg/Kg-dry	1	12/23/2016 01:36
4-Chlorotoluene	U		9.9	45	µg/Kg-dry	1	12/23/2016 01:36
4-Methyl-2-pentanone	U		33	45	µg/Kg-dry	1	12/23/2016 01:36
Acetone	U		82	150	µg/Kg-dry	1	12/23/2016 01:36
Benzene	U		10	45	µg/Kg-dry	1	12/23/2016 01:36
Bromobenzene	U		20	45	µg/Kg-dry	1	12/23/2016 01:36
Bromochloromethane	U		20	45	µg/Kg-dry	1	12/23/2016 01:36
Bromodichloromethane	U		12	45	µg/Kg-dry	1	12/23/2016 01:36
Bromoform	U		16	45	µg/Kg-dry	1	12/23/2016 01:36
Bromomethane	U		20	110	µg/Kg-dry	1	12/23/2016 01:36
Carbon disulfide	U		15	45	µg/Kg-dry	1	12/23/2016 01:36
Carbon tetrachloride	U		8.0	45	µg/Kg-dry	1	12/23/2016 01:36
Chlorobenzene	U		14	45	µg/Kg-dry	1	12/23/2016 01:36
Chloroethane	U		29	150	µg/Kg-dry	1	12/23/2016 01:36

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

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: SB-11 (25-27.5')
Collection Date: 12/19/2016 08:30 AM

Work Order: 16121255
Lab ID: 16121255-03
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloroform	U		15	45	µg/Kg-dry	1	12/23/2016 01:36
Chloromethane	U		18	150	µg/Kg-dry	1	12/23/2016 01:36
cis-1,2-Dichloroethene	U		13	45	µg/Kg-dry	1	12/23/2016 01:36
cis-1,3-Dichloropropene	U		17	45	µg/Kg-dry	1	12/23/2016 01:36
Cyclohexane	U		22	45	µg/Kg-dry	1	12/23/2016 01:36
Dibromochloromethane	U		10	45	µg/Kg-dry	1	12/23/2016 01:36
Dichlorodifluoromethane	U		20	45	µg/Kg-dry	1	12/23/2016 01:36
Diisopropyl ether	U		16	45	µg/Kg-dry	1	12/23/2016 01:36
Ethyl acetate	U		42	300	µg/Kg-dry	1	12/23/2016 01:36
Ethylbenzene	U		10	45	µg/Kg-dry	1	12/23/2016 01:36
Hexachlorobutadiene	U		28	150	µg/Kg-dry	1	12/23/2016 01:36
Isopropylbenzene	U		18	45	µg/Kg-dry	1	12/23/2016 01:36
m,p-Xylene	U		20	90	µg/Kg-dry	1	12/23/2016 01:36
Methyl acetate	U		92	300	µg/Kg-dry	1	12/23/2016 01:36
Methyl tert-butyl ether	U		15	45	µg/Kg-dry	1	12/23/2016 01:36
Methylcyclohexane	U		19	45	µg/Kg-dry	1	12/23/2016 01:36
Methylene chloride	U		21	45	µg/Kg-dry	1	12/23/2016 01:36
Naphthalene	U		7.7	150	µg/Kg-dry	1	12/23/2016 01:36
n-Butylbenzene	U		12	45	µg/Kg-dry	1	12/23/2016 01:36
n-Propylbenzene	U		14	45	µg/Kg-dry	1	12/23/2016 01:36
o-Xylene	U		15	45	µg/Kg-dry	1	12/23/2016 01:36
p-Isopropyltoluene	U		17	45	µg/Kg-dry	1	12/23/2016 01:36
sec-Butylbenzene	U		18	45	µg/Kg-dry	1	12/23/2016 01:36
Styrene	U		32	45	µg/Kg-dry	1	12/23/2016 01:36
tert-Butylbenzene	U		20	45	µg/Kg-dry	1	12/23/2016 01:36
Tetrachloroethene	U		22	45	µg/Kg-dry	1	12/23/2016 01:36
Toluene	U		15	45	µg/Kg-dry	1	12/23/2016 01:36
trans-1,2-Dichloroethene	U		13	45	µg/Kg-dry	1	12/23/2016 01:36
trans-1,3-Dichloropropene	U		8.0	45	µg/Kg-dry	1	12/23/2016 01:36
Trichloroethene	U		12	45	µg/Kg-dry	1	12/23/2016 01:36
Trichlorofluoromethane	U		8.7	45	µg/Kg-dry	1	12/23/2016 01:36
Vinyl chloride	U		14	45	µg/Kg-dry	1	12/23/2016 01:36
Xylenes, Total	U		35	140	µg/Kg-dry	1	12/23/2016 01:36
Surr: 1,2-Dichloroethane-d4	*92.8*			*70-130*	*%REC*	1	12/23/2016 01:36
Surr: 4-Bromofluorobenzene	*99.3*			*70-130*	*%REC*	1	12/23/2016 01:36
Surr: Dibromofluoromethane	*87.3*			*70-130*	*%REC*	1	12/23/2016 01:36
Surr: Toluene-d8	*98.4*			*70-130*	*%REC*	1	12/23/2016 01:36
MOISTURE		Method: **SW3550C**					Analyst: **EDL**
Moisture	**20**		**0.025**	**0.050**	**% of sample**	1	12/21/2016 19:17

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

ALS Group, USA

Date: *29-Dec-16*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: PZ-9 (5-7.5')
Collection Date: 12/19/2016 10:00 AM

Work Order: 16121255
Lab ID: 16121255-04
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
ORGANIC COMPOUNDS BY GC-FID		Method: **SW8015M**					Analyst: **KYM**
Triethylamine	U		3.4	32	mg/Kg-dry	1	12/28/2016 21:06
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260B**			Prep: SW5035 / 12/22/16		Analyst: **BG**
1,1,1,2-Tetrachloroethane	U		12	46	µg/Kg-dry	1	12/23/2016 02:01
1,1,1-Trichloroethane	U		13	46	µg/Kg-dry	1	12/23/2016 02:01
1,1,2,2-Tetrachloroethane	U		11	46	µg/Kg-dry	1	12/23/2016 02:01
1,1,2-Trichloroethane	U		14	46	µg/Kg-dry	1	12/23/2016 02:01
1,1,2-Trichlorotrifluoroethane	U		10	46	µg/Kg-dry	1	12/23/2016 02:01
1,1-Dichloroethane	U		12	46	µg/Kg-dry	1	12/23/2016 02:01
1,1-Dichloroethene	U		12	46	µg/Kg-dry	1	12/23/2016 02:01
1,2,3-Trichlorobenzene	U		20	46	µg/Kg-dry	1	12/23/2016 02:01
1,2,4-Trichlorobenzene	U		34	46	µg/Kg-dry	1	12/23/2016 02:01
1,2,4-Trimethylbenzene	**42**	J	**9.2**	**46**	**µg/Kg-dry**	1	12/23/2016 02:01
1,2-Dibromo-3-chloropropane	U		19	46	µg/Kg-dry	1	12/23/2016 02:01
1,2-Dibromoethane	U		15	46	µg/Kg-dry	1	12/23/2016 02:01
1,2-Dichlorobenzene	U		14	46	µg/Kg-dry	1	12/23/2016 02:01
1,2-Dichloroethane	U		12	46	µg/Kg-dry	1	12/23/2016 02:01
1,2-Dichloropropane	U		13	46	µg/Kg-dry	1	12/23/2016 02:01
1,3,5-Trimethylbenzene	U		20	46	µg/Kg-dry	1	12/23/2016 02:01
1,3-Dichlorobenzene	U		15	46	µg/Kg-dry	1	12/23/2016 02:01
1,3-Dichloropropane	U		13	46	µg/Kg-dry	1	12/23/2016 02:01
1,4-Dichlorobenzene	U		12	46	µg/Kg-dry	1	12/23/2016 02:01
2,2-Dichloropropane	U		17	46	µg/Kg-dry	1	12/23/2016 02:01
2-Butanone	U		62	310	µg/Kg-dry	1	12/23/2016 02:01
2-Chlorotoluene	U		14	46	µg/Kg-dry	1	12/23/2016 02:01
2-Hexanone	U		30	46	µg/Kg-dry	1	12/23/2016 02:01
4-Chlorotoluene	U		10	46	µg/Kg-dry	1	12/23/2016 02:01
4-Methyl-2-pentanone	U		34	46	µg/Kg-dry	1	12/23/2016 02:01
Acetone	U		83	150	µg/Kg-dry	1	12/23/2016 02:01
Benzene	U		10	46	µg/Kg-dry	1	12/23/2016 02:01
Bromobenzene	U		21	46	µg/Kg-dry	1	12/23/2016 02:01
Bromochloromethane	U		21	46	µg/Kg-dry	1	12/23/2016 02:01
Bromodichloromethane	U		12	46	µg/Kg-dry	1	12/23/2016 02:01
Bromoform	U		16	46	µg/Kg-dry	1	12/23/2016 02:01
Bromomethane	U		20	110	µg/Kg-dry	1	12/23/2016 02:01
Carbon disulfide	U		16	46	µg/Kg-dry	1	12/23/2016 02:01
Carbon tetrachloride	U		8.1	46	µg/Kg-dry	1	12/23/2016 02:01
Chlorobenzene	U		14	46	µg/Kg-dry	1	12/23/2016 02:01
Chloroethane	U		29	150	µg/Kg-dry	1	12/23/2016 02:01

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

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: PZ-9 (5-7.5')
Collection Date: 12/19/2016 10:00 AM

Work Order: 16121255
Lab ID: 16121255-04
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloroform	U		16	46	µg/Kg-dry	1	12/23/2016 02:01
Chloromethane	U		19	150	µg/Kg-dry	1	12/23/2016 02:01
cis-1,2-Dichloroethene	U		13	46	µg/Kg-dry	1	12/23/2016 02:01
cis-1,3-Dichloropropene	U		18	46	µg/Kg-dry	1	12/23/2016 02:01
Cyclohexane	U		23	46	µg/Kg-dry	1	12/23/2016 02:01
Dibromochloromethane	U		10	46	µg/Kg-dry	1	12/23/2016 02:01
Dichlorodifluoromethane	U		20	46	µg/Kg-dry	1	12/23/2016 02:01
Diisopropyl ether	U		16	46	µg/Kg-dry	1	12/23/2016 02:01
Ethyl acetate	**110**	J	**43**	**310**	**µg/Kg-dry**	1	12/23/2016 02:01
Ethylbenzene	U		11	46	µg/Kg-dry	1	12/23/2016 02:01
Hexachlorobutadiene	U		29	150	µg/Kg-dry	1	12/23/2016 02:01
Isopropylbenzene	U		18	46	µg/Kg-dry	1	12/23/2016 02:01
m,p-Xylene	U		21	92	µg/Kg-dry	1	12/23/2016 02:01
Methyl acetate	U		94	310	µg/Kg-dry	1	12/23/2016 02:01
Methyl tert-butyl ether	U		15	46	µg/Kg-dry	1	12/23/2016 02:01
Methylcyclohexane	**1,500**		**20**	**46**	**µg/Kg-dry**	1	12/23/2016 02:01
Methylene chloride	U		21	46	µg/Kg-dry	1	12/23/2016 02:01
Naphthalene	U		7.8	150	µg/Kg-dry	1	12/23/2016 02:01
n-Butylbenzene	U		12	46	µg/Kg-dry	1	12/23/2016 02:01
n-Propylbenzene	U		15	46	µg/Kg-dry	1	12/23/2016 02:01
o-Xylene	U		15	46	µg/Kg-dry	1	12/23/2016 02:01
p-Isopropyltoluene	U		18	46	µg/Kg-dry	1	12/23/2016 02:01
sec-Butylbenzene	U		18	46	µg/Kg-dry	1	12/23/2016 02:01
Styrene	U		32	46	µg/Kg-dry	1	12/23/2016 02:01
tert-Butylbenzene	U		20	46	µg/Kg-dry	1	12/23/2016 02:01
Tetrachloroethene	U		23	46	µg/Kg-dry	1	12/23/2016 02:01
Toluene	U		15	46	µg/Kg-dry	1	12/23/2016 02:01
trans-1,2-Dichloroethene	U		13	46	µg/Kg-dry	1	12/23/2016 02:01
trans-1,3-Dichloropropene	U		8.2	46	µg/Kg-dry	1	12/23/2016 02:01
Trichloroethene	U		12	46	µg/Kg-dry	1	12/23/2016 02:01
Trichlorofluoromethane	U		8.8	46	µg/Kg-dry	1	12/23/2016 02:01
Vinyl chloride	U		15	46	µg/Kg-dry	1	12/23/2016 02:01
Xylenes, Total	U		36	140	µg/Kg-dry	1	12/23/2016 02:01
Surr: 1,2-Dichloroethane-d4	*91.6*			*70-130*	*%REC*	1	12/23/2016 02:01
Surr: 4-Bromofluorobenzene	*95.8*			*70-130*	*%REC*	1	12/23/2016 02:01
Surr: Dibromofluoromethane	*90.3*			*70-130*	*%REC*	1	12/23/2016 02:01
Surr: Toluene-d8	*102*			*70-130*	*%REC*	1	12/23/2016 02:01
MOISTURE		Method: **SW3550C**					Analyst: **EDL**
Moisture	**21**		**0.025**	**0.050**	**% of sample**	1	12/21/2016 19:17

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

ALS Group, USA

Date: *29-Dec-16*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: PZ-9 (12.5-15')
Collection Date: 12/19/2016 10:00 AM

Work Order: 16121255
Lab ID: 16121255-05
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
ORGANIC COMPOUNDS BY GC-FID		Method: **SW8015M**					Analyst: **KYM**
Triethylamine	U		3.2	30	mg/Kg-dry	1	12/28/2016 21:17
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260B**			Prep: SW5035 / 12/22/16		Analyst: **BG**
1,1,1,2-Tetrachloroethane	U		11	42	µg/Kg-dry	1	12/23/2016 02:25
1,1,1-Trichloroethane	U		12	42	µg/Kg-dry	1	12/23/2016 02:25
1,1,2,2-Tetrachloroethane	U		10	42	µg/Kg-dry	1	12/23/2016 02:25
1,1,2-Trichloroethane	U		13	42	µg/Kg-dry	1	12/23/2016 02:25
1,1,2-Trichlorotrifluoroethane	U		9.5	42	µg/Kg-dry	1	12/23/2016 02:25
1,1-Dichloroethane	U		11	42	µg/Kg-dry	1	12/23/2016 02:25
1,1-Dichloroethene	U		11	42	µg/Kg-dry	1	12/23/2016 02:25
1,2,3-Trichlorobenzene	U		19	42	µg/Kg-dry	1	12/23/2016 02:25
1,2,4-Trichlorobenzene	U		31	42	µg/Kg-dry	1	12/23/2016 02:25
1,2,4-Trimethylbenzene	U		8.5	42	µg/Kg-dry	1	12/23/2016 02:25
1,2-Dibromo-3-chloropropane	U		17	42	µg/Kg-dry	1	12/23/2016 02:25
1,2-Dibromoethane	U		14	42	µg/Kg-dry	1	12/23/2016 02:25
1,2-Dichlorobenzene	U		13	42	µg/Kg-dry	1	12/23/2016 02:25
1,2-Dichloroethane	U		12	42	µg/Kg-dry	1	12/23/2016 02:25
1,2-Dichloropropane	U		12	42	µg/Kg-dry	1	12/23/2016 02:25
1,3,5-Trimethylbenzene	U		19	42	µg/Kg-dry	1	12/23/2016 02:25
1,3-Dichlorobenzene	U		14	42	µg/Kg-dry	1	12/23/2016 02:25
1,3-Dichloropropane	U		12	42	µg/Kg-dry	1	12/23/2016 02:25
1,4-Dichlorobenzene	U		11	42	µg/Kg-dry	1	12/23/2016 02:25
2,2-Dichloropropane	U		15	42	µg/Kg-dry	1	12/23/2016 02:25
2-Butanone	U		57	280	µg/Kg-dry	1	12/23/2016 02:25
2-Chlorotoluene	U		13	42	µg/Kg-dry	1	12/23/2016 02:25
2-Hexanone	U		28	42	µg/Kg-dry	1	12/23/2016 02:25
4-Chlorotoluene	U		9.3	42	µg/Kg-dry	1	12/23/2016 02:25
4-Methyl-2-pentanone	U		31	42	µg/Kg-dry	1	12/23/2016 02:25
Acetone	U		77	140	µg/Kg-dry	1	12/23/2016 02:25
Benzene	U		9.6	42	µg/Kg-dry	1	12/23/2016 02:25
Bromobenzene	U		19	42	µg/Kg-dry	1	12/23/2016 02:25
Bromochloromethane	U		19	42	µg/Kg-dry	1	12/23/2016 02:25
Bromodichloromethane	U		11	42	µg/Kg-dry	1	12/23/2016 02:25
Bromoform	U		15	42	µg/Kg-dry	1	12/23/2016 02:25
Bromomethane	U		18	110	µg/Kg-dry	1	12/23/2016 02:25
Carbon disulfide	U		14	42	µg/Kg-dry	1	12/23/2016 02:25
Carbon tetrachloride	U		7.5	42	µg/Kg-dry	1	12/23/2016 02:25
Chlorobenzene	U		13	42	µg/Kg-dry	1	12/23/2016 02:25
Chloroethane	U		27	140	µg/Kg-dry	1	12/23/2016 02:25

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

ALS Group, USA

Date: *29-Dec-16*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: PZ-9 (12.5-15')
Collection Date: 12/19/2016 10:00 AM

Work Order: 16121255
Lab ID: 16121255-05
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloroform	U		14	42	µg/Kg-dry	1	12/23/2016 02:25
Chloromethane	U		17	140	µg/Kg-dry	1	12/23/2016 02:25
cis-1,2-Dichloroethene	U		12	42	µg/Kg-dry	1	12/23/2016 02:25
cis-1,3-Dichloropropene	U		16	42	µg/Kg-dry	1	12/23/2016 02:25
Cyclohexane	U		21	42	µg/Kg-dry	1	12/23/2016 02:25
Dibromochloromethane	U		9.6	42	µg/Kg-dry	1	12/23/2016 02:25
Dichlorodifluoromethane	U		19	42	µg/Kg-dry	1	12/23/2016 02:25
Diisopropyl ether	U		15	42	µg/Kg-dry	1	12/23/2016 02:25
Ethyl acetate	U		40	280	µg/Kg-dry	1	12/23/2016 02:25
Ethylbenzene	U		9.9	42	µg/Kg-dry	1	12/23/2016 02:25
Hexachlorobutadiene	U		27	140	µg/Kg-dry	1	12/23/2016 02:25
Isopropylbenzene	U		17	42	µg/Kg-dry	1	12/23/2016 02:25
m,p-Xylene	U		19	85	µg/Kg-dry	1	12/23/2016 02:25
Methyl acetate	U		87	280	µg/Kg-dry	1	12/23/2016 02:25
Methyl tert-butyl ether	U		14	42	µg/Kg-dry	1	12/23/2016 02:25
Methylcyclohexane	U		18	42	µg/Kg-dry	1	12/23/2016 02:25
Methylene chloride	U		19	42	µg/Kg-dry	1	12/23/2016 02:25
Naphthalene	U		7.2	140	µg/Kg-dry	1	12/23/2016 02:25
n-Butylbenzene	U		11	42	µg/Kg-dry	1	12/23/2016 02:25
n-Propylbenzene	U		14	42	µg/Kg-dry	1	12/23/2016 02:25
o-Xylene	U		14	42	µg/Kg-dry	1	12/23/2016 02:25
p-Isopropyltoluene	U		16	42	µg/Kg-dry	1	12/23/2016 02:25
sec-Butylbenzene	U		17	42	µg/Kg-dry	1	12/23/2016 02:25
Styrene	U		30	42	µg/Kg-dry	1	12/23/2016 02:25
tert-Butylbenzene	U		19	42	µg/Kg-dry	1	12/23/2016 02:25
Tetrachloroethene	U		21	42	µg/Kg-dry	1	12/23/2016 02:25
Toluene	U		14	42	µg/Kg-dry	1	12/23/2016 02:25
trans-1,2-Dichloroethene	U		12	42	µg/Kg-dry	1	12/23/2016 02:25
trans-1,3-Dichloropropene	U		7.6	42	µg/Kg-dry	1	12/23/2016 02:25
Trichloroethene	U		11	42	µg/Kg-dry	1	12/23/2016 02:25
Trichlorofluoromethane	U		8.1	42	µg/Kg-dry	1	12/23/2016 02:25
Vinyl chloride	U		13	42	µg/Kg-dry	1	12/23/2016 02:25
Xylenes, Total	U		33	130	µg/Kg-dry	1	12/23/2016 02:25
Surr: 1,2-Dichloroethane-d4	*93.4*			*70-130*	*%REC*	1	12/23/2016 02:25
Surr: 4-Bromofluorobenzene	*96.6*			*70-130*	*%REC*	1	12/23/2016 02:25
Surr: Dibromofluoromethane	*87.2*			*70-130*	*%REC*	1	12/23/2016 02:25
Surr: Toluene-d8	*95.1*			*70-130*	*%REC*	1	12/23/2016 02:25
MOISTURE		Method: **SW3550C**					Analyst: **EDL**
Moisture	**17**		**0.025**	**0.050**	**% of sample**	1	12/21/2016 19:17

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

ALS Group, USA

Date: *29-Dec-16*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: PZ-9 (22.5-25')
Collection Date: 12/19/2016 10:00 AM

Work Order: 16121255
Lab ID: 16121255-06
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
ORGANIC COMPOUNDS BY GC-FID		Method: **SW8015M**					Analyst: **KYM**
Triethylamine	U		3.3	31	mg/Kg-dry	1	12/28/2016 21:29
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260B**			Prep: SW5035 / 12/22/16		Analyst: **BG**
1,1,1,2-Tetrachloroethane	U		11	44	µg/Kg-dry	1	12/23/2016 02:50
1,1,1-Trichloroethane	U		13	44	µg/Kg-dry	1	12/23/2016 02:50
1,1,2,2-Tetrachloroethane	U		11	44	µg/Kg-dry	1	12/23/2016 02:50
1,1,2-Trichloroethane	U		13	44	µg/Kg-dry	1	12/23/2016 02:50
1,1,2-Trichlorotrifluoroethane	U		9.9	44	µg/Kg-dry	1	12/23/2016 02:50
1,1-Dichloroethane	U		11	44	µg/Kg-dry	1	12/23/2016 02:50
1,1-Dichloroethene	U		12	44	µg/Kg-dry	1	12/23/2016 02:50
1,2,3-Trichlorobenzene	U		19	44	µg/Kg-dry	1	12/23/2016 02:50
1,2,4-Trichlorobenzene	U		32	44	µg/Kg-dry	1	12/23/2016 02:50
1,2,4-Trimethylbenzene	U		8.8	44	µg/Kg-dry	1	12/23/2016 02:50
1,2-Dibromo-3-chloropropane	U		18	44	µg/Kg-dry	1	12/23/2016 02:50
1,2-Dibromoethane	U		15	44	µg/Kg-dry	1	12/23/2016 02:50
1,2-Dichlorobenzene	U		13	44	µg/Kg-dry	1	12/23/2016 02:50
1,2-Dichloroethane	U		12	44	µg/Kg-dry	1	12/23/2016 02:50
1,2-Dichloropropane	U		12	44	µg/Kg-dry	1	12/23/2016 02:50
1,3,5-Trimethylbenzene	U		19	44	µg/Kg-dry	1	12/23/2016 02:50
1,3-Dichlorobenzene	U		14	44	µg/Kg-dry	1	12/23/2016 02:50
1,3-Dichloropropane	U		12	44	µg/Kg-dry	1	12/23/2016 02:50
1,4-Dichlorobenzene	U		12	44	µg/Kg-dry	1	12/23/2016 02:50
2,2-Dichloropropane	U		16	44	µg/Kg-dry	1	12/23/2016 02:50
2-Butanone	U		59	290	µg/Kg-dry	1	12/23/2016 02:50
2-Chlorotoluene	U		13	44	µg/Kg-dry	1	12/23/2016 02:50
2-Hexanone	U		29	44	µg/Kg-dry	1	12/23/2016 02:50
4-Chlorotoluene	U		9.7	44	µg/Kg-dry	1	12/23/2016 02:50
4-Methyl-2-pentanone	U		32	44	µg/Kg-dry	1	12/23/2016 02:50
Acetone	U		80	150	µg/Kg-dry	1	12/23/2016 02:50
Benzene	U		10	44	µg/Kg-dry	1	12/23/2016 02:50
Bromobenzene	U		20	44	µg/Kg-dry	1	12/23/2016 02:50
Bromochloromethane	U		20	44	µg/Kg-dry	1	12/23/2016 02:50
Bromodichloromethane	U		12	44	µg/Kg-dry	1	12/23/2016 02:50
Bromoform	U		16	44	µg/Kg-dry	1	12/23/2016 02:50
Bromomethane	U		19	110	µg/Kg-dry	1	12/23/2016 02:50
Carbon disulfide	U		15	44	µg/Kg-dry	1	12/23/2016 02:50
Carbon tetrachloride	U		7.8	44	µg/Kg-dry	1	12/23/2016 02:50
Chlorobenzene	U		13	44	µg/Kg-dry	1	12/23/2016 02:50
Chloroethane	U		28	150	µg/Kg-dry	1	12/23/2016 02:50

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

ALS Group, USA

Date: *29-Dec-16*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: PZ-9 (22.5-25')
Collection Date: 12/19/2016 10:00 AM

Work Order: 16121255
Lab ID: 16121255-06
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloroform	U		15	44	µg/Kg-dry	1	12/23/2016 02:50
Chloromethane	U		18	150	µg/Kg-dry	1	12/23/2016 02:50
cis-1,2-Dichloroethene	U		12	44	µg/Kg-dry	1	12/23/2016 02:50
cis-1,3-Dichloropropene	U		17	44	µg/Kg-dry	1	12/23/2016 02:50
Cyclohexane	U		22	44	µg/Kg-dry	1	12/23/2016 02:50
Dibromochloromethane	U		10	44	µg/Kg-dry	1	12/23/2016 02:50
Dichlorodifluoromethane	U		19	44	µg/Kg-dry	1	12/23/2016 02:50
Diisopropyl ether	U		15	44	µg/Kg-dry	1	12/23/2016 02:50
Ethyl acetate	U		41	290	µg/Kg-dry	1	12/23/2016 02:50
Ethylbenzene	U		10	44	µg/Kg-dry	1	12/23/2016 02:50
Hexachlorobutadiene	U		28	150	µg/Kg-dry	1	12/23/2016 02:50
Isopropylbenzene	U		17	44	µg/Kg-dry	1	12/23/2016 02:50
m,p-Xylene	U		20	88	µg/Kg-dry	1	12/23/2016 02:50
Methyl acetate	U		90	290	µg/Kg-dry	1	12/23/2016 02:50
Methyl tert-butyl ether	U		14	44	µg/Kg-dry	1	12/23/2016 02:50
Methylcyclohexane	U		19	44	µg/Kg-dry	1	12/23/2016 02:50
Methylene chloride	U		20	44	µg/Kg-dry	1	12/23/2016 02:50
Naphthalene	U		7.5	150	µg/Kg-dry	1	12/23/2016 02:50
n-Butylbenzene	U		11	44	µg/Kg-dry	1	12/23/2016 02:50
n-Propylbenzene	U		14	44	µg/Kg-dry	1	12/23/2016 02:50
o-Xylene	U		14	44	µg/Kg-dry	1	12/23/2016 02:50
p-Isopropyltoluene	U		17	44	µg/Kg-dry	1	12/23/2016 02:50
sec-Butylbenzene	U		17	44	µg/Kg-dry	1	12/23/2016 02:50
Styrene	U		31	44	µg/Kg-dry	1	12/23/2016 02:50
tert-Butylbenzene	U		19	44	µg/Kg-dry	1	12/23/2016 02:50
Tetrachloroethene	U		22	44	µg/Kg-dry	1	12/23/2016 02:50
Toluene	U		15	44	µg/Kg-dry	1	12/23/2016 02:50
trans-1,2-Dichloroethene	U		12	44	µg/Kg-dry	1	12/23/2016 02:50
trans-1,3-Dichloropropene	U		7.9	44	µg/Kg-dry	1	12/23/2016 02:50
Trichloroethene	U		12	44	µg/Kg-dry	1	12/23/2016 02:50
Trichlorofluoromethane	U		8.5	44	µg/Kg-dry	1	12/23/2016 02:50
Vinyl chloride	U		14	44	µg/Kg-dry	1	12/23/2016 02:50
Xylenes, Total	U		34	130	µg/Kg-dry	1	12/23/2016 02:50
Surr: 1,2-Dichloroethane-d4	*91.8*			*70-130*	*%REC*	1	12/23/2016 02:50
Surr: 4-Bromofluorobenzene	*100*			*70-130*	*%REC*	1	12/23/2016 02:50
Surr: Dibromofluoromethane	*86.7*			*70-130*	*%REC*	1	12/23/2016 02:50
Surr: Toluene-d8	*97.8*			*70-130*	*%REC*	1	12/23/2016 02:50
MOISTURE		Method: **SW3550C**					Analyst: **EDL**
Moisture	**19**		**0.025**	**0.050**	**% of sample**	1	12/21/2016 19:17

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

ALS Group, USA

Date: *29-Dec-16*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: PZ-8 (10-12.5')
Collection Date: 12/19/2016 11:00 AM

Work Order: 16121255
Lab ID: 16121255-07
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
ORGANIC COMPOUNDS BY GC-FID		Method: **SW8015M**					Analyst: **KYM**
Triethylamine	U		3.2	30	mg/Kg-dry	1	12/28/2016 21:41
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260B**			Prep: SW5035 / 12/22/16		Analyst: **BG**
1,1,1,2-Tetrachloroethane	U		11	41	µg/Kg-dry	1	12/23/2016 03:15
1,1,1-Trichloroethane	U		12	41	µg/Kg-dry	1	12/23/2016 03:15
1,1,2,2-Tetrachloroethane	U		10	41	µg/Kg-dry	1	12/23/2016 03:15
1,1,2-Trichloroethane	U		12	41	µg/Kg-dry	1	12/23/2016 03:15
1,1,2-Trichlorotrifluoroethane	U		9.3	41	µg/Kg-dry	1	12/23/2016 03:15
1,1-Dichloroethane	U		11	41	µg/Kg-dry	1	12/23/2016 03:15
1,1-Dichloroethene	U		11	41	µg/Kg-dry	1	12/23/2016 03:15
1,2,3-Trichlorobenzene	U		18	41	µg/Kg-dry	1	12/23/2016 03:15
1,2,4-Trichlorobenzene	U		31	41	µg/Kg-dry	1	12/23/2016 03:15
1,2,4-Trimethylbenzene	U		8.3	41	µg/Kg-dry	1	12/23/2016 03:15
1,2-Dibromo-3-chloropropane	U		17	41	µg/Kg-dry	1	12/23/2016 03:15
1,2-Dibromoethane	U		14	41	µg/Kg-dry	1	12/23/2016 03:15
1,2-Dichlorobenzene	U		12	41	µg/Kg-dry	1	12/23/2016 03:15
1,2-Dichloroethane	U		11	41	µg/Kg-dry	1	12/23/2016 03:15
1,2-Dichloropropane	U		11	41	µg/Kg-dry	1	12/23/2016 03:15
1,3,5-Trimethylbenzene	U		18	41	µg/Kg-dry	1	12/23/2016 03:15
1,3-Dichlorobenzene	U		13	41	µg/Kg-dry	1	12/23/2016 03:15
1,3-Dichloropropane	U		12	41	µg/Kg-dry	1	12/23/2016 03:15
1,4-Dichlorobenzene	U		11	41	µg/Kg-dry	1	12/23/2016 03:15
2,2-Dichloropropane	U		15	41	µg/Kg-dry	1	12/23/2016 03:15
2-Butanone	U		56	280	µg/Kg-dry	1	12/23/2016 03:15
2-Chlorotoluene	U		12	41	µg/Kg-dry	1	12/23/2016 03:15
2-Hexanone	U		27	41	µg/Kg-dry	1	12/23/2016 03:15
4-Chlorotoluene	U		9.1	41	µg/Kg-dry	1	12/23/2016 03:15
4-Methyl-2-pentanone	U		30	41	µg/Kg-dry	1	12/23/2016 03:15
Acetone	U		75	140	µg/Kg-dry	1	12/23/2016 03:15
Benzene	U		9.4	41	µg/Kg-dry	1	12/23/2016 03:15
Bromobenzene	U		19	41	µg/Kg-dry	1	12/23/2016 03:15
Bromochloromethane	U		19	41	µg/Kg-dry	1	12/23/2016 03:15
Bromodichloromethane	U		11	41	µg/Kg-dry	1	12/23/2016 03:15
Bromoform	U		15	41	µg/Kg-dry	1	12/23/2016 03:15
Bromomethane	U		18	100	µg/Kg-dry	1	12/23/2016 03:15
Carbon disulfide	U		14	41	µg/Kg-dry	1	12/23/2016 03:15
Carbon tetrachloride	U		7.3	41	µg/Kg-dry	1	12/23/2016 03:15
Chlorobenzene	U		12	41	µg/Kg-dry	1	12/23/2016 03:15
Chloroethane	U		26	140	µg/Kg-dry	1	12/23/2016 03:15

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

ALS Group, USA

Date: *29-Dec-16*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: PZ-8 (10-12.5')
Collection Date: 12/19/2016 11:00 AM

Work Order: 16121255
Lab ID: 16121255-07
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloroform	U		14	41	µg/Kg-dry	1	12/23/2016 03:15
Chloromethane	U		17	140	µg/Kg-dry	1	12/23/2016 03:15
cis-1,2-Dichloroethene	U		12	41	µg/Kg-dry	1	12/23/2016 03:15
cis-1,3-Dichloropropene	U		16	41	µg/Kg-dry	1	12/23/2016 03:15
Cyclohexane	U		21	41	µg/Kg-dry	1	12/23/2016 03:15
Dibromochloromethane	U		9.4	41	µg/Kg-dry	1	12/23/2016 03:15
Dichlorodifluoromethane	U		18	41	µg/Kg-dry	1	12/23/2016 03:15
Diisopropyl ether	U		14	41	µg/Kg-dry	1	12/23/2016 03:15
Ethyl acetate	U		39	280	µg/Kg-dry	1	12/23/2016 03:15
Ethylbenzene	U		9.7	41	µg/Kg-dry	1	12/23/2016 03:15
Hexachlorobutadiene	U		26	140	µg/Kg-dry	1	12/23/2016 03:15
Isopropylbenzene	U		16	41	µg/Kg-dry	1	12/23/2016 03:15
m,p-Xylene	U		19	83	µg/Kg-dry	1	12/23/2016 03:15
Methyl acetate	U		85	280	µg/Kg-dry	1	12/23/2016 03:15
Methyl tert-butyl ether	U		13	41	µg/Kg-dry	1	12/23/2016 03:15
Methylcyclohexane	U		18	41	µg/Kg-dry	1	12/23/2016 03:15
Methylene chloride	U		19	41	µg/Kg-dry	1	12/23/2016 03:15
Naphthalene	U		7.1	140	µg/Kg-dry	1	12/23/2016 03:15
n-Butylbenzene	U		11	41	µg/Kg-dry	1	12/23/2016 03:15
n-Propylbenzene	U		13	41	µg/Kg-dry	1	12/23/2016 03:15
o-Xylene	U		13	41	µg/Kg-dry	1	12/23/2016 03:15
p-Isopropyltoluene	U		16	41	µg/Kg-dry	1	12/23/2016 03:15
sec-Butylbenzene	U		16	41	µg/Kg-dry	1	12/23/2016 03:15
Styrene	U		29	41	µg/Kg-dry	1	12/23/2016 03:15
tert-Butylbenzene	U		18	41	µg/Kg-dry	1	12/23/2016 03:15
Tetrachloroethene	U		20	41	µg/Kg-dry	1	12/23/2016 03:15
Toluene	U		14	41	µg/Kg-dry	1	12/23/2016 03:15
trans-1,2-Dichloroethene	U		12	41	µg/Kg-dry	1	12/23/2016 03:15
trans-1,3-Dichloropropene	U		7.4	41	µg/Kg-dry	1	12/23/2016 03:15
Trichloroethene	U		11	41	µg/Kg-dry	1	12/23/2016 03:15
Trichlorofluoromethane	U		8.0	41	µg/Kg-dry	1	12/23/2016 03:15
Vinyl chloride	U		13	41	µg/Kg-dry	1	12/23/2016 03:15
Xylenes, Total	U		32	120	µg/Kg-dry	1	12/23/2016 03:15
Surr: 1,2-Dichloroethane-d4	*91.7*			*70-130*	*%REC*	1	12/23/2016 03:15
Surr: 4-Bromofluorobenzene	*97.4*			*70-130*	*%REC*	1	12/23/2016 03:15
Surr: Dibromofluoromethane	*85.8*			*70-130*	*%REC*	1	12/23/2016 03:15
Surr: Toluene-d8	*97.6*			*70-130*	*%REC*	1	12/23/2016 03:15
MOISTURE		Method: **SW3550C**					Analyst: **EDL**
Moisture	**16**		**0.025**	**0.050**	**% of sample**	1	12/21/2016 19:17

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

ALS Group, USA

Date: *29-Dec-16*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: PZ-8 (20-22.5')
Collection Date: 12/19/2016 11:00 AM

