



June 13, 2018

Mr. Alexander Yulfo  
BFC Partners  
450 Kent Avenue  
Brooklyn, NY 11211

**Re: Phase II Investigation Report  
Block 7062, Lots 25, 28 & 34  
Block 7061, Lots 14, 20 & 27  
Coney Island, New York 11224**

Dear Mr. Yulfo

Hillmann Consulting, LLC (Hillmann) conducted a Phase II subsurface investigation at two sites located on Surf Avenue, Coney Island, New York. The sites are identified as Block 7062, Lots 25, 28 and 24 and Block 7061, Lots 14, 20 and 27.

Hillmann prepared Phase I Environmental Site Assessments (ESAs) dated May 31 and June 11, 2018 for each site. The Phase I ESA for Block 7062 identified several Recognized Environmental Conditions (RECs) including historic property uses of manufacturing, auto repair and a machine shop. The Phase I ESA for Block 7061 identified several Recognized Environmental Conditions (RECs) at the Property including historic site uses of a railroad right of way, dry cleaner, gasoline filling station, auto repair and car wash.

The purpose of this Phase II investigation was to further assess whether the subsurface soil, groundwater and soil vapor has been impacted by the identified RECs. This Phase II Subsurface Investigation Report presents the findings and recommendations associated with the investigative activities conducted by Hillmann.

#### **FIELD ACTIVITIES (May, 30 2018- May, 31 2018)**

##### **Block 7062**

On May 30, 2018, five borings (SB1- SB5) were advanced on the site using direct push technology (i.e. Geoprobe®). The borings were advanced through the depth of groundwater to 10 feet below ground surface (bgs). All recovered soil cuttings were field screened using visual and olfactory senses and a photoionization detector (PID). One soil sample was collected from each boring (S1-S5); either from the highest potentially contaminated interval based on field screening or at the soil-groundwater interface.

Groundwater was encountered in each boring at depths ranging from 5 to 7 feet bgs. One temporary well point (TWP) was installed in location SB3 to facilitate collection of a groundwater sample. One groundwater sample was collected (GW-1) using dedicated sampling equipment.

All soil and groundwater samples were placed in laboratory approved containers and kept cool during transport to a New York certified laboratory under chain of custody protocol. Soil and groundwater samples

were analyzed for (VOCs) by EPA method 8260, semi-volatile organic compounds (SVOCs) by EPA method 8270, pesticides and polychlorinated biphenyls (PCBs) by EPA method 8081 and 8082 and TAL metals.

Two soil vapor samples (SV1 – SV2) were collected from 5 feet bgs using sampling points installed by direct push technology. The soil vapor samples were collected as grab samples over a 2 hour period in laboratory certified Summa® Canisters and transported to a New York certified laboratory under chain of custody protocol. Soil vapors samples were analyzed for VOCs by USEPA Method TO-15.

The sampling locations for Block 7062 are shown on the attached Figure 1.

### **Block 7061**

On May 31, 2018, seven borings (SB6 – SB12) were advanced using direct push machinery through the depth of groundwater to 10 feet bgs. All recovered soil cuttings were field screened using visual and olfactory senses and a photoionization detector (PID). One soil sample was collected from each boring (S6-S12); either from the highest potentially contaminated interval based on field screening or at the soil-groundwater interface.

Groundwater was encountered in each boring at depths ranging from 5 to 7 feet bgs. Two temporary well points (TWP) were installed in SB8 and SB12 to facilitate groundwater collection. One groundwater sample (GW-2 and GW-3) was collected from each TWP using dedicated sampling equipment.

All soil and groundwater samples were placed in laboratory approved containers and kept cool during transport to a New York certified laboratory under chain of custody protocol. Soil and groundwater samples were analyzed for (VOCs) by EPA method 8260, semi-volatile organic compounds (SVOCs) by EPA method 8270, pesticides and polychlorinated biphenyls (PCBs) by EPA method 8081 and 8082 and TAL metals.

Two soil vapor samples (SV3 and SV4) were collected as grab samples over a 2 hour period from 5 feet bgs using sampling points installed by direct push technology. All samples were collected in laboratory certified Summa® Canisters and transported to a New York certified laboratory under chain of custody protocol. Soil vapors samples were analyzed for VOCs by USEPA Method TO-15.

The sampling locations for Block 7061 are shown on the attached Figure 2.

## **RESULTS**

### **Block 7062**

Soil in the boring profiles consisted mainly of urban fill material from the ground surface to 6 feet bgs at SB1, SB4, and SB5, and from ground surface to 3 feet bgs at SB3 and SB6. The fill material was underlain by native fine sands to a depth of 10 feet bgs. Groundwater was encountered from 6-8 feet bgs. Field screening did not indicate elevated PID readings in any of the borings. No odors or sheen was observed during groundwater collection. Soil boring logs are included as Attachment A.

The soil samples were compared to the applicable New York Department of Environmental Conservation (NYSDEC) Unrestricted Use Soil Cleanup Objective (UUSCO) and the Restricted – Residential Soil Cleanup Objective (RRSCO). Laboratory results indicated several exceedances above UUSCO for pesticide

and several metal compounds in multiple samples. Several polycyclic aromatic hydrocarbons (PAHs) and metals (lead and mercury) were detected at concentrations in exceedance of both the UUSCO and RRSCO in multiple samples. All other target compounds were either not detected above applicable method detection limits (MDL) or detected at concentrations below the applicable soil standards. A summary of the soil results is included as Table 1(a) and the full laboratory analytical data package is included as Attachment B.

The groundwater samples were compared to the NYSDEC Class GA Groundwater Effluent Limitations. Several SVOCs and sodium were detected at concentrations in exceedance of the limitations. All other target compounds were either not detected above the MDL or detected at concentrations below the applicable groundwater standards. A summary of the groundwater results is included as Table 2(a) and the full laboratory data package is included as Attachment B.

Several VOCs were detected in both soil vapor samples (SV1 and SV2); with tetrachloroethene and trichloroethene detected at elevated levels of 27,000 ug/m<sup>3</sup> and 620 ug/m<sup>3</sup>, respectively, in SV1. A summary of the soil-vapor results is included as Table 3 and the full laboratory data package is included as Attachment B.

### **Block 7061**

Soil in the boring profiles consisted mainly of urban fill material ranging from the ground surface to 4 feet bgs at SB7, SB8, and SB9; and from ground surface to 10 feet bgs at SB11 and SB12. The fill material was underlain by native fine sands to a depth of 10 feet bgs. Groundwater was encountered from 7 – 10 feet bgs. Field screening did not indicate elevated PID readings in any of the borings. A slight petroleum odor was observed in soil recovered from borings SB8 and SB12. Soil boring logs are included as Attachment A.

The soil samples were compared to the applicable New York Department of Environmental Conservation (NYSDEC) Unrestricted Use Soil Cleanup Objective (UUSCO) and the Restricted – Residential Soil Cleanup Objective (RRSCO). Laboratory results indicated one pesticide and several metals compounds exceeded the UUSCO in two samples; S7 and S8. All other target compounds were either not detected above applicable MDLs, or were detected below applicable soil standards. A summary of the soil results is included as Table 1(b) and the full laboratory analytical data package is included as Attachment B.

The groundwater samples were compared to the NYSDEC Class GA Groundwater Effluent Limitations. Sodium was detected in exceedance of the applicable GW standard in GW-3. All other target compounds were either not detected above applicable MDLs, or were detected below the applicable groundwater standards. A summary of the groundwater results is included as Table 2(b) and the full laboratory data package is included as Attachment B.

Several VOCs were detected in both soil vapor samples. A summary of the soil-vapor results is included as Table 3 and the full laboratory data package is included as Attachment B.

## CONCLUSIONS AND RECOMMENDATIONS

Both sites have a NYC e-designation requiring NYC Office of Environmental Remediation (OER) oversight prior to and during redevelopment activities. The NYCOER will likely require additional site investigation activities in accordance with approved Workplan; and will require remedial actions in accordance with an approved Remedial Action Workplan. The recommendations presented below are based on the anticipated likely requirements of an OER approved Remedial Action Workplan. The anticipated cost for additional investigation and reporting activities through the Remedial Action Workplan phase is anticipated at \$50,000 per site.

Hillmann notes that the potential exists that additional contaminants and/or conditions may be determined during subsequent NYCOER approved site investigation activities; and that additional remedial actions may become warranted as a result.

### **Block 7062**

Laboratory results of soil samples indicated exceedances of the applicable NYSDEC UUSCO and RRSCO Cleanup Objectives for PAH compounds and lead. These PAH compounds and lead are suspected to be present as a result of historic property uses. During redevelopment activities, impacted soil from these areas should be excavated for off-site disposal as a hot-spot. All soil transported off-site for disposal should be disposed of in accordance with federal, state and local regulations. Based on the laboratory results, soil is expected to be classified as “non-hazardous, contaminated” for disposal purposes. “Non-hazardous, contaminated” soil can typically be disposed of for approximately \$75 per ton; this cost may vary depending on fuel costs, destination facility, etc.

Laboratory results of groundwater samples indicated several exceedances of the NYSDEC Groundwater Standards for SVOC compounds and sodium. The sodium exceedance is suspected to be related to naturally occurring conditions. The SVOC exceedances are likely due to soil particles and turbulence in groundwater during temporary well point installation. During site redevelopment activities, groundwater dewatering, if needed, should be conducted in accordance with all federal, state and local regulations. Treatment measures such as filtration or a settling tank may be required prior to discharging the groundwater off-site.

VOC compounds were detected in both soil-vapor samples; with tetrachloroethene (27,000 ug/m<sup>3</sup>) and trichloroethene (620 ug/m<sup>3</sup>) detected at elevated levels in SV1. Corresponding VOC compounds were not detected in soil or groundwater indicating that the soil vapor plume is either from a non-sampled portion of the site or from an off-site source. To prevent vapor intrusion, any new buildings constructed onsite should have a vapor barrier and sub-slab depressurization system (SSDS) to mitigate subsurface soil vapor. An estimated “ballpark” cost budget for SSDS design and installation is projected at \$50,000, and may vary depending on the size and layout of the building.

### **Block 7061**

Laboratory results of soil samples indicated limited exceedances of applicable NYSDEC UUSCOs and no exceedances of applicable RRSCOs. The results did not indicate the need for “hot spot” remedial excavation, or excavations other than what would be required for construction redevelopment activities. During site redevelopment activities, all soil slated for removal off-site should be disposed of in accordance with federal, state and local regulations. Soil onsite is expected to be classified as either “non-contaminated, non-hazardous” or as “non-hazardous-contaminated” (fill material). Disposal costs are expected to range

from approximately \$50 (non-contaminated) to \$75 (contaminated) per ton; and may vary depending on fuel costs, destination facility, etc.

Laboratory results indicated sodium in exceedance of the NYSDEC Groundwater Standards in one groundwater sample. This sodium level is suspected to be related to naturally occurring conditions. During site redevelopment activities, groundwater dewatering, if needed, should be in accordance with all federal, state and local regulations.

Hillmann notes that prior groundwater testing of Block 7061 identified concentrations of chlorinated solvent compounds exceeding applicable groundwater standards. Therefore it is possible, and should be anticipated for planning purposes, that elevated chlorinated solvent compounds will be detected by subsequent site investigations activities that may be needed to satisfy NYCOER requirements. If identified, additional monitoring and/or remedial activities may be required.

VOC compounds were detected in both soil-vapor samples. Corresponding VOC compounds were not detected in soil or groundwater samples indicating the soil vapor plume is either from a non-sampled portion of the site or an off-site source. To prevent vapor intrusion, any new buildings constructed onsite should have a vapor barrier and sub-slab depressurization system (SSDS) to mitigate subsurface soil vapor. An estimated “ballpark” cost budget for SSDS design and installation is projected at \$50,000 per site, and may vary depending on the size and layout of the building.

We thank you for the opportunity to provide you with our services. If you have any questions or comments, please feel free to contact us at any time.

Sincerely,

Hillmann Consulting, LLC



Chris Hirschmann, CHMM  
Director, Site Investigation & Remediation Services



Figure 1: SITE DIAGRAM

N ↑



Project Location: Block 7062, Lots 25, 28 & 34  
Coney Island, NY

Project No.: G6-2368



Figure 2: SITE DIAGRAM

N ↑



Project  
Location:

Block 7061, Lots 14, 20 & 27  
Coney Island, NY

Project No.:

G6-2368

**Table 1(a) - Soil Results - VOCs**

1601 Surf Avenue, Block 7062  
 Coney Island, New York

Hillmann Consulting, LLC  
 Project #: G6-2368

Target Compounds	NYSDEC Unrestricted Use SCO	NYSDEC Restricted Residential SCO	S1				S2				S2				S4				S5				S6				Sample Date: 05/30/2018											
			Sample Depth: 4.0-5.0'				Sample Depth: 4.0-5.0'				Sample Depth: 4.0-5.0'				Sample Depth: 5.0-6.0'				Sample Depth: 5.0-6.0'				Sample Depth: 3.0-4.0'															
Volatiles (mg/Kg)	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL						
1,1,1-Trichloroethane	0.68	100	ND	0.00103	0.000243	ND	0.00136	0.000321	ND	0.00124	0.000293	ND	0.032	0.030	ND	0.00125	0.000295	ND	0.057	0.052	ND	0.057	0.052	ND	0.057	0.052	ND	0.057	0.052	ND	0.057	0.052						
1,1,2,2-Tetrachloroethane	NS	NS	ND	0.00206	0.000277	ND	0.00272	0.000366	ND	0.00248	0.000334	ND	0.065	0.030	ND	0.0025	0.000336	ND	0.113	0.105	ND	0.113	0.105	ND	0.113	0.105	ND	0.113	0.105	ND	0.113	0.105						
1,1,2-Trichloroethane	NS	NS	ND	0.00103	0.000278	ND	0.00136	0.000367	ND	0.00124	0.000345	ND	0.065	0.036	ND	0.00125	0.000454	ND	0.057	0.054	ND	0.057	0.054	ND	0.057	0.054	ND	0.057	0.054	ND	0.057	0.054						
1,1-Dichloroethane	0.27	26	ND	0.00103	0.0002	ND	0.00136	0.000264	ND	0.00124	0.000241	ND	0.032	0.032	ND	0.00125	0.000243	ND	0.057	0.056	ND	0.057	0.056	ND	0.057	0.056	ND	0.057	0.056	ND	0.057	0.056						
1,1-Dichloroethene	0.33	100	ND	0.00103	0.000388	ND	0.00136	0.000513	ND	0.00124	0.000467	ND	0.032	0.032	ND	0.00125	0.000471	ND	0.057	0.056	ND	0.057	0.056	ND	0.057	0.056	ND	0.057	0.056	ND	0.057	0.056						
1,2,3-Trichlorobenzene	NS	NS	ND	0.00103	0.000495	ND	0.00136	0.000654	ND	0.00124	0.000596	ND	0.065	0.022	ND	0.00125	0.000601	ND	0.113	0.038	ND	0.113	0.038	ND	0.113	0.038	ND	0.113	0.038	ND	0.113	0.038						
1,2,4-Trichlorobenzene	NS	NS	ND	0.00103	0.000453	ND	0.00136	0.000598	ND	0.00124	0.000546	ND	0.065	0.020	ND	0.00125	0.00055	ND	0.113	0.035	ND	0.113	0.035	ND	0.113	0.035	ND	0.113	0.035	ND	0.113	0.035						
1,2-Dibromo-3-chloropropane	NS	NS	ND	0.00206	0.000278	ND	0.00272	0.000367	ND	0.00248	0.000335	ND	0.065	0.034	ND	0.0025	0.000338	ND	0.113	0.060	ND	0.113	0.060	ND	0.113	0.060	ND	0.113	0.060	ND	0.113	0.060						
1,2-Dibromoethane (EDB)	NS	NS	ND	0.00103	0.00182	ND	0.00136	0.00241	ND	0.00124	0.000219	ND	0.032	0.028	ND	0.00125	0.000221	ND	0.057	0.046	ND	0.057	0.046	ND	0.057	0.046	ND	0.057	0.046	ND	0.057	0.046						
1,2-Dichlorobenzene	1.1	100	ND	0.00103	0.000178	ND	0.00136	0.000235	ND	0.00124	0.000215	ND	0.032	0.024	ND	0.00125	0.000216	ND	0.113	0.041	ND	0.113	0.041	ND	0.113	0.041	ND	0.113	0.041	ND	0.113	0.041						
1,2-Dichloroethane (EDC)	0.02	3.1	ND	0.00103	0.000272	ND	0.00136	0.000359	ND	0.00124	0.000327	ND	0.032	0.030	ND	0.00125	0.000333	ND	0.057	0.052	ND	0.057	0.052	ND	0.057	0.052	ND	0.057	0.052	ND	0.057	0.052						
1,2-Dichloropropane	NS	NS	ND	0.00103	0.000174	ND	0.00136	0.000203	ND	0.00124	0.000201	ND	0.032	0.029	ND	0.00125	0.000211	ND	0.113	0.051	ND	0.113	0.051	ND	0.113	0.051	ND	0.113	0.051	ND	0.113	0.051						
1,3-Dichlorobenzene	2.4	49	ND	0.00103	0.000199	ND	0.00136	0.000262	ND	0.00124	0.000239	ND	0.032	0.023	ND	0.00125	0.000241	ND	0.113	0.040	ND	0.113	0.040	ND	0.113	0.040	ND	0.113	0.040	ND	0.113	0.040						
1,3-Dichloropropene (cis- and trans-)	NS	NS	ND	0.00103	0.000238	ND	0.00136	0.000314	ND	0.00124	0.000286	ND	0.065	0.021	ND	0.00125	0.000289	ND	0.113	0.038	ND	0.113	0.038	ND	0.113	0.038	ND	0.113	0.038	ND	0.113	0.038						
1,4-Dichlorobenzene	1.8	13	ND	0.00103	0.000176	0.000403	J	0.00136	0.000233	ND	0.00124	0.000212	0.023	J	0.032	0.022	ND	0.00125	0.000214	ND	0.057	0.039	ND	0.057	0.039	ND	0.057	0.039	ND	0.057	0.039	ND	0.057	0.039				
1,4-Dioxane	0.1	13	ND	0.206	0.037	ND	0.272	0.049	ND	0.248	0.044	ND	6.45	6.34	ND	0.250	0.045	ND	11.3	11.2	ND	11.3	11.2	ND	11.3	11.2	ND	11.3	11.2	ND	11.3	11.2	ND	11.3	11.2			
2-Butanone (MEK)	0.12	100	ND	0.00206	0.000507	ND	0.00272	0.000669	ND	0.00248	0.000661	ND	0.129	0.107	ND	0.0025	0.000615	ND	0.227	0.188	ND	0.227	0.188	ND	0.227	0.188	ND	0.227	0.188	ND	0.227	0.188	ND	0.227	0.188			
2-Hexanone	NS	NS	ND	0.00206	0.000107	ND	0.00272	0.00142	ND	0.00248	0.000128	ND	0.129	0.049	ND	0.0025	0.000103	ND	0.227	0.086	ND	0.227	0.086	ND	0.227	0.086	ND	0.227	0.086	ND	0.227	0.086	ND	0.227	0.086			
4-Methyl-2-pentanone (MIBK)	NS	NS	ND	0.00206	0.000596	ND	0.00272	0.000767	ND	0.00248	0.000718	ND	0.129	0.045	ND	0.0025	0.000724	ND	0.227	0.079	ND	0.227	0.079	ND	0.227	0.079	ND	0.227	0.079	ND	0.227	0.079	ND	0.227	0.079			
Acetone	0.05	100	ND	0.010	0.00101	ND	0.014	0.00133	ND	0.012	0.00121	ND	0.129	0.086	0.022	ND	0.133	0.012	ND	0.227	0.151	ND	0.227	0.151	ND	0.227	0.151	ND	0.227	0.151	ND	0.227	0.151	ND	0.227	0.151		
Benzene	0.06	4.8	ND	0.00103	0.000269	ND	0.00136	0.000355	ND	0.00124	0.000324	ND	0.032	0.030	ND	0.00125	0.000326	ND	0.113	0.053	ND	0.113	0.053	ND	0.113	0.053	ND	0.113	0.053	ND	0.113	0.053	ND	0.113	0.053			
Bromodichloromethane	NS	NS	ND	0.00103	0.000286	ND	0.00136	0.000378	ND	0.00124	0.000345	ND	0.065	0.038	ND	0.00125	0.000348	ND	0.113	0.068	ND	0.113	0.068	ND	0.113	0.068	ND	0.113	0.068	ND	0.113	0.068	ND	0.113	0.068			
Bromodichloromethane	NS	NS	ND	0.00103	0.000224	ND	0.00136	0.000317	ND	0.00124	0.000289	ND	0.032	0.023	ND	0.00125	0.000291	ND	0.113	0.060	ND	0.113	0.060	ND	0.113	0.060	ND	0.113	0.060	ND	0.113	0.060	ND	0.113	0.060			
Bromform	NS	NS	ND	0.00103	0.000296	ND	0.00136	0.00039	ND	0.00124	0.000356	ND	0.032	0.029	ND	0.00125	0.000359	ND	0.113	0.050	ND	0.113	0.050	ND	0.113	0.050	ND	0.113	0.050	ND	0.113	0.050	ND	0.113	0.050			
Bromomethane	NS	NS	ND	0.00103	0.000307	ND	0.00136	0.000405	ND	0.00124	0.000337	ND	0.065	0.035	ND	0.00125	0.000373	ND	0.113	0.062	ND	0.113	0.062	ND	0.113	0.062	ND	0.113	0.062	ND	0.113	0.062	ND	0.113	0.062			
Carbon disulfide	NS	NS	ND	0.00103	0.000319	ND	0.00136	0.000422	ND	0.00124	0.000384	ND	0.032	0.030	ND	0.00125	0.000388	ND	0.113	0.053	ND	0.113	0.053	ND	0.113	0.053	ND	0.113	0.053	ND	0.113	0.053	ND	0.113	0.053			
Carbon tetrachloride	0.76	2.4	ND	0.00103	0.000166	ND	0.00136	0.000219	ND	0.00124	0.000202	ND	0.065	0.029	ND	0.00125	0.000201	ND	0.113	0.051	ND	0.113	0.051	ND	0.113	0.051	ND	0.113	0.051	ND	0.113	0.051	ND	0.113	0.051			
Chlorobenzene	1.1	100	ND	0.00103	0.000232	ND	0.00136	0.000306	ND	0.00124	0.000279	ND	0.032	0.024	ND	0.00125	0.000281	ND	0.113	0.043	ND	0.113	0.043	ND	0.113	0.043	ND	0.113	0.043	ND	0.113	0.043	ND	0.113	0.043			
Chloroform	0.37	49	ND	0.00103	0.000216	ND	0.00136	0.000286	ND	0.00124	0.000264	ND	0.032	0.029	ND	0.00125	0.000266	ND	0.113	0.051	ND	0.113	0.051	ND	0.113	0.051	ND	0.113	0.051	ND	0.113	0.051	ND	0.113	0.051	ND	0.113	0.051
Chloromethane	NS	NS	ND	0.00103	0.000191	ND	0.00136	0.000252	ND	0.00124	0.000229	ND	0.032	0.030	ND	0.00125	0.000231	ND	0.113	0.053	ND	0.113	0.053															

**Table 1(a) (Cont'd) - Soil Results - SVOCs**

**1601 Surf Avenue, Block 7062**  
**Coney Island, New York**

**Hillmann Consulting, LLC**  
**Project #: G6-2368**

**Sample Date: 05/30/2018**

Target Compounds	NYSDEC Unrestricted Use SCO	NYSDEC Restricted Residential SCO	S1 Sample Depth: 4.0-5.0'				S2 Sample Depth: 4.0-5.0'				S3 Sample Depth: 4.0-5.0'				S4 Sample Depth: 5.0-6.0'				S5 Sample Depth: 5.0-6.0'				S6 Sample Depth: 3.0-4.0'								
			Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL					
Semivolatiles - BNA (mg/Kg)																															
1,1'-Biphenyl	NS	NS	0.048	0.037	0.034	ND	0.035	0.032	ND	0.037	0.035	0.170	0.039	0.037	0.034	J	0.036	0.034	ND	0.036	0.032	ND	0.067	0.063	ND	0.067	0.058				
1,2,4,5-Tetrachlorobenzene	NS	NS	ND	0.037	0.032	ND	0.035	0.030	ND	0.037	0.032	ND	0.039	0.033	ND	0.036	0.030	ND	0.067	0.056	ND	0.067	0.056	ND	0.067	0.061	ND	0.067	0.051		
2,2'-Oxybis(1-Chloropropane)	NS	NS	ND	0.037	0.031	ND	0.035	0.029	ND	0.037	0.031	ND	0.039	0.030	ND	0.036	0.033	ND	0.036	0.028	ND	0.039	0.030	ND	0.036	0.026	ND	0.067	0.055		
2,4-Dinitrotoluene	NS	NS	ND	0.037	0.033	ND	0.035	0.032	ND	0.037	0.034	ND	0.039	0.036	ND	0.036	0.032	ND	0.036	0.031	ND	0.036	0.028	ND	0.036	0.027	ND	0.067	0.047		
2,6-Dinitrotoluene	NS	NS	ND	0.037	0.028	ND	0.035	0.026	ND	0.037	0.028	ND	0.039	0.030	ND	0.036	0.028	ND	0.036	0.026	ND	0.039	0.028	ND	0.036	0.025	ND	0.067	0.049		
2-Chloronaphthalene	NS	NS	ND	0.037	0.030	ND	0.035	0.029	ND	0.037	0.030	ND	0.039	0.032	ND	0.036	0.031	ND	0.036	0.029	ND	0.036	0.031	ND	0.067	0.054	ND	0.067	0.057		
2-Methylnaphthalene	NS	NS	0.142	0.037	0.026	ND	0.035	0.024	ND	0.037	0.026	0.279	0.039	0.028	0.073	0.036	0.026	ND	0.036	0.025	ND	0.036	0.025	ND	0.067	0.047	ND	0.067	0.047		
2-Nitroaniline	NS	NS	ND	0.037	0.026	ND	0.035	0.024	ND	0.037	0.026	ND	0.039	0.028	ND	0.036	0.025	ND	0.036	0.025	ND	0.036	0.025	ND	0.067	0.047	ND	0.067	0.049		
3,3'-Dichlorobenzidine	NS	NS	ND	0.037	0.026	ND	0.035	0.025	ND	0.037	0.027	ND	0.039	0.029	ND	0.036	0.026	ND	0.036	0.026	ND	0.036	0.026	ND	0.067	0.054	ND	0.067	0.054		
3-Nitroaniline	NS	NS	ND	0.037	0.029	ND	0.035	0.028	ND	0.037	0.030	ND	0.039	0.031	ND	0.036	0.029	ND	0.036	0.031	ND	0.036	0.031	ND	0.067	0.058	ND	0.067	0.057		
4-Bromophenyl phenyl ether	NS	NS	ND	0.037	0.031	ND	0.035	0.029	ND	0.037	0.031	ND	0.039	0.033	ND	0.036	0.031	ND	0.036	0.031	ND	0.036	0.031	ND	0.067	0.044	ND	0.067	0.063		
4-Chloroaniline	NS	NS	ND	0.037	0.024	ND	0.035	0.023	ND	0.037	0.024	ND	0.039	0.026	ND	0.036	0.027	ND	0.036	0.027	ND	0.036	0.027	ND	0.067	0.051	ND	0.067	0.051		
4-Chlorophenyl phenyl ether	NS	NS	ND	0.037	0.034	ND	0.035	0.032	ND	0.037	0.034	ND	0.039	0.037	ND	0.036	0.034	ND	0.036	0.035	ND	0.036	0.035	ND	0.067	0.050	ND	0.067	0.050		
4-Nitroaniline	NS	NS	ND	0.037	0.028	ND	0.035	0.026	ND	0.037	0.028	ND	0.039	0.030	ND	0.036	0.027	ND	0.036	0.027	ND	0.036	0.027	ND	0.067	0.051	ND	0.067	0.051		
Acenaphthene	20	100	0.442	0.037	0.032	0.044	0.035	0.031	ND	0.037	0.033	1.37	0.039	0.035	0.516	0.036	0.032	ND	0.036	0.030	ND	0.036	0.030	ND	0.067	0.049	ND	0.067	0.049		
Acenaphthylene	100	100	0.095	0.037	0.030	ND	0.035	0.029	ND	0.037	0.030	2.28	0.039	0.032	0.933	0.036	0.030	ND	0.036	0.034	ND	0.036	0.034	ND	0.067	0.055	ND	0.067	0.055		
Acetophenone	NS	NS	ND	0.037	0.035	ND	0.035	0.033	ND	0.037	0.035	ND	0.039	0.031	ND	0.036	0.029	ND	0.036	0.031	ND	0.036	0.031	ND	0.067	0.058	ND	0.067	0.058		
Anthracene	100	100	1.06	0.037	0.032	0.078	0.035	0.031	0.050	0.037	0.033	4.22	0.039	0.035	3.05	0.036	0.032	ND	0.036	0.032	ND	0.036	0.032	ND	0.067	0.058	ND	0.067	0.058		
Atrazine	NS	NS	ND	0.037	0.032	ND	0.035	0.030	ND	0.037	0.032	ND	0.039	0.034	ND	0.036	0.032	ND	0.036	0.035	ND	0.036	0.035	ND	0.067	0.066	ND	0.067	0.066		
Benzaldehyde	NS	NS	ND	0.037	0.036	ND	0.035	0.034	ND	0.037	0.036	ND	0.039	0.038	ND	0.036	0.035	ND	0.036	0.035	ND	0.036	0.035	ND	0.067	0.064	ND	0.067	0.064		
Benz[a]anthracene	1	1	<b>1.91</b>	0.037	0.031	0.136	0.035	0.030	0.227	0.037	0.032	<b>12.8</b>	D	0.394	0.338	<b>14.8</b>	D	0.182	0.156	<b>4.91</b>	D	0.394	0.338	<b>13.5</b>	D	0.182	0.156	<b>0.067</b>	D	0.067	0.058
Benz[a]pyrene	1	1	<b>1.24</b>	0.037	0.030	0.080	0.035	0.028	0.157	0.037	0.030	<b>8.39</b>	D	0.394	0.322	<b>10.3</b>	D	0.182	0.149	<b>4.85</b>	D	0.393	0.326	<b>13.5</b>	D	0.182	0.156	<b>0.067</b>	D	0.067	0.055
Benz[b]fluoranthene	1	1	0.949	0.037	0.029	0.088	0.035	0.028	0.178	0.037	0.030	<b>8.59</b>	D	0.394	0.316	<b>8.48</b>	D	0.182	0.146	<b>4.85</b>	D	0.393	0.316	<b>13.5</b>	D	0.182	0.156	<b>0.067</b>	D	0.067	0.054
Benz[g,i]perylene	100	100	0.805	0.037	0.033	0.068	0.035	0.031	0.127	0.037	0.033	ND	0.039	0.036	ND	0.036	0.031	ND	0.036	0.031	ND	0.036	0.031	ND	0.067	0.052	<b>0.067</b>	D	0.067	0.051	
Benz[k]fluoranthene	0.8	3.9	<b>1.08</b>	0.037	0.031	0.073	0.035	0.029	0.131	0.037	0.031	<b>4.91</b>	D	0.394	0.338	<b>4.91</b>	D	0.394	0.338	<b>4.91</b>	D	0.394	0.338	<b>13.5</b>	D	0.182	0.156	<b>0.067</b>	D	0.067	0.057
Bis(2-chloroethoxy) methane	NS	NS	ND	0.037	0.033	ND	0.035	0.031	ND	0.037	0.033	ND	0.039	0.035	ND	0.036	0.033	ND	0.036	0.033	ND	0.036	0.033	ND	0.067	0.061	ND	0.067	0.061		
Bis(2-chloroethyl) ether	NS	NS	ND	0.037	0.033	ND	0.035	0.032	ND	0.037	0.034	ND	0.039	0.036	ND	0.036	0.033	ND	0.036	0.033	ND	0.036	0.033	ND	0.067	0.061	ND	0.067	0.061		
Bis(2-ethylhexyl) phthalate	NS	NS	0.037	0.037	0.023	ND	0.035	0.021	0.051	0.037	0.023	0.275	0.039	0.024	ND	0.036	0.023	ND	0.036	0.023	ND	0.036	0.023	ND	0.067	0.042	ND	0.067	0.042		
Butyl benzyl phthalate	NS	NS	ND	0.037	0.034	ND	0.035	0.032	ND	0.037	0.034	ND	0.039	0.036	ND	0.036	0.034	ND	0.036	0.034	ND	0.036	0.034	ND	0.067	0.062	ND	0.067	0.062		
Caprolactam	NS	NS	ND	0.037	0.024	ND	0.035	0.023	ND	0.037	0.025	ND	0.039	0.026	ND	0.036	0.024	ND	0.036	0.024	ND	0.036	0.024	ND	0.067	0.045	ND	0.067	0.045		
Carbazole	NS	NS	0.473	0.037	0.028	0.034	J	0.035	0.027	ND	0.037	0.029	1.52	0.039	0.031	0.514	0.036	0.028	ND	0.036	0.028	ND	0.036	0.028	ND	0.067	0.052	ND	0.067	0.052	
Chrysene	1	3.9	<b>1.94</b>	0.037	0.031	0.137	0.035	0.030	0.211	0.037	0.032	<b>12.5</b>	D	0.394	0.338	<b>2.35</b>	D	0.393	0.338	<b>2.35</b>	D	0.393	0.338	<b>13.5</b>	D	0.182	0.156	<b>0.067</b>	D	0.067	0.058
Dibenzofuran	7	59	0.387	0.037	0.031	ND	0.035	0.030	ND	0.037	0.032	1.09	0.039	0.034	0.184	0.036	0.031	ND	0.036	0.031	ND	0.036	0.031	ND	0.067	0.058	ND	0.067	0.058		
Diethyl phthalate	NS	NS	ND	0.037	0.036	ND	0.035	0.034	ND	0.037	0.036	ND	0.039	0.037	ND	0.036	0.036	ND	0.036	0.036	ND	0.036	0.036	ND	0.067	0.066	ND	0.067	0.066		
Dimethyl phthalate	NS	NS	ND	0.037	0.034	ND	0.035	0.032	ND	0.037	0.034	ND	0.039	0.036	ND	0.036	0.034	ND	0.036	0.034	ND	0.036	0.034	ND	0.067	0.062	ND	0.067	0.062		
Di-n-butyl phthalate	NS	NS	0.139	0.037	0.028	ND	0.035	0.026	ND	0.037	0.028	ND	0.039	0.030	ND	0.036	0.028	ND	0.036	0.028	ND	0.036	0.028	ND	0.067	0.051	ND	0.067	0.051		
Dinitrotoluene (2,4- and 2,6-)	NS	NS	ND	0.037	0.033	ND	0.035	0.032																							

**Table 1(a) (Cont'd) - Soil Results - PCBs, Pesticides, Metals, TCLP Metals**

**1601 Surf Avenue, Block 7062  
Coney Island, New York 11224**

**Hillmann Consulting, LLC  
Project #: G6-2368**

**Sample Date: 05/30/2018**

<b>Target Compounds</b>	NYSDEC Unrestricted Use SCO		NYSDEC Restricted Residential SCO		S1 Sample Depth: 4.0-5.0'				S2 Sample Depth: 4.0-5.0'				S3 Sample Depth: 4.0-5.0'				S4 Sample Depth: 5.0-6.0'				S5 Sample Depth: 5.0-6.0'				S6 Sample Depth: 3.0-4.0'										
	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL							
<b>PCBs (mg/Kg)</b>																																			
Aroclor-1016	NS	NS	ND	ND	0.018	0.0073	ND	0.00879	0.00352	0.018	0.00725	ND	0.018	0.00725	ND	0.020	0.00786	ND	0.018	0.00723	ND	0.017	0.00685	ND	0.017	0.00685	ND	0.017	0.00685	ND					
Aroclor-1221	NS	NS	ND	ND	0.018	0.0073	ND	0.00879	0.00352	0.018	0.00725	ND	0.018	0.00725	ND	0.020	0.00786	ND	0.018	0.00723	ND	0.017	0.00685	ND	0.017	0.00685	ND	0.017	0.00685	ND					
Aroclor-1232	NS	NS	ND	ND	0.018	0.0073	ND	0.00879	0.00352	0.018	0.00725	ND	0.018	0.00725	ND	0.020	0.00786	ND	0.018	0.00723	ND	0.017	0.00685	ND	0.017	0.00685	ND	0.017	0.00685	ND					
Aroclor-1242	NS	NS	ND	ND	0.018	0.0073	ND	0.00879	0.00352	0.018	0.00725	ND	0.018	0.00725	ND	0.020	0.00786	ND	0.018	0.00723	ND	0.017	0.00685	ND	0.017	0.00685	ND	0.017	0.00685	ND					
Aroclor-1248	NS	NS	ND	ND	0.018	0.0073	ND	0.00879	0.00352	0.018	0.00725	0.076	D	0.020	0.00786	ND	0.018	0.00723	ND	0.018	0.00723	ND	0.017	0.00685	ND	0.017	0.00685	ND	0.017	0.00685	ND				
Aroclor-1254	NS	NS	ND	ND	0.018	0.0073	ND	0.00879	0.00352	0.018	0.00725	ND	0.018	0.00725	ND	0.020	0.00786	ND	0.018	0.00723	ND	0.017	0.00685	ND	0.017	0.00685	ND	0.017	0.00685	ND					
Aroclor-1260	NS	NS	0.020	D	0.018	0.0073	ND	0.00879	0.00352	0.035	D	0.018	0.00725	0.056	D	0.020	0.00786	ND	0.018	0.00723	ND	0.017	0.00685	ND	0.017	0.00685	ND	0.017	0.00685	ND					
Aroclor-1262	NS	NS	ND	ND	0.018	0.0073	ND	0.00879	0.00352	0.018	0.00725	ND	0.018	0.00725	ND	0.020	0.00786	ND	0.018	0.00723	ND	0.017	0.00685	ND	0.017	0.00685	ND	0.017	0.00685	ND					
Aroclor-1268	NS	NS	ND	ND	0.018	0.0073	ND	0.00879	0.00352	0.018	0.00725	ND	0.018	0.00725	ND	0.020	0.00786	ND	0.018	0.00723	ND	0.017	0.00685	ND	0.017	0.00685	ND	0.017	0.00685	ND					
PCBs	0.1	1	0.020	D	0.018	0.0073	ND	0.00879	0.00352	0.035	D	0.018	0.00725	0.132	D	0.020	0.00786	ND	0.018	0.00723	ND	0.017	0.00685	ND	0.017	0.00685	ND	0.017	0.00685	ND					
<b>Pesticides (mg/Kg)</b>																																			
4,4'-DDD	0.0033	13	ND	0.00183	0.000913	0.020	D	0.00176	0.000879	0.00189	D	0.00181	0.000906	ND	0.00983	0.00492	ND	0.00362	0.00181	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND			
4,4'-DDE	0.0033	8.9	ND	0.00183	0.000913	0.091	D	0.00176	0.000879	0.015	D	0.00181	0.000906	0.026	D	0.00983	0.00492	ND	0.00362	0.00181	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND		
4,4'-DDT	0.0033	7.9	ND	0.00183	0.000913	0.129	D	0.00176	0.000879	0.093	D	0.00181	0.000906	0.049	D	0.00983	0.00492	ND	0.00362	0.00181	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND		
Aldrin	0.005	0.097	ND	0.00183	0.000913	ND	0.00176	0.000879	ND	0.00181	0.000906	ND	0.00983	0.00492	ND	0.00362	0.00181	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND		
alpha-BHC	0.02	0.48	ND	0.00183	0.000913	ND	0.00176	0.000879	ND	0.00181	0.000906	ND	0.00983	0.00492	ND	0.00362	0.00181	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND		
alpha-Chlordane	0.094	4.2	ND	0.00183	0.000913	0.00519	D	0.00176	0.000879	0.00969	DJ	0.00181	0.000906	ND	0.00983	0.00492	ND	0.00362	0.00181	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND
beta-BHC	0.036	0.36	ND	0.00183	0.000913	ND	0.00176	0.000879	ND	0.00181	0.000906	ND	0.00983	0.00492	ND	0.00362	0.00181	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND		
Chlordane (alpha and gamma)	NS	NS	ND	0.00183	0.000913	0.0085	D	0.00176	0.000879	0.0285	D	0.00181	0.000906	0.010	D	0.00983	0.00492	ND	0.00362	0.00181	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND		
delta-BHC	0.04	100	ND	0.00183	0.000913	ND	0.00176	0.000879	ND	0.00181	0.000906	ND	0.00983	0.00492	ND	0.00362	0.00181	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND		
Dieldrin	0.005	0.2	ND	0.00183	0.000913	ND	0.00176	0.000879	ND	0.00181	0.000906	ND	0.00983	0.00492	ND	0.00362	0.00181	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND		
Endosulfan (I and II)	NS	NS	ND	0.00183	0.000913	ND	0.00176	0.000879	ND	0.00181	0.000906	ND	0.00983	0.00492	ND	0.00362	0.00181	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND		
Endosulfan I	2.4	24	ND	0.00183	0.000913	ND	0.00176	0.000879	ND	0.00181	0.000906	ND	0.00983	0.00492	ND	0.00362	0.00181	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND		
Endosulfan II	2.4	24	ND	0.00183	0.000913	ND	0.00176	0.000879	ND	0.00181	0.000906	ND	0.00983	0.00492	ND	0.00362	0.00181	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND		
Endosulfan sulfate	2.4	24	ND	0.00183	0.000913	ND	0.00176	0.000879	ND	0.00181	0.000906	ND	0.00983	0.00492	ND	0.00362	0.00181	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND		
Endrin	0.014	11	ND	0.00183	0.000913	ND	0.00176	0.000879	ND	0.00181	0.000906	ND	0.00983	0.00492	ND	0.00362	0.00181	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND		
Endrin aldehyde	NS	NS	ND	0.00183	0.000913	ND	0.00176	0.000879	ND	0.00181	0.000906	ND	0.00983	0.00492	ND	0.00362	0.00181	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND		
Endrin ketone	NS	NS	ND	0.00183	0.000913	ND	0.00176	0.000879	ND	0.00181	0.000906	ND	0.00983	0.00492	ND	0.00362	0.00181	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND		
gamma-BHC (Lindane)	0.1	1.3	ND	0.00183	0.000913	0.00331	D	0.00176	0.000879	0.00188	D	0.00181	0.000906	0.010	D	0.00983	0.00492	ND	0.00362	0.00181	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND		
gamma-Chlordane	NS	NS	ND	0.00183	0.000913	0.00331	D	0.00176	0.000879	0.00188	D	0.00181	0.000906	0.010	D	0.00983	0.00492	ND	0.00362	0.00181	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND		
Heptachlor	0.042	2.1	ND	0.00183	0.000913	ND	0.00176	0.000879	ND	0.00181	0.000906	ND	0.00983	0.00492	ND	0.00362	0.00181	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND		
Heptachlor epoxide	NS	NS	ND	0.00183	0.000913	ND	0.00176	0.000879	ND	0.00181	0.000906	ND	0.00983	0.00492	ND	0.00362	0.00181	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND	0.086	0.043	ND		
Methoxychlor	NS	NS	ND	0.00183	0.000913	ND	0.00176	0.000879	ND	0.00181</td																									

**Table 2(a) - Groundwater Results - VOCs and Metals**

**1601 Surf Avenue, Block 7062**  
**Coney Island, New York**

**Hillmann Consulting, LLC**  
**Project #: G6-2368**

Sample Date: 05/30/2018

Target Compounds	Groundwater Effluent Limitations (Class GA)	GW1			
		Conc	Q	RL	MDL
<b>Volatiles (µg/L)</b>					
1,1,1-Trichloroethane	5	ND	0.500	0.462	
1,1,2,2-Tetrachloroethane	5	ND	0.500	0.458	
1,1,2-Trichloro-1,2,2-trifluoroethane	5	ND	1.00	0.563	
1,1,2-Trichloroethane	1	ND	1.00	0.473	
1,1-Dichloroethane	5	ND	0.500	0.493	
1,1-Dichloroethene	5	ND	0.500	0.493	
1,2,3-Trichlorobenzene	5	ND	0.500	0.339	
1,2,4-Trichlorobenzene	5	ND	0.500	0.304	
1,2-Dibromo-3-chloropropane	0.04	ND	1.00	0.533	
1,2-Dibromoethane (EDB)	0.0006	ND	0.500	0.402	
1,2-Dichlorobenzene	3	ND	0.500	0.364	
1,2-Dichloroethane (EDC)	0.6	ND	0.500	0.458	
1,2-Dichloropropane	1	ND	0.500	0.447	
1,3-Dichlorobenzene	3	ND	0.500	0.351	
1,3-Dichloropropene (cis- and trans-)	0.4	ND	0.500	0.331	
1,4-Dichlorobenzene	3	ND	0.500	0.341	
1,4-Dioxane	NS	ND	100	98.4	
2-Butanone (MEK)	50	ND	2.00	1.66	
2-Hexanone	50	ND	1.00	0.761	
4-Methyl-2-pentanone (MIBK)	NS	ND	1.00	0.699	
Acetone	50	ND	2.00	1.33	
Benzene	1	ND	0.500	0.464	
Bromochloromethane	5	ND	1.00	0.596	
Bromodichloromethane	50	ND	0.500	0.353	
Bromoform	50	ND	0.500	0.445	
Bromomethane	5	ND	1.00	0.544	
Carbon disulfide	60	ND	0.500	0.464	
Carbon tetrachloride	5	ND	0.500	0.449	
Chlorobenzene	5	ND	0.500	0.376	
Chloroethane	5	ND	0.500	0.495	
Chloroform	7	ND	0.500	0.469	
Chloromethane	5	ND	0.500	0.463	
cis-1,2-Dichloroethene	5	ND	0.500	0.451	
cis-1,3-Dichloropropene	NS	ND	0.500	0.331	
Cyclohexane	NS	ND	1.00	0.411	
Dibromochloromethane	50	ND	1.00	0.442	
Dichlorodifluoromethane	5	ND	1.00	0.662	
Ethylbenzene	5	ND	0.500	0.344	
Isopropylbenzene	5	ND	0.500	0.323	
Methyl acetate	NS	ND	0.500	0.485	
Methyl tert-butyl ether (MTBE)	10	ND	0.500	0.479	
Methylcyclohexane	NS	ND	0.500	0.411	
Methylene chloride	5	ND	1.00	0.990	
Styrene	930	ND	0.500	0.290	
Tetrachloroethene	5	0.861	0.500	0.451	
Toluene	5	ND	0.500	0.379	
Total Xylenes	15	ND	1.00	0.923	
trans-1,2-Dichloroethene	5	ND	0.500	0.454	
trans-1,3-Dichloropropene	NS	ND	0.500	0.321	
Trichloroethene	5	ND	0.500	0.493	
Trichlorofluoromethane	5	ND	0.500	0.433	
Vinyl chloride	2	ND	1.00	0.591	
TOTAL VOC's	NS	0.861		NA	
TOTAL TIC's	NS	ND		NA	
TOTAL VOC's & TIC's	NS	0.861		NA	

Target Compounds	Groundwater Effluent Limitations (Class GA)	GW1				GW1- Filter			
		Conc	Q	RL	MDL	Conc	Q	RL	MDL
<b>Metals (µg/L)</b>									
Aluminum	NS	171		20.0	8.00	ND		20.0	8.00
Antimony	3	2.54		2.00	1.20	2.61	X	2.00	1.20
Arsenic	25	1.55	J	2.00	0.600	1.59	JX	2.00	0.600
Barium	1000	34.8		1.20	30.1	2.00		1.20	
Beryllium	3	ND		1.00	0.320	ND		1.00	0.320
Cadmium	5	ND		1.00	ND	ND		2.00	1.00
Calcium	NS	96100		60.0	90800	200		60.0	
Chromium	50	3.92		1.00	ND	2.00		1.00	
Cobalt	NS	ND		0.600	ND	2.00		0.600	
Copper	200	ND		1.00	ND	2.00		1.00	
Iron	NS	362		60.0	ND	200		60.0	
Lead	25	1.86	J	2.00	1.20	ND		2.00	1.20
Magnesium	35000	14000		60.0	13300	200		60.0	
Manganese	NS	14.2		1.40	14.4	X	2.00	1.40	
Mercury	0.7	ND		0.200	ND	0.500		0.200	
Nickel	100	2.67		1.20	1.82	J	2.00	1.20	
Potassium	NS	5650		80.0	5310	200		80.0	
Selenium	10	6.68	J	20.0	6.00	6.16	J	20.0	6.00
Silver	50	ND		1.20	ND	2.00		1.20	
Sodium	20000	32700		80.0	31300	200		80.0	
Thallium	0.5	ND		1.20	ND	2.00		1.20	
Vanadium	NS	5.27		0.600	4.94	2.00		0.600	
Zinc	2000	105		8.00	97.1	20.0		8.00	

**Results in Blue Highlight displays exceedance above the Groundwater Effluent Limitations**

NS = No Standard Available

~ = Sample not analyzed for

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds.

For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

C = Common Laboratory and/or Bottle Contaminant.

D = The compound was reported from the Diluted analysis

X = Samples analyzed for total and dissolved metals differ at <= 20% RPD.

**Table 2(a) (Cont'd) - Groundwater Results - SVOCs, PCBS, Pesticides**

**1601 Surf Avenue, Block 7062**  
**Coney Island, New York**

**Hillmann Consulting, LLC**  
**Project #: G6-2362**

Target Compounds	Groundwater Effluent Limitations (Class GA)	GW1			
		Conc	Q	RL	MDL
<b>Semivolatiles - BNA (µg/L)</b>					
1,1'-Biphenyl	5	ND	1.00	0.133	
1,2,4,5-Tetrachlorobenzene	5	ND	1.00	0.923	
2,2'-Oxybis(1-Chloropropane)	5	ND	1.00	0.248	
2,4-Dinitrotoluene	5	ND	1.00	0.135	
2,6-Dinitrotoluene	5	ND	1.00	0.139	
2-Chloronaphthalene	NS	ND	1.00	0.154	
2-Methylnaphthalene	NS	ND	1.00	0.128	
2-Nitroaniline	5	ND	1.00	0.161	
3,3'-Dichlorobenzidine	5	ND	1.00	0.399	
3-Nitroaniline	5	ND	1.00	0.214	
4-Bromophenyl phenyl ether	NS	ND	1.00	0.291	
4-Chloroaniline	5	ND	1.00	0.140	
4-Chlorophenyl phenyl ether	NS	ND	1.00	0.316	
4-Nitroaniline	5	ND	1.00	0.205	
Acenaphthene	NS	ND	1.00	0.129	
Acenaphthylene	NS	ND	1.00	0.141	
Acetophenone	NS	ND	1.00	0.180	
Anthracene	50	ND	1.00	0.211	
Atrazine	3	ND	1.00	0.247	
Benzaldehyde	NS	ND	1.00	0.192	
Benz[a]anthracene	0.002	0.179	0.100	0.100	
Benz[a]pyrene	ND	0.170	0.100	0.100	
Benz[b]fluoranthene	0.002	0.172	0.100	0.100	
Benz[g,h,i]perylene	NS	ND	1.00	0.672	
Benz[k]fluoranthene	0.002	0.214	0.100	0.100	
Bis(2-chloroethoxy) methane	5	ND	1.00	0.171	
Bis(2-chloroethyl) ether	1	ND	1.00	0.243	
Bis(2-ethylhexyl) phthalate	5	ND	1.00	0.277	
Butyl benzyl phthalate	50	ND	1.00	0.215	
Caprolactam	NS	ND	1.00	0.547	
Carbazole	NS	ND	1.00	0.221	
Chrysene	0.002	ND	1.00	0.245	
Dibenz[a,h]anthracene	NS	0.173	0.100	0.100	
Dibenzo[furan	NS	ND	1.00	0.133	
Diethyl phthalate	50	ND	1.00	0.166	
Dimethyl phthalate	50	ND	1.00	0.137	
Di-n-butyl phthalate	50	ND	1.00	0.196	
Dinitrotoluene (2,4- and 2,6-)	NS	ND	1.00	0.139	
Di-n-octyl phthalate	50	ND	1.00	0.306	
Fluoranthene	50	ND	1.00	0.204	
Fluorene	50	ND	1.00	0.182	
Hexachlorobenzene	0.04	ND	0.020	0.020	
Hexachlorobutadiene	0.5	ND	1.00	0.187	
Hexachlorocyclopentadiene	5	ND	1.00	0.140	
Hexachloroethane	5	ND	1.00	0.163	
Indeno[1,2,3-cd]pyrene	0.002	0.160	0.100	0.100	
Isophorone	50	ND	1.00	0.115	
Naphthalene	NS	ND	1.00	0.139	
Nitrobenzene	0.4	ND	1.00	0.210	
N-Nitrosodi-n-propylamine	NS	ND	1.00	0.229	
N-Nitrosodiphenylamine	50	ND	1.00	0.179	
Phenanthrene	50	ND	1.00	0.175	
Pyrene	50	ND	1.00	0.339	
TOTAL BNS:	NS	1.07		NA	
TOTAL BNS & TIC's:	NS	1.07		NA	
TOTAL TIC's:	NS	ND		NA	

Target Compounds	Groundwater Effluent Limitations (Class GA)	GW1			
		Conc	Q	RL	MDL
<b>PCBs (µg/L)</b>					
Aroclor-1016	NS	ND	0.050	0.020	
Aroclor-1221	NS	ND	0.050	0.020	
Aroclor-1232	NS	ND	0.050	0.020	
Aroclor-1242	NS	ND	0.050	0.020	
Aroclor-1248	NS	ND	0.050	0.020	
Aroclor-1254	NS	ND	0.050	0.020	
Aroclor-1260	NS	ND	0.050	0.020	
Aroclor-1262	NS	ND	0.050	0.020	
Aroclor-1268	NS	ND	0.050	0.020	
PCBs	0.09	ND	0.050	0.020	

Target Compounds	Groundwater Effluent Limitations (Class GA)	GW1			
		Conc	Q	RL	MDL
<b>Pesticides (µg/L)</b>					
4,4'-DDD	0.3	ND	0.010	0.005	
4,4'-DDE	0.2	ND	0.010	0.005	
4,4'-DDT	0.2	ND	0.010	0.005	
Aldrin	ND	ND	0.010	0.005	
alpha-BHC	0.01	ND	0.010	0.005	
alpha-Chlordane	NS	ND	0.010	0.005	
beta-BHC	0.04	ND	0.010	0.005	
Chlordane (alpha and gamma)	0.05	ND	0.010	0.005	
delta-BHC	0.04	ND	0.010	0.005	
Dieldrin	0.004	ND	0.010	0.005	
Endosulfan (I and II)	NS	ND	0.010	0.005	
Endosulfan I	NS	ND	0.010	0.005	
Endosulfan II	NS	ND	0.010	0.005	
Endosulfan sulfate	NS	ND	0.010	0.005	
Endrin	ND	ND	0.010	0.005	
Endrin aldehyde	5	ND	0.010	0.005	
Endrin ketone	5	ND	0.010	0.005	
gamma-BHC (Lindane)	0.05	ND	0.010	0.005	
gamma-Chlordane	NS	ND	0.010	0.005	
Heptachlor	0.04	ND	0.010	0.005	
Heptachlor epoxide	0.03	ND	0.010	0.005	
Methoxychlor	35	ND	0.010	0.005	
Toxaphene	0.06	ND	0.125	0.060	

**Results in Blue Highlight displays exceedance above the Groundwater Effluent Limitations**

NS = No Standard Available

~ = Sample not analyzed for

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds.

For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

C = Common Laboratory and/or Bottle Contaminant.

D = The compound was reported from the Diluted analysis

X = Samples analyzed for total and dissolved metals differ at <= 20% RPD.

**Table 1(b) - Soil Results - VOCs**

**1601 Surf Ave, Block 7061**  
**Coney Island, New York**

**Hillmann Consulting, LLC**  
**Project #: G6-2368**

Sample Date: 05/31/2018

Target Compounds	NYSDEC Unrestricted Use SCO	NYSDEC Restricted Residential SCO	S7 Sample Depth: 2.0-3.0'				S8 Sample Depth: 3.0-4.0'				S9 Sample Depth: 2.0-3.0'				S10 Sample Depth: 5.0-6.0'				S11 Sample Depth: 9.0-10.0'				S12 Sample Depth: 9.0-10.0'					
	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL				
<b>Volatiles (mg/Kg)</b>																												
1,1,1-Trichloroethane	0.68	100			ND	0.00123	0.00029		ND	0.00138	0.000326		ND	0.00184	0.000434		ND	0.00127	0.0003		ND	0.00133	0.000314		ND	0.00137	0.000323	
1,1,2,2-Tetrachloroethane	NS	NS			ND	0.00246	0.000331		ND	0.00276	0.000371		ND	0.00368	0.000495		ND	0.00254	0.000342		ND	0.00266	0.000358		ND	0.00274	0.000369	
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	NS			ND	0.00123	0.000446		ND	0.00138	0.000501		ND	0.00184	0.000668		ND	0.00127	0.000461		ND	0.00133	0.000483		ND	0.00137	0.000497	
1,1,2-Trichloroethane	NS	NS			ND	0.00123	0.000332		ND	0.00138	0.000373		ND	0.00184	0.000497		ND	0.00127	0.000343		ND	0.00133	0.000359		ND	0.00137	0.00037	
1,1-Dichloroethane	0.27	26			ND	0.00123	0.000239		ND	0.00138	0.000268		ND	0.00184	0.000357		ND	0.00127	0.000246		ND	0.00133	0.000258		ND	0.00137	0.000266	
1,1-Dichloroethene	0.33	100			ND	0.00123	0.000464		ND	0.00138	0.00052		ND	0.00184	0.000694		ND	0.00127	0.000479		ND	0.00133	0.000501		ND	0.00137	0.000516	
1,2,3-Trichlorobenzene	NS	NS			ND	0.00123	0.000592		ND	0.00138	0.000664		ND	0.00184	0.000885		0.000907	J	0.00127	0.000611		ND	0.00133	0.000664		ND	0.00137	0.000659
1,2,4-Trichlorobenzene	NS	NS			ND	0.00123	0.000541		ND	0.00138	0.000607		ND	0.00184	0.000881		ND	0.00127	0.000559		ND	0.00133	0.000585		ND	0.00137	0.000603	
1,2-Dibromo-3-chloropropane	NS	NS			ND	0.00246	0.000332		ND	0.00276	0.000373		ND	0.00368	0.000497		ND	0.00254	0.000343		ND	0.00266	0.000359		ND	0.00274	0.00037	
1,2-Dibromoethane (EDB)	NS	NS			ND	0.00123	0.000218		ND	0.00138	0.000244		ND	0.00184	0.000326		ND	0.00127	0.000225		ND	0.00133	0.000235		ND	0.00137	0.000242	
1,2-Dichlorobenzene	1.1	100			ND	0.00123	0.000213		ND	0.00138	0.000239		ND	0.00184	0.000318		ND	0.00127	0.000222		ND	0.00133	0.00023		ND	0.00137	0.000237	
1,2-Dichloroethane (EDC)	0.02	3.1			ND	0.00123	0.000325		ND	0.00138	0.000364		ND	0.00184	0.000486		ND	0.00127	0.000335		ND	0.00133	0.000351		ND	0.00137	0.000362	
1,2-Dichloropropane	NS	NS			ND	0.00123	0.000208		ND	0.00138	0.000233		ND	0.00184	0.000311		ND	0.00127	0.000215		ND	0.00133	0.000225		ND	0.00137	0.000232	
1,3-Dichlorobenzene	2.4	49			ND	0.00123	0.000237		ND	0.00138	0.000266		ND	0.00184	0.000355		ND	0.00127	0.000245		ND	0.00133	0.000257		ND	0.00137	0.000264	
1,3-Dichloropropene (cis- and trans-)	NS	NS			ND	0.00123	0.000284		ND	0.00138	0.000319		ND	0.00184	0.000425		ND	0.00127	0.000293		ND	0.00133	0.000307		ND	0.00137	0.000316	
1,4-Dichlorobenzene	1.8	13			ND	0.00123	0.00021		ND	0.00138	0.000236		ND	0.00184	0.000315		ND	0.00127	0.000217		ND	0.00133	0.000227		ND	0.00137	0.000234	
1,4-Dioxane	0.1	13			ND	0.246	0.044		ND	0.276	0.049		ND	0.368	0.066		ND	0.254	0.046		ND	0.266	0.048		ND	0.274	0.049	
2-Butanone (MEK)	0.12	100			ND	0.00246	0.000605		ND	0.00276	0.000679		ND	0.00368	0.000905		ND	0.00254	0.000625		ND	0.00266	0.000654		ND	0.00274	0.000674	
2-Hexanone	NS	NS			ND	0.00246	0.00028		ND	0.00276	0.00144		ND	0.00368	0.000192		ND	0.00254	0.000132		ND	0.00266	0.000138		ND	0.00274	0.000143	
4-Methyl-2-pentanone (MIBK)	NS	NS			ND	0.00246	0.000712		ND	0.00276	0.000799		ND	0.00368	0.00107		ND	0.00254	0.000735		ND	0.00266	0.00077		ND	0.00274	0.000793	
Acetone	0.05	100			ND	0.012	0.0012		ND	0.014	0.00135		0.014	J	0.018	0.0018	0.013	0.013	0.00124		ND	0.013	0.0013		0.011	J	0.014	0.00134
Benzene	0.06	4.8			ND	0.00123	0.000321		ND	0.00138	0.00036		ND	0.00184	0.00048		ND	0.00127	0.000331		ND	0.00133	0.000347		ND	0.00137	0.000358	
Bromochloromethane	NS	NS			ND	0.00123	0.000342		ND	0.00138	0.000384		ND	0.00184	0.000512		ND	0.00127	0.000353		ND	0.00133	0.00037		ND	0.00137	0.000381	
Bromodichloromethane	NS	NS			ND	0.00123	0.000287		ND	0.00138	0.000322		ND	0.00184	0.000429		ND	0.00127	0.000296		ND	0.00133	0.00031		ND	0.00137	0.000319	
Bromoform	NS	NS			ND	0.00123	0.000353		ND	0.00138	0.000396		ND	0.00184	0.000528		ND	0.00127	0.000364		ND	0.00133	0.000382		ND	0.00137	0.000393	
Bromomethane	NS	NS			ND	0.00123	0.000367		ND	0.00138	0.000411		ND	0.00184	0.000548		ND	0.00127										

**Table 1(b) (Cont'd) - Soil Results - SVOCs**

**1601 Surf Ave, Block 7061**  
**Coney Island, New York**

**Hillmann Consulting, LLC**  
**Project #: G6-2368**

Sample Date: 05/31/2018

Target Compounds	NYSDEC Unrestricted Use SCO	NYSDEC Restricted Residential SCO	S7 Sample Depth: 2.0-3.0'				S8 Sample Depth: 3.0-4.0'				S9 Sample Depth: 2.0-3.0'				S10 Sample Depth: 5.0-6.0'				S11 Sample Depth: 9.0-10.0'				S12 Sample Depth: 9.0-10.0'				
	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL			
Semivolatiles - BNA (mg/Kg)																											
1,1'-Biphenyl	NS	NS	ND	0.069	0.065	ND	0.034	0.031	ND	0.035	0.033	ND	0.038	0.036	ND	0.039	0.037	ND	0.038	0.036	ND	0.038	0.033	ND	0.038	0.033	
1,2,4,5-Tetrachlorobenzene	NS	NS	ND	0.069	0.060	ND	0.034	0.029	ND	0.035	0.030	ND	0.038	0.033	ND	0.039	0.034	ND	0.038	0.033	ND	0.038	0.032	ND	0.038	0.032	
2,2'-Oxybis(1-Chloropropane)	NS	NS	ND	0.069	0.058	ND	0.034	0.028	ND	0.035	0.029	ND	0.038	0.032	ND	0.039	0.033	ND	0.038	0.032	ND	0.038	0.032	ND	0.038	0.032	
2,4-Dinitrotoluene	NS	NS	ND	0.069	0.063	ND	0.034	0.031	ND	0.035	0.032	ND	0.038	0.035	ND	0.039	0.036	ND	0.038	0.035	ND	0.038	0.035	ND	0.038	0.035	
2,6-Dinitrotoluene	NS	NS	ND	0.069	0.053	ND	0.034	0.026	ND	0.035	0.026	ND	0.038	0.029	ND	0.039	0.030	ND	0.038	0.029	ND	0.038	0.029	ND	0.038	0.029	
2-Chloronaphthalene	NS	NS	ND	0.069	0.057	ND	0.034	0.028	ND	0.035	0.029	ND	0.038	0.032	ND	0.039	0.032	ND	0.038	0.032	ND	0.038	0.032	ND	0.038	0.032	
2-Methylnaphthalene	NS	NS	ND	0.069	0.049	ND	0.034	0.024	ND	0.035	0.024	ND	0.038	0.027	ND	0.039	0.028	ND	0.038	0.027	ND	0.038	0.027	ND	0.038	0.027	
2-Nitroaniline	NS	NS	ND	0.069	0.048	ND	0.034	0.024	ND	0.035	0.024	ND	0.038	0.027	ND	0.039	0.028	ND	0.038	0.027	ND	0.038	0.027	ND	0.038	0.027	
3,3'-Dichlorobenzidine	NS	NS	ND	0.069	0.050	ND	0.034	0.024	ND	0.035	0.025	ND	0.038	0.028	ND	0.039	0.029	ND	0.038	0.028	ND	0.038	0.028	ND	0.038	0.028	
3-Nitroaniline	NS	NS	ND	0.069	0.055	ND	0.034	0.027	ND	0.035	0.028	ND	0.038	0.031	ND	0.039	0.031	ND	0.038	0.031	ND	0.038	0.031	ND	0.038	0.031	
4-Bromophenyl phenyl ether	NS	NS	ND	0.069	0.058	ND	0.034	0.028	ND	0.035	0.029	ND	0.038	0.032	ND	0.039	0.033	ND	0.038	0.032	ND	0.038	0.032	ND	0.038	0.032	
4-Chloroaniline	NS	NS	ND	0.069	0.046	ND	0.034	0.022	ND	0.035	0.023	ND	0.038	0.025	ND	0.039	0.026	ND	0.038	0.025	ND	0.038	0.025	ND	0.038	0.025	
4-Chlorophenyl phenyl ether	NS	NS	ND	0.069	0.064	ND	0.034	0.031	ND	0.035	0.032	ND	0.038	0.036	ND	0.039	0.037	ND	0.038	0.036	ND	0.038	0.036	ND	0.038	0.036	
4-Nitroaniline	NS	NS	ND	0.069	0.052	ND	0.034	0.025	ND	0.035	0.026	ND	0.038	0.029	ND	0.039	0.030	ND	0.038	0.029	ND	0.038	0.029	ND	0.038	0.029	
Acenaphthene	20	100	ND	0.069	0.061	ND	0.034	0.030	ND	0.035	0.031	ND	0.038	0.034	ND	0.039	0.035	ND	0.038	0.034	ND	0.038	0.034	ND	0.038	0.034	
Acenaphthylene	100	100	ND	0.069	0.057	ND	0.034	0.028	ND	0.035	0.029	ND	0.038	0.032	ND	0.039	0.032	ND	0.038	0.032	ND	0.038	0.032	ND	0.038	0.032	
Acetophenone	NS	NS	ND	0.069	0.066	ND	0.034	0.032	ND	0.035	0.033	ND	0.038	0.036	ND	0.039	0.037	ND	0.038	0.036	ND	0.038	0.036	ND	0.038	0.036	
Anthracene	100	100	ND	0.069	0.061	ND	0.034	0.030	ND	0.035	0.031	ND	0.038	0.034	ND	0.039	0.035	ND	0.038	0.034	ND	0.038	0.034	ND	0.038	0.034	
Atrazine	NS	NS	ND	0.069	0.060	ND	0.034	0.029	ND	0.035	0.030	ND	0.038	0.033	ND	0.039	0.034	ND	0.038	0.033	ND	0.038	0.033	ND	0.038	0.033	
Benzaldehyde	NS	NS	ND	0.069	0.067	ND	0.034	0.033	ND	0.035	0.034	ND	0.038	0.037	ND	0.039	0.038	ND	0.038	0.037	ND	0.038	0.037	ND	0.038	0.037	
Benz[a]anthracene	1	1	0.420	D	0.069	0.060	0.055	0.034	0.029	ND	0.035	0.030	ND	0.038	0.033	ND	0.039	0.034	ND	0.038	0.033	ND	0.038	0.033	ND	0.038	0.033
Benz[a]pyrene	1	1	0.305	D	0.069	0.057	0.044	0.034	0.027	ND	0.035	0.029	ND	0.038	0.031	ND	0.039	0.032	ND	0.038	0.031	ND	0.038	0.031	ND	0.038	0.031
Benz[b]fluoranthene	1	1	0.224	D	0.069	0.056	0.045	0.034	0.027	ND	0.035	0.028	ND	0.038	0.031	ND	0.039	0.032	ND	0.038	0.031	ND	0.038	0.031	ND	0.038	0.031
Benz[g,h,i]perylene	100	100	0.302	D	0.069	0.063	0.037	0.034	0.030	ND	0.035	0.032	ND	0.038	0.035	ND	0.039	0.036	ND	0.038	0.035	ND	0.038	0.035	ND	0.038	0.035
Benz[j]fluoranthene	0.8	3.9	0.193	D	0.069	0.058	0.035	0.034	0.028	ND	0.035	0.029	ND	0.038	0.032	ND	0.039	0.033	ND	0.038	0.032	ND	0.038	0.032	ND	0.038	0.032
Bis(2-chloroethoxy) methane	NS	NS	ND	0.069	0.062	ND	0.034	0.030	ND	0.035	0.031	ND	0.038	0.034	ND	0.039	0.035	ND	0.038	0.034	ND	0.038	0.034	ND	0.038	0.034	
Bis(2-chloroethyl) ether	NS	NS	ND	0.069	0.																						

**Table 1(b) (Cont'd) - Soil Results - PCBs, Pesticides, Metals, TCLP Metals**

**1601 Surf Ave, Block 7061  
Coney Island, New York**

**Hillmann Consulting, LLC  
Project #: G6-2368**

Sample Date: 05/31/2018

Target Compounds	NYSDEC Unrestricted Use SCO	NYSDEC Restricted Residential SCO	S7 Sample Depth: 2.0-3.0'				S8 Sample Depth: 3.0-4.0'				S9 Sample Depth: 2.0-3.0'				S10 Sample Depth: 5.0-6.0'				S11 Sample Depth: 9.0-10.0'				S12 Sample Depth: 9.0-10.0'										
			Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL							
<b>PCB's (mg/Kg)</b>																																	
Aroclor-1016	NS	NS	ND	0.00873	0.00349	ND	0.00851	0.0034	ND	0.00865	0.00346	ND	0.00949	0.0038	ND	0.002	0.0008	ND	0.00196	0.000784	ND	0.00196	0.000784	ND	0.00196	0.000784	ND	0.00196	0.000784				
Aroclor-1221	NS	NS	ND	0.00873	0.00349	ND	0.00851	0.0034	ND	0.00865	0.00346	ND	0.00949	0.0038	ND	0.002	0.0008	ND	0.00196	0.000784	ND	0.00196	0.000784	ND	0.00196	0.000784	ND	0.00196	0.000784				
Aroclor-1232	NS	NS	ND	0.00873	0.00349	ND	0.00851	0.0034	ND	0.00865	0.00346	ND	0.00949	0.0038	ND	0.002	0.0008	ND	0.00196	0.000784	ND	0.00196	0.000784	ND	0.00196	0.000784	ND	0.00196	0.000784				
Aroclor-1242	NS	NS	ND	0.00873	0.00349	ND	0.00851	0.0034	ND	0.00865	0.00346	ND	0.00949	0.0038	ND	0.002	0.0008	ND	0.00196	0.000784	ND	0.00196	0.000784	ND	0.00196	0.000784	ND	0.00196	0.000784				
Aroclor-1248	NS	NS	ND	0.00873	0.00349	ND	0.00851	0.0034	ND	0.00865	0.00346	ND	0.00949	0.0038	ND	0.002	0.0008	ND	0.00196	0.000784	ND	0.00196	0.000784	ND	0.00196	0.000784	ND	0.00196	0.000784				
Aroclor-1254	NS	NS	ND	0.00873	0.00349	ND	0.00851	0.0034	ND	0.00865	0.00346	ND	0.00949	0.0038	ND	0.002	0.0008	ND	0.00196	0.000784	ND	0.00196	0.000784	ND	0.00196	0.000784	ND	0.00196	0.000784				
Aroclor-1260	NS	NS	ND	0.00873	0.00349	ND	0.00851	0.0034	ND	0.00865	0.00346	ND	0.00949	0.0038	ND	0.002	0.0008	ND	0.00196	0.000784	ND	0.00196	0.000784	ND	0.00196	0.000784	ND	0.00196	0.000784				
Aroclor-1262	NS	NS	ND	0.00873	0.00349	ND	0.00851	0.0034	ND	0.00865	0.00346	ND	0.00949	0.0038	ND	0.002	0.0008	ND	0.00196	0.000784	ND	0.00196	0.000784	ND	0.00196	0.000784	ND	0.00196	0.000784				
Aroclor-1268	NS	NS	ND	0.00873	0.00349	ND	0.00851	0.0034	ND	0.00865	0.00346	ND	0.00949	0.0038	ND	0.002	0.0008	ND	0.00196	0.000784	ND	0.00196	0.000784	ND	0.00196	0.000784	ND	0.00196	0.000784				
PCBs	0.1	1	ND	0.00873	0.00349	ND	0.00851	0.0034	ND	0.00865	0.00346	ND	0.00949	0.0038	ND	0.002	0.0008	ND	0.00196	0.000784	ND	0.00196	0.000784	ND	0.00196	0.000784	ND	0.00196	0.000784				
<b>Pesticides (mg/Kg)</b>			Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL	Conc	Q	RL	MDL			
4,4'-DDD	0.0033	13	ND	0.00175	0.000873	<b>0.00731</b>	D	0.00341	0.0017	ND	0.00173	0.000865	ND	0.0019	0.000949	ND	0.0004	0.0002	ND	0.000392	0.000196	ND	0.000392	0.000196	ND	0.000392	0.000196	ND	0.000392	0.000196	ND	0.000392	0.000196
4,4'-DDE	0.0033	8.9	ND	0.00175	0.000873	ND	0.00341	0.0017	ND	0.00173	0.000865	ND	0.0019	0.000949	ND	0.0004	0.0002	ND	0.000392	0.000196	ND	0.000392	0.000196	ND	0.000392	0.000196	ND	0.000392	0.000196	ND	0.000392	0.000196	
4,4'-DDT	0.0033	7.9	ND	0.00175	0.000873	0.00327	DJ	0.00341	0.0017	ND	0.00173	0.000865	ND	0.0019	0.000949	ND	0.0004	0.0002	ND	0.000392	0.000196	ND	0.000392	0.000196	ND	0.000392	0.000196	ND	0.000392	0.000196	ND	0.000392	0.000196
Aldrin	0.005	0.097	ND	0.00175	0.000873	ND	0.00341	0.0017	ND	0.00173	0.000865	ND	0.0019	0.000949	ND	0.0004	0.0002	ND	0.000392	0.000196	ND	0.000392	0.000196	ND	0.000392	0.000196	ND	0.000392	0.000196	ND	0.000392	0.000196	
alpha-BHC	0.02	0.48	ND	0.00175	0.000873	ND	0.00341	0.0017	ND	0.00173	0.000865	ND	0.0019	0.000949	ND	0.0004	0.0002	ND	0.000392	0.000196	ND	0.000392	0.000196	ND	0.000392	0.000196	ND	0.000392	0.000196	ND	0.000392	0.000196	
alpha-Chlordane	0.094	4.2	ND	0.00175	0.000873	ND	0.00341	0.0017	ND	0.00173	0.000865	ND	0.0019	0.000949	ND	0.0004	0.0002	ND	0.000392	0.000196	ND	0.000392	0.000196	ND	0.000392	0.000196	ND	0.000392	0.000196	ND	0.000392	0.000196	
beta-BHC	0.036	0.36	ND	0.00175	0.000873	ND	0.00341	0.0017	ND	0.00173	0.000865	ND	0.0019	0.000949	ND	0.0004	0.0002	ND	0.000392	0.000196	ND	0.000392	0.000196	ND	0.000392	0.000196	ND	0.000392	0.000196	ND	0.000392	0.000196	
Chlordane (alpha and gamma)	NS	NS	ND	0.00175	0.000873	ND	0.00341	0.0017	ND	0.00173	0.000865	ND	0.0019	0.000949	ND	0.0004	0.0002	ND	0.000392	0.000196	ND	0.000392	0.000196	ND	0.000392	0.000196	ND	0.000392	0.000196	ND	0.000392	0.000196	
delta-BHC	0.04	100	ND	0.00175	0.000873	<b>ND</b>	0.00341	0.0017	ND	0.00173	0.000865	<b>ND</b>	0.0019	0.000949	ND	0.0004	0.0002	ND	0.000392	0.000196	ND	0.000392	0.000196	ND	0.000392	0.000196	ND						

**Table 2(b) - Groundwater Results - VOCs and Metals**

**1601 Surf Ave, Block 7061  
Coney Island, New York**

Hillmann Consulting, LLC  
Project #: G6-2368

**Table 2(b) (Cont'd) - Groundwater Results - SVOCs, PCBs, Pesticides**

**1601 Surf Ave, Block 7061  
Coney Island, New York**

**Hillmann Consulting, LLC  
Project #: G6-2368**

Target Compounds	Groundwater Effluent Limitations (Class GA)	GW2				GW3			
Semivolatiles - BNA ( $\mu\text{g/L}$ )		Conc	Q	RL	MDL	Conc	Q	RL	MDL
1,1'-Biphenyl	5	ND	1.00	0.133	ND	1.00	0.133	1.00	0.133
1,2,4,5-Tetrachlorobenzene	5	ND	1.00	0.923	ND	1.00	0.923	1.00	0.923
2,2'-Oxybis(1-Chloropropane)	5	ND	1.00	0.248	ND	1.00	0.248	1.00	0.248
2,4-Dinitrotoluene	5	ND	1.00	0.135	ND	1.00	0.135	1.00	0.135
2,6-Dinitrotoluene	5	ND	1.00	0.139	ND	1.00	0.139	1.00	0.139
2-Chloronaphthalene	NS	ND	1.00	0.154	ND	1.00	0.154	1.00	0.154
2-Methylnaphthalene	NS	ND	1.00	0.128	ND	1.00	0.128	1.00	0.128
2-Nitroaniline	5	ND	1.00	0.161	ND	1.00	0.161	1.00	0.161
3,3'-Dichlorobenzidine	5	ND	1.00	0.399	ND	1.00	0.399	1.00	0.399
3-Nitroaniline	5	ND	1.00	0.214	ND	1.00	0.214	1.00	0.214
4-Bromophenyl phenyl ether	NS	ND	1.00	0.291	ND	1.00	0.291	1.00	0.291
4-Chloroaniline	5	ND	1.00	0.140	ND	1.00	0.140	1.00	0.140
4-Chlorophenyl phenyl ether	NS	ND	1.00	0.316	ND	1.00	0.316	1.00	0.316
4-Nitroaniline	5	ND	1.00	0.205	ND	1.00	0.205	1.00	0.205
Acenaphthene	NS	ND	1.00	0.129	ND	1.00	0.129	1.00	0.129
Acenaphthylene	NS	ND	1.00	0.141	ND	1.00	0.141	1.00	0.141
Acetophenone	NS	ND	1.00	0.180	ND	1.00	0.180	1.00	0.180
Anthracene	50	ND	1.00	0.211	ND	1.00	0.211	1.00	0.211
Atrazine	3	ND	1.00	0.247	ND	1.00	0.247	1.00	0.247
Benzaldehyde	NS	ND	1.00	0.192	ND	1.00	0.192	1.00	0.192
Benzo[a]anthracene	0.002	ND	0.100	0.100	ND	0.100	0.100	0.100	0.100
Benzo[a]pyrene	ND	ND	0.100	0.100	ND	0.100	0.100	0.100	0.100
Benzo[b]fluoranthene	0.002	ND	0.100	0.100	ND	0.100	0.100	0.100	0.100
Benzo[g,h,i]perylene	NS	ND	1.00	0.672	ND	1.00	0.672	1.00	0.672
Benzo[k]fluoranthene	0.002	ND	0.100	0.100	ND	0.100	0.100	0.100	0.100
Bis(2-chloroethoxy) methane	5	ND	1.00	0.171	ND	1.00	0.171	1.00	0.171
Bis(2-chloroethyl) ether	1	ND	1.00	0.243	ND	1.00	0.243	1.00	0.243
Bis(2-ethylhexyl) phthalate	5	ND	1.00	0.277	ND	1.00	0.277	1.00	0.277
Butyl benzyl phthalate	50	ND	1.00	0.215	ND	1.00	0.215	1.00	0.215
Caprolactam	NS	ND	1.00	0.547	ND	1.00	0.547	1.00	0.547
Carbazole	NS	ND	1.00	0.221	ND	1.00	0.221	1.00	0.221
Chrysene	0.002	ND	1.00	0.245	ND	1.00	0.245	1.00	0.245
Dibenz[a,h]anthracene	NS	ND	0.100	0.100	ND	0.100	0.100	0.100	0.100
Dibenzofuran	NS	ND	1.00	0.133	ND	1.00	0.133	1.00	0.133
Diethyl phthalate	50	ND	1.00	0.166	ND	1.00	0.166	1.00	0.166
Dimethyl phthalate	50	ND	1.00	0.137	ND	1.00	0.137	1.00	0.137
Di-n-butyl phthalate	50	ND	1.00	0.196	ND	1.00	0.196	1.00	0.196
Dinitrotoluene (2,4- and 2,6-)	NS	ND	1.00	0.139	ND	1.00	0.139	1.00	0.139
Di-n-octyl phthalate	50	ND	1.00	0.306	ND	1.00	0.306	1.00	0.306
Fluoranthene	50	ND	1.00	0.204	ND	1.00	0.204	1.00	0.204
Fluorene	50	ND	1.00	0.182	ND	1.00	0.182	1.00	0.182
Hexachlorobenzene	0.04	ND	0.020	0.020	ND	0.020	0.020	0.020	0.020
Hexachlorobutadiene	0.5	ND	1.00	0.187	ND	1.00	0.187	1.00	0.187
Hexachlorocyclopentadiene	5	ND	1.00	0.140	ND	1.00	0.140	1.00	0.140
Hexachloroethane	5	ND	1.00	0.163	ND	1.00	0.163	1.00	0.163
Indeno[1,2,3-cd]pyrene	0.002	ND	0.100	0.100	ND	0.100	0.100	0.100	0.100
Isophorone	50	ND	1.00	0.115	ND	1.00	0.115	1.00	0.115
Naphthalene	NS	ND	1.00	0.139	ND	1.00	0.139	1.00	0.139
Nitrobenzene	0.4	ND	1.00	0.210	ND	1.00	0.210	1.00	0.210
N-Nitrosodi-n-propylamine	NS	ND	1.00	0.229	ND	1.00	0.229	1.00	0.229
N-Nitrosodiphenylamine	50	ND	1.00	0.179	ND	1.00	0.179	1.00	0.179
Phenanthrene	50	ND	1.00	0.175	ND	1.00	0.175	1.00	0.175
Pyrene	50	ND	1.00	0.339	ND	1.00	0.339	1.00	0.339
TOTAL BN'S:	NS	ND		NA	ND		NA		NA
TOTAL BN's & TIC's:	NS	ND		NA	ND		NA		NA
TOTAL TIC's:	NS	ND		NA	ND		NA		NA

Target Compounds	Groundwater Effluent Limitations (Class GA)	GW2				GW3			
PCBs ( $\mu\text{g/L}$ )		Conc	Q	RL	MDL	Conc	Q	RL	MDL
Aroclor-1016	NS	ND	0.050	0.020	ND	0.050	0.020	ND	0.020
Aroclor-1221	NS	ND	0.050	0.020	ND	0.050	0.020	ND	0.020
Aroclor-1232	NS	ND	0.050	0.020	ND	0.050	0.020	ND	0.020
Aroclor-1242	NS	ND	0.050	0.020	ND	0.050	0.020	ND	0.020
Aroclor-1248	NS	ND	0.050	0.020	ND	0.050	0.020	ND	0.020
Aroclor-1254	NS	ND	0.050	0.020	ND	0.050	0.020	ND	0.020
Aroclor-1260	NS	ND	0.050	0.020	ND	0.050	0.020	ND	0.020
Aroclor-1262	NS	ND	0.050	0.020	ND	0.050	0.020	ND	0.020
Aroclor-1268	NS	ND	0.050	0.020	ND	0.050	0.020	ND	0.020
PCBs	0.09	ND	0.050	0.020	ND	0.050	0.020	ND	0.020

Target Compounds	Groundwater Effluent Limitations (Class GA)	GW2				GW3			
Pesticides ( $\mu\text{g/L}$ )		Conc	Q	RL	MDL	Conc	Q	RL	MDL
4,4'-DDD	0.3	ND	0.010	0.005	ND	0.010	0.005	ND	0.005
4,4'-DDE	0.2	ND	0.010	0.005	ND	0.010	0.005	ND	0.005
4,4'-DDT	0.2								

**Table 3 - Soil Vapor Results**  
**Surf Ave, Block 7061 & 7062**  
**Coney Island, New York 11224**  
**Hillmann Consulting, LLC**  
**Project #: G6-2368**

Sampling Date: 5/30/18

Target Compound	SV1 Block 7062			SV2 Block 7062			SV3 Block 7061		SV4 Block 7061			
Acetone	D	76	4.8	D	130	4.8		34	0.48	D	150	4.8
Benzene	D	8.0	6.4		9.7	0.64		6.0	0.64		30	0.64
Bromodichloromethane		ND	13		ND	1.3		ND	1.3		ND	1.3
Bromoform		ND	21		ND	2.1		ND	2.1		ND	2.1
Bromomethane		ND	7.8		ND	0.78		ND	0.78		ND	0.78
1,3-Butadiene		ND	4.4		ND	0.44		ND	0.44		ND	0.44
Chlorobenzene		ND	9.2		ND	0.92		ND	0.92		ND	0.92
Chloroethane		ND	5.3		ND	0.53		ND	0.53		ND	0.53
Chloroform	D	12	9.8		11	0.98		1.1	0.98		ND	0.98
Chloromethane		ND	4.1		ND	0.41		ND	0.41		ND	0.41
Carbon disulfide	D	17	6.2		2.7	0.62		2.3	0.62		4.7	0.62
Carbon tetrachloride		ND	2.5		ND	0.25		ND	0.25		ND	0.25
Cyclohexane		ND	6.9		1.5	0.69		2.3	0.69		4.5	0.69
Dibromochloromethane		ND	17		ND	1.7		ND	1.7		ND	1.7
1,2-Dibromoethane		ND	15		ND	1.5		ND	1.5		ND	1.5
1,2-Dichlorobenzene		ND	12		ND	1.2		ND	1.2		ND	1.2
1,3-Dichlorobenzene		ND	12		ND	1.2		ND	1.2		ND	1.2
1,4-Dichlorobenzene		ND	12		ND	1.2		ND	1.2		ND	1.2
Dichlorodifluoromethane		ND	9.9		ND	0.99		ND	0.99		4.6	0.99
1,1-Dichloroethane		ND	8.1		ND	0.81		ND	0.81		ND	0.81
1,2-Dichloroethane		ND	8.1		ND	0.81		ND	0.81		ND	0.81
1,1-Dichloroethylene		ND	7.9		ND	0.79		ND	0.79		ND	0.79
1,2-Dichloroethylene (cis)	D	32	7.9		ND	0.79		ND	0.79		ND	0.79
1,2-Dichloroethylene (trans)		ND	7.9		ND	0.79		ND	0.79		ND	0.79
1,2-Dichloropropane		ND	9.2		ND	0.92		ND	0.92		ND	0.92
1,3-Dichloropropene (cis)		ND	9.1		ND	0.91		ND	0.91		ND	0.91
1,3-Dichloropropene (trans)		ND	9.1		ND	0.91		ND	0.91		ND	0.91
1,3-Dichloropropene - TOTAL		ND	9.1		ND	0.91		ND	0.91		ND	0.91
1,2-Dichlorotetrafluoroethane		ND	14		ND	1.4		ND	1.4		3.8	1.4
1,4-Dioxane		ND	7.2		ND	0.72		ND	0.72		ND	0.72
Ethylbenzene	D	11	8.7		17	0.87		20	0.87		22	0.87
n-Heptane	D	12	8.2		11	0.82		11	0.82		42	0.82
1,3-Hexachlorobutadiene		ND	21		ND	2.1		ND	2.1		ND	2.1
n-Hexane	D	17	7.1		7.9	0.71		12	0.71		63	0.71
Methylene chloride	D	21	7.0		ND	0.70		26	0.70		ND	0.70
Methyl ethyl ketone	D	16	5.9		59	0.59		16	0.59		50	0.59
Methyl isobutyl ketone		ND	8.2		4.6	0.82		1.2	0.82		8.8	0.82
Methyl tert-butyl ether		ND	7.2		ND	0.72		ND	0.72		3.5	0.72
Styrene		ND	8.5		2.1	0.85		1.6	0.85		1.8	0.85
Tert-butyl alcohol	D	7.2	6.1		25	0.61		3.2	0.61		18	0.61
1,1,2,2-Tetrachloroethane		ND	14		ND	1.4		ND	1.4		ND	1.4
Tetrachloroethene	D	27000	136		13	1.4		140	1.4		9.0	1.4
Toluene	D	50	7.5		69	0.75		62	0.75		100	0.75
1,2,4-Trichlorobenzene		ND	15		ND	1.5		ND	1.5		ND	1.5
1,1,1-Trichloroethane	D	12	11		5.8	1.1		1.9	1.1		ND	1.1
1,1,2-Trichloroethane		ND	11		ND	1.1		ND	1.1		ND	1.1
Trichloroethene	D	620	2.5		0.40	0.25		ND	0.25		0.39	0.25
Trichlorofluoromethane		ND	11		190	1.1		4.5	1.1		17	1.1
1,1,2-Trichloro-1,2,2-trifluoroethane		ND	15		ND	1.5		ND	1.5		ND	1.5
1,2,4-Trimethylbenzene	D	48	9.8		49	0.98		63	0.98		57	0.98
1,3,5-Trimethylbenzene	D	13	9.8		17	0.98		22	0.98		20	0.98
2,2,4-Trimethylpentane		ND	9.3		2.5	0.93		3.0	0.93		140	0.93
Vinyl bromide		ND	8.7		ND	0.87		ND	0.87		ND	0.87
Vinyl chloride		ND	5.1		ND	0.51		ND	0.51		ND	0.51
Xylenes (m&p)	D	64	8.7		88	0.87		98	0.87		110	0.87
Xylenes (o)	D	18	8.7		28	0.87		33	0.87		36	0.87
Xylenes - TOTAL	D	82	8.7		116	0.87		131	0.87		146	0.87

## Attachment A: Soil Boring Field Logs

Surf Ave, Block 7061 & 7062

Brooklyn, NY

Project: G6-2368



Soil Boring ID	Boring Depth (bgs)	Subsurface Lithology (bgs)	Water Depth (bgs)	Field Notes
SB1	10' End of Boring	0-6' Fill Material 7-10' Gray Saturated, Silty sand	6'	No PID Readings Samples Collected: <u>S1</u> 4-5' bgs
SB2	10' End of Boring	0-4' Fill Material 4-7' White Silty Sand, Moist 10-15' White Silty Sand, Saturated	7'	No PID Readings Samples Collected: <u>S2</u> 4-5' bgs
SB3	10' End of boring	0-6' Fill Material 7-10' Gray Saturated, Silty Sand	6'	No PID Readings Samples Collected: <u>S3</u> 4-5' bgs <u>GW1</u> water sample collected from temp well point
SB4	10' End of Boring	0-6' Fill Material 7-10' Gray Saturated, Silty Sand	7'	No PID Readings Samples Collected: <u>S4</u> 5-6' bgs
SB5	10' End of Boring	0-6' Fill Material 7-10' Gray, Saturated, Silty Sand	6'	No PID Readings Samples Collected: <u>S5</u> 5-6' bgs
SB6	10' End of Boring	0-3' Fill Material 5' Grey Silty Sand 10' Grey, Saturated, Silty Sand	3-5' 8'	No PID Readings Samples Collected: <u>S6</u> 3-4' bgs
SB7	10' End of Boring	0-3' Fill Material 7' Grey Silty Sand 10' Grey, Saturated, Silty Sand	3-7' 7'	No PID Readings Samples Collected: <u>S7</u> 2-3' bgs
SB8	10 End of Boring	0-3' Fill Material 5' Grey Silty Sand 10' Grey, Saturated, Silty Sand	3-6' 5'	No PID Readings Samples Collected: <u>S8</u> 3-4' bgs <u>GW2</u> water sample collected from temp well poin
SB9	10 End of Boring	0-3' Fill Material 5' Grey Silty Sand 10' Grey, Saturated, Silty Sand	3-6' 5'	No PID Readings Samples Collected: <u>S9</u> 2-3' bgs
SB10	10 End of boring	0-5' Fill Material 6-9' Gray, Silty Sand, Odor 9-10' Gray, Silty Saturated Sand	9'	No PID Readings Samples Collected: <u>S10</u> 5-6' bgs
SB11	10 End of Boring	0-5' Fill Material 6-9' Gray, Silty Sand, Moist 9-10' Gray, Silty Saturated Sand, Odor	10'	No PID Readings Samples Collected: <u>S11</u> 9-10' bgs
SB12	10' End of Boring	0-5' Fill Material 6-9' Gray, Silty Sand, Moist 9-10' Gray, Silty Saturated Sand, Odor	9'	No PID Readings Samples Collected: <u>S12</u> 9-10' bgs <u>GW3</u> water sample collected from temp well poin

**ATTACHMENT B**  
**LABORATORY ANALYTICAL DATA REPORTS**



## **ANALYTICAL DATA REPORT**

Hillmann Consulting, LLC  
1600 Route 22 East  
Union, NJ 07083

Project Name: **G6-2368**  
IAL Case Number: **E18-04234**

These data have been reviewed and accepted by:

A handwritten signature in black ink, appearing to read "Michael Leftin".

Michael H. Leftin, Ph.D.  
Laboratory Director

This report shall not be reproduced, except in its entirety, without the written consent of Integrated Analytical Laboratories, LLC. The test results included in this report relate only to the samples analyzed. The results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

---

273 Franklin Road  
Randolph, NJ 07869  
Phone: 973 361 4252  
Fax: 973 989 5288



IAL is a NELAP accredited lab (TNI01284) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).

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# *Sample Summary*

*IAL Case No.*

**E18-04234**

*Client* Hillmann Consulting, LLC

*Project* G6-2368

*Received On* 5/31/2018@17:27

<u>Lab ID</u>	<u>Client Sample ID</u>	<u>Depth Top/Bottom</u>	<u>Sampling Time</u>	<u>Matrix</u>	<u># of Container</u>
04234-001	S1	5	5/30/2018@09:40	Soil	4
04234-002	S2	5	5/30/2018@10:15	Soil	4
04234-003	S3	5	5/30/2018@10:45	Soil	4
04234-004	S4	6	5/30/2018@11:10	Soil	4
04234-005	S5	6	5/30/2018@11:40	Soil	4
04234-006	S6	4	5/30/2018@12:10	Soil	9
04234-007	GW1	10	5/30/2018	Aqueous	
04234-008	GW1 - FILT	n/a	5/30/2018	Aqueous	

# INTEGRATED ANALYTICAL LABORATORIES, LLC.

## DATA QUALIFIERS AND FLAGS

- B** Indicates the analyte found in the associated method blank and in the sample due to potential lab contamination.
- C** Indicates analyte is a common laboratory contaminant.
- D** Indicates analyte was reported from diluted analysis.
- E** Identifies a compound concentration that exceeds the upper level of the calibration range of the instrument
- J** Indicates an estimated value either when the concentration in the sample is less than the RL or for qualification of TICs
- M** Indicates matrix interference
- N** Presumptive evidence of a compound from the use of GC/MS library search.
- X** Indicates samples analyzed for total and dissolved metals differ at ≤20% RPD.
- Y** Indicates DO depletion in the BOD blank is >0.20ppm
- Z** Indicates internal standard failure. Sample results are either biased high or biased low.
- \$** Value outside NJDEP DKQP Limits
- \*** Result outside of QC limits

## PROJECT NOTES

- All results for soils, solids, and sludges are reported on a dry-weight basis except where noted
- All test results and QC are compliant with TNI or other applicable state agency requirements/guidance unless otherwise noted in the case narrative
- The case narrative for this SDG should be consulted to determine any non-conformances
- Any samples with 15-minute or "analyze immediately" holding times (e.g. pH, Dissolved Oxygen, Sulfite, etc.) which are analyzed in the laboratory are considered out of holding time
- IAL is a NELAP/TNI certified laboratory (TNI ID# TNI01284). IAL retains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).
- Certification is not required to perform analyses in the following states: AL, CO, DE, GA, HI, ID, IN, KY, MD, MI, MS, MO, MT, NE, NM, SD and TN. IAL can perform all analyses, except Drinking Water, within its scope of capabilities in these states.

## ACRONYMS AND ABBREVIATIONS

<b>CFU</b>	Colony Forming Unit	<b>ND</b>	Indicates analyte was analyzed for but not detected at MDL or RL (only if MDL is not used)
<b>CCB</b>	Continuing Calibration Blank		
<b>CCV</b>	Continuing Calibration Verification	<b>NTU</b>	Nephelometric Turbidity Units
<b>DF</b>	Dilution Factor	<b>ppb</b>	Parts per billion. Reported as µg/L or µg/kg
<b>DL</b>	Attached as a suffix to a diluted sample	<b>ppm</b>	Parts per million. Reported as mg/L, µg/mL or mg/kg
<b>DUP</b>	Duplicate	<b>QC</b>	Quality Control
<b>ICB</b>	Initial Calibration Blank	<b>% Rec</b>	Percent Recovery
<b>ICC</b>	Initial Calibration Curve	<b>RL</b>	Reporting Limit. The RL is typically determined by the concentration of the lowest standard in the calibration curve
<b>ICV</b>	Initial Calibration Verification		
<b>kg</b>	kilogram		
<b>L</b>	Liter	<b>RPD</b>	Relative Percent Difference
<b>LCS</b>	Laboratory Control Sample	<b>RSD</b>	Relative Standard Deviation
<b>LCSD</b>	Laboratory Control Sample Duplicate	<b>RT</b>	Retention Time
<b>MDL</b>	Method Detection Limit as determined according to 40 CFR Part 136 Appendix B	<b>SU</b>	Standard Units
<b>MF</b>	Membrane Filter	<b>TIC</b>	Tentatively Identified Compound AKA Library Search Compounds
<b>mg</b>	milligram (1000mg = 1g)	<b>TNI</b>	The NELAC (National Environmental Laboratory Accreditation Council) Institute
<b>µg</b>	microgram (1000µg = 1mg)		
<b>ml</b>	milliliter (1000ml = 1L)	<b>TNTC</b>	Too numerous to count
<b>µl</b>	microliter (1000µl = 1ml)	*	When attached to a compound name, indicates this analyte was analyzed by Method SW-846 8270 SIM
<b>µmhos</b>	Conductivity units - resistance expressed in ohms		
<b>MPN</b>	Most Probable Number	^	When attached to a compound name, indicates this analyte was analyzed by Method SW-846 8011 or EPA 504.1
<b>MS</b>	Matrix Spike		
<b>MSD</b>	Matrix Spike Duplicate	<	Less than; In conjunction with a numerical value, indicates a concentration less than the RL or MDL
<b>NA</b>	Not applicable		
<b>NC</b>	Not calculated		

**SAMPLE DELIVERY GROUP CASE NARRATIVE  
(Conformance / Non-Conformance Summary)**

INTEGRATED ANALYTICAL LABORATORIES, LLC  
SAMPLE DELIVERY GROUP CASE NARRATIVE

**SDG#: E18-04234**

Integrated Analytical Laboratories, LLC. received eight (8) samples\*\* from Hillmann Consulting, LLC (IAL SDG# **E18-04234**, Project: G6-2368) on May 31, 2018 for the analysis of :

- ( 7 ) TCL VO + 15
- ( 6 ) TCL BN + 15
- ( 1 ) TCL BN + SIM + 15
- ( 7 ) TCL PCB
- ( 7 ) TCL Pesticides
- ( 8 ) TAL Metals

\*\*Number of samples listed above may be greater than what is listed on the chain of custody. Any samples that require in-house filtration or splitting will be counted as separate samples.

Samples were received in good condition with documentation in order.

Cooler temperature was acceptable at  $4 \pm 2^{\circ}\text{C}$

<b>Volatiles By SW 8260C</b>		<b>Batch: 180606A</b>		<b>Matrix: Aqueous</b>		
<b>QC</b>	<ul style="list-style-type: none"><li>- Calibration curve met QC criteria.</li><li>- Internal standards recovery met QC criteria.</li><li>- Surrogate percent recovery met QC criteria.</li><li>- Method blank met QC criteria.</li><li>- LCS percent recovery met QC criteria.</li><li>- MS/MSD RPD met QC criteria.</li><li>- MS/MSD percent recovery met QC criteria.</li></ul>					
<b>E18-04234</b>	<ul style="list-style-type: none"><li>- All samples were analyzed within holding time.</li></ul>					
Dilution Summary:						
		Sample ID	DF(s)	Dilution For		
		E18-04234-007	1	NA		
<b>Volatiles By SW 8260C</b>		<b>Batch: F180604-02, F180605-01</b>		<b>Matrix: Soil</b>		
<b>QC</b>	<ul style="list-style-type: none"><li>- Calibration curve met QC criteria.</li><li>- Internal standards recovery met QC criteria.</li><li>- Surrogate percent recovery met QC criteria.</li><li>- Method blank met QC criteria.</li><li>- LCS percent recovery met QC criteria.</li><li>- MS/MSD RPD met QC criteria.</li><li>- MS/MSD percent recovery met QC criteria.</li></ul>					
<b>E18-04234</b>	<ul style="list-style-type: none"><li>- All samples were analyzed within holding time.</li></ul>					
Dilution Summary:						
		Sample ID	DF(s)	Dilution For		
		E18-04234-001	1	NA		
		E18-04234-002	1	NA		
		E18-04234-003	1	NA		
		E18-04234-005	1	NA		

**INTEGRATED ANALYTICAL LABORATORIES, LLC**  
**SAMPLE DELIVERY GROUP CASE NARRATIVE**

**SDG#: E18-04234**

<b>Volatiles By SW 8260C</b>		<b>Batch: J180604-02</b>	<b>Matrix: MEOH</b>									
<b>QC</b>	<ul style="list-style-type: none"> <li>- Calibration curve met QC criteria.</li> <li>- Internal standards recovery met QC criteria.</li> <li>- Surrogate percent recovery met QC criteria.</li> <li>- Method blank met QC criteria.</li> <li>- LCS percent recovery met QC criteria.</li> <li>- MS/MSD RPD met QC criteria.</li> <li>- MS/MSD percent recovery met QC criteria.</li> </ul>											
<b>E18-04234</b>	<ul style="list-style-type: none"> <li>- All samples were analyzed within holding time.</li> <li>- Samples listed below were run using methanol preserved sample, as applicable. This sample preservation technique elevates RLs and MDLs 100x versus water preservation. If subsequent dilutions are performed, the RLs and MDLs will increase by that factor (e.g. a methanol sample run at a 5x dilution would elevate RLs and MDLs by 500x). Initial runs using methanol are considered "straight" runs and have a dilution factor of 1.</li> </ul> <p>Dilution Summary:</p> <table border="1"> <thead> <tr> <th>Sample ID</th> <th>DF(s)</th> <th>Dilution For</th> </tr> </thead> <tbody> <tr> <td>E18-04234-004</td> <td>1</td> <td>NA</td> </tr> <tr> <td>E18-04234-006</td> <td>1</td> <td>NA</td> </tr> </tbody> </table>	Sample ID	DF(s)	Dilution For	E18-04234-004	1	NA	E18-04234-006	1	NA		
Sample ID	DF(s)	Dilution For										
E18-04234-004	1	NA										
E18-04234-006	1	NA										

<b>Semivolatiles By SW 8270D SIM</b>		<b>Batch: 180604-02</b>	<b>Matrix: Aqueous</b>						
<b>QC</b>	<ul style="list-style-type: none"> <li>- Calibration curve met QC criteria.</li> <li>- Internal standard recovery met QC criteria.</li> <li>- Surrogate recovery met QC criteria.</li> <li>- Method blank met QC criteria.</li> <li>- LCS percent recovery met QC criteria. NJDEP DKQP criteria not met.</li> <li>- MS/MSD RPD met QC criteria.</li> <li>- MS/MSD percent recovery met QC criteria. NJDEP DKQP criteria not met.</li> </ul>								
<b>E18-04234</b>	<ul style="list-style-type: none"> <li>- Extraction holding time met requirement for each sample.</li> <li>- Analysis holding time met requirement for each sample.</li> <li>- Sample(s) used for aqueous Semivolatiles analyses contained varying levels of sediment. Precautions were taken to take an aliquot representative of the sample. However, due to the nature of aqueous samples containing sediment, reproduction of results may prove difficult. The rough amount of sediment present in the samples is as follows: 04234-007:1%.</li> </ul> <p>Dilution Summary:</p> <table border="1"> <thead> <tr> <th>Sample ID</th> <th>DF(s)</th> <th>Dilution For</th> </tr> </thead> <tbody> <tr> <td>E18-04234-007</td> <td>1</td> <td>NA</td> </tr> </tbody> </table>	Sample ID	DF(s)	Dilution For	E18-04234-007	1	NA		
Sample ID	DF(s)	Dilution For							
E18-04234-007	1	NA							

The result reported for 1,2-Diphenylhydrazine is also representative of Azobenzene. 1,2-Diphenylhydrazine rapidly decomposes to Azobenzene when exposed to water or heat. Analytical results from analysis of 1,2-Diphenylhydrazine will be directly compared to the applicable criteria for Azobenzene and/or 1,2-Diphenylhydrazine.

**INTEGRATED ANALYTICAL LABORATORIES, LLC**  
**SAMPLE DELIVERY GROUP CASE NARRATIVE**

**SDG#: E18-04234**

<b>Semivolatiles By SW 8270D</b>		<b>Batch: 180605-02</b>	<b>Matrix: Soil</b>
----------------------------------	--	-------------------------	---------------------

- |                  |   |
|------------------|---|
| <b>QC</b>        | <ul style="list-style-type: none"> <li>- Calibration curve met QC criteria.</li> <li>- Internal standard recovery met QC criteria.</li> <li>- Surrogate recovery met QC criteria.</li> <li>- Method blank met QC criteria.</li> <li>- LCS percent recovery met QC criteria. NJDEP DKQP criteria not met.</li> <li>- MS/MSD RPD met QC criteria.</li> <li>- MS/MSD percent recovery met QC criteria. NJDEP DKQP criteria not met.</li> </ul> |
| <b>E18-04234</b> | <ul style="list-style-type: none"> <li>- Extraction holding time met requirement for each sample.</li> <li>- Analysis holding time met requirement for each sample.</li> </ul>  |

**Dilution Summary:**

Sample ID	DF(s)	Dilution For
E18-04234-001	1	NA
E18-04234-002	1	NA
E18-04234-003	1	NA
E18-04234-004	1;10	Target compound(s).
E18-04234-005	1;5	Target compound(s).
E18-04234-006	2	Matrix Interference.

The result reported for 1,2-Diphenylhydrazine is also representative of Azobenzene. 1,2-Diphenylhydrazine rapidly decomposes to Azobenzene when exposed to water or heat. Analytical results from analysis of 1,2-Diphenylhydrazine will be directly compared to the applicable criteria for Azobenzene and/or 1,2-Diphenylhydrazine.

<b>PCB By SW 8082A</b>		<b>Batch: 180604-12</b>	<b>Matrix: Soil</b>
------------------------	--	-------------------------	---------------------

- |                  |  |
|------------------|--|
| <b>QC</b>        | <ul style="list-style-type: none"> <li>- Calibration curve met QC criteria.</li> <li>- Surrogate percent recovery did not meet QC criteria for sample 006, due to matrix interference. NJDEP DKQP criteria not met.</li> <li>- Method blank met QC criteria.</li> <li>- LCS Percent Recovery met QC criteria.</li> <li>- RPD between MS/MSD met QC criteria.</li> <li>- MS/MSD Percent Recovery met QC criteria.</li> <li>- The following samples were cleaned up using method 3665A: 001, 002, 003, 004, 005, 006.</li> <li>- The following samples were cleaned up using method 3660B to remove sulfur: 001, 002, 003, 004, 005, 006.</li> </ul> |
| <b>E18-04234</b> | <ul style="list-style-type: none"> <li>- All samples were extracted within holding time.</li> <li>- All samples were analyzed within holding time.</li> <li>- Retention Time Shift met QC criteria.</li> </ul>   |

**Dilution Summary:**

Sample ID	DF(s)	Dilution For
E18-04234-001	10	Matrix Interference.
E18-04234-002	5	Matrix Interference.
E18-04234-003	10	Matrix Interference.
E18-04234-004	10	Matrix Interference.
E18-04234-005	10	Matrix Interference.
E18-04234-006	10	Matrix Interference.

**INTEGRATED ANALYTICAL LABORATORIES, LLC**  
**SAMPLE DELIVERY GROUP CASE NARRATIVE**

**SDG#: E18-04234**

<b>PCB By SW 8082A</b>		<b>Batch: 180606-02</b>	<b>Matrix: Aqueous</b>																												
<b>QC</b>	<ul style="list-style-type: none"> <li>- Calibration curve met QC criteria.</li> <li>- Surrogate percent recovery met QC criteria.</li> <li>- Method blank met QC criteria.</li> <li>- LCS Percent Recovery met QC criteria.</li> <li>- RPD between MS/MSD met QC criteria.</li> <li>- MS/MSD Percent Recovery met QC criteria.</li> <li>- The following samples were cleaned up using method 3660B to remove sulfur: 007.</li> </ul>																														
<b>E18-04234</b>	<ul style="list-style-type: none"> <li>- All samples were extracted within holding time.</li> <li>- All samples were analyzed within holding time.</li> <li>- Retention Time Shift met QC criteria.</li> </ul>																														
Dilution Summary:																															
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 30%;">Sample ID</th><th style="text-align: center; width: 20%;">DF(s)</th><th style="text-align: center; width: 30%;">Dilution For</th><th style="text-align: right; width: 20%;"></th></tr> </thead> <tbody> <tr> <td>E18-04234-007</td><td style="text-align: center;">1</td><td style="text-align: center;">NA</td><td></td></tr> </tbody> </table>				Sample ID	DF(s)	Dilution For		E18-04234-007	1	NA																					
Sample ID	DF(s)	Dilution For																													
E18-04234-007	1	NA																													
<b>Pesticides By SW 8081B</b>		<b>Batch: 180604-12</b>	<b>Matrix: Soil</b>																												
<b>QC</b>	<ul style="list-style-type: none"> <li>- Calibration curve met QC criteria.</li> <li>- Surrogate percent recovery did not meet QC criteria due to matrix interference for #001; #004; #005; diluted out for #006. NJDEP DKQP criteria not met.</li> <li>- Method blank met QC criteria.</li> <li>- LCS Percent Recovery met QC criteria.</li> <li>- RPD between MS/MSD met QC criteria.</li> <li>- MS/MSD Percent Recovery met QC criteria.</li> <li>- The following samples were cleaned up using method 3660B to remove sulfur: 001, 002, 003, 004, 005, 006.</li> </ul>																														
<b>E18-04234</b>	<ul style="list-style-type: none"> <li>- All samples were extracted within holding time.</li> <li>- All samples were analyzed within holding time.</li> <li>- Retention Time Shift met QC criteria.</li> </ul>																														
Dilution Summary:																															
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 30%;">Sample ID</th><th style="text-align: center; width: 20%;">DF(s)</th><th style="text-align: center; width: 30%;">Dilution For</th><th style="text-align: right; width: 20%;"></th></tr> </thead> <tbody> <tr> <td>E18-04234-001</td><td style="text-align: center;">5</td><td style="text-align: center;">Matrix Interference.</td><td></td></tr> <tr> <td>E18-04234-002</td><td style="text-align: center;">5</td><td style="text-align: center;">Matrix Interference.</td><td></td></tr> <tr> <td>E18-04234-003</td><td style="text-align: center;">5</td><td style="text-align: center;">Matrix Interference.</td><td></td></tr> <tr> <td>E18-04234-004</td><td style="text-align: center;">25</td><td style="text-align: center;">Matrix Interference.</td><td></td></tr> <tr> <td>E18-04234-005</td><td style="text-align: center;">10</td><td style="text-align: center;">Matrix Interference.</td><td></td></tr> <tr> <td>E18-04234-006</td><td style="text-align: center;">250</td><td style="text-align: center;">Matrix Interference.</td><td></td></tr> </tbody> </table>				Sample ID	DF(s)	Dilution For		E18-04234-001	5	Matrix Interference.		E18-04234-002	5	Matrix Interference.		E18-04234-003	5	Matrix Interference.		E18-04234-004	25	Matrix Interference.		E18-04234-005	10	Matrix Interference.		E18-04234-006	250	Matrix Interference.	
Sample ID	DF(s)	Dilution For																													
E18-04234-001	5	Matrix Interference.																													
E18-04234-002	5	Matrix Interference.																													
E18-04234-003	5	Matrix Interference.																													
E18-04234-004	25	Matrix Interference.																													
E18-04234-005	10	Matrix Interference.																													
E18-04234-006	250	Matrix Interference.																													