Work Order: 16121255
Lab ID: 16121255-08
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
ORGANIC COMPOUNDS BY GC-FID		Method: **SW8015M**					Analyst: **KYM**
Triethylamine	U		3.5	33	mg/Kg-dry	1	12/28/2016 21:52
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260B**			Prep: SW5035 / 12/22/16		Analyst: **BG**
1,1,1,2-Tetrachloroethane	U		13	49	µg/Kg-dry	1	12/23/2016 03:39
1,1,1-Trichloroethane	U		14	49	µg/Kg-dry	1	12/23/2016 03:39
1,1,2,2-Tetrachloroethane	U		12	49	µg/Kg-dry	1	12/23/2016 03:39
1,1,2-Trichloroethane	U		15	49	µg/Kg-dry	1	12/23/2016 03:39
1,1,2-Trichlorotrifluoroethane	U		11	49	µg/Kg-dry	1	12/23/2016 03:39
1,1-Dichloroethane	U		12	49	µg/Kg-dry	1	12/23/2016 03:39
1,1-Dichloroethene	U		13	49	µg/Kg-dry	1	12/23/2016 03:39
1,2,3-Trichlorobenzene	U		22	49	µg/Kg-dry	1	12/23/2016 03:39
1,2,4-Trichlorobenzene	U		36	49	µg/Kg-dry	1	12/23/2016 03:39
1,2,4-Trimethylbenzene	U		9.8	49	µg/Kg-dry	1	12/23/2016 03:39
1,2-Dibromo-3-chloropropane	U		20	49	µg/Kg-dry	1	12/23/2016 03:39
1,2-Dibromoethane	U		16	49	µg/Kg-dry	1	12/23/2016 03:39
1,2-Dichlorobenzene	U		15	49	µg/Kg-dry	1	12/23/2016 03:39
1,2-Dichloroethane	U		13	49	µg/Kg-dry	1	12/23/2016 03:39
1,2-Dichloropropane	U		14	49	µg/Kg-dry	1	12/23/2016 03:39
1,3,5-Trimethylbenzene	U		21	49	µg/Kg-dry	1	12/23/2016 03:39
1,3-Dichlorobenzene	U		16	49	µg/Kg-dry	1	12/23/2016 03:39
1,3-Dichloropropane	U		14	49	µg/Kg-dry	1	12/23/2016 03:39
1,4-Dichlorobenzene	U		13	49	µg/Kg-dry	1	12/23/2016 03:39
2,2-Dichloropropane	U		18	49	µg/Kg-dry	1	12/23/2016 03:39
2-Butanone	U		66	330	µg/Kg-dry	1	12/23/2016 03:39
2-Chlorotoluene	U		15	49	µg/Kg-dry	1	12/23/2016 03:39
2-Hexanone	U		32	49	µg/Kg-dry	1	12/23/2016 03:39
4-Chlorotoluene	U		11	49	µg/Kg-dry	1	12/23/2016 03:39
4-Methyl-2-pentanone	U		36	49	µg/Kg-dry	1	12/23/2016 03:39
Acetone	U		89	160	µg/Kg-dry	1	12/23/2016 03:39
Benzene	U		11	49	µg/Kg-dry	1	12/23/2016 03:39
Bromobenzene	U		22	49	µg/Kg-dry	1	12/23/2016 03:39
Bromochloromethane	U		22	49	µg/Kg-dry	1	12/23/2016 03:39
Bromodichloromethane	U		13	49	µg/Kg-dry	1	12/23/2016 03:39
Bromoform	U		17	49	µg/Kg-dry	1	12/23/2016 03:39
Bromomethane	U		21	120	µg/Kg-dry	1	12/23/2016 03:39
Carbon disulfide	U		17	49	µg/Kg-dry	1	12/23/2016 03:39
Carbon tetrachloride	U		8.7	49	µg/Kg-dry	1	12/23/2016 03:39
Chlorobenzene	U		15	49	µg/Kg-dry	1	12/23/2016 03:39
Chloroethane	U		31	160	µg/Kg-dry	1	12/23/2016 03:39

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

ALS Group, USA

Date: *29-Dec-16*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: PZ-8 (20-22.5')
Collection Date: 12/19/2016 11:00 AM

Work Order: 16121255
Lab ID: 16121255-08
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloroform	U		17	49	µg/Kg-dry	1	12/23/2016 03:39
Chloromethane	U		20	160	µg/Kg-dry	1	12/23/2016 03:39
cis-1,2-Dichloroethene	U		14	49	µg/Kg-dry	1	12/23/2016 03:39
cis-1,3-Dichloropropene	U		19	49	µg/Kg-dry	1	12/23/2016 03:39
Cyclohexane	U		24	49	µg/Kg-dry	1	12/23/2016 03:39
Dibromochloromethane	U		11	49	µg/Kg-dry	1	12/23/2016 03:39
Dichlorodifluoromethane	U		22	49	µg/Kg-dry	1	12/23/2016 03:39
Diisopropyl ether	U		17	49	µg/Kg-dry	1	12/23/2016 03:39
Ethyl acetate	U		46	330	µg/Kg-dry	1	12/23/2016 03:39
Ethylbenzene	U		11	49	µg/Kg-dry	1	12/23/2016 03:39
Hexachlorobutadiene	U		31	160	µg/Kg-dry	1	12/23/2016 03:39
Isopropylbenzene	U		19	49	µg/Kg-dry	1	12/23/2016 03:39
m,p-Xylene	U		22	98	µg/Kg-dry	1	12/23/2016 03:39
Methyl acetate	U		100	330	µg/Kg-dry	1	12/23/2016 03:39
Methyl tert-butyl ether	U		16	49	µg/Kg-dry	1	12/23/2016 03:39
Methylcyclohexane	U		21	49	µg/Kg-dry	1	12/23/2016 03:39
Methylene chloride	U		22	49	µg/Kg-dry	1	12/23/2016 03:39
Naphthalene	U		8.4	160	µg/Kg-dry	1	12/23/2016 03:39
n-Butylbenzene	U		13	49	µg/Kg-dry	1	12/23/2016 03:39
n-Propylbenzene	U		16	49	µg/Kg-dry	1	12/23/2016 03:39
o-Xylene	U		16	49	µg/Kg-dry	1	12/23/2016 03:39
p-Isopropyltoluene	U		19	49	µg/Kg-dry	1	12/23/2016 03:39
sec-Butylbenzene	U		19	49	µg/Kg-dry	1	12/23/2016 03:39
Styrene	U		35	49	µg/Kg-dry	1	12/23/2016 03:39
tert-Butylbenzene	U		22	49	µg/Kg-dry	1	12/23/2016 03:39
Tetrachloroethene	U		24	49	µg/Kg-dry	1	12/23/2016 03:39
Toluene	U		16	49	µg/Kg-dry	1	12/23/2016 03:39
trans-1,2-Dichloroethene	U		14	49	µg/Kg-dry	1	12/23/2016 03:39
trans-1,3-Dichloropropene	U		8.7	49	µg/Kg-dry	1	12/23/2016 03:39
Trichloroethene	U		13	49	µg/Kg-dry	1	12/23/2016 03:39
Trichlorofluoromethane	U		9.4	49	µg/Kg-dry	1	12/23/2016 03:39
Vinyl chloride	U		16	49	µg/Kg-dry	1	12/23/2016 03:39
Xylenes, Total	U		38	150	µg/Kg-dry	1	12/23/2016 03:39
Surr: 1,2-Dichloroethane-d4	*93.0*			*70-130*	*%REC*	1	12/23/2016 03:39
Surr: 4-Bromofluorobenzene	*96.2*			*70-130*	*%REC*	1	12/23/2016 03:39
Surr: Dibromofluoromethane	*86.6*			*70-130*	*%REC*	1	12/23/2016 03:39
Surr: Toluene-d8	*96.5*			*70-130*	*%REC*	1	12/23/2016 03:39
MOISTURE		Method: **SW3550C**					Analyst: **EDL**
Moisture	**24**		**0.025**	**0.050**	**% of sample**	1	12/21/2016 19:17

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

ALS Group, USA

Date: *29-Dec-16*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: PZ-8 (22.5-25')
Collection Date: 12/19/2016 11:00 AM

Work Order: 16121255
Lab ID: 16121255-09
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
ORGANIC COMPOUNDS BY GC-FID		Method: **SW8015M**					Analyst: **KYM**
Triethylamine	U		3.3	31	mg/Kg-dry	1	12/28/2016 22:39
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260B**			Prep: SW5035 / 12/22/16		Analyst: **BG**
1,1,1,2-Tetrachloroethane	U		12	45	µg/Kg-dry	1	12/23/2016 04:04
1,1,1-Trichloroethane	U		13	45	µg/Kg-dry	1	12/23/2016 04:04
1,1,2,2-Tetrachloroethane	U		11	45	µg/Kg-dry	1	12/23/2016 04:04
1,1,2-Trichloroethane	U		13	45	µg/Kg-dry	1	12/23/2016 04:04
1,1,2-Trichlorotrifluoroethane	U		10	45	µg/Kg-dry	1	12/23/2016 04:04
1,1-Dichloroethane	U		11	45	µg/Kg-dry	1	12/23/2016 04:04
1,1-Dichloroethene	U		12	45	µg/Kg-dry	1	12/23/2016 04:04
1,2,3-Trichlorobenzene	U		20	45	µg/Kg-dry	1	12/23/2016 04:04
1,2,4-Trichlorobenzene	U		33	45	µg/Kg-dry	1	12/23/2016 04:04
1,2,4-Trimethylbenzene	U		9.0	45	µg/Kg-dry	1	12/23/2016 04:04
1,2-Dibromo-3-chloropropane	U		18	45	µg/Kg-dry	1	12/23/2016 04:04
1,2-Dibromoethane	U		15	45	µg/Kg-dry	1	12/23/2016 04:04
1,2-Dichlorobenzene	U		13	45	µg/Kg-dry	1	12/23/2016 04:04
1,2-Dichloroethane	U		12	45	µg/Kg-dry	1	12/23/2016 04:04
1,2-Dichloropropane	U		12	45	µg/Kg-dry	1	12/23/2016 04:04
1,3,5-Trimethylbenzene	U		20	45	µg/Kg-dry	1	12/23/2016 04:04
1,3-Dichlorobenzene	U		14	45	µg/Kg-dry	1	12/23/2016 04:04
1,3-Dichloropropane	U		13	45	µg/Kg-dry	1	12/23/2016 04:04
1,4-Dichlorobenzene	U		12	45	µg/Kg-dry	1	12/23/2016 04:04
2,2-Dichloropropane	U		16	45	µg/Kg-dry	1	12/23/2016 04:04
2-Butanone	U		61	300	µg/Kg-dry	1	12/23/2016 04:04
2-Chlorotoluene	U		14	45	µg/Kg-dry	1	12/23/2016 04:04
2-Hexanone	U		30	45	µg/Kg-dry	1	12/23/2016 04:04
4-Chlorotoluene	U		9.9	45	µg/Kg-dry	1	12/23/2016 04:04
4-Methyl-2-pentanone	U		33	45	µg/Kg-dry	1	12/23/2016 04:04
Acetone	U		82	150	µg/Kg-dry	1	12/23/2016 04:04
Benzene	U		10	45	µg/Kg-dry	1	12/23/2016 04:04
Bromobenzene	U		20	45	µg/Kg-dry	1	12/23/2016 04:04
Bromochloromethane	U		20	45	µg/Kg-dry	1	12/23/2016 04:04
Bromodichloromethane	U		12	45	µg/Kg-dry	1	12/23/2016 04:04
Bromoform	U		16	45	µg/Kg-dry	1	12/23/2016 04:04
Bromomethane	U		20	110	µg/Kg-dry	1	12/23/2016 04:04
Carbon disulfide	U		15	45	µg/Kg-dry	1	12/23/2016 04:04
Carbon tetrachloride	U		8.0	45	µg/Kg-dry	1	12/23/2016 04:04
Chlorobenzene	U		14	45	µg/Kg-dry	1	12/23/2016 04:04
Chloroethane	U		29	150	µg/Kg-dry	1	12/23/2016 04:04

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

ALS Group, USA

Date: *29-Dec-16*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: PZ-8 (22.5-25')
Collection Date: 12/19/2016 11:00 AM

Work Order: 16121255
Lab ID: 16121255-09
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloroform	U		15	45	µg/Kg-dry	1	12/23/2016 04:04
Chloromethane	U		18	150	µg/Kg-dry	1	12/23/2016 04:04
cis-1,2-Dichloroethene	U		13	45	µg/Kg-dry	1	12/23/2016 04:04
cis-1,3-Dichloropropene	U		17	45	µg/Kg-dry	1	12/23/2016 04:04
Cyclohexane	U		22	45	µg/Kg-dry	1	12/23/2016 04:04
Dibromochloromethane	U		10	45	µg/Kg-dry	1	12/23/2016 04:04
Dichlorodifluoromethane	U		20	45	µg/Kg-dry	1	12/23/2016 04:04
Diisopropyl ether	U		16	45	µg/Kg-dry	1	12/23/2016 04:04
Ethyl acetate	U		42	300	µg/Kg-dry	1	12/23/2016 04:04
Ethylbenzene	U		10	45	µg/Kg-dry	1	12/23/2016 04:04
Hexachlorobutadiene	U		28	150	µg/Kg-dry	1	12/23/2016 04:04
Isopropylbenzene	U		18	45	µg/Kg-dry	1	12/23/2016 04:04
m,p-Xylene	U		20	90	µg/Kg-dry	1	12/23/2016 04:04
Methyl acetate	U		92	300	µg/Kg-dry	1	12/23/2016 04:04
Methyl tert-butyl ether	U		15	45	µg/Kg-dry	1	12/23/2016 04:04
Methylcyclohexane	U		19	45	µg/Kg-dry	1	12/23/2016 04:04
Methylene chloride	U		21	45	µg/Kg-dry	1	12/23/2016 04:04
Naphthalene	U		7.7	150	µg/Kg-dry	1	12/23/2016 04:04
n-Butylbenzene	U		12	45	µg/Kg-dry	1	12/23/2016 04:04
n-Propylbenzene	U		14	45	µg/Kg-dry	1	12/23/2016 04:04
o-Xylene	U		15	45	µg/Kg-dry	1	12/23/2016 04:04
p-Isopropyltoluene	U		17	45	µg/Kg-dry	1	12/23/2016 04:04
sec-Butylbenzene	U		18	45	µg/Kg-dry	1	12/23/2016 04:04
Styrene	U		32	45	µg/Kg-dry	1	12/23/2016 04:04
tert-Butylbenzene	U		20	45	µg/Kg-dry	1	12/23/2016 04:04
Tetrachloroethene	U		22	45	µg/Kg-dry	1	12/23/2016 04:04
Toluene	U		15	45	µg/Kg-dry	1	12/23/2016 04:04
trans-1,2-Dichloroethene	U		13	45	µg/Kg-dry	1	12/23/2016 04:04
trans-1,3-Dichloropropene	U		8.0	45	µg/Kg-dry	1	12/23/2016 04:04
Trichloroethene	U		12	45	µg/Kg-dry	1	12/23/2016 04:04
Trichlorofluoromethane	U		8.7	45	µg/Kg-dry	1	12/23/2016 04:04
Vinyl chloride	U		14	45	µg/Kg-dry	1	12/23/2016 04:04
Xylenes, Total	U		35	140	µg/Kg-dry	1	12/23/2016 04:04
Surr: 1,2-Dichloroethane-d4	*93.6*			*70-130*	*%REC*	1	12/23/2016 04:04
Surr: 4-Bromofluorobenzene	*99.4*			*70-130*	*%REC*	1	12/23/2016 04:04
Surr: Dibromofluoromethane	*85.8*			*70-130*	*%REC*	1	12/23/2016 04:04
Surr: Toluene-d8	*97.2*			*70-130*	*%REC*	1	12/23/2016 04:04
MOISTURE		Method: **SW3550C**					Analyst: **EDL**
Moisture	**20**		**0.025**	**0.050**	**% of sample**	1	12/21/2016 19:17

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

ALS Group, USA

Date: *29-Dec-16*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: PZ-6 (7.5-10')
Collection Date: 12/19/2016 12:00 PM

Work Order: 16121255
Lab ID: 16121255-10
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
ORGANIC COMPOUNDS BY GC-FID		Method: **SW8015M**					Analyst: **KYM**
Triethylamine	U		3.2	30	mg/Kg-dry	1	12/28/2016 22:51
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260B**			Prep: SW5035 / 12/22/16		Analyst: **BG**
1,1,1,2-Tetrachloroethane	U		11	41	µg/Kg-dry	1	12/23/2016 04:28
1,1,1-Trichloroethane	U		12	41	µg/Kg-dry	1	12/23/2016 04:28
1,1,2,2-Tetrachloroethane	U		10	41	µg/Kg-dry	1	12/23/2016 04:28
1,1,2-Trichloroethane	U		12	41	µg/Kg-dry	1	12/23/2016 04:28
1,1,2-Trichlorotrifluoroethane	U		9.3	41	µg/Kg-dry	1	12/23/2016 04:28
1,1-Dichloroethane	U		11	41	µg/Kg-dry	1	12/23/2016 04:28
1,1-Dichloroethene	U		11	41	µg/Kg-dry	1	12/23/2016 04:28
1,2,3-Trichlorobenzene	U		18	41	µg/Kg-dry	1	12/23/2016 04:28
1,2,4-Trichlorobenzene	U		31	41	µg/Kg-dry	1	12/23/2016 04:28
1,2,4-Trimethylbenzene	U		8.3	41	µg/Kg-dry	1	12/23/2016 04:28
1,2-Dibromo-3-chloropropane	U		17	41	µg/Kg-dry	1	12/23/2016 04:28
1,2-Dibromoethane	U		14	41	µg/Kg-dry	1	12/23/2016 04:28
1,2-Dichlorobenzene	U		12	41	µg/Kg-dry	1	12/23/2016 04:28
1,2-Dichloroethane	U		11	41	µg/Kg-dry	1	12/23/2016 04:28
1,2-Dichloropropane	U		11	41	µg/Kg-dry	1	12/23/2016 04:28
1,3,5-Trimethylbenzene	U		18	41	µg/Kg-dry	1	12/23/2016 04:28
1,3-Dichlorobenzene	U		13	41	µg/Kg-dry	1	12/23/2016 04:28
1,3-Dichloropropane	U		12	41	µg/Kg-dry	1	12/23/2016 04:28
1,4-Dichlorobenzene	U		11	41	µg/Kg-dry	1	12/23/2016 04:28
2,2-Dichloropropane	U		15	41	µg/Kg-dry	1	12/23/2016 04:28
2-Butanone	U		56	280	µg/Kg-dry	1	12/23/2016 04:28
2-Chlorotoluene	U		12	41	µg/Kg-dry	1	12/23/2016 04:28
2-Hexanone	U		27	41	µg/Kg-dry	1	12/23/2016 04:28
4-Chlorotoluene	U		9.1	41	µg/Kg-dry	1	12/23/2016 04:28
4-Methyl-2-pentanone	U		30	41	µg/Kg-dry	1	12/23/2016 04:28
Acetone	U		75	140	µg/Kg-dry	1	12/23/2016 04:28
Benzene	U		9.4	41	µg/Kg-dry	1	12/23/2016 04:28
Bromobenzene	U		19	41	µg/Kg-dry	1	12/23/2016 04:28
Bromochloromethane	U		19	41	µg/Kg-dry	1	12/23/2016 04:28
Bromodichloromethane	U		11	41	µg/Kg-dry	1	12/23/2016 04:28
Bromoform	U		15	41	µg/Kg-dry	1	12/23/2016 04:28
Bromomethane	U		18	100	µg/Kg-dry	1	12/23/2016 04:28
Carbon disulfide	U		14	41	µg/Kg-dry	1	12/23/2016 04:28
Carbon tetrachloride	U		7.3	41	µg/Kg-dry	1	12/23/2016 04:28
Chlorobenzene	U		12	41	µg/Kg-dry	1	12/23/2016 04:28
Chloroethane	U		26	140	µg/Kg-dry	1	12/23/2016 04:28

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

ALS Group, USA

Date: *29-Dec-16*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: PZ-6 (7.5-10')
Collection Date: 12/19/2016 12:00 PM

Work Order: 16121255
Lab ID: 16121255-10
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloroform	U		14	41	µg/Kg-dry	1	12/23/2016 04:28
Chloromethane	U		17	140	µg/Kg-dry	1	12/23/2016 04:28
cis-1,2-Dichloroethene	U		12	41	µg/Kg-dry	1	12/23/2016 04:28
cis-1,3-Dichloropropene	U		16	41	µg/Kg-dry	1	12/23/2016 04:28
Cyclohexane	U		21	41	µg/Kg-dry	1	12/23/2016 04:28
Dibromochloromethane	U		9.4	41	µg/Kg-dry	1	12/23/2016 04:28
Dichlorodifluoromethane	U		18	41	µg/Kg-dry	1	12/23/2016 04:28
Diisopropyl ether	U		14	41	µg/Kg-dry	1	12/23/2016 04:28
Ethyl acetate	U		39	280	µg/Kg-dry	1	12/23/2016 04:28
Ethylbenzene	U		9.7	41	µg/Kg-dry	1	12/23/2016 04:28
Hexachlorobutadiene	U		26	140	µg/Kg-dry	1	12/23/2016 04:28
Isopropylbenzene	U		16	41	µg/Kg-dry	1	12/23/2016 04:28
m,p-Xylene	U		19	83	µg/Kg-dry	1	12/23/2016 04:28
Methyl acetate	U		85	280	µg/Kg-dry	1	12/23/2016 04:28
Methyl tert-butyl ether	U		13	41	µg/Kg-dry	1	12/23/2016 04:28
Methylcyclohexane	U		18	41	µg/Kg-dry	1	12/23/2016 04:28
Methylene chloride	U		19	41	µg/Kg-dry	1	12/23/2016 04:28
Naphthalene	U		7.1	140	µg/Kg-dry	1	12/23/2016 04:28
n-Butylbenzene	U		11	41	µg/Kg-dry	1	12/23/2016 04:28
n-Propylbenzene	U		13	41	µg/Kg-dry	1	12/23/2016 04:28
o-Xylene	U		13	41	µg/Kg-dry	1	12/23/2016 04:28
p-Isopropyltoluene	U		16	41	µg/Kg-dry	1	12/23/2016 04:28
sec-Butylbenzene	U		16	41	µg/Kg-dry	1	12/23/2016 04:28
Styrene	U		29	41	µg/Kg-dry	1	12/23/2016 04:28
tert-Butylbenzene	U		18	41	µg/Kg-dry	1	12/23/2016 04:28
Tetrachloroethene	U		20	41	µg/Kg-dry	1	12/23/2016 04:28
Toluene	U		14	41	µg/Kg-dry	1	12/23/2016 04:28
trans-1,2-Dichloroethene	U		12	41	µg/Kg-dry	1	12/23/2016 04:28
trans-1,3-Dichloropropene	U		7.4	41	µg/Kg-dry	1	12/23/2016 04:28
Trichloroethene	U		11	41	µg/Kg-dry	1	12/23/2016 04:28
Trichlorofluoromethane	U		8.0	41	µg/Kg-dry	1	12/23/2016 04:28
Vinyl chloride	U		13	41	µg/Kg-dry	1	12/23/2016 04:28
Xylenes, Total	U		32	120	µg/Kg-dry	1	12/23/2016 04:28
Surr: 1,2-Dichloroethane-d4	*93.0*			*70-130*	*%REC*	1	12/23/2016 04:28
Surr: 4-Bromofluorobenzene	*96.1*			*70-130*	*%REC*	1	12/23/2016 04:28
Surr: Dibromofluoromethane	*89.8*			*70-130*	*%REC*	1	12/23/2016 04:28
Surr: Toluene-d8	*98.8*			*70-130*	*%REC*	1	12/23/2016 04:28
MOISTURE		Method: **SW3550C**					Analyst: **EDL**
Moisture	**16**		**0.025**	**0.050**	**% of sample**	1	12/21/2016 19:17

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

ALS Group, USA

Date: *29-Dec-16*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: PZ-6 (15-17.5')
Collection Date: 12/19/2016 12:00 PM

Work Order: 16121255
Lab ID: 16121255-11
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
ORGANIC COMPOUNDS BY GC-FID		Method: **SW8015M**					Analyst: **KYM**
Triethylamine	U		3.2	30	mg/Kg-dry	1	12/28/2016 23:03
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260B**			Prep: SW5035 / 12/22/16		Analyst: **BG**
1,1,1,2-Tetrachloroethane	U		11	42	µg/Kg-dry	1	12/23/2016 04:53
1,1,1-Trichloroethane	U		12	42	µg/Kg-dry	1	12/23/2016 04:53
1,1,2,2-Tetrachloroethane	U		10	42	µg/Kg-dry	1	12/23/2016 04:53
1,1,2-Trichloroethane	U		13	42	µg/Kg-dry	1	12/23/2016 04:53
1,1,2-Trichlorotrifluoroethane	U		9.5	42	µg/Kg-dry	1	12/23/2016 04:53
1,1-Dichloroethane	U		11	42	µg/Kg-dry	1	12/23/2016 04:53
1,1-Dichloroethene	U		11	42	µg/Kg-dry	1	12/23/2016 04:53
1,2,3-Trichlorobenzene	U		19	42	µg/Kg-dry	1	12/23/2016 04:53
1,2,4-Trichlorobenzene	U		31	42	µg/Kg-dry	1	12/23/2016 04:53
1,2,4-Trimethylbenzene	U		8.5	42	µg/Kg-dry	1	12/23/2016 04:53
1,2-Dibromo-3-chloropropane	U		17	42	µg/Kg-dry	1	12/23/2016 04:53
1,2-Dibromoethane	U		14	42	µg/Kg-dry	1	12/23/2016 04:53
1,2-Dichlorobenzene	U		13	42	µg/Kg-dry	1	12/23/2016 04:53
1,2-Dichloroethane	U		12	42	µg/Kg-dry	1	12/23/2016 04:53
1,2-Dichloropropane	U		12	42	µg/Kg-dry	1	12/23/2016 04:53
1,3,5-Trimethylbenzene	U		19	42	µg/Kg-dry	1	12/23/2016 04:53
1,3-Dichlorobenzene	U		14	42	µg/Kg-dry	1	12/23/2016 04:53
1,3-Dichloropropane	U		12	42	µg/Kg-dry	1	12/23/2016 04:53
1,4-Dichlorobenzene	U		11	42	µg/Kg-dry	1	12/23/2016 04:53
2,2-Dichloropropane	U		15	42	µg/Kg-dry	1	12/23/2016 04:53
2-Butanone	U		57	280	µg/Kg-dry	1	12/23/2016 04:53
2-Chlorotoluene	U		13	42	µg/Kg-dry	1	12/23/2016 04:53
2-Hexanone	U		28	42	µg/Kg-dry	1	12/23/2016 04:53
4-Chlorotoluene	U		9.3	42	µg/Kg-dry	1	12/23/2016 04:53
4-Methyl-2-pentanone	U		31	42	µg/Kg-dry	1	12/23/2016 04:53
Acetone	U		77	140	µg/Kg-dry	1	12/23/2016 04:53
Benzene	U		9.6	42	µg/Kg-dry	1	12/23/2016 04:53
Bromobenzene	U		19	42	µg/Kg-dry	1	12/23/2016 04:53
Bromochloromethane	U		19	42	µg/Kg-dry	1	12/23/2016 04:53
Bromodichloromethane	U		11	42	µg/Kg-dry	1	12/23/2016 04:53
Bromoform	U		15	42	µg/Kg-dry	1	12/23/2016 04:53
Bromomethane	U		18	110	µg/Kg-dry	1	12/23/2016 04:53
Carbon disulfide	U		14	42	µg/Kg-dry	1	12/23/2016 04:53
Carbon tetrachloride	U		7.5	42	µg/Kg-dry	1	12/23/2016 04:53
Chlorobenzene	U		13	42	µg/Kg-dry	1	12/23/2016 04:53
Chloroethane	U		27	140	µg/Kg-dry	1	12/23/2016 04:53

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

ALS Group, USA

Date: *29-Dec-16*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: PZ-6 (15-17.5')
Collection Date: 12/19/2016 12:00 PM

Work Order: 16121255
Lab ID: 16121255-11
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloroform	U		14	42	µg/Kg-dry	1	12/23/2016 04:53
Chloromethane	U		17	140	µg/Kg-dry	1	12/23/2016 04:53
cis-1,2-Dichloroethene	U		12	42	µg/Kg-dry	1	12/23/2016 04:53
cis-1,3-Dichloropropene	U		16	42	µg/Kg-dry	1	12/23/2016 04:53
Cyclohexane	U		21	42	µg/Kg-dry	1	12/23/2016 04:53
Dibromochloromethane	U		9.6	42	µg/Kg-dry	1	12/23/2016 04:53
Dichlorodifluoromethane	U		19	42	µg/Kg-dry	1	12/23/2016 04:53
Diisopropyl ether	U		15	42	µg/Kg-dry	1	12/23/2016 04:53
Ethyl acetate	U		40	280	µg/Kg-dry	1	12/23/2016 04:53
Ethylbenzene	U		9.9	42	µg/Kg-dry	1	12/23/2016 04:53
Hexachlorobutadiene	U		27	140	µg/Kg-dry	1	12/23/2016 04:53
Isopropylbenzene	U		17	42	µg/Kg-dry	1	12/23/2016 04:53
m,p-Xylene	U		19	85	µg/Kg-dry	1	12/23/2016 04:53
Methyl acetate	U		87	280	µg/Kg-dry	1	12/23/2016 04:53
Methyl tert-butyl ether	U		14	42	µg/Kg-dry	1	12/23/2016 04:53
Methylcyclohexane	U		18	42	µg/Kg-dry	1	12/23/2016 04:53
Methylene chloride	U		19	42	µg/Kg-dry	1	12/23/2016 04:53
Naphthalene	U		7.2	140	µg/Kg-dry	1	12/23/2016 04:53
n-Butylbenzene	U		11	42	µg/Kg-dry	1	12/23/2016 04:53
n-Propylbenzene	U		14	42	µg/Kg-dry	1	12/23/2016 04:53
o-Xylene	U		14	42	µg/Kg-dry	1	12/23/2016 04:53
p-Isopropyltoluene	U		16	42	µg/Kg-dry	1	12/23/2016 04:53
sec-Butylbenzene	U		17	42	µg/Kg-dry	1	12/23/2016 04:53
Styrene	U		30	42	µg/Kg-dry	1	12/23/2016 04:53
tert-Butylbenzene	U		19	42	µg/Kg-dry	1	12/23/2016 04:53
Tetrachloroethene	U		21	42	µg/Kg-dry	1	12/23/2016 04:53
Toluene	U		14	42	µg/Kg-dry	1	12/23/2016 04:53
trans-1,2-Dichloroethene	U		12	42	µg/Kg-dry	1	12/23/2016 04:53
trans-1,3-Dichloropropene	U		7.6	42	µg/Kg-dry	1	12/23/2016 04:53
Trichloroethene	U		11	42	µg/Kg-dry	1	12/23/2016 04:53
Trichlorofluoromethane	U		8.1	42	µg/Kg-dry	1	12/23/2016 04:53
Vinyl chloride	U		13	42	µg/Kg-dry	1	12/23/2016 04:53
Xylenes, Total	U		33	130	µg/Kg-dry	1	12/23/2016 04:53
Surr: 1,2-Dichloroethane-d4	*93.2*			*70-130*	*%REC*	1	12/23/2016 04:53
Surr: 4-Bromofluorobenzene	*95.7*			*70-130*	*%REC*	1	12/23/2016 04:53
Surr: Dibromofluoromethane	*89.6*			*70-130*	*%REC*	1	12/23/2016 04:53
Surr: Toluene-d8	*97.3*			*70-130*	*%REC*	1	12/23/2016 04:53
MOISTURE		Method: **SW3550C**					Analyst: **EDL**
Moisture	**17**		**0.025**	**0.050**	**% of sample**	1	12/21/2016 19:17

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

ALS Group, USA

Date: *29-Dec-16*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: PZ-6 (25-27.5')
Collection Date: 12/19/2016 12:00 PM

Work Order: 16121255
Lab ID: 16121255-12
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
ORGANIC COMPOUNDS BY GC-FID		Method: **SW8015M**					Analyst: **KYM**
Triethylamine	U		3.4	32	mg/Kg-dry	1	12/28/2016 23:14
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260B**			Prep: SW5035 / 12/22/16		Analyst: **BG**
1,1,1,2-Tetrachloroethane	U		12	47	µg/Kg-dry	1	12/23/2016 05:18
1,1,1-Trichloroethane	U		13	47	µg/Kg-dry	1	12/23/2016 05:18
1,1,2,2-Tetrachloroethane	U		11	47	µg/Kg-dry	1	12/23/2016 05:18
1,1,2-Trichloroethane	U		14	47	µg/Kg-dry	1	12/23/2016 05:18
1,1,2-Trichlorotrifluoroethane	U		11	47	µg/Kg-dry	1	12/23/2016 05:18
1,1-Dichloroethane	U		12	47	µg/Kg-dry	1	12/23/2016 05:18
1,1-Dichloroethene	U		13	47	µg/Kg-dry	1	12/23/2016 05:18
1,2,3-Trichlorobenzene	U		21	47	µg/Kg-dry	1	12/23/2016 05:18
1,2,4-Trichlorobenzene	U		35	47	µg/Kg-dry	1	12/23/2016 05:18
1,2,4-Trimethylbenzene	U		9.4	47	µg/Kg-dry	1	12/23/2016 05:18
1,2-Dibromo-3-chloropropane	U		19	47	µg/Kg-dry	1	12/23/2016 05:18
1,2-Dibromoethane	U		16	47	µg/Kg-dry	1	12/23/2016 05:18
1,2-Dichlorobenzene	U		14	47	µg/Kg-dry	1	12/23/2016 05:18
1,2-Dichloroethane	U		13	47	µg/Kg-dry	1	12/23/2016 05:18
1,2-Dichloropropane	U		13	47	µg/Kg-dry	1	12/23/2016 05:18
1,3,5-Trimethylbenzene	U		21	47	µg/Kg-dry	1	12/23/2016 05:18
1,3-Dichlorobenzene	U		15	47	µg/Kg-dry	1	12/23/2016 05:18
1,3-Dichloropropane	U		13	47	µg/Kg-dry	1	12/23/2016 05:18
1,4-Dichlorobenzene	U		12	47	µg/Kg-dry	1	12/23/2016 05:18
2,2-Dichloropropane	U		17	47	µg/Kg-dry	1	12/23/2016 05:18
2-Butanone	U		63	310	µg/Kg-dry	1	12/23/2016 05:18
2-Chlorotoluene	U		14	47	µg/Kg-dry	1	12/23/2016 05:18
2-Hexanone	U		31	47	µg/Kg-dry	1	12/23/2016 05:18
4-Chlorotoluene	**36**	J	**10**	**47**	**µg/Kg-dry**	1	12/23/2016 05:18
4-Methyl-2-pentanone	U		34	47	µg/Kg-dry	1	12/23/2016 05:18
Acetone	U		85	160	µg/Kg-dry	1	12/23/2016 05:18
Benzene	U		11	47	µg/Kg-dry	1	12/23/2016 05:18
Bromobenzene	U		21	47	µg/Kg-dry	1	12/23/2016 05:18
Bromochloromethane	U		21	47	µg/Kg-dry	1	12/23/2016 05:18
Bromodichloromethane	U		13	47	µg/Kg-dry	1	12/23/2016 05:18
Bromoform	U		17	47	µg/Kg-dry	1	12/23/2016 05:18
Bromomethane	U		20	120	µg/Kg-dry	1	12/23/2016 05:18
Carbon disulfide	U		16	47	µg/Kg-dry	1	12/23/2016 05:18
Carbon tetrachloride	U		8.3	47	µg/Kg-dry	1	12/23/2016 05:18
Chlorobenzene	U		14	47	µg/Kg-dry	1	12/23/2016 05:18
Chloroethane	U		30	160	µg/Kg-dry	1	12/23/2016 05:18

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

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: PZ-6 (25-27.5')
Collection Date: 12/19/2016 12:00 PM

Work Order: 16121255
Lab ID: 16121255-12
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloroform	U		16	47	µg/Kg-dry	1	12/23/2016 05:18
Chloromethane	U		19	160	µg/Kg-dry	1	12/23/2016 05:18
cis-1,2-Dichloroethene	U		13	47	µg/Kg-dry	1	12/23/2016 05:18
cis-1,3-Dichloropropene	U		18	47	µg/Kg-dry	1	12/23/2016 05:18
Cyclohexane	**88**		**23**	**47**	**µg/Kg-dry**	1	12/23/2016 05:18
Dibromochloromethane	U		11	47	µg/Kg-dry	1	12/23/2016 05:18
Dichlorodifluoromethane	U		21	47	µg/Kg-dry	1	12/23/2016 05:18
Diisopropyl ether	U		16	47	µg/Kg-dry	1	12/23/2016 05:18
Ethyl acetate	U		44	310	µg/Kg-dry	1	12/23/2016 05:18
Ethylbenzene	U		11	47	µg/Kg-dry	1	12/23/2016 05:18
Hexachlorobutadiene	U		30	160	µg/Kg-dry	1	12/23/2016 05:18
Isopropylbenzene	U		18	47	µg/Kg-dry	1	12/23/2016 05:18
m,p-Xylene	**41**	J	**21**	**94**	**µg/Kg-dry**	1	12/23/2016 05:18
Methyl acetate	U		96	310	µg/Kg-dry	1	12/23/2016 05:18
Methyl tert-butyl ether	U		15	47	µg/Kg-dry	1	12/23/2016 05:18
Methylcyclohexane	**1,200**		**20**	**47**	**µg/Kg-dry**	1	12/23/2016 05:18
Methylene chloride	U		21	47	µg/Kg-dry	1	12/23/2016 05:18
Naphthalene	U		8.0	160	µg/Kg-dry	1	12/23/2016 05:18
n-Butylbenzene	U		12	47	µg/Kg-dry	1	12/23/2016 05:18
n-Propylbenzene	U		15	47	µg/Kg-dry	1	12/23/2016 05:18
o-Xylene	U		15	47	µg/Kg-dry	1	12/23/2016 05:18
p-Isopropyltoluene	**590**		**18**	**47**	**µg/Kg-dry**	1	12/23/2016 05:18
sec-Butylbenzene	U		19	47	µg/Kg-dry	1	12/23/2016 05:18
Styrene	U		33	47	µg/Kg-dry	1	12/23/2016 05:18
tert-Butylbenzene	U		21	47	µg/Kg-dry	1	12/23/2016 05:18
Tetrachloroethene	U		23	47	µg/Kg-dry	1	12/23/2016 05:18
Toluene	**27**	J	**16**	**47**	**µg/Kg-dry**	1	12/23/2016 05:18
trans-1,2-Dichloroethene	U		13	47	µg/Kg-dry	1	12/23/2016 05:18
trans-1,3-Dichloropropene	U		8.4	47	µg/Kg-dry	1	12/23/2016 05:18
Trichloroethene	U		13	47	µg/Kg-dry	1	12/23/2016 05:18
Trichlorofluoromethane	U		9.0	47	µg/Kg-dry	1	12/23/2016 05:18
Vinyl chloride	U		15	47	µg/Kg-dry	1	12/23/2016 05:18
Xylenes, Total	**41**	J	**36**	**140**	**µg/Kg-dry**	1	12/23/2016 05:18
Surr: 1,2-Dichloroethane-d4	*91.8*			*70-130*	*%REC*	1	12/23/2016 05:18
Surr: 4-Bromofluorobenzene	*95.4*			*70-130*	*%REC*	1	12/23/2016 05:18
Surr: Dibromofluoromethane	*88.0*			*70-130*	*%REC*	1	12/23/2016 05:18
Surr: Toluene-d8	*100*			*70-130*	*%REC*	1	12/23/2016 05:18
MOISTURE		Method: **SW3550C**					Analyst: **EDL**
Moisture	**22**		**0.025**	**0.050**	**% of sample**	1	12/21/2016 19:17

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

ALS Group, USA

Date: *29-Dec-16*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: PZ-6 (32.5-35')
Collection Date: 12/19/2016 12:00 PM

Work Order: 16121255
Lab ID: 16121255-13
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
ORGANIC COMPOUNDS BY GC-FID		Method: **SW8015M**					Analyst: **KYM**
Triethylamine	U		3.4	31	mg/Kg-dry	1	12/28/2016 23:26
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260B**			Prep: SW5035 / 12/22/16		Analyst: **BG**
1,1,1,2-Tetrachloroethane	U		12	45	µg/Kg-dry	1	12/23/2016 05:42
1,1,1-Trichloroethane	U		13	45	µg/Kg-dry	1	12/23/2016 05:42
1,1,2,2-Tetrachloroethane	U		11	45	µg/Kg-dry	1	12/23/2016 05:42
1,1,2-Trichloroethane	U		13	45	µg/Kg-dry	1	12/23/2016 05:42
1,1,2-Trichlorotrifluoroethane	U		10	45	µg/Kg-dry	1	12/23/2016 05:42
1,1-Dichloroethane	U		11	45	µg/Kg-dry	1	12/23/2016 05:42
1,1-Dichloroethene	U		12	45	µg/Kg-dry	1	12/23/2016 05:42
1,2,3-Trichlorobenzene	U		20	45	µg/Kg-dry	1	12/23/2016 05:42
1,2,4-Trichlorobenzene	U		33	45	µg/Kg-dry	1	12/23/2016 05:42
1,2,4-Trimethylbenzene	U		9.0	45	µg/Kg-dry	1	12/23/2016 05:42
1,2-Dibromo-3-chloropropane	U		18	45	µg/Kg-dry	1	12/23/2016 05:42
1,2-Dibromoethane	U		15	45	µg/Kg-dry	1	12/23/2016 05:42
1,2-Dichlorobenzene	U		13	45	µg/Kg-dry	1	12/23/2016 05:42
1,2-Dichloroethane	U		12	45	µg/Kg-dry	1	12/23/2016 05:42
1,2-Dichloropropane	U		12	45	µg/Kg-dry	1	12/23/2016 05:42
1,3,5-Trimethylbenzene	U		20	45	µg/Kg-dry	1	12/23/2016 05:42
1,3-Dichlorobenzene	U		14	45	µg/Kg-dry	1	12/23/2016 05:42
1,3-Dichloropropane	U		13	45	µg/Kg-dry	1	12/23/2016 05:42
1,4-Dichlorobenzene	U		12	45	µg/Kg-dry	1	12/23/2016 05:42
2,2-Dichloropropane	U		16	45	µg/Kg-dry	1	12/23/2016 05:42
2-Butanone	U		61	300	µg/Kg-dry	1	12/23/2016 05:42
2-Chlorotoluene	U		14	45	µg/Kg-dry	1	12/23/2016 05:42
2-Hexanone	U		30	45	µg/Kg-dry	1	12/23/2016 05:42
4-Chlorotoluene	U		9.9	45	µg/Kg-dry	1	12/23/2016 05:42
4-Methyl-2-pentanone	U		33	45	µg/Kg-dry	1	12/23/2016 05:42
Acetone	U		82	150	µg/Kg-dry	1	12/23/2016 05:42
Benzene	U		10	45	µg/Kg-dry	1	12/23/2016 05:42
Bromobenzene	U		20	45	µg/Kg-dry	1	12/23/2016 05:42
Bromochloromethane	U		20	45	µg/Kg-dry	1	12/23/2016 05:42
Bromodichloromethane	U		12	45	µg/Kg-dry	1	12/23/2016 05:42
Bromoform	U		16	45	µg/Kg-dry	1	12/23/2016 05:42
Bromomethane	U		20	110	µg/Kg-dry	1	12/23/2016 05:42
Carbon disulfide	U		15	45	µg/Kg-dry	1	12/23/2016 05:42
Carbon tetrachloride	U		8.0	45	µg/Kg-dry	1	12/23/2016 05:42
Chlorobenzene	U		14	45	µg/Kg-dry	1	12/23/2016 05:42
Chloroethane	U		29	150	µg/Kg-dry	1	12/23/2016 05:42

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

ALS Group, USA

Date: *29-Dec-16*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: PZ-6 (32.5-35')
Collection Date: 12/19/2016 12:00 PM

Work Order: 16121255
Lab ID: 16121255-13
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloroform	U		15	45	µg/Kg-dry	1	12/23/2016 05:42
Chloromethane	U		18	150	µg/Kg-dry	1	12/23/2016 05:42
cis-1,2-Dichloroethene	U		13	45	µg/Kg-dry	1	12/23/2016 05:42
cis-1,3-Dichloropropene	U		17	45	µg/Kg-dry	1	12/23/2016 05:42
Cyclohexane	U		22	45	µg/Kg-dry	1	12/23/2016 05:42
Dibromochloromethane	U		10	45	µg/Kg-dry	1	12/23/2016 05:42
Dichlorodifluoromethane	U		20	45	µg/Kg-dry	1	12/23/2016 05:42
Diisopropyl ether	U		16	45	µg/Kg-dry	1	12/23/2016 05:42
Ethyl acetate	U		42	300	µg/Kg-dry	1	12/23/2016 05:42
Ethylbenzene	U		10	45	µg/Kg-dry	1	12/23/2016 05:42
Hexachlorobutadiene	U		28	150	µg/Kg-dry	1	12/23/2016 05:42
Isopropylbenzene	U		18	45	µg/Kg-dry	1	12/23/2016 05:42
m,p-Xylene	U		20	90	µg/Kg-dry	1	12/23/2016 05:42
Methyl acetate	U		92	300	µg/Kg-dry	1	12/23/2016 05:42
Methyl tert-butyl ether	U		15	45	µg/Kg-dry	1	12/23/2016 05:42
Methylcyclohexane	U		19	45	µg/Kg-dry	1	12/23/2016 05:42
Methylene chloride	U		21	45	µg/Kg-dry	1	12/23/2016 05:42
Naphthalene	U		7.7	150	µg/Kg-dry	1	12/23/2016 05:42
n-Butylbenzene	U		12	45	µg/Kg-dry	1	12/23/2016 05:42
n-Propylbenzene	U		14	45	µg/Kg-dry	1	12/23/2016 05:42
o-Xylene	U		15	45	µg/Kg-dry	1	12/23/2016 05:42
p-Isopropyltoluene	U		17	45	µg/Kg-dry	1	12/23/2016 05:42
sec-Butylbenzene	U		18	45	µg/Kg-dry	1	12/23/2016 05:42
Styrene	U		32	45	µg/Kg-dry	1	12/23/2016 05:42
tert-Butylbenzene	U		20	45	µg/Kg-dry	1	12/23/2016 05:42
Tetrachloroethene	U		22	45	µg/Kg-dry	1	12/23/2016 05:42
Toluene	U		15	45	µg/Kg-dry	1	12/23/2016 05:42
trans-1,2-Dichloroethene	U		13	45	µg/Kg-dry	1	12/23/2016 05:42
trans-1,3-Dichloropropene	U		8.0	45	µg/Kg-dry	1	12/23/2016 05:42
Trichloroethene	U		12	45	µg/Kg-dry	1	12/23/2016 05:42
Trichlorofluoromethane	U		8.7	45	µg/Kg-dry	1	12/23/2016 05:42
Vinyl chloride	U		14	45	µg/Kg-dry	1	12/23/2016 05:42
Xylenes, Total	U		35	140	µg/Kg-dry	1	12/23/2016 05:42
Surr: 1,2-Dichloroethane-d4	*92.8*			*70-130*	*%REC*	1	12/23/2016 05:42
Surr: 4-Bromofluorobenzene	*96.3*			*70-130*	*%REC*	1	12/23/2016 05:42
Surr: Dibromofluoromethane	*87.5*			*70-130*	*%REC*	1	12/23/2016 05:42
Surr: Toluene-d8	*99.0*			*70-130*	*%REC*	1	12/23/2016 05:42
MOISTURE		Method: **SW3550C**					Analyst: **EDL**
Moisture	**20**		**0.025**	**0.050**	**% of sample**	1	12/21/2016 19:17

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

ALS Group, USA

Date: *29-Dec-16*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: SB-12 (2.5-5')
Collection Date: 12/19/2016 01:15 PM

Work Order: 16121255
Lab ID: 16121255-14
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
ORGANIC COMPOUNDS BY GC-FID		Method: **SW8015M**					Analyst: **KYM**
Triethylamine	U		4.0	37	mg/Kg-dry	1	12/28/2016 23:38
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260B**			Prep: SW5035 / 12/22/16		Analyst: **BG**
1,1,1,2-Tetrachloroethane	U		15	58	µg/Kg-dry	1	12/23/2016 06:07
1,1,1-Trichloroethane	U		17	58	µg/Kg-dry	1	12/23/2016 06:07
1,1,2,2-Tetrachloroethane	U		14	58	µg/Kg-dry	1	12/23/2016 06:07
1,1,2-Trichloroethane	U		17	58	µg/Kg-dry	1	12/23/2016 06:07
1,1,2-Trichlorotrifluoroethane	U		13	58	µg/Kg-dry	1	12/23/2016 06:07
1,1-Dichloroethane	U		15	58	µg/Kg-dry	1	12/23/2016 06:07
1,1-Dichloroethene	U		16	58	µg/Kg-dry	1	12/23/2016 06:07
1,2,3-Trichlorobenzene	U		26	58	µg/Kg-dry	1	12/23/2016 06:07
1,2,4-Trichlorobenzene	U		43	58	µg/Kg-dry	1	12/23/2016 06:07
1,2,4-Trimethylbenzene	U		12	58	µg/Kg-dry	1	12/23/2016 06:07
1,2-Dibromo-3-chloropropane	U		24	58	µg/Kg-dry	1	12/23/2016 06:07
1,2-Dibromoethane	U		19	58	µg/Kg-dry	1	12/23/2016 06:07
1,2-Dichlorobenzene	U		17	58	µg/Kg-dry	1	12/23/2016 06:07
1,2-Dichloroethane	U		16	58	µg/Kg-dry	1	12/23/2016 06:07
1,2-Dichloropropane	U		16	58	µg/Kg-dry	1	12/23/2016 06:07
1,3,5-Trimethylbenzene	U		25	58	µg/Kg-dry	1	12/23/2016 06:07
1,3-Dichlorobenzene	U		19	58	µg/Kg-dry	1	12/23/2016 06:07
1,3-Dichloropropane	U		16	58	µg/Kg-dry	1	12/23/2016 06:07
1,4-Dichlorobenzene	**38,000**		**76**	**290**	**µg/Kg-dry**	5	12/27/2016 13:41
2,2-Dichloropropane	U		21	58	µg/Kg-dry	1	12/23/2016 06:07
2-Butanone	U		78	390	µg/Kg-dry	1	12/23/2016 06:07
2-Chlorotoluene	U		17	58	µg/Kg-dry	1	12/23/2016 06:07
2-Hexanone	U		39	58	µg/Kg-dry	1	12/23/2016 06:07
4-Chlorotoluene	U		13	58	µg/Kg-dry	1	12/23/2016 06:07
4-Methyl-2-pentanone	U		42	58	µg/Kg-dry	1	12/23/2016 06:07
Acetone	U		110	190	µg/Kg-dry	1	12/23/2016 06:07
Benzene	U		13	58	µg/Kg-dry	1	12/23/2016 06:07
Bromobenzene	U		26	58	µg/Kg-dry	1	12/23/2016 06:07
Bromochloromethane	U		26	58	µg/Kg-dry	1	12/23/2016 06:07
Bromodichloromethane	U		16	58	µg/Kg-dry	1	12/23/2016 06:07
Bromoform	U		21	58	µg/Kg-dry	1	12/23/2016 06:07
Bromomethane	U		25	150	µg/Kg-dry	1	12/23/2016 06:07
Carbon disulfide	U		20	58	µg/Kg-dry	1	12/23/2016 06:07
Carbon tetrachloride	U		10	58	µg/Kg-dry	1	12/23/2016 06:07
Chlorobenzene	U		17	58	µg/Kg-dry	1	12/23/2016 06:07
Chloroethane	U		37	190	µg/Kg-dry	1	12/23/2016 06:07

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

ALS Group, USA

Date: *29-Dec-16*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: SB-12 (2.5-5')
Collection Date: 12/19/2016 01:15 PM

Work Order: 16121255
Lab ID: 16121255-14
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloroform	U		20	58	µg/Kg-dry	1	12/23/2016 06:07
Chloromethane	U		24	190	µg/Kg-dry	1	12/23/2016 06:07
cis-1,2-Dichloroethene	U		16	58	µg/Kg-dry	1	12/23/2016 06:07
cis-1,3-Dichloropropene	U		22	58	µg/Kg-dry	1	12/23/2016 06:07
Cyclohexane	U		29	58	µg/Kg-dry	1	12/23/2016 06:07
Dibromochloromethane	U		13	58	µg/Kg-dry	1	12/23/2016 06:07
Dichlorodifluoromethane	U		26	58	µg/Kg-dry	1	12/23/2016 06:07
Diisopropyl ether	U		20	58	µg/Kg-dry	1	12/23/2016 06:07
Ethyl acetate	U		55	390	µg/Kg-dry	1	12/23/2016 06:07
Ethylbenzene	U		14	58	µg/Kg-dry	1	12/23/2016 06:07
Hexachlorobutadiene	U		37	190	µg/Kg-dry	1	12/23/2016 06:07
Isopropylbenzene	U		23	58	µg/Kg-dry	1	12/23/2016 06:07
m,p-Xylene	U		26	120	µg/Kg-dry	1	12/23/2016 06:07
Methyl acetate	U		120	390	µg/Kg-dry	1	12/23/2016 06:07
Methyl tert-butyl ether	U		19	58	µg/Kg-dry	1	12/23/2016 06:07
Methylcyclohexane	U		25	58	µg/Kg-dry	1	12/23/2016 06:07
Methylene chloride	U		27	58	µg/Kg-dry	1	12/23/2016 06:07
Naphthalene	**110**	J	**9.9**	**190**	**µg/Kg-dry**	1	12/23/2016 06:07
n-Butylbenzene	U		15	58	µg/Kg-dry	1	12/23/2016 06:07
n-Propylbenzene	U		19	58	µg/Kg-dry	1	12/23/2016 06:07
o-Xylene	U		19	58	µg/Kg-dry	1	12/23/2016 06:07
p-Isopropyltoluene	**3,700**		**22**	**58**	**µg/Kg-dry**	1	12/23/2016 06:07
sec-Butylbenzene	U		23	58	µg/Kg-dry	1	12/23/2016 06:07
Styrene	U		41	58	µg/Kg-dry	1	12/23/2016 06:07
tert-Butylbenzene	U		26	58	µg/Kg-dry	1	12/23/2016 06:07
Tetrachloroethene	U		29	58	µg/Kg-dry	1	12/23/2016 06:07
Toluene	U		19	58	µg/Kg-dry	1	12/23/2016 06:07
trans-1,2-Dichloroethene	U		16	58	µg/Kg-dry	1	12/23/2016 06:07
trans-1,3-Dichloropropene	U		10	58	µg/Kg-dry	1	12/23/2016 06:07
Trichloroethene	U		16	58	µg/Kg-dry	1	12/23/2016 06:07
Trichlorofluoromethane	U		11	58	µg/Kg-dry	1	12/23/2016 06:07
Vinyl chloride	U		18	58	µg/Kg-dry	1	12/23/2016 06:07
Xylenes, Total	U		45	170	µg/Kg-dry	1	12/23/2016 06:07
Surr: 1,2-Dichloroethane-d4	*94.1*			*70-130*	*%REC*	1	12/23/2016 06:07
Surr: 1,2-Dichloroethane-d4	*95.4*			*70-130*	*%REC*	5	12/27/2016 13:41
Surr: 4-Bromofluorobenzene	*99.8*			*70-130*	*%REC*	1	12/23/2016 06:07
Surr: 4-Bromofluorobenzene	*98.7*			*70-130*	*%REC*	5	12/27/2016 13:41
Surr: Dibromofluoromethane	*89.0*			*70-130*	*%REC*	1	12/23/2016 06:07
Surr: Dibromofluoromethane	*93.6*			*70-130*	*%REC*	5	12/27/2016 13:41
Surr: Toluene-d8	*97.8*			*70-130*	*%REC*	1	12/23/2016 06:07

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

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: SB-12 (2.5-5')
Collection Date: 12/19/2016 01:15 PM

Work Order: 16121255
Lab ID: 16121255-14
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: Toluene-d8	*97.8*			*70-130*	*%REC*	5	12/27/2016 13:41
MOISTURE		Method: **SW3550C**					Analyst: **EDL**
Moisture	**32**		**0.025**	**0.050**	**% of sample**	1	12/21/2016 19:17

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

ALS Group, USA

Date: *29-Dec-16*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: SB-12 (12.5-15')
Collection Date: 12/19/2016 01:15 PM

Work Order: 16121255
Lab ID: 16121255-15
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
ORGANIC COMPOUNDS BY GC-FID		Method: **SW8015M**					Analyst: **KYM**
Triethylamine	U		3.2	30	mg/Kg-dry	1	12/28/2016 23:50
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260B**			Prep: SW5035 / 12/22/16		Analyst: **BG**
1,1,1,2-Tetrachloroethane	U		11	42	µg/Kg-dry	1	12/27/2016 15:27
1,1,1-Trichloroethane	U		12	42	µg/Kg-dry	1	12/27/2016 15:27
1,1,2,2-Tetrachloroethane	U		10	42	µg/Kg-dry	1	12/27/2016 15:27
1,1,2-Trichloroethane	U		13	42	µg/Kg-dry	1	12/27/2016 15:27
1,1,2-Trichlorotrifluoroethane	U		9.5	42	µg/Kg-dry	1	12/27/2016 15:27
1,1-Dichloroethane	U		11	42	µg/Kg-dry	1	12/27/2016 15:27
1,1-Dichloroethene	U		11	42	µg/Kg-dry	1	12/27/2016 15:27
1,2,3-Trichlorobenzene	U		19	42	µg/Kg-dry	1	12/27/2016 15:27
1,2,4-Trichlorobenzene	U		31	42	µg/Kg-dry	1	12/27/2016 15:27
1,2,4-Trimethylbenzene	U		8.5	42	µg/Kg-dry	1	12/27/2016 15:27
1,2-Dibromo-3-chloropropane	U		17	42	µg/Kg-dry	1	12/27/2016 15:27
1,2-Dibromoethane	U		14	42	µg/Kg-dry	1	12/27/2016 15:27
1,2-Dichlorobenzene	U		13	42	µg/Kg-dry	1	12/27/2016 15:27
1,2-Dichloroethane	U		12	42	µg/Kg-dry	1	12/27/2016 15:27
1,2-Dichloropropane	U		12	42	µg/Kg-dry	1	12/27/2016 15:27
1,3,5-Trimethylbenzene	U		19	42	µg/Kg-dry	1	12/27/2016 15:27
1,3-Dichlorobenzene	U		14	42	µg/Kg-dry	1	12/27/2016 15:27
1,3-Dichloropropane	U		12	42	µg/Kg-dry	1	12/27/2016 15:27
1,4-Dichlorobenzene	U		11	42	µg/Kg-dry	1	12/27/2016 15:27
2,2-Dichloropropane	U		15	42	µg/Kg-dry	1	12/27/2016 15:27
2-Butanone	U		57	280	µg/Kg-dry	1	12/27/2016 15:27
2-Chlorotoluene	U		13	42	µg/Kg-dry	1	12/27/2016 15:27
2-Hexanone	U		28	42	µg/Kg-dry	1	12/27/2016 15:27
4-Chlorotoluene	U		9.3	42	µg/Kg-dry	1	12/27/2016 15:27
4-Methyl-2-pentanone	U		31	42	µg/Kg-dry	1	12/27/2016 15:27
Acetone	U		77	140	µg/Kg-dry	1	12/27/2016 15:27
Benzene	U		9.6	42	µg/Kg-dry	1	12/27/2016 15:27
Bromobenzene	U		19	42	µg/Kg-dry	1	12/27/2016 15:27
Bromochloromethane	U		19	42	µg/Kg-dry	1	12/27/2016 15:27
Bromodichloromethane	U		11	42	µg/Kg-dry	1	12/27/2016 15:27
Bromoform	U		15	42	µg/Kg-dry	1	12/27/2016 15:27
Bromomethane	U		18	110	µg/Kg-dry	1	12/27/2016 15:27
Carbon disulfide	U		14	42	µg/Kg-dry	1	12/27/2016 15:27
Carbon tetrachloride	U		7.5	42	µg/Kg-dry	1	12/27/2016 15:27
Chlorobenzene	U		13	42	µg/Kg-dry	1	12/27/2016 15:27
Chloroethane	U		27	140	µg/Kg-dry	1	12/27/2016 15:27

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

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: SB-12 (12.5-15')
Collection Date: 12/19/2016 01:15 PM

Work Order: 16121255
Lab ID: 16121255-15
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloroform	U		14	42	µg/Kg-dry	1	12/27/2016 15:27
Chloromethane	U		17	140	µg/Kg-dry	1	12/27/2016 15:27
cis-1,2-Dichloroethene	U		12	42	µg/Kg-dry	1	12/27/2016 15:27
cis-1,3-Dichloropropene	U		16	42	µg/Kg-dry	1	12/27/2016 15:27
Cyclohexane	U		21	42	µg/Kg-dry	1	12/27/2016 15:27
Dibromochloromethane	U		9.6	42	µg/Kg-dry	1	12/27/2016 15:27
Dichlorodifluoromethane	U		19	42	µg/Kg-dry	1	12/27/2016 15:27
Diisopropyl ether	U		15	42	µg/Kg-dry	1	12/27/2016 15:27
Ethyl acetate	U		40	280	µg/Kg-dry	1	12/27/2016 15:27
Ethylbenzene	U		9.9	42	µg/Kg-dry	1	12/27/2016 15:27
Hexachlorobutadiene	U		27	140	µg/Kg-dry	1	12/27/2016 15:27
Isopropylbenzene	U		17	42	µg/Kg-dry	1	12/27/2016 15:27
m,p-Xylene	U		19	85	µg/Kg-dry	1	12/27/2016 15:27
Methyl acetate	U		87	280	µg/Kg-dry	1	12/27/2016 15:27
Methyl tert-butyl ether	U		14	42	µg/Kg-dry	1	12/27/2016 15:27
Methylcyclohexane	U		18	42	µg/Kg-dry	1	12/27/2016 15:27
Methylene chloride	U		19	42	µg/Kg-dry	1	12/27/2016 15:27
Naphthalene	U		7.2	140	µg/Kg-dry	1	12/27/2016 15:27
n-Butylbenzene	U		11	42	µg/Kg-dry	1	12/27/2016 15:27
n-Propylbenzene	U		14	42	µg/Kg-dry	1	12/27/2016 15:27
o-Xylene	U		14	42	µg/Kg-dry	1	12/27/2016 15:27
p-Isopropyltoluene	U		16	42	µg/Kg-dry	1	12/27/2016 15:27
sec-Butylbenzene	U		17	42	µg/Kg-dry	1	12/27/2016 15:27
Styrene	U		30	42	µg/Kg-dry	1	12/27/2016 15:27
tert-Butylbenzene	U		19	42	µg/Kg-dry	1	12/27/2016 15:27
Tetrachloroethene	U		21	42	µg/Kg-dry	1	12/27/2016 15:27
Toluene	U		14	42	µg/Kg-dry	1	12/27/2016 15:27
trans-1,2-Dichloroethene	U		12	42	µg/Kg-dry	1	12/27/2016 15:27
trans-1,3-Dichloropropene	U		7.6	42	µg/Kg-dry	1	12/27/2016 15:27
Trichloroethene	U		11	42	µg/Kg-dry	1	12/27/2016 15:27
Trichlorofluoromethane	U		8.1	42	µg/Kg-dry	1	12/27/2016 15:27
Vinyl chloride	U		13	42	µg/Kg-dry	1	12/27/2016 15:27
Xylenes, Total	U		33	130	µg/Kg-dry	1	12/27/2016 15:27
Surr: 1,2-Dichloroethane-d4	*101*			*70-130*	*%REC*	1	12/27/2016 15:27
Surr: 4-Bromofluorobenzene	*96.0*			*70-130*	*%REC*	1	12/27/2016 15:27
Surr: Dibromofluoromethane	*104*			*70-130*	*%REC*	1	12/27/2016 15:27
Surr: Toluene-d8	*98.2*			*70-130*	*%REC*	1	12/27/2016 15:27
MOISTURE		Method: **SW3550C**					Analyst: **EDL**
Moisture	**17**		**0.025**	**0.050**	**% of sample**	1	12/22/2016 13:49

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

ALS Group, USA

Date: *29-Dec-16*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: SB-12 (27.5-30')
Collection Date: 12/19/2016 01:15 PM

Work Order: 16121255
Lab ID: 16121255-16
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
ORGANIC COMPOUNDS BY GC-FID		Method: **SW8015M**					Analyst: **KYM**
Triethylamine	U		3.3	31	mg/Kg-dry	1	12/29/2016 00:01
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260B**			Prep: SW5035 / 12/22/16		Analyst: **BG**
1,1,1,2-Tetrachloroethane	U		11	44	µg/Kg-dry	1	12/27/2016 15:53
1,1,1-Trichloroethane	U		13	44	µg/Kg-dry	1	12/27/2016 15:53
1,1,2,2-Tetrachloroethane	U		11	44	µg/Kg-dry	1	12/27/2016 15:53
1,1,2-Trichloroethane	U		13	44	µg/Kg-dry	1	12/27/2016 15:53
1,1,2-Trichlorotrifluoroethane	U		9.9	44	µg/Kg-dry	1	12/27/2016 15:53
1,1-Dichloroethane	U		11	44	µg/Kg-dry	1	12/27/2016 15:53
1,1-Dichloroethene	U		12	44	µg/Kg-dry	1	12/27/2016 15:53
1,2,3-Trichlorobenzene	U		19	44	µg/Kg-dry	1	12/27/2016 15:53
1,2,4-Trichlorobenzene	U		32	44	µg/Kg-dry	1	12/27/2016 15:53
1,2,4-Trimethylbenzene	U		8.8	44	µg/Kg-dry	1	12/27/2016 15:53
1,2-Dibromo-3-chloropropane	U		18	44	µg/Kg-dry	1	12/27/2016 15:53
1,2-Dibromoethane	U		15	44	µg/Kg-dry	1	12/27/2016 15:53
1,2-Dichlorobenzene	U		13	44	µg/Kg-dry	1	12/27/2016 15:53
1,2-Dichloroethane	U		12	44	µg/Kg-dry	1	12/27/2016 15:53
1,2-Dichloropropane	U		12	44	µg/Kg-dry	1	12/27/2016 15:53
1,3,5-Trimethylbenzene	U		19	44	µg/Kg-dry	1	12/27/2016 15:53
1,3-Dichlorobenzene	U		14	44	µg/Kg-dry	1	12/27/2016 15:53
1,3-Dichloropropane	U		12	44	µg/Kg-dry	1	12/27/2016 15:53
1,4-Dichlorobenzene	U		12	44	µg/Kg-dry	1	12/27/2016 15:53
2,2-Dichloropropane	U		16	44	µg/Kg-dry	1	12/27/2016 15:53
2-Butanone	U		59	290	µg/Kg-dry	1	12/27/2016 15:53
2-Chlorotoluene	U		13	44	µg/Kg-dry	1	12/27/2016 15:53
2-Hexanone	U		29	44	µg/Kg-dry	1	12/27/2016 15:53
4-Chlorotoluene	U		9.7	44	µg/Kg-dry	1	12/27/2016 15:53
4-Methyl-2-pentanone	U		32	44	µg/Kg-dry	1	12/27/2016 15:53
Acetone	U		80	150	µg/Kg-dry	1	12/27/2016 15:53
Benzene	U		10	44	µg/Kg-dry	1	12/27/2016 15:53
Bromobenzene	U		20	44	µg/Kg-dry	1	12/27/2016 15:53
Bromochloromethane	U		20	44	µg/Kg-dry	1	12/27/2016 15:53
Bromodichloromethane	U		12	44	µg/Kg-dry	1	12/27/2016 15:53
Bromoform	U		16	44	µg/Kg-dry	1	12/27/2016 15:53
Bromomethane	U		19	110	µg/Kg-dry	1	12/27/2016 15:53
Carbon disulfide	U		15	44	µg/Kg-dry	1	12/27/2016 15:53
Carbon tetrachloride	U		7.8	44	µg/Kg-dry	1	12/27/2016 15:53
Chlorobenzene	U		13	44	µg/Kg-dry	1	12/27/2016 15:53
Chloroethane	U		28	150	µg/Kg-dry	1	12/27/2016 15:53

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

ALS Group, USA

Date: *29-Dec-16*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: SB-12 (27.5-30')
Collection Date: 12/19/2016 01:15 PM

Work Order: 16121255
Lab ID: 16121255-16
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloroform	U		15	44	µg/Kg-dry	1	12/27/2016 15:53
Chloromethane	U		18	150	µg/Kg-dry	1	12/27/2016 15:53
cis-1,2-Dichloroethene	U		12	44	µg/Kg-dry	1	12/27/2016 15:53
cis-1,3-Dichloropropene	U		17	44	µg/Kg-dry	1	12/27/2016 15:53
Cyclohexane	U		22	44	µg/Kg-dry	1	12/27/2016 15:53
Dibromochloromethane	U		10	44	µg/Kg-dry	1	12/27/2016 15:53
Dichlorodifluoromethane	U		19	44	µg/Kg-dry	1	12/27/2016 15:53
Diisopropyl ether	U		15	44	µg/Kg-dry	1	12/27/2016 15:53
Ethyl acetate	U		41	290	µg/Kg-dry	1	12/27/2016 15:53
Ethylbenzene	U		10	44	µg/Kg-dry	1	12/27/2016 15:53
Hexachlorobutadiene	U		28	150	µg/Kg-dry	1	12/27/2016 15:53
Isopropylbenzene	U		17	44	µg/Kg-dry	1	12/27/2016 15:53
m,p-Xylene	U		20	88	µg/Kg-dry	1	12/27/2016 15:53
Methyl acetate	**99**	J	**90**	**290**	**µg/Kg-dry**	1	12/27/2016 15:53
Methyl tert-butyl ether	U		14	44	µg/Kg-dry	1	12/27/2016 15:53
Methylcyclohexane	U		19	44	µg/Kg-dry	1	12/27/2016 15:53
Methylene chloride	U		20	44	µg/Kg-dry	1	12/27/2016 15:53
Naphthalene	U		7.5	150	µg/Kg-dry	1	12/27/2016 15:53
n-Butylbenzene	U		11	44	µg/Kg-dry	1	12/27/2016 15:53
n-Propylbenzene	U		14	44	µg/Kg-dry	1	12/27/2016 15:53
o-Xylene	U		14	44	µg/Kg-dry	1	12/27/2016 15:53
p-Isopropyltoluene	U		17	44	µg/Kg-dry	1	12/27/2016 15:53
sec-Butylbenzene	U		17	44	µg/Kg-dry	1	12/27/2016 15:53
Styrene	U		31	44	µg/Kg-dry	1	12/27/2016 15:53
tert-Butylbenzene	U		19	44	µg/Kg-dry	1	12/27/2016 15:53
Tetrachloroethene	U		22	44	µg/Kg-dry	1	12/27/2016 15:53
Toluene	U		15	44	µg/Kg-dry	1	12/27/2016 15:53
trans-1,2-Dichloroethene	U		12	44	µg/Kg-dry	1	12/27/2016 15:53
trans-1,3-Dichloropropene	U		7.9	44	µg/Kg-dry	1	12/27/2016 15:53
Trichloroethene	U		12	44	µg/Kg-dry	1	12/27/2016 15:53
Trichlorofluoromethane	U		8.5	44	µg/Kg-dry	1	12/27/2016 15:53
Vinyl chloride	U		14	44	µg/Kg-dry	1	12/27/2016 15:53
Xylenes, Total	U		34	130	µg/Kg-dry	1	12/27/2016 15:53
Surr: 1,2-Dichloroethane-d4	*103*			*70-130*	*%REC*	1	12/27/2016 15:53
Surr: 4-Bromofluorobenzene	*99.0*			*70-130*	*%REC*	1	12/27/2016 15:53
Surr: Dibromofluoromethane	*105*			*70-130*	*%REC*	1	12/27/2016 15:53
Surr: Toluene-d8	*96.5*			*70-130*	*%REC*	1	12/27/2016 15:53
MOISTURE		Method: **SW3550C**					Analyst: **EDL**
Moisture	**19**		**0.025**	**0.050**	**% of sample**	1	12/22/2016 13:49

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

ALS Group, USA

Date: *29-Dec-16*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: Trip Blank
Collection Date: 12/19/2016

Work Order: 16121255
Lab ID: 16121255-17
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260B**			Prep: SW5035 / 12/22/16		Analyst: **BG**
1,1,1,2-Tetrachloroethane	U		7.7	30	µg/Kg-dry	1	12/23/2016 12:22
1,1,1-Trichloroethane	U		8.6	30	µg/Kg-dry	1	12/23/2016 12:22
1,1,2,2-Tetrachloroethane	U		7.2	30	µg/Kg-dry	1	12/23/2016 12:22
1,1,2-Trichloroethane	U		9.0	30	µg/Kg-dry	1	12/23/2016 12:22
1,1,2-Trichlorotrifluoroethane	U		6.8	30	µg/Kg-dry	1	12/23/2016 12:22
1,1-Dichloroethane	U		7.6	30	µg/Kg-dry	1	12/23/2016 12:22
1,1-Dichloroethene	U		8.0	30	µg/Kg-dry	1	12/23/2016 12:22
1,2,3-Trichlorobenzene	U		13	30	µg/Kg-dry	1	12/23/2016 12:22
1,2,4-Trichlorobenzene	U		22	30	µg/Kg-dry	1	12/23/2016 12:22
1,2,4-Trimethylbenzene	U		6.0	30	µg/Kg-dry	1	12/23/2016 12:22
1,2-Dibromo-3-chloropropane	U		12	30	µg/Kg-dry	1	12/23/2016 12:22
1,2-Dibromoethane	U		10	30	µg/Kg-dry	1	12/23/2016 12:22
1,2-Dichlorobenzene	U		8.9	30	µg/Kg-dry	1	12/23/2016 12:22
1,2-Dichloroethane	U		8.2	30	µg/Kg-dry	1	12/23/2016 12:22
1,2-Dichloropropane	U		8.3	30	µg/Kg-dry	1	12/23/2016 12:22
1,3,5-Trimethylbenzene	U		13	30	µg/Kg-dry	1	12/23/2016 12:22
1,3-Dichlorobenzene	U		9.6	30	µg/Kg-dry	1	12/23/2016 12:22
1,3-Dichloropropane	U		8.4	30	µg/Kg-dry	1	12/23/2016 12:22
1,4-Dichlorobenzene	U		7.8	30	µg/Kg-dry	1	12/23/2016 12:22
2,2-Dichloropropane	U		11	30	µg/Kg-dry	1	12/23/2016 12:22
2-Butanone	U		40	200	µg/Kg-dry	1	12/23/2016 12:22
2-Chlorotoluene	U		9.0	30	µg/Kg-dry	1	12/23/2016 12:22
2-Hexanone	U		20	30	µg/Kg-dry	1	12/23/2016 12:22
4-Chlorotoluene	U		6.6	30	µg/Kg-dry	1	12/23/2016 12:22
4-Methyl-2-pentanone	U		22	30	µg/Kg-dry	1	12/23/2016 12:22
Acetone	U		54	100	µg/Kg-dry	1	12/23/2016 12:22
Benzene	U		6.8	30	µg/Kg-dry	1	12/23/2016 12:22
Bromobenzene	U		14	30	µg/Kg-dry	1	12/23/2016 12:22
Bromochloromethane	U		13	30	µg/Kg-dry	1	12/23/2016 12:22
Bromodichloromethane	U		8.0	30	µg/Kg-dry	1	12/23/2016 12:22
Bromoform	U		11	30	µg/Kg-dry	1	12/23/2016 12:22
Bromomethane	U		13	75	µg/Kg-dry	1	12/23/2016 12:22
Carbon disulfide	U		10	30	µg/Kg-dry	1	12/23/2016 12:22
Carbon tetrachloride	U		5.3	30	µg/Kg-dry	1	12/23/2016 12:22
Chlorobenzene	U		9.0	30	µg/Kg-dry	1	12/23/2016 12:22
Chloroethane	U		19	100	µg/Kg-dry	1	12/23/2016 12:22
Chloroform	U		10	30	µg/Kg-dry	1	12/23/2016 12:22
Chloromethane	U		12	100	µg/Kg-dry	1	12/23/2016 12:22

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

ALS Group, USA

Date: *29-Dec-16*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: Trip Blank
Collection Date: 12/19/2016