**INTEGRATED ANALYTICAL LABORATORIES, LLC**  
**SAMPLE DELIVERY GROUP CASE NARRATIVE**

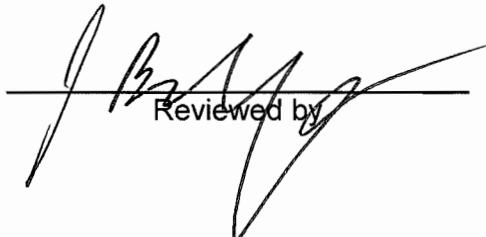
**SDG#: E18-04234**

<b>Pesticides By SW 8081B</b>		<b>Batch: 180606-02</b>	<b>Matrix: Aqueous</b>																					
<b>QC</b>	<ul style="list-style-type: none"> <li>- Calibration curve met QC criteria.</li> <li>- Surrogate percent recovery met QC criteria.</li> <li>- Method blank met QC criteria.</li> <li>- LCS Percent Recovery met QC criteria.</li> <li>- RPD between MS/MSD met QC criteria.</li> <li>- MS/MSD Percent Recovery met QC criteria.</li> <li>- The following samples were cleaned up using method 3660B to remove sulfur: 007.</li> </ul>																							
<b>E18-04234</b>	<ul style="list-style-type: none"> <li>- All samples were extracted within holding time.</li> <li>- All samples were analyzed within holding time.</li> <li>- Retention Time Shift met QC criteria.</li> </ul> <p>Dilution Summary:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Sample ID</th> <th style="text-align: center;">DF(s)</th> <th style="text-align: left;">Dilution For</th> </tr> </thead> <tbody> <tr> <td>E18-04234-007</td> <td style="text-align: center;">1</td> <td>NA</td> </tr> </tbody> </table>			Sample ID	DF(s)	Dilution For	E18-04234-007	1	NA															
Sample ID	DF(s)	Dilution For																						
E18-04234-007	1	NA																						
<b>Metals By SW 6020B/7470A</b>																								
		<b>Batch: A180605-01 (307A)</b>	<b>Matrix: Aqueous</b>																					
<b>QC</b>	<ul style="list-style-type: none"> <li>- Calibration Curve Linearity met QC criteria.</li> <li>- Internal Standard Recovery met QC criteria.</li> <li>- Method Blank met QC criteria.</li> <li>- LCS Percent Recovery met QC criteria.</li> <li>- MS Percent Recovery met QC criteria.</li> <li>- RPD between Sample/Duplicate met QC criteria.</li> <li>- Serial Dilution met QC criteria.</li> </ul>																							
<b>E18-04234</b>	<ul style="list-style-type: none"> <li>- Digestion Holding Time met requirement for each sample.</li> <li>- Analysis Holding Time met requirement for each sample.</li> <li>- 04234-007: Trace;</li> </ul> <p>Dilution Summary:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Sample ID</th> <th style="text-align: center;">DF(s)</th> <th style="text-align: left;">Dilution For</th> </tr> </thead> <tbody> <tr> <td>E18-04234-007</td> <td style="text-align: center;">1</td> <td>NA</td> </tr> <tr> <td>E18-04234-008</td> <td style="text-align: center;">1</td> <td>NA</td> </tr> </tbody> </table>			Sample ID	DF(s)	Dilution For	E18-04234-007	1	NA	E18-04234-008	1	NA												
Sample ID	DF(s)	Dilution For																						
E18-04234-007	1	NA																						
E18-04234-008	1	NA																						
<b>Metals By SW 6020B/7471B</b>																								
		<b>Batch: S180604-01 (305A)</b>	<b>Matrix: Soil</b>																					
<b>QC</b>	<ul style="list-style-type: none"> <li>- Calibration Curve Linearity met QC criteria.</li> <li>- Internal Standard Recovery met QC criteria.</li> <li>- Method Blank met QC criteria.</li> <li>- LCS Percent Recovery met QC criteria.</li> <li>- MS Percent Recovery met QC criteria.</li> <li>- RPD between Sample/Duplicate met QC criteria.</li> <li>- Serial Dilution met QC criteria.</li> </ul>																							
<b>E18-04234</b>	<ul style="list-style-type: none"> <li>- Digestion Holding Time met requirement for each sample.</li> <li>- Analysis Holding Time met requirement for each sample.</li> </ul> <p>Dilution Summary:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Sample ID</th> <th style="text-align: center;">DF(s)</th> <th style="text-align: left;">Dilution For</th> </tr> </thead> <tbody> <tr> <td>E18-04234-001</td> <td style="text-align: center;">1</td> <td>NA</td> </tr> <tr> <td>E18-04234-002</td> <td style="text-align: center;">1</td> <td>NA</td> </tr> <tr> <td>E18-04234-003</td> <td style="text-align: center;">1</td> <td>NA</td> </tr> <tr> <td>E18-04234-004</td> <td style="text-align: center;">1</td> <td>NA</td> </tr> <tr> <td>E18-04234-005</td> <td style="text-align: center;">1</td> <td>NA</td> </tr> <tr> <td>E18-04234-006</td> <td style="text-align: center;">1</td> <td>NA</td> </tr> </tbody> </table>			Sample ID	DF(s)	Dilution For	E18-04234-001	1	NA	E18-04234-002	1	NA	E18-04234-003	1	NA	E18-04234-004	1	NA	E18-04234-005	1	NA	E18-04234-006	1	NA
Sample ID	DF(s)	Dilution For																						
E18-04234-001	1	NA																						
E18-04234-002	1	NA																						
E18-04234-003	1	NA																						
E18-04234-004	1	NA																						
E18-04234-005	1	NA																						
E18-04234-006	1	NA																						

INTEGRATED ANALYTICAL LABORATORIES, LLC  
SAMPLE DELIVERY GROUP CASE NARRATIVE

**SDG#: E18-04234**

A review of the QA/QC measures for the analysis of the sample(s) contained in this report has been performed by:

  
Reviewed by

6/8/2018

Date

## RESULTS SUMMARY REPORT

**INTEGRATED ANALYTICAL LABORATORIES, LLC.**

**SUMMARY REPORT**

Client: Hillmann Consulting, LLC

Project: G6-2368

Lab Case No.: E18-04234

Lab ID:	04234-001			04234-002			04234-003			04234-004		
Client ID:	S1			S2			S3			S4		
Depth:	5			5			5			6		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	5/30/18			5/30/18			5/30/18			5/30/18		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
<b>Volatiles (Units)</b>	<i>(mg/Kg)</i>			<i>(mg/Kg)</i>			<i>(mg/Kg)</i>			<i>(mg/Kg)</i>		
cis-1,2-Dichloroethene	0.000367	J	0.000219	ND	0.00029	ND	0.000264	ND	0.029			
Trichloroethene	0.00367		0.000288	ND	0.000381	ND	0.000347	ND	0.032			
Toluene	ND		0.000333	ND	0.000439	ND	0.000401	0.025	J	0.024		
Tetrachloroethene	0.148		0.000264	ND	0.000348	ND	0.000317	ND	0.029			
Ethylbenzene	ND		0.000251	ND	0.000332	0.00188	0.000303	ND	0.022			
Total Xylenes	ND		0.000446	ND	0.000589	0.00231	J	0.000537	ND	0.060		
Isopropylbenzene	ND		0.000204	ND	0.000269	0.000801	J	0.000246	ND	0.021		
1,4-Dichlorobenzene	ND		0.000176	0.000403	J	0.000233	ND	0.000212	0.023	J	0.022	
Cyclohexane	ND		0.000187	ND	0.000248	0.00308	0.000226	ND	0.027			
Methylcyclohexane	ND		0.000214	ND	0.000283	0.00468	0.000258	ND	0.027			
<b>TOTAL VO's:</b>	0.152	J		0.000403	J		0.013	J		0.048	J	
<b>TOTAL TIC's:</b>	ND			ND			0.00905	JN		1.70	JN	
<b>TOTAL VO's &amp; TIC's:</b>	0.152	J		0.000403	J		0.022	JN		1.75	JN	
<b>Semivolatiles - BN (Units)</b>	<i>(mg/Kg)</i>			<i>(mg/Kg)</i>			<i>(mg/Kg)</i>			<i>(mg/Kg)</i>		
Naphthalene	0.318		0.032	ND	0.030	ND	0.032	0.755	0.034			
2-Methylnaphthalene	0.142		0.026	ND	0.024	ND	0.026	0.279	0.028			
1,1'-Biphenyl	0.048		0.034	ND	0.032	ND	0.035	0.170	0.037			
Acenaphthylene	0.095		0.030	ND	0.029	ND	0.030	2.28	0.032			
Acenaphthene	0.442		0.032	0.044		0.031	ND	0.033	1.37	0.035		
Dibenzofuran	0.387		0.031	ND	0.030	ND	0.032	1.09	0.034			
Fluorene	0.403		0.033	0.032	J	0.031	ND	0.033	2.16	0.036		
Phenanthrene	4.00		0.033	0.345		0.032	0.112	0.034	15.5	D	0.360	
Anthracene	1.06		0.032	0.078		0.031	0.050	0.033	4.22		0.035	
Carbazole	0.473		0.028	0.034	J	0.027	ND	0.029	1.52		0.031	
Di-n-butyl phthalate	0.139		0.028	ND	0.026	ND	0.028	ND	0.030			
Fluoranthene	4.41		0.031	0.353		0.029	0.430	0.031	37.4	D	0.332	
Pyrene	3.14		0.030	0.248		0.029	0.276	0.030	19.8	D	0.324	
Benzo[a]anthracene	1.91		0.031	0.136		0.030	0.227	0.032	12.8	D	0.338	
Chrysene	1.94		0.031	0.137		0.030	0.211	0.032	12.5	D	0.338	
Bis(2-ethylhexyl) phthalate	0.037		0.023	ND	0.021	0.051	0.023	0.275	0.024			
Benzo[b]fluoranthene	0.949		0.029	0.088		0.028	0.178	0.030	8.59	D	0.316	
Benzo[k]fluoranthene	1.08		0.031	0.073		0.029	0.131	0.031	4.91		0.033	
Benzo[a]pyrene	1.24		0.030	0.080		0.028	0.157	0.030	8.39	D	0.322	
Indeno[1,2,3-cd]pyrene	0.653		0.030	0.053		0.029	0.103	0.031	4.56		0.033	
Dibenz[a,h]anthracene	0.346		0.036	ND	0.034	0.047	0.036	2.35	0.039			
Benzo[g,h,i]perylene	0.805		0.033	0.068		0.031	0.127	0.033	4.85		0.036	
<b>TOTAL BN'S:</b>	24.0			1.77	J		2.10			146	D	
<b>TOTAL TIC's:</b>	4.22	JN		ND			3.33	JN		19.9	JN	
<b>TOTAL BN'S &amp; TIC's:</b>	28.2	JN		1.77	J		5.43	JN		166	DJN	

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.

N = Presumptive evidence of a compound from the use of GC/MS library search.

**INTEGRATED ANALYTICAL LABORATORIES, LLC.**

**SUMMARY REPORT**  
**Client: Hillmann Consulting, LLC**  
**Project: G6-2368**  
**Lab Case No.: E18-04234**

PARAMETER(Units)	04234-001			04234-002			04234-003			04234-004			
	Lab ID: Client ID: Depth: Matrix: Sampled Date	S1 5 Soil 5/30/18	S2 5 Soil 5/30/18	S3 5 Soil 5/30/18	S4 6 Soil 5/30/18	Conc	Q	MDL	Conc	Q	MDL	Conc	Q
<b>PCB's (Units)</b>	<i>(mg/Kg)</i>			<i>(mg/Kg)</i>			<i>(mg/Kg)</i>			<i>(mg/Kg)</i>			
Aroclor-1016		ND	0.0073	ND	0.00352	ND		0.00725	ND		0.00786		
Aroclor-1221		ND	0.0073	ND	0.00352	ND		0.00725	ND		0.00786		
Aroclor-1232		ND	0.0073	ND	0.00352	ND		0.00725	ND		0.00786		
Aroclor-1242		ND	0.0073	ND	0.00352	ND		0.00725	ND		0.00786		
Aroclor-1248		ND	0.0073	ND	0.00352	ND		0.00725	0.076	D	0.00786		
Aroclor-1254		ND	0.0073	ND	0.00352	ND		0.00725	ND		0.00786		
Aroclor-1260	0.020	D	0.0073	ND	0.00352	0.035	D	0.00725	0.056	D	0.00786		
Aroclor-1262		ND	0.0073	ND	0.00352	ND		0.00725	ND		0.00786		
Aroclor-1268		ND	0.0073	ND	0.00352	ND		0.00725	ND		0.00786		
PCBs	0.020	D	0.0073	ND	0.00352	0.035	D	0.00725	0.132	D	0.00786		
<b>Pesticides (Units)</b>	<i>(mg/Kg)</i>			<i>(mg/Kg)</i>			<i>(mg/Kg)</i>			<i>(mg/Kg)</i>			
alpha-BHC		ND	0.000913	ND	0.000879	ND		0.000906	ND		0.00492		
beta-BHC		ND	0.000913	ND	0.000879	ND		0.000906	ND		0.00492		
gamma-BHC (Lindane)		ND	0.000913	ND	0.000879	ND		0.000906	ND		0.00492		
delta-BHC		ND	0.000913	ND	0.000879	ND		0.000906	ND		0.00492		
Heptachlor		ND	0.000913	ND	0.000879	ND		0.000906	ND		0.00492		
Aldrin		ND	0.000913	ND	0.000879	ND		0.000906	ND		0.00492		
Heptachlor epoxide		ND	0.000913	ND	0.000879	ND		0.000906	ND		0.00492		
Endosulfan I		ND	0.000913	ND	0.000879	ND		0.000906	ND		0.00492		
4,4'-DDE		ND	0.000913	0.091	D	0.000879	0.015	D	0.000906	0.026	D	0.00492	
Dieldrin		ND	0.000913	ND		0.000879	ND		0.000906	ND		0.00492	
Endrin		ND	0.000913	ND		0.000879	ND		0.000906	ND		0.00492	
Endosulfan II		ND	0.000913	ND		0.000879	ND		0.000906	ND		0.00492	
4,4'-DDD		ND	0.000913	0.020	D	0.000879	0.00189	D	0.000906	ND		0.00492	
Endrin aldehyde		ND	0.000913	ND		0.000879	ND		0.000906	ND		0.00492	
Endosulfan sulfate		ND	0.000913	ND		0.000879	ND		0.000906	ND		0.00492	
4,4'-DDT		ND	0.000913	0.129	D	0.000879	0.0093	D	0.000906	0.049	D	0.00492	
Endrin ketone		ND	0.000913	ND		0.000879	ND		0.000906	ND		0.00492	
Methoxychlor		ND	0.000913	ND		0.000879	ND		0.000906	ND		0.00492	
alpha-Chlordane		ND	0.000913	0.00519	D	0.000879	0.000969	DJ	0.000906	ND		0.00492	
gamma-Chlordane		ND	0.000913	0.00331	D	0.000879	0.00188	D	0.000906	0.010	D	0.00492	
Toxaphene		ND	0.011	ND		0.011	ND		0.011	ND		0.059	
Endosulfan (I and II)		ND	0.000913	ND		0.000879	ND		0.000906	ND		0.00492	
Chlordane (alpha and gamma)		ND	0.000913	0.0085	D	0.000879	0.00285	D	0.000906	0.010	D	0.00492	

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

D = The compound was reported from the Diluted analysis

**INTEGRATED ANALYTICAL LABORATORIES, LLC.**

**SUMMARY REPORT**  
**Client: Hillmann Consulting, LLC**  
**Project: G6-2368**  
**Lab Case No.: E18-04234**

Lab ID:	04234-001			04234-002			04234-003			04234-004		
Client ID:	S1			S2			S3			S4		
Depth:	5			5			5			6		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	5/30/18			5/30/18			5/30/18			5/30/18		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
<b>Metals (Units)</b>	<b>(mg/Kg)</b>			<b>(mg/Kg)</b>			<b>(mg/Kg)</b>			<b>(mg/Kg)</b>		
Aluminum	8710		2.38	1690		2.26	3170		2.35	6810		2.53
Antimony	1.14		0.238	ND		0.226	0.399	J	0.235	0.826		0.253
Arsenic	5.76		0.179	2.78		0.169	2.58		0.176	3.28		0.190
Barium	110		0.298	61.9		0.282	81.6		0.294	139		0.316
Beryllium	0.527	J	0.179	ND		0.169	0.243	J	0.176	0.276	J	0.190
Cadmium	ND		0.357	ND		0.338	0.433	J	0.353	0.804		0.380
Calcium	7320		17.9	14900		16.9	21800		17.6	23200		19.0
Chromium	34.5		0.298	7.14		0.282	129		0.294	92.0		0.316
Cobalt	8.36		0.179	1.53		0.169	4.34		0.176	2.59		0.190
Copper	35.3		0.417	24.1		0.395	19.8		0.412	20.5		0.443
Iron	17000		17.9	6460		16.9	9820		17.6	9570		19.0
Lead	222		0.298	45.3		0.282	97.6		0.294	150		0.316
Magnesium	5940		17.9	1190		16.9	8410		17.6	3270		19.0
Manganese	474		0.417	68.4		0.395	141		0.412	144		0.443
Mercury	0.301		0.0099	0.049		0.0093	0.057		0.010	0.219		0.011
Nickel	31.8		0.417	3.94		0.395	26.5		0.412	10.3		0.443
Potassium	1270		23.8	311		22.6	591		23.5	662		25.3
Selenium	2.47	J	1.79	ND		1.69	ND		1.76	ND		1.90
Silver	ND		0.357	0.655		0.338	149		0.353	131		0.380
Sodium	163		23.8	119		22.6	171		23.5	860		25.3
Thallium	0.335	J	0.298	ND		0.282	ND		0.294	ND		0.316
Vanadium	33.6		0.298	9.19		0.282	15.5		0.294	17.0		0.316
Zinc	183		1.19	46.6		1.13	179		1.18	301		1.27

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

**INTEGRATED ANALYTICAL LABORATORIES, LLC.**

**SUMMARY REPORT**

**Client: Hillmann Consulting, LLC**

**Project: G6-2368**

**Lab Case No.: E18-04234**

PARAMETER(Units)	04234-005			04234-006		
	Conc	Q	MDL	Conc	Q	MDL
<b>Volatiles (Units)</b>	<i>(mg/Kg)</i>			<i>(mg/Kg)</i>		
Acetone	0.022		0.00122	ND		0.151
Tetrachloroethene	0.0033		0.00032	ND		0.051
Styrene	0.000541	J	0.000258	ND		0.033
Methyl acetate	ND		0.000584	1.93		0.055
<b>TOTAL VO's:</b>	0.026	J		1.93		
<b>TOTAL TIC's:</b>	ND			0.623	JN	
<b>TOTAL VO's &amp; TIC's:</b>	0.026	J		2.55	JN	
<b>Semivolatiles - BN (Units)</b>	<i>(mg/Kg)</i>			<i>(mg/Kg)</i>		
Naphthalene	0.174		0.032	ND		0.059
2-Methylnaphthalene	0.073		0.026	ND		0.047
1,1'-Biphenyl	0.034	J	0.034	ND		0.063
Acenaphthylene	0.933		0.030	ND		0.055
Acenaphthene	0.516		0.032	ND		0.060
Dibenzofuran	0.184		0.031	ND		0.058
Fluorene	0.502		0.033	ND		0.061
Phenanthrene	8.59	D	0.166	ND		0.062
Anthracene	3.05		0.032	ND		0.059
Carbazole	0.514		0.028	ND		0.052
Fluoranthene	29.1	D	0.153	0.134	D	0.057
Pyrene	23.5	D	0.150	0.099	D	0.055
Benzo[a]anthracene	14.8	D	0.156	0.067	D	0.058
Chrysene	13.5	D	0.156	0.074	D	0.058
Bis(2-ethylhexyl) phthalate	ND		0.023	0.078	D	0.042
Benzo[b]fluoranthene	8.48	D	0.146	ND		0.054
Benzo[k]fluoranthene	4.31		0.031	ND		0.057
Benzo[a]pyrene	10.3	D	0.149	ND		0.055
Indeno[1,2,3-cd]pyrene	5.63		0.030	0.095	D	0.056
Dibenz[a,h]anthracene	2.90		0.036	ND		0.066
Benzo[g,h,i]perylene	6.11	D	0.164	0.189	D	0.061
<b>TOTAL BN'S:</b>	133	JD		0.736	D	
<b>TOTAL TIC's:</b>	38.2	JN		ND		
<b>TOTAL BN'S &amp; TIC's:</b>	171	JDN		0.736	D	

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

D = The compound was reported from the Diluted analysis

All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.

N = Presumptive evidence of a compound from the use of GC/MS library search.

**INTEGRATED ANALYTICAL LABORATORIES, LLC.**

**SUMMARY REPORT**

**Client: Hillmann Consulting, LLC**

**Project: G6-2368**

**Lab Case No.: E18-04234**

PARAMETER(Units)	Lab ID: 04234-005			04234-006		
	Client ID:	Q	MDL	Client ID:	Q	MDL
Sampled Date		5/30/18			5/30/18	
Depth:	6			4		
Matrix:	Soil			Soil		
PCB's (Units)	(mg/Kg)			(mg/Kg)		
Aroclor-1016	ND	0.00723		ND	0.00685	
Aroclor-1221	ND	0.00723		ND	0.00685	
Aroclor-1232	ND	0.00723		ND	0.00685	
Aroclor-1242	ND	0.00723		ND	0.00685	
Aroclor-1248	ND	0.00723		ND	0.00685	
Aroclor-1254	ND	0.00723		ND	0.00685	
Aroclor-1260	ND	0.00723		ND	0.00685	
Aroclor-1262	ND	0.00723		ND	0.00685	
Aroclor-1268	ND	0.00723		ND	0.00685	
PCBs	ND	0.00723		ND	0.00685	
Pesticides (Units)	(mg/Kg)			(mg/Kg)		
alpha-BHC	ND	0.00181		ND	0.043	
beta-BHC	ND	0.00181		ND	0.043	
gamma-BHC (Lindane)	ND	0.00181		ND	0.043	
delta-BHC	ND	0.00181		ND	0.043	
Heptachlor	ND	0.00181		ND	0.043	
Aldrin	ND	0.00181		ND	0.043	
Heptachlor epoxide	ND	0.00181		ND	0.043	
Endosulfan I	ND	0.00181		ND	0.043	
4,4'-DDE	ND	0.00181		ND	0.043	
Dieldrin	ND	0.00181		ND	0.043	
Endrin	ND	0.00181		ND	0.043	
Endosulfan II	ND	0.00181		ND	0.043	
4,4'-DDD	ND	0.00181		ND	0.043	
Endrin aldehyde	ND	0.00181		ND	0.043	
Endosulfan sulfate	ND	0.00181		ND	0.043	
4,4'-DDT	ND	0.00181		ND	0.043	
Endrin ketone	ND	0.00181		ND	0.043	
Methoxychlor	ND	0.00181		ND	0.043	
alpha-Chlordane	ND	0.00181		ND	0.043	
gamma-Chlordane	ND	0.00181		ND	0.043	
Toxaphene	ND	0.022		ND	0.514	
Endosulfan (I and II)	ND	0.00181		ND	0.043	
Chlordane (alpha and gamma)	ND	0.00181		ND	0.043	

ND = Analyzed for but Not Detected at the MDL

**INTEGRATED ANALYTICAL LABORATORIES, LLC.**

**SUMMARY REPORT**

**Client: Hillmann Consulting, LLC**

**Project: G6-2368**

**Lab Case No.: E18-04234**

PARAMETER(Units)	04234-005			04234-006		
	Conc	Q	MDL	Conc	Q	MDL
<b>Metals (Units)</b>	<i>(mg/Kg)</i>			<i>(mg/Kg)</i>		
Aluminum	2440		2.31	1390		2.08
Antimony	0.809		0.231	ND		0.208
Arsenic	4.03		0.173	1.42		0.156
Barium	85.0		0.289	13.0		0.260
Beryllium	0.232	J	0.173	ND		0.156
Cadmium	0.384	J	0.347	ND		0.312
Calcium	6500		17.3	5810		15.6
Chromium	89.8		0.289	7.31		0.260
Cobalt	2.75		0.173	1.23		0.156
Copper	18.1		0.404	14.6		0.364
Iron	18300		17.3	3530		15.6
Lead	802		0.289	24.8		0.260
Magnesium	1540		17.3	2100		15.6
Manganese	107		0.404	50.0		0.364
Mercury	0.463		0.010	0.056		0.010
Nickel	8.90		0.404	3.41		0.364
Potassium	358		23.1	189		20.8
Selenium	ND		1.73	ND		1.56
Silver	120		0.347	ND		0.312
Sodium	132		23.1	48.3	J	20.8
Thallium	ND		0.289	ND		0.260
Vanadium	12.1		0.289	7.07		0.260
Zinc	212		1.16	16.7		1.04

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

**INTEGRATED ANALYTICAL LABORATORIES, LLC.**

**SUMMARY REPORT**

**Client: Hillmann Consulting, LLC**

**Project: G6-2368**

**Lab Case No.: E18-04234**

<b>Lab ID:</b>	04234-007			04234-008		
<b>Client ID:</b>	GW1			GW1 - FILT		
<b>Depth:</b>	10					
<b>Matrix:</b>	Aqueous			Aqueous		
<b>Sampled Date</b>		5/30/18			5/30/18	
<b>PARAMETER(Units)</b>	Conc	Q	MDL	Conc	Q	MDL
<b>Volatiles (Units)</b>	<i>(ug/L)</i>			<i>(ug/L)</i>		
Tetrachloroethene	0.861	0.451	~	~	~	~
<b>TOTAL VO's:</b>	0.861			~	~	~
<b>TOTAL TIC's:</b>	ND			~	~	~
<b>TOTAL VO's &amp; TIC's:</b>	0.861			~	~	~
<b>Semivolatiles - BN (Units)</b>	<i>(ug/L)</i>			<i>(ug/L)</i>		
Benzo[a]anthracene	0.179	0.100	~	~	~	~
Benzo[b]fluoranthene	0.172	0.100	~	~	~	~
Benzo[k]fluoranthene	0.214	0.100	~	~	~	~
Benzo[a]pyrene	0.170	0.100	~	~	~	~
Indeno[1,2,3-cd]pyrene	0.160	0.100	~	~	~	~
Dibenz[a,h]anthracene	0.173	0.100	~	~	~	~
<b>TOTAL BN'S:</b>	1.07			~	~	~
<b>TOTAL TIC's:</b>	ND			~	~	~
<b>TOTAL BN'S &amp; TIC's:</b>	1.07			~	~	~
<b>PCB's (Units)</b>	<i>(ug/L)</i>			<i>(ug/L)</i>		
Aroclor-1016	ND	0.020	~	~	~	~
Aroclor-1221	ND	0.020	~	~	~	~
Aroclor-1232	ND	0.020	~	~	~	~
Aroclor-1242	ND	0.020	~	~	~	~
Aroclor-1248	ND	0.020	~	~	~	~
Aroclor-1254	ND	0.020	~	~	~	~
Aroclor-1260	ND	0.020	~	~	~	~
Aroclor-1262	ND	0.020	~	~	~	~
Aroclor-1268	ND	0.020	~	~	~	~
PCBs	ND	0.020	~	~	~	~

~ = Sample not analyzed for

ND = Analyzed for but Not Detected at the MDL

**INTEGRATED ANALYTICAL LABORATORIES, LLC.**

**SUMMARY REPORT**  
**Client: Hillmann Consulting, LLC**  
**Project: G6-2368**  
**Lab Case No.: E18-04234**

PARAMETER(Units)	04234-007			04234-008							
	Lab ID:	Client ID:	Depth:	Matrix:	Sampled Date	Conc	Q	MDL	Conc	Q	MDL
<b>Pesticides (Units)</b>	(ug/L)			(ug/L)							
alpha-BHC	ND		0.005		~			~			
beta-BHC	ND		0.005		~			~			
gamma-BHC (Lindane)	ND		0.005		~			~			
delta-BHC	ND		0.005		~			~			
Heptachlor	ND		0.005		~			~			
Aldrin	ND		0.005		~			~			
Heptachlor epoxide	ND		0.005		~			~			
Endosulfan I	ND		0.005		~			~			
4,4'-DDE	ND		0.005		~			~			
Dieldrin	ND		0.005		~			~			
Endrin	ND		0.005		~			~			
Endosulfan II	ND		0.005		~			~			
4,4'-DDD	ND		0.005		~			~			
Endrin aldehyde	ND		0.005		~			~			
Endosulfan sulfate	ND		0.005		~			~			
4,4'-DDT	ND		0.005		~			~			
Endrin ketone	ND		0.005		~			~			
Methoxychlor	ND		0.005		~			~			
alpha-Chlordane	ND		0.005		~			~			
gamma-Chlordane	ND		0.005		~			~			
Toxaphene	ND		0.060		~			~			
Endosulfan (I and II)	ND		0.005		~			~			
Chlordane (alpha and gamma)	ND		0.005		~			~			
<b>Metals (Units)</b>	(ug/L)			(ug/L)							
Aluminum	171		8.00	ND		8.00					
Antimony	2.54		1.20	2.61	X	1.20					
Arsenic	1.55	J	0.600	1.59	JX	0.600					
Barium	34.8		1.20	30.1		1.20					
Beryllium	ND		0.320	ND		0.320					
Cadmium	ND		1.00	ND		1.00					
Calcium	96100		60.0	90800		60.0					
Chromium	3.92		1.00	ND		1.00					
Cobalt	ND		0.600	ND		0.600					
Copper	ND		1.00	ND		1.00					
Iron	362		60.0	ND		60.0					
Lead	1.86	J	1.20	ND		1.20					
Magnesium	14000		60.0	13300		60.0					
Manganese	14.2		1.40	14.4	X	1.40					
Mercury	ND		0.200	ND		0.200					
Nickel	2.67		1.20	1.82	J	1.20					
Potassium	5650		80.0	5310		80.0					
Selenium	6.68	J	6.00	6.16	J	6.00					
Silver	ND		1.20	ND		1.20					
Sodium	32700		80.0	31300		80.0					
Thallium	ND		1.20	ND		1.20					
Vanadium	5.27		0.600	4.94		0.600					
Zinc	105		8.00	97.1		8.00					

~ = Sample not analyzed for

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

X – Samples analyzed for total and dissolved metals differ at <= 20% RPD.

## **ANALYTICAL RESULTS**

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: E18-04234-001  
Client ID: S1/5  
Date Received: 05/31/2018  
Date Analyzed: 06/05/2018  
Data file: F5985.D 06/ 5/18 02:20

GC/MS Column: DB-624  
Sample wt/vol: 5.4g  
Matrix-Units: Soil-mg/Kg  
% Moisture: 9.70  
Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND		0.00103	0.000242
Chloromethane	ND		0.00103	0.000191
Vinyl chloride	ND		0.00103	0.000191
Bromomethane	ND		0.00103	0.000307
Chloroethane	ND		0.00103	0.000273
Trichlorofluoromethane	ND		0.00103	0.000194
1,1-Dichloroethene	ND		0.00103	0.000388
Acetone	ND		0.010	0.00101
Carbon disulfide	ND		0.00103	0.000319
Methylene chloride	ND		0.00206	0.00205
trans-1,2-Dichloroethene	ND		0.00103	0.000299
Methyl tert-butyl ether (MTBE)	ND		0.00103	0.000199
1,1-Dichloroethane	ND		0.00103	0.0002
cis-1,2-Dichloroethene	0.000367	J	0.00103	0.000219
2-Butanone (MEK)	ND		0.00206	0.000507
Bromochloromethane	ND		0.00103	0.000286
Chloroform	ND		0.00103	0.000216
1,1,1-Trichloroethane	ND		0.00103	0.000243
Carbon tetrachloride	ND		0.00103	0.000166
1,2-Dichloroethane (EDC)	ND		0.00103	0.000272
Benzene	ND		0.00103	0.000269
Trichloroethene	0.00367		0.00103	0.000288
1,2-Dichloropropane	ND		0.00103	0.000174
1,4-Dioxane	ND		0.206	0.037
Bromodichloromethane	ND		0.00103	0.00024
cis-1,3-Dichloropropene	ND		0.00103	0.000211
4-Methyl-2-pentanone (MIBK)	ND		0.00206	0.000596

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**

Lab ID: E18-04234-001  
 Client ID: S1/5  
 Date Received: 05/31/2018  
 Date Analyzed: 06/05/2018  
 Data file: F5985.D 06/ 5/18 02:20

GC/MS Column: DB-624  
 Sample wt/vol: 5.4g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 9.70  
 Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND		0.00103	0.000333
trans-1,3-Dichloropropene	ND		0.00103	0.000238
1,1,2-Trichloroethane	ND		0.00103	0.000278
Tetrachloroethene	0.148		0.00103	0.000264
2-Hexanone	ND		0.00206	0.00107
Dibromochloromethane	ND		0.00103	0.000193
1,2-Dibromoethane (EDB)	ND		0.00103	0.000182
Chlorobenzene	ND		0.00103	0.000232
Ethylbenzene	ND		0.00103	0.000251
Total Xylenes	ND		0.00206	0.000446
Styrene	ND		0.00103	0.000212
Bromoform	ND		0.00103	0.000296
Isopropylbenzene	ND		0.00103	0.000204
1,1,2,2-Tetrachloroethane	ND		0.00206	0.000277
1,3-Dichlorobenzene	ND		0.00103	0.000199
1,4-Dichlorobenzene	ND		0.00103	0.000176
1,2-Dichlorobenzene	ND		0.00103	0.000178
1,2-Dibromo-3-chloropropane	ND		0.00206	0.000278
1,2,4-Trichlorobenzene	ND		0.00103	0.000453
1,2,3-Trichlorobenzene	ND		0.00103	0.000495
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00103	0.000374
Methyl acetate	ND		0.00103	0.000481
Cyclohexane	ND		0.00103	0.000187
Methylcyclohexane	ND		0.00103	0.000214
1,3-Dichloropropene (cis- and trans-)	ND		0.00103	0.000238

Total Target Compounds (52): 0.152

J

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04234-001

Client ID: S1/5

Date Received: 05/31/2018

Date Analyzed: 06/05/2018

Date File: F5985.D

GC/MS Column: DB-624

Sample wt/vol: 5.4g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 9.70

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: E18-04234-002

Client ID: S2/5

Date Received: 05/31/2018

Date Analyzed: 06/05/2018

Data file: F5986.D 06/ 5/18 02:49

GC/MS Column: DB-624

Sample wt/vol: 3.9g

Matrix-Units: Soil-mg/Kg

% Moisture: 5.80

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND	0.00136	0.00032	
Chloromethane	ND	0.00136	0.000252	
Vinyl chloride	ND	0.00136	0.000252	
Bromomethane	ND	0.00136	0.000405	
Chloroethane	ND	0.00136	0.00036	
Trichlorofluoromethane	ND	0.00136	0.000256	
1,1-Dichloroethene	ND	0.00136	0.000513	
Acetone	ND	0.014	0.00133	
Carbon disulfide	ND	0.00136	0.000422	
Methylene chloride	ND	0.00272	0.00271	
trans-1,2-Dichloroethene	ND	0.00136	0.000394	
Methyl tert-butyl ether (MTBE)	ND	0.00136	0.000262	
1,1-Dichloroethane	ND	0.00136	0.000264	
cis-1,2-Dichloroethene	ND	0.00136	0.00029	
2-Butanone (MEK)	ND	0.00272	0.000669	
Bromochloromethane	ND	0.00136	0.000378	
Chloroform	ND	0.00136	0.000286	
1,1,1-Trichloroethane	ND	0.00136	0.000321	
Carbon tetrachloride	ND	0.00136	0.000219	
1,2-Dichloroethane (EDC)	ND	0.00136	0.000359	
Benzene	ND	0.00136	0.000355	
Trichloroethene	ND	0.00136	0.000381	
1,2-Dichloropropane	ND	0.00136	0.00023	
1,4-Dioxane	ND	0.272	0.049	
Bromodichloromethane	ND	0.00136	0.000317	
cis-1,3-Dichloropropene	ND	0.00136	0.000279	
4-Methyl-2-pentanone (MIBK)	ND	0.00272	0.000787	

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**

Lab ID: E18-04234-002  
 Client ID: S2/5  
 Date Received: 05/31/2018  
 Date Analyzed: 06/05/2018  
 Data file: F5986.D 06/ 5/18 02:49

GC/MS Column: DB-624  
 Sample wt/vol: 3.9g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 5.80  
 Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND		0.00136	0.000439
trans-1,3-Dichloropropene	ND		0.00136	0.000314
1,1,2-Trichloroethane	ND		0.00136	0.000367
Tetrachloroethene	ND		0.00136	0.000348
2-Hexanone	ND		0.00272	0.00142
Dibromochloromethane	ND		0.00136	0.000254
1,2-Dibromoethane (EDB)	ND		0.00136	0.000241
Chlorobenzene	ND		0.00136	0.000306
Ethylbenzene	ND		0.00136	0.000332
Total Xylenes	ND		0.00272	0.000589
Styrene	ND		0.00136	0.00028
Bromoform	ND		0.00136	0.00039
Isopropylbenzene	ND		0.00136	0.000269
1,1,2,2-Tetrachloroethane	ND		0.00272	0.000366
1,3-Dichlorobenzene	ND		0.00136	0.000262
1,4-Dichlorobenzene	0.000403	J	0.00136	0.000233
1,2-Dichlorobenzene	ND		0.00136	0.000235
1,2-Dibromo-3-chloropropane	ND		0.00272	0.000367
1,2,4-Trichlorobenzene	ND		0.00136	0.000598
1,2,3-Trichlorobenzene	ND		0.00136	0.000654
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00136	0.000494
Methyl acetate	ND		0.00136	0.000635
Cyclohexane	ND		0.00136	0.000248
Methylcyclohexane	ND		0.00136	0.000283
1,3-Dichloropropene (cis- and trans-)	ND		0.00136	0.000314
Total Target Compounds (52):	0.000403	J		

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04234-002

Client ID: S2/5

Date Received: 05/31/2018

Date Analyzed: 06/05/2018

Date File: F5986.D

GC/MS Column: DB-624

Sample wt/vol: 3.9g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 5.80

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: E18-04234-003

Client ID: S3/5

Date Received: 05/31/2018

Date Analyzed: 06/05/2018

Data file: F5987.D 06/ 5/18 03:19

GC/MS Column: DB-624

Sample wt/vol: 4.5g

Matrix-Units: Soil-mg/Kg

% Moisture: 10.5

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND		0.00124	0.000291
Chloromethane	ND		0.00124	0.000229
Vinyl chloride	ND		0.00124	0.000229
Bromomethane	ND		0.00124	0.00037
Chloroethane	ND		0.00124	0.000329
Trichlorofluoromethane	ND		0.00124	0.000233
1,1-Dichloroethene	ND		0.00124	0.000467
Acetone	ND		0.012	0.00121
Carbon disulfide	ND		0.00124	0.000384
Methylene chloride	ND		0.00248	0.00247
trans-1,2-Dichloroethene	ND		0.00124	0.00036
Methyl tert-butyl ether (MTBE)	ND		0.00124	0.000239
1,1-Dichloroethane	ND		0.00124	0.000241
cis-1,2-Dichloroethene	ND		0.00124	0.000264
2-Butanone (MEK)	ND		0.00248	0.00061
Bromochloromethane	ND		0.00124	0.000345
Chloroform	ND		0.00124	0.00026
1,1,1-Trichloroethane	ND		0.00124	0.000293
Carbon tetrachloride	ND		0.00124	0.0002
1,2-Dichloroethane (EDC)	ND		0.00124	0.000327
Benzene	ND		0.00124	0.000324
Trichloroethene	ND		0.00124	0.000347
1,2-Dichloropropane	ND		0.00124	0.00021
1,4-Dioxane	ND		0.248	0.044
Bromodichloromethane	ND		0.00124	0.000289
cis-1,3-Dichloropropene	ND		0.00124	0.000254
4-Methyl-2-pentanone (MIBK)	ND		0.00248	0.000718

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: E18-04234-003  
Client ID: S3/5  
Date Received: 05/31/2018  
Date Analyzed: 06/05/2018  
Data file: F5987.D 06/ 5/18 03:19

GC/MS Column: DB-624  
Sample wt/vol: 4.5g  
Matrix-Units: Soil-mg/Kg  
% Moisture: 10.5  
Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND		0.00124	0.000401
trans-1,3-Dichloropropene	ND		0.00124	0.000286
1,1,2-Trichloroethane	ND		0.00124	0.000335
Tetrachloroethene	ND		0.00124	0.000317
2-Hexanone	ND		0.00248	0.00129
Dibromochloromethane	ND		0.00124	0.000232
1,2-Dibromoethane (EDB)	ND		0.00124	0.000219
Chlorobenzene	ND		0.00124	0.000279
Ethylbenzene	0.00188		0.00124	0.000303
Total Xylenes	0.00231	J	0.00248	0.000537
Styrene	ND		0.00124	0.000255
Bromoform	ND		0.00124	0.000356
Isopropylbenzene	0.000801	J	0.00124	0.000246
1,1,2,2-Tetrachloroethane	ND		0.00248	0.000334
1,3-Dichlorobenzene	ND		0.00124	0.000239
1,4-Dichlorobenzene	ND		0.00124	0.000212
1,2-Dichlorobenzene	ND		0.00124	0.000215
1,2-Dibromo-3-chloropropane	ND		0.00248	0.000335
1,2,4-Trichlorobenzene	ND		0.00124	0.000546
1,2,3-Trichlorobenzene	ND		0.00124	0.000596
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00124	0.00045
Methyl acetate	ND		0.00124	0.000579
Cyclohexane	0.00308		0.00124	0.000226
Methylcyclohexane	0.00468		0.00124	0.000258
1,3-Dichloropropene (cis- and trans-)	ND		0.00124	0.000286
Total Target Compounds (52):	0.013	J		

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04234-003

Client ID: S3/5

Date Received: 05/31/2018

Date Analyzed: 06/05/2018

Date File: F5987.D

GC/MS Column: DB-624

Sample wt/vol: 4.5g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 10.5

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
000108-67-8	Benzene, 1,3,5-trimethyl-	0.00905	JN	12.58

Total TICs = 0.00905 JN

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: E18-04234-004

Client ID: S4/6

Date Received: 05/31/2018

Date Analyzed: 06/05/2018

Data file: J5466.D 06/ 5/18 05:09

GC/MS Column: DB-624

Sample wt/vol: 0.092g

Matrix-Units: Soil-mg/Kg

% Moisture: 15.7

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND		0.065	0.043
Chloromethane	ND		0.032	0.030
Vinyl chloride	ND		0.065	0.038
Bromomethane	ND		0.065	0.035
Chloroethane	ND		0.032	0.032
Trichlorofluoromethane	ND		0.032	0.028
1,1-Dichloroethene	ND		0.032	0.032
Acetone	ND		0.129	0.086
Carbon disulfide	ND		0.032	0.030
Methylene chloride	ND		0.065	0.064
trans-1,2-Dichloroethene	ND		0.032	0.029
Methyl tert-butyl ether (MTBE)	ND		0.032	0.031
1,1-Dichloroethane	ND		0.032	0.032
cis-1,2-Dichloroethene	ND		0.032	0.029
2-Butanone (MEK)	ND		0.129	0.107
Bromochloromethane	ND		0.065	0.038
Chloroform	ND		0.032	0.030
1,1,1-Trichloroethane	ND		0.032	0.030
Carbon tetrachloride	ND		0.065	0.029
1,2-Dichloroethane (EDC)	ND		0.032	0.030
Benzene	ND		0.032	0.030
Trichloroethene	ND		0.032	0.032
1,2-Dichloropropane	ND		0.032	0.029
1,4-Dioxane	ND		6.45	6.34
Bromodichloromethane	ND		0.032	0.023
cis-1,3-Dichloropropene	ND		0.032	0.021
4-Methyl-2-pentanone (MIBK)	ND		0.129	0.045

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**

Lab ID: E18-04234-004  
 Client ID: S4/6  
 Date Received: 05/31/2018  
 Date Analyzed: 06/05/2018  
 Data file: J5466.D 06/ 5/18 05:09

GC/MS Column: DB-624  
 Sample wt/vol: 0.092g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 15.7  
 Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	0.025	J	0.032	0.024
trans-1,3-Dichloropropene	ND		0.065	0.021
1,1,2-Trichloroethane	ND		0.032	0.031
Tetrachloroethene	ND		0.032	0.029
2-Hexanone	ND		0.129	0.049
Dibromochloromethane	ND		0.032	0.029
1,2-Dibromoethane (EDB)	ND		0.032	0.026
Chlorobenzene	ND		0.032	0.024
Ethylbenzene	ND		0.032	0.022
Total Xylenes	ND		0.065	0.060
Styrene	ND		0.032	0.019
Bromoform	ND		0.032	0.029
Isopropylbenzene	ND		0.032	0.021
1,1,2,2-Tetrachloroethane	ND		0.065	0.030
1,3-Dichlorobenzene	ND		0.032	0.023
1,4-Dichlorobenzene	0.023	J	0.032	0.022
1,2-Dichlorobenzene	ND		0.032	0.024
1,2-Dibromo-3-chloropropane	ND		0.065	0.034
1,2,4-Trichlorobenzene	ND		0.065	0.020
1,2,3-Trichlorobenzene	ND		0.065	0.022
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.065	0.036
Methyl acetate	ND		0.032	0.031
Cyclohexane	ND		0.065	0.027
Methylcyclohexane	ND		0.032	0.027
1,3-Dichloropropene (cis- and trans-)	ND		0.065	0.021
Total Target Compounds (52):	0.048	J		

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04234-004

Client ID: S4/6

Date Received: 05/31/2018

Date Analyzed: 06/05/2018

Date File: J5466.D

GC/MS Column: DB-624

Sample wt/vol: 0.092g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 15.7

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
000091-20-3	Naphthalene	1.70	JN	15.60

Total TICs = 1.70 JN

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: E18-04234-005

Client ID: S5/6

Date Received: 05/31/2018

Date Analyzed: 06/05/2018

Data file: F6009.D 06/ 5/18 16:39

GC/MS Column: DB-624

Sample wt/vol: 4.4g

Matrix-Units: Soil-mg/Kg

% Moisture: 9.10

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND		0.00125	0.000294
Chloromethane	ND		0.00125	0.000231
Vinyl chloride	ND		0.00125	0.000231
Bromomethane	ND		0.00125	0.000373
Chloroethane	ND		0.00125	0.000331
Trichlorofluoromethane	ND		0.00125	0.000235
1,1-Dichloroethene	ND		0.00125	0.000471
Acetone	0.022		0.013	0.00122
Carbon disulfide	ND		0.00125	0.000388
Methylene chloride	ND		0.0025	0.00249
trans-1,2-Dichloroethene	ND		0.00125	0.000363
Methyl tert-butyl ether (MTBE)	ND		0.00125	0.000241
1,1-Dichloroethane	ND		0.00125	0.000243
cis-1,2-Dichloroethene	ND		0.00125	0.000266
2-Butanone (MEK)	ND		0.0025	0.000615
Bromochloromethane	ND		0.00125	0.000348
Chloroform	ND		0.00125	0.000263
1,1,1-Trichloroethane	ND		0.00125	0.000295
Carbon tetrachloride	ND		0.00125	0.000201
1,2-Dichloroethane (EDC)	ND		0.00125	0.00033
Benzene	ND		0.00125	0.000326
Trichloroethene	ND		0.00125	0.00035
1,2-Dichloropropane	ND		0.00125	0.000211
1,4-Dioxane	ND		0.250	0.045
Bromodichloromethane	ND		0.00125	0.000291
cis-1,3-Dichloropropene	ND		0.00125	0.000256
4-Methyl-2-pentanone (MIBK)	ND		0.0025	0.000724

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**

Lab ID: E18-04234-005  
 Client ID: S5/6  
 Date Received: 05/31/2018  
 Date Analyzed: 06/05/2018  
 Data file: F6009.D 06/ 5/18 16:39

GC/MS Column: DB-624  
 Sample wt/vol: 4.4g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 9.10  
 Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND		0.00125	0.000404
trans-1,3-Dichloropropene	ND		0.00125	0.000289
1,1,2-Trichloroethane	ND		0.00125	0.000338
Tetrachloroethene	0.0033		0.00125	0.00032
2-Hexanone	ND		0.0025	0.0013
Dibromochloromethane	ND		0.00125	0.000234
1,2-Dibromoethane (EDB)	ND		0.00125	0.000221
Chlorobenzene	ND		0.00125	0.000281
Ethylbenzene	ND		0.00125	0.000305
Total Xylenes	ND		0.0025	0.000541
Styrene	0.000541	J	0.00125	0.000258
Bromoform	ND		0.00125	0.000359
Isopropylbenzene	ND		0.00125	0.000248
1,1,2,2-Tetrachloroethane	ND		0.0025	0.000336
1,3-Dichlorobenzene	ND		0.00125	0.000241
1,4-Dichlorobenzene	ND		0.00125	0.000214
1,2-Dichlorobenzene	ND		0.00125	0.000216
1,2-Dibromo-3-chloropropane	ND		0.0025	0.000338
1,2,4-Trichlorobenzene	ND		0.00125	0.00055
1,2,3-Trichlorobenzene	ND		0.00125	0.000601
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00125	0.000454
Methyl acetate	ND		0.00125	0.000584
Cyclohexane	ND		0.00125	0.000228
Methylcyclohexane	ND		0.00125	0.00026
1,3-Dichloropropene (cis- and trans-)	ND		0.00125	0.000289
Total Target Compounds (52):	0.026	J		

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04234-005

Client ID: S5/6

Date Received: 05/31/2018

Date Analyzed: 06/05/2018

Date File: F6009.D

GC/MS Column: DB-624

Sample wt/vol: 4.4g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 9.10

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: E18-04234-006

Client ID: S6/4

Date Received: 05/31/2018

Date Analyzed: 06/05/2018

Data file: J5464.D 06/ 5/18 04:15

GC/MS Column: DB-624

Sample wt/vol: 0.046g

Matrix-Units: Soil-mg/Kg

% Moisture: 4.10

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND	0.113	0.075	
Chloromethane	ND	0.057	0.053	
Vinyl chloride	ND	0.113	0.067	
Bromomethane	ND	0.113	0.062	
Chloroethane	ND	0.057	0.056	
Trichlorofluoromethane	ND	0.057	0.049	
1,1-Dichloroethene	ND	0.057	0.056	
Acetone	ND	0.227	0.151	
Carbon disulfide	ND	0.057	0.053	
Methylene chloride	ND	0.113	0.112	
trans-1,2-Dichloroethene	ND	0.057	0.052	
Methyl tert-butyl ether (MTBE)	ND	0.057	0.054	
1,1-Dichloroethane	ND	0.057	0.056	
cis-1,2-Dichloroethene	ND	0.057	0.051	
2-Butanone (MEK)	ND	0.227	0.188	
Bromochloromethane	ND	0.113	0.068	
Chloroform	ND	0.057	0.053	
1,1,1-Trichloroethane	ND	0.057	0.052	
Carbon tetrachloride	ND	0.113	0.051	
1,2-Dichloroethane (EDC)	ND	0.057	0.052	
Benzene	ND	0.057	0.053	
Trichloroethene	ND	0.057	0.056	
1,2-Dichloropropane	ND	0.057	0.051	
1,4-Dioxane	ND	11.3	11.2	
Bromodichloromethane	ND	0.057	0.040	
cis-1,3-Dichloropropene	ND	0.057	0.038	
4-Methyl-2-pentanone (MIBK)	ND	0.227	0.079	

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: E18-04234-006  
Client ID: S6/4  
Date Received: 05/31/2018  
Date Analyzed: 06/05/2018  
Data file: J5464.D 06/ 5/18 04:15

GC/MS Column: DB-624  
Sample wt/vol: 0.046g  
Matrix-Units: Soil-mg/Kg  
% Moisture: 4.10  
Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND		0.057	0.043
trans-1,3-Dichloropropene	ND		0.113	0.036
1,1,2-Trichloroethane	ND		0.057	0.054
Tetrachloroethene	ND		0.057	0.051
2-Hexanone	ND		0.227	0.086
Dibromochloromethane	ND		0.057	0.050
1,2-Dibromoethane (EDB)	ND		0.057	0.046
Chlorobenzene	ND		0.057	0.043
Ethylbenzene	ND		0.057	0.039
Total Xylenes	ND		0.113	0.105
Styrene	ND		0.057	0.033
Bromoform	ND		0.057	0.050
Isopropylbenzene	ND		0.057	0.037
1,1,2,2-Tetrachloroethane	ND		0.113	0.052
1,3-Dichlorobenzene	ND		0.057	0.040
1,4-Dichlorobenzene	ND		0.057	0.039
1,2-Dichlorobenzene	ND		0.057	0.041
1,2-Dibromo-3-chloropropane	ND		0.113	0.060
1,2,4-Trichlorobenzene	ND		0.113	0.035
1,2,3-Trichlorobenzene	ND		0.113	0.038
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.113	0.064
Methyl acetate	1.93		0.057	0.055
Cyclohexane	ND		0.113	0.047
Methylcyclohexane	ND		0.057	0.047
1,3-Dichloropropene (cis- and trans-)	ND		0.113	0.038

Total Target Compounds (52): 1.93

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04234-006

Client ID: S6/4

Date Received: 05/31/2018

Date Analyzed: 06/05/2018

Date File: J5464.D

GC/MS Column: DB-624

Sample wt/vol: 0.046g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 4.10

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
000556-24-1	Butanoic acid, 3-methyl-, methyl ester	0.623	JN	8.77

Total TICs = 0.623 JN

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: E18-04234-007  
Client ID: GW1/10  
Date Received: 05/31/2018  
Date Analyzed: 06/07/2018  
Data file: G8348.D 06/ 7/18 01:26

GC/MS Column: DB-624  
Sample wt/vol: 5mL  
Matrix-Units: Aqueous- $\mu$ g/L  
% Moisture: 100  
Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND		1.00	0.662
Chloromethane	ND		0.500	0.463
Vinyl chloride	ND		1.00	0.591
Bromomethane	ND		1.00	0.544
Chloroethane	ND		0.500	0.495
Trichlorofluoromethane	ND		0.500	0.433
1,1-Dichloroethene	ND		0.500	0.493
Acetone	ND		2.00	1.33
Carbon disulfide	ND		0.500	0.464
Methylene chloride	ND		1.00	0.990
trans-1,2-Dichloroethene	ND		0.500	0.454
Methyl tert-butyl ether (MTBE)	ND		0.500	0.479
1,1-Dichloroethane	ND		0.500	0.493
cis-1,2-Dichloroethene	ND		0.500	0.451
2-Butanone (MEK)	ND		2.00	1.66
Bromochloromethane	ND		1.00	0.596
Chloroform	ND		0.500	0.469
1,1,1-Trichloroethane	ND		0.500	0.462
Carbon tetrachloride	ND		0.500	0.449
1,2-Dichloroethane (EDC)	ND		0.500	0.458
Benzene	ND		0.500	0.464
Trichloroethene	ND		0.500	0.493
1,2-Dichloropropane	ND		0.500	0.447
1,4-Dioxane	ND		100	98.4
Bromodichloromethane	ND		0.500	0.353
cis-1,3-Dichloropropene	ND		0.500	0.331
4-Methyl-2-pentanone (MIBK)	ND		1.00	0.699

# INTEGRATED ANALYTICAL LABORATORIES

## VOLATILE ORGANICS

Lab ID: E18-04234-007  
 Client ID: GW1/10  
 Date Received: 05/31/2018  
 Date Analyzed: 06/07/2018  
 Data file: G8348.D 06/7/18 01:26

GC/MS Column: DB-624  
 Sample wt/vol: 5mL  
 Matrix-Units: Aqueous- $\mu$ g/L  
 % Moisture: 100  
 Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND		0.500	0.379
trans-1,3-Dichloropropene	ND		0.500	0.321
1,1,2-Trichloroethane	ND		1.00	0.473
Tetrachloroethene	0.861		0.500	0.451
2-Hexanone	ND		1.00	0.761
Dibromochloromethane	ND		1.00	0.442
1,2-Dibromoethane (EDB)	ND		0.500	0.402
Chlorobenzene	ND		0.500	0.376
Ethylbenzene	ND		0.500	0.344
Total Xylenes	ND		1.00	0.923
Styrene	ND		0.500	0.290
Bromoform	ND		0.500	0.445
Isopropylbenzene	ND		0.500	0.323
1,1,2,2-Tetrachloroethane	ND		0.500	0.458
1,3-Dichlorobenzene	ND		0.500	0.351
1,4-Dichlorobenzene	ND		0.500	0.341
1,2-Dichlorobenzene	ND		0.500	0.364
1,2-Dibromo-3-chloropropane	ND		1.00	0.533
1,2,4-Trichlorobenzene	ND		0.500	0.304
1,2,3-Trichlorobenzene	ND		0.500	0.339
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.00	0.563
Methyl acetate	ND		0.500	0.485
Cyclohexane	ND		1.00	0.411
Methylcyclohexane	ND		0.500	0.411
1,3-Dichloropropene (cis- and trans-)	ND		0.500	0.331
Total Target Compounds (52):		0.861		

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04234-007

Client ID: GW1/10

Date Received: 05/31/2018

Date Analyzed: 06/07/2018

Date File: G8348.D

GC/MS Column: DB-624

Sample wt/vol: 5mL

Matrix-Units: Aqueous- $\mu$ g/L

Dilution Factor: 1

% Moisture: 100

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: BLKS180605-01  
Client ID: BLKS180605-01  
Date Received:  
Date Analyzed: 06/05/2018  
Data file: F6007.D 06/5/18 15:38

GC/MS Column: DB-624  
Sample wt/vol: 5g  
Matrix-Units: Soil-mg/Kg  
% Moisture: NA  
Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND		0.001	0.000235
Chloromethane	ND		0.001	0.000185
Vinyl chloride	ND		0.001	0.000185
Bromomethane	ND		0.001	0.000298
Chloroethane	ND		0.001	0.000265
Trichlorofluoromethane	ND		0.001	0.000188
1,1-Dichloroethene	ND		0.001	0.000377
Acetone	ND		0.010	0.000979
Carbon disulfide	ND		0.001	0.00031
Methylene chloride	ND		0.002	0.00199
trans-1,2-Dichloroethene	ND		0.001	0.00029
Methyl tert-butyl ether (MTBE)	ND		0.001	0.000193
1,1-Dichloroethane	ND		0.001	0.000194
cis-1,2-Dichloroethene	ND		0.001	0.000213
2-Butanone (MEK)	ND		0.002	0.000492
Bromochloromethane	ND		0.001	0.000278
Chloroform	ND		0.001	0.00021
1,1,1-Trichloroethane	ND		0.001	0.000236
Carbon tetrachloride	ND		0.001	0.000161
1,2-Dichloroethane (EDC)	ND		0.001	0.000264
Benzene	ND		0.001	0.000261
Trichloroethene	ND		0.001	0.00028
1,2-Dichloropropane	ND		0.001	0.000169
1,4-Dioxane	ND		0.200	0.036
Bromodichloromethane	ND		0.001	0.000233
cis-1,3-Dichloropropene	ND		0.001	0.000205
4-Methyl-2-pentanone (MIBK)	ND		0.002	0.000579

# INTEGRATED ANALYTICAL LABORATORIES

## VOLATILE ORGANICS

Lab ID: BLKS180605-01  
 Client ID: BLKS180605-01  
 Date Received:  
 Date Analyzed: 06/05/2018  
 Data file: F6007.D 06/5/18 15:38

GC/MS Column: DB-624  
 Sample wt/vol: 5g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: NA  
 Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND		0.001	0.000323
trans-1,3-Dichloropropene	ND		0.001	0.000231
1,1,2-Trichloroethane	ND		0.001	0.00027
Tetrachloroethene	ND		0.001	0.000256
2-Hexanone	ND		0.002	0.00104
Dibromochloromethane	ND		0.001	0.000187
1,2-Dibromoethane (EDB)	ND		0.001	0.000177
Chlorobenzene	ND		0.001	0.000225
Ethylbenzene	ND		0.001	0.000244
Total Xylenes	ND		0.002	0.000433
Styrene	ND		0.001	0.000206
Bromoform	ND		0.001	0.000287
Isopropylbenzene	ND		0.001	0.000198
1,1,2,2-Tetrachloroethane	ND		0.002	0.000269
1,3-Dichlorobenzene	ND		0.001	0.000193
1,4-Dichlorobenzene	ND		0.001	0.000171
1,2-Dichlorobenzene	ND		0.001	0.000173
1,2-Dibromo-3-chloropropane	ND		0.002	0.00027
1,2,4-Trichlorobenzene	ND		0.001	0.00044
1,2,3-Trichlorobenzene	ND		0.001	0.000481
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.001	0.000363
Methyl acetate	ND		0.001	0.000467
Cyclohexane	ND		0.001	0.000182
Methylcyclohexane	ND		0.001	0.000208
1,3-Dichloropropene (cis- and trans-)	ND		0.001	0.000231
Total Target Compounds (52):	0			

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: BLKS180605-01  
Client ID: BLKS180605-01  
Date Received:  
Date Analyzed: 06/05/2018  
Date File: F6007.D

GC/MS Column: DB-624  
Sample wt/vol: 5g  
Matrix-Units: Soil-mg/Kg  
Dilution Factor: 1  
% Moisture: NA

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: BLKS180604-02  
Client ID: BLKS180604-02  
Date Received:  
Date Analyzed: 06/05/2018  
Data file: F5984.D 06/5/18 01:51

GC/MS Column: DB-624  
Sample wt/vol: 5g  
Matrix-Units: Soil-mg/Kg  
% Moisture: NA  
Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND		0.001	0.000235
Chloromethane	ND		0.001	0.000185
Vinyl chloride	ND		0.001	0.000185
Bromomethane	ND		0.001	0.000298
Chloroethane	ND		0.001	0.000265
Trichlorofluoromethane	ND		0.001	0.000188
1,1-Dichloroethene	ND		0.001	0.000377
Acetone	ND		0.010	0.000979
Carbon disulfide	ND		0.001	0.00031
Methylene chloride	ND		0.002	0.00199
trans-1,2-Dichloroethene	ND		0.001	0.00029
Methyl tert-butyl ether (MTBE)	ND		0.001	0.000193
1,1-Dichloroethane	ND		0.001	0.000194
cis-1,2-Dichloroethene	ND		0.001	0.000213
2-Butanone (MEK)	ND		0.002	0.000492
Bromochloromethane	ND		0.001	0.000278
Chloroform	ND		0.001	0.00021
1,1,1-Trichloroethane	ND		0.001	0.000236
Carbon tetrachloride	ND		0.001	0.000161
1,2-Dichloroethane (EDC)	ND		0.001	0.000264
Benzene	ND		0.001	0.000261
Trichloroethene	ND		0.001	0.00028
1,2-Dichloropropane	ND		0.001	0.000169
1,4-Dioxane	ND		0.200	0.036
Bromodichloromethane	ND		0.001	0.000233
cis-1,3-Dichloropropene	ND		0.001	0.000205
4-Methyl-2-pentanone (MIBK)	ND		0.002	0.000579

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: BLKS180604-02  
Client ID: BLKS180604-02  
Date Received:  
Date Analyzed: 06/05/2018  
Data file: F5984.D 06/5/18 01:51

GC/MS Column: DB-624  
Sample wt/vol: 5g  
Matrix-Units: Soil-mg/Kg  
% Moisture: NA  
Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND	0.001	0.000323	
trans-1,3-Dichloropropene	ND	0.001	0.000231	
1,1,2-Trichloroethane	ND	0.001	0.00027	
Tetrachloroethene	ND	0.001	0.000256	
2-Hexanone	ND	0.002	0.00104	
Dibromochloromethane	ND	0.001	0.000187	
1,2-Dibromoethane (EDB)	ND	0.001	0.000177	
Chlorobenzene	ND	0.001	0.000225	
Ethylbenzene	ND	0.001	0.000244	
Total Xylenes	ND	0.002	0.000433	
Styrene	ND	0.001	0.000206	
Bromoform	ND	0.001	0.000287	
Isopropylbenzene	ND	0.001	0.000198	
1,1,2,2-Tetrachloroethane	ND	0.002	0.000269	
1,3-Dichlorobenzene	ND	0.001	0.000193	
1,4-Dichlorobenzene	ND	0.001	0.000171	
1,2-Dichlorobenzene	ND	0.001	0.000173	
1,2-Dibromo-3-chloropropane	ND	0.002	0.00027	
1,2,4-Trichlorobenzene	ND	0.001	0.00044	
1,2,3-Trichlorobenzene	ND	0.001	0.000481	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.001	0.000363	
Methyl acetate	ND	0.001	0.000467	
Cyclohexane	ND	0.001	0.000182	
Methylcyclohexane	ND	0.001	0.000208	
1,3-Dichloropropene (cis- and trans-)	ND	0.001	0.000231	
Total Target Compounds (52):	0			

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: BLKS180604-02  
Client ID: BLKS180604-02  
Date Received:  
Date Analyzed: 06/05/2018  
Date File: F5984.D

GC/MS Column: DB-624  
Sample wt/vol: 5g  
Matrix-Units: Soil-mg/Kg  
Dilution Factor: 1  
% Moisture: NA

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: BLKM180604-02

GC/MS Column: DB-624

Client ID: BLKM180604-02

Sample wt/vol: 0.1g

Date Received:

Matrix-Units: Soil-mg/Kg

Date Analyzed: 06/05/2018

% Moisture: NA

Data file: J5456.D 06/ 5/18 00:41

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND	0.050	0.033	
Chloromethane	ND	0.025	0.023	
Vinyl chloride	ND	0.050	0.030	
Bromomethane	ND	0.050	0.027	
Chloroethane	ND	0.025	0.025	
Trichlorofluoromethane	ND	0.025	0.022	
1,1-Dichloroethene	ND	0.025	0.025	
Acetone	ND	0.100	0.067	
Carbon disulfide	ND	0.025	0.023	
Methylene chloride	ND	0.050	0.050	
trans-1,2-Dichloroethene	ND	0.025	0.023	
Methyl tert-butyl ether (MTBE)	ND	0.025	0.024	
1,1-Dichloroethane	ND	0.025	0.025	
cis-1,2-Dichloroethene	ND	0.025	0.023	
2-Butanone (MEK)	ND	0.100	0.083	
Bromochloromethane	ND	0.050	0.030	
Chloroform	ND	0.025	0.024	
1,1,1-Trichloroethane	ND	0.025	0.023	
Carbon tetrachloride	ND	0.050	0.023	
1,2-Dichloroethane (EDC)	ND	0.025	0.023	
Benzene	ND	0.025	0.023	
Trichloroethene	ND	0.025	0.025	
1,2-Dichloroproppane	ND	0.025	0.022	
1,4-Dioxane	ND	5.00	4.92	
Bromodichloromethane	ND	0.025	0.018	
cis-1,3-Dichloropropene	ND	0.025	0.017	
4-Methyl-2-pentanone (MIBK)	ND	0.100	0.035	

# INTEGRATED ANALYTICAL LABORATORIES

## VOLATILE ORGANICS

Lab ID: BLKM180604-02  
 Client ID: BLKM180604-02  
 Date Received:  
 Date Analyzed: 06/05/2018  
 Data file: J5456.D 06/ 5/18 00:41

GC/MS Column: DB-624  
 Sample wt/vol: 0.1g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: NA  
 Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND		0.025	0.019
trans-1,3-Dichloropropene	ND		0.050	0.016
1,1,2-Trichloroethane	ND		0.025	0.024
Tetrachloroethene	ND		0.025	0.023
2-Hexanone	ND		0.100	0.038
Dibromochloromethane	ND		0.025	0.022
1,2-Dibromoethane (EDB)	ND		0.025	0.020
Chlorobenzene	ND		0.025	0.019
Ethylbenzene	ND		0.025	0.017
Total Xylenes	ND		0.050	0.046
Styrene	ND		0.025	0.015
Bromoform	ND		0.025	0.022
Isopropylbenzene	ND		0.025	0.016
1,1,2,2-Tetrachloroethane	ND		0.050	0.023
1,3-Dichlorobenzene	ND		0.025	0.018
1,4-Dichlorobenzene	ND		0.025	0.017
1,2-Dichlorobenzene	ND		0.025	0.018
1,2-Dibromo-3-chloropropane	ND		0.050	0.027
1,2,4-Trichlorobenzene	ND		0.050	0.015
1,2,3-Trichlorobenzene	ND		0.050	0.017
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.050	0.028
Methyl acetate	ND		0.025	0.024
Cyclohexane	ND		0.050	0.021
Methylcyclohexane	ND		0.025	0.021
1,3-Dichloropropene (cis- and trans-)	ND		0.050	0.017
Total Target Compounds (52):		0		

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: BLKM180604-02

GC/MS Column: DB-624

Client ID: BLKM180604-02

Sample wt/vol: 0.1g

Date Received:

Matrix-Units: Soil-mg/Kg

Date Analyzed: 06/05/2018

Dilution Factor: 1

Data file: J5456.D 06/ 5/18 00:41

% Moisture: NA

CAS #	Compound	Estimated Concentration	Q	Retention Time
No peaks detected				

Total TICs = 0

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: BLKA180606A  
Client ID: BLKA180606A  
Date Received: NA  
Date Analyzed: 06/06/2018  
Data file: G8344.D 06/6/18 23:34

GC/MS Column: DB-624  
Sample wt/vol: 5mL  
Matrix-Units: Aqueous- $\mu$ g/L  
% Moisture: 100  
Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND		1.00	0.662
Chloromethane	ND		0.500	0.463
Vinyl chloride	ND		1.00	0.591
Bromomethane	ND		1.00	0.544
Chloroethane	ND		0.500	0.495
Trichlorofluoromethane	ND		0.500	0.433
1,1-Dichloroethene	ND		0.500	0.493
Acetone	ND		2.00	1.33
Carbon disulfide	ND		0.500	0.464
Methylene chloride	ND		1.00	0.990
tert-Butyl alcohol (TBA)	ND		2.00	1.62
trans-1,2-Dichloroethene	ND		0.500	0.454
Methyl tert-butyl ether (MTBE)	ND		0.500	0.479
1,1-Dichloroethane	ND		0.500	0.493
cis-1,2-Dichloroethene	ND		0.500	0.451
2-Butanone (MEK)	ND		2.00	1.66
Bromochloromethane	ND		1.00	0.596
Chloroform	ND		0.500	0.469
1,1,1-Trichloroethane	ND		0.500	0.462
Carbon tetrachloride	ND		0.500	0.449
1,2-Dichloroethane (EDC)	ND		0.500	0.458
Benzene	ND		0.500	0.464
Trichloroethene	ND		0.500	0.493
1,2-Dichloropropane	ND		0.500	0.447
1,4-Dioxane	ND		100	98.4
Bromodichloromethane	ND		0.500	0.353
cis-1,3-Dichloropropene	ND		0.500	0.331
4-Methyl-2-pentanone (MIBK)	ND		1.00	0.699

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**

Lab ID: BLKA180606A  
 Client ID: BLKA180606A  
 Date Received: NA  
 Date Analyzed: 06/06/2018  
 Data file: G8344.D 06/6/18 23:34

GC/MS Column: DB-624  
 Sample wt/vol: 5mL  
 Matrix-Units: Aqueous- $\mu$ g/L  
 % Moisture: 100  
 Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND		0.500	0.379
trans-1,3-Dichloropropene	ND		0.500	0.321
1,1,2-Trichloroethane	ND		1.00	0.473
Tetrachloroethene	ND		0.500	0.451
2-Hexanone	ND		1.00	0.761
Dibromochloromethane	ND		1.00	0.442
1,2-Dibromoethane (EDB)	ND		0.500	0.402
Chlorobenzene	ND		0.500	0.376
Ethylbenzene	ND		0.500	0.344
Total Xylenes	ND		1.00	0.923
Styrene	ND		0.500	0.290
Bromoform	ND		0.500	0.445
Isopropylbenzene	ND		0.500	0.323
1,1,2,2-Tetrachloroethane	ND		0.500	0.458
1,3-Dichlorobenzene	ND		0.500	0.351
1,4-Dichlorobenzene	ND		0.500	0.341
1,2-Dichlorobenzene	ND		0.500	0.364
1,2-Dibromo-3-chloropropane	ND		1.00	0.533
1,2,4-Trichlorobenzene	ND		0.500	0.304
1,2,3-Trichlorobenzene	ND		0.500	0.339
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.00	0.563
Methyl acetate	ND		0.500	0.485
Cyclohexane	ND		1.00	0.411
Methylcyclohexane	ND		0.500	0.411
1,3-Dichloropropene (cis- and trans-)	ND		0.500	0.331
Total Target Compounds (53):		0		

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: BLKA180606A  
Client ID: BLKA180606A  
Date Received: NA  
Date Analyzed: 06/06/2018  
Data file: G8344.D 06/6/18 23:34

GC/MS Column: DB-624  
Sample wt/vol: 5mL  
Matrix-Units: Aqueous- $\mu$ g/L  
Dilution Factor: 1  
% Moisture: 100

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**

Lab ID: E18-04234-001

GC/MS Column: DB-5

Client ID: S1/5

Sample wt/vol: 15.12g

Date Received: 05/31/2018

Matrix-Units: Soil-mg/Kg

Date Extracted: 06/05/2018

% Moisture: 9.70

Date Analyzed: 06/05/2018

Dilution Factor: 1

Data file: A3706.D 06/05/2018 16:27

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Benzaldehyde	ND		0.037	0.036
Bis(2-chloroethyl) ether	ND		0.037	0.033
2,2'-Oxybis(1-Chloropropane)	ND		0.037	0.031
N-Nitrosodi-n-propylamine	ND		0.037	0.028
Acetophenone	ND		0.037	0.035
Hexachloroethane	ND		0.037	0.031
Nitrobenzene	ND		0.037	0.029
Isophorone	ND		0.037	0.031
Bis(2-chloroethoxy) methane	ND		0.037	0.033
Naphthalene	0.318		0.037	0.032
4-Chloroaniline	ND		0.037	0.024
Hexachlorobutadiene	ND		0.037	0.034
Caprolactam	ND		0.037	0.024
2-Methylnaphthalene	0.142		0.037	0.026
Hexachlorocyclopentadiene	ND		0.037	0.032
1,1'-Biphenyl	0.048		0.037	0.034
2-Chloronaphthalene	ND		0.037	0.030
2-Nitroaniline	ND		0.037	0.026
Dimethyl phthalate	ND		0.037	0.034

# INTEGRATED ANALYTICAL LABORATORIES

## SEMIVOLATILE ORGANICS

Lab ID: E18-04234-001

Client ID: S1/5

Date Received: 05/31/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: A3706.D 06/05/2018 16:27

GC/MS Column: DB-5

Sample wt/vol: 15.12g

Matrix-Units: Soil-mg/Kg

% Moisture: 9.70

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
2,6-Dinitrotoluene	ND		0.037	0.028
Acenaphthylene	0.095		0.037	0.030
3-Nitroaniline	ND		0.037	0.029
Acenaphthene	0.442		0.037	0.032
2,4-Dinitrotoluene	ND		0.037	0.033
Dibenzofuran	0.387		0.037	0.031
Diethyl phthalate	ND		0.037	0.036
Fluorene	0.403		0.037	0.033
4-Chlorophenyl phenyl ether	ND		0.037	0.034
4-Nitroaniline	ND		0.037	0.028
1,2,4,5-Tetrachlorobenzene	ND		0.037	0.032
N-Nitrosodiphenylamine	ND		0.037	0.032
4-Bromophenyl phenyl ether	ND		0.037	0.031
Hexachlorobenzene	ND		0.037	0.034
Atrazine	ND		0.037	0.032
Phenanthrene	4.00		0.037	0.033
Anthracene	1.06		0.037	0.032
Carbazole	0.473		0.037	0.028
Di-n-butyl phthalate	0.139		0.037	0.028
Fluoranthene	4.41		0.037	0.031
Pyrene	3.14		0.037	0.030
Butyl benzyl phthalate	ND		0.037	0.034
3,3'-Dichlorobenzidine	ND		0.037	0.026
Benzo[a]anthracene	1.91		0.037	0.031
Chrysene	1.94		0.037	0.031
Bis(2-ethylhexyl) phthalate	0.037		0.037	0.023
Di-n-octyl phthalate	ND		0.037	0.032
Benzo[b]fluoranthene	0.949		0.037	0.029
Benzo[k]fluoranthene	1.08		0.037	0.031
Benzo[a]pyrene	1.24		0.037	0.030
Indeno[1,2,3-cd]pyrene	0.653		0.037	0.030
Dibenz[a,h]anthracene	0.346		0.037	0.036
Benzo[g,h,i]perylene	0.805		0.037	0.033
Dinitrotoluene (2,4- and 2,6-)	ND		0.037	0.033

Total Target Compounds (53): 24.0

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

# INTEGRATED ANALYTICAL LABORATORIES

## SEMIVOLATILE ORGANICS Tentatively Identified Compounds

Lab ID: E18-04234-001

Client ID: S1/5

Date Received: 05/31/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Date File: A3706.D

GC/MS Column: DB-5

Sample wt/vol: 15.12g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 9.70

CAS #	Compound	Estimated Concentration	Q	Retention Time
000127-18-4	Tetrachloroethylene	0.615	JN	2.14
000132-65-0	Dibenzothiophene	0.187	JN	5.90
	Unknown SV	0.732	J	6.32
000605-02-7	Naphthalene, 1-phenyl-	0.187	JN	6.41
000084-65-1	9,10-Anthracenedione	0.150	JN	6.43
003674-66-6	Phenanthrene, 2,5-dimethyl-	0.194	JN	6.58
002381-21-7	Pyrene, 1-methyl-	0.176	JN	6.94
000238-84-6	11H-Benzo[a]fluorene	0.278	JN	7.01
000192-97-2	Benzo[e]pyrene	0.333	JN	8.47
000198-55-0	Perylene	1.37	JN	8.63

Total TICs = 4.22 JN

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

B --- Compound detected in Blank

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**

Lab ID: E18-04234-002

Client ID: S2/5

Date Received: 05/31/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: A3707.D 06/05/2018 16:43

GC/MS Column: DB-5

Sample wt/vol: 15.27g

Matrix-Units: Soil-mg/Kg

% Moisture: 5.80

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Benzaldehyde	ND		0.035	0.034
Bis(2-chloroethyl) ether	ND		0.035	0.032
2,2'-Oxybis(1-Chloropropane)	ND		0.035	0.029
N-Nitrosodi-n-propylamine	ND		0.035	0.027
Acetophenone	ND		0.035	0.033
Hexachloroethane	ND		0.035	0.029
Nitrobenzene	ND		0.035	0.027
Isophorone	ND		0.035	0.029
Bis(2-chloroethoxy) methane	ND		0.035	0.031
Naphthalene	ND		0.035	0.030
4-Chloroaniline	ND		0.035	0.023
Hexachlorobutadiene	ND		0.035	0.032
Caprolactam	ND		0.035	0.023
2-Methylnaphthalene	ND		0.035	0.024
Hexachlorocyclopentadiene	ND		0.035	0.031
1,1'-Biphenyl	ND		0.035	0.032
2-Choronaphthalene	ND		0.035	0.029
2-Nitroaniline	ND		0.035	0.024
Dimethyl phthalate	ND		0.035	0.032

# INTEGRATED ANALYTICAL LABORATORIES

## SEMIVOLATILE ORGANICS

Lab ID: E18-04234-002

Client ID: S2/5

Date Received: 05/31/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: A3707.D 06/05/2018 16:43

GC/MS Column: DB-5

Sample wt/vol: 15.27g

Matrix-Units: Soil-mg/Kg

% Moisture: 5.80

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
2,6-Dinitrotoluene	ND		0.035	0.026
Acenaphthylene	ND		0.035	0.029
3-Nitroaniline	ND		0.035	0.028
Acenaphthene	0.044		0.035	0.031
2,4-Dinitrotoluene	ND		0.035	0.032
Dibenzofuran	ND		0.035	0.030
Diethyl phthalate	ND		0.035	0.034
Fluorene	0.032	J	0.035	0.031
4-Chlorophenyl phenyl ether	ND		0.035	0.032
4-Nitroaniline	ND		0.035	0.026
1,2,4,5-Tetrachlorobenzene	ND		0.035	0.030
N-Nitrosodiphenylamine	ND		0.035	0.030
4-Bromophenyl phenyl ether	ND		0.035	0.029
Hexachlorobenzene	ND		0.035	0.032
Atrazine	ND		0.035	0.030
Phenanthrene	0.345		0.035	0.032
Anthracene	0.078		0.035	0.031
Carbazole	0.034	J	0.035	0.027
Di-n-butyl phthalate	ND		0.035	0.026
Fluoranthene	0.353		0.035	0.029
Pyrene	0.248		0.035	0.029
Butyl benzyl phthalate	ND		0.035	0.032
3,3'-Dichlorobenzidine	ND		0.035	0.025
Benzo[a]anthracene	0.136		0.035	0.030
Chrysene	0.137		0.035	0.030
Bis(2-ethylhexyl) phthalate	ND		0.035	0.021
Di-n-octyl phthalate	ND		0.035	0.030
Benzo[b]fluoranthene	0.088		0.035	0.028
Benzo[k]fluoranthene	0.073		0.035	0.029
Benzo[a]pyrene	0.080		0.035	0.028
Indeno[1,2,3-cd]pyrene	0.053		0.035	0.029
Dibenz[a,h]anthracene	ND		0.035	0.034
Benzo[g,h,i]perylene	0.068		0.035	0.031
Dinitrotoluene (2,4- and 2,6-)	ND		0.035	0.032

Total Target Compounds (53): 1.77 J

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04234-002

Client ID: S2/5

Date Received: 05/31/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: A3707.D 06/05/2018 16:43

GC/MS Column: DB-5

Sample wt/vol: 15.27g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 5.80

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
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No peaks detected

Total TICs = 0

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**

Lab ID: E18-04234-003

Client ID: S3/5

Date Received: 05/31/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: A3708.D 06/05/2018 16:59

GC/MS Column: DB-5

Sample wt/vol: 15.07g

Matrix-Units: Soil-mg/Kg

% Moisture: 10.5

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Benzaldehyde	ND		0.037	0.036
Bis(2-chloroethyl) ether	ND		0.037	0.034
2,2'-Oxybis(1-Chloropropane)	ND		0.037	0.031
N-Nitrosodi-n-propylamine	ND		0.037	0.028
Acetophenone	ND		0.037	0.035
Hexachloroethane	ND		0.037	0.031
Nitrobenzene	ND		0.037	0.029
Isophorone	ND		0.037	0.031
Bis(2-chloroethoxy) methane	ND		0.037	0.033
Naphthalene	ND		0.037	0.032
4-Chloroaniline	ND		0.037	0.024
Hexachlorobutadiene	ND		0.037	0.034
Caprolactam	ND		0.037	0.025
2-Methylnaphthalene	ND		0.037	0.026
Hexachlorocyclopentadiene	ND		0.037	0.033
1,1'-Biphenyl	ND		0.037	0.035
2-Chloronaphthalene	ND		0.037	0.030
2-Nitroaniline	ND		0.037	0.026
Dimethyl phthalate	ND		0.037	0.034

# INTEGRATED ANALYTICAL LABORATORIES

## SEMIVOLATILE ORGANICS

Lab ID: E18-04234-003

Client ID: S3/5

Date Received: 05/31/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: A3708.D 06/05/2018 16:59

GC/MS Column: DB-5

Sample wt/vol: 15.07g

Matrix-Units: Soil-mg/Kg

% Moisture: 10.5

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
2,6-Dinitrotoluene	ND		0.037	0.028
Acenaphthylene	ND		0.037	0.030
3-Nitroaniline	ND		0.037	0.030
Acenaphthene	ND		0.037	0.033
2,4-Dinitrotoluene	ND		0.037	0.034
Dibenzofuran	ND		0.037	0.032
Diethyl phthalate	ND		0.037	0.036
Fluorene	ND		0.037	0.033
4-Chlorophenyl phenyl ether	ND		0.037	0.034
4-Nitroaniline	ND		0.037	0.028
1,2,4,5-Tetrachlorobenzene	ND		0.037	0.032
N-Nitrosodiphenylamine	ND		0.037	0.032
4-Bromophenyl phenyl ether	ND		0.037	0.031
Hexachlorobenzene	ND		0.037	0.034
Atrazine	ND		0.037	0.032
Phenanthrene	0.112		0.037	0.034
Anthracene	0.050		0.037	0.033
Carbazole	ND		0.037	0.029
Di-n-butyl phthalate	ND		0.037	0.028
Fluoranthene	0.430		0.037	0.031
Pyrene	0.276		0.037	0.030
Butyl benzyl phthalate	ND		0.037	0.034
3,3'-Dichlorobenzidine	ND		0.037	0.027
Benzo[a]anthracene	0.227		0.037	0.032
Chrysene	0.211		0.037	0.032
Bis(2-ethylhexyl) phthalate	0.051		0.037	0.023
Di-n-octyl phthalate	ND		0.037	0.032
Benzo[b]fluoranthene	0.178		0.037	0.030
Benzo[k]fluoranthene	0.131		0.037	0.031
Benzo[a]pyrene	0.157		0.037	0.030
Indeno[1,2,3-cd]pyrene	0.103		0.037	0.031
Dibenz[a,h]anthracene	0.047		0.037	0.036
Benzo[g,h,i]perylene	0.127		0.037	0.033
Dinitrotoluene (2,4- and 2,6-)	ND		0.037	0.034

Total Target Compounds (53): 2.10

D --- Dilution Performed

J --- Value less than RI & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04234-003

Client ID: S3/5

Date Received: 05/31/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Date File: A3708.D

GC/MS Column: DB-5

Sample wt/vol: 15.07g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 10.5

CAS #	Compound	Estimated Concentration	Q	Retention Time
053584-60-4	Unknown SV	0.601	J	8.84
	Unknown SV	0.208	J	8.91
	Unknown SV	0.326	J	9.19
	28-Nor-17.alpha.(H)-hopane	0.975	JN	9.34
	Unknown SV	1.22	J	9.74

Total TICs = 3.33 JN

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

B --- Compound detected in Blank

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**

Lab ID: E18-04234-004

Client ID: S4/6

Date Received: 05/31/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: A3709.D 06/05/2018 17:15

GC/MS Column: DB-5

Sample wt/vol: 15.04g

Matrix-Units: Soil-mg/Kg

% Moisture: 15.7

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Benzaldehyde	ND		0.039	0.038
Bis(2-chloroethyl) ether	ND		0.039	0.036
2,2'-Oxybis(1-Chloropropane)	ND		0.039	0.033
N-Nitrosodi-n-propylamine	ND		0.039	0.030
Acetophenone	ND		0.039	0.037
Hexachloroethane	ND		0.039	0.033
Nitrobenzene	ND		0.039	0.031
Isophorone	ND		0.039	0.033
Bis(2-chloroethoxy) methane	ND		0.039	0.035
Naphthalene	0.755		0.039	0.034
4-Chloroaniline	ND		0.039	0.026
Hexachlorobutadiene	ND		0.039	0.036
Caprolactam	ND		0.039	0.026
2-Methylnaphthalene	0.279		0.039	0.028
Hexachlorocyclopentadiene	ND		0.039	0.035
1,1'-Biphenyl	0.170		0.039	0.037
2-Chloronaphthalene	ND		0.039	0.032
2-Nitroaniline	ND		0.039	0.028
Dimethyl phthalate	ND		0.039	0.036

# INTEGRATED ANALYTICAL LABORATORIES

## SEMIVOLATILE ORGANICS

Lab ID: E18-04234-004

Client ID: S4/6

Date Received: 05/31/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: A3709.D 06/05/2018 17:15

GC/MS Column: DB-5

Sample wt/vol: 15.04g

Matrix-Units: Soil-mg/Kg

% Moisture: 15.7

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
2,6-Dinitrotoluene	ND		0.039	0.030
Acenaphthylene	2.28		0.039	0.032
3-Nitroaniline	ND		0.039	0.031
Acenaphthene	1.37		0.039	0.035
2,4-Dinitrotoluene	ND		0.039	0.036
Dibenzofuran	1.09		0.039	0.034
Diethyl phthalate	ND		0.039	0.039
Fluorene	2.16		0.039	0.036
4-Chlorophenyl phenyl ether	ND		0.039	0.037
4-Nitroaniline	ND		0.039	0.030
1,2,4,5-Tetrachlorobenzene	ND		0.039	0.034
N-Nitrosodiphenylamine	ND		0.039	0.034
4-Bromophenyl phenyl ether	ND		0.039	0.033
Hexachlorobenzene	ND		0.039	0.036
Atrazine	ND		0.039	0.034
Phenanthrene	12.0	E	0.039	0.036
Anthracene	4.22		0.039	0.035
Carbazole	1.52		0.039	0.031
Di-n-butyl phthalate	ND		0.039	0.030
Fluoranthene	29.6	E	0.039	0.033
Pyrene	15.8	E	0.039	0.032
Butyl benzyl phthalate	ND		0.039	0.036
3,3'-Dichlorobenzidine	ND		0.039	0.029
Benzo[a]anthracene	11.7	E	0.039	0.034
Chrysene	11.5	E	0.039	0.034
Bis(2-ethylhexyl) phthalate	0.275		0.039	0.024
Di-n-octyl phthalate	ND		0.039	0.034
Benzo[b]fluoranthene	9.54	E	0.039	0.032
Benzo[k]fluoranthene	4.91		0.039	0.033
Benzo[a]pyrene	8.30	E	0.039	0.032
Indeno[1,2,3-cd]pyrene	4.56		0.039	0.033
Dibenz[a,h]anthracene	2.35		0.039	0.039
Benzo[g,h,i]perylene	4.85		0.039	0.036
Dinitrotoluene (2,4- and 2,6-)	ND		0.039	0.036
Total Target Compounds (53):	129	E		

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

# INTEGRATED ANALYTICAL LABORATORIES

## SEMIVOLATILE ORGANICS Tentatively Identified Compounds

Lab ID: E18-04234-004

Client ID: S4/6

Date Received: 05/31/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Date File: A3709.D

GC/MS Column: DB-5

Sample wt/vol: 15.04g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 15.7

CAS #	Compound	Estimated Concentration	Q	Retention Time
	Unknown SV	0.406	J	5.51
	Unknown SV	0.623	J	6.33
002381-21-7	Pyrene, 1-methyl-	0.256	JN	6.94
000243-17-4	11H-Benzo[b]fluorene	0.572	JN	7.01
000238-84-6	11H-Benzo[a]fluorene	0.513	JN	7.05
003442-78-2	Pyrene, 2-methyl-	0.268	JN	7.08
000239-35-0	Benzo[b]naphtho[2,1-d]thiophene	0.272	JN	7.39
001836-87-9	9H-Fluorene, 9-(phenylmethylene)-	1.14	JN	8.23
000192-97-2	Benzo[e]pyrene	2.91	JN	8.47
000207-93-2	Dinaphtho[1,2-b:1',2'-d]furan	1.03	JN	8.54
000198-55-0	Perylene	7.44	JN	8.64
	Unknown SV	1.28	J	8.82
000239-85-0	13H-Dibenzo[a,h]fluorene	0.891	JN	8.89
000220-97-3	11H-Indeno[2,1-a]phenanthrene	1.44	JN	8.94
000135-48-8	Pentacene	0.840	JN	10.20

Total TICs = 19.9 JN

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

B --- Compound detected in Blank

**INTEGRATED ANALYTICAL LABORATORIES**  
**SEMIVOLATILE ORGANICS**

Lab ID: E18-04234-004DL

GC/MS Column: DB-5

Client ID: S4/6

Sample wt/vol: 15.04g

Date Received: 05/31/2018

Matrix-Units: Soil-mg/Kg

Date Extracted: 06/05/2018

% Moisture: 15.7

Date Analyzed: 06/05/2018

Dilution Factor: 10

Data file: A3718.D 06/05/2018 19:40

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Benzaldehyde	ND		0.394	0.383
Bis(2-chloroethyl) ether	ND		0.394	0.359
2,2'-Oxybis(1-Chloropropane)	ND		0.394	0.329
N-Nitrosodi-n-propylamine	ND		0.394	0.300
Acetophenone	ND		0.394	0.373
Hexachloroethane	ND		0.394	0.330
Nitrobenzene	ND		0.394	0.309
Isophorone	ND		0.394	0.331
Bis(2-chloroethoxy) methane	ND		0.394	0.354
Naphthalene	0.806	D	0.394	0.344
4-Chloroaniline	ND		0.394	0.259
Hexachlorobutadiene	ND		0.394	0.362
Caprolactam	ND		0.394	0.263
2-Methylnaphthalene	0.295	DJ	0.394	0.276
Hexachlorocyclopentadiene	ND		0.394	0.346
1,1'-Biphenyl	ND		0.394	0.368
2-Chloronaphthalene	ND		0.394	0.323
2-Nitroaniline	ND		0.394	0.275
Dimethyl phthalate	ND		0.394	0.362

**INTEGRATED ANALYTICAL LABORATORIES**

**SEMIVOLATILE ORGANICS**

Lab ID: E18-04234-004DL

Client ID: S4/6

Date Received: 05/31/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: A3718.D 06/05/2018 19:40

GC/MS Column: DB-5

Sample wt/vol: 15.04g

Matrix-Units: Soil-mg/Kg

% Moisture: 15.7

Dilution Factor: 10

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
2,6-Dinitrotoluene	ND		0.394	0.299
Acenaphthylene	2.47	D	0.394	0.323
3-Nitroaniline	ND		0.394	0.314
Acenaphthene	1.55	D	0.394	0.349
2,4-Dinitrotoluene	ND		0.394	0.357
Dibenzofuran	1.17	D	0.394	0.336
Diethyl phthalate	ND		0.394	0.386
Fluorene	2.28	D	0.394	0.355
4-Chlorophenyl phenyl ether	ND		0.394	0.366
4-Nitroaniline	ND		0.394	0.296
1,2,4,5-Tetrachlorobenzene	ND		0.394	0.340
N-Nitrosodiphenylamine	ND		0.394	0.342
4-Bromophenyl phenyl ether	ND		0.394	0.331
Hexachlorobenzene	ND		0.394	0.362
Atrazine	ND		0.394	0.341
Phenanthrene	15.5	D	0.394	0.360
Anthracene	4.34	D	0.394	0.347
Carbazole	1.49	D	0.394	0.305
Di-n-butyl phthalate	ND		0.394	0.300
Fluoranthene	37.4	D	0.394	0.332
Pyrene	19.8	D	0.394	0.324
Butyl benzyl phthalate	ND		0.394	0.361
3,3'-Dichlorobenzidine	ND		0.394	0.285
Benzo[a]anthracene	12.8	D	0.394	0.338
Chrysene	12.5	D	0.394	0.338
Bis(2-ethylhexyl) phthalate	0.353	DJ	0.394	0.243
Di-n-octyl phthalate	ND		0.394	0.342
Benzo[b]fluoranthene	8.59	D	0.394	0.316
Benzo[k]fluoranthene	7.13	D	0.394	0.330
Benzo[a]pyrene	8.39	D	0.394	0.322
Indeno[1,2,3-cd]pyrene	4.30	D	0.394	0.326
Dibenz[a,h]anthracene	2.17	D	0.394	0.387
Benzo[g,h,i]perylene	4.30	D	0.394	0.356
Dinitrotoluene (2,4- and 2,6-)	ND		0.394	0.357
Total Target Compounds (53):	148	DJ		

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

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**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**

Lab ID: E18-04234-005

Client ID: S5/6

Date Received: 05/31/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: A3710.D 06/05/2018 17:31

GC/MS Column: DB-5

Sample wt/vol: 15.09g

Matrix-Units: Soil-mg/Kg

% Moisture: 9.10

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Benzaldehyde	ND		0.036	0.035
Bis(2-chloroethyl) ether	ND		0.036	0.033
2,2'-Oxybis(1-Chloropropane)	ND		0.036	0.030
N-Nitrosodi-n-propylamine	ND		0.036	0.028
Acetophenone	ND		0.036	0.034
Hexachloroethane	ND		0.036	0.031
Nitrobenzene	ND		0.036	0.029
Isophorone	ND		0.036	0.031
Bis(2-chloroethoxy) methane	ND		0.036	0.033
Naphthalene	0.174		0.036	0.032
4-Chloroaniline	ND		0.036	0.024
Hexachlorobutadiene	ND		0.036	0.034
Caprolactam	ND		0.036	0.024
2-Methylnaphthalene	0.073		0.036	0.026
Hexachlorocyclopentadiene	ND		0.036	0.032
1,1'-Biphenyl	0.034	J	0.036	0.034
2-Chloronaphthalene	ND		0.036	0.030
2-Nitroaniline	ND		0.036	0.025
Dimethyl phthalate	ND		0.036	0.034

## INTEGRATED ANALYTICAL LABORATORIES

## SEMIVOLATILE ORGANICS

Lab ID: E18-04234-005

Client ID: S5/6

Date Received: 05/31/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: A3710.D 06/05/2018 17:31

GC/MS Column: DB-5

Sample wt/vol: 15.09g

Matrix-Units: Soil-mg/Kg

% Moisture: 9.10

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
2,6-Dinitrotoluene	ND		0.036	0.028
Acenaphthylene	0.933		0.036	0.030
3-Nitroaniline	ND		0.036	0.029
Acenaphthene	0.516		0.036	0.032
2,4-Dinitrotoluene	ND		0.036	0.033
Dibenzofuran	0.184		0.036	0.031
Diethyl phthalate	ND		0.036	0.036
Fluorene	0.502		0.036	0.033
4-Chlorophenyl phenyl ether	ND		0.036	0.034
4-Nitroaniline	ND		0.036	0.027
1,2,4,5-Tetrachlorobenzene	ND		0.036	0.032
N-Nitrosodiphenylamine	ND		0.036	0.032
4-Bromophenyl phenyl ether	ND		0.036	0.031
Hexachlorobenzene	ND		0.036	0.034
Atrazine	ND		0.036	0.032
Phenanthrene	8.74	E	0.036	0.033
Anthracene	3.05		0.036	0.032
Carbazole	0.514		0.036	0.028
Di-n-butyl phthalate	ND		0.036	0.028
Fluoranthene	21.9	E	0.036	0.031
Pyrene	18.5	E	0.036	0.030
Butyl benzyl phthalate	ND		0.036	0.033
3,3'-Dichlorobenzidine	ND		0.036	0.026
Benzo[a]anthracene	14.9	E	0.036	0.031
Chrysene	13.2	E	0.036	0.031
Bis(2-ethylhexyl) phthalate	ND		0.036	0.023
Di-n-octyl phthalate	ND		0.036	0.032
Benzo[b]fluoranthene	10.8	E	0.036	0.029
Benzo[k]fluoranthene	4.31		0.036	0.031
Benzo[a]pyrene	10.1	E	0.036	0.030
Indeno[1,2,3-cd]pyrene	5.63		0.036	0.030
Dibenz[a,h]anthracene	2.90		0.036	0.036
Benzo[g,h,i]perylene	6.59	E	0.036	0.033
Dinitrotoluene (2,4- and 2,6-)	ND		0.036	0.033

Total Target Compounds (53): 124

EJ

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

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# INTEGRATED ANALYTICAL LABORATORIES

## SEMIVOLATILE ORGANICS Tentatively Identified Compounds

Lab ID: E18-04234-005

Client ID: S5/6

Date Received: 05/31/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Date File: A3710.D

GC/MS Column: DB-5

Sample wt/vol: 15.09g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 9.10

CAS #	Compound	Estimated Concentration	Q	Retention Time
002531-84-2	Phenanthrene, 2-methyl-	1.60	JN	6.25
000779-02-2	Anthracene, 9-methyl-	1.93	JN	6.27
000613-12-7	Anthracene, 2-methyl-	4.69	JN	6.32
000612-94-2	Naphthalene, 2-phenyl-	1.30	JN	6.41
003674-66-6	Phenanthrene, 2,5-dimethyl-	1.72	JN	6.58
000483-87-4	Phenanthrene, 1,7-dimethyl-	1.15	JN	6.59
	Unknown SV	1.80	J	8.24
000192-97-2	Benzo[e]pyrene	2.91	JN	8.47
000207-93-2	Dinaphtho[1,2-b:1',2'-d]furan	1.47	JN	8.54
	Unknown SV	1.55	J	8.58
000205-82-3	Benzo[j]fluoranthene	12.5	JN	8.64
	Unknown SV	0.857	J	9.13
	Unknown SV	1.12	J	9.25
000135-48-8	Pentacene	1.59	JN	9.87
000213-46-7	1,2:7,8-Dibenzophenanthrene	2.01	JN	10.28

Total TICs = 38.2 JN

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

B --- Compound detected in Blank

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**

Lab ID: E18-04234-005DL

Client ID: S5/6

Date Received: 05/31/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: A3719.D 06/05/2018 19:56

GC/MS Column: DB-5

Sample wt/vol: 15.09g

Matrix-Units: Soil-mg/Kg

% Moisture: 9.10

Dilution Factor: 5

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Benzaldehyde	ND		0.182	0.177
Bis(2-chloroethyl) ether	ND		0.182	0.166
2,2'-Oxybis(1-Chloropropane)	ND		0.182	0.152
N-Nitrosodi-n-propylamine	ND		0.182	0.139
Acetophenone	ND		0.182	0.172
Hexachloroethane	ND		0.182	0.153
Nitrobenzene	ND		0.182	0.143
Isophorone	ND		0.182	0.153
Bis(2-chloroethoxy) methane	ND		0.182	0.163
Naphthalene	ND		0.182	0.159
4-Chloroaniline	ND		0.182	0.120
Hexachlorobutadiene	ND		0.182	0.167
Caprolactam	ND		0.182	0.122
2-Methylnaphthalene	ND		0.182	0.128
Hexachlorocyclopentadiene	ND		0.182	0.160
1,1'-Biphenyl	ND		0.182	0.170
2-Chloronaphthalene	ND		0.182	0.149
2-Nitroaniline	ND		0.182	0.127
Dimethyl phthalate	ND		0.182	0.167

# INTEGRATED ANALYTICAL LABORATORIES

## SEMIVOLATILE ORGANICS

Lab ID: E18-04234-005DL

Client ID: S5/6

Date Received: 05/31/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: A3719.D 06/05/2018 19:56

GC/MS Column: DB-5

Sample wt/vol: 15.09g

Matrix-Units: Soil-mg/Kg

% Moisture: 9.10

Dilution Factor: 5

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
2,6-Dinitrotoluene	ND		0.182	0.138
Acenaphthylene	0.871	D	0.182	0.149
3-Nitroaniline	ND		0.182	0.145
Acenaphthene	0.468	D	0.182	0.161
2,4-Dinitrotoluene	ND		0.182	0.165
Dibenzofuran	ND		0.182	0.155
Diethyl phthalate	ND		0.182	0.179
Fluorene	0.479	D	0.182	0.164
4-Chlorophenyl phenyl ether	ND		0.182	0.169
4-Nitroaniline	ND		0.182	0.137
1,2,4,5-Tetrachlorobenzene	ND		0.182	0.157
N-Nitrosodiphenylamine	ND		0.182	0.158
4-Bromophenyl phenyl ether	ND		0.182	0.153
Hexachlorobenzene	ND		0.182	0.167
Atrazine	ND		0.182	0.158
Phenanthrene	8.59	D	0.182	0.166
Anthracene	2.88	D	0.182	0.160
Carbazole	0.441	D	0.182	0.141
Di-n-butyl phthalate	ND		0.182	0.139
Fluoranthene	29.1	D	0.182	0.153
Pyrene	23.5	D	0.182	0.150
Butyl benzyl phthalate	ND		0.182	0.167
3,3'-Dichlorobenzidine	ND		0.182	0.132
Benzo[a]anthracene	14.8	D	0.182	0.156
Chrysene	13.5	D	0.182	0.156
Bis(2-ethylhexyl) phthalate	ND		0.182	0.112
Di-n-octyl phthalate	ND		0.182	0.158
Benzo[b]fluoranthene	8.48	D	0.182	0.146
Benzo[k]fluoranthene	8.20	D	0.182	0.153
Benzo[a]pyrene	10.3	D	0.182	0.149
Indeno[1,2,3-cd]pyrene	5.19	D	0.182	0.151
Dibenz[a,h]anthracene	2.40	D	0.182	0.179
Benzo[g,h,i]perylene	6.11	D	0.182	0.164
Dinitrotoluene (2,4- and 2,6-)	ND		0.182	0.165
Total Target Compounds (53):	135	D		

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**

Lab ID: E18-04234-006

Client ID: S6/4

Date Received: 05/31/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: A3720.D 06/05/2018 20:12

GC/MS Column: DB-5

Sample wt/vol: 15.45g

Matrix-Units: Soil-mg/Kg

% Moisture: 4.10

Dilution Factor: 2

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Benzaldehyde	ND		0.067	0.066
Bis(2-chloroethyl) ether	ND		0.067	0.061
2,2'-Oxybis(1-Chloropropane)	ND		0.067	0.056
N-Nitrosodi-n-propylamine	ND		0.067	0.051
Acetophenone	ND		0.067	0.064
Hexachloroethane	ND		0.067	0.057
Nitrobenzene	ND		0.067	0.053
Isophorone	ND		0.067	0.057
Bis(2-chloroethoxy) methane	ND		0.067	0.061
Naphthalene	ND		0.067	0.059
4-Chloroaniline	ND		0.067	0.044
Hexachlorobutadiene	ND		0.067	0.062
Caprolactam	ND		0.067	0.045
2-Methylnaphthalene	ND		0.067	0.047
Hexachlorocyclopentadiene	ND		0.067	0.059
1,1'-Biphenyl	ND		0.067	0.063
2-Chloronaphthalene	ND		0.067	0.055
2-Nitroaniline	ND		0.067	0.047
Dimethyl phthalate	ND		0.067	0.062

# INTEGRATED ANALYTICAL LABORATORIES

## SEMIVOLATILE ORGANICS

Lab ID: E18-04234-006

GC/MS Column: DB-5

Client ID: S6/4

Sample wt/vol: 15.45g

Date Received: 05/31/2018

Matrix-Units: Soil-mg/Kg

Date Extracted: 06/05/2018

% Moisture: 4.10

Date Analyzed: 06/05/2018

Dilution Factor: 2

Data file: A3720.D 06/05/2018 20:12

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
2,6-Dinitrotoluene	ND		0.067	0.051
Acenaphthylene	ND		0.067	0.055
3-Nitroaniline	ND		0.067	0.054
Acenaphthene	ND		0.067	0.060
2,4-Dinitrotoluene	ND		0.067	0.061
Dibenzofuran	ND		0.067	0.058
Diethyl phthalate	ND		0.067	0.066
Fluorene	ND		0.067	0.061
4-Chlorophenyl phenyl ether	ND		0.067	0.063
4-Nitroaniline	ND		0.067	0.051
1,2,4,5-Tetrachlorobenzene	ND		0.067	0.058
N-Nitrosodiphenylamine	ND		0.067	0.058
4-Bromophenyl phenyl ether	ND		0.067	0.057
Hexachlorobenzene	ND		0.067	0.062
Atrazine	ND		0.067	0.058
Phenanthrene	ND		0.067	0.062
Anthracene	ND		0.067	0.059
Carbazole	ND		0.067	0.052
Di-n-butyl phthalate	ND		0.067	0.051
Fluoranthene	0.134	D	0.067	0.057
Pyrene	0.099	D	0.067	0.055
Butyl benzyl phthalate	ND		0.067	0.062
3,3'-Dichlorobenzidine	ND		0.067	0.049
Benzo[a]anthracene	0.067	D	0.067	0.058
Chrysene	0.074	D	0.067	0.058
Bis(2-ethylhexyl) phthalate	0.078	D	0.067	0.042
Di-n-octyl phthalate	ND		0.067	0.059
Benzo[b]fluoranthene	ND		0.067	0.054
Benzo[k]fluoranthene	ND		0.067	0.057
Benzo[a]pyrene	ND		0.067	0.055
Indeno[1,2,3-cd]pyrene	0.095	D	0.067	0.056
Dibenz[a,h]anthracene	ND		0.067	0.066
Benzo[g,h,i]perylene	0.189	D	0.067	0.061
Dinitrotoluene (2,4- and 2,6-)	ND		0.067	0.061

Total Target Compounds (53): 0.736

D

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

B --- Compound detected in Blank

E --- Exceeds upper level of Calibration curve

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04234-006

Client ID: S6/4

Date Received: 05/31/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: A3720.D 06/05/2018 20:12

GC/MS Column: DB-5

Sample wt/vol: 15.45g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 2

% Moisture: 4.10

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
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No peaks detected

Total TICs = 0

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**

Lab ID: E18-04234-007

Client ID: GW1/10

Date Received: 05/31/2018

Date Extracted: 06/04/2018

Date Analyzed: 06/05/2018

Data file: B2539.D 06/05/2018 11:31

SIM Data file: B2564.D 06/06/2018 12:14

GC/MS Column: DB-5

Sample wt/vol: 500ml

Matrix-Units: Aqueous- $\mu$ g/L

% Moisture: 100

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Benzaldehyde	ND		1.00	0.192
Bis(2-chloroethyl) ether	ND		1.00	0.243
2,2'-Oxybis(1-Chloropropane)	ND		1.00	0.248
N-Nitrosodi-n-propylamine	ND		1.00	0.229
Acetophenone	ND		1.00	0.180
Hexachloroethane	ND		1.00	0.163
Nitrobenzene	ND		1.00	0.210
Isophorone	ND		1.00	0.115
Bis(2-chloroethoxy) methane	ND		1.00	0.171
Naphthalene	ND		1.00	0.139
4-Chloroaniline	ND		1.00	0.140
Hexachlorobutadiene	ND		1.00	0.187
Caprolactam	ND		1.00	0.547
2-Methylnaphthalene	ND		1.00	0.128
Hexachlorocyclopentadiene	ND		1.00	0.140
1,1'-Biphenyl	ND		1.00	0.133
2-Chloronaphthalene	ND		1.00	0.154
2-Nitroaniline	ND		1.00	0.161
Dimethyl phthalate	ND		1.00	0.137

# INTEGRATED ANALYTICAL LABORATORIES

## SEMIVOLATILE ORGANICS

Lab ID: E18-04234-007

Client ID: GW1/10

Date Received: 05/31/2018

Date Extracted: 06/04/2018

Date Analyzed: 06/05/2018

Data file: B2539.D 06/05/2018 11:31

SIM Data file: B2564.D 06/06/2018 12:14

GC/MS Column: DB-5

Sample wt/vol: 500ml

Matrix-Units: Aqueous- $\mu$ g/L

% Moisture: 100

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
2,6-Dinitrotoluene	ND		1.00	0.139
Acenaphthylene	ND		1.00	0.141
3-Nitroaniline	ND		1.00	0.214
Acenaphthene	ND		1.00	0.129
2,4-Dinitrotoluene	ND		1.00	0.135
Dibenzofuran	ND		1.00	0.133
Diethyl phthalate	ND		1.00	0.166
Fluorene	ND		1.00	0.182
4-Chlorophenyl phenyl ether	ND		1.00	0.316
4-Nitroaniline	ND		1.00	0.205
1,2,4,5-Tetrachlorobenzene	ND		1.00	0.923
N-Nitrosodiphenylamine	ND		1.00	0.179
4-Bromophenyl phenyl ether	ND		1.00	0.291
Hexachlorobenzene *	ND		0.020	0.020
Atrazine	ND		1.00	0.247
Phenanthrene	ND		1.00	0.175
Anthracene	ND		1.00	0.211
Carbazole	ND		1.00	0.221
Di-n-butyl phthalate	ND		1.00	0.196
Fluoranthene	ND		1.00	0.204
Pyrene	ND		1.00	0.339
Butyl benzyl phthalate	ND		1.00	0.215
3,3'-Dichlorobenzidine	ND		1.00	0.399
Benzo[a]anthracene *	0.179		0.100	0.100
Chrysene	ND		1.00	0.245
Bis(2-ethylhexyl) phthalate	ND		1.00	0.277
Di-n-octyl phthalate	ND		1.00	0.306
Benzo[b]fluoranthene *	0.172		0.100	0.100
Benzo[k]fluoranthene *	0.214		0.100	0.100
Benzo[a]pyrene *	0.170		0.100	0.100
Indeno[1,2,3-cd]pyrene *	0.160		0.100	0.100
Dibenz[a,h]anthracene *	0.173		0.100	0.100
Benzo[g,h,i]perylene	ND		1.00	0.672
Dinitrotoluene (2,4- and 2,6-)	ND		1.00	0.139

Total Target Compounds (53): 1.07

\* - RL & MDL from SIM run

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04234-007

Client ID: GW1/10

Date Received: 05/31/2018

Date Extracted: 06/04/2018

Date Analyzed: 06/05/2018

Data file: B2539.D 06/05/2018 11:31

GC/MS Column: DB-5

Sample wt/vol: 500ml

Matrix-Units: Aqueous- $\mu$ g/L

Dilution Factor: 1

% Moisture: 100

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
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No peaks detected

Total TICs = 0

**INTEGRATED ANALYTICAL LABORATORIES**

**SEMOVOLATILE ORGANICS**

Lab ID: BLKA180604-02

GC/MS Column: DB-5

Client ID: .

Sample wt/vol: 500ml

Date Received: NA

Matrix-Units: Aqueous- $\mu$ g/L

Date Extracted: 06/04/2018

% Moisture: 100

Date Analyzed: 06/05/2018

Dilution Factor: 1

Data file: B2535.D 06/05/2018 10:15

SIM Data file: B2563.D 06/06/2018 11:58

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
N-Nitrosodimethylamine	ND		1.00	0.278
Pyridine	ND		1.00	0.320
Benzaldehyde	ND		1.00	0.192
Phenol	ND		1.00	0.201
Aniline	ND		1.00	0.169
Bis(2-chloroethyl) ether	ND		1.00	0.243
2-Chlorophenol	ND		1.00	0.116
1,3-Dichlorobenzene	ND		1.00	0.148
1,4-Dichlorobenzene	ND		1.00	0.200
Benzyl alcohol	ND		1.00	0.199
1,2-Dichlorobenzene	ND		1.00	0.144
2-Methylphenol	ND		1.00	0.162
2,2'-Oxybis(1-Chloropropane)	ND		1.00	0.248
4-Methylphenol **	ND		1.00	0.170
N-Nitrosodi-n-propylamine	ND		1.00	0.229
Acetophenone	ND		1.00	0.180
3-Methylphenol	ND		1.00	0.529
Hexachloroethane	ND		1.00	0.163
Nitrobenzene	ND		1.00	0.210
Isophorone	ND		1.00	0.115
2-Nitrophenol	ND		1.00	0.160
2,4-Dimethylphenol	ND		1.00	0.137
Bis(2-chloroethoxy) methane	ND		1.00	0.171
Benzoic acid	ND		1.00	0.876
2,4-Dimethylaniline	ND		1.00	0.130
2,4-Dichlorophenol	ND		1.00	0.138
1,2,4-Trichlorobenzene	ND		1.00	0.187
Naphthalene	ND		1.00	0.139
4-Chloroaniline	ND		1.00	0.140
4-Aminotoluene	ND		1.00	0.164
Hexachlorobutadiene	ND		1.00	0.187
Caprolactam	ND		1.00	0.547
2-Aminotoluene	ND		1.00	0.164
4-Chloro-3-methylphenol	ND		1.00	0.139
2-Methylnaphthalene	ND		1.00	0.128
Hexachlorocyclopentadiene	ND		1.00	0.140
2,4,6-Trichlorophenol	ND		1.00	0.188
2,4,5-Trichlorophenol	ND		1.00	0.252
1,1'-Biphenyl	ND		1.00	0.133
2-Chloronaphthalene	ND		1.00	0.154
2-Nitroaniline	ND		1.00	0.161
Dimethyl phthalate	ND		1.00	0.137

## INTEGRATED ANALYTICAL LABORATORIES

## SEMOVOLATILE ORGANICS

Lab ID: BLKA180604-02

GC/MS Column: DB-5

Client ID: .

Sample wt/vol: 500mL

Date Received: NA

Matrix-Units: Aqueous- $\mu$ g/L

Date Extracted: 06/04/2018

% Moisture: 100

Date Analyzed: 06/05/2018

Dilution Factor: 1

Data file: B2535.D 06/05/2018 10:15

SIM Data file: B2563.D 06/06/2018 11:58

Compound	Concentration	Q	RL	MDL
2,6-Dinitrotoluene	ND		1.00	0.139
Acenaphthylene	ND		1.00	0.141
3-Nitroaniline	ND		1.00	0.214
Acenaphthene	ND		1.00	0.129
2,4-Dinitrophenol	ND		1.00	0.206
4-Nitrophenol	ND		1.00	0.466
2,4-Dinitrotoluene	ND		1.00	0.135
Dibenzofuran	ND		1.00	0.133
Diethyl phthalate	ND		1.00	0.166
Fluorene	ND		1.00	0.182
4-Chlorophenyl phenyl ether	ND		1.00	0.316
4-Nitroaniline	ND		1.00	0.205
1,2,4,5-Tetrachlorobenzene	ND		1.00	0.923
2,3,4,6-Tetrachlorophenol	ND		1.00	0.294
4,6-Dinitro-2-methylphenol *	ND		0.100	0.100
N-Nitrosodiphenylamine	ND		1.00	0.179
1,2-Diphenylhydrazine	ND		1.00	0.214
4-Bromophenyl phenyl ether	ND		1.00	0.291
Hexachlorobenzene *	ND		0.020	0.020
Atrazine	ND		1.00	0.247
Pentachlorophenol *	ND		0.100	0.100
Phenanthrene	ND		1.00	0.175
Anthracene	ND		1.00	0.211
Carbazole	ND		1.00	0.221
Di-n-butyl phthalate	ND		1.00	0.196
Fluoranthene	ND		1.00	0.204
Benzidine	ND		1.00	0.664
Pyrene	ND		1.00	0.339
3,3'-Dimethylbenzidine	ND		1.00	0.188
Butyl benzyl phthalate	ND		1.00	0.215
3,3'-Dichlorobenzidine	ND		1.00	0.399
Benzo[a]anthracene *	ND		0.100	0.100
Chrysene	ND		1.00	0.245
Bis(2-ethylhexyl) phthalate	ND		1.00	0.277
Di-n-octyl phthalate	ND		1.00	0.306
Benzo[b]fluoranthene *	ND		0.100	0.100
Benzo[k]fluoranthene *	ND		0.100	0.100
Benzo[a]pyrene *	ND		0.100	0.100
Indeno[1,2,3-cd]pyrene *	ND		0.100	0.100
Dibenz[a,h]anthracene *	ND		0.100	0.100
Benzo[g,h,i]perylene	ND		1.00	0.672

Total Target Compounds (83): 0

\* - RL &amp; MDL from SIM run

D --- Dilution Performed

\*\* - represents the total of 3+4-Methylphenol

J --- Value Less than RL &amp; greater than MDL

B --- Compound detected in Blank

E --- Exceeds upper level of Calibration curve

Page 2 of Q --- Common laboratory contamination E18-04234 Page 79

**INTEGRATED ANALYTICAL LABORATORIES**

**SEMIVOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: BLKA180604-02

GC/MS Column: DB-5

Client ID: .