Work Order: 16121255
Lab ID: 16121255-17
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
cis-1,2-Dichloroethene	U		8.5	30	µg/Kg-dry	1	12/23/2016 12:22
cis-1,3-Dichloropropene	U		11	30	µg/Kg-dry	1	12/23/2016 12:22
Cyclohexane	U		15	30	µg/Kg-dry	1	12/23/2016 12:22
Dibromochloromethane	U		6.8	30	µg/Kg-dry	1	12/23/2016 12:22
Dichlorodifluoromethane	U		13	30	µg/Kg-dry	1	12/23/2016 12:22
Diisopropyl ether	U		10	30	µg/Kg-dry	1	12/23/2016 12:22
Ethyl acetate	U		28	200	µg/Kg-dry	1	12/23/2016 12:22
Ethylbenzene	U		7.0	30	µg/Kg-dry	1	12/23/2016 12:22
Hexachlorobutadiene	U		19	100	µg/Kg-dry	1	12/23/2016 12:22
Isopropylbenzene	U		12	30	µg/Kg-dry	1	12/23/2016 12:22
m,p-Xylene	U		13	60	µg/Kg-dry	1	12/23/2016 12:22
Methyl acetate	U		62	200	µg/Kg-dry	1	12/23/2016 12:22
Methyl tert-butyl ether	U		9.8	30	µg/Kg-dry	1	12/23/2016 12:22
Methylcyclohexane	U		13	30	µg/Kg-dry	1	12/23/2016 12:22
Methylene chloride	U		14	30	µg/Kg-dry	1	12/23/2016 12:22
Naphthalene	U		5.1	100	µg/Kg-dry	1	12/23/2016 12:22
n-Butylbenzene	U		7.8	30	µg/Kg-dry	1	12/23/2016 12:22
n-Propylbenzene	U		9.6	30	µg/Kg-dry	1	12/23/2016 12:22
o-Xylene	U		9.7	30	µg/Kg-dry	1	12/23/2016 12:22
p-Isopropyltoluene	U		11	30	µg/Kg-dry	1	12/23/2016 12:22
sec-Butylbenzene	U		12	30	µg/Kg-dry	1	12/23/2016 12:22
Styrene	U		21	30	µg/Kg-dry	1	12/23/2016 12:22
tert-Butylbenzene	U		13	30	µg/Kg-dry	1	12/23/2016 12:22
Tetrachloroethene	U		15	30	µg/Kg-dry	1	12/23/2016 12:22
Toluene	U		9.9	30	µg/Kg-dry	1	12/23/2016 12:22
trans-1,2-Dichloroethene	U		8.5	30	µg/Kg-dry	1	12/23/2016 12:22
trans-1,3-Dichloropropene	U		5.4	30	µg/Kg-dry	1	12/23/2016 12:22
Trichloroethene	U		8.0	30	µg/Kg-dry	1	12/23/2016 12:22
Trichlorofluoromethane	U		5.8	30	µg/Kg-dry	1	12/23/2016 12:22
Vinyl chloride	U		9.5	30	µg/Kg-dry	1	12/23/2016 12:22
Xylenes, Total	U		23	90	µg/Kg-dry	1	12/23/2016 12:22
Surr: 1,2-Dichloroethane-d4	*92.4*			*70-130*	*%REC*	1	12/23/2016 12:22
Surr: 4-Bromofluorobenzene	*97.4*			*70-130*	*%REC*	1	12/23/2016 12:22
Surr: Dibromofluoromethane	*90.4*			*70-130*	*%REC*	1	12/23/2016 12:22
Surr: Toluene-d8	*98.6*			*70-130*	*%REC*	1	12/23/2016 12:22

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

ALS Group, USA

Date: 29-Dec-16

Client: The Sigma Group

Work Order: 16121255

Project: Solenis (16153)

QC BATCH REPORT

Batch ID: **R203289** Instrument ID **GC11** Method: **SW8015M**

MBLK Sample ID: **MBLKS1-R203289** Units: **mg/Kg** Analysis Date: **12/28/2016 08:19 PM**

Client ID: Run ID: **GC11_161228B** SeqNo: **4222822** Prep Date: **12/27/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Triethylamine	U	25								

LCS Sample ID: **LCSS1-R203289** Units: **mg/Kg** Analysis Date: **12/28/2016 07:08 PM**

Client ID: Run ID: **GC11_161228B** SeqNo: **4222817** Prep Date: **12/27/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Triethylamine	401.5	25	500	0	80.3	50-150	0			

MS Sample ID: **16121255-01B MS** Units: **mg/Kg** Analysis Date: **12/28/2016 07:20 PM**

Client ID: **SB-11 (5-7.5')** Run ID: **GC11_161228B** SeqNo: **4222818** Prep Date: **12/27/2016** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Triethylamine	897.1	50	952	0	94.2	50-150	0			

MSD Sample ID: **16121255-01B MSD** Units: **mg/Kg** Analysis Date: **12/28/2016 07:32 PM**

Client ID: **SB-11 (5-7.5')** Run ID: **GC11_161228B** SeqNo: **4222819** Prep Date: **12/27/2016** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Triethylamine	704.9	50	952	0	74	50-150	897.1	24	30	

The following samples were analyzed in this batch:

16121255-01B	16121255-02B	16121255-03B
16121255-04B	16121255-05B	16121255-06B
16121255-07B	16121255-08B	16121255-09B
16121255-10B	16121255-11B	16121255-12B
16121255-13B	16121255-14B	16121255-15B
16121255-16B		

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

Client: The Sigma Group
Work Order: 16121255
Project: Solenis (16153)

QC BATCH REPORT

Batch ID: **96173** Instrument ID **VMS9** Method: **SW8260B**

MBLK Sample ID: **MBLK-96173-96173** Units: **µg/Kg-dry** Analysis Date: **12/22/2016 11:58 PM**
Client ID: Run ID: **VMS9_161222B** SeqNo: **4217735** Prep Date: **12/22/2016** 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	0	0	0	0-0	0			
1,1,1-Trichloroethane	U	30	0	0	0	0-0	0			
1,1,2,2-Tetrachloroethane	U	30	0	0	0	0-0	0			
1,1,2-Trichloroethane	U	30	0	0	0	0-0	0			
1,1,2-Trichlorotrifluoroethane	U	30	0	0	0		0			
1,1-Dichloroethane	U	30	0	0	0	0-0	0			
1,1-Dichloroethene	U	30	0	0	0	0-0	0			
1,2,3-Trichlorobenzene	U	30	0	0	0	0-0	0			
1,2,4-Trichlorobenzene	U	30	0	0	0	0-0	0			
1,2,4-Trimethylbenzene	U	30	0	0	0	0-0	0			
1,2-Dibromo-3-chloropropane	U	30	0	0	0	0-0	0			
1,2-Dibromoethane	U	30	0	0	0	0-0	0			
1,2-Dichlorobenzene	U	30	0	0	0	0-0	0			
1,2-Dichloroethane	U	30	0	0	0	0-0	0			
1,2-Dichloropropane	U	30	0	0	0	0-0	0			
1,3,5-Trimethylbenzene	U	30	0	0	0	0-0	0			
1,3-Dichlorobenzene	U	30	0	0	0	0-0	0			
1,3-Dichloropropane	U	30	0	0	0	0-0	0			
1,4-Dichlorobenzene	U	30	0	0	0	0-0	0			
2,2-Dichloropropane	U	30	0	0	0	0-0	0			
2-Butanone	U	200	0	0	0	0-0	0			
2-Chlorotoluene	U	30	0	0	0	0-0	0			
2-Hexanone	U	30	0	0	0	0-0	0			
4-Chlorotoluene	U	30	0	0	0	0-0	0			
4-Methyl-2-pentanone	U	30	0	0	0	0-0	0			
Acetone	U	100	0	0	0	0-0	0			
Benzene	U	30	0	0	0	0-0	0			
Bromobenzene	U	30	0	0	0	0-0	0			
Bromochloromethane	U	30	0	0	0	0-0	0			
Bromodichloromethane	U	30	0	0	0	0-0	0			
Bromoform	U	30	0	0	0	0-0	0			
Bromomethane	U	75	0	0	0	0-0	0			
Carbon disulfide	U	30	0	0	0	0-0	0			
Carbon tetrachloride	U	30	0	0	0	0-0	0			
Chlorobenzene	U	30	0	0	0	0-0	0			
Chloroethane	U	100	0	0	0	0-0	0			
Chloroform	U	30	0	0	0	0-0	0			
Chloromethane	U	100	0	0	0	0-0	0			
cis-1,2-Dichloroethene	U	30	0	0	0	0-0	0			
cis-1,3-Dichloropropene	U	30	0	0	0	0-0	0			
Cyclohexane	U	30	0	0	0		0			
Dibromochloromethane	U	30	0	0	0	0-0	0			

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

Batch ID: **96173** Instrument ID **VMS9** Method: **SW8260B**

Dichlorodifluoromethane	U	30	0	0	0	0-0	0
Diisopropyl ether	U	30	0	0	0		0
Ethyl acetate	U	200	0	0	0	0-0	0
Ethylbenzene	U	30	0	0	0	0-0	0
Hexachlorobutadiene	U	100	0	0	0	0-0	0
Isopropylbenzene	U	30	0	0	0	0-0	0
m,p-Xylene	U	60	0	0	0	0-0	0
Methyl acetate	U	200	0	0	0		0
Methyl tert-butyl ether	U	30	0	0	0	0-0	0
Methylcyclohexane	U	30	0	0	0		0
Methylene chloride	U	30	0	0	0	0-0	0
Naphthalene	U	100	0	0	0	0-0	0
n-Butylbenzene	U	30	0	0	0	0-0	0
n-Propylbenzene	U	30	0	0	0	0-0	0
o-Xylene	U	30	0	0	0	0-0	0
p-Isopropyltoluene	U	30	0	0	0	0-0	0
sec-Butylbenzene	U	30	0	0	0	0-0	0
Styrene	U	30	0	0	0	0-0	0
tert-Butylbenzene	U	30	0	0	0	0-0	0
Tetrachloroethene	U	30	0	0	0	0-0	0
Toluene	U	30	0	0	0	0-0	0
trans-1,2-Dichloroethene	U	30	0	0	0	0-0	0
trans-1,3-Dichloropropene	U	30	0	0	0	0-0	0
Trichloroethene	U	30	0	0	0	0-0	0
Trichlorofluoromethane	U	30	0	0	0	0-0	0
Vinyl chloride	U	30	0	0	0	0-0	0
Xylenes, Total	U	90	0	0	0	0-0	0
Surr: 1,2-Dichloroethane-d4	*931.5*	0	*1000*	0	*93.2*	*70-130*	0
Surr: 4-Bromofluorobenzene	*987.5*	0	*1000*	0	*98.8*	*70-130*	0
Surr: Dibromofluoromethane	*911.5*	0	*1000*	0	*91.2*	*70-130*	0
Surr: Toluene-d8	*996.5*	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: 16121255
Project: Solenis (16153)

QC BATCH REPORT

Batch ID: **96173** Instrument ID **VMS9** Method: **SW8260B**

LCS Sample ID: **LCS-96173-96173** Units: **µg/Kg-dry** Analysis Date: **12/22/2016 10:44 PM**
Client ID: Run ID: **VMS9_161222B** SeqNo: **4217734** Prep Date: **12/22/2016** 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	1090	30	1000	0	109	75-125	0			
1,1,1-Trichloroethane	1033	30	1000	0	103	70-135	0			
1,1,2,2-Tetrachloroethane	1067	30	1000	0	107	55-130	0			
1,1,2-Trichloroethane	1081	30	1000	0	108	60-125	0			
1,1-Dichloroethane	1003	30	1000	0	100	75-125	0			
1,1-Dichloroethene	1034	30	1000	0	103	65-135	0			
1,2,3-Trichlorobenzene	1132	30	1000	0	113	60-135	0			
1,2,4-Trichlorobenzene	1135	30	1000	0	114	65-130	0			
1,2,4-Trimethylbenzene	1124	30	1000	0	112	65-135	0			
1,2-Dibromo-3-chloropropane	966	30	1000	0	96.6	40-135	0			
1,2-Dibromoethane	1475	30	1000	0	148	80-195	0			
1,2-Dichlorobenzene	1051	30	1000	0	105	75-120	0			
1,2-Dichloroethane	983.5	30	1000	0	98.4	70-135	0			
1,2-Dichloropropane	900	30	1000	0	90	70-120	0			
1,3,5-Trimethylbenzene	1156	30	1000	0	116	65-135	0			
1,3-Dichlorobenzene	1072	30	1000	0	107	70-125	0			
1,3-Dichloropropane	1036	30	1000	0	104	75-125	0			
1,4-Dichlorobenzene	1026	30	1000	0	103	70-125	0			
2,2-Dichloropropane	944	30	1000	0	94.4	54-146	0			
2-Butanone	924	200	1000	0	92.4	30-160	0			
2-Chlorotoluene	1062	30	1000	0	106	70-130	0			
2-Hexanone	867	30	1000	0	86.7	45-145	0			
4-Chlorotoluene	1084	30	1000	0	108	75-125	0			
4-Methyl-2-pentanone	1053	30	1000	0	105	74-176	0			
Acetone	986.5	100	1000	0	98.6	20-160	0			
Benzene	988	30	1000	0	98.8	75-125	0			
Bromobenzene	1036	30	1000	0	104	65-120	0			
Bromochloromethane	985	30	1000	0	98.5	74-134	0			
Bromodichloromethane	907.5	30	1000	0	90.8	70-130	0			
Bromoform	1038	30	1000	0	104	55-135	0			
Bromomethane	880	75	1000	0	88	50-170	0			
Carbon disulfide	1010	30	1000	0	101	45-160	0			
Carbon tetrachloride	1032	30	1000	0	103	65-135	0			
Chlorobenzene	1064	30	1000	0	106	75-125	0			
Chloroethane	944	100	1000	0	94.4	40-155	0			
Chloroform	970	30	1000	0	97	70-125	0			
Chloromethane	892.5	100	1000	0	89.2	50-144	0			
cis-1,2-Dichloroethene	944.5	30	1000	0	94.4	65-125	0			
cis-1,3-Dichloropropene	901.5	30	1000	0	90.2	70-125	0			
Dibromochloromethane	844	30	1000	0	84.4	65-135	0			
Dichlorodifluoromethane	834.5	30	1000	0	83.4	35-135	0			
Ethylbenzene	1076	30	1000	0	108	75-125	0			

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

Batch ID: **96173** Instrument ID **VMS9** Method: **SW8260B**

Hexachlorobutadiene	1118	100	1000	0	112	55-140	0
Isopropylbenzene	1148	30	1000	0	115	75-130	0
m,p-Xylene	2214	60	2000	0	111	80-125	0
Methyl tert-butyl ether	926	30	1000	0	92.6	75-125	0
Methylene chloride	978.5	30	1000	0	97.8	55-145	0
Naphthalene	1106	100	1000	0	111	40-140	0
n-Butylbenzene	1060	30	1000	0	106	65-140	0
n-Propylbenzene	1101	30	1000	0	110	65-135	0
o-Xylene	1106	30	1000	0	111	75-125	0
p-Isopropyltoluene	1100	30	1000	0	110	71-157	0
sec-Butylbenzene	1170	30	1000	0	117	65-130	0
Styrene	1178	30	1000	0	118	80-138	0
tert-Butylbenzene	1148	30	1000	0	115	65-130	0
Tetrachloroethene	1446	30	1000	0	145	67-167	0
Toluene	1039	30	1000	0	104	70-125	0
trans-1,2-Dichloroethene	1014	30	1000	0	101	65-135	0
trans-1,3-Dichloropropene	968	30	1000	0	96.8	59-129	0
Trichloroethene	1126	30	1000	0	113	75-125	0
Trichlorofluoromethane	1000	30	1000	0	100	25-185	0
Vinyl chloride	964.5	30	1000	0	96.4	60-125	0
Xylenes, Total	3320	90	3000	0	111	75-125	0
Surr: 1,2-Dichloroethane-d4	*904*	0	*1000*	0	*90.4*	*70-130*	0
Surr: 4-Bromofluorobenzene	*1016*	0	*1000*	0	*102*	*70-130*	0
Surr: Dibromofluoromethane	*1004*	0	*1000*	0	*100*	*70-130*	0
Surr: Toluene-d8	*996.5*	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: 16121255
Project: Solenis (16153)

QC BATCH REPORT

Batch ID: **96173** Instrument ID **VMS9** Method: **SW8260B**

MS Sample ID: **16121255-03A MS** Units: **µg/Kg-dry** Analysis Date: **12/23/2016 07:21 A**

Client ID: **SB-11 (25-27.5')** Run ID: **VMS9_161222B** SeqNo: **4217596** Prep Date: **12/22/2016** 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	1367	45	1500	0	91.2	75-125	0			
1,1,1-Trichloroethane	1366	45	1500	0	91	70-135	0			
1,1,2,2-Tetrachloroethane	961.5	45	1500	0	64.1	55-130	0			
1,1,2-Trichloroethane	1442	45	1500	0	96.1	60-125	0			
1,1-Dichloroethane	1380	45	1500	0	92	75-125	0			
1,1-Dichloroethene	1378	45	1500	0	91.8	65-135	0			
1,2,3-Trichlorobenzene	1421	45	1500	0	94.8	60-135	0			
1,2,4-Trichlorobenzene	1474	45	1500	0	98.2	65-130	0			
1,2,4-Trimethylbenzene	1503	45	1500	0	100	65-135	0			
1,2-Dibromo-3-chloropropane	1097	45	1500	0	73.2	40-135	0			
1,2-Dibromoethane	1856	45	1500	0	124	80-195	0			
1,2-Dichlorobenzene	1431	45	1500	0	95.4	75-120	0			
1,2-Dichloroethane	1330	45	1500	0	88.7	70-135	0			
1,2-Dichloropropane	1268	45	1500	0	84.5	70-120	0			
1,3,5-Trimethylbenzene	1600	45	1500	0	107	65-135	0			
1,3-Dichlorobenzene	1450	45	1500	0	96.6	70-125	0			
1,3-Dichloropropane	1372	45	1500	0	91.4	75-125	0			
1,4-Dichlorobenzene	1425	45	1500	0	95	70-125	0			
2,2-Dichloropropane	960	45	1500	0	64	54-146	0			
2-Butanone	2146	300	1500	0	143	30-160	0			
2-Chlorotoluene	1459	45	1500	0	97.2	70-130	0			
2-Hexanone	1779	45	1500	0	119	45-145	0			
4-Chlorotoluene	1492	45	1500	0	99.5	75-125	0			
4-Methyl-2-pentanone	1312	45	1500	0	87.4	74-176	0			
Acetone	2817	150	1500	0	188	20-160	0			S
Benzene	1391	45	1500	0	92.8	75-125	0			
Bromobenzene	1425	45	1500	0	95	65-120	0			
Bromochloromethane	1312	45	1500	0	87.4	74-134	0			
Bromodichloromethane	1106	45	1500	0	73.7	70-130	0			
Bromoform	1249	45	1500	0	83.2	55-135	0			
Bromomethane	586.5	110	1500	0	39.1	50-170	0			S
Carbon disulfide	1102	45	1500	0	73.4	45-160	0			
Carbon tetrachloride	1336	45	1500	0	89	65-135	0			
Chlorobenzene	1432	45	1500	0	95.5	75-125	0			
Chloroethane	987	150	1500	0	65.8	40-155	0			
Chloroform	1335	45	1500	0	89	70-125	0			
Chloromethane	1213	150	1500	0	80.8	50-144	0			
cis-1,2-Dichloroethene	1268	45	1500	0	84.6	65-125	0			
cis-1,3-Dichloropropene	1097	45	1500	0	73.2	70-125	0			
Dibromochloromethane	1042	45	1500	0	69.4	65-135	0			
Dichlorodifluoromethane	984	45	1500	0	65.6	35-135	0			
Ethylbenzene	1484	45	1500	0	98.9	75-125	0			

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

Batch ID: **96173** Instrument ID **VMS9** Method: **SW8260B**

Hexachlorobutadiene	1334	150	1500	0	89	55-140	0	
Isopropylbenzene	1578	45	1500	0	105	75-130	0	
m,p-Xylene	3080	90	3000	0	103	80-125	0	
Methyl tert-butyl ether	1270	45	1500	0	84.7	75-125	0	
Methylene chloride	1319	45	1500	0	88	55-145	0	
Naphthalene	1395	150	1500	0	93	40-140	0	
n-Butylbenzene	1354	45	1500	0	90.2	65-140	0	
n-Propylbenzene	1483	45	1500	0	98.8	65-135	0	
o-Xylene	1539	45	1500	0	103	75-125	0	
p-Isopropyltoluene	1459	45	1500	0	97.2	71-157	0	
sec-Butylbenzene	1554	45	1500	0	104	65-130	0	
Styrene	1620	45	1500	0	108	80-138	0	
tert-Butylbenzene	1540	45	1500	0	103	65-130	0	
Tetrachloroethene	2758	45	1500	0	184	67-167	0	S
Toluene	1421	45	1500	0	94.8	70-125	0	
trans-1,2-Dichloroethene	1362	45	1500	0	90.8	65-135	0	
trans-1,3-Dichloropropene	1149	45	1500	0	76.6	59-129	0	
Trichloroethene	1861	45	1500	0	124	75-125	0	
Trichlorofluoromethane	1336	45	1500	0	89	25-185	0	
Vinyl chloride	1295	45	1500	0	86.4	60-125	0	
Xylenes, Total	4619	140	4500	0	103	75-125	0	
Surr: 1,2-Dichloroethane-d4	*1389*	0	*1500*	0	*92.6*	*70-130*	0	
Surr: 4-Bromofluorobenzene	*1507*	0	*1500*	0	*100*	*70-130*	0	
Surr: Dibromofluoromethane	*1418*	0	*1500*	0	*94.5*	*70-130*	0	
Surr: Toluene-d8	*1478*	0	*1500*	0	*98.5*	*70-130*	0	

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

Client: The Sigma Group
Work Order: 16121255
Project: Solenis (16153)

QC BATCH REPORT

Batch ID: **96173** Instrument ID **VMS9** Method: **SW8260B**

MSD Sample ID: **16121255-03A MSD** Units: **µg/Kg-dry** Analysis Date: **12/23/2016 07:45 A**

Client ID: **SB-11 (25-27.5')** Run ID: **VMS9_161222B** SeqNo: **4217597** Prep Date: **12/22/2016** 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	1486	45	1500	0	99.1	75-125	1367	8.36	30	
1,1,1-Trichloroethane	1539	45	1500	0	103	70-135	1366	11.9	30	
1,1,2,2-Tetrachloroethane	1038	45	1500	0	69.2	55-130	961.5	7.65	30	
1,1,2-Trichloroethane	1541	45	1500	0	103	60-125	1442	6.69	30	
1,1-Dichloroethane	1501	45	1500	0	100	75-125	1380	8.38	30	
1,1-Dichloroethene	1526	45	1500	0	102	65-135	1378	10.2	30	
1,2,3-Trichlorobenzene	1565	45	1500	0	104	60-135	1421	9.64	30	
1,2,4-Trichlorobenzene	1616	45	1500	0	108	65-130	1474	9.22	30	
1,2,4-Trimethylbenzene	1666	45	1500	0	111	65-135	1503	10.3	30	
1,2-Dibromo-3-chloropropane	1162	45	1500	0	77.5	40-135	1097	5.77	30	
1,2-Dibromoethane	2037	45	1500	0	136	80-195	1856	9.33	30	
1,2-Dichlorobenzene	1528	45	1500	0	102	75-120	1431	6.59	30	
1,2-Dichloroethane	1466	45	1500	0	97.8	70-135	1330	9.71	30	
1,2-Dichloropropane	1324	45	1500	0	88.2	70-120	1268	4.34	30	
1,3,5-Trimethylbenzene	1746	45	1500	0	116	65-135	1600	8.74	30	
1,3-Dichlorobenzene	1562	45	1500	0	104	70-125	1450	7.47	30	
1,3-Dichloropropane	1456	45	1500	0	97.1	75-125	1372	5.99	30	
1,4-Dichlorobenzene	1507	45	1500	0	100	70-125	1425	5.58	30	
2,2-Dichloropropane	1077	45	1500	0	71.8	54-146	960	11.5	30	
2-Butanone	2302	300	1500	0	154	30-160	2146	7.05	30	
2-Chlorotoluene	1588	45	1500	0	106	70-130	1459	8.52	30	
2-Hexanone	2002	45	1500	0	133	45-145	1779	11.8	30	
4-Chlorotoluene	1643	45	1500	0	110	75-125	1492	9.61	30	
4-Methyl-2-pentanone	1384	45	1500	0	92.3	74-176	1312	5.4	30	
Acetone	3130	150	1500	0	209	20-160	2817	10.5	30	S
Benzene	1510	45	1500	0	101	75-125	1391	8.22	30	
Bromobenzene	1532	45	1500	0	102	65-120	1425	7.25	30	
Bromochloromethane	1452	45	1500	0	96.8	74-134	1312	10.1	30	
Bromodichloromethane	1237	45	1500	0	82.4	70-130	1106	11.2	30	
Bromoform	1356	45	1500	0	90.4	55-135	1249	8.23	30	
Bromomethane	642.8	110	1500	0	42.8	50-170	586.5	9.15	30	S
Carbon disulfide	1246	45	1500	0	83.1	45-160	1102	12.3	30	
Carbon tetrachloride	1498	45	1500	0	99.8	65-135	1336	11.4	30	
Chlorobenzene	1564	45	1500	0	104	75-125	1432	8.81	30	
Chloroethane	838.5	150	1500	0	55.9	40-155	987	16.3	30	
Chloroform	1448	45	1500	0	96.6	70-125	1335	8.14	30	
Chloromethane	1282	150	1500	0	85.4	50-144	1213	5.53	30	
cis-1,2-Dichloroethene	1379	45	1500	0	92	65-125	1268	8.39	30	
cis-1,3-Dichloropropene	1160	45	1500	0	77.4	70-125	1097	5.58	30	
Dibromochloromethane	1109	45	1500	0	74	65-135	1042	6.28	30	
Dichlorodifluoromethane	1092	45	1500	0	72.8	35-135	984	10.4	30	
Ethylbenzene	1606	45	1500	0	107	75-125	1484	7.91	30	

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

Batch ID: **96173** Instrument ID **VMS9** Method: **SW8260B**

Hexachlorobutadiene	1528	150	1500	0	102	55-140	1334	13.6	30	
Isopropylbenzene	1735	45	1500	0	116	75-130	1578	9.46	30	
m,p-Xylene	3306	90	3000	0	110	80-125	3080	7.07	30	
Methyl tert-butyl ether	1347	45	1500	0	89.8	75-125	1270	5.85	30	
Methylene chloride	1459	45	1500	0	97.2	55-145	1319	10	30	
Naphthalene	1522	150	1500	0	102	40-140	1395	8.74	30	
n-Butylbenzene	1524	45	1500	0	102	65-140	1354	11.8	30	
n-Propylbenzene	1652	45	1500	0	110	65-135	1483	10.8	30	
o-Xylene	1637	45	1500	0	109	75-125	1539	6.19	30	
p-Isopropyltoluene	1612	45	1500	0	107	71-157	1459	9.97	30	
sec-Butylbenzene	1750	45	1500	0	117	65-130	1554	11.9	30	
Styrene	1778	45	1500	0	118	80-138	1620	9.27	30	
tert-Butylbenzene	1725	45	1500	0	115	65-130	1540	11.3	30	
Tetrachloroethene	2914	45	1500	0	194	67-167	2758	5.5	30	S
Toluene	1517	45	1500	0	101	70-125	1421	6.53	30	
trans-1,2-Dichloroethene	1475	45	1500	0	98.4	65-135	1362	7.98	30	
trans-1,3-Dichloropropene	1232	45	1500	0	82.1	59-129	1149	6.93	30	
Trichloroethene	2081	45	1500	0	139	75-125	1861	11.2	30	S
Trichlorofluoromethane	1461	45	1500	0	97.4	25-185	1336	8.96	30	
Vinyl chloride	1424	45	1500	0	95	60-125	1295	9.49	30	
Xylenes, Total	4943	140	4500	0	110	75-125	4619	6.78	30	
Surr: 1,2-Dichloroethane-d4	*1392*	0	*1500*	0	*92.8*	*70-130*	1389	*0.216*	*30*	
Surr: 4-Bromofluorobenzene	*1527*	0	*1500*	0	*102*	*70-130*	1507	*1.33*	*30*	
Surr: Dibromofluoromethane	*1465*	0	*1500*	0	*97.6*	*70-130*	1418	*3.28*	*30*	
Surr: Toluene-d8	*1474*	0	*1500*	0	*98.2*	*70-130*	1478	*0.254*	*30*	

The following samples were analyzed in this batch:

16121255-01A	16121255-02A	16121255-03A
16121255-04A	16121255-05A	16121255-06A
16121255-07A	16121255-08A	16121255-09A
16121255-10A	16121255-11A	16121255-12A
16121255-13A	16121255-14A	16121255-15A
16121255-16A	16121255-17A	

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

Client: The Sigma Group
Work Order: 16121255
Project: Solenis (16153)

QC BATCH REPORT

Batch ID: **R203001** Instrument ID **MOIST** Method: **SW3550C**

MBLK Sample ID: **WBLKS-R203001** Units: **% of sample** Analysis Date: **12/21/2016 07:17 PM**
Client ID: Run ID: **MOIST_161221D** SeqNo: **4215225** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	0.03	0.050								J

LCS Sample ID: **LCS-R203001** Units: **% of sample** Analysis Date: **12/21/2016 07:17 PM**
Client ID: Run ID: **MOIST_161221D** SeqNo: **4215223** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	100	0.050	100	0	100	99.5-100.5	0			

DUP Sample ID: **16121253-22B DUP** Units: **% of sample** Analysis Date: **12/21/2016 07:17 PM**
Client ID: Run ID: **MOIST_161221D** SeqNo: **4215183** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	13.42	0.050	0	0	0		13.2	1.65	5	

DUP Sample ID: **16121253-26B DUP** Units: **% of sample** Analysis Date: **12/21/2016 07:17 PM**
Client ID: Run ID: **MOIST_161221D** SeqNo: **4215193** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	11.68	0.050	0	0	0		12.19	4.27	5	

The following samples were analyzed in this batch:

16121255-01B	16121255-02B	16121255-03B
16121255-04B	16121255-05B	16121255-06B
16121255-07B	16121255-08B	16121255-09B
16121255-10B	16121255-11B	16121255-12B
16121255-13B	16121255-14B	

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

Client: The Sigma Group
Work Order: 16121255
Project: Solenis (16153)

QC BATCH REPORT

Batch ID: **R203075** Instrument ID **MOIST** Method: **SW3550C**

MBLK Sample ID: **WBLKS-R203075** Units: **% of sample** Analysis Date: **12/22/2016 01:49 PM**
Client ID: Run ID: **MOIST_161222A** SeqNo: **4216914** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	U	0.050								

LCS Sample ID: **LCS-R203075** Units: **% of sample** Analysis Date: **12/22/2016 01:49 PM**
Client ID: Run ID: **MOIST_161222A** SeqNo: **4216913** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	100	0.050	100	0	100	99.5-100.5	0			

DUP Sample ID: **16121255-15B DUP** Units: **% of sample** Analysis Date: **12/22/2016 01:49 PM**
Client ID: **SB-12 (12.5-15')** Run ID: **MOIST_161222A** SeqNo: **4216892** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	15.52	0.050	0	0	0		16.6	6.72	5	R

DUP Sample ID: **16121255-16B DUP** Units: **% of sample** Analysis Date: **12/22/2016 01:49 PM**
Client ID: **SB-12 (27.5-30')** Run ID: **MOIST_161222A** SeqNo: **4216894** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	19.34	0.050	0	0	0		19.12	1.14	5	

The following samples were analyzed in this batch:

16121255-15B	16121255-16B

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

COC ID: 42196

ALS Project Manager: | ALS Work Order #: 1612255

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Solaris	A	VOCs
Work Order	19445	Project Number	16153	B	Triethylamine
Company Name	The Sigma Group	Bill To Company	The Sigma Group	C	
Send Report To	Cory Katzban	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	ckatzban@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	SB-11 (5-7.5')	12/19/16	8:30am	Soil	MeOH None	3	X	X									
2	SB-11 (10-12.5')	"	"	"	"	"	"	"									
3	SB-11 (25-27.5')	"	"	"	"	"	"	"									
4	PZ-9 (5-7.5')	"	10 am	"	"	"	"	"									
5	PZ-9 (12.5-15')	"	"	"	"	"	"	"									
6	PZ-9 (22.5-25')	"	"	"	"	"	"	"									
7	PZ-8 (10-12.5')	"	11am	"	"	"	"	"									
8	PZ-8 (20-22.5')	"	"	"	"	"	"	"									
9	PZ-8 (22.5-25')	"	"	"	"	"	"	"									
10	PZ-6 (7.5'-10')	"	12pm	"	"	"	"	"									

Sampler(s) Please Print & Sign: Cory Katzban

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:
	12/20/16	6:00pm	FEDEX
Relinquished by: FEDEX	Date: 12/21/16	Time: 1200	Received by (Laboratory):
Logged by (Laboratory): KW	Date: 12/21/16	Time: 1535	Checked by (Laboratory):

Notes:

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 Data ☐ 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.

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 2 of 2

COC ID: 42195

ALS Project Manager:

ALS Work Order #: 16121255

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Solenis	A	VOCs
Work Order	19445	Project Number	16153	B	Triethylamine
Company Name	The Sigma Group	Bill To Company	The Sigma Group	C	
Send Report To	Cory Katzban	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	ckatzban@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
11	PZ-6 (15-17.5')	12/19/16	12pm	Soil	MeOH Vials	3	X	X									
12	PZ-6 (25-27.5')	"	"	"	"	"	"	"									
13	PZ-6 (32.5-35')	"	"	"	"	"	"	"									
14	SB-12 (2.5-5')	"	1:15pm	"	"	"	"	"									
15	SB-12 (12.5-15')	"	"	"	"	"	"	"									
16	SB-12 (27.5-30')	"	"	"	"	"	"	"									
17	Trip (MeOH) Blank	"	-	-	MeOH	1	X										
8																	
9																	
10																	

Sampler(s) Please Print & Sign: Cory Katzban

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: 12/20/16	Time: 6:00pm	Received by: FedEx
Relinquished by: FedEx	Date: 12/21/16	Time: 1200	Received by (Laboratory):
Logged by (Laboratory): KR	Date: 12/21/16	Time: 1535	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 Data ☐ 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
3352 128th Avenue
Holland, Michigan 49424
Tel. +1 616 399 6070
Fax. +1 616 399 6185

CUSTODY SEAL

Date: 12/20/16 Time: 6:45 PM
Name: [illegible]
Company: TriSigma Kings, Inc.

Seal Broken By:

Date:

ALS Group, USA

Sample Receipt Checklist

Client Name: **SIGMAGROUP** Date/Time Received: **21-Dec-16 12:00**

Work Order: **16121255** Received by: **KRW**

Checklist completed by Keith Wierenga eSignature 21-Dec-16 Date Reviewed by: Chad Whelton eSignature 21-Dec-16 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:	12/21/2016 4:13:26 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:

APPENDIX E

Groundwater Laboratory Report and Chain of Custody

20-Jan-2017

Cory Katzban
The Sigma Group
1300 W. Canal Street
Milwaukee, WI 53233

Re: **Solenis (16153)** Work Order: **1701570**

Dear Cory,

ALS Environmental received 13 samples on 13-Jan-2017 08:30 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental 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 53.

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

Sincerely,

Electronically approved by: Chad Whelton

Chad Whelton
Project Manager

Certificate No: WI: 399084510

ADDRESS 3352 128th Ave Holland, Michigan 49424 | PHONE (616) 399-6070 | FAX (616) 399-6185
ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

ALS Group, USA

Date: 20-Jan-17

Client: The Sigma Group
Project: Solenis (16153)
Work Order: **1701570**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1701570-01	MW-6	Groundwater		1/11/2017 13:05	1/13/2017 08:30	☐
1701570-02	MW-10	Groundwater		1/11/2017 12:03	1/13/2017 08:30	☐
1701570-03	MW-12	Groundwater		1/11/2017 14:05	1/13/2017 08:30	☐
1701570-04	PZ-6	Groundwater		1/11/2017 13:10	1/13/2017 08:30	☐
1701570-05	PZ-9	Groundwater		1/11/2017 14:19	1/13/2017 08:30	☐
1701570-06	PZ-12	Groundwater		1/11/2017 13:50	1/13/2017 08:30	☐
1701570-07	MW-8	Groundwater		1/12/2017 09:52	1/13/2017 08:30	☐
1701570-08	PZ-8	Groundwater		1/12/2017 09:30	1/13/2017 08:30	☐
1701570-09	MW-9	Groundwater		1/12/2017 10:55	1/13/2017 08:30	☐
1701570-10	MW-1	Groundwater		1/12/2017 12:20	1/13/2017 08:30	☐
1701570-11	MW-2	Groundwater		1/12/2017 12:06	1/13/2017 08:30	☐
1701570-12	Duplicate	Groundwater		1/12/2017	1/13/2017 08:30	☐
1701570-13	Trip Blank	Water		1/11/2017	1/13/2017 08:30	☐

Client: The Sigma Group
Project: Solenis (16153)
Work Order: 1701570

Case Narrative

Samples for the above noted Work Order were received on 01/13/2017. 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 R204208, Method VOC_8260_W, Samples 1701570-10A, -11A and -12A: The samples ran at dilutions due to 1,2-Dichloropropane at high concentrations.