Sample wt/vol: 500ml

Date Received: NA

Matrix-Units: Aqueous- $\mu$ g/L

Date Extracted: 06/04/2018

Dilution Factor: 1

Date Analyzed: 06/05/2018

% Moisture: 100

Data file: B2535.D 06/05/2018 10:15

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
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No peaks detected

Total TICs = 0

**INTEGRATED ANALYTICAL LABORATORIES****SEMOVOLATILE ORGANICS**

Lab ID: BLKS180605-02

GC/MS Column: DB-5

Client ID: .

Sample wt/vol: 15.00g

Date Received: NA

Matrix-Units: Soil-mg/Kg

Date Extracted: 06/05/2018

% Moisture: NA

Date Analyzed: 06/05/2018

Dilution Factor: 1

Data file: A3693.D 06/05/2018 12:59

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
N-Nitrosodimethylamine	ND	0.033	0.029	
Pyridine	ND	0.033	0.028	
Benzaldehyde	ND	0.033	0.032	
Phenol	ND	0.033	0.031	
Aniline	ND	0.033	0.031	
Bis(2-chloroethyl) ether	ND	0.033	0.030	
2-Chlorophenol	ND	0.033	0.025	
1,3-Dichlorobenzene	ND	0.033	0.027	
1,4-Dichlorobenzene	ND	0.033	0.027	
Benzyl alcohol	ND	0.033	0.025	
1,2-Dichlorobenzene	ND	0.033	0.031	
2-Methylphenol	ND	0.033	0.030	
2,2'-Oxybis(1-Chloropropane)	ND	0.033	0.028	
4-Methylphenol **	ND	0.033	0.027	
N-Nitrosodi-n-propylamine	ND	0.033	0.025	
Acetophenone	ND	0.033	0.032	
3-Methylphenol	ND	0.033	0.023	
Hexachloroethane	ND	0.033	0.028	
Nitrobenzene	ND	0.033	0.026	
Isophorone	ND	0.033	0.028	
2-Nitrophenol	ND	0.033	0.028	
2,4-Dimethylphenol	ND	0.033	0.024	
Bis(2-chloroethoxy) methane	ND	0.033	0.030	
Benzoic acid	ND	0.033	0.033	
2,4-Dimethylaniline	ND	0.033	0.027	
2,4-Dichlorophenol	ND	0.033	0.029	
1,2,4-Trichlorobenzene	ND	0.033	0.029	
Naphthalene	ND	0.033	0.029	
4-Chloroaniline	ND	0.033	0.022	
4-Aminotoluene	ND	0.033	0.026	
Hexachlorobutadiene	ND	0.033	0.031	
Caprolactam	ND	0.033	0.022	
2-Aminotoluene	ND	0.033	0.031	
4-Chloro-3-methylphenol	ND	0.033	0.028	
2-Methylnaphthalene	ND	0.033	0.023	
Hexachlorocyclopentadiene	ND	0.033	0.029	
2,4,6-Trichlorophenol	ND	0.033	0.028	
2,4,5-Trichlorophenol	ND	0.033	0.029	
1,1'-Biphenyl	ND	0.033	0.031	
2-Chloronaphthalene	ND	0.033	0.027	
2-Nitroaniline	ND	0.033	0.023	
Dimethyl phthalate	ND	0.033	0.031	

# INTEGRATED ANALYTICAL LABORATORIES

## SEMIVOLATILE ORGANICS

Lab ID: BLKS180605-02

GC/MS Column: DB-5

Client ID: .

Sample wt/vol: 15.00g

Date Received: NA

Matrix-Units: Soil-mg/Kg

Date Extracted: 06/05/2018

% Moisture: NA

Date Analyzed: 06/05/2018

Dilution Factor: 1

Data file: A3693.D 06/05/2018 12:59

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
2,6-Dinitrotoluene	ND	0.033	0.025	
Acenaphthylene	ND	0.033	0.027	
3-Nitroaniline	ND	0.033	0.027	
Acenaphthene	ND	0.033	0.030	
2,4-Dinitrophenol	ND	0.033	0.020	
4-Nitrophenol	ND	0.033	0.029	
2,4-Dinitrotoluene	ND	0.033	0.030	
Dibenzofuran	ND	0.033	0.028	
Diethyl phthalate	ND	0.033	0.033	
Fluorene	ND	0.033	0.030	
4-Chlorophenyl phenyl ether	ND	0.033	0.031	
4-Nitroaniline	ND	0.033	0.025	
1,2,4,5-Tetrachlorobenzene	ND	0.033	0.029	
2,3,4,6-Tetrachlorophenol	ND	0.033	0.023	
4,6-Dinitro-2-methylphenol	ND	0.033	0.020	
N-Nitrosodiphenylamine	ND	0.033	0.029	
1,2-Diphenylhydrazine	ND	0.033	0.033	
4-Bromophenyl phenyl ether	ND	0.033	0.028	
Hexachlorobenzene	ND	0.033	0.031	
Atrazine	ND	0.033	0.029	
Pentachlorophenol	ND	0.033	0.020	
Phenanthrene	ND	0.033	0.030	
Anthracene	ND	0.033	0.029	
Carbazole	ND	0.033	0.026	
Di-n-butyl phthalate	ND	0.033	0.025	
Fluoranthene	ND	0.033	0.028	
Benzidine	ND	0.033	0.020	
Pyrene	ND	0.033	0.027	
3,3'-Dimethylbenzidine	ND	0.033	0.021	
Butyl benzyl phthalate	ND	0.033	0.031	
3,3'-Dichlorobenzidine	ND	0.033	0.024	
Benzo[a]anthracene	ND	0.033	0.029	
Chrysene	ND	0.033	0.029	
Bis(2-ethylhexyl) phthalate	ND	0.033	0.021	
Di-n-octyl phthalate	ND	0.033	0.029	
Benzo[b]fluoranthene	ND	0.033	0.027	
Benzo[k]fluoranthene	ND	0.033	0.028	
Benzo[a]pyrene	ND	0.033	0.027	
Indeno[1,2,3-cd]pyrene	ND	0.033	0.028	
Dibenz[a,h]anthracene	ND	0.033	0.033	
Benzo[g,h,i]perylene	ND	0.033	0.030	

Total Target Compounds (83): 0

D --- Dilution Performed

\*\* - represents the total of 3 + 4-Methylphenol

J --- Value Less than RL & greater than MDL

B --- Compound detected in Blank

E --- Exceeds upper level of Calibration curve

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Page 2 of Q --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: BLKS180605-02

GC/MS Column: DB-5

Client ID: .

Sample wt/vol: 15.00g

Date Received: NA

Matrix-Units: Soil-mg/Kg

Date Extracted: 06/05/2018

Dilution Factor: 1

Date Analyzed: 06/05/2018

% Moisture: NA

Data file: A3693.D 06/05/2018 12:59

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: E18-04234-001  
Client ID: S1/5  
Date Received: 05/31/2018  
Date Extracted: 06/04/2018  
Date Analyzed: 06/05/2018  
Data file: R4794.D 06/05/2018 17:02

GC Column: DB-5/DB1701P  
Sample wt/vol: 30.33g  
Matrix-Units: Soil-mg/Kg  
% Moisture: 9.70  
Dilution Factor: 10

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Aroclor-1016	ND		0.018	0.0073
Aroclor-1221	ND		0.018	0.0073
Aroclor-1232	ND		0.018	0.0073
Aroclor-1242	ND		0.018	0.0073
Aroclor-1248	ND		0.018	0.0073
Aroclor-1254	ND		0.018	0.0073
Aroclor-1260	0.020	D	0.018	0.0073
Aroclor-1262	ND		0.018	0.0073
Aroclor-1268	ND		0.018	0.0073
PCBs	0.020	D	0.018	0.0073

D --- Dilution Performed

B --- Compound detected in Blank

J --- Value Less than RL & greater than MDL

C --- Common laboratory contamination

E --- Exceeds upper level of Calibration curve

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: E18-04234-002  
Client ID: S2/5  
Date Received: 05/31/2018  
Date Extracted: 06/04/2018  
Date Analyzed: 06/05/2018  
Data file: R4795.D 06/05/2018 17:19

GC Column: DB-5/DB1701P  
Sample wt/vol: 30.19g  
Matrix-Units: Soil-mg/Kg  
% Moisture: 5.80  
Dilution Factor: 5

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Aroclor-1016	ND		0.00879	0.00352
Aroclor-1221	ND		0.00879	0.00352
Aroclor-1232	ND		0.00879	0.00352
Aroclor-1242	ND		0.00879	0.00352
Aroclor-1248	ND		0.00879	0.00352
Aroclor-1254	ND		0.00879	0.00352
Aroclor-1260	ND		0.00879	0.00352
Aroclor-1262	ND		0.00879	0.00352
Aroclor-1268	ND		0.00879	0.00352
PCBs	ND		0.00879	0.00352

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: E18-04234-003  
Client ID: S3/5  
Date Received: 05/31/2018  
Date Extracted: 06/04/2018  
Date Analyzed: 06/05/2018  
Data file: R4796.D 06/05/2018 17:36

GC Column: DB-5/DB1701P  
Sample wt/vol: 30.83g  
Matrix-Units: Soil-mg/Kg  
% Moisture: 10.5  
Dilution Factor: 10

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Aroclor-1016	ND		0.018	0.00725
Aroclor-1221	ND		0.018	0.00725
Aroclor-1232	ND		0.018	0.00725
Aroclor-1242	ND		0.018	0.00725
Aroclor-1248	ND		0.018	0.00725
Aroclor-1254	ND		0.018	0.00725
Aroclor-1260	0.035	D	0.018	0.00725
Aroclor-1262	ND		0.018	0.00725
Aroclor-1268	ND		0.018	0.00725
PCBs	0.035	D	0.018	0.00725

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: E18-04234-004  
Client ID: S4/6  
Date Received: 05/31/2018  
Date Extracted: 06/04/2018  
Date Analyzed: 06/05/2018  
Data file: R4797.D 06/05/2018 17:54

GC Column: DB-5/DB1701P  
Sample wt/vol: 30.17g  
Matrix-Units: Soil-mg/Kg  
% Moisture: 15.7  
Dilution Factor: 10

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Aroclor-1016	ND		0.020	0.00786
Aroclor-1221	ND		0.020	0.00786
Aroclor-1232	ND		0.020	0.00786
Aroclor-1242	ND		0.020	0.00786
Aroclor-1248	0.076	D	0.020	0.00786
Aroclor-1254	ND		0.020	0.00786
Aroclor-1260	0.056	D	0.020	0.00786
Aroclor-1262	ND		0.020	0.00786
Aroclor-1268	ND		0.020	0.00786
PCBs	0.132	D	0.020	0.00786

D --- Dilution Performed

B --- Compound detected in Blank

J --- Value Less than RL & greater than MDL

C --- Common laboratory contamination

E --- Exceeds upper level of Calibration curve

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: E18-04234-005  
Client ID: S5/6  
Date Received: 05/31/2018  
Date Extracted: 06/04/2018  
Date Analyzed: 06/05/2018  
Data file: R4798.D 06/05/2018 18:11

GC Column: DB-5/DB1701P  
Sample wt/vol: 30.42g  
Matrix-Units: Soil-mg/Kg  
% Moisture: 9.10  
Dilution Factor: 10

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Aroclor-1016	ND		0.018	0.00723
Aroclor-1221	ND		0.018	0.00723
Aroclor-1232	ND		0.018	0.00723
Aroclor-1242	ND		0.018	0.00723
Aroclor-1248	ND		0.018	0.00723
Aroclor-1254	ND		0.018	0.00723
Aroclor-1260	ND		0.018	0.00723
Aroclor-1262	ND		0.018	0.00723
Aroclor-1268	ND		0.018	0.00723
PCBs	ND		0.018	0.00723

D --- Dilution Performed

B --- Compound detected in Blank

J --- Value Less than RL & greater than MDL

C --- Common laboratory contamination

E --- Exceeds upper level of Calibration curve

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: E18-04234-006  
Client ID: S6/4  
Date Received: 05/31/2018  
Date Extracted: 06/04/2018  
Date Analyzed: 06/05/2018  
Data file: R4799.D 06/05/2018 18:28

GC Column: DB-5/DB1701P  
Sample wt/vol: 30.45g  
Matrix-Units: Soil-mg/Kg  
% Moisture: 4.10  
Dilution Factor: 10

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Aroclor-1016	ND		0.017	0.00685
Aroclor-1221	ND		0.017	0.00685
Aroclor-1232	ND		0.017	0.00685
Aroclor-1242	ND		0.017	0.00685
Aroclor-1248	ND		0.017	0.00685
Aroclor-1254	ND		0.017	0.00685
Aroclor-1260	ND		0.017	0.00685
Aroclor-1262	ND		0.017	0.00685
Aroclor-1268	ND		0.017	0.00685
PCBs	ND		0.017	0.00685

D --- Dilution Performed

B --- Compound detected in Blank

J --- Value Less than RL & greater than MDL

C --- Common laboratory contamination

E --- Exceeds upper level of Calibration curve

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: E18-04234-007  
Client ID: GW1/10  
Date Received: 05/31/2018  
Date Extracted: 06/06/2018  
Date Analyzed: 06/06/2018  
Data file: R4838.D 06/06/2018 13:13

GC Column: DB-5/DB1701P  
Sample wt/vol: 1000ml  
Matrix-Units: Aqueous- $\mu$ g/L  
% Moisture: 100  
Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Aroclor-1016	ND		0.050	0.020
Aroclor-1221	ND		0.050	0.020
Aroclor-1232	ND		0.050	0.020
Aroclor-1242	ND		0.050	0.020
Aroclor-1248	ND		0.050	0.020
Aroclor-1254	ND		0.050	0.020
Aroclor-1260	ND		0.050	0.020
Aroclor-1262	ND		0.050	0.020
Aroclor-1268	ND		0.050	0.020
PCBs	ND		0.050	0.020

D --- Dilution Performed

B --- Compound detected in Blank

J --- Value Less than RL & greater than MDL

C --- Common laboratory contamination

E --- Exceeds upper level of Calibration curve

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: BLKA180530-05

Client ID: PCB

Date Received: NA

Date Extracted: 05/30/2018

Date Analyzed: 05/30/2018

Data file: R4653.D 05/30/2018 20:30

GC Column: DB-5/DB1701P

Sample wt/vol: 1000ml

Matrix-Units: Aqueous- $\mu$ g/L

% Moisture: 100

Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.050	0.020
Aroclor-1221	ND		0.050	0.020
Aroclor-1232	ND		0.050	0.020
Aroclor-1242	ND		0.050	0.020
Aroclor-1248	ND		0.050	0.020
Aroclor-1254	ND		0.050	0.020
Aroclor-1260	ND		0.050	0.020
Aroclor-1262	ND		0.050	0.020
Aroclor-1268	ND		0.050	0.020
PCBs	ND		0.050	0.020

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: BLKA180606-02

Client ID: PCB

Date Received: NA

Date Extracted: 06/06/2018

Date Analyzed: 06/06/2018

Data file: R4836.D 06/06/2018 12:39

GC Column: DB-5/DB1701P

Sample wt/vol: 1000ml

Matrix-Units: Aqueous- $\mu$ g/L

% Moisture: 100

Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.050	0.020
Aroclor-1221	ND		0.050	0.020
Aroclor-1232	ND		0.050	0.020
Aroclor-1242	ND		0.050	0.020
Aroclor-1248	ND		0.050	0.020
Aroclor-1254	ND		0.050	0.020
Aroclor-1260	ND		0.050	0.020
Aroclor-1262	ND		0.050	0.020
Aroclor-1268	ND		0.050	0.020
PCBs	ND		0.050	0.020

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: BLKS180604-12

Client ID: PCB

Date Received: NA

Date Extracted: 06/04/2018

Date Analyzed: 06/05/2018

Data file: R4790.D 06/05/2018 15:49

GC Column: DB-5/DB1701P

Sample wt/vol: 30g

Matrix-Units: Soil-mg/Kg

% Moisture: NA

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Aroclor-1016	ND		0.00167	0.000668
Aroclor-1221	ND		0.00167	0.000668
Aroclor-1232	ND		0.00167	0.000668
Aroclor-1242	ND		0.00167	0.000668
Aroclor-1248	ND		0.00167	0.000668
Aroclor-1254	ND		0.00167	0.000668
Aroclor-1260	ND		0.00167	0.000668
Aroclor-1262	ND		0.00167	0.000668
Aroclor-1268	ND		0.00167	0.000668
PCBs	ND		0.00167	0.000668

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**  
**PESTICIDES**

Lab ID: E18-04234-001  
 Client ID: S1/5  
 Date Received: 05/31/2018  
 Date Extracted: 06/04/2018  
 Date Analyzed: 06/06/2018  
 Data file: O0873.D 06/06/2018 11:08

GC Column: RTX-CLP1/CLP2  
 Sample wt/vol: 30.33g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 9.70  
 Dilution Factor: 5

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.00183	0.000913
beta-BHC	ND		0.00183	0.000913
gamma-BHC (Lindane)	ND		0.00183	0.000913
delta-BHC	ND		0.00183	0.000913
Heptachlor	ND		0.00183	0.000913
Aldrin	ND		0.00183	0.000913
Heptachlor epoxide	ND		0.00183	0.000913
Endosulfan I	ND		0.00183	0.000913
4,4'-DDE	ND		0.00183	0.000913
Dieldrin	ND		0.00183	0.000913
Endrin	ND		0.00183	0.000913
Endosulfan II	ND		0.00183	0.000913
4,4'-DDD	ND		0.00183	0.000913
Endrin aldehyde	ND		0.00183	0.000913
Endosulfan sulfate	ND		0.00183	0.000913
4,4'-DDT	ND		0.00183	0.000913
Endrin ketone	ND		0.00183	0.000913
Methoxychlor	ND		0.00183	0.000913
alpha-Chlordane	ND		0.00183	0.000913
gamma-Chlordane	ND		0.00183	0.000913
Toxaphene	ND		0.023	0.011
Endosulfan (I and II)	ND		0.00183	0.000913
Chlordane (alpha and gamma)	ND		0.00183	0.000913

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

# INTEGRATED ANALYTICAL LABORATORIES

## PESTICIDES

Lab ID: E18-04234-002  
 Client ID: S2/5  
 Date Received: 05/31/2018  
 Date Extracted: 06/04/2018  
 Date Analyzed: 06/06/2018  
 Data file: O0874.D 06/06/2018 11:21

GC Column: RTX-CLP1/CLP2  
 Sample wt/vol: 30.19g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 5.80  
 Dilution Factor: 5

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
alpha-BHC	ND		0.00176	0.000879
beta-BHC	ND		0.00176	0.000879
gamma-BHC (Lindane)	ND		0.00176	0.000879
delta-BHC	ND		0.00176	0.000879
Heptachlor	ND		0.00176	0.000879
Aldrin	ND		0.00176	0.000879
Heptachlor epoxide	ND		0.00176	0.000879
Endosulfan I	ND		0.00176	0.000879
4,4'-DDE	0.091	D	0.00176	0.000879
Dieldrin	ND		0.00176	0.000879
Endrin	ND		0.00176	0.000879
Endosulfan II	ND		0.00176	0.000879
4,4'-DDD	0.020	D	0.00176	0.000879
Endrin aldehyde	ND		0.00176	0.000879
Endosulfan sulfate	ND		0.00176	0.000879
4,4'-DDT	0.129	D	0.00176	0.000879
Endrin ketone	ND		0.00176	0.000879
Methoxychlor	ND		0.00176	0.000879
alpha-Chlordane	0.00519	D	0.00176	0.000879
gamma-Chlordane	0.00331	D	0.00176	0.000879
Toxaphene	ND		0.022	0.011
Endosulfan (I and II)	ND		0.00176	0.000879
Chlordane (alpha and gamma)	0.0085	D	0.00176	0.000879

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

# INTEGRATED ANALYTICAL LABORATORIES

## PESTICIDES

Lab ID: E18-04234-003  
 Client ID: S3/5  
 Date Received: 05/31/2018  
 Date Extracted: 06/04/2018  
 Date Analyzed: 06/06/2018  
 Data file: O0875.D 06/06/2018 11:34

GC Column: RTX-CLP1/CLP2  
 Sample wt/vol: 30.83g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 10.5  
 Dilution Factor: 5

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
alpha-BHC	ND		0.00181	0.000906
beta-BHC	ND		0.00181	0.000906
gamma-BHC (Lindane)	ND		0.00181	0.000906
delta-BHC	ND		0.00181	0.000906
Heptachlor	ND		0.00181	0.000906
Aldrin	ND		0.00181	0.000906
Heptachlor epoxide	ND		0.00181	0.000906
Endosulfan I	ND		0.00181	0.000906
4,4'-DDE	0.015	D	0.00181	0.000906
Dieldrin	ND		0.00181	0.000906
Endrin	ND		0.00181	0.000906
Endosulfan II	ND		0.00181	0.000906
4,4'-DDD	0.00189	D	0.00181	0.000906
Endrin aldehyde	ND		0.00181	0.000906
Endosulfan sulfate	ND		0.00181	0.000906
4,4'-DDT	0.0093	D	0.00181	0.000906
Endrin ketone	ND		0.00181	0.000906
Methoxychlor	ND		0.00181	0.000906
alpha-Chlordane	0.000969	DJ	0.00181	0.000906
gamma-Chlordane	0.00188	D	0.00181	0.000906
Toxaphene	ND		0.023	0.011
Endosulfan (I and II)	ND		0.00181	0.000906
Chlordane (alpha and gamma)	0.00285	D	0.00181	0.000906

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**  
**PESTICIDES**

Lab ID: E18-04234-004  
 Client ID: S4/6  
 Date Received: 05/31/2018  
 Date Extracted: 06/04/2018  
 Date Analyzed: 06/06/2018  
 Data file: O0876.D 06/06/2018 11:46

GC Column: RTX-CLP1/CLP2  
 Sample wt/vol: 30.17g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 15.7  
 Dilution Factor: 25

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.00983	0.00492
beta-BHC	ND		0.00983	0.00492
gamma-BHC (Lindane)	ND		0.00983	0.00492
delta-BHC	ND		0.00983	0.00492
Heptachlor	ND		0.00983	0.00492
Aldrin	ND		0.00983	0.00492
Heptachlor epoxide	ND		0.00983	0.00492
Endosulfan I	ND		0.00983	0.00492
4,4'-DDE	0.026	D	0.00983	0.00492
Dieldrin	ND		0.00983	0.00492
Endrin	ND		0.00983	0.00492
Endosulfan II	ND		0.00983	0.00492
4,4'-DDD	ND		0.00983	0.00492
Endrin aldehyde	ND		0.00983	0.00492
Endosulfan sulfate	ND		0.00983	0.00492
4,4'-DDT	0.049	D	0.00983	0.00492
Endrin ketone	ND		0.00983	0.00492
Methoxychlor	ND		0.00983	0.00492
alpha-Chlordane	ND		0.00983	0.00492
gamma-Chlordane	0.010	D	0.00983	0.00492
Toxaphene	ND		0.123	0.059
Endosulfan (I and II)	ND		0.00983	0.00492
Chlordane (alpha and gamma)	0.010	D	0.00983	0.00492

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****PESTICIDES**

Lab ID: E18-04234-005

Client ID: S5/6

Date Received: 05/31/2018

Date Extracted: 06/04/2018

Date Analyzed: 06/06/2018

Data file: O0877.D 06/06/2018 11:59

GC Column: RTX-CLP1/CLP2

Sample wt/vol: 30.42g

Matrix-Units: Soil-mg/Kg

% Moisture: 9.10

Dilution Factor: 10

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.00362	0.00181
beta-BHC	ND		0.00362	0.00181
gamma-BHC (Lindane)	ND		0.00362	0.00181
delta-BHC	ND		0.00362	0.00181
Heptachlor	ND		0.00362	0.00181
Aldrin	ND		0.00362	0.00181
Heptachlor epoxide	ND		0.00362	0.00181
Endosulfan I	ND		0.00362	0.00181
4,4'-DDE	ND		0.00362	0.00181
Dieldrin	ND		0.00362	0.00181
Endrin	ND		0.00362	0.00181
Endosulfan II	ND		0.00362	0.00181
4,4'-DDD	ND		0.00362	0.00181
Endrin aldehyde	ND		0.00362	0.00181
Endosulfan sulfate	ND		0.00362	0.00181
4,4'-DDT	ND		0.00362	0.00181
Endrin ketone	ND		0.00362	0.00181
Methoxychlor	ND		0.00362	0.00181
alpha-Chlordane	ND		0.00362	0.00181
gamma-Chlordane	ND		0.00362	0.00181
Toxaphene	ND		0.045	0.022
Endosulfan (I and II)	ND		0.00362	0.00181
Chlordane (alpha and gamma)	ND		0.00362	0.00181

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**  
**PESTICIDES**

Lab ID: E18-04234-006  
 Client ID: S6/4  
 Date Received: 05/31/2018  
 Date Extracted: 06/04/2018  
 Date Analyzed: 06/06/2018  
 Data file: O0878.D 06/06/2018 12:11

GC Column: RTX-CLP1/CLP2  
 Sample wt/vol: 30.45g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 4.10  
 Dilution Factor: 250

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
alpha-BHC	ND		0.086	0.043
beta-BHC	ND		0.086	0.043
gamma-BHC (Lindane)	ND		0.086	0.043
delta-BHC	ND		0.086	0.043
Heptachlor	ND		0.086	0.043
Aldrin	ND		0.086	0.043
Heptachlor epoxide	ND		0.086	0.043
Endosulfan I	ND		0.086	0.043
4,4'-DDE	ND		0.086	0.043
Dieldrin	ND		0.086	0.043
Endrin	ND		0.086	0.043
Endosulfan II	ND		0.086	0.043
4,4'-DDD	ND		0.086	0.043
Endrin aldehyde	ND		0.086	0.043
Endosulfan sulfate	ND		0.086	0.043
4,4'-DDT	ND		0.086	0.043
Endrin ketone	ND		0.086	0.043
Methoxychlor	ND		0.086	0.043
alpha-Chlordane	ND		0.086	0.043
gamma-Chlordane	ND		0.086	0.043
Toxaphene	ND		1.07	0.514
Endosulfan (I and II)	ND		0.086	0.043
Chlordane (alpha and gamma)	ND		0.086	0.043

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****PESTICIDES**

Lab ID: E18-04234-007

Client ID: GW1/10

Date Received: 05/31/2018

Date Extracted: 06/06/2018

Date Analyzed: 06/06/2018

Data file: V0781.D 06/06/2018 14:24

GC Column: RTX-CLP1/CLP2

Sample wt/vol: 1000ml

Matrix-Units: Aqueous- $\mu$ g/L

% Moisture: 100

Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.010	0.005
beta-BHC	ND		0.010	0.005
gamma-BHC (Lindane)	ND		0.010	0.005
delta-BHC	ND		0.010	0.005
Heptachlor	ND		0.010	0.005
Aldrin	ND		0.010	0.005
Heptachlor epoxide	ND		0.010	0.005
Endosulfan I	ND		0.010	0.005
4,4'-DDE	ND		0.010	0.005
Dieldrin	ND		0.010	0.005
Endrin	ND		0.010	0.005
Endosulfan II	ND		0.010	0.005
4,4'-DDD	ND		0.010	0.005
Endrin aldehyde	ND		0.010	0.005
Endosulfan sulfate	ND		0.010	0.005
4,4'-DDT	ND		0.010	0.005
Endrin ketone	ND		0.010	0.005
Methoxychlor	ND		0.010	0.005
alpha-Chlordane	ND		0.010	0.005
gamma-Chlordane	ND		0.010	0.005
Toxaphene	ND		0.125	0.060
Endosulfan (I and II)	ND		0.010	0.005
Chlordane (alpha and gamma)	ND		0.010	0.005

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****PESTICIDES**

Lab ID: BLKS180604-12

Client ID: Pest

Date Received: NA

Date Extracted: 06/04/2018

Date Analyzed: 06/06/2018

Data file: O0869.D 06/06/2018 10:18

GC Column: RTX-CLP1/CLP2

Sample wt/vol: 30g

Matrix-Units: Soil-mg/Kg

% Moisture: NA

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
alpha-BHC	ND		0.000334	0.000167
beta-BHC	ND		0.000334	0.000167
gamma-BHC (Lindane)	ND		0.000334	0.000167
delta-BHC	ND		0.000334	0.000167
Heptachlor	ND		0.000334	0.000167
Aldrin	ND		0.000334	0.000167
Heptachlor epoxide	ND		0.000334	0.000167
Endosulfan I	ND		0.000334	0.000167
4,4'-DDE	ND		0.000334	0.000167
Dieldrin	ND		0.000334	0.000167
Endrin	ND		0.000334	0.000167
Endosulfan II	ND		0.000334	0.000167
4,4'-DDD	ND		0.000334	0.000167
Endrin aldehyde	ND		0.000334	0.000167
Endosulfan sulfate	ND		0.000334	0.000167
4,4'-DDT	ND		0.000334	0.000167
Endrin ketone	ND		0.000334	0.000167
Methoxychlor	ND		0.000334	0.000167
alpha-Chlordane	ND		0.000334	0.000167
gamma-Chlordane	ND		0.000334	0.000167
Toxaphene	ND		0.00418	0.002
Endosulfan (I and II)	ND		0.000334	0.000167
Chlordane (alpha and gamma)	ND		0.000334	0.000167

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****PESTICIDES**

Lab ID: BLKA180606-02

Client ID: Pest

Date Received: NA

Date Extracted: 06/06/2018

Date Analyzed: 06/06/2018

Data file: V0777.D 06/06/2018 13:04

GC Column: RTX-CLP1/CLP2

Sample wt/vol: 1000ml

Matrix-Units: Aqueous- $\mu$ g/L

% Moisture: 100

Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.010	0.005
beta-BHC	ND		0.010	0.005
gamma-BHC (Lindane)	ND		0.010	0.005
delta-BHC	ND		0.010	0.005
Heptachlor	ND		0.010	0.005
Aldrin	ND		0.010	0.005
Heptachlor epoxide	ND		0.010	0.005
Endosulfan I	ND		0.010	0.005
4,4'-DDE	ND		0.010	0.005
Dieldrin	ND		0.010	0.005
Endrin	ND		0.010	0.005
Endosulfan II	ND		0.010	0.005
4,4'-DDD	ND		0.010	0.005
Endrin aldehyde	ND		0.010	0.005
Endosulfan sulfate	ND		0.010	0.005
4,4'-DDT	ND		0.010	0.005
Endrin ketone	ND		0.010	0.005
Methoxychlor	ND		0.010	0.005
alpha-Chlordane	ND		0.010	0.005
gamma-Chlordane	ND		0.010	0.005
Toxaphene	ND		0.125	0.060
Endosulfan (I and II)	ND		0.010	0.005
Chlordane (alpha and gamma)	ND		0.010	0.005

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

## INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS**Client/Project: HILLMAN/G6-2368

Lab ID: E18-04234-001

Client ID: S1

Date Collected: 05/30/18 09:40

Date Received: 05/31/18 17:27

Matrix-Units: Soil-mg/Kg (ppm)

% Moisture: 9.70

Batch #: 305

<b>Compound</b>	<b>Result</b>	<b>Q</b>	<b>DF</b>	<b>RL</b>	<b>MDL</b>	<b>Date Analyzed</b>	<b>Method</b>
Aluminum	8710		1	5.95	2.38	06/05/18 14:53	SW 6020B
Antimony	1.14		1	0.595	0.238	06/05/18 14:53	SW 6020B
Arsenic	5.76		1	0.595	0.179	06/05/18 14:53	SW 6020B
Barium	110		1	0.595	0.298	06/05/18 14:53	SW 6020B
Beryllium	0.527	J	1	0.595	0.179	06/05/18 14:53	SW 6020B
Cadmium	ND		1	0.595	0.357	06/05/18 14:53	SW 6020B
Calcium	7320		1	59.5	17.9	06/05/18 14:53	SW 6020B
Chromium	34.5		1	0.595	0.298	06/05/18 14:53	SW 6020B
Cobalt	8.36		1	0.595	0.179	06/05/18 14:53	SW 6020B
Copper	35.3		1	0.595	0.417	06/05/18 14:53	SW 6020B
Iron	17000		1	59.5	17.9	06/05/18 14:53	SW 6020B
Lead	222		1	0.595	0.298	06/05/18 14:53	SW 6020B
Magnesium	5940		1	59.5	17.9	06/05/18 14:53	SW 6020B
Manganese	474		1	0.595	0.417	06/05/18 14:53	SW 6020B
Mercury	0.301		1	0.025	0.0099	06/05/18 10:44	SW 7471B
Nickel	31.8		1	0.595	0.417	06/05/18 14:53	SW 6020B
Potassium	1270		1	59.5	23.8	06/05/18 14:53	SW 6020B
Selenium	2.47	J	1	4.17	1.79	06/05/18 14:53	SW 6020B
Silver	ND		1	0.595	0.357	06/05/18 14:53	SW 6020B
Sodium	163		1	59.5	23.8	06/05/18 14:53	SW 6020B
Thallium	0.335	J	1	0.595	0.298	06/05/18 14:53	SW 6020B
Vanadium	33.6		1	0.595	0.298	06/05/18 14:53	SW 6020B
Zinc	183		1	5.95	1.19	06/05/18 14:53	SW 6020B

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds

## INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS**Client/Project: HILLMAN/G6-2368

Lab ID: E18-04234-002

Client ID: S2

Date Collected: 05/30/18 10:15

Date Received: 05/31/18 17:27

Matrix-Units: Soil-mg/Kg (ppm)

% Moisture: 5.80

Batch #: 305

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Aluminum	1690		1	5.64	2.26	06/05/18 14:59	SW 6020B
Antimony	ND		1	0.564	0.226	06/05/18 14:59	SW 6020B
Arsenic	2.78		1	0.564	0.169	06/05/18 14:59	SW 6020B
Barium	61.9		1	0.564	0.282	06/05/18 14:59	SW 6020B
Beryllium	ND		1	0.564	0.169	06/05/18 14:59	SW 6020B
Cadmium	ND		1	0.564	0.338	06/05/18 14:59	SW 6020B
Calcium	14900		1	56.4	16.9	06/05/18 14:59	SW 6020B
Chromium	7.14		1	0.564	0.282	06/05/18 14:59	SW 6020B
Cobalt	1.53		1	0.564	0.169	06/05/18 14:59	SW 6020B
Copper	24.1		1	0.564	0.395	06/05/18 14:59	SW 6020B
Iron	6460		1	56.4	16.9	06/05/18 14:59	SW 6020B
Lead	45.3		1	0.564	0.282	06/05/18 14:59	SW 6020B
Magnesium	1190		1	56.4	16.9	06/05/18 14:59	SW 6020B
Manganese	68.4		1	0.564	0.395	06/05/18 14:59	SW 6020B
Mercury	0.049		1	0.023	0.0093	06/05/18 10:46	SW 7471B
Nickel	3.94		1	0.564	0.395	06/05/18 14:59	SW 6020B
Potassium	311		1	56.4	22.6	06/05/18 14:59	SW 6020B
Selenium	ND		1	3.95	1.69	06/05/18 14:59	SW 6020B
Silver	0.655		1	0.564	0.338	06/05/18 14:59	SW 6020B
Sodium	119		1	56.4	22.6	06/05/18 14:59	SW 6020B
Thallium	ND		1	0.564	0.282	06/05/18 14:59	SW 6020B
Vanadium	9.19		1	0.564	0.282	06/05/18 14:59	SW 6020B
Zinc	46.6		1	5.64	1.13	06/05/18 14:59	SW 6020B

ND = Analyzed for but Not Detected at the MDL

INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS**

Client/Project: HILLMAN/G6-2368

Lab ID: E18-04234-003

Client ID: S3

Date Collected: 05/30/18 10:45

Date Received: 05/31/18 17:27

Matrix-Units: Soil-mg/Kg (ppm)

% Moisture: 10.5

Batch #: 305

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Aluminum	3170		1	5.88	2.35	06/05/18 15:15	SW 6020B
Antimony	0.399	J	1	0.588	0.235	06/05/18 15:15	SW 6020B
Arsenic	2.58		1	0.588	0.176	06/05/18 15:15	SW 6020B
Barium	81.6		1	0.588	0.294	06/05/18 15:15	SW 6020B
Beryllium	0.243	J	1	0.588	0.176	06/05/18 15:15	SW 6020B
Cadmium	0.433	J	1	0.588	0.353	06/05/18 15:15	SW 6020B
Calcium	21800		1	58.8	17.6	06/05/18 15:15	SW 6020B
Chromium	129		1	0.588	0.294	06/05/18 15:15	SW 6020B
Cobalt	4.34		1	0.588	0.176	06/05/18 15:15	SW 6020B
Copper	19.8		1	0.588	0.412	06/05/18 15:15	SW 6020B
Iron	9820		1	58.8	17.6	06/05/18 15:15	SW 6020B
Lead	97.6		1	0.588	0.294	06/05/18 15:15	SW 6020B
Magnesium	8410		1	58.8	17.6	06/05/18 15:15	SW 6020B
Manganese	141		1	0.588	0.412	06/05/18 15:15	SW 6020B
Mercury	0.057		1	0.026	0.010	06/05/18 10:49	SW 7471B
Nickel	26.5		1	0.588	0.412	06/05/18 15:15	SW 6020B
Potassium	591		1	58.8	23.5	06/05/18 15:15	SW 6020B
Selenium	ND		1	4.12	1.76	06/05/18 15:15	SW 6020B
Silver	149		1	0.588	0.353	06/05/18 15:15	SW 6020B
Sodium	171		1	58.8	23.5	06/05/18 15:15	SW 6020B
Thallium	ND		1	0.588	0.294	06/05/18 15:15	SW 6020B
Vanadium	15.5		1	0.588	0.294	06/05/18 15:15	SW 6020B
Zinc	179		1	5.88	1.18	06/05/18 15:15	SW 6020B

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds

## INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS**Client/Project: HILLMAN/G6-2368

Lab ID: E18-04234-004

Client ID: S4

Date Collected: 05/30/18 11:10

Date Received: 05/31/18 17:27

Matrix-Units: Soil-mg/Kg (ppm)

% Moisture: 15.7

Batch #: 305

<b>Compound</b>	<b>Result</b>	<b>Q</b>	<b>DF</b>	<b>RL</b>	<b>MDL</b>	<b>Date Analyzed</b>	<b>Method</b>
Aluminum	6810		1	6.33	2.53	06/05/18 15:21	SW 6020B
Antimony	0.826		1	0.633	0.253	06/05/18 15:21	SW 6020B
Arsenic	3.28		1	0.633	0.190	06/05/18 15:21	SW 6020B
Barium	139		1	0.633	0.316	06/05/18 15:21	SW 6020B
Beryllium	0.276	J	1	0.633	0.190	06/05/18 15:21	SW 6020B
Cadmium	0.804		1	0.633	0.380	06/05/18 15:21	SW 6020B
Calcium	23200		1	63.3	19.0	06/05/18 15:21	SW 6020B
Chromium	92.0		1	0.633	0.316	06/05/18 15:21	SW 6020B
Cobalt	2.59		1	0.633	0.190	06/05/18 15:21	SW 6020B
Copper	20.5		1	0.633	0.443	06/05/18 15:21	SW 6020B
Iron	9570		1	63.3	19.0	06/05/18 15:21	SW 6020B
Lead	150		1	0.633	0.316	06/05/18 15:21	SW 6020B
Magnesium	3270		1	63.3	19.0	06/05/18 15:21	SW 6020B
Manganese	144		1	0.633	0.443	06/05/18 15:21	SW 6020B
Mercury	0.219		1	0.027	0.011	06/05/18 10:52	SW 7471B
Nickel	10.3		1	0.633	0.443	06/05/18 15:21	SW 6020B
Potassium	662		1	63.3	25.3	06/05/18 15:21	SW 6020B
Selenium	ND		1	4.43	1.90	06/05/18 15:21	SW 6020B
Silver	131		1	0.633	0.380	06/05/18 15:21	SW 6020B
Sodium	860		1	63.3	25.3	06/05/18 15:21	SW 6020B
Thallium	ND		1	0.633	0.316	06/05/18 15:21	SW 6020B
Vanadium	17.0		1	0.633	0.316	06/05/18 15:21	SW 6020B
Zinc	301		1	6.33	1.27	06/05/18 15:21	SW 6020B

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds

## INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS**Client/Project: HILLMAN/G6-2368

Lab ID: E18-04234-005

Client ID: S5

Date Collected: 05/30/18 11:40

Date Received: 05/31/18 17:27

Matrix-Units: Soil-mg/Kg (ppm)

% Moisture: 9.10

Batch #: 305

<b>Compound</b>	<b>Result</b>	<b>Q</b>	<b>DF</b>	<b>RL</b>	<b>MDL</b>	<b>Date Analyzed</b>	<b>Method</b>
Aluminum	2440		1	5.78	2.31	06/05/18 15:26	SW 6020B
Antimony	0.809		1	0.578	0.231	06/05/18 15:26	SW 6020B
Arsenic	4.03		1	0.578	0.173	06/05/18 15:26	SW 6020B
Barium	85.0		1	0.578	0.289	06/05/18 15:26	SW 6020B
Beryllium	0.232	J	1	0.578	0.173	06/05/18 15:26	SW 6020B
Cadmium	0.384	J	1	0.578	0.347	06/05/18 15:26	SW 6020B
Calcium	6500		1	57.8	17.3	06/05/18 15:26	SW 6020B
Chromium	89.8		1	0.578	0.289	06/05/18 15:26	SW 6020B
Cobalt	2.75		1	0.578	0.173	06/05/18 15:26	SW 6020B
Copper	18.1		1	0.578	0.404	06/05/18 15:26	SW 6020B
Iron	18300		1	57.8	17.3	06/05/18 15:26	SW 6020B
Lead	802		1	0.578	0.289	06/05/18 15:26	SW 6020B
Magnesium	1540		1	57.8	17.3	06/05/18 15:26	SW 6020B
Manganese	107		1	0.578	0.404	06/05/18 15:26	SW 6020B
Mercury	0.463		1	0.026	0.010	06/05/18 11:00	SW 7471B
Nickel	8.90		1	0.578	0.404	06/05/18 15:26	SW 6020B
Potassium	358		1	57.8	23.1	06/05/18 15:26	SW 6020B
Selenium	ND		1	4.04	1.73	06/05/18 15:26	SW 6020B
Silver	120		1	0.578	0.347	06/05/18 15:26	SW 6020B
Sodium	132		1	57.8	23.1	06/05/18 15:26	SW 6020B
Thallium	ND		1	0.578	0.289	06/05/18 15:26	SW 6020B
Vanadium	12.1		1	0.578	0.289	06/05/18 15:26	SW 6020B
Zinc	212		1	5.78	1.16	06/05/18 15:26	SW 6020B

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds

## INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS**Client/Project: HILLMAN/G6-2368

Lab ID: E18-04234-006

Client ID: S6

Date Collected: 05/30/18 12:10

Date Received: 05/31/18 17:27

Matrix-Units: Soil-mg/Kg (ppm)

% Moisture: 4.10

Batch #: 305

<b>Compound</b>	<b>Result</b>	<b>Q</b>	<b>DF</b>	<b>RL</b>	<b>MDL</b>	<b>Date Analyzed</b>	<b>Method</b>
Aluminum	1390		1	5.20	2.08	06/05/18 14:15	SW 6020B
Antimony	ND		1	0.520	0.208	06/05/18 14:15	SW 6020B
Arsenic	1.42		1	0.520	0.156	06/05/18 14:15	SW 6020B
Barium	13.0		1	0.520	0.260	06/05/18 14:15	SW 6020B
Beryllium	ND		1	0.520	0.156	06/05/18 14:15	SW 6020B
Cadmium	ND		1	0.520	0.312	06/05/18 14:15	SW 6020B
Calcium	5810		1	52.0	15.6	06/05/18 14:15	SW 6020B
Chromium	7.31		1	0.520	0.260	06/05/18 14:15	SW 6020B
Cobalt	1.23		1	0.520	0.156	06/05/18 14:15	SW 6020B
Copper	14.6		1	0.520	0.364	06/05/18 14:15	SW 6020B
Iron	3530		1	52.0	15.6	06/05/18 14:15	SW 6020B
Lead	24.8		1	0.520	0.260	06/05/18 14:15	SW 6020B
Magnesium	2100		1	52.0	15.6	06/05/18 14:15	SW 6020B
Manganese	50.0		1	0.520	0.364	06/05/18 14:15	SW 6020B
Mercury	0.056		1	0.026	0.010	06/05/18 10:33	SW 7471B
Nickel	3.41		1	0.520	0.364	06/05/18 14:15	SW 6020B
Potassium	189		1	52.0	20.8	06/05/18 14:15	SW 6020B
Selenium	ND		1	3.64	1.56	06/05/18 14:15	SW 6020B
Silver	ND		1	0.520	0.312	06/05/18 14:15	SW 6020B
Sodium	48.3	J	1	52.0	20.8	06/05/18 14:15	SW 6020B
Thallium	ND		1	0.520	0.260	06/05/18 14:15	SW 6020B
Vanadium	7.07		1	0.520	0.260	06/05/18 14:15	SW 6020B
Zinc	16.7		1	5.20	1.04	06/05/18 14:15	SW 6020B

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds

## INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS**Client/Project: HILLMAN/G6-2368

Lab ID: E18-04234-007  
 Client ID: GW1  
 Date Collected: 05/30/18  
 Date Received: 05/31/18 17:27  
 Matrix-Units: Aqueous-ug/L (ppb)  
 % Moisture: 100  
 Batch #: 307

<b>Compound</b>	<b>Result</b>	<b>Q</b>	<b>DF</b>	<b>RL</b>	<b>MDL</b>	<b>Date Analyzed</b>	<b>Method</b>
Aluminum	171		1	20.0	8.00	06/06/18 14:12	SW 6020B
Antimony	2.54		1	2.00	1.20	06/06/18 14:12	SW 6020B
Arsenic	1.55	J	1	2.00	0.600	06/06/18 14:12	SW 6020B
Barium	34.8		1	2.00	1.20	06/06/18 14:12	SW 6020B
Beryllium	ND		1	1.00	0.320	06/06/18 14:12	SW 6020B
Cadmium	ND		1	2.00	1.00	06/06/18 14:12	SW 6020B
Calcium	96100		1	200	60.0	06/06/18 14:12	SW 6020B
Chromium	3.92		1	2.00	1.00	06/06/18 14:12	SW 6020B
Cobalt	ND		1	2.00	0.600	06/06/18 14:12	SW 6020B
Copper	ND		1	2.00	1.00	06/06/18 14:12	SW 6020B
Iron	362		1	200	60.0	06/06/18 14:12	SW 6020B
Lead	1.86	J	1	2.00	1.20	06/06/18 14:12	SW 6020B
Magnesium	14000		1	200	60.0	06/06/18 14:12	SW 6020B
Manganese	14.2		1	2.00	1.40	06/06/18 14:12	SW 6020B
Mercury	ND		1	0.500	0.200	06/06/18 09:29	SW 7470A
Nickel	2.67		1	2.00	1.20	06/06/18 14:12	SW 6020B
Potassium	5650		1	200	80.0	06/06/18 14:12	SW 6020B
Selenium	6.68	J	1	20.0	6.00	06/06/18 14:12	SW 6020B
Silver	ND		1	2.00	1.20	06/06/18 14:12	SW 6020B
Sodium	32700		1	200	80.0	06/06/18 14:12	SW 6020B
Thallium	ND		1	2.00	1.20	06/06/18 14:12	SW 6020B
Vanadium	5.27		1	2.00	0.600	06/06/18 14:12	SW 6020B
Zinc	105		1	20.0	8.00	06/06/18 14:12	SW 6020B

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds

## INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS**Client/Project: HILLMAN/G6-2368

Lab ID: E18-04234-008

Client ID: GW1 - FILT

Date Collected: 05/30/18

Date Received: 05/31/18 17:27

Matrix-Units: Aqueous-ug/L (ppb)

% Moisture: 100

Batch #: 307

<b>Compound</b>	<b>Result</b>	<b>Q</b>	<b>DF</b>	<b>RL</b>	<b>MDL</b>	<b>Date Analyzed</b>	<b>Method</b>
Aluminum	ND		1	20.0	8.00	06/06/18 15:07	SW 6020B
Antimony	2.61	X	1	2.00	1.20	06/06/18 15:07	SW 6020B
Arsenic	1.59	JX	1	2.00	0.600	06/06/18 15:07	SW 6020B
Barium	30.1		1	2.00	1.20	06/06/18 15:07	SW 6020B
Beryllium	ND		1	1.00	0.320	06/06/18 15:07	SW 6020B
Cadmium	ND		1	2.00	1.00	06/06/18 15:07	SW 6020B
Calcium	90800		1	200	60.0	06/06/18 15:07	SW 6020B
Chromium	ND		1	2.00	1.00	06/06/18 15:07	SW 6020B
Cobalt	ND		1	2.00	0.600	06/06/18 15:07	SW 6020B
Copper	ND		1	2.00	1.00	06/06/18 15:07	SW 6020B
Iron	ND		1	200	60.0	06/06/18 15:07	SW 6020B
Lead	ND		1	2.00	1.20	06/06/18 15:07	SW 6020B
Magnesium	13300		1	200	60.0	06/06/18 15:07	SW 6020B
Manganese	14.4	X	1	2.00	1.40	06/06/18 15:07	SW 6020B
Mercury	ND		1	0.500	0.200	06/06/18 09:39	SW 7470A
Nickel	1.82	J	1	2.00	1.20	06/06/18 15:07	SW 6020B
Potassium	5310		1	200	80.0	06/06/18 15:07	SW 6020B
Selenium	6.16	J	1	20.0	6.00	06/06/18 15:07	SW 6020B
Silver	ND		1	2.00	1.20	06/06/18 15:07	SW 6020B
Sodium	31300		1	200	80.0	06/06/18 15:07	SW 6020B
Thallium	ND		1	2.00	1.20	06/06/18 15:07	SW 6020B
Vanadium	4.94		1	2.00	0.600	06/06/18 15:07	SW 6020B
Zinc	97.1		1	20.0	8.00	06/06/18 15:07	SW 6020B

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds

X = Samples analyzed for total and dissolved metals may have slightly different concentrations due to normal variations in the analytical process. Slightly higher concentrations present in dissolved versus total analyses can occur even when all QC are acceptable. A 20% RPD between total and dissolved results is used to evaluate if the concentrations are statistically indistinguishable.

**METALS QUALITY CONTROL**  
**BLANK 1 RESULTS SUMMARY**

06/06/2018 02:07 PM

Batch (Page) #: 307

Associated Lab E18-04234, E18-04245, E18-04262, E18-04276, E18-04347

Case for Blank

1:

Matrix: Aqueous

Unit: ppb ( $\mu\text{g/L}$ )

Method: 6020B/7470A

ANALYTE	1/2 Sample RL	REAGENT BLANK BLKA180605-01
Aluminum	10.0	ND
Antimony	1.00	ND
Arsenic	1.00	ND
Barium	1.00	ND
Beryllium	0.500	ND
Cadmium	1.00	ND
Calcium	100	ND
Chromium	1.00	ND
Cobalt	1.00	ND
Copper	1.00	ND
Iron	100	ND
Lead	1.00	ND
Magnesium	100	ND
Manganese	1.00	ND
Mercury	0.250	ND
Nickel	1.00	ND
Potassium	100	ND
Selenium	10.0	ND
Silver	1.00	ND
Sodium	100	ND
Thallium	1.00	ND
Vanadium	1.00	ND
Zinc	10.0	ND

Associated Sample for Blank 1:

04234-007~008; 04245-001~005; 04262-001~007

04276-001; 04347-007~010

**METALS QUALITY CONTROL**  
**BLANK 1 RESULTS SUMMARY**

06/05/2018 02:10 PM

Batch (Page) #: 305

Associated Lab E18-04234, E18-04270, E18-04271, E18-04304

Case for Blank

1:

Matrix: Soil

Unit: ppm (mg/kg)

Method: 6020B/7471B

ANALYTE	1/2 Sample RL	REAGENT BLANK BLKS180604-01
Aluminum	2.50	ND
Antimony	0.250	ND
Arsenic	0.250	ND
Barium	0.250	ND
Beryllium	0.250	ND
Cadmium	0.250	ND
Calcium	25.0	ND
Chromium	0.250	ND
Cobalt	0.250	ND
Copper	0.250	ND
Iron	25.0	ND
Lead	0.250	ND
Magnesium	25.0	ND
Manganese	0.250	ND
Mercury	0.013	ND
Nickel	0.250	ND
Potassium	25.0	ND
Selenium	1.75	ND
Silver	0.250	ND
Sodium	25.0	ND
Thallium	0.250	ND
Vanadium	0.250	ND
Zinc	2.50	ND

Associated Sample for Blank 1:

04234-001~006; 04270-012~019; 04271-001,007

04304-001

## SAMPLE TRACKING

## Chain of Custody Record

Customer Information		Reporting Information		***Rush TAT Charge		Deliverables		EDDs		Concentrations Expected:	
Company: <i>Hillmann Consulting</i>	REPORT TO: Address: <i>1600 Ft 21 East</i>	24 hr - 100%... 48 hr - 75%... 72 hr - 50%... 96 hr - 35%... 5 day - 25%... 6-9 day - 10%	NJ, CT, PA <input type="checkbox"/> Results Only <input type="checkbox"/> Reduced <input type="checkbox"/> Regulatory/ <input type="checkbox"/> Full*	NY <input checked="" type="checkbox"/> A <input type="checkbox"/> B*	NJ SRP <input type="checkbox"/> NYSDEC EQUIIS <input type="checkbox"/> lab approved custom EDD	No EDD REQ'D <input type="checkbox"/>	No EDD REQ'D <input type="checkbox"/>	Low <input type="checkbox"/> Med <input type="checkbox"/> High <input type="checkbox"/>	New Jersey <input type="checkbox"/> New York <input checked="" type="checkbox"/>	Regulatory Requirement	
Telephone #: <i>902 477 0880</i>	Attn: <i>FAX #</i>	Turn-Around Time (TAT)		5 days							
Project Manager: <i>Chris Thorsdason</i>		INVOICE TO: Address:		Standard (10 business days) Verbal Rush/date needed (only if pre-approved)**		Hard Copy: Std 3 week Petroleum Hydrocarbons - Selection is REQUIRED <input type="checkbox"/> NJ EPH-DRO - Category 1 <input type="checkbox"/> NJ EPH-C40 - Category 2 <input type="checkbox"/> NJ EPH-Fractionated - Cat 2		Other - call for price TAT for PHC (if other than 2 weeks): <input type="checkbox"/> CP-51 Table 2 or 3 (selection required) <input type="checkbox"/> OTHER Reg. Req. (specify)		GWQS <input type="checkbox"/> IGW <input type="checkbox"/> SRS <input type="checkbox"/> Ecological <input type="checkbox"/> DW <input type="checkbox"/> SPLP <input type="checkbox"/>	
Project Location (State): <i>NY</i>		Attn: <i>PO #</i>	Quote #	ANALYTICAL PARAMETERS (please note if contingent)							
Bottle Order #: <i></i>		Sample Matrix		DW - Drinking Water WW - Waste Water GW - Groundwater SW - Surface Water LIQ - Liquid (Specify)		Oil - Oil S - Soil SOL - Solid SL - Sludge W - Wipe B - Biphasic		TEST PCB 200 200 200 200S			
"Report to"/"Invoice To" same as above		Sampled by: <i>Brian Peters</i>		Sampling	Date	Matrix	# containers	IAL #	Sample Specific Notes:		
COMPLETED BY IAL: Field Sampling      Equipment Rental		SAMPLE INFORMATION									
Client ID	Depth (ft only)										
<i>S1</i>	<i>5ft</i>	<i>5/30/18</i>	<i>940am</i>	<i>S</i>	<i>4</i>	<i>1</i>	<i>1</i>	<i>1</i>			
<i>S2</i>	<i>5ft</i>	<i>10/5/18</i>	<i>1045am</i>	<i>S</i>	<i>4</i>	<i>1</i>	<i>1</i>	<i>1</i>			
<i>S3</i>	<i>5ft</i>	<i>10/5/18</i>	<i>1045am</i>	<i>S</i>	<i>4</i>	<i>1</i>	<i>1</i>	<i>1</i>			
<i>S4</i>	<i>6ft</i>	<i>11/10/18</i>	<i>1110am</i>	<i>S</i>	<i>4</i>	<i>1</i>	<i>1</i>	<i>1</i>			
<i>S5</i>	<i>6ft</i>	<i>11/10/18</i>	<i>1140am</i>	<i>S</i>	<i>4</i>	<i>1</i>	<i>1</i>	<i>1</i>			
<i>S6</i>	<i>4ft</i>	<i>12/10/18</i>	<i>1210pm</i>	<i>GW</i>	<i>9</i>	<i>1</i>	<i>1</i>	<i>1</i>			
<i>(GW)</i>	<i>10ft</i>										
Known Hazard: YES / NO		Preservative Code:	Container Code:	Preservative (use code)		Special Instructions/QC Requirements & Comments:		FOR LAB USE ONLY			
Describe:										SDG #: <i>1234</i>	
<i>Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day if samples rec'd at lab &gt; 5PM.</i>		<i>BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS &amp; CONDITIONS (found on rear of pink copy).</i>								Cooler Temp: <i>6 °C</i>	
										Date Received: <i>5/31/18</i>	
										Time: <i>17:00</i>	
										Date: <i>5/31/18</i>	
										Time: <i>17:00</i>	
										Carrier (check one): <input type="checkbox"/> IAL Courier <input type="checkbox"/> Client Courier <input type="checkbox"/> FedEx/UUPS*** *****Tracking #:	
										IAL Rev 2/2014	
										LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK	
										PAGE: <i>of</i>	

Certification IDs: TN1 (TN101284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

# PROJECT INFORMATION

**RUSH**
**E18-04234: G6-2368**

**To:** Chris Hirschmann  
Hillmann Consulting, LLC  
Fax: 1(908) 686-2636  
EMail: chirschmann@hillmanngroup.com;

**Report To**

Hillmann Consulting, LLC  
1600 Route 22 East  
Union, NJ 07083  
Attn: Chris Hirschmann

**Bill To**

Hillmann Consulting, LLC  
1600 Route 22 East  
Union, NJ 07083  
Attn: Chris Hirschmann

Report Format	P.O. #	Received At Lab	TPHC Due	Verbal Due	Hardcopy Due
Category A		May 31, 2018 @ 17:27	NA	Jun 07, 2018	Jun 21, 2018 *

\* Any *Conditional or Hold* status will delay final hardcopy report sent date.

**Diskette Req.** Not Required

\*\* QC Requirement (must meet): NY Part 375-6.8(UUSCO+RUSCO)

Lab ID	Client Sample ID	Depth	Sampling Time	Matrix	Unit	Field pH/Temp
04234-001	S1	5	05/30/18@09:40	Soil	mg/Kg (ppm)	
04234-002	S2	5	05/30/18@10:15	Soil	mg/Kg (ppm)	
04234-003	S3	5	05/30/18@10:45	Soil	mg/Kg (ppm)	
04234-004	S4	6	05/30/18@11:10	Soil	mg/Kg (ppm)	
04234-005	S5	6	05/30/18@11:40	Soil	mg/Kg (ppm)	
04234-006	S6	4	05/30/18@12:10	Soil	mg/Kg (ppm)	
04234-007	GW1	10	05/30/18	Aqueous	ug/L (ppb)	
04234-008	GW1 - FILT	NA	05/30/18	Aqueous	ug/L (ppb)	

Sample #	Test	Status	QA Method	TAT	Holding Time Expires
001	TCL VO + 15	Analyze	8260C	RUSH 1 WK	6/13/2018
	TCL BN + 15	Analyze	8270D	RUSH 1 WK	6/13/2018
	TCL Pesticides	Analyze	8081B	RUSH 1 WK	6/13/2018
	TCL PCB	Analyze	8082A	RUSH 1 WK	5/30/2019
	TAL Metals	Analyze	6020B/7471B	RUSH 1 WK	6/27/2018
002	TCL VO + 15	Analyze	8260C	RUSH 1 WK	6/13/2018
	TCL BN + 15	Analyze	8270D	RUSH 1 WK	6/13/2018
	TCL Pesticides	Analyze	8081B	RUSH 1 WK	6/13/2018
	TCL PCB	Analyze	8082A	RUSH 1 WK	5/30/2019
	TAL Metals	Analyze	6020B/7471B	RUSH 1 WK	6/27/2018
003	TCL VO + 15	Analyze	8260C	RUSH 1 WK	6/13/2018
	TCL BN + 15	Analyze	8270D	RUSH 1 WK	6/13/2018
	TCL PCB	Analyze	8082A	RUSH 1 WK	5/30/2019
	TCL Pesticides	Analyze	8081B	RUSH 1 WK	6/13/2018
	TAL Metals	Analyze	6020B/7471B	RUSH 1 WK	6/27/2018



# PROJECT INFORMATION

**RUSH**
**E18-04234: G6-2368**

<u>Sample #</u>	<u>Test</u>	<u>Status</u>	<u>QA Method</u>	<u>TAT</u>	<u>Holding Time Expires</u>
004	TCL VO + 15	Analyze	8260C	RUSH 1 WK	6/13/2018
	TCL BN + 15	Analyze	8270D	RUSH 1 WK	6/13/2018
	TCL PCB	Analyze	8082A	RUSH 1 WK	5/30/2019
	TCL Pesticides	Analyze	8081B	RUSH 1 WK	6/13/2018
	TAL Metals	Analyze	6020B/7471B	RUSH 1 WK	6/27/2018
005	TCL VO + 15	Analyze	8260C	RUSH 1 WK	6/13/2018
	TCL BN + 15	Analyze	8270D	RUSH 1 WK	6/13/2018
	TCL PCB	Analyze	8082A	RUSH 1 WK	5/30/2019
	TCL Pesticides	Analyze	8081B	RUSH 1 WK	6/13/2018
	TAL Metals	Analyze	6020B/7471B	RUSH 1 WK	6/27/2018
006	TCL VO + 15	Analyze	8260C	RUSH 1 WK	6/13/2018
	TCL BN + 15	Analyze	8270D	RUSH 1 WK	6/13/2018
	TCL Pesticides	Analyze	8081B	RUSH 1 WK	6/13/2018
	TCL PCB	Analyze	8082A	RUSH 1 WK	5/30/2019
	TAL Metals	Analyze	6020B/7471B	RUSH 1 WK	6/27/2018
007	TCL VO + 15	Analyze	8260C	RUSH 1 WK	6/13/2018
	TCL BN + SIM + 15	Analyze	8270D SIM	RUSH 1 WK	6/6/2018
	TCL PCB	Analyze	8082A	RUSH 1 WK	5/30/2019
	TCL Pesticides	Analyze	8081B	RUSH 1 WK	6/6/2018
	Metals Filtration	Analyze		RUSH 1 WK	6/27/2018
	TAL Metals	Analyze	6020B/7471B	RUSH 1 WK	6/27/2018
008	TAL Metals	Analyze	6020B/7471B	RUSH 1 WK	6/27/2018

**Project Notes:****NOTE 1 taken by kfalconer on 06/01/2018 10:54**

SAMPLE 007, AWQS TOGS TABLE 1

**NOTE 2 taken by kfalconer on 06/04/2018 09:17**

RECEIVED A BOTTLE MARKED 'FILTER AT LAB' BUT NO INDICATION ON COC AS TO WHAT PARAMETER

PER CHRIS HIRSCHMANN, FILTER FOR TAL METALS

**NOTE 3 taken by kim on 06/05/2018 10:12**

3 ENCORS RECEIVED - 1 INTO MECH/2 INTO H2O



## INTEGRATED ANALYTICAL LABORATORIES, LLC

## SAMPLE RECEIPT VERIFICATION

CASE NO: E 18

04234

CLIENT:

Hullmann

COOLER TEMPERATURE: 2° - 6°C: 

( See Chain of Custody)

## Comments

COC: **COMPLETE** / INCOMPLETE  
KEY

- ✓ = YES/NA  
✗ = NO

VOA received:  Encore  IGW - Methanol  
 Terra Core  No Preservative

- ✓ Bottles Intact  
✓ no-Missing Bottles  
✓ no-Extra Bottles

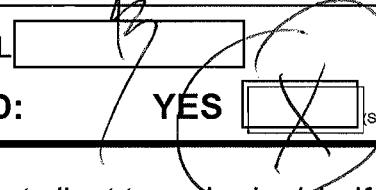
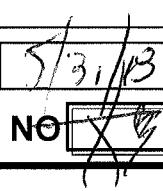
*Received 1,250 mL vials. Labeled filter at LAB  
For what parameter?*

- ✓ Sufficient Sample Volume  
✓ no-headspace/bubbles in VOs  
✓ Labels intact/correct  
✓ pH Check (exclude VOs)<sup>1</sup>  
✓ Correct bottles/preservative  
✓ Sufficient Holding/Prep Time<sup>1</sup>  
 Multiphasic Sample  
 Sample to be Subcontracted  
 Chain of Custody is Clear

<sup>1</sup>All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

*Chain not filled in correctly description for 7  
Labeled in 6 sept.*

SAMPLE(S) VERIFIED BY: INITIAL DATE  5/31/13

CORRECTIVE ACTION REQUIRED:

YES 

SEE BELOW

NO If COC is NOT clear, **STOP** until you get client to authorize/clarify work.

CLIENT NOTIFIED:

YES 

Date/ Time:

NO 

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY:

INITIAL 

DATE

6-4-18

# Laboratory Custody Chronicle

**IAL Case No.**

**E18-04234**

**Client** Hillmann Consulting, LLC

**Project** G6-2368

**Received On** 5/31/2018@17:27

**Department: Volatiles**

			<u>Prep. Date</u>	<u>Analyst</u>	<u>Analysis Date</u>	<u>Analyst</u>
TCL VO + 15	04234-001	Soil	n/a	n/a	6/ 5/18	Xing
"	-002	"	n/a	n/a	6/ 5/18	Xing
"	-003	"	n/a	n/a	6/ 5/18	Xing
"	-004	"	n/a	n/a	6/ 4/18	Mei
"	-005	"	n/a	n/a	6/ 5/18	Xing
"	-006	"	n/a	n/a	6/ 4/18	Mei
"	-007	Aqueous	n/a	n/a	6/ 7/18	Sylvia

**Department: Semivolatiles**

			<u>Prep. Date</u>	<u>Analyst</u>	<u>Analysis Date</u>	<u>Analyst</u>
TCL BN + 15	-001	Soil	6/ 5/18	Frank L.	6/ 5/18	Donnie
"	-002	"	6/ 5/18	Frank L.	6/ 5/18	Donnie
"	-003	"	6/ 5/18	Frank L.	6/ 5/18	Donnie
"	-004	"	6/ 5/18	Frank L.	6/ 5/18	Donnie
"	-005	"	6/ 5/18	Frank L.	6/ 5/18	Donnie
"	-006	"	6/ 5/18	Frank L.	6/ 5/18	Donnie
TCL BN + SIM + 15	-007	Aqueous	6/ 4/18	Frank L.	6/ 5/18	Trudy

**Department: GC**

			<u>Prep. Date</u>	<u>Analyst</u>	<u>Analysis Date</u>	<u>Analyst</u>
TCL PCB	-001	Soil	6/ 4/18	Archimede	6/ 6/18	Latha
"	-002	"	6/ 4/18	Archimede	6/ 6/18	Latha
"	-003	"	6/ 4/18	Archimede	6/ 6/18	Latha
"	-004	"	6/ 4/18	Archimede	6/ 6/18	Latha
"	-005	"	6/ 4/18	Archimede	6/ 6/18	Latha
"	-006	"	6/ 4/18	Archimede	6/ 6/18	Latha
"	-007	Aqueous	6/ 6/18	Archimede	6/ 6/18	Latha
TCL Pesticides	-001	Soil	6/ 4/18	Archimede	6/ 7/18	Iwona
"	-002	"	6/ 4/18	Archimede	6/ 7/18	Iwona
"	-003	"	6/ 4/18	Archimede	6/ 7/18	Iwona
"	-004	"	6/ 4/18	Archimede	6/ 7/18	Iwona
"	-005	"	6/ 4/18	Archimede	6/ 7/18	Iwona
"	-006	"	6/ 4/18	Archimede	6/ 7/18	Iwona
"	-007	Aqueous	6/ 6/18	Archimede	6/ 7/18	Iwona

**Department: Metals**

			<u>Prep. Date</u>	<u>Analyst</u>	<u>Analysis Date</u>	<u>Analyst</u>
TAL Metals	-001	Soil	6/ 4/18	Frank R.	6/ 5/18	Danielle
"	-002	"	6/ 4/18	Frank R.	6/ 5/18	Danielle
"	-003	"	6/ 4/18	Frank R.	6/ 5/18	Danielle
"	-004	"	6/ 4/18	Frank R.	6/ 5/18	Danielle
"	-005	"	6/ 4/18	Frank R.	6/ 5/18	Danielle
"	-006	"	6/ 4/18	Frank R.	6/ 5/18	Danielle
"	-007	Aqueous	6/ 5/18	Frank R.	6/ 6/18	Danielle
"	-008	"	6/ 5/18	Frank R.	6/ 6/18	Danielle

**LAST PAGE OF DOCUMENT**



## **ANALYTICAL DATA REPORT**

Hillmann Consulting, LLC  
1600 Route 22 East  
Union, NJ 07083

Project Name: **G6-2368**  
IAL Case Number: **E18-04347**

These data have been reviewed and accepted by:

A handwritten signature in black ink, appearing to read "Michael H. Leftin".

Michael H. Leftin, Ph.D.  
Laboratory Director

This report shall not be reproduced, except in its entirety, without the written consent of Integrated Analytical Laboratories, LLC. The test results included in this report relate only to the samples analyzed. The results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

---

273 Franklin Road  
Randolph, NJ 07869  
Phone: 973 361 4252  
Fax: 973 989 5288



IAL is a NELAP accredited lab (TNI01284) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).

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# ***Sample Summary***

***IAL Case No.***

**E18-04347**

***Client*** Hillmann Consulting, LLC

***Project*** G6-2368

***Received On*** 6/1/2018@17:05

<b><u>Lab ID</u></b>	<b><u>Client Sample ID</u></b>	<b><u>Depth</u></b>	<b><u>Top/Bottom</u></b>	<b><u>Sampling Time</u></b>	<b><u>Matrix</u></b>	<b><u># of Container</u></b>
04347-001	S7		3	5/31/2018@08:50	Soil	4
04347-002	S8		4	5/31/2018@09:20	Soil	4
04347-003	S9		3	5/31/2018@10:10	Soil	4
04347-004	S10		6	5/31/2018@10:40	Soil	4
04347-005	S11		9	5/31/2018@11:00	Soil	4
04347-006	S12		10	5/31/2018@11:30	Soil	4
04347-007	GW2		7	5/31/2018@09:30	Aqueous	7
04347-008	GW3		6	5/31/2018@11:40	Aqueous	8
04347-009	GW2-FILT		n/a	5/31/2018@09:30	Aqueous	
04347-010	GW3-FILT		n/a	5/31/2018@11:40	Aqueous	

# INTEGRATED ANALYTICAL LABORATORIES, LLC.

## DATA QUALIFIERS AND FLAGS

- B** Indicates the analyte found in the associated method blank and in the sample due to potential lab contamination.
- C** Indicates analyte is a common laboratory contaminant.
- D** Indicates analyte was reported from diluted analysis.
- E** Identifies a compound concentration that exceeds the upper level of the calibration range of the instrument
- J** Indicates an estimated value either when the concentration in the sample is less than the RL or for qualification of TICs
- M** Indicates matrix interference
- N** Presumptive evidence of a compound from the use of GC/MS library search.
- X** Indicates samples analyzed for total and dissolved metals differ at  $\leq 20\%$  RPD.
- Y** Indicates DO depletion in the BOD blank is  $> 0.20\text{ppm}$
- Z** Indicates internal standard failure. Sample results are either biased high or biased low.
- \$** Value outside NJDEP DKQP Limits
- \*** Result outside of QC limits

## PROJECT NOTES

- All results for soils, solids, and sludges are reported on a dry-weight basis except where noted
- All test results and QC are compliant with TNI or other applicable state agency requirements/guidance unless otherwise noted in the case narrative
- The case narrative for this SDG should be consulted to determine any non-conformances
- Any samples with 15-minute or "analyze immediately" holding times (e.g. pH, Dissolved Oxygen, Sulfite, etc.) which are analyzed in the laboratory are considered out of holding time
- IAL is a NELAP/TNI certified laboratory (TNI ID# TNI01284). IAL retains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).
- Certification is not required to perform analyses in the following states: AL, CO, DE, GA, HI, ID, IN, KY, MD, MI, MS, MO, MT, NE, NM, SD and TN. IAL can perform all analyses, except Drinking Water, within its scope of capabilities in these states.

## ACRONYMS AND ABBREVIATIONS

<b>CFU</b>	Colony Forming Unit	<b>ND</b>	Indicates analyte was analyzed for but not detected at MDL or RL (only if MDL is not used)
<b>CCB</b>	Continuing Calibration Blank		<b>NTU</b> Nephelometric Turbidity Units
<b>CCV</b>	Continuing Calibration Verification	<b>ppb</b>	Parts per billion. Reported as $\mu\text{g}/\text{L}$ or $\mu\text{g}/\text{kg}$
<b>DF</b>	Dilution Factor	<b>ppm</b>	Parts per million. Reported as $\text{mg}/\text{L}$ , $\mu\text{g}/\text{mL}$ or $\text{mg}/\text{kg}$
<b>DL</b>	Attached as a suffix to a diluted sample	<b>QC</b>	Quality Control
<b>DUP</b>	Duplicate	<b>% Rec</b>	Percent Recovery
<b>ICB</b>	Initial Calibration Blank	<b>RL</b>	Reporting Limit. The RL is typically determined by the concentration of the lowest standard in the calibration curve
<b>ICC</b>	Initial Calibration Curve		
<b>ICV</b>	Initial Calibration Verification		
<b>kg</b>	kilogram	<b>RPD</b>	Relative Percent Difference
<b>L</b>	Liter	<b>RSD</b>	Relative Standard Deviation
<b>LCS</b>	Laboratory Control Sample	<b>RT</b>	Retention Time
<b>LCSD</b>	Laboratory Control Sample Duplicate	<b>SU</b>	Standard Units
<b>MDL</b>	Method Detection Limit as determined according to 40 CFR Part 136 Appendix B	<b>TIC</b>	Tentatively Identified Compound AKA Library Search Compounds
<b>MF</b>	Membrane Filter	<b>TNI</b>	The NELAC (National Environmental Laboratory Accreditation Council) Institute
<b>mg</b>	milligram ( $1000\text{mg} = 1\text{g}$ )	<b>TNTC</b>	Too numerous to count
<b><math>\mu\text{g}</math></b>	microgram ( $1000\mu\text{g} = 1\text{mg}$ )	*	When attached to a compound name, indicates this analyte was analyzed by Method SW-846 8270 SIM
<b>ml</b>	milliliter ( $1000\text{ml} = 1\text{L}$ )		
<b><math>\mu\text{l}</math></b>	microliter ( $1000\mu\text{l} = 1\text{ml}$ )	^	When attached to a compound name, indicates this analyte was analyzed by Method SW-846 8011 or EPA 504.1
<b><math>\mu\text{mhos}</math></b>	Conductivity units - resistance expressed in ohms		
<b>MPN</b>	Most Probable Number		
<b>MS</b>	Matrix Spike	<	Less than; In conjunction with a numerical value, indicates a concentration less than the RL or MDL
<b>MSD</b>	Matrix Spike Duplicate		
<b>NA</b>	Not applicable		
<b>NC</b>	Not calculated		

**SAMPLE DELIVERY GROUP CASE NARRATIVE**  
**(Conformance / Non-Conformance Summary)**

INTEGRATED ANALYTICAL LABORATORIES, LLC  
SAMPLE DELIVERY GROUP CASE NARRATIVE

**SDG#: E18-04347**

Integrated Analytical Laboratories, LLC. received ten (10) samples\*\* from Hillmann Consulting, LLC (IAL SDG# **E18-04347**, Project: G6-2368) on June 1, 2018 for the analysis of :

- ( 8 ) TCL VO + 15
- ( 6 ) TCL BN + 15
- ( 2 ) TCL BN + SIM + 15
- ( 8 ) TCL PCB
- ( 8 ) TCL Pesticides
- ( 10 ) TAL Metals

\*\*Number of samples listed above may be greater than what is listed on the chain of custody. Any samples that require in-house filtration or splitting will be counted as separate samples.

Samples were received in good condition with documentation in order.  
Cooler temperature was acceptable at  $4 \pm 2^{\circ}\text{C}$

<b>Volatiles By SW 8260C</b>		<b>Batch: 180608</b>	<b>Matrix: Aqueous</b>
------------------------------	--	----------------------	------------------------

- QC**
- Calibration curve met QC criteria.
  - Internal standards recovery met QC criteria.
  - Surrogate percent recovery met QC criteria.
  - Method blank met QC criteria.
  - LCS percent recovery met QC criteria.
  - MS/MSD RPD met QC criteria.
  - MS/MSD percent recovery met QC criteria.
- E18-04347**
- All samples were analyzed within holding time.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E18-04347-007	1	NA
E18-04347-008	1	NA

<b>Volatiles By SW 8260C</b>		<b>Batch: F180605-01, F180605-02</b>	<b>Matrix: Soil</b>
------------------------------	--	--------------------------------------	---------------------

- QC**
- Calibration curve met QC criteria.
  - Internal standards recovery met QC criteria.
  - Surrogate percent recovery met QC criteria.
  - Method blank met QC criteria.
  - LCS Percent Recovery met QC criteria.
  - MS/MSD RPD met QC criteria.
  - MS/MSD percent recovery met QC criteria.
- E18-04347**
- All samples were analyzed within holding time.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E18-04347-001	1	NA
E18-04347-002	1	NA
E18-04347-003	1	NA
E18-04347-004	1	NA
E18-04347-005	1	NA
E18-04347-006	1	NA

**INTEGRATED ANALYTICAL LABORATORIES, LLC**  
**SAMPLE DELIVERY GROUP CASE NARRATIVE**

**SDG#: E18-04347**

<b>Semivolatiles By SW 8270D</b>		<b>Batch: 180605-03</b>	<b>Matrix: Soil</b>
----------------------------------	--	-------------------------	---------------------

- |                  |  |
|------------------|--|
| <b>QC</b>        | <ul style="list-style-type: none"> <li>- Calibration curve met QC criteria.</li> <li>- Internal standard recovery met QC criteria.</li> <li>- Surrogate recovery met QC criteria.</li> <li>- Method blank met QC criteria.</li> <li>- LCS percent recovery met QC criteria. NJDEP DKQP criteria not met.</li> <li>- MS/MSD RPD met QC criteria. NJDEP DKQP criteria not met.</li> <li>- MS/MSD percent recovery met QC criteria. NJDEP DKQP criteria not met.</li> </ul> |
| <b>E18-04347</b> | <ul style="list-style-type: none"> <li>- Extraction holding time met requirement for each sample.</li> <li>- Analysis holding time met requirement for each sample.</li> </ul>   |

Dilution Summary:

Sample ID	DF(s)	Dilution For
E18-04347-001	2	Matrix Interference.
E18-04347-002	1	NA
E18-04347-003	1	NA
E18-04347-004	1	NA
E18-04347-005	1	NA
E18-04347-006	1	NA

The result reported for 1,2-Diphenylhydrazine is also representative of Azobenzene. 1,2-Diphenylhydrazine rapidly decomposes to Azobenzene when exposed to water or heat. Analytical results from analysis of 1,2-Diphenylhydrazine will be directly compared to the applicable criteria for Azobenzene and/or 1,2-Diphenylhydrazine.

<b>Semivolatiles By SW 8270D SIM</b>		<b>Batch: 180607-03</b>	<b>Matrix: Aqueous</b>
--------------------------------------	--	-------------------------	------------------------

- |                  |  |
|------------------|--|
| <b>QC</b>        | <ul style="list-style-type: none"> <li>- Calibration curve met QC criteria.</li> <li>- Internal standard recovery met QC criteria.</li> <li>- Surrogate recovery met QC criteria.</li> <li>- Method blank met QC criteria.</li> <li>- LCS percent recovery met QC criteria. NJDEP DKQP criteria not met.</li> <li>- MS/MSD RPD met QC criteria.</li> <li>- MS/MSD percent recovery met QC criteria. NJDEP DKQP criteria not met.</li> </ul>  |
| <b>E18-04347</b> | <ul style="list-style-type: none"> <li>- Extraction holding time met requirement for each sample.</li> <li>- Analysis holding time met requirement for each sample.</li> <li>- Sample(s) used for aqueous Semivolatiles analyses contained varying levels of sediment. Precautions were taken to take an aliquot representative of the sample. However, due to the nature of aqueous samples containing sediment, reproduction of results may prove difficult. The rough amount of sediment present in the samples is as follows: 04347-007:2%; 04347-008:1%.</li> </ul> |

Dilution Summary:

Sample ID	DF(s)	Dilution For
E18-04347-007	1	NA
E18-04347-008	1	NA

The result reported for 1,2-Diphenylhydrazine is also representative of Azobenzene. 1,2-Diphenylhydrazine rapidly decomposes to Azobenzene when exposed to water or heat. Analytical results from analysis of 1,2-Diphenylhydrazine will be directly compared to the applicable criteria for Azobenzene and/or 1,2-Diphenylhydrazine.

**INTEGRATED ANALYTICAL LABORATORIES, LLC**  
**SAMPLE DELIVERY GROUP CASE NARRATIVE**

**SDG#: E18-04347**

<b>PCB By SW 8082A</b>	<b>Batch: 180606-02</b>	<b>Matrix: Aqueous</b>
------------------------	-------------------------	------------------------

- |                  |  |
|------------------|--|
| <b>QC</b>        | <ul style="list-style-type: none"> <li>- Calibration curve met QC criteria.</li> <li>- Surrogate percent recovery met QC criteria.</li> <li>- Method blank met QC criteria.</li> <li>- LCS Percent Recovery met QC criteria.</li> <li>- RPD between MS/MSD met QC criteria.</li> <li>- MS/MSD Percent Recovery met QC criteria.</li> <li>- The following samples were cleaned up using method 3660B to remove sulfur: 007, 008.</li> </ul> |
| <b>E18-04347</b> | <ul style="list-style-type: none"> <li>- All samples were extracted within holding time.</li> <li>- All samples were analyzed within holding time.</li> <li>- Retention Time Shift met QC criteria.</li> </ul>   |

Dilution Summary:

Sample ID	DF(s)	Dilution For
E18-04347-007	1	NA
E18-04347-008	1	NA

<b>PCB By SW 8082A</b>	<b>Batch: 180606-08</b>	<b>Matrix: Soil</b>
------------------------	-------------------------	---------------------

- |                  |  |
|------------------|--|
| <b>QC</b>        | <ul style="list-style-type: none"> <li>- Calibration curve met QC criteria.</li> <li>- Surrogate percent recovery did not meet QC criteria for sample 002 ,due to matrix interference. NJDEP DKQP criteria not met.</li> <li>- Method blank met QC criteria.</li> <li>- LCS Percent Recovery met QC criteria.</li> <li>- RPD between MS/MSD met QC criteria.</li> <li>- MS/MSD Percent Recovery met QC criteria.</li> <li>- The following samples were cleaned up using method 3665A: 001, 002, 003, 004, 005, 006.</li> <li>- The following samples were cleaned up using method 3660B to remove sulfur: 001, 002, 003, 004, 005, 006.</li> </ul> |
| <b>E18-04347</b> | <ul style="list-style-type: none"> <li>- All samples were extracted within holding time.</li> <li>- All samples were analyzed within holding time.</li> <li>- Retention Time Shift met QC criteria.</li> </ul>   |

Dilution Summary:

Sample ID	DF(s)	Dilution For
E18-04347-001	5	Matrix Interference.
E18-04347-002	5	Matrix Interference.
E18-04347-003	5	Matrix Interference.
E18-04347-004	5	Matrix Interference.
E18-04347-005	1	NA
E18-04347-006	1	NA

**INTEGRATED ANALYTICAL LABORATORIES, LLC**  
**SAMPLE DELIVERY GROUP CASE NARRATIVE**

**SDG#: E18-04347**

<b>Pesticides By SW 8081B</b>		<b>Batch: 180606-02</b>	<b>Matrix: Aqueous</b>																					
<b>QC</b>	<ul style="list-style-type: none"> <li>- Calibration curve met QC criteria.</li> <li>- Surrogate percent recovery met QC criteria.</li> <li>- Method blank met QC criteria.</li> <li>- LCS Percent Recovery met QC criteria.</li> <li>- RPD between MS/MSD met QC criteria.</li> <li>- MS/MSD Percent Recovery met QC criteria.</li> <li>- The following samples were cleaned up using method 3660B to remove sulfur: 007, 008.</li> </ul>																							
<b>E18-04347</b>	<ul style="list-style-type: none"> <li>- All samples were extracted within holding time.</li> <li>- All samples were analyzed within holding time.</li> <li>- Retention Time Shift met QC criteria.</li> </ul> <p>Dilution Summary:</p> <table> <thead> <tr> <th>Sample ID</th> <th>DF(s)</th> <th>Dilution For</th> </tr> </thead> <tbody> <tr> <td>E18-04347-007</td> <td>1</td> <td>NA</td> </tr> <tr> <td>E18-04347-008</td> <td>1</td> <td>NA</td> </tr> </tbody> </table>			Sample ID	DF(s)	Dilution For	E18-04347-007	1	NA	E18-04347-008	1	NA												
Sample ID	DF(s)	Dilution For																						
E18-04347-007	1	NA																						
E18-04347-008	1	NA																						
<b>Pesticides By SW 8081B</b>		<b>Batch: 180606-08</b>	<b>Matrix: Soil</b>																					
<b>QC</b>	<ul style="list-style-type: none"> <li>- Calibration curve met QC criteria.</li> <li>- Surrogate percent recovery met QC criteria.</li> <li>- Method blank met QC criteria.</li> <li>- LCS Percent Recovery met QC criteria.</li> <li>- RPD between MS/MSD met QC criteria.</li> <li>- MS/MSD Percent Recovery met QC criteria.</li> <li>- The following samples were cleaned up using method 3660B to remove sulfur: 001, 002, 003, 004, 005, 006.</li> </ul>																							
<b>E18-04347</b>	<ul style="list-style-type: none"> <li>- All samples were extracted within holding time.</li> <li>- All samples were analyzed within holding time.</li> <li>- Retention Time Shift met QC criteria.</li> </ul> <p>Dilution Summary:</p> <table> <thead> <tr> <th>Sample ID</th> <th>DF(s)</th> <th>Dilution For</th> </tr> </thead> <tbody> <tr> <td>E18-04347-001</td> <td>5</td> <td>Matrix Interference.</td> </tr> <tr> <td>E18-04347-002</td> <td>10</td> <td>Matrix Interference.</td> </tr> <tr> <td>E18-04347-003</td> <td>5</td> <td>Matrix Interference.</td> </tr> <tr> <td>E18-04347-004</td> <td>5</td> <td>Matrix Interference.</td> </tr> <tr> <td>E18-04347-005</td> <td>1</td> <td>NA</td> </tr> <tr> <td>E18-04347-006</td> <td>1</td> <td>NA</td> </tr> </tbody> </table>			Sample ID	DF(s)	Dilution For	E18-04347-001	5	Matrix Interference.	E18-04347-002	10	Matrix Interference.	E18-04347-003	5	Matrix Interference.	E18-04347-004	5	Matrix Interference.	E18-04347-005	1	NA	E18-04347-006	1	NA
Sample ID	DF(s)	Dilution For																						
E18-04347-001	5	Matrix Interference.																						
E18-04347-002	10	Matrix Interference.																						
E18-04347-003	5	Matrix Interference.																						
E18-04347-004	5	Matrix Interference.																						
E18-04347-005	1	NA																						
E18-04347-006	1	NA																						

INTEGRATED ANALYTICAL LABORATORIES, LLC  
SAMPLE DELIVERY GROUP CASE NARRATIVE

**SDG#: E18-04347**

<b>Metals By SW 6020B/7470A</b>	<b>Batch: A180605-01 (307A)</b>	<b>Matrix: Aqueous</b>
---------------------------------	---------------------------------	------------------------

- QC**
- Calibration Curve Linearity met QC criteria.
  - Internal Standard Recovery met QC criteria.
  - Method Blank met QC criteria.
  - LCS Percent Recovery met QC criteria.
  - MS Percent Recovery met QC criteria.
  - RPD between Sample/Duplicate met QC criteria.
  - Serial Dilution met QC criteria.

- E18-04347**
- Digestion Holding Time met requirement for each sample.
  - Analysis Holding Time met requirement for each sample.
  - 04347-007: 1%; 04347-008: 1%;

Dilution Summary:

Sample ID	DF(s)	Dilution For
E18-04347-007	1	NA
E18-04347-008	1	NA
E18-04347-009	1	NA
E18-04347-010	1	NA

<b>Metals By SW 6020B/7471B</b>	<b>Batch: S180605-01 (306A)</b>	<b>Matrix: Soil</b>
---------------------------------	---------------------------------	---------------------

- QC**
- Calibration Curve Linearity met QC criteria.
  - Internal Standard Recovery met QC criteria.
  - Method Blank met QC criteria.
  - LCS Percent Recovery met QC criteria.
  - MS Percent Recovery met QC criteria.
  - RPD between Sample/Duplicate met QC criteria.
  - Serial Dilution met QC criteria.

- E18-04347**
- Digestion Holding Time met requirement for each sample.
  - Analysis Holding Time met requirement for each sample.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E18-04347-001	1	NA
E18-04347-002	1	NA
E18-04347-003	1	NA
E18-04347-004	1	NA
E18-04347-005	1	NA
E18-04347-006	1	NA

A review of the QA/QC measures for the analysis of the sample(s) contained in this report has been performed by:

  
Reviewed by \_\_\_\_\_

6/11/2018

Date

## **RESULTS SUMMARY REPORT**

**INTEGRATED ANALYTICAL LABORATORIES, LLC.**

**SUMMARY REPORT**  
**Client: Hillmann Consulting, LLC**  
**Project: G6-2368**  
**Lab Case No.: E18-04347**

PARAMETER(Units)	Lab ID:	04347-007			04347-008			04347-009			04347-010		
	Client ID:	GW2	7	Aqueous	GW3	6	Aqueous	GW2-FILT	Aqueous	GW3-FILT	Aqueous	5/31/18	
Sampled Date	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	
<b>Volatiles (Units)</b>	<i>(ug/L)</i>			<i>(ug/L)</i>			<i>(ug/L)</i>			<i>(ug/L)</i>			
cis-1,2-Dichloroethene	0.988	0.451	ND	0.451	~	~	~	~	~	~	~	~	
<b>TOTAL VO's:</b>	0.988		ND		~	~	~	~	~	~	~	~	
<b>TOTAL TIC's:</b>	ND		ND		~	~	~	~	~	~	~	~	
<b>TOTAL VO's &amp; TIC's:</b>	0.988		ND		~	~	~	~	~	~	~	~	
<b>Semivolatiles - BN (Units)</b>	<i>(ug/L)</i>			<i>(ug/L)</i>			<i>(ug/L)</i>			<i>(ug/L)</i>			
<b>TOTAL BN'S:</b>	ND		ND		~	~	~	~	~	~	~	~	
<b>TOTAL TIC's:</b>	ND		ND		~	~	~	~	~	~	~	~	
<b>TOTAL BN'S &amp; TIC's:</b>	ND		ND		~	~	~	~	~	~	~	~	
<b>PCB's (Units)</b>	<i>(ug/L)</i>			<i>(ug/L)</i>			<i>(ug/L)</i>			<i>(ug/L)</i>			
Aroclor-1016	ND	0.020	ND	0.020	~	~	~	~	~	~	~	~	
Aroclor-1221	ND	0.020	ND	0.020	~	~	~	~	~	~	~	~	
Aroclor-1232	ND	0.020	ND	0.020	~	~	~	~	~	~	~	~	
Aroclor-1242	ND	0.020	ND	0.020	~	~	~	~	~	~	~	~	
Aroclor-1248	ND	0.020	ND	0.020	~	~	~	~	~	~	~	~	
Aroclor-1254	ND	0.020	ND	0.020	~	~	~	~	~	~	~	~	
Aroclor-1260	ND	0.020	ND	0.020	~	~	~	~	~	~	~	~	
Aroclor-1262	ND	0.020	ND	0.020	~	~	~	~	~	~	~	~	
Aroclor-1268	ND	0.020	ND	0.020	~	~	~	~	~	~	~	~	
PCBs	ND	0.020	ND	0.020	~	~	~	~	~	~	~	~	

~ = Sample not analyzed for

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

D = The compound was reported from the Diluted analysis

All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.

N = Presumptive evidence of a compound from the use of GC/MS library search.

**INTEGRATED ANALYTICAL LABORATORIES, LLC.**

**SUMMARY REPORT**  
**Client: Hillmann Consulting, LLC**  
**Project: G6-2368**  
**Lab Case No.: E18-04347**

Lab ID:	04347-007			04347-008			04347-009			04347-010		
Client ID:	GW2			GW3			GW2-FILT			GW3-FILT		
Depth:	7			6								
Matrix:	Aqueous			Aqueous			Aqueous			Aqueous		
Sampled Date	5/31/18			5/31/18			5/31/18			5/31/18		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Pesticides (Units)	(ug/L)			(ug/L)			(ug/L)			(ug/L)		
alpha-BHC	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
beta-BHC	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
gamma-BHC (Lindane)	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
delta-BHC	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
Heptachlor	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
Aldrin	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
Heptachlor epoxide	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
Endosulfan I	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
4,4'-DDE	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
Dieldrin	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
Endrin	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
Endosulfan II	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
4,4'-DDD	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
Endrin aldehyde	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
Endosulfan sulfate	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
4,4'-DDT	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
Endrin ketone	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
Methoxychlor	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
alpha-Chlordane	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
gamma-Chlordane	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
Toxaphene	ND	0.060	ND	0.060	~	~	~	~	~	~	~	~
Endosulfan (I and II)	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
Chlordane (alpha and gamma)	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~

~ = Sample not analyzed for

ND = Analyzed for but Not Detected at the MDL

**INTEGRATED ANALYTICAL LABORATORIES, LLC.**

**SUMMARY REPORT**  
**Client: Hillmann Consulting, LLC**  
**Project: G6-2368**  
**Lab Case No.: E18-04347**

	Lab ID: Client ID: Depth: Matrix: Sampled Date	04347-007 GW2 7 Aqueous 5/31/18			04347-008 GW3 6 Aqueous 5/31/18			04347-009 GW2-FILT			04347-010 GW3-FILT		
PARAMETER(Units)		Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
<b>Metals (Units)</b>		<i>(ug/L)</i>			<i>(ug/L)</i>			<i>(ug/L)</i>			<i>(ug/L)</i>		
Aluminum		570		8.00	234		8.00	42.6		8.00	ND		8.00
Antimony		ND		1.20	ND		1.20	ND		1.20	ND		1.20
Arsenic		3.36		0.600	0.995	J	0.600	3.22		0.600	ND		0.600
Barium		7.62		1.20	17.5		1.20	4.12		1.20	15.2		1.20
Beryllium		ND		0.320	ND		0.320	ND		0.320	ND		0.320
Cadmium		ND		1.00	ND		1.00	ND		1.00	ND		1.00
Calcium		11500		60.0	17400		60.0	10600		60.0	17400	X	60.0
Chromium		8.24		1.00	7.38		1.00	2.56		1.00	ND		1.00
Cobalt		0.796	J	0.600	ND		0.600	ND		0.600	ND		0.600
Copper		ND		1.00	ND		1.00	ND		1.00	ND		1.00
Iron		1850		60.0	1250		60.0	128	J	60.0	ND		60.0
Lead		10.5		1.20	2.52		1.20	ND		1.20	ND		1.20
Magnesium		1580		60.0	11000		60.0	1560		60.0	12300	X	60.0
Manganese		19.7		1.40	31.9		1.40	18.2		1.40	29.5		1.40
Mercury		ND		0.200	ND		0.200	ND		0.200	ND		0.200
Nickel		5.23		1.20	1.34	J	1.20	3.30		1.20	1.31	J	1.20
Potassium		4240		80.0	9240		80.0	4210		80.0	9040		80.0
Selenium		ND		6.00	ND		6.00	ND		6.00	ND		6.00
Silver		ND		1.20	ND		1.20	ND		1.20	ND		1.20
Sodium		9890		80.0	136000		80.0	9380		80.0	141000	X	80.0
Thallium		ND		1.20	ND		1.20	ND		1.20	ND		1.20
Vanadium		5.13		0.600	1.60	J	0.600	4.38		0.600	ND		0.600
Zinc		42.5		8.00	46.3		8.00	15.5	J	8.00	28.7		8.00

X = Samples analyzed for total and dissolved metals differ at <= 20% RPD.

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

**INTEGRATED ANALYTICAL LABORATORIES, LLC.**

**SUMMARY REPORT**

Client: Hillmann Consulting, LLC

Project: G6-2368

Lab Case No.: E18-04347

Lab ID:	04347-001	04347-002	04347-003	04347-004					
Client ID:	S7	S8	S9	S10					
Depth:	3	4	3	6					
Matrix:	Soil	Soil	Soil	Soil					
Sampled Date	5/31/18	5/31/18	5/31/18	5/31/18					
PARAMETER(Units)	Conc	Q	MDL	Conc					
Volatiles (Units)	(mg/Kg)			(mg/Kg)					
Acetone	ND	0.0012	ND	0.00135	0.014	J 0.0018	0.013	0.00124	
Tetrachloroethene	ND	0.000315	0.00185	0.000353	ND	0.000471	ND	0.000325	
Ethylbenzene	ND	0.0003	ND	0.000337	ND	0.000449	0.00449	0.00031	
Total Xylenes	ND	0.000533	ND	0.000598	ND	0.000797	0.050	0.00055	
Isopropylbenzene	ND	0.000244	ND	0.000273	ND	0.000364	0.00226	0.000251	
1,2,3-Trichlorobenzene	ND	0.000592	ND	0.000664	ND	0.000885	0.000907	J 0.000611	
<b>TOTAL VO's:</b>	ND	0.00185		0.014	J		0.071	J	
<b>TOTAL TIC's:</b>	ND	ND		ND			2.01	JN	
<b>TOTAL VO's &amp; TIC's:</b>	ND	0.00185		0.014	J		2.08	JN	
Semivolatiles - BN (Units)	(mg/Kg)			(mg/Kg)			(mg/Kg)		
Phenanthrene	0.083	D	0.063	0.074	0.031	ND	0.032	ND	0.035
Fluoranthene	0.285	D	0.058	0.108	0.028	ND	0.029	ND	0.032
Pyrene	0.556	D	0.057	0.113	0.028	ND	0.029	ND	0.032
Benzo[a]anthracene	0.420	D	0.060	0.055	0.029	ND	0.030	ND	0.033
Chrysene	0.456	D	0.060	0.072	0.029	ND	0.030	ND	0.033
Benzo[b]fluoranthene	0.224	D	0.056	0.045	0.027	ND	0.028	ND	0.031
Benzo[k]fluoranthene	0.193	D	0.058	0.035	0.028	ND	0.029	ND	0.032
Benzo[a]pyrene	0.305	D	0.057	0.044	0.027	ND	0.029	ND	0.031
Indeno[1,2,3-cd]pyrene	0.194	D	0.057	0.031	J 0.028	ND	0.029	ND	0.032
Dibenz[a,h]anthracene	0.101	D	0.068	ND	0.033	ND	0.034	ND	0.038
Benzo[g,h,i]perylene	0.302	D	0.063	0.037	0.030	ND	0.032	ND	0.035
<b>TOTAL BN'S:</b>	3.12	D		0.614	J	ND		ND	
<b>TOTAL TIC's:</b>	0.395	DJN		0.212	J	ND		ND	
<b>TOTAL BN'S &amp; TIC's:</b>	3.52	DJN		0.826	J	ND		ND	
PCB's (Units)	(mg/Kg)			(mg/Kg)			(mg/Kg)		
Aroclor-1016	ND	0.00349	ND	0.0034	ND	0.00346	ND	0.0038	
Aroclor-1221	ND	0.00349	ND	0.0034	ND	0.00346	ND	0.0038	
Aroclor-1232	ND	0.00349	ND	0.0034	ND	0.00346	ND	0.0038	
Aroclor-1242	ND	0.00349	ND	0.0034	ND	0.00346	ND	0.0038	
Aroclor-1248	ND	0.00349	ND	0.0034	ND	0.00346	ND	0.0038	
Aroclor-1254	ND	0.00349	ND	0.0034	ND	0.00346	ND	0.0038	
Aroclor-1260	ND	0.00349	ND	0.0034	ND	0.00346	ND	0.0038	
Aroclor-1262	ND	0.00349	ND	0.0034	ND	0.00346	ND	0.0038	
Aroclor-1268	ND	0.00349	ND	0.0034	ND	0.00346	ND	0.0038	
PCBs	ND	0.00349	ND	0.0034	ND	0.00346	ND	0.0038	

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

D = The compound was reported from the Diluted analysis

All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.

N = Presumptive evidence of a compound from the use of GC/MS library search.

**INTEGRATED ANALYTICAL LABORATORIES, LLC.**

**SUMMARY REPORT**  
**Client: Hillmann Consulting, LLC**  
**Project: G6-2368**  
**Lab Case No.: E18-04347**

PARAMETER(Units)	Lab ID: Client ID: Depth: Matrix: Sampled Date	04347-001			04347-002			04347-003			04347-004		
		Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Pesticides (Units)		(mg/Kg)			(mg/Kg)			(mg/Kg)			(mg/Kg)		
alpha-BHC		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			
beta-BHC		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			
gamma-BHC (Lindane)		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			
delta-BHC		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			
Heptachlor		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			
Aldrin		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			
Heptachlor epoxide		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			
Endosulfan I		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			
4,4'-DDE		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			
Dieldrin		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			
Endrin		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			
Endosulfan II		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			
4,4'-DDD		ND	0.000873	0.00731 D	0.0017	ND	0.000865	ND		0.000949			
Endrin aldehyde		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			
Endosulfan sulfate		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			
4,4'-DDT		ND	0.000873	0.00327 DJ	0.0017	ND	0.000865	ND		0.000949			
Endrin ketone		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			
Methoxychlor		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			
alpha-Chlordane		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			
gamma-Chlordane		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			
Toxaphene		ND	0.011	ND	0.020	ND	0.010	ND		0.011			
Endosulfan (I and II)		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			
Chlordane (alpha and gamma)		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			

~ = Sample not analyzed for

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

D = The compound was reported from the Diluted analysis

All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.

N = Presumptive evidence of a compound from the use of GC/MS library search.

**INTEGRATED ANALYTICAL LABORATORIES, LLC.**

**SUMMARY REPORT**  
**Client: Hillmann Consulting, LLC**  
**Project: G6-2368**  
**Lab Case No.: E18-04347**

PARAMETER(Units)	Lab ID: 04347-001			04347-002			04347-003			04347-004						
	Client ID:	S7	Depth:	3	Matrix:	Soil	Sampled Date	5/31/18	Conc	Q	MDL	Conc	Q	MDL	Conc	Q
<b>Metals (Units)</b>	<i>(mg/Kg)</i>			<i>(mg/Kg)</i>			<i>(mg/Kg)</i>			<i>(mg/Kg)</i>						
Aluminum	2450	2.26		1450	2.22		1920	2.20		843		2.42				
Antimony	0.921	0.226		0.543	J	0.222	0.551	0.220		ND		0.242				
Arsenic	2.15	0.170		1.61	0.167		1.58	0.165		0.414	J	0.181				
Barium	86.6	0.283		54.3	0.278		17.1	0.275		11.5		0.302				
Beryllium	ND	0.170		ND	0.167		ND	0.165		ND		0.181				
Cadmium	ND	0.340		ND	0.334		ND	0.330		ND		0.363				
Calcium	1960	17.0		3470	16.7		11500	16.5		2030		18.1				
Chromium	8.33	0.283		6.15	0.278		5.75	0.275		5.24		0.302				
Cobalt	2.53	0.170		1.20	0.167		2.15	0.165		0.629		0.181				
Copper	14.0	0.396		20.1	0.389		16.5	0.385		1.64		0.423				
Iron	5100	17.0		4430	16.7		5800	16.5		1860		18.1				
Lead	193	0.283		97.8	0.278		23.3	0.275		11.0		0.302				
Magnesium	693	17.0		969	16.7		3910	16.5		396		18.1				
Manganese	94.8	0.396		64.5	0.389		63.0	0.385		42.6		0.423				
Mercury	0.260	0.010		0.072	9.55		0.020	J	9.73	0.050		1.03				
Nickel	6.78	0.396		5.59	0.389		4.33	0.385		1.73		0.423				
Potassium	347	22.6		188	22.2		315	22.0		178		24.2				
Selenium	1.84	J	1.70	ND	1.67		ND	1.65		ND		1.81				
Silver	0.362	J	0.340	ND	0.334		ND	0.330		ND		0.363				
Sodium	122	22.6		57.9	22.2		160	22.0		35.5	J	24.2				
Thallium	ND	0.283		ND	0.278		ND	0.275		ND		0.302				
Vanadium	10.6	0.283		7.87	0.278		18.6	0.275		5.77		0.302				
Zinc	134	1.13		81.4	1.11		27.8	1.10		8.04		1.21				

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

**INTEGRATED ANALYTICAL LABORATORIES, LLC.**

**SUMMARY REPORT**

Client: Hillmann Consulting, LLC

Project: G6-2368

Lab Case No.: E18-04347

PARAMETER(Units)	Lab ID: 04347-005			04347-006		
	Client ID:	S11	MDL	Client ID:	S12	MDL
Sampled Date	5/31/18			5/31/18		
<b>Volatiles (Units)</b>	<i>(mg/Kg)</i>			<i>(mg/Kg)</i>		
Acetone	ND	0.0013	0.011 J	0.00134		
Carbon disulfide	ND	0.000412	0.00145	0.000425		
<b>TOTAL VO's:</b>	ND		0.012 J			
<b>TOTAL TIC's:</b>	ND		ND			
<b>TOTAL VO's &amp; TIC's:</b>	ND		0.012 J			
<b>Semivolatiles - BN (Units)</b>	<i>(mg/Kg)</i>			<i>(mg/Kg)</i>		
<b>TOTAL BN'S:</b>	ND		ND			
<b>TOTAL TIC's:</b>	ND		ND			
<b>TOTAL BN'S &amp; TIC's:</b>	ND		ND			
<b>PCB's (Units)</b>	<i>(mg/Kg)</i>			<i>(mg/Kg)</i>		
Aroclor-1016	ND	0.0008	ND	0.000784		
Aroclor-1221	ND	0.0008	ND	0.000784		
Aroclor-1232	ND	0.0008	ND	0.000784		
Aroclor-1242	ND	0.0008	ND	0.000784		
Aroclor-1248	ND	0.0008	ND	0.000784		
Aroclor-1254	ND	0.0008	ND	0.000784		
Aroclor-1260	ND	0.0008	ND	0.000784		
Aroclor-1262	ND	0.0008	ND	0.000784		
Aroclor-1268	ND	0.0008	ND	0.000784		
PCBs	ND	0.0008	ND	0.000784		

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

D = The compound was reported from the Diluted analysis

All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.