ALS Group, USA

Date: 20-Jan-17

Client: The Sigma Group
Project: Solenis (16153)
WorkOrder: **1701570**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
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
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
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter

ALS Group, USA

Date: *20-Jan-17*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: MW-6
Collection Date: 1/11/2017 01:05 PM

Work Order: 1701570
Lab ID: 1701570-01
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
ORGANIC COMPOUNDS BY GC-FID		Method: **SW8015M**					Analyst: **KYM**
Triethylamine	U		0.99	25	mg/L	1	1/18/2017 17:12
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260B**					Analyst: **BG**
1,1,1,2-Tetrachloroethane	U		0.22	1.0	µg/L	1	1/19/2017 14:14
1,1,1-Trichloroethane	U		0.36	1.0	µg/L	1	1/19/2017 14:14
1,1,2,2-Tetrachloroethane	U		0.19	1.0	µg/L	1	1/19/2017 14:14
1,1,2-Trichloroethane	U		0.40	1.0	µg/L	1	1/19/2017 14:14
1,1,2-Trichlorotrifluoroethane	U		0.42	1.0	µg/L	1	1/19/2017 14:14
1,1-Dichloroethane	U		0.31	1.0	µg/L	1	1/19/2017 14:14
1,1-Dichloroethene	U		0.28	1.0	µg/L	1	1/19/2017 14:14
1,2,3-Trichlorobenzene	U		0.17	1.0	µg/L	1	1/19/2017 14:14
1,2,4-Trichlorobenzene	U		0.21	1.0	µg/L	1	1/19/2017 14:14
1,2,4-Trimethylbenzene	U		0.37	1.0	µg/L	1	1/19/2017 14:14
1,2-Dibromo-3-chloropropane	U		0.97	1.0	µg/L	1	1/19/2017 14:14
1,2-Dibromoethane	U		0.98	1.0	µg/L	1	1/19/2017 14:14
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	1/19/2017 14:14
1,2-Dichloroethane	U		0.17	1.0	µg/L	1	1/19/2017 14:14
1,2-Dichloropropane	**6.7**		**0.25**	**1.0**	**µg/L**	1	1/19/2017 14:14
1,3,5-Trimethylbenzene	U		0.29	1.0	µg/L	1	1/19/2017 14:14
1,3-Dichlorobenzene	U		0.29	1.0	µg/L	1	1/19/2017 14:14
1,4-Dichlorobenzene	U		0.21	1.0	µg/L	1	1/19/2017 14:14
2,2-Dichloropropane	U		0.44	1.0	µg/L	1	1/19/2017 14:14
2-Butanone	U		0.58	5.0	µg/L	1	1/19/2017 14:14
2-Chlorotoluene	U		0.32	1.0	µg/L	1	1/19/2017 14:14
2-Hexanone	U		0.13	5.0	µg/L	1	1/19/2017 14:14
4-Chlorotoluene	U		0.28	1.0	µg/L	1	1/19/2017 14:14
4-Methyl-2-pentanone	U		0.11	1.0	µg/L	1	1/19/2017 14:14
Acetone	**34**		**0.92**	**10**	**µg/L**	1	1/19/2017 14:14
Benzene	U		0.30	1.0	µg/L	1	1/19/2017 14:14
Bromobenzene	U		0.24	1.0	µg/L	1	1/19/2017 14:14
Bromochloromethane	U		0.20	1.0	µg/L	1	1/19/2017 14:14
Bromodichloromethane	U		0.23	1.0	µg/L	1	1/19/2017 14:14
Bromoform	U		0.77	1.0	µg/L	1	1/19/2017 14:14
Bromomethane	U		0.38	1.0	µg/L	1	1/19/2017 14:14
Carbon disulfide	**1.5**		**0.23**	**1.0**	**µg/L**	1	1/19/2017 14:14
Carbon tetrachloride	U		0.31	1.0	µg/L	1	1/19/2017 14:14
Chlorobenzene	U		0.27	1.0	µg/L	1	1/19/2017 14:14
Chloroethane	U		0.29	1.0	µg/L	1	1/19/2017 14:14
Chloroform	U		0.26	1.0	µg/L	1	1/19/2017 14:14

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

ALS Group, USA

Date: *20-Jan-17*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: MW-6
Collection Date: 1/11/2017 01:05 PM

Work Order: 1701570
Lab ID: 1701570-01
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloromethane	U		0.17	1.0	µg/L	1	1/19/2017 14:14
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	1/19/2017 14:14
cis-1,3-Dichloropropene	U		0.39	1.0	µg/L	1	1/19/2017 14:14
Cyclohexane	U		0.22	1.0	µg/L	1	1/19/2017 14:14
Dibromochloromethane	U		0.38	1.0	µg/L	1	1/19/2017 14:14
Dichlorodifluoromethane	U		0.13	1.0	µg/L	1	1/19/2017 14:14
Diisopropyl ether	U		0.13	5.0	µg/L	1	1/19/2017 14:14
Ethyl acetate	U		0.25	5.0	µg/L	1	1/19/2017 14:14
Ethylbenzene	U		0.40	1.0	µg/L	1	1/19/2017 14:14
Hexachlorobutadiene	U		0.24	1.0	µg/L	1	1/19/2017 14:14
Isopropylbenzene	U		0.31	1.0	µg/L	1	1/19/2017 14:14
m,p-Xylene	U		0.98	2.0	µg/L	1	1/19/2017 14:14
Methyl acetate	U		0.23	2.0	µg/L	1	1/19/2017 14:14
Methyl tert-butyl ether	U		0.12	1.0	µg/L	1	1/19/2017 14:14
Methylcyclohexane	**1.5**		**0.27**	**1.0**	**µg/L**	1	1/19/2017 14:14
Methylene chloride	U		0.56	5.0	µg/L	1	1/19/2017 14:14
Naphthalene	U		0.18	5.0	µg/L	1	1/19/2017 14:14
n-Butylbenzene	U		0.22	1.0	µg/L	1	1/19/2017 14:14
n-Propylbenzene	U		0.24	1.0	µg/L	1	1/19/2017 14:14
o-Xylene	U		0.35	1.0	µg/L	1	1/19/2017 14:14
p-Isopropyltoluene	U		0.14	1.0	µg/L	1	1/19/2017 14:14
sec-Butylbenzene	U		0.29	1.0	µg/L	1	1/19/2017 14:14
Styrene	U		0.24	1.0	µg/L	1	1/19/2017 14:14
tert-Butylbenzene	U		0.34	1.0	µg/L	1	1/19/2017 14:14
Tetrachloroethene	U		0.27	1.0	µg/L	1	1/19/2017 14:14
Toluene	U		0.37	1.0	µg/L	1	1/19/2017 14:14
trans-1,2-Dichloroethene	U		0.28	1.0	µg/L	1	1/19/2017 14:14
trans-1,3-Dichloropropene	U		0.82	1.0	µg/L	1	1/19/2017 14:14
Trichloroethene	U		0.30	1.0	µg/L	1	1/19/2017 14:14
Trichlorofluoromethane	U		0.20	1.0	µg/L	1	1/19/2017 14:14
Vinyl chloride	U		0.20	1.0	µg/L	1	1/19/2017 14:14
Xylenes, Total	U		1.3	3.0	µg/L	1	1/19/2017 14:14
Surr: 1,2-Dichloroethane-d4	*109*			*75-120*	*%REC*	1	1/19/2017 14:14
Surr: 4-Bromofluorobenzene	*94.4*			*80-110*	*%REC*	1	1/19/2017 14:14
Surr: Dibromofluoromethane	*101*			*85-115*	*%REC*	1	1/19/2017 14:14
Surr: Toluene-d8	*99.6*			*85-110*	*%REC*	1	1/19/2017 14:14

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

ALS Group, USA

Date: *20-Jan-17*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: MW-10
Collection Date: 1/11/2017 12:03 PM

Work Order: 1701570
Lab ID: 1701570-02
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
ORGANIC COMPOUNDS BY GC-FID		Method: **SW8015M**					Analyst: **KYM**
Triethylamine	U		0.99	25	mg/L	1	1/18/2017 17:22
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260B**					Analyst: **BG**
1,1,1,2-Tetrachloroethane	U		0.22	1.0	µg/L	1	1/19/2017 14:41
1,1,1-Trichloroethane	U		0.36	1.0	µg/L	1	1/19/2017 14:41
1,1,2,2-Tetrachloroethane	U		0.19	1.0	µg/L	1	1/19/2017 14:41
1,1,2-Trichloroethane	U		0.40	1.0	µg/L	1	1/19/2017 14:41
1,1,2-Trichlorotrifluoroethane	U		0.42	1.0	µg/L	1	1/19/2017 14:41
1,1-Dichloroethane	U		0.31	1.0	µg/L	1	1/19/2017 14:41
1,1-Dichloroethene	U		0.28	1.0	µg/L	1	1/19/2017 14:41
1,2,3-Trichlorobenzene	U		0.17	1.0	µg/L	1	1/19/2017 14:41
1,2,4-Trichlorobenzene	U		0.21	1.0	µg/L	1	1/19/2017 14:41
1,2,4-Trimethylbenzene	U		0.37	1.0	µg/L	1	1/19/2017 14:41
1,2-Dibromo-3-chloropropane	U		0.97	1.0	µg/L	1	1/19/2017 14:41
1,2-Dibromoethane	U		0.98	1.0	µg/L	1	1/19/2017 14:41
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	1/19/2017 14:41
1,2-Dichloroethane	U		0.17	1.0	µg/L	1	1/19/2017 14:41
1,2-Dichloropropane	**92**		**1.2**	**5.0**	**µg/L**	5	1/16/2017 17:06
1,3,5-Trimethylbenzene	U		0.29	1.0	µg/L	1	1/19/2017 14:41
1,3-Dichlorobenzene	U		0.29	1.0	µg/L	1	1/19/2017 14:41
1,4-Dichlorobenzene	U		0.21	1.0	µg/L	1	1/19/2017 14:41
2,2-Dichloropropane	U		0.44	1.0	µg/L	1	1/19/2017 14:41
2-Butanone	U		0.58	5.0	µg/L	1	1/19/2017 14:41
2-Chlorotoluene	U		0.32	1.0	µg/L	1	1/19/2017 14:41
2-Hexanone	U		0.13	5.0	µg/L	1	1/19/2017 14:41
4-Chlorotoluene	U		0.28	1.0	µg/L	1	1/19/2017 14:41
4-Methyl-2-pentanone	U		0.11	1.0	µg/L	1	1/19/2017 14:41
Acetone	U		0.92	10	µg/L	1	1/19/2017 14:41
Benzene	U		0.30	1.0	µg/L	1	1/19/2017 14:41
Bromobenzene	U		0.24	1.0	µg/L	1	1/19/2017 14:41
Bromochloromethane	U		0.20	1.0	µg/L	1	1/19/2017 14:41
Bromodichloromethane	U		0.23	1.0	µg/L	1	1/19/2017 14:41
Bromoform	U		0.77	1.0	µg/L	1	1/19/2017 14:41
Bromomethane	U		0.38	1.0	µg/L	1	1/19/2017 14:41
Carbon disulfide	U		0.23	1.0	µg/L	1	1/19/2017 14:41
Carbon tetrachloride	U		0.31	1.0	µg/L	1	1/19/2017 14:41
Chlorobenzene	U		0.27	1.0	µg/L	1	1/19/2017 14:41
Chloroethane	U		0.29	1.0	µg/L	1	1/19/2017 14:41
Chloroform	U		0.26	1.0	µg/L	1	1/19/2017 14:41

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

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: MW-10
Collection Date: 1/11/2017 12:03 PM

Work Order: 1701570
Lab ID: 1701570-02
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloromethane	U		0.17	1.0	µg/L	1	1/19/2017 14:41
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	1/19/2017 14:41
cis-1,3-Dichloropropene	U		0.39	1.0	µg/L	1	1/19/2017 14:41
Cyclohexane	U		0.22	1.0	µg/L	1	1/19/2017 14:41
Dibromochloromethane	U		0.38	1.0	µg/L	1	1/19/2017 14:41
Dichlorodifluoromethane	U		0.13	1.0	µg/L	1	1/19/2017 14:41
Diisopropyl ether	**1.8**	J	**0.13**	**5.0**	**µg/L**	1	1/19/2017 14:41
Ethyl acetate	U		0.25	5.0	µg/L	1	1/19/2017 14:41
Ethylbenzene	U		0.40	1.0	µg/L	1	1/19/2017 14:41
Hexachlorobutadiene	U		0.24	1.0	µg/L	1	1/19/2017 14:41
Isopropylbenzene	U		0.31	1.0	µg/L	1	1/19/2017 14:41
m,p-Xylene	U		0.98	2.0	µg/L	1	1/19/2017 14:41
Methyl acetate	U		0.23	2.0	µg/L	1	1/19/2017 14:41
Methyl tert-butyl ether	U		0.12	1.0	µg/L	1	1/19/2017 14:41
Methylcyclohexane	U		0.27	1.0	µg/L	1	1/19/2017 14:41
Methylene chloride	U		0.56	5.0	µg/L	1	1/19/2017 14:41
Naphthalene	U		0.18	5.0	µg/L	1	1/19/2017 14:41
n-Butylbenzene	U		0.22	1.0	µg/L	1	1/19/2017 14:41
n-Propylbenzene	U		0.24	1.0	µg/L	1	1/19/2017 14:41
o-Xylene	U		0.35	1.0	µg/L	1	1/19/2017 14:41
p-Isopropyltoluene	U		0.14	1.0	µg/L	1	1/19/2017 14:41
sec-Butylbenzene	U		0.29	1.0	µg/L	1	1/19/2017 14:41
Styrene	U		0.24	1.0	µg/L	1	1/19/2017 14:41
tert-Butylbenzene	U		0.34	1.0	µg/L	1	1/19/2017 14:41
Tetrachloroethene	U		0.27	1.0	µg/L	1	1/19/2017 14:41
Toluene	U		0.37	1.0	µg/L	1	1/19/2017 14:41
trans-1,2-Dichloroethene	U		0.28	1.0	µg/L	1	1/19/2017 14:41
trans-1,3-Dichloropropene	U		0.82	1.0	µg/L	1	1/19/2017 14:41
Trichloroethene	U		0.30	1.0	µg/L	1	1/19/2017 14:41
Trichlorofluoromethane	U		0.20	1.0	µg/L	1	1/19/2017 14:41
Vinyl chloride	U		0.20	1.0	µg/L	1	1/19/2017 14:41
Xylenes, Total	U		1.3	3.0	µg/L	1	1/19/2017 14:41
Surr: 1,2-Dichloroethane-d4	*103*			*75-120*	*%REC*	5	1/16/2017 17:06
Surr: 1,2-Dichloroethane-d4	*109*			*75-120*	*%REC*	1	1/19/2017 14:41
Surr: 4-Bromofluorobenzene	*97.4*			*80-110*	*%REC*	5	1/16/2017 17:06
Surr: 4-Bromofluorobenzene	*95.2*			*80-110*	*%REC*	1	1/19/2017 14:41
Surr: Dibromofluoromethane	*91.4*			*85-115*	*%REC*	5	1/16/2017 17:06
Surr: Dibromofluoromethane	*102*			*85-115*	*%REC*	1	1/19/2017 14:41
Surr: Toluene-d8	*102*			*85-110*	*%REC*	5	1/16/2017 17:06
Surr: Toluene-d8	*99.6*			*85-110*	*%REC*	1	1/19/2017 14:41

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

ALS Group, USA

Date: *20-Jan-17*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: MW-12
Collection Date: 1/11/2017 02:05 PM

Work Order: 1701570
Lab ID: 1701570-03
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
ORGANIC COMPOUNDS BY GC-FID		Method: **SW8015M**					Analyst: **KYM**
Triethylamine	U		0.99	25	mg/L	1	1/18/2017 17:32
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260B**					Analyst: **BJB**
1,1,1,2-Tetrachloroethane	U		0.22	1.0	µg/L	1	1/13/2017 22:20
1,1,1-Trichloroethane	U		0.36	1.0	µg/L	1	1/13/2017 22:20
1,1,2,2-Tetrachloroethane	U		0.19	1.0	µg/L	1	1/13/2017 22:20
1,1,2-Trichloroethane	U		0.40	1.0	µg/L	1	1/13/2017 22:20
1,1,2-Trichlorotrifluoroethane	U		0.42	1.0	µg/L	1	1/13/2017 22:20
1,1-Dichloroethane	U		0.31	1.0	µg/L	1	1/13/2017 22:20
1,1-Dichloroethene	U		0.28	1.0	µg/L	1	1/13/2017 22:20
1,2,3-Trichlorobenzene	U		0.17	1.0	µg/L	1	1/13/2017 22:20
1,2,4-Trichlorobenzene	U		0.21	1.0	µg/L	1	1/13/2017 22:20
1,2,4-Trimethylbenzene	U		0.37	1.0	µg/L	1	1/13/2017 22:20
1,2-Dibromo-3-chloropropane	U		0.97	1.0	µg/L	1	1/13/2017 22:20
1,2-Dibromoethane	U		0.98	1.0	µg/L	1	1/13/2017 22:20
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	1/13/2017 22:20
1,2-Dichloroethane	U		0.17	1.0	µg/L	1	1/13/2017 22:20
1,2-Dichloropropane	U		0.25	1.0	µg/L	1	1/13/2017 22:20
1,3,5-Trimethylbenzene	U		0.29	1.0	µg/L	1	1/13/2017 22:20
1,3-Dichlorobenzene	U		0.29	1.0	µg/L	1	1/13/2017 22:20
1,4-Dichlorobenzene	U		0.21	1.0	µg/L	1	1/13/2017 22:20
2,2-Dichloropropane	U		0.44	1.0	µg/L	1	1/13/2017 22:20
2-Butanone	U		0.58	5.0	µg/L	1	1/13/2017 22:20
2-Chlorotoluene	U		0.32	1.0	µg/L	1	1/13/2017 22:20
2-Hexanone	U		0.13	5.0	µg/L	1	1/13/2017 22:20
4-Chlorotoluene	U		0.28	1.0	µg/L	1	1/13/2017 22:20
4-Methyl-2-pentanone	U		0.11	1.0	µg/L	1	1/13/2017 22:20
Acetone	**9.1**	J	**0.92**	**10**	**µg/L**	1	1/13/2017 22:20
Benzene	U		0.30	1.0	µg/L	1	1/13/2017 22:20
Bromobenzene	U		0.24	1.0	µg/L	1	1/13/2017 22:20
Bromochloromethane	U		0.20	1.0	µg/L	1	1/13/2017 22:20
Bromodichloromethane	U		0.23	1.0	µg/L	1	1/13/2017 22:20
Bromoform	U		0.77	1.0	µg/L	1	1/13/2017 22:20
Bromomethane	U		0.38	1.0	µg/L	1	1/13/2017 22:20
Carbon disulfide	U		0.23	1.0	µg/L	1	1/13/2017 22:20
Carbon tetrachloride	U		0.31	1.0	µg/L	1	1/13/2017 22:20
Chlorobenzene	U		0.27	1.0	µg/L	1	1/13/2017 22:20
Chloroethane	U		0.29	1.0	µg/L	1	1/13/2017 22:20
Chloroform	U		0.26	1.0	µg/L	1	1/13/2017 22:20

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

ALS Group, USA

Date: *20-Jan-17*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: MW-12
Collection Date: 1/11/2017 02:05 PM

Work Order: 1701570
Lab ID: 1701570-03
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloromethane	U		0.17	1.0	µg/L	1	1/13/2017 22:20
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	1/13/2017 22:20
cis-1,3-Dichloropropene	U		0.39	1.0	µg/L	1	1/13/2017 22:20
Cyclohexane	U		0.22	1.0	µg/L	1	1/13/2017 22:20
Dibromochloromethane	U		0.38	1.0	µg/L	1	1/13/2017 22:20
Dichlorodifluoromethane	U		0.13	1.0	µg/L	1	1/13/2017 22:20
Diisopropyl ether	U		0.13	5.0	µg/L	1	1/13/2017 22:20
Ethyl acetate	U		0.25	5.0	µg/L	1	1/13/2017 22:20
Ethylbenzene	U		0.40	1.0	µg/L	1	1/13/2017 22:20
Hexachlorobutadiene	U		0.24	1.0	µg/L	1	1/13/2017 22:20
Isopropylbenzene	U		0.31	1.0	µg/L	1	1/13/2017 22:20
m,p-Xylene	U		0.98	2.0	µg/L	1	1/13/2017 22:20
Methyl acetate	U		0.23	2.0	µg/L	1	1/13/2017 22:20
Methyl tert-butyl ether	U		0.12	1.0	µg/L	1	1/13/2017 22:20
Methylcyclohexane	U		0.27	1.0	µg/L	1	1/13/2017 22:20
Methylene chloride	U		0.56	5.0	µg/L	1	1/13/2017 22:20
Naphthalene	U		0.18	5.0	µg/L	1	1/13/2017 22:20
n-Butylbenzene	U		0.22	1.0	µg/L	1	1/13/2017 22:20
n-Propylbenzene	U		0.24	1.0	µg/L	1	1/13/2017 22:20
o-Xylene	U		0.35	1.0	µg/L	1	1/13/2017 22:20
p-Isopropyltoluene	U		0.14	1.0	µg/L	1	1/13/2017 22:20
sec-Butylbenzene	U		0.29	1.0	µg/L	1	1/13/2017 22:20
Styrene	U		0.24	1.0	µg/L	1	1/13/2017 22:20
tert-Butylbenzene	U		0.34	1.0	µg/L	1	1/13/2017 22:20
Tetrachloroethene	U		0.27	1.0	µg/L	1	1/13/2017 22:20
Toluene	U		0.37	1.0	µg/L	1	1/13/2017 22:20
trans-1,2-Dichloroethene	U		0.28	1.0	µg/L	1	1/13/2017 22:20
trans-1,3-Dichloropropene	U		0.82	1.0	µg/L	1	1/13/2017 22:20
Trichloroethene	U		0.30	1.0	µg/L	1	1/13/2017 22:20
Trichlorofluoromethane	U		0.20	1.0	µg/L	1	1/13/2017 22:20
Vinyl chloride	U		0.20	1.0	µg/L	1	1/13/2017 22:20
Xylenes, Total	U		1.3	3.0	µg/L	1	1/13/2017 22:20
Surr: 1,2-Dichloroethane-d4	*100*			*75-120*	*%REC*	1	1/13/2017 22:20
Surr: 4-Bromofluorobenzene	*99.8*			*80-110*	*%REC*	1	1/13/2017 22:20
Surr: Dibromofluoromethane	*100*			*85-115*	*%REC*	1	1/13/2017 22:20
Surr: Toluene-d8	*97.8*			*85-110*	*%REC*	1	1/13/2017 22:20

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

ALS Group, USA

Date: *20-Jan-17*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: PZ-6
Collection Date: 1/11/2017 01:10 PM

Work Order: 1701570
Lab ID: 1701570-04
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
ORGANIC COMPOUNDS BY GC-FID		Method: **SW8015M**					Analyst: **KYM**
Triethylamine	U		0.99	25	mg/L	1	1/18/2017 17:42
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260B**					Analyst: **BJB**
1,1,1,2-Tetrachloroethane	U		0.22	1.0	µg/L	1	1/13/2017 22:44
1,1,1-Trichloroethane	U		0.36	1.0	µg/L	1	1/13/2017 22:44
1,1,2,2-Tetrachloroethane	U		0.19	1.0	µg/L	1	1/13/2017 22:44
1,1,2-Trichloroethane	U		0.40	1.0	µg/L	1	1/13/2017 22:44
1,1,2-Trichlorotrifluoroethane	U		0.42	1.0	µg/L	1	1/13/2017 22:44
1,1-Dichloroethane	U		0.31	1.0	µg/L	1	1/13/2017 22:44
1,1-Dichloroethene	U		0.28	1.0	µg/L	1	1/13/2017 22:44
1,2,3-Trichlorobenzene	U		0.17	1.0	µg/L	1	1/13/2017 22:44
1,2,4-Trichlorobenzene	U		0.21	1.0	µg/L	1	1/13/2017 22:44
1,2,4-Trimethylbenzene	U		0.37	1.0	µg/L	1	1/13/2017 22:44
1,2-Dibromo-3-chloropropane	U		0.97	1.0	µg/L	1	1/13/2017 22:44
1,2-Dibromoethane	U		0.98	1.0	µg/L	1	1/13/2017 22:44
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	1/13/2017 22:44
1,2-Dichloroethane	U		0.17	1.0	µg/L	1	1/13/2017 22:44
1,2-Dichloropropane	**1.2**		**0.25**	**1.0**	**µg/L**	1	1/13/2017 22:44
1,3,5-Trimethylbenzene	U		0.29	1.0	µg/L	1	1/13/2017 22:44
1,3-Dichlorobenzene	U		0.29	1.0	µg/L	1	1/13/2017 22:44
1,4-Dichlorobenzene	U		0.21	1.0	µg/L	1	1/13/2017 22:44
2,2-Dichloropropane	U		0.44	1.0	µg/L	1	1/13/2017 22:44
2-Butanone	U		0.58	5.0	µg/L	1	1/13/2017 22:44
2-Chlorotoluene	U		0.32	1.0	µg/L	1	1/13/2017 22:44
2-Hexanone	U		0.13	5.0	µg/L	1	1/13/2017 22:44
4-Chlorotoluene	U		0.28	1.0	µg/L	1	1/13/2017 22:44
4-Methyl-2-pentanone	U		0.11	1.0	µg/L	1	1/13/2017 22:44
Acetone	**37**		**0.92**	**10**	**µg/L**	1	1/13/2017 22:44
Benzene	U		0.30	1.0	µg/L	1	1/13/2017 22:44
Bromobenzene	U		0.24	1.0	µg/L	1	1/13/2017 22:44
Bromochloromethane	U		0.20	1.0	µg/L	1	1/13/2017 22:44
Bromodichloromethane	U		0.23	1.0	µg/L	1	1/13/2017 22:44
Bromoform	U		0.77	1.0	µg/L	1	1/13/2017 22:44
Bromomethane	U		0.38	1.0	µg/L	1	1/13/2017 22:44
Carbon disulfide	**1.2**		**0.23**	**1.0**	**µg/L**	1	1/13/2017 22:44
Carbon tetrachloride	U		0.31	1.0	µg/L	1	1/13/2017 22:44
Chlorobenzene	U		0.27	1.0	µg/L	1	1/13/2017 22:44
Chloroethane	U		0.29	1.0	µg/L	1	1/13/2017 22:44
Chloroform	U		0.26	1.0	µg/L	1	1/13/2017 22:44

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

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: PZ-6
Collection Date: 1/11/2017 01:10 PM

Work Order: 1701570
Lab ID: 1701570-04
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloromethane	U		0.17	1.0	µg/L	1	1/13/2017 22:44
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	1/13/2017 22:44
cis-1,3-Dichloropropene	U		0.39	1.0	µg/L	1	1/13/2017 22:44
Cyclohexane	U		0.22	1.0	µg/L	1	1/13/2017 22:44
Dibromochloromethane	U		0.38	1.0	µg/L	1	1/13/2017 22:44
Dichlorodifluoromethane	U		0.13	1.0	µg/L	1	1/13/2017 22:44
Diisopropyl ether	U		0.13	5.0	µg/L	1	1/13/2017 22:44
Ethyl acetate	U		0.25	5.0	µg/L	1	1/13/2017 22:44
Ethylbenzene	U		0.40	1.0	µg/L	1	1/13/2017 22:44
Hexachlorobutadiene	U		0.24	1.0	µg/L	1	1/13/2017 22:44
Isopropylbenzene	U		0.31	1.0	µg/L	1	1/13/2017 22:44
m,p-Xylene	U		0.98	2.0	µg/L	1	1/13/2017 22:44
Methyl acetate	U		0.23	2.0	µg/L	1	1/13/2017 22:44
Methyl tert-butyl ether	U		0.12	1.0	µg/L	1	1/13/2017 22:44
Methylcyclohexane	U		0.27	1.0	µg/L	1	1/13/2017 22:44
Methylene chloride	U		0.56	5.0	µg/L	1	1/13/2017 22:44
Naphthalene	U		0.18	5.0	µg/L	1	1/13/2017 22:44
n-Butylbenzene	U		0.22	1.0	µg/L	1	1/13/2017 22:44
n-Propylbenzene	U		0.24	1.0	µg/L	1	1/13/2017 22:44
o-Xylene	U		0.35	1.0	µg/L	1	1/13/2017 22:44
p-Isopropyltoluene	U		0.14	1.0	µg/L	1	1/13/2017 22:44
sec-Butylbenzene	U		0.29	1.0	µg/L	1	1/13/2017 22:44
Styrene	U		0.24	1.0	µg/L	1	1/13/2017 22:44
tert-Butylbenzene	U		0.34	1.0	µg/L	1	1/13/2017 22:44
Tetrachloroethene	U		0.27	1.0	µg/L	1	1/13/2017 22:44
Toluene	U		0.37	1.0	µg/L	1	1/13/2017 22:44
trans-1,2-Dichloroethene	U		0.28	1.0	µg/L	1	1/13/2017 22:44
trans-1,3-Dichloropropene	U		0.82	1.0	µg/L	1	1/13/2017 22:44
Trichloroethene	U		0.30	1.0	µg/L	1	1/13/2017 22:44
Trichlorofluoromethane	U		0.20	1.0	µg/L	1	1/13/2017 22:44
Vinyl chloride	U		0.20	1.0	µg/L	1	1/13/2017 22:44
Xylenes, Total	U		1.3	3.0	µg/L	1	1/13/2017 22:44
Surr: 1,2-Dichloroethane-d4	*103*			*75-120*	*%REC*	1	1/13/2017 22:44
Surr: 4-Bromofluorobenzene	*97.0*			*80-110*	*%REC*	1	1/13/2017 22:44
Surr: Dibromofluoromethane	*99.1*			*85-115*	*%REC*	1	1/13/2017 22:44
Surr: Toluene-d8	*97.4*			*85-110*	*%REC*	1	1/13/2017 22:44

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

ALS Group, USA

Date: *20-Jan-17*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: PZ-9
Collection Date: 1/11/2017 02:19 PM

Work Order: 1701570
Lab ID: 1701570-05
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
ORGANIC COMPOUNDS BY GC-FID		Method: **SW8015M**					Analyst: **KYM**
Triethylamine	U		0.99	25	mg/L	1	1/18/2017 18:12
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260B**					Analyst: **BJB**
1,1,1,2-Tetrachloroethane	U		0.22	1.0	µg/L	1	1/13/2017 23:09
1,1,1-Trichloroethane	U		0.36	1.0	µg/L	1	1/13/2017 23:09
1,1,2,2-Tetrachloroethane	U		0.19	1.0	µg/L	1	1/13/2017 23:09
1,1,2-Trichloroethane	U		0.40	1.0	µg/L	1	1/13/2017 23:09
1,1,2-Trichlorotrifluoroethane	U		0.42	1.0	µg/L	1	1/13/2017 23:09
1,1-Dichloroethane	U		0.31	1.0	µg/L	1	1/13/2017 23:09
1,1-Dichloroethene	U		0.28	1.0	µg/L	1	1/13/2017 23:09
1,2,3-Trichlorobenzene	U		0.17	1.0	µg/L	1	1/13/2017 23:09
1,2,4-Trichlorobenzene	U		0.21	1.0	µg/L	1	1/13/2017 23:09
1,2,4-Trimethylbenzene	U		0.37	1.0	µg/L	1	1/13/2017 23:09
1,2-Dibromo-3-chloropropane	U		0.97	1.0	µg/L	1	1/13/2017 23:09
1,2-Dibromoethane	U		0.98	1.0	µg/L	1	1/13/2017 23:09
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	1/13/2017 23:09
1,2-Dichloroethane	U		0.17	1.0	µg/L	1	1/13/2017 23:09
1,2-Dichloropropane	U		0.25	1.0	µg/L	1	1/13/2017 23:09
1,3,5-Trimethylbenzene	U		0.29	1.0	µg/L	1	1/13/2017 23:09
1,3-Dichlorobenzene	U		0.29	1.0	µg/L	1	1/13/2017 23:09
1,4-Dichlorobenzene	U		0.21	1.0	µg/L	1	1/13/2017 23:09
2,2-Dichloropropane	U		0.44	1.0	µg/L	1	1/13/2017 23:09
2-Butanone	U		0.58	5.0	µg/L	1	1/13/2017 23:09
2-Chlorotoluene	U		0.32	1.0	µg/L	1	1/13/2017 23:09
2-Hexanone	U		0.13	5.0	µg/L	1	1/13/2017 23:09
4-Chlorotoluene	U		0.28	1.0	µg/L	1	1/13/2017 23:09
4-Methyl-2-pentanone	U		0.11	1.0	µg/L	1	1/13/2017 23:09
Acetone	U		0.92	10	µg/L	1	1/13/2017 23:09
Benzene	U		0.30	1.0	µg/L	1	1/13/2017 23:09
Bromobenzene	U		0.24	1.0	µg/L	1	1/13/2017 23:09
Bromochloromethane	U		0.20	1.0	µg/L	1	1/13/2017 23:09
Bromodichloromethane	U		0.23	1.0	µg/L	1	1/13/2017 23:09
Bromoform	U		0.77	1.0	µg/L	1	1/13/2017 23:09
Bromomethane	U		0.38	1.0	µg/L	1	1/13/2017 23:09
Carbon disulfide	**0.47**	J	**0.23**	**1.0**	**µg/L**	1	1/13/2017 23:09
Carbon tetrachloride	U		0.31	1.0	µg/L	1	1/13/2017 23:09
Chlorobenzene	U		0.27	1.0	µg/L	1	1/13/2017 23:09
Chloroethane	U		0.29	1.0	µg/L	1	1/13/2017 23:09
Chloroform	U		0.26	1.0	µg/L	1	1/13/2017 23:09

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

ALS Group, USA

Date: *20-Jan-17*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: PZ-9
Collection Date: 1/11/2017 02:19 PM

Work Order: 1701570
Lab ID: 1701570-05
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloromethane	U		0.17	1.0	µg/L	1	1/13/2017 23:09
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	1/13/2017 23:09
cis-1,3-Dichloropropene	U		0.39	1.0	µg/L	1	1/13/2017 23:09
Cyclohexane	U		0.22	1.0	µg/L	1	1/13/2017 23:09
Dibromochloromethane	U		0.38	1.0	µg/L	1	1/13/2017 23:09
Dichlorodifluoromethane	U		0.13	1.0	µg/L	1	1/13/2017 23:09
Diisopropyl ether	U		0.13	5.0	µg/L	1	1/13/2017 23:09
Ethyl acetate	U		0.25	5.0	µg/L	1	1/13/2017 23:09
Ethylbenzene	U		0.40	1.0	µg/L	1	1/13/2017 23:09
Hexachlorobutadiene	U		0.24	1.0	µg/L	1	1/13/2017 23:09
Isopropylbenzene	U		0.31	1.0	µg/L	1	1/13/2017 23:09
m,p-Xylene	U		0.98	2.0	µg/L	1	1/13/2017 23:09
Methyl acetate	U		0.23	2.0	µg/L	1	1/13/2017 23:09
Methyl tert-butyl ether	U		0.12	1.0	µg/L	1	1/13/2017 23:09
Methylcyclohexane	U		0.27	1.0	µg/L	1	1/13/2017 23:09
Methylene chloride	U		0.56	5.0	µg/L	1	1/13/2017 23:09
Naphthalene	U		0.18	5.0	µg/L	1	1/13/2017 23:09
n-Butylbenzene	U		0.22	1.0	µg/L	1	1/13/2017 23:09
n-Propylbenzene	U		0.24	1.0	µg/L	1	1/13/2017 23:09
o-Xylene	U		0.35	1.0	µg/L	1	1/13/2017 23:09
p-Isopropyltoluene	U		0.14	1.0	µg/L	1	1/13/2017 23:09
sec-Butylbenzene	U		0.29	1.0	µg/L	1	1/13/2017 23:09
Styrene	U		0.24	1.0	µg/L	1	1/13/2017 23:09
tert-Butylbenzene	U		0.34	1.0	µg/L	1	1/13/2017 23:09
Tetrachloroethene	U		0.27	1.0	µg/L	1	1/13/2017 23:09
Toluene	U		0.37	1.0	µg/L	1	1/13/2017 23:09
trans-1,2-Dichloroethene	U		0.28	1.0	µg/L	1	1/13/2017 23:09
trans-1,3-Dichloropropene	U		0.82	1.0	µg/L	1	1/13/2017 23:09
Trichloroethene	U		0.30	1.0	µg/L	1	1/13/2017 23:09
Trichlorofluoromethane	U		0.20	1.0	µg/L	1	1/13/2017 23:09
Vinyl chloride	U		0.20	1.0	µg/L	1	1/13/2017 23:09
Xylenes, Total	U		1.3	3.0	µg/L	1	1/13/2017 23:09
Surr: 1,2-Dichloroethane-d4	*102*			*75-120*	*%REC*	1	1/13/2017 23:09
Surr: 4-Bromofluorobenzene	*97.4*			*80-110*	*%REC*	1	1/13/2017 23:09
Surr: Dibromofluoromethane	*100*			*85-115*	*%REC*	1	1/13/2017 23:09
Surr: Toluene-d8	*99.6*			*85-110*	*%REC*	1	1/13/2017 23:09

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

ALS Group, USA

Date: *20-Jan-17*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: PZ-12
Collection Date: 1/11/2017 01:50 PM

Work Order: 1701570
Lab ID: 1701570-06
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
ORGANIC COMPOUNDS BY GC-FID		Method: **SW8015M**					Analyst: **KYM**
Triethylamine	U		0.99	25	mg/L	1	1/18/2017 18:22
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260B**					Analyst: **BJB**
1,1,1,2-Tetrachloroethane	U		0.22	1.0	µg/L	1	1/13/2017 23:33
1,1,1-Trichloroethane	U		0.36	1.0	µg/L	1	1/13/2017 23:33
1,1,2,2-Tetrachloroethane	U		0.19	1.0	µg/L	1	1/13/2017 23:33
1,1,2-Trichloroethane	U		0.40	1.0	µg/L	1	1/13/2017 23:33
1,1,2-Trichlorotrifluoroethane	U		0.42	1.0	µg/L	1	1/13/2017 23:33
1,1-Dichloroethane	U		0.31	1.0	µg/L	1	1/13/2017 23:33
1,1-Dichloroethene	U		0.28	1.0	µg/L	1	1/13/2017 23:33
1,2,3-Trichlorobenzene	U		0.17	1.0	µg/L	1	1/13/2017 23:33
1,2,4-Trichlorobenzene	U		0.21	1.0	µg/L	1	1/13/2017 23:33
1,2,4-Trimethylbenzene	U		0.37	1.0	µg/L	1	1/13/2017 23:33
1,2-Dibromo-3-chloropropane	U		0.97	1.0	µg/L	1	1/13/2017 23:33
1,2-Dibromoethane	U		0.98	1.0	µg/L	1	1/13/2017 23:33
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	1/13/2017 23:33
1,2-Dichloroethane	U		0.17	1.0	µg/L	1	1/13/2017 23:33
1,2-Dichloropropane	U		0.25	1.0	µg/L	1	1/13/2017 23:33
1,3,5-Trimethylbenzene	U		0.29	1.0	µg/L	1	1/13/2017 23:33
1,3-Dichlorobenzene	U		0.29	1.0	µg/L	1	1/13/2017 23:33
1,4-Dichlorobenzene	U		0.21	1.0	µg/L	1	1/13/2017 23:33
2,2-Dichloropropane	U		0.44	1.0	µg/L	1	1/13/2017 23:33
2-Butanone	U		0.58	5.0	µg/L	1	1/13/2017 23:33
2-Chlorotoluene	U		0.32	1.0	µg/L	1	1/13/2017 23:33
2-Hexanone	U		0.13	5.0	µg/L	1	1/13/2017 23:33
4-Chlorotoluene	U		0.28	1.0	µg/L	1	1/13/2017 23:33
4-Methyl-2-pentanone	U		0.11	1.0	µg/L	1	1/13/2017 23:33
Acetone	U		0.92	10	µg/L	1	1/13/2017 23:33
Benzene	U		0.30	1.0	µg/L	1	1/13/2017 23:33
Bromobenzene	U		0.24	1.0	µg/L	1	1/13/2017 23:33
Bromochloromethane	U		0.20	1.0	µg/L	1	1/13/2017 23:33
Bromodichloromethane	U		0.23	1.0	µg/L	1	1/13/2017 23:33
Bromoform	U		0.77	1.0	µg/L	1	1/13/2017 23:33
Bromomethane	U		0.38	1.0	µg/L	1	1/13/2017 23:33
Carbon disulfide	U		0.23	1.0	µg/L	1	1/13/2017 23:33
Carbon tetrachloride	U		0.31	1.0	µg/L	1	1/13/2017 23:33
Chlorobenzene	U		0.27	1.0	µg/L	1	1/13/2017 23:33
Chloroethane	U		0.29	1.0	µg/L	1	1/13/2017 23:33
Chloroform	U		0.26	1.0	µg/L	1	1/13/2017 23:33

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

ALS Group, USA

Date: *20-Jan-17*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: PZ-12
Collection Date: 1/11/2017 01:50 PM

Work Order: 1701570
Lab ID: 1701570-06
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloromethane	U		0.17	1.0	µg/L	1	1/13/2017 23:33
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	1/13/2017 23:33
cis-1,3-Dichloropropene	U		0.39	1.0	µg/L	1	1/13/2017 23:33
Cyclohexane	U		0.22	1.0	µg/L	1	1/13/2017 23:33
Dibromochloromethane	U		0.38	1.0	µg/L	1	1/13/2017 23:33
Dichlorodifluoromethane	U		0.13	1.0	µg/L	1	1/13/2017 23:33
Diisopropyl ether	U		0.13	5.0	µg/L	1	1/13/2017 23:33
Ethyl acetate	U		0.25	5.0	µg/L	1	1/13/2017 23:33
Ethylbenzene	U		0.40	1.0	µg/L	1	1/13/2017 23:33
Hexachlorobutadiene	U		0.24	1.0	µg/L	1	1/13/2017 23:33
Isopropylbenzene	U		0.31	1.0	µg/L	1	1/13/2017 23:33
m,p-Xylene	U		0.98	2.0	µg/L	1	1/13/2017 23:33
Methyl acetate	U		0.23	2.0	µg/L	1	1/13/2017 23:33
Methyl tert-butyl ether	U		0.12	1.0	µg/L	1	1/13/2017 23:33
Methylcyclohexane	U		0.27	1.0	µg/L	1	1/13/2017 23:33
Methylene chloride	U		0.56	5.0	µg/L	1	1/13/2017 23:33
Naphthalene	U		0.18	5.0	µg/L	1	1/13/2017 23:33
n-Butylbenzene	U		0.22	1.0	µg/L	1	1/13/2017 23:33
n-Propylbenzene	U		0.24	1.0	µg/L	1	1/13/2017 23:33
o-Xylene	U		0.35	1.0	µg/L	1	1/13/2017 23:33
p-Isopropyltoluene	U		0.14	1.0	µg/L	1	1/13/2017 23:33
sec-Butylbenzene	U		0.29	1.0	µg/L	1	1/13/2017 23:33
Styrene	U		0.24	1.0	µg/L	1	1/13/2017 23:33
tert-Butylbenzene	U		0.34	1.0	µg/L	1	1/13/2017 23:33
Tetrachloroethene	U		0.27	1.0	µg/L	1	1/13/2017 23:33
Toluene	U		0.37	1.0	µg/L	1	1/13/2017 23:33
trans-1,2-Dichloroethene	U		0.28	1.0	µg/L	1	1/13/2017 23:33
trans-1,3-Dichloropropene	U		0.82	1.0	µg/L	1	1/13/2017 23:33
Trichloroethene	U		0.30	1.0	µg/L	1	1/13/2017 23:33
Trichlorofluoromethane	U		0.20	1.0	µg/L	1	1/13/2017 23:33
Vinyl chloride	U		0.20	1.0	µg/L	1	1/13/2017 23:33
Xylenes, Total	U		1.3	3.0	µg/L	1	1/13/2017 23:33
Surr: 1,2-Dichloroethane-d4	*99.2*			*75-120*	*%REC*	1	1/13/2017 23:33
Surr: 4-Bromofluorobenzene	*97.0*			*80-110*	*%REC*	1	1/13/2017 23:33
Surr: Dibromofluoromethane	*94.8*			*85-115*	*%REC*	1	1/13/2017 23:33
Surr: Toluene-d8	*98.2*			*85-110*	*%REC*	1	1/13/2017 23:33

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

ALS Group, USA

Date: *20-Jan-17*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: MW-8
Collection Date: 1/12/2017 09:52 AM

Work Order: 1701570
Lab ID: 1701570-07
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
ORGANIC COMPOUNDS BY GC-FID		Method: **SW8015M**					Analyst: **KYM**
Triethylamine	U		0.99	25	mg/L	1	1/18/2017 18:32
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260B**					Analyst: **BJB**
1,1,1,2-Tetrachloroethane	U		0.22	1.0	µg/L	1	1/13/2017 23:57
1,1,1-Trichloroethane	U		0.36	1.0	µg/L	1	1/13/2017 23:57
1,1,2,2-Tetrachloroethane	U		0.19	1.0	µg/L	1	1/13/2017 23:57
1,1,2-Trichloroethane	U		0.40	1.0	µg/L	1	1/13/2017 23:57
1,1,2-Trichlorotrifluoroethane	U		0.42	1.0	µg/L	1	1/13/2017 23:57
1,1-Dichloroethane	U		0.31	1.0	µg/L	1	1/13/2017 23:57
1,1-Dichloroethene	U		0.28	1.0	µg/L	1	1/13/2017 23:57
1,2,3-Trichlorobenzene	U		0.17	1.0	µg/L	1	1/13/2017 23:57
1,2,4-Trichlorobenzene	U		0.21	1.0	µg/L	1	1/13/2017 23:57
1,2,4-Trimethylbenzene	U		0.37	1.0	µg/L	1	1/13/2017 23:57
1,2-Dibromo-3-chloropropane	U		0.97	1.0	µg/L	1	1/13/2017 23:57
1,2-Dibromoethane	U		0.98	1.0	µg/L	1	1/13/2017 23:57
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	1/13/2017 23:57
1,2-Dichloroethane	U		0.17	1.0	µg/L	1	1/13/2017 23:57
1,2-Dichloropropane	**2.4**		**0.25**	**1.0**	**µg/L**	1	1/13/2017 23:57
1,3,5-Trimethylbenzene	U		0.29	1.0	µg/L	1	1/13/2017 23:57
1,3-Dichlorobenzene	U		0.29	1.0	µg/L	1	1/13/2017 23:57
1,4-Dichlorobenzene	U		0.21	1.0	µg/L	1	1/13/2017 23:57
2,2-Dichloropropane	U		0.44	1.0	µg/L	1	1/13/2017 23:57
2-Butanone	U		0.58	5.0	µg/L	1	1/13/2017 23:57
2-Chlorotoluene	U		0.32	1.0	µg/L	1	1/13/2017 23:57
2-Hexanone	U		0.13	5.0	µg/L	1	1/13/2017 23:57
4-Chlorotoluene	U		0.28	1.0	µg/L	1	1/13/2017 23:57
4-Methyl-2-pentanone	U		0.11	1.0	µg/L	1	1/13/2017 23:57
Acetone	**2.1**	J	**0.92**	**10**	**µg/L**	1	1/13/2017 23:57
Benzene	U		0.30	1.0	µg/L	1	1/13/2017 23:57
Bromobenzene	U		0.24	1.0	µg/L	1	1/13/2017 23:57
Bromochloromethane	U		0.20	1.0	µg/L	1	1/13/2017 23:57
Bromodichloromethane	U		0.23	1.0	µg/L	1	1/13/2017 23:57
Bromoform	U		0.77	1.0	µg/L	1	1/13/2017 23:57
Bromomethane	U		0.38	1.0	µg/L	1	1/13/2017 23:57
Carbon disulfide	U		0.23	1.0	µg/L	1	1/13/2017 23:57
Carbon tetrachloride	U		0.31	1.0	µg/L	1	1/13/2017 23:57
Chlorobenzene	U		0.27	1.0	µg/L	1	1/13/2017 23:57
Chloroethane	U		0.29	1.0	µg/L	1	1/13/2017 23:57
Chloroform	U		0.26	1.0	µg/L	1	1/13/2017 23:57

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

ALS Group, USA

Date: *20-Jan-17*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: MW-8
Collection Date: 1/12/2017 09:52 AM

Work Order: 1701570
Lab ID: 1701570-07
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloromethane	U		0.17	1.0	µg/L	1	1/13/2017 23:57
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	1/13/2017 23:57
cis-1,3-Dichloropropene	U		0.39	1.0	µg/L	1	1/13/2017 23:57
Cyclohexane	U		0.22	1.0	µg/L	1	1/13/2017 23:57
Dibromochloromethane	U		0.38	1.0	µg/L	1	1/13/2017 23:57
Dichlorodifluoromethane	U		0.13	1.0	µg/L	1	1/13/2017 23:57
Diisopropyl ether	U		0.13	5.0	µg/L	1	1/13/2017 23:57
Ethyl acetate	U		0.25	5.0	µg/L	1	1/13/2017 23:57
Ethylbenzene	U		0.40	1.0	µg/L	1	1/13/2017 23:57
Hexachlorobutadiene	U		0.24	1.0	µg/L	1	1/13/2017 23:57
Isopropylbenzene	U		0.31	1.0	µg/L	1	1/13/2017 23:57
m,p-Xylene	U		0.98	2.0	µg/L	1	1/13/2017 23:57
Methyl acetate	U		0.23	2.0	µg/L	1	1/13/2017 23:57
Methyl tert-butyl ether	U		0.12	1.0	µg/L	1	1/13/2017 23:57
Methylcyclohexane	U		0.27	1.0	µg/L	1	1/13/2017 23:57
Methylene chloride	U		0.56	5.0	µg/L	1	1/13/2017 23:57
Naphthalene	U		0.18	5.0	µg/L	1	1/13/2017 23:57
n-Butylbenzene	U		0.22	1.0	µg/L	1	1/13/2017 23:57
n-Propylbenzene	U		0.24	1.0	µg/L	1	1/13/2017 23:57
o-Xylene	U		0.35	1.0	µg/L	1	1/13/2017 23:57
p-Isopropyltoluene	U		0.14	1.0	µg/L	1	1/13/2017 23:57
sec-Butylbenzene	U		0.29	1.0	µg/L	1	1/13/2017 23:57
Styrene	U		0.24	1.0	µg/L	1	1/13/2017 23:57
tert-Butylbenzene	U		0.34	1.0	µg/L	1	1/13/2017 23:57
Tetrachloroethene	U		0.27	1.0	µg/L	1	1/13/2017 23:57
Toluene	U		0.37	1.0	µg/L	1	1/13/2017 23:57
trans-1,2-Dichloroethene	U		0.28	1.0	µg/L	1	1/13/2017 23:57
trans-1,3-Dichloropropene	U		0.82	1.0	µg/L	1	1/13/2017 23:57
Trichloroethene	U		0.30	1.0	µg/L	1	1/13/2017 23:57
Trichlorofluoromethane	U		0.20	1.0	µg/L	1	1/13/2017 23:57
Vinyl chloride	U		0.20	1.0	µg/L	1	1/13/2017 23:57
Xylenes, Total	U		1.3	3.0	µg/L	1	1/13/2017 23:57
Surr: 1,2-Dichloroethane-d4	*99.6*			*75-120*	*%REC*	1	1/13/2017 23:57
Surr: 4-Bromofluorobenzene	*95.6*			*80-110*	*%REC*	1	1/13/2017 23:57
Surr: Dibromofluoromethane	*101*			*85-115*	*%REC*	1	1/13/2017 23:57
Surr: Toluene-d8	*99.6*			*85-110*	*%REC*	1	1/13/2017 23:57

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

ALS Group, USA

Date: *20-Jan-17*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: PZ-8
Collection Date: 1/12/2017 09:30 AM

Work Order: 1701570
Lab ID: 1701570-08
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
ORGANIC COMPOUNDS BY GC-FID		Method: **SW8015M**					Analyst: **KYM**
Triethylamine	U		0.99	25	mg/L	1	1/18/2017 18:42
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260B**					Analyst: **BJB**
1,1,1,2-Tetrachloroethane	U		0.22	1.0	µg/L	1	1/14/2017 12:22
1,1,1-Trichloroethane	U		0.36	1.0	µg/L	1	1/14/2017 12:22
1,1,2,2-Tetrachloroethane	U		0.19	1.0	µg/L	1	1/14/2017 12:22
1,1,2-Trichloroethane	U		0.40	1.0	µg/L	1	1/14/2017 12:22
1,1,2-Trichlorotrifluoroethane	U		0.42	1.0	µg/L	1	1/14/2017 12:22
1,1-Dichloroethane	U		0.31	1.0	µg/L	1	1/14/2017 12:22
1,1-Dichloroethene	U		0.28	1.0	µg/L	1	1/14/2017 12:22
1,2,3-Trichlorobenzene	U		0.17	1.0	µg/L	1	1/14/2017 12:22
1,2,4-Trichlorobenzene	U		0.21	1.0	µg/L	1	1/14/2017 12:22
1,2,4-Trimethylbenzene	U		0.37	1.0	µg/L	1	1/14/2017 12:22
1,2-Dibromo-3-chloropropane	U		0.97	1.0	µg/L	1	1/14/2017 12:22
1,2-Dibromoethane	U		0.98	1.0	µg/L	1	1/14/2017 12:22
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	1/14/2017 12:22
1,2-Dichloroethane	U		0.17	1.0	µg/L	1	1/14/2017 12:22
1,2-Dichloropropane	U		0.25	1.0	µg/L	1	1/14/2017 12:22
1,3,5-Trimethylbenzene	U		0.29	1.0	µg/L	1	1/14/2017 12:22
1,3-Dichlorobenzene	U		0.29	1.0	µg/L	1	1/14/2017 12:22
1,4-Dichlorobenzene	U		0.21	1.0	µg/L	1	1/14/2017 12:22
2,2-Dichloropropane	U		0.44	1.0	µg/L	1	1/14/2017 12:22
2-Butanone	U		0.58	5.0	µg/L	1	1/14/2017 12:22
2-Chlorotoluene	U		0.32	1.0	µg/L	1	1/14/2017 12:22
2-Hexanone	U		0.13	5.0	µg/L	1	1/14/2017 12:22
4-Chlorotoluene	U		0.28	1.0	µg/L	1	1/14/2017 12:22
4-Methyl-2-pentanone	U		0.11	1.0	µg/L	1	1/14/2017 12:22
Acetone	**1.8**	J	**0.92**	**10**	**µg/L**	1	1/14/2017 12:22
Benzene	U		0.30	1.0	µg/L	1	1/14/2017 12:22
Bromobenzene	U		0.24	1.0	µg/L	1	1/14/2017 12:22
Bromochloromethane	U		0.20	1.0	µg/L	1	1/14/2017 12:22
Bromodichloromethane	U		0.23	1.0	µg/L	1	1/14/2017 12:22
Bromoform	U		0.77	1.0	µg/L	1	1/14/2017 12:22
Bromomethane	U		0.38	1.0	µg/L	1	1/14/2017 12:22
Carbon disulfide	U		0.23	1.0	µg/L	1	1/14/2017 12:22
Carbon tetrachloride	U		0.31	1.0	µg/L	1	1/14/2017 12:22
Chlorobenzene	U		0.27	1.0	µg/L	1	1/14/2017 12:22
Chloroethane	U		0.29	1.0	µg/L	1	1/14/2017 12:22
Chloroform	U		0.26	1.0	µg/L	1	1/14/2017 12:22

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

ALS Group, USA

Date: *20-Jan-17*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: PZ-8
Collection Date: 1/12/2017 09:30 AM

Work Order: 1701570
Lab ID: 1701570-08
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloromethane	U		0.17	1.0	µg/L	1	1/14/2017 12:22
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	1/14/2017 12:22
cis-1,3-Dichloropropene	U		0.39	1.0	µg/L	1	1/14/2017 12:22
Cyclohexane	U		0.22	1.0	µg/L	1	1/14/2017 12:22
Dibromochloromethane	U		0.38	1.0	µg/L	1	1/14/2017 12:22
Dichlorodifluoromethane	U		0.13	1.0	µg/L	1	1/14/2017 12:22
Diisopropyl ether	U		0.13	5.0	µg/L	1	1/14/2017 12:22
Ethyl acetate	U		0.25	5.0	µg/L	1	1/14/2017 12:22
Ethylbenzene	U		0.40	1.0	µg/L	1	1/14/2017 12:22
Hexachlorobutadiene	U		0.24	1.0	µg/L	1	1/14/2017 12:22
Isopropylbenzene	U		0.31	1.0	µg/L	1	1/14/2017 12:22
m,p-Xylene	U		0.98	2.0	µg/L	1	1/14/2017 12:22
Methyl acetate	U		0.23	2.0	µg/L	1	1/14/2017 12:22
Methyl tert-butyl ether	U		0.12	1.0	µg/L	1	1/14/2017 12:22
Methylcyclohexane	U		0.27	1.0	µg/L	1	1/14/2017 12:22
Methylene chloride	U		0.56	5.0	µg/L	1	1/14/2017 12:22
Naphthalene	U		0.18	5.0	µg/L	1	1/14/2017 12:22
n-Butylbenzene	U		0.22	1.0	µg/L	1	1/14/2017 12:22
n-Propylbenzene	U		0.24	1.0	µg/L	1	1/14/2017 12:22
o-Xylene	U		0.35	1.0	µg/L	1	1/14/2017 12:22
p-Isopropyltoluene	U		0.14	1.0	µg/L	1	1/14/2017 12:22
sec-Butylbenzene	U		0.29	1.0	µg/L	1	1/14/2017 12:22
Styrene	U		0.24	1.0	µg/L	1	1/14/2017 12:22
tert-Butylbenzene	U		0.34	1.0	µg/L	1	1/14/2017 12:22
Tetrachloroethene	U		0.27	1.0	µg/L	1	1/14/2017 12:22
Toluene	U		0.37	1.0	µg/L	1	1/14/2017 12:22
trans-1,2-Dichloroethene	U		0.28	1.0	µg/L	1	1/14/2017 12:22
trans-1,3-Dichloropropene	U		0.82	1.0	µg/L	1	1/14/2017 12:22
Trichloroethene	U		0.30	1.0	µg/L	1	1/14/2017 12:22
Trichlorofluoromethane	U		0.20	1.0	µg/L	1	1/14/2017 12:22
Vinyl chloride	U		0.20	1.0	µg/L	1	1/14/2017 12:22
Xylenes, Total	U		1.3	3.0	µg/L	1	1/14/2017 12:22
Surr: 1,2-Dichloroethane-d4	*102*			*75-120*	*%REC*	1	1/14/2017 12:22
Surr: 4-Bromofluorobenzene	*97.0*			*80-110*	*%REC*	1	1/14/2017 12:22
Surr: Dibromofluoromethane	*99.6*			*85-115*	*%REC*	1	1/14/2017 12:22
Surr: Toluene-d8	*99.0*			*85-110*	*%REC*	1	1/14/2017 12:22

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

ALS Group, USA

Date: *20-Jan-17*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: MW-9
Collection Date: 1/12/2017 10:55 AM

Work Order: 1701570
Lab ID: 1701570-09
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
ORGANIC COMPOUNDS BY GC-FID		Method: **SW8015M**					Analyst: **KYM**
Triethylamine	U		0.99	25	mg/L	1	1/18/2017 18:52
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260B**					Analyst: **BJB**
1,1,1,2-Tetrachloroethane	U		0.22	1.0	µg/L	1	1/14/2017 12:46
1,1,1-Trichloroethane	U		0.36	1.0	µg/L	1	1/14/2017 12:46
1,1,2,2-Tetrachloroethane	U		0.19	1.0	µg/L	1	1/14/2017 12:46
1,1,2-Trichloroethane	U		0.40	1.0	µg/L	1	1/14/2017 12:46
1,1,2-Trichlorotrifluoroethane	U		0.42	1.0	µg/L	1	1/14/2017 12:46
1,1-Dichloroethane	U		0.31	1.0	µg/L	1	1/14/2017 12:46
1,1-Dichloroethene	U		0.28	1.0	µg/L	1	1/14/2017 12:46
1,2,3-Trichlorobenzene	U		0.17	1.0	µg/L	1	1/14/2017 12:46
1,2,4-Trichlorobenzene	U		0.21	1.0	µg/L	1	1/14/2017 12:46
1,2,4-Trimethylbenzene	U		0.37	1.0	µg/L	1	1/14/2017 12:46
1,2-Dibromo-3-chloropropane	U		0.97	1.0	µg/L	1	1/14/2017 12:46
1,2-Dibromoethane	U		0.98	1.0	µg/L	1	1/14/2017 12:46
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	1/14/2017 12:46
1,2-Dichloroethane	U		0.17	1.0	µg/L	1	1/14/2017 12:46
1,2-Dichloropropane	**1.2**		**0.25**	**1.0**	**µg/L**	1	1/14/2017 12:46
1,3,5-Trimethylbenzene	U		0.29	1.0	µg/L	1	1/14/2017 12:46
1,3-Dichlorobenzene	U		0.29	1.0	µg/L	1	1/14/2017 12:46
1,4-Dichlorobenzene	U		0.21	1.0	µg/L	1	1/14/2017 12:46
2,2-Dichloropropane	U		0.44	1.0	µg/L	1	1/14/2017 12:46
2-Butanone	**11**		**0.58**	**5.0**	**µg/L**	1	1/14/2017 12:46
2-Chlorotoluene	U		0.32	1.0	µg/L	1	1/14/2017 12:46
2-Hexanone	U		0.13	5.0	µg/L	1	1/14/2017 12:46
4-Chlorotoluene	U		0.28	1.0	µg/L	1	1/14/2017 12:46
4-Methyl-2-pentanone	U		0.11	1.0	µg/L	1	1/14/2017 12:46
Acetone	**5.8**	J	**0.92**	**10**	**µg/L**	1	1/14/2017 12:46
Benzene	U		0.30	1.0	µg/L	1	1/14/2017 12:46
Bromobenzene	U		0.24	1.0	µg/L	1	1/14/2017 12:46
Bromochloromethane	U		0.20	1.0	µg/L	1	1/14/2017 12:46
Bromodichloromethane	U		0.23	1.0	µg/L	1	1/14/2017 12:46
Bromoform	U		0.77	1.0	µg/L	1	1/14/2017 12:46
Bromomethane	U		0.38	1.0	µg/L	1	1/14/2017 12:46
Carbon disulfide	U		0.23	1.0	µg/L	1	1/14/2017 12:46
Carbon tetrachloride	U		0.31	1.0	µg/L	1	1/14/2017 12:46
Chlorobenzene	U		0.27	1.0	µg/L	1	1/14/2017 12:46
Chloroethane	U		0.29	1.0	µg/L	1	1/14/2017 12:46
Chloroform	U		0.26	1.0	µg/L	1	1/14/2017 12:46

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

ALS Group, USA

Date: *20-Jan-17*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: MW-9
Collection Date: 1/12/2017 10:55 AM

Work Order: 1701570
Lab ID: 1701570-09
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloromethane	U		0.17	1.0	µg/L	1	1/14/2017 12:46
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	1/14/2017 12:46
cis-1,3-Dichloropropene	U		0.39	1.0	µg/L	1	1/14/2017 12:46
Cyclohexane	U		0.22	1.0	µg/L	1	1/14/2017 12:46
Dibromochloromethane	U		0.38	1.0	µg/L	1	1/14/2017 12:46
Dichlorodifluoromethane	U		0.13	1.0	µg/L	1	1/14/2017 12:46
Diisopropyl ether	U		0.13	5.0	µg/L	1	1/14/2017 12:46
Ethyl acetate	U		0.25	5.0	µg/L	1	1/14/2017 12:46
Ethylbenzene	U		0.40	1.0	µg/L	1	1/14/2017 12:46
Hexachlorobutadiene	U		0.24	1.0	µg/L	1	1/14/2017 12:46
Isopropylbenzene	U		0.31	1.0	µg/L	1	1/14/2017 12:46
m,p-Xylene	U		0.98	2.0	µg/L	1	1/14/2017 12:46
Methyl acetate	U		0.23	2.0	µg/L	1	1/14/2017 12:46
Methyl tert-butyl ether	U		0.12	1.0	µg/L	1	1/14/2017 12:46
Methylcyclohexane	U		0.27	1.0	µg/L	1	1/14/2017 12:46
Methylene chloride	U		0.56	5.0	µg/L	1	1/14/2017 12:46
Naphthalene	U		0.18	5.0	µg/L	1	1/14/2017 12:46
n-Butylbenzene	U		0.22	1.0	µg/L	1	1/14/2017 12:46
n-Propylbenzene	U		0.24	1.0	µg/L	1	1/14/2017 12:46
o-Xylene	U		0.35	1.0	µg/L	1	1/14/2017 12:46
p-Isopropyltoluene	U		0.14	1.0	µg/L	1	1/14/2017 12:46
sec-Butylbenzene	U		0.29	1.0	µg/L	1	1/14/2017 12:46
Styrene	U		0.24	1.0	µg/L	1	1/14/2017 12:46
tert-Butylbenzene	U		0.34	1.0	µg/L	1	1/14/2017 12:46
Tetrachloroethene	U		0.27	1.0	µg/L	1	1/14/2017 12:46
Toluene	U		0.37	1.0	µg/L	1	1/14/2017 12:46
trans-1,2-Dichloroethene	U		0.28	1.0	µg/L	1	1/14/2017 12:46
trans-1,3-Dichloropropene	U		0.82	1.0	µg/L	1	1/14/2017 12:46
Trichloroethene	U		0.30	1.0	µg/L	1	1/14/2017 12:46
Trichlorofluoromethane	U		0.20	1.0	µg/L	1	1/14/2017 12:46
Vinyl chloride	U		0.20	1.0	µg/L	1	1/14/2017 12:46
Xylenes, Total	U		1.3	3.0	µg/L	1	1/14/2017 12:46
Surr: 1,2-Dichloroethane-d4	*101*			*75-120*	*%REC*	1	1/14/2017 12:46
Surr: 4-Bromofluorobenzene	*94.5*			*80-110*	*%REC*	1	1/14/2017 12:46
Surr: Dibromofluoromethane	*96.6*			*85-115*	*%REC*	1	1/14/2017 12:46
Surr: Toluene-d8	*94.6*			*85-110*	*%REC*	1	1/14/2017 12:46

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

ALS Group, USA

Date: *20-Jan-17*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: MW-1
Collection Date: 1/12/2017 12:20 PM

Work Order: 1701570
Lab ID: 1701570-10
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
ORGANIC COMPOUNDS BY GC-FID		Method: **SW8015M**					Analyst: **KYM**
Triethylamine	U		0.99	25	mg/L	1	1/18/2017 19:02
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260B**					Analyst: **BJB**
1,1,1,2-Tetrachloroethane	U		2,200	10,000	µg/L	10000	1/14/2017 01:11
1,1,1-Trichloroethane	U		3,600	10,000	µg/L	10000	1/14/2017 01:11
1,1,2,2-Tetrachloroethane	U		1,900	10,000	µg/L	10000	1/14/2017 01:11
1,1,2-Trichloroethane	U		4,000	10,000	µg/L	10000	1/14/2017 01:11
1,1,2-Trichlorotrifluoroethane	U		4,200	10,000	µg/L	10000	1/14/2017 01:11
1,1-Dichloroethane	U		3,100	10,000	µg/L	10000	1/14/2017 01:11
1,1-Dichloroethene	U		2,800	10,000	µg/L	10000	1/14/2017 01:11
1,2,3-Trichlorobenzene	U		1,700	10,000	µg/L	10000	1/14/2017 01:11
1,2,4-Trichlorobenzene	U		2,100	10,000	µg/L	10000	1/14/2017 01:11
1,2,4-Trimethylbenzene	U		3,700	10,000	µg/L	10000	1/14/2017 01:11
1,2-Dibromo-3-chloropropane	U		9,700	10,000	µg/L	10000	1/14/2017 01:11
1,2-Dibromoethane	U		9,800	10,000	µg/L	10000	1/14/2017 01:11
1,2-Dichlorobenzene	U		2,200	10,000	µg/L	10000	1/14/2017 01:11
1,2-Dichloroethane	U		1,700	10,000	µg/L	10000	1/14/2017 01:11
1,2-Dichloropropane	**2,700,000**		**12,000**	**50,000**	**µg/L**	50000	1/16/2017 13:46
1,3,5-Trimethylbenzene	U		2,900	10,000	µg/L	10000	1/14/2017 01:11
1,3-Dichlorobenzene	U		2,900	10,000	µg/L	10000	1/14/2017 01:11
1,4-Dichlorobenzene	U		2,100	10,000	µg/L	10000	1/14/2017 01:11
2,2-Dichloropropane	U		4,400	10,000	µg/L	10000	1/14/2017 01:11
2-Butanone	U		5,800	50,000	µg/L	10000	1/14/2017 01:11
2-Chlorotoluene	U		3,200	10,000	µg/L	10000	1/14/2017 01:11
2-Hexanone	U		1,300	50,000	µg/L	10000	1/14/2017 01:11
4-Chlorotoluene	U		2,800	10,000	µg/L	10000	1/14/2017 01:11
4-Methyl-2-pentanone	U		1,100	10,000	µg/L	10000	1/14/2017 01:11
Acetone	U		9,200	100,000	µg/L	10000	1/14/2017 01:11
Benzene	U		3,000	10,000	µg/L	10000	1/14/2017 01:11
Bromobenzene	U		2,400	10,000	µg/L	10000	1/14/2017 01:11
Bromochloromethane	U		2,000	10,000	µg/L	10000	1/14/2017 01:11
Bromodichloromethane	U		2,300	10,000	µg/L	10000	1/14/2017 01:11
Bromoform	U		7,700	10,000	µg/L	10000	1/14/2017 01:11
Bromomethane	U		3,800	10,000	µg/L	10000	1/14/2017 01:11
Carbon disulfide	U		2,300	10,000	µg/L	10000	1/14/2017 01:11
Carbon tetrachloride	U		3,100	10,000	µg/L	10000	1/14/2017 01:11
Chlorobenzene	U		2,700	10,000	µg/L	10000	1/14/2017 01:11
Chloroethane	U		2,900	10,000	µg/L	10000	1/14/2017 01:11
Chloroform	U		2,600	10,000	µg/L	10000	1/14/2017 01:11

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

ALS Group, USA

Date: *20-Jan-17*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: MW-1
Collection Date: 1/12/2017 12:20 PM

Work Order: 1701570
Lab ID: 1701570-10
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloromethane	U		1,700	10,000	µg/L	10000	1/14/2017 01:11
cis-1,2-Dichloroethene	U		2,500	10,000	µg/L	10000	1/14/2017 01:11
cis-1,3-Dichloropropene	U		3,900	10,000	µg/L	10000	1/14/2017 01:11
Cyclohexane	U		2,200	10,000	µg/L	10000	1/14/2017 01:11
Dibromochloromethane	U		3,800	10,000	µg/L	10000	1/14/2017 01:11
Dichlorodifluoromethane	U		1,300	10,000	µg/L	10000	1/14/2017 01:11
Diisopropyl ether	U		1,300	50,000	µg/L	10000	1/14/2017 01:11
Ethyl acetate	U		2,500	50,000	µg/L	10000	1/14/2017 01:11
Ethylbenzene	U		4,000	10,000	µg/L	10000	1/14/2017 01:11
Hexachlorobutadiene	U		2,400	10,000	µg/L	10000	1/14/2017 01:11
Isopropylbenzene	U		3,100	10,000	µg/L	10000	1/14/2017 01:11
m,p-Xylene	U		9,800	20,000	µg/L	10000	1/14/2017 01:11
Methyl acetate	U		2,300	20,000	µg/L	10000	1/14/2017 01:11
Methyl tert-butyl ether	U		1,200	10,000	µg/L	10000	1/14/2017 01:11
Methylcyclohexane	U		2,700	10,000	µg/L	10000	1/14/2017 01:11
Methylene chloride	U		5,600	50,000	µg/L	10000	1/14/2017 01:11
Naphthalene	U		1,800	50,000	µg/L	10000	1/14/2017 01:11
n-Butylbenzene	U		2,200	10,000	µg/L	10000	1/14/2017 01:11
n-Propylbenzene	U		2,400	10,000	µg/L	10000	1/14/2017 01:11
o-Xylene	U		3,500	10,000	µg/L	10000	1/14/2017 01:11
p-Isopropyltoluene	U		1,400	10,000	µg/L	10000	1/14/2017 01:11
sec-Butylbenzene	U		2,900	10,000	µg/L	10000	1/14/2017 01:11
Styrene	U		2,400	10,000	µg/L	10000	1/14/2017 01:11
tert-Butylbenzene	U		3,400	10,000	µg/L	10000	1/14/2017 01:11
Tetrachloroethene	U		2,700	10,000	µg/L	10000	1/14/2017 01:11
Toluene	U		3,700	10,000	µg/L	10000	1/14/2017 01:11
trans-1,2-Dichloroethene	U		2,800	10,000	µg/L	10000	1/14/2017 01:11
trans-1,3-Dichloropropene	U		8,200	10,000	µg/L	10000	1/14/2017 01:11
Trichloroethene	U		3,000	10,000	µg/L	10000	1/14/2017 01:11
Trichlorofluoromethane	U		2,000	10,000	µg/L	10000	1/14/2017 01:11
Vinyl chloride	U		2,000	10,000	µg/L	10000	1/14/2017 01:11
Xylenes, Total	U		13,000	30,000	µg/L	10000	1/14/2017 01:11
Surr: 1,2-Dichloroethane-d4	*104*			*75-120*	*%REC*	10000	1/14/2017 01:11
Surr: 1,2-Dichloroethane-d4	*103*			*75-120*	*%REC*	50000	1/16/2017 13:46
Surr: 4-Bromofluorobenzene	*99.8*			*80-110*	*%REC*	10000	1/14/2017 01:11
Surr: 4-Bromofluorobenzene	*98.2*			*80-110*	*%REC*	50000	1/16/2017 13:46
Surr: Dibromofluoromethane	*99.6*			*85-115*	*%REC*	10000	1/14/2017 01:11
Surr: Dibromofluoromethane	*93.4*			*85-115*	*%REC*	50000	1/16/2017 13:46
Surr: Toluene-d8	*99.0*			*85-110*	*%REC*	10000	1/14/2017 01:11
Surr: Toluene-d8	*100*			*85-110*	*%REC*	50000	1/16/2017 13:46

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

ALS Group, USA

Date: *20-Jan-17*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: MW-2
Collection Date: 1/12/2017 12:06 PM

Work Order: 1701570
Lab ID: 1701570-11
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
ORGANIC COMPOUNDS BY GC-FID		Method: **SW8015M**					Analyst: **KYM**
Triethylamine	U		0.99	25	mg/L	1	1/18/2017 19:12
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260B**					Analyst: **BJB**
1,1,1,2-Tetrachloroethane	U		2,200	10,000	µg/L	10000	1/14/2017 01:35
1,1,1-Trichloroethane	U		3,600	10,000	µg/L	10000	1/14/2017 01:35
1,1,2,2-Tetrachloroethane	U		1,900	10,000	µg/L	10000	1/14/2017 01:35
1,1,2-Trichloroethane	U		4,000	10,000	µg/L	10000	1/14/2017 01:35
1,1,2-Trichlorotrifluoroethane	U		4,200	10,000	µg/L	10000	1/14/2017 01:35
1,1-Dichloroethane	U		3,100	10,000	µg/L	10000	1/14/2017 01:35
1,1-Dichloroethene	U		2,800	10,000	µg/L	10000	1/14/2017 01:35
1,2,3-Trichlorobenzene	U		1,700	10,000	µg/L	10000	1/14/2017 01:35
1,2,4-Trichlorobenzene	U		2,100	10,000	µg/L	10000	1/14/2017 01:35
1,2,4-Trimethylbenzene	U		3,700	10,000	µg/L	10000	1/14/2017 01:35
1,2-Dibromo-3-chloropropane	U		9,700	10,000	µg/L	10000	1/14/2017 01:35
1,2-Dibromoethane	U		9,800	10,000	µg/L	10000	1/14/2017 01:35
1,2-Dichlorobenzene	U		2,200	10,000	µg/L	10000	1/14/2017 01:35
1,2-Dichloroethane	U		1,700	10,000	µg/L	10000	1/14/2017 01:35
1,2-Dichloropropane	**3,000,000**		**12,000**	**50,000**	**µg/L**	50000	1/16/2017 14:09
1,3,5-Trimethylbenzene	U		2,900	10,000	µg/L	10000	1/14/2017 01:35
1,3-Dichlorobenzene	U		2,900	10,000	µg/L	10000	1/14/2017 01:35
1,4-Dichlorobenzene	U		2,100	10,000	µg/L	10000	1/14/2017 01:35
2,2-Dichloropropane	U		4,400	10,000	µg/L	10000	1/14/2017 01:35
2-Butanone	U		5,800	50,000	µg/L	10000	1/14/2017 01:35
2-Chlorotoluene	U		3,200	10,000	µg/L	10000	1/14/2017 01:35
2-Hexanone	U		1,300	50,000	µg/L	10000	1/14/2017 01:35
4-Chlorotoluene	U		2,800	10,000	µg/L	10000	1/14/2017 01:35
4-Methyl-2-pentanone	U		1,100	10,000	µg/L	10000	1/14/2017 01:35
Acetone	U		9,200	100,000	µg/L	10000	1/14/2017 01:35
Benzene	U		3,000	10,000	µg/L	10000	1/14/2017 01:35
Bromobenzene	U		2,400	10,000	µg/L	10000	1/14/2017 01:35
Bromochloromethane	U		2,000	10,000	µg/L	10000	1/14/2017 01:35
Bromodichloromethane	U		2,300	10,000	µg/L	10000	1/14/2017 01:35
Bromoform	U		7,700	10,000	µg/L	10000	1/14/2017 01:35
Bromomethane	U		3,800	10,000	µg/L	10000	1/14/2017 01:35
Carbon disulfide	U		2,300	10,000	µg/L	10000	1/14/2017 01:35
Carbon tetrachloride	U		3,100	10,000	µg/L	10000	1/14/2017 01:35
Chlorobenzene	U		2,700	10,000	µg/L	10000	1/14/2017 01:35
Chloroethane	U		2,900	10,000	µg/L	10000	1/14/2017 01:35
Chloroform	U		2,600	10,000	µg/L	10000	1/14/2017 01:35

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

ALS Group, USA

Date: *20-Jan-17*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: MW-2
Collection Date: 1/12/2017 12:06 PM