**INTEGRATED ANALYTICAL LABORATORIES, LLC.**

**SUMMARY REPORT**  
**Client: Hillmann Consulting, LLC**  
**Project: G6-2368**  
**Lab Case No.: E18-04347**

PARAMETER(Units)	Lab ID: 04347-005			04347-006		
	Client ID:	S11	Depth:	9	Matrix:	Soil
	Sampled Date 5/31/18			5/31/18		
	Conc	Q	MDL	Conc	Q	MDL
<b>Pesticides (Units)</b>		<i>(mg/Kg)</i>			<i>(mg/Kg)</i>	
alpha-BHC	ND	0.0002	ND	0.000196		
beta-BHC	ND	0.0002	ND	0.000196		
gamma-BHC (Lindane)	ND	0.0002	ND	0.000196		
delta-BHC	ND	0.0002	ND	0.000196		
Heptachlor	ND	0.0002	ND	0.000196		
Aldrin	ND	0.0002	ND	0.000196		
Heptachlor epoxide	ND	0.0002	ND	0.000196		
Endosulfan I	ND	0.0002	ND	0.000196		
4,4'-DDE	ND	0.0002	ND	0.000196		
Dieldrin	ND	0.0002	ND	0.000196		
Endrin	ND	0.0002	ND	0.000196		
Endosulfan II	ND	0.0002	ND	0.000196		
4,4'-DDD	ND	0.0002	ND	0.000196		
Endrin aldehyde	ND	0.0002	ND	0.000196		
Endosulfan sulfate	ND	0.0002	ND	0.000196		
4,4'-DDT	ND	0.0002	ND	0.000196		
Endrin ketone	ND	0.0002	ND	0.000196		
Methoxychlor	ND	0.0002	ND	0.000196		
alpha-Chlordane	ND	0.0002	ND	0.000196		
gamma-Chlordane	ND	0.0002	ND	0.000196		
Toxaphene	ND	0.0024	ND	0.00235		
Endosulfan (I and II)	ND	0.0002	ND	0.000196		
Chlordane (alpha and gamma)	ND	0.0002	ND	0.000196		

ND = Analyzed for but Not Detected at the MDL

**INTEGRATED ANALYTICAL LABORATORIES, LLC.**

**SUMMARY REPORT**

**Client: Hillmann Consulting, LLC**

**Project: G6-2368**

**Lab Case No.: E18-04347**

<b>PARAMETER(Units)</b>	<b>Lab ID:</b>	04347-005			04347-006		
	<b>Client ID:</b>	S11			S12		
	<b>Depth:</b>	9			10		
	<b>Matrix:</b>	Soil			Soil		
	<b>Sampled Date</b>	5/31/18			5/31/18		
		Conc	Q	MDL	Conc	Q	MDL
<b>Metals (Units)</b>		<i>(mg/Kg)</i>			<i>(mg/Kg)</i>		
Aluminum		712		2.56	492		2.49
Antimony		ND		0.256	ND		0.249
Arsenic		0.588	J	0.192	0.197	J	0.187
Barium		4.19		0.320	1.99		0.311
Beryllium		ND		0.192	ND		0.187
Cadmium		ND		0.384	ND		0.373
Calcium		612		19.2	98.0		18.7
Chromium		4.33		0.320	1.72		0.311
Cobalt		0.483	J	0.192	0.279	J	0.187
Copper		ND		0.449	ND		0.436
Iron		1740		19.2	766		18.7
Lead		1.75		0.320	0.546	J	0.311
Magnesium		335		19.2	218		18.7
Manganese		30.7		0.449	6.90		0.436
Mercury		ND		1.13	ND		0.011
Nickel		1.61		0.449	1.11		0.436
Potassium		153		25.6	136		24.9
Selenium		ND		1.92	ND		1.87
Silver		ND		0.384	ND		0.373
Sodium		45.6	J	25.6	140		24.9
Thallium		ND		0.320	ND		0.311
Vanadium		3.97		0.320	1.24		0.311
Zinc		9.41		1.28	13.7		1.24

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

## **ANALYTICAL RESULTS**

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: E18-04347-001  
Client ID: S7/3  
Date Received: 06/01/2018  
Date Analyzed: 06/06/2018  
Data file: F6026.D 06/6/18 00:56

GC/MS Column: DB-624  
Sample wt/vol: 4.3g  
Matrix-Units: Soil-mg/Kg  
% Moisture: 5.60  
Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND		0.00123	0.000289
Chloromethane	ND		0.00123	0.000228
Vinyl chloride	ND		0.00123	0.000228
Bromomethane	ND		0.00123	0.000367
Chloroethane	ND		0.00123	0.000326
Trichlorofluoromethane	ND		0.00123	0.000231
1,1-Dichloroethene	ND		0.00123	0.000464
Acetone	ND		0.012	0.0012
Carbon disulfide	ND		0.00123	0.000381
Methylene chloride	ND		0.00246	0.00245
trans-1,2-Dichloroethene	ND		0.00123	0.000357
Methyl tert-butyl ether (MTBE)	ND		0.00123	0.000237
1,1-Dichloroethane	ND		0.00123	0.000239
cis-1,2-Dichloroethene	ND		0.00123	0.000262
2-Butanone (MEK)	ND		0.00246	0.000605
Bromochloromethane	ND		0.00123	0.000342
Chloroform	ND		0.00123	0.000258
1,1,1-Trichloroethane	ND		0.00123	0.00029
Carbon tetrachloride	ND		0.00123	0.000198
1,2-Dichloroethane (EDC)	ND		0.00123	0.000325
Benzene	ND		0.00123	0.000321
Trichloroethene	ND		0.00123	0.000344
1,2-Dichloropropane	ND		0.00123	0.000208
1,4-Dioxane	ND		0.246	0.044
Bromodichloromethane	ND		0.00123	0.000287
cis-1,3-Dichloropropene	ND		0.00123	0.000252
4-Methyl-2-pentanone (MIBK)	ND		0.00246	0.000712

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**

Lab ID: E18-04347-001  
 Client ID: S7/3  
 Date Received: 06/01/2018  
 Date Analyzed: 06/06/2018  
 Data file: F6026.D 06/6/18 00:56

GC/MS Column: DB-624  
 Sample wt/vol: 4.3g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 5.60  
 Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND		0.00123	0.000397
trans-1,3-Dichloropropene	ND		0.00123	0.000284
1,1,2-Trichloroethane	ND		0.00123	0.000332
Tetrachloroethene	ND		0.00123	0.000315
2-Hexanone	ND		0.00246	0.00128
Dibromochloromethane	ND		0.00123	0.00023
1,2-Dibromoethane (EDB)	ND		0.00123	0.000218
Chlorobenzene	ND		0.00123	0.000277
Ethylbenzene	ND		0.00123	0.0003
Total Xylenes	ND		0.00246	0.000533
Styrene	ND		0.00123	0.000253
Bromoform	ND		0.00123	0.000353
Isopropylbenzene	ND		0.00123	0.000244
1,1,2,2-Tetrachloroethane	ND		0.00246	0.000331
1,3-Dichlorobenzene	ND		0.00123	0.000237
1,4-Dichlorobenzene	ND		0.00123	0.00021
1,2-Dichlorobenzene	ND		0.00123	0.000213
1,2-Dibromo-3-chloropropane	ND		0.00246	0.000332
1,2,4-Trichlorobenzene	ND		0.00123	0.000541
1,2,3-Trichlorobenzene	ND		0.00123	0.000592
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00123	0.000446
Methyl acetate	ND		0.00123	0.000574
Cyclohexane	ND		0.00123	0.000224
Methylcyclohexane	ND		0.00123	0.000256
1,3-Dichloropropene (cis- and trans-)	ND		0.00123	0.000284
Total Target Compounds (52):	0			

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04347-001

Client ID: S7/3

Date Received: 06/01/2018

Date Analyzed: 06/06/2018

Date File: F6026.D

GC/MS Column: DB-624

Sample wt/vol: 4.3g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 5.60

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: E18-04347-002

Client ID: S8/4

Date Received: 06/01/2018

Date Analyzed: 06/06/2018

Data file: F6027.D 06/6/18 01:25

GC/MS Column: DB-624

Sample wt/vol: 3.8g

Matrix-Units: Soil-mg/Kg

% Moisture: 4.40

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND		0.00138	0.000324
Chloromethane	ND		0.00138	0.000255
Vinyl chloride	ND		0.00138	0.000255
Bromomethane	ND		0.00138	0.000411
Chloroethane	ND		0.00138	0.000366
Trichlorofluoromethane	ND		0.00138	0.000259
1,1-Dichloroethene	ND		0.00138	0.00052
Acetone	ND		0.014	0.00135
Carbon disulfide	ND		0.00138	0.000428
Methylene chloride	ND		0.00276	0.00275
trans-1,2-Dichloroethene	ND		0.00138	0.0004
Methyl tert-butyl ether (MTBE)	ND		0.00138	0.000266
1,1-Dichloroethane	ND		0.00138	0.000268
cis-1,2-Dichloroethene	ND		0.00138	0.000294
2-Butanone (MEK)	ND		0.00276	0.000679
Bromochloromethane	ND		0.00138	0.000384
Chloroform	ND		0.00138	0.00029
1,1,1-Trichloroethane	ND		0.00138	0.000326
Carbon tetrachloride	ND		0.00138	0.000222
1,2-Dichloroethane (EDC)	ND		0.00138	0.000364
Benzene	ND		0.00138	0.00036
Trichloroethene	ND		0.00138	0.000386
1,2-Dichloropropane	ND		0.00138	0.000233
1,4-Dioxane	ND		0.276	0.049
Bromodichloromethane	ND		0.00138	0.000322
cis-1,3-Dichloropropene	ND		0.00138	0.000283
4-Methyl-2-pentanone (MIBK)	ND		0.00276	0.000799

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**

Lab ID: E18-04347-002  
 Client ID: S8/4  
 Date Received: 06/01/2018  
 Date Analyzed: 06/06/2018  
 Data file: F6027.D 06/6/18 01:25

GC/MS Column: DB-624  
 Sample wt/vol: 3.8g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 4.40  
 Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND		0.00138	0.000446
trans-1,3-Dichloropropene	ND		0.00138	0.000319
1,1,2-Trichloroethane	ND		0.00138	0.000373
Tetrachloroethene	0.00185		0.00138	0.000353
2-Hexanone	ND		0.00276	0.00144
Dibromochloromethane	ND		0.00138	0.000258
1,2-Dibromoethane (EDB)	ND		0.00138	0.000244
Chlorobenzene	ND		0.00138	0.000311
Ethylbenzene	ND		0.00138	0.000337
Total Xylenes	ND		0.00276	0.000598
Styrene	ND		0.00138	0.000284
Bromoform	ND		0.00138	0.000396
Isopropylbenzene	ND		0.00138	0.000273
1,1,2,2-Tetrachloroethane	ND		0.00276	0.000371
1,3-Dichlorobenzene	ND		0.00138	0.000266
1,4-Dichlorobenzene	ND		0.00138	0.000236
1,2-Dichlorobenzene	ND		0.00138	0.000239
1,2-Dibromo-3-chloropropane	ND		0.00276	0.000373
1,2,4-Trichlorobenzene	ND		0.00138	0.000607
1,2,3-Trichlorobenzene	ND		0.00138	0.000664
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00138	0.000501
Methyl acetate	ND		0.00138	0.000644
Cyclohexane	ND		0.00138	0.000251
Methylcyclohexane	ND		0.00138	0.000287
1,3-Dichloropropene (cis- and trans-)	ND		0.00138	0.000319
Total Target Compounds (52):		0.00185		

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04347-002

Client ID: S8/4

Date Received: 06/01/2018

Date Analyzed: 06/06/2018

Date File: F6027.D

GC/MS Column: DB-624

Sample wt/vol: 3.8g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 4.40

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: E18-04347-003

Client ID: S9/3

Date Received: 06/01/2018

Date Analyzed: 06/06/2018

Data file: F6028.D 06/6/18 01:54

GC/MS Column: DB-624

Sample wt/vol: 2.9g

Matrix-Units: Soil-mg/Kg

% Moisture: 6.40

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND		0.00184	0.000432
Chloromethane	ND		0.00184	0.00034
Vinyl chloride	ND		0.00184	0.00034
Bromomethane	ND		0.00184	0.000548
Chloroethane	ND		0.00184	0.000488
Trichlorofluoromethane	ND		0.00184	0.000346
1,1-Dichloroethene	ND		0.00184	0.000694
Acetone	0.014	J	0.018	0.0018
Carbon disulfide	ND		0.00184	0.00057
Methylene chloride	ND		0.00368	0.00366
trans-1,2-Dichloroethene	ND		0.00184	0.000534
Methyl tert-butyl ether (MTBE)	ND		0.00184	0.000355
1,1-Dichloroethane	ND		0.00184	0.000357
cis-1,2-Dichloroethene	ND		0.00184	0.000392
2-Butanone (MEK)	ND		0.00368	0.000905
Bromochloromethane	ND		0.00184	0.000512
Chloroform	ND		0.00184	0.000386
1,1,1-Trichloroethane	ND		0.00184	0.000434
Carbon tetrachloride	ND		0.00184	0.000296
1,2-Dichloroethane (EDC)	ND		0.00184	0.000486
Benzene	ND		0.00184	0.00048
Trichloroethene	ND		0.00184	0.000515
1,2-Dichloropropane	ND		0.00184	0.000311
1,4-Dioxane	ND		0.368	0.066
Bromodichloromethane	ND		0.00184	0.000429
cis-1,3-Dichloropropene	ND		0.00184	0.000377
4-Methyl-2-pentanone (MIBK)	ND		0.00368	0.00107

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**

Lab ID: E18-04347-003  
 Client ID: S9/3  
 Date Received: 06/01/2018  
 Date Analyzed: 06/06/2018  
 Data file: F6028.D 06/6/18 01:54

GC/MS Column: DB-624  
 Sample wt/vol: 2.9g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 6.40  
 Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND		0.00184	0.000594
trans-1,3-Dichloropropene	ND		0.00184	0.000425
1,1,2-Trichloroethane	ND		0.00184	0.000497
Tetrachloroethene	ND		0.00184	0.000471
2-Hexanone	ND		0.00368	0.00192
Dibromochloromethane	ND		0.00184	0.000344
1,2-Dibromoethane (EDB)	ND		0.00184	0.000326
Chlorobenzene	ND		0.00184	0.000414
Ethylbenzene	ND		0.00184	0.000449
Total Xylenes	ND		0.00368	0.000797
Styrene	ND		0.00184	0.000379
Bromoform	ND		0.00184	0.000528
Isopropylbenzene	ND		0.00184	0.000364
1,1,2,2-Tetrachloroethane	ND		0.00368	0.000495
1,3-Dichlorobenzene	ND		0.00184	0.000355
1,4-Dichlorobenzene	ND		0.00184	0.000315
1,2-Dichlorobenzene	ND		0.00184	0.000318
1,2-Dibromo-3-chloropropane	ND		0.00368	0.000497
1,2,4-Trichlorobenzene	ND		0.00184	0.00081
1,2,3-Trichlorobenzene	ND		0.00184	0.000885
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00184	0.000668
Methyl acetate	ND		0.00184	0.000859
Cyclohexane	ND		0.00184	0.000335
Methylcyclohexane	ND		0.00184	0.000383
1,3-Dichloropropene (cis- and trans-)	ND		0.00184	0.000425
Total Target Compounds (52):	0.014	J		

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**  
**VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04347-003

Client ID: S9/3

Date Received: 06/01/2018

Date Analyzed: 06/06/2018

Date File: F6028.D

GC/MS Column: DB-624

Sample wt/vol: 2.9g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 6.40

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: E18-04347-004  
Client ID: S10/6  
Date Received: 06/01/2018  
Date Analyzed: 06/06/2018  
Data file: F6035.D 06/6/18 05:19

GC/MS Column: DB-624  
Sample wt/vol: 4.6g  
Matrix-Units: Soil-mg/Kg  
% Moisture: 14.4  
Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND		0.00127	0.000298
Chloromethane	ND		0.00127	0.000235
Vinyl chloride	ND		0.00127	0.000235
Bromomethane	ND		0.00127	0.000378
Chloroethane	ND		0.00127	0.000337
Trichlorofluoromethane	ND		0.00127	0.000239
1,1-Dichloroethene	ND		0.00127	0.000479
Acetone	0.013		0.013	0.00124
Carbon disulfide	ND		0.00127	0.000394
Methylene chloride	ND		0.00254	0.00253
trans-1,2-Dichloroethene	ND		0.00127	0.000368
Methyl tert-butyl ether (MTBE)	ND		0.00127	0.000245
1,1-Dichloroethane	ND		0.00127	0.000246
cis-1,2-Dichloroethene	ND		0.00127	0.000271
2-Butanone (MEK)	ND		0.00254	0.000625
Bromochloromethane	ND		0.00127	0.000353
Chloroform	ND		0.00127	0.000267
1,1,1-Trichloroethane	ND		0.00127	0.0003
Carbon tetrachloride	ND		0.00127	0.000204
1,2-Dichloroethane (EDC)	ND		0.00127	0.000335
Benzene	ND		0.00127	0.000331
Trichloroethene	ND		0.00127	0.000356
1,2-Dichloropropane	ND		0.00127	0.000215
1,4-Dioxane	ND		0.254	0.046
Bromodichloromethane	ND		0.00127	0.000296
cis-1,3-Dichloropropene	ND		0.00127	0.00026
4-Methyl-2-pentanone (MIBK)	ND		0.00254	0.000735

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**

Lab ID: E18-04347-004  
 Client ID: S10/6  
 Date Received: 06/01/2018  
 Date Analyzed: 06/06/2018  
 Data file: F6035.D 06/6/18 05:19

GC/MS Column: DB-624  
 Sample wt/vol: 4.6g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 14.4  
 Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND		0.00127	0.00041
trans-1,3-Dichloropropene	ND		0.00127	0.000293
1,1,2-Trichloroethane	ND		0.00127	0.000343
Tetrachloroethene	ND		0.00127	0.000325
2-Hexanone	ND		0.00254	0.00132
Dibromochloromethane	ND		0.00127	0.000237
1,2-Dibromoethane (EDB)	ND		0.00127	0.000225
Chlorobenzene	ND		0.00127	0.000286
Ethylbenzene	0.00449		0.00127	0.00031
Total Xylenes	0.050		0.00254	0.00055
Styrene	ND		0.00127	0.000262
Bromoform	ND		0.00127	0.000364
Isopropylbenzene	0.00226		0.00127	0.000251
1,1,2,2-Tetrachloroethane	ND		0.00254	0.000342
1,3-Dichlorobenzene	ND		0.00127	0.000245
1,4-Dichlorobenzene	ND		0.00127	0.000217
1,2-Dichlorobenzene	ND		0.00127	0.00022
1,2-Dibromo-3-chloropropane	ND		0.00254	0.000343
1,2,4-Trichlorobenzene	ND		0.00127	0.000559
1,2,3-Trichlorobenzene	0.000907	J	0.00127	0.000611
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00127	0.000461
Methyl acetate	ND		0.00127	0.000593
Cyclohexane	ND		0.00127	0.000231
Methylcyclohexane	ND		0.00127	0.000264
1,3-Dichloropropene (cis- and trans-)	ND		0.00127	0.000293
Total Target Compounds (52):	0.071		J	

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**  
**VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04347-004

Client ID: S10/6

Date Received: 06/01/2018

Date Analyzed: 06/06/2018

Date File: F6035.D

GC/MS Column: DB-624

Sample wt/vol: 4.6g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 14.4

CAS #	Compound	Estimated Concentration	Q	Retention Time
000620-14-4	Benzene, 1-ethyl-3-methyl-	0.116	JN	12.02
000526-73-8	Benzene, 1,2,3-trimethyl-	0.221	JN	12.58
000108-67-8	Benzene, 1,3,5-trimethyl-	0.092	JN	13.10
055337-80-9	Bicyclo[4.2.0]octa-1,3,5-triene, 7-methyl-	0.169	JN	13.35
001758-88-9	Benzene, 2-ethyl-1,4-dimethyl-	0.169	JN	13.46
000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	0.134	JN	13.92
001005-64-7	Benzene, 1-butenyl-, (E)-	0.093	JN	14.06
000095-93-2	Benzene, 1,2,4,5-tetramethyl-	0.081	JN	14.40
000488-23-3	Benzene, 1,2,3,4-tetramethyl-	0.112	JN	14.46
002050-24-0	Benzene, 1,3-diethyl-5-methyl-	0.144	JN	14.59
003333-13-9	Benzene, 1-methyl-4-(2-propenyl)-	0.132	JN	14.77
000874-35-1	1H-Indene, 2,3-dihydro-5-methyl-	0.238	JN	14.95
	Unknown Aromatic	0.139	J	15.37
	Unknown Aromatic	0.086	J	15.49
	Unknown Aromatic	0.084	J	16.22

Total TICs = 2.01 JN

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: E18-04347-005  
Client ID: S11/9  
Date Received: 06/01/2018  
Date Analyzed: 06/06/2018  
Data file: F6036.D 06/6/18 05:49

GC/MS Column: DB-624  
Sample wt/vol: 4.6g  
Matrix-Units: Soil-mg/Kg  
% Moisture: 18.0  
Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND		0.00133	0.000313
Chloromethane	ND		0.00133	0.000246
Vinyl chloride	ND		0.00133	0.000246
Bromomethane	ND		0.00133	0.000396
Chloroethane	ND		0.00133	0.000352
Trichlorofluoromethane	ND		0.00133	0.00025
1,1-Dichloroethene	ND		0.00133	0.000501
Acetone	ND		0.013	0.0013
Carbon disulfide	ND		0.00133	0.000412
Methylene chloride	ND		0.00266	0.00265
trans-1,2-Dichloroethene	ND		0.00133	0.000386
Methyl tert-butyl ether (MTBE)	ND		0.00133	0.000257
1,1-Dichloroethane	ND		0.00133	0.000258
cis-1,2-Dichloroethene	ND		0.00133	0.000283
2-Butanone (MEK)	ND		0.00266	0.000654
Bromochloromethane	ND		0.00133	0.00037
Chloroform	ND		0.00133	0.000279
1,1,1-Trichloroethane	ND		0.00133	0.000314
Carbon tetrachloride	ND		0.00133	0.000214
1,2-Dichloroethane (EDC)	ND		0.00133	0.000351
Benzene	ND		0.00133	0.000347
Trichloroethene	ND		0.00133	0.000372
1,2-Dichloropropane	ND		0.00133	0.000225
1,4-Dioxane	ND		0.266	0.048
Bromodichloromethane	ND		0.00133	0.00031
cis-1,3-Dichloropropene	ND		0.00133	0.000273
4-Methyl-2-pentanone (MIBK)	ND		0.00266	0.00077

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**

Lab ID: E18-04347-005  
 Client ID: S11/9  
 Date Received: 06/01/2018  
 Date Analyzed: 06/06/2018  
 Data file: F6036.D 06/6/18 05:49

GC/MS Column: DB-624  
 Sample wt/vol: 4.6g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 18.0  
 Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND		0.00133	0.00043
trans-1,3-Dichloropropene	ND		0.00133	0.000307
1,1,2-Trichloroethane	ND		0.00133	0.000359
Tetrachloroethene	ND		0.00133	0.00034
2-Hexanone	ND		0.00266	0.00138
Dibromochloromethane	ND		0.00133	0.000249
1,2-Dibromoethane (EDB)	ND		0.00133	0.000235
Chlorobenzene	ND		0.00133	0.000299
Ethylbenzene	ND		0.00133	0.000325
Total Xylenes	ND		0.00266	0.000576
Styrene	ND		0.00133	0.000274
Bromoform	ND		0.00133	0.000382
Isopropylbenzene	ND		0.00133	0.000263
1,1,2,2-Tetrachloroethane	ND		0.00266	0.000358
1,3-Dichlorobenzene	ND		0.00133	0.000257
1,4-Dichlorobenzene	ND		0.00133	0.000227
1,2-Dichlorobenzene	ND		0.00133	0.00023
1,2-Dibromo-3-chloropropane	ND		0.00266	0.000359
1,2,4-Trichlorobenzene	ND		0.00133	0.000585
1,2,3-Trichlorobenzene	ND		0.00133	0.00064
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00133	0.000483
Methyl acetate	ND		0.00133	0.000621
Cyclohexane	ND		0.00133	0.000242
Methylcyclohexane	ND		0.00133	0.000277
1,3-Dichloropropene (cis- and trans-)	ND		0.00133	0.000307
Total Target Compounds (52):	0			

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**  
**VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04347-005

Client ID: S11/9

Date Received: 06/01/2018

Date Analyzed: 06/06/2018

Date File: F6036.D

GC/MS Column: DB-624

Sample wt/vol: 4.6g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 18.0

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: E18-04347-006  
Client ID: S12/10  
Date Received: 06/01/2018  
Date Analyzed: 06/06/2018  
Data file: F6037.D 06/6/18 06:18

GC/MS Column: DB-624  
Sample wt/vol: 4.4g  
Matrix-Units: Soil-mg/Kg  
% Moisture: 17.1  
Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND		0.00137	0.000322
Chloromethane	ND		0.00137	0.000253
Vinyl chloride	ND		0.00137	0.000253
Bromomethane	ND		0.00137	0.000408
Chloroethane	ND		0.00137	0.000363
Trichlorofluoromethane	ND		0.00137	0.000258
1,1-Dichloroethene	ND		0.00137	0.000516
Acetone	0.011	J	0.014	0.00134
Carbon disulfide	0.00145		0.00137	0.000425
Methylene chloride	ND		0.00274	0.00273
trans-1,2-Dichloroethene	ND		0.00137	0.000397
Methyl tert-butyl ether (MTBE)	ND		0.00137	0.000264
1,1-Dichloroethane	ND		0.00137	0.000266
cis-1,2-Dichloroethene	ND		0.00137	0.000292
2-Butanone (MEK)	ND		0.00274	0.000674
Bromochloromethane	ND		0.00137	0.000381
Chloroform	ND		0.00137	0.000288
1,1,1-Trichloroethane	ND		0.00137	0.000323
Carbon tetrachloride	ND		0.00137	0.000221
1,2-Dichloroethane (EDC)	ND		0.00137	0.000362
Benzene	ND		0.00137	0.000358
Trichloroethene	ND		0.00137	0.000384
1,2-Dichloropropane	ND		0.00137	0.000232
1,4-Dioxane	ND		0.274	0.049
Bromodichloromethane	ND		0.00137	0.000319
cis-1,3-Dichloropropene	ND		0.00137	0.000281
4-Methyl-2-pentanone (MIBK)	ND		0.00274	0.000793

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**

Lab ID: E18-04347-006  
 Client ID: S12/10  
 Date Received: 06/01/2018  
 Date Analyzed: 06/06/2018  
 Data file: F6037.D 06/6/18 06:18

GC/MS Column: DB-624  
 Sample wt/vol: 4.4g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 17.1  
 Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND		0.00137	0.000443
trans-1,3-Dichloropropene	ND		0.00137	0.000316
1,1,2-Trichloroethane	ND		0.00137	0.00037
Tetrachloroethene	ND		0.00137	0.000351
2-Hexanone	ND		0.00274	0.00143
Dibromochloromethane	ND		0.00137	0.000256
1,2-Dibromoethane (EDB)	ND		0.00137	0.000242
Chlorobenzene	ND		0.00137	0.000308
Ethylbenzene	ND		0.00137	0.000334
Total Xylenes	ND		0.00274	0.000593
Styrene	ND		0.00137	0.000282
Bromoform	ND		0.00137	0.000393
Isopropylbenzene	ND		0.00137	0.000271
1,1,2,2-Tetrachloroethane	ND		0.00274	0.000369
1,3-Dichlorobenzene	ND		0.00137	0.000264
1,4-Dichlorobenzene	ND		0.00137	0.000234
1,2-Dichlorobenzene	ND		0.00137	0.000237
1,2-Dibromo-3-chloropropane	ND		0.00274	0.00037
1,2,4-Trichlorobenzene	ND		0.00137	0.000603
1,2,3-Trichlorobenzene	ND		0.00137	0.000659
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00137	0.000497
Methyl acetate	ND		0.00137	0.00064
Cyclohexane	ND		0.00137	0.000249
Methylcyclohexane	ND		0.00137	0.000285
1,3-Dichloropropene (cis- and trans-)	ND		0.00137	0.000316
Total Target Compounds (52):	0.012	J		

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**  
**VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04347-006

Client ID: S12/10

Date Received: 06/01/2018

Date Analyzed: 06/06/2018

Date File: F6037.D

GC/MS Column: DB-624

Sample wt/vol: 4.4g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 17.1

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: E18-04347-007

Client ID: GW2/7

Date Received: 06/01/2018

Date Analyzed: 06/08/2018

Data file: L0216.D 06/8/18 12:48

GC/MS Column: DB-624

Sample wt/vol: 5ml

Matrix-Units: Aqueous- $\mu$ g/L

% Moisture: 100

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND		1.00	0.662
Chloromethane	ND		0.500	0.463
Vinyl chloride	ND		1.00	0.591
Bromomethane	ND		1.00	0.544
Chloroethane	ND		1.00	0.495
Trichlorofluoromethane	ND		0.500	0.433
1,1-Dichloroethene	ND		0.500	0.493
Acetone	ND		2.00	1.33
Carbon disulfide	ND		0.500	0.464
Methylene chloride	ND		1.00	0.990
trans-1,2-Dichloroethene	ND		0.500	0.454
Methyl tert-butyl ether (MTBE)	ND		0.500	0.479
1,1-Dichloroethane	ND		0.500	0.493
cis-1,2-Dichloroethene	0.988		0.500	0.451
2-Butanone (MEK)	ND		2.00	1.66
Bromochloromethane	ND		1.00	0.596
Chloroform	ND		0.500	0.469
1,1,1-Trichloroethane	ND		0.500	0.462
Carbon tetrachloride	ND		0.500	0.449
1,2-Dichloroethane (EDC)	ND		0.500	0.458
Benzene	ND		0.500	0.464
Trichloroethene	ND		0.500	0.493
1,2-Dichloropropane	ND		0.500	0.447
1,4-Dioxane	ND		100	98.4
Bromodichloromethane	ND		0.500	0.353
cis-1,3-Dichloropropene	ND		0.500	0.331
4-Methyl-2-pentanone (MIBK)	ND		1.00	0.699

# INTEGRATED ANALYTICAL LABORATORIES

## VOLATILE ORGANICS

Lab ID: E18-04347-007  
 Client ID: GW2/7  
 Date Received: 06/01/2018  
 Date Analyzed: 06/08/2018  
 Data file: L0216.D 06/8/18 12:48

GC/MS Column: DB-624  
 Sample wt/vol: 5ml  
 Matrix-Units: Aqueous- $\mu$ g/L  
 % Moisture: 100  
 Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND		0.500	0.379
trans-1,3-Dichloropropene	ND		0.500	0.321
1,1,2-Trichloroethane	ND		0.500	0.473
Tetrachloroethene	ND		0.500	0.451
2-Hexanone	ND		2.00	0.761
Dibromochloromethane	ND		0.500	0.442
1,2-Dibromoethane (EDB)	ND		0.500	0.402
Chlorobenzene	ND		0.500	0.376
Ethylbenzene	ND		0.500	0.344
Total Xylenes	ND		1.00	0.923
Styrene	ND		0.500	0.290
Bromoform	ND		0.500	0.445
Isopropylbenzene	ND		0.500	0.323
1,1,2,2-Tetrachloroethane	ND		1.00	0.458
1,3-Dichlorobenzene	ND		0.500	0.351
1,4-Dichlorobenzene	ND		0.500	0.341
1,2-Dichlorobenzene	ND		0.500	0.364
1,2-Dibromo-3-chloropropane	ND		1.00	0.533
1,2,4-Trichlorobenzene	ND		1.00	0.304
1,2,3-Trichlorobenzene	ND		1.00	0.339
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.00	0.563
Methyl acetate	ND		0.500	0.485
Cyclohexane	ND		1.00	0.411
Methylcyclohexane	ND		1.00	0.411
1,3-Dichloropropene (cis- and trans-)	ND		0.500	0.331
Total Target Compounds (52):		0.988		

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04347-007

Client ID: GW2/7

Date Received: 06/01/2018

Date Analyzed: 06/08/2018

Data file: L0216.D 06/8/18 12:48

GC/MS Column: DB-624

Sample wt/vol: 5ml

Matrix-Units: Aqueous- $\mu$ g/L

Dilution Factor: 1

% Moisture: 100

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: E18-04347-008

Client ID: GW3/6

Date Received: 06/01/2018

Date Analyzed: 06/08/2018

Data file: L0217.D 06/8/18 13:16

GC/MS Column: DB-624

Sample wt/vol: 5ml

Matrix-Units: Aqueous- $\mu$ g/L

% Moisture: 100

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND		1.00	0.662
Chloromethane	ND		0.500	0.463
Vinyl chloride	ND		1.00	0.591
Bromomethane	ND		1.00	0.544
Chloroethane	ND		1.00	0.495
Trichlorofluoromethane	ND		0.500	0.433
1,1-Dichloroethene	ND		0.500	0.493
Acetone	ND		2.00	1.33
Carbon disulfide	ND		0.500	0.464
Methylene chloride	ND		1.00	0.990
trans-1,2-Dichloroethene	ND		0.500	0.454
Methyl tert-butyl ether (MTBE)	ND		0.500	0.479
1,1-Dichloroethane	ND		0.500	0.493
cis-1,2-Dichloroethene	ND		0.500	0.451
2-Butanone (MEK)	ND		2.00	1.66
Bromochloromethane	ND		1.00	0.596
Chloroform	ND		0.500	0.469
1,1,1-Trichloroethane	ND		0.500	0.462
Carbon tetrachloride	ND		0.500	0.449
1,2-Dichloroethane (EDC)	ND		0.500	0.458
Benzene	ND		0.500	0.464
Trichloroethene	ND		0.500	0.493
1,2-Dichloropropane	ND		0.500	0.447
1,4-Dioxane	ND		100	98.4
Bromodichloromethane	ND		0.500	0.353
cis-1,3-Dichloropropene	ND		0.500	0.331
4-Methyl-2-pentanone (MIBK)	ND		1.00	0.699

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**

Lab ID: E18-04347-008

Client ID: GW3/6

Date Received: 06/01/2018

Date Analyzed: 06/08/2018

Data file: L0217.D 06/ 8/18 13:16

GC/MS Column: DB-624

Sample wt/vol: 5ml

Matrix-Units: Aqueous- $\mu$ g/L

% Moisture: 100

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND	0.500	0.379	
trans-1,3-Dichloropropene	ND	0.500	0.321	
1,1,2-Trichloroethane	ND	0.500	0.473	
Tetrachloroethene	ND	0.500	0.451	
2-Hexanone	ND	2.00	0.761	
Dibromochloromethane	ND	0.500	0.442	
1,2-Dibromoethane (EDB)	ND	0.500	0.402	
Chlorobenzene	ND	0.500	0.376	
Ethylbenzene	ND	0.500	0.344	
Total Xylenes	ND	1.00	0.923	
Styrene	ND	0.500	0.290	
Bromoform	ND	0.500	0.445	
Isopropylbenzene	ND	0.500	0.323	
1,1,2,2-Tetrachloroethane	ND	1.00	0.458	
1,3-Dichlorobenzene	ND	0.500	0.351	
1,4-Dichlorobenzene	ND	0.500	0.341	
1,2-Dichlorobenzene	ND	0.500	0.364	
1,2-Dibromo-3-chloropropane	ND	1.00	0.533	
1,2,4-Trichlorobenzene	ND	1.00	0.304	
1,2,3-Trichlorobenzene	ND	1.00	0.339	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.00	0.563	
Methyl acetate	ND	0.500	0.485	
Cyclohexane	ND	1.00	0.411	
Methylcyclohexane	ND	1.00	0.411	
1,3-Dichloropropene (cis- and trans-)	ND	0.500	0.331	
Total Target Compounds (52):	0			

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04347-008

Client ID: GW3/6

Date Received: 06/01/2018

Date Analyzed: 06/08/2018

Data file: L0217.D 06/8/18 13:16

GC/MS Column: DB-624

Sample wt/vol: 5ml

Matrix-Units: Aqueous- $\mu$ g/L

Dilution Factor: 1

% Moisture: 100

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: BLKS180605-01  
Client ID: BLKS180605-01  
Date Received:  
Date Analyzed: 06/05/2018  
Data file: F6007.D 06/ 5/18 15:38

GC/MS Column: DB-624  
Sample wt/vol: 5g  
Matrix-Units: Soil-mg/Kg  
% Moisture: NA  
Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND		0.001	0.000235
Chloromethane	ND		0.001	0.000185
Vinyl chloride	ND		0.001	0.000185
Bromomethane	ND		0.001	0.000298
Chloroethane	ND		0.001	0.000265
Trichlorofluoromethane	ND		0.001	0.000188
1,1-Dichloroethene	ND		0.001	0.000377
Acetone	ND		0.010	0.000979
Carbon disulfide	ND		0.001	0.00031
Methylene chloride	ND		0.002	0.00199
trans-1,2-Dichloroethene	ND		0.001	0.00029
Methyl tert-butyl ether (MTBE)	ND		0.001	0.000193
1,1-Dichloroethane	ND		0.001	0.000194
cis-1,2-Dichloroethene	ND		0.001	0.000213
2-Butanone (MEK)	ND		0.002	0.000492
Bromochloromethane	ND		0.001	0.000278
Chloroform	ND		0.001	0.00021
1,1,1-Trichloroethane	ND		0.001	0.000236
Carbon tetrachloride	ND		0.001	0.000161
1,2-Dichloroethane (EDC)	ND		0.001	0.000264
Benzene	ND		0.001	0.000261
Trichloroethene	ND		0.001	0.00028
1,2-Dichloropropane	ND		0.001	0.000169
1,4-Dioxane	ND		0.200	0.036
Bromodichloromethane	ND		0.001	0.000233
cis-1,3-Dichloropropene	ND		0.001	0.000205
4-Methyl-2-pentanone (MIBK)	ND		0.002	0.000579

# INTEGRATED ANALYTICAL LABORATORIES

## VOLATILE ORGANICS

Lab ID: BLKS180605-01  
 Client ID: BLKS180605-01  
 Date Received:  
 Date Analyzed: 06/05/2018  
 Data file: F6007.D 06/5/18 15:38

GC/MS Column: DB-624  
 Sample wt/vol: 5g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: NA  
 Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND		0.001	0.000323
trans-1,3-Dichloropropene	ND		0.001	0.000231
1,1,2-Trichloroethane	ND		0.001	0.00027
Tetrachloroethene	ND		0.001	0.000256
2-Hexanone	ND		0.002	0.00104
Dibromochloromethane	ND		0.001	0.000187
1,2-Dibromoethane (EDB)	ND		0.001	0.000177
Chlorobenzene	ND		0.001	0.000225
Ethylbenzene	ND		0.001	0.000244
Total Xylenes	ND		0.002	0.000433
Styrene	ND		0.001	0.000206
Bromoform	ND		0.001	0.000287
Isopropylbenzene	ND		0.001	0.000198
1,1,2,2-Tetrachloroethane	ND		0.002	0.000269
1,3-Dichlorobenzene	ND		0.001	0.000193
1,4-Dichlorobenzene	ND		0.001	0.000171
1,2-Dichlorobenzene	ND		0.001	0.000173
1,2-Dibromo-3-chloropropane	ND		0.002	0.00027
1,2,4-Trichlorobenzene	ND		0.001	0.00044
1,2,3-Trichlorobenzene	ND		0.001	0.000481
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.001	0.000363
Methyl acetate	ND		0.001	0.000467
Cyclohexane	ND		0.001	0.000182
Methylcyclohexane	ND		0.001	0.000208
1,3-Dichloropropene (cis- and trans-)	ND		0.001	0.000231
Total Target Compounds (52):	0			

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**  
**VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: BLKS180605-01  
Client ID: BLKS180605-01  
Date Received:  
Date Analyzed: 06/05/2018  
Date File: F6007.D

GC/MS Column: DB-624  
Sample wt/vol: 5g  
Matrix-Units: Soil-mg/Kg  
Dilution Factor: 1  
% Moisture: NA

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: BLKS180605-02  
Client ID: BLKS180605-02  
Date Received:  
Date Analyzed: 06/06/2018  
Data file: F6034.D 06/6/18 04:50

GC/MS Column: DB-624  
Sample wt/vol: 5g  
Matrix-Units: Soil-mg/Kg  
% Moisture: NA  
Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND	0.001	0.000235	
Chloromethane	ND	0.001	0.000185	
Vinyl chloride	ND	0.001	0.000185	
Bromomethane	ND	0.001	0.000298	
Chloroethane	ND	0.001	0.000265	
Trichlorofluoromethane	ND	0.001	0.000188	
1,1-Dichloroethene	ND	0.001	0.000377	
Acetone	ND	0.010	0.000979	
Carbon disulfide	ND	0.001	0.00031	
Methylene chloride	ND	0.002	0.00199	
trans-1,2-Dichloroethene	ND	0.001	0.00029	
Methyl tert-butyl ether (MTBE)	ND	0.001	0.000193	
1,1-Dichloroethane	ND	0.001	0.000194	
cis-1,2-Dichloroethene	ND	0.001	0.000213	
2-Butanone (MEK)	ND	0.002	0.000492	
Bromochloromethane	ND	0.001	0.000278	
Chloroform	ND	0.001	0.00021	
1,1,1-Trichloroethane	ND	0.001	0.000236	
Carbon tetrachloride	ND	0.001	0.000161	
1,2-Dichloroethane (EDC)	ND	0.001	0.000264	
Benzene	ND	0.001	0.000261	
Trichloroethene	ND	0.001	0.00028	
1,2-Dichloropropane	ND	0.001	0.000169	
1,4-Dioxane	ND	0.200	0.036	
Bromodichloromethane	ND	0.001	0.000233	
cis-1,3-Dichloropropene	ND	0.001	0.000205	
4-Methyl-2-pentanone (MIBK)	ND	0.002	0.000579	

# INTEGRATED ANALYTICAL LABORATORIES

## VOLATILE ORGANICS

Lab ID: BLKS180605-02  
 Client ID: BLKS180605-02  
 Date Received:  
 Date Analyzed: 06/06/2018  
 Data file: F6034.D 06/6/18 04:50

GC/MS Column: DB-624  
 Sample wt/vol: 5g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: NA  
 Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND		0.001	0.000323
trans-1,3-Dichloropropene	ND		0.001	0.000231
1,1,2-Trichloroethane	ND		0.001	0.00027
Tetrachloroethene	ND		0.001	0.000256
2-Hexanone	ND		0.002	0.00104
Dibromochloromethane	ND		0.001	0.000187
1,2-Dibromoethane (EDB)	ND		0.001	0.000177
Chlorobenzene	ND		0.001	0.000225
Ethylbenzene	ND		0.001	0.000244
Total Xylenes	ND		0.002	0.000433
Styrene	ND		0.001	0.000206
Bromoform	ND		0.001	0.000287
Isopropylbenzene	ND		0.001	0.000198
1,1,2,2-Tetrachloroethane	ND		0.002	0.000269
1,3-Dichlorobenzene	ND		0.001	0.000193
1,4-Dichlorobenzene	ND		0.001	0.000171
1,2-Dichlorobenzene	ND		0.001	0.000173
1,2-Dibromo-3-chloropropane	ND		0.002	0.00027
1,2,4-Trichlorobenzene	ND		0.001	0.00044
1,2,3-Trichlorobenzene	ND		0.001	0.000481
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.001	0.000363
Methyl acetate	ND		0.001	0.000467
Cyclohexane	ND		0.001	0.000182
Methylcyclohexane	ND		0.001	0.000208
1,3-Dichloropropene (cis- and trans-)	ND		0.001	0.000231
Total Target Compounds (52):	0			

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**  
**VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: BLKS180605-02  
Client ID: BLKS180605-02  
Date Received:  
Date Analyzed: 06/06/2018  
Date File: F6034.D

GC/MS Column: DB-624  
Sample wt/vol: 5g  
Matrix-Units: Soil-mg/Kg  
Dilution Factor: 1  
% Moisture: NA

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: BLKA180608

Client ID: BLKA180608

Date Received:

Date Analyzed: 06/08/2018

Data file: L0215.D 06/8/18 12:20

GC/MS Column: DB-624

Sample wt/vol: 5ml

Matrix-Units: Aqueous- $\mu$ g/L

% Moisture: 100

Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		1.00	0.662
Chloromethane	ND		0.500	0.463
Vinyl chloride	ND		1.00	0.591
Bromomethane	ND		1.00	0.544
Chloroethane	ND		1.00	0.495
Trichlorofluoromethane	ND		0.500	0.433
1,1-Dichloroethene	ND		0.500	0.493
Acetone	ND		2.00	1.33
Carbon disulfide	ND		0.500	0.464
Methylene chloride	ND		1.00	0.990
trans-1,2-Dichloroethene	ND		0.500	0.454
Methyl tert-butyl ether (MTBE)	ND		0.500	0.479
1,1-Dichloroethane	ND		0.500	0.493
cis-1,2-Dichloroethene	ND		0.500	0.451
2-Butanone (MEK)	ND		2.00	1.66
Bromochloromethane	ND		1.00	0.596
Chloroform	ND		0.500	0.469
1,1,1-Trichloroethane	ND		0.500	0.462
Carbon tetrachloride	ND		0.500	0.449
1,2-Dichloroethane (EDC)	ND		0.500	0.458
Benzene	ND		0.500	0.464
Trichloroethene	ND		0.500	0.493
1,2-Dichloropropane	ND		0.500	0.447
1,4-Dioxane	ND		100	98.4
Bromodichloromethane	ND		0.500	0.353
cis-1,3-Dichloropropene	ND		0.500	0.331
4-Methyl-2-pentanone (MIBK)	ND		1.00	0.699

## INTEGRATED ANALYTICAL LABORATORIES

## VOLATILE ORGANICS

Lab ID: BLKA180608  
 Client ID: BLKA180608  
 Date Received:  
 Date Analyzed: 06/08/2018  
 Data file: L0215.D 06/8/18 12:20

GC/MS Column: DB-624  
 Sample wt/vol: 5ml  
 Matrix-Units: Aqueous- $\mu$ g/L  
 % Moisture: 100  
 Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.500	0.379
trans-1,3-Dichloropropene	ND		0.500	0.321
1,1,2-Trichloroethane	ND		0.500	0.473
Tetrachloroethene	ND		0.500	0.451
2-Hexanone	ND		2.00	0.761
Dibromochloromethane	ND		0.500	0.442
1,2-Dibromoethane (EDB)	ND		0.500	0.402
Chlorobenzene	ND		0.500	0.376
Ethylbenzene	ND		0.500	0.344
Total Xylenes	ND		1.00	0.923
Styrene	ND		0.500	0.290
Bromoform	ND		0.500	0.445
Isopropylbenzene	ND		0.500	0.323
1,1,2,2-Tetrachloroethane	ND		1.00	0.458
1,3-Dichlorobenzene	ND		0.500	0.351
1,4-Dichlorobenzene	ND		0.500	0.341
1,2-Dichlorobenzene	ND		0.500	0.364
1,2-Dibromo-3-chloropropane	ND		1.00	0.533
1,2,4-Trichlorobenzene	ND		1.00	0.304
1,2,3-Trichlorobenzene	ND		1.00	0.339
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.00	0.563
Methyl acetate	ND		0.500	0.485
Cyclohexane	ND		1.00	0.411
Methylcyclohexane	ND		1.00	0.411
1,3-Dichloropropene (cis- and trans-)	ND		0.500	0.331
Total Target Compounds (52):		0		

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: BLKA180608

Client ID: BLKA180608

Date Received:

Date Analyzed: 06/08/2018

Data file: L0215.D 06/ 8/18 12:20

GC/MS Column: DB-624

Sample wt/vol: 5ml

Matrix-Units: Aqueous- $\mu$ g/L

Dilution Factor: 1

% Moisture: 100

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
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No peaks detected

Total TICs = 0

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**

Lab ID: E18-04347-001

Client ID: S7/3

Date Received: 06/01/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: C4807.D 06/05/2018 16:43

GC/MS Column: DB-5

Sample wt/vol: 15.27g

Matrix-Units: Soil-mg/Kg

% Moisture: 5.60

Dilution Factor: 2

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Benzaldehyde	ND		0.069	0.067
Bis(2-chloroethyl) ether	ND		0.069	0.063
2,2'-Oxybis(1-Chloropropane)	ND		0.069	0.058
N-Nitrosodi-n-propylamine	ND		0.069	0.053
Acetophenone	ND		0.069	0.066
Hexachloroethane	ND		0.069	0.058
Nitrobenzene	ND		0.069	0.054
Isophorone	ND		0.069	0.058
Bis(2-chloroethoxy) methane	ND		0.069	0.062
Naphthalene	ND		0.069	0.061
4-Chloroaniline	ND		0.069	0.046
Hexachlorobutadiene	ND		0.069	0.064
Caprolactam	ND		0.069	0.046
2-Methylnaphthalene	ND		0.069	0.049
Hexachlorocyclopentadiene	ND		0.069	0.061
1,1'-Biphenyl	ND		0.069	0.065
2-Chloronaphthalene	ND		0.069	0.057
2-Nitroaniline	ND		0.069	0.048
Dimethyl phthalate	ND		0.069	0.064

**INTEGRATED ANALYTICAL LABORATORIES**

**SEMIVOLATILE ORGANICS**

Lab ID: E18-04347-001

Client ID: S7/3

Date Received: 06/01/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: C4807.D 06/05/2018 16:43

GC/MS Column: DB-5

Sample wt/vol: 15.27g

Matrix-Units: Soil-mg/Kg

% Moisture: 5.60

Dilution Factor: 2

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
2,6-Dinitrotoluene	ND		0.069	0.053
Acenaphthylene	ND		0.069	0.057
3-Nitroaniline	ND		0.069	0.055
Acenaphthene	ND		0.069	0.061
2,4-Dinitrotoluene	ND		0.069	0.063
Dibenzofuran	ND		0.069	0.059
Diethyl phthalate	ND		0.069	0.068
Fluorene	ND		0.069	0.062
4-Chlorophenyl phenyl ether	ND		0.069	0.064
4-Nitroaniline	ND		0.069	0.052
1,2,4,5-Tetrachlorobenzene	ND		0.069	0.060
N-Nitrosodiphenylamine	ND		0.069	0.060
4-Bromophenyl phenyl ether	ND		0.069	0.058
Hexachlorobenzene	ND		0.069	0.064
Atrazine	ND		0.069	0.060
Phenanthrene	0.083	D	0.069	0.063
Anthracene	ND		0.069	0.061
Carbazole	ND		0.069	0.054
Di-n-butyl phthalate	ND		0.069	0.053
Fluoranthene	0.285	D	0.069	0.058
Pyrene	0.556	D	0.069	0.057
Butyl benzyl phthalate	ND		0.069	0.064
3,3'-Dichlorobenzidine	ND		0.069	0.050
Benzo[a]anthracene	0.420	D	0.069	0.060
Chrysene	0.456	D	0.069	0.060
Bis(2-ethylhexyl) phthalate	ND		0.069	0.043
Di-n-octyl phthalate	ND		0.069	0.060
Benzo[b]fluoranthene	0.224	D	0.069	0.056
Benzo[k]fluoranthene	0.193	D	0.069	0.058
Benzo[a]pyrene	0.305	D	0.069	0.057
Indeno[1,2,3-cd]pyrene	0.194	D	0.069	0.057
Dibenz[a,h]anthracene	0.101	D	0.069	0.068
Benzo[g,h,i]perylene	0.302	D	0.069	0.063
Dinitrotoluene (2,4- and 2,6-)	ND		0.069	0.063

Total Target Compounds (53): 3.12

D

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

E18-04347 Page 54

C --- Common laboratory contamination

# INTEGRATED ANALYTICAL LABORATORIES

## SEMIVOLATILE ORGANICS Tentatively Identified Compounds

Lab ID: E18-04347-001

Client ID: S7/3

Date Received: 06/01/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Date File: C4807.D

GC/MS Column: DB-5

Sample wt/vol: 15.27g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 2

% Moisture: 5.60

CAS #	Compound	Estimated Concentration	Q	Retention Time
000198-55-0	Perylene	0.395	DNJ	7.57

Total TICs = 0.395 DNJ

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

B --- Compound detected in Blank

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**

Lab ID: E18-04347-002

Client ID: S8/4

Date Received: 06/01/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: C4808.D 06/05/2018 16:59

GC/MS Column: DB-5

Sample wt/vol: 15.55g

Matrix-Units: Soil-mg/Kg

% Moisture: 4.40

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Benzaldehyde	ND		0.034	0.033
Bis(2-chloroethyl) ether	ND		0.034	0.031
2,2'-Oxybis(1-Chloropropane)	ND		0.034	0.028
N-Nitrosodi-n-propylamine	ND		0.034	0.026
Acetophenone	ND		0.034	0.032
Hexachloroethane	ND		0.034	0.028
Nitrobenzene	ND		0.034	0.026
Isophorone	ND		0.034	0.028
Bis(2-chloroethoxy) methane	ND		0.034	0.030
Naphthalene	ND		0.034	0.029
4-Chloroaniline	ND		0.034	0.022
Hexachlorobutadiene	ND		0.034	0.031
Caprolactam	ND		0.034	0.022
2-Methylnaphthalene	ND		0.034	0.024
Hexachlorocyclopentadiene	ND		0.034	0.030
1,1'-Biphenyl	ND		0.034	0.031
2-Chloronaphthalene	ND		0.034	0.028
2-Nitroaniline	ND		0.034	0.024
Dimethyl phthalate	ND		0.034	0.031

# INTEGRATED ANALYTICAL LABORATORIES

## SEMIVOLATILE ORGANICS

Lab ID: E18-04347-002

Client ID: S8/4

Date Received: 06/01/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: C4808.D 06/05/2018 16:59

GC/MS Column: DB-5

Sample wt/vol: 15.55g

Matrix-Units: Soil-mg/Kg

% Moisture: 4.40

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
2,6-Dinitrotoluene	ND		0.034	0.026
Acenaphthylene	ND		0.034	0.028
3-Nitroaniline	ND		0.034	0.027
Acenaphthene	ND		0.034	0.030
2,4-Dinitrotoluene	ND		0.034	0.031
Dibenzofuran	ND		0.034	0.029
Diethyl phthalate	ND		0.034	0.033
Fluoranc	ND		0.034	0.030
4-Chlorophenyl phenyl ether	ND		0.034	0.031
4-Nitroaniline	ND		0.034	0.025
1,2,4,5-Tetrachlorobenzene	ND		0.034	0.029
N-Nitrosodiphenylamine	ND		0.034	0.029
4-Bromophenyl phenyl ether	ND		0.034	0.028
Hexachlorobenzene	ND		0.034	0.031
Atrazine	ND		0.034	0.029
Phenanthrene	0.074		0.034	0.031
Anthracene	ND		0.034	0.030
Carbazole	ND		0.034	0.026
Di-n-butyl phthalate	ND		0.034	0.026
Fluoranthene	0.108		0.034	0.028
Pyrene	0.113		0.034	0.028
Butyl benzyl phthalate	ND		0.034	0.031
3,3'-Dichlorobenzidine	ND		0.034	0.024
Benzo[a]anthracene	0.055		0.034	0.029
Chrysene	0.072		0.034	0.029
Bis(2-ethylhexyl) phthalate	ND		0.034	0.021
Di-n-octyl phthalate	ND		0.034	0.029
Benzo[b]fluoranthene	0.045		0.034	0.027
Benzo[k]fluoranthene	0.035		0.034	0.028
Benzo[a]pyrene	0.044		0.034	0.027
Indeno[1,2,3-cd]pyrene	0.031	J	0.034	0.028
Dibenz[a,h]anthracene	ND		0.034	0.033
Benzo[g,h,i]perylene	0.037		0.034	0.030
Dinitrotoluene (2,4- and 2,6-)	ND		0.034	0.031

Total Target Compounds (53): 0.614

J

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank E18-04347 Page 57

C --- Common laboratory contamination

# INTEGRATED ANALYTICAL LABORATORIES

## SEMIVOLATILE ORGANICS Tentatively Identified Compounds

Lab ID: E18-04347-002

Client ID: S8/4

Date Received: 06/01/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Date File: C4808.D

GC/MS Column: DB-5

Sample wt/vol: 15.55g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 4.40

CAS #	Compound	Estimated Concentration Q	Retention Time
	Unknown SV	0.212	J 6.05

$$\text{Total TICs} = 0.212 \quad J$$

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

B --- Compound detected in Blank

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**

Lab ID: E18-04347-003

Client ID: S9/3

Date Received: 06/01/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: C4809.D 06/05/2018 17:15

GC/MS Column: DB-5

Sample wt/vol: 15.31g

Matrix-Units: Soil-mg/Kg

% Moisture: 6.40

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Benzaldehyde	ND		0.035	0.034
Bis(2-chloroethyl) ether	ND		0.035	0.032
2,2'-Oxybis(1-Chloropropane)	ND		0.035	0.029
N-Nitrosodi-n-propylamine	ND		0.035	0.027
Acetophenone	ND		0.035	0.033
Hexachloroethane	ND		0.035	0.029
Nitrobenzene	ND		0.035	0.027
Isophorone	ND		0.035	0.029
Bis(2-chloroethoxy) methane	ND		0.035	0.031
Naphthalene	ND		0.035	0.030
4-Chloroaniline	ND		0.035	0.023
Hexachlorobutadiene	ND		0.035	0.032
Caprolactam	ND		0.035	0.023
2-Methylnaphthalene	ND		0.035	0.024
Hexachlorocyclopentadiene	ND		0.035	0.031
1,1'-Biphenyl	ND		0.035	0.033
2-Chloronaphthalene	ND		0.035	0.029
2-Nitroaniline	ND		0.035	0.024
Dimethyl phthalate	ND		0.035	0.032

# INTEGRATED ANALYTICAL LABORATORIES

## SEMIVOLATILE ORGANICS

Lab ID: E18-04347-003

Client ID: S9/3

Date Received: 06/01/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: C4809.D 06/05/2018 17:15

GC/MS Column: DB-5

Sample wt/vol: 15.31g

Matrix-Units: Soil-mg/Kg

% Moisture: 6.40

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
2,6-Dinitrotoluene	ND		0.035	0.026
Acenaphthylene	ND		0.035	0.029
3-Nitroaniline	ND		0.035	0.028
Acenaphthene	ND		0.035	0.031
2,4-Dinitrotoluene	ND		0.035	0.032
Dibenzofuran	ND		0.035	0.030
Diethyl phthalate	ND		0.035	0.034
Fluorene	ND		0.035	0.031
4-Chlorophenyl phenyl ether	ND		0.035	0.032
4-Nitroaniline	ND		0.035	0.026
1,2,4,5-Tetrachlorobenzene	ND		0.035	0.030
N-Nitrosodiphenylamine	ND		0.035	0.030
4-Bromophenyl phenyl ether	ND		0.035	0.029
Hexachlorobenzene	ND		0.035	0.032
Atrazine	ND		0.035	0.030
Phenanthrene	ND		0.035	0.032
Anthracene	ND		0.035	0.031
Carbazole	ND		0.035	0.027
Di-n-butyl phthalate	ND		0.035	0.027
Fluoranthene	ND		0.035	0.029
Pyrene	ND		0.035	0.029
Butyl benzyl phthalate	ND		0.035	0.032
3,3'-Dichlorobenzidine	ND		0.035	0.025
Benzo[a]anthracene	ND		0.035	0.030
Chrysene	ND		0.035	0.030
Bis(2-ethylhexyl) phthalate	ND		0.035	0.022
Di-n-octyl phthalate	ND		0.035	0.030
Benzo[b]fluoranthene	ND		0.035	0.028
Benzo[k]fluoranthene	ND		0.035	0.029
Benzo[a]pyrene	ND		0.035	0.029
Indeno[1,2,3-cd]pyrene	ND		0.035	0.029
Dibenz[a,h]anthracene	ND		0.035	0.034
Benzo[g,h,i]perylene	ND		0.035	0.032
Dinitrotoluene (2,4- and 2,6-)	ND		0.035	0.032

Total Target Compounds (53): 0

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank E18-04347 Page 60

C --- Common laboratory contamination

# INTEGRATED ANALYTICAL LABORATORIES

## SEMIVOLATILE ORGANICS Tentatively Identified Compounds

Lab ID: E18-04347-003

Client ID: S9/3

Date Received: 06/01/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Date File: C4809.D

GC/MS Column: DB-5

Sample wt/vol: 15.31g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 6.40

CAS #	Compound	Estimated Concentration Q	Retention Time
No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

B --- Compound detected in Blank

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**

Lab ID: E18-04347-004

Client ID: S10/6

Date Received: 06/01/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: C4810.D 06/05/2018 17:31

GC/MS Column: DB-5

Sample wt/vol: 15.22g

Matrix-Units: Soil-mg/Kg

% Moisture: 14.4

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Benzaldehyde	ND		0.038	0.037
Bis(2-chloroethyl) ether	ND		0.038	0.035
2,2'-Oxybis(1-Chloropropane)	ND		0.038	0.032
N-Nitrosodi-n-propylamine	ND		0.038	0.029
Acetophenone	ND		0.038	0.036
Hexachloroethane	ND		0.038	0.032
Nitrobenzene	ND		0.038	0.030
Isophorone	ND		0.038	0.032
Bis(2-chloroethoxy) methane	ND		0.038	0.034
Naphthalene	ND		0.038	0.034
4-Chloroaniline	ND		0.038	0.025
Hexachlorobutadiene	ND		0.038	0.035
Caprolactam	ND		0.038	0.026
2-Methylnaphthalene	ND		0.038	0.027
Hexachlorocyclopentadiene	ND		0.038	0.034
1,1'-Biphenyl	ND		0.038	0.036
2-Chloronaphthalene	ND		0.038	0.032
2-Nitroaniline	ND		0.038	0.027
Dimethyl phthalate	ND		0.038	0.035

**INTEGRATED ANALYTICAL LABORATORIES**

**SEMIVOLATILE ORGANICS**

Lab ID: E18-04347-004

Client ID: S10/6

Date Received: 06/01/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: C4810.D 06/05/2018 17:31

GC/MS Column: DB-5

Sample wt/vol: 15.22g

Matrix-Units: Soil-mg/Kg

% Moisture: 14.4

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
2,6-Dinitrotoluene	ND		0.038	0.029
Acenaphthylene	ND		0.038	0.032
3-Nitroaniline	ND		0.038	0.031
Acenaphthene	ND		0.038	0.034
2,4-Dinitrotoluene	ND		0.038	0.035
Dibenzofuran	ND		0.038	0.033
Diethyl phthalate	ND		0.038	0.038
Fluorene	ND		0.038	0.035
4-Chlorophenyl phenyl ether	ND		0.038	0.036
4-Nitroaniline	ND		0.038	0.029
1,2,4,5-Tetrachlorobenzene	ND		0.038	0.033
N-Nitrosodiphenylamine	ND		0.038	0.033
4-Bromophenyl phenyl ether	ND		0.038	0.032
Hexachlorobenzene	ND		0.038	0.035
Atrazine	ND		0.038	0.033
Phenanthrene	ND		0.038	0.035
Anthracene	ND		0.038	0.034
Carbazole	ND		0.038	0.030
Di-n-butyl phthalate	ND		0.038	0.029
Fluoranthene	ND		0.038	0.032
Pyrene	ND		0.038	0.032
Butyl benzyl phthalate	ND		0.038	0.035
3,3'-Dichlorobenzidine	ND		0.038	0.028
Benzo[a]anthracene	ND		0.038	0.033
Chrysene	ND		0.038	0.033
Bis(2-ethylhexyl) phthalate	ND		0.038	0.024
Di-n-octyl phthalate	ND		0.038	0.033
Benzo[b]fluoranthene	ND		0.038	0.031
Benzo[k]fluoranthene	ND		0.038	0.032
Benzo[a]pyrene	ND		0.038	0.031
Indeno[1,2,3-cd]pyrene	ND		0.038	0.032
Dibenz[a,h]anthracene	ND		0.038	0.038
Benzo[g,h,i]perylene	ND		0.038	0.035
Dinitrotoluene (2,4- and 2,6-)	ND		0.038	0.035

Total Target Compounds (53): 0

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank  
E18-04347 Page 63  
C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04347-004

GC/MS Column: DB-5

Client ID: S10/6

Sample wt/vol: 15.22g

Date Received: 06/01/2018

Matrix-Units: Soil-mg/Kg

Date Extracted: 06/05/2018

Dilution Factor: 1

Date Analyzed: 06/05/2018

% Moisture: 14.4

Date File: C4810.D

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

B --- Compound detected in Blank

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**

Lab ID: E18-04347-005

Client ID: S11/9

Date Received: 06/01/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: C4811.D 06/05/2018 17:47

GC/MS Column: DB-5

Sample wt/vol: 15.46g

Matrix-Units: Soil-mg/Kg

% Moisture: 18.0

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Benzaldehyde	ND		0.039	0.038
Bis(2-chloroethyl) ether	ND		0.039	0.036
2,2'-Oxybis(1-Chloropropane)	ND		0.039	0.033
N-Nitrosodi-n-propylamine	ND		0.039	0.030
Acetophenone	ND		0.039	0.037
Hexachloroethane	ND		0.039	0.033
Nitrobenzene	ND		0.039	0.031
Isophorone	ND		0.039	0.033
Bis(2-chloroethoxy) methane	ND		0.039	0.035
Naphthalene	ND		0.039	0.034
4-Chloroaniline	ND		0.039	0.026
Hexachlorobutadiene	ND		0.039	0.036
Caprolactam	ND		0.039	0.026
2-Methylnaphthalene	ND		0.039	0.028
Hexachlorocyclopentadiene	ND		0.039	0.035
1,1'-Biphenyl	ND		0.039	0.037
2-Chloronaphthalene	ND		0.039	0.032
2-Nitroaniline	ND		0.039	0.028
Dimethyl phthalate	ND		0.039	0.036

**INTEGRATED ANALYTICAL LABORATORIES**

**SEMIVOLATILE ORGANICS**

Lab ID: E18-04347-005  
 Client ID: S11/9  
 Date Received: 06/01/2018  
 Date Extracted: 06/05/2018  
 Date Analyzed: 06/05/2018  
 Data file: C4811.D 06/05/2018 17:47

GC/MS Column: DB-5  
 Sample wt/vol: 15.46g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 18.0  
 Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
2,6-Dinitrotoluene	ND		0.039	0.030
Acenaphthylene	ND		0.039	0.032
3-Nitroaniline	ND		0.039	0.031
Acenaphthene	ND		0.039	0.035
2,4-Dinitrotoluene	ND		0.039	0.036
Dibenzofuran	ND		0.039	0.034
Diethyl phthalate	ND		0.039	0.039
Fluorene	ND		0.039	0.036
4-Chlorophenyl phenyl ether	ND		0.039	0.037
4-Nitroaniline	ND		0.039	0.030
1,2,4,5-Tetrachlorobenzene	ND		0.039	0.034
N-Nitrosodiphenylamine	ND		0.039	0.034
4-Bromophenyl phenyl ether	ND		0.039	0.033
Hexachlorobenzene	ND		0.039	0.036
Atrazine	ND		0.039	0.034
Phenanthrene	ND		0.039	0.036
Anthracene	ND		0.039	0.035
Carbazole	ND		0.039	0.031
Di-n-butyl phthalate	ND		0.039	0.030
Fluoranthene	ND		0.039	0.033
Pyrene	ND		0.039	0.032
Butyl benzyl phthalate	ND		0.039	0.036
3,3'-Dichlorobenzidine	ND		0.039	0.029
Benzo[a]anthracene	ND		0.039	0.034
Chrysene	ND		0.039	0.034
Bis(2-ethylhexyl) phthalate	ND		0.039	0.024
Di-n-octyl phthalate	ND		0.039	0.034
Benzo[b]fluoranthene	ND		0.039	0.032
Benzo[k]fluoranthene	ND		0.039	0.033
Benzo[a]pyrene	ND		0.039	0.032
Indeno[1,2,3-cd]pyrene	ND		0.039	0.033
Dibenz[a,h]anthracene	ND		0.039	0.039
Benzo[g,h,i]perylene	ND		0.039	0.036
Dinitrotoluene (2,4- and 2,6-)	ND		0.039	0.036

Total Target Compounds (53): 0

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank E18-04347 Page 66  
 C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**

**SEMIVOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04347-005

Client ID: S11/9

Date Received: 06/01/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Date File: C4811.D

GC/MS Column: DB-5

Sample wt/vol: 15.46g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 18.0

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

B --- Compound detected in Blank

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**

Lab ID: E18-04347-006

GC/MS Column: DB-5

Client ID: S12/10

Sample wt/vol: 15.72g

Date Received: 06/01/2018

Matrix-Units: Soil-mg/Kg

Date Extracted: 06/05/2018

% Moisture: 17.1

Date Analyzed: 06/05/2018

Dilution Factor: 1

Data file: C4812.D 06/05/2018 18:03

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Benzaldehyde	ND		0.038	0.037
Bis(2-chloroethyl) ether	ND		0.038	0.035
2,2'-Oxybis(1-Chloropropane)	ND		0.038	0.032
N-Nitrosodi-n-propylamine	ND		0.038	0.029
Acetophenone	ND		0.038	0.036
Hexachloroethane	ND		0.038	0.032
Nitrobenzene	ND		0.038	0.030
Isophorone	ND		0.038	0.032
Bis(2-chloroethoxy) methane	ND		0.038	0.034
Naphthalene	ND		0.038	0.034
4-Chloroaniline	ND		0.038	0.025
Hexachlorobutadiene	ND		0.038	0.035
Caprolactam	ND		0.038	0.026
2-Methylnaphthalene	ND		0.038	0.027
Hexachlorocyclopentadiene	ND		0.038	0.034
1,1'-Biphenyl	ND		0.038	0.036
2-Chloronaphthalene	ND		0.038	0.032
2-Nitroaniline	ND		0.038	0.027
Dimethyl phthalate	ND		0.038	0.035

**INTEGRATED ANALYTICAL LABORATORIES**

**SEMOVOLATILE ORGANICS**

Lab ID: E18-04347-006

Client ID: S12/10

Date Received: 06/01/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: C4812.D 06/05/2018 18:03

GC/MS Column: DB-5

Sample wt/vol: 15.72g

Matrix-Units: Soil-mg/Kg

% Moisture: 17.1

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
2,6-Dinitrotoluene	ND		0.038	0.029
Acenaphthylene	ND		0.038	0.032
3-Nitroaniline	ND		0.038	0.031
Acenaphthene	ND		0.038	0.034
2,4-Dinitrotoluene	ND		0.038	0.035
Dibenzofuran	ND		0.038	0.033
Diethyl phthalate	ND		0.038	0.038
Fluorene	ND		0.038	0.035
4-Chlorophenyl phenyl ether	ND		0.038	0.036
4-Nitroaniline	ND		0.038	0.029
1,2,4,5-Tetrachlorobenzene	ND		0.038	0.033
N-Nitrosodiphenylamine	ND		0.038	0.033
4-Bromophenyl phenyl ether	ND		0.038	0.032
Hexachlorobenzene	ND		0.038	0.035
Atrazine	ND		0.038	0.033
Phenanthrene	ND		0.038	0.035
Anthracene	ND		0.038	0.034
Carbazole	ND		0.038	0.030
Di-n-butyl phthalate	ND		0.038	0.029
Fluoranthene	ND		0.038	0.032
Pyrene	ND		0.038	0.032
Butyl benzyl phthalate	ND		0.038	0.035
3,3'-Dichlorobenzidine	ND		0.038	0.028
Benzo[a]anthracene	ND		0.038	0.033
Chrysene	ND		0.038	0.033
Bis(2-ethylhexyl) phthalate	ND		0.038	0.024
Di-n-octyl phthalate	ND		0.038	0.033
Benzo[b]fluoranthene	ND		0.038	0.031
Benzo[k]fluoranthene	ND		0.038	0.032
Benzo[a]pyrene	ND		0.038	0.031
Indeno[1,2,3-cd]pyrene	ND		0.038	0.032
Dibenz[a,h]anthracene	ND		0.038	0.038
Benzo[g,h,i]perylene	ND		0.038	0.035
Dinitrotoluene (2,4- and 2,6-)	ND		0.038	0.035

Total Target Compounds (53): 0

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank E18-04347 Page 69

C --- Common laboratory contamination

# INTEGRATED ANALYTICAL LABORATORIES

## SEMIVOLATILE ORGANICS Tentatively Identified Compounds

Lab ID: E18-04347-006

Client ID: S12/10

Date Received: 06/01/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Date File: C4812.D

GC/MS Column: DB-5

Sample wt/vol: 15.72g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 17.1

CAS #	Compound	Estimated Concentration Q	Retention Time
No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

B --- Compound detected in Blank

**INTEGRATED ANALYTICAL LABORATORIES**

**SEMIVOLATILE ORGANICS**

Lab ID: BLKS180605-03

GC/MS Column: DB-5

Client ID: .

Sample wt/vol: 15.00g

Date Received: NA

Matrix-Units: Soil-mg/Kg

Date Extracted: 06/05/2018

% Moisture: NA

Date Analyzed: 06/05/2018

Dilution Factor: 1

Data file: C4801.D 06/05/2018 15:08

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
N-Nitrosodimethylamine	ND		0.033	0.029
Pyridine	ND		0.033	0.028
Benzaldehyde	ND		0.033	0.032
Phenol	ND		0.033	0.031
Aniline	ND		0.033	0.031
Bis(2-chloroethyl) ether	ND		0.033	0.030
2-Chlorophenol	ND		0.033	0.025
1,3-Dichlorobenzene	ND		0.033	0.027
1,4-Dichlorobenzene	ND		0.033	0.027
Benzyl alcohol	ND		0.033	0.025
1,2-Dichlorobenzene	ND		0.033	0.031
2-Methylphenol	ND		0.033	0.030
2,2'-Oxybis(1-Chloropropane)	ND		0.033	0.028
4-Methylphenol **	ND		0.033	0.027
N-Nitrosodi-n-propylamine	ND		0.033	0.025
Acetophenone	ND		0.033	0.032
3-Methylphenol	ND		0.033	0.023
Hexachloroethane	ND		0.033	0.028
Nitrobenzene	ND		0.033	0.026
Isophorone	ND		0.033	0.028
2-Nitrophenol	ND		0.033	0.028
2,4-Dimethylphenol	ND		0.033	0.024
Bis(2-chloroethoxy) methane	ND		0.033	0.030
Benzoic acid	ND		0.033	0.033
2,4-Dimethylaniline	ND		0.033	0.027
2,4-Dichlorophenol	ND		0.033	0.029
1,2,4-Trichlorobenzene	ND		0.033	0.029
Naphthalene	ND		0.033	0.029
4-Chloroaniline	ND		0.033	0.022
4-Aminotoluene	ND		0.033	0.026
Hexachlorobutadiene	ND		0.033	0.031
Caprolactam	ND		0.033	0.022
2-Aminotoluene	ND		0.033	0.031
4-Chloro-3-methylphenol	ND		0.033	0.028
2-Methylnaphthalene	ND		0.033	0.023
Hexachlorocyclopentadiene	ND		0.033	0.029
2,4,6-Trichlorophenol	ND		0.033	0.028
2,4,5-Trichlorophenol	ND		0.033	0.029
1,1'-Biphenyl	ND		0.033	0.031
2-Chloronaphthalene	ND		0.033	0.027
2-Nitroaniline	ND		0.033	0.023
Dimethyl phthalate	ND		0.033	0.031

## INTEGRATED ANALYTICAL LABORATORIES

## SEMOVOLATILE ORGANICS

Lab ID: BLKS180605-03

GC/MS Column: DB-5

Client ID: .

Sample wt/vol: 15.00g

Date Received: NA

Matrix-Units: Soil-mg/Kg

Date Extracted: 06/05/2018

% Moisture: NA

Date Analyzed: 06/05/2018

Dilution Factor: 1

Data file: C4801.D 06/05/2018 15:08

Compound	Concentration	Q	RL	MDL
2,6-Dinitrotoluene	ND		0.033	0.025
Acenaphthylene	ND		0.033	0.027
3-Nitroaniline	ND		0.033	0.027
Acenaphthene	ND		0.033	0.030
2,4-Dinitrophenol	ND		0.033	0.020
4-Nitrophenol	ND		0.033	0.029
2,4-Dinitrotoluene	ND		0.033	0.030
Dibenzofuran	ND		0.033	0.028
Diethyl phthalate	ND		0.033	0.033
Fluorene	ND		0.033	0.030
4-Chlorophenyl phenyl ether	ND		0.033	0.031
4-Nitroaniline	ND		0.033	0.025
1,2,4,5-Tetrachlorobenzene	ND		0.033	0.029
2,3,4,6-Tetrachlorophenol	ND		0.033	0.023
4,6-Dinitro-2-methylphenol	ND		0.033	0.020
N-Nitrosodiphenylamine	ND		0.033	0.029
1,2-Diphenylhydrazine	ND		0.033	0.033
4-Bromophenyl phenyl ether	ND		0.033	0.028
Hexachlorobenzene	ND		0.033	0.031
Atrazine	ND		0.033	0.029
Pentachlorophenol	ND		0.033	0.020
Phenanthrene	ND		0.033	0.030
Anthracene	ND		0.033	0.029
Carbazole	ND		0.033	0.026
Di-n-butyl phthalate	ND		0.033	0.025
Fluoranthene	ND		0.033	0.028
Benzidine	ND		0.033	0.020
Pyrene	ND		0.033	0.027
3,3'-Dimethylbenzidine	ND		0.033	0.021
Butyl benzyl phthalate	ND		0.033	0.031
3,3'-Dichlorobenzidine	ND		0.033	0.024
Benzo[a]anthracene	ND		0.033	0.029
Chrysene	ND		0.033	0.029
Bis(2-ethylhexyl) phthalate	ND		0.033	0.021
Di-n-octyl phthalate	ND		0.033	0.029
Benzo[b]fluoranthene	ND		0.033	0.027
Benzo[k]fluoranthene	ND		0.033	0.028
Benzo[a]pyrene	ND		0.033	0.027
Indeno[1,2,3-cd]pyrene	ND		0.033	0.028
Dibenz[a,h]anthracene	ND		0.033	0.033
Benzo[g,h,i]perylene	ND		0.033	0.030

Total Target Compounds (83): 0

D --- Dilution Performed

\*\* - represents the total of 3+4-Methylphenol

J --- Value Less than RL &amp; greater than MDL

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E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

Page 2 of Q --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**

**SEMOVOLATILE ORGANICS**

Lab ID: BLKA180530-04

GC/MS Column: DB-5

Client ID: .

Sample wt/vol: 500ml

Date Received: NA

Matrix-Units: Aqueous- $\mu$ g/L

Date Extracted: 05/30/2018

% Moisture: 100

Date Analyzed: 05/31/2018

Dilution Factor: 1

Data file: B2458.D 05/31/2018 12:40

SIM Data file: B2478.D 05/31/2018 18:59

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
N-Nitrosodimethylamine	ND		1.00	0.278
Pyridine	ND		1.00	0.320
Benzaldehyde	ND		1.00	0.192
Phenol	ND		1.00	0.201
Aniline	ND		1.00	0.169
Bis(2-chloroethyl) ether	ND		1.00	0.243
2-Chlorophenol	ND		1.00	0.116
1,3-Dichlorobenzene	ND		1.00	0.148
1,4-Dichlorobenzene	ND		1.00	0.200
Benzyl alcohol	ND		1.00	0.199
1,2-Dichlorobenzene	ND		1.00	0.144
2-Methylphenol	ND		1.00	0.162
2,2'-Oxybis(1-Chloropropane)	ND		1.00	0.248
4-Methylphenol **	ND		1.00	0.170
N-Nitrosodi-n-propylamine	ND		1.00	0.229
Acetophenone	ND		1.00	0.180
3-Methylphenol	ND		1.00	0.529
Hexachloroethane	ND		1.00	0.163
Nitrobenzene	ND		1.00	0.210
Isophorone	ND		1.00	0.115
2-Nitrophenol	ND		1.00	0.160
2,4-Dimethylphenol	ND		1.00	0.137
Bis(2-chloroethoxy) methane	ND		1.00	0.171
Benzoic acid	ND		1.00	0.876
2,4-Dimethylaniline	ND		1.00	0.130
2,4-Dichlorophenol	ND		1.00	0.138
1,2,4-Trichlorobenzene	ND		1.00	0.187
Naphthalene	ND		1.00	0.139
4-Chloroaniline	ND		1.00	0.140
4-Aminotoluene	ND		1.00	0.164
Hexachlorobutadiene	ND		1.00	0.187
Caprolactam	ND		1.00	0.547
2-Aminotoluene	ND		1.00	0.164
4-Chloro-3-methylphenol	ND		1.00	0.139
2-Methylnaphthalene	ND		1.00	0.128
Hexachlorocyclopentadiene	ND		1.00	0.140
2,4,6-Trichlorophenol	ND		1.00	0.188
2,4,5-Trichlorophenol	ND		1.00	0.252
1,1'-Biphenyl	ND		1.00	0.133
2-Chloronaphthalene	ND		1.00	0.154
2-Nitroaniline	ND		1.00	0.161
Dimethyl phthalate	ND		1.00	0.137

**INTEGRATED ANALYTICAL LABORATORIES**  
**SEMIVOLATILE ORGANICS**

Lab ID: BLKA180530-04

GC/MS Column: DB-5

Client ID: .

Sample wt/vol: 500ml

Date Received: NA

Matrix-Units: Aqueous- $\mu$ g/L

Date Extracted: 05/30/2018

% Moisture: 100

Date Analyzed: 05/31/2018

Dilution Factor: 1

Data file: B2458.D 05/31/2018 12:40

SIM Data file: B2478.D 05/31/2018 18:59

Compound	Concentration	Q	RL	MDL
2,6-Dinitrotoluene	ND		1.00	0.139
Acenaphthylene	ND		1.00	0.141
3-Nitroaniline	ND		1.00	0.214
Acenaphthene	ND		1.00	0.129
2,4-Dinitrophenol	ND		1.00	0.206
4-Nitrophenol	ND		1.00	0.466
2,4-Dinitrotoluene	ND		1.00	0.135
Dibenzofuran	ND		1.00	0.133
Diethyl phthalate	ND		1.00	0.166
Fluorene	ND		1.00	0.182
4-Chlorophenyl phenyl ether	ND		1.00	0.316
4-Nitroaniline	ND		1.00	0.205
1,2,4,5-Tetrachlorobenzene	ND		1.00	0.923
2,3,4,6-Tetrachlorophenol	ND		1.00	0.294
4,6-Dinitro-2-methylphenol *	ND		0.100	0.100
N-Nitrosodiphenylamine	ND		1.00	0.179
1,2-Diphenylhydrazine	ND		1.00	0.214
4-Bromophenyl phenyl ether	ND		1.00	0.291
Hexachlorobenzene *	ND		0.020	0.020
Atrazine	ND		1.00	0.247
Pentachlorophenol *	ND		0.100	0.100
Phenanthrene	ND		1.00	0.175
Anthracene	ND		1.00	0.211
Carbazole	ND		1.00	0.221
Di-n-butyl phthalate	ND		1.00	0.196
Fluoranthene	ND		1.00	0.204
Benzidine	ND		1.00	0.664
Pyrene	ND		1.00	0.339
3,3'-Dimethylbenzidine	ND		1.00	0.188
Butyl benzyl phthalate	ND		1.00	0.215
3,3'-Dichlorobenzidine	ND		1.00	0.399
Benzo[a]anthracene *	ND		0.100	0.100
Chrysene	ND		1.00	0.245
Bis(2-ethylhexyl) phthalate	ND		1.00	0.277
Di-n-octyl phthalate	ND		1.00	0.306
Benzo[b]fluoranthene *	ND		0.100	0.100
Benzo[k]fluoranthene *	ND		0.100	0.100
Benzo[a]pyrene *	ND		0.100	0.100
Indeno[1,2,3-cd]pyrene *	ND		0.100	0.100
Dibenz[a,h]anthracene *	ND		0.100	0.100
Benzo[g,h,i]perylene	ND		1.00	0.672

Total Target Compounds (83): 0

\* - RL & MDL from SIM run

D --- Dilution Performed

\*\* - represents the total of 3+4-MethylPhenol 347 Page 74

J --- Value Less than RL & greater than MDL

B --- Compound detected in Blank

E --- Exceeds upper level of Calibration curve

Page 2 of Q --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**

**SEMIVOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: BLKA180530-04

GC/MS Column: DB-5

Client ID: .

Sample wt/vol: 500ml

Date Received: NA

Matrix-Units: Aqueous- $\mu$ g/L

Date Extracted: 05/30/2018

Dilution Factor: 1

Date Analyzed: 05/31/2018

% Moisture: 100

Data file: B2458.D 05/31/2018 12:40

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

**INTEGRATED ANALYTICAL LABORATORIES**

**SEMIVOLATILE ORGANICS**

Lab ID: BLKA180607-03

Client ID: .

Date Received: NA

Date Extracted: 06/07/2018

Date Analyzed: 06/07/2018

Data file: A3758.D 06/07/2018 14:40

SIM Data file: A3764.D 06/07/2018 16:15

GC/MS Column: DB-5

Sample wt/vol: 500ml

Matrix-Units: Aqueous- $\mu$ g/L

% Moisture: 100

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
N-Nitrosodimethylamine	ND	1.00	0.278	
Pyridine	ND	1.00	0.320	
Benzaldehyde	ND	1.00	0.192	
Phenol	ND	1.00	0.201	
Aniline	ND	1.00	0.169	
Bis(2-chloroethyl) ether	ND	1.00	0.243	
2-Chlorophenol	ND	1.00	0.116	
1,3-Dichlorobenzene	ND	1.00	0.148	
1,4-Dichlorobenzene	ND	1.00	0.200	
Benzyl alcohol	ND	1.00	0.199	
1,2-Dichlorobenzene	ND	1.00	0.144	
2-Methylphenol	ND	1.00	0.162	
2,2'-Oxybis(1-Chloropropane)	ND	1.00	0.248	
4-Methylphenol **	ND	1.00	0.170	
N-Nitrosodi-n-propylamine	ND	1.00	0.229	
Acetophenone	ND	1.00	0.180	
3-Methylphenol	ND	1.00	0.529	
Hexachloroethane	ND	1.00	0.163	
Nitrobenzene	ND	1.00	0.210	
Isophorone	ND	1.00	0.115	
2-Nitrophenol	ND	1.00	0.160	
2,4-Dimethylphenol	ND	1.00	0.137	
Bis(2-chloroethoxy) methane	ND	1.00	0.171	
Benzoic acid	ND	1.00	0.876	
2,4-Dimethylaniline	ND	1.00	0.130	
2,4-Dichlorophenol	ND	1.00	0.138	
1,2,4-Trichlorobenzene	ND	1.00	0.187	
Naphthalene	ND	1.00	0.139	
4-Chloroaniline	ND	1.00	0.140	
4-Aminotoluene	ND	1.00	0.164	
Hexachlorobutadiene	ND	1.00	0.187	
Caprolactam	ND	1.00	0.547	
2-Aminotoluene	ND	1.00	0.164	
4-Chloro-3-methylphenol	ND	1.00	0.139	
2-Methylnaphthalene	ND	1.00	0.128	
Hexachlorocyclopentadiene	ND	1.00	0.140	
2,4,6-Trichlorophenol	ND	1.00	0.188	
2,4,5-Trichlorophenol	ND	1.00	0.252	
1,1'-Biphenyl	ND	1.00	0.133	
2-Chloronaphthalene	ND	1.00	0.154	
2-Nitroaniline	ND	1.00	0.161	
Dimethyl phthalate	ND	1.00	0.137	18-04347 Page 76

**INTEGRATED ANALYTICAL LABORATORIES**

**SEMIVOLATILE ORGANICS**

Lab ID: BLKA180607-03

GC/MS Column: DB-5

Client ID: .

Sample wt/vol: 500ml

Date Received: NA

Matrix-Units: Aqueous- $\mu$ g/L

Date Extracted: 06/07/2018

% Moisture: 100

Date Analyzed: 06/07/2018

Dilution Factor: 1

Data file: A3758.D 06/07/2018 14:40

SIM Data file: A3764.D 06/07/2018 16:15

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
2,6-Dinitrotoluene	ND		1.00	0.139
Acenaphthylene	ND		1.00	0.141
3-Nitroaniline	ND		1.00	0.214
Acenaphthene	ND		1.00	0.129
2,4-Dinitrophenol	ND		1.00	0.206
4-Nitrophenol	ND		1.00	0.466
2,4-Dinitrotoluene	ND		1.00	0.135
Dibenzofuran	ND		1.00	0.133
Diethyl phthalate	ND		1.00	0.166
Fluorene	ND		1.00	0.182
4-Chlorophenyl phenyl ether	ND		1.00	0.316
4-Nitroaniline	ND		1.00	0.205
1,2,4,5-Tetrachlorobenzene	ND		1.00	0.923
2,3,4,6-Tetrachlorophenol	ND		1.00	0.294
4,6-Dinitro-2-methylphenol *	ND		0.100	0.100
N-Nitrosodiphenylamine	ND		1.00	0.179
1,2-Diphenylhydrazine	ND		1.00	0.214
4-Bromophenyl phenyl ether	ND		1.00	0.291
Hexachlorobenzene *	ND		0.020	0.020
Atrazine	ND		1.00	0.247
Pentachlorophenol *	ND		0.100	0.100
Phenanthrene	ND		1.00	0.175
Anthracene	ND		1.00	0.211
Carbazole	ND		1.00	0.221
Di-n-butyl phthalate	ND		1.00	0.196
Fluoranthene	ND		1.00	0.204
Benzidine	ND		1.00	0.664
Pyrene	ND		1.00	0.339
3,3'-Dimethylbenzidine	ND		1.00	0.188
Butyl benzyl phthalate	ND		1.00	0.215
3,3'-Dichlorobenzidine	ND		1.00	0.399
Benzo[a]anthracene *	ND		0.100	0.100
Chrysene	ND		1.00	0.245
Bis(2-ethylhexyl) phthalate	ND		1.00	0.277
Di-n-octyl phthalate	ND		1.00	0.306
Benzo[b]fluoranthene *	ND		0.100	0.100
Benzo[k]fluoranthene *	ND		0.100	0.100
Benzo[a]pyrene *	ND		0.100	0.100
Indeno[1,2,3-ed]pyrene *	ND		0.100	0.100
Dibenz[a,h]anthracene *	ND		0.100	0.100
Benzo[g,h,i]perylene	ND		1.00	0.672

Total Target Compounds (83): 0

\* - RL & MDL from SIM run

D --- Dilution Performed

\*\* - represents the total of 3+4-Methylphenol

J --- Value Less than RL & greater than MDL

B --- Compound detected in Blank

E --- Exceeds upper level of Calibration curve

Page 2 of Q --- Common laboratory contamination

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**INTEGRATED ANALYTICAL LABORATORIES**

**SEMIVOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: BLKA180607-03

GC/MS Column: DB-5

Client ID: .

Sample wt/vol: 500ml

Date Received: NA

Matrix-Units: Aqueous- $\mu$ g/L

Date Extracted: 06/07/2018

Dilution Factor: 1

Date Analyzed: 06/07/2018

% Moisture: 100

Data file: A3758.D 06/07/2018 14:40

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

**INTEGRATED ANALYTICAL LABORATORIES**

**SEMIVOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: BLKS180605-03

GC/MS Column: DB-5

Client ID: .

Sample wt/vol: 15.00g

Date Received: NA

Matrix-Units: Soil-mg/Kg

Date Extracted: 06/05/2018

Dilution Factor: 1

Date Analyzed: 06/05/2018

% Moisture: NA

Data file: C4801.D 06/05/2018 15:08

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**

Lab ID: E18-04347-007

Client ID: GW2/7

Date Received: 06/01/2018

Date Extracted: 06/07/2018

Date Analyzed: 06/07/2018

Data file: A3760.D 06/07/2018 15:12

SIM Data file: A3765.D 06/07/2018 16:30

GC/MS Column: DB-5

Sample wt/vol: 500ml

Matrix-Units: Aqueous- $\mu$ g/L

% Moisture: 100

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Benzaldehyde	ND		1.00	0.192
Bis(2-chloroethyl) ether	ND		1.00	0.243
2,2'-Oxybis(1-Chloropropane)	ND		1.00	0.248
N-Nitrosodi-n-propylamine	ND		1.00	0.229
Acetophenone	ND		1.00	0.180
Hexachloroethane	ND		1.00	0.163
Nitrobenzene	ND		1.00	0.210
Isophorone	ND		1.00	0.115
Bis(2-chloroethoxy) methane	ND		1.00	0.171
Naphthalene	ND		1.00	0.139
4-Chloroaniline	ND		1.00	0.140
Hexachlorobutadiene	ND		1.00	0.187
Caprolactam	ND		1.00	0.547
2-Methylnaphthalene	ND		1.00	0.128
Hexachlorocyclopentadiene	ND		1.00	0.140
1,1'-Biphenyl	ND		1.00	0.133
2-Chloronaphthalene	ND		1.00	0.154
2-Nitroaniline	ND		1.00	0.161
Dimethyl phthalate	ND		1.00	0.137

# INTEGRATED ANALYTICAL LABORATORIES

## SEMIVOLATILE ORGANICS

Lab ID: E18-04347-007

Client ID: GW2/7

Date Received: 06/01/2018

Date Extracted: 06/07/2018

Date Analyzed: 06/07/2018

Data file: A3760.D 06/07/2018 15:12

SIM Data file: A3765.D 06/07/2018 16:30

GC/MS Column: DB-5

Sample wt/vol: 500ml

Matrix-Units: Aqueous- $\mu$ g/L

% Moisture: 100

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
2,6-Dinitrotoluene	ND		1.00	0.139
Acenaphthylene	ND		1.00	0.141
3-Nitroaniline	ND		1.00	0.214
Acenaphthene	ND		1.00	0.129
2,4-Dinitrotoluene	ND		1.00	0.135
Dibenzofuran	ND		1.00	0.133
Diethyl phthalate	ND		1.00	0.166
Fluorene	ND		1.00	0.182
4-Chlorophenyl phenyl ether	ND		1.00	0.316
4-Nitroaniline	ND		1.00	0.205
1,2,4,5-Tetrachlorobenzene	ND		1.00	0.923
N-Nitrosodiphenylamine	ND		1.00	0.179
4-Bromophenyl phenyl ether	ND		1.00	0.291
Hexachlorobenzene *	ND		0.020	0.020
Atrazine	ND		1.00	0.247
Phenanthrene	ND		1.00	0.175
Anthracene	ND		1.00	0.211
Carbazole	ND		1.00	0.221
Di-n-butyl phthalate	ND		1.00	0.196
Fluoranthene	ND		1.00	0.204
Pyrene	ND		1.00	0.339
Butyl benzyl phthalate	ND		1.00	0.215
3,3'-Dichlorobenzidine	ND		1.00	0.399
Benzo[a]anthracene *	ND		0.100	0.100
Chrysene	ND		1.00	0.245
Bis(2-ethylhexyl) phthalate	ND		1.00	0.277
Di-n-octyl phthalate	ND		1.00	0.306
Benzo[b]fluoranthene *	ND		0.100	0.100
Benzo[k]fluoranthene *	ND		0.100	0.100
Benzo[a]pyrene *	ND		0.100	0.100
Indeno[1,2,3-cd]pyrene *	ND		0.100	0.100
Dibenz[a,h]anthracene *	ND		0.100	0.100
Benzo[g,h,i]perylene	ND		1.00	0.672
Dinitrotoluene (2,4- and 2,6-)	ND		1.00	0.139

Total Target Compounds (53): 0

\* - RL & MDL from SIM run

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank  
 C --- Common laboratory contamination  
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**INTEGRATED ANALYTICAL LABORATORIES**

**SEMIVOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04347-007

Client ID: GW2/7

Date Received: 06/01/2018

Date Extracted: 06/07/2018

Date Analyzed: 06/07/2018

Data file: A3760.D 06/07/2018 15:12

GC/MS Column: DB-5

Sample wt/vol: 500ml

Matrix-Units: Aqueous- $\mu$ g/L

Dilution Factor: 1

% Moisture: 100

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
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No peaks detected

Total TICs = 0

**INTEGRATED ANALYTICAL LABORATORIES****SEMOVOLATILE ORGANICS**

Lab ID: E18-04347-008

Client ID: GW3/6

Date Received: 06/01/2018

Date Extracted: 06/07/2018

Date Analyzed: 06/07/2018

Data file: A3761.D 06/07/2018 15:28

SIM Data file: A3766.D 06/07/2018 16:44

GC/MS Column: DB-5

Sample wt/vol: 500ml

Matrix-Units: Aqueous- $\mu$ g/L

% Moisture: 100

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Benzaldehyde	ND		1.00	0.192
Bis(2-chloroethyl) ether	ND		1.00	0.243
2,2'-Oxybis(1-Chloropropane)	ND		1.00	0.248
N-Nitrosodi-n-propylamine	ND		1.00	0.229
Acetophenone	ND		1.00	0.180
Hexachloroethane	ND		1.00	0.163
Nitrobenzene	ND		1.00	0.210
Isophorone	ND		1.00	0.115
Bis(2-chloroethoxy) methane	ND		1.00	0.171
Naphthalene	ND		1.00	0.139
4-Chloroaniline	ND		1.00	0.140
Hexachlorobutadiene	ND		1.00	0.187
Caprolactam	ND		1.00	0.547
2-Methylnaphthalene	ND		1.00	0.128
Hexachlorocyclopentadiene	ND		1.00	0.140
1,1'-Biphenyl	ND		1.00	0.133
2-Chloronaphthalene	ND		1.00	0.154
2-Nitroaniline	ND		1.00	0.161
Dimethyl phthalate	ND		1.00	0.137

**INTEGRATED ANALYTICAL LABORATORIES**

**SEMOVOLATILE ORGANICS**

Lab ID: E18-04347-008

Client ID: GW3/6

Date Received: 06/01/2018

Date Extracted: 06/07/2018

Date Analyzed: 06/07/2018

Data file: A3761.D 06/07/2018 15:28

SIM Data file: A3766.D 06/07/2018 16:44

GC/MS Column: DB-5

Sample wt/vol: 500ml

Matrix-Units: Aqueous- $\mu$ g/L

% Moisture: 100

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
2,6-Dinitrotoluene	ND		1.00	0.139
Acenaphthylene	ND		1.00	0.141
3-Nitroaniline	ND		1.00	0.214
Acenaphthene	ND		1.00	0.129
2,4-Dinitrotoluene	ND		1.00	0.135
Dibenzofuran	ND		1.00	0.133
Diethyl phthalate	ND		1.00	0.166
Fluorene	ND		1.00	0.182
4-Chlorophenyl phenyl ether	ND		1.00	0.316
4-Nitroaniline	ND		1.00	0.205
1,2,4,5-Tetrachlorobenzene	ND		1.00	0.923
N-Nitrosodiphenylamine	ND		1.00	0.179
4-Bromophenyl phenyl ether	ND		1.00	0.291
Hexachlorobenzene *	ND		0.020	0.020
Atrazine	ND		1.00	0.247
Phenanthrene	ND		1.00	0.175
Anthracene	ND		1.00	0.211
Carbazole	ND		1.00	0.221
Di-n-butyl phthalate	ND		1.00	0.196
Fluoranthene	ND		1.00	0.204
Pyrene	ND		1.00	0.339
Butyl benzyl phthalate	ND		1.00	0.215
3,3'-Dichlorobenzidine	ND		1.00	0.399
Benzo[a]anthracene *	ND		0.100	0.100
Chrysene	ND		1.00	0.245
Bis(2-ethylhexyl) phthalate	ND		1.00	0.277
Di-n-octyl phthalate	ND		1.00	0.306
Benzo[b]fluoranthene *	ND		0.100	0.100
Benzo[k]fluoranthene *	ND		0.100	0.100
Benzo[a]pyrene *	ND		0.100	0.100
Indeno[1,2,3-cd]pyrene *	ND		0.100	0.100
Dibenz[a,h]anthracene *	ND		0.100	0.100
Benzo[g,h,i]perylene	ND		1.00	0.672
Dinitrotoluene (2,4- and 2,6-)	ND		1.00	0.139

Total Target Compounds (53): 0

\* - RL & MDL from SIM run

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank  
C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04347-008

Client ID: GW3/6

Date Received: 06/01/2018

Date Extracted: 06/07/2018

Date Analyzed: 06/07/2018

Data file: A3761.D 06/07/2018 15:28

GC/MS Column: DB-5

Sample wt/vol: 500ml

Matrix-Units: Aqueous- $\mu$ g/L

Dilution Factor: 1

% Moisture: 100

CAS #	Compound	Estimated Concentration Q	Retention Time
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No peaks detected

Total TICs = 0

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: E18-04347-001

Client ID: S7/3

Date Received: 06/01/2018

Date Extracted: 06/06/2018

Date Analyzed: 06/07/2018

Data file: R4877.D 06/07/2018 16:48

GC Column: DB-5/DB1701P

Sample wt/vol: 30.33g

Matrix-Units: Soil-mg/Kg

% Moisture: 5.60

Dilution Factor: 5

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Aroclor-1016	ND	0.00873	0.00349	
Aroclor-1221	ND	0.00873	0.00349	
Aroclor-1232	ND	0.00873	0.00349	
Aroclor-1242	ND	0.00873	0.00349	
Aroclor-1248	ND	0.00873	0.00349	
Aroclor-1254	ND	0.00873	0.00349	
Aroclor-1260	ND	0.00873	0.00349	
Aroclor-1262	ND	0.00873	0.00349	
Aroclor-1268	ND	0.00873	0.00349	
PCBs	ND	0.00873	0.00349	

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: E18-04347-002

Client ID: S8/4

Date Received: 06/01/2018

Date Extracted: 06/06/2018

Date Analyzed: 06/07/2018

Data file: R4878.D 06/07/2018 17:05

GC Column: DB-5/DB1701P

Sample wt/vol: 30.72g

Matrix-Units: Soil-mg/Kg

% Moisture: 4.40

Dilution Factor: 5

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Aroclor-1016	ND		0.00851	0.0034
Aroclor-1221	ND		0.00851	0.0034
Aroclor-1232	ND		0.00851	0.0034
Aroclor-1242	ND		0.00851	0.0034
Aroclor-1248	ND		0.00851	0.0034
Aroclor-1254	ND		0.00851	0.0034
Aroclor-1260	ND		0.00851	0.0034
Aroclor-1262	ND		0.00851	0.0034
Aroclor-1268	ND		0.00851	0.0034
PCBs	ND		0.00851	0.0034

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: E18-04347-003

Client ID: S9/3

Date Received: 06/01/2018

Date Extracted: 06/06/2018

Date Analyzed: 06/07/2018

Data file: R4879.D 06/07/2018 17:22

GC Column: DB-5/DB1701P

Sample wt/vol: 30.88g

Matrix-Units: Soil-mg/Kg

% Moisture: 6.40

Dilution Factor: 5

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Aroclor-1016	ND		0.00865	0.00346
Aroclor-1221	ND		0.00865	0.00346
Aroclor-1232	ND		0.00865	0.00346
Aroclor-1242	ND		0.00865	0.00346
Aroclor-1248	ND		0.00865	0.00346
Aroclor-1254	ND		0.00865	0.00346
Aroclor-1260	ND		0.00865	0.00346
Aroclor-1262	ND		0.00865	0.00346
Aroclor-1268	ND		0.00865	0.00346
PCBs	ND		0.00865	0.00346

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: E18-04347-004

Client ID: S10/6

Date Received: 06/01/2018

Date Extracted: 06/06/2018

Date Analyzed: 06/07/2018

Data file: R4880.D 06/07/2018 17:39

GC Column: DB-5/DB1701P

Sample wt/vol: 30.77g

Matrix-Units: Soil-mg/Kg

% Moisture: 14.4

Dilution Factor: 5

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Aroclor-1016	ND		0.00949	0.0038
Aroclor-1221	ND		0.00949	0.0038
Aroclor-1232	ND		0.00949	0.0038
Aroclor-1242	ND		0.00949	0.0038
Aroclor-1248	ND		0.00949	0.0038
Aroclor-1254	ND		0.00949	0.0038
Aroclor-1260	ND		0.00949	0.0038
Aroclor-1262	ND		0.00949	0.0038
Aroclor-1268	ND		0.00949	0.0038
PCBs	ND		0.00949	0.0038

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: E18-04347-005

Client ID: S11/9

Date Received: 06/01/2018

Date Extracted: 06/06/2018

Date Analyzed: 06/07/2018

Data file: R4881.D 06/07/2018 17:57

GC Column: DB-5/DB1701P

Sample wt/vol: 30.48g

Matrix-Units: Soil-mg/Kg

% Moisture: 18.0

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Aroclor-1016	ND		0.002	0.0008
Aroclor-1221	ND		0.002	0.0008
Aroclor-1232	ND		0.002	0.0008
Aroclor-1242	ND		0.002	0.0008
Aroclor-1248	ND		0.002	0.0008
Aroclor-1254	ND		0.002	0.0008
Aroclor-1260	ND		0.002	0.0008
Aroclor-1262	ND		0.002	0.0008
Aroclor-1268	ND		0.002	0.0008
PCBs	ND		0.002	0.0008

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: E18-04347-006  
Client ID: S12/10  
Date Received: 06/01/2018  
Date Extracted: 06/06/2018  
Date Analyzed: 06/07/2018  
Data file: R4882.D 06/07/2018 18:14

GC Column: DB-5/DB1701P  
Sample wt/vol: 30.78g  
Matrix-Units: Soil-mg/Kg  
% Moisture: 17.1  
Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Aroclor-1016	ND		0.00196	0.000784
Aroclor-1221	ND		0.00196	0.000784
Aroclor-1232	ND		0.00196	0.000784
Aroclor-1242	ND		0.00196	0.000784
Aroclor-1248	ND		0.00196	0.000784
Aroclor-1254	ND		0.00196	0.000784
Aroclor-1260	ND		0.00196	0.000784
Aroclor-1262	ND		0.00196	0.000784
Aroclor-1268	ND		0.00196	0.000784
PCBs	ND		0.00196	0.000784

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: E18-04347-007

Client ID: GW2/7

Date Received: 06/01/2018

Date Extracted: 06/06/2018

Date Analyzed: 06/06/2018

Data file: R4840.D 06/06/2018 13:48

GC Column: DB-5/DB1701P

Sample wt/vol: 1000ml

Matrix-Units: Aqueous- $\mu$ g/L

% Moisture: 100

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Aroclor-1016	ND		0.050	0.020
Aroclor-1221	ND		0.050	0.020
Aroclor-1232	ND		0.050	0.020
Aroclor-1242	ND		0.050	0.020
Aroclor-1248	ND		0.050	0.020
Aroclor-1254	ND		0.050	0.020
Aroclor-1260	ND		0.050	0.020
Aroclor-1262	ND		0.050	0.020
Aroclor-1268	ND		0.050	0.020
PCBs	ND		0.050	0.020

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: E18-04347-008

Client ID: GW3/6

Date Received: 06/01/2018

Date Extracted: 06/06/2018

Date Analyzed: 06/06/2018

Data file: R4841.D 06/06/2018 14:05

GC Column: DB-5/DB1701P

Sample wt/vol: 1000ml

Matrix-Units: Aqueous- $\mu$ g/L

% Moisture: 100

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Aroclor-1016	ND		0.050	0.020
Aroclor-1221	ND		0.050	0.020
Aroclor-1232	ND		0.050	0.020
Aroclor-1242	ND		0.050	0.020
Aroclor-1248	ND		0.050	0.020
Aroclor-1254	ND		0.050	0.020
Aroclor-1260	ND		0.050	0.020
Aroclor-1262	ND		0.050	0.020
Aroclor-1268	ND		0.050	0.020
PCBs	ND		0.050	0.020

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: BLKS180606-08

Client ID: PCB

Date Received: NA

Date Extracted: 06/06/2018

Date Analyzed: 06/07/2018

Data file: R4873.D 06/07/2018 15:38

GC Column: DB-5/DB1701P

Sample wt/vol: 30g

Matrix-Units: Soil-mg/Kg

% Moisture: NA

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Aroclor-1016	ND		0.00167	0.000668
Aroclor-1221	ND		0.00167	0.000668
Aroclor-1232	ND		0.00167	0.000668
Aroclor-1242	ND		0.00167	0.000668
Aroclor-1248	ND		0.00167	0.000668
Aroclor-1254	ND		0.00167	0.000668
Aroclor-1260	ND		0.00167	0.000668
Aroclor-1262	ND		0.00167	0.000668
Aroclor-1268	ND		0.00167	0.000668
PCBs	ND		0.00167	0.000668

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: BLKA180530-05

Client ID: PCB

Date Received: NA

Date Extracted: 05/30/2018

Date Analyzed: 05/30/2018

Data file: R4653.D 05/30/2018 20:30

GC Column: DB-5/DB1701P

Sample wt/vol: 1000ml

Matrix-Units: Aqueous- $\mu$ g/L

% Moisture: 100

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Aroclor-1016	ND		0.050	0.020
Aroclor-1221	ND		0.050	0.020
Aroclor-1232	ND		0.050	0.020
Aroclor-1242	ND		0.050	0.020
Aroclor-1248	ND		0.050	0.020
Aroclor-1254	ND		0.050	0.020
Aroclor-1260	ND		0.050	0.020
Aroclor-1262	ND		0.050	0.020
Aroclor-1268	ND		0.050	0.020
PCBs	ND		0.050	0.020

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: BLKA180606-02

Client ID: PCB

Date Received: NA

Date Extracted: 06/06/2018

Date Analyzed: 06/06/2018

Data file: R4836.D 06/06/2018 12:39

GC Column: DB-5/DB1701P

Sample wt/vol: 1000ml

Matrix-Units: Aqueous- $\mu$ g/L

% Moisture: 100

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Aroclor-1016	ND		0.050	0.020
Aroclor-1221	ND		0.050	0.020
Aroclor-1232	ND		0.050	0.020
Aroclor-1242	ND		0.050	0.020
Aroclor-1248	ND		0.050	0.020
Aroclor-1254	ND		0.050	0.020
Aroclor-1260	ND		0.050	0.020
Aroclor-1262	ND		0.050	0.020
Aroclor-1268	ND		0.050	0.020
PCBs	ND		0.050	0.020

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**  
**PESTICIDES**

Lab ID: E18-04347-001  
 Client ID: S7/3  
 Date Received: 06/01/2018  
 Date Extracted: 06/06/2018  
 Date Analyzed: 06/08/2018  
 Data file: O0919.D 06/08/2018 10:32

GC Column: RTX-CLP1/CLP2  
 Sample wt/vol: 30.33g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 5.60  
 Dilution Factor: 5

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
alpha-BHC	ND		0.00175	0.000873
beta-BHC	ND		0.00175	0.000873
gamma-BHC (Lindane)	ND		0.00175	0.000873
delta-BHC	ND		0.00175	0.000873
Heptachlor	ND		0.00175	0.000873
Aldrin	ND		0.00175	0.000873
Heptachlor epoxide	ND		0.00175	0.000873
Endosulfan I	ND		0.00175	0.000873
4,4'-DDE	ND		0.00175	0.000873
Dieldrin	ND		0.00175	0.000873
Endrin	ND		0.00175	0.000873
Endosulfan II	ND		0.00175	0.000873
4,4'-DDD	ND		0.00175	0.000873
Endrin aldehyde	ND		0.00175	0.000873
Endosulfan sulfate	ND		0.00175	0.000873
4,4'-DDT	ND		0.00175	0.000873
Endrin ketone	ND		0.00175	0.000873
Methoxychlor	ND		0.00175	0.000873
alpha-Chlordane	ND		0.00175	0.000873
gamma-Chlordane	ND		0.00175	0.000873
Toxaphene	ND		0.022	0.011
Endosulfan (I and II)	ND		0.00175	0.000873
Chlordane (alpha and gamma)	ND		0.00175	0.000873

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**  
**PESTICIDES**

Lab ID: E18-04347-002  
 Client ID: S8/4  
 Date Received: 06/01/2018  
 Date Extracted: 06/06/2018  
 Date Analyzed: 06/08/2018  
 Data file: O0920.D 06/08/2018 10:44

GC Column: RTX-CLP1/CLP2  
 Sample wt/vol: 30.72g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 4.40  
 Dilution Factor: 10

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.00341	0.0017
beta-BHC	ND		0.00341	0.0017
gamma-BHC (Lindane)	ND		0.00341	0.0017
delta-BHC	ND		0.00341	0.0017
Heptachlor	ND		0.00341	0.0017
Aldrin	ND		0.00341	0.0017
Heptachlor epoxide	ND		0.00341	0.0017
Endosulfan I	ND		0.00341	0.0017
4,4'-DDE	ND		0.00341	0.0017
Dieldrin	ND		0.00341	0.0017
Endrin	ND		0.00341	0.0017
Endosulfan II	ND		0.00341	0.0017
4,4'-DDD	0.00731	D	0.00341	0.0017
Endrin aldehyde	ND		0.00341	0.0017
Endosulfan sulfate	ND		0.00341	0.0017
4,4'-DDT	0.00327	DJ	0.00341	0.0017
Endrin ketone	ND		0.00341	0.0017
Methoxychlor	ND		0.00341	0.0017
alpha-Chlordane	ND		0.00341	0.0017
gamma-Chlordane	ND		0.00341	0.0017
Toxaphene	ND		0.043	0.020
Endosulfan (I and II)	ND		0.00341	0.0017
Chlordane (alpha and gamma)	ND		0.00341	0.0017

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**  
**PESTICIDES**

Lab ID: E18-04347-003  
 Client ID: S9/3  
 Date Received: 06/01/2018  
 Date Extracted: 06/06/2018  
 Date Analyzed: 06/08/2018  
 Data file: O0921.D 06/08/2018 10:57

GC Column: RTX-CLP1/CLP2  
 Sample wt/vol: 30.88g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 6.40  
 Dilution Factor: 5

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.00173	0.000865
beta-BHC	ND		0.00173	0.000865
gamma-BHC (Lindane)	ND		0.00173	0.000865
delta-BHC	ND		0.00173	0.000865
Heptachlor	ND		0.00173	0.000865
Aldrin	ND		0.00173	0.000865
Heptachlor epoxide	ND		0.00173	0.000865
Endosulfan I	ND		0.00173	0.000865
4,4'-DDE	ND		0.00173	0.000865
Dieldrin	ND		0.00173	0.000865
Endrin	ND		0.00173	0.000865
Endosulfan II	ND		0.00173	0.000865
4,4'-DDD	ND		0.00173	0.000865
Endrin aldehyde	ND		0.00173	0.000865
Endosulfan sulfate	ND		0.00173	0.000865
4,4'-DDT	ND		0.00173	0.000865
Endrin ketone	ND		0.00173	0.000865
Methoxychlor	ND		0.00173	0.000865
alpha-Chlordane	ND		0.00173	0.000865
gamma-Chlordane	ND		0.00173	0.000865
Toxaphene	ND		0.022	0.010
Endosulfan (I and II)	ND		0.00173	0.000865
Chlordane (alpha and gamma)	ND		0.00173	0.000865

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**  
**PESTICIDES**

Lab ID: E18-04347-004  
 Client ID: S10/6  
 Date Received: 06/01/2018  
 Date Extracted: 06/06/2018  
 Date Analyzed: 06/08/2018  
 Data file: O0922.D 06/08/2018 11:09

GC Column: RTX-CLP1/CLP2  
 Sample wt/vol: 30.77g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 14.4  
 Dilution Factor: 5

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.0019	0.000949
beta-BHC	ND		0.0019	0.000949
gamma-BHC (Lindane)	ND		0.0019	0.000949
delta-BHC	ND		0.0019	0.000949
Heptachlor	ND		0.0019	0.000949
Aldrin	ND		0.0019	0.000949
Heptachlor epoxide	ND		0.0019	0.000949
Endosulfan I	ND		0.0019	0.000949
4,4'-DDE	ND		0.0019	0.000949
Dieldrin	ND		0.0019	0.000949
Endrin	ND		0.0019	0.000949
Endosulfan II	ND		0.0019	0.000949
4,4'-DDD	ND		0.0019	0.000949
Endrin aldehyde	ND		0.0019	0.000949
Endosulfan sulfate	ND		0.0019	0.000949
4,4'-DDT	ND		0.0019	0.000949
Endrin ketone	ND		0.0019	0.000949
Methoxychlor	ND		0.0019	0.000949
alpha-Chlordane	ND		0.0019	0.000949
gamma-Chlordane	ND		0.0019	0.000949
Toxaphene	ND		0.024	0.011
Endosulfan (I and II)	ND		0.0019	0.000949
Chlordane (alpha and gamma)	ND		0.0019	0.000949

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

# INTEGRATED ANALYTICAL LABORATORIES

## PESTICIDES

Lab ID: E18-04347-005

Client ID: S11/9

Date Received: 06/01/2018

Date Extracted: 06/06/2018

Date Analyzed: 06/08/2018

Data file: O0923.D 06/08/2018 11:22

GC Column: RTX-CLP1/CLP2

Sample wt/vol: 30.48g

Matrix-Units: Soil-mg/Kg

% Moisture: 18.0

Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND	0.0004	0.0002	
beta-BHC	ND	0.0004	0.0002	
gamma-BHC (Lindane)	ND	0.0004	0.0002	
delta-BHC	ND	0.0004	0.0002	
Heptachlor	ND	0.0004	0.0002	
Aldrin	ND	0.0004	0.0002	
Heptachlor epoxide	ND	0.0004	0.0002	
Endosulfan I	ND	0.0004	0.0002	
4,4'-DDE	ND	0.0004	0.0002	
Dieldrin	ND	0.0004	0.0002	
Endrin	ND	0.0004	0.0002	
Endosulfan II	ND	0.0004	0.0002	
4,4'-DDD	ND	0.0004	0.0002	
Endrin aldehyde	ND	0.0004	0.0002	
Endosulfan sulfate	ND	0.0004	0.0002	
4,4'-DDT	ND	0.0004	0.0002	
Endrin ketone	ND	0.0004	0.0002	
Methoxychlor	ND	0.0004	0.0002	
alpha-Chlordane	ND	0.0004	0.0002	
gamma-Chlordane	ND	0.0004	0.0002	
Toxaphene	ND	0.005	0.0024	
Endosulfan (I and II)	ND	0.0004	0.0002	
Chlordane (alpha and gamma)	ND	0.0004	0.0002	

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**  
**PESTICIDES**

Lab ID: E18-04347-006  
 Client ID: S12/10  
 Date Received: 06/01/2018  
 Date Extracted: 06/06/2018  
 Date Analyzed: 06/08/2018  
 Data file: O0924.D 06/08/2018 11:35

GC Column: RTX-CLP1/CLP2  
 Sample wt/vol: 30.78g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 17.1  
 Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000392	0.000196
beta-BHC	ND		0.000392	0.000196
gamma-BHC (Lindane)	ND		0.000392	0.000196
delta-BHC	ND		0.000392	0.000196
Heptachlor	ND		0.000392	0.000196
Aldrin	ND		0.000392	0.000196
Heptachlor epoxide	ND		0.000392	0.000196
Endosulfan I	ND		0.000392	0.000196
4,4'-DDE	ND		0.000392	0.000196
Dieldrin	ND		0.000392	0.000196
Endrin	ND		0.000392	0.000196
Endosulfan II	ND		0.000392	0.000196
4,4'-DDD	ND		0.000392	0.000196
Endrin aldehyde	ND		0.000392	0.000196
Endosulfan sulfate	ND		0.000392	0.000196
4,4'-DDT	ND		0.000392	0.000196
Endrin ketone	ND		0.000392	0.000196
Methoxychlor	ND		0.000392	0.000196
alpha-Chlordane	ND		0.000392	0.000196
gamma-Chlordane	ND		0.000392	0.000196
Toxaphene	ND		0.0049	0.00235
Endosulfan (I and II)	ND		0.000392	0.000196
Chlordane (alpha and gamma)	ND		0.000392	0.000196

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**  
**PESTICIDES**

Lab ID: E18-04347-007  
 Client ID: GW2/7  
 Date Received: 06/01/2018  
 Date Extracted: 06/06/2018  
 Date Analyzed: 06/06/2018  
 Data file: V0782.D 06/06/2018 14:36

GC Column: RTX-CLP1/CLP2  
 Sample wt/vol: 1000ml  
 Matrix-Units: Aqueous- $\mu$ g/L  
 % Moisture: 100  
 Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.010	0.005
beta-BHC	ND		0.010	0.005
gamma-BHC (Lindane)	ND		0.010	0.005
delta-BHC	ND		0.010	0.005
Heptachlor	ND		0.010	0.005
Aldrin	ND		0.010	0.005
Heptachlor epoxide	ND		0.010	0.005
Endosulfan I	ND		0.010	0.005
4,4'-DDE	ND		0.010	0.005
Dieldrin	ND		0.010	0.005
Endrin	ND		0.010	0.005
Endosulfan II	ND		0.010	0.005
4,4'-DDD	ND		0.010	0.005
Endrin aldehyde	ND		0.010	0.005
Endosulfan sulfate	ND		0.010	0.005
4,4'-DDT	ND		0.010	0.005
Endrin ketone	ND		0.010	0.005
Methoxychlor	ND		0.010	0.005
alpha-Chlordane	ND		0.010	0.005
gamma-Chlordane	ND		0.010	0.005
Toxaphene	ND		0.125	0.060
Endosulfan (I and II)	ND		0.010	0.005
Chlordane (alpha and gamma)	ND		0.010	0.005

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**  
**PESTICIDES**

Lab ID: E18-04347-008  
 Client ID: GW3/6  
 Date Received: 06/01/2018  
 Date Extracted: 06/06/2018  
 Date Analyzed: 06/06/2018  
 Data file: V0783.D 06/06/2018 14:49

GC Column: RTX-CLP1/CLP2  
 Sample wt/vol: 1000ml  
 Matrix-Units: Aqueous- $\mu$ g/L  
 % Moisture: 100  
 Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.010	0.005
beta-BHC	ND		0.010	0.005
gamma-BHC (Lindane)	ND		0.010	0.005
delta-BHC	ND		0.010	0.005
Heptachlor	ND		0.010	0.005
Aldrin	ND		0.010	0.005
Heptachlor epoxide	ND		0.010	0.005
Endosulfan I	ND		0.010	0.005
4,4'-DDE	ND		0.010	0.005
Dieldrin	ND		0.010	0.005
Endrin	ND		0.010	0.005
Endosulfan II	ND		0.010	0.005
4,4'-DDD	ND		0.010	0.005
Endrin aldehyde	ND		0.010	0.005
Endosulfan sulfate	ND		0.010	0.005
4,4'-DDT	ND		0.010	0.005
Endrin ketone	ND		0.010	0.005
Methoxychlor	ND		0.010	0.005
alpha-Chlordane	ND		0.010	0.005
gamma-Chlordane	ND		0.010	0.005
Toxaphene	ND		0.125	0.060
Endosulfan (I and II)	ND		0.010	0.005
Chlordane (alpha and gamma)	ND		0.010	0.005

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**  
**PESTICIDES**

Lab ID: BLKS180606-08  
 Client ID: Pest  
 Date Received: NA  
 Date Extracted: 06/06/2018  
 Date Analyzed: 06/08/2018  
 Data file: O0915.D 06/08/2018 09:41

GC Column: RTX-CLP1/CLP2  
 Sample wt/vol: 30g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: NA  
 Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000334	0.000167
beta-BHC	ND		0.000334	0.000167
gamma-BHC (Lindane)	ND		0.000334	0.000167
delta-BHC	ND		0.000334	0.000167
Heptachlor	ND		0.000334	0.000167
Aldrin	ND		0.000334	0.000167
Heptachlor epoxide	ND		0.000334	0.000167
Endosulfan I	ND		0.000334	0.000167
4,4'-DDE	ND		0.000334	0.000167
Dieldrin	ND		0.000334	0.000167
Endrin	ND		0.000334	0.000167
Endosulfan II	ND		0.000334	0.000167
4,4'-DDD	ND		0.000334	0.000167
Endrin aldehyde	ND		0.000334	0.000167
Endosulfan sulfate	ND		0.000334	0.000167
4,4'-DDT	ND		0.000334	0.000167
Endrin ketone	ND		0.000334	0.000167
Methoxychlor	ND		0.000334	0.000167
alpha-Chlordane	ND		0.000334	0.000167
gamma-Chlordane	ND		0.000334	0.000167
Toxaphene	ND		0.00418	0.002
Endosulfan (I and II)	ND		0.000334	0.000167
Chlordane (alpha and gamma)	ND		0.000334	0.000167

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**  
**PESTICIDES**

Lab ID: BLKA180606-02  
 Client ID: Pest  
 Date Received: NA  
 Date Extracted: 06/06/2018  
 Date Analyzed: 06/06/2018  
 Data file: V0777.D 06/06/2018 13:04

GC Column: RTX-CLP1/CLP2  
 Sample wt/vol: 1000ml  
 Matrix-Units: Aqueous- $\mu$ g/L  
 % Moisture: 100  
 Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.010	0.005
beta-BHC	ND		0.010	0.005
gamma-BHC (Lindane)	ND		0.010	0.005
delta-BHC	ND		0.010	0.005
Heptachlor	ND		0.010	0.005
Aldrin	ND		0.010	0.005
Heptachlor epoxide	ND		0.010	0.005
Endosulfan I	ND		0.010	0.005
4,4'-DDE	ND		0.010	0.005
Dieldrin	ND		0.010	0.005
Endrin	ND		0.010	0.005
Endosulfan II	ND		0.010	0.005
4,4'-DDD	ND		0.010	0.005
Endrin aldehyde	ND		0.010	0.005
Endosulfan sulfate	ND		0.010	0.005
4,4'-DDT	ND		0.010	0.005
Endrin ketone	ND		0.010	0.005
Methoxychlor	ND		0.010	0.005
alpha-Chlordane	ND		0.010	0.005
gamma-Chlordane	ND		0.010	0.005
Toxaphene	ND		0.125	0.060
Endosulfan (I and II)	ND		0.010	0.005
Chlordane (alpha and gamma)	ND		0.010	0.005

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

## INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS**Client/Project: HILLMAN/G6-2368

Lab ID: E18-04347-001

Client ID: S7

Date Collected: 05/31/18 08:50

Date Received: 06/01/18 17:05

Matrix-Units: Soil-mg/Kg (ppm)

% Moisture: 5.60

Batch #: 306

<b>Compound</b>	<b>Result</b>	<b>Q</b>	<b>DF</b>	<b>RL</b>	<b>MDL</b>	<b>Date Analyzed</b>	<b>Method</b>
Aluminum	2450		1	5.66	2.26	06/05/18 20:39	SW 6020B
Antimony	0.921		1	0.566	0.226	06/05/18 20:39	SW 6020B
Arsenic	2.15		1	0.566	0.170	06/05/18 20:39	SW 6020B
Barium	86.6		1	0.566	0.283	06/05/18 20:39	SW 6020B
Beryllium	ND		1	0.566	0.170	06/05/18 20:39	SW 6020B
Cadmium	ND		1	0.566	0.340	06/05/18 20:39	SW 6020B
Calcium	1960		1	56.6	17.0	06/05/18 20:39	SW 6020B
Chromium	8.33		1	0.566	0.283	06/05/18 20:39	SW 6020B
Cobalt	2.53		1	0.566	0.170	06/05/18 20:39	SW 6020B
Copper	14.0		1	0.566	0.396	06/05/18 20:39	SW 6020B
Iron	5100		1	56.6	17.0	06/05/18 20:39	SW 6020B
Lead	193		1	0.566	0.283	06/05/18 20:39	SW 6020B
Magnesium	693		1	56.6	17.0	06/05/18 20:39	SW 6020B
Manganese	94.8		1	0.566	0.396	06/05/18 20:39	SW 6020B
Mercury	0.260		1	0.0250	0.0100	06/05/18 13:00	SW 7471B
Nickel	6.78		1	0.566	0.396	06/05/18 20:39	SW 6020B
Potassium	347		1	56.6	22.6	06/05/18 20:39	SW 6020B
Selenium	1.84	J	1	3.96	1.70	06/05/18 20:39	SW 6020B
Silver	0.362	J	1	0.566	0.340	06/05/18 20:39	SW 6020B
Sodium	122		1	56.6	22.6	06/05/18 20:39	SW 6020B
Thallium	ND		1	0.566	0.283	06/05/18 20:39	SW 6020B
Vanadium	10.6		1	0.566	0.283	06/05/18 20:39	SW 6020B
Zinc	134		1	5.66	1.13	06/05/18 20:39	SW 6020B

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds

INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS**

Client/Project: HILLMAN/G6 2368

Lab ID: E18-04347-002

Client ID: S8

Date Collected: 05/31/18 09:20

Date Received: 06/01/18 17:05

Matrix-Units: Soil-mg/Kg (ppm)

% Moisture: 4.40

Batch #: 306

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Aluminum	1450		1	5.56	2.22	06/05/18 20:45	SW 6020B
Antimony	0.543	J	1	0.556	0.222	06/05/18 20:45	SW 6020B
Arsenic	1.61		1	0.556	0.167	06/05/18 20:45	SW 6020B
Barium	54.3		1	0.556	0.278	06/05/18 20:45	SW 6020B
Beryllium	ND		1	0.556	0.167	06/05/18 20:45	SW 6020B
Cadmium	ND		1	0.556	0.334	06/05/18 20:45	SW 6020B
Calcium	3470		1	55.6	16.7	06/05/18 20:45	SW 6020B
Chromium	6.15		1	0.556	0.278	06/05/18 20:45	SW 6020B
Cobalt	1.20		1	0.556	0.167	06/05/18 20:45	SW 6020B
Copper	20.1		1	0.556	0.389	06/05/18 20:45	SW 6020B
Iron	4430		1	55.6	16.7	06/05/18 20:45	SW 6020B
Lead	97.8		1	0.556	0.278	06/05/18 20:45	SW 6020B
Magnesium	969		1	55.6	16.7	06/05/18 20:45	SW 6020B
Manganese	64.5		1	0.556	0.389	06/05/18 20:45	SW 6020B
Mercury	0.0722		1	2.39	9.55	06/05/18 13:03	SW 7471B
Nickel	5.59		1	0.556	0.389	06/05/18 20:45	SW 6020B
Potassium	188		1	55.6	22.2	06/05/18 20:45	SW 6020B
Selenium	ND		1	3.89	1.67	06/05/18 20:45	SW 6020B
Silver	ND		1	0.556	0.334	06/05/18 20:45	SW 6020B
Sodium	57.9		1	55.6	22.2	06/05/18 20:45	SW 6020B
Thallium	ND		1	0.556	0.278	06/05/18 20:45	SW 6020B
Vanadium	7.87		1	0.556	0.278	06/05/18 20:45	SW 6020B
Zinc	81.4		1	5.56	1.11	06/05/18 20:45	SW 6020B

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds

## INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS**Client/Project: HILLMAN/G6-2368

Lab ID: E18-04347-003

Client ID: S9

Date Collected: 05/31/18 10:10

Date Received: 06/01/18 17:05

Matrix-Units: Soil-mg/Kg (ppm)

% Moisture: 6.40

Batch #: 306

<b>Compound</b>	<b>Result</b>	<b>Q</b>	<b>DF</b>	<b>RL</b>	<b>MDL</b>	<b>Date Analyzed</b>	<b>Method</b>
Aluminum	1920		1	5.50	2.20	06/05/18 20:50	SW 6020B
Antimony	0.551		1	0.550	0.220	06/05/18 20:50	SW 6020B
Arsenic	1.58		1	0.550	0.165	06/05/18 20:50	SW 6020B
Barium	17.1		1	0.550	0.275	06/05/18 20:50	SW 6020B
Beryllium	ND		1	0.550	0.165	06/05/18 20:50	SW 6020B
Cadmium	ND		1	0.550	0.330	06/05/18 20:50	SW 6020B
Calcium	11500		1	55.0	16.5	06/05/18 20:50	SW 6020B
Chromium	5.75		1	0.550	0.275	06/05/18 20:50	SW 6020B
Cobalt	2.15		1	0.550	0.165	06/05/18 20:50	SW 6020B
Copper	16.5		1	0.550	0.385	06/05/18 20:50	SW 6020B
Iron	5800		1	55.0	16.5	06/05/18 20:50	SW 6020B
Lead	23.3		1	0.550	0.275	06/05/18 20:50	SW 6020B
Magnesium	3910		1	55.0	16.5	06/05/18 20:50	SW 6020B
Manganese	63.0		1	0.550	0.385	06/05/18 20:50	SW 6020B
Mercury	0.0199	J	1	2.43	9.73	06/05/18 13:06	SW 7471B
Nickel	4.33		1	0.550	0.385	06/05/18 20:50	SW 6020B
Potassium	315		1	55.0	22.0	06/05/18 20:50	SW 6020B
Selenium	ND		1	3.85	1.65	06/05/18 20:50	SW 6020B
Silver	ND		1	0.550	0.330	06/05/18 20:50	SW 6020B
Sodium	160		1	55.0	22.0	06/05/18 20:50	SW 6020B
Thallium	ND		1	0.550	0.275	06/05/18 20:50	SW 6020B
Vanadium	18.6		1	0.550	0.275	06/05/18 20:50	SW 6020B
Zinc	27.8		1	5.50	1.10	06/05/18 20:50	SW 6020B

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds

## INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS**Client/Project: HILLMAN/G6-2368

Lab ID: E18-04347-004

Client ID: S10

Date Collected: 05/31/18 10:40

Date Received: 06/01/18 17:05

Matrix-Units: Soil-mg/Kg (ppm)

% Moisture: 14.4

Batch #: 306

<b>Compound</b>	<b>Result</b>	<b>Q</b>	<b>DF</b>	<b>RL</b>	<b>MDL</b>	<b>Date Analyzed</b>	<b>Method</b>
Aluminum	843		1	6.04	2.42	06/05/18 20:56	SW 6020B
Antimony	ND		1	0.604	0.242	06/05/18 20:56	SW 6020B
Arsenic	0.414	J	1	0.604	0.181	06/05/18 20:56	SW 6020B
Barium	11.5		1	0.604	0.302	06/05/18 20:56	SW 6020B
Beryllium	ND		1	0.604	0.181	06/05/18 20:56	SW 6020B
Cadmium	ND		1	0.604	0.363	06/05/18 20:56	SW 6020B
Calcium	2030		1	60.4	18.1	06/05/18 20:56	SW 6020B
Chromium	5.24		1	0.604	0.302	06/05/18 20:56	SW 6020B
Cobalt	0.629		1	0.604	0.181	06/05/18 20:56	SW 6020B
Copper	1.64		1	0.604	0.423	06/05/18 20:56	SW 6020B
Iron	1860		1	60.4	18.1	06/05/18 20:56	SW 6020B
Lead	11.0		1	0.604	0.302	06/05/18 20:56	SW 6020B
Magnesium	396		1	60.4	18.1	06/05/18 20:56	SW 6020B
Manganese	42.6		1	0.604	0.423	06/05/18 20:56	SW 6020B
Mercury	0.0503		1	2.57	1.03	06/05/18 13:14	SW 7471B
Nickel	1.73		1	0.604	0.423	06/05/18 20:56	SW 6020B
Potassium	178		1	60.4	24.2	06/05/18 20:56	SW 6020B
Selenium	ND		1	4.23	1.81	06/05/18 20:56	SW 6020B
Silver	ND		1	0.604	0.363	06/05/18 20:56	SW 6020B
Sodium	35.5	J	1	60.4	24.2	06/05/18 20:56	SW 6020B
Thallium	ND		1	0.604	0.302	06/05/18 20:56	SW 6020B
Vanadium	5.77		1	0.604	0.302	06/05/18 20:56	SW 6020B
Zinc	8.04		1	6.04	1.21	06/05/18 20:56	SW 6020B

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds

INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS**

Client/Project: HILLMAN/G6-2368

Lab ID: E18-04347-005

Client ID: S11

Date Collected: 05/31/18 11:00

Date Received: 06/01/18 17:05

Matrix-Units: Soil-mg/Kg (ppm)

% Moisture: 18.0

Batch #: 306

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Aluminum	712		1	6.41	2.56	06/05/18 21:01	SW 6020B
Antimony	ND		1	0.641	0.256	06/05/18 21:01	SW 6020B
Arsenic	0.588	J	1	0.641	0.192	06/05/18 21:01	SW 6020B
Barium	4.19		1	0.641	0.320	06/05/18 21:01	SW 6020B
Beryllium	ND		1	0.641	0.192	06/05/18 21:01	SW 6020B
Cadmium	ND		1	0.641	0.384	06/05/18 21:01	SW 6020B
Calcium	612		1	64.1	19.2	06/05/18 21:01	SW 6020B
Chromium	4.33		1	0.641	0.320	06/05/18 21:01	SW 6020B
Cobalt	0.483	J	1	0.641	0.192	06/05/18 21:01	SW 6020B
Copper	ND		1	0.641	0.449	06/05/18 21:01	SW 6020B
Iron	1740		1	64.1	19.2	06/05/18 21:01	SW 6020B
Lead	1.75		1	0.641	0.320	06/05/18 21:01	SW 6020B
Magnesium	335		1	64.1	19.2	06/05/18 21:01	SW 6020B
Manganese	30.7		1	0.641	0.449	06/05/18 21:01	SW 6020B
Mercury	ND		1	2.82	1.13	06/05/18 13:16	SW 7471B
Nickel	1.61		1	0.641	0.449	06/05/18 21:01	SW 6020B
Potassium	153		1	64.1	25.6	06/05/18 21:01	SW 6020B
Selenium	ND		1	4.49	1.92	06/05/18 21:01	SW 6020B
Silver	ND		1	0.641	0.384	06/05/18 21:01	SW 6020B
Sodium	45.6	J	1	64.1	25.6	06/05/18 21:01	SW 6020B
Thallium	ND		1	0.641	0.320	06/05/18 21:01	SW 6020B
Vanadium	3.97		1	0.641	0.320	06/05/18 21:01	SW 6020B
Zinc	9.41		1	6.41	1.28	06/05/18 21:01	SW 6020B

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds

## INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS**Client/Project: HILLMAN/G6-2368

Lab ID: E18-04347-006

Client ID: S12

Date Collected: 05/31/18 11:30

Date Received: 06/01/18 17:05

Matrix-Units: Soil-mg/Kg (ppm)

% Moisture: 17.1

Batch #: 306

<b>Compound</b>	<b>Result</b>	<b>Q</b>	<b>DF</b>	<b>RL</b>	<b>MDL</b>	<b>Date Analyzed</b>	<b>Method</b>
Aluminum	492		1	6.22	2.49	06/05/18 21:07	SW 6020B
Antimony	ND		1	0.622	0.249	06/05/18 21:07	SW 6020B
Arsenic	0.197	J	1	0.622	0.187	06/05/18 21:07	SW 6020B
Barium	1.99		1	0.622	0.311	06/05/18 21:07	SW 6020B
Beryllium	ND		1	0.622	0.187	06/05/18 21:07	SW 6020B
Cadmium	ND		1	0.622	0.373	06/05/18 21:07	SW 6020B
Calcium	98.0		1	62.2	18.7	06/05/18 21:07	SW 6020B
Chromium	1.72		1	0.622	0.311	06/05/18 21:07	SW 6020B
Cobalt	0.279	J	1	0.622	0.187	06/05/18 21:07	SW 6020B
Copper	ND		1	0.622	0.436	06/05/18 21:07	SW 6020B
Iron	766		1	62.2	18.7	06/05/18 21:07	SW 6020B
Lead	0.546	J	1	0.622	0.311	06/05/18 21:07	SW 6020B
Magnesium	218		1	62.2	18.7	06/05/18 21:07	SW 6020B
Manganese	6.90		1	0.622	0.436	06/05/18 21:07	SW 6020B
Mercury	ND		1	0.0275	0.0110	06/05/18 13:19	SW 7471B
Nickel	1.11		1	0.622	0.436	06/05/18 21:07	SW 6020B
Potassium	136		1	62.2	24.9	06/05/18 21:07	SW 6020B
Selenium	ND		1	4.36	1.87	06/05/18 21:07	SW 6020B
Silver	ND		1	0.622	0.373	06/05/18 21:07	SW 6020B
Sodium	140		1	62.2	24.9	06/05/18 21:07	SW 6020B
Thallium	ND		1	0.622	0.311	06/05/18 21:07	SW 6020B
Vanadium	1.24		1	0.622	0.311	06/05/18 21:07	SW 6020B
Zinc	13.7		1	6.22	1.24	06/05/18 21:07	SW 6020B

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds

INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS**

Client/Project: HILLMAN/G6-2368

Lab ID: E18-04347-007

Client ID: GW2

Date Collected: 05/31/18 09:30

Date Received: 06/01/18 17:05

Matrix-Units: Aqueous-ug/L (ppb)

% Moisture: 100

Batch #: 307

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Aluminum	570		1	20.0	8.00	06/06/18 15:23	SW 6020B
Antimony	ND		1	2.00	1.20	06/06/18 15:23	SW 6020B
Arsenic	3.36		1	2.00	0.600	06/06/18 15:23	SW 6020B
Barium	7.62		1	2.00	1.20	06/06/18 15:23	SW 6020B
Beryllium	ND		1	1.00	0.320	06/06/18 15:23	SW 6020B
Cadmium	ND		1	2.00	1.00	06/06/18 15:23	SW 6020B
Calcium	11500		1	200	60.0	06/06/18 15:23	SW 6020B
Chromium	8.24		1	2.00	1.00	06/06/18 15:23	SW 6020B
Cobalt	0.796	J	1	2.00	0.600	06/06/18 15:23	SW 6020B
Copper	ND		1	2.00	1.00	06/06/18 15:23	SW 6020B
Iron	1850		1	200	60.0	06/06/18 15:23	SW 6020B
Lead	10.5		1	2.00	1.20	06/06/18 15:23	SW 6020B
Magnesium	1580		1	200	60.0	06/06/18 15:23	SW 6020B
Manganese	19.7		1	2.00	1.40	06/06/18 15:23	SW 6020B
Mercury	ND		1	0.500	0.200	06/06/18 09:47	SW 7470A
Nickel	5.23		1	2.00	1.20	06/06/18 15:23	SW 6020B
Potassium	4240		1	200	80.0	06/06/18 15:23	SW 6020B
Selenium	ND		1	20.0	6.00	06/06/18 15:23	SW 6020B
Silver	ND		1	2.00	1.20	06/06/18 15:23	SW 6020B
Sodium	9890		1	200	80.0	06/06/18 15:23	SW 6020B
Thallium	ND		1	2.00	1.20	06/06/18 15:23	SW 6020B
Vanadium	5.13		1	2.00	0.600	06/06/18 15:23	SW 6020B
Zinc	42.5		1	20.0	8.00	06/06/18 15:23	SW 6020B

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds

## INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS**Client/Project: HILLMAN/G6-2368

Lab ID: E18-04347-008

Client ID: GW3

Date Collected: 05/31/18 11:40

Date Received: 06/01/18 17:05

Matrix-Units: Aqueous-ug/L (ppb)

% Moisture: 100

Batch #: 307

<b>Compound</b>	<b>Result</b>	<b>Q</b>	<b>DF</b>	<b>RL</b>	<b>MDL</b>	<b>Date Analyzed</b>	<b>Method</b>
Aluminum	234		1	20.0	8.00	06/06/18 15:29	SW 6020B
Antimony	ND		1	2.00	1.20	06/06/18 15:29	SW 6020B
Arsenic	0.995	J	1	2.00	0.600	06/06/18 15:29	SW 6020B
Barium	17.5		1	2.00	1.20	06/06/18 15:29	SW 6020B
Beryllium	ND		1	1.00	0.320	06/06/18 15:29	SW 6020B
Cadmium	ND		1	2.00	1.00	06/06/18 15:29	SW 6020B
Calcium	17400		1	200	60.0	06/06/18 15:29	SW 6020B
Chromium	7.38		1	2.00	1.00	06/06/18 15:29	SW 6020B
Cobalt	ND		1	2.00	0.600	06/06/18 15:29	SW 6020B
Copper	ND		1	2.00	1.00	06/06/18 15:29	SW 6020B
Iron	1250		1	200	60.0	06/06/18 15:29	SW 6020B
Lead	2.52		1	2.00	1.20	06/06/18 15:29	SW 6020B
Magnesium	11000		1	200	60.0	06/06/18 15:29	SW 6020B
Manganese	31.9		1	2.00	1.40	06/06/18 15:29	SW 6020B
Mercury	ND		1	0.500	0.200	06/06/18 09:55	SW 7470A
Nickel	1.34	J	1	2.00	1.20	06/06/18 15:29	SW 6020B
Potassium	9240		1	200	80.0	06/06/18 15:29	SW 6020B
Selenium	ND		1	20.0	6.00	06/06/18 15:29	SW 6020B
Silver	ND		1	2.00	1.20	06/06/18 15:29	SW 6020B
Sodium	136000		1	200	80.0	06/06/18 15:29	SW 6020B
Thallium	ND		1	2.00	1.20	06/06/18 15:29	SW 6020B
Vanadium	1.60	J	1	2.00	0.600	06/06/18 15:29	SW 6020B
Zinc	46.3		1	20.0	8.00	06/06/18 15:29	SW 6020B

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds

## INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS**Client/Project: HILLMAN/G6-2368

Lab ID: E18-04347-009

Client ID: GW2-FILT

Date Collected: 05/31/18 09:30

Date Received: 06/01/18 17:05

Matrix-Units: Aqueous-ug/L (ppb)

% Moisture: 100

Batch #: 307

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Aluminum	42.6		1	20.0	8.00	06/06/18 15:12	SW 6020B
Antimony	ND		1	2.00	1.20	06/06/18 15:12	SW 6020B
Arsenic	3.22		1	2.00	0.600	06/06/18 15:12	SW 6020B
Barium	4.12		1	2.00	1.20	06/06/18 15:12	SW 6020B
Beryllium	ND		1	1.00	0.320	06/06/18 15:12	SW 6020B
Cadmium	ND		1	2.00	1.00	06/06/18 15:12	SW 6020B
Calcium	10600		1	200	60.0	06/06/18 15:12	SW 6020B
Chromium	2.56		1	2.00	1.00	06/06/18 15:12	SW 6020B
Cobalt	ND		1	2.00	0.600	06/06/18 15:12	SW 6020B
Copper	ND		1	2.00	1.00	06/06/18 15:12	SW 6020B
Iron	128	J	1	200	60.0	06/06/18 15:12	SW 6020B
Lead	ND		1	2.00	1.20	06/06/18 15:12	SW 6020B
Magnesium	1560		1	200	60.0	06/06/18 15:12	SW 6020B
Manganese	18.2		1	2.00	1.40	06/06/18 15:12	SW 6020B
Mercury	ND		1	0.500	0.200	06/06/18 09:42	SW 7470A
Nickel	3.30		1	2.00	1.20	06/06/18 15:12	SW 6020B
Potassium	4210		1	200	80.0	06/06/18 15:12	SW 6020B
Selenium	ND		1	20.0	6.00	06/06/18 15:12	SW 6020B
Silver	ND		1	2.00	1.20	06/06/18 15:12	SW 6020B
Sodium	9380		1	200	80.0	06/06/18 15:12	SW 6020B
Thallium	ND		1	2.00	1.20	06/06/18 15:12	SW 6020B
Vanadium	4.38		1	2.00	0.600	06/06/18 15:12	SW 6020B
Zinc	15.5	J	1	20.0	8.00	06/06/18 15:12	SW 6020B

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds

## INTEGRATED ANALYTICAL LABORATORIES, LLC.

## METALS

Client/Project: HILLMAN/G6-2368

Lab ID: E18-04347-010

Client ID: GW3-FILT

Date Collected: 05/31/18 11:40

Date Received: 06/01/18 17:05

Matrix-Units: Aqueous-ug/L (ppb)

% Moisture: 100

Batch #: 307

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Aluminum	ND		1	20.0	8.00	06/06/18 15:18	SW 6020B
Antimony	ND		1	2.00	1.20	06/06/18 15:18	SW 6020B
Arsenic	ND		1	2.00	0.600	06/06/18 15:18	SW 6020B
Barium	15.2		1	2.00	1.20	06/06/18 15:18	SW 6020B
Beryllium	ND		1	1.00	0.320	06/06/18 15:18	SW 6020B
Cadmium	ND		1	2.00	1.00	06/06/18 15:18	SW 6020B
Calcium	17400	X	1	200	60.0	06/06/18 15:18	SW 6020B
Chromium	ND		1	2.00	1.00	06/06/18 15:18	SW 6020B
Cobalt	ND		1	2.00	0.600	06/06/18 15:18	SW 6020B
Copper	ND		1	2.00	1.00	06/06/18 15:18	SW 6020B
Iron	ND		1	200	60.0	06/06/18 15:18	SW 6020B
Lead	ND		1	2.00	1.20	06/06/18 15:18	SW 6020B
Magnesium	12300	X	1	200	60.0	06/06/18 15:18	SW 6020B
Manganese	29.5		1	2.00	1.40	06/06/18 15:18	SW 6020B
Mercury	ND		1	0.500	0.200	06/06/18 09:45	SW 7470A
Nickel	1.31	J	1	2.00	1.20	06/06/18 15:18	SW 6020B
Potassium	9040		1	200	80.0	06/06/18 15:18	SW 6020B
Selenium	ND		1	20.0	6.00	06/06/18 15:18	SW 6020B
Silver	ND		1	2.00	1.20	06/06/18 15:18	SW 6020B
Sodium	141000	X	1	200	80.0	06/06/18 15:18	SW 6020B
Thallium	ND		1	2.00	1.20	06/06/18 15:18	SW 6020B
Vanadium	ND		1	2.00	0.600	06/06/18 15:18	SW 6020B
Zinc	28.7		1	20.0	8.00	06/06/18 15:18	SW 6020B

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds

X = Samples analyzed for total and dissolved metals may have slightly different concentrations due to normal variations in the analytical process. Slightly higher concentrations present in dissolved versus total analyses can occur even when all QC are acceptable. A 20% RPD between total and dissolved results is used to evaluate if the concentrations are statistically indistinguishable.

**METALS QUALITY CONTROL**  
**BLANK 1 RESULTS SUMMARY**  
**06/05/2018 06:28 PM**

Batch (Page) #: 306

Associated Lab E18-04312, E18-04314, E18-04347

Case for Blank

1:

Matrix: Soil

Unit: ppm (mg/kg)

Method: 6020B/7471B

ANALYTE	1/2 Sample RL	REAGENT BLANK BLKS180605-01
Aluminum	2.50	ND
Antimony	0.250	ND
Arsenic	0.250	ND
Barium	0.250	ND
Beryllium	0.250	ND
Cadmium	0.250	ND
Calcium	25.0	ND
Chromium	0.250	ND
Cobalt	0.250	ND
Copper	0.250	ND
Iron	25.0	ND
Lead	0.250	ND
Magnesium	25.0	ND
Manganese	0.250	ND
Mercury	0.013	ND
Nickel	0.250	ND
Potassium	25.0	ND
Selenium	1.75	ND
Silver	0.250	ND
Sodium	25.0	ND
Thallium	0.250	ND
Vanadium	0.250	ND
Zinc	2.50	ND

Associated Sample for Blank 1:

04312-001~013; 04314-001; 04347-001~006

**METALS QUALITY CONTROL**  
**BLANK 1 RESULTS SUMMARY**

06/06/2018 02:07 PM

Batch (Page) #: 307

Associated Lab E18-04234, E18-04245, E18-04262, E18-04276, E18-04347

Case for Blank

1:

Matrix: Aqueous      Unit: ppb ( $\mu$ g/L)      Method: 6020B/7470A

ANALYTE	1/2 Sample RL	REAGENT BLANK BLKA180605-01
Aluminum	10.0	ND
Antimony	1.00	ND
Arsenic	1.00	ND
Barium	1.00	ND
Beryllium	0.500	ND
Cadmium	1.00	ND
Calcium	100	ND
Chromium	1.00	ND
Cobalt	1.00	ND
Copper	1.00	ND
Iron	100	ND
Lead	1.00	ND
Magnesium	100	ND
Manganese	1.00	ND
Mercury	0.250	ND
Nickel	1.00	ND
Potassium	100	ND
Selenium	10.0	ND
Silver	1.00	ND
Sodium	100	ND
Thallium	1.00	ND
Vanadium	1.00	ND
Zinc	10.0	ND

Associated Sample for Blank 1:

04234-007~008; 04245-001~005; 04262-001~007

04276-001; 04347-007~010

## **SAMPLE TRACKING**

## Chain of Custody Record

Customer Information		Reporting Information			EDDs			Concentrations Expected:		
Company: <i>Hillman Consulting</i>	REPORT TO:	24 hr - 100%	NJ, CT, PA, NY	<input type="checkbox"/> NYSRP	<input type="checkbox"/> NYSDEC EQuIS	<input type="checkbox"/> lab approved custom EDD	<input type="checkbox"/> Low	<input type="checkbox"/> Med	<input type="checkbox"/> High	
Address: <i>1600 NJ 22 East, Union, NJ 07083</i>	Attn:	48 hr - 75%....	<input type="checkbox"/> Results Only	<input type="checkbox"/> ASP Category A	<input type="checkbox"/> NO EDD REQ'D	<input type="checkbox"/> NO EDD REQ'D	<input checked="" type="checkbox"/> Previously analyzed by IAL	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
Telephone #:	FAX #:	72 hr - 50%....	<input type="checkbox"/> Reduced	<input type="checkbox"/> Regulatory/ Full*	<input type="checkbox"/> B*	<input type="checkbox"/> SRS	<input type="checkbox"/> Ecological	<input type="checkbox"/> DW	<input type="checkbox"/> SPLP	
6-9 day - 25%....	5 day - 35%....	<input type="checkbox"/> Full*	<input type="checkbox"/> ASP Category B*	<input type="checkbox"/> TAT for PHC (if other than 2 weeks):	<input type="checkbox"/> Other - call for price	<input type="checkbox"/> GWQS	<input type="checkbox"/> AWQS (TOGS Table 1)			
6-9 day - 10%....	<input type="checkbox"/> Turn-Around Time (TAT)	<input type="checkbox"/> Hard Copy: Std 3 week	<input type="checkbox"/> Petroleum Hydrocarbons - Selection is REQUIRED	<input type="checkbox"/> IGW	<input type="checkbox"/> GWEL (TOGS Table 5)	<input type="checkbox"/> Part 375-6.8(a) - Unrestricted	<input type="checkbox"/> CP-51 Table 2 or 3 (selection required)	<input type="checkbox"/> TAT 375-6.8(b) - Restricted		
Project Manager: <i>Chris Hirschmann</i>		INVOICE TO:			<input type="checkbox"/> NJ EPH-DRO - Category 1	<input type="checkbox"/> NJ EPH-C40 - Category 2	<input type="checkbox"/> OTHER Reg. Req. (specify)	<input type="checkbox"/> NJ EPH-Fractionated - Cat 2	<input type="checkbox"/> DRO-8015	
EMAIL Address: <i>66-2368</i>		Address:			<input type="checkbox"/> NJ EPH-Fractionated - Cat 2	<input type="checkbox"/> ANALYTICAL PARAMETERS (please note if contingent)	<input type="checkbox"/> SRS	<input type="checkbox"/> Ecological	<input type="checkbox"/> DW	
Project Name: <i>66-2368</i>		Attn:			<input type="checkbox"/> NJ EPH-DRO - Category 1	<input type="checkbox"/> NJ EPH-C40 - Category 2	<input type="checkbox"/> DW	<input type="checkbox"/> SPLP	<input type="checkbox"/> SPLP	
Project Location (State):		PO #:			<input type="checkbox"/> NJ EPH-Fractionated - Cat 2	<input type="checkbox"/> ANALYTICAL PARAMETERS (please note if contingent)	<input type="checkbox"/> SRS	<input type="checkbox"/> Ecological	<input type="checkbox"/> DW	
Bottle Order #:		Quote #:			<input type="checkbox"/> NJ EPH-Fractionated - Cat 2	<input type="checkbox"/> ANALYTICAL PARAMETERS (please note if contingent)	<input type="checkbox"/> DW	<input type="checkbox"/> SPLP	<input type="checkbox"/> SPLP	
Sampled by: <i>Yann Peters</i>		Sample Matrix			<input type="checkbox"/> NJ EPH-Fractionated - Cat 2	<input type="checkbox"/> ANALYTICAL PARAMETERS (please note if contingent)	<input type="checkbox"/> SRS	<input type="checkbox"/> Ecological	<input type="checkbox"/> DW	
DW - Drinking Water		Oil - Oil			<input type="checkbox"/> NJ EPH-Fractionated - Cat 2	<input type="checkbox"/> ANALYTICAL PARAMETERS (please note if contingent)	<input type="checkbox"/> DW	<input type="checkbox"/> SPLP	<input type="checkbox"/> SPLP	
WW - Waste Water		S - Soil			<input type="checkbox"/> NJ EPH-Fractionated - Cat 2	<input type="checkbox"/> ANALYTICAL PARAMETERS (please note if contingent)	<input type="checkbox"/> SRS	<input type="checkbox"/> Ecological	<input type="checkbox"/> DW	
GW - Groundwater		SOL - Solid			<input type="checkbox"/> NJ EPH-Fractionated - Cat 2	<input type="checkbox"/> ANALYTICAL PARAMETERS (please note if contingent)	<input type="checkbox"/> DW	<input type="checkbox"/> SPLP	<input type="checkbox"/> SPLP	
SW - Surface Water		SL - Sludge			<input type="checkbox"/> NJ EPH-Fractionated - Cat 2	<input type="checkbox"/> ANALYTICAL PARAMETERS (please note if contingent)	<input type="checkbox"/> SRS	<input type="checkbox"/> Ecological	<input type="checkbox"/> DW	
LIQ - Liquid (Specify)		W - Wipe			<input type="checkbox"/> NJ EPH-Fractionated - Cat 2	<input type="checkbox"/> ANALYTICAL PARAMETERS (please note if contingent)	<input type="checkbox"/> DW	<input type="checkbox"/> SPLP	<input type="checkbox"/> SPLP	
B - Biphasic					<input type="checkbox"/> NJ EPH-Fractionated - Cat 2	<input type="checkbox"/> ANALYTICAL PARAMETERS (please note if contingent)	<input type="checkbox"/> SRS	<input type="checkbox"/> Ecological	<input type="checkbox"/> DW	
SAMPLE INFORMATION		Sampling			<input type="checkbox"/> NJ EPH-Fractionated - Cat 2	<input type="checkbox"/> ANALYTICAL PARAMETERS (please note if contingent)	<input type="checkbox"/> DW	<input type="checkbox"/> SPLP	<input type="checkbox"/> SPLP	
Client ID	Depth (ft only)	Date	Time	Matrix	# containers	IAL #	SDG #:	4347	FOR LAB USE ONLY	
S1	3	8/31/14	8:50AM	S	4	1	SDG #:	4347	FOR LAB USE ONLY	
S8	4	9/2/14	9:02AM	S	2	1	SDG #:	4347	FOR LAB USE ONLY	
S9	3	9/2/14	10:05AM	S	3	1	SDG #:	4347	FOR LAB USE ONLY	
S10	6	10/4/14	9:45AM	S	4	1	SDG #:	4347	FOR LAB USE ONLY	
S11	9	11/1/14	10:20AM	S	4	1	SDG #:	4347	FOR LAB USE ONLY	
S12	10	11/2/14	9:25AM	BW	5	1	SDG #:	4347	FOR LAB USE ONLY	
GW1	7	11/4/14	8:45AM	BW	7	1	SDG #:	4347	FOR LAB USE ONLY	
GW2	6	11/4/14	8:45AM	BW	8	1	SDG #:	4347	FOR LAB USE ONLY	
GW3	6	11/4/14	8:45AM	BW	8	1	SDG #:	4347	FOR LAB USE ONLY	
Known Hazard: YES / NO		Preservative Code:	Container Code:	Preservative (use code)			SDG #:	4347	FOR LAB USE ONLY	
Describe:		Container Type (use code)			Special Instructions/QC Requirements & Comments:			SDG #:	4347	
Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved.		A = Amber Glass B = Plastic C = Vial D = Glass E = EnCore T = Terracore			Received by (Signature and Company)			SDG #:	4347	
TAT starts the following day if samples rec'd at lab > 5PM.		Carrier (check one): <input type="checkbox"/> IAL Courier <input type="checkbox"/> Client Courier <input type="checkbox"/> FedEx/UFS**			Date			SDG #:	4347	
BY EXECUTING THIS CCR, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONDITIONS (found on rear of pink copy).		Time			Time			SDG #:	4347	
***Tracking #:								SDG #:	4347	

# PROJECT INFORMATION

**RUSH**
**E18-04347: G6-2368**

**To:** Chris Hirschmann  
 Hillmann Consulting, LLC  
 Fax: 1(908) 686-2636  
 EMail: chirschmann@hillmanngroup.com;r

**Report To**

Hillmann Consulting, LLC  
 1600 Route 22 East  
 Union, NJ 07083  
 Attn: Chris Hirschmann

**Bill To**

Hillmann Consulting, LLC  
 1600 Route 22 East  
 Union, NJ 07083  
 Attn: Chris Hirschmann

<b>Report Format</b>	<b>P.O. #</b>	<b>Received At Lab</b>	<b>TPHC Due</b>	<b>Verbal Due</b>	<b>Hardcopy Due</b>
Category A		Jun 01, 2018 @ 17:05	NA	Jun 11, 2018	Jun 25, 2018 *

\* Any *Conditional or Hold* status will delay final hardcopy report sent date.

**Diskette Req.** Not Required

\*\* QC Requirement (must meet): NY Part 375-6.8(UUSCO+RUSCO)

<b>Lab ID</b>	<b>Client Sample ID</b>	<b>Depth</b>	<b>Sampling Time</b>	<b>Matrix</b>	<b>Unit</b>	<b>Field pH/Temp</b>
04347-001	S7	3	05/31/18@08:50	Soil	mg/Kg (ppm)	
04347-002	S8	4	05/31/18@09:20	Soil	mg/Kg (ppm)	
04347-003	S9	3	05/31/18@10:10	Soil	mg/Kg (ppm)	
04347-004	S10	6	05/31/18@10:40	Soil	mg/Kg (ppm)	
04347-005	S11	9	05/31/18@11:00	Soil	mg/Kg (ppm)	
04347-006	S12	10	05/31/18@11:30	Soil	mg/Kg (ppm)	
04347-007	GW2	7	05/31/18@09:30	Aqueous	ug/L (ppb)	
04347-008	GW3	6	05/31/18@11:40	Aqueous	ug/L (ppb)	
04347-009	GW2-FILT	NA	05/31/18@09:30	Aqueous	ug/L (ppb)	
04347-010	GW3-FILT	NA	05/31/18@11:40	Aqueous	ug/L (ppb)	

<b>Sample #</b>	<b>Test</b>	<b>Status</b>	<b>QA Method</b>	<b>TAT</b>	<b>Holding Time Expires</b>
001	TCL VO + 15	Analyze	8260C	RUSH 1 WK	6/14/2018
	TCL BN + 15	Analyze	8270D	RUSH 1 WK	6/14/2018
	TCL PCB	Analyze	8082A	RUSH 1 WK	5/31/2019
	TCL Pesticides	Analyze	8081B	RUSH 1 WK	6/14/2018
	TAL Metals	Analyze	6020B/7471B	RUSH 1 WK	6/28/2018
002	TCL VO + 15	Analyze	8260C	RUSH 1 WK	6/14/2018
	TCL BN + 15	Analyze	8270D	RUSH 1 WK	6/14/2018
	TCL Pesticides	Analyze	8081B	RUSH 1 WK	6/14/2018
	TCL PCB	Analyze	8082A	RUSH 1 WK	5/31/2019
	TAL Metals	Analyze	6020B/7471B	RUSH 1 WK	6/28/2018
003	TCL VO + 15	Analyze	8260C	RUSH 1 WK	6/14/2018
	TCL BN + 15	Analyze	8270D	RUSH 1 WK	6/14/2018
	TCL Pesticides	Analyze	8081B	RUSH 1 WK	6/14/2018



# PROJECT INFORMATION

RUSH

E18-04347: G6-2368

Sample #	Test	Status	QA Method	TAT	Holding Time Expires
003	TCL PCB	Analyze	8082A	RUSH 1 WK	5/31/2019
	TAL Metals	Analyze	6020B/7471B	RUSH 1 WK	6/28/2018
004	TCL VO + 15	Analyze	8260C	RUSH 1 WK	6/14/2018
	TCL BN + 15	Analyze	8270D	RUSH 1 WK	6/14/2018
	TCL PCB	Analyze	8082A	RUSH 1 WK	5/31/2019
	TCL Pesticides	Analyze	8081B	RUSH 1 WK	6/14/2018
	TAL Metals	Analyze	6020B/7471B	RUSH 1 WK	6/28/2018
005	TCL VO + 15	Analyze	8260C	RUSH 1 WK	6/14/2018
	TCL BN + 15	Analyze	8270D	RUSH 1 WK	6/14/2018
	TCL PCB	Analyze	8082A	RUSH 1 WK	5/31/2019
	TCL Pesticides	Analyze	8081B	RUSH 1 WK	6/14/2018
	TAL Metals	Analyze	6020B/7471B	RUSH 1 WK	6/28/2018
006	TCL VO + 15	Analyze	8260C	RUSH 1 WK	6/14/2018
	TCL BN + 15	Analyze	8270D	RUSH 1 WK	6/14/2018
	TCL Pesticides	Analyze	8081B	RUSH 1 WK	6/14/2018
	TCL PCB	Analyze	8082A	RUSH 1 WK	5/31/2019
	TAL Metals	Analyze	6020B/7471B	RUSH 1 WK	6/28/2018
007	TCL VO + 15	Analyze	8260C	RUSH 1 WK	6/14/2018
	TCL BN + SIM + 15	Analyze	8270D SIM	RUSH 1 WK	6/7/2018
	TCL Pesticides	Analyze	8081B	RUSH 1 WK	6/7/2018
	TCL PCB	Analyze	8082A	RUSH 1 WK	5/31/2019
	Metals Filtration	Analyze		RUSH 1 WK	6/28/2018
	TAL Metals	Analyze	6020B/7471B	RUSH 1 WK	6/28/2018
008	TCL VO + 15	Analyze	8260C	RUSH 1 WK	6/14/2018
	TCL BN + SIM + 15	Analyze	8270D SIM	RUSH 1 WK	6/7/2018
	TCL PCB	Analyze	8082A	RUSH 1 WK	5/31/2019
	TCL Pesticides	Analyze	8081B	RUSH 1 WK	6/7/2018
	Metals Filtration	Analyze		RUSH 1 WK	6/28/2018
	TAL Metals	Analyze	6020B/7471B	RUSH 1 WK	6/28/2018
009	TAL Metals	Analyze	6020B/7471B	RUSH 1 WK	6/28/2018
010	TAL Metals	Analyze	6020B/7471B	RUSH 1 WK	6/28/2018

**Project Notes:**
**NOTE 2 taken by kfalconer on 06/04/2018 01:35**

3 ENCORS RECEIVED - 1 INTO MEOH/2 INTO H2O

**NOTE 3 taken by kfalconer on 06/04/2018 01:36**

SAMPLE 007 - 010, AWQS TOGS TABLE 1

**NOTE 1 taken by kim on 06/05/2018 10:16**

 FILTER UNPRESERVED METALS BOTTLES AT LAB AND REPORT TOTAL AND DISSOLVED TAL METALS  
 PER CHRIS HIRSCHMANN.


## INTEGRATED ANALYTICAL LABORATORIES, LLC

## SAMPLE RECEIPT VERIFICATION

CASE NO: E 18

04347

CLIENT:

Hillman

COOLER TEMPERATURE: 2° - 6°C: 

( See Chain of Custody)

## Comments

COC: **COMPLETE** / INCOMPLETE

## KEY

- |   |          |
|---|----------|
| ✓ | = YES/NA |
| ✗ | = NO     |

VOA received:  Encore  
(check one)  Terra Core IGW - Methanol  
 No Preservative

- |   |                    |
|---|--------------------|
| ✓ | Bottles Intact     |
| ✓ | no-Missing Bottles |
| ✓ | no-Extra Bottles   |

- |                          |   |
|--------------------------|---|
| ✓                        | Sufficient Sample Volume                  |
| ✓                        | no-headspace/bubbles in VOs               |
| ✓                        | Labels intact/correct                     |
| ✓                        | pH Check (exclude VOs) <sup>1</sup>       |
| ✓                        | Correct bottles/preservative              |
| ✓                        | Sufficient Holding/Prep Time <sup>1</sup> |
| <input type="checkbox"/> | Multiphasic Sample                        |
| <input type="checkbox"/> | Sample to be Subcontracted                |
| ✓                        | Chain of Custody is Clear                 |

Did not receive a filter at lab  
 Container for Sample 8  
 AP

<sup>1</sup>All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY:

INITIAL

AP

DATE

6/1/18

CORRECTIVE ACTION REQUIRED:

YES

(SEE BELOW)

NO

If COC is NOT clear, **STOP** until you get client to authorize/clarify work.

CLIENT NOTIFIED:

YES

Date/ Time:

NO

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY:

INITIAL

KJ

DATE

6/5/18

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REV 03/2013

# Laboratory Custody Chronicle

**IAL Case No.**

**E18-04347**

**Client** Hillmann Consulting, LLC

**Project** G6-2368

**Received On** 6/ 1/2018 @17:05

**Department: Volatiles**

			<b>Prep. Date</b>	<b>Analyst</b>	<b>Analysis Date</b>	<b>Analyst</b>
TCL VO + 15	04347-001	Soil	n/a	n/a	6/ 6/18	Xing
"	-002	"	n/a	n/a	6/ 6/18	Xing
"	-003	"	n/a	n/a	6/ 6/18	Xing
"	-004	"	n/a	n/a	6/ 6/18	Xing
"	-005	"	n/a	n/a	6/ 6/18	Xing
"	-006	"	n/a	n/a	6/ 6/18	Xing
"	-007	Aqueous	n/a	n/a	6/ 8/18	Barbara
"	-008	"	n/a	n/a	6/ 8/18	Barbara

**Department: Semivolatiles**

			<b>Prep. Date</b>	<b>Analyst</b>	<b>Analysis Date</b>	<b>Analyst</b>
TCL BN + 15	-001	Soil	6/ 5/18	Frank L.	6/ 5/18	Eleanor
"	-002	"	6/ 5/18	Frank L.	6/ 5/18	Eleanor
"	-003	"	6/ 5/18	Frank L.	6/ 5/18	Eleanor
"	-004	"	6/ 5/18	Frank L.	6/ 5/18	Eleanor
"	-005	"	6/ 5/18	Frank L.	6/ 5/18	Eleanor
"	-006	"	6/ 5/18	Frank L.	6/ 5/18	Eleanor
TCL BN + SIM + 15	-007	Aqueous	6/ 7/18	Frank L.	6/ 7/18	Donnie
"	-008	"	6/ 7/18	Frank L.	6/ 7/18	Donnie

**Department: GC**

			<b>Prep. Date</b>	<b>Analyst</b>	<b>Analysis Date</b>	<b>Analyst</b>
TCL PCB	-001	Soil	6/ 6/18	Archimede	6/ 8/18	Latha
"	-002	"	6/ 6/18	Archimede	6/ 8/18	Latha
"	-003	"	6/ 6/18	Archimede	6/ 8/18	Latha
"	-004	"	6/ 6/18	Archimede	6/ 8/18	Latha
"	-005	"	6/ 6/18	Archimede	6/ 8/18	Latha
"	-006	"	6/ 6/18	Archimede	6/ 8/18	Latha
"	-007	Aqueous	6/ 6/18	Archimede	6/ 6/18	Latha
"	-008	"	6/ 6/18	Archimede	6/ 6/18	Latha
TCL Pesticides	-001	Soil	6/ 6/18	Archimede	6/11/18	Iwona
"	-002	"	6/ 6/18	Archimede	6/11/18	Iwona
"	-003	"	6/ 6/18	Archimede	6/11/18	Iwona
"	-004	"	6/ 6/18	Archimede	6/11/18	Iwona
"	-005	"	6/ 6/18	Archimede	6/11/18	Iwona
"	-006	"	6/ 6/18	Archimede	6/11/18	Iwona
"	-007	Aqueous	6/ 6/18	Archimede	6/ 7/18	Iwona
"	-008	"	6/ 6/18	Archimede	6/ 7/18	Iwona

**Department: Metals**

			<b>Prep. Date</b>	<b>Analyst</b>	<b>Analysis Date</b>	<b>Analyst</b>
TAL Metals	-001	Soil	6/ 5/18	Frank R.	6/ 5/18	Danielle
"	-002	"	6/ 5/18	Frank R.	6/ 5/18	Danielle
"	-003	"	6/ 5/18	Frank R.	6/ 5/18	Danielle
"	-004	"	6/ 5/18	Frank R.	6/ 5/18	Danielle
"	-005	"	6/ 5/18	Frank R.	6/ 5/18	Danielle

# Laboratory Custody Chronicle

IAL Case No.

E18-04347

Client Hillmann Consulting, LLC

Project G6-2368

Received On 6/ 1/2018@17:05

"	-006	"	6/ 5/18	Frank R.	6/ 5/18	Danielle
"	-007	Aqueous	6/ 5/18	Frank R.	6/ 6/18	Danielle
"	-008	"	6/ 5/18	Frank R.	6/ 6/18	Danielle
"	-009	"	6/ 5/18	Frank R.	6/ 6/18	Danielle
"	-010	"	6/ 5/18	Frank R.	6/ 6/18	Danielle

**LAST PAGE OF DOCUMENT**



## **ANALYTICAL DATA REPORT**

Hillmann Consulting, LLC  
1600 Route 22 East  
Union, NJ 07083

Project Name: **G6-2368**  
IAL Case Number: **E18-04234**

These data have been reviewed and accepted by:

A handwritten signature in black ink, appearing to read "Michael Leftin".

Michael H. Leftin, Ph.D.  
Laboratory Director

This report shall not be reproduced, except in its entirety, without the written consent of Integrated Analytical Laboratories, LLC. The test results included in this report relate only to the samples analyzed. The results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

---

273 Franklin Road  
Randolph, NJ 07869  
Phone: 973 361 4252  
Fax: 973 989 5288



IAL is a NELAP accredited lab (TNI01284) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).

# **Integrated Analytical Laboratories - Table of Contents**

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# *Sample Summary*

*IAL Case No.*

**E18-04234**

*Client* Hillmann Consulting, LLC

*Project* G6-2368

*Received On* 5/31/2018@17:27

<u>Lab ID</u>	<u>Client Sample ID</u>	<u>Depth Top/Bottom</u>	<u>Sampling Time</u>	<u>Matrix</u>	<u># of Container</u>
04234-001	S1	5	5/30/2018@09:40	Soil	4
04234-002	S2	5	5/30/2018@10:15	Soil	4
04234-003	S3	5	5/30/2018@10:45	Soil	4
04234-004	S4	6	5/30/2018@11:10	Soil	4
04234-005	S5	6	5/30/2018@11:40	Soil	4
04234-006	S6	4	5/30/2018@12:10	Soil	9
04234-007	GW1	10	5/30/2018	Aqueous	
04234-008	GW1 - FILT	n/a	5/30/2018	Aqueous	

# INTEGRATED ANALYTICAL LABORATORIES, LLC.

## DATA QUALIFIERS AND FLAGS

- B** Indicates the analyte found in the associated method blank and in the sample due to potential lab contamination.
- C** Indicates analyte is a common laboratory contaminant.
- D** Indicates analyte was reported from diluted analysis.
- E** Identifies a compound concentration that exceeds the upper level of the calibration range of the instrument
- J** Indicates an estimated value either when the concentration in the sample is less than the RL or for qualification of TICs
- M** Indicates matrix interference
- N** Presumptive evidence of a compound from the use of GC/MS library search.
- X** Indicates samples analyzed for total and dissolved metals differ at ≤20% RPD.
- Y** Indicates DO depletion in the BOD blank is >0.20ppm
- Z** Indicates internal standard failure. Sample results are either biased high or biased low.
- \$** Value outside NJDEP DKQP Limits
- \*** Result outside of QC limits

## PROJECT NOTES

- All results for soils, solids, and sludges are reported on a dry-weight basis except where noted
- All test results and QC are compliant with TNI or other applicable state agency requirements/guidance unless otherwise noted in the case narrative
- The case narrative for this SDG should be consulted to determine any non-conformances
- Any samples with 15-minute or "analyze immediately" holding times (e.g. pH, Dissolved Oxygen, Sulfite, etc.) which are analyzed in the laboratory are considered out of holding time
- IAL is a NELAP/TNI certified laboratory (TNI ID# TNI01284). IAL retains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).
- Certification is not required to perform analyses in the following states: AL, CO, DE, GA, HI, ID, IN, KY, MD, MI, MS, MO, MT, NE, NM, SD and TN. IAL can perform all analyses, except Drinking Water, within its scope of capabilities in these states.

## ACRONYMS AND ABBREVIATIONS

<b>CFU</b>	Colony Forming Unit	<b>ND</b>	Indicates analyte was analyzed for but not detected at MDL or RL (only if MDL is not used)
<b>CCB</b>	Continuing Calibration Blank		
<b>CCV</b>	Continuing Calibration Verification	<b>NTU</b>	Nephelometric Turbidity Units
<b>DF</b>	Dilution Factor	<b>ppb</b>	Parts per billion. Reported as µg/L or µg/kg
<b>DL</b>	Attached as a suffix to a diluted sample	<b>ppm</b>	Parts per million. Reported as mg/L, µg/mL or mg/kg
<b>DUP</b>	Duplicate	<b>QC</b>	Quality Control
<b>ICB</b>	Initial Calibration Blank	<b>% Rec</b>	Percent Recovery
<b>ICC</b>	Initial Calibration Curve	<b>RL</b>	Reporting Limit. The RL is typically determined by the concentration of the lowest standard in the calibration curve
<b>ICV</b>	Initial Calibration Verification		
<b>kg</b>	kilogram		
<b>L</b>	Liter	<b>RPD</b>	Relative Percent Difference
<b>LCS</b>	Laboratory Control Sample	<b>RSD</b>	Relative Standard Deviation
<b>LCSD</b>	Laboratory Control Sample Duplicate	<b>RT</b>	Retention Time
<b>MDL</b>	Method Detection Limit as determined according to 40 CFR Part 136 Appendix B	<b>SU</b>	Standard Units
<b>MF</b>	Membrane Filter	<b>TIC</b>	Tentatively Identified Compound AKA Library Search Compounds
<b>mg</b>	milligram (1000mg = 1g)	<b>TNI</b>	The NELAC (National Environmental Laboratory Accreditation Council) Institute
<b>µg</b>	microgram (1000µg = 1mg)		
<b>ml</b>	milliliter (1000ml = 1L)	<b>TNTC</b>	Too numerous to count
<b>µl</b>	microliter (1000µl = 1ml)	*	When attached to a compound name, indicates this analyte was analyzed by Method SW-846 8270 SIM
<b>µmhos</b>	Conductivity units - resistance expressed in ohms		
<b>MPN</b>	Most Probable Number	^	When attached to a compound name, indicates this analyte was analyzed by Method SW-846 8011 or EPA 504.1
<b>MS</b>	Matrix Spike		
<b>MSD</b>	Matrix Spike Duplicate	<	Less than; In conjunction with a numerical value, indicates a concentration less than the RL or MDL
<b>NA</b>	Not applicable		
<b>NC</b>	Not calculated		

**SAMPLE DELIVERY GROUP CASE NARRATIVE  
(Conformance / Non-Conformance Summary)**

INTEGRATED ANALYTICAL LABORATORIES, LLC  
SAMPLE DELIVERY GROUP CASE NARRATIVE

**SDG#: E18-04234**

Integrated Analytical Laboratories, LLC. received eight (8) samples\*\* from Hillmann Consulting, LLC (IAL SDG# **E18-04234**, Project: G6-2368) on May 31, 2018 for the analysis of :

- ( 7 ) TCL VO + 15
- ( 6 ) TCL BN + 15
- ( 1 ) TCL BN + SIM + 15
- ( 7 ) TCL PCB
- ( 7 ) TCL Pesticides
- ( 8 ) TAL Metals

\*\*Number of samples listed above may be greater than what is listed on the chain of custody. Any samples that require in-house filtration or splitting will be counted as separate samples.

Samples were received in good condition with documentation in order.

Cooler temperature was acceptable at  $4 \pm 2^{\circ}\text{C}$

<b>Volatiles By SW 8260C</b>		<b>Batch: 180606A</b>		<b>Matrix: Aqueous</b>		
<b>QC</b>	<ul style="list-style-type: none"><li>- Calibration curve met QC criteria.</li><li>- Internal standards recovery met QC criteria.</li><li>- Surrogate percent recovery met QC criteria.</li><li>- Method blank met QC criteria.</li><li>- LCS percent recovery met QC criteria.</li><li>- MS/MSD RPD met QC criteria.</li><li>- MS/MSD percent recovery met QC criteria.</li></ul>					
<b>E18-04234</b>	<ul style="list-style-type: none"><li>- All samples were analyzed within holding time.</li></ul>					
Dilution Summary:						
		Sample ID	DF(s)	Dilution For		
		E18-04234-007	1	NA		
<b>Volatiles By SW 8260C</b>		<b>Batch: F180604-02, F180605-01</b>		<b>Matrix: Soil</b>		
<b>QC</b>	<ul style="list-style-type: none"><li>- Calibration curve met QC criteria.</li><li>- Internal standards recovery met QC criteria.</li><li>- Surrogate percent recovery met QC criteria.</li><li>- Method blank met QC criteria.</li><li>- LCS percent recovery met QC criteria.</li><li>- MS/MSD RPD met QC criteria.</li><li>- MS/MSD percent recovery met QC criteria.</li></ul>					
<b>E18-04234</b>	<ul style="list-style-type: none"><li>- All samples were analyzed within holding time.</li></ul>					
Dilution Summary:						
		Sample ID	DF(s)	Dilution For		
		E18-04234-001	1	NA		
		E18-04234-002	1	NA		
		E18-04234-003	1	NA		
		E18-04234-005	1	NA		

**INTEGRATED ANALYTICAL LABORATORIES, LLC**  
**SAMPLE DELIVERY GROUP CASE NARRATIVE**

**SDG#: E18-04234**

<b>Volatiles By SW 8260C</b>		<b>Batch: J180604-02</b>	<b>Matrix: MEOH</b>									
<b>QC</b>	<ul style="list-style-type: none"> <li>- Calibration curve met QC criteria.</li> <li>- Internal standards recovery met QC criteria.</li> <li>- Surrogate percent recovery met QC criteria.</li> <li>- Method blank met QC criteria.</li> <li>- LCS percent recovery met QC criteria.</li> <li>- MS/MSD RPD met QC criteria.</li> <li>- MS/MSD percent recovery met QC criteria.</li> </ul>											
<b>E18-04234</b>	<ul style="list-style-type: none"> <li>- All samples were analyzed within holding time.</li> <li>- Samples listed below were run using methanol preserved sample, as applicable. This sample preservation technique elevates RLs and MDLs 100x versus water preservation. If subsequent dilutions are performed, the RLs and MDLs will increase by that factor (e.g. a methanol sample run at a 5x dilution would elevate RLs and MDLs by 500x). Initial runs using methanol are considered "straight" runs and have a dilution factor of 1.</li> </ul> <p>Dilution Summary:</p> <table border="1"> <thead> <tr> <th>Sample ID</th> <th>DF(s)</th> <th>Dilution For</th> </tr> </thead> <tbody> <tr> <td>E18-04234-004</td> <td>1</td> <td>NA</td> </tr> <tr> <td>E18-04234-006</td> <td>1</td> <td>NA</td> </tr> </tbody> </table>	Sample ID	DF(s)	Dilution For	E18-04234-004	1	NA	E18-04234-006	1	NA		
Sample ID	DF(s)	Dilution For										
E18-04234-004	1	NA										
E18-04234-006	1	NA										

<b>Semivolatiles By SW 8270D SIM</b>		<b>Batch: 180604-02</b>	<b>Matrix: Aqueous</b>						
<b>QC</b>	<ul style="list-style-type: none"> <li>- Calibration curve met QC criteria.</li> <li>- Internal standard recovery met QC criteria.</li> <li>- Surrogate recovery met QC criteria.</li> <li>- Method blank met QC criteria.</li> <li>- LCS percent recovery met QC criteria. NJDEP DKQP criteria not met.</li> <li>- MS/MSD RPD met QC criteria.</li> <li>- MS/MSD percent recovery met QC criteria. NJDEP DKQP criteria not met.</li> </ul>								
<b>E18-04234</b>	<ul style="list-style-type: none"> <li>- Extraction holding time met requirement for each sample.</li> <li>- Analysis holding time met requirement for each sample.</li> <li>- Sample(s) used for aqueous Semivolatiles analyses contained varying levels of sediment. Precautions were taken to take an aliquot representative of the sample. However, due to the nature of aqueous samples containing sediment, reproduction of results may prove difficult. The rough amount of sediment present in the samples is as follows: 04234-007:1%.</li> </ul> <p>Dilution Summary:</p> <table border="1"> <thead> <tr> <th>Sample ID</th> <th>DF(s)</th> <th>Dilution For</th> </tr> </thead> <tbody> <tr> <td>E18-04234-007</td> <td>1</td> <td>NA</td> </tr> </tbody> </table>	Sample ID	DF(s)	Dilution For	E18-04234-007	1	NA		
Sample ID	DF(s)	Dilution For							
E18-04234-007	1	NA							

The result reported for 1,2-Diphenylhydrazine is also representative of Azobenzene. 1,2-Diphenylhydrazine rapidly decomposes to Azobenzene when exposed to water or heat. Analytical results from analysis of 1,2-Diphenylhydrazine will be directly compared to the applicable criteria for Azobenzene and/or 1,2-Diphenylhydrazine.

**INTEGRATED ANALYTICAL LABORATORIES, LLC**  
**SAMPLE DELIVERY GROUP CASE NARRATIVE**

**SDG#: E18-04234**

<b>Semivolatiles By SW 8270D</b>		<b>Batch: 180605-02</b>	<b>Matrix: Soil</b>
----------------------------------	--	-------------------------	---------------------

- |                  |   |
|------------------|---|
| <b>QC</b>        | <ul style="list-style-type: none"> <li>- Calibration curve met QC criteria.</li> <li>- Internal standard recovery met QC criteria.</li> <li>- Surrogate recovery met QC criteria.</li> <li>- Method blank met QC criteria.</li> <li>- LCS percent recovery met QC criteria. NJDEP DKQP criteria not met.</li> <li>- MS/MSD RPD met QC criteria.</li> <li>- MS/MSD percent recovery met QC criteria. NJDEP DKQP criteria not met.</li> </ul> |
| <b>E18-04234</b> | <ul style="list-style-type: none"> <li>- Extraction holding time met requirement for each sample.</li> <li>- Analysis holding time met requirement for each sample.</li> </ul>  |

**Dilution Summary:**

Sample ID	DF(s)	Dilution For
E18-04234-001	1	NA
E18-04234-002	1	NA
E18-04234-003	1	NA
E18-04234-004	1;10	Target compound(s).
E18-04234-005	1;5	Target compound(s).
E18-04234-006	2	Matrix Interference.

The result reported for 1,2-Diphenylhydrazine is also representative of Azobenzene. 1,2-Diphenylhydrazine rapidly decomposes to Azobenzene when exposed to water or heat. Analytical results from analysis of 1,2-Diphenylhydrazine will be directly compared to the applicable criteria for Azobenzene and/or 1,2-Diphenylhydrazine.

<b>PCB By SW 8082A</b>		<b>Batch: 180604-12</b>	<b>Matrix: Soil</b>
------------------------	--	-------------------------	---------------------

- |                  |  |
|------------------|--|
| <b>QC</b>        | <ul style="list-style-type: none"> <li>- Calibration curve met QC criteria.</li> <li>- Surrogate percent recovery did not meet QC criteria for sample 006, due to matrix interference. NJDEP DKQP criteria not met.</li> <li>- Method blank met QC criteria.</li> <li>- LCS Percent Recovery met QC criteria.</li> <li>- RPD between MS/MSD met QC criteria.</li> <li>- MS/MSD Percent Recovery met QC criteria.</li> <li>- The following samples were cleaned up using method 3665A: 001, 002, 003, 004, 005, 006.</li> <li>- The following samples were cleaned up using method 3660B to remove sulfur: 001, 002, 003, 004, 005, 006.</li> </ul> |
| <b>E18-04234</b> | <ul style="list-style-type: none"> <li>- All samples were extracted within holding time.</li> <li>- All samples were analyzed within holding time.</li> <li>- Retention Time Shift met QC criteria.</li> </ul>   |

**Dilution Summary:**

Sample ID	DF(s)	Dilution For
E18-04234-001	10	Matrix Interference.
E18-04234-002	5	Matrix Interference.
E18-04234-003	10	Matrix Interference.
E18-04234-004	10	Matrix Interference.
E18-04234-005	10	Matrix Interference.
E18-04234-006	10	Matrix Interference.

**INTEGRATED ANALYTICAL LABORATORIES, LLC**  
**SAMPLE DELIVERY GROUP CASE NARRATIVE**

**SDG#: E18-04234**

<b>PCB By SW 8082A</b>		<b>Batch: 180606-02</b>	<b>Matrix: Aqueous</b>																												
<b>QC</b>	<ul style="list-style-type: none"> <li>- Calibration curve met QC criteria.</li> <li>- Surrogate percent recovery met QC criteria.</li> <li>- Method blank met QC criteria.</li> <li>- LCS Percent Recovery met QC criteria.</li> <li>- RPD between MS/MSD met QC criteria.</li> <li>- MS/MSD Percent Recovery met QC criteria.</li> <li>- The following samples were cleaned up using method 3660B to remove sulfur: 007.</li> </ul>																														
<b>E18-04234</b>	<ul style="list-style-type: none"> <li>- All samples were extracted within holding time.</li> <li>- All samples were analyzed within holding time.</li> <li>- Retention Time Shift met QC criteria.</li> </ul>																														
Dilution Summary:																															
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 30%;">Sample ID</th><th style="text-align: center; width: 20%;">DF(s)</th><th style="text-align: center; width: 30%;">Dilution For</th><th style="text-align: right; width: 20%;"></th></tr> </thead> <tbody> <tr> <td>E18-04234-007</td><td style="text-align: center;">1</td><td style="text-align: center;">NA</td><td></td></tr> </tbody> </table>				Sample ID	DF(s)	Dilution For		E18-04234-007	1	NA																					
Sample ID	DF(s)	Dilution For																													
E18-04234-007	1	NA																													
<b>Pesticides By SW 8081B</b>		<b>Batch: 180604-12</b>	<b>Matrix: Soil</b>																												
<b>QC</b>	<ul style="list-style-type: none"> <li>- Calibration curve met QC criteria.</li> <li>- Surrogate percent recovery did not meet QC criteria due to matrix interference for #001; #004; #005; diluted out for #006. NJDEP DKQP criteria not met.</li> <li>- Method blank met QC criteria.</li> <li>- LCS Percent Recovery met QC criteria.</li> <li>- RPD between MS/MSD met QC criteria.</li> <li>- MS/MSD Percent Recovery met QC criteria.</li> <li>- The following samples were cleaned up using method 3660B to remove sulfur: 001, 002, 003, 004, 005, 006.</li> </ul>																														
<b>E18-04234</b>	<ul style="list-style-type: none"> <li>- All samples were extracted within holding time.</li> <li>- All samples were analyzed within holding time.</li> <li>- Retention Time Shift met QC criteria.</li> </ul>																														
Dilution Summary:																															
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 30%;">Sample ID</th><th style="text-align: center; width: 20%;">DF(s)</th><th style="text-align: center; width: 30%;">Dilution For</th><th style="text-align: right; width: 20%;"></th></tr> </thead> <tbody> <tr> <td>E18-04234-001</td><td style="text-align: center;">5</td><td style="text-align: center;">Matrix Interference.</td><td></td></tr> <tr> <td>E18-04234-002</td><td style="text-align: center;">5</td><td style="text-align: center;">Matrix Interference.</td><td></td></tr> <tr> <td>E18-04234-003</td><td style="text-align: center;">5</td><td style="text-align: center;">Matrix Interference.</td><td></td></tr> <tr> <td>E18-04234-004</td><td style="text-align: center;">25</td><td style="text-align: center;">Matrix Interference.</td><td></td></tr> <tr> <td>E18-04234-005</td><td style="text-align: center;">10</td><td style="text-align: center;">Matrix Interference.</td><td></td></tr> <tr> <td>E18-04234-006</td><td style="text-align: center;">250</td><td style="text-align: center;">Matrix Interference.</td><td></td></tr> </tbody> </table>				Sample ID	DF(s)	Dilution For		E18-04234-001	5	Matrix Interference.		E18-04234-002	5	Matrix Interference.		E18-04234-003	5	Matrix Interference.		E18-04234-004	25	Matrix Interference.		E18-04234-005	10	Matrix Interference.		E18-04234-006	250	Matrix Interference.	
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E18-04234-001	5	Matrix Interference.																													
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E18-04234-006	250	Matrix Interference.																													

**INTEGRATED ANALYTICAL LABORATORIES, LLC**  
**SAMPLE DELIVERY GROUP CASE NARRATIVE**

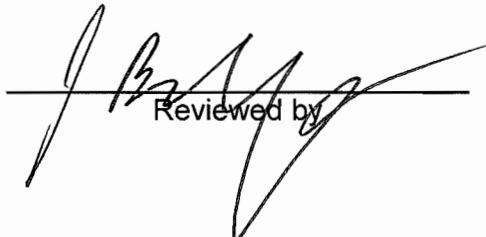
**SDG#: E18-04234**

<b>Pesticides By SW 8081B</b>		<b>Batch: 180606-02</b>	<b>Matrix: Aqueous</b>																					
<b>QC</b>	<ul style="list-style-type: none"> <li>- Calibration curve met QC criteria.</li> <li>- Surrogate percent recovery met QC criteria.</li> <li>- Method blank met QC criteria.</li> <li>- LCS Percent Recovery met QC criteria.</li> <li>- RPD between MS/MSD met QC criteria.</li> <li>- MS/MSD Percent Recovery met QC criteria.</li> <li>- The following samples were cleaned up using method 3660B to remove sulfur: 007.</li> </ul>																							
<b>E18-04234</b>	<ul style="list-style-type: none"> <li>- All samples were extracted within holding time.</li> <li>- All samples were analyzed within holding time.</li> <li>- Retention Time Shift met QC criteria.</li> </ul> <p>Dilution Summary:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Sample ID</th> <th style="text-align: center;">DF(s)</th> <th style="text-align: left;">Dilution For</th> </tr> </thead> <tbody> <tr> <td>E18-04234-007</td> <td style="text-align: center;">1</td> <td>NA</td> </tr> </tbody> </table>			Sample ID	DF(s)	Dilution For	E18-04234-007	1	NA															
Sample ID	DF(s)	Dilution For																						
E18-04234-007	1	NA																						
<b>Metals By SW 6020B/7470A</b>																								
		<b>Batch: A180605-01 (307A)</b>	<b>Matrix: Aqueous</b>																					
<b>QC</b>	<ul style="list-style-type: none"> <li>- Calibration Curve Linearity met QC criteria.</li> <li>- Internal Standard Recovery met QC criteria.</li> <li>- Method Blank met QC criteria.</li> <li>- LCS Percent Recovery met QC criteria.</li> <li>- MS Percent Recovery met QC criteria.</li> <li>- RPD between Sample/Duplicate met QC criteria.</li> <li>- Serial Dilution met QC criteria.</li> </ul>																							
<b>E18-04234</b>	<ul style="list-style-type: none"> <li>- Digestion Holding Time met requirement for each sample.</li> <li>- Analysis Holding Time met requirement for each sample.</li> <li>- 04234-007: Trace;</li> </ul> <p>Dilution Summary:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Sample ID</th> <th style="text-align: center;">DF(s)</th> <th style="text-align: left;">Dilution For</th> </tr> </thead> <tbody> <tr> <td>E18-04234-007</td> <td style="text-align: center;">1</td> <td>NA</td> </tr> <tr> <td>E18-04234-008</td> <td style="text-align: center;">1</td> <td>NA</td> </tr> </tbody> </table>			Sample ID	DF(s)	Dilution For	E18-04234-007	1	NA	E18-04234-008	1	NA												
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E18-04234-008	1	NA																						
<b>Metals By SW 6020B/7471B</b>																								
		<b>Batch: S180604-01 (305A)</b>	<b>Matrix: Soil</b>																					
<b>QC</b>	<ul style="list-style-type: none"> <li>- Calibration Curve Linearity met QC criteria.</li> <li>- Internal Standard Recovery met QC criteria.</li> <li>- Method Blank met QC criteria.</li> <li>- LCS Percent Recovery met QC criteria.</li> <li>- MS Percent Recovery met QC criteria.</li> <li>- RPD between Sample/Duplicate met QC criteria.</li> <li>- Serial Dilution met QC criteria.</li> </ul>																							
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Sample ID	DF(s)	Dilution For																						
E18-04234-001	1	NA																						
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E18-04234-006	1	NA																						

INTEGRATED ANALYTICAL LABORATORIES, LLC  
SAMPLE DELIVERY GROUP CASE NARRATIVE

**SDG#: E18-04234**

A review of the QA/QC measures for the analysis of the sample(s) contained in this report has been performed by:

  
Reviewed by

6/8/2018

Date

## RESULTS SUMMARY REPORT

**INTEGRATED ANALYTICAL LABORATORIES, LLC.**

**SUMMARY REPORT**

Client: Hillmann Consulting, LLC

Project: G6-2368

Lab Case No.: E18-04234

Lab ID:	04234-001			04234-002			04234-003			04234-004		
Client ID:	S1			S2			S3			S4		
Depth:	5			5			5			6		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	5/30/18			5/30/18			5/30/18			5/30/18		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
<b>Volatiles (Units)</b>	<i>(mg/Kg)</i>			<i>(mg/Kg)</i>			<i>(mg/Kg)</i>			<i>(mg/Kg)</i>		
cis-1,2-Dichloroethene	0.000367	J	0.000219	ND	0.00029	ND	0.000264	ND	0.029			
Trichloroethene	0.00367		0.000288	ND	0.000381	ND	0.000347	ND	0.032			
Toluene	ND		0.000333	ND	0.000439	ND	0.000401	0.025	J	0.024		
Tetrachloroethene	0.148		0.000264	ND	0.000348	ND	0.000317	ND	0.029			
Ethylbenzene	ND		0.000251	ND	0.000332	0.00188	0.000303	ND	0.022			
Total Xylenes	ND		0.000446	ND	0.000589	0.00231	J	0.000537	ND	0.060		
Isopropylbenzene	ND		0.000204	ND	0.000269	0.000801	J	0.000246	ND	0.021		
1,4-Dichlorobenzene	ND		0.000176	0.000403	J	0.000233	ND	0.000212	0.023	J	0.022	
Cyclohexane	ND		0.000187	ND	0.000248	0.00308	0.000226	ND	0.027			
Methylcyclohexane	ND		0.000214	ND	0.000283	0.00468	0.000258	ND	0.027			
<b>TOTAL VO's:</b>	0.152	J		0.000403	J		0.013	J		0.048	J	
<b>TOTAL TIC's:</b>	ND			ND			0.00905	JN		1.70	JN	
<b>TOTAL VO's &amp; TIC's:</b>	0.152	J		0.000403	J		0.022	JN		1.75	JN	
<b>Semivolatiles - BN (Units)</b>	<i>(mg/Kg)</i>			<i>(mg/Kg)</i>			<i>(mg/Kg)</i>			<i>(mg/Kg)</i>		
Naphthalene	0.318		0.032	ND	0.030	ND	0.032	0.755	0.034			
2-Methylnaphthalene	0.142		0.026	ND	0.024	ND	0.026	0.279	0.028			
1,1'-Biphenyl	0.048		0.034	ND	0.032	ND	0.035	0.170	0.037			
Acenaphthylene	0.095		0.030	ND	0.029	ND	0.030	2.28	0.032			
Acenaphthene	0.442		0.032	0.044		0.031	ND	0.033	1.37	0.035		
Dibenzofuran	0.387		0.031	ND	0.030	ND	0.032	1.09	0.034			
Fluorene	0.403		0.033	0.032	J	0.031	ND	0.033	2.16	0.036		
Phenanthrene	4.00		0.033	0.345		0.032	0.112	0.034	15.5	D	0.360	
Anthracene	1.06		0.032	0.078		0.031	0.050	0.033	4.22		0.035	
Carbazole	0.473		0.028	0.034	J	0.027	ND	0.029	1.52		0.031	
Di-n-butyl phthalate	0.139		0.028	ND	0.026	ND	0.028	ND	0.030			
Fluoranthene	4.41		0.031	0.353		0.029	0.430	0.031	37.4	D	0.332	
Pyrene	3.14		0.030	0.248		0.029	0.276	0.030	19.8	D	0.324	
Benzo[a]anthracene	1.91		0.031	0.136		0.030	0.227	0.032	12.8	D	0.338	
Chrysene	1.94		0.031	0.137		0.030	0.211	0.032	12.5	D	0.338	
Bis(2-ethylhexyl) phthalate	0.037		0.023	ND	0.021	0.051	0.023	0.275	0.024			
Benzo[b]fluoranthene	0.949		0.029	0.088		0.028	0.178	0.030	8.59	D	0.316	
Benzo[k]fluoranthene	1.08		0.031	0.073		0.029	0.131	0.031	4.91		0.033	
Benzo[a]pyrene	1.24		0.030	0.080		0.028	0.157	0.030	8.39	D	0.322	
Indeno[1,2,3-cd]pyrene	0.653		0.030	0.053		0.029	0.103	0.031	4.56		0.033	
Dibenz[a,h]anthracene	0.346		0.036	ND	0.034	0.047	0.036	2.35	0.039			
Benzo[g,h,i]perylene	0.805		0.033	0.068		0.031	0.127	0.033	4.85		0.036	
<b>TOTAL BN'S:</b>	24.0			1.77	J		2.10			146	D	
<b>TOTAL TIC's:</b>	4.22	JN		ND			3.33	JN		19.9	JN	
<b>TOTAL BN'S &amp; TIC's:</b>	28.2	JN		1.77	J		5.43	JN		166	DJN	

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.

N = Presumptive evidence of a compound from the use of GC/MS library search.

**INTEGRATED ANALYTICAL LABORATORIES, LLC.**

**SUMMARY REPORT**  
**Client: Hillmann Consulting, LLC**  
**Project: G6-2368**  
**Lab Case No.: E18-04234**

PARAMETER(Units)	Lab ID: 04234-001			04234-002			04234-003			04234-004						
	Client ID: S1	Depth: 5	Matrix: Soil	Sampled Date: 5/30/18	Client ID: S2	Depth: 5	Matrix: Soil	Sampled Date: 5/30/18	Client ID: S3	Depth: 5	Matrix: Soil	Sampled Date: 5/30/18	Client ID: S4	Depth: 6	Matrix: Soil	Sampled Date: 5/30/18
	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	
<b>PCB's (Units)</b>	<i>(mg/Kg)</i>			<i>(mg/Kg)</i>			<i>(mg/Kg)</i>			<i>(mg/Kg)</i>			<i>(mg/Kg)</i>			
Aroclor-1016	ND		0.0073	ND		0.00352	ND		0.00725	ND		0.00786				
Aroclor-1221	ND		0.0073	ND		0.00352	ND		0.00725	ND		0.00786				
Aroclor-1232	ND		0.0073	ND		0.00352	ND		0.00725	ND		0.00786				
Aroclor-1242	ND		0.0073	ND		0.00352	ND		0.00725	ND		0.00786				
Aroclor-1248	ND		0.0073	ND		0.00352	ND		0.00725	0.076	D	0.00786				
Aroclor-1254	ND		0.0073	ND		0.00352	ND		0.00725	ND		0.00786				
Aroclor-1260	0.020	D	0.0073	ND		0.00352	0.035	D	0.00725	0.056	D	0.00786				
Aroclor-1262	ND		0.0073	ND		0.00352	ND		0.00725	ND		0.00786				
Aroclor-1268	ND		0.0073	ND		0.00352	ND		0.00725	ND		0.00786				
PCBs	0.020	D	0.0073	ND		0.00352	0.035	D	0.00725	0.132	D	0.00786				
<b>Pesticides (Units)</b>	<i>(mg/Kg)</i>			<i>(mg/Kg)</i>			<i>(mg/Kg)</i>			<i>(mg/Kg)</i>			<i>(mg/Kg)</i>			
alpha-BHC	ND		0.000913	ND		0.000879	ND		0.000906	ND		0.00492				
beta-BHC	ND		0.000913	ND		0.000879	ND		0.000906	ND		0.00492				
gamma-BHC (Lindane)	ND		0.000913	ND		0.000879	ND		0.000906	ND		0.00492				
delta-BHC	ND		0.000913	ND		0.000879	ND		0.000906	ND		0.00492				
Heptachlor	ND		0.000913	ND		0.000879	ND		0.000906	ND		0.00492				
Aldrin	ND		0.000913	ND		0.000879	ND		0.000906	ND		0.00492				
Heptachlor epoxide	ND		0.000913	ND		0.000879	ND		0.000906	ND		0.00492				
Endosulfan I	ND		0.000913	ND		0.000879	ND		0.000906	ND		0.00492				
4,4'-DDE	ND		0.000913	0.091	D	0.000879	0.015	D	0.000906	0.026	D	0.00492				
Dieldrin	ND		0.000913	ND		0.000879	ND		0.000906	ND		0.00492				
Endrin	ND		0.000913	ND		0.000879	ND		0.000906	ND		0.00492				
Endosulfan II	ND		0.000913	ND		0.000879	ND		0.000906	ND		0.00492				
4,4'-DDD	ND		0.000913	0.020	D	0.000879	0.00189	D	0.000906	ND		0.00492				
Endrin aldehyde	ND		0.000913	ND		0.000879	ND		0.000906	ND		0.00492				
Endosulfan sulfate	ND		0.000913	ND		0.000879	ND		0.000906	ND		0.00492				
4,4'-DDT	ND		0.000913	0.129	D	0.000879	0.0093	D	0.000906	0.049	D	0.00492				
Endrin ketone	ND		0.000913	ND		0.000879	ND		0.000906	ND		0.00492				
Methoxychlor	ND		0.000913	ND		0.000879	ND		0.000906	ND		0.00492				
alpha-Chlordane	ND		0.000913	0.00519	D	0.000879	0.000969	DJ	0.000906	ND		0.00492				
gamma-Chlordane	ND		0.000913	0.00331	D	0.000879	0.00188	D	0.000906	0.010	D	0.00492				
Toxaphene	ND		0.011	ND		0.011	ND		0.011	ND		0.059				
Endosulfan (I and II)	ND		0.000913	ND		0.000879	ND		0.000906	ND		0.00492				
Chlordane (alpha and gamma)	ND		0.000913	0.0085	D	0.000879	0.00285	D	0.000906	0.010	D	0.00492				

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

D = The compound was reported from the Diluted analysis

**INTEGRATED ANALYTICAL LABORATORIES, LLC.**

**SUMMARY REPORT**  
**Client: Hillmann Consulting, LLC**  
**Project: G6-2368**  
**Lab Case No.: E18-04234**

Lab ID:	04234-001			04234-002			04234-003			04234-004		
Client ID:	S1			S2			S3			S4		
Depth:	5			5			5			6		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	5/30/18			5/30/18			5/30/18			5/30/18		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
<b>Metals (Units)</b>	<b>(mg/Kg)</b>			<b>(mg/Kg)</b>			<b>(mg/Kg)</b>			<b>(mg/Kg)</b>		
Aluminum	8710		2.38	1690		2.26	3170		2.35	6810		2.53
Antimony	1.14		0.238	ND		0.226	0.399	J	0.235	0.826		0.253
Arsenic	5.76		0.179	2.78		0.169	2.58		0.176	3.28		0.190
Barium	110		0.298	61.9		0.282	81.6		0.294	139		0.316
Beryllium	0.527	J	0.179	ND		0.169	0.243	J	0.176	0.276	J	0.190
Cadmium	ND		0.357	ND		0.338	0.433	J	0.353	0.804		0.380
Calcium	7320		17.9	14900		16.9	21800		17.6	23200		19.0
Chromium	34.5		0.298	7.14		0.282	129		0.294	92.0		0.316
Cobalt	8.36		0.179	1.53		0.169	4.34		0.176	2.59		0.190
Copper	35.3		0.417	24.1		0.395	19.8		0.412	20.5		0.443
Iron	17000		17.9	6460		16.9	9820		17.6	9570		19.0
Lead	222		0.298	45.3		0.282	97.6		0.294	150		0.316
Magnesium	5940		17.9	1190		16.9	8410		17.6	3270		19.0
Manganese	474		0.417	68.4		0.395	141		0.412	144		0.443
Mercury	0.301		0.0099	0.049		0.0093	0.057		0.010	0.219		0.011
Nickel	31.8		0.417	3.94		0.395	26.5		0.412	10.3		0.443
Potassium	1270		23.8	311		22.6	591		23.5	662		25.3
Selenium	2.47	J	1.79	ND		1.69	ND		1.76	ND		1.90
Silver	ND		0.357	0.655		0.338	149		0.353	131		0.380
Sodium	163		23.8	119		22.6	171		23.5	860		25.3
Thallium	0.335	J	0.298	ND		0.282	ND		0.294	ND		0.316
Vanadium	33.6		0.298	9.19		0.282	15.5		0.294	17.0		0.316
Zinc	183		1.19	46.6		1.13	179		1.18	301		1.27

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**INTEGRATED ANALYTICAL LABORATORIES, LLC.**

**SUMMARY REPORT**

**Client: Hillmann Consulting, LLC**

**Project: G6-2368**

**Lab Case No.: E18-04234**

PARAMETER(Units)	04234-005			04234-006		
	Conc	Q	MDL	Conc	Q	MDL
<b>Volatiles (Units)</b>	<i>(mg/Kg)</i>			<i>(mg/Kg)</i>		
Acetone	0.022		0.00122	ND		0.151
Tetrachloroethene	0.0033		0.00032	ND		0.051
Styrene	0.000541	J	0.000258	ND		0.033
Methyl acetate	ND		0.000584	1.93		0.055
<b>TOTAL VO's:</b>	0.026	J		1.93		
<b>TOTAL TIC's:</b>	ND			0.623	JN	
<b>TOTAL VO's &amp; TIC's:</b>	0.026	J		2.55	JN	
<b>Semivolatiles - BN (Units)</b>	<i>(mg/Kg)</i>			<i>(mg/Kg)</i>		
Naphthalene	0.174		0.032	ND		0.059
2-Methylnaphthalene	0.073		0.026	ND		0.047
1,1'-Biphenyl	0.034	J	0.034	ND		0.063
Acenaphthylene	0.933		0.030	ND		0.055
Acenaphthene	0.516		0.032	ND		0.060
Dibenzofuran	0.184		0.031	ND		0.058
Fluorene	0.502		0.033	ND		0.061
Phenanthrene	8.59	D	0.166	ND		0.062
Anthracene	3.05		0.032	ND		0.059
Carbazole	0.514		0.028	ND		0.052
Fluoranthene	29.1	D	0.153	0.134	D	0.057
Pyrene	23.5	D	0.150	0.099	D	0.055
Benzo[a]anthracene	14.8	D	0.156	0.067	D	0.058
Chrysene	13.5	D	0.156	0.074	D	0.058
Bis(2-ethylhexyl) phthalate	ND		0.023	0.078	D	0.042
Benzo[b]fluoranthene	8.48	D	0.146	ND		0.054
Benzo[k]fluoranthene	4.31		0.031	ND		0.057
Benzo[a]pyrene	10.3	D	0.149	ND		0.055
Indeno[1,2,3-cd]pyrene	5.63		0.030	0.095	D	0.056
Dibenz[a,h]anthracene	2.90		0.036	ND		0.066
Benzo[g,h,i]perylene	6.11	D	0.164	0.189	D	0.061
<b>TOTAL BN'S:</b>	133	JD		0.736	D	
<b>TOTAL TIC's:</b>	38.2	JN		ND		
<b>TOTAL BN'S &amp; TIC's:</b>	171	JDN		0.736	D	

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

D = The compound was reported from the Diluted analysis

All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.

N = Presumptive evidence of a compound from the use of GC/MS library search.

**INTEGRATED ANALYTICAL LABORATORIES, LLC.**

**SUMMARY REPORT**

**Client: Hillmann Consulting, LLC**

**Project: G6-2368**

**Lab Case No.: E18-04234**

PARAMETER(Units)	Lab ID: 04234-005			04234-006		
	Client ID:	Q	MDL	Client ID:	Q	MDL
Sampled Date		5/30/18			5/30/18	
Depth:	6			4		
Matrix:	Soil			Soil		
PCB's (Units)	(mg/Kg)			(mg/Kg)		
Aroclor-1016	ND	0.00723		ND	0.00685	
Aroclor-1221	ND	0.00723		ND	0.00685	
Aroclor-1232	ND	0.00723		ND	0.00685	
Aroclor-1242	ND	0.00723		ND	0.00685	
Aroclor-1248	ND	0.00723		ND	0.00685	
Aroclor-1254	ND	0.00723		ND	0.00685	
Aroclor-1260	ND	0.00723		ND	0.00685	
Aroclor-1262	ND	0.00723		ND	0.00685	
Aroclor-1268	ND	0.00723		ND	0.00685	
PCBs	ND	0.00723		ND	0.00685	
Pesticides (Units)	(mg/Kg)			(mg/Kg)		
alpha-BHC	ND	0.00181		ND	0.043	
beta-BHC	ND	0.00181		ND	0.043	
gamma-BHC (Lindane)	ND	0.00181		ND	0.043	
delta-BHC	ND	0.00181		ND	0.043	
Heptachlor	ND	0.00181		ND	0.043	
Aldrin	ND	0.00181		ND	0.043	
Heptachlor epoxide	ND	0.00181		ND	0.043	
Endosulfan I	ND	0.00181		ND	0.043	
4,4'-DDE	ND	0.00181		ND	0.043	
Dieldrin	ND	0.00181		ND	0.043	
Endrin	ND	0.00181		ND	0.043	
Endosulfan II	ND	0.00181		ND	0.043	
4,4'-DDD	ND	0.00181		ND	0.043	
Endrin aldehyde	ND	0.00181		ND	0.043	
Endosulfan sulfate	ND	0.00181		ND	0.043	
4,4'-DDT	ND	0.00181		ND	0.043	
Endrin ketone	ND	0.00181		ND	0.043	
Methoxychlor	ND	0.00181		ND	0.043	
alpha-Chlordane	ND	0.00181		ND	0.043	
gamma-Chlordane	ND	0.00181		ND	0.043	
Toxaphene	ND	0.022		ND	0.514	
Endosulfan (I and II)	ND	0.00181		ND	0.043	
Chlordane (alpha and gamma)	ND	0.00181		ND	0.043	

ND = Analyzed for but Not Detected at the MDL

**INTEGRATED ANALYTICAL LABORATORIES, LLC.**

**SUMMARY REPORT**

**Client: Hillmann Consulting, LLC**

**Project: G6-2368**

**Lab Case No.: E18-04234**

PARAMETER(Units)	04234-005			04234-006		
	Conc	Q	MDL	Conc	Q	MDL
<b>Metals (Units)</b>	<i>(mg/Kg)</i>			<i>(mg/Kg)</i>		
Aluminum	2440		2.31	1390		2.08
Antimony	0.809		0.231	ND		0.208
Arsenic	4.03		0.173	1.42		0.156
Barium	85.0		0.289	13.0		0.260
Beryllium	0.232	J	0.173	ND		0.156
Cadmium	0.384	J	0.347	ND		0.312
Calcium	6500		17.3	5810		15.6
Chromium	89.8		0.289	7.31		0.260
Cobalt	2.75		0.173	1.23		0.156
Copper	18.1		0.404	14.6		0.364
Iron	18300		17.3	3530		15.6
Lead	802		0.289	24.8		0.260
Magnesium	1540		17.3	2100		15.6
Manganese	107		0.404	50.0		0.364
Mercury	0.463		0.010	0.056		0.010
Nickel	8.90		0.404	3.41		0.364
Potassium	358		23.1	189		20.8
Selenium	ND		1.73	ND		1.56
Silver	120		0.347	ND		0.312
Sodium	132		23.1	48.3	J	20.8
Thallium	ND		0.289	ND		0.260
Vanadium	12.1		0.289	7.07		0.260
Zinc	212		1.16	16.7		1.04

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

**INTEGRATED ANALYTICAL LABORATORIES, LLC.**

**SUMMARY REPORT**

**Client: Hillmann Consulting, LLC**

**Project: G6-2368**

**Lab Case No.: E18-04234**

<b>Lab ID:</b>	04234-007			04234-008		
<b>Client ID:</b>	GW1			GW1 - FILT		
<b>Depth:</b>	10					
<b>Matrix:</b>	Aqueous			Aqueous		
<b>Sampled Date</b>		5/30/18			5/30/18	
<b>PARAMETER(Units)</b>	Conc	Q	MDL	Conc	Q	MDL
<b>Volatiles (Units)</b>	<i>(ug/L)</i>			<i>(ug/L)</i>		
Tetrachloroethene	0.861	0.451	~	~	~	~
<b>TOTAL VO's:</b>	0.861			~	~	~
<b>TOTAL TIC's:</b>	ND			~	~	~
<b>TOTAL VO's &amp; TIC's:</b>	0.861			~	~	~
<b>Semivolatiles - BN (Units)</b>	<i>(ug/L)</i>			<i>(ug/L)</i>		
Benzo[a]anthracene	0.179	0.100	~	~	~	~
Benzo[b]fluoranthene	0.172	0.100	~	~	~	~
Benzo[k]fluoranthene	0.214	0.100	~	~	~	~
Benzo[a]pyrene	0.170	0.100	~	~	~	~
Indeno[1,2,3-cd]pyrene	0.160	0.100	~	~	~	~
Dibenz[a,h]anthracene	0.173	0.100	~	~	~	~
<b>TOTAL BN'S:</b>	1.07			~	~	~
<b>TOTAL TIC's:</b>	ND			~	~	~
<b>TOTAL BN'S &amp; TIC's:</b>	1.07			~	~	~
<b>PCB's (Units)</b>	<i>(ug/L)</i>			<i>(ug/L)</i>		
Aroclor-1016	ND	0.020	~	~	~	~
Aroclor-1221	ND	0.020	~	~	~	~
Aroclor-1232	ND	0.020	~	~	~	~
Aroclor-1242	ND	0.020	~	~	~	~
Aroclor-1248	ND	0.020	~	~	~	~
Aroclor-1254	ND	0.020	~	~	~	~
Aroclor-1260	ND	0.020	~	~	~	~
Aroclor-1262	ND	0.020	~	~	~	~
Aroclor-1268	ND	0.020	~	~	~	~
PCBs	ND	0.020	~	~	~	~

~ = Sample not analyzed for

ND = Analyzed for but Not Detected at the MDL

**INTEGRATED ANALYTICAL LABORATORIES, LLC.**

**SUMMARY REPORT**  
**Client: Hillmann Consulting, LLC**  
**Project: G6-2368**  
**Lab Case No.: E18-04234**

PARAMETER(Units)	04234-007			04234-008							
	Lab ID:	Client ID:	Depth:	Matrix:	Sampled Date	Conc	Q	MDL	Conc	Q	MDL
<b>Pesticides (Units)</b>	(ug/L)			(ug/L)							
alpha-BHC	ND		0.005		~			~			
beta-BHC	ND		0.005		~			~			
gamma-BHC (Lindane)	ND		0.005		~			~			
delta-BHC	ND		0.005		~			~			
Heptachlor	ND		0.005		~			~			
Aldrin	ND		0.005		~			~			
Heptachlor epoxide	ND		0.005		~			~			
Endosulfan I	ND		0.005		~			~			
4,4'-DDE	ND		0.005		~			~			
Dieldrin	ND		0.005		~			~			
Endrin	ND		0.005		~			~			
Endosulfan II	ND		0.005		~			~			
4,4'-DDD	ND		0.005		~			~			
Endrin aldehyde	ND		0.005		~			~			
Endosulfan sulfate	ND		0.005		~			~			
4,4'-DDT	ND		0.005		~			~			
Endrin ketone	ND		0.005		~			~			
Methoxychlor	ND		0.005		~			~			
alpha-Chlordane	ND		0.005		~			~			
gamma-Chlordane	ND		0.005		~			~			
Toxaphene	ND		0.060		~			~			
Endosulfan (I and II)	ND		0.005		~			~			
Chlordane (alpha and gamma)	ND		0.005		~			~			
<b>Metals (Units)</b>	(ug/L)			(ug/L)							
Aluminum	171		8.00	ND		8.00					
Antimony	2.54		1.20	2.61	X	1.20					
Arsenic	1.55	J	0.600	1.59	JX	0.600					
Barium	34.8		1.20	30.1		1.20					
Beryllium	ND		0.320	ND		0.320					
Cadmium	ND		1.00	ND		1.00					
Calcium	96100		60.0	90800		60.0					
Chromium	3.92		1.00	ND		1.00					
Cobalt	ND		0.600	ND		0.600					
Copper	ND		1.00	ND		1.00					
Iron	362		60.0	ND		60.0					
Lead	1.86	J	1.20	ND		1.20					
Magnesium	14000		60.0	13300		60.0					
Manganese	14.2		1.40	14.4	X	1.40					
Mercury	ND		0.200	ND		0.200					
Nickel	2.67		1.20	1.82	J	1.20					
Potassium	5650		80.0	5310		80.0					
Selenium	6.68	J	6.00	6.16	J	6.00					
Silver	ND		1.20	ND		1.20					
Sodium	32700		80.0	31300		80.0					
Thallium	ND		1.20	ND		1.20					
Vanadium	5.27		0.600	4.94		0.600					
Zinc	105		8.00	97.1		8.00					

~ = Sample not analyzed for

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

X – Samples analyzed for total and dissolved metals differ at <= 20% RPD.

## **ANALYTICAL RESULTS**

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: E18-04234-001  
Client ID: S1/5  
Date Received: 05/31/2018  
Date Analyzed: 06/05/2018  
Data file: F5985.D 06/ 5/18 02:20

GC/MS Column: DB-624  
Sample wt/vol: 5.4g  
Matrix-Units: Soil-mg/Kg  
% Moisture: 9.70  
Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND		0.00103	0.000242
Chloromethane	ND		0.00103	0.000191
Vinyl chloride	ND		0.00103	0.000191
Bromomethane	ND		0.00103	0.000307
Chloroethane	ND		0.00103	0.000273
Trichlorofluoromethane	ND		0.00103	0.000194
1,1-Dichloroethene	ND		0.00103	0.000388
Acetone	ND		0.010	0.00101
Carbon disulfide	ND		0.00103	0.000319
Methylene chloride	ND		0.00206	0.00205
trans-1,2-Dichloroethene	ND		0.00103	0.000299
Methyl tert-butyl ether (MTBE)	ND		0.00103	0.000199
1,1-Dichloroethane	ND		0.00103	0.0002
cis-1,2-Dichloroethene	0.000367	J	0.00103	0.000219
2-Butanone (MEK)	ND		0.00206	0.000507
Bromochloromethane	ND		0.00103	0.000286
Chloroform	ND		0.00103	0.000216
1,1,1-Trichloroethane	ND		0.00103	0.000243
Carbon tetrachloride	ND		0.00103	0.000166
1,2-Dichloroethane (EDC)	ND		0.00103	0.000272
Benzene	ND		0.00103	0.000269
Trichloroethene	0.00367		0.00103	0.000288
1,2-Dichloropropane	ND		0.00103	0.000174
1,4-Dioxane	ND		0.206	0.037
Bromodichloromethane	ND		0.00103	0.00024
cis-1,3-Dichloropropene	ND		0.00103	0.000211
4-Methyl-2-pentanone (MIBK)	ND		0.00206	0.000596

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: E18-04234-001  
Client ID: S1/5  
Date Received: 05/31/2018  
Date Analyzed: 06/05/2018  
Data file: F5985.D 06/ 5/18 02:20

GC/MS Column: DB-624  
Sample wt/vol: 5.4g  
Matrix-Units: Soil-mg/Kg  
% Moisture: 9.70  
Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND		0.00103	0.000333
trans-1,3-Dichloropropene	ND		0.00103	0.000238
1,1,2-Trichloroethane	ND		0.00103	0.000278
Tetrachloroethene	0.148		0.00103	0.000264
2-Hexanone	ND		0.00206	0.00107
Dibromochloromethane	ND		0.00103	0.000193
1,2-Dibromoethane (EDB)	ND		0.00103	0.000182
Chlorobenzene	ND		0.00103	0.000232
Ethylbenzene	ND		0.00103	0.000251
Total Xylenes	ND		0.00206	0.000446
Styrene	ND		0.00103	0.000212
Bromoform	ND		0.00103	0.000296
Isopropylbenzene	ND		0.00103	0.000204
1,1,2,2-Tetrachloroethane	ND		0.00206	0.000277
1,3-Dichlorobenzene	ND		0.00103	0.000199
1,4-Dichlorobenzene	ND		0.00103	0.000176
1,2-Dichlorobenzene	ND		0.00103	0.000178
1,2-Dibromo-3-chloropropane	ND		0.00206	0.000278
1,2,4-Trichlorobenzene	ND		0.00103	0.000453
1,2,3-Trichlorobenzene	ND		0.00103	0.000495
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00103	0.000374
Methyl acetate	ND		0.00103	0.000481
Cyclohexane	ND		0.00103	0.000187
Methylcyclohexane	ND		0.00103	0.000214
1,3-Dichloropropene (cis- and trans-)	ND		0.00103	0.000238

Total Target Compounds (52): 0.152

J

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04234-001

Client ID: S1/5

Date Received: 05/31/2018

Date Analyzed: 06/05/2018

Date File: F5985.D

GC/MS Column: DB-624

Sample wt/vol: 5.4g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 9.70

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: E18-04234-002

Client ID: S2/5

Date Received: 05/31/2018

Date Analyzed: 06/05/2018

Data file: F5986.D 06/ 5/18 02:49

GC/MS Column: DB-624

Sample wt/vol: 3.9g

Matrix-Units: Soil-mg/Kg

% Moisture: 5.80

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND	0.00136	0.00032	
Chloromethane	ND	0.00136	0.000252	
Vinyl chloride	ND	0.00136	0.000252	
Bromomethane	ND	0.00136	0.000405	
Chloroethane	ND	0.00136	0.00036	
Trichlorofluoromethane	ND	0.00136	0.000256	
1,1-Dichloroethene	ND	0.00136	0.000513	
Acetone	ND	0.014	0.00133	
Carbon disulfide	ND	0.00136	0.000422	
Methylene chloride	ND	0.00272	0.00271	
trans-1,2-Dichloroethene	ND	0.00136	0.000394	
Methyl tert-butyl ether (MTBE)	ND	0.00136	0.000262	
1,1-Dichloroethane	ND	0.00136	0.000264	
cis-1,2-Dichloroethene	ND	0.00136	0.00029	
2-Butanone (MEK)	ND	0.00272	0.000669	
Bromochloromethane	ND	0.00136	0.000378	
Chloroform	ND	0.00136	0.000286	
1,1,1-Trichloroethane	ND	0.00136	0.000321	
Carbon tetrachloride	ND	0.00136	0.000219	
1,2-Dichloroethane (EDC)	ND	0.00136	0.000359	
Benzene	ND	0.00136	0.000355	
Trichloroethene	ND	0.00136	0.000381	
1,2-Dichloropropane	ND	0.00136	0.00023	
1,4-Dioxane	ND	0.272	0.049	
Bromodichloromethane	ND	0.00136	0.000317	
cis-1,3-Dichloropropene	ND	0.00136	0.000279	
4-Methyl-2-pentanone (MIBK)	ND	0.00272	0.000787	

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**

Lab ID: E18-04234-002  
 Client ID: S2/5  
 Date Received: 05/31/2018  
 Date Analyzed: 06/05/2018  
 Data file: F5986.D 06/ 5/18 02:49

GC/MS Column: DB-624  
 Sample wt/vol: 3.9g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 5.80  
 Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND		0.00136	0.000439
trans-1,3-Dichloropropene	ND		0.00136	0.000314
1,1,2-Trichloroethane	ND		0.00136	0.000367
Tetrachloroethene	ND		0.00136	0.000348
2-Hexanone	ND		0.00272	0.00142
Dibromochloromethane	ND		0.00136	0.000254
1,2-Dibromoethane (EDB)	ND		0.00136	0.000241
Chlorobenzene	ND		0.00136	0.000306
Ethylbenzene	ND		0.00136	0.000332
Total Xylenes	ND		0.00272	0.000589
Styrene	ND		0.00136	0.00028
Bromoform	ND		0.00136	0.00039
Isopropylbenzene	ND		0.00136	0.000269
1,1,2,2-Tetrachloroethane	ND		0.00272	0.000366
1,3-Dichlorobenzene	ND		0.00136	0.000262
1,4-Dichlorobenzene	0.000403	J	0.00136	0.000233
1,2-Dichlorobenzene	ND		0.00136	0.000235
1,2-Dibromo-3-chloropropane	ND		0.00272	0.000367
1,2,4-Trichlorobenzene	ND		0.00136	0.000598
1,2,3-Trichlorobenzene	ND		0.00136	0.000654
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00136	0.000494
Methyl acetate	ND		0.00136	0.000635
Cyclohexane	ND		0.00136	0.000248
Methylcyclohexane	ND		0.00136	0.000283
1,3-Dichloropropene (cis- and trans-)	ND		0.00136	0.000314
Total Target Compounds (52):	0.000403	J		

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04234-002

Client ID: S2/5

Date Received: 05/31/2018

Date Analyzed: 06/05/2018

Date File: F5986.D

GC/MS Column: DB-624

Sample wt/vol: 3.9g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 5.80

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: E18-04234-003

Client ID: S3/5

Date Received: 05/31/2018

Date Analyzed: 06/05/2018

Data file: F5987.D 06/ 5/18 03:19

GC/MS Column: DB-624

Sample wt/vol: 4.5g

Matrix-Units: Soil-mg/Kg

% Moisture: 10.5

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND		0.00124	0.000291
Chloromethane	ND		0.00124	0.000229
Vinyl chloride	ND		0.00124	0.000229
Bromomethane	ND		0.00124	0.00037
Chloroethane	ND		0.00124	0.000329
Trichlorofluoromethane	ND		0.00124	0.000233
1,1-Dichloroethene	ND		0.00124	0.000467
Acetone	ND		0.012	0.00121
Carbon disulfide	ND		0.00124	0.000384
Methylene chloride	ND		0.00248	0.00247
trans-1,2-Dichloroethene	ND		0.00124	0.00036
Methyl tert-butyl ether (MTBE)	ND		0.00124	0.000239
1,1-Dichloroethane	ND		0.00124	0.000241
cis-1,2-Dichloroethene	ND		0.00124	0.000264
2-Butanone (MEK)	ND		0.00248	0.00061
Bromochloromethane	ND		0.00124	0.000345
Chloroform	ND		0.00124	0.00026
1,1,1-Trichloroethane	ND		0.00124	0.000293
Carbon tetrachloride	ND		0.00124	0.0002
1,2-Dichloroethane (EDC)	ND		0.00124	0.000327
Benzene	ND		0.00124	0.000324
Trichloroethene	ND		0.00124	0.000347
1,2-Dichloropropane	ND		0.00124	0.00021
1,4-Dioxane	ND		0.248	0.044
Bromodichloromethane	ND		0.00124	0.000289
cis-1,3-Dichloropropene	ND		0.00124	0.000254
4-Methyl-2-pentanone (MIBK)	ND		0.00248	0.000718

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: E18-04234-003  
Client ID: S3/5  
Date Received: 05/31/2018  
Date Analyzed: 06/05/2018  
Data file: F5987.D 06/ 5/18 03:19

GC/MS Column: DB-624  
Sample wt/vol: 4.5g  
Matrix-Units: Soil-mg/Kg  
% Moisture: 10.5  
Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND		0.00124	0.000401
trans-1,3-Dichloropropene	ND		0.00124	0.000286
1,1,2-Trichloroethane	ND		0.00124	0.000335
Tetrachloroethene	ND		0.00124	0.000317
2-Hexanone	ND		0.00248	0.00129
Dibromochloromethane	ND		0.00124	0.000232
1,2-Dibromoethane (EDB)	ND		0.00124	0.000219
Chlorobenzene	ND		0.00124	0.000279
Ethylbenzene	0.00188		0.00124	0.000303
Total Xylenes	0.00231	J	0.00248	0.000537
Styrene	ND		0.00124	0.000255
Bromoform	ND		0.00124	0.000356
Isopropylbenzene	0.000801	J	0.00124	0.000246
1,1,2,2-Tetrachloroethane	ND		0.00248	0.000334
1,3-Dichlorobenzene	ND		0.00124	0.000239
1,4-Dichlorobenzene	ND		0.00124	0.000212
1,2-Dichlorobenzene	ND		0.00124	0.000215
1,2-Dibromo-3-chloropropane	ND		0.00248	0.000335
1,2,4-Trichlorobenzene	ND		0.00124	0.000546
1,2,3-Trichlorobenzene	ND		0.00124	0.000596
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00124	0.00045
Methyl acetate	ND		0.00124	0.000579
Cyclohexane	0.00308		0.00124	0.000226
Methylcyclohexane	0.00468		0.00124	0.000258
1,3-Dichloropropene (cis- and trans-)	ND		0.00124	0.000286
Total Target Compounds (52):	0.013	J		

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04234-003

Client ID: S3/5

Date Received: 05/31/2018

Date Analyzed: 06/05/2018

Date File: F5987.D

GC/MS Column: DB-624

Sample wt/vol: 4.5g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 10.5

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
000108-67-8	Benzene, 1,3,5-trimethyl-	0.00905	JN	12.58

Total TICs = 0.00905 JN

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: E18-04234-004

Client ID: S4/6

Date Received: 05/31/2018

Date Analyzed: 06/05/2018

Data file: J5466.D 06/ 5/18 05:09

GC/MS Column: DB-624

Sample wt/vol: 0.092g

Matrix-Units: Soil-mg/Kg

% Moisture: 15.7

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND		0.065	0.043
Chloromethane	ND		0.032	0.030
Vinyl chloride	ND		0.065	0.038
Bromomethane	ND		0.065	0.035
Chloroethane	ND		0.032	0.032
Trichlorofluoromethane	ND		0.032	0.028
1,1-Dichloroethene	ND		0.032	0.032
Acetone	ND		0.129	0.086
Carbon disulfide	ND		0.032	0.030
Methylene chloride	ND		0.065	0.064
trans-1,2-Dichloroethene	ND		0.032	0.029
Methyl tert-butyl ether (MTBE)	ND		0.032	0.031
1,1-Dichloroethane	ND		0.032	0.032
cis-1,2-Dichloroethene	ND		0.032	0.029
2-Butanone (MEK)	ND		0.129	0.107
Bromochloromethane	ND		0.065	0.038
Chloroform	ND		0.032	0.030
1,1,1-Trichloroethane	ND		0.032	0.030
Carbon tetrachloride	ND		0.065	0.029
1,2-Dichloroethane (EDC)	ND		0.032	0.030
Benzene	ND		0.032	0.030
Trichloroethene	ND		0.032	0.032
1,2-Dichloropropane	ND		0.032	0.029
1,4-Dioxane	ND		6.45	6.34
Bromodichloromethane	ND		0.032	0.023
cis-1,3-Dichloropropene	ND		0.032	0.021
4-Methyl-2-pentanone (MIBK)	ND		0.129	0.045

# INTEGRATED ANALYTICAL LABORATORIES

## VOLATILE ORGANICS

Lab ID: E18-04234-004  
 Client ID: S4/6  
 Date Received: 05/31/2018  
 Date Analyzed: 06/05/2018  
 Data file: J5466.D 06/ 5/18 05:09

GC/MS Column: DB-624  
 Sample wt/vol: 0.092g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 15.7  
 Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	0.025	J	0.032	0.024
trans-1,3-Dichloropropene	ND		0.065	0.021
1,1,2-Trichloroethane	ND		0.032	0.031
Tetrachloroethene	ND		0.032	0.029
2-Hexanone	ND		0.129	0.049
Dibromochloromethane	ND		0.032	0.029
1,2-Dibromoethane (EDB)	ND		0.032	0.026
Chlorobenzene	ND		0.032	0.024
Ethylbenzene	ND		0.032	0.022
Total Xylenes	ND		0.065	0.060
Styrene	ND		0.032	0.019
Bromoform	ND		0.032	0.029
Isopropylbenzene	ND		0.032	0.021
1,1,2,2-Tetrachloroethane	ND		0.065	0.030
1,3-Dichlorobenzene	ND		0.032	0.023
1,4-Dichlorobenzene	0.023	J	0.032	0.022
1,2-Dichlorobenzene	ND		0.032	0.024
1,2-Dibromo-3-chloropropane	ND		0.065	0.034
1,2,4-Trichlorobenzene	ND		0.065	0.020
1,2,3-Trichlorobenzene	ND		0.065	0.022
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.065	0.036
Methyl acetate	ND		0.032	0.031
Cyclohexane	ND		0.065	0.027
Methylcyclohexane	ND		0.032	0.027
1,3-Dichloropropene (cis- and trans-)	ND		0.065	0.021
Total Target Compounds (52):	0.048	J		

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04234-004

Client ID: S4/6

Date Received: 05/31/2018

Date Analyzed: 06/05/2018

Date File: J5466.D

GC/MS Column: DB-624

Sample wt/vol: 0.092g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 15.7

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
000091-20-3	Naphthalene	1.70	JN	15.60

Total TICs = 1.70 JN

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: E18-04234-005

Client ID: S5/6

Date Received: 05/31/2018

Date Analyzed: 06/05/2018

Data file: F6009.D 06/ 5/18 16:39

GC/MS Column: DB-624

Sample wt/vol: 4.4g

Matrix-Units: Soil-mg/Kg

% Moisture: 9.10

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND		0.00125	0.000294
Chloromethane	ND		0.00125	0.000231
Vinyl chloride	ND		0.00125	0.000231
Bromomethane	ND		0.00125	0.000373
Chloroethane	ND		0.00125	0.000331
Trichlorofluoromethane	ND		0.00125	0.000235
1,1-Dichloroethene	ND		0.00125	0.000471
Acetone	0.022		0.013	0.00122
Carbon disulfide	ND		0.00125	0.000388
Methylene chloride	ND		0.0025	0.00249
trans-1,2-Dichloroethene	ND		0.00125	0.000363
Methyl tert-butyl ether (MTBE)	ND		0.00125	0.000241
1,1-Dichloroethane	ND		0.00125	0.000243
cis-1,2-Dichloroethene	ND		0.00125	0.000266
2-Butanone (MEK)	ND		0.0025	0.000615
Bromochloromethane	ND		0.00125	0.000348
Chloroform	ND		0.00125	0.000263
1,1,1-Trichloroethane	ND		0.00125	0.000295
Carbon tetrachloride	ND		0.00125	0.000201
1,2-Dichloroethane (EDC)	ND		0.00125	0.00033
Benzene	ND		0.00125	0.000326
Trichloroethene	ND		0.00125	0.00035
1,2-Dichloropropane	ND		0.00125	0.000211
1,4-Dioxane	ND		0.250	0.045
Bromodichloromethane	ND		0.00125	0.000291
cis-1,3-Dichloropropene	ND		0.00125	0.000256
4-Methyl-2-pentanone (MIBK)	ND		0.0025	0.000724

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**

Lab ID: E18-04234-005  
 Client ID: S5/6  
 Date Received: 05/31/2018  
 Date Analyzed: 06/05/2018  
 Data file: F6009.D 06/ 5/18 16:39

GC/MS Column: DB-624  
 Sample wt/vol: 4.4g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 9.10  
 Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND		0.00125	0.000404
trans-1,3-Dichloropropene	ND		0.00125	0.000289
1,1,2-Trichloroethane	ND		0.00125	0.000338
Tetrachloroethene	0.0033		0.00125	0.00032
2-Hexanone	ND		0.0025	0.0013
Dibromochloromethane	ND		0.00125	0.000234
1,2-Dibromoethane (EDB)	ND		0.00125	0.000221
Chlorobenzene	ND		0.00125	0.000281
Ethylbenzene	ND		0.00125	0.000305
Total Xylenes	ND		0.0025	0.000541
Styrene	0.000541	J	0.00125	0.000258
Bromoform	ND		0.00125	0.000359
Isopropylbenzene	ND		0.00125	0.000248
1,1,2,2-Tetrachloroethane	ND		0.0025	0.000336
1,3-Dichlorobenzene	ND		0.00125	0.000241
1,4-Dichlorobenzene	ND		0.00125	0.000214
1,2-Dichlorobenzene	ND		0.00125	0.000216
1,2-Dibromo-3-chloropropane	ND		0.0025	0.000338
1,2,4-Trichlorobenzene	ND		0.00125	0.00055
1,2,3-Trichlorobenzene	ND		0.00125	0.000601
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00125	0.000454
Methyl acetate	ND		0.00125	0.000584
Cyclohexane	ND		0.00125	0.000228
Methylcyclohexane	ND		0.00125	0.00026
1,3-Dichloropropene (cis- and trans-)	ND		0.00125	0.000289
Total Target Compounds (52):	0.026	J		