Work Order: 1701570
Lab ID: 1701570-11
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloromethane	U		1,700	10,000	µg/L	10000	1/14/2017 01:35
cis-1,2-Dichloroethene	U		2,500	10,000	µg/L	10000	1/14/2017 01:35
cis-1,3-Dichloropropene	U		3,900	10,000	µg/L	10000	1/14/2017 01:35
Cyclohexane	U		2,200	10,000	µg/L	10000	1/14/2017 01:35
Dibromochloromethane	U		3,800	10,000	µg/L	10000	1/14/2017 01:35
Dichlorodifluoromethane	U		1,300	10,000	µg/L	10000	1/14/2017 01:35
Diisopropyl ether	U		1,300	50,000	µg/L	10000	1/14/2017 01:35
Ethyl acetate	U		2,500	50,000	µg/L	10000	1/14/2017 01:35
Ethylbenzene	U		4,000	10,000	µg/L	10000	1/14/2017 01:35
Hexachlorobutadiene	U		2,400	10,000	µg/L	10000	1/14/2017 01:35
Isopropylbenzene	U		3,100	10,000	µg/L	10000	1/14/2017 01:35
m,p-Xylene	U		9,800	20,000	µg/L	10000	1/14/2017 01:35
Methyl acetate	U		2,300	20,000	µg/L	10000	1/14/2017 01:35
Methyl tert-butyl ether	U		1,200	10,000	µg/L	10000	1/14/2017 01:35
Methylcyclohexane	U		2,700	10,000	µg/L	10000	1/14/2017 01:35
Methylene chloride	U		5,600	50,000	µg/L	10000	1/14/2017 01:35
Naphthalene	U		1,800	50,000	µg/L	10000	1/14/2017 01:35
n-Butylbenzene	U		2,200	10,000	µg/L	10000	1/14/2017 01:35
n-Propylbenzene	U		2,400	10,000	µg/L	10000	1/14/2017 01:35
o-Xylene	U		3,500	10,000	µg/L	10000	1/14/2017 01:35
p-Isopropyltoluene	U		1,400	10,000	µg/L	10000	1/14/2017 01:35
sec-Butylbenzene	U		2,900	10,000	µg/L	10000	1/14/2017 01:35
Styrene	U		2,400	10,000	µg/L	10000	1/14/2017 01:35
tert-Butylbenzene	U		3,400	10,000	µg/L	10000	1/14/2017 01:35
Tetrachloroethene	U		2,700	10,000	µg/L	10000	1/14/2017 01:35
Toluene	U		3,700	10,000	µg/L	10000	1/14/2017 01:35
trans-1,2-Dichloroethene	U		2,800	10,000	µg/L	10000	1/14/2017 01:35
trans-1,3-Dichloropropene	U		8,200	10,000	µg/L	10000	1/14/2017 01:35
Trichloroethene	U		3,000	10,000	µg/L	10000	1/14/2017 01:35
Trichlorofluoromethane	U		2,000	10,000	µg/L	10000	1/14/2017 01:35
Vinyl chloride	U		2,000	10,000	µg/L	10000	1/14/2017 01:35
Xylenes, Total	U		13,000	30,000	µg/L	10000	1/14/2017 01:35
Surr: 1,2-Dichloroethane-d4	*102*			*75-120*	*%REC*	10000	1/14/2017 01:35
Surr: 1,2-Dichloroethane-d4	*104*			*75-120*	*%REC*	50000	1/16/2017 14:09
Surr: 4-Bromofluorobenzene	*95.6*			*80-110*	*%REC*	10000	1/14/2017 01:35
Surr: 4-Bromofluorobenzene	*96.8*			*80-110*	*%REC*	50000	1/16/2017 14:09
Surr: Dibromofluoromethane	*96.5*			*85-115*	*%REC*	10000	1/14/2017 01:35
Surr: Dibromofluoromethane	*92.2*			*85-115*	*%REC*	50000	1/16/2017 14:09
Surr: Toluene-d8	*97.5*			*85-110*	*%REC*	10000	1/14/2017 01:35
Surr: Toluene-d8	*100*			*85-110*	*%REC*	50000	1/16/2017 14:09

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

ALS Group, USA

Date: *20-Jan-17*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: Duplicate
Collection Date: 1/12/2017

Work Order: 1701570
Lab ID: 1701570-12
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
ORGANIC COMPOUNDS BY GC-FID		Method: **SW8015M**					Analyst: **KYM**
Triethylamine	U		0.99	25	mg/L	1	1/18/2017 19:22
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260B**					Analyst: **BJB**
1,1,1,2-Tetrachloroethane	U		2,200	10,000	µg/L	10000	1/14/2017 01:59
1,1,1-Trichloroethane	U		3,600	10,000	µg/L	10000	1/14/2017 01:59
1,1,2,2-Tetrachloroethane	U		1,900	10,000	µg/L	10000	1/14/2017 01:59
1,1,2-Trichloroethane	U		4,000	10,000	µg/L	10000	1/14/2017 01:59
1,1,2-Trichlorotrifluoroethane	U		4,200	10,000	µg/L	10000	1/14/2017 01:59
1,1-Dichloroethane	U		3,100	10,000	µg/L	10000	1/14/2017 01:59
1,1-Dichloroethene	U		2,800	10,000	µg/L	10000	1/14/2017 01:59
1,2,3-Trichlorobenzene	U		1,700	10,000	µg/L	10000	1/14/2017 01:59
1,2,4-Trichlorobenzene	U		2,100	10,000	µg/L	10000	1/14/2017 01:59
1,2,4-Trimethylbenzene	U		3,700	10,000	µg/L	10000	1/14/2017 01:59
1,2-Dibromo-3-chloropropane	U		9,700	10,000	µg/L	10000	1/14/2017 01:59
1,2-Dibromoethane	U		9,800	10,000	µg/L	10000	1/14/2017 01:59
1,2-Dichlorobenzene	U		2,200	10,000	µg/L	10000	1/14/2017 01:59
1,2-Dichloroethane	U		1,700	10,000	µg/L	10000	1/14/2017 01:59
1,2-Dichloropropane	**3,300,000**		**12,000**	**50,000**	**µg/L**	50000	1/16/2017 14:33
1,3,5-Trimethylbenzene	U		2,900	10,000	µg/L	10000	1/14/2017 01:59
1,3-Dichlorobenzene	U		2,900	10,000	µg/L	10000	1/14/2017 01:59
1,4-Dichlorobenzene	U		2,100	10,000	µg/L	10000	1/14/2017 01:59
2,2-Dichloropropane	U		4,400	10,000	µg/L	10000	1/14/2017 01:59
2-Butanone	U		5,800	50,000	µg/L	10000	1/14/2017 01:59
2-Chlorotoluene	U		3,200	10,000	µg/L	10000	1/14/2017 01:59
2-Hexanone	U		1,300	50,000	µg/L	10000	1/14/2017 01:59
4-Chlorotoluene	U		2,800	10,000	µg/L	10000	1/14/2017 01:59
4-Methyl-2-pentanone	U		1,100	10,000	µg/L	10000	1/14/2017 01:59
Acetone	U		9,200	100,000	µg/L	10000	1/14/2017 01:59
Benzene	U		3,000	10,000	µg/L	10000	1/14/2017 01:59
Bromobenzene	U		2,400	10,000	µg/L	10000	1/14/2017 01:59
Bromochloromethane	U		2,000	10,000	µg/L	10000	1/14/2017 01:59
Bromodichloromethane	U		2,300	10,000	µg/L	10000	1/14/2017 01:59
Bromoform	U		7,700	10,000	µg/L	10000	1/14/2017 01:59
Bromomethane	U		3,800	10,000	µg/L	10000	1/14/2017 01:59
Carbon disulfide	U		2,300	10,000	µg/L	10000	1/14/2017 01:59
Carbon tetrachloride	U		3,100	10,000	µg/L	10000	1/14/2017 01:59
Chlorobenzene	U		2,700	10,000	µg/L	10000	1/14/2017 01:59
Chloroethane	U		2,900	10,000	µg/L	10000	1/14/2017 01:59
Chloroform	U		2,600	10,000	µg/L	10000	1/14/2017 01:59

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

ALS Group, USA

Date: *20-Jan-17*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: Duplicate
Collection Date: 1/12/2017

Work Order: 1701570
Lab ID: 1701570-12
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Chloromethane	U		1,700	10,000	µg/L	10000	1/14/2017 01:59
cis-1,2-Dichloroethene	U		2,500	10,000	µg/L	10000	1/14/2017 01:59
cis-1,3-Dichloropropene	U		3,900	10,000	µg/L	10000	1/14/2017 01:59
Cyclohexane	U		2,200	10,000	µg/L	10000	1/14/2017 01:59
Dibromochloromethane	U		3,800	10,000	µg/L	10000	1/14/2017 01:59
Dichlorodifluoromethane	U		1,300	10,000	µg/L	10000	1/14/2017 01:59
Diisopropyl ether	U		1,300	50,000	µg/L	10000	1/14/2017 01:59
Ethyl acetate	U		2,500	50,000	µg/L	10000	1/14/2017 01:59
Ethylbenzene	U		4,000	10,000	µg/L	10000	1/14/2017 01:59
Hexachlorobutadiene	U		2,400	10,000	µg/L	10000	1/14/2017 01:59
Isopropylbenzene	U		3,100	10,000	µg/L	10000	1/14/2017 01:59
m,p-Xylene	U		9,800	20,000	µg/L	10000	1/14/2017 01:59
Methyl acetate	U		2,300	20,000	µg/L	10000	1/14/2017 01:59
Methyl tert-butyl ether	U		1,200	10,000	µg/L	10000	1/14/2017 01:59
Methylcyclohexane	U		2,700	10,000	µg/L	10000	1/14/2017 01:59
Methylene chloride	U		5,600	50,000	µg/L	10000	1/14/2017 01:59
Naphthalene	U		1,800	50,000	µg/L	10000	1/14/2017 01:59
n-Butylbenzene	U		2,200	10,000	µg/L	10000	1/14/2017 01:59
n-Propylbenzene	U		2,400	10,000	µg/L	10000	1/14/2017 01:59
o-Xylene	U		3,500	10,000	µg/L	10000	1/14/2017 01:59
p-Isopropyltoluene	U		1,400	10,000	µg/L	10000	1/14/2017 01:59
sec-Butylbenzene	U		2,900	10,000	µg/L	10000	1/14/2017 01:59
Styrene	U		2,400	10,000	µg/L	10000	1/14/2017 01:59
tert-Butylbenzene	U		3,400	10,000	µg/L	10000	1/14/2017 01:59
Tetrachloroethene	U		2,700	10,000	µg/L	10000	1/14/2017 01:59
Toluene	U		3,700	10,000	µg/L	10000	1/14/2017 01:59
trans-1,2-Dichloroethene	U		2,800	10,000	µg/L	10000	1/14/2017 01:59
trans-1,3-Dichloropropene	U		8,200	10,000	µg/L	10000	1/14/2017 01:59
Trichloroethene	U		3,000	10,000	µg/L	10000	1/14/2017 01:59
Trichlorofluoromethane	U		2,000	10,000	µg/L	10000	1/14/2017 01:59
Vinyl chloride	U		2,000	10,000	µg/L	10000	1/14/2017 01:59
Xylenes, Total	U		13,000	30,000	µg/L	10000	1/14/2017 01:59
Surr: 1,2-Dichloroethane-d4	*98.5*			*75-120*	*%REC*	10000	1/14/2017 01:59
Surr: 1,2-Dichloroethane-d4	*103*			*75-120*	*%REC*	50000	1/16/2017 14:33
Surr: 4-Bromofluorobenzene	*94.5*			*80-110*	*%REC*	10000	1/14/2017 01:59
Surr: 4-Bromofluorobenzene	*97.0*			*80-110*	*%REC*	50000	1/16/2017 14:33
Surr: Dibromofluoromethane	*96.2*			*85-115*	*%REC*	10000	1/14/2017 01:59
Surr: Dibromofluoromethane	*91.2*			*85-115*	*%REC*	50000	1/16/2017 14:33
Surr: Toluene-d8	*97.0*			*85-110*	*%REC*	10000	1/14/2017 01:59
Surr: Toluene-d8	*101*			*85-110*	*%REC*	50000	1/16/2017 14:33

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

ALS Group, USA

Date: *20-Jan-17*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: Trip Blank
Collection Date: 1/11/2017

Work Order: 1701570
Lab ID: 1701570-13
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS		Method: **SW8260B**					Analyst: **BJB**
1,1,1,2-Tetrachloroethane	U		0.22	1.0	µg/L	1	1/13/2017 18:47
1,1,1-Trichloroethane	U		0.36	1.0	µg/L	1	1/13/2017 18:47
1,1,2,2-Tetrachloroethane	U		0.19	1.0	µg/L	1	1/13/2017 18:47
1,1,2-Trichloroethane	U		0.40	1.0	µg/L	1	1/13/2017 18:47
1,1,2-Trichlorotrifluoroethane	U		0.42	1.0	µg/L	1	1/13/2017 18:47
1,1-Dichloroethane	U		0.31	1.0	µg/L	1	1/13/2017 18:47
1,1-Dichloroethene	U		0.28	1.0	µg/L	1	1/13/2017 18:47
1,2,3-Trichlorobenzene	U		0.17	1.0	µg/L	1	1/13/2017 18:47
1,2,4-Trichlorobenzene	U		0.21	1.0	µg/L	1	1/13/2017 18:47
1,2,4-Trimethylbenzene	U		0.37	1.0	µg/L	1	1/13/2017 18:47
1,2-Dibromo-3-chloropropane	U		0.97	1.0	µg/L	1	1/13/2017 18:47
1,2-Dibromoethane	U		0.98	1.0	µg/L	1	1/13/2017 18:47
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	1/13/2017 18:47
1,2-Dichloroethane	U		0.17	1.0	µg/L	1	1/13/2017 18:47
1,2-Dichloropropane	U		0.25	1.0	µg/L	1	1/13/2017 18:47
1,3,5-Trimethylbenzene	U		0.29	1.0	µg/L	1	1/13/2017 18:47
1,3-Dichlorobenzene	U		0.29	1.0	µg/L	1	1/13/2017 18:47
1,4-Dichlorobenzene	U		0.21	1.0	µg/L	1	1/13/2017 18:47
2,2-Dichloropropane	U		0.44	1.0	µg/L	1	1/13/2017 18:47
2-Butanone	U		0.58	5.0	µg/L	1	1/13/2017 18:47
2-Chlorotoluene	U		0.32	1.0	µg/L	1	1/13/2017 18:47
2-Hexanone	U		0.13	5.0	µg/L	1	1/13/2017 18:47
4-Chlorotoluene	U		0.28	1.0	µg/L	1	1/13/2017 18:47
4-Methyl-2-pentanone	U		0.11	1.0	µg/L	1	1/13/2017 18:47
Acetone	U		0.92	10	µg/L	1	1/13/2017 18:47
Benzene	U		0.30	1.0	µg/L	1	1/13/2017 18:47
Bromobenzene	U		0.24	1.0	µg/L	1	1/13/2017 18:47
Bromochloromethane	U		0.20	1.0	µg/L	1	1/13/2017 18:47
Bromodichloromethane	U		0.23	1.0	µg/L	1	1/13/2017 18:47
Bromoform	U		0.77	1.0	µg/L	1	1/13/2017 18:47
Bromomethane	U		0.38	1.0	µg/L	1	1/13/2017 18:47
Carbon disulfide	U		0.23	1.0	µg/L	1	1/13/2017 18:47
Carbon tetrachloride	U		0.31	1.0	µg/L	1	1/13/2017 18:47
Chlorobenzene	U		0.27	1.0	µg/L	1	1/13/2017 18:47
Chloroethane	U		0.29	1.0	µg/L	1	1/13/2017 18:47
Chloroform	**0.66**	J	**0.26**	**1.0**	**µg/L**	1	1/13/2017 18:47
Chloromethane	U		0.17	1.0	µg/L	1	1/13/2017 18:47
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	1/13/2017 18:47

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

ALS Group, USA

Date: *20-Jan-17*

Client: The Sigma Group
Project: Solenis (16153)
Sample ID: Trip Blank
Collection Date: 1/11/2017

Work Order: 1701570
Lab ID: 1701570-13
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
cis-1,3-Dichloropropene	U		0.39	1.0	µg/L	1	1/13/2017 18:47
Cyclohexane	U		0.22	1.0	µg/L	1	1/13/2017 18:47
Dibromochloromethane	U		0.38	1.0	µg/L	1	1/13/2017 18:47
Dichlorodifluoromethane	U		0.13	1.0	µg/L	1	1/13/2017 18:47
Diisopropyl ether	U		0.13	5.0	µg/L	1	1/13/2017 18:47
Ethyl acetate	U		0.25	5.0	µg/L	1	1/13/2017 18:47
Ethylbenzene	U		0.40	1.0	µg/L	1	1/13/2017 18:47
Hexachlorobutadiene	U		0.24	1.0	µg/L	1	1/13/2017 18:47
Isopropylbenzene	U		0.31	1.0	µg/L	1	1/13/2017 18:47
m,p-Xylene	U		0.98	2.0	µg/L	1	1/13/2017 18:47
Methyl acetate	U		0.23	2.0	µg/L	1	1/13/2017 18:47
Methyl tert-butyl ether	U		0.12	1.0	µg/L	1	1/13/2017 18:47
Methylcyclohexane	U		0.27	1.0	µg/L	1	1/13/2017 18:47
Methylene chloride	**1.0**	J	**0.56**	**5.0**	**µg/L**	1	1/13/2017 18:47
Naphthalene	U		0.18	5.0	µg/L	1	1/13/2017 18:47
n-Butylbenzene	U		0.22	1.0	µg/L	1	1/13/2017 18:47
n-Propylbenzene	U		0.24	1.0	µg/L	1	1/13/2017 18:47
o-Xylene	U		0.35	1.0	µg/L	1	1/13/2017 18:47
p-Isopropyltoluene	U		0.14	1.0	µg/L	1	1/13/2017 18:47
sec-Butylbenzene	U		0.29	1.0	µg/L	1	1/13/2017 18:47
Styrene	U		0.24	1.0	µg/L	1	1/13/2017 18:47
tert-Butylbenzene	U		0.34	1.0	µg/L	1	1/13/2017 18:47
Tetrachloroethene	U		0.27	1.0	µg/L	1	1/13/2017 18:47
Toluene	U		0.37	1.0	µg/L	1	1/13/2017 18:47
trans-1,2-Dichloroethene	U		0.28	1.0	µg/L	1	1/13/2017 18:47
trans-1,3-Dichloropropene	U		0.82	1.0	µg/L	1	1/13/2017 18:47
Trichloroethene	U		0.30	1.0	µg/L	1	1/13/2017 18:47
Trichlorofluoromethane	U		0.20	1.0	µg/L	1	1/13/2017 18:47
Vinyl chloride	U		0.20	1.0	µg/L	1	1/13/2017 18:47
Xylenes, Total	U		1.3	3.0	µg/L	1	1/13/2017 18:47
Surr: 1,2-Dichloroethane-d4	*100*			*75-120*	*%REC*	1	1/13/2017 18:47
Surr: 4-Bromofluorobenzene	*97.0*			*80-110*	*%REC*	1	1/13/2017 18:47
Surr: Dibromofluoromethane	*93.1*			*85-115*	*%REC*	1	1/13/2017 18:47
Surr: Toluene-d8	*97.6*			*85-110*	*%REC*	1	1/13/2017 18:47

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

ALS Group, USA

Date: 20-Jan-17

Client: The Sigma Group

Work Order: 1701570

Project: Solenis (16153)

QC BATCH REPORT

Batch ID: **R204540** Instrument ID **GC11** Method: **SW8015M**

MBLK	Sample ID: **MBLKW1-R204540**				Units: **mg/L**			Analysis Date: **1/18/2017 04:52 PM**			
Client ID:	Run ID: **GC11_170118A**				SeqNo: **4252611**			Prep Date: **1/18/2017**		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Triethylamine	U	25									

LCS	Sample ID: **LCSW1-R204540**				Units: **mg/L**			Analysis Date: **1/18/2017 04:12 PM**			
Client ID:	Run ID: **GC11_170118A**				SeqNo: **4252608**			Prep Date: **1/18/2017**		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Triethylamine	558.9	25	500	0	112	50-150	0				

MS	Sample ID: **1701778-01G MS**				Units: **mg/L**			Analysis Date: **1/18/2017 04:22 PM**			
Client ID:	Run ID: **GC11_170118A**				SeqNo: **4252609**			Prep Date: **1/18/2017**		DF: **2**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Triethylamine	1082	50	1000	0	108	50-150	0				

MSD	Sample ID: **1701778-01G MSD**				Units: **mg/L**			Analysis Date: **1/18/2017 04:32 PM**			
Client ID:	Run ID: **GC11_170118A**				SeqNo: **4252610**			Prep Date: **1/18/2017**		DF: **2**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Triethylamine	1204	50	1000	0	120	50-150	1082	10.7	30		

The following samples were analyzed in this batch:

1701570-01B	1701570-02B	1701570-03B
1701570-04B	1701570-05B	1701570-06B
1701570-07B	1701570-08B	1701570-09B
1701570-10B	1701570-11B	1701570-12B

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

Client: The Sigma Group
Work Order: 1701570
Project: Solenis (16153)

QC BATCH REPORT

Batch ID: **R204208** Instrument ID **VMS8** Method: **SW8260B**

MBLK Sample ID: **VBLKW2-170113-R204208** Units: **µg/L** Analysis Date: **1/13/2017 06:22 PM**
Client ID: Run ID: **VMS8_170113B** SeqNo: **4244997** Prep Date: 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	1.0								
1,1,1-Trichloroethane	U	1.0								
1,1,2,2-Tetrachloroethane	U	1.0								
1,1,2-Trichloroethane	U	1.0								
1,1,2-Trichlorotrifluoroethane	U	1.0								
1,1-Dichloroethane	U	1.0								
1,1-Dichloroethene	U	1.0								
1,2,3-Trichlorobenzene	U	1.0								
1,2,4-Trichlorobenzene	U	1.0								
1,2,4-Trimethylbenzene	U	1.0								
1,2-Dibromo-3-chloropropane	U	1.0								
1,2-Dibromoethane	U	1.0								
1,2-Dichlorobenzene	U	1.0								
1,2-Dichloroethane	U	1.0								
1,2-Dichloropropane	U	1.0								
1,3,5-Trimethylbenzene	U	1.0								
1,3-Dichlorobenzene	U	1.0								
1,4-Dichlorobenzene	U	1.0								
2,2-Dichloropropane	U	1.0								
2-Butanone	U	5.0								
2-Chlorotoluene	U	1.0								
2-Hexanone	U	5.0								
4-Chlorotoluene	U	1.0								
4-Methyl-2-pentanone	U	1.0								
Acetone	U	10								
Benzene	U	1.0								
Bromobenzene	U	1.0								
Bromochloromethane	U	1.0								
Bromodichloromethane	U	1.0								
Bromoform	U	1.0								
Bromomethane	U	1.0								
Carbon disulfide	U	1.0								
Carbon tetrachloride	U	1.0								
Chlorobenzene	U	1.0								
Chloroethane	U	1.0								
Chloroform	U	1.0								
Chloromethane	U	1.0								
cis-1,2-Dichloroethene	U	1.0								
cis-1,3-Dichloropropene	U	1.0								
Cyclohexane	U	1.0								
Dibromochloromethane	U	1.0								
Dichlorodifluoromethane	U	1.0								

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

Batch ID: **R204208** Instrument ID **VMS8** Method: **SW8260B**

Diisopropyl ether	U	5.0					
Ethyl acetate	U	5.0					
Ethylbenzene	U	1.0					
Hexachlorobutadiene	U	1.0					
Isopropylbenzene	U	1.0					
m,p-Xylene	U	2.0					
Methyl acetate	U	2.0					
Methyl tert-butyl ether	U	1.0					
Methylcyclohexane	U	1.0					
Methylene chloride	U	5.0					
Naphthalene	U	5.0					
n-Butylbenzene	U	1.0					
n-Propylbenzene	U	1.0					
o-Xylene	U	1.0					
p-Isopropyltoluene	U	1.0					
sec-Butylbenzene	U	1.0					
Styrene	U	1.0					
tert-Butylbenzene	U	1.0					
Tetrachloroethene	U	1.0					
Toluene	U	1.0					
trans-1,2-Dichloroethene	U	1.0					
trans-1,3-Dichloropropene	U	1.0					
Trichloroethene	U	1.0					
Trichlorofluoromethane	U	1.0					
Vinyl chloride	U	1.0					
Xylenes, Total	U	3.0					
Surr: 1,2-Dichloroethane-d4	*19.64*	0	*20*	0	*98.2*	*75-120*	0
Surr: 4-Bromofluorobenzene	*19.69*	0	*20*	0	*98.4*	*80-110*	0
Surr: Dibromofluoromethane	*19.09*	0	*20*	0	*95.4*	*85-115*	0
Surr: Toluene-d8	*20.18*	0	*20*	0	*101*	*85-110*	0

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

Client: The Sigma Group
Work Order: 1701570
Project: Solenis (16153)

QC BATCH REPORT

Batch ID: **R204208** Instrument ID **VMS8** Method: **SW8260B**

LCS Sample ID: **VLCSW2-170113-R204208** Units: **µg/L** Analysis Date: **1/13/2017 05:33 PM**
Client ID: Run ID: **VMS8_170113B** SeqNo: **4244996** Prep Date: 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	16.13	1.0	20	0	80.6	80-130	0			
1,1,1-Trichloroethane	17.63	1.0	20	0	88.2	75-130	0			
1,1,2,2-Tetrachloroethane	17.28	1.0	20	0	86.4	75-130	0			
1,1,2-Trichloroethane	17.41	1.0	20	0	87	75-125	0			
1,1-Dichloroethane	17.97	1.0	20	0	89.8	75-133	0			
1,1-Dichloroethene	20.26	1.0	20	0	101	70-145	0			
1,2,3-Trichlorobenzene	18.7	1.0	20	0	93.5	70-140	0			
1,2,4-Trichlorobenzene	18.28	1.0	20	0	91.4	70-135	0			
1,2,4-Trimethylbenzene	18.34	1.0	20	0	91.7	75-130	0			
1,2-Dibromo-3-chloropropane	19.97	1.0	20	0	99.8	60-130	0			
1,2-Dibromoethane	50.95	1.0	20	0	255	90-195	0			S
1,2-Dichlorobenzene	18.35	1.0	20	0	91.8	70-130	0			
1,2-Dichloroethane	15.84	1.0	20	0	79.2	78-125	0			
1,2-Dichloropropane	16.09	1.0	20	0	80.4	75-125	0			
1,3,5-Trimethylbenzene	18.82	1.0	20	0	94.1	75-130	0			
1,3-Dichlorobenzene	18.19	1.0	20	0	91	75-130	0			
1,4-Dichlorobenzene	17.49	1.0	20	0	87.4	75-130	0			
2,2-Dichloropropane	17.02	1.0	20	0	85.1	43-150	0			
2-Butanone	16.45	5.0	20	0	82.2	55-150	0			
2-Chlorotoluene	18.46	1.0	20	0	92.3	84-133	0			
2-Hexanone	15.94	5.0	20	0	79.7	60-135	0			
4-Chlorotoluene	18.44	1.0	20	0	92.2	80-125	0			
4-Methyl-2-pentanone	19.92	1.0	20	0	99.6	77-178	0			
Acetone	15.66	10	20	0	78.3	60-160	0			
Benzene	17.71	1.0	20	0	88.6	85-125	0			
Bromobenzene	16.93	1.0	20	0	84.6	80-125	0			
Bromochloromethane	17.8	1.0	20	0	89	72-141	0			
Bromodichloromethane	15.56	1.0	20	0	77.8	75-125	0			
Bromoform	13.61	1.0	20	0	68	60-125	0			
Bromomethane	16.47	1.0	20	0	82.4	30-185	0			
Carbon disulfide	18.5	1.0	20	0	92.5	60-165	0			
Carbon tetrachloride	17.88	1.0	20	0	89.4	65-140	0			
Chlorobenzene	17.65	1.0	20	0	88.2	80-120	0			
Chloroethane	18.01	1.0	20	0	90	50-140	0			
Chloroform	16.81	1.0	20	0	84	80-130	0			
Chloromethane	14.51	1.0	20	0	72.6	46-148	0			
cis-1,2-Dichloroethene	17.55	1.0	20	0	87.8	75-134	0			
cis-1,3-Dichloropropene	14.91	1.0	20	0	74.6	70-130	0			
Dibromochloromethane	13.9	1.0	20	0	69.5	60-115	0			
Dichlorodifluoromethane	14.46	1.0	20	0	72.3	20-120	0			
Ethylbenzene	18.17	1.0	20	0	90.8	85-125	0			
Hexachlorobutadiene	19.14	1.0	20	0	95.7	70-155	0			

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

Batch ID: **R204208** Instrument ID **VMS8** Method: **SW8260B**

Isopropylbenzene	18.46	1.0	20	0	92.3	80-127	0
m,p-Xylene	37.11	2.0	40	0	92.8	75-130	0
Methyl tert-butyl ether	17.06	1.0	20	0	85.3	80-130	0
Methylene chloride	18.71	5.0	20	0	93.6	75-140	0
Naphthalene	17.18	5.0	20	0	85.9	55-160	0
n-Butylbenzene	18.62	1.0	20	0	93.1	75-145	0
n-Propylbenzene	18.89	1.0	20	0	94.4	83-135	0
o-Xylene	18.14	1.0	20	0	90.7	80-125	0
p-Isopropyltoluene	18.62	1.0	20	0	93.1	61-164	0
sec-Butylbenzene	19.47	1.0	20	0	97.4	80-134	0
Styrene	18.84	1.0	20	0	94.2	83-137	0
tert-Butylbenzene	18.87	1.0	20	0	94.4	70-130	0
Tetrachloroethene	20.72	1.0	20	0	104	68-166	0
Toluene	17.58	1.0	20	0	87.9	85-125	0
trans-1,2-Dichloroethene	18.33	1.0	20	0	91.6	80-140	0
trans-1,3-Dichloropropene	12.55	1.0	20	0	62.8	56-132	0
Trichloroethene	18.36	1.0	20	0	91.8	84-130	0
Trichlorofluoromethane	19.75	1.0	20	0	98.8	60-140	0
Vinyl chloride	19.17	1.0	20	0	95.8	50-136	0
Xylenes, Total	55.25	3.0	60	0	92.1	80-126	0
Surr: 1,2-Dichloroethane-d4	*19.51*	0	*20*	0	*97.6*	*75-120*	0
Surr: 4-Bromofluorobenzene	*20.28*	0	*20*	0	*101*	*80-110*	0
Surr: Dibromofluoromethane	*20.13*	0	*20*	0	*101*	*85-115*	0
Surr: Toluene-d8	*19.81*	0	*20*	0	*99*	*85-110*	0

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

Client: The Sigma Group
Work Order: 1701570
Project: Solenis (16153)

QC BATCH REPORT

Batch ID: **R204208** Instrument ID **VMS8** Method: **SW8260B**

MS Sample ID: **1701522-01A MS** Units: **µg/L** Analysis Date: **1/14/2017 02:48 AM**
Client ID: Run ID: **VMS8_170113B** SeqNo: **4245014** Prep Date: 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	161.8	10	200	0	80.9	80-130	0			
1,1,1-Trichloroethane	174.4	10	200	0	87.2	75-130	0			
1,1,2,2-Tetrachloroethane	188.6	10	200	0	94.3	75-130	0			
1,1,2-Trichloroethane	183.1	10	200	0	91.6	75-125	0			
1,1-Dichloroethane	189.8	10	200	0	94.9	75-133	0			
1,1-Dichloroethene	183.4	10	200	0	91.7	70-145	0			
1,2,3-Trichlorobenzene	176.3	10	200	0	88.2	70-140	0			
1,2,4-Trichlorobenzene	168.8	10	200	0	84.4	70-135	0			
1,2,4-Trimethylbenzene	184.4	10	200	0	92.2	75-130	0			
1,2-Dibromo-3-chloropropane	190.3	10	200	0	95.2	60-130	0			
1,2-Dibromoethane	544.4	10	200	0	272	90-195	0			S
1,2-Dichlorobenzene	171.1	10	200	0	85.6	70-130	0			
1,2-Dichloroethane	168.3	10	200	0	84.2	78-125	0			
1,2-Dichloropropane	166.4	10	200	0	83.2	75-125	0			
1,3,5-Trimethylbenzene	190.4	10	200	0	95.2	75-130	0			
1,3-Dichlorobenzene	172.9	10	200	0	86.4	75-130	0			
1,4-Dichlorobenzene	169.7	10	200	0	84.8	75-130	0			
2,2-Dichloropropane	122.6	10	200	0	61.3	43-150	0			
2-Butanone	194.7	50	200	0	97.4	55-150	0			
2-Chlorotoluene	188.6	10	200	0	94.3	84-133	0			
2-Hexanone	174	50	200	0	87	60-135	0			
4-Chlorotoluene	190.2	10	200	0	95.1	80-125	0			
4-Methyl-2-pentanone	211.1	10	200	0	106	77-178	0			
Acetone	195.7	100	200	2.79	96.5	60-160	0			
Benzene	188.7	10	200	0	94.4	85-125	0			
Bromobenzene	179.1	10	200	0	89.6	80-125	0			
Bromochloromethane	183	10	200	0	91.5	72-141	0			
Bromodichloromethane	154.3	10	200	0	77.2	75-125	0			
Bromoform	137.8	10	200	0	68.9	60-125	0			
Bromomethane	213.8	10	200	0	107	30-185	0			
Carbon disulfide	173.3	10	200	0	86.6	60-165	0			
Carbon tetrachloride	175	10	200	0	87.5	65-140	0			
Chlorobenzene	182.7	10	200	0	91.4	80-120	0			
Chloroethane	180.2	10	200	0	90.1	50-140	0			
Chloroform	173.2	10	200	0	86.6	80-130	0			
Chloromethane	160	10	200	0	80	46-148	0			
cis-1,2-Dichloroethene	177.5	10	200	0	88.8	75-134	0			
cis-1,3-Dichloropropene	133	10	200	0	66.5	70-130	0			S
Dibromochloromethane	132.2	10	200	0	66.1	60-115	0			
Dichlorodifluoromethane	144.8	10	200	0	72.4	20-120	0			
Ethylbenzene	185.7	10	200	0	92.8	85-125	0			
Hexachlorobutadiene	169	10	200	0	84.5	70-155	0			

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

Batch ID: **R204208** Instrument ID **VMS8** Method: **SW8260B**

Isopropylbenzene	184.2	10	200	0	92.1	80-127	0
m,p-Xylene	370.3	20	400	0	92.6	75-130	0
Methyl tert-butyl ether	173.1	10	200	0	86.6	80-130	0
Methylene chloride	194.3	50	200	0	97.2	75-140	0
Naphthalene	182.5	50	200	0	91.2	55-160	0
n-Butylbenzene	166.8	10	200	0	83.4	75-145	0
n-Propylbenzene	188.3	10	200	0	94.2	83-135	0
o-Xylene	187.9	10	200	0	94	80-125	0
p-Isopropyltoluene	171.6	10	200	0	85.8	61-164	0
sec-Butylbenzene	195	10	200	0	97.5	80-134	0
Styrene	192	10	200	0	96	83-137	0
tert-Butylbenzene	191.7	10	200	0	95.8	70-130	0
Tetrachloroethene	222.6	10	200	0	111	68-166	0
Toluene	184.9	10	200	0	92.4	85-125	0
trans-1,2-Dichloroethene	186.8	10	200	0	93.4	80-140	0
trans-1,3-Dichloropropene	114.3	10	200	0	57.2	56-132	0
Trichloroethene	186.5	10	200	0	93.2	84-130	0
Trichlorofluoromethane	207.5	10	200	0	104	60-140	0
Vinyl chloride	198.1	10	200	0	99	50-136	0
Xylenes, Total	558.2	30	600	0	93	80-126	0
Surr: 1,2-Dichloroethane-d4	*193.3*	0	*200*	0	*96.6*	*75-120*	0
Surr: 4-Bromofluorobenzene	*198.6*	0	*200*	0	*99.3*	*80-110*	0
Surr: Dibromofluoromethane	*203.9*	0	*200*	0	*102*	*85-115*	0
Surr: Toluene-d8	*196.1*	0	*200*	0	*98*	*85-110*	0

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

Client: The Sigma Group
Work Order: 1701570
Project: Solenis (16153)

QC BATCH REPORT

Batch ID: **R204208** Instrument ID **VMS8** Method: **SW8260B**

MSD Sample ID: **1701522-01A MSD** Units: **µg/L** Analysis Date: **1/14/2017 03:13 AM**
Client ID: Run ID: **VMS8_170113B** SeqNo: **4245015** Prep Date: 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	176.8	10	200	0	88.4	80-130	161.8	8.86	30	
1,1,1-Trichloroethane	193.5	10	200	0	96.8	75-130	174.4	10.4	30	
1,1,2,2-Tetrachloroethane	201.1	10	200	0	101	75-130	188.6	6.42	30	
1,1,2-Trichloroethane	195.8	10	200	0	97.9	75-125	183.1	6.7	30	
1,1-Dichloroethane	198.3	10	200	0	99.2	75-133	189.8	4.38	30	
1,1-Dichloroethene	185.9	10	200	0	93	70-145	183.4	1.35	30	
1,2,3-Trichlorobenzene	194.7	10	200	0	97.4	70-140	176.3	9.92	30	
1,2,4-Trichlorobenzene	181.6	10	200	0	90.8	70-135	168.8	7.31	30	
1,2,4-Trimethylbenzene	198.5	10	200	0	99.2	75-130	184.4	7.36	30	
1,2-Dibromo-3-chloropropane	206.3	10	200	0	103	60-130	190.3	8.07	30	
1,2-Dibromoethane	601.6	10	200	0	301	90-195	544.4	9.98	30	S
1,2-Dichlorobenzene	188.8	10	200	0	94.4	70-130	171.1	9.84	30	
1,2-Dichloroethane	181.7	10	200	0	90.8	78-125	168.3	7.66	30	
1,2-Dichloropropane	179.8	10	200	0	89.9	75-125	166.4	7.74	30	
1,3,5-Trimethylbenzene	206.1	10	200	0	103	75-130	190.4	7.92	30	
1,3-Dichlorobenzene	182.4	10	200	0	91.2	75-130	172.9	5.35	30	
1,4-Dichlorobenzene	183	10	200	0	91.5	75-130	169.7	7.54	30	
2,2-Dichloropropane	126.6	10	200	0	63.3	43-150	122.6	3.21	30	
2-Butanone	184.5	50	200	0	92.2	55-150	194.7	5.38	30	
2-Chlorotoluene	203.5	10	200	0	102	84-133	188.6	7.6	30	
2-Hexanone	184.7	50	200	0	92.4	60-135	174	5.97	30	
4-Chlorotoluene	204.8	10	200	0	102	80-125	190.2	7.39	30	
4-Methyl-2-pentanone	236.4	10	200	0	118	77-178	211.1	11.3	30	
Acetone	188.6	100	200	2.79	92.9	60-160	195.7	3.7	30	
Benzene	189.2	10	200	0	94.6	85-125	188.7	0.265	30	
Bromobenzene	192.9	10	200	0	96.4	80-125	179.1	7.42	30	
Bromochloromethane	194.7	10	200	0	97.4	72-141	183	6.2	30	
Bromodichloromethane	168.9	10	200	0	84.4	75-125	154.3	9.03	30	
Bromoform	150.6	10	200	0	75.3	60-125	137.8	8.88	30	
Bromomethane	204	10	200	0	102	30-185	213.8	4.69	30	
Carbon disulfide	190.3	10	200	0	95.2	60-165	173.3	9.35	30	
Carbon tetrachloride	194.2	10	200	0	97.1	65-140	175	10.4	30	
Chlorobenzene	200	10	200	0	100	80-120	182.7	9.04	30	
Chloroethane	198	10	200	0	99	50-140	180.2	9.41	30	
Chloroform	188.7	10	200	0	94.4	80-130	173.2	8.57	30	
Chloromethane	157.3	10	200	0	78.6	46-148	160	1.7	30	
cis-1,2-Dichloroethene	187.1	10	200	0	93.6	75-134	177.5	5.27	30	
cis-1,3-Dichloropropene	141.9	10	200	0	71	70-130	133	6.48	30	
Dibromochloromethane	151.4	10	200	0	75.7	60-115	132.2	13.5	30	
Dichlorodifluoromethane	154.1	10	200	0	77	20-120	144.8	6.22	30	
Ethylbenzene	204	10	200	0	102	85-125	185.7	9.39	30	
Hexachlorobutadiene	186.8	10	200	0	93.4	70-155	169	10	30	