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04234-005

Client ID: S5/6

Date Received: 05/31/2018

Date Analyzed: 06/05/2018

Date File: F6009.D

GC/MS Column: DB-624

Sample wt/vol: 4.4g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 9.10

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: E18-04234-006

Client ID: S6/4

Date Received: 05/31/2018

Date Analyzed: 06/05/2018

Data file: J5464.D 06/ 5/18 04:15

GC/MS Column: DB-624

Sample wt/vol: 0.046g

Matrix-Units: Soil-mg/Kg

% Moisture: 4.10

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND	0.113	0.075	
Chloromethane	ND	0.057	0.053	
Vinyl chloride	ND	0.113	0.067	
Bromomethane	ND	0.113	0.062	
Chloroethane	ND	0.057	0.056	
Trichlorofluoromethane	ND	0.057	0.049	
1,1-Dichloroethene	ND	0.057	0.056	
Acetone	ND	0.227	0.151	
Carbon disulfide	ND	0.057	0.053	
Methylene chloride	ND	0.113	0.112	
trans-1,2-Dichloroethene	ND	0.057	0.052	
Methyl tert-butyl ether (MTBE)	ND	0.057	0.054	
1,1-Dichloroethane	ND	0.057	0.056	
cis-1,2-Dichloroethene	ND	0.057	0.051	
2-Butanone (MEK)	ND	0.227	0.188	
Bromochloromethane	ND	0.113	0.068	
Chloroform	ND	0.057	0.053	
1,1,1-Trichloroethane	ND	0.057	0.052	
Carbon tetrachloride	ND	0.113	0.051	
1,2-Dichloroethane (EDC)	ND	0.057	0.052	
Benzene	ND	0.057	0.053	
Trichloroethene	ND	0.057	0.056	
1,2-Dichloropropane	ND	0.057	0.051	
1,4-Dioxane	ND	11.3	11.2	
Bromodichloromethane	ND	0.057	0.040	
cis-1,3-Dichloropropene	ND	0.057	0.038	
4-Methyl-2-pentanone (MIBK)	ND	0.227	0.079	

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**

Lab ID: E18-04234-006  
 Client ID: S6/4  
 Date Received: 05/31/2018  
 Date Analyzed: 06/05/2018  
 Data file: J5464.D 06/ 5/18 04:15

GC/MS Column: DB-624  
 Sample wt/vol: 0.046g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 4.10  
 Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND		0.057	0.043
trans-1,3-Dichloropropene	ND		0.113	0.036
1,1,2-Trichloroethane	ND		0.057	0.054
Tetrachloroethene	ND		0.057	0.051
2-Hexanone	ND		0.227	0.086
Dibromochloromethane	ND		0.057	0.050
1,2-Dibromoethane (EDB)	ND		0.057	0.046
Chlorobenzene	ND		0.057	0.043
Ethylbenzene	ND		0.057	0.039
Total Xylenes	ND		0.113	0.105
Styrene	ND		0.057	0.033
Bromoform	ND		0.057	0.050
Isopropylbenzene	ND		0.057	0.037
1,1,2,2-Tetrachloroethane	ND		0.113	0.052
1,3-Dichlorobenzene	ND		0.057	0.040
1,4-Dichlorobenzene	ND		0.057	0.039
1,2-Dichlorobenzene	ND		0.057	0.041
1,2-Dibromo-3-chloropropane	ND		0.113	0.060
1,2,4-Trichlorobenzene	ND		0.113	0.035
1,2,3-Trichlorobenzene	ND		0.113	0.038
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.113	0.064
Methyl acetate	1.93		0.057	0.055
Cyclohexane	ND		0.113	0.047
Methylcyclohexane	ND		0.057	0.047
1,3-Dichloropropene (cis- and trans-)	ND		0.113	0.038

Total Target Compounds (52): 1.93

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04234-006

Client ID: S6/4

Date Received: 05/31/2018

Date Analyzed: 06/05/2018

Date File: J5464.D

GC/MS Column: DB-624

Sample wt/vol: 0.046g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 4.10

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
000556-24-1	Butanoic acid, 3-methyl-, methyl ester	0.623	JN	8.77

Total TICs = 0.623 JN

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: E18-04234-007  
Client ID: GW1/10  
Date Received: 05/31/2018  
Date Analyzed: 06/07/2018  
Data file: G8348.D 06/ 7/18 01:26

GC/MS Column: DB-624  
Sample wt/vol: 5mL  
Matrix-Units: Aqueous- $\mu$ g/L  
% Moisture: 100  
Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND		1.00	0.662
Chloromethane	ND		0.500	0.463
Vinyl chloride	ND		1.00	0.591
Bromomethane	ND		1.00	0.544
Chloroethane	ND		0.500	0.495
Trichlorofluoromethane	ND		0.500	0.433
1,1-Dichloroethene	ND		0.500	0.493
Acetone	ND		2.00	1.33
Carbon disulfide	ND		0.500	0.464
Methylene chloride	ND		1.00	0.990
trans-1,2-Dichloroethene	ND		0.500	0.454
Methyl tert-butyl ether (MTBE)	ND		0.500	0.479
1,1-Dichloroethane	ND		0.500	0.493
cis-1,2-Dichloroethene	ND		0.500	0.451
2-Butanone (MEK)	ND		2.00	1.66
Bromochloromethane	ND		1.00	0.596
Chloroform	ND		0.500	0.469
1,1,1-Trichloroethane	ND		0.500	0.462
Carbon tetrachloride	ND		0.500	0.449
1,2-Dichloroethane (EDC)	ND		0.500	0.458
Benzene	ND		0.500	0.464
Trichloroethene	ND		0.500	0.493
1,2-Dichloropropane	ND		0.500	0.447
1,4-Dioxane	ND		100	98.4
Bromodichloromethane	ND		0.500	0.353
cis-1,3-Dichloropropene	ND		0.500	0.331
4-Methyl-2-pentanone (MIBK)	ND		1.00	0.699

# INTEGRATED ANALYTICAL LABORATORIES

## VOLATILE ORGANICS

Lab ID: E18-04234-007  
 Client ID: GW1/10  
 Date Received: 05/31/2018  
 Date Analyzed: 06/07/2018  
 Data file: G8348.D 06/7/18 01:26

GC/MS Column: DB-624  
 Sample wt/vol: 5mL  
 Matrix-Units: Aqueous- $\mu$ g/L  
 % Moisture: 100  
 Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND		0.500	0.379
trans-1,3-Dichloropropene	ND		0.500	0.321
1,1,2-Trichloroethane	ND		1.00	0.473
Tetrachloroethene	0.861		0.500	0.451
2-Hexanone	ND		1.00	0.761
Dibromochloromethane	ND		1.00	0.442
1,2-Dibromoethane (EDB)	ND		0.500	0.402
Chlorobenzene	ND		0.500	0.376
Ethylbenzene	ND		0.500	0.344
Total Xylenes	ND		1.00	0.923
Styrene	ND		0.500	0.290
Bromoform	ND		0.500	0.445
Isopropylbenzene	ND		0.500	0.323
1,1,2,2-Tetrachloroethane	ND		0.500	0.458
1,3-Dichlorobenzene	ND		0.500	0.351
1,4-Dichlorobenzene	ND		0.500	0.341
1,2-Dichlorobenzene	ND		0.500	0.364
1,2-Dibromo-3-chloropropane	ND		1.00	0.533
1,2,4-Trichlorobenzene	ND		0.500	0.304
1,2,3-Trichlorobenzene	ND		0.500	0.339
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.00	0.563
Methyl acetate	ND		0.500	0.485
Cyclohexane	ND		1.00	0.411
Methylcyclohexane	ND		0.500	0.411
1,3-Dichloropropene (cis- and trans-)	ND		0.500	0.331
Total Target Compounds (52):		0.861		

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04234-007

Client ID: GW1/10

Date Received: 05/31/2018

Date Analyzed: 06/07/2018

Date File: G8348.D

GC/MS Column: DB-624

Sample wt/vol: 5mL

Matrix-Units: Aqueous- $\mu$ g/L

Dilution Factor: 1

% Moisture: 100

CAS #	Compound	Estimated Concentration Q	Retention Time
No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: BLKS180605-01  
Client ID: BLKS180605-01  
Date Received:  
Date Analyzed: 06/05/2018  
Data file: F6007.D 06/5/18 15:38

GC/MS Column: DB-624  
Sample wt/vol: 5g  
Matrix-Units: Soil-mg/Kg  
% Moisture: NA  
Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND		0.001	0.000235
Chloromethane	ND		0.001	0.000185
Vinyl chloride	ND		0.001	0.000185
Bromomethane	ND		0.001	0.000298
Chloroethane	ND		0.001	0.000265
Trichlorofluoromethane	ND		0.001	0.000188
1,1-Dichloroethene	ND		0.001	0.000377
Acetone	ND		0.010	0.000979
Carbon disulfide	ND		0.001	0.00031
Methylene chloride	ND		0.002	0.00199
trans-1,2-Dichloroethene	ND		0.001	0.00029
Methyl tert-butyl ether (MTBE)	ND		0.001	0.000193
1,1-Dichloroethane	ND		0.001	0.000194
cis-1,2-Dichloroethene	ND		0.001	0.000213
2-Butanone (MEK)	ND		0.002	0.000492
Bromochloromethane	ND		0.001	0.000278
Chloroform	ND		0.001	0.00021
1,1,1-Trichloroethane	ND		0.001	0.000236
Carbon tetrachloride	ND		0.001	0.000161
1,2-Dichloroethane (EDC)	ND		0.001	0.000264
Benzene	ND		0.001	0.000261
Trichloroethene	ND		0.001	0.00028
1,2-Dichloropropane	ND		0.001	0.000169
1,4-Dioxane	ND		0.200	0.036
Bromodichloromethane	ND		0.001	0.000233
cis-1,3-Dichloropropene	ND		0.001	0.000205
4-Methyl-2-pentanone (MIBK)	ND		0.002	0.000579

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: BLKS180605-01  
Client ID: BLKS180605-01  
Date Received:  
Date Analyzed: 06/05/2018  
Data file: F6007.D 06/5/18 15:38

GC/MS Column: DB-624  
Sample wt/vol: 5g  
Matrix-Units: Soil-mg/Kg  
% Moisture: NA  
Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND		0.001	0.000323
trans-1,3-Dichloropropene	ND		0.001	0.000231
1,1,2-Trichloroethane	ND		0.001	0.00027
Tetrachloroethene	ND		0.001	0.000256
2-Hexanone	ND		0.002	0.00104
Dibromochloromethane	ND		0.001	0.000187
1,2-Dibromoethane (EDB)	ND		0.001	0.000177
Chlorobenzene	ND		0.001	0.000225
Ethylbenzene	ND		0.001	0.000244
Total Xylenes	ND		0.002	0.000433
Styrene	ND		0.001	0.000206
Bromoform	ND		0.001	0.000287
Isopropylbenzene	ND		0.001	0.000198
1,1,2,2-Tetrachloroethane	ND		0.002	0.000269
1,3-Dichlorobenzene	ND		0.001	0.000193
1,4-Dichlorobenzene	ND		0.001	0.000171
1,2-Dichlorobenzene	ND		0.001	0.000173
1,2-Dibromo-3-chloropropane	ND		0.002	0.00027
1,2,4-Trichlorobenzene	ND		0.001	0.00044
1,2,3-Trichlorobenzene	ND		0.001	0.000481
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.001	0.000363
Methyl acetate	ND		0.001	0.000467
Cyclohexane	ND		0.001	0.000182
Methylcyclohexane	ND		0.001	0.000208
1,3-Dichloropropene (cis- and trans-)	ND		0.001	0.000231
Total Target Compounds (52):	0			

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: BLKS180605-01  
Client ID: BLKS180605-01  
Date Received:  
Date Analyzed: 06/05/2018  
Date File: F6007.D

GC/MS Column: DB-624  
Sample wt/vol: 5g  
Matrix-Units: Soil-mg/Kg  
Dilution Factor: 1  
% Moisture: NA

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: BLKS180604-02  
Client ID: BLKS180604-02  
Date Received:  
Date Analyzed: 06/05/2018  
Data file: F5984.D 06/5/18 01:51

GC/MS Column: DB-624  
Sample wt/vol: 5g  
Matrix-Units: Soil-mg/Kg  
% Moisture: NA  
Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND		0.001	0.000235
Chloromethane	ND		0.001	0.000185
Vinyl chloride	ND		0.001	0.000185
Bromomethane	ND		0.001	0.000298
Chloroethane	ND		0.001	0.000265
Trichlorofluoromethane	ND		0.001	0.000188
1,1-Dichloroethene	ND		0.001	0.000377
Acetone	ND		0.010	0.000979
Carbon disulfide	ND		0.001	0.00031
Methylene chloride	ND		0.002	0.00199
trans-1,2-Dichloroethene	ND		0.001	0.00029
Methyl tert-butyl ether (MTBE)	ND		0.001	0.000193
1,1-Dichloroethane	ND		0.001	0.000194
cis-1,2-Dichloroethene	ND		0.001	0.000213
2-Butanone (MEK)	ND		0.002	0.000492
Bromochloromethane	ND		0.001	0.000278
Chloroform	ND		0.001	0.00021
1,1,1-Trichloroethane	ND		0.001	0.000236
Carbon tetrachloride	ND		0.001	0.000161
1,2-Dichloroethane (EDC)	ND		0.001	0.000264
Benzene	ND		0.001	0.000261
Trichloroethene	ND		0.001	0.00028
1,2-Dichloropropane	ND		0.001	0.000169
1,4-Dioxane	ND		0.200	0.036
Bromodichloromethane	ND		0.001	0.000233
cis-1,3-Dichloropropene	ND		0.001	0.000205
4-Methyl-2-pentanone (MIBK)	ND		0.002	0.000579

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: BLKS180604-02  
Client ID: BLKS180604-02  
Date Received:  
Date Analyzed: 06/05/2018  
Data file: F5984.D 06/5/18 01:51

GC/MS Column: DB-624  
Sample wt/vol: 5g  
Matrix-Units: Soil-mg/Kg  
% Moisture: NA  
Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND	0.001	0.000323	
trans-1,3-Dichloropropene	ND	0.001	0.000231	
1,1,2-Trichloroethane	ND	0.001	0.00027	
Tetrachloroethene	ND	0.001	0.000256	
2-Hexanone	ND	0.002	0.00104	
Dibromochloromethane	ND	0.001	0.000187	
1,2-Dibromoethane (EDB)	ND	0.001	0.000177	
Chlorobenzene	ND	0.001	0.000225	
Ethylbenzene	ND	0.001	0.000244	
Total Xylenes	ND	0.002	0.000433	
Styrene	ND	0.001	0.000206	
Bromoform	ND	0.001	0.000287	
Isopropylbenzene	ND	0.001	0.000198	
1,1,2,2-Tetrachloroethane	ND	0.002	0.000269	
1,3-Dichlorobenzene	ND	0.001	0.000193	
1,4-Dichlorobenzene	ND	0.001	0.000171	
1,2-Dichlorobenzene	ND	0.001	0.000173	
1,2-Dibromo-3-chloropropane	ND	0.002	0.00027	
1,2,4-Trichlorobenzene	ND	0.001	0.00044	
1,2,3-Trichlorobenzene	ND	0.001	0.000481	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.001	0.000363	
Methyl acetate	ND	0.001	0.000467	
Cyclohexane	ND	0.001	0.000182	
Methylcyclohexane	ND	0.001	0.000208	
1,3-Dichloropropene (cis- and trans-)	ND	0.001	0.000231	
Total Target Compounds (52):	0			

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: BLKS180604-02  
Client ID: BLKS180604-02  
Date Received:  
Date Analyzed: 06/05/2018  
Date File: F5984.D

GC/MS Column: DB-624  
Sample wt/vol: 5g  
Matrix-Units: Soil-mg/Kg  
Dilution Factor: 1  
% Moisture: NA

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: BLKM180604-02

GC/MS Column: DB-624

Client ID: BLKM180604-02

Sample wt/vol: 0.1g

Date Received:

Matrix-Units: Soil-mg/Kg

Date Analyzed: 06/05/2018

% Moisture: NA

Data file: J5456.D 06/ 5/18 00:41

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND	0.050	0.033	
Chloromethane	ND	0.025	0.023	
Vinyl chloride	ND	0.050	0.030	
Bromomethane	ND	0.050	0.027	
Chloroethane	ND	0.025	0.025	
Trichlorofluoromethane	ND	0.025	0.022	
1,1-Dichloroethene	ND	0.025	0.025	
Acetone	ND	0.100	0.067	
Carbon disulfide	ND	0.025	0.023	
Methylene chloride	ND	0.050	0.050	
trans-1,2-Dichloroethene	ND	0.025	0.023	
Methyl tert-butyl ether (MTBE)	ND	0.025	0.024	
1,1-Dichloroethane	ND	0.025	0.025	
cis-1,2-Dichloroethene	ND	0.025	0.023	
2-Butanone (MEK)	ND	0.100	0.083	
Bromochloromethane	ND	0.050	0.030	
Chloroform	ND	0.025	0.024	
1,1,1-Trichloroethane	ND	0.025	0.023	
Carbon tetrachloride	ND	0.050	0.023	
1,2-Dichloroethane (EDC)	ND	0.025	0.023	
Benzene	ND	0.025	0.023	
Trichloroethene	ND	0.025	0.025	
1,2-Dichloroproppane	ND	0.025	0.022	
1,4-Dioxane	ND	5.00	4.92	
Bromodichloromethane	ND	0.025	0.018	
cis-1,3-Dichloropropene	ND	0.025	0.017	
4-Methyl-2-pentanone (MIBK)	ND	0.100	0.035	

# INTEGRATED ANALYTICAL LABORATORIES

## VOLATILE ORGANICS

Lab ID: BLKM180604-02  
 Client ID: BLKM180604-02  
 Date Received:  
 Date Analyzed: 06/05/2018  
 Data file: J5456.D 06/ 5/18 00:41

GC/MS Column: DB-624  
 Sample wt/vol: 0.1g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: NA  
 Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND		0.025	0.019
trans-1,3-Dichloropropene	ND		0.050	0.016
1,1,2-Trichloroethane	ND		0.025	0.024
Tetrachloroethene	ND		0.025	0.023
2-Hexanone	ND		0.100	0.038
Dibromochloromethane	ND		0.025	0.022
1,2-Dibromoethane (EDB)	ND		0.025	0.020
Chlorobenzene	ND		0.025	0.019
Ethylbenzene	ND		0.025	0.017
Total Xylenes	ND		0.050	0.046
Styrene	ND		0.025	0.015
Bromoform	ND		0.025	0.022
Isopropylbenzene	ND		0.025	0.016
1,1,2,2-Tetrachloroethane	ND		0.050	0.023
1,3-Dichlorobenzene	ND		0.025	0.018
1,4-Dichlorobenzene	ND		0.025	0.017
1,2-Dichlorobenzene	ND		0.025	0.018
1,2-Dibromo-3-chloropropane	ND		0.050	0.027
1,2,4-Trichlorobenzene	ND		0.050	0.015
1,2,3-Trichlorobenzene	ND		0.050	0.017
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.050	0.028
Methyl acetate	ND		0.025	0.024
Cyclohexane	ND		0.050	0.021
Methylcyclohexane	ND		0.025	0.021
1,3-Dichloropropene (cis- and trans-)	ND		0.050	0.017
Total Target Compounds (52):		0		

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: BLKM180604-02

GC/MS Column: DB-624

Client ID: BLKM180604-02

Sample wt/vol: 0.1g

Date Received:

Matrix-Units: Soil-mg/Kg

Date Analyzed: 06/05/2018

Dilution Factor: 1

Data file: J5456.D 06/ 5/18 00:41

% Moisture: NA

CAS #	Compound	Estimated Concentration	Q	Retention Time
No peaks detected				

Total TICs = 0

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: BLKA180606A  
Client ID: BLKA180606A  
Date Received: NA  
Date Analyzed: 06/06/2018  
Data file: G8344.D 06/6/18 23:34

GC/MS Column: DB-624  
Sample wt/vol: 5mL  
Matrix-Units: Aqueous- $\mu$ g/L  
% Moisture: 100  
Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND		1.00	0.662
Chloromethane	ND		0.500	0.463
Vinyl chloride	ND		1.00	0.591
Bromomethane	ND		1.00	0.544
Chloroethane	ND		0.500	0.495
Trichlorofluoromethane	ND		0.500	0.433
1,1-Dichloroethene	ND		0.500	0.493
Acetone	ND		2.00	1.33
Carbon disulfide	ND		0.500	0.464
Methylene chloride	ND		1.00	0.990
tert-Butyl alcohol (TBA)	ND		2.00	1.62
trans-1,2-Dichloroethene	ND		0.500	0.454
Methyl tert-butyl ether (MTBE)	ND		0.500	0.479
1,1-Dichloroethane	ND		0.500	0.493
cis-1,2-Dichloroethene	ND		0.500	0.451
2-Butanone (MEK)	ND		2.00	1.66
Bromochloromethane	ND		1.00	0.596
Chloroform	ND		0.500	0.469
1,1,1-Trichloroethane	ND		0.500	0.462
Carbon tetrachloride	ND		0.500	0.449
1,2-Dichloroethane (EDC)	ND		0.500	0.458
Benzene	ND		0.500	0.464
Trichloroethene	ND		0.500	0.493
1,2-Dichloropropane	ND		0.500	0.447
1,4-Dioxane	ND		100	98.4
Bromodichloromethane	ND		0.500	0.353
cis-1,3-Dichloropropene	ND		0.500	0.331
4-Methyl-2-pentanone (MIBK)	ND		1.00	0.699

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**

Lab ID: BLKA180606A  
 Client ID: BLKA180606A  
 Date Received: NA  
 Date Analyzed: 06/06/2018  
 Data file: G8344.D 06/6/18 23:34

GC/MS Column: DB-624  
 Sample wt/vol: 5mL  
 Matrix-Units: Aqueous- $\mu$ g/L  
 % Moisture: 100  
 Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND		0.500	0.379
trans-1,3-Dichloropropene	ND		0.500	0.321
1,1,2-Trichloroethane	ND		1.00	0.473
Tetrachloroethene	ND		0.500	0.451
2-Hexanone	ND		1.00	0.761
Dibromochloromethane	ND		1.00	0.442
1,2-Dibromoethane (EDB)	ND		0.500	0.402
Chlorobenzene	ND		0.500	0.376
Ethylbenzene	ND		0.500	0.344
Total Xylenes	ND		1.00	0.923
Styrene	ND		0.500	0.290
Bromoform	ND		0.500	0.445
Isopropylbenzene	ND		0.500	0.323
1,1,2,2-Tetrachloroethane	ND		0.500	0.458
1,3-Dichlorobenzene	ND		0.500	0.351
1,4-Dichlorobenzene	ND		0.500	0.341
1,2-Dichlorobenzene	ND		0.500	0.364
1,2-Dibromo-3-chloropropane	ND		1.00	0.533
1,2,4-Trichlorobenzene	ND		0.500	0.304
1,2,3-Trichlorobenzene	ND		0.500	0.339
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.00	0.563
Methyl acetate	ND		0.500	0.485
Cyclohexane	ND		1.00	0.411
Methylcyclohexane	ND		0.500	0.411
1,3-Dichloropropene (cis- and trans-)	ND		0.500	0.331
Total Target Compounds (53):		0		

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: BLKA180606A  
Client ID: BLKA180606A  
Date Received: NA  
Date Analyzed: 06/06/2018  
Data file: G8344.D 06/6/18 23:34

GC/MS Column: DB-624  
Sample wt/vol: 5mL  
Matrix-Units: Aqueous- $\mu$ g/L  
Dilution Factor: 1  
% Moisture: 100

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**

Lab ID: E18-04234-001

GC/MS Column: DB-5

Client ID: S1/5

Sample wt/vol: 15.12g

Date Received: 05/31/2018

Matrix-Units: Soil-mg/Kg

Date Extracted: 06/05/2018

% Moisture: 9.70

Date Analyzed: 06/05/2018

Dilution Factor: 1

Data file: A3706.D 06/05/2018 16:27

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Benzaldehyde	ND		0.037	0.036
Bis(2-chloroethyl) ether	ND		0.037	0.033
2,2'-Oxybis(1-Chloropropane)	ND		0.037	0.031
N-Nitrosodi-n-propylamine	ND		0.037	0.028
Acetophenone	ND		0.037	0.035
Hexachloroethane	ND		0.037	0.031
Nitrobenzene	ND		0.037	0.029
Isophorone	ND		0.037	0.031
Bis(2-chloroethoxy) methane	ND		0.037	0.033
Naphthalene	0.318		0.037	0.032
4-Chloroaniline	ND		0.037	0.024
Hexachlorobutadiene	ND		0.037	0.034
Caprolactam	ND		0.037	0.024
2-Methylnaphthalene	0.142		0.037	0.026
Hexachlorocyclopentadiene	ND		0.037	0.032
1,1'-Biphenyl	0.048		0.037	0.034
2-Chloronaphthalene	ND		0.037	0.030
2-Nitroaniline	ND		0.037	0.026
Dimethyl phthalate	ND		0.037	0.034

# INTEGRATED ANALYTICAL LABORATORIES

## SEMIVOLATILE ORGANICS

Lab ID: E18-04234-001

Client ID: S1/5

Date Received: 05/31/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: A3706.D 06/05/2018 16:27

GC/MS Column: DB-5

Sample wt/vol: 15.12g

Matrix-Units: Soil-mg/Kg

% Moisture: 9.70

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
2,6-Dinitrotoluene	ND		0.037	0.028
Acenaphthylene	0.095		0.037	0.030
3-Nitroaniline	ND		0.037	0.029
Acenaphthene	0.442		0.037	0.032
2,4-Dinitrotoluene	ND		0.037	0.033
Dibenzofuran	0.387		0.037	0.031
Diethyl phthalate	ND		0.037	0.036
Fluorene	0.403		0.037	0.033
4-Chlorophenyl phenyl ether	ND		0.037	0.034
4-Nitroaniline	ND		0.037	0.028
1,2,4,5-Tetrachlorobenzene	ND		0.037	0.032
N-Nitrosodiphenylamine	ND		0.037	0.032
4-Bromophenyl phenyl ether	ND		0.037	0.031
Hexachlorobenzene	ND		0.037	0.034
Atrazine	ND		0.037	0.032
Phenanthrene	4.00		0.037	0.033
Anthracene	1.06		0.037	0.032
Carbazole	0.473		0.037	0.028
Di-n-butyl phthalate	0.139		0.037	0.028
Fluoranthene	4.41		0.037	0.031
Pyrene	3.14		0.037	0.030
Butyl benzyl phthalate	ND		0.037	0.034
3,3'-Dichlorobenzidine	ND		0.037	0.026
Benzo[a]anthracene	1.91		0.037	0.031
Chrysene	1.94		0.037	0.031
Bis(2-ethylhexyl) phthalate	0.037		0.037	0.023
Di-n-octyl phthalate	ND		0.037	0.032
Benzo[b]fluoranthene	0.949		0.037	0.029
Benzo[k]fluoranthene	1.08		0.037	0.031
Benzo[a]pyrene	1.24		0.037	0.030
Indeno[1,2,3-cd]pyrene	0.653		0.037	0.030
Dibenz[a,h]anthracene	0.346		0.037	0.036
Benzo[g,h,i]perylene	0.805		0.037	0.033
Dinitrotoluene (2,4- and 2,6-)	ND		0.037	0.033

Total Target Compounds (53): 24.0

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

# INTEGRATED ANALYTICAL LABORATORIES

## SEMIVOLATILE ORGANICS Tentatively Identified Compounds

Lab ID: E18-04234-001

Client ID: S1/5

Date Received: 05/31/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Date File: A3706.D

GC/MS Column: DB-5

Sample wt/vol: 15.12g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 9.70

CAS #	Compound	Estimated Concentration	Q	Retention Time
000127-18-4	Tetrachloroethylene	0.615	JN	2.14
000132-65-0	Dibenzothiophene	0.187	JN	5.90
	Unknown SV	0.732	J	6.32
000605-02-7	Naphthalene, 1-phenyl-	0.187	JN	6.41
000084-65-1	9,10-Anthracenedione	0.150	JN	6.43
003674-66-6	Phenanthrene, 2,5-dimethyl-	0.194	JN	6.58
002381-21-7	Pyrene, 1-methyl-	0.176	JN	6.94
000238-84-6	11H-Benzo[a]fluorene	0.278	JN	7.01
000192-97-2	Benzo[e]pyrene	0.333	JN	8.47
000198-55-0	Perylene	1.37	JN	8.63

Total TICs = 4.22 JN

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

B --- Compound detected in Blank

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**

Lab ID: E18-04234-002

Client ID: S2/5

Date Received: 05/31/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: A3707.D 06/05/2018 16:43

GC/MS Column: DB-5

Sample wt/vol: 15.27g

Matrix-Units: Soil-mg/Kg

% Moisture: 5.80

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Benzaldehyde	ND		0.035	0.034
Bis(2-chloroethyl) ether	ND		0.035	0.032
2,2'-Oxybis(1-Chloropropane)	ND		0.035	0.029
N-Nitrosodi-n-propylamine	ND		0.035	0.027
Acetophenone	ND		0.035	0.033
Hexachloroethane	ND		0.035	0.029
Nitrobenzene	ND		0.035	0.027
Isophorone	ND		0.035	0.029
Bis(2-chloroethoxy) methane	ND		0.035	0.031
Naphthalene	ND		0.035	0.030
4-Chloroaniline	ND		0.035	0.023
Hexachlorobutadiene	ND		0.035	0.032
Caprolactam	ND		0.035	0.023
2-Methylnaphthalene	ND		0.035	0.024
Hexachlorocyclopentadiene	ND		0.035	0.031
1,1'-Biphenyl	ND		0.035	0.032
2-Choronaphthalene	ND		0.035	0.029
2-Nitroaniline	ND		0.035	0.024
Dimethyl phthalate	ND		0.035	0.032

# INTEGRATED ANALYTICAL LABORATORIES

## SEMIVOLATILE ORGANICS

Lab ID: E18-04234-002

Client ID: S2/5

Date Received: 05/31/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: A3707.D 06/05/2018 16:43

GC/MS Column: DB-5

Sample wt/vol: 15.27g

Matrix-Units: Soil-mg/Kg

% Moisture: 5.80

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
2,6-Dinitrotoluene	ND		0.035	0.026
Acenaphthylene	ND		0.035	0.029
3-Nitroaniline	ND		0.035	0.028
Acenaphthene	0.044		0.035	0.031
2,4-Dinitrotoluene	ND		0.035	0.032
Dibenzofuran	ND		0.035	0.030
Diethyl phthalate	ND		0.035	0.034
Fluorene	0.032	J	0.035	0.031
4-Chlorophenyl phenyl ether	ND		0.035	0.032
4-Nitroaniline	ND		0.035	0.026
1,2,4,5-Tetrachlorobenzene	ND		0.035	0.030
N-Nitrosodiphenylamine	ND		0.035	0.030
4-Bromophenyl phenyl ether	ND		0.035	0.029
Hexachlorobenzene	ND		0.035	0.032
Atrazine	ND		0.035	0.030
Phenanthrene	0.345		0.035	0.032
Anthracene	0.078		0.035	0.031
Carbazole	0.034	J	0.035	0.027
Di-n-butyl phthalate	ND		0.035	0.026
Fluoranthene	0.353		0.035	0.029
Pyrene	0.248		0.035	0.029
Butyl benzyl phthalate	ND		0.035	0.032
3,3'-Dichlorobenzidine	ND		0.035	0.025
Benzo[a]anthracene	0.136		0.035	0.030
Chrysene	0.137		0.035	0.030
Bis(2-ethylhexyl) phthalate	ND		0.035	0.021
Di-n-octyl phthalate	ND		0.035	0.030
Benzo[b]fluoranthene	0.088		0.035	0.028
Benzo[k]fluoranthene	0.073		0.035	0.029
Benzo[a]pyrene	0.080		0.035	0.028
Indeno[1,2,3-cd]pyrene	0.053		0.035	0.029
Dibenz[a,h]anthracene	ND		0.035	0.034
Benzo[g,h,i]perylene	0.068		0.035	0.031
Dinitrotoluene (2,4- and 2,6-)	ND		0.035	0.032

Total Target Compounds (53): 1.77 J

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04234-002

Client ID: S2/5

Date Received: 05/31/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: A3707.D 06/05/2018 16:43

GC/MS Column: DB-5

Sample wt/vol: 15.27g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 5.80

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
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No peaks detected

Total TICs = 0

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**

Lab ID: E18-04234-003

Client ID: S3/5

Date Received: 05/31/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: A3708.D 06/05/2018 16:59

GC/MS Column: DB-5

Sample wt/vol: 15.07g

Matrix-Units: Soil-mg/Kg

% Moisture: 10.5

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Benzaldehyde	ND		0.037	0.036
Bis(2-chloroethyl) ether	ND		0.037	0.034
2,2'-Oxybis(1-Chloropropane)	ND		0.037	0.031
N-Nitrosodi-n-propylamine	ND		0.037	0.028
Acetophenone	ND		0.037	0.035
Hexachloroethane	ND		0.037	0.031
Nitrobenzene	ND		0.037	0.029
Isophorone	ND		0.037	0.031
Bis(2-chloroethoxy) methane	ND		0.037	0.033
Naphthalene	ND		0.037	0.032
4-Chloroaniline	ND		0.037	0.024
Hexachlorobutadiene	ND		0.037	0.034
Caprolactam	ND		0.037	0.025
2-Methylnaphthalene	ND		0.037	0.026
Hexachlorocyclopentadiene	ND		0.037	0.033
1,1'-Biphenyl	ND		0.037	0.035
2-Choronaphthalene	ND		0.037	0.030
2-Nitroaniline	ND		0.037	0.026
Dimethyl phthalate	ND		0.037	0.034

# INTEGRATED ANALYTICAL LABORATORIES

## SEMIVOLATILE ORGANICS

Lab ID: E18-04234-003

Client ID: S3/5

Date Received: 05/31/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: A3708.D 06/05/2018 16:59

GC/MS Column: DB-5

Sample wt/vol: 15.07g

Matrix-Units: Soil-mg/Kg

% Moisture: 10.5

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
2,6-Dinitrotoluene	ND		0.037	0.028
Acenaphthylene	ND		0.037	0.030
3-Nitroaniline	ND		0.037	0.030
Acenaphthene	ND		0.037	0.033
2,4-Dinitrotoluene	ND		0.037	0.034
Dibenzofuran	ND		0.037	0.032
Diethyl phthalate	ND		0.037	0.036
Fluorene	ND		0.037	0.033
4-Chlorophenyl phenyl ether	ND		0.037	0.034
4-Nitroaniline	ND		0.037	0.028
1,2,4,5-Tetrachlorobenzene	ND		0.037	0.032
N-Nitrosodiphenylamine	ND		0.037	0.032
4-Bromophenyl phenyl ether	ND		0.037	0.031
Hexachlorobenzene	ND		0.037	0.034
Atrazine	ND		0.037	0.032
Phenanthrene	0.112		0.037	0.034
Anthracene	0.050		0.037	0.033
Carbazole	ND		0.037	0.029
Di-n-butyl phthalate	ND		0.037	0.028
Fluoranthene	0.430		0.037	0.031
Pyrene	0.276		0.037	0.030
Butyl benzyl phthalate	ND		0.037	0.034
3,3'-Dichlorobenzidine	ND		0.037	0.027
Benzo[a]anthracene	0.227		0.037	0.032
Chrysene	0.211		0.037	0.032
Bis(2-ethylhexyl) phthalate	0.051		0.037	0.023
Di-n-octyl phthalate	ND		0.037	0.032
Benzo[b]fluoranthene	0.178		0.037	0.030
Benzo[k]fluoranthene	0.131		0.037	0.031
Benzo[a]pyrene	0.157		0.037	0.030
Indeno[1,2,3-cd]pyrene	0.103		0.037	0.031
Dibenz[a,h]anthracene	0.047		0.037	0.036
Benzo[g,h,i]perylene	0.127		0.037	0.033
Dinitrotoluene (2,4- and 2,6-)	ND		0.037	0.034

Total Target Compounds (53): 2.10

D --- Dilution Performed

J --- Value less than RI & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04234-003

Client ID: S3/5

Date Received: 05/31/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Date File: A3708.D

GC/MS Column: DB-5

Sample wt/vol: 15.07g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 10.5

CAS #	Compound	Estimated Concentration	Q	Retention Time
053584-60-4	Unknown SV	0.601	J	8.84
	Unknown SV	0.208	J	8.91
	Unknown SV	0.326	J	9.19
	28-Nor-17.alpha.(H)-hopane	0.975	JN	9.34
	Unknown SV	1.22	J	9.74

Total TICs = 3.33 JN

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

B --- Compound detected in Blank

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**

Lab ID: E18-04234-004

Client ID: S4/6

Date Received: 05/31/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: A3709.D 06/05/2018 17:15

GC/MS Column: DB-5

Sample wt/vol: 15.04g

Matrix-Units: Soil-mg/Kg

% Moisture: 15.7

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Benzaldehyde	ND		0.039	0.038
Bis(2-chloroethyl) ether	ND		0.039	0.036
2,2'-Oxybis(1-Chloropropane)	ND		0.039	0.033
N-Nitrosodi-n-propylamine	ND		0.039	0.030
Acetophenone	ND		0.039	0.037
Hexachloroethane	ND		0.039	0.033
Nitrobenzene	ND		0.039	0.031
Isophorone	ND		0.039	0.033
Bis(2-chloroethoxy) methane	ND		0.039	0.035
Naphthalene	0.755		0.039	0.034
4-Chloroaniline	ND		0.039	0.026
Hexachlorobutadiene	ND		0.039	0.036
Caprolactam	ND		0.039	0.026
2-Methylnaphthalene	0.279		0.039	0.028
Hexachlorocyclopentadiene	ND		0.039	0.035
1,1'-Biphenyl	0.170		0.039	0.037
2-Chloronaphthalene	ND		0.039	0.032
2-Nitroaniline	ND		0.039	0.028
Dimethyl phthalate	ND		0.039	0.036

# INTEGRATED ANALYTICAL LABORATORIES

## SEMIVOLATILE ORGANICS

Lab ID: E18-04234-004

Client ID: S4/6

Date Received: 05/31/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: A3709.D 06/05/2018 17:15

GC/MS Column: DB-5

Sample wt/vol: 15.04g

Matrix-Units: Soil-mg/Kg

% Moisture: 15.7

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
2,6-Dinitrotoluene	ND		0.039	0.030
Acenaphthylene	2.28		0.039	0.032
3-Nitroaniline	ND		0.039	0.031
Acenaphthene	1.37		0.039	0.035
2,4-Dinitrotoluene	ND		0.039	0.036
Dibenzofuran	1.09		0.039	0.034
Diethyl phthalate	ND		0.039	0.039
Fluorene	2.16		0.039	0.036
4-Chlorophenyl phenyl ether	ND		0.039	0.037
4-Nitroaniline	ND		0.039	0.030
1,2,4,5-Tetrachlorobenzene	ND		0.039	0.034
N-Nitrosodiphenylamine	ND		0.039	0.034
4-Bromophenyl phenyl ether	ND		0.039	0.033
Hexachlorobenzene	ND		0.039	0.036
Atrazine	ND		0.039	0.034
Phenanthrene	12.0	E	0.039	0.036
Anthracene	4.22		0.039	0.035
Carbazole	1.52		0.039	0.031
Di-n-butyl phthalate	ND		0.039	0.030
Fluoranthene	29.6	E	0.039	0.033
Pyrene	15.8	E	0.039	0.032
Butyl benzyl phthalate	ND		0.039	0.036
3,3'-Dichlorobenzidine	ND		0.039	0.029
Benzo[a]anthracene	11.7	E	0.039	0.034
Chrysene	11.5	E	0.039	0.034
Bis(2-ethylhexyl) phthalate	0.275		0.039	0.024
Di-n-octyl phthalate	ND		0.039	0.034
Benzo[b]fluoranthene	9.54	E	0.039	0.032
Benzo[k]fluoranthene	4.91		0.039	0.033
Benzo[a]pyrene	8.30	E	0.039	0.032
Indeno[1,2,3-cd]pyrene	4.56		0.039	0.033
Dibenz[a,h]anthracene	2.35		0.039	0.039
Benzo[g,h,i]perylene	4.85		0.039	0.036
Dinitrotoluene (2,4- and 2,6-)	ND		0.039	0.036

Total Target Compounds (53): 129

E

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

# INTEGRATED ANALYTICAL LABORATORIES

## SEMIVOLATILE ORGANICS Tentatively Identified Compounds

Lab ID: E18-04234-004

Client ID: S4/6

Date Received: 05/31/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Date File: A3709.D

GC/MS Column: DB-5

Sample wt/vol: 15.04g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 15.7

CAS #	Compound	Estimated Concentration	Q	Retention Time
	Unknown SV	0.406	J	5.51
	Unknown SV	0.623	J	6.33
002381-21-7	Pyrene, 1-methyl-	0.256	JN	6.94
000243-17-4	11H-Benzo[b]fluorene	0.572	JN	7.01
000238-84-6	11H-Benzo[a]fluorene	0.513	JN	7.05
003442-78-2	Pyrene, 2-methyl-	0.268	JN	7.08
000239-35-0	Benzo[b]naphtho[2,1-d]thiophene	0.272	JN	7.39
001836-87-9	9H-Fluorene, 9-(phenylmethylene)-	1.14	JN	8.23
000192-97-2	Benzo[e]pyrene	2.91	JN	8.47
000207-93-2	Dinaphtho[1,2-b:1',2'-d]furan	1.03	JN	8.54
000198-55-0	Perylene	7.44	JN	8.64
	Unknown SV	1.28	J	8.82
000239-85-0	13H-Dibenzo[a,h]fluorene	0.891	JN	8.89
000220-97-3	11H-Indeno[2,1-a]phenanthrene	1.44	JN	8.94
000135-48-8	Pentacene	0.840	JN	10.20

Total TICs = 19.9 JN

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

B --- Compound detected in Blank

**INTEGRATED ANALYTICAL LABORATORIES**  
**SEMIVOLATILE ORGANICS**

Lab ID: E18-04234-004DL

GC/MS Column: DB-5

Client ID: S4/6

Sample wt/vol: 15.04g

Date Received: 05/31/2018

Matrix-Units: Soil-mg/Kg

Date Extracted: 06/05/2018

% Moisture: 15.7

Date Analyzed: 06/05/2018

Dilution Factor: 10

Data file: A3718.D 06/05/2018 19:40

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Benzaldehyde	ND		0.394	0.383
Bis(2-chloroethyl) ether	ND		0.394	0.359
2,2'-Oxybis(1-Chloropropane)	ND		0.394	0.329
N-Nitrosodi-n-propylamine	ND		0.394	0.300
Acetophenone	ND		0.394	0.373
Hexachloroethane	ND		0.394	0.330
Nitrobenzene	ND		0.394	0.309
Isophorone	ND		0.394	0.331
Bis(2-chloroethoxy) methane	ND		0.394	0.354
Naphthalene	0.806	D	0.394	0.344
4-Chloroaniline	ND		0.394	0.259
Hexachlorobutadiene	ND		0.394	0.362
Caprolactam	ND		0.394	0.263
2-Methylnaphthalene	0.295	DJ	0.394	0.276
Hexachlorocyclopentadiene	ND		0.394	0.346
1,1'-Biphenyl	ND		0.394	0.368
2-Chloronaphthalene	ND		0.394	0.323
2-Nitroaniline	ND		0.394	0.275
Dimethyl phthalate	ND		0.394	0.362

**INTEGRATED ANALYTICAL LABORATORIES**

**SEMIVOLATILE ORGANICS**

Lab ID: E18-04234-004DL

Client ID: S4/6

Date Received: 05/31/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: A3718.D 06/05/2018 19:40

GC/MS Column: DB-5

Sample wt/vol: 15.04g

Matrix-Units: Soil-mg/Kg

% Moisture: 15.7

Dilution Factor: 10

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
2,6-Dinitrotoluene	ND		0.394	0.299
Acenaphthylene	2.47	D	0.394	0.323
3-Nitroaniline	ND		0.394	0.314
Acenaphthene	1.55	D	0.394	0.349
2,4-Dinitrotoluene	ND		0.394	0.357
Dibenzofuran	1.17	D	0.394	0.336
Diethyl phthalate	ND		0.394	0.386
Fluorene	2.28	D	0.394	0.355
4-Chlorophenyl phenyl ether	ND		0.394	0.366
4-Nitroaniline	ND		0.394	0.296
1,2,4,5-Tetrachlorobenzene	ND		0.394	0.340
N-Nitrosodiphenylamine	ND		0.394	0.342
4-Bromophenyl phenyl ether	ND		0.394	0.331
Hexachlorobenzene	ND		0.394	0.362
Atrazine	ND		0.394	0.341
Phenanthrene	15.5	D	0.394	0.360
Anthracene	4.34	D	0.394	0.347
Carbazole	1.49	D	0.394	0.305
Di-n-butyl phthalate	ND		0.394	0.300
Fluoranthene	37.4	D	0.394	0.332
Pyrene	19.8	D	0.394	0.324
Butyl benzyl phthalate	ND		0.394	0.361
3,3'-Dichlorobenzidine	ND		0.394	0.285
Benzo[a]anthracene	12.8	D	0.394	0.338
Chrysene	12.5	D	0.394	0.338
Bis(2-ethylhexyl) phthalate	0.353	DJ	0.394	0.243
Di-n-octyl phthalate	ND		0.394	0.342
Benzo[b]fluoranthene	8.59	D	0.394	0.316
Benzo[k]fluoranthene	7.13	D	0.394	0.330
Benzo[a]pyrene	8.39	D	0.394	0.322
Indeno[1,2,3-cd]pyrene	4.30	D	0.394	0.326
Dibenz[a,h]anthracene	2.17	D	0.394	0.387
Benzo[g,h,i]perylene	4.30	D	0.394	0.356
Dinitrotoluene (2,4- and 2,6-)	ND		0.394	0.357
Total Target Compounds (53):	148	DJ		

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

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**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**

Lab ID: E18-04234-005

Client ID: S5/6

Date Received: 05/31/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: A3710.D 06/05/2018 17:31

GC/MS Column: DB-5

Sample wt/vol: 15.09g

Matrix-Units: Soil-mg/Kg

% Moisture: 9.10

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Benzaldehyde	ND		0.036	0.035
Bis(2-chloroethyl) ether	ND		0.036	0.033
2,2'-Oxybis(1-Chloropropane)	ND		0.036	0.030
N-Nitrosodi-n-propylamine	ND		0.036	0.028
Acetophenone	ND		0.036	0.034
Hexachloroethane	ND		0.036	0.031
Nitrobenzene	ND		0.036	0.029
Isophorone	ND		0.036	0.031
Bis(2-chloroethoxy) methane	ND		0.036	0.033
Naphthalene	0.174		0.036	0.032
4-Chloroaniline	ND		0.036	0.024
Hexachlorobutadiene	ND		0.036	0.034
Caprolactam	ND		0.036	0.024
2-Methylnaphthalene	0.073		0.036	0.026
Hexachlorocyclopentadiene	ND		0.036	0.032
1,1'-Biphenyl	0.034	J	0.036	0.034
2-Chloronaphthalene	ND		0.036	0.030
2-Nitroaniline	ND		0.036	0.025
Dimethyl phthalate	ND		0.036	0.034

# INTEGRATED ANALYTICAL LABORATORIES

## SEMIVOLATILE ORGANICS

Lab ID: E18-04234-005

Client ID: S5/6

Date Received: 05/31/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: A3710.D 06/05/2018 17:31

GC/MS Column: DB-5

Sample wt/vol: 15.09g

Matrix-Units: Soil-mg/Kg

% Moisture: 9.10

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
2,6-Dinitrotoluene	ND		0.036	0.028
Acenaphthylene	0.933		0.036	0.030
3-Nitroaniline	ND		0.036	0.029
Acenaphthene	0.516		0.036	0.032
2,4-Dinitrotoluene	ND		0.036	0.033
Dibenzofuran	0.184		0.036	0.031
Diethyl phthalate	ND		0.036	0.036
Fluorene	0.502		0.036	0.033
4-Chlorophenyl phenyl ether	ND		0.036	0.034
4-Nitroaniline	ND		0.036	0.027
1,2,4,5-Tetrachlorobenzene	ND		0.036	0.032
N-Nitrosodiphenylamine	ND		0.036	0.032
4-Bromophenyl phenyl ether	ND		0.036	0.031
Hexachlorobenzene	ND		0.036	0.034
Atrazine	ND		0.036	0.032
Phenanthrene	8.74	E	0.036	0.033
Anthracene	3.05		0.036	0.032
Carbazole	0.514		0.036	0.028
Di-n-butyl phthalate	ND		0.036	0.028
Fluoranthene	21.9	E	0.036	0.031
Pyrene	18.5	E	0.036	0.030
Butyl benzyl phthalate	ND		0.036	0.033
3,3'-Dichlorobenzidine	ND		0.036	0.026
Benzo[a]anthracene	14.9	E	0.036	0.031
Chrysene	13.2	E	0.036	0.031
Bis(2-ethylhexyl) phthalate	ND		0.036	0.023
Di-n-octyl phthalate	ND		0.036	0.032
Benzo[b]fluoranthene	10.8	E	0.036	0.029
Benzo[k]fluoranthene	4.31		0.036	0.031
Benzo[a]pyrene	10.1	E	0.036	0.030
Indeno[1,2,3-cd]pyrene	5.63		0.036	0.030
Dibenz[a,h]anthracene	2.90		0.036	0.036
Benzo[g,h,i]perylene	6.59	E	0.036	0.033
Dinitrotoluene (2,4- and 2,6-)	ND		0.036	0.033
Total Target Compounds (53):	124		EJ	

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

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# INTEGRATED ANALYTICAL LABORATORIES

## SEMIVOLATILE ORGANICS Tentatively Identified Compounds

Lab ID: E18-04234-005

Client ID: S5/6

Date Received: 05/31/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Date File: A3710.D

GC/MS Column: DB-5

Sample wt/vol: 15.09g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 9.10

CAS #	Compound	Estimated Concentration	Q	Retention Time
002531-84-2	Phenanthrene, 2-methyl-	1.60	JN	6.25
000779-02-2	Anthracene, 9-methyl-	1.93	JN	6.27
000613-12-7	Anthracene, 2-methyl-	4.69	JN	6.32
000612-94-2	Naphthalene, 2-phenyl-	1.30	JN	6.41
003674-66-6	Phenanthrene, 2,5-dimethyl-	1.72	JN	6.58
000483-87-4	Phenanthrene, 1,7-dimethyl-	1.15	JN	6.59
	Unknown SV	1.80	J	8.24
000192-97-2	Benzo[e]pyrene	2.91	JN	8.47
000207-93-2	Dinaphtho[1,2-b:1',2'-d]furan	1.47	JN	8.54
	Unknown SV	1.55	J	8.58
000205-82-3	Benzo[j]fluoranthene	12.5	JN	8.64
	Unknown SV	0.857	J	9.13
	Unknown SV	1.12	J	9.25
000135-48-8	Pentacene	1.59	JN	9.87
000213-46-7	1,2:7,8-Dibenzophenanthrene	2.01	JN	10.28

Total TICs = 38.2 JN

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

B --- Compound detected in Blank

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**

Lab ID: E18-04234-005DL

Client ID: S5/6

Date Received: 05/31/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: A3719.D 06/05/2018 19:56

GC/MS Column: DB-5

Sample wt/vol: 15.09g

Matrix-Units: Soil-mg/Kg

% Moisture: 9.10

Dilution Factor: 5

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Benzaldehyde	ND		0.182	0.177
Bis(2-chloroethyl) ether	ND		0.182	0.166
2,2'-Oxybis(1-Chloropropane)	ND		0.182	0.152
N-Nitrosodi-n-propylamine	ND		0.182	0.139
Acetophenone	ND		0.182	0.172
Hexachloroethane	ND		0.182	0.153
Nitrobenzene	ND		0.182	0.143
Isophorone	ND		0.182	0.153
Bis(2-chloroethoxy) methane	ND		0.182	0.163
Naphthalene	ND		0.182	0.159
4-Chloroaniline	ND		0.182	0.120
Hexachlorobutadiene	ND		0.182	0.167
Caprolactam	ND		0.182	0.122
2-Methylnaphthalene	ND		0.182	0.128
Hexachlorocyclopentadiene	ND		0.182	0.160
1,1'-Biphenyl	ND		0.182	0.170
2-Chloronaphthalene	ND		0.182	0.149
2-Nitroaniline	ND		0.182	0.127
Dimethyl phthalate	ND		0.182	0.167

# INTEGRATED ANALYTICAL LABORATORIES

## SEMIVOLATILE ORGANICS

Lab ID: E18-04234-005DL

Client ID: S5/6

Date Received: 05/31/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: A3719.D 06/05/2018 19:56

GC/MS Column: DB-5

Sample wt/vol: 15.09g

Matrix-Units: Soil-mg/Kg

% Moisture: 9.10

Dilution Factor: 5

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
2,6-Dinitrotoluene	ND		0.182	0.138
Acenaphthylene	0.871	D	0.182	0.149
3-Nitroaniline	ND		0.182	0.145
Acenaphthene	0.468	D	0.182	0.161
2,4-Dinitrotoluene	ND		0.182	0.165
Dibenzofuran	ND		0.182	0.155
Diethyl phthalate	ND		0.182	0.179
Fluorene	0.479	D	0.182	0.164
4-Chlorophenyl phenyl ether	ND		0.182	0.169
4-Nitroaniline	ND		0.182	0.137
1,2,4,5-Tetrachlorobenzene	ND		0.182	0.157
N-Nitrosodiphenylamine	ND		0.182	0.158
4-Bromophenyl phenyl ether	ND		0.182	0.153
Hexachlorobenzene	ND		0.182	0.167
Atrazine	ND		0.182	0.158
Phenanthrene	8.59	D	0.182	0.166
Anthracene	2.88	D	0.182	0.160
Carbazole	0.441	D	0.182	0.141
Di-n-butyl phthalate	ND		0.182	0.139
Fluoranthene	29.1	D	0.182	0.153
Pyrene	23.5	D	0.182	0.150
Butyl benzyl phthalate	ND		0.182	0.167
3,3'-Dichlorobenzidine	ND		0.182	0.132
Benzo[a]anthracene	14.8	D	0.182	0.156
Chrysene	13.5	D	0.182	0.156
Bis(2-ethylhexyl) phthalate	ND		0.182	0.112
Di-n-octyl phthalate	ND		0.182	0.158
Benzo[b]fluoranthene	8.48	D	0.182	0.146
Benzo[k]fluoranthene	8.20	D	0.182	0.153
Benzo[a]pyrene	10.3	D	0.182	0.149
Indeno[1,2,3-cd]pyrene	5.19	D	0.182	0.151
Dibenz[a,h]anthracene	2.40	D	0.182	0.179
Benzo[g,h,i]perylene	6.11	D	0.182	0.164
Dinitrotoluene (2,4- and 2,6-)	ND		0.182	0.165
Total Target Compounds (53):	135	D		

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**

Lab ID: E18-04234-006

Client ID: S6/4

Date Received: 05/31/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: A3720.D 06/05/2018 20:12

GC/MS Column: DB-5

Sample wt/vol: 15.45g

Matrix-Units: Soil-mg/Kg

% Moisture: 4.10

Dilution Factor: 2

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Benzaldehyde	ND		0.067	0.066
Bis(2-chloroethyl) ether	ND		0.067	0.061
2,2'-Oxybis(1-Chloropropane)	ND		0.067	0.056
N-Nitrosodi-n-propylamine	ND		0.067	0.051
Acetophenone	ND		0.067	0.064
Hexachloroethane	ND		0.067	0.057
Nitrobenzene	ND		0.067	0.053
Isophorone	ND		0.067	0.057
Bis(2-chloroethoxy) methane	ND		0.067	0.061
Naphthalene	ND		0.067	0.059
4-Chloroaniline	ND		0.067	0.044
Hexachlorobutadiene	ND		0.067	0.062
Caprolactam	ND		0.067	0.045
2-Methylnaphthalene	ND		0.067	0.047
Hexachlorocyclopentadiene	ND		0.067	0.059
1,1'-Biphenyl	ND		0.067	0.063
2-Chloronaphthalene	ND		0.067	0.055
2-Nitroaniline	ND		0.067	0.047
Dimethyl phthalate	ND		0.067	0.062

# INTEGRATED ANALYTICAL LABORATORIES

## SEMIVOLATILE ORGANICS

Lab ID: E18-04234-006

GC/MS Column: DB-5

Client ID: S6/4

Sample wt/vol: 15.45g

Date Received: 05/31/2018

Matrix-Units: Soil-mg/Kg

Date Extracted: 06/05/2018

% Moisture: 4.10

Date Analyzed: 06/05/2018

Dilution Factor: 2

Data file: A3720.D 06/05/2018 20:12

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
2,6-Dinitrotoluene	ND		0.067	0.051
Acenaphthylene	ND		0.067	0.055
3-Nitroaniline	ND		0.067	0.054
Acenaphthene	ND		0.067	0.060
2,4-Dinitrotoluene	ND		0.067	0.061
Dibenzofuran	ND		0.067	0.058
Diethyl phthalate	ND		0.067	0.066
Fluorene	ND		0.067	0.061
4-Chlorophenyl phenyl ether	ND		0.067	0.063
4-Nitroaniline	ND		0.067	0.051
1,2,4,5-Tetrachlorobenzene	ND		0.067	0.058
N-Nitrosodiphenylamine	ND		0.067	0.058
4-Bromophenyl phenyl ether	ND		0.067	0.057
Hexachlorobenzene	ND		0.067	0.062
Atrazine	ND		0.067	0.058
Phenanthrene	ND		0.067	0.062
Anthracene	ND		0.067	0.059
Carbazole	ND		0.067	0.052
Di-n-butyl phthalate	ND		0.067	0.051
Fluoranthene	0.134	D	0.067	0.057
Pyrene	0.099	D	0.067	0.055
Butyl benzyl phthalate	ND		0.067	0.062
3,3'-Dichlorobenzidine	ND		0.067	0.049
Benzo[a]anthracene	0.067	D	0.067	0.058
Chrysene	0.074	D	0.067	0.058
Bis(2-ethylhexyl) phthalate	0.078	D	0.067	0.042
Di-n-octyl phthalate	ND		0.067	0.059
Benzo[b]fluoranthene	ND		0.067	0.054
Benzo[k]fluoranthene	ND		0.067	0.057
Benzo[a]pyrene	ND		0.067	0.055
Indeno[1,2,3-cd]pyrene	0.095	D	0.067	0.056
Dibenz[a,h]anthracene	ND		0.067	0.066
Benzo[g,h,i]perylene	0.189	D	0.067	0.061
Dinitrotoluene (2,4- and 2,6-)	ND		0.067	0.061
Total Target Compounds (53):	0.736	D		

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

B --- Compound detected in Blank

E --- Exceeds upper level of Calibration curve

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04234-006

Client ID: S6/4

Date Received: 05/31/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: A3720.D 06/05/2018 20:12

GC/MS Column: DB-5

Sample wt/vol: 15.45g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 2

% Moisture: 4.10

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
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No peaks detected

Total TICs = 0

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**

Lab ID: E18-04234-007

Client ID: GW1/10

Date Received: 05/31/2018

Date Extracted: 06/04/2018

Date Analyzed: 06/05/2018

Data file: B2539.D 06/05/2018 11:31

SIM Data file: B2564.D 06/06/2018 12:14

GC/MS Column: DB-5

Sample wt/vol: 500ml

Matrix-Units: Aqueous- $\mu$ g/L

% Moisture: 100

Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Benzaldehyde	ND		1.00	0.192
Bis(2-chloroethyl) ether	ND		1.00	0.243
2,2'-Oxybis(1-Chloropropane)	ND		1.00	0.248
N-Nitrosodi-n-propylamine	ND		1.00	0.229
Acetophenone	ND		1.00	0.180
Hexachloroethane	ND		1.00	0.163
Nitrobenzene	ND		1.00	0.210
Isophorone	ND		1.00	0.115
Bis(2-chloroethoxy) methane	ND		1.00	0.171
Naphthalene	ND		1.00	0.139
4-Chloroaniline	ND		1.00	0.140
Hexachlorobutadiene	ND		1.00	0.187
Caprolactam	ND		1.00	0.547
2-Methylnaphthalene	ND		1.00	0.128
Hexachlorocyclopentadiene	ND		1.00	0.140
1,1'-Biphenyl	ND		1.00	0.133
2-Chloronaphthalene	ND		1.00	0.154
2-Nitroaniline	ND		1.00	0.161
Dimethyl phthalate	ND		1.00	0.137

# INTEGRATED ANALYTICAL LABORATORIES

## SEMIVOLATILE ORGANICS

Lab ID: E18-04234-007

Client ID: GW1/10

Date Received: 05/31/2018

Date Extracted: 06/04/2018

Date Analyzed: 06/05/2018

Data file: B2539.D 06/05/2018 11:31

SIM Data file: B2564.D 06/06/2018 12:14

GC/MS Column: DB-5

Sample wt/vol: 500ml

Matrix-Units: Aqueous- $\mu$ g/L

% Moisture: 100

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
2,6-Dinitrotoluene	ND		1.00	0.139
Acenaphthylene	ND		1.00	0.141
3-Nitroaniline	ND		1.00	0.214
Acenaphthene	ND		1.00	0.129
2,4-Dinitrotoluene	ND		1.00	0.135
Dibenzofuran	ND		1.00	0.133
Diethyl phthalate	ND		1.00	0.166
Fluorene	ND		1.00	0.182
4-Chlorophenyl phenyl ether	ND		1.00	0.316
4-Nitroaniline	ND		1.00	0.205
1,2,4,5-Tetrachlorobenzene	ND		1.00	0.923
N-Nitrosodiphenylamine	ND		1.00	0.179
4-Bromophenyl phenyl ether	ND		1.00	0.291
Hexachlorobenzene *	ND		0.020	0.020
Atrazine	ND		1.00	0.247
Phenanthrene	ND		1.00	0.175
Anthracene	ND		1.00	0.211
Carbazole	ND		1.00	0.221
Di-n-butyl phthalate	ND		1.00	0.196
Fluoranthene	ND		1.00	0.204
Pyrene	ND		1.00	0.339
Butyl benzyl phthalate	ND		1.00	0.215
3,3'-Dichlorobenzidine	ND		1.00	0.399
Benzo[a]anthracene *	0.179		0.100	0.100
Chrysene	ND		1.00	0.245
Bis(2-ethylhexyl) phthalate	ND		1.00	0.277
Di-n-octyl phthalate	ND		1.00	0.306
Benzo[b]fluoranthene *	0.172		0.100	0.100
Benzo[k]fluoranthene *	0.214		0.100	0.100
Benzo[a]pyrene *	0.170		0.100	0.100
Indeno[1,2,3-cd]pyrene *	0.160		0.100	0.100
Dibenz[a,h]anthracene *	0.173		0.100	0.100
Benzo[g,h,i]perylene	ND		1.00	0.672
Dinitrotoluene (2,4- and 2,6-)	ND		1.00	0.139

Total Target Compounds (53): 1.07

\* - RL & MDL from SIM run

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04234-007

Client ID: GW1/10

Date Received: 05/31/2018

Date Extracted: 06/04/2018

Date Analyzed: 06/05/2018

Data file: B2539.D 06/05/2018 11:31

GC/MS Column: DB-5

Sample wt/vol: 500ml

Matrix-Units: Aqueous- $\mu$ g/L

Dilution Factor: 1

% Moisture: 100

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
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No peaks detected

Total TICs = 0

**INTEGRATED ANALYTICAL LABORATORIES**

**SEMOVOLATILE ORGANICS**

Lab ID: BLKA180604-02

GC/MS Column: DB-5

Client ID: .

Sample wt/vol: 500ml

Date Received: NA

Matrix-Units: Aqueous- $\mu$ g/L

Date Extracted: 06/04/2018

% Moisture: 100

Date Analyzed: 06/05/2018

Dilution Factor: 1

Data file: B2535.D 06/05/2018 10:15

SIM Data file: B2563.D 06/06/2018 11:58

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
N-Nitrosodimethylamine	ND		1.00	0.278
Pyridine	ND		1.00	0.320
Benzaldehyde	ND		1.00	0.192
Phenol	ND		1.00	0.201
Aniline	ND		1.00	0.169
Bis(2-chloroethyl) ether	ND		1.00	0.243
2-Chlorophenol	ND		1.00	0.116
1,3-Dichlorobenzene	ND		1.00	0.148
1,4-Dichlorobenzene	ND		1.00	0.200
Benzyl alcohol	ND		1.00	0.199
1,2-Dichlorobenzene	ND		1.00	0.144
2-Methylphenol	ND		1.00	0.162
2,2'-Oxybis(1-Chloropropane)	ND		1.00	0.248
4-Methylphenol **	ND		1.00	0.170
N-Nitrosodi-n-propylamine	ND		1.00	0.229
Acetophenone	ND		1.00	0.180
3-Methylphenol	ND		1.00	0.529
Hexachloroethane	ND		1.00	0.163
Nitrobenzene	ND		1.00	0.210
Isophorone	ND		1.00	0.115
2-Nitrophenol	ND		1.00	0.160
2,4-Dimethylphenol	ND		1.00	0.137
Bis(2-chloroethoxy) methane	ND		1.00	0.171
Benzoic acid	ND		1.00	0.876
2,4-Dimethylaniline	ND		1.00	0.130
2,4-Dichlorophenol	ND		1.00	0.138
1,2,4-Trichlorobenzene	ND		1.00	0.187
Naphthalene	ND		1.00	0.139
4-Chloroaniline	ND		1.00	0.140
4-Aminotoluene	ND		1.00	0.164
Hexachlorobutadiene	ND		1.00	0.187
Caprolactam	ND		1.00	0.547
2-Aminotoluene	ND		1.00	0.164
4-Chloro-3-methylphenol	ND		1.00	0.139
2-Methylnaphthalene	ND		1.00	0.128
Hexachlorocyclopentadiene	ND		1.00	0.140
2,4,6-Trichlorophenol	ND		1.00	0.188
2,4,5-Trichlorophenol	ND		1.00	0.252
1,1'-Biphenyl	ND		1.00	0.133
2-Chloronaphthalene	ND		1.00	0.154
2-Nitroaniline	ND		1.00	0.161
Dimethyl phthalate	ND		1.00	0.137

## INTEGRATED ANALYTICAL LABORATORIES

## SEMOVOLATILE ORGANICS

Lab ID: BLKA180604-02

GC/MS Column: DB-5

Client ID: .

Sample wt/vol: 500mL

Date Received: NA

Matrix-Units: Aqueous- $\mu$ g/L

Date Extracted: 06/04/2018

% Moisture: 100

Date Analyzed: 06/05/2018

Dilution Factor: 1

Data file: B2535.D 06/05/2018 10:15

SIM Data file: B2563.D 06/06/2018 11:58

Compound	Concentration	Q	RL	MDL
2,6-Dinitrotoluene	ND		1.00	0.139
Acenaphthylene	ND		1.00	0.141
3-Nitroaniline	ND		1.00	0.214
Acenaphthene	ND		1.00	0.129
2,4-Dinitrophenol	ND		1.00	0.206
4-Nitrophenol	ND		1.00	0.466
2,4-Dinitrotoluene	ND		1.00	0.135
Dibenzofuran	ND		1.00	0.133
Diethyl phthalate	ND		1.00	0.166
Fluorene	ND		1.00	0.182
4-Chlorophenyl phenyl ether	ND		1.00	0.316
4-Nitroaniline	ND		1.00	0.205
1,2,4,5-Tetrachlorobenzene	ND		1.00	0.923
2,3,4,6-Tetrachlorophenol	ND		1.00	0.294
4,6-Dinitro-2-methylphenol *	ND		0.100	0.100
N-Nitrosodiphenylamine	ND		1.00	0.179
1,2-Diphenylhydrazine	ND		1.00	0.214
4-Bromophenyl phenyl ether	ND		1.00	0.291
Hexachlorobenzene *	ND		0.020	0.020
Atrazine	ND		1.00	0.247
Pentachlorophenol *	ND		0.100	0.100
Phenanthrene	ND		1.00	0.175
Anthracene	ND		1.00	0.211
Carbazole	ND		1.00	0.221
Di-n-butyl phthalate	ND		1.00	0.196
Fluoranthene	ND		1.00	0.204
Benzidine	ND		1.00	0.664
Pyrene	ND		1.00	0.339
3,3'-Dimethylbenzidine	ND		1.00	0.188
Butyl benzyl phthalate	ND		1.00	0.215
3,3'-Dichlorobenzidine	ND		1.00	0.399
Benzo[a]anthracene *	ND		0.100	0.100
Chrysene	ND		1.00	0.245
Bis(2-ethylhexyl) phthalate	ND		1.00	0.277
Di-n-octyl phthalate	ND		1.00	0.306
Benzo[b]fluoranthene *	ND		0.100	0.100
Benzo[k]fluoranthene *	ND		0.100	0.100
Benzo[a]pyrene *	ND		0.100	0.100
Indeno[1,2,3-cd]pyrene *	ND		0.100	0.100
Dibenz[a,h]anthracene *	ND		0.100	0.100
Benzo[g,h,i]perylene	ND		1.00	0.672

Total Target Compounds (83): 0

\* - RL &amp; MDL from SIM run

D --- Dilution Performed

\*\* - represents the total of 3+4-Methylphenol

J --- Value Less than RL &amp; greater than MDL

B --- Compound detected in Blank

E --- Exceeds upper level of Calibration curve

Page 2 of Q --- Common laboratory contamination E18-04234 Page 79

**INTEGRATED ANALYTICAL LABORATORIES**

**SEMIVOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: BLKA180604-02

GC/MS Column: DB-5

Client ID: .

Sample wt/vol: 500ml

Date Received: NA

Matrix-Units: Aqueous- $\mu$ g/L

Date Extracted: 06/04/2018

Dilution Factor: 1

Date Analyzed: 06/05/2018

% Moisture: 100

Data file: B2535.D 06/05/2018 10:15

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
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No peaks detected

Total TICs = 0

**INTEGRATED ANALYTICAL LABORATORIES****SEMOVOLATILE ORGANICS**

Lab ID: BLKS180605-02

GC/MS Column: DB-5

Client ID: .

Sample wt/vol: 15.00g

Date Received: NA

Matrix-Units: Soil-mg/Kg

Date Extracted: 06/05/2018

% Moisture: NA

Date Analyzed: 06/05/2018

Dilution Factor: 1

Data file: A3693.D 06/05/2018 12:59

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
N-Nitrosodimethylamine	ND	0.033	0.029	
Pyridine	ND	0.033	0.028	
Benzaldehyde	ND	0.033	0.032	
Phenol	ND	0.033	0.031	
Aniline	ND	0.033	0.031	
Bis(2-chloroethyl) ether	ND	0.033	0.030	
2-Chlorophenol	ND	0.033	0.025	
1,3-Dichlorobenzene	ND	0.033	0.027	
1,4-Dichlorobenzene	ND	0.033	0.027	
Benzyl alcohol	ND	0.033	0.025	
1,2-Dichlorobenzene	ND	0.033	0.031	
2-Methylphenol	ND	0.033	0.030	
2,2'-Oxybis(1-Chloropropane)	ND	0.033	0.028	
4-Methylphenol **	ND	0.033	0.027	
N-Nitrosodi-n-propylamine	ND	0.033	0.025	
Acetophenone	ND	0.033	0.032	
3-Methylphenol	ND	0.033	0.023	
Hexachloroethane	ND	0.033	0.028	
Nitrobenzene	ND	0.033	0.026	
Isophorone	ND	0.033	0.028	
2-Nitrophenol	ND	0.033	0.028	
2,4-Dimethylphenol	ND	0.033	0.024	
Bis(2-chloroethoxy) methane	ND	0.033	0.030	
Benzoic acid	ND	0.033	0.033	
2,4-Dimethylaniline	ND	0.033	0.027	
2,4-Dichlorophenol	ND	0.033	0.029	
1,2,4-Trichlorobenzene	ND	0.033	0.029	
Naphthalene	ND	0.033	0.029	
4-Chloroaniline	ND	0.033	0.022	
4-Aminotoluene	ND	0.033	0.026	
Hexachlorobutadiene	ND	0.033	0.031	
Caprolactam	ND	0.033	0.022	
2-Aminotoluene	ND	0.033	0.031	
4-Chloro-3-methylphenol	ND	0.033	0.028	
2-Methylnaphthalene	ND	0.033	0.023	
Hexachlorocyclopentadiene	ND	0.033	0.029	
2,4,6-Trichlorophenol	ND	0.033	0.028	
2,4,5-Trichlorophenol	ND	0.033	0.029	
1,1'-Biphenyl	ND	0.033	0.031	
2-Chloronaphthalene	ND	0.033	0.027	
2-Nitroaniline	ND	0.033	0.023	
Dimethyl phthalate	ND	0.033	0.031	

# INTEGRATED ANALYTICAL LABORATORIES

## SEMIVOLATILE ORGANICS

Lab ID: BLKS180605-02

GC/MS Column: DB-5

Client ID: .

Sample wt/vol: 15.00g

Date Received: NA

Matrix-Units: Soil-mg/Kg

Date Extracted: 06/05/2018

% Moisture: NA

Date Analyzed: 06/05/2018

Dilution Factor: 1

Data file: A3693.D 06/05/2018 12:59

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
2,6-Dinitrotoluene	ND	0.033	0.025	
Acenaphthylene	ND	0.033	0.027	
3-Nitroaniline	ND	0.033	0.027	
Acenaphthene	ND	0.033	0.030	
2,4-Dinitrophenol	ND	0.033	0.020	
4-Nitrophenol	ND	0.033	0.029	
2,4-Dinitrotoluene	ND	0.033	0.030	
Dibenzofuran	ND	0.033	0.028	
Diethyl phthalate	ND	0.033	0.033	
Fluorene	ND	0.033	0.030	
4-Chlorophenyl phenyl ether	ND	0.033	0.031	
4-Nitroaniline	ND	0.033	0.025	
1,2,4,5-Tetrachlorobenzene	ND	0.033	0.029	
2,3,4,6-Tetrachlorophenol	ND	0.033	0.023	
4,6-Dinitro-2-methylphenol	ND	0.033	0.020	
N-Nitrosodiphenylamine	ND	0.033	0.029	
1,2-Diphenylhydrazine	ND	0.033	0.033	
4-Bromophenyl phenyl ether	ND	0.033	0.028	
Hexachlorobenzene	ND	0.033	0.031	
Atrazine	ND	0.033	0.029	
Pentachlorophenol	ND	0.033	0.020	
Phenanthrene	ND	0.033	0.030	
Anthracene	ND	0.033	0.029	
Carbazole	ND	0.033	0.026	
Di-n-butyl phthalate	ND	0.033	0.025	
Fluoranthene	ND	0.033	0.028	
Benzidine	ND	0.033	0.020	
Pyrene	ND	0.033	0.027	
3,3'-Dimethylbenzidine	ND	0.033	0.021	
Butyl benzyl phthalate	ND	0.033	0.031	
3,3'-Dichlorobenzidine	ND	0.033	0.024	
Benzo[a]anthracene	ND	0.033	0.029	
Chrysene	ND	0.033	0.029	
Bis(2-ethylhexyl) phthalate	ND	0.033	0.021	
Di-n-octyl phthalate	ND	0.033	0.029	
Benzo[b]fluoranthene	ND	0.033	0.027	
Benzo[k]fluoranthene	ND	0.033	0.028	
Benzo[a]pyrene	ND	0.033	0.027	
Indeno[1,2,3-cd]pyrene	ND	0.033	0.028	
Dibenz[a,h]anthracene	ND	0.033	0.033	
Benzo[g,h,i]perylene	ND	0.033	0.030	

Total Target Compounds (83): 0

D --- Dilution Performed

\*\* - represents the total of 3 + 4-Methylphenol

J --- Value Less than RL & greater than MDL

B --- Compound detected in Blank

E --- Exceeds upper level of Calibration curve

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Page 2 of Q --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: BLKS180605-02

GC/MS Column: DB-5

Client ID: .

Sample wt/vol: 15.00g

Date Received: NA

Matrix-Units: Soil-mg/Kg

Date Extracted: 06/05/2018

Dilution Factor: 1

Date Analyzed: 06/05/2018

% Moisture: NA

Data file: A3693.D 06/05/2018 12:59

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: E18-04234-001  
Client ID: S1/5  
Date Received: 05/31/2018  
Date Extracted: 06/04/2018  
Date Analyzed: 06/05/2018  
Data file: R4794.D 06/05/2018 17:02

GC Column: DB-5/DB1701P  
Sample wt/vol: 30.33g  
Matrix-Units: Soil-mg/Kg  
% Moisture: 9.70  
Dilution Factor: 10

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Aroclor-1016	ND		0.018	0.0073
Aroclor-1221	ND		0.018	0.0073
Aroclor-1232	ND		0.018	0.0073
Aroclor-1242	ND		0.018	0.0073
Aroclor-1248	ND		0.018	0.0073
Aroclor-1254	ND		0.018	0.0073
Aroclor-1260	0.020	D	0.018	0.0073
Aroclor-1262	ND		0.018	0.0073
Aroclor-1268	ND		0.018	0.0073
PCBs	0.020	D	0.018	0.0073

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: E18-04234-002  
Client ID: S2/5  
Date Received: 05/31/2018  
Date Extracted: 06/04/2018  
Date Analyzed: 06/05/2018  
Data file: R4795.D 06/05/2018 17:19

GC Column: DB-5/DB1701P  
Sample wt/vol: 30.19g  
Matrix-Units: Soil-mg/Kg  
% Moisture: 5.80  
Dilution Factor: 5

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Aroclor-1016	ND		0.00879	0.00352
Aroclor-1221	ND		0.00879	0.00352
Aroclor-1232	ND		0.00879	0.00352
Aroclor-1242	ND		0.00879	0.00352
Aroclor-1248	ND		0.00879	0.00352
Aroclor-1254	ND		0.00879	0.00352
Aroclor-1260	ND		0.00879	0.00352
Aroclor-1262	ND		0.00879	0.00352
Aroclor-1268	ND		0.00879	0.00352
PCBs	ND		0.00879	0.00352

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: E18-04234-003  
Client ID: S3/5  
Date Received: 05/31/2018  
Date Extracted: 06/04/2018  
Date Analyzed: 06/05/2018  
Data file: R4796.D 06/05/2018 17:36

GC Column: DB-5/DB1701P  
Sample wt/vol: 30.83g  
Matrix-Units: Soil-mg/Kg  
% Moisture: 10.5  
Dilution Factor: 10

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Aroclor-1016	ND		0.018	0.00725
Aroclor-1221	ND		0.018	0.00725
Aroclor-1232	ND		0.018	0.00725
Aroclor-1242	ND		0.018	0.00725
Aroclor-1248	ND		0.018	0.00725
Aroclor-1254	ND		0.018	0.00725
Aroclor-1260	0.035	D	0.018	0.00725
Aroclor-1262	ND		0.018	0.00725
Aroclor-1268	ND		0.018	0.00725
PCBs	0.035	D	0.018	0.00725

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: E18-04234-004  
Client ID: S4/6  
Date Received: 05/31/2018  
Date Extracted: 06/04/2018  
Date Analyzed: 06/05/2018  
Data file: R4797.D 06/05/2018 17:54

GC Column: DB-5/DB1701P  
Sample wt/vol: 30.17g  
Matrix-Units: Soil-mg/Kg  
% Moisture: 15.7  
Dilution Factor: 10

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Aroclor-1016	ND		0.020	0.00786
Aroclor-1221	ND		0.020	0.00786
Aroclor-1232	ND		0.020	0.00786
Aroclor-1242	ND		0.020	0.00786
Aroclor-1248	0.076	D	0.020	0.00786
Aroclor-1254	ND		0.020	0.00786
Aroclor-1260	0.056	D	0.020	0.00786
Aroclor-1262	ND		0.020	0.00786
Aroclor-1268	ND		0.020	0.00786
PCBs	0.132	D	0.020	0.00786

D --- Dilution Performed

B --- Compound detected in Blank

J --- Value Less than RL & greater than MDL

C --- Common laboratory contamination

E --- Exceeds upper level of Calibration curve

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: E18-04234-005  
Client ID: S5/6  
Date Received: 05/31/2018  
Date Extracted: 06/04/2018  
Date Analyzed: 06/05/2018  
Data file: R4798.D 06/05/2018 18:11

GC Column: DB-5/DB1701P  
Sample wt/vol: 30.42g  
Matrix-Units: Soil-mg/Kg  
% Moisture: 9.10  
Dilution Factor: 10

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Aroclor-1016	ND		0.018	0.00723
Aroclor-1221	ND		0.018	0.00723
Aroclor-1232	ND		0.018	0.00723
Aroclor-1242	ND		0.018	0.00723
Aroclor-1248	ND		0.018	0.00723
Aroclor-1254	ND		0.018	0.00723
Aroclor-1260	ND		0.018	0.00723
Aroclor-1262	ND		0.018	0.00723
Aroclor-1268	ND		0.018	0.00723
PCBs	ND		0.018	0.00723

D --- Dilution Performed

B --- Compound detected in Blank

J --- Value Less than RL & greater than MDL

C --- Common laboratory contamination

E --- Exceeds upper level of Calibration curve

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: E18-04234-006  
Client ID: S6/4  
Date Received: 05/31/2018  
Date Extracted: 06/04/2018  
Date Analyzed: 06/05/2018  
Data file: R4799.D 06/05/2018 18:28

GC Column: DB-5/DB1701P  
Sample wt/vol: 30.45g  
Matrix-Units: Soil-mg/Kg  
% Moisture: 4.10  
Dilution Factor: 10

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Aroclor-1016	ND		0.017	0.00685
Aroclor-1221	ND		0.017	0.00685
Aroclor-1232	ND		0.017	0.00685
Aroclor-1242	ND		0.017	0.00685
Aroclor-1248	ND		0.017	0.00685
Aroclor-1254	ND		0.017	0.00685
Aroclor-1260	ND		0.017	0.00685
Aroclor-1262	ND		0.017	0.00685
Aroclor-1268	ND		0.017	0.00685
PCBs	ND		0.017	0.00685

D --- Dilution Performed

B --- Compound detected in Blank

J --- Value Less than RL & greater than MDL

C --- Common laboratory contamination

E --- Exceeds upper level of Calibration curve

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: E18-04234-007  
Client ID: GW1/10  
Date Received: 05/31/2018  
Date Extracted: 06/06/2018  
Date Analyzed: 06/06/2018  
Data file: R4838.D 06/06/2018 13:13

GC Column: DB-5/DB1701P  
Sample wt/vol: 1000ml  
Matrix-Units: Aqueous- $\mu$ g/L  
% Moisture: 100  
Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Aroclor-1016	ND		0.050	0.020
Aroclor-1221	ND		0.050	0.020
Aroclor-1232	ND		0.050	0.020
Aroclor-1242	ND		0.050	0.020
Aroclor-1248	ND		0.050	0.020
Aroclor-1254	ND		0.050	0.020
Aroclor-1260	ND		0.050	0.020
Aroclor-1262	ND		0.050	0.020
Aroclor-1268	ND		0.050	0.020
PCBs	ND		0.050	0.020

D --- Dilution Performed

B --- Compound detected in Blank

J --- Value Less than RL & greater than MDL

C --- Common laboratory contamination

E --- Exceeds upper level of Calibration curve

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: BLKA180530-05

Client ID: PCB

Date Received: NA

Date Extracted: 05/30/2018

Date Analyzed: 05/30/2018

Data file: R4653.D 05/30/2018 20:30

GC Column: DB-5/DB1701P

Sample wt/vol: 1000ml

Matrix-Units: Aqueous- $\mu$ g/L

% Moisture: 100

Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.050	0.020
Aroclor-1221	ND		0.050	0.020
Aroclor-1232	ND		0.050	0.020
Aroclor-1242	ND		0.050	0.020
Aroclor-1248	ND		0.050	0.020
Aroclor-1254	ND		0.050	0.020
Aroclor-1260	ND		0.050	0.020
Aroclor-1262	ND		0.050	0.020
Aroclor-1268	ND		0.050	0.020
PCBs	ND		0.050	0.020

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: BLKA180606-02

Client ID: PCB

Date Received: NA

Date Extracted: 06/06/2018

Date Analyzed: 06/06/2018

Data file: R4836.D 06/06/2018 12:39

GC Column: DB-5/DB1701P

Sample wt/vol: 1000ml

Matrix-Units: Aqueous- $\mu$ g/L

% Moisture: 100

Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.050	0.020
Aroclor-1221	ND		0.050	0.020
Aroclor-1232	ND		0.050	0.020
Aroclor-1242	ND		0.050	0.020
Aroclor-1248	ND		0.050	0.020
Aroclor-1254	ND		0.050	0.020
Aroclor-1260	ND		0.050	0.020
Aroclor-1262	ND		0.050	0.020
Aroclor-1268	ND		0.050	0.020
PCBs	ND		0.050	0.020

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: BLKS180604-12

Client ID: PCB

Date Received: NA

Date Extracted: 06/04/2018

Date Analyzed: 06/05/2018

Data file: R4790.D 06/05/2018 15:49

GC Column: DB-5/DB1701P

Sample wt/vol: 30g

Matrix-Units: Soil-mg/Kg

% Moisture: NA

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Aroclor-1016	ND		0.00167	0.000668
Aroclor-1221	ND		0.00167	0.000668
Aroclor-1232	ND		0.00167	0.000668
Aroclor-1242	ND		0.00167	0.000668
Aroclor-1248	ND		0.00167	0.000668
Aroclor-1254	ND		0.00167	0.000668
Aroclor-1260	ND		0.00167	0.000668
Aroclor-1262	ND		0.00167	0.000668
Aroclor-1268	ND		0.00167	0.000668
PCBs	ND		0.00167	0.000668

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**  
**PESTICIDES**

Lab ID: E18-04234-001  
 Client ID: S1/5  
 Date Received: 05/31/2018  
 Date Extracted: 06/04/2018  
 Date Analyzed: 06/06/2018  
 Data file: O0873.D 06/06/2018 11:08

GC Column: RTX-CLP1/CLP2  
 Sample wt/vol: 30.33g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 9.70  
 Dilution Factor: 5

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.00183	0.000913
beta-BHC	ND		0.00183	0.000913
gamma-BHC (Lindane)	ND		0.00183	0.000913
delta-BHC	ND		0.00183	0.000913
Heptachlor	ND		0.00183	0.000913
Aldrin	ND		0.00183	0.000913
Heptachlor epoxide	ND		0.00183	0.000913
Endosulfan I	ND		0.00183	0.000913
4,4'-DDE	ND		0.00183	0.000913
Dieldrin	ND		0.00183	0.000913
Endrin	ND		0.00183	0.000913
Endosulfan II	ND		0.00183	0.000913
4,4'-DDD	ND		0.00183	0.000913
Endrin aldehyde	ND		0.00183	0.000913
Endosulfan sulfate	ND		0.00183	0.000913
4,4'-DDT	ND		0.00183	0.000913
Endrin ketone	ND		0.00183	0.000913
Methoxychlor	ND		0.00183	0.000913
alpha-Chlordane	ND		0.00183	0.000913
gamma-Chlordane	ND		0.00183	0.000913
Toxaphene	ND		0.023	0.011
Endosulfan (I and II)	ND		0.00183	0.000913
Chlordane (alpha and gamma)	ND		0.00183	0.000913

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

# INTEGRATED ANALYTICAL LABORATORIES

## PESTICIDES

Lab ID: E18-04234-002  
 Client ID: S2/5  
 Date Received: 05/31/2018  
 Date Extracted: 06/04/2018  
 Date Analyzed: 06/06/2018  
 Data file: O0874.D 06/06/2018 11:21

GC Column: RTX-CLP1/CLP2  
 Sample wt/vol: 30.19g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 5.80  
 Dilution Factor: 5

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
alpha-BHC	ND		0.00176	0.000879
beta-BHC	ND		0.00176	0.000879
gamma-BHC (Lindane)	ND		0.00176	0.000879
delta-BHC	ND		0.00176	0.000879
Heptachlor	ND		0.00176	0.000879
Aldrin	ND		0.00176	0.000879
Heptachlor epoxide	ND		0.00176	0.000879
Endosulfan I	ND		0.00176	0.000879
4,4'-DDE	0.091	D	0.00176	0.000879
Dieldrin	ND		0.00176	0.000879
Endrin	ND		0.00176	0.000879
Endosulfan II	ND		0.00176	0.000879
4,4'-DDD	0.020	D	0.00176	0.000879
Endrin aldehyde	ND		0.00176	0.000879
Endosulfan sulfate	ND		0.00176	0.000879
4,4'-DDT	0.129	D	0.00176	0.000879
Endrin ketone	ND		0.00176	0.000879
Methoxychlor	ND		0.00176	0.000879
alpha-Chlordane	0.00519	D	0.00176	0.000879
gamma-Chlordane	0.00331	D	0.00176	0.000879
Toxaphene	ND		0.022	0.011
Endosulfan (I and II)	ND		0.00176	0.000879
Chlordane (alpha and gamma)	0.0085	D	0.00176	0.000879

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

# INTEGRATED ANALYTICAL LABORATORIES

## PESTICIDES

Lab ID: E18-04234-003  
 Client ID: S3/5  
 Date Received: 05/31/2018  
 Date Extracted: 06/04/2018  
 Date Analyzed: 06/06/2018  
 Data file: O0875.D 06/06/2018 11:34

GC Column: RTX-CLP1/CLP2  
 Sample wt/vol: 30.83g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 10.5  
 Dilution Factor: 5

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
alpha-BHC	ND		0.00181	0.000906
beta-BHC	ND		0.00181	0.000906
gamma-BHC (Lindane)	ND		0.00181	0.000906
delta-BHC	ND		0.00181	0.000906
Heptachlor	ND		0.00181	0.000906
Aldrin	ND		0.00181	0.000906
Heptachlor epoxide	ND		0.00181	0.000906
Endosulfan I	ND		0.00181	0.000906
4,4'-DDE	0.015	D	0.00181	0.000906
Dieldrin	ND		0.00181	0.000906
Endrin	ND		0.00181	0.000906
Endosulfan II	ND		0.00181	0.000906
4,4'-DDD	0.00189	D	0.00181	0.000906
Endrin aldehyde	ND		0.00181	0.000906
Endosulfan sulfate	ND		0.00181	0.000906
4,4'-DDT	0.0093	D	0.00181	0.000906
Endrin ketone	ND		0.00181	0.000906
Methoxychlor	ND		0.00181	0.000906
alpha-Chlordane	0.000969	DJ	0.00181	0.000906
gamma-Chlordane	0.00188	D	0.00181	0.000906
Toxaphene	ND		0.023	0.011
Endosulfan (I and II)	ND		0.00181	0.000906
Chlordane (alpha and gamma)	0.00285	D	0.00181	0.000906

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**  
**PESTICIDES**

Lab ID: E18-04234-004  
 Client ID: S4/6  
 Date Received: 05/31/2018  
 Date Extracted: 06/04/2018  
 Date Analyzed: 06/06/2018  
 Data file: O0876.D 06/06/2018 11:46

GC Column: RTX-CLP1/CLP2  
 Sample wt/vol: 30.17g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 15.7  
 Dilution Factor: 25

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.00983	0.00492
beta-BHC	ND		0.00983	0.00492
gamma-BHC (Lindane)	ND		0.00983	0.00492
delta-BHC	ND		0.00983	0.00492
Heptachlor	ND		0.00983	0.00492
Aldrin	ND		0.00983	0.00492
Heptachlor epoxide	ND		0.00983	0.00492
Endosulfan I	ND		0.00983	0.00492
4,4'-DDE	0.026	D	0.00983	0.00492
Dieldrin	ND		0.00983	0.00492
Endrin	ND		0.00983	0.00492
Endosulfan II	ND		0.00983	0.00492
4,4'-DDD	ND		0.00983	0.00492
Endrin aldehyde	ND		0.00983	0.00492
Endosulfan sulfate	ND		0.00983	0.00492
4,4'-DDT	0.049	D	0.00983	0.00492
Endrin ketone	ND		0.00983	0.00492
Methoxychlor	ND		0.00983	0.00492
alpha-Chlordane	ND		0.00983	0.00492
gamma-Chlordane	0.010	D	0.00983	0.00492
Toxaphene	ND		0.123	0.059
Endosulfan (I and II)	ND		0.00983	0.00492
Chlordane (alpha and gamma)	0.010	D	0.00983	0.00492

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****PESTICIDES**

Lab ID: E18-04234-005

Client ID: S5/6

Date Received: 05/31/2018

Date Extracted: 06/04/2018

Date Analyzed: 06/06/2018

Data file: O0877.D 06/06/2018 11:59

GC Column: RTX-CLP1/CLP2

Sample wt/vol: 30.42g

Matrix-Units: Soil-mg/Kg

% Moisture: 9.10

Dilution Factor: 10

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.00362	0.00181
beta-BHC	ND		0.00362	0.00181
gamma-BHC (Lindane)	ND		0.00362	0.00181
delta-BHC	ND		0.00362	0.00181
Heptachlor	ND		0.00362	0.00181
Aldrin	ND		0.00362	0.00181
Heptachlor epoxide	ND		0.00362	0.00181
Endosulfan I	ND		0.00362	0.00181
4,4'-DDE	ND		0.00362	0.00181
Dieldrin	ND		0.00362	0.00181
Endrin	ND		0.00362	0.00181
Endosulfan II	ND		0.00362	0.00181
4,4'-DDD	ND		0.00362	0.00181
Endrin aldehyde	ND		0.00362	0.00181
Endosulfan sulfate	ND		0.00362	0.00181
4,4'-DDT	ND		0.00362	0.00181
Endrin ketone	ND		0.00362	0.00181
Methoxychlor	ND		0.00362	0.00181
alpha-Chlordane	ND		0.00362	0.00181
gamma-Chlordane	ND		0.00362	0.00181
Toxaphene	ND		0.045	0.022
Endosulfan (I and II)	ND		0.00362	0.00181
Chlordane (alpha and gamma)	ND		0.00362	0.00181

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**  
**PESTICIDES**

Lab ID: E18-04234-006  
 Client ID: S6/4  
 Date Received: 05/31/2018  
 Date Extracted: 06/04/2018  
 Date Analyzed: 06/06/2018  
 Data file: O0878.D 06/06/2018 12:11

GC Column: RTX-CLP1/CLP2  
 Sample wt/vol: 30.45g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 4.10  
 Dilution Factor: 250

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.086	0.043
beta-BHC	ND		0.086	0.043
gamma-BHC (Lindane)	ND		0.086	0.043
delta-BHC	ND		0.086	0.043
Heptachlor	ND		0.086	0.043
Aldrin	ND		0.086	0.043
Heptachlor epoxide	ND		0.086	0.043
Endosulfan I	ND		0.086	0.043
4,4'-DDE	ND		0.086	0.043
Dieldrin	ND		0.086	0.043
Endrin	ND		0.086	0.043
Endosulfan II	ND		0.086	0.043
4,4'-DDD	ND		0.086	0.043
Endrin aldehyde	ND		0.086	0.043
Endosulfan sulfate	ND		0.086	0.043
4,4'-DDT	ND		0.086	0.043
Endrin ketone	ND		0.086	0.043
Methoxychlor	ND		0.086	0.043
alpha-Chlordane	ND		0.086	0.043
gamma-Chlordane	ND		0.086	0.043
Toxaphene	ND		1.07	0.514
Endosulfan (I and II)	ND		0.086	0.043
Chlordane (alpha and gamma)	ND		0.086	0.043

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****PESTICIDES**

Lab ID: E18-04234-007

Client ID: GW1/10

Date Received: 05/31/2018

Date Extracted: 06/06/2018

Date Analyzed: 06/06/2018

Data file: V0781.D 06/06/2018 14:24

GC Column: RTX-CLP1/CLP2

Sample wt/vol: 1000ml

Matrix-Units: Aqueous- $\mu$ g/L

% Moisture: 100

Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.010	0.005
beta-BHC	ND		0.010	0.005
gamma-BHC (Lindane)	ND		0.010	0.005
delta-BHC	ND		0.010	0.005
Heptachlor	ND		0.010	0.005
Aldrin	ND		0.010	0.005
Heptachlor epoxide	ND		0.010	0.005
Endosulfan I	ND		0.010	0.005
4,4'-DDE	ND		0.010	0.005
Dieldrin	ND		0.010	0.005
Endrin	ND		0.010	0.005
Endosulfan II	ND		0.010	0.005
4,4'-DDD	ND		0.010	0.005
Endrin aldehyde	ND		0.010	0.005
Endosulfan sulfate	ND		0.010	0.005
4,4'-DDT	ND		0.010	0.005
Endrin ketone	ND		0.010	0.005
Methoxychlor	ND		0.010	0.005
alpha-Chlordane	ND		0.010	0.005
gamma-Chlordane	ND		0.010	0.005
Toxaphene	ND		0.125	0.060
Endosulfan (I and II)	ND		0.010	0.005
Chlordane (alpha and gamma)	ND		0.010	0.005

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****PESTICIDES**

Lab ID: BLKS180604-12

Client ID: Pest

Date Received: NA

Date Extracted: 06/04/2018

Date Analyzed: 06/06/2018

Data file: O0869.D 06/06/2018 10:18

GC Column: RTX-CLP1/CLP2

Sample wt/vol: 30g

Matrix-Units: Soil-mg/Kg

% Moisture: NA

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
alpha-BHC	ND		0.000334	0.000167
beta-BHC	ND		0.000334	0.000167
gamma-BHC (Lindane)	ND		0.000334	0.000167
delta-BHC	ND		0.000334	0.000167
Heptachlor	ND		0.000334	0.000167
Aldrin	ND		0.000334	0.000167
Heptachlor epoxide	ND		0.000334	0.000167
Endosulfan I	ND		0.000334	0.000167
4,4'-DDE	ND		0.000334	0.000167
Dieldrin	ND		0.000334	0.000167
Endrin	ND		0.000334	0.000167
Endosulfan II	ND		0.000334	0.000167
4,4'-DDD	ND		0.000334	0.000167
Endrin aldehyde	ND		0.000334	0.000167
Endosulfan sulfate	ND		0.000334	0.000167
4,4'-DDT	ND		0.000334	0.000167
Endrin ketone	ND		0.000334	0.000167
Methoxychlor	ND		0.000334	0.000167
alpha-Chlordane	ND		0.000334	0.000167
gamma-Chlordane	ND		0.000334	0.000167
Toxaphene	ND		0.00418	0.002
Endosulfan (I and II)	ND		0.000334	0.000167
Chlordane (alpha and gamma)	ND		0.000334	0.000167

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

## INTEGRATED ANALYTICAL LABORATORIES

## PESTICIDES

Lab ID: BLKA180606-02

Client ID: Pest

Date Received: NA

Date Extracted: 06/06/2018

Date Analyzed: 06/06/2018

Data file: V0777.D 06/06/2018 13:04

GC Column: RTX-CLP1/CLP2

Sample wt/vol: 1000ml

Matrix-Units: Aqueous- $\mu$ g/L

% Moisture: 100

Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.010	0.005
beta-BHC	ND		0.010	0.005
gamma-BHC (Lindane)	ND		0.010	0.005
delta-BHC	ND		0.010	0.005
Heptachlor	ND		0.010	0.005
Aldrin	ND		0.010	0.005
Heptachlor epoxide	ND		0.010	0.005
Endosulfan I	ND		0.010	0.005
4,4'-DDE	ND		0.010	0.005
Dieldrin	ND		0.010	0.005
Endrin	ND		0.010	0.005
Endosulfan II	ND		0.010	0.005
4,4'-DDD	ND		0.010	0.005
Endrin aldehyde	ND		0.010	0.005
Endosulfan sulfate	ND		0.010	0.005
4,4'-DDT	ND		0.010	0.005
Endrin ketone	ND		0.010	0.005
Methoxychlor	ND		0.010	0.005
alpha-Chlordane	ND		0.010	0.005
gamma-Chlordane	ND		0.010	0.005
Toxaphene	ND		0.125	0.060
Endosulfan (I and II)	ND		0.010	0.005
Chlordane (alpha and gamma)	ND		0.010	0.005

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

## INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS**Client/Project: HILLMAN/G6-2368

Lab ID: E18-04234-001

Client ID: S1

Date Collected: 05/30/18 09:40

Date Received: 05/31/18 17:27

Matrix-Units: Soil-mg/Kg (ppm)

% Moisture: 9.70

Batch #: 305

<b>Compound</b>	<b>Result</b>	<b>Q</b>	<b>DF</b>	<b>RL</b>	<b>MDL</b>	<b>Date Analyzed</b>	<b>Method</b>
Aluminum	8710		1	5.95	2.38	06/05/18 14:53	SW 6020B
Antimony	1.14		1	0.595	0.238	06/05/18 14:53	SW 6020B
Arsenic	5.76		1	0.595	0.179	06/05/18 14:53	SW 6020B
Barium	110		1	0.595	0.298	06/05/18 14:53	SW 6020B
Beryllium	0.527	J	1	0.595	0.179	06/05/18 14:53	SW 6020B
Cadmium	ND		1	0.595	0.357	06/05/18 14:53	SW 6020B
Calcium	7320		1	59.5	17.9	06/05/18 14:53	SW 6020B
Chromium	34.5		1	0.595	0.298	06/05/18 14:53	SW 6020B
Cobalt	8.36		1	0.595	0.179	06/05/18 14:53	SW 6020B
Copper	35.3		1	0.595	0.417	06/05/18 14:53	SW 6020B
Iron	17000		1	59.5	17.9	06/05/18 14:53	SW 6020B
Lead	222		1	0.595	0.298	06/05/18 14:53	SW 6020B
Magnesium	5940		1	59.5	17.9	06/05/18 14:53	SW 6020B
Manganese	474		1	0.595	0.417	06/05/18 14:53	SW 6020B
Mercury	0.301		1	0.025	0.0099	06/05/18 10:44	SW 7471B
Nickel	31.8		1	0.595	0.417	06/05/18 14:53	SW 6020B
Potassium	1270		1	59.5	23.8	06/05/18 14:53	SW 6020B
Selenium	2.47	J	1	4.17	1.79	06/05/18 14:53	SW 6020B
Silver	ND		1	0.595	0.357	06/05/18 14:53	SW 6020B
Sodium	163		1	59.5	23.8	06/05/18 14:53	SW 6020B
Thallium	0.335	J	1	0.595	0.298	06/05/18 14:53	SW 6020B
Vanadium	33.6		1	0.595	0.298	06/05/18 14:53	SW 6020B
Zinc	183		1	5.95	1.19	06/05/18 14:53	SW 6020B

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds

## INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS**Client/Project: HILLMAN/G6-2368

Lab ID: E18-04234-002

Client ID: S2

Date Collected: 05/30/18 10:15

Date Received: 05/31/18 17:27

Matrix-Units: Soil-mg/Kg (ppm)

% Moisture: 5.80

Batch #: 305

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Aluminum	1690		1	5.64	2.26	06/05/18 14:59	SW 6020B
Antimony	ND		1	0.564	0.226	06/05/18 14:59	SW 6020B
Arsenic	2.78		1	0.564	0.169	06/05/18 14:59	SW 6020B
Barium	61.9		1	0.564	0.282	06/05/18 14:59	SW 6020B
Beryllium	ND		1	0.564	0.169	06/05/18 14:59	SW 6020B
Cadmium	ND		1	0.564	0.338	06/05/18 14:59	SW 6020B
Calcium	14900		1	56.4	16.9	06/05/18 14:59	SW 6020B
Chromium	7.14		1	0.564	0.282	06/05/18 14:59	SW 6020B
Cobalt	1.53		1	0.564	0.169	06/05/18 14:59	SW 6020B
Copper	24.1		1	0.564	0.395	06/05/18 14:59	SW 6020B
Iron	6460		1	56.4	16.9	06/05/18 14:59	SW 6020B
Lead	45.3		1	0.564	0.282	06/05/18 14:59	SW 6020B
Magnesium	1190		1	56.4	16.9	06/05/18 14:59	SW 6020B
Manganese	68.4		1	0.564	0.395	06/05/18 14:59	SW 6020B
Mercury	0.049		1	0.023	0.0093	06/05/18 10:46	SW 7471B
Nickel	3.94		1	0.564	0.395	06/05/18 14:59	SW 6020B
Potassium	311		1	56.4	22.6	06/05/18 14:59	SW 6020B
Selenium	ND		1	3.95	1.69	06/05/18 14:59	SW 6020B
Silver	0.655		1	0.564	0.338	06/05/18 14:59	SW 6020B
Sodium	119		1	56.4	22.6	06/05/18 14:59	SW 6020B
Thallium	ND		1	0.564	0.282	06/05/18 14:59	SW 6020B
Vanadium	9.19		1	0.564	0.282	06/05/18 14:59	SW 6020B
Zinc	46.6		1	5.64	1.13	06/05/18 14:59	SW 6020B

ND = Analyzed for but Not Detected at the MDL

INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS**

Client/Project: HILLMAN/G6-2368

Lab ID: E18-04234-003

Client ID: S3

Date Collected: 05/30/18 10:45

Date Received: 05/31/18 17:27

Matrix-Units: Soil-mg/Kg (ppm)

% Moisture: 10.5

Batch #: 305

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Aluminum	3170		1	5.88	2.35	06/05/18 15:15	SW 6020B
Antimony	0.399	J	1	0.588	0.235	06/05/18 15:15	SW 6020B
Arsenic	2.58		1	0.588	0.176	06/05/18 15:15	SW 6020B
Barium	81.6		1	0.588	0.294	06/05/18 15:15	SW 6020B
Beryllium	0.243	J	1	0.588	0.176	06/05/18 15:15	SW 6020B
Cadmium	0.433	J	1	0.588	0.353	06/05/18 15:15	SW 6020B
Calcium	21800		1	58.8	17.6	06/05/18 15:15	SW 6020B
Chromium	129		1	0.588	0.294	06/05/18 15:15	SW 6020B
Cobalt	4.34		1	0.588	0.176	06/05/18 15:15	SW 6020B
Copper	19.8		1	0.588	0.412	06/05/18 15:15	SW 6020B
Iron	9820		1	58.8	17.6	06/05/18 15:15	SW 6020B
Lead	97.6		1	0.588	0.294	06/05/18 15:15	SW 6020B
Magnesium	8410		1	58.8	17.6	06/05/18 15:15	SW 6020B
Manganese	141		1	0.588	0.412	06/05/18 15:15	SW 6020B
Mercury	0.057		1	0.026	0.010	06/05/18 10:49	SW 7471B
Nickel	26.5		1	0.588	0.412	06/05/18 15:15	SW 6020B
Potassium	591		1	58.8	23.5	06/05/18 15:15	SW 6020B
Selenium	ND		1	4.12	1.76	06/05/18 15:15	SW 6020B
Silver	149		1	0.588	0.353	06/05/18 15:15	SW 6020B
Sodium	171		1	58.8	23.5	06/05/18 15:15	SW 6020B
Thallium	ND		1	0.588	0.294	06/05/18 15:15	SW 6020B
Vanadium	15.5		1	0.588	0.294	06/05/18 15:15	SW 6020B
Zinc	179		1	5.88	1.18	06/05/18 15:15	SW 6020B

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds

## INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS**Client/Project: HILLMAN/G6-2368

Lab ID: E18-04234-004

Client ID: S4

Date Collected: 05/30/18 11:10

Date Received: 05/31/18 17:27

Matrix-Units: Soil-mg/Kg (ppm)

% Moisture: 15.7

Batch #: 305

<b>Compound</b>	<b>Result</b>	<b>Q</b>	<b>DF</b>	<b>RL</b>	<b>MDL</b>	<b>Date Analyzed</b>	<b>Method</b>
Aluminum	6810		1	6.33	2.53	06/05/18 15:21	SW 6020B
Antimony	0.826		1	0.633	0.253	06/05/18 15:21	SW 6020B
Arsenic	3.28		1	0.633	0.190	06/05/18 15:21	SW 6020B
Barium	139		1	0.633	0.316	06/05/18 15:21	SW 6020B
Beryllium	0.276	J	1	0.633	0.190	06/05/18 15:21	SW 6020B
Cadmium	0.804		1	0.633	0.380	06/05/18 15:21	SW 6020B
Calcium	23200		1	63.3	19.0	06/05/18 15:21	SW 6020B
Chromium	92.0		1	0.633	0.316	06/05/18 15:21	SW 6020B
Cobalt	2.59		1	0.633	0.190	06/05/18 15:21	SW 6020B
Copper	20.5		1	0.633	0.443	06/05/18 15:21	SW 6020B
Iron	9570		1	63.3	19.0	06/05/18 15:21	SW 6020B
Lead	150		1	0.633	0.316	06/05/18 15:21	SW 6020B
Magnesium	3270		1	63.3	19.0	06/05/18 15:21	SW 6020B
Manganese	144		1	0.633	0.443	06/05/18 15:21	SW 6020B
Mercury	0.219		1	0.027	0.011	06/05/18 10:52	SW 7471B
Nickel	10.3		1	0.633	0.443	06/05/18 15:21	SW 6020B
Potassium	662		1	63.3	25.3	06/05/18 15:21	SW 6020B
Selenium	ND		1	4.43	1.90	06/05/18 15:21	SW 6020B
Silver	131		1	0.633	0.380	06/05/18 15:21	SW 6020B
Sodium	860		1	63.3	25.3	06/05/18 15:21	SW 6020B
Thallium	ND		1	0.633	0.316	06/05/18 15:21	SW 6020B
Vanadium	17.0		1	0.633	0.316	06/05/18 15:21	SW 6020B
Zinc	301		1	6.33	1.27	06/05/18 15:21	SW 6020B

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds

## INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS**Client/Project: HILLMAN/G6-2368

Lab ID: E18-04234-005

Client ID: S5

Date Collected: 05/30/18 11:40

Date Received: 05/31/18 17:27

Matrix-Units: Soil-mg/Kg (ppm)

% Moisture: 9.10

Batch #: 305

<b>Compound</b>	<b>Result</b>	<b>Q</b>	<b>DF</b>	<b>RL</b>	<b>MDL</b>	<b>Date Analyzed</b>	<b>Method</b>
Aluminum	2440		1	5.78	2.31	06/05/18 15:26	SW 6020B
Antimony	0.809		1	0.578	0.231	06/05/18 15:26	SW 6020B
Arsenic	4.03		1	0.578	0.173	06/05/18 15:26	SW 6020B
Barium	85.0		1	0.578	0.289	06/05/18 15:26	SW 6020B
Beryllium	0.232	J	1	0.578	0.173	06/05/18 15:26	SW 6020B
Cadmium	0.384	J	1	0.578	0.347	06/05/18 15:26	SW 6020B
Calcium	6500		1	57.8	17.3	06/05/18 15:26	SW 6020B
Chromium	89.8		1	0.578	0.289	06/05/18 15:26	SW 6020B
Cobalt	2.75		1	0.578	0.173	06/05/18 15:26	SW 6020B
Copper	18.1		1	0.578	0.404	06/05/18 15:26	SW 6020B
Iron	18300		1	57.8	17.3	06/05/18 15:26	SW 6020B
Lead	802		1	0.578	0.289	06/05/18 15:26	SW 6020B
Magnesium	1540		1	57.8	17.3	06/05/18 15:26	SW 6020B
Manganese	107		1	0.578	0.404	06/05/18 15:26	SW 6020B
Mercury	0.463		1	0.026	0.010	06/05/18 11:00	SW 7471B
Nickel	8.90		1	0.578	0.404	06/05/18 15:26	SW 6020B
Potassium	358		1	57.8	23.1	06/05/18 15:26	SW 6020B
Selenium	ND		1	4.04	1.73	06/05/18 15:26	SW 6020B
Silver	120		1	0.578	0.347	06/05/18 15:26	SW 6020B
Sodium	132		1	57.8	23.1	06/05/18 15:26	SW 6020B
Thallium	ND		1	0.578	0.289	06/05/18 15:26	SW 6020B
Vanadium	12.1		1	0.578	0.289	06/05/18 15:26	SW 6020B
Zinc	212		1	5.78	1.16	06/05/18 15:26	SW 6020B

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds

## INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS**Client/Project: HILLMAN/G6-2368

Lab ID: E18-04234-006

Client ID: S6

Date Collected: 05/30/18 12:10

Date Received: 05/31/18 17:27

Matrix-Units: Soil-mg/Kg (ppm)

% Moisture: 4.10

Batch #: 305

<b>Compound</b>	<b>Result</b>	<b>Q</b>	<b>DF</b>	<b>RL</b>	<b>MDL</b>	<b>Date Analyzed</b>	<b>Method</b>
Aluminum	1390		1	5.20	2.08	06/05/18 14:15	SW 6020B
Antimony	ND		1	0.520	0.208	06/05/18 14:15	SW 6020B
Arsenic	1.42		1	0.520	0.156	06/05/18 14:15	SW 6020B
Barium	13.0		1	0.520	0.260	06/05/18 14:15	SW 6020B
Beryllium	ND		1	0.520	0.156	06/05/18 14:15	SW 6020B
Cadmium	ND		1	0.520	0.312	06/05/18 14:15	SW 6020B
Calcium	5810		1	52.0	15.6	06/05/18 14:15	SW 6020B
Chromium	7.31		1	0.520	0.260	06/05/18 14:15	SW 6020B
Cobalt	1.23		1	0.520	0.156	06/05/18 14:15	SW 6020B
Copper	14.6		1	0.520	0.364	06/05/18 14:15	SW 6020B
Iron	3530		1	52.0	15.6	06/05/18 14:15	SW 6020B
Lead	24.8		1	0.520	0.260	06/05/18 14:15	SW 6020B
Magnesium	2100		1	52.0	15.6	06/05/18 14:15	SW 6020B
Manganese	50.0		1	0.520	0.364	06/05/18 14:15	SW 6020B
Mercury	0.056		1	0.026	0.010	06/05/18 10:33	SW 7471B
Nickel	3.41		1	0.520	0.364	06/05/18 14:15	SW 6020B
Potassium	189		1	52.0	20.8	06/05/18 14:15	SW 6020B
Selenium	ND		1	3.64	1.56	06/05/18 14:15	SW 6020B
Silver	ND		1	0.520	0.312	06/05/18 14:15	SW 6020B
Sodium	48.3	J	1	52.0	20.8	06/05/18 14:15	SW 6020B
Thallium	ND		1	0.520	0.260	06/05/18 14:15	SW 6020B
Vanadium	7.07		1	0.520	0.260	06/05/18 14:15	SW 6020B
Zinc	16.7		1	5.20	1.04	06/05/18 14:15	SW 6020B

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds

## INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS**Client/Project: HILLMAN/G6-2368

Lab ID: E18-04234-007  
 Client ID: GW1  
 Date Collected: 05/30/18  
 Date Received: 05/31/18 17:27  
 Matrix-Units: Aqueous-ug/L (ppb)  
 % Moisture: 100  
 Batch #: 307

<b>Compound</b>	<b>Result</b>	<b>Q</b>	<b>DF</b>	<b>RL</b>	<b>MDL</b>	<b>Date Analyzed</b>	<b>Method</b>
Aluminum	171		1	20.0	8.00	06/06/18 14:12	SW 6020B
Antimony	2.54		1	2.00	1.20	06/06/18 14:12	SW 6020B
Arsenic	1.55	J	1	2.00	0.600	06/06/18 14:12	SW 6020B
Barium	34.8		1	2.00	1.20	06/06/18 14:12	SW 6020B
Beryllium	ND		1	1.00	0.320	06/06/18 14:12	SW 6020B
Cadmium	ND		1	2.00	1.00	06/06/18 14:12	SW 6020B
Calcium	96100		1	200	60.0	06/06/18 14:12	SW 6020B
Chromium	3.92		1	2.00	1.00	06/06/18 14:12	SW 6020B
Cobalt	ND		1	2.00	0.600	06/06/18 14:12	SW 6020B
Copper	ND		1	2.00	1.00	06/06/18 14:12	SW 6020B
Iron	362		1	200	60.0	06/06/18 14:12	SW 6020B
Lead	1.86	J	1	2.00	1.20	06/06/18 14:12	SW 6020B
Magnesium	14000		1	200	60.0	06/06/18 14:12	SW 6020B
Manganese	14.2		1	2.00	1.40	06/06/18 14:12	SW 6020B
Mercury	ND		1	0.500	0.200	06/06/18 09:29	SW 7470A
Nickel	2.67		1	2.00	1.20	06/06/18 14:12	SW 6020B
Potassium	5650		1	200	80.0	06/06/18 14:12	SW 6020B
Selenium	6.68	J	1	20.0	6.00	06/06/18 14:12	SW 6020B
Silver	ND		1	2.00	1.20	06/06/18 14:12	SW 6020B
Sodium	32700		1	200	80.0	06/06/18 14:12	SW 6020B
Thallium	ND		1	2.00	1.20	06/06/18 14:12	SW 6020B
Vanadium	5.27		1	2.00	0.600	06/06/18 14:12	SW 6020B
Zinc	105		1	20.0	8.00	06/06/18 14:12	SW 6020B

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds

## INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS**Client/Project: HILLMAN/G6-2368

Lab ID: E18-04234-008

Client ID: GW1 - FILT

Date Collected: 05/30/18

Date Received: 05/31/18 17:27

Matrix-Units: Aqueous-ug/L (ppb)

% Moisture: 100

Batch #: 307

<b>Compound</b>	<b>Result</b>	<b>Q</b>	<b>DF</b>	<b>RL</b>	<b>MDL</b>	<b>Date Analyzed</b>	<b>Method</b>
Aluminum	ND		1	20.0	8.00	06/06/18 15:07	SW 6020B
Antimony	2.61	X	1	2.00	1.20	06/06/18 15:07	SW 6020B
Arsenic	1.59	JX	1	2.00	0.600	06/06/18 15:07	SW 6020B
Barium	30.1		1	2.00	1.20	06/06/18 15:07	SW 6020B
Beryllium	ND		1	1.00	0.320	06/06/18 15:07	SW 6020B
Cadmium	ND		1	2.00	1.00	06/06/18 15:07	SW 6020B
Calcium	90800		1	200	60.0	06/06/18 15:07	SW 6020B
Chromium	ND		1	2.00	1.00	06/06/18 15:07	SW 6020B
Cobalt	ND		1	2.00	0.600	06/06/18 15:07	SW 6020B
Copper	ND		1	2.00	1.00	06/06/18 15:07	SW 6020B
Iron	ND		1	200	60.0	06/06/18 15:07	SW 6020B
Lead	ND		1	2.00	1.20	06/06/18 15:07	SW 6020B
Magnesium	13300		1	200	60.0	06/06/18 15:07	SW 6020B
Manganese	14.4	X	1	2.00	1.40	06/06/18 15:07	SW 6020B
Mercury	ND		1	0.500	0.200	06/06/18 09:39	SW 7470A
Nickel	1.82	J	1	2.00	1.20	06/06/18 15:07	SW 6020B
Potassium	5310		1	200	80.0	06/06/18 15:07	SW 6020B
Selenium	6.16	J	1	20.0	6.00	06/06/18 15:07	SW 6020B
Silver	ND		1	2.00	1.20	06/06/18 15:07	SW 6020B
Sodium	31300		1	200	80.0	06/06/18 15:07	SW 6020B
Thallium	ND		1	2.00	1.20	06/06/18 15:07	SW 6020B
Vanadium	4.94		1	2.00	0.600	06/06/18 15:07	SW 6020B
Zinc	97.1		1	20.0	8.00	06/06/18 15:07	SW 6020B

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds

X = Samples analyzed for total and dissolved metals may have slightly different concentrations due to normal variations in the analytical process. Slightly higher concentrations present in dissolved versus total analyses can occur even when all QC are acceptable. A 20% RPD between total and dissolved results is used to evaluate if the concentrations are statistically indistinguishable.

**METALS QUALITY CONTROL**  
**BLANK 1 RESULTS SUMMARY**

06/06/2018 02:07 PM

Batch (Page) #: 307

Associated Lab E18-04234, E18-04245, E18-04262, E18-04276, E18-04347

Case for Blank

1:

Matrix: Aqueous

Unit: ppb ( $\mu\text{g/L}$ )

Method: 6020B/7470A

ANALYTE	1/2 Sample RL	REAGENT BLANK BLKA180605-01
Aluminum	10.0	ND
Antimony	1.00	ND
Arsenic	1.00	ND
Barium	1.00	ND
Beryllium	0.500	ND
Cadmium	1.00	ND
Calcium	100	ND
Chromium	1.00	ND
Cobalt	1.00	ND
Copper	1.00	ND
Iron	100	ND
Lead	1.00	ND
Magnesium	100	ND
Manganese	1.00	ND
Mercury	0.250	ND
Nickel	1.00	ND
Potassium	100	ND
Selenium	10.0	ND
Silver	1.00	ND
Sodium	100	ND
Thallium	1.00	ND
Vanadium	1.00	ND
Zinc	10.0	ND

Associated Sample for Blank 1:

04234-007~008; 04245-001~005; 04262-001~007

04276-001; 04347-007~010

**METALS QUALITY CONTROL**  
**BLANK 1 RESULTS SUMMARY**

06/05/2018 02:10 PM

Batch (Page) #: 305

Associated Lab E18-04234, E18-04270, E18-04271, E18-04304

Case for Blank

1:

Matrix: Soil

Unit: ppm (mg/kg)

Method: 6020B/7471B

ANALYTE	1/2 Sample RL	REAGENT BLANK BLKS180604-01
Aluminum	2.50	ND
Antimony	0.250	ND
Arsenic	0.250	ND
Barium	0.250	ND
Beryllium	0.250	ND
Cadmium	0.250	ND
Calcium	25.0	ND
Chromium	0.250	ND
Cobalt	0.250	ND
Copper	0.250	ND
Iron	25.0	ND
Lead	0.250	ND
Magnesium	25.0	ND
Manganese	0.250	ND
Mercury	0.013	ND
Nickel	0.250	ND
Potassium	25.0	ND
Selenium	1.75	ND
Silver	0.250	ND
Sodium	25.0	ND
Thallium	0.250	ND
Vanadium	0.250	ND
Zinc	2.50	ND

Associated Sample for Blank 1:

04234-001~006; 04270-012~019; 04271-001,007

04304-001

## SAMPLE TRACKING

## Chain of Custody Record

Customer Information		Reporting Information		***Rush TAT Charge		Deliverables		EDDs		Concentrations Expected:	
Company: <i>Hillmann Consulting</i>	REPORT TO: Address: <i>1600 Ft 21 East</i>	24 hr - 100%... 48 hr - 75%... 72 hr - 50%... 96 hr - 35%... 5 day - 25%... 6-9 day - 10%	NJ, CT, PA <input type="checkbox"/> Results Only <input type="checkbox"/> Reduced <input type="checkbox"/> Regulatory/ <input type="checkbox"/> Full*	NY <input checked="" type="checkbox"/> A <input type="checkbox"/> B*	NJ SRP <input type="checkbox"/> NYSDEC EQUIIS <input type="checkbox"/> lab approved custom EDD	No EDD REQ'D <input type="checkbox"/>	No EDD REQ'D <input type="checkbox"/>	Low <input type="checkbox"/> Med <input type="checkbox"/> High <input type="checkbox"/>	New Jersey <input type="checkbox"/> New York <input checked="" type="checkbox"/>	Regulatory Requirement	
Telephone #: <i>902 477 0580</i>	Attn: <i>FAX #</i>	Turn-Around Time (TAT)		5 days							
Project Manager: <i>Chris Thorsdason</i>		INVOICE TO: Address:		Standard (10 business days) Verbal Rush/date needed (only if pre-approved)**		Hard Copy: Std 3 week Petroleum Hydrocarbons - Selection is REQUIRED <input type="checkbox"/> NJ EPH-DRO - Category 1 <input type="checkbox"/> NJ EPH-C40 - Category 2 <input type="checkbox"/> NJ EPH-Fractionated - Cat 2		Other - call for price TAT for PHC (if other than 2 weeks): <input type="checkbox"/> CP-51 Table 2 or 3 (selection required) <input checked="" type="checkbox"/> OTHER Reg. Req. (specify)		GWQS <input type="checkbox"/> IGW <input type="checkbox"/> SRS <input type="checkbox"/> Ecological <input type="checkbox"/> DW <input type="checkbox"/> SPLP <input type="checkbox"/>	
Project Location (State): <i>NY</i>		Attn: <i>PO #</i>	Quote #	ANALYTICAL PARAMETERS (please note if contingent)							
Bottle Order #: <i></i>		Sample Matrix		DW - Drinking Water WW - Waste Water GW - Groundwater SW - Surface Water LIQ - Liquid (Specify)		Oil - Oil S - Soil SOL - Solid SL - Sludge W - Wipe B - Biphasic		TEST PCB 200 200 200 200S			
"Report to"/"Invoice To" same as above		Sampled by: <i>Brian Peters</i>		Sampling	Date	Matrix	# containers	IAL #	Sample Specific Notes:		
COMPLETED BY IAL: Field Sampling      Equipment Rental		SAMPLE INFORMATION									
Client ID	Depth (ft only)										
<i>S1</i>	<i>5ft</i>	<i>5/30/18</i>	<i>940am</i>	<i>S</i>	<i>4</i>	<i>1</i>	<i>1</i>	<i>1</i>			
<i>S2</i>	<i>5ft</i>	<i>10/5/18</i>	<i>1045am</i>	<i>S</i>	<i>4</i>	<i>1</i>	<i>1</i>	<i>1</i>			
<i>S3</i>	<i>5ft</i>	<i>10/5/18</i>	<i>1045am</i>	<i>S</i>	<i>4</i>	<i>1</i>	<i>1</i>	<i>1</i>			
<i>S4</i>	<i>6ft</i>	<i>11/10/18</i>	<i>1110am</i>	<i>S</i>	<i>4</i>	<i>1</i>	<i>1</i>	<i>1</i>			
<i>S5</i>	<i>6ft</i>	<i>11/10/18</i>	<i>1140am</i>	<i>S</i>	<i>4</i>	<i>1</i>	<i>1</i>	<i>1</i>			
<i>S6</i>	<i>4ft</i>	<i>12/10/18</i>	<i>1210pm</i>	<i>GW</i>	<i>9</i>	<i>1</i>	<i>1</i>	<i>1</i>			
<i>(GW)</i>	<i>10ft</i>										
Known Hazard: YES / NO		Preservative Code:	Container Code:	Preservative (use code)		Special Instructions/QC Requirements & Comments:		FOR LAB USE ONLY			
Describe:										SDG #: <i>1234</i>	
<i>Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day if samples rec'd at lab &gt; 5PM.</i>		<i>BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS &amp; CONDITIONS (found on rear of pink copy).</i>								Cooler Temp: <i>6 °C</i>	
										Date: <i>5/31/18</i>	
										Time: <i>17:00</i>	
										Carrier (check one): <input type="checkbox"/> IAL Courier <input type="checkbox"/> Client Courier <input type="checkbox"/> FedEx/UUPS***	
										*****Tracking #:	
										IAL Rev 2/2014	
										LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK	
										PAGE: <i>of</i>	

# PROJECT INFORMATION

**RUSH**
**E18-04234: G6-2368**

**To:** Chris Hirschmann  
Hillmann Consulting, LLC  
Fax: 1(908) 686-2636  
EMail: chirschmann@hillmanngroup.com;

**Report To**

Hillmann Consulting, LLC  
1600 Route 22 East  
Union, NJ 07083  
Attn: Chris Hirschmann

**Bill To**

Hillmann Consulting, LLC  
1600 Route 22 East  
Union, NJ 07083  
Attn: Chris Hirschmann

Report Format	P.O. #	Received At Lab	TPHC Due	Verbal Due	Hardcopy Due
Category A		May 31, 2018 @ 17:27	NA	Jun 07, 2018	Jun 21, 2018 *

\* Any *Conditional or Hold* status will delay final hardcopy report sent date.

**Diskette Req.** Not Required

\*\* QC Requirement (must meet): NY Part 375-6.8(UUSCO+RUSCO)

Lab ID	Client Sample ID	Depth	Sampling Time	Matrix	Unit	Field pH/Temp
04234-001	S1	5	05/30/18@09:40	Soil	mg/Kg (ppm)	
04234-002	S2	5	05/30/18@10:15	Soil	mg/Kg (ppm)	
04234-003	S3	5	05/30/18@10:45	Soil	mg/Kg (ppm)	
04234-004	S4	6	05/30/18@11:10	Soil	mg/Kg (ppm)	
04234-005	S5	6	05/30/18@11:40	Soil	mg/Kg (ppm)	
04234-006	S6	4	05/30/18@12:10	Soil	mg/Kg (ppm)	
04234-007	GW1	10	05/30/18	Aqueous	ug/L (ppb)	
04234-008	GW1 - FILT	NA	05/30/18	Aqueous	ug/L (ppb)	

Sample #	Test	Status	QA Method	TAT	Holding Time Expires
001	TCL VO + 15	Analyze	8260C	RUSH 1 WK	6/13/2018
	TCL BN + 15	Analyze	8270D	RUSH 1 WK	6/13/2018
	TCL Pesticides	Analyze	8081B	RUSH 1 WK	6/13/2018
	TCL PCB	Analyze	8082A	RUSH 1 WK	5/30/2019
	TAL Metals	Analyze	6020B/7471B	RUSH 1 WK	6/27/2018
002	TCL VO + 15	Analyze	8260C	RUSH 1 WK	6/13/2018
	TCL BN + 15	Analyze	8270D	RUSH 1 WK	6/13/2018
	TCL Pesticides	Analyze	8081B	RUSH 1 WK	6/13/2018
	TCL PCB	Analyze	8082A	RUSH 1 WK	5/30/2019
	TAL Metals	Analyze	6020B/7471B	RUSH 1 WK	6/27/2018
003	TCL VO + 15	Analyze	8260C	RUSH 1 WK	6/13/2018
	TCL BN + 15	Analyze	8270D	RUSH 1 WK	6/13/2018
	TCL PCB	Analyze	8082A	RUSH 1 WK	5/30/2019
	TCL Pesticides	Analyze	8081B	RUSH 1 WK	6/13/2018
	TAL Metals	Analyze	6020B/7471B	RUSH 1 WK	6/27/2018



# PROJECT INFORMATION

**RUSH**
**E18-04234: G6-2368**

<u>Sample #</u>	<u>Test</u>	<u>Status</u>	<u>QA Method</u>	<u>TAT</u>	<u>Holding Time Expires</u>
004	TCL VO + 15	Analyze	8260C	RUSH 1 WK	6/13/2018
	TCL BN + 15	Analyze	8270D	RUSH 1 WK	6/13/2018
	TCL PCB	Analyze	8082A	RUSH 1 WK	5/30/2019
	TCL Pesticides	Analyze	8081B	RUSH 1 WK	6/13/2018
	TAL Metals	Analyze	6020B/7471B	RUSH 1 WK	6/27/2018
005	TCL VO + 15	Analyze	8260C	RUSH 1 WK	6/13/2018
	TCL BN + 15	Analyze	8270D	RUSH 1 WK	6/13/2018
	TCL PCB	Analyze	8082A	RUSH 1 WK	5/30/2019
	TCL Pesticides	Analyze	8081B	RUSH 1 WK	6/13/2018
	TAL Metals	Analyze	6020B/7471B	RUSH 1 WK	6/27/2018
006	TCL VO + 15	Analyze	8260C	RUSH 1 WK	6/13/2018
	TCL BN + 15	Analyze	8270D	RUSH 1 WK	6/13/2018
	TCL Pesticides	Analyze	8081B	RUSH 1 WK	6/13/2018
	TCL PCB	Analyze	8082A	RUSH 1 WK	5/30/2019
	TAL Metals	Analyze	6020B/7471B	RUSH 1 WK	6/27/2018
007	TCL VO + 15	Analyze	8260C	RUSH 1 WK	6/13/2018
	TCL BN + SIM + 15	Analyze	8270D SIM	RUSH 1 WK	6/6/2018
	TCL PCB	Analyze	8082A	RUSH 1 WK	5/30/2019
	TCL Pesticides	Analyze	8081B	RUSH 1 WK	6/6/2018
	Metals Filtration	Analyze		RUSH 1 WK	6/27/2018
	TAL Metals	Analyze	6020B/7471B	RUSH 1 WK	6/27/2018
008	TAL Metals	Analyze	6020B/7471B	RUSH 1 WK	6/27/2018

**Project Notes:****NOTE 1 taken by kfalconer on 06/01/2018 10:54**

SAMPLE 007, AWQS TOGS TABLE 1

**NOTE 2 taken by kfalconer on 06/04/2018 09:17**

RECEIVED A BOTTLE MARKED 'FILTER AT LAB' BUT NO INDICATION ON COC AS TO WHAT PARAMETER

PER CHRIS HIRSCHMANN, FILTER FOR TAL METALS

**NOTE 3 taken by kim on 06/05/2018 10:12**

3 ENCORS RECEIVED - 1 INTO MECH/2 INTO H2O



## INTEGRATED ANALYTICAL LABORATORIES, LLC

## SAMPLE RECEIPT VERIFICATION

CASE NO: E 18

04234

CLIENT:

Hullmann

COOLER TEMPERATURE: 2° - 6°C: 

( See Chain of Custody)

## Comments

COC: **COMPLETE** / INCOMPLETE  
KEY

- ✓ = YES/NA  
✗ = NO

VOA received:  Encore  IGW - Methanol  
 Terra Core  No Preservative

- ✓ Bottles Intact  
✓ no-Missing Bottles  
✓ no-Extra Bottles

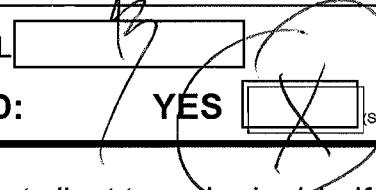
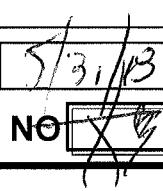
*Received 1,250 mL vials. Labeled filter at LAB  
For what parameter?*

- ✓ Sufficient Sample Volume  
✓ no-headspace/bubbles in VOs  
✓ Labels intact/correct  
✓ pH Check (exclude VOs)<sup>1</sup>  
✓ Correct bottles/preservative  
✓ Sufficient Holding/Prep Time<sup>1</sup>  
 Multiphasic Sample  
 Sample to be Subcontracted  
 Chain of Custody is Clear

<sup>1</sup>All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

*Chain not filled in correctly description for 7  
Labeled in 6 sept.*

SAMPLE(S) VERIFIED BY: INITIAL DATE  5/31/13

CORRECTIVE ACTION REQUIRED:

YES 

SEE BELOW

NO If COC is NOT clear, **STOP** until you get client to authorize/clarify work.

CLIENT NOTIFIED:

YES 

Date/ Time: \_\_\_\_\_

NO 

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY:

INITIAL 

DATE

6-4-18

# Laboratory Custody Chronicle

**IAL Case No.**

**E18-04234**

**Client** Hillmann Consulting, LLC

**Project** G6-2368

**Received On** 5/31/2018@17:27

**Department: Volatiles**

			<u>Prep. Date</u>	<u>Analyst</u>	<u>Analysis Date</u>	<u>Analyst</u>
TCL VO + 15	04234-001	Soil	n/a	n/a	6/ 5/18	Xing
"	-002	"	n/a	n/a	6/ 5/18	Xing
"	-003	"	n/a	n/a	6/ 5/18	Xing
"	-004	"	n/a	n/a	6/ 4/18	Mei
"	-005	"	n/a	n/a	6/ 5/18	Xing
"	-006	"	n/a	n/a	6/ 4/18	Mei
"	-007	Aqueous	n/a	n/a	6/ 7/18	Sylvia

**Department: Semivolatiles**

			<u>Prep. Date</u>	<u>Analyst</u>	<u>Analysis Date</u>	<u>Analyst</u>
TCL BN + 15	-001	Soil	6/ 5/18	Frank L.	6/ 5/18	Donnie
"	-002	"	6/ 5/18	Frank L.	6/ 5/18	Donnie
"	-003	"	6/ 5/18	Frank L.	6/ 5/18	Donnie
"	-004	"	6/ 5/18	Frank L.	6/ 5/18	Donnie
"	-005	"	6/ 5/18	Frank L.	6/ 5/18	Donnie
"	-006	"	6/ 5/18	Frank L.	6/ 5/18	Donnie
TCL BN + SIM + 15	-007	Aqueous	6/ 4/18	Frank L.	6/ 5/18	Trudy

**Department: GC**

			<u>Prep. Date</u>	<u>Analyst</u>	<u>Analysis Date</u>	<u>Analyst</u>
TCL PCB	-001	Soil	6/ 4/18	Archimede	6/ 6/18	Latha
"	-002	"	6/ 4/18	Archimede	6/ 6/18	Latha
"	-003	"	6/ 4/18	Archimede	6/ 6/18	Latha
"	-004	"	6/ 4/18	Archimede	6/ 6/18	Latha
"	-005	"	6/ 4/18	Archimede	6/ 6/18	Latha
"	-006	"	6/ 4/18	Archimede	6/ 6/18	Latha
"	-007	Aqueous	6/ 6/18	Archimede	6/ 6/18	Latha
TCL Pesticides	-001	Soil	6/ 4/18	Archimede	6/ 7/18	Iwona
"	-002	"	6/ 4/18	Archimede	6/ 7/18	Iwona
"	-003	"	6/ 4/18	Archimede	6/ 7/18	Iwona
"	-004	"	6/ 4/18	Archimede	6/ 7/18	Iwona
"	-005	"	6/ 4/18	Archimede	6/ 7/18	Iwona
"	-006	"	6/ 4/18	Archimede	6/ 7/18	Iwona
"	-007	Aqueous	6/ 6/18	Archimede	6/ 7/18	Iwona

**Department: Metals**

			<u>Prep. Date</u>	<u>Analyst</u>	<u>Analysis Date</u>	<u>Analyst</u>
TAL Metals	-001	Soil	6/ 4/18	Frank R.	6/ 5/18	Danielle
"	-002	"	6/ 4/18	Frank R.	6/ 5/18	Danielle
"	-003	"	6/ 4/18	Frank R.	6/ 5/18	Danielle
"	-004	"	6/ 4/18	Frank R.	6/ 5/18	Danielle
"	-005	"	6/ 4/18	Frank R.	6/ 5/18	Danielle
"	-006	"	6/ 4/18	Frank R.	6/ 5/18	Danielle
"	-007	Aqueous	6/ 5/18	Frank R.	6/ 6/18	Danielle
"	-008	"	6/ 5/18	Frank R.	6/ 6/18	Danielle

**LAST PAGE OF DOCUMENT**



## **ANALYTICAL DATA REPORT**

Hillmann Consulting, LLC  
1600 Route 22 East  
Union, NJ 07083

Project Name: **G6-2368**  
IAL Case Number: **E18-04347**

These data have been reviewed and accepted by:

A handwritten signature in black ink, appearing to read "Michael H. Leftin".

Michael H. Leftin, Ph.D.  
Laboratory Director

This report shall not be reproduced, except in its entirety, without the written consent of Integrated Analytical Laboratories, LLC. The test results included in this report relate only to the samples analyzed. The results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

---

273 Franklin Road  
Randolph, NJ 07869  
Phone: 973 361 4252  
Fax: 973 989 5288



IAL is a NELAP accredited lab (TNI01284) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).

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# ***Sample Summary***

***IAL Case No.***

**E18-04347**

***Client*** Hillmann Consulting, LLC

***Project*** G6-2368

***Received On*** 6/1/2018@17:05

<b><u>Lab ID</u></b>	<b><u>Client Sample ID</u></b>	<b><u>Depth</u></b>	<b><u>Top/Bottom</u></b>	<b><u>Sampling Time</u></b>	<b><u>Matrix</u></b>	<b><u># of Container</u></b>
04347-001	S7		3	5/31/2018@08:50	Soil	4
04347-002	S8		4	5/31/2018@09:20	Soil	4
04347-003	S9		3	5/31/2018@10:10	Soil	4
04347-004	S10		6	5/31/2018@10:40	Soil	4
04347-005	S11		9	5/31/2018@11:00	Soil	4
04347-006	S12		10	5/31/2018@11:30	Soil	4
04347-007	GW2		7	5/31/2018@09:30	Aqueous	7
04347-008	GW3		6	5/31/2018@11:40	Aqueous	8
04347-009	GW2-FILT		n/a	5/31/2018@09:30	Aqueous	
04347-010	GW3-FILT		n/a	5/31/2018@11:40	Aqueous	

# INTEGRATED ANALYTICAL LABORATORIES, LLC.

## DATA QUALIFIERS AND FLAGS

- B** Indicates the analyte found in the associated method blank and in the sample due to potential lab contamination.
- C** Indicates analyte is a common laboratory contaminant.
- D** Indicates analyte was reported from diluted analysis.
- E** Identifies a compound concentration that exceeds the upper level of the calibration range of the instrument
- J** Indicates an estimated value either when the concentration in the sample is less than the RL or for qualification of TICs
- M** Indicates matrix interference
- N** Presumptive evidence of a compound from the use of GC/MS library search.
- X** Indicates samples analyzed for total and dissolved metals differ at  $\leq 20\%$  RPD.
- Y** Indicates DO depletion in the BOD blank is  $> 0.20\text{ppm}$
- Z** Indicates internal standard failure. Sample results are either biased high or biased low.
- \$** Value outside NJDEP DKQP Limits
- \*** Result outside of QC limits

## PROJECT NOTES

- All results for soils, solids, and sludges are reported on a dry-weight basis except where noted
- All test results and QC are compliant with TNI or other applicable state agency requirements/guidance unless otherwise noted in the case narrative
- The case narrative for this SDG should be consulted to determine any non-conformances
- Any samples with 15-minute or "analyze immediately" holding times (e.g. pH, Dissolved Oxygen, Sulfite, etc.) which are analyzed in the laboratory are considered out of holding time
- IAL is a NELAP/TNI certified laboratory (TNI ID# TNI01284). IAL retains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).
- Certification is not required to perform analyses in the following states: AL, CO, DE, GA, HI, ID, IN, KY, MD, MI, MS, MO, MT, NE, NM, SD and TN. IAL can perform all analyses, except Drinking Water, within its scope of capabilities in these states.

## ACRONYMS AND ABBREVIATIONS

<b>CFU</b>	Colony Forming Unit	<b>ND</b>	Indicates analyte was analyzed for but not detected at MDL or RL (only if MDL is not used)
<b>CCB</b>	Continuing Calibration Blank		<b>NTU</b> Nephelometric Turbidity Units
<b>CCV</b>	Continuing Calibration Verification	<b>ppb</b>	Parts per billion. Reported as $\mu\text{g}/\text{L}$ or $\mu\text{g}/\text{kg}$
<b>DF</b>	Dilution Factor	<b>ppm</b>	Parts per million. Reported as $\text{mg}/\text{L}$ , $\mu\text{g/mL}$ or $\text{mg}/\text{kg}$
<b>DL</b>	Attached as a suffix to a diluted sample	<b>QC</b>	Quality Control
<b>DUP</b>	Duplicate	<b>% Rec</b>	Percent Recovery
<b>ICB</b>	Initial Calibration Blank	<b>RL</b>	Reporting Limit. The RL is typically determined by the concentration of the lowest standard in the calibration curve
<b>ICC</b>	Initial Calibration Curve		
<b>ICV</b>	Initial Calibration Verification		
<b>kg</b>	kilogram	<b>RPD</b>	Relative Percent Difference
<b>L</b>	Liter	<b>RSD</b>	Relative Standard Deviation
<b>LCS</b>	Laboratory Control Sample	<b>RT</b>	Retention Time
<b>LCSD</b>	Laboratory Control Sample Duplicate	<b>SU</b>	Standard Units
<b>MDL</b>	Method Detection Limit as determined according to 40 CFR Part 136 Appendix B	<b>TIC</b>	Tentatively Identified Compound AKA Library Search Compounds
<b>MF</b>	Membrane Filter		
<b>mg</b>	milligram ( $1000\text{mg} = 1\text{g}$ )	<b>TNI</b>	The NELAC (National Environmental Laboratory Accreditation Council) Institute
<b><math>\mu\text{g}</math></b>	microgram ( $1000\mu\text{g} = 1\text{mg}$ )		
<b>ml</b>	milliliter ( $1000\text{ml} = 1\text{L}$ )	<b>TNTC</b>	Too numerous to count
<b><math>\mu\text{l}</math></b>	microliter ( $1000\mu\text{l} = 1\text{ml}$ )	*	When attached to a compound name, indicates this analyte was analyzed by Method SW-846 8270 SIM
<b><math>\mu\text{mhos}</math></b>	Conductivity units - resistance expressed in ohms		
<b>MPN</b>	Most Probable Number	^	When attached to a compound name, indicates this analyte was analyzed by Method SW-846 8011 or EPA 504.1
<b>MS</b>	Matrix Spike		
<b>MSD</b>	Matrix Spike Duplicate	<	Less than; In conjunction with a numerical value, indicates a concentration less than the RL or MDL
<b>NA</b>	Not applicable		
<b>NC</b>	Not calculated		

**SAMPLE DELIVERY GROUP CASE NARRATIVE**  
**(Conformance / Non-Conformance Summary)**

INTEGRATED ANALYTICAL LABORATORIES, LLC  
SAMPLE DELIVERY GROUP CASE NARRATIVE

**SDG#: E18-04347**

Integrated Analytical Laboratories, LLC. received ten (10) samples\*\* from Hillmann Consulting, LLC (IAL SDG# **E18-04347**, Project: G6-2368) on June 1, 2018 for the analysis of :

- ( 8 ) TCL VO + 15
- ( 6 ) TCL BN + 15
- ( 2 ) TCL BN + SIM + 15
- ( 8 ) TCL PCB
- ( 8 ) TCL Pesticides
- ( 10 ) TAL Metals

\*\*Number of samples listed above may be greater than what is listed on the chain of custody. Any samples that require in-house filtration or splitting will be counted as separate samples.

Samples were received in good condition with documentation in order.  
Cooler temperature was acceptable at  $4 \pm 2^{\circ}\text{C}$

<b>Volatiles By SW 8260C</b>		<b>Batch: 180608</b>	<b>Matrix: Aqueous</b>
------------------------------	--	----------------------	------------------------

- QC**
- Calibration curve met QC criteria.
  - Internal standards recovery met QC criteria.
  - Surrogate percent recovery met QC criteria.
  - Method blank met QC criteria.
  - LCS percent recovery met QC criteria.
  - MS/MSD RPD met QC criteria.
  - MS/MSD percent recovery met QC criteria.
- E18-04347**
- All samples were analyzed within holding time.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E18-04347-007	1	NA
E18-04347-008	1	NA

<b>Volatiles By SW 8260C</b>		<b>Batch: F180605-01, F180605-02</b>	<b>Matrix: Soil</b>
------------------------------	--	--------------------------------------	---------------------

- QC**
- Calibration curve met QC criteria.
  - Internal standards recovery met QC criteria.
  - Surrogate percent recovery met QC criteria.
  - Method blank met QC criteria.
  - LCS Percent Recovery met QC criteria.
  - MS/MSD RPD met QC criteria.
  - MS/MSD percent recovery met QC criteria.
- E18-04347**
- All samples were analyzed within holding time.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E18-04347-001	1	NA
E18-04347-002	1	NA
E18-04347-003	1	NA
E18-04347-004	1	NA
E18-04347-005	1	NA
E18-04347-006	1	NA

**INTEGRATED ANALYTICAL LABORATORIES, LLC**  
**SAMPLE DELIVERY GROUP CASE NARRATIVE**

**SDG#: E18-04347**

<b>Semivolatiles By SW 8270D</b>		<b>Batch: 180605-03</b>	<b>Matrix: Soil</b>
----------------------------------	--	-------------------------	---------------------

- |                  |  |
|------------------|--|
| <b>QC</b>        | <ul style="list-style-type: none"> <li>- Calibration curve met QC criteria.</li> <li>- Internal standard recovery met QC criteria.</li> <li>- Surrogate recovery met QC criteria.</li> <li>- Method blank met QC criteria.</li> <li>- LCS percent recovery met QC criteria. NJDEP DKQP criteria not met.</li> <li>- MS/MSD RPD met QC criteria. NJDEP DKQP criteria not met.</li> <li>- MS/MSD percent recovery met QC criteria. NJDEP DKQP criteria not met.</li> </ul> |
| <b>E18-04347</b> | <ul style="list-style-type: none"> <li>- Extraction holding time met requirement for each sample.</li> <li>- Analysis holding time met requirement for each sample.</li> </ul>   |

Dilution Summary:

Sample ID	DF(s)	Dilution For
E18-04347-001	2	Matrix Interference.
E18-04347-002	1	NA
E18-04347-003	1	NA
E18-04347-004	1	NA
E18-04347-005	1	NA
E18-04347-006	1	NA

The result reported for 1,2-Diphenylhydrazine is also representative of Azobenzene. 1,2-Diphenylhydrazine rapidly decomposes to Azobenzene when exposed to water or heat. Analytical results from analysis of 1,2-Diphenylhydrazine will be directly compared to the applicable criteria for Azobenzene and/or 1,2-Diphenylhydrazine.

<b>Semivolatiles By SW 8270D SIM</b>		<b>Batch: 180607-03</b>	<b>Matrix: Aqueous</b>
--------------------------------------	--	-------------------------	------------------------

- |                  |  |
|------------------|--|
| <b>QC</b>        | <ul style="list-style-type: none"> <li>- Calibration curve met QC criteria.</li> <li>- Internal standard recovery met QC criteria.</li> <li>- Surrogate recovery met QC criteria.</li> <li>- Method blank met QC criteria.</li> <li>- LCS percent recovery met QC criteria. NJDEP DKQP criteria not met.</li> <li>- MS/MSD RPD met QC criteria.</li> <li>- MS/MSD percent recovery met QC criteria. NJDEP DKQP criteria not met.</li> </ul>  |
| <b>E18-04347</b> | <ul style="list-style-type: none"> <li>- Extraction holding time met requirement for each sample.</li> <li>- Analysis holding time met requirement for each sample.</li> <li>- Sample(s) used for aqueous Semivolatiles analyses contained varying levels of sediment. Precautions were taken to take an aliquot representative of the sample. However, due to the nature of aqueous samples containing sediment, reproduction of results may prove difficult. The rough amount of sediment present in the samples is as follows: 04347-007:2%; 04347-008:1%.</li> </ul> |

Dilution Summary:

Sample ID	DF(s)	Dilution For
E18-04347-007	1	NA
E18-04347-008	1	NA

The result reported for 1,2-Diphenylhydrazine is also representative of Azobenzene. 1,2-Diphenylhydrazine rapidly decomposes to Azobenzene when exposed to water or heat. Analytical results from analysis of 1,2-Diphenylhydrazine will be directly compared to the applicable criteria for Azobenzene and/or 1,2-Diphenylhydrazine.

**INTEGRATED ANALYTICAL LABORATORIES, LLC**  
**SAMPLE DELIVERY GROUP CASE NARRATIVE**

**SDG#: E18-04347**

<b>PCB By SW 8082A</b>	<b>Batch: 180606-02</b>	<b>Matrix: Aqueous</b>
------------------------	-------------------------	------------------------

- |                  |  |
|------------------|--|
| <b>QC</b>        | <ul style="list-style-type: none"> <li>- Calibration curve met QC criteria.</li> <li>- Surrogate percent recovery met QC criteria.</li> <li>- Method blank met QC criteria.</li> <li>- LCS Percent Recovery met QC criteria.</li> <li>- RPD between MS/MSD met QC criteria.</li> <li>- MS/MSD Percent Recovery met QC criteria.</li> <li>- The following samples were cleaned up using method 3660B to remove sulfur: 007, 008.</li> </ul> |
| <b>E18-04347</b> | <ul style="list-style-type: none"> <li>- All samples were extracted within holding time.</li> <li>- All samples were analyzed within holding time.</li> <li>- Retention Time Shift met QC criteria.</li> </ul>   |

Dilution Summary:

Sample ID	DF(s)	Dilution For
E18-04347-007	1	NA
E18-04347-008	1	NA

<b>PCB By SW 8082A</b>	<b>Batch: 180606-08</b>	<b>Matrix: Soil</b>
------------------------	-------------------------	---------------------

- |                  |  |
|------------------|--|
| <b>QC</b>        | <ul style="list-style-type: none"> <li>- Calibration curve met QC criteria.</li> <li>- Surrogate percent recovery did not meet QC criteria for sample 002 ,due to matrix interference. NJDEP DKQP criteria not met.</li> <li>- Method blank met QC criteria.</li> <li>- LCS Percent Recovery met QC criteria.</li> <li>- RPD between MS/MSD met QC criteria.</li> <li>- MS/MSD Percent Recovery met QC criteria.</li> <li>- The following samples were cleaned up using method 3665A: 001, 002, 003, 004, 005, 006.</li> <li>- The following samples were cleaned up using method 3660B to remove sulfur: 001, 002, 003, 004, 005, 006.</li> </ul> |
| <b>E18-04347</b> | <ul style="list-style-type: none"> <li>- All samples were extracted within holding time.</li> <li>- All samples were analyzed within holding time.</li> <li>- Retention Time Shift met QC criteria.</li> </ul>   |

Dilution Summary:

Sample ID	DF(s)	Dilution For
E18-04347-001	5	Matrix Interference.
E18-04347-002	5	Matrix Interference.
E18-04347-003	5	Matrix Interference.
E18-04347-004	5	Matrix Interference.
E18-04347-005	1	NA
E18-04347-006	1	NA

**INTEGRATED ANALYTICAL LABORATORIES, LLC**  
**SAMPLE DELIVERY GROUP CASE NARRATIVE**

**SDG#: E18-04347**

<b>Pesticides By SW 8081B</b>		<b>Batch: 180606-02</b>	<b>Matrix: Aqueous</b>																					
<b>QC</b>	<ul style="list-style-type: none"> <li>- Calibration curve met QC criteria.</li> <li>- Surrogate percent recovery met QC criteria.</li> <li>- Method blank met QC criteria.</li> <li>- LCS Percent Recovery met QC criteria.</li> <li>- RPD between MS/MSD met QC criteria.</li> <li>- MS/MSD Percent Recovery met QC criteria.</li> <li>- The following samples were cleaned up using method 3660B to remove sulfur: 007, 008.</li> </ul>																							
<b>E18-04347</b>	<ul style="list-style-type: none"> <li>- All samples were extracted within holding time.</li> <li>- All samples were analyzed within holding time.</li> <li>- Retention Time Shift met QC criteria.</li> </ul> <p>Dilution Summary:</p> <table> <thead> <tr> <th>Sample ID</th> <th>DF(s)</th> <th>Dilution For</th> </tr> </thead> <tbody> <tr> <td>E18-04347-007</td> <td>1</td> <td>NA</td> </tr> <tr> <td>E18-04347-008</td> <td>1</td> <td>NA</td> </tr> </tbody> </table>			Sample ID	DF(s)	Dilution For	E18-04347-007	1	NA	E18-04347-008	1	NA												
Sample ID	DF(s)	Dilution For																						
E18-04347-007	1	NA																						
E18-04347-008	1	NA																						
<b>Pesticides By SW 8081B</b>		<b>Batch: 180606-08</b>	<b>Matrix: Soil</b>																					
<b>QC</b>	<ul style="list-style-type: none"> <li>- Calibration curve met QC criteria.</li> <li>- Surrogate percent recovery met QC criteria.</li> <li>- Method blank met QC criteria.</li> <li>- LCS Percent Recovery met QC criteria.</li> <li>- RPD between MS/MSD met QC criteria.</li> <li>- MS/MSD Percent Recovery met QC criteria.</li> <li>- The following samples were cleaned up using method 3660B to remove sulfur: 001, 002, 003, 004, 005, 006.</li> </ul>																							
<b>E18-04347</b>	<ul style="list-style-type: none"> <li>- All samples were extracted within holding time.</li> <li>- All samples were analyzed within holding time.</li> <li>- Retention Time Shift met QC criteria.</li> </ul> <p>Dilution Summary:</p> <table> <thead> <tr> <th>Sample ID</th> <th>DF(s)</th> <th>Dilution For</th> </tr> </thead> <tbody> <tr> <td>E18-04347-001</td> <td>5</td> <td>Matrix Interference.</td> </tr> <tr> <td>E18-04347-002</td> <td>10</td> <td>Matrix Interference.</td> </tr> <tr> <td>E18-04347-003</td> <td>5</td> <td>Matrix Interference.</td> </tr> <tr> <td>E18-04347-004</td> <td>5</td> <td>Matrix Interference.</td> </tr> <tr> <td>E18-04347-005</td> <td>1</td> <td>NA</td> </tr> <tr> <td>E18-04347-006</td> <td>1</td> <td>NA</td> </tr> </tbody> </table>			Sample ID	DF(s)	Dilution For	E18-04347-001	5	Matrix Interference.	E18-04347-002	10	Matrix Interference.	E18-04347-003	5	Matrix Interference.	E18-04347-004	5	Matrix Interference.	E18-04347-005	1	NA	E18-04347-006	1	NA
Sample ID	DF(s)	Dilution For																						
E18-04347-001	5	Matrix Interference.																						
E18-04347-002	10	Matrix Interference.																						
E18-04347-003	5	Matrix Interference.																						
E18-04347-004	5	Matrix Interference.																						
E18-04347-005	1	NA																						
E18-04347-006	1	NA																						

INTEGRATED ANALYTICAL LABORATORIES, LLC  
SAMPLE DELIVERY GROUP CASE NARRATIVE

**SDG#: E18-04347**

<b>Metals By SW 6020B/7470A</b>	<b>Batch: A180605-01 (307A)</b>	<b>Matrix: Aqueous</b>
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- QC**
- Calibration Curve Linearity met QC criteria.
  - Internal Standard Recovery met QC criteria.
  - Method Blank met QC criteria.
  - LCS Percent Recovery met QC criteria.
  - MS Percent Recovery met QC criteria.
  - RPD between Sample/Duplicate met QC criteria.
  - Serial Dilution met QC criteria.

- E18-04347**
- Digestion Holding Time met requirement for each sample.
  - Analysis Holding Time met requirement for each sample.
  - 04347-007: 1%; 04347-008: 1%;

Dilution Summary:

Sample ID	DF(s)	Dilution For
E18-04347-007	1	NA
E18-04347-008	1	NA
E18-04347-009	1	NA
E18-04347-010	1	NA

<b>Metals By SW 6020B/7471B</b>	<b>Batch: S180605-01 (306A)</b>	<b>Matrix: Soil</b>
---------------------------------	---------------------------------	---------------------

- QC**
- Calibration Curve Linearity met QC criteria.
  - Internal Standard Recovery met QC criteria.
  - Method Blank met QC criteria.
  - LCS Percent Recovery met QC criteria.
  - MS Percent Recovery met QC criteria.
  - RPD between Sample/Duplicate met QC criteria.
  - Serial Dilution met QC criteria.

- E18-04347**
- Digestion Holding Time met requirement for each sample.
  - Analysis Holding Time met requirement for each sample.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E18-04347-001	1	NA
E18-04347-002	1	NA
E18-04347-003	1	NA
E18-04347-004	1	NA
E18-04347-005	1	NA
E18-04347-006	1	NA

A review of the QA/QC measures for the analysis of the sample(s) contained in this report has been performed by:

  
Reviewed by \_\_\_\_\_

6/11/2018

Date

## **RESULTS SUMMARY REPORT**

**INTEGRATED ANALYTICAL LABORATORIES, LLC.**

**SUMMARY REPORT**  
**Client: Hillmann Consulting, LLC**  
**Project: G6-2368**  
**Lab Case No.: E18-04347**

PARAMETER(Units)	Lab ID:	04347-007			04347-008			04347-009			04347-010		
	Client ID:	GW2	7	Aqueous	GW3	6	Aqueous	GW2-FILT	Aqueous	GW3-FILT	Matrix:	Aqueous	5/31/18
Sampled Date	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	
<b>Volatiles (Units)</b>	<i>(ug/L)</i>			<i>(ug/L)</i>			<i>(ug/L)</i>			<i>(ug/L)</i>			
cis-1,2-Dichloroethene	0.988	0.451	ND	0.451	~	~	~	~	~	~	~	~	
<b>TOTAL VO's:</b>	0.988		ND		~	~	~	~	~	~	~	~	
<b>TOTAL TIC's:</b>	ND		ND		~	~	~	~	~	~	~	~	
<b>TOTAL VO's &amp; TIC's:</b>	0.988		ND		~	~	~	~	~	~	~	~	
<b>Semivolatiles - BN (Units)</b>	<i>(ug/L)</i>			<i>(ug/L)</i>			<i>(ug/L)</i>			<i>(ug/L)</i>			
<b>TOTAL BN'S:</b>	ND		ND		~	~	~	~	~	~	~	~	
<b>TOTAL TIC's:</b>	ND		ND		~	~	~	~	~	~	~	~	
<b>TOTAL BN'S &amp; TIC's:</b>	ND		ND		~	~	~	~	~	~	~	~	
<b>PCB's (Units)</b>	<i>(ug/L)</i>			<i>(ug/L)</i>			<i>(ug/L)</i>			<i>(ug/L)</i>			
Aroclor-1016	ND	0.020	ND	0.020	~	~	~	~	~	~	~	~	
Aroclor-1221	ND	0.020	ND	0.020	~	~	~	~	~	~	~	~	
Aroclor-1232	ND	0.020	ND	0.020	~	~	~	~	~	~	~	~	
Aroclor-1242	ND	0.020	ND	0.020	~	~	~	~	~	~	~	~	
Aroclor-1248	ND	0.020	ND	0.020	~	~	~	~	~	~	~	~	
Aroclor-1254	ND	0.020	ND	0.020	~	~	~	~	~	~	~	~	
Aroclor-1260	ND	0.020	ND	0.020	~	~	~	~	~	~	~	~	
Aroclor-1262	ND	0.020	ND	0.020	~	~	~	~	~	~	~	~	
Aroclor-1268	ND	0.020	ND	0.020	~	~	~	~	~	~	~	~	
PCBs	ND	0.020	ND	0.020	~	~	~	~	~	~	~	~	

~ = Sample not analyzed for

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

D = The compound was reported from the Diluted analysis

All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.

N = Presumptive evidence of a compound from the use of GC/MS library search.

**INTEGRATED ANALYTICAL LABORATORIES, LLC.**

**SUMMARY REPORT**  
**Client: Hillmann Consulting, LLC**  
**Project: G6-2368**  
**Lab Case No.: E18-04347**

Lab ID:	04347-007			04347-008			04347-009			04347-010		
Client ID:	GW2			GW3			GW2-FILT			GW3-FILT		
Depth:	7			6								
Matrix:	Aqueous			Aqueous			Aqueous			Aqueous		
Sampled Date	5/31/18			5/31/18			5/31/18			5/31/18		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Pesticides (Units)	(ug/L)			(ug/L)			(ug/L)			(ug/L)		
alpha-BHC	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
beta-BHC	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
gamma-BHC (Lindane)	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
delta-BHC	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
Heptachlor	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
Aldrin	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
Heptachlor epoxide	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
Endosulfan I	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
4,4'-DDE	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
Dieldrin	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
Endrin	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
Endosulfan II	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
4,4'-DDD	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
Endrin aldehyde	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
Endosulfan sulfate	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
4,4'-DDT	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
Endrin ketone	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
Methoxychlor	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
alpha-Chlordane	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
gamma-Chlordane	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
Toxaphene	ND	0.060	ND	0.060	~	~	~	~	~	~	~	~
Endosulfan (I and II)	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~
Chlordane (alpha and gamma)	ND	0.005	ND	0.005	~	~	~	~	~	~	~	~

~ = Sample not analyzed for

ND = Analyzed for but Not Detected at the MDL

**INTEGRATED ANALYTICAL LABORATORIES, LLC.**

**SUMMARY REPORT**  
**Client: Hillmann Consulting, LLC**  
**Project: G6-2368**  
**Lab Case No.: E18-04347**

	Lab ID: Client ID: Depth: Matrix: Sampled Date	04347-007 GW2 7 Aqueous 5/31/18			04347-008 GW3 6 Aqueous 5/31/18			04347-009 GW2-FILT			04347-010 GW3-FILT		
PARAMETER(Units)		Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
<b>Metals (Units)</b>		<i>(ug/L)</i>			<i>(ug/L)</i>			<i>(ug/L)</i>			<i>(ug/L)</i>		
Aluminum		570		8.00	234		8.00	42.6		8.00	ND		8.00
Antimony		ND		1.20	ND		1.20	ND		1.20	ND		1.20
Arsenic		3.36		0.600	0.995	J	0.600	3.22		0.600	ND		0.600
Barium		7.62		1.20	17.5		1.20	4.12		1.20	15.2		1.20
Beryllium		ND		0.320	ND		0.320	ND		0.320	ND		0.320
Cadmium		ND		1.00	ND		1.00	ND		1.00	ND		1.00
Calcium		11500		60.0	17400		60.0	10600		60.0	17400	X	60.0
Chromium		8.24		1.00	7.38		1.00	2.56		1.00	ND		1.00
Cobalt		0.796	J	0.600	ND		0.600	ND		0.600	ND		0.600
Copper		ND		1.00	ND		1.00	ND		1.00	ND		1.00
Iron		1850		60.0	1250		60.0	128	J	60.0	ND		60.0
Lead		10.5		1.20	2.52		1.20	ND		1.20	ND		1.20
Magnesium		1580		60.0	11000		60.0	1560		60.0	12300	X	60.0
Manganese		19.7		1.40	31.9		1.40	18.2		1.40	29.5		1.40
Mercury		ND		0.200	ND		0.200	ND		0.200	ND		0.200
Nickel		5.23		1.20	1.34	J	1.20	3.30		1.20	1.31	J	1.20
Potassium		4240		80.0	9240		80.0	4210		80.0	9040		80.0
Selenium		ND		6.00	ND		6.00	ND		6.00	ND		6.00
Silver		ND		1.20	ND		1.20	ND		1.20	ND		1.20
Sodium		9890		80.0	136000		80.0	9380		80.0	141000	X	80.0
Thallium		ND		1.20	ND		1.20	ND		1.20	ND		1.20
Vanadium		5.13		0.600	1.60	J	0.600	4.38		0.600	ND		0.600
Zinc		42.5		8.00	46.3		8.00	15.5	J	8.00	28.7		8.00

X = Samples analyzed for total and dissolved metals differ at <= 20% RPD.

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

**INTEGRATED ANALYTICAL LABORATORIES, LLC.**

**SUMMARY REPORT**

Client: Hillmann Consulting, LLC

Project: G6-2368

Lab Case No.: E18-04347

Lab ID:	04347-001	04347-002	04347-003	04347-004					
Client ID:	S7	S8	S9	S10					
Depth:	3	4	3	6					
Matrix:	Soil	Soil	Soil	Soil					
Sampled Date	5/31/18	5/31/18	5/31/18	5/31/18					
PARAMETER(Units)	Conc	Q	MDL	Conc					
Volatiles (Units)	(mg/Kg)			(mg/Kg)					
Acetone	ND	0.0012	ND	0.00135	0.014	J 0.0018	0.013	0.00124	
Tetrachloroethene	ND	0.000315	0.00185	0.000353	ND	0.000471	ND	0.000325	
Ethylbenzene	ND	0.0003	ND	0.000337	ND	0.000449	0.00449	0.00031	
Total Xylenes	ND	0.000533	ND	0.000598	ND	0.000797	0.050	0.00055	
Isopropylbenzene	ND	0.000244	ND	0.000273	ND	0.000364	0.00226	0.000251	
1,2,3-Trichlorobenzene	ND	0.000592	ND	0.000664	ND	0.000885	0.000907	J 0.000611	
<b>TOTAL VO's:</b>	ND	0.00185		0.014	J		0.071	J	
<b>TOTAL TIC's:</b>	ND	ND		ND			2.01	JN	
<b>TOTAL VO's &amp; TIC's:</b>	ND	0.00185		0.014	J		2.08	JN	
Semivolatiles - BN (Units)	(mg/Kg)			(mg/Kg)			(mg/Kg)		
Phenanthrene	0.083	D	0.063	0.074	0.031	ND	0.032	ND	0.035
Fluoranthene	0.285	D	0.058	0.108	0.028	ND	0.029	ND	0.032
Pyrene	0.556	D	0.057	0.113	0.028	ND	0.029	ND	0.032
Benzo[a]anthracene	0.420	D	0.060	0.055	0.029	ND	0.030	ND	0.033
Chrysene	0.456	D	0.060	0.072	0.029	ND	0.030	ND	0.033
Benzo[b]fluoranthene	0.224	D	0.056	0.045	0.027	ND	0.028	ND	0.031
Benzo[k]fluoranthene	0.193	D	0.058	0.035	0.028	ND	0.029	ND	0.032
Benzo[a]pyrene	0.305	D	0.057	0.044	0.027	ND	0.029	ND	0.031
Indeno[1,2,3-cd]pyrene	0.194	D	0.057	0.031	J 0.028	ND	0.029	ND	0.032
Dibenz[a,h]anthracene	0.101	D	0.068	ND	0.033	ND	0.034	ND	0.038
Benzo[g,h,i]perylene	0.302	D	0.063	0.037	0.030	ND	0.032	ND	0.035
<b>TOTAL BN'S:</b>	3.12	D		0.614	J	ND		ND	
<b>TOTAL TIC's:</b>	0.395	DJN		0.212	J	ND		ND	
<b>TOTAL BN'S &amp; TIC's:</b>	3.52	DJN		0.826	J	ND		ND	
PCB's (Units)	(mg/Kg)			(mg/Kg)			(mg/Kg)		
Aroclor-1016	ND	0.00349	ND	0.0034	ND	0.00346	ND	0.0038	
Aroclor-1221	ND	0.00349	ND	0.0034	ND	0.00346	ND	0.0038	
Aroclor-1232	ND	0.00349	ND	0.0034	ND	0.00346	ND	0.0038	
Aroclor-1242	ND	0.00349	ND	0.0034	ND	0.00346	ND	0.0038	
Aroclor-1248	ND	0.00349	ND	0.0034	ND	0.00346	ND	0.0038	
Aroclor-1254	ND	0.00349	ND	0.0034	ND	0.00346	ND	0.0038	
Aroclor-1260	ND	0.00349	ND	0.0034	ND	0.00346	ND	0.0038	
Aroclor-1262	ND	0.00349	ND	0.0034	ND	0.00346	ND	0.0038	
Aroclor-1268	ND	0.00349	ND	0.0034	ND	0.00346	ND	0.0038	
PCBs	ND	0.00349	ND	0.0034	ND	0.00346	ND	0.0038	

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

D = The compound was reported from the Diluted analysis

All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.

N = Presumptive evidence of a compound from the use of GC/MS library search.

**INTEGRATED ANALYTICAL LABORATORIES, LLC.**

**SUMMARY REPORT**  
**Client: Hillmann Consulting, LLC**  
**Project: G6-2368**  
**Lab Case No.: E18-04347**

PARAMETER(Units)	Lab ID: Client ID: Depth: Matrix: Sampled Date	04347-001			04347-002			04347-003			04347-004		
		Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Pesticides (Units)		(mg/Kg)			(mg/Kg)			(mg/Kg)			(mg/Kg)		
alpha-BHC		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			
beta-BHC		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			
gamma-BHC (Lindane)		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			
delta-BHC		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			
Heptachlor		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			
Aldrin		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			
Heptachlor epoxide		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			
Endosulfan I		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			
4,4'-DDE		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			
Dieldrin		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			
Endrin		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			
Endosulfan II		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			
4,4'-DDD		ND	0.000873	0.00731 D	0.0017	ND	0.000865	ND		0.000949			
Endrin aldehyde		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			
Endosulfan sulfate		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			
4,4'-DDT		ND	0.000873	0.00327 DJ	0.0017	ND	0.000865	ND		0.000949			
Endrin ketone		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			
Methoxychlor		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			
alpha-Chlordane		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			
gamma-Chlordane		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			
Toxaphene		ND	0.011	ND	0.020	ND	0.010	ND		0.011			
Endosulfan (I and II)		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			
Chlordane (alpha and gamma)		ND	0.000873	ND	0.0017	ND	0.000865	ND		0.000949			

~ = Sample not analyzed for

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

D = The compound was reported from the Diluted analysis

All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.

N = Presumptive evidence of a compound from the use of GC/MS library search.

**INTEGRATED ANALYTICAL LABORATORIES, LLC.**

**SUMMARY REPORT**  
**Client: Hillmann Consulting, LLC**  
**Project: G6-2368**  
**Lab Case No.: E18-04347**

PARAMETER(Units)	Lab ID: 04347-001			04347-002			04347-003			04347-004						
	Client ID:	S7	Depth:	3	Matrix:	Soil	Sampled Date	5/31/18	Conc	Q	MDL	Conc	Q	MDL	Conc	Q
<b>Metals (Units)</b>	<i>(mg/Kg)</i>			<i>(mg/Kg)</i>			<i>(mg/Kg)</i>			<i>(mg/Kg)</i>						
Aluminum	2450	2.26		1450	2.22		1920	2.20		843		2.42				
Antimony	0.921	0.226		0.543	J	0.222	0.551	0.220		ND		0.242				
Arsenic	2.15	0.170		1.61	0.167		1.58	0.165		0.414	J	0.181				
Barium	86.6	0.283		54.3	0.278		17.1	0.275		11.5		0.302				
Beryllium	ND	0.170		ND	0.167		ND	0.165		ND		0.181				
Cadmium	ND	0.340		ND	0.334		ND	0.330		ND		0.363				
Calcium	1960	17.0		3470	16.7		11500	16.5		2030		18.1				
Chromium	8.33	0.283		6.15	0.278		5.75	0.275		5.24		0.302				
Cobalt	2.53	0.170		1.20	0.167		2.15	0.165		0.629		0.181				
Copper	14.0	0.396		20.1	0.389		16.5	0.385		1.64		0.423				
Iron	5100	17.0		4430	16.7		5800	16.5		1860		18.1				
Lead	193	0.283		97.8	0.278		23.3	0.275		11.0		0.302				
Magnesium	693	17.0		969	16.7		3910	16.5		396		18.1				
Manganese	94.8	0.396		64.5	0.389		63.0	0.385		42.6		0.423				
Mercury	0.260	0.010		0.072	9.55		0.020	J	9.73	0.050		1.03				
Nickel	6.78	0.396		5.59	0.389		4.33	0.385		1.73		0.423				
Potassium	347	22.6		188	22.2		315	22.0		178		24.2				
Selenium	1.84	J	1.70	ND	1.67		ND	1.65		ND		1.81				
Silver	0.362	J	0.340	ND	0.334		ND	0.330		ND		0.363				
Sodium	122	22.6		57.9	22.2		160	22.0		35.5	J	24.2				
Thallium	ND	0.283		ND	0.278		ND	0.275		ND		0.302				
Vanadium	10.6	0.283		7.87	0.278		18.6	0.275		5.77		0.302				
Zinc	134	1.13		81.4	1.11		27.8	1.10		8.04		1.21				

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

**INTEGRATED ANALYTICAL LABORATORIES, LLC.**

**SUMMARY REPORT**

Client: Hillmann Consulting, LLC

Project: G6-2368

Lab Case No.: E18-04347

PARAMETER(Units)	Lab ID: 04347-005			04347-006		
	Client ID:	S11	MDL	Client ID:	S12	MDL
Sampled Date	5/31/18			5/31/18		
<b>Volatiles (Units)</b>	<i>(mg/Kg)</i>			<i>(mg/Kg)</i>		
Acetone	ND	0.0013	0.011 J	0.00134		
Carbon disulfide	ND	0.000412	0.00145	0.000425		
<b>TOTAL VO's:</b>	ND		0.012 J			
<b>TOTAL TIC's:</b>	ND		ND			
<b>TOTAL VO's &amp; TIC's:</b>	ND		0.012 J			
<b>Semivolatiles - BN (Units)</b>	<i>(mg/Kg)</i>			<i>(mg/Kg)</i>		
<b>TOTAL BN'S:</b>	ND		ND			
<b>TOTAL TIC's:</b>	ND		ND			
<b>TOTAL BN'S &amp; TIC's:</b>	ND		ND			
<b>PCB's (Units)</b>	<i>(mg/Kg)</i>			<i>(mg/Kg)</i>		
Aroclor-1016	ND	0.0008	ND	0.000784		
Aroclor-1221	ND	0.0008	ND	0.000784		
Aroclor-1232	ND	0.0008	ND	0.000784		
Aroclor-1242	ND	0.0008	ND	0.000784		
Aroclor-1248	ND	0.0008	ND	0.000784		
Aroclor-1254	ND	0.0008	ND	0.000784		
Aroclor-1260	ND	0.0008	ND	0.000784		
Aroclor-1262	ND	0.0008	ND	0.000784		
Aroclor-1268	ND	0.0008	ND	0.000784		
PCBs	ND	0.0008	ND	0.000784		

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

D = The compound was reported from the Diluted analysis

All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.

**INTEGRATED ANALYTICAL LABORATORIES, LLC.**

**SUMMARY REPORT**  
**Client: Hillmann Consulting, LLC**  
**Project: G6-2368**  
**Lab Case No.: E18-04347**

PARAMETER(Units)	Lab ID: 04347-005			04347-006		
	Client ID:	S11	Depth:	9	Matrix:	Soil
	Sampled Date 5/31/18			5/31/18		
	Conc	Q	MDL	Conc	Q	MDL
<b>Pesticides (Units)</b>		<i>(mg/Kg)</i>			<i>(mg/Kg)</i>	
alpha-BHC	ND	0.0002	ND	0.000196		
beta-BHC	ND	0.0002	ND	0.000196		
gamma-BHC (Lindane)	ND	0.0002	ND	0.000196		
delta-BHC	ND	0.0002	ND	0.000196		
Heptachlor	ND	0.0002	ND	0.000196		
Aldrin	ND	0.0002	ND	0.000196		
Heptachlor epoxide	ND	0.0002	ND	0.000196		
Endosulfan I	ND	0.0002	ND	0.000196		
4,4'-DDE	ND	0.0002	ND	0.000196		
Dieldrin	ND	0.0002	ND	0.000196		
Endrin	ND	0.0002	ND	0.000196		
Endosulfan II	ND	0.0002	ND	0.000196		
4,4'-DDD	ND	0.0002	ND	0.000196		
Endrin aldehyde	ND	0.0002	ND	0.000196		
Endosulfan sulfate	ND	0.0002	ND	0.000196		
4,4'-DDT	ND	0.0002	ND	0.000196		
Endrin ketone	ND	0.0002	ND	0.000196		
Methoxychlor	ND	0.0002	ND	0.000196		
alpha-Chlordane	ND	0.0002	ND	0.000196		
gamma-Chlordane	ND	0.0002	ND	0.000196		
Toxaphene	ND	0.0024	ND	0.00235		
Endosulfan (I and II)	ND	0.0002	ND	0.000196		
Chlordane (alpha and gamma)	ND	0.0002	ND	0.000196		

ND = Analyzed for but Not Detected at the MDL

**INTEGRATED ANALYTICAL LABORATORIES, LLC.**

**SUMMARY REPORT**

**Client: Hillmann Consulting, LLC**

**Project: G6-2368**

**Lab Case No.: E18-04347**

PARAMETER(Units)	Lab ID: 04347-005			04347-006		
	Client ID:	S11	MDL	Client ID:	S12	MDL
Sampled Date	5/31/18		5/31/18			
<b>Metals (Units)</b>			<i>(mg/Kg)</i>			
Aluminum	712	2.56	492	2.49		
Antimony	ND	0.256	ND	0.249		
Arsenic	0.588	J	0.192	0.197	J	0.187
Barium	4.19	0.320	1.99	0.311		
Beryllium	ND	0.192	ND	0.187		
Cadmium	ND	0.384	ND	0.373		
Calcium	612	19.2	98.0	18.7		
Chromium	4.33	0.320	1.72	0.311		
Cobalt	0.483	J	0.192	0.279	J	0.187
Copper	ND	0.449	ND	0.436		
Iron	1740	19.2	766	18.7		
Lead	1.75	0.320	0.546	J	0.311	
Magnesium	335	19.2	218	18.7		
Manganese	30.7	0.449	6.90	0.436		
Mercury	ND	1.13	ND	0.011		
Nickel	1.61	0.449	1.11	0.436		
Potassium	153	25.6	136	24.9		
Selenium	ND	1.92	ND	1.87		
Silver	ND	0.384	ND	0.373		
Sodium	45.6	J	25.6	140	24.9	
Thallium	ND	0.320	ND	0.311		
Vanadium	3.97	0.320	1.24	0.311		
Zinc	9.41	1.28	13.7	1.24		

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

## **ANALYTICAL RESULTS**

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: E18-04347-001  
Client ID: S7/3  
Date Received: 06/01/2018  
Date Analyzed: 06/06/2018  
Data file: F6026.D 06/6/18 00:56

GC/MS Column: DB-624  
Sample wt/vol: 4.3g  
Matrix-Units: Soil-mg/Kg  
% Moisture: 5.60  
Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND		0.00123	0.000289
Chloromethane	ND		0.00123	0.000228
Vinyl chloride	ND		0.00123	0.000228
Bromomethane	ND		0.00123	0.000367
Chloroethane	ND		0.00123	0.000326
Trichlorofluoromethane	ND		0.00123	0.000231
1,1-Dichloroethene	ND		0.00123	0.000464
Acetone	ND		0.012	0.0012
Carbon disulfide	ND		0.00123	0.000381
Methylene chloride	ND		0.00246	0.00245
trans-1,2-Dichloroethene	ND		0.00123	0.000357
Methyl tert-butyl ether (MTBE)	ND		0.00123	0.000237
1,1-Dichloroethane	ND		0.00123	0.000239
cis-1,2-Dichloroethene	ND		0.00123	0.000262
2-Butanone (MEK)	ND		0.00246	0.000605
Bromochloromethane	ND		0.00123	0.000342
Chloroform	ND		0.00123	0.000258
1,1,1-Trichloroethane	ND		0.00123	0.00029
Carbon tetrachloride	ND		0.00123	0.000198
1,2-Dichloroethane (EDC)	ND		0.00123	0.000325
Benzene	ND		0.00123	0.000321
Trichloroethene	ND		0.00123	0.000344
1,2-Dichloropropane	ND		0.00123	0.000208
1,4-Dioxane	ND		0.246	0.044
Bromodichloromethane	ND		0.00123	0.000287
cis-1,3-Dichloropropene	ND		0.00123	0.000252
4-Methyl-2-pentanone (MIBK)	ND		0.00246	0.000712

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**

Lab ID: E18-04347-001  
 Client ID: S7/3  
 Date Received: 06/01/2018  
 Date Analyzed: 06/06/2018  
 Data file: F6026.D 06/6/18 00:56

GC/MS Column: DB-624  
 Sample wt/vol: 4.3g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 5.60  
 Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND		0.00123	0.000397
trans-1,3-Dichloropropene	ND		0.00123	0.000284
1,1,2-Trichloroethane	ND		0.00123	0.000332
Tetrachloroethene	ND		0.00123	0.000315
2-Hexanone	ND		0.00246	0.00128
Dibromochloromethane	ND		0.00123	0.00023
1,2-Dibromoethane (EDB)	ND		0.00123	0.000218
Chlorobenzene	ND		0.00123	0.000277
Ethylbenzene	ND		0.00123	0.0003
Total Xylenes	ND		0.00246	0.000533
Styrene	ND		0.00123	0.000253
Bromoform	ND		0.00123	0.000353
Isopropylbenzene	ND		0.00123	0.000244
1,1,2,2-Tetrachloroethane	ND		0.00246	0.000331
1,3-Dichlorobenzene	ND		0.00123	0.000237
1,4-Dichlorobenzene	ND		0.00123	0.00021
1,2-Dichlorobenzene	ND		0.00123	0.000213
1,2-Dibromo-3-chloropropane	ND		0.00246	0.000332
1,2,4-Trichlorobenzene	ND		0.00123	0.000541
1,2,3-Trichlorobenzene	ND		0.00123	0.000592
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00123	0.000446
Methyl acetate	ND		0.00123	0.000574
Cyclohexane	ND		0.00123	0.000224
Methylcyclohexane	ND		0.00123	0.000256
1,3-Dichloropropene (cis- and trans-)	ND		0.00123	0.000284
Total Target Compounds (52):	0			

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04347-001

Client ID: S7/3

Date Received: 06/01/2018

Date Analyzed: 06/06/2018

Date File: F6026.D

GC/MS Column: DB-624

Sample wt/vol: 4.3g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 5.60

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: E18-04347-002

Client ID: S8/4

Date Received: 06/01/2018

Date Analyzed: 06/06/2018

Data file: F6027.D 06/6/18 01:25

GC/MS Column: DB-624

Sample wt/vol: 3.8g

Matrix-Units: Soil-mg/Kg

% Moisture: 4.40

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND		0.00138	0.000324
Chloromethane	ND		0.00138	0.000255
Vinyl chloride	ND		0.00138	0.000255
Bromomethane	ND		0.00138	0.000411
Chloroethane	ND		0.00138	0.000366
Trichlorofluoromethane	ND		0.00138	0.000259
1,1-Dichloroethene	ND		0.00138	0.00052
Acetone	ND		0.014	0.00135
Carbon disulfide	ND		0.00138	0.000428
Methylene chloride	ND		0.00276	0.00275
trans-1,2-Dichloroethene	ND		0.00138	0.0004
Methyl tert-butyl ether (MTBE)	ND		0.00138	0.000266
1,1-Dichloroethane	ND		0.00138	0.000268
cis-1,2-Dichloroethene	ND		0.00138	0.000294
2-Butanone (MEK)	ND		0.00276	0.000679
Bromochloromethane	ND		0.00138	0.000384
Chloroform	ND		0.00138	0.00029
1,1,1-Trichloroethane	ND		0.00138	0.000326
Carbon tetrachloride	ND		0.00138	0.000222
1,2-Dichloroethane (EDC)	ND		0.00138	0.000364
Benzene	ND		0.00138	0.00036
Trichloroethene	ND		0.00138	0.000386
1,2-Dichloropropane	ND		0.00138	0.000233
1,4-Dioxane	ND		0.276	0.049
Bromodichloromethane	ND		0.00138	0.000322
cis-1,3-Dichloropropene	ND		0.00138	0.000283
4-Methyl-2-pentanone (MIBK)	ND		0.00276	0.000799

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**

Lab ID: E18-04347-002  
 Client ID: S8/4  
 Date Received: 06/01/2018  
 Date Analyzed: 06/06/2018  
 Data file: F6027.D 06/6/18 01:25

GC/MS Column: DB-624  
 Sample wt/vol: 3.8g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 4.40  
 Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND		0.00138	0.000446
trans-1,3-Dichloropropene	ND		0.00138	0.000319
1,1,2-Trichloroethane	ND		0.00138	0.000373
Tetrachloroethene	0.00185		0.00138	0.000353
2-Hexanone	ND		0.00276	0.00144
Dibromochloromethane	ND		0.00138	0.000258
1,2-Dibromoethane (EDB)	ND		0.00138	0.000244
Chlorobenzene	ND		0.00138	0.000311
Ethylbenzene	ND		0.00138	0.000337
Total Xylenes	ND		0.00276	0.000598
Styrene	ND		0.00138	0.000284
Bromoform	ND		0.00138	0.000396
Isopropylbenzene	ND		0.00138	0.000273
1,1,2,2-Tetrachloroethane	ND		0.00276	0.000371
1,3-Dichlorobenzene	ND		0.00138	0.000266
1,4-Dichlorobenzene	ND		0.00138	0.000236
1,2-Dichlorobenzene	ND		0.00138	0.000239
1,2-Dibromo-3-chloropropane	ND		0.00276	0.000373
1,2,4-Trichlorobenzene	ND		0.00138	0.000607
1,2,3-Trichlorobenzene	ND		0.00138	0.000664
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00138	0.000501
Methyl acetate	ND		0.00138	0.000644
Cyclohexane	ND		0.00138	0.000251
Methylcyclohexane	ND		0.00138	0.000287
1,3-Dichloropropene (cis- and trans-)	ND		0.00138	0.000319
Total Target Compounds (52):		0.00185		

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04347-002

Client ID: S8/4

Date Received: 06/01/2018

Date Analyzed: 06/06/2018

Date File: F6027.D

GC/MS Column: DB-624

Sample wt/vol: 3.8g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 4.40

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: E18-04347-003

Client ID: S9/3

Date Received: 06/01/2018

Date Analyzed: 06/06/2018

Data file: F6028.D 06/6/18 01:54

GC/MS Column: DB-624

Sample wt/vol: 2.9g

Matrix-Units: Soil-mg/Kg

% Moisture: 6.40

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND		0.00184	0.000432
Chloromethane	ND		0.00184	0.00034
Vinyl chloride	ND		0.00184	0.00034
Bromomethane	ND		0.00184	0.000548
Chloroethane	ND		0.00184	0.000488
Trichlorofluoromethane	ND		0.00184	0.000346
1,1-Dichloroethene	ND		0.00184	0.000694
Acetone	0.014	J	0.018	0.0018
Carbon disulfide	ND		0.00184	0.00057
Methylene chloride	ND		0.00368	0.00366
trans-1,2-Dichloroethene	ND		0.00184	0.000534
Methyl tert-butyl ether (MTBE)	ND		0.00184	0.000355
1,1-Dichloroethane	ND		0.00184	0.000357
cis-1,2-Dichloroethene	ND		0.00184	0.000392
2-Butanone (MEK)	ND		0.00368	0.000905
Bromochloromethane	ND		0.00184	0.000512
Chloroform	ND		0.00184	0.000386
1,1,1-Trichloroethane	ND		0.00184	0.000434
Carbon tetrachloride	ND		0.00184	0.000296
1,2-Dichloroethane (EDC)	ND		0.00184	0.000486
Benzene	ND		0.00184	0.00048
Trichloroethene	ND		0.00184	0.000515
1,2-Dichloropropane	ND		0.00184	0.000311
1,4-Dioxane	ND		0.368	0.066
Bromodichloromethane	ND		0.00184	0.000429
cis-1,3-Dichloropropene	ND		0.00184	0.000377
4-Methyl-2-pentanone (MIBK)	ND		0.00368	0.00107

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**

Lab ID: E18-04347-003  
 Client ID: S9/3  
 Date Received: 06/01/2018  
 Date Analyzed: 06/06/2018  
 Data file: F6028.D 06/6/18 01:54

GC/MS Column: DB-624  
 Sample wt/vol: 2.9g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 6.40  
 Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND		0.00184	0.000594
trans-1,3-Dichloropropene	ND		0.00184	0.000425
1,1,2-Trichloroethane	ND		0.00184	0.000497
Tetrachloroethene	ND		0.00184	0.000471
2-Hexanone	ND		0.00368	0.00192
Dibromochloromethane	ND		0.00184	0.000344
1,2-Dibromoethane (EDB)	ND		0.00184	0.000326
Chlorobenzene	ND		0.00184	0.000414
Ethylbenzene	ND		0.00184	0.000449
Total Xylenes	ND		0.00368	0.000797
Styrene	ND		0.00184	0.000379
Bromoform	ND		0.00184	0.000528
Isopropylbenzene	ND		0.00184	0.000364
1,1,2,2-Tetrachloroethane	ND		0.00368	0.000495
1,3-Dichlorobenzene	ND		0.00184	0.000355
1,4-Dichlorobenzene	ND		0.00184	0.000315
1,2-Dichlorobenzene	ND		0.00184	0.000318
1,2-Dibromo-3-chloropropane	ND		0.00368	0.000497
1,2,4-Trichlorobenzene	ND		0.00184	0.00081
1,2,3-Trichlorobenzene	ND		0.00184	0.000885
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00184	0.000668
Methyl acetate	ND		0.00184	0.000859
Cyclohexane	ND		0.00184	0.000335
Methylcyclohexane	ND		0.00184	0.000383
1,3-Dichloropropene (cis- and trans-)	ND		0.00184	0.000425
Total Target Compounds (52):	0.014	J		

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**  
**VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04347-003

Client ID: S9/3

Date Received: 06/01/2018

Date Analyzed: 06/06/2018

Date File: F6028.D

GC/MS Column: DB-624

Sample wt/vol: 2.9g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 6.40

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: E18-04347-004  
Client ID: S10/6  
Date Received: 06/01/2018  
Date Analyzed: 06/06/2018  
Data file: F6035.D 06/6/18 05:19

GC/MS Column: DB-624  
Sample wt/vol: 4.6g  
Matrix-Units: Soil-mg/Kg  
% Moisture: 14.4  
Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND		0.00127	0.000298
Chloromethane	ND		0.00127	0.000235
Vinyl chloride	ND		0.00127	0.000235
Bromomethane	ND		0.00127	0.000378
Chloroethane	ND		0.00127	0.000337
Trichlorofluoromethane	ND		0.00127	0.000239
1,1-Dichloroethene	ND		0.00127	0.000479
Acetone	0.013		0.013	0.00124
Carbon disulfide	ND		0.00127	0.000394
Methylene chloride	ND		0.00254	0.00253
trans-1,2-Dichloroethene	ND		0.00127	0.000368
Methyl tert-butyl ether (MTBE)	ND		0.00127	0.000245
1,1-Dichloroethane	ND		0.00127	0.000246
cis-1,2-Dichloroethene	ND		0.00127	0.000271
2-Butanone (MEK)	ND		0.00254	0.000625
Bromochloromethane	ND		0.00127	0.000353
Chloroform	ND		0.00127	0.000267
1,1,1-Trichloroethane	ND		0.00127	0.0003
Carbon tetrachloride	ND		0.00127	0.000204
1,2-Dichloroethane (EDC)	ND		0.00127	0.000335
Benzene	ND		0.00127	0.000331
Trichloroethene	ND		0.00127	0.000356
1,2-Dichloropropane	ND		0.00127	0.000215
1,4-Dioxane	ND		0.254	0.046
Bromodichloromethane	ND		0.00127	0.000296
cis-1,3-Dichloropropene	ND		0.00127	0.00026
4-Methyl-2-pentanone (MIBK)	ND		0.00254	0.000735

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**

Lab ID: E18-04347-004  
 Client ID: S10/6  
 Date Received: 06/01/2018  
 Date Analyzed: 06/06/2018  
 Data file: F6035.D 06/6/18 05:19

GC/MS Column: DB-624  
 Sample wt/vol: 4.6g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 14.4  
 Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND		0.00127	0.00041
trans-1,3-Dichloropropene	ND		0.00127	0.000293
1,1,2-Trichloroethane	ND		0.00127	0.000343
Tetrachloroethene	ND		0.00127	0.000325
2-Hexanone	ND		0.00254	0.00132
Dibromochloromethane	ND		0.00127	0.000237
1,2-Dibromoethane (EDB)	ND		0.00127	0.000225
Chlorobenzene	ND		0.00127	0.000286
Ethylbenzene	0.00449		0.00127	0.00031
Total Xylenes	0.050		0.00254	0.00055
Styrene	ND		0.00127	0.000262
Bromoform	ND		0.00127	0.000364
Isopropylbenzene	0.00226		0.00127	0.000251
1,1,2,2-Tetrachloroethane	ND		0.00254	0.000342
1,3-Dichlorobenzene	ND		0.00127	0.000245
1,4-Dichlorobenzene	ND		0.00127	0.000217
1,2-Dichlorobenzene	ND		0.00127	0.00022
1,2-Dibromo-3-chloropropane	ND		0.00254	0.000343
1,2,4-Trichlorobenzene	ND		0.00127	0.000559
1,2,3-Trichlorobenzene	0.000907	J	0.00127	0.000611
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00127	0.000461
Methyl acetate	ND		0.00127	0.000593
Cyclohexane	ND		0.00127	0.000231
Methylcyclohexane	ND		0.00127	0.000264
1,3-Dichloropropene (cis- and trans-)	ND		0.00127	0.000293
Total Target Compounds (52):	0.071		J	

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**  
**VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04347-004

Client ID: S10/6

Date Received: 06/01/2018

Date Analyzed: 06/06/2018

Date File: F6035.D

GC/MS Column: DB-624

Sample wt/vol: 4.6g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 14.4

CAS #	Compound	Estimated Concentration	Q	Retention Time
000620-14-4	Benzene, 1-ethyl-3-methyl-	0.116	JN	12.02
000526-73-8	Benzene, 1,2,3-trimethyl-	0.221	JN	12.58
000108-67-8	Benzene, 1,3,5-trimethyl-	0.092	JN	13.10
055337-80-9	Bicyclo[4.2.0]octa-1,3,5-triene, 7-methyl-	0.169	JN	13.35
001758-88-9	Benzene, 2-ethyl-1,4-dimethyl-	0.169	JN	13.46
000934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	0.134	JN	13.92
001005-64-7	Benzene, 1-butenyl-, (E)-	0.093	JN	14.06
000095-93-2	Benzene, 1,2,4,5-tetramethyl-	0.081	JN	14.40
000488-23-3	Benzene, 1,2,3,4-tetramethyl-	0.112	JN	14.46
002050-24-0	Benzene, 1,3-diethyl-5-methyl-	0.144	JN	14.59
003333-13-9	Benzene, 1-methyl-4-(2-propenyl)-	0.132	JN	14.77
000874-35-1	1H-Indene, 2,3-dihydro-5-methyl-	0.238	JN	14.95
	Unknown Aromatic	0.139	J	15.37
	Unknown Aromatic	0.086	J	15.49
	Unknown Aromatic	0.084	J	16.22

Total TICs = 2.01 JN

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: E18-04347-005

Client ID: S11/9

Date Received: 06/01/2018

Date Analyzed: 06/06/2018

Data file: F6036.D 06/6/18 05:49

GC/MS Column: DB-624

Sample wt/vol: 4.6g

Matrix-Units: Soil-mg/Kg

% Moisture: 18.0

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND		0.00133	0.000313
Chloromethane	ND		0.00133	0.000246
Vinyl chloride	ND		0.00133	0.000246
Bromomethane	ND		0.00133	0.000396
Chloroethane	ND		0.00133	0.000352
Trichlorofluoromethane	ND		0.00133	0.00025
1,1-Dichloroethene	ND		0.00133	0.000501
Acetone	ND		0.013	0.0013
Carbon disulfide	ND		0.00133	0.000412
Methylene chloride	ND		0.00266	0.00265
trans-1,2-Dichloroethene	ND		0.00133	0.000386
Methyl tert-butyl ether (MTBE)	ND		0.00133	0.000257
1,1-Dichloroethane	ND		0.00133	0.000258
cis-1,2-Dichloroethene	ND		0.00133	0.000283
2-Butanone (MEK)	ND		0.00266	0.000654
Bromochloromethane	ND		0.00133	0.00037
Chloroform	ND		0.00133	0.000279
1,1,1-Trichloroethane	ND		0.00133	0.000314
Carbon tetrachloride	ND		0.00133	0.000214
1,2-Dichloroethane (EDC)	ND		0.00133	0.000351
Benzene	ND		0.00133	0.000347
Trichloroethene	ND		0.00133	0.000372
1,2-Dichloropropane	ND		0.00133	0.000225
1,4-Dioxane	ND		0.266	0.048
Bromodichloromethane	ND		0.00133	0.00031
cis-1,3-Dichloropropene	ND		0.00133	0.000273
4-Methyl-2-pentanone (MIBK)	ND		0.00266	0.00077

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**

Lab ID: E18-04347-005  
 Client ID: S11/9  
 Date Received: 06/01/2018  
 Date Analyzed: 06/06/2018  
 Data file: F6036.D 06/6/18 05:49

GC/MS Column: DB-624  
 Sample wt/vol: 4.6g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 18.0  
 Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND		0.00133	0.00043
trans-1,3-Dichloropropene	ND		0.00133	0.000307
1,1,2-Trichloroethane	ND		0.00133	0.000359
Tetrachloroethene	ND		0.00133	0.00034
2-Hexanone	ND		0.00266	0.00138
Dibromochloromethane	ND		0.00133	0.000249
1,2-Dibromoethane (EDB)	ND		0.00133	0.000235
Chlorobenzene	ND		0.00133	0.000299
Ethylbenzene	ND		0.00133	0.000325
Total Xylenes	ND		0.00266	0.000576
Styrene	ND		0.00133	0.000274
Bromoform	ND		0.00133	0.000382
Isopropylbenzene	ND		0.00133	0.000263
1,1,2,2-Tetrachloroethane	ND		0.00266	0.000358
1,3-Dichlorobenzene	ND		0.00133	0.000257
1,4-Dichlorobenzene	ND		0.00133	0.000227
1,2-Dichlorobenzene	ND		0.00133	0.00023
1,2-Dibromo-3-chloropropane	ND		0.00266	0.000359
1,2,4-Trichlorobenzene	ND		0.00133	0.000585
1,2,3-Trichlorobenzene	ND		0.00133	0.00064
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00133	0.000483
Methyl acetate	ND		0.00133	0.000621
Cyclohexane	ND		0.00133	0.000242
Methylcyclohexane	ND		0.00133	0.000277
1,3-Dichloropropene (cis- and trans-)	ND		0.00133	0.000307
Total Target Compounds (52):	0			

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**  
**VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04347-005

Client ID: S11/9

Date Received: 06/01/2018

Date Analyzed: 06/06/2018

Date File: F6036.D

GC/MS Column: DB-624

Sample wt/vol: 4.6g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 18.0

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: E18-04347-006  
Client ID: S12/10  
Date Received: 06/01/2018  
Date Analyzed: 06/06/2018  
Data file: F6037.D 06/6/18 06:18

GC/MS Column: DB-624  
Sample wt/vol: 4.4g  
Matrix-Units: Soil-mg/Kg  
% Moisture: 17.1  
Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND		0.00137	0.000322
Chloromethane	ND		0.00137	0.000253
Vinyl chloride	ND		0.00137	0.000253
Bromomethane	ND		0.00137	0.000408
Chloroethane	ND		0.00137	0.000363
Trichlorofluoromethane	ND		0.00137	0.000258
1,1-Dichloroethene	ND		0.00137	0.000516
Acetone	0.011	J	0.014	0.00134
Carbon disulfide	0.00145		0.00137	0.000425
Methylene chloride	ND		0.00274	0.00273
trans-1,2-Dichloroethene	ND		0.00137	0.000397
Methyl tert-butyl ether (MTBE)	ND		0.00137	0.000264
1,1-Dichloroethane	ND		0.00137	0.000266
cis-1,2-Dichloroethene	ND		0.00137	0.000292
2-Butanone (MEK)	ND		0.00274	0.000674
Bromochloromethane	ND		0.00137	0.000381
Chloroform	ND		0.00137	0.000288
1,1,1-Trichloroethane	ND		0.00137	0.000323
Carbon tetrachloride	ND		0.00137	0.000221
1,2-Dichloroethane (EDC)	ND		0.00137	0.000362
Benzene	ND		0.00137	0.000358
Trichloroethene	ND		0.00137	0.000384
1,2-Dichloropropane	ND		0.00137	0.000232
1,4-Dioxane	ND		0.274	0.049
Bromodichloromethane	ND		0.00137	0.000319
cis-1,3-Dichloropropene	ND		0.00137	0.000281
4-Methyl-2-pentanone (MIBK)	ND		0.00274	0.000793

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**

Lab ID: E18-04347-006  
 Client ID: S12/10  
 Date Received: 06/01/2018  
 Date Analyzed: 06/06/2018  
 Data file: F6037.D 06/6/18 06:18

GC/MS Column: DB-624  
 Sample wt/vol: 4.4g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 17.1  
 Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND		0.00137	0.000443
trans-1,3-Dichloropropene	ND		0.00137	0.000316
1,1,2-Trichloroethane	ND		0.00137	0.00037
Tetrachloroethene	ND		0.00137	0.000351
2-Hexanone	ND		0.00274	0.00143
Dibromochloromethane	ND		0.00137	0.000256
1,2-Dibromoethane (EDB)	ND		0.00137	0.000242
Chlorobenzene	ND		0.00137	0.000308
Ethylbenzene	ND		0.00137	0.000334
Total Xylenes	ND		0.00274	0.000593
Styrene	ND		0.00137	0.000282
Bromoform	ND		0.00137	0.000393
Isopropylbenzene	ND		0.00137	0.000271
1,1,2,2-Tetrachloroethane	ND		0.00274	0.000369
1,3-Dichlorobenzene	ND		0.00137	0.000264
1,4-Dichlorobenzene	ND		0.00137	0.000234
1,2-Dichlorobenzene	ND		0.00137	0.000237
1,2-Dibromo-3-chloropropane	ND		0.00274	0.00037
1,2,4-Trichlorobenzene	ND		0.00137	0.000603
1,2,3-Trichlorobenzene	ND		0.00137	0.000659
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00137	0.000497
Methyl acetate	ND		0.00137	0.00064
Cyclohexane	ND		0.00137	0.000249
Methylcyclohexane	ND		0.00137	0.000285
1,3-Dichloropropene (cis- and trans-)	ND		0.00137	0.000316
Total Target Compounds (52):	0.012	J		

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**  
**VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04347-006

Client ID: S12/10

Date Received: 06/01/2018

Date Analyzed: 06/06/2018

Date File: F6037.D

GC/MS Column: DB-624

Sample wt/vol: 4.4g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 17.1

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: E18-04347-007

Client ID: GW2/7

Date Received: 06/01/2018

Date Analyzed: 06/08/2018

Data file: L0216.D 06/8/18 12:48

GC/MS Column: DB-624

Sample wt/vol: 5ml

Matrix-Units: Aqueous- $\mu$ g/L

% Moisture: 100

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND		1.00	0.662
Chloromethane	ND		0.500	0.463
Vinyl chloride	ND		1.00	0.591
Bromomethane	ND		1.00	0.544
Chloroethane	ND		1.00	0.495
Trichlorofluoromethane	ND		0.500	0.433
1,1-Dichloroethene	ND		0.500	0.493
Acetone	ND		2.00	1.33
Carbon disulfide	ND		0.500	0.464
Methylene chloride	ND		1.00	0.990
trans-1,2-Dichloroethene	ND		0.500	0.454
Methyl tert-butyl ether (MTBE)	ND		0.500	0.479
1,1-Dichloroethane	ND		0.500	0.493
cis-1,2-Dichloroethene	0.988		0.500	0.451
2-Butanone (MEK)	ND		2.00	1.66
Bromochloromethane	ND		1.00	0.596
Chloroform	ND		0.500	0.469
1,1,1-Trichloroethane	ND		0.500	0.462
Carbon tetrachloride	ND		0.500	0.449
1,2-Dichloroethane (EDC)	ND		0.500	0.458
Benzene	ND		0.500	0.464
Trichloroethene	ND		0.500	0.493
1,2-Dichloropropane	ND		0.500	0.447
1,4-Dioxane	ND		100	98.4
Bromodichloromethane	ND		0.500	0.353
cis-1,3-Dichloropropene	ND		0.500	0.331
4-Methyl-2-pentanone (MIBK)	ND		1.00	0.699

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: E18-04347-007  
Client ID: GW2/7  
Date Received: 06/01/2018  
Date Analyzed: 06/08/2018  
Data file: L0216.D 06/8/18 12:48

GC/MS Column: DB-624  
Sample wt/vol: 5ml  
Matrix-Units: Aqueous- $\mu$ g/L  
% Moisture: 100  
Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.500	0.379
trans-1,3-Dichloropropene	ND		0.500	0.321
1,1,2-Trichloroethane	ND		0.500	0.473
Tetrachloroethene	ND		0.500	0.451
2-Hexanone	ND		2.00	0.761
Dibromochloromethane	ND		0.500	0.442
1,2-Dibromoethane (EDB)	ND		0.500	0.402
Chlorobenzene	ND		0.500	0.376
Ethylbenzene	ND		0.500	0.344
Total Xylenes	ND		1.00	0.923
Styrene	ND		0.500	0.290
Bromoform	ND		0.500	0.445
Isopropylbenzene	ND		0.500	0.323
1,1,2,2-Tetrachloroethane	ND		1.00	0.458
1,3-Dichlorobenzene	ND		0.500	0.351
1,4-Dichlorobenzene	ND		0.500	0.341
1,2-Dichlorobenzene	ND		0.500	0.364
1,2-Dibromo-3-chloropropane	ND		1.00	0.533
1,2,4-Trichlorobenzene	ND		1.00	0.304
1,2,3-Trichlorobenzene	ND		1.00	0.339
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.00	0.563
Methyl acetate	ND		0.500	0.485
Cyclohexane	ND		1.00	0.411
Methylcyclohexane	ND		1.00	0.411
1,3-Dichloropropene (cis- and trans-)	ND		0.500	0.331
Total Target Compounds (52):		0.988		

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04347-007

Client ID: GW2/7

Date Received: 06/01/2018

Date Analyzed: 06/08/2018

Data file: L0216.D 06/8/18 12:48

GC/MS Column: DB-624

Sample wt/vol: 5ml

Matrix-Units: Aqueous- $\mu$ g/L

Dilution Factor: 1

% Moisture: 100

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: E18-04347-008

Client ID: GW3/6

Date Received: 06/01/2018

Date Analyzed: 06/08/2018

Data file: L0217.D 06/8/18 13:16

GC/MS Column: DB-624

Sample wt/vol: 5ml

Matrix-Units: Aqueous- $\mu$ g/L

% Moisture: 100

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND		1.00	0.662
Chloromethane	ND		0.500	0.463
Vinyl chloride	ND		1.00	0.591
Bromomethane	ND		1.00	0.544
Chloroethane	ND		1.00	0.495
Trichlorofluoromethane	ND		0.500	0.433
1,1-Dichloroethene	ND		0.500	0.493
Acetone	ND		2.00	1.33
Carbon disulfide	ND		0.500	0.464
Methylene chloride	ND		1.00	0.990
trans-1,2-Dichloroethene	ND		0.500	0.454
Methyl tert-butyl ether (MTBE)	ND		0.500	0.479
1,1-Dichloroethane	ND		0.500	0.493
cis-1,2-Dichloroethene	ND		0.500	0.451
2-Butanone (MEK)	ND		2.00	1.66
Bromochloromethane	ND		1.00	0.596
Chloroform	ND		0.500	0.469
1,1,1-Trichloroethane	ND		0.500	0.462
Carbon tetrachloride	ND		0.500	0.449
1,2-Dichloroethane (EDC)	ND		0.500	0.458
Benzene	ND		0.500	0.464
Trichloroethene	ND		0.500	0.493
1,2-Dichloropropane	ND		0.500	0.447
1,4-Dioxane	ND		100	98.4
Bromodichloromethane	ND		0.500	0.353
cis-1,3-Dichloropropene	ND		0.500	0.331
4-Methyl-2-pentanone (MIBK)	ND		1.00	0.699

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**

Lab ID: E18-04347-008

Client ID: GW3/6

Date Received: 06/01/2018

Date Analyzed: 06/08/2018

Data file: L0217.D 06/ 8/18 13:16

GC/MS Column: DB-624

Sample wt/vol: 5ml

Matrix-Units: Aqueous- $\mu$ g/L

% Moisture: 100

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND	0.500	0.379	
trans-1,3-Dichloropropene	ND	0.500	0.321	
1,1,2-Trichloroethane	ND	0.500	0.473	
Tetrachloroethene	ND	0.500	0.451	
2-Hexanone	ND	2.00	0.761	
Dibromochloromethane	ND	0.500	0.442	
1,2-Dibromoethane (EDB)	ND	0.500	0.402	
Chlorobenzene	ND	0.500	0.376	
Ethylbenzene	ND	0.500	0.344	
Total Xylenes	ND	1.00	0.923	
Styrene	ND	0.500	0.290	
Bromoform	ND	0.500	0.445	
Isopropylbenzene	ND	0.500	0.323	
1,1,2,2-Tetrachloroethane	ND	1.00	0.458	
1,3-Dichlorobenzene	ND	0.500	0.351	
1,4-Dichlorobenzene	ND	0.500	0.341	
1,2-Dichlorobenzene	ND	0.500	0.364	
1,2-Dibromo-3-chloropropane	ND	1.00	0.533	
1,2,4-Trichlorobenzene	ND	1.00	0.304	
1,2,3-Trichlorobenzene	ND	1.00	0.339	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.00	0.563	
Methyl acetate	ND	0.500	0.485	
Cyclohexane	ND	1.00	0.411	
Methylcyclohexane	ND	1.00	0.411	
1,3-Dichloropropene (cis- and trans-)	ND	0.500	0.331	
Total Target Compounds (52):	0			

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04347-008

Client ID: GW3/6

Date Received: 06/01/2018

Date Analyzed: 06/08/2018

Data file: L0217.D 06/8/18 13:16

GC/MS Column: DB-624

Sample wt/vol: 5ml

Matrix-Units: Aqueous- $\mu$ g/L

Dilution Factor: 1

% Moisture: 100

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: BLKS180605-01  
Client ID: BLKS180605-01  
Date Received:  
Date Analyzed: 06/05/2018  
Data file: F6007.D 06/ 5/18 15:38

GC/MS Column: DB-624  
Sample wt/vol: 5g  
Matrix-Units: Soil-mg/Kg  
% Moisture: NA  
Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND		0.001	0.000235
Chloromethane	ND		0.001	0.000185
Vinyl chloride	ND		0.001	0.000185
Bromomethane	ND		0.001	0.000298
Chloroethane	ND		0.001	0.000265
Trichlorofluoromethane	ND		0.001	0.000188
1,1-Dichloroethene	ND		0.001	0.000377
Acetone	ND		0.010	0.000979
Carbon disulfide	ND		0.001	0.00031
Methylene chloride	ND		0.002	0.00199
trans-1,2-Dichloroethene	ND		0.001	0.00029
Methyl tert-butyl ether (MTBE)	ND		0.001	0.000193
1,1-Dichloroethane	ND		0.001	0.000194
cis-1,2-Dichloroethene	ND		0.001	0.000213
2-Butanone (MEK)	ND		0.002	0.000492
Bromochloromethane	ND		0.001	0.000278
Chloroform	ND		0.001	0.00021
1,1,1-Trichloroethane	ND		0.001	0.000236
Carbon tetrachloride	ND		0.001	0.000161
1,2-Dichloroethane (EDC)	ND		0.001	0.000264
Benzene	ND		0.001	0.000261
Trichloroethene	ND		0.001	0.00028
1,2-Dichloropropane	ND		0.001	0.000169
1,4-Dioxane	ND		0.200	0.036
Bromodichloromethane	ND		0.001	0.000233
cis-1,3-Dichloropropene	ND		0.001	0.000205
4-Methyl-2-pentanone (MIBK)	ND		0.002	0.000579

# INTEGRATED ANALYTICAL LABORATORIES

## VOLATILE ORGANICS

Lab ID: BLKS180605-01  
 Client ID: BLKS180605-01  
 Date Received:  
 Date Analyzed: 06/05/2018  
 Data file: F6007.D 06/5/18 15:38

GC/MS Column: DB-624  
 Sample wt/vol: 5g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: NA  
 Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND		0.001	0.000323
trans-1,3-Dichloropropene	ND		0.001	0.000231
1,1,2-Trichloroethane	ND		0.001	0.00027
Tetrachloroethene	ND		0.001	0.000256
2-Hexanone	ND		0.002	0.00104
Dibromochloromethane	ND		0.001	0.000187
1,2-Dibromoethane (EDB)	ND		0.001	0.000177
Chlorobenzene	ND		0.001	0.000225
Ethylbenzene	ND		0.001	0.000244
Total Xylenes	ND		0.002	0.000433
Styrene	ND		0.001	0.000206
Bromoform	ND		0.001	0.000287
Isopropylbenzene	ND		0.001	0.000198
1,1,2,2-Tetrachloroethane	ND		0.002	0.000269
1,3-Dichlorobenzene	ND		0.001	0.000193
1,4-Dichlorobenzene	ND		0.001	0.000171
1,2-Dichlorobenzene	ND		0.001	0.000173
1,2-Dibromo-3-chloropropane	ND		0.002	0.00027
1,2,4-Trichlorobenzene	ND		0.001	0.00044
1,2,3-Trichlorobenzene	ND		0.001	0.000481
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.001	0.000363
Methyl acetate	ND		0.001	0.000467
Cyclohexane	ND		0.001	0.000182
Methylcyclohexane	ND		0.001	0.000208
1,3-Dichloropropene (cis- and trans-)	ND		0.001	0.000231
Total Target Compounds (52):	0			

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**  
**VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: BLKS180605-01  
Client ID: BLKS180605-01  
Date Received:  
Date Analyzed: 06/05/2018  
Date File: F6007.D

GC/MS Column: DB-624  
Sample wt/vol: 5g  
Matrix-Units: Soil-mg/Kg  
Dilution Factor: 1  
% Moisture: NA

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: BLKS180605-02  
Client ID: BLKS180605-02  
Date Received:  
Date Analyzed: 06/06/2018  
Data file: F6034.D 06/6/18 04:50

GC/MS Column: DB-624  
Sample wt/vol: 5g  
Matrix-Units: Soil-mg/Kg  
% Moisture: NA  
Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Dichlorodifluoromethane	ND	0.001	0.000235	
Chloromethane	ND	0.001	0.000185	
Vinyl chloride	ND	0.001	0.000185	
Bromomethane	ND	0.001	0.000298	
Chloroethane	ND	0.001	0.000265	
Trichlorofluoromethane	ND	0.001	0.000188	
1,1-Dichloroethene	ND	0.001	0.000377	
Acetone	ND	0.010	0.000979	
Carbon disulfide	ND	0.001	0.00031	
Methylene chloride	ND	0.002	0.00199	
trans-1,2-Dichloroethene	ND	0.001	0.00029	
Methyl tert-butyl ether (MTBE)	ND	0.001	0.000193	
1,1-Dichloroethane	ND	0.001	0.000194	
cis-1,2-Dichloroethene	ND	0.001	0.000213	
2-Butanone (MEK)	ND	0.002	0.000492	
Bromochloromethane	ND	0.001	0.000278	
Chloroform	ND	0.001	0.00021	
1,1,1-Trichloroethane	ND	0.001	0.000236	
Carbon tetrachloride	ND	0.001	0.000161	
1,2-Dichloroethane (EDC)	ND	0.001	0.000264	
Benzene	ND	0.001	0.000261	
Trichloroethene	ND	0.001	0.00028	
1,2-Dichloropropane	ND	0.001	0.000169	
1,4-Dioxane	ND	0.200	0.036	
Bromodichloromethane	ND	0.001	0.000233	
cis-1,3-Dichloropropene	ND	0.001	0.000205	
4-Methyl-2-pentanone (MIBK)	ND	0.002	0.000579	

# INTEGRATED ANALYTICAL LABORATORIES

## VOLATILE ORGANICS

Lab ID: BLKS180605-02  
 Client ID: BLKS180605-02  
 Date Received:  
 Date Analyzed: 06/06/2018  
 Data file: F6034.D 06/6/18 04:50

GC/MS Column: DB-624  
 Sample wt/vol: 5g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: NA  
 Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND		0.001	0.000323
trans-1,3-Dichloropropene	ND		0.001	0.000231
1,1,2-Trichloroethane	ND		0.001	0.00027
Tetrachloroethene	ND		0.001	0.000256
2-Hexanone	ND		0.002	0.00104
Dibromochloromethane	ND		0.001	0.000187
1,2-Dibromoethane (EDB)	ND		0.001	0.000177
Chlorobenzene	ND		0.001	0.000225
Ethylbenzene	ND		0.001	0.000244
Total Xylenes	ND		0.002	0.000433
Styrene	ND		0.001	0.000206
Bromoform	ND		0.001	0.000287
Isopropylbenzene	ND		0.001	0.000198
1,1,2,2-Tetrachloroethane	ND		0.002	0.000269
1,3-Dichlorobenzene	ND		0.001	0.000193
1,4-Dichlorobenzene	ND		0.001	0.000171
1,2-Dichlorobenzene	ND		0.001	0.000173
1,2-Dibromo-3-chloropropane	ND		0.002	0.00027
1,2,4-Trichlorobenzene	ND		0.001	0.00044
1,2,3-Trichlorobenzene	ND		0.001	0.000481
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.001	0.000363
Methyl acetate	ND		0.001	0.000467
Cyclohexane	ND		0.001	0.000182
Methylcyclohexane	ND		0.001	0.000208
1,3-Dichloropropene (cis- and trans-)	ND		0.001	0.000231
Total Target Compounds (52):	0			

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**  
**VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: BLKS180605-02  
Client ID: BLKS180605-02  
Date Received:  
Date Analyzed: 06/06/2018  
Date File: F6034.D

GC/MS Column: DB-624  
Sample wt/vol: 5g  
Matrix-Units: Soil-mg/Kg  
Dilution Factor: 1  
% Moisture: NA

CAS #	Compound	Estimated Concentration Q	Retention Time
No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

**INTEGRATED ANALYTICAL LABORATORIES****VOLATILE ORGANICS**

Lab ID: BLKA180608

Client ID: BLKA180608

Date Received:

Date Analyzed: 06/08/2018

Data file: L0215.D 06/8/18 12:20

GC/MS Column: DB-624

Sample wt/vol: 5ml

Matrix-Units: Aqueous- $\mu$ g/L

% Moisture: 100

Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		1.00	0.662
Chloromethane	ND		0.500	0.463
Vinyl chloride	ND		1.00	0.591
Bromomethane	ND		1.00	0.544
Chloroethane	ND		1.00	0.495
Trichlorofluoromethane	ND		0.500	0.433
1,1-Dichloroethene	ND		0.500	0.493
Acetone	ND		2.00	1.33
Carbon disulfide	ND		0.500	0.464
Methylene chloride	ND		1.00	0.990
trans-1,2-Dichloroethene	ND		0.500	0.454
Methyl tert-butyl ether (MTBE)	ND		0.500	0.479
1,1-Dichloroethane	ND		0.500	0.493
cis-1,2-Dichloroethene	ND		0.500	0.451
2-Butanone (MEK)	ND		2.00	1.66
Bromochloromethane	ND		1.00	0.596
Chloroform	ND		0.500	0.469
1,1,1-Trichloroethane	ND		0.500	0.462
Carbon tetrachloride	ND		0.500	0.449
1,2-Dichloroethane (EDC)	ND		0.500	0.458
Benzene	ND		0.500	0.464
Trichloroethene	ND		0.500	0.493
1,2-Dichloropropane	ND		0.500	0.447
1,4-Dioxane	ND		100	98.4
Bromodichloromethane	ND		0.500	0.353
cis-1,3-Dichloropropene	ND		0.500	0.331
4-Methyl-2-pentanone (MIBK)	ND		1.00	0.699

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**

Lab ID: BLKA180608  
 Client ID: BLKA180608  
 Date Received:  
 Date Analyzed: 06/08/2018  
 Data file: L0215.D 06/8/18 12:20

GC/MS Column: DB-624  
 Sample wt/vol: 5ml  
 Matrix-Units: Aqueous- $\mu$ g/L  
 % Moisture: 100  
 Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Toluene	ND		0.500	0.379
trans-1,3-Dichloropropene	ND		0.500	0.321
1,1,2-Trichloroethane	ND		0.500	0.473
Tetrachloroethene	ND		0.500	0.451
2-Hexanone	ND		2.00	0.761
Dibromochloromethane	ND		0.500	0.442
1,2-Dibromoethane (EDB)	ND		0.500	0.402
Chlorobenzene	ND		0.500	0.376
Ethylbenzene	ND		0.500	0.344
Total Xylenes	ND		1.00	0.923
Styrene	ND		0.500	0.290
Bromoform	ND		0.500	0.445
Isopropylbenzene	ND		0.500	0.323
1,1,2,2-Tetrachloroethane	ND		1.00	0.458
1,3-Dichlorobenzene	ND		0.500	0.351
1,4-Dichlorobenzene	ND		0.500	0.341
1,2-Dichlorobenzene	ND		0.500	0.364
1,2-Dibromo-3-chloropropane	ND		1.00	0.533
1,2,4-Trichlorobenzene	ND		1.00	0.304
1,2,3-Trichlorobenzene	ND		1.00	0.339
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.00	0.563
Methyl acetate	ND		0.500	0.485
Cyclohexane	ND		1.00	0.411
Methylcyclohexane	ND		1.00	0.411
1,3-Dichloropropene (cis- and trans-)	ND		0.500	0.331
Total Target Compounds (52):		0		

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**

**VOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: BLKA180608

Client ID: BLKA180608

Date Received:

Date Analyzed: 06/08/2018

Data file: L0215.D 06/ 8/18 12:20

GC/MS Column: DB-624

Sample wt/vol: 5ml

Matrix-Units: Aqueous- $\mu$ g/L

Dilution Factor: 1

% Moisture: 100

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
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No peaks detected

Total TICs = 0

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**

Lab ID: E18-04347-001

Client ID: S7/3

Date Received: 06/01/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: C4807.D 06/05/2018 16:43

GC/MS Column: DB-5

Sample wt/vol: 15.27g

Matrix-Units: Soil-mg/Kg

% Moisture: 5.60

Dilution Factor: 2

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Benzaldehyde	ND		0.069	0.067
Bis(2-chloroethyl) ether	ND		0.069	0.063
2,2'-Oxybis(1-Chloropropane)	ND		0.069	0.058
N-Nitrosodi-n-propylamine	ND		0.069	0.053
Acetophenone	ND		0.069	0.066
Hexachloroethane	ND		0.069	0.058
Nitrobenzene	ND		0.069	0.054
Isophorone	ND		0.069	0.058
Bis(2-chloroethoxy) methane	ND		0.069	0.062
Naphthalene	ND		0.069	0.061
4-Chloroaniline	ND		0.069	0.046
Hexachlorobutadiene	ND		0.069	0.064
Caprolactam	ND		0.069	0.046
2-Methylnaphthalene	ND		0.069	0.049
Hexachlorocyclopentadiene	ND		0.069	0.061
1,1'-Biphenyl	ND		0.069	0.065
2-Chloronaphthalene	ND		0.069	0.057
2-Nitroaniline	ND		0.069	0.048
Dimethyl phthalate	ND		0.069	0.064

**INTEGRATED ANALYTICAL LABORATORIES**

**SEMIVOLATILE ORGANICS**

Lab ID: E18-04347-001

Client ID: S7/3

Date Received: 06/01/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: C4807.D 06/05/2018 16:43

GC/MS Column: DB-5

Sample wt/vol: 15.27g

Matrix-Units: Soil-mg/Kg

% Moisture: 5.60

Dilution Factor: 2

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
2,6-Dinitrotoluene	ND		0.069	0.053
Acenaphthylene	ND		0.069	0.057
3-Nitroaniline	ND		0.069	0.055
Acenaphthene	ND		0.069	0.061
2,4-Dinitrotoluene	ND		0.069	0.063
Dibenzofuran	ND		0.069	0.059
Diethyl phthalate	ND		0.069	0.068
Fluorene	ND		0.069	0.062
4-Chlorophenyl phenyl ether	ND		0.069	0.064
4-Nitroaniline	ND		0.069	0.052
1,2,4,5-Tetrachlorobenzene	ND		0.069	0.060
N-Nitrosodiphenylamine	ND		0.069	0.060
4-Bromophenyl phenyl ether	ND		0.069	0.058
Hexachlorobenzene	ND		0.069	0.064
Atrazine	ND		0.069	0.060
Phenanthrene	0.083	D	0.069	0.063
Anthracene	ND		0.069	0.061
Carbazole	ND		0.069	0.054
Di-n-butyl phthalate	ND		0.069	0.053
Fluoranthene	0.285	D	0.069	0.058
Pyrene	0.556	D	0.069	0.057
Butyl benzyl phthalate	ND		0.069	0.064
3,3'-Dichlorobenzidine	ND		0.069	0.050
Benzo[a]anthracene	0.420	D	0.069	0.060
Chrysene	0.456	D	0.069	0.060
Bis(2-ethylhexyl) phthalate	ND		0.069	0.043
Di-n-octyl phthalate	ND		0.069	0.060
Benzo[b]fluoranthene	0.224	D	0.069	0.056
Benzo[k]fluoranthene	0.193	D	0.069	0.058
Benzo[a]pyrene	0.305	D	0.069	0.057
Indeno[1,2,3-cd]pyrene	0.194	D	0.069	0.057
Dibenz[a,h]anthracene	0.101	D	0.069	0.068
Benzo[g,h,i]perylene	0.302	D	0.069	0.063
Dinitrotoluene (2,4- and 2,6-)	ND		0.069	0.063

Total Target Compounds (53): 3.12

D

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

E18-04347 Page 54

C --- Common laboratory contamination

# INTEGRATED ANALYTICAL LABORATORIES

## SEMIVOLATILE ORGANICS Tentatively Identified Compounds

Lab ID: E18-04347-001

Client ID: S7/3

Date Received: 06/01/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Date File: C4807.D

GC/MS Column: DB-5

Sample wt/vol: 15.27g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 2

% Moisture: 5.60

CAS #	Compound	Estimated Concentration	Q	Retention Time
000198-55-0	Perylene	0.395	DJN	7.57

Total TICs = 0.395 DJN

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

B --- Compound detected in Blank

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**

Lab ID: E18-04347-002

Client ID: S8/4

Date Received: 06/01/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: C4808.D 06/05/2018 16:59

GC/MS Column: DB-5

Sample wt/vol: 15.55g

Matrix-Units: Soil-mg/Kg

% Moisture: 4.40

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Benzaldehyde	ND		0.034	0.033
Bis(2-chloroethyl) ether	ND		0.034	0.031
2,2'-Oxybis(1-Chloropropane)	ND		0.034	0.028
N-Nitrosodi-n-propylamine	ND		0.034	0.026
Acetophenone	ND		0.034	0.032
Hexachloroethane	ND		0.034	0.028
Nitrobenzene	ND		0.034	0.026
Isophorone	ND		0.034	0.028
Bis(2-chloroethoxy) methane	ND		0.034	0.030
Naphthalene	ND		0.034	0.029
4-Chloroaniline	ND		0.034	0.022
Hexachlorobutadiene	ND		0.034	0.031
Caprolactam	ND		0.034	0.022
2-Methylnaphthalene	ND		0.034	0.024
Hexachlorocyclopentadiene	ND		0.034	0.030
1,1'-Biphenyl	ND		0.034	0.031
2-Chloronaphthalene	ND		0.034	0.028
2-Nitroaniline	ND		0.034	0.024
Dimethyl phthalate	ND		0.034	0.031

## INTEGRATED ANALYTICAL LABORATORIES

## SEMIVOLATILE ORGANICS

Lab ID: E18-04347-002

Client ID: S8/4

Date Received: 06/01/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: C4808.D 06/05/2018 16:59

GC/MS Column: DB-5

Sample wt/vol: 15.55g

Matrix-Units: Soil-mg/Kg

% Moisture: 4.40

Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
2,6-Dinitrotoluene	ND		0.034	0.026
Acenaphthylene	ND		0.034	0.028
3-Nitroaniline	ND		0.034	0.027
Acenaphthene	ND		0.034	0.030
2,4-Dinitrotoluene	ND		0.034	0.031
Dibenzofuran	ND		0.034	0.029
Diethyl phthalate	ND		0.034	0.033
Fluoranc	ND		0.034	0.030
4-Chlorophenyl phenyl ether	ND		0.034	0.031
4-Nitroaniline	ND		0.034	0.025
1,2,4,5-Tetrachlorobenzene	ND		0.034	0.029
N-Nitrosodiphenylamine	ND		0.034	0.029
4-Bromophenyl phenyl ether	ND		0.034	0.028
Hexachlorobenzene	ND		0.034	0.031
Atrazine	ND		0.034	0.029
Phenanthrene	0.074		0.034	0.031
Anthracene	ND		0.034	0.030
Carbazole	ND		0.034	0.026
Di-n-butyl phthalate	ND		0.034	0.026
Fluoranthene	0.108		0.034	0.028
Pyrene	0.113		0.034	0.028
Butyl benzyl phthalate	ND		0.034	0.031
3,3'-Dichlorobenzidine	ND		0.034	0.024
Benzo[a]anthracene	0.055		0.034	0.029
Chrysene	0.072		0.034	0.029
Bis(2-ethylhexyl) phthalate	ND		0.034	0.021
Di-n-octyl phthalate	ND		0.034	0.029
Benzo[b]fluoranthene	0.045		0.034	0.027
Benzo[k]fluoranthene	0.035		0.034	0.028
Benzo[a]pyrene	0.044		0.034	0.027
Indeno[1,2,3-cd]pyrene	0.031	J	0.034	0.028
Dibenz[a,h]anthracene	ND		0.034	0.033
Benzo[g,h,i]perylene	0.037		0.034	0.030
Dinitrotoluene (2,4- and 2,6-)	ND		0.034	0.031

Total Target Compounds (53): 0.614

J

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank E18-04347 Page 57

C --- Common laboratory contamination

# INTEGRATED ANALYTICAL LABORATORIES

## SEMIVOLATILE ORGANICS Tentatively Identified Compounds

Lab ID: E18-04347-002

Client ID: S8/4

Date Received: 06/01/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Date File: C4808.D

GC/MS Column: DB-5

Sample wt/vol: 15.55g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 4.40

CAS #	Compound	Estimated Concentration Q	Retention Time
	Unknown SV	0.212	J 6.05

$$\text{Total TICs} = 0.212 \quad J$$

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

B --- Compound detected in Blank

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**

Lab ID: E18-04347-003

Client ID: S9/3

Date Received: 06/01/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: C4809.D 06/05/2018 17:15

GC/MS Column: DB-5

Sample wt/vol: 15.31g

Matrix-Units: Soil-mg/Kg

% Moisture: 6.40

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Benzaldehyde	ND		0.035	0.034
Bis(2-chloroethyl) ether	ND		0.035	0.032
2,2'-Oxybis(1-Chloropropane)	ND		0.035	0.029
N-Nitrosodi-n-propylamine	ND		0.035	0.027
Acetophenone	ND		0.035	0.033
Hexachloroethane	ND		0.035	0.029
Nitrobenzene	ND		0.035	0.027
Isophorone	ND		0.035	0.029
Bis(2-chloroethoxy) methane	ND		0.035	0.031
Naphthalene	ND		0.035	0.030
4-Chloroaniline	ND		0.035	0.023
Hexachlorobutadiene	ND		0.035	0.032
Caprolactam	ND		0.035	0.023
2-Methylnaphthalene	ND		0.035	0.024
Hexachlorocyclopentadiene	ND		0.035	0.031
1,1'-Biphenyl	ND		0.035	0.033
2-Chloronaphthalene	ND		0.035	0.029
2-Nitroaniline	ND		0.035	0.024
Dimethyl phthalate	ND		0.035	0.032

# INTEGRATED ANALYTICAL LABORATORIES

## SEMIVOLATILE ORGANICS

Lab ID: E18-04347-003

Client ID: S9/3

Date Received: 06/01/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: C4809.D 06/05/2018 17:15

GC/MS Column: DB-5

Sample wt/vol: 15.31g

Matrix-Units: Soil-mg/Kg

% Moisture: 6.40

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
2,6-Dinitrotoluene	ND		0.035	0.026
Acenaphthylene	ND		0.035	0.029
3-Nitroaniline	ND		0.035	0.028
Acenaphthene	ND		0.035	0.031
2,4-Dinitrotoluene	ND		0.035	0.032
Dibenzofuran	ND		0.035	0.030
Diethyl phthalate	ND		0.035	0.034
Fluorene	ND		0.035	0.031
4-Chlorophenyl phenyl ether	ND		0.035	0.032
4-Nitroaniline	ND		0.035	0.026
1,2,4,5-Tetrachlorobenzene	ND		0.035	0.030
N-Nitrosodiphenylamine	ND		0.035	0.030
4-Bromophenyl phenyl ether	ND		0.035	0.029
Hexachlorobenzene	ND		0.035	0.032
Atrazine	ND		0.035	0.030
Phenanthrene	ND		0.035	0.032
Anthracene	ND		0.035	0.031
Carbazole	ND		0.035	0.027
Di-n-butyl phthalate	ND		0.035	0.027
Fluoranthene	ND		0.035	0.029
Pyrene	ND		0.035	0.029
Butyl benzyl phthalate	ND		0.035	0.032
3,3'-Dichlorobenzidine	ND		0.035	0.025
Benzo[a]anthracene	ND		0.035	0.030
Chrysene	ND		0.035	0.030
Bis(2-ethylhexyl) phthalate	ND		0.035	0.022
Di-n-octyl phthalate	ND		0.035	0.030
Benzo[b]fluoranthene	ND		0.035	0.028
Benzo[k]fluoranthene	ND		0.035	0.029
Benzo[a]pyrene	ND		0.035	0.029
Indeno[1,2,3-cd]pyrene	ND		0.035	0.029
Dibenz[a,h]anthracene	ND		0.035	0.034
Benzo[g,h,i]perylene	ND		0.035	0.032
Dinitrotoluene (2,4- and 2,6-)	ND		0.035	0.032

Total Target Compounds (53): 0

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank E18-04347 Page 60

C --- Common laboratory contamination

# INTEGRATED ANALYTICAL LABORATORIES

## SEMIVOLATILE ORGANICS Tentatively Identified Compounds

Lab ID: E18-04347-003

Client ID: S9/3

Date Received: 06/01/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Date File: C4809.D

GC/MS Column: DB-5

Sample wt/vol: 15.31g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 6.40

CAS #	Compound	Estimated Concentration Q	Retention Time
No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

B --- Compound detected in Blank

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**

Lab ID: E18-04347-004

Client ID: S10/6

Date Received: 06/01/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: C4810.D 06/05/2018 17:31

GC/MS Column: DB-5

Sample wt/vol: 15.22g

Matrix-Units: Soil-mg/Kg

% Moisture: 14.4

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Benzaldehyde	ND		0.038	0.037
Bis(2-chloroethyl) ether	ND		0.038	0.035
2,2'-Oxybis(1-Chloropropane)	ND		0.038	0.032
N-Nitrosodi-n-propylamine	ND		0.038	0.029
Acetophenone	ND		0.038	0.036
Hexachloroethane	ND		0.038	0.032
Nitrobenzene	ND		0.038	0.030
Isophorone	ND		0.038	0.032
Bis(2-chloroethoxy) methane	ND		0.038	0.034
Naphthalene	ND		0.038	0.034
4-Chloroaniline	ND		0.038	0.025
Hexachlorobutadiene	ND		0.038	0.035
Caprolactam	ND		0.038	0.026
2-Methylnaphthalene	ND		0.038	0.027
Hexachlorocyclopentadiene	ND		0.038	0.034
1,1'-Biphenyl	ND		0.038	0.036
2-Chloronaphthalene	ND		0.038	0.032
2-Nitroaniline	ND		0.038	0.027
Dimethyl phthalate	ND		0.038	0.035

**INTEGRATED ANALYTICAL LABORATORIES**

**SEMIVOLATILE ORGANICS**

Lab ID: E18-04347-004

Client ID: S10/6

Date Received: 06/01/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: C4810.D 06/05/2018 17:31

GC/MS Column: DB-5

Sample wt/vol: 15.22g

Matrix-Units: Soil-mg/Kg

% Moisture: 14.4

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
2,6-Dinitrotoluene	ND		0.038	0.029
Acenaphthylene	ND		0.038	0.032
3-Nitroaniline	ND		0.038	0.031
Acenaphthene	ND		0.038	0.034
2,4-Dinitrotoluene	ND		0.038	0.035
Dibenzofuran	ND		0.038	0.033
Diethyl phthalate	ND		0.038	0.038
Fluorene	ND		0.038	0.035
4-Chlorophenyl phenyl ether	ND		0.038	0.036
4-Nitroaniline	ND		0.038	0.029
1,2,4,5-Tetrachlorobenzene	ND		0.038	0.033
N-Nitrosodiphenylamine	ND		0.038	0.033
4-Bromophenyl phenyl ether	ND		0.038	0.032
Hexachlorobenzene	ND		0.038	0.035
Atrazine	ND		0.038	0.033
Phenanthrene	ND		0.038	0.035
Anthracene	ND		0.038	0.034
Carbazole	ND		0.038	0.030
Di-n-butyl phthalate	ND		0.038	0.029
Fluoranthene	ND		0.038	0.032
Pyrene	ND		0.038	0.032
Butyl benzyl phthalate	ND		0.038	0.035
3,3'-Dichlorobenzidine	ND		0.038	0.028
Benzo[a]anthracene	ND		0.038	0.033
Chrysene	ND		0.038	0.033
Bis(2-ethylhexyl) phthalate	ND		0.038	0.024
Di-n-octyl phthalate	ND		0.038	0.033
Benzo[b]fluoranthene	ND		0.038	0.031
Benzo[k]fluoranthene	ND		0.038	0.032
Benzo[a]pyrene	ND		0.038	0.031
Indeno[1,2,3-cd]pyrene	ND		0.038	0.032
Dibenz[a,h]anthracene	ND		0.038	0.038
Benzo[g,h,i]perylene	ND		0.038	0.035
Dinitrotoluene (2,4- and 2,6-)	ND		0.038	0.035

Total Target Compounds (53): 0

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank  
E18-04347 Page 63  
C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04347-004

GC/MS Column: DB-5

Client ID: S10/6

Sample wt/vol: 15.22g

Date Received: 06/01/2018

Matrix-Units: Soil-mg/Kg

Date Extracted: 06/05/2018

Dilution Factor: 1

Date Analyzed: 06/05/2018

% Moisture: 14.4

Date File: C4810.D

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

B --- Compound detected in Blank

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**

Lab ID: E18-04347-005

Client ID: S11/9

Date Received: 06/01/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: C4811.D 06/05/2018 17:47

GC/MS Column: DB-5

Sample wt/vol: 15.46g

Matrix-Units: Soil-mg/Kg

% Moisture: 18.0

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Benzaldehyde	ND		0.039	0.038
Bis(2-chloroethyl) ether	ND		0.039	0.036
2,2'-Oxybis(1-Chloropropane)	ND		0.039	0.033
N-Nitrosodi-n-propylamine	ND		0.039	0.030
Acetophenone	ND		0.039	0.037
Hexachloroethane	ND		0.039	0.033
Nitrobenzene	ND		0.039	0.031
Isophorone	ND		0.039	0.033
Bis(2-chloroethoxy) methane	ND		0.039	0.035
Naphthalene	ND		0.039	0.034
4-Chloroaniline	ND		0.039	0.026
Hexachlorobutadiene	ND		0.039	0.036
Caprolactam	ND		0.039	0.026
2-Methylnaphthalene	ND		0.039	0.028
Hexachlorocyclopentadiene	ND		0.039	0.035
1,1'-Biphenyl	ND		0.039	0.037
2-Chloronaphthalene	ND		0.039	0.032
2-Nitroaniline	ND		0.039	0.028
Dimethyl phthalate	ND		0.039	0.036

**INTEGRATED ANALYTICAL LABORATORIES**

**SEMIVOLATILE ORGANICS**

Lab ID: E18-04347-005  
 Client ID: S11/9  
 Date Received: 06/01/2018  
 Date Extracted: 06/05/2018  
 Date Analyzed: 06/05/2018  
 Data file: C4811.D 06/05/2018 17:47

GC/MS Column: DB-5  
 Sample wt/vol: 15.46g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 18.0  
 Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
2,6-Dinitrotoluene	ND		0.039	0.030
Acenaphthylene	ND		0.039	0.032
3-Nitroaniline	ND		0.039	0.031
Acenaphthene	ND		0.039	0.035
2,4-Dinitrotoluene	ND		0.039	0.036
Dibenzofuran	ND		0.039	0.034
Diethyl phthalate	ND		0.039	0.039
Fluorene	ND		0.039	0.036
4-Chlorophenyl phenyl ether	ND		0.039	0.037
4-Nitroaniline	ND		0.039	0.030
1,2,4,5-Tetrachlorobenzene	ND		0.039	0.034
N-Nitrosodiphenylamine	ND		0.039	0.034
4-Bromophenyl phenyl ether	ND		0.039	0.033
Hexachlorobenzene	ND		0.039	0.036
Atrazine	ND		0.039	0.034
Phenanthrene	ND		0.039	0.036
Anthracene	ND		0.039	0.035
Carbazole	ND		0.039	0.031
Di-n-butyl phthalate	ND		0.039	0.030
Fluoranthene	ND		0.039	0.033
Pyrene	ND		0.039	0.032
Butyl benzyl phthalate	ND		0.039	0.036
3,3'-Dichlorobenzidine	ND		0.039	0.029
Benzo[a]anthracene	ND		0.039	0.034
Chrysene	ND		0.039	0.034
Bis(2-ethylhexyl) phthalate	ND		0.039	0.024
Di-n-octyl phthalate	ND		0.039	0.034
Benzo[b]fluoranthene	ND		0.039	0.032
Benzo[k]fluoranthene	ND		0.039	0.033
Benzo[a]pyrene	ND		0.039	0.032
Indeno[1,2,3-cd]pyrene	ND		0.039	0.033
Dibenz[a,h]anthracene	ND		0.039	0.039
Benzo[g,h,i]perylene	ND		0.039	0.036
Dinitrotoluene (2,4- and 2,6-)	ND		0.039	0.036

Total Target Compounds (53): 0

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank E18-04347 Page 66  
 C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**

**SEMIVOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04347-005

Client ID: S11/9

Date Received: 06/01/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Date File: C4811.D

GC/MS Column: DB-5

Sample wt/vol: 15.46g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 18.0

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

B --- Compound detected in Blank

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**

Lab ID: E18-04347-006

GC/MS Column: DB-5

Client ID: S12/10

Sample wt/vol: 15.72g

Date Received: 06/01/2018

Matrix-Units: Soil-mg/Kg

Date Extracted: 06/05/2018

% Moisture: 17.1

Date Analyzed: 06/05/2018

Dilution Factor: 1

Data file: C4812.D 06/05/2018 18:03

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Benzaldehyde	ND		0.038	0.037
Bis(2-chloroethyl) ether	ND		0.038	0.035
2,2'-Oxybis(1-Chloropropane)	ND		0.038	0.032
N-Nitrosodi-n-propylamine	ND		0.038	0.029
Acetophenone	ND		0.038	0.036
Hexachloroethane	ND		0.038	0.032
Nitrobenzene	ND		0.038	0.030
Isophorone	ND		0.038	0.032
Bis(2-chloroethoxy) methane	ND		0.038	0.034
Naphthalene	ND		0.038	0.034
4-Chloroaniline	ND		0.038	0.025
Hexachlorobutadiene	ND		0.038	0.035
Caprolactam	ND		0.038	0.026
2-Methylnaphthalene	ND		0.038	0.027
Hexachlorocyclopentadiene	ND		0.038	0.034
1,1'-Biphenyl	ND		0.038	0.036
2-Chloronaphthalene	ND		0.038	0.032
2-Nitroaniline	ND		0.038	0.027
Dimethyl phthalate	ND		0.038	0.035

**INTEGRATED ANALYTICAL LABORATORIES**

**SEMOVOLATILE ORGANICS**

Lab ID: E18-04347-006

Client ID: S12/10

Date Received: 06/01/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: C4812.D 06/05/2018 18:03

GC/MS Column: DB-5

Sample wt/vol: 15.72g

Matrix-Units: Soil-mg/Kg

% Moisture: 17.1

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
2,6-Dinitrotoluene	ND		0.038	0.029
Acenaphthylene	ND		0.038	0.032
3-Nitroaniline	ND		0.038	0.031
Acenaphthene	ND		0.038	0.034
2,4-Dinitrotoluene	ND		0.038	0.035
Dibenzofuran	ND		0.038	0.033
Diethyl phthalate	ND		0.038	0.038
Fluorene	ND		0.038	0.035
4-Chlorophenyl phenyl ether	ND		0.038	0.036
4-Nitroaniline	ND		0.038	0.029
1,2,4,5-Tetrachlorobenzene	ND		0.038	0.033
N-Nitrosodiphenylamine	ND		0.038	0.033
4-Bromophenyl phenyl ether	ND		0.038	0.032
Hexachlorobenzene	ND		0.038	0.035
Atrazine	ND		0.038	0.033
Phenanthrene	ND		0.038	0.035
Anthracene	ND		0.038	0.034
Carbazole	ND		0.038	0.030
Di-n-butyl phthalate	ND		0.038	0.029
Fluoranthene	ND		0.038	0.032
Pyrene	ND		0.038	0.032
Butyl benzyl phthalate	ND		0.038	0.035
3,3'-Dichlorobenzidine	ND		0.038	0.028
Benzo[a]anthracene	ND		0.038	0.033
Chrysene	ND		0.038	0.033
Bis(2-ethylhexyl) phthalate	ND		0.038	0.024
Di-n-octyl phthalate	ND		0.038	0.033
Benzo[b]fluoranthene	ND		0.038	0.031
Benzo[k]fluoranthene	ND		0.038	0.032
Benzo[a]pyrene	ND		0.038	0.031
Indeno[1,2,3-cd]pyrene	ND		0.038	0.032
Dibenz[a,h]anthracene	ND		0.038	0.038
Benzo[g,h,i]perylene	ND		0.038	0.035
Dinitrotoluene (2,4- and 2,6-)	ND		0.038	0.035

Total Target Compounds (53): 0

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank E18-04347 Page 69

C --- Common laboratory contamination

# INTEGRATED ANALYTICAL LABORATORIES

## SEMIVOLATILE ORGANICS Tentatively Identified Compounds

Lab ID: E18-04347-006

Client ID: S12/10

Date Received: 06/01/2018

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Date File: C4812.D

GC/MS Column: DB-5

Sample wt/vol: 15.72g

Matrix-Units: Soil-mg/Kg

Dilution Factor: 1

% Moisture: 17.1

CAS #	Compound	Estimated Concentration Q	Retention Time
No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

B --- Compound detected in Blank

**INTEGRATED ANALYTICAL LABORATORIES**

**SEMIVOLATILE ORGANICS**

Lab ID: BLKS180605-03

GC/MS Column: DB-5

Client ID: .

Sample wt/vol: 15.00g

Date Received: NA

Matrix-Units: Soil-mg/Kg

Date Extracted: 06/05/2018

% Moisture: NA

Date Analyzed: 06/05/2018

Dilution Factor: 1

Data file: C4801.D 06/05/2018 15:08

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
N-Nitrosodimethylamine	ND		0.033	0.029
Pyridine	ND		0.033	0.028
Benzaldehyde	ND		0.033	0.032
Phenol	ND		0.033	0.031
Aniline	ND		0.033	0.031
Bis(2-chloroethyl) ether	ND		0.033	0.030
2-Chlorophenol	ND		0.033	0.025
1,3-Dichlorobenzene	ND		0.033	0.027
1,4-Dichlorobenzene	ND		0.033	0.027
Benzyl alcohol	ND		0.033	0.025
1,2-Dichlorobenzene	ND		0.033	0.031
2-Methylphenol	ND		0.033	0.030
2,2'-Oxybis(1-Chloropropane)	ND		0.033	0.028
4-Methylphenol **	ND		0.033	0.027
N-Nitrosodi-n-propylamine	ND		0.033	0.025
Acetophenone	ND		0.033	0.032
3-Methylphenol	ND		0.033	0.023
Hexachloroethane	ND		0.033	0.028
Nitrobenzene	ND		0.033	0.026
Isophorone	ND		0.033	0.028
2-Nitrophenol	ND		0.033	0.028
2,4-Dimethylphenol	ND		0.033	0.024
Bis(2-chloroethoxy) methane	ND		0.033	0.030
Benzoic acid	ND		0.033	0.033
2,4-Dimethylaniline	ND		0.033	0.027
2,4-Dichlorophenol	ND		0.033	0.029
1,2,4-Trichlorobenzene	ND		0.033	0.029
Naphthalene	ND		0.033	0.029
4-Chloroaniline	ND		0.033	0.022
4-Aminotoluene	ND		0.033	0.026
Hexachlorobutadiene	ND		0.033	0.031
Caprolactam	ND		0.033	0.022
2-Aminotoluene	ND		0.033	0.031
4-Chloro-3-methylphenol	ND		0.033	0.028
2-Methylnaphthalene	ND		0.033	0.023
Hexachlorocyclopentadiene	ND		0.033	0.029
2,4,6-Trichlorophenol	ND		0.033	0.028
2,4,5-Trichlorophenol	ND		0.033	0.029
1,1'-Biphenyl	ND		0.033	0.031
2-Chloronaphthalene	ND		0.033	0.027
2-Nitroaniline	ND		0.033	0.023
Dimethyl phthalate	ND		0.033	0.031

**INTEGRATED ANALYTICAL LABORATORIES**

**SEMOVOLATILE ORGANICS**

Lab ID: BLKS180605-03

Client ID: .

Date Received: NA

Date Extracted: 06/05/2018

Date Analyzed: 06/05/2018

Data file: C4801.D 06/05/2018 15:08

GC/MS Column: DB-5

Sample wt/vol: 15.00g

Matrix-Units: Soil-mg/Kg

% Moisture: NA

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
2,6-Dinitrotoluene	ND		0.033	0.025
Acenaphthylene	ND		0.033	0.027
3-Nitroaniline	ND		0.033	0.027
Acenaphthene	ND		0.033	0.030
2,4-Dinitrophenol	ND		0.033	0.020
4-Nitrophenol	ND		0.033	0.029
2,4-Dinitrotoluene	ND		0.033	0.030
Dibenzofuran	ND		0.033	0.028
Diethyl phthalate	ND		0.033	0.033
Fluorene	ND		0.033	0.030
4-Chlorophenyl phenyl ether	ND		0.033	0.031
4-Nitroaniline	ND		0.033	0.025
1,2,4,5-Tetrachlorobenzene	ND		0.033	0.029
2,3,4,6-Tetrachlorophenol	ND		0.033	0.023
4,6-Dinitro-2-methylphenol	ND		0.033	0.020
N-Nitrosodiphenylamine	ND		0.033	0.029
1,2-Diphenylhydrazine	ND		0.033	0.033
4-Bromophenyl phenyl ether	ND		0.033	0.028
Hexachlorobenzene	ND		0.033	0.031
Atrazine	ND		0.033	0.029
Pentachlorophenol	ND		0.033	0.020
Phenanthrene	ND		0.033	0.030
Anthracene	ND		0.033	0.029
Carbazole	ND		0.033	0.026
Di-n-butyl phthalate	ND		0.033	0.025
Fluoranthene	ND		0.033	0.028
Benzidine	ND		0.033	0.020
Pyrene	ND		0.033	0.027
3,3'-Dimethylbenzidine	ND		0.033	0.021
Butyl benzyl phthalate	ND		0.033	0.031
3,3'-Dichlorobenzidine	ND		0.033	0.024
Benzo[a]anthracene	ND		0.033	0.029
Chrysene	ND		0.033	0.029
Bis(2-ethylhexyl) phthalate	ND		0.033	0.021
Di-n-octyl phthalate	ND		0.033	0.029
Benzo[b]fluoranthene	ND		0.033	0.027
Benzo[k]fluoranthene	ND		0.033	0.028
Benzo[a]pyrene	ND		0.033	0.027
Indeno[1,2,3-cd]pyrene	ND		0.033	0.028
Dibenz[a,h]anthracene	ND		0.033	0.033
Benzo[g,h,i]perylene	ND		0.033	0.030

Total Target Compounds (83): 0

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

\*\* - represents the total of 3+4-Methylphenol

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B --- Compound detected in Blank

Q --- Common laboratory contamination

Page 2 of

**INTEGRATED ANALYTICAL LABORATORIES**

**SEMOVOLATILE ORGANICS**

Lab ID: BLKA180530-04

GC/MS Column: DB-5

Client ID: .

Sample wt/vol: 500ml

Date Received: NA

Matrix-Units: Aqueous- $\mu$ g/L

Date Extracted: 05/30/2018

% Moisture: 100

Date Analyzed: 05/31/2018

Dilution Factor: 1

Data file: B2458.D 05/31/2018 12:40

SIM Data file: B2478.D 05/31/2018 18:59

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
N-Nitrosodimethylamine	ND		1.00	0.278
Pyridine	ND		1.00	0.320
Benzaldehyde	ND		1.00	0.192
Phenol	ND		1.00	0.201
Aniline	ND		1.00	0.169
Bis(2-chloroethyl) ether	ND		1.00	0.243
2-Chlorophenol	ND		1.00	0.116
1,3-Dichlorobenzene	ND		1.00	0.148
1,4-Dichlorobenzene	ND		1.00	0.200
Benzyl alcohol	ND		1.00	0.199
1,2-Dichlorobenzene	ND		1.00	0.144
2-Methylphenol	ND		1.00	0.162
2,2'-Oxybis(1-Chloropropane)	ND		1.00	0.248
4-Methylphenol **	ND		1.00	0.170
N-Nitrosodi-n-propylamine	ND		1.00	0.229
Acetophenone	ND		1.00	0.180
3-Methylphenol	ND		1.00	0.529
Hexachloroethane	ND		1.00	0.163
Nitrobenzene	ND		1.00	0.210
Isophorone	ND		1.00	0.115
2-Nitrophenol	ND		1.00	0.160
2,4-Dimethylphenol	ND		1.00	0.137
Bis(2-chloroethoxy) methane	ND		1.00	0.171
Benzoic acid	ND		1.00	0.876
2,4-Dimethylaniline	ND		1.00	0.130
2,4-Dichlorophenol	ND		1.00	0.138
1,2,4-Trichlorobenzene	ND		1.00	0.187
Naphthalene	ND		1.00	0.139
4-Chloroaniline	ND		1.00	0.140
4-Aminotoluene	ND		1.00	0.164
Hexachlorobutadiene	ND		1.00	0.187
Caprolactam	ND		1.00	0.547
2-Aminotoluene	ND		1.00	0.164
4-Chloro-3-methylphenol	ND		1.00	0.139
2-Methylnaphthalene	ND		1.00	0.128
Hexachlorocyclopentadiene	ND		1.00	0.140
2,4,6-Trichlorophenol	ND		1.00	0.188
2,4,5-Trichlorophenol	ND		1.00	0.252
1,1'-Biphenyl	ND		1.00	0.133
2-Chloronaphthalene	ND		1.00	0.154
2-Nitroaniline	ND		1.00	0.161
Dimethyl phthalate	ND		1.00	0.137

**INTEGRATED ANALYTICAL LABORATORIES**  
**SEMIVOLATILE ORGANICS**

Lab ID: BLKA180530-04  
 Client ID: .  
 Date Received: NA  
 Date Extracted: 05/30/2018  
 Date Analyzed: 05/31/2018  
 Data file: B2458.D 05/31/2018 12:40  
 SIM Data file: B2478.D 05/31/2018 18:59

GC/MS Column: DB-5  
 Sample wt/vol: 500ml  
 Matrix-Units: Aqueous- $\mu$ g/L  
 % Moisture: 100  
 Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
2,6-Dinitrotoluene	ND		1.00	0.139
Acenaphthylene	ND		1.00	0.141
3-Nitroaniline	ND		1.00	0.214
Acenaphthene	ND		1.00	0.129
2,4-Dinitrophenol	ND		1.00	0.206
4-Nitrophenol	ND		1.00	0.466
2,4-Dinitrotoluene	ND		1.00	0.135
Dibenzofuran	ND		1.00	0.133
Diethyl phthalate	ND		1.00	0.166
Fluorene	ND		1.00	0.182
4-Chlorophenyl phenyl ether	ND		1.00	0.316
4-Nitroaniline	ND		1.00	0.205
1,2,4,5-Tetrachlorobenzene	ND		1.00	0.923
2,3,4,6-Tetrachlorophenol	ND		1.00	0.294
4,6-Dinitro-2-methylphenol *	ND		0.100	0.100
N-Nitrosodiphenylamine	ND		1.00	0.179
1,2-Diphenylhydrazine	ND		1.00	0.214
4-Bromophenyl phenyl ether	ND		1.00	0.291
Hexachlorobenzene *	ND		0.020	0.020
Atrazine	ND		1.00	0.247
Pentachlorophenol *	ND		0.100	0.100
Phenanthrene	ND		1.00	0.175
Anthracene	ND		1.00	0.211
Carbazole	ND		1.00	0.221
Di-n-butyl phthalate	ND		1.00	0.196
Fluoranthene	ND		1.00	0.204
Benzidine	ND		1.00	0.664
Pyrene	ND		1.00	0.339
3,3'-Dimethylbenzidine	ND		1.00	0.188
Butyl benzyl phthalate	ND		1.00	0.215
3,3'-Dichlorobenzidine	ND		1.00	0.399
Benzo[a]anthracene *	ND		0.100	0.100
Chrysene	ND		1.00	0.245
Bis(2-ethylhexyl) phthalate	ND		1.00	0.277
Di-n-octyl phthalate	ND		1.00	0.306
Benzo[b]fluoranthene *	ND		0.100	0.100
Benzo[k]fluoranthene *	ND		0.100	0.100
Benzo[a]pyrene *	ND		0.100	0.100
Indeno[1,2,3-cd]pyrene *	ND		0.100	0.100
Dibenz[a,h]anthracene *	ND		0.100	0.100
Benzo[g,h,i]perylene	ND		1.00	0.672

Total Target Compounds (83): 0

\* - RL & MDL from SIM run

D --- Dilution Performed

\*\* - represents the total of 3+4-MethylPhenol 347 Page 74

J --- Value Less than RL & greater than MDL

B --- Compound detected in Blank

E --- Exceeds upper level of Calibration curve

Q --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**

**SEMIVOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: BLKA180530-04

GC/MS Column: DB-5

Client ID: .

Sample wt/vol: 500ml

Date Received: NA

Matrix-Units: Aqueous- $\mu$ g/L

Date Extracted: 05/30/2018

Dilution Factor: 1

Date Analyzed: 05/31/2018

% Moisture: 100

Data file: B2458.D 05/31/2018 12:40

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

**INTEGRATED ANALYTICAL LABORATORIES**

**SEMIVOLATILE ORGANICS**

Lab ID: BLKA180607-03

Client ID: .

Date Received: NA

Date Extracted: 06/07/2018

Date Analyzed: 06/07/2018

Data file: A3758.D 06/07/2018 14:40

SIM Data file: A3764.D 06/07/2018 16:15

GC/MS Column: DB-5

Sample wt/vol: 500ml

Matrix-Units: Aqueous- $\mu$ g/L

% Moisture: 100

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
N-Nitrosodimethylamine	ND	1.00	0.278	
Pyridine	ND	1.00	0.320	
Benzaldehyde	ND	1.00	0.192	
Phenol	ND	1.00	0.201	
Aniline	ND	1.00	0.169	
Bis(2-chloroethyl) ether	ND	1.00	0.243	
2-Chlorophenol	ND	1.00	0.116	
1,3-Dichlorobenzene	ND	1.00	0.148	
1,4-Dichlorobenzene	ND	1.00	0.200	
Benzyl alcohol	ND	1.00	0.199	
1,2-Dichlorobenzene	ND	1.00	0.144	
2-Methylphenol	ND	1.00	0.162	
2,2'-Oxybis(1-Chloropropane)	ND	1.00	0.248	
4-Methylphenol **	ND	1.00	0.170	
N-Nitrosodi-n-propylamine	ND	1.00	0.229	
Acetophenone	ND	1.00	0.180	
3-Methylphenol	ND	1.00	0.529	
Hexachloroethane	ND	1.00	0.163	
Nitrobenzene	ND	1.00	0.210	
Isophorone	ND	1.00	0.115	
2-Nitrophenol	ND	1.00	0.160	
2,4-Dimethylphenol	ND	1.00	0.137	
Bis(2-chloroethoxy) methane	ND	1.00	0.171	
Benzoic acid	ND	1.00	0.876	
2,4-Dimethylaniline	ND	1.00	0.130	
2,4-Dichlorophenol	ND	1.00	0.138	
1,2,4-Trichlorobenzene	ND	1.00	0.187	
Naphthalene	ND	1.00	0.139	
4-Chloroaniline	ND	1.00	0.140	
4-Aminotoluene	ND	1.00	0.164	
Hexachlorobutadiene	ND	1.00	0.187	
Caprolactam	ND	1.00	0.547	
2-Aminotoluene	ND	1.00	0.164	
4-Chloro-3-methylphenol	ND	1.00	0.139	
2-Methylnaphthalene	ND	1.00	0.128	
Hexachlorocyclopentadiene	ND	1.00	0.140	
2,4,6-Trichlorophenol	ND	1.00	0.188	
2,4,5-Trichlorophenol	ND	1.00	0.252	
1,1'-Biphenyl	ND	1.00	0.133	
2-Chloronaphthalene	ND	1.00	0.154	
2-Nitroaniline	ND	1.00	0.161	
Dimethyl phthalate	ND	1.00	0.137	18-04347 Page 76

**INTEGRATED ANALYTICAL LABORATORIES**

**SEMIVOLATILE ORGANICS**

Lab ID: BLKA180607-03

GC/MS Column: DB-5

Client ID: .

Sample wt/vol: 500ml

Date Received: NA

Matrix-Units: Aqueous- $\mu$ g/L

Date Extracted: 06/07/2018

% Moisture: 100

Date Analyzed: 06/07/2018

Dilution Factor: 1

Data file: A3758.D 06/07/2018 14:40

SIM Data file: A3764.D 06/07/2018 16:15

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
2,6-Dinitrotoluene	ND		1.00	0.139
Acenaphthylene	ND		1.00	0.141
3-Nitroaniline	ND		1.00	0.214
Acenaphthene	ND		1.00	0.129
2,4-Dinitrophenol	ND		1.00	0.206
4-Nitrophenol	ND		1.00	0.466
2,4-Dinitrotoluene	ND		1.00	0.135
Dibenzofuran	ND		1.00	0.133
Diethyl phthalate	ND		1.00	0.166
Fluorene	ND		1.00	0.182
4-Chlorophenyl phenyl ether	ND		1.00	0.316
4-Nitroaniline	ND		1.00	0.205
1,2,4,5-Tetrachlorobenzene	ND		1.00	0.923
2,3,4,6-Tetrachlorophenol	ND		1.00	0.294
4,6-Dinitro-2-methylphenol *	ND		0.100	0.100
N-Nitrosodiphenylamine	ND		1.00	0.179
1,2-Diphenylhydrazine	ND		1.00	0.214
4-Bromophenyl phenyl ether	ND		1.00	0.291
Hexachlorobenzene *	ND		0.020	0.020
Atrazine	ND		1.00	0.247
Pentachlorophenol *	ND		0.100	0.100
Phenanthrene	ND		1.00	0.175
Anthracene	ND		1.00	0.211
Carbazole	ND		1.00	0.221
Di-n-butyl phthalate	ND		1.00	0.196
Fluoranthene	ND		1.00	0.204
Benzidine	ND		1.00	0.664
Pyrene	ND		1.00	0.339
3,3'-Dimethylbenzidine	ND		1.00	0.188
Butyl benzyl phthalate	ND		1.00	0.215
3,3'-Dichlorobenzidine	ND		1.00	0.399
Benzo[a]anthracene *	ND		0.100	0.100
Chrysene	ND		1.00	0.245
Bis(2-ethylhexyl) phthalate	ND		1.00	0.277
Di-n-octyl phthalate	ND		1.00	0.306
Benzo[b]fluoranthene *	ND		0.100	0.100
Benzo[k]fluoranthene *	ND		0.100	0.100
Benzo[a]pyrene *	ND		0.100	0.100
Indeno[1,2,3-ed]pyrene *	ND		0.100	0.100
Dibenz[a,h]anthracene *	ND		0.100	0.100
Benzo[g,h,i]perylene	ND		1.00	0.672

Total Target Compounds (83): 0

\* - RL & MDL from SIM run

D --- Dilution Performed

\*\* - represents the total of 3+4-Methylphenol

J --- Value Less than RL & greater than MDL

B --- Compound detected in Blank

E --- Exceeds upper level of Calibration curve

Page 2 of Q --- Common laboratory contamination

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**INTEGRATED ANALYTICAL LABORATORIES**

**SEMIVOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: BLKA180607-03

GC/MS Column: DB-5

Client ID: .

Sample wt/vol: 500ml

Date Received: NA

Matrix-Units: Aqueous- $\mu$ g/L

Date Extracted: 06/07/2018

Dilution Factor: 1

Date Analyzed: 06/07/2018

% Moisture: 100

Data file: A3758.D 06/07/2018 14:40

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

**INTEGRATED ANALYTICAL LABORATORIES**

**SEMIVOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: BLKS180605-03

GC/MS Column: DB-5

Client ID: .

Sample wt/vol: 15.00g

Date Received: NA

Matrix-Units: Soil-mg/Kg

Date Extracted: 06/05/2018

Dilution Factor: 1

Date Analyzed: 06/05/2018

% Moisture: NA

Data file: C4801.D 06/05/2018 15:08

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
No peaks detected				

Total TICs = 0

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**

Lab ID: E18-04347-007

Client ID: GW2/7

Date Received: 06/01/2018

Date Extracted: 06/07/2018

Date Analyzed: 06/07/2018

Data file: A3760.D 06/07/2018 15:12

SIM Data file: A3765.D 06/07/2018 16:30

GC/MS Column: DB-5

Sample wt/vol: 500ml

Matrix-Units: Aqueous- $\mu$ g/L

% Moisture: 100

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Benzaldehyde	ND		1.00	0.192
Bis(2-chloroethyl) ether	ND		1.00	0.243
2,2'-Oxybis(1-Chloropropane)	ND		1.00	0.248
N-Nitrosodi-n-propylamine	ND		1.00	0.229
Acetophenone	ND		1.00	0.180
Hexachloroethane	ND		1.00	0.163
Nitrobenzene	ND		1.00	0.210
Isophorone	ND		1.00	0.115
Bis(2-chloroethoxy) methane	ND		1.00	0.171
Naphthalene	ND		1.00	0.139
4-Chloroaniline	ND		1.00	0.140
Hexachlorobutadiene	ND		1.00	0.187
Caprolactam	ND		1.00	0.547
2-Methylnaphthalene	ND		1.00	0.128
Hexachlorocyclopentadiene	ND		1.00	0.140
1,1'-Biphenyl	ND		1.00	0.133
2-Chloronaphthalene	ND		1.00	0.154
2-Nitroaniline	ND		1.00	0.161
Dimethyl phthalate	ND		1.00	0.137

# INTEGRATED ANALYTICAL LABORATORIES

## SEMIVOLATILE ORGANICS

Lab ID: E18-04347-007

Client ID: GW2/7

Date Received: 06/01/2018

Date Extracted: 06/07/2018

Date Analyzed: 06/07/2018

Data file: A3760.D 06/07/2018 15:12

SIM Data file: A3765.D 06/07/2018 16:30

GC/MS Column: DB-5

Sample wt/vol: 500ml

Matrix-Units: Aqueous- $\mu$ g/L

% Moisture: 100

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
2,6-Dinitrotoluene	ND		1.00	0.139
Acenaphthylene	ND		1.00	0.141
3-Nitroaniline	ND		1.00	0.214
Acenaphthene	ND		1.00	0.129
2,4-Dinitrotoluene	ND		1.00	0.135
Dibenzofuran	ND		1.00	0.133
Diethyl phthalate	ND		1.00	0.166
Fluorene	ND		1.00	0.182
4-Chlorophenyl phenyl ether	ND		1.00	0.316
4-Nitroaniline	ND		1.00	0.205
1,2,4,5-Tetrachlorobenzene	ND		1.00	0.923
N-Nitrosodiphenylamine	ND		1.00	0.179
4-Bromophenyl phenyl ether	ND		1.00	0.291
Hexachlorobenzene *	ND		0.020	0.020
Atrazine	ND		1.00	0.247
Phenanthrene	ND		1.00	0.175
Anthracene	ND		1.00	0.211
Carbazole	ND		1.00	0.221
Di-n-butyl phthalate	ND		1.00	0.196
Fluoranthene	ND		1.00	0.204
Pyrene	ND		1.00	0.339
Butyl benzyl phthalate	ND		1.00	0.215
3,3'-Dichlorobenzidine	ND		1.00	0.399
Benzo[a]anthracene *	ND		0.100	0.100
Chrysene	ND		1.00	0.245
Bis(2-ethylhexyl) phthalate	ND		1.00	0.277
Di-n-octyl phthalate	ND		1.00	0.306
Benzo[b]fluoranthene *	ND		0.100	0.100
Benzo[k]fluoranthene *	ND		0.100	0.100
Benzo[a]pyrene *	ND		0.100	0.100
Indeno[1,2,3-cd]pyrene *	ND		0.100	0.100
Dibenz[a,h]anthracene *	ND		0.100	0.100
Benzo[g,h,i]perylene	ND		1.00	0.672
Dinitrotoluene (2,4- and 2,6-)	ND		1.00	0.139

Total Target Compounds (53): 0

\* - RL & MDL from SIM run

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank  
 C --- Common laboratory contamination  
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**INTEGRATED ANALYTICAL LABORATORIES**

**SEMIVOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04347-007

Client ID: GW2/7

Date Received: 06/01/2018

Date Extracted: 06/07/2018

Date Analyzed: 06/07/2018

Data file: A3760.D 06/07/2018 15:12

GC/MS Column: DB-5

Sample wt/vol: 500ml

Matrix-Units: Aqueous- $\mu$ g/L

Dilution Factor: 1

% Moisture: 100

<b>CAS #</b>	<b>Compound</b>	<b>Estimated Concentration</b>	<b>Q</b>	<b>Retention Time</b>
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No peaks detected

Total TICs = 0

**INTEGRATED ANALYTICAL LABORATORIES****SEMOVOLATILE ORGANICS**

Lab ID: E18-04347-008

Client ID: GW3/6

Date Received: 06/01/2018

Date Extracted: 06/07/2018

Date Analyzed: 06/07/2018

Data file: A3761.D 06/07/2018 15:28

SIM Data file: A3766.D 06/07/2018 16:44

GC/MS Column: DB-5

Sample wt/vol: 500ml

Matrix-Units: Aqueous- $\mu$ g/L

% Moisture: 100

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Benzaldehyde	ND		1.00	0.192
Bis(2-chloroethyl) ether	ND		1.00	0.243
2,2'-Oxybis(1-Chloropropane)	ND		1.00	0.248
N-Nitrosodi-n-propylamine	ND		1.00	0.229
Acetophenone	ND		1.00	0.180
Hexachloroethane	ND		1.00	0.163
Nitrobenzene	ND		1.00	0.210
Isophorone	ND		1.00	0.115
Bis(2-chloroethoxy) methane	ND		1.00	0.171
Naphthalene	ND		1.00	0.139
4-Chloroaniline	ND		1.00	0.140
Hexachlorobutadiene	ND		1.00	0.187
Caprolactam	ND		1.00	0.547
2-Methylnaphthalene	ND		1.00	0.128
Hexachlorocyclopentadiene	ND		1.00	0.140
1,1'-Biphenyl	ND		1.00	0.133
2-Chloronaphthalene	ND		1.00	0.154
2-Nitroaniline	ND		1.00	0.161
Dimethyl phthalate	ND		1.00	0.137

**INTEGRATED ANALYTICAL LABORATORIES**

**SEMOVOLATILE ORGANICS**

Lab ID: E18-04347-008

Client ID: GW3/6

Date Received: 06/01/2018

Date Extracted: 06/07/2018

Date Analyzed: 06/07/2018

Data file: A3761.D 06/07/2018 15:28

SIM Data file: A3766.D 06/07/2018 16:44

GC/MS Column: DB-5

Sample wt/vol: 500ml

Matrix-Units: Aqueous- $\mu$ g/L

% Moisture: 100

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
2,6-Dinitrotoluene	ND		1.00	0.139
Acenaphthylene	ND		1.00	0.141
3-Nitroaniline	ND		1.00	0.214
Acenaphthene	ND		1.00	0.129
2,4-Dinitrotoluene	ND		1.00	0.135
Dibenzofuran	ND		1.00	0.133
Diethyl phthalate	ND		1.00	0.166
Fluorene	ND		1.00	0.182
4-Chlorophenyl phenyl ether	ND		1.00	0.316
4-Nitroaniline	ND		1.00	0.205
1,2,4,5-Tetrachlorobenzene	ND		1.00	0.923
N-Nitrosodiphenylamine	ND		1.00	0.179
4-Bromophenyl phenyl ether	ND		1.00	0.291
Hexachlorobenzene *	ND		0.020	0.020
Atrazine	ND		1.00	0.247
Phenanthrene	ND		1.00	0.175
Anthracene	ND		1.00	0.211
Carbazole	ND		1.00	0.221
Di-n-butyl phthalate	ND		1.00	0.196
Fluoranthene	ND		1.00	0.204
Pyrene	ND		1.00	0.339
Butyl benzyl phthalate	ND		1.00	0.215
3,3'-Dichlorobenzidine	ND		1.00	0.399
Benzo[a]anthracene *	ND		0.100	0.100
Chrysene	ND		1.00	0.245
Bis(2-ethylhexyl) phthalate	ND		1.00	0.277
Di-n-octyl phthalate	ND		1.00	0.306
Benzo[b]fluoranthene *	ND		0.100	0.100
Benzo[k]fluoranthene *	ND		0.100	0.100
Benzo[a]pyrene *	ND		0.100	0.100
Indeno[1,2,3-cd]pyrene *	ND		0.100	0.100
Dibenz[a,h]anthracene *	ND		0.100	0.100
Benzo[g,h,i]perylene	ND		1.00	0.672
Dinitrotoluene (2,4- and 2,6-)	ND		1.00	0.139

Total Target Compounds (53): 0

\* - RL & MDL from SIM run

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank  
C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****SEMIVOLATILE ORGANICS**  
**Tentatively Identified Compounds**

Lab ID: E18-04347-008

Client ID: GW3/6

Date Received: 06/01/2018

Date Extracted: 06/07/2018

Date Analyzed: 06/07/2018

Data file: A3761.D 06/07/2018 15:28

GC/MS Column: DB-5

Sample wt/vol: 500ml

Matrix-Units: Aqueous- $\mu$ g/L

Dilution Factor: 1

% Moisture: 100

CAS #	Compound	Estimated Concentration Q	Retention Time
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No peaks detected

Total TICs = 0

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: E18-04347-001

Client ID: S7/3

Date Received: 06/01/2018

Date Extracted: 06/06/2018

Date Analyzed: 06/07/2018

Data file: R4877.D 06/07/2018 16:48

GC Column: DB-5/DB1701P

Sample wt/vol: 30.33g

Matrix-Units: Soil-mg/Kg

% Moisture: 5.60

Dilution Factor: 5

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Aroclor-1016	ND	0.00873	0.00349	
Aroclor-1221	ND	0.00873	0.00349	
Aroclor-1232	ND	0.00873	0.00349	
Aroclor-1242	ND	0.00873	0.00349	
Aroclor-1248	ND	0.00873	0.00349	
Aroclor-1254	ND	0.00873	0.00349	
Aroclor-1260	ND	0.00873	0.00349	
Aroclor-1262	ND	0.00873	0.00349	
Aroclor-1268	ND	0.00873	0.00349	
PCBs	ND	0.00873	0.00349	

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: E18-04347-002

Client ID: S8/4

Date Received: 06/01/2018

Date Extracted: 06/06/2018

Date Analyzed: 06/07/2018

Data file: R4878.D 06/07/2018 17:05

GC Column: DB-5/DB1701P

Sample wt/vol: 30.72g

Matrix-Units: Soil-mg/Kg

% Moisture: 4.40

Dilution Factor: 5

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Aroclor-1016	ND		0.00851	0.0034
Aroclor-1221	ND		0.00851	0.0034
Aroclor-1232	ND		0.00851	0.0034
Aroclor-1242	ND		0.00851	0.0034
Aroclor-1248	ND		0.00851	0.0034
Aroclor-1254	ND		0.00851	0.0034
Aroclor-1260	ND		0.00851	0.0034
Aroclor-1262	ND		0.00851	0.0034
Aroclor-1268	ND		0.00851	0.0034
PCBs	ND		0.00851	0.0034

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: E18-04347-003

Client ID: S9/3

Date Received: 06/01/2018

Date Extracted: 06/06/2018

Date Analyzed: 06/07/2018

Data file: R4879.D 06/07/2018 17:22

GC Column: DB-5/DB1701P

Sample wt/vol: 30.88g

Matrix-Units: Soil-mg/Kg

% Moisture: 6.40

Dilution Factor: 5

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Aroclor-1016	ND		0.00865	0.00346
Aroclor-1221	ND		0.00865	0.00346
Aroclor-1232	ND		0.00865	0.00346
Aroclor-1242	ND		0.00865	0.00346
Aroclor-1248	ND		0.00865	0.00346
Aroclor-1254	ND		0.00865	0.00346
Aroclor-1260	ND		0.00865	0.00346
Aroclor-1262	ND		0.00865	0.00346
Aroclor-1268	ND		0.00865	0.00346
PCBs	ND		0.00865	0.00346

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: E18-04347-004

Client ID: S10/6

Date Received: 06/01/2018

Date Extracted: 06/06/2018

Date Analyzed: 06/07/2018

Data file: R4880.D 06/07/2018 17:39

GC Column: DB-5/DB1701P

Sample wt/vol: 30.77g

Matrix-Units: Soil-mg/Kg

% Moisture: 14.4

Dilution Factor: 5

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Aroclor-1016	ND		0.00949	0.0038
Aroclor-1221	ND		0.00949	0.0038
Aroclor-1232	ND		0.00949	0.0038
Aroclor-1242	ND		0.00949	0.0038
Aroclor-1248	ND		0.00949	0.0038
Aroclor-1254	ND		0.00949	0.0038
Aroclor-1260	ND		0.00949	0.0038
Aroclor-1262	ND		0.00949	0.0038
Aroclor-1268	ND		0.00949	0.0038
PCBs	ND		0.00949	0.0038

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: E18-04347-005

Client ID: S11/9

Date Received: 06/01/2018

Date Extracted: 06/06/2018

Date Analyzed: 06/07/2018

Data file: R4881.D 06/07/2018 17:57

GC Column: DB-5/DB1701P

Sample wt/vol: 30.48g

Matrix-Units: Soil-mg/Kg

% Moisture: 18.0

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Aroclor-1016	ND		0.002	0.0008
Aroclor-1221	ND		0.002	0.0008
Aroclor-1232	ND		0.002	0.0008
Aroclor-1242	ND		0.002	0.0008
Aroclor-1248	ND		0.002	0.0008
Aroclor-1254	ND		0.002	0.0008
Aroclor-1260	ND		0.002	0.0008
Aroclor-1262	ND		0.002	0.0008
Aroclor-1268	ND		0.002	0.0008
PCBs	ND		0.002	0.0008

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: E18-04347-006  
Client ID: S12/10  
Date Received: 06/01/2018  
Date Extracted: 06/06/2018  
Date Analyzed: 06/07/2018  
Data file: R4882.D 06/07/2018 18:14

GC Column: DB-5/DB1701P  
Sample wt/vol: 30.78g  
Matrix-Units: Soil-mg/Kg  
% Moisture: 17.1  
Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Aroclor-1016	ND		0.00196	0.000784
Aroclor-1221	ND		0.00196	0.000784
Aroclor-1232	ND		0.00196	0.000784
Aroclor-1242	ND		0.00196	0.000784
Aroclor-1248	ND		0.00196	0.000784
Aroclor-1254	ND		0.00196	0.000784
Aroclor-1260	ND		0.00196	0.000784
Aroclor-1262	ND		0.00196	0.000784
Aroclor-1268	ND		0.00196	0.000784
PCBs	ND		0.00196	0.000784

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: E18-04347-007

Client ID: GW2/7

Date Received: 06/01/2018

Date Extracted: 06/06/2018

Date Analyzed: 06/06/2018

Data file: R4840.D 06/06/2018 13:48

GC Column: DB-5/DB1701P

Sample wt/vol: 1000ml

Matrix-Units: Aqueous- $\mu$ g/L

% Moisture: 100

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Aroclor-1016	ND		0.050	0.020
Aroclor-1221	ND		0.050	0.020
Aroclor-1232	ND		0.050	0.020
Aroclor-1242	ND		0.050	0.020
Aroclor-1248	ND		0.050	0.020
Aroclor-1254	ND		0.050	0.020
Aroclor-1260	ND		0.050	0.020
Aroclor-1262	ND		0.050	0.020
Aroclor-1268	ND		0.050	0.020
PCBs	ND		0.050	0.020

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: E18-04347-008

Client ID: GW3/6

Date Received: 06/01/2018

Date Extracted: 06/06/2018

Date Analyzed: 06/06/2018

Data file: R4841.D 06/06/2018 14:05

GC Column: DB-5/DB1701P

Sample wt/vol: 1000ml

Matrix-Units: Aqueous- $\mu$ g/L

% Moisture: 100

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Aroclor-1016	ND		0.050	0.020
Aroclor-1221	ND		0.050	0.020
Aroclor-1232	ND		0.050	0.020
Aroclor-1242	ND		0.050	0.020
Aroclor-1248	ND		0.050	0.020
Aroclor-1254	ND		0.050	0.020
Aroclor-1260	ND		0.050	0.020
Aroclor-1262	ND		0.050	0.020
Aroclor-1268	ND		0.050	0.020
PCBs	ND		0.050	0.020

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: BLKS180606-08

Client ID: PCB

Date Received: NA

Date Extracted: 06/06/2018

Date Analyzed: 06/07/2018

Data file: R4873.D 06/07/2018 15:38

GC Column: DB-5/DB1701P

Sample wt/vol: 30g

Matrix-Units: Soil-mg/Kg

% Moisture: NA

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Aroclor-1016	ND		0.00167	0.000668
Aroclor-1221	ND		0.00167	0.000668
Aroclor-1232	ND		0.00167	0.000668
Aroclor-1242	ND		0.00167	0.000668
Aroclor-1248	ND		0.00167	0.000668
Aroclor-1254	ND		0.00167	0.000668
Aroclor-1260	ND		0.00167	0.000668
Aroclor-1262	ND		0.00167	0.000668
Aroclor-1268	ND		0.00167	0.000668
PCBs	ND		0.00167	0.000668

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: BLKA180530-05

Client ID: PCB

Date Received: NA

Date Extracted: 05/30/2018

Date Analyzed: 05/30/2018

Data file: R4653.D 05/30/2018 20:30

GC Column: DB-5/DB1701P

Sample wt/vol: 1000ml

Matrix-Units: Aqueous- $\mu$ g/L

% Moisture: 100

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Aroclor-1016	ND		0.050	0.020
Aroclor-1221	ND		0.050	0.020
Aroclor-1232	ND		0.050	0.020
Aroclor-1242	ND		0.050	0.020
Aroclor-1248	ND		0.050	0.020
Aroclor-1254	ND		0.050	0.020
Aroclor-1260	ND		0.050	0.020
Aroclor-1262	ND		0.050	0.020
Aroclor-1268	ND		0.050	0.020
PCBs	ND		0.050	0.020

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES****PCB's**

Lab ID: BLKA180606-02

Client ID: PCB

Date Received: NA

Date Extracted: 06/06/2018

Date Analyzed: 06/06/2018

Data file: R4836.D 06/06/2018 12:39

GC Column: DB-5/DB1701P

Sample wt/vol: 1000ml

Matrix-Units: Aqueous- $\mu$ g/L

% Moisture: 100

Dilution Factor: 1

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
Aroclor-1016	ND		0.050	0.020
Aroclor-1221	ND		0.050	0.020
Aroclor-1232	ND		0.050	0.020
Aroclor-1242	ND		0.050	0.020
Aroclor-1248	ND		0.050	0.020
Aroclor-1254	ND		0.050	0.020
Aroclor-1260	ND		0.050	0.020
Aroclor-1262	ND		0.050	0.020
Aroclor-1268	ND		0.050	0.020
PCBs	ND		0.050	0.020

D --- Dilution Performed

J --- Value Less than RL &amp; greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**  
**PESTICIDES**

Lab ID: E18-04347-001  
 Client ID: S7/3  
 Date Received: 06/01/2018  
 Date Extracted: 06/06/2018  
 Date Analyzed: 06/08/2018  
 Data file: O0919.D 06/08/2018 10:32

GC Column: RTX-CLP1/CLP2  
 Sample wt/vol: 30.33g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 5.60  
 Dilution Factor: 5

<b>Compound</b>	<b>Concentration</b>	<b>Q</b>	<b>RL</b>	<b>MDL</b>
alpha-BHC	ND		0.00175	0.000873
beta-BHC	ND		0.00175	0.000873
gamma-BHC (Lindane)	ND		0.00175	0.000873
delta-BHC	ND		0.00175	0.000873
Heptachlor	ND		0.00175	0.000873
Aldrin	ND		0.00175	0.000873
Heptachlor epoxide	ND		0.00175	0.000873
Endosulfan I	ND		0.00175	0.000873
4,4'-DDE	ND		0.00175	0.000873
Dieldrin	ND		0.00175	0.000873
Endrin	ND		0.00175	0.000873
Endosulfan II	ND		0.00175	0.000873
4,4'-DDD	ND		0.00175	0.000873
Endrin aldehyde	ND		0.00175	0.000873
Endosulfan sulfate	ND		0.00175	0.000873
4,4'-DDT	ND		0.00175	0.000873
Endrin ketone	ND		0.00175	0.000873
Methoxychlor	ND		0.00175	0.000873
alpha-Chlordane	ND		0.00175	0.000873
gamma-Chlordane	ND		0.00175	0.000873
Toxaphene	ND		0.022	0.011
Endosulfan (I and II)	ND		0.00175	0.000873
Chlordane (alpha and gamma)	ND		0.00175	0.000873

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**  
**PESTICIDES**

Lab ID: E18-04347-002  
 Client ID: S8/4  
 Date Received: 06/01/2018  
 Date Extracted: 06/06/2018  
 Date Analyzed: 06/08/2018  
 Data file: O0920.D 06/08/2018 10:44

GC Column: RTX-CLP1/CLP2  
 Sample wt/vol: 30.72g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 4.40  
 Dilution Factor: 10

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.00341	0.0017
beta-BHC	ND		0.00341	0.0017
gamma-BHC (Lindane)	ND		0.00341	0.0017
delta-BHC	ND		0.00341	0.0017
Heptachlor	ND		0.00341	0.0017
Aldrin	ND		0.00341	0.0017
Heptachlor epoxide	ND		0.00341	0.0017
Endosulfan I	ND		0.00341	0.0017
4,4'-DDE	ND		0.00341	0.0017
Dieldrin	ND		0.00341	0.0017
Endrin	ND		0.00341	0.0017
Endosulfan II	ND		0.00341	0.0017
4,4'-DDD	0.00731	D	0.00341	0.0017
Endrin aldehyde	ND		0.00341	0.0017
Endosulfan sulfate	ND		0.00341	0.0017
4,4'-DDT	0.00327	DJ	0.00341	0.0017
Endrin ketone	ND		0.00341	0.0017
Methoxychlor	ND		0.00341	0.0017
alpha-Chlordane	ND		0.00341	0.0017
gamma-Chlordane	ND		0.00341	0.0017
Toxaphene	ND		0.043	0.020
Endosulfan (I and II)	ND		0.00341	0.0017
Chlordane (alpha and gamma)	ND		0.00341	0.0017

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**  
**PESTICIDES**

Lab ID: E18-04347-003  
 Client ID: S9/3  
 Date Received: 06/01/2018  
 Date Extracted: 06/06/2018  
 Date Analyzed: 06/08/2018  
 Data file: O0921.D 06/08/2018 10:57

GC Column: RTX-CLP1/CLP2  
 Sample wt/vol: 30.88g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 6.40  
 Dilution Factor: 5

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.00173	0.000865
beta-BHC	ND		0.00173	0.000865
gamma-BHC (Lindane)	ND		0.00173	0.000865
delta-BHC	ND		0.00173	0.000865
Heptachlor	ND		0.00173	0.000865
Aldrin	ND		0.00173	0.000865
Heptachlor epoxide	ND		0.00173	0.000865
Endosulfan I	ND		0.00173	0.000865
4,4'-DDE	ND		0.00173	0.000865
Dieldrin	ND		0.00173	0.000865
Endrin	ND		0.00173	0.000865
Endosulfan II	ND		0.00173	0.000865
4,4'-DDD	ND		0.00173	0.000865
Endrin aldehyde	ND		0.00173	0.000865
Endosulfan sulfate	ND		0.00173	0.000865
4,4'-DDT	ND		0.00173	0.000865
Endrin ketone	ND		0.00173	0.000865
Methoxychlor	ND		0.00173	0.000865
alpha-Chlordane	ND		0.00173	0.000865
gamma-Chlordane	ND		0.00173	0.000865
Toxaphene	ND		0.022	0.010
Endosulfan (I and II)	ND		0.00173	0.000865
Chlordane (alpha and gamma)	ND		0.00173	0.000865

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**  
**PESTICIDES**

Lab ID: E18-04347-004  
 Client ID: S10/6  
 Date Received: 06/01/2018  
 Date Extracted: 06/06/2018  
 Date Analyzed: 06/08/2018  
 Data file: O0922.D 06/08/2018 11:09

GC Column: RTX-CLP1/CLP2  
 Sample wt/vol: 30.77g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 14.4  
 Dilution Factor: 5

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.0019	0.000949
beta-BHC	ND		0.0019	0.000949
gamma-BHC (Lindane)	ND		0.0019	0.000949
delta-BHC	ND		0.0019	0.000949
Heptachlor	ND		0.0019	0.000949
Aldrin	ND		0.0019	0.000949
Heptachlor epoxide	ND		0.0019	0.000949
Endosulfan I	ND		0.0019	0.000949
4,4'-DDE	ND		0.0019	0.000949
Dieldrin	ND		0.0019	0.000949
Endrin	ND		0.0019	0.000949
Endosulfan II	ND		0.0019	0.000949
4,4'-DDD	ND		0.0019	0.000949
Endrin aldehyde	ND		0.0019	0.000949
Endosulfan sulfate	ND		0.0019	0.000949
4,4'-DDT	ND		0.0019	0.000949
Endrin ketone	ND		0.0019	0.000949
Methoxychlor	ND		0.0019	0.000949
alpha-Chlordane	ND		0.0019	0.000949
gamma-Chlordane	ND		0.0019	0.000949
Toxaphene	ND		0.024	0.011
Endosulfan (I and II)	ND		0.0019	0.000949
Chlordane (alpha and gamma)	ND		0.0019	0.000949

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

# INTEGRATED ANALYTICAL LABORATORIES

## PESTICIDES

Lab ID: E18-04347-005

Client ID: S11/9

Date Received: 06/01/2018

Date Extracted: 06/06/2018

Date Analyzed: 06/08/2018

Data file: O0923.D 06/08/2018 11:22

GC Column: RTX-CLP1/CLP2

Sample wt/vol: 30.48g

Matrix-Units: Soil-mg/Kg

% Moisture: 18.0

Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND	0.0004	0.0002	
beta-BHC	ND	0.0004	0.0002	
gamma-BHC (Lindane)	ND	0.0004	0.0002	
delta-BHC	ND	0.0004	0.0002	
Heptachlor	ND	0.0004	0.0002	
Aldrin	ND	0.0004	0.0002	
Heptachlor epoxide	ND	0.0004	0.0002	
Endosulfan I	ND	0.0004	0.0002	
4,4'-DDE	ND	0.0004	0.0002	
Dieldrin	ND	0.0004	0.0002	
Endrin	ND	0.0004	0.0002	
Endosulfan II	ND	0.0004	0.0002	
4,4'-DDD	ND	0.0004	0.0002	
Endrin aldehyde	ND	0.0004	0.0002	
Endosulfan sulfate	ND	0.0004	0.0002	
4,4'-DDT	ND	0.0004	0.0002	
Endrin ketone	ND	0.0004	0.0002	
Methoxychlor	ND	0.0004	0.0002	
alpha-Chlordane	ND	0.0004	0.0002	
gamma-Chlordane	ND	0.0004	0.0002	
Toxaphene	ND	0.005	0.0024	
Endosulfan (I and II)	ND	0.0004	0.0002	
Chlordane (alpha and gamma)	ND	0.0004	0.0002	

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**  
**PESTICIDES**

Lab ID: E18-04347-006  
 Client ID: S12/10  
 Date Received: 06/01/2018  
 Date Extracted: 06/06/2018  
 Date Analyzed: 06/08/2018  
 Data file: O0924.D 06/08/2018 11:35

GC Column: RTX-CLP1/CLP2  
 Sample wt/vol: 30.78g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: 17.1  
 Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000392	0.000196
beta-BHC	ND		0.000392	0.000196
gamma-BHC (Lindane)	ND		0.000392	0.000196
delta-BHC	ND		0.000392	0.000196
Heptachlor	ND		0.000392	0.000196
Aldrin	ND		0.000392	0.000196
Heptachlor epoxide	ND		0.000392	0.000196
Endosulfan I	ND		0.000392	0.000196
4,4'-DDE	ND		0.000392	0.000196
Dieldrin	ND		0.000392	0.000196
Endrin	ND		0.000392	0.000196
Endosulfan II	ND		0.000392	0.000196
4,4'-DDD	ND		0.000392	0.000196
Endrin aldehyde	ND		0.000392	0.000196
Endosulfan sulfate	ND		0.000392	0.000196
4,4'-DDT	ND		0.000392	0.000196
Endrin ketone	ND		0.000392	0.000196
Methoxychlor	ND		0.000392	0.000196
alpha-Chlordane	ND		0.000392	0.000196
gamma-Chlordane	ND		0.000392	0.000196
Toxaphene	ND		0.0049	0.00235
Endosulfan (I and II)	ND		0.000392	0.000196
Chlordane (alpha and gamma)	ND		0.000392	0.000196

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**  
**PESTICIDES**

Lab ID: E18-04347-007  
 Client ID: GW2/7  
 Date Received: 06/01/2018  
 Date Extracted: 06/06/2018  
 Date Analyzed: 06/06/2018  
 Data file: V0782.D 06/06/2018 14:36

GC Column: RTX-CLP1/CLP2  
 Sample wt/vol: 1000ml  
 Matrix-Units: Aqueous- $\mu$ g/L  
 % Moisture: 100  
 Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.010	0.005
beta-BHC	ND		0.010	0.005
gamma-BHC (Lindane)	ND		0.010	0.005
delta-BHC	ND		0.010	0.005
Heptachlor	ND		0.010	0.005
Aldrin	ND		0.010	0.005
Heptachlor epoxide	ND		0.010	0.005
Endosulfan I	ND		0.010	0.005
4,4'-DDE	ND		0.010	0.005
Dieldrin	ND		0.010	0.005
Endrin	ND		0.010	0.005
Endosulfan II	ND		0.010	0.005
4,4'-DDD	ND		0.010	0.005
Endrin aldehyde	ND		0.010	0.005
Endosulfan sulfate	ND		0.010	0.005
4,4'-DDT	ND		0.010	0.005
Endrin ketone	ND		0.010	0.005
Methoxychlor	ND		0.010	0.005
alpha-Chlordane	ND		0.010	0.005
gamma-Chlordane	ND		0.010	0.005
Toxaphene	ND		0.125	0.060
Endosulfan (I and II)	ND		0.010	0.005
Chlordane (alpha and gamma)	ND		0.010	0.005

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**  
**PESTICIDES**

Lab ID: E18-04347-008  
 Client ID: GW3/6  
 Date Received: 06/01/2018  
 Date Extracted: 06/06/2018  
 Date Analyzed: 06/06/2018  
 Data file: V0783.D 06/06/2018 14:49

GC Column: RTX-CLP1/CLP2  
 Sample wt/vol: 1000ml  
 Matrix-Units: Aqueous- $\mu$ g/L  
 % Moisture: 100  
 Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.010	0.005
beta-BHC	ND		0.010	0.005
gamma-BHC (Lindane)	ND		0.010	0.005
delta-BHC	ND		0.010	0.005
Heptachlor	ND		0.010	0.005
Aldrin	ND		0.010	0.005
Heptachlor epoxide	ND		0.010	0.005
Endosulfan I	ND		0.010	0.005
4,4'-DDE	ND		0.010	0.005
Dieldrin	ND		0.010	0.005
Endrin	ND		0.010	0.005
Endosulfan II	ND		0.010	0.005
4,4'-DDD	ND		0.010	0.005
Endrin aldehyde	ND		0.010	0.005
Endosulfan sulfate	ND		0.010	0.005
4,4'-DDT	ND		0.010	0.005
Endrin ketone	ND		0.010	0.005
Methoxychlor	ND		0.010	0.005
alpha-Chlordane	ND		0.010	0.005
gamma-Chlordane	ND		0.010	0.005
Toxaphene	ND		0.125	0.060
Endosulfan (I and II)	ND		0.010	0.005
Chlordane (alpha and gamma)	ND		0.010	0.005

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**  
**PESTICIDES**

Lab ID: BLKS180606-08  
 Client ID: Pest  
 Date Received: NA  
 Date Extracted: 06/06/2018  
 Date Analyzed: 06/08/2018  
 Data file: O0915.D 06/08/2018 09:41

GC Column: RTX-CLP1/CLP2  
 Sample wt/vol: 30g  
 Matrix-Units: Soil-mg/Kg  
 % Moisture: NA  
 Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000334	0.000167
beta-BHC	ND		0.000334	0.000167
gamma-BHC (Lindane)	ND		0.000334	0.000167
delta-BHC	ND		0.000334	0.000167
Heptachlor	ND		0.000334	0.000167
Aldrin	ND		0.000334	0.000167
Heptachlor epoxide	ND		0.000334	0.000167
Endosulfan I	ND		0.000334	0.000167
4,4'-DDE	ND		0.000334	0.000167
Dieldrin	ND		0.000334	0.000167
Endrin	ND		0.000334	0.000167
Endosulfan II	ND		0.000334	0.000167
4,4'-DDD	ND		0.000334	0.000167
Endrin aldehyde	ND		0.000334	0.000167
Endosulfan sulfate	ND		0.000334	0.000167
4,4'-DDT	ND		0.000334	0.000167
Endrin ketone	ND		0.000334	0.000167
Methoxychlor	ND		0.000334	0.000167
alpha-Chlordane	ND		0.000334	0.000167
gamma-Chlordane	ND		0.000334	0.000167
Toxaphene	ND		0.00418	0.002
Endosulfan (I and II)	ND		0.000334	0.000167
Chlordane (alpha and gamma)	ND		0.000334	0.000167

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

**INTEGRATED ANALYTICAL LABORATORIES**  
**PESTICIDES**

Lab ID: BLKA180606-02  
 Client ID: Pest  
 Date Received: NA  
 Date Extracted: 06/06/2018  
 Date Analyzed: 06/06/2018  
 Data file: V0777.D 06/06/2018 13:04

GC Column: RTX-CLP1/CLP2  
 Sample wt/vol: 1000ml  
 Matrix-Units: Aqueous- $\mu$ g/L  
 % Moisture: 100  
 Dilution Factor: 1

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.010	0.005
beta-BHC	ND		0.010	0.005
gamma-BHC (Lindane)	ND		0.010	0.005
delta-BHC	ND		0.010	0.005
Heptachlor	ND		0.010	0.005
Aldrin	ND		0.010	0.005
Heptachlor epoxide	ND		0.010	0.005
Endosulfan I	ND		0.010	0.005
4,4'-DDE	ND		0.010	0.005
Dieldrin	ND		0.010	0.005
Endrin	ND		0.010	0.005
Endosulfan II	ND		0.010	0.005
4,4'-DDD	ND		0.010	0.005
Endrin aldehyde	ND		0.010	0.005
Endosulfan sulfate	ND		0.010	0.005
4,4'-DDT	ND		0.010	0.005
Endrin ketone	ND		0.010	0.005
Methoxychlor	ND		0.010	0.005
alpha-Chlordane	ND		0.010	0.005
gamma-Chlordane	ND		0.010	0.005
Toxaphene	ND		0.125	0.060
Endosulfan (I and II)	ND		0.010	0.005
Chlordane (alpha and gamma)	ND		0.010	0.005

D --- Dilution Performed

J --- Value Less than RL & greater than MDL

E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank

C --- Common laboratory contamination

## INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS**Client/Project: HILLMAN/G6-2368

Lab ID: E18-04347-001

Client ID: S7

Date Collected: 05/31/18 08:50

Date Received: 06/01/18 17:05

Matrix-Units: Soil-mg/Kg (ppm)

% Moisture: 5.60

Batch #: 306

<b>Compound</b>	<b>Result</b>	<b>Q</b>	<b>DF</b>	<b>RL</b>	<b>MDL</b>	<b>Date Analyzed</b>	<b>Method</b>
Aluminum	2450		1	5.66	2.26	06/05/18 20:39	SW 6020B
Antimony	0.921		1	0.566	0.226	06/05/18 20:39	SW 6020B
Arsenic	2.15		1	0.566	0.170	06/05/18 20:39	SW 6020B
Barium	86.6		1	0.566	0.283	06/05/18 20:39	SW 6020B
Beryllium	ND		1	0.566	0.170	06/05/18 20:39	SW 6020B
Cadmium	ND		1	0.566	0.340	06/05/18 20:39	SW 6020B
Calcium	1960		1	56.6	17.0	06/05/18 20:39	SW 6020B
Chromium	8.33		1	0.566	0.283	06/05/18 20:39	SW 6020B
Cobalt	2.53		1	0.566	0.170	06/05/18 20:39	SW 6020B
Copper	14.0		1	0.566	0.396	06/05/18 20:39	SW 6020B
Iron	5100		1	56.6	17.0	06/05/18 20:39	SW 6020B
Lead	193		1	0.566	0.283	06/05/18 20:39	SW 6020B
Magnesium	693		1	56.6	17.0	06/05/18 20:39	SW 6020B
Manganese	94.8		1	0.566	0.396	06/05/18 20:39	SW 6020B
Mercury	0.260		1	0.0250	0.0100	06/05/18 13:00	SW 7471B
Nickel	6.78		1	0.566	0.396	06/05/18 20:39	SW 6020B
Potassium	347		1	56.6	22.6	06/05/18 20:39	SW 6020B
Selenium	1.84	J	1	3.96	1.70	06/05/18 20:39	SW 6020B
Silver	0.362	J	1	0.566	0.340	06/05/18 20:39	SW 6020B
Sodium	122		1	56.6	22.6	06/05/18 20:39	SW 6020B
Thallium	ND		1	0.566	0.283	06/05/18 20:39	SW 6020B
Vanadium	10.6		1	0.566	0.283	06/05/18 20:39	SW 6020B
Zinc	134		1	5.66	1.13	06/05/18 20:39	SW 6020B

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds

INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS**

Client/Project: HILLMAN/G6 2368

Lab ID: E18-04347-002

Client ID: S8

Date Collected: 05/31/18 09:20

Date Received: 06/01/18 17:05

Matrix-Units: Soil-mg/Kg (ppm)

% Moisture: 4.40

Batch #: 306

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Aluminum	1450		1	5.56	2.22	06/05/18 20:45	SW 6020B
Antimony	0.543	J	1	0.556	0.222	06/05/18 20:45	SW 6020B
Arsenic	1.61		1	0.556	0.167	06/05/18 20:45	SW 6020B
Barium	54.3		1	0.556	0.278	06/05/18 20:45	SW 6020B
Beryllium	ND		1	0.556	0.167	06/05/18 20:45	SW 6020B
Cadmium	ND		1	0.556	0.334	06/05/18 20:45	SW 6020B
Calcium	3470		1	55.6	16.7	06/05/18 20:45	SW 6020B
Chromium	6.15		1	0.556	0.278	06/05/18 20:45	SW 6020B
Cobalt	1.20		1	0.556	0.167	06/05/18 20:45	SW 6020B
Copper	20.1		1	0.556	0.389	06/05/18 20:45	SW 6020B
Iron	4430		1	55.6	16.7	06/05/18 20:45	SW 6020B
Lead	97.8		1	0.556	0.278	06/05/18 20:45	SW 6020B
Magnesium	969		1	55.6	16.7	06/05/18 20:45	SW 6020B
Manganese	64.5		1	0.556	0.389	06/05/18 20:45	SW 6020B
Mercury	0.0722		1	2.39	9.55	06/05/18 13:03	SW 7471B
Nickel	5.59		1	0.556	0.389	06/05/18 20:45	SW 6020B
Potassium	188		1	55.6	22.2	06/05/18 20:45	SW 6020B
Selenium	ND		1	3.89	1.67	06/05/18 20:45	SW 6020B
Silver	ND		1	0.556	0.334	06/05/18 20:45	SW 6020B
Sodium	57.9		1	55.6	22.2	06/05/18 20:45	SW 6020B
Thallium	ND		1	0.556	0.278	06/05/18 20:45	SW 6020B
Vanadium	7.87		1	0.556	0.278	06/05/18 20:45	SW 6020B
Zinc	81.4		1	5.56	1.11	06/05/18 20:45	SW 6020B

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds

## INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS**Client/Project: HILLMAN/G6-2368

Lab ID: E18-04347-003

Client ID: S9

Date Collected: 05/31/18 10:10

Date Received: 06/01/18 17:05

Matrix-Units: Soil-mg/Kg (ppm)

% Moisture: 6.40

Batch #: 306

<b>Compound</b>	<b>Result</b>	<b>Q</b>	<b>DF</b>	<b>RL</b>	<b>MDL</b>	<b>Date Analyzed</b>	<b>Method</b>
Aluminum	1920		1	5.50	2.20	06/05/18 20:50	SW 6020B
Antimony	0.551		1	0.550	0.220	06/05/18 20:50	SW 6020B
Arsenic	1.58		1	0.550	0.165	06/05/18 20:50	SW 6020B
Barium	17.1		1	0.550	0.275	06/05/18 20:50	SW 6020B
Beryllium	ND		1	0.550	0.165	06/05/18 20:50	SW 6020B
Cadmium	ND		1	0.550	0.330	06/05/18 20:50	SW 6020B
Calcium	11500		1	55.0	16.5	06/05/18 20:50	SW 6020B
Chromium	5.75		1	0.550	0.275	06/05/18 20:50	SW 6020B
Cobalt	2.15		1	0.550	0.165	06/05/18 20:50	SW 6020B
Copper	16.5		1	0.550	0.385	06/05/18 20:50	SW 6020B
Iron	5800		1	55.0	16.5	06/05/18 20:50	SW 6020B
Lead	23.3		1	0.550	0.275	06/05/18 20:50	SW 6020B
Magnesium	3910		1	55.0	16.5	06/05/18 20:50	SW 6020B
Manganese	63.0		1	0.550	0.385	06/05/18 20:50	SW 6020B
Mercury	0.0199	J	1	2.43	9.73	06/05/18 13:06	SW 7471B
Nickel	4.33		1	0.550	0.385	06/05/18 20:50	SW 6020B
Potassium	315		1	55.0	22.0	06/05/18 20:50	SW 6020B
Selenium	ND		1	3.85	1.65	06/05/18 20:50	SW 6020B
Silver	ND		1	0.550	0.330	06/05/18 20:50	SW 6020B
Sodium	160		1	55.0	22.0	06/05/18 20:50	SW 6020B
Thallium	ND		1	0.550	0.275	06/05/18 20:50	SW 6020B
Vanadium	18.6		1	0.550	0.275	06/05/18 20:50	SW 6020B
Zinc	27.8		1	5.50	1.10	06/05/18 20:50	SW 6020B

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds

## INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS**Client/Project: HILLMAN/G6-2368

Lab ID: E18-04347-004

Client ID: S10

Date Collected: 05/31/18 10:40

Date Received: 06/01/18 17:05

Matrix-Units: Soil-mg/Kg (ppm)

% Moisture: 14.4

Batch #: 306

<b>Compound</b>	<b>Result</b>	<b>Q</b>	<b>DF</b>	<b>RL</b>	<b>MDL</b>	<b>Date Analyzed</b>	<b>Method</b>
Aluminum	843		1	6.04	2.42	06/05/18 20:56	SW 6020B
Antimony	ND		1	0.604	0.242	06/05/18 20:56	SW 6020B
Arsenic	0.414	J	1	0.604	0.181	06/05/18 20:56	SW 6020B
Barium	11.5		1	0.604	0.302	06/05/18 20:56	SW 6020B
Beryllium	ND		1	0.604	0.181	06/05/18 20:56	SW 6020B
Cadmium	ND		1	0.604	0.363	06/05/18 20:56	SW 6020B
Calcium	2030		1	60.4	18.1	06/05/18 20:56	SW 6020B
Chromium	5.24		1	0.604	0.302	06/05/18 20:56	SW 6020B
Cobalt	0.629		1	0.604	0.181	06/05/18 20:56	SW 6020B
Copper	1.64		1	0.604	0.423	06/05/18 20:56	SW 6020B
Iron	1860		1	60.4	18.1	06/05/18 20:56	SW 6020B
Lead	11.0		1	0.604	0.302	06/05/18 20:56	SW 6020B
Magnesium	396		1	60.4	18.1	06/05/18 20:56	SW 6020B
Manganese	42.6		1	0.604	0.423	06/05/18 20:56	SW 6020B
Mercury	0.0503		1	2.57	1.03	06/05/18 13:14	SW 7471B
Nickel	1.73		1	0.604	0.423	06/05/18 20:56	SW 6020B
Potassium	178		1	60.4	24.2	06/05/18 20:56	SW 6020B
Selenium	ND		1	4.23	1.81	06/05/18 20:56	SW 6020B
Silver	ND		1	0.604	0.363	06/05/18 20:56	SW 6020B
Sodium	35.5	J	1	60.4	24.2	06/05/18 20:56	SW 6020B
Thallium	ND		1	0.604	0.302	06/05/18 20:56	SW 6020B
Vanadium	5.77		1	0.604	0.302	06/05/18 20:56	SW 6020B
Zinc	8.04		1	6.04	1.21	06/05/18 20:56	SW 6020B

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds

INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS**

Client/Project: HILLMAN/G6-2368

Lab ID: E18-04347-005

Client ID: S11

Date Collected: 05/31/18 11:00

Date Received: 06/01/18 17:05

Matrix-Units: Soil-mg/Kg (ppm)

% Moisture: 18.0

Batch #: 306

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Aluminum	712		1	6.41	2.56	06/05/18 21:01	SW 6020B
Antimony	ND		1	0.641	0.256	06/05/18 21:01	SW 6020B
Arsenic	0.588	J	1	0.641	0.192	06/05/18 21:01	SW 6020B
Barium	4.19		1	0.641	0.320	06/05/18 21:01	SW 6020B
Beryllium	ND		1	0.641	0.192	06/05/18 21:01	SW 6020B
Cadmium	ND		1	0.641	0.384	06/05/18 21:01	SW 6020B
Calcium	612		1	64.1	19.2	06/05/18 21:01	SW 6020B
Chromium	4.33		1	0.641	0.320	06/05/18 21:01	SW 6020B
Cobalt	0.483	J	1	0.641	0.192	06/05/18 21:01	SW 6020B
Copper	ND		1	0.641	0.449	06/05/18 21:01	SW 6020B
Iron	1740		1	64.1	19.2	06/05/18 21:01	SW 6020B
Lead	1.75		1	0.641	0.320	06/05/18 21:01	SW 6020B
Magnesium	335		1	64.1	19.2	06/05/18 21:01	SW 6020B
Manganese	30.7		1	0.641	0.449	06/05/18 21:01	SW 6020B
Mercury	ND		1	2.82	1.13	06/05/18 13:16	SW 7471B
Nickel	1.61		1	0.641	0.449	06/05/18 21:01	SW 6020B
Potassium	153		1	64.1	25.6	06/05/18 21:01	SW 6020B
Selenium	ND		1	4.49	1.92	06/05/18 21:01	SW 6020B
Silver	ND		1	0.641	0.384	06/05/18 21:01	SW 6020B
Sodium	45.6	J	1	64.1	25.6	06/05/18 21:01	SW 6020B
Thallium	ND		1	0.641	0.320	06/05/18 21:01	SW 6020B
Vanadium	3.97		1	0.641	0.320	06/05/18 21:01	SW 6020B
Zinc	9.41		1	6.41	1.28	06/05/18 21:01	SW 6020B

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds

## INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS**Client/Project: HILLMAN/G6-2368

Lab ID: E18-04347-006

Client ID: S12

Date Collected: 05/31/18 11:30

Date Received: 06/01/18 17:05

Matrix-Units: Soil-mg/Kg (ppm)

% Moisture: 17.1

Batch #: 306

<b>Compound</b>	<b>Result</b>	<b>Q</b>	<b>DF</b>	<b>RL</b>	<b>MDL</b>	<b>Date Analyzed</b>	<b>Method</b>
Aluminum	492		1	6.22	2.49	06/05/18 21:07	SW 6020B
Antimony	ND		1	0.622	0.249	06/05/18 21:07	SW 6020B
Arsenic	0.197	J	1	0.622	0.187	06/05/18 21:07	SW 6020B
Barium	1.99		1	0.622	0.311	06/05/18 21:07	SW 6020B
Beryllium	ND		1	0.622	0.187	06/05/18 21:07	SW 6020B
Cadmium	ND		1	0.622	0.373	06/05/18 21:07	SW 6020B
Calcium	98.0		1	62.2	18.7	06/05/18 21:07	SW 6020B
Chromium	1.72		1	0.622	0.311	06/05/18 21:07	SW 6020B
Cobalt	0.279	J	1	0.622	0.187	06/05/18 21:07	SW 6020B
Copper	ND		1	0.622	0.436	06/05/18 21:07	SW 6020B
Iron	766		1	62.2	18.7	06/05/18 21:07	SW 6020B
Lead	0.546	J	1	0.622	0.311	06/05/18 21:07	SW 6020B
Magnesium	218		1	62.2	18.7	06/05/18 21:07	SW 6020B
Manganese	6.90		1	0.622	0.436	06/05/18 21:07	SW 6020B
Mercury	ND		1	0.0275	0.0110	06/05/18 13:19	SW 7471B
Nickel	1.11		1	0.622	0.436	06/05/18 21:07	SW 6020B
Potassium	136		1	62.2	24.9	06/05/18 21:07	SW 6020B
Selenium	ND		1	4.36	1.87	06/05/18 21:07	SW 6020B
Silver	ND		1	0.622	0.373	06/05/18 21:07	SW 6020B
Sodium	140		1	62.2	24.9	06/05/18 21:07	SW 6020B
Thallium	ND		1	0.622	0.311	06/05/18 21:07	SW 6020B
Vanadium	1.24		1	0.622	0.311	06/05/18 21:07	SW 6020B
Zinc	13.7		1	6.22	1.24	06/05/18 21:07	SW 6020B

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds

INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS**

Client/Project: HILLMAN/G6-2368

Lab ID: E18-04347-007

Client ID: GW2

Date Collected: 05/31/18 09:30

Date Received: 06/01/18 17:05

Matrix-Units: Aqueous-ug/L (ppb)

% Moisture: 100

Batch #: 307

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Aluminum	570		1	20.0	8.00	06/06/18 15:23	SW 6020B
Antimony	ND		1	2.00	1.20	06/06/18 15:23	SW 6020B
Arsenic	3.36		1	2.00	0.600	06/06/18 15:23	SW 6020B
Barium	7.62		1	2.00	1.20	06/06/18 15:23	SW 6020B
Beryllium	ND		1	1.00	0.320	06/06/18 15:23	SW 6020B
Cadmium	ND		1	2.00	1.00	06/06/18 15:23	SW 6020B
Calcium	11500		1	200	60.0	06/06/18 15:23	SW 6020B
Chromium	8.24		1	2.00	1.00	06/06/18 15:23	SW 6020B
Cobalt	0.796	J	1	2.00	0.600	06/06/18 15:23	SW 6020B
Copper	ND		1	2.00	1.00	06/06/18 15:23	SW 6020B
Iron	1850		1	200	60.0	06/06/18 15:23	SW 6020B
Lead	10.5		1	2.00	1.20	06/06/18 15:23	SW 6020B
Magnesium	1580		1	200	60.0	06/06/18 15:23	SW 6020B
Manganese	19.7		1	2.00	1.40	06/06/18 15:23	SW 6020B
Mercury	ND		1	0.500	0.200	06/06/18 09:47	SW 7470A
Nickel	5.23		1	2.00	1.20	06/06/18 15:23	SW 6020B
Potassium	4240		1	200	80.0	06/06/18 15:23	SW 6020B
Selenium	ND		1	20.0	6.00	06/06/18 15:23	SW 6020B
Silver	ND		1	2.00	1.20	06/06/18 15:23	SW 6020B
Sodium	9890		1	200	80.0	06/06/18 15:23	SW 6020B
Thallium	ND		1	2.00	1.20	06/06/18 15:23	SW 6020B
Vanadium	5.13		1	2.00	0.600	06/06/18 15:23	SW 6020B
Zinc	42.5		1	20.0	8.00	06/06/18 15:23	SW 6020B

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds

INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS**

Client/Project: HILLMAN/G6-2368

Lab ID: E18-04347-008

Client ID: GW3

Date Collected: 05/31/18 11:40

Date Received: 06/01/18 17:05

Matrix-Units: Aqueous-ug/L (ppb)

% Moisture: 100

Batch #: 307

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Aluminum	234		1	20.0	8.00	06/06/18 15:29	SW 6020B
Antimony	ND		1	2.00	1.20	06/06/18 15:29	SW 6020B
Arsenic	0.995	J	1	2.00	0.600	06/06/18 15:29	SW 6020B
Barium	17.5		1	2.00	1.20	06/06/18 15:29	SW 6020B
Beryllium	ND		1	1.00	0.320	06/06/18 15:29	SW 6020B
Cadmium	ND		1	2.00	1.00	06/06/18 15:29	SW 6020B
Calcium	17400		1	200	60.0	06/06/18 15:29	SW 6020B
Chromium	7.38		1	2.00	1.00	06/06/18 15:29	SW 6020B
Cobalt	ND		1	2.00	0.600	06/06/18 15:29	SW 6020B
Copper	ND		1	2.00	1.00	06/06/18 15:29	SW 6020B
Iron	1250		1	200	60.0	06/06/18 15:29	SW 6020B
Lead	2.52		1	2.00	1.20	06/06/18 15:29	SW 6020B
Magnesium	11000		1	200	60.0	06/06/18 15:29	SW 6020B
Manganese	31.9		1	2.00	1.40	06/06/18 15:29	SW 6020B
Mercury	ND		1	0.500	0.200	06/06/18 09:55	SW 7470A
Nickel	1.34	J	1	2.00	1.20	06/06/18 15:29	SW 6020B
Potassium	9240		1	200	80.0	06/06/18 15:29	SW 6020B
Selenium	ND		1	20.0	6.00	06/06/18 15:29	SW 6020B
Silver	ND		1	2.00	1.20	06/06/18 15:29	SW 6020B
Sodium	136000		1	200	80.0	06/06/18 15:29	SW 6020B
Thallium	ND		1	2.00	1.20	06/06/18 15:29	SW 6020B
Vanadium	1.60	J	1	2.00	0.600	06/06/18 15:29	SW 6020B
Zinc	46.3		1	20.0	8.00	06/06/18 15:29	SW 6020B

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds

## INTEGRATED ANALYTICAL LABORATORIES, LLC.

**METALS**Client/Project: HILLMAN/G6-2368

Lab ID: E18-04347-009

Client ID: GW2-FILT

Date Collected: 05/31/18 09:30

Date Received: 06/01/18 17:05

Matrix-Units: Aqueous-ug/L (ppb)

% Moisture: 100

Batch #: 307

<b>Compound</b>	<b>Result</b>	<b>Q</b>	<b>DF</b>	<b>RL</b>	<b>MDL</b>	<b>Date Analyzed</b>	<b>Method</b>
Aluminum	42.6		1	20.0	8.00	06/06/18 15:12	SW 6020B
Antimony	ND		1	2.00	1.20	06/06/18 15:12	SW 6020B
Arsenic	3.22		1	2.00	0.600	06/06/18 15:12	SW 6020B
Barium	4.12		1	2.00	1.20	06/06/18 15:12	SW 6020B
Beryllium	ND		1	1.00	0.320	06/06/18 15:12	SW 6020B
Cadmium	ND		1	2.00	1.00	06/06/18 15:12	SW 6020B
Calcium	10600		1	200	60.0	06/06/18 15:12	SW 6020B
Chromium	2.56		1	2.00	1.00	06/06/18 15:12	SW 6020B
Cobalt	ND		1	2.00	0.600	06/06/18 15:12	SW 6020B
Copper	ND		1	2.00	1.00	06/06/18 15:12	SW 6020B
Iron	128	J	1	200	60.0	06/06/18 15:12	SW 6020B
Lead	ND		1	2.00	1.20	06/06/18 15:12	SW 6020B
Magnesium	1560		1	200	60.0	06/06/18 15:12	SW 6020B
Manganese	18.2		1	2.00	1.40	06/06/18 15:12	SW 6020B
Mercury	ND		1	0.500	0.200	06/06/18 09:42	SW 7470A
Nickel	3.30		1	2.00	1.20	06/06/18 15:12	SW 6020B
Potassium	4210		1	200	80.0	06/06/18 15:12	SW 6020B
Selenium	ND		1	20.0	6.00	06/06/18 15:12	SW 6020B
Silver	ND		1	2.00	1.20	06/06/18 15:12	SW 6020B
Sodium	9380		1	200	80.0	06/06/18 15:12	SW 6020B
Thallium	ND		1	2.00	1.20	06/06/18 15:12	SW 6020B
Vanadium	4.38		1	2.00	0.600	06/06/18 15:12	SW 6020B
Zinc	15.5	J	1	20.0	8.00	06/06/18 15:12	SW 6020B

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds

## INTEGRATED ANALYTICAL LABORATORIES, LLC.

## METALS

Client/Project: HILLMAN/G6-2368

Lab ID: E18-04347-010

Client ID: GW3-FILT

Date Collected: 05/31/18 11:40

Date Received: 06/01/18 17:05

Matrix-Units: Aqueous-ug/L (ppb)

% Moisture: 100

Batch #: 307

Compound	Result	Q	DF	RL	MDL	Date Analyzed	Method
Aluminum	ND		1	20.0	8.00	06/06/18 15:18	SW 6020B
Antimony	ND		1	2.00	1.20	06/06/18 15:18	SW 6020B
Arsenic	ND		1	2.00	0.600	06/06/18 15:18	SW 6020B
Barium	15.2		1	2.00	1.20	06/06/18 15:18	SW 6020B
Beryllium	ND		1	1.00	0.320	06/06/18 15:18	SW 6020B
Cadmium	ND		1	2.00	1.00	06/06/18 15:18	SW 6020B
Calcium	17400	X	1	200	60.0	06/06/18 15:18	SW 6020B
Chromium	ND		1	2.00	1.00	06/06/18 15:18	SW 6020B
Cobalt	ND		1	2.00	0.600	06/06/18 15:18	SW 6020B
Copper	ND		1	2.00	1.00	06/06/18 15:18	SW 6020B
Iron	ND		1	200	60.0	06/06/18 15:18	SW 6020B
Lead	ND		1	2.00	1.20	06/06/18 15:18	SW 6020B
Magnesium	12300	X	1	200	60.0	06/06/18 15:18	SW 6020B
Manganese	29.5		1	2.00	1.40	06/06/18 15:18	SW 6020B
Mercury	ND		1	0.500	0.200	06/06/18 09:45	SW 7470A
Nickel	1.31	J	1	2.00	1.20	06/06/18 15:18	SW 6020B
Potassium	9040		1	200	80.0	06/06/18 15:18	SW 6020B
Selenium	ND		1	20.0	6.00	06/06/18 15:18	SW 6020B
Silver	ND		1	2.00	1.20	06/06/18 15:18	SW 6020B
Sodium	141000	X	1	200	80.0	06/06/18 15:18	SW 6020B
Thallium	ND		1	2.00	1.20	06/06/18 15:18	SW 6020B
Vanadium	ND		1	2.00	0.600	06/06/18 15:18	SW 6020B
Zinc	28.7		1	20.0	8.00	06/06/18 15:18	SW 6020B

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds

X = Samples analyzed for total and dissolved metals may have slightly different concentrations due to normal variations in the analytical process. Slightly higher concentrations present in dissolved versus total analyses can occur even when all QC are acceptable. A 20% RPD between total and dissolved results is used to evaluate if the concentrations are statistically indistinguishable.

**METALS QUALITY CONTROL**  
**BLANK 1 RESULTS SUMMARY**  
**06/05/2018 06:28 PM**

Batch (Page) #: 306

Associated Lab E18-04312, E18-04314, E18-04347

Case for Blank

1:

Matrix: Soil

Unit: ppm (mg/kg)

Method: 6020B/7471B

ANALYTE	1/2 Sample RL	REAGENT BLANK BLKS180605-01
Aluminum	2.50	ND
Antimony	0.250	ND
Arsenic	0.250	ND
Barium	0.250	ND
Beryllium	0.250	ND
Cadmium	0.250	ND
Calcium	25.0	ND
Chromium	0.250	ND
Cobalt	0.250	ND
Copper	0.250	ND
Iron	25.0	ND
Lead	0.250	ND
Magnesium	25.0	ND
Manganese	0.250	ND
Mercury	0.013	ND
Nickel	0.250	ND
Potassium	25.0	ND
Selenium	1.75	ND
Silver	0.250	ND
Sodium	25.0	ND
Thallium	0.250	ND
Vanadium	0.250	ND
Zinc	2.50	ND

Associated Sample for Blank 1:

04312-001~013; 04314-001; 04347-001~006

**METALS QUALITY CONTROL**  
**BLANK 1 RESULTS SUMMARY**

06/06/2018 02:07 PM

Batch (Page) #: 307

Associated Lab E18-04234, E18-04245, E18-04262, E18-04276, E18-04347

Case for Blank

1:

Matrix: Aqueous      Unit: ppb ( $\mu$ g/L)      Method: 6020B/7470A

ANALYTE	1/2 Sample RL	REAGENT BLANK BLKA180605-01
Aluminum	10.0	ND
Antimony	1.00	ND
Arsenic	1.00	ND
Barium	1.00	ND
Beryllium	0.500	ND
Cadmium	1.00	ND
Calcium	100	ND
Chromium	1.00	ND
Cobalt	1.00	ND
Copper	1.00	ND
Iron	100	ND
Lead	1.00	ND
Magnesium	100	ND
Manganese	1.00	ND
Mercury	0.250	ND
Nickel	1.00	ND
Potassium	100	ND
Selenium	10.0	ND
Silver	1.00	ND
Sodium	100	ND
Thallium	1.00	ND
Vanadium	1.00	ND
Zinc	10.0	ND

Associated Sample for Blank 1:

04234-007~008; 04245-001~005; 04262-001~007

04276-001; 04347-007~010

## **SAMPLE TRACKING**

## Chain of Custody Record

Contact Us: 973-361-4252  
Fax: 973-989-5288  
Web: www.ialonline.com

Customer Information		Reporting Information			EDDs			Concentrations Expected:				
Company: <i>Hillman Consulting</i>	REPORT TO:	24 hr - 100%	NJ, CT, PA, NY	<input type="checkbox"/> NYSRP	<input type="checkbox"/> NYSDEC EQuIS	<input type="checkbox"/> lab approved custom EDD	<input type="checkbox"/> Low	<input type="checkbox"/> Med	<input type="checkbox"/> High			
Address: <i>1600 NJ 22 East, Union, NJ 07083</i>	Attn:	48 hr - 75%....	<input type="checkbox"/> Results Only	<input checked="" type="checkbox"/> ASP Category A	<input type="checkbox"/> NO EDD REQ'D	<input type="checkbox"/> NO EDD REQ'D	<input type="checkbox"/> Part 375-6.8(a) - Unrestricted	<input type="checkbox"/> Part 375-6.8(b) - Restricted	<input type="checkbox"/> CP-51 Table 2 or 3 (selection required)			
Telephone #:	FAX #:	72 hr - 50%....	<input type="checkbox"/> Reduced	<input type="checkbox"/> Regulatory/ Full*	<input type="checkbox"/> B*	<input type="checkbox"/> OTHER Reg. Req. (specify)	<input type="checkbox"/> AWQS (TOGS Table 1)	<input type="checkbox"/> GWEL (TOGS Table 5)	<input type="checkbox"/> OTHER Reg. Req. (specify)			
6-9 day - 10%....		96 hr - 35%....	<input type="checkbox"/> Full*				<input type="checkbox"/> IGW	<input type="checkbox"/> SRS				
6-9 day - 10%....		5 day - 25%....					<input type="checkbox"/> TAT for PHC (if other than 2 weeks):	<input type="checkbox"/> DW				
		6-9 day - 10%....					<input type="checkbox"/> NJ EPH-DRO - Category 1	<input type="checkbox"/> DRO-8015	<input type="checkbox"/> SPLP			
							<input type="checkbox"/> NJ EPH-C40 - Category 2					
							<input type="checkbox"/> NJ EPH-Fractionated - Cat 2					
Project Manager: <i>Chris Hirschmann</i>		INVOICE TO:			Turn-Around Time (TAT)			Regulatory Requirement				
EMAIL Address:		Address:			Standard (10 business days) Verbal			New Jersey New York				
Project Name: <i>66-2368</i>					Rush date needed only if pre-approved**			<i>S 2nd</i>				
Project Location (State):		Attn:			Hard Copy: Std 3 week			Other - call for price				
Bottle Order #:		PO #			Petroleum Hydrocarbons - Selection is REQUIRED			<i>TAT for PHC</i>				
<input type="checkbox"/> "Report to?" / "Invoice To" same as above		Quote #			<input type="checkbox"/> NJ EPH-DRO - Category 1							
Sampled by: <i>Yann Peters</i>		Sample Matrix			<input type="checkbox"/> NJ EPH-C40 - Category 2							
COMPLETED BY IAL: Field Sampling		DW - Drinking Water WW - Waste Water GW - Groundwater SW - Surface Water LIQ - Liquid (Specify)			<input type="checkbox"/> NJ EPH-Fractionated - Cat 2							
SAMPLE INFORMATION		Sampling			ANALYTICAL PARAMETERS (please note if contingent)							
Client ID	Depth (ft only)	Date	Time	Matrix	# containers	IAL #						
<i>S1</i>	<i>3</i>	<i>8/31/14</i>	<i>8:50am</i>	<i>S</i>	<i>4</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>		
<i>S8</i>	<i>4</i>	<i>9/2/14</i>	<i>9:02am</i>	<i>S</i>	<i>2</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>		
<i>S9</i>	<i>3</i>	<i>9/2/14</i>	<i>10:05am</i>	<i>S</i>	<i>3</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>		
<i>S10</i>	<i>6</i>	<i>10/4/14</i>	<i>10:40am</i>	<i>S</i>	<i>4</i>	<i>5</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>		
<i>S11</i>	<i>9</i>	<i>11/1/14</i>	<i>11:20am</i>	<i>S</i>	<i>4</i>	<i>6</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>		
<i>S12</i>	<i>10</i>	<i>11/2/14</i>	<i>9:20am</i>	<i>BW</i>	<i>7</i>	<i>7</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>		
<i>GW1</i>	<i>7</i>	<i>11/4/14</i>	<i>8:45am</i>	<i>BW</i>	<i>8</i>	<i>3</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>		
<i>GW2</i>	<i>6</i>	<i>11/4/14</i>	<i>8:50am</i>	<i>BW</i>	<i>8</i>	<i>3</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>		
Known Hazard: YES / NO		Preservative Code:	Container Code:	Preservative (use code)			Container Type (use code)			Sample Specific Notes:		
Describe:												
<p>Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day off samples rec'd at lab &gt; 5PM.</p> <p>BY EXECUTING THIS CCC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS &amp; CONDITIONS (found on rear of pink copy).</p>												
Carrier (check one):		<input type="checkbox"/> IAL Courier	<input type="checkbox"/> Client Courier	<input type="checkbox"/> FedEx/UFS**				SDG #: <i>4347</i>			Cooler Temp: <i>5 °C</i>	
***Tracking #:											Date: <i>6/1/14</i> Time: <i>14:59</i> Date: <i>6/1/14</i> Time: <i>17:15</i>	
Relinquished by <i>Yann Peters</i> Signature and Company												
Received <i>6/1/14 14:59pm</i> Date: <i>6/1/14</i> Time: <i>17:05</i>												
IAL Rev 2/2014												
LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK												
Certification IDs: TNI (TN101284); CT (PH-0699); NJ (14751); NY (11402); PA (63-00773).												
PAGE: <i>of</i>												

# PROJECT INFORMATION

**RUSH**
**E18-04347: G6-2368**

**To:** Chris Hirschmann  
 Hillmann Consulting, LLC  
 Fax: 1(908) 686-2636  
 EMail: chirschmann@hillmanngroup.com;r

**Report To**

Hillmann Consulting, LLC  
 1600 Route 22 East  
 Union, NJ 07083  
 Attn: Chris Hirschmann

**Bill To**

Hillmann Consulting, LLC  
 1600 Route 22 East  
 Union, NJ 07083  
 Attn: Chris Hirschmann

<b>Report Format</b>	<b>P.O. #</b>	<b>Received At Lab</b>	<b>TPHC Due</b>	<b>Verbal Due</b>	<b>Hardcopy Due</b>
Category A		Jun 01, 2018 @ 17:05	NA	Jun 11, 2018	Jun 25, 2018 *

\* Any *Conditional or Hold* status will delay final hardcopy report sent date.

**Diskette Req.** Not Required

\*\* QC Requirement (must meet): NY Part 375-6.8(UUSCO+RUSCO)

<b>Lab ID</b>	<b>Client Sample ID</b>	<b>Depth</b>	<b>Sampling Time</b>	<b>Matrix</b>	<b>Unit</b>	<b>Field pH/Temp</b>
04347-001	S7	3	05/31/18@08:50	Soil	mg/Kg (ppm)	
04347-002	S8	4	05/31/18@09:20	Soil	mg/Kg (ppm)	
04347-003	S9	3	05/31/18@10:10	Soil	mg/Kg (ppm)	
04347-004	S10	6	05/31/18@10:40	Soil	mg/Kg (ppm)	
04347-005	S11	9	05/31/18@11:00	Soil	mg/Kg (ppm)	
04347-006	S12	10	05/31/18@11:30	Soil	mg/Kg (ppm)	
04347-007	GW2	7	05/31/18@09:30	Aqueous	ug/L (ppb)	
04347-008	GW3	6	05/31/18@11:40	Aqueous	ug/L (ppb)	
04347-009	GW2-FILT	NA	05/31/18@09:30	Aqueous	ug/L (ppb)	
04347-010	GW3-FILT	NA	05/31/18@11:40	Aqueous	ug/L (ppb)	

<b>Sample #</b>	<b>Test</b>	<b>Status</b>	<b>QA Method</b>	<b>TAT</b>	<b>Holding Time Expires</b>
001	TCL VO + 15	Analyze	8260C	RUSH 1 WK	6/14/2018
	TCL BN + 15	Analyze	8270D	RUSH 1 WK	6/14/2018
	TCL PCB	Analyze	8082A	RUSH 1 WK	5/31/2019
	TCL Pesticides	Analyze	8081B	RUSH 1 WK	6/14/2018
	TAL Metals	Analyze	6020B/7471B	RUSH 1 WK	6/28/2018
002	TCL VO + 15	Analyze	8260C	RUSH 1 WK	6/14/2018
	TCL BN + 15	Analyze	8270D	RUSH 1 WK	6/14/2018
	TCL Pesticides	Analyze	8081B	RUSH 1 WK	6/14/2018
	TCL PCB	Analyze	8082A	RUSH 1 WK	5/31/2019
	TAL Metals	Analyze	6020B/7471B	RUSH 1 WK	6/28/2018
003	TCL VO + 15	Analyze	8260C	RUSH 1 WK	6/14/2018
	TCL BN + 15	Analyze	8270D	RUSH 1 WK	6/14/2018
	TCL Pesticides	Analyze	8081B	RUSH 1 WK	6/14/2018



# PROJECT INFORMATION

RUSH

E18-04347: G6-2368

Sample #	Test	Status	QA Method	TAT	Holding Time Expires
003	TCL PCB	Analyze	8082A	RUSH 1 WK	5/31/2019
	TAL Metals	Analyze	6020B/7471B	RUSH 1 WK	6/28/2018
004	TCL VO + 15	Analyze	8260C	RUSH 1 WK	6/14/2018
	TCL BN + 15	Analyze	8270D	RUSH 1 WK	6/14/2018
	TCL PCB	Analyze	8082A	RUSH 1 WK	5/31/2019
	TCL Pesticides	Analyze	8081B	RUSH 1 WK	6/14/2018
	TAL Metals	Analyze	6020B/7471B	RUSH 1 WK	6/28/2018
005	TCL VO + 15	Analyze	8260C	RUSH 1 WK	6/14/2018
	TCL BN + 15	Analyze	8270D	RUSH 1 WK	6/14/2018
	TCL PCB	Analyze	8082A	RUSH 1 WK	5/31/2019
	TCL Pesticides	Analyze	8081B	RUSH 1 WK	6/14/2018
	TAL Metals	Analyze	6020B/7471B	RUSH 1 WK	6/28/2018
006	TCL VO + 15	Analyze	8260C	RUSH 1 WK	6/14/2018
	TCL BN + 15	Analyze	8270D	RUSH 1 WK	6/14/2018
	TCL Pesticides	Analyze	8081B	RUSH 1 WK	6/14/2018
	TCL PCB	Analyze	8082A	RUSH 1 WK	5/31/2019
	TAL Metals	Analyze	6020B/7471B	RUSH 1 WK	6/28/2018
007	TCL VO + 15	Analyze	8260C	RUSH 1 WK	6/14/2018
	TCL BN + SIM + 15	Analyze	8270D SIM	RUSH 1 WK	6/7/2018
	TCL Pesticides	Analyze	8081B	RUSH 1 WK	6/7/2018
	TCL PCB	Analyze	8082A	RUSH 1 WK	5/31/2019
	Metals Filtration	Analyze		RUSH 1 WK	6/28/2018
	TAL Metals	Analyze	6020B/7471B	RUSH 1 WK	6/28/2018
008	TCL VO + 15	Analyze	8260C	RUSH 1 WK	6/14/2018
	TCL BN + SIM + 15	Analyze	8270D SIM	RUSH 1 WK	6/7/2018
	TCL PCB	Analyze	8082A	RUSH 1 WK	5/31/2019
	TCL Pesticides	Analyze	8081B	RUSH 1 WK	6/7/2018
	Metals Filtration	Analyze		RUSH 1 WK	6/28/2018
	TAL Metals	Analyze	6020B/7471B	RUSH 1 WK	6/28/2018
009	TAL Metals	Analyze	6020B/7471B	RUSH 1 WK	6/28/2018
010	TAL Metals	Analyze	6020B/7471B	RUSH 1 WK	6/28/2018

**Project Notes:**
**NOTE 2 taken by kfalconer on 06/04/2018 01:35**

3 ENCORS RECEIVED - 1 INTO MECH/2 INTO H2O

**NOTE 3 taken by kfalconer on 06/04/2018 01:36**

SAMPLE 007 - 010, AWQS TOGS TABLE 1

**NOTE 1 taken by kim on 06/05/2018 10:16**

 FILTER UNPRESERVED METALS BOTTLES AT LAB AND REPORT TOTAL AND DISSOLVED TAL METALS  
 PER CHRIS HIRSCHMANN.


## INTEGRATED ANALYTICAL LABORATORIES, LLC

## SAMPLE RECEIPT VERIFICATION

CASE NO: E 18

04347

CLIENT:

Hillman

COOLER TEMPERATURE: 2° - 6°C: 

( See Chain of Custody)

## Comments

COC: **COMPLETE** / INCOMPLETE

## KEY

- |   |          |
|---|----------|
| ✓ | = YES/NA |
| ✗ | = NO     |

VOA received:  Encore  
(check one)  Terra Core IGW - Methanol  
 No Preservative

- |   |                    |
|---|--------------------|
| ✓ | Bottles Intact     |
| ✓ | no-Missing Bottles |
| ✓ | no-Extra Bottles   |

- |                          |   |
|--------------------------|---|
| ✓                        | Sufficient Sample Volume                  |
| ✓                        | no-headspace/bubbles in VOs               |
| ✓                        | Labels intact/correct                     |
| ✓                        | pH Check (exclude VOs) <sup>1</sup>       |
| ✓                        | Correct bottles/preservative              |
| ✓                        | Sufficient Holding/Prep Time <sup>1</sup> |
| <input type="checkbox"/> | Multiphasic Sample                        |
| <input type="checkbox"/> | Sample to be Subcontracted                |
| ✓                        | Chain of Custody is Clear                 |

Did not receive a filter at lab  
 Container for Sample 8  
 AP

<sup>1</sup>All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY:

INITIAL

AP

DATE

6/1/18

CORRECTIVE ACTION REQUIRED:

YES

(SEE BELOW)

NO

If COC is NOT clear, **STOP** until you get client to authorize/clarify work.

CLIENT NOTIFIED:

YES

Date/ Time:

NO

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY:

INITIAL

KJ

DATE

6/5/18

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REV 03/2013

# Laboratory Custody Chronicle

**IAL Case No.**

**E18-04347**

**Client** Hillmann Consulting, LLC

**Project** G6-2368

**Received On** 6/ 1/2018 @17:05

**Department: Volatiles**

			<b>Prep. Date</b>	<b>Analyst</b>	<b>Analysis Date</b>	<b>Analyst</b>
TCL VO + 15	04347-001	Soil	n/a	n/a	6/ 6/18	Xing
"	-002	"	n/a	n/a	6/ 6/18	Xing
"	-003	"	n/a	n/a	6/ 6/18	Xing
"	-004	"	n/a	n/a	6/ 6/18	Xing
"	-005	"	n/a	n/a	6/ 6/18	Xing
"	-006	"	n/a	n/a	6/ 6/18	Xing
"	-007	Aqueous	n/a	n/a	6/ 8/18	Barbara
"	-008	"	n/a	n/a	6/ 8/18	Barbara

**Department: Semivolatiles**

			<b>Prep. Date</b>	<b>Analyst</b>	<b>Analysis Date</b>	<b>Analyst</b>
TCL BN + 15	-001	Soil	6/ 5/18	Frank L.	6/ 5/18	Eleanor
"	-002	"	6/ 5/18	Frank L.	6/ 5/18	Eleanor
"	-003	"	6/ 5/18	Frank L.	6/ 5/18	Eleanor
"	-004	"	6/ 5/18	Frank L.	6/ 5/18	Eleanor
"	-005	"	6/ 5/18	Frank L.	6/ 5/18	Eleanor
"	-006	"	6/ 5/18	Frank L.	6/ 5/18	Eleanor
TCL BN + SIM + 15	-007	Aqueous	6/ 7/18	Frank L.	6/ 7/18	Donnie
"	-008	"	6/ 7/18	Frank L.	6/ 7/18	Donnie

**Department: GC**

			<b>Prep. Date</b>	<b>Analyst</b>	<b>Analysis Date</b>	<b>Analyst</b>
TCL PCB	-001	Soil	6/ 6/18	Archimede	6/ 8/18	Latha
"	-002	"	6/ 6/18	Archimede	6/ 8/18	Latha
"	-003	"	6/ 6/18	Archimede	6/ 8/18	Latha
"	-004	"	6/ 6/18	Archimede	6/ 8/18	Latha
"	-005	"	6/ 6/18	Archimede	6/ 8/18	Latha
"	-006	"	6/ 6/18	Archimede	6/ 8/18	Latha
"	-007	Aqueous	6/ 6/18	Archimede	6/ 6/18	Latha
"	-008	"	6/ 6/18	Archimede	6/ 6/18	Latha
TCL Pesticides	-001	Soil	6/ 6/18	Archimede	6/11/18	Iwona
"	-002	"	6/ 6/18	Archimede	6/11/18	Iwona
"	-003	"	6/ 6/18	Archimede	6/11/18	Iwona
"	-004	"	6/ 6/18	Archimede	6/11/18	Iwona
"	-005	"	6/ 6/18	Archimede	6/11/18	Iwona
"	-006	"	6/ 6/18	Archimede	6/11/18	Iwona
"	-007	Aqueous	6/ 6/18	Archimede	6/ 7/18	Iwona
"	-008	"	6/ 6/18	Archimede	6/ 7/18	Iwona

**Department: Metals**

			<b>Prep. Date</b>	<b>Analyst</b>	<b>Analysis Date</b>	<b>Analyst</b>
TAL Metals	-001	Soil	6/ 5/18	Frank R.	6/ 5/18	Danielle
"	-002	"	6/ 5/18	Frank R.	6/ 5/18	Danielle
"	-003	"	6/ 5/18	Frank R.	6/ 5/18	Danielle
"	-004	"	6/ 5/18	Frank R.	6/ 5/18	Danielle
"	-005	"	6/ 5/18	Frank R.	6/ 5/18	Danielle

# Laboratory Custody Chronicle

IAL Case No.

E18-04347

Client Hillmann Consulting, LLC

Project G6-2368

Received On 6/ 1/2018@17:05

"	-006	"	6/ 5/18	Frank R.	6/ 5/18	Danielle
"	-007	Aqueous	6/ 5/18	Frank R.	6/ 6/18	Danielle
"	-008	"	6/ 5/18	Frank R.	6/ 6/18	Danielle
"	-009	"	6/ 5/18	Frank R.	6/ 6/18	Danielle
"	-010	"	6/ 5/18	Frank R.	6/ 6/18	Danielle

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