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

Batch ID: **R204208** Instrument ID **VMS8** Method: **SW8260B**

Isopropylbenzene	205.7	10	200	0	103	80-127	184.2	11	30
m,p-Xylene	408.2	20	400	0	102	75-130	370.3	9.74	30
Methyl tert-butyl ether	180.5	10	200	0	90.2	80-130	173.1	4.19	30
Methylene chloride	201.5	50	200	0	101	75-140	194.3	3.64	30
Naphthalene	186.6	50	200	0	93.3	55-160	182.5	2.22	30
n-Butylbenzene	185.4	10	200	0	92.7	75-145	166.8	10.6	30
n-Propylbenzene	206	10	200	0	103	83-135	188.3	8.98	30
o-Xylene	203.5	10	200	0	102	80-125	187.9	7.97	30
p-Isopropyltoluene	189.4	10	200	0	94.7	61-164	171.6	9.86	30
sec-Butylbenzene	214.6	10	200	0	107	80-134	195	9.57	30
Styrene	213.9	10	200	0	107	83-137	192	10.8	30
tert-Butylbenzene	210.9	10	200	0	105	70-130	191.7	9.54	30
Tetrachloroethene	241.6	10	200	0	121	68-166	222.6	8.19	30
Toluene	200.4	10	200	0	100	85-125	184.9	8.05	30
trans-1,2-Dichloroethene	200.8	10	200	0	100	80-140	186.8	7.22	30
trans-1,3-Dichloropropene	124.6	10	200	0	62.3	56-132	114.3	8.62	30
Trichloroethene	198.2	10	200	0	99.1	84-130	186.5	6.08	30
Trichlorofluoromethane	214.3	10	200	0	107	60-140	207.5	3.22	30
Vinyl chloride	207.5	10	200	0	104	50-136	198.1	4.64	30
Xylenes, Total	611.7	30	600	0	102	80-126	558.2	9.15	30
Surr: 1,2-Dichloroethane-d4	*197.5*	0	*200*	0	*98.8*	*75-120*	193.3	*2.15*	*30*
Surr: 4-Bromofluorobenzene	*206.7*	0	*200*	0	*103*	*80-110*	198.6	*4*	*30*
Surr: Dibromofluoromethane	*207.3*	0	*200*	0	*104*	*85-115*	203.9	*1.65*	*30*
Surr: Toluene-d8	*204*	0	*200*	0	*102*	*85-110*	196.1	*3.95*	*30*

The following samples were analyzed in this batch:

1701570-03A	1701570-04A	1701570-05A
1701570-06A	1701570-07A	1701570-08A
1701570-09A	1701570-10A	1701570-11A
1701570-12A	1701570-13A	

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

Client: The Sigma Group
Work Order: 1701570
Project: Solenis (16153)

QC BATCH REPORT

Batch ID: **R204254A** Instrument ID **VMS7** Method: **SW8260B**

MBLK Sample ID: **VBLKW1-170116-R204254A** Units: **µg/L** Analysis Date: **1/16/2017 11:47 AM**
Client ID: Run ID: **VMS7_170116A** SeqNo: **4246425** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2-Dichloropropane	U	1.0								
Surr: 1,2-Dichloroethane-d4	*20.72*	0	*20*	0	*104*	*75-120*	0			
Surr: 4-Bromofluorobenzene	*19.54*	0	*20*	0	*97.7*	*80-110*	0			
Surr: Dibromofluoromethane	*19.29*	0	*20*	0	*96.4*	*85-115*	0			
Surr: Toluene-d8	*20.56*	0	*20*	0	*103*	*85-110*	0			

LCS Sample ID: **VLCSW1-170116-R204254A** Units: **µg/L** Analysis Date: **1/16/2017 10:36 AM**
Client ID: Run ID: **VMS7_170116A** SeqNo: **4246424** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2-Dichloropropane	19.05	1.0	20	0	95.2	75-125	0			
Surr: 1,2-Dichloroethane-d4	*21.42*	0	*20*	0	*107*	*75-120*	0			
Surr: 4-Bromofluorobenzene	*20.53*	0	*20*	0	*103*	*80-110*	0			
Surr: Dibromofluoromethane	*20.18*	0	*20*	0	*101*	*85-115*	0			
Surr: Toluene-d8	*20.06*	0	*20*	0	*100*	*85-110*	0			

MS Sample ID: **1701564-02A MS** Units: **µg/L** Analysis Date: **1/16/2017 08:39 PM**
Client ID: Run ID: **VMS7_170116A** SeqNo: **4246437** Prep Date: DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2-Dichloropropane	198.2	10	200	0	99.1	75-125	0			
Surr: 1,2-Dichloroethane-d4	*214.3*	0	*200*	0	*107*	*75-120*	0			
Surr: 4-Bromofluorobenzene	*199.9*	0	*200*	0	*100*	*80-110*	0			
Surr: Dibromofluoromethane	*196.2*	0	*200*	0	*98.1*	*85-115*	0			
Surr: Toluene-d8	*208.4*	0	*200*	0	*104*	*85-110*	0			

MSD Sample ID: **1701564-02A MSD** Units: **µg/L** Analysis Date: **1/16/2017 09:03 PM**
Client ID: Run ID: **VMS7_170116A** SeqNo: **4246438** Prep Date: DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2-Dichloropropane	203.5	10	200	0	102	75-125	198.2	2.64	30	
Surr: 1,2-Dichloroethane-d4	*210*	0	*200*	0	*105*	*75-120*	214.3	*2.03*	*30*	
Surr: 4-Bromofluorobenzene	*200.2*	0	*200*	0	*100*	*80-110*	199.9	*0.15*	*30*	
Surr: Dibromofluoromethane	*194.8*	0	*200*	0	*97.4*	*85-115*	196.2	*0.716*	*30*	
Surr: Toluene-d8	*202.5*	0	*200*	0	*101*	*85-110*	208.4	*2.87*	*30*	

The following samples were analyzed in this batch:

1701570-01A	1701570-02A	1701570-10A
1701570-11A	1701570-12A	

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

Client: The Sigma Group
Work Order: 1701570
Project: Solenis (16153)

QC BATCH REPORT

Batch ID: **R204500a** Instrument ID **VMS6** Method: **SW8260B**

MBLK	Sample ID: **VBLKW1-170119-R204500a**			Units: **µg/L**		Analysis Date: **1/19/2017 01:46 PM**			
Client ID:		Run ID: **VMS6_170119A**		SeqNo: **4252711**		Prep Date:		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	1.0								
1,1,1-Trichloroethane	U	1.0								
1,1,2,2-Tetrachloroethane	U	1.0								
1,1,2-Trichloroethane	U	1.0								
1,1,2-Trichlorotrifluoroethane	U	1.0								
1,1-Dichloroethane	U	1.0								
1,1-Dichloroethene	U	1.0								
1,2,3-Trichlorobenzene	U	1.0								
1,2,4-Trichlorobenzene	U	1.0								
1,2,4-Trimethylbenzene	U	1.0								
1,2-Dibromo-3-chloropropane	U	1.0								
1,2-Dibromoethane	U	1.0								
1,2-Dichlorobenzene	U	1.0								
1,2-Dichloroethane	U	1.0								
1,2-Dichloropropane	U	1.0								
1,3,5-Trimethylbenzene	U	1.0								
1,3-Dichlorobenzene	U	1.0								
1,4-Dichlorobenzene	U	1.0								
2,2-Dichloropropane	U	1.0								
2-Butanone	U	5.0								
2-Chlorotoluene	U	1.0								
2-Hexanone	U	5.0								
4-Chlorotoluene	U	1.0								
4-Methyl-2-pentanone	U	1.0								
Acetone	U	10								
Benzene	U	1.0								
Bromobenzene	U	1.0								
Bromochloromethane	U	1.0								
Bromodichloromethane	U	1.0								
Bromoform	U	1.0								
Bromomethane	U	1.0								
Carbon disulfide	U	1.0								
Carbon tetrachloride	U	1.0								
Chlorobenzene	U	1.0								
Chloroethane	U	1.0								
Chloroform	U	1.0								
Chloromethane	U	1.0								
cis-1,2-Dichloroethene	U	1.0								
cis-1,3-Dichloropropene	U	1.0								
Cyclohexane	U	1.0								
Dibromochloromethane	U	1.0								
Dichlorodifluoromethane	U	1.0								

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

Batch ID: **R204500a** Instrument ID **VMS6** Method: **SW8260B**

Diisopropyl ether	U	5.0					
Ethyl acetate	U	5.0					
Ethylbenzene	U	1.0					
Hexachlorobutadiene	U	1.0					
Isopropylbenzene	U	1.0					
m,p-Xylene	U	2.0					
Methyl acetate	U	2.0					
Methyl tert-butyl ether	U	1.0					
Methylcyclohexane	U	1.0					
Methylene chloride	U	5.0					
Naphthalene	U	5.0					
n-Butylbenzene	U	1.0					
n-Propylbenzene	U	1.0					
o-Xylene	U	1.0					
p-Isopropyltoluene	U	1.0					
sec-Butylbenzene	U	1.0					
Styrene	U	1.0					
tert-Butylbenzene	U	1.0					
Tetrachloroethene	U	1.0					
Toluene	U	1.0					
trans-1,2-Dichloroethene	U	1.0					
trans-1,3-Dichloropropene	U	1.0					
Trichloroethene	U	1.0					
Trichlorofluoromethane	U	1.0					
Vinyl chloride	U	1.0					
Xylenes, Total	U	3.0					
Surr: 1,2-Dichloroethane-d4	*21.63*	0	*20*	0	*108*	*75-120*	0
Surr: 4-Bromofluorobenzene	*19.18*	0	*20*	0	*95.9*	*80-110*	0
Surr: Dibromofluoromethane	*20.36*	0	*20*	0	*102*	*85-115*	0
Surr: Toluene-d8	*19.76*	0	*20*	0	*98.8*	*85-110*	0

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

Client: The Sigma Group
Work Order: 1701570
Project: Solenis (16153)

QC BATCH REPORT

Batch ID: **R204500a** Instrument ID **VMS6** Method: **SW8260B**

LCS Sample ID: **VLCSW1-170119-R204500a** Units: **µg/L** Analysis Date: **1/19/2017 12:53 PM**
Client ID: Run ID: **VMS6_170119A** SeqNo: **4252710** Prep Date: 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	20.77	1.0	20	0	104	80-130	0			
1,1,1-Trichloroethane	21.18	1.0	20	0	106	75-130	0			
1,1,2,2-Tetrachloroethane	21.14	1.0	20	0	106	75-130	0			
1,1,2-Trichloroethane	20.42	1.0	20	0	102	75-125	0			
1,1-Dichloroethane	21.17	1.0	20	0	106	75-133	0			
1,1-Dichloroethene	22.78	1.0	20	0	114	70-145	0			
1,2,3-Trichlorobenzene	20.71	1.0	20	0	104	70-140	0			
1,2,4-Trichlorobenzene	19.72	1.0	20	0	98.6	70-135	0			
1,2,4-Trimethylbenzene	18.91	1.0	20	0	94.6	75-130	0			
1,2-Dibromo-3-chloropropane	17.41	1.0	20	0	87	60-130	0			
1,2-Dibromoethane	22.31	1.0	20	0	112	90-195	0			
1,2-Dichlorobenzene	20.45	1.0	20	0	102	70-130	0			
1,2-Dichloroethane	20.72	1.0	20	0	104	78-125	0			
1,2-Dichloropropane	19.81	1.0	20	0	99	75-125	0			
1,3,5-Trimethylbenzene	19.41	1.0	20	0	97	75-130	0			
1,3-Dichlorobenzene	20.25	1.0	20	0	101	75-130	0			
1,4-Dichlorobenzene	20.08	1.0	20	0	100	75-130	0			
2,2-Dichloropropane	21.22	1.0	20	0	106	43-150	0			
2-Butanone	18.7	5.0	20	0	93.5	55-150	0			
2-Chlorotoluene	21.16	1.0	20	0	106	84-133	0			
2-Hexanone	18.72	5.0	20	0	93.6	60-135	0			
4-Chlorotoluene	19.41	1.0	20	0	97	80-125	0			
4-Methyl-2-pentanone	26.12	1.0	20	0	131	77-178	0			
Acetone	18.65	10	20	0	93.2	60-160	0			
Benzene	21.42	1.0	20	0	107	85-125	0			
Bromobenzene	21.23	1.0	20	0	106	80-125	0			
Bromochloromethane	20.94	1.0	20	0	105	72-141	0			
Bromodichloromethane	20.77	1.0	20	0	104	75-125	0			
Bromoform	17.13	1.0	20	0	85.6	60-125	0			
Bromomethane	19.4	1.0	20	0	97	30-185	0			
Carbon disulfide	23.36	1.0	20	0	117	60-165	0			
Carbon tetrachloride	21.98	1.0	20	0	110	65-140	0			
Chlorobenzene	20.62	1.0	20	0	103	80-120	0			
Chloroethane	19.85	1.0	20	0	99.2	50-140	0			
Chloroform	19.73	1.0	20	0	98.6	80-130	0			
Chloromethane	21.93	1.0	20	0	110	46-148	0			
cis-1,2-Dichloroethene	21.01	1.0	20	0	105	75-134	0			
cis-1,3-Dichloropropene	18.9	1.0	20	0	94.5	70-130	0			
Dibromochloromethane	17.53	1.0	20	0	87.6	60-115	0			
Dichlorodifluoromethane	16.87	1.0	20	0	84.4	20-120	0			
Ethylbenzene	21.47	1.0	20	0	107	85-125	0			
Hexachlorobutadiene	23.64	1.0	20	0	118	70-155	0			

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

Batch ID: **R204500a** Instrument ID **VMS6** Method: **SW8260B**

Isopropylbenzene	19.28	1.0	20	0	96.4	80-127	0
m,p-Xylene	39.8	2.0	40	0	99.5	75-130	0
Methyl tert-butyl ether	19.14	1.0	20	0	95.7	80-130	0
Methylene chloride	20.43	5.0	20	0	102	75-140	0
Naphthalene	17.3	5.0	20	0	86.5	55-160	0
n-Butylbenzene	20.25	1.0	20	0	101	75-145	0
n-Propylbenzene	19.3	1.0	20	0	96.5	83-135	0
o-Xylene	19.96	1.0	20	0	99.8	80-125	0
p-Isopropyltoluene	19.65	1.0	20	0	98.2	61-164	0
sec-Butylbenzene	19.82	1.0	20	0	99.1	80-134	0
Styrene	20.24	1.0	20	0	101	83-137	0
tert-Butylbenzene	19.71	1.0	20	0	98.6	70-130	0
Tetrachloroethene	21	1.0	20	0	105	68-166	0
Toluene	21.49	1.0	20	0	107	85-125	0
trans-1,2-Dichloroethene	21.64	1.0	20	0	108	80-140	0
trans-1,3-Dichloropropene	18.83	1.0	20	0	94.2	56-132	0
Trichloroethene	20.13	1.0	20	0	101	84-130	0
Trichlorofluoromethane	21.22	1.0	20	0	106	60-140	0
Vinyl chloride	22.19	1.0	20	0	111	50-136	0
Xylenes, Total	59.76	3.0	60	0	99.6	80-126	0
Surr: 1,2-Dichloroethane-d4	*20.56*	0	*20*	0	*103*	*75-120*	0
Surr: 4-Bromofluorobenzene	*20.71*	0	*20*	0	*104*	*80-110*	0
Surr: Dibromofluoromethane	*19.6*	0	*20*	0	*98*	*85-115*	0
Surr: Toluene-d8	*20.42*	0	*20*	0	*102*	*85-110*	0

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

Client: The Sigma Group
Work Order: 1701570
Project: Solenis (16153)

QC BATCH REPORT

Batch ID: **R204500a** Instrument ID **VMS6** Method: **SW8260B**

MS Sample ID: **1701806-13A MS** Units: **µg/L** Analysis Date: **1/19/2017 11:03 PM**
Client ID: Run ID: **VMS6_170119A** SeqNo: **4252725** Prep Date: 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	218.8	10	200	0	109	80-130	0			
1,1,1-Trichloroethane	232.4	10	200	0	116	75-130	0			
1,1,2,2-Tetrachloroethane	228.1	10	200	0	114	75-130	0			
1,1,2-Trichloroethane	211.9	10	200	0	106	75-125	0			
1,1-Dichloroethane	227.8	10	200	0	114	75-133	0			
1,1-Dichloroethene	241.5	10	200	0	121	70-145	0			
1,2,3-Trichlorobenzene	208.4	10	200	0	104	70-140	0			
1,2,4-Trichlorobenzene	206.2	10	200	0	103	70-135	0			
1,2,4-Trimethylbenzene	208.4	10	200	0	104	75-130	0			
1,2-Dibromo-3-chloropropane	187.7	10	200	0	93.8	60-130	0			
1,2-Dibromoethane	229.2	10	200	0	115	90-195	0			
1,2-Dichlorobenzene	218.2	10	200	0	109	70-130	0			
1,2-Dichloroethane	225.4	10	200	0	113	78-125	0			
1,2-Dichloropropane	219.7	10	200	0	110	75-125	0			
1,3,5-Trimethylbenzene	211.8	10	200	0	106	75-130	0			
1,3-Dichlorobenzene	220.1	10	200	0	110	75-130	0			
1,4-Dichlorobenzene	213.7	10	200	0	107	75-130	0			
2,2-Dichloropropane	177.6	10	200	0	88.8	43-150	0			
2-Butanone	260.3	50	200	0	130	55-150	0			
2-Chlorotoluene	239	10	200	0	120	84-133	0			
2-Hexanone	239.8	50	200	0	120	60-135	0			
4-Chlorotoluene	216.7	10	200	0	108	80-125	0			
4-Methyl-2-pentanone	313.8	10	200	0	157	77-178	0			
Acetone	281.7	100	200	0	141	60-160	0			
Benzene	231	10	200	0	116	85-125	0			
Bromobenzene	228.8	10	200	0	114	80-125	0			
Bromochloromethane	218.8	10	200	0	109	72-141	0			
Bromodichloromethane	216.5	10	200	0	108	75-125	0			
Bromoform	171.2	10	200	0	85.6	60-125	0			
Bromomethane	63	10	200	0	31.5	30-185	0			
Carbon disulfide	234.6	10	200	0	117	60-165	0			
Carbon tetrachloride	233.3	10	200	0	117	65-140	0			
Chlorobenzene	218.1	10	200	0	109	80-120	0			
Chloroethane	214.8	10	200	0	107	50-140	0			
Chloroform	214	10	200	1.82	106	80-130	0			
Chloromethane	190.6	10	200	0	95.3	46-148	0			
cis-1,2-Dichloroethene	214.4	10	200	0	107	75-134	0			
cis-1,3-Dichloropropene	196.1	10	200	0	98	70-130	0			
Dibromochloromethane	175.9	10	200	0	88	60-115	0			
Dichlorodifluoromethane	177.5	10	200	0	88.8	20-120	0			
Ethylbenzene	234.8	10	200	0	117	85-125	0			
Hexachlorobutadiene	218.8	10	200	0	109	70-155	0			

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

Batch ID: **R204500a** Instrument ID **VMS6** Method: **SW8260B**

Isopropylbenzene	216.9	10	200	0	108	80-127	0
m,p-Xylene	436.3	20	400	0	109	75-130	0
Methyl tert-butyl ether	219.6	10	200	0	110	80-130	0
Methylene chloride	217.1	50	200	0	109	75-140	0
Naphthalene	203.5	50	200	0	102	55-160	0
n-Butylbenzene	213.7	10	200	0	107	75-145	0
n-Propylbenzene	216	10	200	0	108	83-135	0
o-Xylene	214.1	10	200	0	107	80-125	0
p-Isopropyltoluene	210.5	10	200	0	105	61-164	0
sec-Butylbenzene	213.2	10	200	0	107	80-134	0
Styrene	213.9	10	200	0	107	83-137	0
tert-Butylbenzene	208.3	10	200	0	104	70-130	0
Tetrachloroethene	242.3	10	200	0	121	68-166	0
Toluene	226.5	10	200	0	113	85-125	0
trans-1,2-Dichloroethene	225.6	10	200	0	113	80-140	0
trans-1,3-Dichloropropene	185.6	10	200	0	92.8	56-132	0
Trichloroethene	219.6	10	200	0	110	84-130	0
Trichlorofluoromethane	227.4	10	200	0	114	60-140	0
Vinyl chloride	229.9	10	200	0	115	50-136	0
Xylenes, Total	650.4	30	600	0	108	80-126	0
Surr: 1,2-Dichloroethane-d4	*208.4*	0	*200*	0	*104*	*75-120*	0
Surr: 4-Bromofluorobenzene	*206.8*	0	*200*	0	*103*	*80-110*	0
Surr: Dibromofluoromethane	*197.1*	0	*200*	0	*98.6*	*85-115*	0
Surr: Toluene-d8	*200.2*	0	*200*	0	*100*	*85-110*	0

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

Client: The Sigma Group
Work Order: 1701570
Project: Solenis (16153)

QC BATCH REPORT

Batch ID: **R204500a** Instrument ID **VMS6** Method: **SW8260B**

MSD Sample ID: **1701806-13A MSD** Units: **µg/L** Analysis Date: **1/19/2017 11:29 PM**
Client ID: Run ID: **VMS6_170119A** SeqNo: **4252726** Prep Date: 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	221	10	200	0	110	80-130	218.8	1	30	
1,1,1-Trichloroethane	236.9	10	200	0	118	75-130	232.4	1.92	30	
1,1,2,2-Tetrachloroethane	234.6	10	200	0	117	75-130	228.1	2.81	30	
1,1,2-Trichloroethane	220.1	10	200	0	110	75-125	211.9	3.8	30	
1,1-Dichloroethane	229.9	10	200	0	115	75-133	227.8	0.918	30	
1,1-Dichloroethene	246.2	10	200	0	123	70-145	241.5	1.93	30	
1,2,3-Trichlorobenzene	214.7	10	200	0	107	70-140	208.4	2.98	30	
1,2,4-Trichlorobenzene	205.7	10	200	0	103	70-135	206.2	0.243	30	
1,2,4-Trimethylbenzene	211.9	10	200	0	106	75-130	208.4	1.67	30	
1,2-Dibromo-3-chloropropane	188	10	200	0	94	60-130	187.7	0.16	30	
1,2-Dibromoethane	239	10	200	0	120	90-195	229.2	4.19	30	
1,2-Dichlorobenzene	228	10	200	0	114	70-130	218.2	4.39	30	
1,2-Dichloroethane	223.1	10	200	0	112	78-125	225.4	1.03	30	
1,2-Dichloropropane	218.2	10	200	0	109	75-125	219.7	0.685	30	
1,3,5-Trimethylbenzene	216.8	10	200	0	108	75-130	211.8	2.33	30	
1,3-Dichlorobenzene	228.2	10	200	0	114	75-130	220.1	3.61	30	
1,4-Dichlorobenzene	222.5	10	200	0	111	75-130	213.7	4.03	30	
2,2-Dichloropropane	179.6	10	200	0	89.8	43-150	177.6	1.12	30	
2-Butanone	247.4	50	200	0	124	55-150	260.3	5.08	30	
2-Chlorotoluene	245.3	10	200	0	123	84-133	239	2.6	30	
2-Hexanone	233.1	50	200	0	117	60-135	239.8	2.83	30	
4-Chlorotoluene	221.9	10	200	0	111	80-125	216.7	2.37	30	
4-Methyl-2-pentanone	316.7	10	200	0	158	77-178	313.8	0.92	30	
Acetone	275	100	200	0	138	60-160	281.7	2.41	30	
Benzene	230.6	10	200	0	115	85-125	231	0.173	30	
Bromobenzene	237.5	10	200	0	119	80-125	228.8	3.73	30	
Bromochloromethane	222.1	10	200	0	111	72-141	218.8	1.5	30	
Bromodichloromethane	223.7	10	200	0	112	75-125	216.5	3.27	30	
Bromoform	175.7	10	200	0	87.8	60-125	171.2	2.59	30	
Bromomethane	106.9	10	200	0	53.4	30-185	63	51.7	30	R
Carbon disulfide	241.9	10	200	0	121	60-165	234.6	3.06	30	
Carbon tetrachloride	235.5	10	200	0	118	65-140	233.3	0.939	30	
Chlorobenzene	224.8	10	200	0	112	80-120	218.1	3.03	30	
Chloroethane	220.1	10	200	0	110	50-140	214.8	2.44	30	
Chloroform	218.8	10	200	1.82	108	80-130	214	2.22	30	
Chloromethane	201.1	10	200	0	101	46-148	190.6	5.36	30	
cis-1,2-Dichloroethene	217.9	10	200	0	109	75-134	214.4	1.62	30	
cis-1,3-Dichloropropene	200.2	10	200	0	100	70-130	196.1	2.07	30	
Dibromochloromethane	183.2	10	200	0	91.6	60-115	175.9	4.07	30	
Dichlorodifluoromethane	174.7	10	200	0	87.4	20-120	177.5	1.59	30	
Ethylbenzene	240.7	10	200	0	120	85-125	234.8	2.48	30	
Hexachlorobutadiene	224.6	10	200	0	112	70-155	218.8	2.62	30	

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

Client: The Sigma Group
Work Order: 1701570
Project: Solenis (16153)

QC BATCH REPORT

Batch ID: **R204500a** Instrument ID **VMS6** Method: **SW8260B**

Isopropylbenzene	221.5	10	200	0	111	80-127	216.9	2.1	30
m,p-Xylene	453	20	400	0	113	75-130	436.3	3.76	30
Methyl tert-butyl ether	219.6	10	200	0	110	80-130	219.6	0	30
Methylene chloride	214.6	50	200	0	107	75-140	217.1	1.16	30
Naphthalene	205.6	50	200	0	103	55-160	203.5	1.03	30
n-Butylbenzene	220.2	10	200	0	110	75-145	213.7	3	30
n-Propylbenzene	219.2	10	200	0	110	83-135	216	1.47	30
o-Xylene	222	10	200	0	111	80-125	214.1	3.62	30
p-Isopropyltoluene	215.1	10	200	0	108	61-164	210.5	2.16	30
sec-Butylbenzene	219.9	10	200	0	110	80-134	213.2	3.09	30
Styrene	220.3	10	200	0	110	83-137	213.9	2.95	30
tert-Butylbenzene	213.2	10	200	0	107	70-130	208.3	2.33	30
Tetrachloroethene	252	10	200	0	126	68-166	242.3	3.92	30
Toluene	234.5	10	200	0	117	85-125	226.5	3.47	30
trans-1,2-Dichloroethene	232.1	10	200	0	116	80-140	225.6	2.84	30
trans-1,3-Dichloropropene	191.8	10	200	0	95.9	56-132	185.6	3.29	30
Trichloroethene	222.2	10	200	0	111	84-130	219.6	1.18	30
Trichlorofluoromethane	231.8	10	200	0	116	60-140	227.4	1.92	30
Vinyl chloride	233.2	10	200	0	117	50-136	229.9	1.43	30
Xylenes, Total	675	30	600	0	112	80-126	650.4	3.71	30
Surr: 1,2-Dichloroethane-d4	*207.8*	0	*200*	0	*104*	*75-120*	208.4	*0.288*	*30*
Surr: 4-Bromofluorobenzene	*214.4*	0	*200*	0	*107*	*80-110*	206.8	*3.61*	*30*
Surr: Dibromofluoromethane	*193.7*	0	*200*	0	*96.8*	*85-115*	197.1	*1.74*	*30*
Surr: Toluene-d8	*205.1*	0	*200*	0	*103*	*85-110*	200.2	*2.42*	*30*

The following samples were analyzed in this batch: 1701570-01A 1701570-02A

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 2

COC ID: 42192

ALS Project Manager: | ALS Work Order #: 701570

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Solenis	A	VOCs
Work Order		Project Number	16163	B	Triethylamine
Company Name	The Sigma Group	Bill To Company	The Sigma Group	C	
Send Report To	Cory Katzbas	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	MW-6	1-11-17	1:05	GW	HCL None	5	X	X									
2	MW-10	1-11-17	12:03	GW	HCL	5	X	X									
3	MW-12	1-11-17	2:05	GW	HCL	5	X	X									
4	PZ-6	1-11-17	1:10	GW	HCL	5	X	X									
5	PZ-9	1-11-17	2:19	GW	HCL	5	X	X									
6	PZ-12	1-11-17	1:50	GW	HCL	5	X	X									
7	MW-8	1-12-17	9:52	GW	HCL	5	X	X									
8	PZ-8	1-12-17	9:30	GW	HCL	5	X	X									
9	MW-9	1-12-17	10:55	GW	HCL	5	X	X									
10	MW-1	1-12-17	12:20	GW	HCL	5	X	X									

Sampler(s) Please Print & Sign: David Dailey David Dailey

Shipment Method: Fed X

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

Results Due Date:

Relinquished by: David Dailey Date: 1-12-17 Time: Received by:

Relinquished by: Date: 1/13/17 Time: 830 Received by (Laboratory):

Logged by (Laboratory): MB Date: 1/13/17 Time: 1230 Checked by (Laboratory):

Notes: MW-1 is HOT sample

Cooler ID	Cooler Temp
	2.4
	5.2
	4.3

QC Package: (Check One Box Below)
☐ Level II Std QC ☐ TRRP Checklist
☐ Level III Std QC/Raw Data ☐ 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.

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

COC ID: 42194

ALS Project Manager: | ALS Work Order #: 1701570

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Solenis	A	VOCs
Work Order		Project Number	16153	B	Triethylamine
Company Name	The Sigma Group	Bill To Company	The Sigma Group	C	
Send Report To	Cory Katzban	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
11	MW-2	1-12-17	12:06	GW	HCL None	5	X	X									
12	Duplicate	1-12-17	—	GW	HCL None	5	X	X									
13	Trip blank	—	—	—	HCL	2	X										
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign: David Dailey David Dailey

Shipment Method: Fed X

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

Results Due Date:

Relinquished by: David Dailey — Date: 1-12-17 — Time: — Received by:

Relinquished by: — Date: 1/13/17 — Time: 830 — Received by (Laboratory):

Logged by (Laboratory): MB — Date: 1/13/17 — Time: 1230 — Checked by (Laboratory):

Notes: MW-2 is HOT sample

Cooler ID	Cooler Temp
	2.4
	9.2

QC Package: (Check One Box Below)
☐ Level II Std QC ☐ TRRP Checklist
☐ Level III Std QC/Raw Data ☐ 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.

FedEx Express **US Airbill**

FedEx Tracking Number 8664 9596 8497

Form ID No. 0215

Recipient's Copy

RECIPIENT: PEEL HERE

1 From
This portion can be removed for Recipient's records.

Date

FedEx Tracking Number 866495968497

Sender's Name DAVE CZERNICKI   Phone 414 643-4200

Company SIGMA ENVIRONMENTAL SERVICES

Address 1300 W CANAL ST

Dept./Floor/Suite/Room

City MILWAUKEE   State WI   ZIP 53233-2615

2 Your Internal Billing Reference
16153

3 To
Recipient's Name Chad Whelton   Phone 616 399-6070

Company ALS Lab

Recipient's Address 3352 128th

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Dept./Floor/Suite/Room

Address

City

4a Express Package Service
Packages up to 150 lbs.

- [ ] FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [x] FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.
- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations.* Saturday Delivery NOT available.
- [ ] FedEx 2Day — Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

FedEx Envelope rate not available. Minimum charge: One-pound rate.

4b Express Freight Service
Packages over 150 lbs.

- [ ] FedEx 1Day Freight* — Next business day.** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx 2Day Freight — Second business day.** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx 3Day Freight — Third business day.** Saturday Delivery NOT available.

* Call for Confirmation.

** To most locations.

5 Packaging
- [ ] FedEx Envelope*
- [ ] FedEx Pak* — Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak.
- [ ] FedEx Box
- [ ] FedEx Tube
- [ ] Other

* Declared value limit $500.

6 Special Handling
Include FedEx address in Section 3.

- [ ] SATURDAY Delivery — Not available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx 3Day Freight.
- [ ] HOLD Weekday at FedEx Location — Not available for FedEx First Overnight.
- [ ] HOLD Saturday at FedEx Location — Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Does this shipment contain dangerous goods? One box must be checked.

- [ ] No
- [ ] Yes — As per attached Shipper's Declaration.
- [ ] Yes — Shipper's Declaration not required.
- [ ] Dry Ice — Dry Ice, 9, UN 1845 ___ x ___ kg
- [ ] Cargo Aircraft Only

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

7 Payment
Bill to:

- [x] Sender
- [ ] Recipient

Enter FedEx Acct. No. or Credit Card No. below.

Obtain Recip. Acct. No.

ALS
3352 128th Avenue
Holland, Michigan 49424
Tel. +1 616 399 6070
Fax. +1 616 399 6185

CUSTODY SEAL

Date: 1-18-17	Time: 4:20 PM
Name: Dailey	
Company: Sigma Group	
Seal Broken By:	Date:

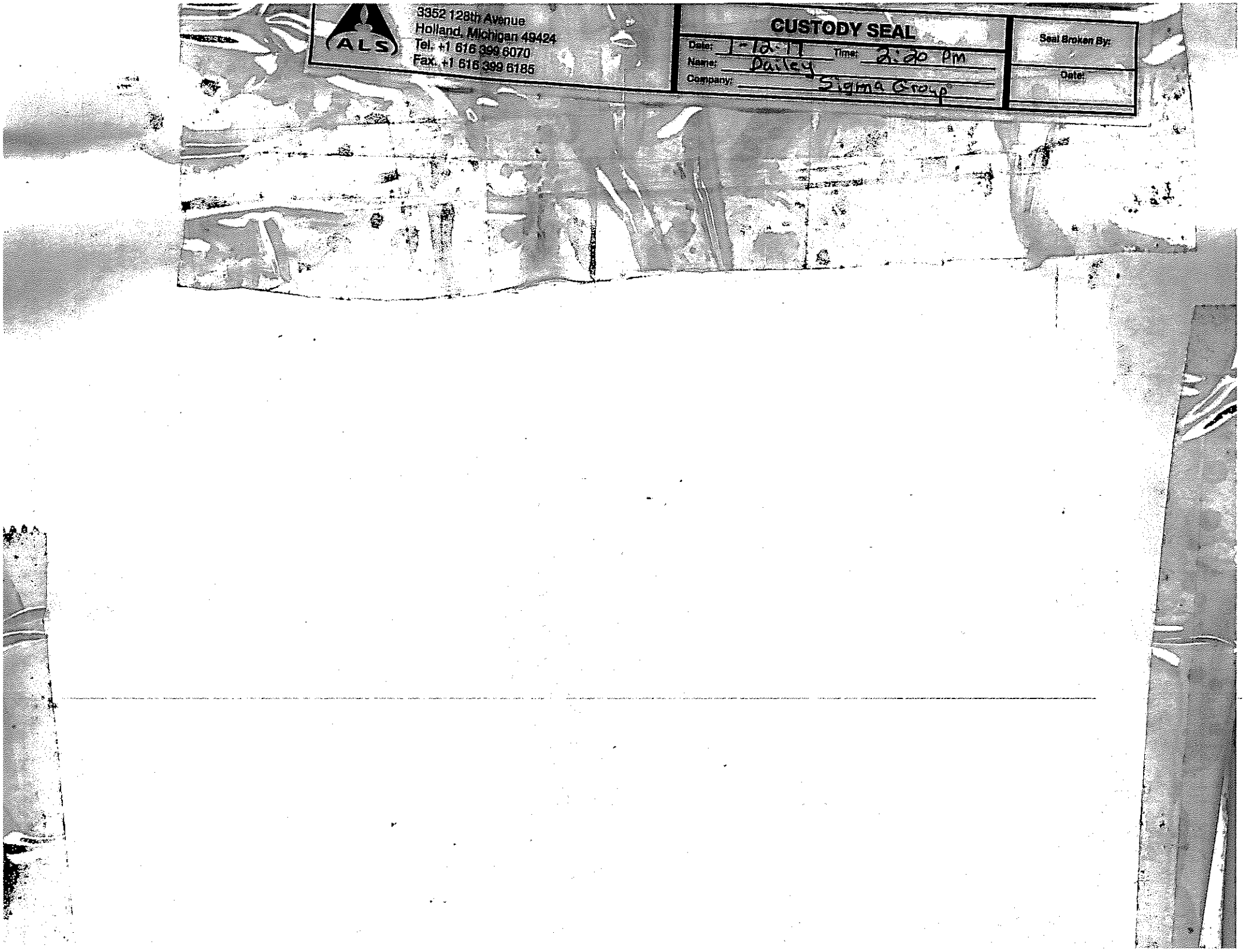
Signature Options — If you require a signature, check Direct or Indirect.

- [ ] No Signature Required
- [ ] Direct Signature — Someone at recipient's address may sign for delivery. Fee applies.
- [ ] Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. Fee applies.

519

8664 9596 8497

fedex.com 1.800.GoFedEx 1.800.463.3339



ALS

3352 128th Avenue
Holland, Michigan 49424
Tel. +1 616 399 6070
Fax. +1 616 399 6185

CUSTODY SEAL

Date: 4-12-11 Time: 2:20 pm
Name: Bailey
Company: Sigma Group

Seal Broken By:

Date:

ALS Group, USA

Sample Receipt Checklist

Client Name: **SIGMAGROUP** Date/Time Received: **13-Jan-17 08:30**

Work Order: **1701570** Received by: **MBB**

Checklist completed by Meghan Broadbent (eSignature) 13-Jan-17 (Date) Reviewed by: Chad Whelton (eSignature) 13-Jan-17 (Date)

Matrices: water
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):	2.4/2.4	SR2	
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	1/13/2017 12:55:53 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: