

**Emergency Discharges / Spills should be reported via the 24-Hour Hotline: 1-800-943-0003**

**Notice: Hazardous substance discharges must be reported immediately** according to s. 292.11 Wis. Stats. Non-emergency hazardous substance discharges may be reported by telefaxing or e-mailing a completed report to the Department, or calling or visiting a Department office in person. If you choose to notify the Department by telefax or by email, you should use this form to be sure that all necessary information is included. However, use of this form is not mandatory. Under s. 292.99, Wis. Stats., the penalty for violating the reporting requirements of ch. 292 Wis. Stats., shall be no less than \$10 nor more than \$5000 for each violation. Each day of continued violation is a separate offense. It is not the Department's intention to use any personally identifiable information from this form for any purpose other than program administration. However, information submitted on this form may also be made available to requesters under Wisconsin's Open Records Law (ss. 19.31 – 19.39, Wis. Stats.).

Confirmatory laboratory data should be included with this form, to assist the DNR in processing this Hazardous Substance Release Notification.

Complete this form. **TYPE or PRINT LEGIBLY.** NOTIFY appropriate DNR region (see next page) **IMMEDIATELY** upon discovery of a potential release from (check one):

- Underground Petroleum Storage Tank System (additional information may be required for Item 6 below)
- Aboveground Petroleum Storage Tank System
- Dry Cleaner Facility
- Other - Describe: Contaminated soil fill

ATTN DNR: **R & R Program Associate**

Date DNR Notified: 06/21/2017

**1. Discharge Reported By**

Name Cory Katzban	Firm The Sigma Group, Inc.	Phone Number (include area code) (414) 643-4200
Mailing Address 1300 W. Canal Street, Milwaukee, WI	Email ckatzban@thesigmagroup.com	

**2. Site Information**

Name of site at which discharge occurred. Include local name of site/business, not responsible party name, unless a residence/vacant property.

BMO Downtown Campus - Parking Structure

Location: Include street address, not PO Box. If no street address, describe as precisely as possible, i.e., 1/4 mile NW of CTHs 60 & 123 on E side of CTH 60.

SEC of N. Water Street & E. Wells Street. Lot 2 of CSM no. 8910

Municipality: (City, Village, Township) Specify municipality in which the site is located, not mailing address/city.

Milwaukee

County Milwaukee	Legal Description: SE ¼ of NE ¼ Section 29, Town 07 N, Range 22 <input checked="" type="radio"/> E <input type="radio"/> W	WTM: X 690352 Y 287483
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**3. Responsible Party (RP) and/or RP Representative**

Responsible Party Name: Business or owner name that is responsible for cleanup. If more than one, list all. Attach additional pages as necessary.

WWB Development, LLC

A local governmental unit claiming an exemption from state Spill Law and Solid Waste Management responsibilities for the discharge being reported, per Wis. Stat. §§ 292.11(9)(e) and 292.23, should: 1) check this box; 2) review DNR publication RR-055; and 3) provide documentation to DNR that demonstrates compliance with the statutory requirements of the liability exemptions. Local governmental units may also request a fee-based liability clarification letter from DNR by using DNR Form 4400-237.

Contact Person Name (if different) Timothy J. Gasperetti	Phone Number (414) 443-0700	Email tgasperetti@irgens.com
Mailing Address 833 East Michigan Street, Suite 400	City Milwaukee	State WI
		ZIP Code 53202

Responsible Party Name: Business or owner name that is responsible for cleanup. If more than one, list all. Attach additional pages as necessary.

Contact Person Name (if different)	Phone Number	Email
Mailing Address	City	State
		ZIP Code

(continued)

# Notification For Hazardous Substance Discharge (Non-Emergency Only)

Cory Katzban The Sigma Group, Inc.

Form 4400-225 (R 06/17)

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## 4. Hazardous Substance Information

Identify hazardous substance discharged (check all that apply):

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> VOCs<br><input type="checkbox"/> PCE<br><input type="checkbox"/> TCE<br><input type="checkbox"/> Other Chlorinated<br><input type="checkbox"/> Diesel<br><input type="checkbox"/> Fuel Oil<br><input type="checkbox"/> Gasoline<br><input type="checkbox"/> Hydraulic Oil<br><input type="checkbox"/> Jet Fuel | (VOCs continued)<br><input type="checkbox"/> Mineral Oil<br><input type="checkbox"/> Waste Oil<br><input type="checkbox"/> Petroleum-Unknown Type<br><input checked="" type="checkbox"/> PAHs<br><input type="checkbox"/> PCBs<br><input type="checkbox"/> Cyanide<br><input type="checkbox"/> Leachate<br><input type="checkbox"/> Manure | <input checked="" type="checkbox"/> Metals<br><input checked="" type="checkbox"/> Arsenic<br><input type="checkbox"/> Chromium<br><input checked="" type="checkbox"/> Lead<br><input checked="" type="checkbox"/> Other: cadmium, selenium, silver<br><input type="checkbox"/> Pesticides: _____<br><input type="checkbox"/> Fertilizer: _____<br><input type="checkbox"/> RCRA Hazardous Waste: _____<br><input type="checkbox"/> Other: _____<br><input type="checkbox"/> Unknown |
|---|--|---|

## 5. Impacts to the Environment Information

Enter "K" for known/confirmed or "P" for potential for all that apply.

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Air Contamination   | <input type="checkbox"/> Fire Explosion Threat        | <input checked="" type="checkbox"/> Soil Contamination |
| <input type="checkbox"/> Co-mingled (Petroleum & Non-Petroleum) Contamination in Fractured Bedrock | <input type="checkbox"/> Free Product                 | <input type="checkbox"/> Soil Gas Contamination        |
| <input type="checkbox"/> Contamination Within 1 Meter of Bedrock                                   | <input type="checkbox"/> Groundwater Contamination    | <input type="checkbox"/> Sub-slab Vapor Contamination  |
| <input type="checkbox"/> Contaminated Private Well   | <input type="checkbox"/> Off-Site Contamination       | <input type="checkbox"/> Surface Water Contamination   |
| <input type="checkbox"/> Contaminated Public Well  | <input type="checkbox"/> Sanitary Sewer Contamination | <input type="checkbox"/> Within 100 ft of Private Well |
| <input type="checkbox"/> Contamination in Right of Way   | <input type="checkbox"/> Storm Sewer Contamination    | <input type="checkbox"/> Within 1000 ft of Public Well |
|  | <input type="checkbox"/> Sediment Contamination       |  |
|  | Other (specify): _____                                |  |

Contamination was discovered as a result of:

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Tank closure assessment | <input checked="" type="checkbox"/> Site assessment | <input type="checkbox"/> Other - Describe: _____ |
| Date <input type="text" value=""/>               | Date <input type="text" value="01/30/2017"/>        | Date <input type="text" value=""/>               |

Lab results:  Lab results will be faxed upon receipt  Lab results are attached

Additional Comments: Include a brief description of immediate actions taken to halt the release and contain or cleanup hazardous substances that have been discharged.

RCRA metals (TW-1) and lead / PAH (COMP OUTDOOR) concentrations were detected within soil samples collected from a parking garage (sub-slab, TW-1) and auto-banking drive area (COMP OUTDOOR) of the site during Phase II activities. Areas are capped/paved.

## 6. Federal Energy Act Requirements (Section 9002(d) of the Solid Waste Disposal Act (SWDA))

Source	Cause
For all confirmed releases from USTs occurring after 9/30/2007 please provide the following information:  <input type="checkbox"/> Tank <input type="checkbox"/> Piping <input type="checkbox"/> Dispenser <input type="checkbox"/> Submersible Turbine Pump <input type="checkbox"/> Delivery Problem  <input checked="" type="checkbox"/> Does not apply. <input type="checkbox"/> Other (specify): _____	<input type="checkbox"/> Spill <input type="checkbox"/> Overfill <input type="checkbox"/> Corrosion <input type="checkbox"/> Physical or Mechanical Damage <input type="checkbox"/> Installation Problem <input type="checkbox"/> Other (does not fit any of above) <input type="checkbox"/> Unknown

Contact information to report non-emergency releases in DNR's five regions are as follows:

- Northeast Region (FAX: 920-662-5413); Attention -- R&R Program Associate: DNRRRNER@wisconsin.gov**  
 Brown, Calumet, Door, Fond du Lac (except City of Waupun - see South Central Region), Green Lake, Kewaunee, Manitowoc, Marinette, Marquette, Menominee, Oconto, Outagamie, Shawano, Sheboygan, Waupaca, Waushara, Winnebago counties
- Northern Region (FAX: 715-623-6773); Attention -- R&R Program Associate: DNRRRNOR@wisconsin.gov**  
 Ashland, Barron, Bayfield, Burnett, Douglas, Forest, Florence, Iron, Langlade, Lincoln, Oneida, Polk, Price, Rusk, Sawyer, Taylor, Vilas, Washburn counties
- South Central Region (FAX: 608-273-5610); Attention -- R&R Program Associate: DNRRRSCR@wisconsin.gov**  
 Columbia, Dane, Dodge, Fond du Lac (City of Waupun only), Grant, Green, Iowa, Jefferson, Lafayette, Richland, Rock, Sauk, Walworth counties
- Southeast Region (FAX: 414-263-8550); Attention -- R&R Program Associate: DNRRRSER@wisconsin.gov**  
 Kenosha, Milwaukee, Ozaukee, Racine, Washington, Waukesha counties

## Notification For Hazardous Substance Discharge (Non-Emergency Only)

Cory Katzban The Sigma Group, Inc.

Form 4400-225 (R 06/17)

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**West Central Region (FAX: 715-839-6076); Attention -- R&R Program Associate: [DNRRRWCR@wisconsin.gov](mailto:DNRRRWCR@wisconsin.gov)**

Adams, Buffalo, Chippewa, Clark, Crawford, Dunn, Eau Claire, Jackson, Juneau, LaCrosse, Marathon, Monroe, Pepin, Pierce, Portage, St. Croix, Trempealeau, Vernon, Wood counties

## Environmental Lab, Inc.

1990 Prospect Ct. • Appleton, WI 54914  
 920-830-2455 • FAX 920-733-0631

**Sample Handling Request** 5  
 Rush Analysis Date Required Day  
 (Rushes accepted only with prior authorization)  
 Normal Turn Around

Lab I.D. # \_\_\_\_\_  
 Account No.: \_\_\_\_\_ Quote No.: \_\_\_\_\_  
 Project #: 16722-001  
 Sampler: (signature) Steve Kicket

Project (Name / Location): Irgens - BK10 / Milwaukee, WI

Reports To: Cory Katzev  
 Company: The Sigma Group, Inc  
 Address: 1300 W. Canal St  
 City State Zip: Milwaukee, WI 53233  
 Phone: 414-643-4200  
 FAX: 414-643-4210

Invoice To: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City State Zip: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 FAX: \_\_\_\_\_

**Analysis Requested** **Other Analysis**

Lab I.D.	Sample I.D.	Collection Date	Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation	DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	LEAD	NITRATE/NITRITE	OIL & GREASE	PAH (EPA 8270)	PCB	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	TOTAL SUSPENDED SOLIDS	VOC DW (EPA 542.2)	VOC (EPA 8260)	8-PCRA METALS	PID/ FID
<u>S032409A</u>	<u>TW-1(0-2')</u>	<u>11:30</u>	<u>11am</u>		<input checked="" type="checkbox"/>	<u>N</u>	<u>3</u>	<u>Soil</u>	<u>None/Meth</u>			<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>							<input checked="" type="checkbox"/>		<u>0.8</u>
<u>B</u>	<u>TW-1(4-6')</u>		<u>↓</u>																				<input checked="" type="checkbox"/>	<u>1.1</u>
<u>C</u>	<u>SB-2(2-4')</u>		<u>10am</u>									<input checked="" type="checkbox"/>												<u>1.1</u>
<u>D</u>	<u>SB-2(6-8')</u>		<u>↓</u>																					<u>13.1</u>
<u>E</u>	<u>TW-3(0-2')</u>		<u>11:50</u>																					<u>0.7</u>
<u>F</u>	<u>TW-3(2-4')</u>		<u>↓</u>																					<u>1.2</u>
<u>G</u>	<u>SB-4(0-2')</u>		<u>9:30</u>																					<u>1.5</u>
<u>H</u>	<u>SB-4(4-6')</u>		<u>↓</u>																					<u>1.2</u>
<u>I</u>	<u>SB-5(0-2')</u>		<u>9:15</u>																					<u>19.8</u>
<u>J</u>	<u>SB-5(2-4')</u>		<u>↓</u>																			<input checked="" type="checkbox"/>		<u>1.7</u>

Comments/Special Instructions (\*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

Sample Integrity - To be completed by receiving lab.  
 Method of Shipment: SM  
 Temp. of Temp. Blank \_\_\_\_\_ °C On Ice   
 Cooler seal intact upon receipt:  Yes \_\_\_\_\_ No

Relinquished By: (sign) [Signature] Time 12:00pm Date 1/31/17  
 Received By: (sign) \_\_\_\_\_ Time \_\_\_\_\_ Date \_\_\_\_\_  
 Received in Laboratory By: [Signature] Time: 8:00 Date: 2/1/17

## Environmental Lab, Inc.

1990 Prospect Ct. • Appleton, WI 54914  
920-830-2455 • FAX 920-733-0631

Sample Handling Request **5**

Rush Analysis Date Required **Day**  
(Rushes accepted only with prior authorization)

Normal Turn Around

Lab I.D. # \_\_\_\_\_  
Account No.: \_\_\_\_\_ Quote No.: \_\_\_\_\_  
Project #: **16722-001**  
Sampler: (signature) *Steven Kikert*

Project (Name / Location): **Irgens - BMO 1 Milwaukee, WI**

Reports To: **Cory Katschun** Invoice To: \_\_\_\_\_  
Company: **The Sigma Group, Inc** Company: \_\_\_\_\_  
Address: **1300 W. Laramie St** Address: \_\_\_\_\_  
City State Zip: **Milwaukee, WI 53233** City State Zip: \_\_\_\_\_  
Phone: **414-643-4200** Phone: \_\_\_\_\_  
FAX: **414-643-4210** FAX: \_\_\_\_\_

Analysis Requested: \_\_\_\_\_ Other Analysis: \_\_\_\_\_

Lab I.D.	Sample I.D.	Collection Date	Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation	DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	LEAD	NITRATE/NITRITE	OIL & GREASE	PAH (EPA 8270)	PCB	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	TOTAL SUSPENDED SOLIDS	VOC DW (EPA 542.2)	VOC (EPA 8260)	8-PCRA METALS	PID/ FID
<b>503240</b>	<b>k SB-6 (2-4')</b>	<b>1/31/17</b>	<b>9am</b>		<b>X</b>	<b>N</b>	<b>4</b>	<b>Soil</b>	<b>None/MLH</b>			<b>X</b>			<b>X</b>	<b>X</b>						<b>X</b>		<b>1.5</b>
	<b>L SB-6 (6-8')</b>		<b>↓</b>				<b>4</b>									<b>X</b>								<b>1.9</b>
	<b>M TW-7 (0-2')</b>		<b>11:32</b>				<b>3</b>									<b>X</b>								<b>0.9</b>
	<b>N TW-7 (2-4')</b>		<b>↓</b>				<b>4</b>									<b>X</b>								<b>0.9</b>
	<b>O TW-8 (0-2')</b>		<b>11:25</b>				<b>3</b>									<b>X</b>								<b>0.9</b>
	<b>P TW-8 (2-4')</b>		<b>↓</b>				<b>3</b>									<b>X</b>						<b>X</b>		<b>0.6</b>
	<b>Q TW-1</b>		<b>1pm</b>				<b>4</b>	<b>GW</b>	<b>None/MLC</b>			<b>X</b>												<b>-</b>
	<b>R TW-3</b>		<b>1:50p</b>				<b>4</b>																	<b>-</b>
	<b>S TW-7</b>		<b>1:30p</b>				<b>5</b>									<b>X</b>								<b>-</b>
	<b>T TW-8</b>		<b>1:45p</b>				<b>4</b>																	<b>-</b>

Comments/Special Instructions (\*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

**• Dissolved lead for GW**  
**\* Samples not filtered, please filter in lab**

Sample Integrity - To be completed by receiving lab.  
Method of Shipment: **GM**  
Temp. of Temp. Blank: \_\_\_\_\_ °C On Ice: **X**  
Cooler seal intact upon receipt: **X** Yes \_\_\_\_\_ No

Relinquished By: (sign) \_\_\_\_\_ Time: **12:00pm** Date: **1/31/17**  
Received By: (sign) \_\_\_\_\_ Time: **8:00** Date: **2/1/17**  
Received in Laboratory By: *[Signature]* Time: \_\_\_\_\_ Date: \_\_\_\_\_

## Environmental Lab, Inc.

1990 Prospect Ct. • Appleton, WI 54914  
920-830-2455 • FAX 920-733-0631

**Sample Handling Request 5**  
 Rush Analysis Date Required Day  
 (Rushes accepted only with prior authorization)  
 \_\_\_\_\_ Normal Turn Around

Lab I.D. # \_\_\_\_\_  
 Account No.: \_\_\_\_\_ Quote No.: \_\_\_\_\_  
 Project #: 16722-001  
 Sampler: (signature) Steven K. Kert per [Signature]

Project (Name / Location): Ingers - BMO / Milwaukee, WI  
 Reports To: Cory Katzban Invoice To: \_\_\_\_\_  
 Company The Sigma Group, Inc Company \_\_\_\_\_  
 Address 1300 W. Canal St Address \_\_\_\_\_  
 City State Zip Milwaukee, WI 53233 City State Zip \_\_\_\_\_  
 Phone 414-643-4200 Phone \_\_\_\_\_  
 FAX 414-643-4210 FAX \_\_\_\_\_

Analysis Requested												Other Analysis		
DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	LEAD	NITRATE/NITRITE	OIL & GREASE	PAH (EPA 8270)	PCB	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	TOTAL SUSPENDED SOLIDS	VOC DW (EPA 542.2)	VOC (EPA 8260)	8-PCRA METALS	PID/ FID
												<input checked="" type="checkbox"/>		-

Lab I.D.	Sample I.D.	Collection Date	Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation
<u>50324094</u>	<u>SB-5</u>	<u>1130</u>	<u>2pm</u>		<input checked="" type="checkbox"/>	<u>N</u>	<u>3</u>	<u>GW</u>	<u>HCL</u>

Comments/Special Instructions (\*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)

Sample Integrity - To be completed by receiving lab.  
 Method of Shipment: SM  
 Temp. of Temp. Blank \_\_\_\_\_ °C On Ice:   
 Cooler seal intact upon receipt:  Yes \_\_\_\_\_ No

Relinquished By: (sign) [Signature] Time 12pm Date 11/3/17  
 Received By: (sign) \_\_\_\_\_ Time \_\_\_\_\_ Date \_\_\_\_\_  
 Received in Laboratory By: [Signature] Time: 8:00 Date: 2/1/17

# Synergy Environmental Lab, INC.

1990 Prospect Ct., Appleton, WI 54914 \*P 920-830-2455 \* F 920-733-0631

CORY KATZBAN  
THE SIGMA GROUP, INC.  
1300 W. CANAL STREET  
MILWAUKEE, WI 53233

Report Date 08-Feb-17

Project Name IRGENS-BMO  
Project # 16722-001  
Lab Code 5032409A  
Sample ID TW-1 0-2'  
Sample Matrix Soil  
Sample Date 1/30/2017

Invoice # E32409

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	93.0	%			1	5021		2/1/2017	NJC	1
Inorganic										
Metals										
Lead, Total	5.22	mg/Kg	0.34	1.16	2	6010B		2/7/2017	CWT	1 46
Organic										
PAH SIM										
Acenaphthene	< 0.0135	mg/kg	0.0135	0.043	1	M8270C	2/2/2017	2/3/2017	NJC	1
Acenaphthylene	< 0.012	mg/kg	0.012	0.0381	1	M8270C	2/2/2017	2/3/2017	NJC	1
Anthracene	< 0.0124	mg/kg	0.0124	0.0395	1	M8270C	2/2/2017	2/3/2017	NJC	1
Benzo(a)anthracene	< 0.0116	mg/kg	0.0116	0.037	1	M8270C	2/2/2017	2/3/2017	NJC	1
Benzo(a)pyrene	< 0.0113	mg/kg	0.0113	0.0359	1	M8270C	2/2/2017	2/3/2017	NJC	1
Benzo(b)fluoranthene	< 0.013	mg/kg	0.013	0.0414	1	M8270C	2/2/2017	2/3/2017	NJC	1
Benzo(g,h,i)perylene	< 0.0114	mg/kg	0.0114	0.0363	1	M8270C	2/2/2017	2/3/2017	NJC	1
Benzo(k)fluoranthene	< 0.0117	mg/kg	0.0117	0.0371	1	M8270C	2/2/2017	2/3/2017	NJC	1
Chrysene	< 0.0138	mg/kg	0.0138	0.0439	1	M8270C	2/2/2017	2/3/2017	NJC	1
Dibenzo(a,h)anthracene	< 0.0142	mg/kg	0.0142	0.0453	1	M8270C	2/2/2017	2/3/2017	NJC	1
Fluoranthene	< 0.0131	mg/kg	0.0131	0.0418	1	M8270C	2/2/2017	2/3/2017	NJC	1
Fluorene	< 0.0135	mg/kg	0.0135	0.0431	1	M8270C	2/2/2017	2/3/2017	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.015	mg/kg	0.015	0.0476	1	M8270C	2/2/2017	2/3/2017	NJC	1
1-Methyl naphthalene	< 0.0143	mg/kg	0.0143	0.0456	1	M8270C	2/2/2017	2/3/2017	NJC	1
2-Methyl naphthalene	< 0.0119	mg/kg	0.0119	0.038	1	M8270C	2/2/2017	2/3/2017	NJC	1
Naphthalene	< 0.0122	mg/kg	0.0122	0.0387	1	M8270C	2/2/2017	2/3/2017	NJC	1
Phenanthrene	< 0.0109	mg/kg	0.0109	0.0347	1	M8270C	2/2/2017	2/3/2017	NJC	1
Pyrene	< 0.0126	mg/kg	0.0126	0.0401	1	M8270C	2/2/2017	2/3/2017	NJC	1
VOC's										
Benzene	< 0.03	mg/kg	0.03	0.96	1	8260B		2/2/2017	CJR	1
Bromobenzene	< 0.025	mg/kg	0.025	0.081	1	8260B		2/2/2017	CJR	1

**Project Name** IRGENS-BMO  
**Project #** 16722-001

**Invoice #** E32409

**Lab Code** 5032409A  
**Sample ID** TW-1 0-2'  
**Sample Matrix** Soil  
**Sample Date** 1/30/2017

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
Bromodichloromethane	< 0.074	mg/kg	0.074	0.24	1	8260B	2/2/2017	2/2/2017	CJR	1
Bromoform	< 0.029	mg/kg	0.029	0.092	1	8260B	2/2/2017	2/2/2017	CJR	1
tert-Butylbenzene	< 0.026	mg/kg	0.026	0.084	1	8260B	2/2/2017	2/2/2017	CJR	1
sec-Butylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
n-Butylbenzene	< 0.04	mg/kg	0.04	0.13	1	8260B	2/2/2017	2/2/2017	CJR	1
Carbon Tetrachloride	< 0.016	mg/kg	0.016	0.053	1	8260B	2/2/2017	2/2/2017	CJR	1
Chlorobenzene	< 0.013	mg/kg	0.013	0.04	1	8260B	2/2/2017	2/2/2017	CJR	1
Chloroethane	< 0.091	mg/kg	0.091	0.29	1	8260B	2/2/2017	2/2/2017	CJR	1
Chloroform	< 0.035	mg/kg	0.035	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
Chloromethane	< 0.076	mg/kg	0.076	0.24	1	8260B	2/2/2017	2/2/2017	CJR	1
2-Chlorotoluene	< 0.015	mg/kg	0.015	0.047	1	8260B	2/2/2017	2/2/2017	CJR	1
4-Chlorotoluene	< 0.018	mg/kg	0.018	0.057	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2-Dibromo-3-chloropropane	< 0.058	mg/kg	0.058	0.18	1	8260B	2/2/2017	2/2/2017	CJR	1
Dibromochloromethane	< 0.025	mg/kg	0.025	0.079	1	8260B	2/2/2017	2/2/2017	CJR	1
1,4-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B	2/2/2017	2/2/2017	CJR	1
1,3-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2-Dichlorobenzene	< 0.028	mg/kg	0.028	0.088	1	8260B	2/2/2017	2/2/2017	CJR	1
Dichlorodifluoromethane	< 0.048	mg/kg	0.048	0.15	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2-Dichloroethane	< 0.038	mg/kg	0.038	0.12	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1-Dichloroethane	< 0.034	mg/kg	0.034	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1-Dichloroethene	< 0.022	mg/kg	0.022	0.069	1	8260B	2/2/2017	2/2/2017	CJR	1
cis-1,2-Dichloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
trans-1,2-Dichloroethene	< 0.028	mg/kg	0.028	0.09	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2-Dichloropropane	< 0.035	mg/kg	0.035	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
2,2-Dichloropropane	< 0.037	mg/kg	0.037	0.12	1	8260B	2/2/2017	2/2/2017	CJR	1
1,3-Dichloropropane	< 0.025	mg/kg	0.025	0.079	1	8260B	2/2/2017	2/2/2017	CJR	1
Di-isopropyl ether	< 0.01	mg/kg	0.01	0.032	1	8260B	2/2/2017	2/2/2017	CJR	1
EDB (1,2-Dibromoethane)	< 0.023	mg/kg	0.023	0.072	1	8260B	2/2/2017	2/2/2017	CJR	1
Ethylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
Hexachlorobutadiene	< 0.085	mg/kg	0.085	0.27	1	8260B	2/2/2017	2/2/2017	CJR	1
Isopropylbenzene	< 0.034	mg/kg	0.034	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
p-Isopropyltoluene	< 0.029	mg/kg	0.029	0.093	1	8260B	2/2/2017	2/2/2017	CJR	1
Methylene chloride	< 0.15	mg/kg	0.15	0.46	1	8260B	2/2/2017	2/2/2017	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.05	mg/kg	0.05	0.16	1	8260B	2/2/2017	2/2/2017	CJR	1
Naphthalene	< 0.094	mg/kg	0.094	0.3	1	8260B	2/2/2017	2/2/2017	CJR	1
n-Propylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,2,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.88	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,1,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.09	1	8260B	2/2/2017	2/2/2017	CJR	1
Tetrachloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
Toluene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,4-Trichlorobenzene	< 0.064	mg/kg	0.064	0.2	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,3-Trichlorobenzene	< 0.066	mg/kg	0.066	0.21	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.96	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
Trichloroethene (TCE)	< 0.041	mg/kg	0.041	0.13	1	8260B	2/2/2017	2/2/2017	CJR	1
Trichlorofluoromethane	< 0.041	mg/kg	0.041	0.13	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.025	0.08	1	8260B	2/2/2017	2/2/2017	CJR	1
1,3,5-Trimethylbenzene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
Vinyl Chloride	< 0.019	mg/kg	0.019	0.062	1	8260B	2/2/2017	2/2/2017	CJR	1
m&p-Xylene	< 0.072	mg/kg	0.072	0.23	1	8260B	2/2/2017	2/2/2017	CJR	1
o-Xylene	< 0.044	mg/kg	0.044	0.14	1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - Toluene-d8	100	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1



**Project Name** IRGENS-BMO  
**Project #** 16722-001

**Invoice #** E32409

**Lab Code** 5032409A  
**Sample ID** TW-1 0-2'  
**Sample Matrix** Soil  
**Sample Date** 1/30/2017

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
SUR - 1,2-Dichloroethane-d4	96	Rec %			1	8260B		2/2/2017	CJR	1
SUR - 4-Bromofluorobenzene	105	Rec %			1	8260B		2/2/2017	CJR	1
SUR - Dibromofluoromethane	92	Rec %			1	8260B		2/2/2017	CJR	1

Project Name IRGENS-BMO  
 Project # 16722-001

Invoice # E32409

Lab Code 5032409B  
 Sample ID TW-1 4-6'  
 Sample Matrix Soil  
 Sample Date 1/30/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	89.4	%			1	5021		2/1/2017	NJC	1
Inorganic										
Metals										
Arsenic, Total	60.6	mg/Kg	0.33	1.09	1	6010B		2/6/2017	CWT	1
Barium, Total	132	mg/Kg	0.21	0.7	1	6010B		2/6/2017	CWT	1
Cadmium, Total	1.33	mg/Kg	0.08	0.25	1	6010B		2/6/2017	CWT	1
Chromium, Total	20.7	mg/Kg	0.08	0.26	1	6010B		2/6/2017	CWT	1
Lead, Total	65.5	mg/Kg	0.17	0.58	1	6010B		2/6/2017	CWT	1
Mercury, Total	< 0.0131	mg/kg	0.0131	0.0435	1	7471		2/1/2017	CWT	1
Selenium, Total	54.0	mg/Kg	0.52	1.73	1	6010B		2/6/2017	CWT	1
Silver, Total	15.2	mg/Kg	0.57	1.89	1	6010B		2/6/2017	CWT	1
Organic										
PAH SIM										
Acenaphthene	< 0.0135	mg/kg	0.0135	0.043	1	M8270C	2/2/2017	2/3/2017	NJC	1
Acenaphthylene	< 0.012	mg/kg	0.012	0.0381	1	M8270C	2/2/2017	2/3/2017	NJC	1
Anthracene	< 0.0124	mg/kg	0.0124	0.0395	1	M8270C	2/2/2017	2/3/2017	NJC	1
Benzo(a)anthracene	< 0.0116	mg/kg	0.0116	0.037	1	M8270C	2/2/2017	2/3/2017	NJC	1
Benzo(a)pyrene	< 0.0113	mg/kg	0.0113	0.0359	1	M8270C	2/2/2017	2/3/2017	NJC	1
Benzo(b)fluoranthene	< 0.013	mg/kg	0.013	0.0414	1	M8270C	2/2/2017	2/3/2017	NJC	1
Benzo(g,h,i)perylene	< 0.0114	mg/kg	0.0114	0.0363	1	M8270C	2/2/2017	2/3/2017	NJC	1
Benzo(k)fluoranthene	< 0.0117	mg/kg	0.0117	0.0371	1	M8270C	2/2/2017	2/3/2017	NJC	1
Chrysene	< 0.0138	mg/kg	0.0138	0.0439	1	M8270C	2/2/2017	2/3/2017	NJC	1
Dibenzo(a,h)anthracene	< 0.0142	mg/kg	0.0142	0.0453	1	M8270C	2/2/2017	2/3/2017	NJC	1
Fluoranthene	< 0.0131	mg/kg	0.0131	0.0418	1	M8270C	2/2/2017	2/3/2017	NJC	1
Fluorene	< 0.0135	mg/kg	0.0135	0.0431	1	M8270C	2/2/2017	2/3/2017	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.015	mg/kg	0.015	0.0476	1	M8270C	2/2/2017	2/3/2017	NJC	1
1-Methyl naphthalene	< 0.0143	mg/kg	0.0143	0.0456	1	M8270C	2/2/2017	2/3/2017	NJC	1
2-Methyl naphthalene	< 0.0119	mg/kg	0.0119	0.038	1	M8270C	2/2/2017	2/3/2017	NJC	1
Naphthalene	< 0.0122	mg/kg	0.0122	0.0387	1	M8270C	2/2/2017	2/3/2017	NJC	1
Phenanthrene	< 0.0109	mg/kg	0.0109	0.0347	1	M8270C	2/2/2017	2/3/2017	NJC	1
Pyrene	< 0.0126	mg/kg	0.0126	0.0401	1	M8270C	2/2/2017	2/3/2017	NJC	1
VOC's										
Benzene	< 0.03	mg/kg	0.03	0.96	1	8260B		2/2/2017	CJR	1
Bromobenzene	< 0.025	mg/kg	0.025	0.081	1	8260B		2/2/2017	CJR	1
Bromodichloromethane	< 0.074	mg/kg	0.074	0.24	1	8260B		2/2/2017	CJR	1
Bromoform	< 0.029	mg/kg	0.029	0.092	1	8260B		2/2/2017	CJR	1
tert-Butylbenzene	< 0.026	mg/kg	0.026	0.084	1	8260B		2/2/2017	CJR	1
sec-Butylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		2/2/2017	CJR	1
n-Butylbenzene	< 0.04	mg/kg	0.04	0.13	1	8260B		2/2/2017	CJR	1
Carbon Tetrachloride	< 0.016	mg/kg	0.016	0.053	1	8260B		2/2/2017	CJR	1
Chlorobenzene	< 0.013	mg/kg	0.013	0.04	1	8260B		2/2/2017	CJR	1
Chloroethane	< 0.091	mg/kg	0.091	0.29	1	8260B		2/2/2017	CJR	1
Chloroform	< 0.035	mg/kg	0.035	0.11	1	8260B		2/2/2017	CJR	1
Chloromethane	< 0.076	mg/kg	0.076	0.24	1	8260B		2/2/2017	CJR	1
2-Chlorotoluene	< 0.015	mg/kg	0.015	0.047	1	8260B		2/2/2017	CJR	1
4-Chlorotoluene	< 0.018	mg/kg	0.018	0.057	1	8260B		2/2/2017	CJR	1
1,2-Dibromo-3-chloropropane	< 0.058	mg/kg	0.058	0.18	1	8260B		2/2/2017	CJR	1
Dibromochloromethane	< 0.025	mg/kg	0.025	0.079	1	8260B		2/2/2017	CJR	1
1,4-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		2/2/2017	CJR	1

**Project Name** IRGENS-BMO  
**Project #** 16722-001

**Invoice #** E32409

**Lab Code** 5032409B  
**Sample ID** TW-1 4-6'  
**Sample Matrix** Soil  
**Sample Date** 1/30/2017

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
1,3-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		2/2/2017	CJR	1
1,2-Dichlorobenzene	< 0.028	mg/kg	0.028	0.088	1	8260B		2/2/2017	CJR	1
Dichlorodifluoromethane	< 0.048	mg/kg	0.048	0.15	1	8260B		2/2/2017	CJR	1
1,2-Dichloroethane	< 0.038	mg/kg	0.038	0.12	1	8260B		2/2/2017	CJR	1
1,1-Dichloroethane	< 0.034	mg/kg	0.034	0.11	1	8260B		2/2/2017	CJR	1
1,1-Dichloroethene	< 0.022	mg/kg	0.022	0.069	1	8260B		2/2/2017	CJR	1
cis-1,2-Dichloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B		2/2/2017	CJR	1
trans-1,2-Dichloroethene	< 0.028	mg/kg	0.028	0.09	1	8260B		2/2/2017	CJR	1
1,2-Dichloropropane	< 0.035	mg/kg	0.035	0.11	1	8260B		2/2/2017	CJR	1
2,2-Dichloropropane	< 0.037	mg/kg	0.037	0.12	1	8260B		2/2/2017	CJR	1
1,3-Dichloropropane	< 0.025	mg/kg	0.025	0.079	1	8260B		2/2/2017	CJR	1
Di-isopropyl ether	< 0.01	mg/kg	0.01	0.032	1	8260B		2/2/2017	CJR	1
EDB (1,2-Dibromoethane)	< 0.023	mg/kg	0.023	0.072	1	8260B		2/2/2017	CJR	1
Ethylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		2/2/2017	CJR	1
Hexachlorobutadiene	< 0.085	mg/kg	0.085	0.27	1	8260B		2/2/2017	CJR	1
Isopropylbenzene	< 0.034	mg/kg	0.034	0.11	1	8260B		2/2/2017	CJR	1
p-Isopropyltoluene	< 0.029	mg/kg	0.029	0.093	1	8260B		2/2/2017	CJR	1
Methylene chloride	< 0.15	mg/kg	0.15	0.46	1	8260B		2/2/2017	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.05	mg/kg	0.05	0.16	1	8260B		2/2/2017	CJR	1
Naphthalene	< 0.094	mg/kg	0.094	0.3	1	8260B		2/2/2017	CJR	1
n-Propylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		2/2/2017	CJR	1
1,1,2,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.88	1	8260B		2/2/2017	CJR	1
1,1,1,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.09	1	8260B		2/2/2017	CJR	1
Tetrachloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B		2/2/2017	CJR	1
Toluene	< 0.032	mg/kg	0.032	0.1	1	8260B		2/2/2017	CJR	1
1,2,4-Trichlorobenzene	< 0.064	mg/kg	0.064	0.2	1	8260B		2/2/2017	CJR	1
1,2,3-Trichlorobenzene	< 0.066	mg/kg	0.066	0.21	1	8260B		2/2/2017	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.96	1	8260B		2/2/2017	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B		2/2/2017	CJR	1
Trichloroethene (TCE)	< 0.041	mg/kg	0.041	0.13	1	8260B		2/2/2017	CJR	1
Trichlorofluoromethane	< 0.041	mg/kg	0.041	0.13	1	8260B		2/2/2017	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.025	0.08	1	8260B		2/2/2017	CJR	1
1,3,5-Trimethylbenzene	< 0.032	mg/kg	0.032	0.1	1	8260B		2/2/2017	CJR	1
Vinyl Chloride	< 0.019	mg/kg	0.019	0.062	1	8260B		2/2/2017	CJR	1
m&p-Xylene	< 0.072	mg/kg	0.072	0.23	1	8260B		2/2/2017	CJR	1
o-Xylene	< 0.044	mg/kg	0.044	0.14	1	8260B		2/2/2017	CJR	1
SUR - 1,2-Dichloroethane-d4	86	Rec %			1	8260B		2/2/2017	CJR	1
SUR - 4-Bromofluorobenzene	113	Rec %			1	8260B		2/2/2017	CJR	1
SUR - Dibromofluoromethane	91	Rec %			1	8260B		2/2/2017	CJR	1
SUR - Toluene-d8	99	Rec %			1	8260B		2/2/2017	CJR	1

Project Name IRGENS-BMO  
 Project # 16722-001

Invoice # E32409

Lab Code 5032409C  
 Sample ID SB-2 2-4'  
 Sample Matrix Soil  
 Sample Date 1/30/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	94.2	%			1	5021		2/1/2017	NJC	1
Inorganic										
Metals										
Lead, Total	3.45	mg/Kg	0.34	1.16	2	6010B		2/7/2017	CWT	1 49
Organic										
PAH SIM										
Acenaphthene	< 0.0135	mg/kg	0.0135	0.043	1	M8270C	2/2/2017	2/3/2017	NJC	1
Acenaphthylene	< 0.012	mg/kg	0.012	0.0381	1	M8270C	2/2/2017	2/3/2017	NJC	1
Anthracene	< 0.0124	mg/kg	0.0124	0.0395	1	M8270C	2/2/2017	2/3/2017	NJC	1
Benzo(a)anthracene	< 0.0116	mg/kg	0.0116	0.037	1	M8270C	2/2/2017	2/3/2017	NJC	1
Benzo(a)pyrene	< 0.0113	mg/kg	0.0113	0.0359	1	M8270C	2/2/2017	2/3/2017	NJC	1
Benzo(b)fluoranthene	< 0.013	mg/kg	0.013	0.0414	1	M8270C	2/2/2017	2/3/2017	NJC	1
Benzo(g,h,i)perylene	< 0.0114	mg/kg	0.0114	0.0363	1	M8270C	2/2/2017	2/3/2017	NJC	1
Benzo(k)fluoranthene	< 0.0117	mg/kg	0.0117	0.0371	1	M8270C	2/2/2017	2/3/2017	NJC	1
Chrysene	< 0.0138	mg/kg	0.0138	0.0439	1	M8270C	2/2/2017	2/3/2017	NJC	1
Dibenzo(a,h)anthracene	< 0.0142	mg/kg	0.0142	0.0453	1	M8270C	2/2/2017	2/3/2017	NJC	1
Fluoranthene	< 0.0131	mg/kg	0.0131	0.0418	1	M8270C	2/2/2017	2/3/2017	NJC	1
Fluorene	< 0.0135	mg/kg	0.0135	0.0431	1	M8270C	2/2/2017	2/3/2017	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.015	mg/kg	0.015	0.0476	1	M8270C	2/2/2017	2/3/2017	NJC	1
1-Methyl naphthalene	< 0.0143	mg/kg	0.0143	0.0456	1	M8270C	2/2/2017	2/3/2017	NJC	1
2-Methyl naphthalene	< 0.0119	mg/kg	0.0119	0.038	1	M8270C	2/2/2017	2/3/2017	NJC	1
Naphthalene	< 0.0122	mg/kg	0.0122	0.0387	1	M8270C	2/2/2017	2/3/2017	NJC	1
Phenanthrene	< 0.0109	mg/kg	0.0109	0.0347	1	M8270C	2/2/2017	2/3/2017	NJC	1
Pyrene	< 0.0126	mg/kg	0.0126	0.0401	1	M8270C	2/2/2017	2/3/2017	NJC	1
VOC's										
Benzene	< 0.03	mg/kg	0.03	0.96	1	8260B		2/2/2017	CJR	1
Bromobenzene	< 0.025	mg/kg	0.025	0.081	1	8260B		2/2/2017	CJR	1
Bromodichloromethane	< 0.074	mg/kg	0.074	0.24	1	8260B		2/2/2017	CJR	1
Bromoform	< 0.029	mg/kg	0.029	0.092	1	8260B		2/2/2017	CJR	1
tert-Butylbenzene	< 0.026	mg/kg	0.026	0.084	1	8260B		2/2/2017	CJR	1
sec-Butylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		2/2/2017	CJR	1
n-Butylbenzene	< 0.04	mg/kg	0.04	0.13	1	8260B		2/2/2017	CJR	1
Carbon Tetrachloride	< 0.016	mg/kg	0.016	0.053	1	8260B		2/2/2017	CJR	1
Chlorobenzene	< 0.013	mg/kg	0.013	0.04	1	8260B		2/2/2017	CJR	1
Chloroethane	< 0.091	mg/kg	0.091	0.29	1	8260B		2/2/2017	CJR	1
Chloroform	< 0.035	mg/kg	0.035	0.11	1	8260B		2/2/2017	CJR	1
Chloromethane	< 0.076	mg/kg	0.076	0.24	1	8260B		2/2/2017	CJR	1
2-Chlorotoluene	< 0.015	mg/kg	0.015	0.047	1	8260B		2/2/2017	CJR	1
4-Chlorotoluene	< 0.018	mg/kg	0.018	0.057	1	8260B		2/2/2017	CJR	1
1,2-Dibromo-3-chloropropane	< 0.058	mg/kg	0.058	0.18	1	8260B		2/2/2017	CJR	1
Dibromochloromethane	< 0.025	mg/kg	0.025	0.079	1	8260B		2/2/2017	CJR	1
1,4-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		2/2/2017	CJR	1
1,3-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		2/2/2017	CJR	1
1,2-Dichlorobenzene	< 0.028	mg/kg	0.028	0.088	1	8260B		2/2/2017	CJR	1
Dichlorodifluoromethane	< 0.048	mg/kg	0.048	0.15	1	8260B		2/2/2017	CJR	1
1,2-Dichloroethane	< 0.038	mg/kg	0.038	0.12	1	8260B		2/2/2017	CJR	1
1,1-Dichloroethane	< 0.034	mg/kg	0.034	0.11	1	8260B		2/2/2017	CJR	1
1,1-Dichloroethene	< 0.022	mg/kg	0.022	0.069	1	8260B		2/2/2017	CJR	1
cis-1,2-Dichloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B		2/2/2017	CJR	1

**Project Name** IRGENS-BMO  
**Project #** 16722-001

**Invoice #** E32409

**Lab Code** 5032409C  
**Sample ID** SB-2 2-4'  
**Sample Matrix** Soil  
**Sample Date** 1/30/2017

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
trans-1,2-Dichloroethene	< 0.028	mg/kg	0.028	0.09	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2-Dichloropropane	< 0.035	mg/kg	0.035	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
2,2-Dichloropropane	< 0.037	mg/kg	0.037	0.12	1	8260B	2/2/2017	2/2/2017	CJR	1
1,3-Dichloropropane	< 0.025	mg/kg	0.025	0.079	1	8260B	2/2/2017	2/2/2017	CJR	1
Di-isopropyl ether	< 0.01	mg/kg	0.01	0.032	1	8260B	2/2/2017	2/2/2017	CJR	1
EDB (1,2-Dibromoethane)	< 0.023	mg/kg	0.023	0.072	1	8260B	2/2/2017	2/2/2017	CJR	1
Ethylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
Hexachlorobutadiene	< 0.085	mg/kg	0.085	0.27	1	8260B	2/2/2017	2/2/2017	CJR	1
Isopropylbenzene	< 0.034	mg/kg	0.034	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
p-Isopropyltoluene	< 0.029	mg/kg	0.029	0.093	1	8260B	2/2/2017	2/2/2017	CJR	1
Methylene chloride	< 0.15	mg/kg	0.15	0.46	1	8260B	2/2/2017	2/2/2017	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.05	mg/kg	0.05	0.16	1	8260B	2/2/2017	2/2/2017	CJR	1
Naphthalene	< 0.094	mg/kg	0.094	0.3	1	8260B	2/2/2017	2/2/2017	CJR	1
n-Propylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,2,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.88	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,1,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.09	1	8260B	2/2/2017	2/2/2017	CJR	1
Tetrachloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
Toluene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,4-Trichlorobenzene	< 0.064	mg/kg	0.064	0.2	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,3-Trichlorobenzene	< 0.066	mg/kg	0.066	0.21	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.96	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
Trichloroethene (TCE)	< 0.041	mg/kg	0.041	0.13	1	8260B	2/2/2017	2/2/2017	CJR	1
Trichlorofluoromethane	< 0.041	mg/kg	0.041	0.13	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.025	0.08	1	8260B	2/2/2017	2/2/2017	CJR	1
1,3,5-Trimethylbenzene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
Vinyl Chloride	< 0.019	mg/kg	0.019	0.062	1	8260B	2/2/2017	2/2/2017	CJR	1
m&p-Xylene	< 0.072	mg/kg	0.072	0.23	1	8260B	2/2/2017	2/2/2017	CJR	1
o-Xylene	< 0.044	mg/kg	0.044	0.14	1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - 1,2-Dichloroethane-d4	90	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - 4-Bromofluorobenzene	111	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - Dibromofluoromethane	93	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - Toluene-d8	100	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1

Project Name IRGENS-BMO  
 Project # 16722-001

Invoice # E32409

Lab Code 5032409D  
 Sample ID SB-2 6-8'  
 Sample Matrix Soil  
 Sample Date 1/30/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	82.1	%			1	5021		2/1/2017	NJC	1
Inorganic										
Metals										
Lead, Total	8.83	mg/Kg	0.17	0.58	1	6010B		2/7/2017	CWT	1
Organic										
PAH SIM										
Acenaphthene	< 0.0135	mg/kg	0.0135	0.043	1	M8270C	2/2/2017	2/4/2017	NJC	1
Acenaphthylene	< 0.012	mg/kg	0.012	0.0381	1	M8270C	2/2/2017	2/4/2017	NJC	1
Anthracene	< 0.0124	mg/kg	0.0124	0.0395	1	M8270C	2/2/2017	2/4/2017	NJC	1
Benzo(a)anthracene	< 0.0116	mg/kg	0.0116	0.037	1	M8270C	2/2/2017	2/4/2017	NJC	1
Benzo(a)pyrene	< 0.0113	mg/kg	0.0113	0.0359	1	M8270C	2/2/2017	2/4/2017	NJC	1
Benzo(b)fluoranthene	< 0.013	mg/kg	0.013	0.0414	1	M8270C	2/2/2017	2/4/2017	NJC	1
Benzo(g,h,i)perylene	< 0.0114	mg/kg	0.0114	0.0363	1	M8270C	2/2/2017	2/4/2017	NJC	1
Benzo(k)fluoranthene	< 0.0117	mg/kg	0.0117	0.0371	1	M8270C	2/2/2017	2/4/2017	NJC	1
Chrysene	< 0.0138	mg/kg	0.0138	0.0439	1	M8270C	2/2/2017	2/4/2017	NJC	1
Dibenzo(a,h)anthracene	< 0.0142	mg/kg	0.0142	0.0453	1	M8270C	2/2/2017	2/4/2017	NJC	1
Fluoranthene	< 0.0131	mg/kg	0.0131	0.0418	1	M8270C	2/2/2017	2/4/2017	NJC	1
Fluorene	< 0.0135	mg/kg	0.0135	0.0431	1	M8270C	2/2/2017	2/4/2017	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.015	mg/kg	0.015	0.0476	1	M8270C	2/2/2017	2/4/2017	NJC	1
1-Methyl naphthalene	0.0211 "J"	mg/kg	0.0143	0.0456	1	M8270C	2/2/2017	2/4/2017	NJC	1
2-Methyl naphthalene	< 0.0119	mg/kg	0.0119	0.038	1	M8270C	2/2/2017	2/4/2017	NJC	1
Naphthalene	< 0.0122	mg/kg	0.0122	0.0387	1	M8270C	2/2/2017	2/4/2017	NJC	1
Phenanthrene	0.0128 "J"	mg/kg	0.0109	0.0347	1	M8270C	2/2/2017	2/4/2017	NJC	1
Pyrene	< 0.0126	mg/kg	0.0126	0.0401	1	M8270C	2/2/2017	2/4/2017	NJC	1
VOC's										
Benzene	< 0.03	mg/kg	0.03	0.96	1	8260B		2/2/2017	CJR	1
Bromobenzene	< 0.025	mg/kg	0.025	0.081	1	8260B		2/2/2017	CJR	1
Bromodichloromethane	< 0.074	mg/kg	0.074	0.24	1	8260B		2/2/2017	CJR	1
Bromoform	< 0.029	mg/kg	0.029	0.092	1	8260B		2/2/2017	CJR	1
tert-Butylbenzene	< 0.026	mg/kg	0.026	0.084	1	8260B		2/2/2017	CJR	1
sec-Butylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		2/2/2017	CJR	1
n-Butylbenzene	< 0.04	mg/kg	0.04	0.13	1	8260B		2/2/2017	CJR	1
Carbon Tetrachloride	< 0.016	mg/kg	0.016	0.053	1	8260B		2/2/2017	CJR	1
Chlorobenzene	< 0.013	mg/kg	0.013	0.04	1	8260B		2/2/2017	CJR	1
Chloroethane	< 0.091	mg/kg	0.091	0.29	1	8260B		2/2/2017	CJR	4
Chloroform	< 0.035	mg/kg	0.035	0.11	1	8260B		2/2/2017	CJR	1
Chloromethane	< 0.076	mg/kg	0.076	0.24	1	8260B		2/2/2017	CJR	1
2-Chlorotoluene	< 0.015	mg/kg	0.015	0.047	1	8260B		2/2/2017	CJR	1
4-Chlorotoluene	< 0.018	mg/kg	0.018	0.057	1	8260B		2/2/2017	CJR	1
1,2-Dibromo-3-chloropropane	< 0.058	mg/kg	0.058	0.18	1	8260B		2/2/2017	CJR	1
Dibromochloromethane	< 0.025	mg/kg	0.025	0.079	1	8260B		2/2/2017	CJR	1
1,4-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		2/2/2017	CJR	1
1,3-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		2/2/2017	CJR	1
1,2-Dichlorobenzene	< 0.028	mg/kg	0.028	0.088	1	8260B		2/2/2017	CJR	1
Dichlorodifluoromethane	< 0.048	mg/kg	0.048	0.15	1	8260B		2/2/2017	CJR	1
1,2-Dichloroethane	< 0.038	mg/kg	0.038	0.12	1	8260B		2/2/2017	CJR	1
1,1-Dichloroethane	< 0.034	mg/kg	0.034	0.11	1	8260B		2/2/2017	CJR	1
1,1-Dichloroethene	< 0.022	mg/kg	0.022	0.069	1	8260B		2/2/2017	CJR	1
cis-1,2-Dichloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B		2/2/2017	CJR	1

**Project Name** IRGENS-BMO  
**Project #** 16722-001

**Invoice #** E32409

**Lab Code** 5032409D  
**Sample ID** SB-2 6-8'  
**Sample Matrix** Soil  
**Sample Date** 1/30/2017

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
trans-1,2-Dichloroethene	< 0.028	mg/kg	0.028	0.09	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2-Dichloropropane	< 0.035	mg/kg	0.035	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
2,2-Dichloropropane	< 0.037	mg/kg	0.037	0.12	1	8260B	2/2/2017	2/2/2017	CJR	1
1,3-Dichloropropane	< 0.025	mg/kg	0.025	0.079	1	8260B	2/2/2017	2/2/2017	CJR	1
Di-isopropyl ether	< 0.01	mg/kg	0.01	0.032	1	8260B	2/2/2017	2/2/2017	CJR	1
EDB (1,2-Dibromoethane)	< 0.023	mg/kg	0.023	0.072	1	8260B	2/2/2017	2/2/2017	CJR	1
Ethylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
Hexachlorobutadiene	< 0.085	mg/kg	0.085	0.27	1	8260B	2/2/2017	2/2/2017	CJR	1
Isopropylbenzene	< 0.034	mg/kg	0.034	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
p-Isopropyltoluene	< 0.029	mg/kg	0.029	0.093	1	8260B	2/2/2017	2/2/2017	CJR	1
Methylene chloride	< 0.15	mg/kg	0.15	0.46	1	8260B	2/2/2017	2/2/2017	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.05	mg/kg	0.05	0.16	1	8260B	2/2/2017	2/2/2017	CJR	1
Naphthalene	< 0.094	mg/kg	0.094	0.3	1	8260B	2/2/2017	2/2/2017	CJR	1
n-Propylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,2,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.88	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,1,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.09	1	8260B	2/2/2017	2/2/2017	CJR	1
Tetrachloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
Toluene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,4-Trichlorobenzene	< 0.064	mg/kg	0.064	0.2	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,3-Trichlorobenzene	< 0.066	mg/kg	0.066	0.21	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.96	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
Trichloroethene (TCE)	< 0.041	mg/kg	0.041	0.13	1	8260B	2/2/2017	2/2/2017	CJR	1
Trichlorofluoromethane	< 0.041	mg/kg	0.041	0.13	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.025	0.08	1	8260B	2/2/2017	2/2/2017	CJR	1
1,3,5-Trimethylbenzene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
Vinyl Chloride	< 0.019	mg/kg	0.019	0.062	1	8260B	2/2/2017	2/2/2017	CJR	1
m&p-Xylene	< 0.072	mg/kg	0.072	0.23	1	8260B	2/2/2017	2/2/2017	CJR	1
o-Xylene	< 0.044	mg/kg	0.044	0.14	1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - 4-Bromofluorobenzene	103	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - Dibromofluoromethane	91	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - Toluene-d8	102	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - 1,2-Dichloroethane-d4	94	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1

**Project Name** IRGENS-BMO  
**Project #** 16722-001

**Invoice #** E32409

**Lab Code** 5032409E  
**Sample ID** TW-3 0-2'  
**Sample Matrix** Soil  
**Sample Date** 1/30/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	94.3	%			1	5021		2/1/2017	NJC	1
Inorganic										
Metals										
Lead, Total	3.69	mg/Kg	0.17	0.58	1	6010B		2/7/2017	CWT	1
Organic										
PAH SIM										
Acenaphthene	< 0.0135	mg/kg	0.0135	0.043	1	M8270C	2/2/2017	2/4/2017	NJC	1
Acenaphthylene	< 0.012	mg/kg	0.012	0.0381	1	M8270C	2/2/2017	2/4/2017	NJC	1
Anthracene	< 0.0124	mg/kg	0.0124	0.0395	1	M8270C	2/2/2017	2/4/2017	NJC	1
Benzo(a)anthracene	< 0.0116	mg/kg	0.0116	0.037	1	M8270C	2/2/2017	2/4/2017	NJC	1
Benzo(a)pyrene	< 0.0113	mg/kg	0.0113	0.0359	1	M8270C	2/2/2017	2/4/2017	NJC	1
Benzo(b)fluoranthene	< 0.013	mg/kg	0.013	0.0414	1	M8270C	2/2/2017	2/4/2017	NJC	1
Benzo(g,h,i)perylene	< 0.0114	mg/kg	0.0114	0.0363	1	M8270C	2/2/2017	2/4/2017	NJC	1
Benzo(k)fluoranthene	< 0.0117	mg/kg	0.0117	0.0371	1	M8270C	2/2/2017	2/4/2017	NJC	1
Chrysene	< 0.0138	mg/kg	0.0138	0.0439	1	M8270C	2/2/2017	2/4/2017	NJC	1
Dibenzo(a,h)anthracene	< 0.0142	mg/kg	0.0142	0.0453	1	M8270C	2/2/2017	2/4/2017	NJC	1
Fluoranthene	< 0.0131	mg/kg	0.0131	0.0418	1	M8270C	2/2/2017	2/4/2017	NJC	1
Fluorene	< 0.0135	mg/kg	0.0135	0.0431	1	M8270C	2/2/2017	2/4/2017	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.015	mg/kg	0.015	0.0476	1	M8270C	2/2/2017	2/4/2017	NJC	1
1-Methyl naphthalene	< 0.0143	mg/kg	0.0143	0.0456	1	M8270C	2/2/2017	2/4/2017	NJC	1
2-Methyl naphthalene	< 0.0119	mg/kg	0.0119	0.038	1	M8270C	2/2/2017	2/4/2017	NJC	1
Naphthalene	< 0.0122	mg/kg	0.0122	0.0387	1	M8270C	2/2/2017	2/4/2017	NJC	1
Phenanthrene	< 0.0109	mg/kg	0.0109	0.0347	1	M8270C	2/2/2017	2/4/2017	NJC	1
Pyrene	< 0.0126	mg/kg	0.0126	0.0401	1	M8270C	2/2/2017	2/4/2017	NJC	1
VOC's										
Benzene	< 0.03	mg/kg	0.03	0.96	1	8260B		2/2/2017	CJR	1
Bromobenzene	< 0.025	mg/kg	0.025	0.081	1	8260B		2/2/2017	CJR	1
Bromodichloromethane	< 0.074	mg/kg	0.074	0.24	1	8260B		2/2/2017	CJR	1
Bromoform	< 0.029	mg/kg	0.029	0.092	1	8260B		2/2/2017	CJR	1
tert-Butylbenzene	< 0.026	mg/kg	0.026	0.084	1	8260B		2/2/2017	CJR	1
sec-Butylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		2/2/2017	CJR	1
n-Butylbenzene	< 0.04	mg/kg	0.04	0.13	1	8260B		2/2/2017	CJR	1
Carbon Tetrachloride	< 0.016	mg/kg	0.016	0.053	1	8260B		2/2/2017	CJR	1
Chlorobenzene	< 0.013	mg/kg	0.013	0.04	1	8260B		2/2/2017	CJR	1
Chloroethane	< 0.091	mg/kg	0.091	0.29	1	8260B		2/2/2017	CJR	4
Chloroform	< 0.035	mg/kg	0.035	0.11	1	8260B		2/2/2017	CJR	1
Chloromethane	< 0.076	mg/kg	0.076	0.24	1	8260B		2/2/2017	CJR	1
2-Chlorotoluene	< 0.015	mg/kg	0.015	0.047	1	8260B		2/2/2017	CJR	1
4-Chlorotoluene	< 0.018	mg/kg	0.018	0.057	1	8260B		2/2/2017	CJR	1
1,2-Dibromo-3-chloropropane	< 0.058	mg/kg	0.058	0.18	1	8260B		2/2/2017	CJR	1
Dibromochloromethane	< 0.025	mg/kg	0.025	0.079	1	8260B		2/2/2017	CJR	1
1,4-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		2/2/2017	CJR	1
1,3-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		2/2/2017	CJR	1
1,2-Dichlorobenzene	< 0.028	mg/kg	0.028	0.088	1	8260B		2/2/2017	CJR	1
Dichlorodifluoromethane	< 0.048	mg/kg	0.048	0.15	1	8260B		2/2/2017	CJR	1
1,2-Dichloroethane	< 0.038	mg/kg	0.038	0.12	1	8260B		2/2/2017	CJR	1
1,1-Dichloroethane	< 0.034	mg/kg	0.034	0.11	1	8260B		2/2/2017	CJR	1
1,1-Dichloroethene	< 0.022	mg/kg	0.022	0.069	1	8260B		2/2/2017	CJR	1
cis-1,2-Dichloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B		2/2/2017	CJR	1



**Project Name** IRGENS-BMO  
**Project #** 16722-001

**Invoice #** E32409

**Lab Code** 5032409E  
**Sample ID** TW-3 0-2'  
**Sample Matrix** Soil  
**Sample Date** 1/30/2017

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
trans-1,2-Dichloroethene	< 0.028	mg/kg	0.028	0.09	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2-Dichloropropane	< 0.035	mg/kg	0.035	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
2,2-Dichloropropane	< 0.037	mg/kg	0.037	0.12	1	8260B	2/2/2017	2/2/2017	CJR	1
1,3-Dichloropropane	< 0.025	mg/kg	0.025	0.079	1	8260B	2/2/2017	2/2/2017	CJR	1
Di-isopropyl ether	< 0.01	mg/kg	0.01	0.032	1	8260B	2/2/2017	2/2/2017	CJR	1
EDB (1,2-Dibromoethane)	< 0.023	mg/kg	0.023	0.072	1	8260B	2/2/2017	2/2/2017	CJR	1
Ethylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
Hexachlorobutadiene	< 0.085	mg/kg	0.085	0.27	1	8260B	2/2/2017	2/2/2017	CJR	1
Isopropylbenzene	< 0.034	mg/kg	0.034	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
p-Isopropyltoluene	< 0.029	mg/kg	0.029	0.093	1	8260B	2/2/2017	2/2/2017	CJR	1
Methylene chloride	< 0.15	mg/kg	0.15	0.46	1	8260B	2/2/2017	2/2/2017	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.05	mg/kg	0.05	0.16	1	8260B	2/2/2017	2/2/2017	CJR	1
Naphthalene	< 0.094	mg/kg	0.094	0.3	1	8260B	2/2/2017	2/2/2017	CJR	1
n-Propylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,2,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.88	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,1,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.09	1	8260B	2/2/2017	2/2/2017	CJR	1
Tetrachloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
Toluene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,4-Trichlorobenzene	< 0.064	mg/kg	0.064	0.2	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,3-Trichlorobenzene	< 0.066	mg/kg	0.066	0.21	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.96	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
Trichloroethene (TCE)	< 0.041	mg/kg	0.041	0.13	1	8260B	2/2/2017	2/2/2017	CJR	1
Trichlorofluoromethane	< 0.041	mg/kg	0.041	0.13	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.025	0.08	1	8260B	2/2/2017	2/2/2017	CJR	1
1,3,5-Trimethylbenzene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
Vinyl Chloride	< 0.019	mg/kg	0.019	0.062	1	8260B	2/2/2017	2/2/2017	CJR	1
m&p-Xylene	< 0.072	mg/kg	0.072	0.23	1	8260B	2/2/2017	2/2/2017	CJR	1
o-Xylene	< 0.044	mg/kg	0.044	0.14	1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - Toluene-d8	100	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - Dibromofluoromethane	95	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - 1,2-Dichloroethane-d4	97	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - 4-Bromofluorobenzene	108	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1

Project Name IRGENS-BMO  
 Project # 16722-001

Invoice # E32409

Lab Code 5032409F  
 Sample ID TW-3 2-4'  
 Sample Matrix Soil  
 Sample Date 1/30/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	89.8	%			1	5021		2/1/2017	NJC	1
Inorganic										
Metals										
Lead, Total	3.82	mg/Kg	0.17	0.58	1	6010B		2/7/2017	CWT	1
Organic										
PAH SIM										
Acenaphthene	< 0.0135	mg/kg	0.0135	0.043	1	M8270C	2/2/2017	2/4/2017	NJC	1
Acenaphthylene	< 0.012	mg/kg	0.012	0.0381	1	M8270C	2/2/2017	2/4/2017	NJC	1
Anthracene	< 0.0124	mg/kg	0.0124	0.0395	1	M8270C	2/2/2017	2/4/2017	NJC	1
Benzo(a)anthracene	< 0.0116	mg/kg	0.0116	0.037	1	M8270C	2/2/2017	2/4/2017	NJC	1
Benzo(a)pyrene	< 0.0113	mg/kg	0.0113	0.0359	1	M8270C	2/2/2017	2/4/2017	NJC	1
Benzo(b)fluoranthene	< 0.013	mg/kg	0.013	0.0414	1	M8270C	2/2/2017	2/4/2017	NJC	1
Benzo(g,h,i)perylene	< 0.0114	mg/kg	0.0114	0.0363	1	M8270C	2/2/2017	2/4/2017	NJC	1
Benzo(k)fluoranthene	< 0.0117	mg/kg	0.0117	0.0371	1	M8270C	2/2/2017	2/4/2017	NJC	1
Chrysene	< 0.0138	mg/kg	0.0138	0.0439	1	M8270C	2/2/2017	2/4/2017	NJC	1
Dibenzo(a,h)anthracene	< 0.0142	mg/kg	0.0142	0.0453	1	M8270C	2/2/2017	2/4/2017	NJC	1
Fluoranthene	< 0.0131	mg/kg	0.0131	0.0418	1	M8270C	2/2/2017	2/4/2017	NJC	1
Fluorene	< 0.0135	mg/kg	0.0135	0.0431	1	M8270C	2/2/2017	2/4/2017	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.015	mg/kg	0.015	0.0476	1	M8270C	2/2/2017	2/4/2017	NJC	1
1-Methyl naphthalene	< 0.0143	mg/kg	0.0143	0.0456	1	M8270C	2/2/2017	2/4/2017	NJC	1
2-Methyl naphthalene	< 0.0119	mg/kg	0.0119	0.038	1	M8270C	2/2/2017	2/4/2017	NJC	1
Naphthalene	< 0.0122	mg/kg	0.0122	0.0387	1	M8270C	2/2/2017	2/4/2017	NJC	1
Phenanthrene	< 0.0109	mg/kg	0.0109	0.0347	1	M8270C	2/2/2017	2/4/2017	NJC	1
Pyrene	< 0.0126	mg/kg	0.0126	0.0401	1	M8270C	2/2/2017	2/4/2017	NJC	1
VOC's										
Benzene	< 0.03	mg/kg	0.03	0.96	1	8260B		2/2/2017	CJR	1
Bromobenzene	< 0.025	mg/kg	0.025	0.081	1	8260B		2/2/2017	CJR	1
Bromodichloromethane	< 0.074	mg/kg	0.074	0.24	1	8260B		2/2/2017	CJR	1
Bromoform	< 0.029	mg/kg	0.029	0.092	1	8260B		2/2/2017	CJR	1
tert-Butylbenzene	< 0.026	mg/kg	0.026	0.084	1	8260B		2/2/2017	CJR	1
sec-Butylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		2/2/2017	CJR	1
n-Butylbenzene	< 0.04	mg/kg	0.04	0.13	1	8260B		2/2/2017	CJR	1
Carbon Tetrachloride	< 0.016	mg/kg	0.016	0.053	1	8260B		2/2/2017	CJR	1
Chlorobenzene	< 0.013	mg/kg	0.013	0.04	1	8260B		2/2/2017	CJR	1
Chloroethane	< 0.091	mg/kg	0.091	0.29	1	8260B		2/2/2017	CJR	4
Chloroform	< 0.035	mg/kg	0.035	0.11	1	8260B		2/2/2017	CJR	1
Chloromethane	< 0.076	mg/kg	0.076	0.24	1	8260B		2/2/2017	CJR	1
2-Chlorotoluene	< 0.015	mg/kg	0.015	0.047	1	8260B		2/2/2017	CJR	1
4-Chlorotoluene	< 0.018	mg/kg	0.018	0.057	1	8260B		2/2/2017	CJR	1
1,2-Dibromo-3-chloropropane	< 0.058	mg/kg	0.058	0.18	1	8260B		2/2/2017	CJR	1
Dibromochloromethane	< 0.025	mg/kg	0.025	0.079	1	8260B		2/2/2017	CJR	1
1,4-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		2/2/2017	CJR	1
1,3-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		2/2/2017	CJR	1
1,2-Dichlorobenzene	< 0.028	mg/kg	0.028	0.088	1	8260B		2/2/2017	CJR	1
Dichlorodifluoromethane	< 0.048	mg/kg	0.048	0.15	1	8260B		2/2/2017	CJR	1
1,2-Dichloroethane	< 0.038	mg/kg	0.038	0.12	1	8260B		2/2/2017	CJR	1
1,1-Dichloroethane	< 0.034	mg/kg	0.034	0.11	1	8260B		2/2/2017	CJR	1
1,1-Dichloroethene	< 0.022	mg/kg	0.022	0.069	1	8260B		2/2/2017	CJR	1
cis-1,2-Dichloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B		2/2/2017	CJR	1

**Project Name** IRGENS-BMO  
**Project #** 16722-001

**Invoice #** E32409

**Lab Code** 5032409F  
**Sample ID** TW-3 2-4'  
**Sample Matrix** Soil  
**Sample Date** 1/30/2017

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
trans-1,2-Dichloroethene	< 0.028	mg/kg	0.028	0.09	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2-Dichloropropane	< 0.035	mg/kg	0.035	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
2,2-Dichloropropane	< 0.037	mg/kg	0.037	0.12	1	8260B	2/2/2017	2/2/2017	CJR	1
1,3-Dichloropropane	< 0.025	mg/kg	0.025	0.079	1	8260B	2/2/2017	2/2/2017	CJR	1
Di-isopropyl ether	< 0.01	mg/kg	0.01	0.032	1	8260B	2/2/2017	2/2/2017	CJR	1
EDB (1,2-Dibromoethane)	< 0.023	mg/kg	0.023	0.072	1	8260B	2/2/2017	2/2/2017	CJR	1
Ethylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
Hexachlorobutadiene	< 0.085	mg/kg	0.085	0.27	1	8260B	2/2/2017	2/2/2017	CJR	1
Isopropylbenzene	< 0.034	mg/kg	0.034	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
p-Isopropyltoluene	< 0.029	mg/kg	0.029	0.093	1	8260B	2/2/2017	2/2/2017	CJR	1
Methylene chloride	< 0.15	mg/kg	0.15	0.46	1	8260B	2/2/2017	2/2/2017	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.05	mg/kg	0.05	0.16	1	8260B	2/2/2017	2/2/2017	CJR	1
Naphthalene	< 0.094	mg/kg	0.094	0.3	1	8260B	2/2/2017	2/2/2017	CJR	1
n-Propylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,2,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.88	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,1,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.09	1	8260B	2/2/2017	2/2/2017	CJR	1
Tetrachloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
Toluene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,4-Trichlorobenzene	< 0.064	mg/kg	0.064	0.2	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,3-Trichlorobenzene	< 0.066	mg/kg	0.066	0.21	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.96	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
Trichloroethene (TCE)	< 0.041	mg/kg	0.041	0.13	1	8260B	2/2/2017	2/2/2017	CJR	1
Trichlorofluoromethane	< 0.041	mg/kg	0.041	0.13	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.025	0.08	1	8260B	2/2/2017	2/2/2017	CJR	1
1,3,5-Trimethylbenzene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
Vinyl Chloride	< 0.019	mg/kg	0.019	0.062	1	8260B	2/2/2017	2/2/2017	CJR	1
m&p-Xylene	< 0.072	mg/kg	0.072	0.23	1	8260B	2/2/2017	2/2/2017	CJR	1
o-Xylene	< 0.044	mg/kg	0.044	0.14	1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - Toluene-d8	100	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - Dibromofluoromethane	98	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - 4-Bromofluorobenzene	108	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - 1,2-Dichloroethane-d4	105	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1

**Project Name** IRGENS-BMO  
**Project #** 16722-001

**Invoice #** E32409

**Lab Code** 5032409G  
**Sample ID** SB-4 0-2'  
**Sample Matrix** Soil  
**Sample Date** 1/30/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	91.6	%			1	5021		2/1/2017	NJC	1
Inorganic										
Metals										
Lead, Total	3.64	mg/Kg	0.17	0.58	1	6010B		2/7/2017	CWT	1
Organic										
PAH SIM										
Acenaphthene	< 0.0135	mg/kg	0.0135	0.043	1	M8270C	2/2/2017	2/4/2017	NJC	1
Acenaphthylene	< 0.012	mg/kg	0.012	0.0381	1	M8270C	2/2/2017	2/4/2017	NJC	1
Anthracene	< 0.0124	mg/kg	0.0124	0.0395	1	M8270C	2/2/2017	2/4/2017	NJC	1
Benzo(a)anthracene	< 0.0116	mg/kg	0.0116	0.037	1	M8270C	2/2/2017	2/4/2017	NJC	1
Benzo(a)pyrene	< 0.0113	mg/kg	0.0113	0.0359	1	M8270C	2/2/2017	2/4/2017	NJC	1
Benzo(b)fluoranthene	< 0.013	mg/kg	0.013	0.0414	1	M8270C	2/2/2017	2/4/2017	NJC	1
Benzo(g,h,i)perylene	< 0.0114	mg/kg	0.0114	0.0363	1	M8270C	2/2/2017	2/4/2017	NJC	1
Benzo(k)fluoranthene	< 0.0117	mg/kg	0.0117	0.0371	1	M8270C	2/2/2017	2/4/2017	NJC	1
Chrysene	< 0.0138	mg/kg	0.0138	0.0439	1	M8270C	2/2/2017	2/4/2017	NJC	1
Dibenzo(a,h)anthracene	< 0.0142	mg/kg	0.0142	0.0453	1	M8270C	2/2/2017	2/4/2017	NJC	1
Fluoranthene	< 0.0131	mg/kg	0.0131	0.0418	1	M8270C	2/2/2017	2/4/2017	NJC	1
Fluorene	< 0.0135	mg/kg	0.0135	0.0431	1	M8270C	2/2/2017	2/4/2017	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.015	mg/kg	0.015	0.0476	1	M8270C	2/2/2017	2/4/2017	NJC	1
1-Methyl naphthalene	< 0.0143	mg/kg	0.0143	0.0456	1	M8270C	2/2/2017	2/4/2017	NJC	1
2-Methyl naphthalene	< 0.0119	mg/kg	0.0119	0.038	1	M8270C	2/2/2017	2/4/2017	NJC	1
Naphthalene	< 0.0122	mg/kg	0.0122	0.0387	1	M8270C	2/2/2017	2/4/2017	NJC	1
Phenanthrene	< 0.0109	mg/kg	0.0109	0.0347	1	M8270C	2/2/2017	2/4/2017	NJC	1
Pyrene	< 0.0126	mg/kg	0.0126	0.0401	1	M8270C	2/2/2017	2/4/2017	NJC	1
VOC's										
Benzene	< 0.03	mg/kg	0.03	0.96	1	8260B		2/2/2017	CJR	1
Bromobenzene	< 0.025	mg/kg	0.025	0.081	1	8260B		2/2/2017	CJR	1
Bromodichloromethane	< 0.074	mg/kg	0.074	0.24	1	8260B		2/2/2017	CJR	1
Bromoform	< 0.029	mg/kg	0.029	0.092	1	8260B		2/2/2017	CJR	1
tert-Butylbenzene	< 0.026	mg/kg	0.026	0.084	1	8260B		2/2/2017	CJR	1
sec-Butylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		2/2/2017	CJR	1
n-Butylbenzene	< 0.04	mg/kg	0.04	0.13	1	8260B		2/2/2017	CJR	1
Carbon Tetrachloride	< 0.016	mg/kg	0.016	0.053	1	8260B		2/2/2017	CJR	1
Chlorobenzene	< 0.013	mg/kg	0.013	0.04	1	8260B		2/2/2017	CJR	1
Chloroethane	< 0.091	mg/kg	0.091	0.29	1	8260B		2/2/2017	CJR	4
Chloroform	< 0.035	mg/kg	0.035	0.11	1	8260B		2/2/2017	CJR	1
Chloromethane	< 0.076	mg/kg	0.076	0.24	1	8260B		2/2/2017	CJR	1
2-Chlorotoluene	< 0.015	mg/kg	0.015	0.047	1	8260B		2/2/2017	CJR	1
4-Chlorotoluene	< 0.018	mg/kg	0.018	0.057	1	8260B		2/2/2017	CJR	1
1,2-Dibromo-3-chloropropane	< 0.058	mg/kg	0.058	0.18	1	8260B		2/2/2017	CJR	1
Dibromochloromethane	< 0.025	mg/kg	0.025	0.079	1	8260B		2/2/2017	CJR	1
1,4-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		2/2/2017	CJR	1
1,3-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		2/2/2017	CJR	1
1,2-Dichlorobenzene	< 0.028	mg/kg	0.028	0.088	1	8260B		2/2/2017	CJR	1
Dichlorodifluoromethane	< 0.048	mg/kg	0.048	0.15	1	8260B		2/2/2017	CJR	1
1,2-Dichloroethane	< 0.038	mg/kg	0.038	0.12	1	8260B		2/2/2017	CJR	1
1,1-Dichloroethane	< 0.034	mg/kg	0.034	0.11	1	8260B		2/2/2017	CJR	1
1,1-Dichloroethene	< 0.022	mg/kg	0.022	0.069	1	8260B		2/2/2017	CJR	1
cis-1,2-Dichloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B		2/2/2017	CJR	1

**Project Name** IRGENS-BMO  
**Project #** 16722-001

**Invoice #** E32409

**Lab Code** 5032409G  
**Sample ID** SB-4 0-2'  
**Sample Matrix** Soil  
**Sample Date** 1/30/2017

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
trans-1,2-Dichloroethene	< 0.028	mg/kg	0.028	0.09	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2-Dichloropropane	< 0.035	mg/kg	0.035	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
2,2-Dichloropropane	< 0.037	mg/kg	0.037	0.12	1	8260B	2/2/2017	2/2/2017	CJR	1
1,3-Dichloropropane	< 0.025	mg/kg	0.025	0.079	1	8260B	2/2/2017	2/2/2017	CJR	1
Di-isopropyl ether	< 0.01	mg/kg	0.01	0.032	1	8260B	2/2/2017	2/2/2017	CJR	1
EDB (1,2-Dibromoethane)	< 0.023	mg/kg	0.023	0.072	1	8260B	2/2/2017	2/2/2017	CJR	1
Ethylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
Hexachlorobutadiene	< 0.085	mg/kg	0.085	0.27	1	8260B	2/2/2017	2/2/2017	CJR	1
Isopropylbenzene	< 0.034	mg/kg	0.034	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
p-Isopropyltoluene	< 0.029	mg/kg	0.029	0.093	1	8260B	2/2/2017	2/2/2017	CJR	1
Methylene chloride	< 0.15	mg/kg	0.15	0.46	1	8260B	2/2/2017	2/2/2017	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.05	mg/kg	0.05	0.16	1	8260B	2/2/2017	2/2/2017	CJR	1
Naphthalene	< 0.094	mg/kg	0.094	0.3	1	8260B	2/2/2017	2/2/2017	CJR	1
n-Propylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,2,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.88	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,1,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.09	1	8260B	2/2/2017	2/2/2017	CJR	1
Tetrachloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
Toluene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,4-Trichlorobenzene	< 0.064	mg/kg	0.064	0.2	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,3-Trichlorobenzene	< 0.066	mg/kg	0.066	0.21	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.96	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
Trichloroethene (TCE)	< 0.041	mg/kg	0.041	0.13	1	8260B	2/2/2017	2/2/2017	CJR	1
Trichlorofluoromethane	< 0.041	mg/kg	0.041	0.13	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.025	0.08	1	8260B	2/2/2017	2/2/2017	CJR	1
1,3,5-Trimethylbenzene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
Vinyl Chloride	< 0.019	mg/kg	0.019	0.062	1	8260B	2/2/2017	2/2/2017	CJR	1
m&p-Xylene	< 0.072	mg/kg	0.072	0.23	1	8260B	2/2/2017	2/2/2017	CJR	1
o-Xylene	< 0.044	mg/kg	0.044	0.14	1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - 4-Bromofluorobenzene	104	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - Dibromofluoromethane	90	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - 1,2-Dichloroethane-d4	89	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - Toluene-d8	104	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1

**Project Name** IRGENS-BMO  
**Project #** 16722-001

**Invoice #** E32409

**Lab Code** 5032409H  
**Sample ID** SB-4 4-6'  
**Sample Matrix** Soil  
**Sample Date** 1/30/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	87.3	%			1	5021		2/1/2017	NJC	1
Inorganic										
Metals										
Lead, Total	4.67	mg/Kg	0.34	1.16	2	6010B		2/7/2017	CWT	1 49
Organic										
PAH SIM										
Acenaphthene	< 0.0135	mg/kg	0.0135	0.043	1	M8270C	2/2/2017	2/4/2017	NJC	1
Acenaphthylene	< 0.012	mg/kg	0.012	0.0381	1	M8270C	2/2/2017	2/4/2017	NJC	1
Anthracene	< 0.0124	mg/kg	0.0124	0.0395	1	M8270C	2/2/2017	2/4/2017	NJC	1
Benzo(a)anthracene	< 0.0116	mg/kg	0.0116	0.037	1	M8270C	2/2/2017	2/4/2017	NJC	1
Benzo(a)pyrene	< 0.0113	mg/kg	0.0113	0.0359	1	M8270C	2/2/2017	2/4/2017	NJC	1
Benzo(b)fluoranthene	< 0.013	mg/kg	0.013	0.0414	1	M8270C	2/2/2017	2/4/2017	NJC	1
Benzo(g,h,i)perylene	< 0.0114	mg/kg	0.0114	0.0363	1	M8270C	2/2/2017	2/4/2017	NJC	1
Benzo(k)fluoranthene	< 0.0117	mg/kg	0.0117	0.0371	1	M8270C	2/2/2017	2/4/2017	NJC	1
Chrysene	< 0.0138	mg/kg	0.0138	0.0439	1	M8270C	2/2/2017	2/4/2017	NJC	1
Dibenzo(a,h)anthracene	< 0.0142	mg/kg	0.0142	0.0453	1	M8270C	2/2/2017	2/4/2017	NJC	1
Fluoranthene	< 0.0131	mg/kg	0.0131	0.0418	1	M8270C	2/2/2017	2/4/2017	NJC	1
Fluorene	< 0.0135	mg/kg	0.0135	0.0431	1	M8270C	2/2/2017	2/4/2017	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.015	mg/kg	0.015	0.0476	1	M8270C	2/2/2017	2/4/2017	NJC	1
1-Methyl naphthalene	< 0.0143	mg/kg	0.0143	0.0456	1	M8270C	2/2/2017	2/4/2017	NJC	1
2-Methyl naphthalene	< 0.0119	mg/kg	0.0119	0.038	1	M8270C	2/2/2017	2/4/2017	NJC	1
Naphthalene	< 0.0122	mg/kg	0.0122	0.0387	1	M8270C	2/2/2017	2/4/2017	NJC	1
Phenanthrene	< 0.0109	mg/kg	0.0109	0.0347	1	M8270C	2/2/2017	2/4/2017	NJC	1
Pyrene	< 0.0126	mg/kg	0.0126	0.0401	1	M8270C	2/2/2017	2/4/2017	NJC	1
VOC's										
Benzene	< 0.03	mg/kg	0.03	0.96	1	8260B		2/2/2017	CJR	1
Bromobenzene	< 0.025	mg/kg	0.025	0.081	1	8260B		2/2/2017	CJR	1
Bromodichloromethane	< 0.074	mg/kg	0.074	0.24	1	8260B		2/2/2017	CJR	1
Bromoform	< 0.029	mg/kg	0.029	0.092	1	8260B		2/2/2017	CJR	1
tert-Butylbenzene	< 0.026	mg/kg	0.026	0.084	1	8260B		2/2/2017	CJR	1
sec-Butylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		2/2/2017	CJR	1
n-Butylbenzene	< 0.04	mg/kg	0.04	0.13	1	8260B		2/2/2017	CJR	1
Carbon Tetrachloride	< 0.016	mg/kg	0.016	0.053	1	8260B		2/2/2017	CJR	1
Chlorobenzene	< 0.013	mg/kg	0.013	0.04	1	8260B		2/2/2017	CJR	1
Chloroethane	< 0.091	mg/kg	0.091	0.29	1	8260B		2/2/2017	CJR	4
Chloroform	< 0.035	mg/kg	0.035	0.11	1	8260B		2/2/2017	CJR	1
Chloromethane	< 0.076	mg/kg	0.076	0.24	1	8260B		2/2/2017	CJR	1
2-Chlorotoluene	< 0.015	mg/kg	0.015	0.047	1	8260B		2/2/2017	CJR	1
4-Chlorotoluene	< 0.018	mg/kg	0.018	0.057	1	8260B		2/2/2017	CJR	1
1,2-Dibromo-3-chloropropane	< 0.058	mg/kg	0.058	0.18	1	8260B		2/2/2017	CJR	1
Dibromochloromethane	< 0.025	mg/kg	0.025	0.079	1	8260B		2/2/2017	CJR	1
1,4-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		2/2/2017	CJR	1
1,3-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		2/2/2017	CJR	1
1,2-Dichlorobenzene	< 0.028	mg/kg	0.028	0.088	1	8260B		2/2/2017	CJR	1
Dichlorodifluoromethane	< 0.048	mg/kg	0.048	0.15	1	8260B		2/2/2017	CJR	1
1,2-Dichloroethane	< 0.038	mg/kg	0.038	0.12	1	8260B		2/2/2017	CJR	1
1,1-Dichloroethane	< 0.034	mg/kg	0.034	0.11	1	8260B		2/2/2017	CJR	1
1,1-Dichloroethene	< 0.022	mg/kg	0.022	0.069	1	8260B		2/2/2017	CJR	1
cis-1,2-Dichloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B		2/2/2017	CJR	1

**Project Name** IRGENS-BMO  
**Project #** 16722-001

**Invoice #** E32409

**Lab Code** 5032409H  
**Sample ID** SB-4 4-6'  
**Sample Matrix** Soil  
**Sample Date** 1/30/2017

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
trans-1,2-Dichloroethene	< 0.028	mg/kg	0.028	0.09	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2-Dichloropropane	< 0.035	mg/kg	0.035	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
2,2-Dichloropropane	< 0.037	mg/kg	0.037	0.12	1	8260B	2/2/2017	2/2/2017	CJR	1
1,3-Dichloropropane	< 0.025	mg/kg	0.025	0.079	1	8260B	2/2/2017	2/2/2017	CJR	1
Di-isopropyl ether	< 0.01	mg/kg	0.01	0.032	1	8260B	2/2/2017	2/2/2017	CJR	1
EDB (1,2-Dibromoethane)	< 0.023	mg/kg	0.023	0.072	1	8260B	2/2/2017	2/2/2017	CJR	1
Ethylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
Hexachlorobutadiene	< 0.085	mg/kg	0.085	0.27	1	8260B	2/2/2017	2/2/2017	CJR	1
Isopropylbenzene	< 0.034	mg/kg	0.034	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
p-Isopropyltoluene	< 0.029	mg/kg	0.029	0.093	1	8260B	2/2/2017	2/2/2017	CJR	1
Methylene chloride	< 0.15	mg/kg	0.15	0.46	1	8260B	2/2/2017	2/2/2017	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.05	mg/kg	0.05	0.16	1	8260B	2/2/2017	2/2/2017	CJR	1
Naphthalene	< 0.094	mg/kg	0.094	0.3	1	8260B	2/2/2017	2/2/2017	CJR	1
n-Propylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,2,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.88	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,1,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.09	1	8260B	2/2/2017	2/2/2017	CJR	1
Tetrachloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
Toluene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,4-Trichlorobenzene	< 0.064	mg/kg	0.064	0.2	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,3-Trichlorobenzene	< 0.066	mg/kg	0.066	0.21	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.96	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
Trichloroethene (TCE)	< 0.041	mg/kg	0.041	0.13	1	8260B	2/2/2017	2/2/2017	CJR	1
Trichlorofluoromethane	< 0.041	mg/kg	0.041	0.13	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.025	0.08	1	8260B	2/2/2017	2/2/2017	CJR	1
1,3,5-Trimethylbenzene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
Vinyl Chloride	< 0.019	mg/kg	0.019	0.062	1	8260B	2/2/2017	2/2/2017	CJR	1
m&p-Xylene	< 0.072	mg/kg	0.072	0.23	1	8260B	2/2/2017	2/2/2017	CJR	1
o-Xylene	< 0.044	mg/kg	0.044	0.14	1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - Toluene-d8	103	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - 1,2-Dichloroethane-d4	93	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - 4-Bromofluorobenzene	104	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - Dibromofluoromethane	93	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1

**Project Name** IRGENS-BMO  
**Project #** 16722-001

**Invoice #** E32409

**Lab Code** 5032409I  
**Sample ID** SB-5 0-2'  
**Sample Matrix** Soil  
**Sample Date** 1/30/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	89.3	%			1	5021		2/1/2017	NJC	1
Inorganic										
Metals										
Lead, Total	1.30	mg/Kg	0.17	0.58	1	6010B		2/7/2017	CWT	1
Organic										
PAH SIM										
Acenaphthene	< 0.0135	mg/kg	0.0135	0.043	1	M8270C	2/2/2017	2/4/2017	NJC	1
Acenaphthylene	< 0.012	mg/kg	0.012	0.0381	1	M8270C	2/2/2017	2/4/2017	NJC	1
Anthracene	< 0.0124	mg/kg	0.0124	0.0395	1	M8270C	2/2/2017	2/4/2017	NJC	1
Benzo(a)anthracene	0.0118 "J"	mg/kg	0.0116	0.037	1	M8270C	2/2/2017	2/4/2017	NJC	1
Benzo(a)pyrene	< 0.0113	mg/kg	0.0113	0.0359	1	M8270C	2/2/2017	2/4/2017	NJC	1
Benzo(b)fluoranthene	< 0.013	mg/kg	0.013	0.0414	1	M8270C	2/2/2017	2/4/2017	NJC	1
Benzo(g,h,i)perylene	< 0.0114	mg/kg	0.0114	0.0363	1	M8270C	2/2/2017	2/4/2017	NJC	1
Benzo(k)fluoranthene	< 0.0117	mg/kg	0.0117	0.0371	1	M8270C	2/2/2017	2/4/2017	NJC	1
Chrysene	0.015 "J"	mg/kg	0.0138	0.0439	1	M8270C	2/2/2017	2/4/2017	NJC	1
Dibenzo(a,h)anthracene	< 0.0142	mg/kg	0.0142	0.0453	1	M8270C	2/2/2017	2/4/2017	NJC	1
Fluoranthene	0.0273 "J"	mg/kg	0.0131	0.0418	1	M8270C	2/2/2017	2/4/2017	NJC	1
Fluorene	< 0.0135	mg/kg	0.0135	0.0431	1	M8270C	2/2/2017	2/4/2017	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.015	mg/kg	0.015	0.0476	1	M8270C	2/2/2017	2/4/2017	NJC	1
1-Methyl naphthalene	0.017 "J"	mg/kg	0.0143	0.0456	1	M8270C	2/2/2017	2/4/2017	NJC	1
2-Methyl naphthalene	0.0148 "J"	mg/kg	0.0119	0.038	1	M8270C	2/2/2017	2/4/2017	NJC	1
Naphthalene	< 0.0122	mg/kg	0.0122	0.0387	1	M8270C	2/2/2017	2/4/2017	NJC	1
Phenanthrene	0.0168 "J"	mg/kg	0.0109	0.0347	1	M8270C	2/2/2017	2/4/2017	NJC	1
Pyrene	0.0245 "J"	mg/kg	0.0126	0.0401	1	M8270C	2/2/2017	2/4/2017	NJC	1
VOC's										
Benzene	< 0.03	mg/kg	0.03	0.96	1	8260B		2/2/2017	CJR	1
Bromobenzene	< 0.025	mg/kg	0.025	0.081	1	8260B		2/2/2017	CJR	1
Bromodichloromethane	< 0.074	mg/kg	0.074	0.24	1	8260B		2/2/2017	CJR	1
Bromoform	< 0.029	mg/kg	0.029	0.092	1	8260B		2/2/2017	CJR	1
tert-Butylbenzene	< 0.026	mg/kg	0.026	0.084	1	8260B		2/2/2017	CJR	1
sec-Butylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		2/2/2017	CJR	1
n-Butylbenzene	< 0.04	mg/kg	0.04	0.13	1	8260B		2/2/2017	CJR	1
Carbon Tetrachloride	< 0.016	mg/kg	0.016	0.053	1	8260B		2/2/2017	CJR	1
Chlorobenzene	< 0.013	mg/kg	0.013	0.04	1	8260B		2/2/2017	CJR	1
Chloroethane	< 0.091	mg/kg	0.091	0.29	1	8260B		2/2/2017	CJR	4
Chloroform	< 0.035	mg/kg	0.035	0.11	1	8260B		2/2/2017	CJR	1
Chloromethane	< 0.076	mg/kg	0.076	0.24	1	8260B		2/2/2017	CJR	1
2-Chlorotoluene	< 0.015	mg/kg	0.015	0.047	1	8260B		2/2/2017	CJR	1
4-Chlorotoluene	< 0.018	mg/kg	0.018	0.057	1	8260B		2/2/2017	CJR	1
1,2-Dibromo-3-chloropropane	< 0.058	mg/kg	0.058	0.18	1	8260B		2/2/2017	CJR	1
Dibromochloromethane	< 0.025	mg/kg	0.025	0.079	1	8260B		2/2/2017	CJR	1
1,4-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		2/2/2017	CJR	1
1,3-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		2/2/2017	CJR	1
1,2-Dichlorobenzene	< 0.028	mg/kg	0.028	0.088	1	8260B		2/2/2017	CJR	1
Dichlorodifluoromethane	< 0.048	mg/kg	0.048	0.15	1	8260B		2/2/2017	CJR	1
1,2-Dichloroethane	< 0.038	mg/kg	0.038	0.12	1	8260B		2/2/2017	CJR	1
1,1-Dichloroethane	< 0.034	mg/kg	0.034	0.11	1	8260B		2/2/2017	CJR	1
1,1-Dichloroethene	< 0.022	mg/kg	0.022	0.069	1	8260B		2/2/2017	CJR	1
cis-1,2-Dichloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B		2/2/2017	CJR	1



**Project Name** IRGENS-BMO  
**Project #** 16722-001

**Invoice #** E32409

**Lab Code** 5032409I  
**Sample ID** SB-5 0-2'  
**Sample Matrix** Soil  
**Sample Date** 1/30/2017

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
trans-1,2-Dichloroethene	< 0.028	mg/kg	0.028	0.09	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2-Dichloropropane	< 0.035	mg/kg	0.035	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
2,2-Dichloropropane	< 0.037	mg/kg	0.037	0.12	1	8260B	2/2/2017	2/2/2017	CJR	1
1,3-Dichloropropane	< 0.025	mg/kg	0.025	0.079	1	8260B	2/2/2017	2/2/2017	CJR	1
Di-isopropyl ether	< 0.01	mg/kg	0.01	0.032	1	8260B	2/2/2017	2/2/2017	CJR	1
EDB (1,2-Dibromoethane)	< 0.023	mg/kg	0.023	0.072	1	8260B	2/2/2017	2/2/2017	CJR	1
Ethylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
Hexachlorobutadiene	< 0.085	mg/kg	0.085	0.27	1	8260B	2/2/2017	2/2/2017	CJR	1
Isopropylbenzene	< 0.034	mg/kg	0.034	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
p-Isopropyltoluene	< 0.029	mg/kg	0.029	0.093	1	8260B	2/2/2017	2/2/2017	CJR	1
Methylene chloride	< 0.15	mg/kg	0.15	0.46	1	8260B	2/2/2017	2/2/2017	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.05	mg/kg	0.05	0.16	1	8260B	2/2/2017	2/2/2017	CJR	1
Naphthalene	< 0.094	mg/kg	0.094	0.3	1	8260B	2/2/2017	2/2/2017	CJR	1
n-Propylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,2,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.88	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,1,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.09	1	8260B	2/2/2017	2/2/2017	CJR	1
Tetrachloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
Toluene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,4-Trichlorobenzene	< 0.064	mg/kg	0.064	0.2	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,3-Trichlorobenzene	< 0.066	mg/kg	0.066	0.21	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.96	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
Trichloroethene (TCE)	< 0.041	mg/kg	0.041	0.13	1	8260B	2/2/2017	2/2/2017	CJR	1
Trichlorofluoromethane	< 0.041	mg/kg	0.041	0.13	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,4-Trimethylbenzene	0.083	mg/kg	0.025	0.08	1	8260B	2/2/2017	2/2/2017	CJR	1
1,3,5-Trimethylbenzene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
Vinyl Chloride	< 0.019	mg/kg	0.019	0.062	1	8260B	2/2/2017	2/2/2017	CJR	1
m&p-Xylene	0.102 "J"	mg/kg	0.072	0.23	1	8260B	2/2/2017	2/2/2017	CJR	1
o-Xylene	< 0.044	mg/kg	0.044	0.14	1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - Dibromofluoromethane	90	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - 4-Bromofluorobenzene	108	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - 1,2-Dichloroethane-d4	91	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - Toluene-d8	101	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1

Project Name IRGENS-BMO  
 Project # 16722-001

Invoice # E32409

Lab Code 5032409J  
 Sample ID SB-5 2-4'  
 Sample Matrix Soil  
 Sample Date 1/30/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	89.6	%			1	5021		2/1/2017	NJC	1
Inorganic										
Metals										
Arsenic, Total	3.91	mg/Kg	0.33	1.09	1	6010B		2/6/2017	CWT	1
Barium, Total	21.8	mg/Kg	0.21	0.7	1	6010B		2/6/2017	CWT	1
Cadmium, Total	< 0.02	mg/Kg	0.08	0.25	1	6010B		2/6/2017	CWT	1
Chromium, Total	8.21	mg/Kg	0.08	0.26	1	6010B		2/6/2017	CWT	1
Lead, Total	9.45	mg/Kg	0.17	0.58	1	6010B		2/6/2017	CWT	1
Mercury, Total	< 0.0131	mg/kg	0.0131	0.0435	1	7471		2/1/2017	CWT	1
Selenium, Total	< 0.52	mg/Kg	0.52	1.73	1	6010B		2/6/2017	CWT	1
Silver, Total	< 0.57	mg/Kg	0.57	1.89	1	6010B		2/6/2017	CWT	1
Organic										
PAH SIM										
Acenaphthene	< 0.0135	mg/kg	0.0135	0.043	1	M8270C	2/2/2017	2/4/2017	NJC	1
Acenaphthylene	< 0.012	mg/kg	0.012	0.0381	1	M8270C	2/2/2017	2/4/2017	NJC	1
Anthracene	< 0.0124	mg/kg	0.0124	0.0395	1	M8270C	2/2/2017	2/4/2017	NJC	1
Benzo(a)anthracene	< 0.0116	mg/kg	0.0116	0.037	1	M8270C	2/2/2017	2/4/2017	NJC	1
Benzo(a)pyrene	< 0.0113	mg/kg	0.0113	0.0359	1	M8270C	2/2/2017	2/4/2017	NJC	1
Benzo(b)fluoranthene	< 0.013	mg/kg	0.013	0.0414	1	M8270C	2/2/2017	2/4/2017	NJC	1
Benzo(g,h,i)perylene	< 0.0114	mg/kg	0.0114	0.0363	1	M8270C	2/2/2017	2/4/2017	NJC	1
Benzo(k)fluoranthene	< 0.0117	mg/kg	0.0117	0.0371	1	M8270C	2/2/2017	2/4/2017	NJC	1
Chrysene	< 0.0138	mg/kg	0.0138	0.0439	1	M8270C	2/2/2017	2/4/2017	NJC	1
Dibenzo(a,h)anthracene	< 0.0142	mg/kg	0.0142	0.0453	1	M8270C	2/2/2017	2/4/2017	NJC	1
Fluoranthene	< 0.0131	mg/kg	0.0131	0.0418	1	M8270C	2/2/2017	2/4/2017	NJC	1
Fluorene	< 0.0135	mg/kg	0.0135	0.0431	1	M8270C	2/2/2017	2/4/2017	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.015	mg/kg	0.015	0.0476	1	M8270C	2/2/2017	2/4/2017	NJC	1
1-Methyl naphthalene	< 0.0143	mg/kg	0.0143	0.0456	1	M8270C	2/2/2017	2/4/2017	NJC	1
2-Methyl naphthalene	< 0.0119	mg/kg	0.0119	0.038	1	M8270C	2/2/2017	2/4/2017	NJC	1
Naphthalene	< 0.0122	mg/kg	0.0122	0.0387	1	M8270C	2/2/2017	2/4/2017	NJC	1
Phenanthrene	< 0.0109	mg/kg	0.0109	0.0347	1	M8270C	2/2/2017	2/4/2017	NJC	1
Pyrene	< 0.0126	mg/kg	0.0126	0.0401	1	M8270C	2/2/2017	2/4/2017	NJC	1
VOC's										
Benzene	< 0.03	mg/kg	0.03	0.96	1	8260B		2/2/2017	CJR	1
Bromobenzene	< 0.025	mg/kg	0.025	0.081	1	8260B		2/2/2017	CJR	1
Bromodichloromethane	< 0.074	mg/kg	0.074	0.24	1	8260B		2/2/2017	CJR	1
Bromoform	< 0.029	mg/kg	0.029	0.092	1	8260B		2/2/2017	CJR	1
tert-Butylbenzene	< 0.026	mg/kg	0.026	0.084	1	8260B		2/2/2017	CJR	1
sec-Butylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		2/2/2017	CJR	1
n-Butylbenzene	< 0.04	mg/kg	0.04	0.13	1	8260B		2/2/2017	CJR	1
Carbon Tetrachloride	< 0.016	mg/kg	0.016	0.053	1	8260B		2/2/2017	CJR	1
Chlorobenzene	< 0.013	mg/kg	0.013	0.04	1	8260B		2/2/2017	CJR	1
Chloroethane	< 0.091	mg/kg	0.091	0.29	1	8260B		2/2/2017	CJR	4
Chloroform	< 0.035	mg/kg	0.035	0.11	1	8260B		2/2/2017	CJR	1
Chloromethane	< 0.076	mg/kg	0.076	0.24	1	8260B		2/2/2017	CJR	1
2-Chlorotoluene	< 0.015	mg/kg	0.015	0.047	1	8260B		2/2/2017	CJR	1
4-Chlorotoluene	< 0.018	mg/kg	0.018	0.057	1	8260B		2/2/2017	CJR	1
1,2-Dibromo-3-chloropropane	< 0.058	mg/kg	0.058	0.18	1	8260B		2/2/2017	CJR	1
Dibromochloromethane	< 0.025	mg/kg	0.025	0.079	1	8260B		2/2/2017	CJR	1
1,4-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		2/2/2017	CJR	1

**Project Name** IRGENS-BMO  
**Project #** 16722-001

**Invoice #** E32409

**Lab Code** 5032409J  
**Sample ID** SB-5 2-4'  
**Sample Matrix** Soil  
**Sample Date** 1/30/2017

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
1,3-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		2/2/2017	CJR	1
1,2-Dichlorobenzene	< 0.028	mg/kg	0.028	0.088	1	8260B		2/2/2017	CJR	1
Dichlorodifluoromethane	< 0.048	mg/kg	0.048	0.15	1	8260B		2/2/2017	CJR	1
1,2-Dichloroethane	< 0.038	mg/kg	0.038	0.12	1	8260B		2/2/2017	CJR	1
1,1-Dichloroethane	< 0.034	mg/kg	0.034	0.11	1	8260B		2/2/2017	CJR	1
1,1-Dichloroethene	< 0.022	mg/kg	0.022	0.069	1	8260B		2/2/2017	CJR	1
cis-1,2-Dichloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B		2/2/2017	CJR	1
trans-1,2-Dichloroethene	< 0.028	mg/kg	0.028	0.09	1	8260B		2/2/2017	CJR	1
1,2-Dichloropropane	< 0.035	mg/kg	0.035	0.11	1	8260B		2/2/2017	CJR	1
2,2-Dichloropropane	< 0.037	mg/kg	0.037	0.12	1	8260B		2/2/2017	CJR	1
1,3-Dichloropropane	< 0.025	mg/kg	0.025	0.079	1	8260B		2/2/2017	CJR	1
Di-isopropyl ether	< 0.01	mg/kg	0.01	0.032	1	8260B		2/2/2017	CJR	1
EDB (1,2-Dibromoethane)	< 0.023	mg/kg	0.023	0.072	1	8260B		2/2/2017	CJR	1
Ethylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		2/2/2017	CJR	1
Hexachlorobutadiene	< 0.085	mg/kg	0.085	0.27	1	8260B		2/2/2017	CJR	1
Isopropylbenzene	< 0.034	mg/kg	0.034	0.11	1	8260B		2/2/2017	CJR	1
p-Isopropyltoluene	< 0.029	mg/kg	0.029	0.093	1	8260B		2/2/2017	CJR	1
Methylene chloride	< 0.15	mg/kg	0.15	0.46	1	8260B		2/2/2017	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.05	mg/kg	0.05	0.16	1	8260B		2/2/2017	CJR	1
Naphthalene	< 0.094	mg/kg	0.094	0.3	1	8260B		2/2/2017	CJR	1
n-Propylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		2/2/2017	CJR	1
1,1,2,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.88	1	8260B		2/2/2017	CJR	1
1,1,1,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.09	1	8260B		2/2/2017	CJR	1
Tetrachloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B		2/2/2017	CJR	1
Toluene	< 0.032	mg/kg	0.032	0.1	1	8260B		2/2/2017	CJR	1
1,2,4-Trichlorobenzene	< 0.064	mg/kg	0.064	0.2	1	8260B		2/2/2017	CJR	1
1,2,3-Trichlorobenzene	< 0.066	mg/kg	0.066	0.21	1	8260B		2/2/2017	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.96	1	8260B		2/2/2017	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B		2/2/2017	CJR	1
Trichloroethene (TCE)	< 0.041	mg/kg	0.041	0.13	1	8260B		2/2/2017	CJR	1
Trichlorofluoromethane	< 0.041	mg/kg	0.041	0.13	1	8260B		2/2/2017	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.025	0.08	1	8260B		2/2/2017	CJR	1
1,3,5-Trimethylbenzene	< 0.032	mg/kg	0.032	0.1	1	8260B		2/2/2017	CJR	1
Vinyl Chloride	< 0.019	mg/kg	0.019	0.062	1	8260B		2/2/2017	CJR	1
m&p-Xylene	< 0.072	mg/kg	0.072	0.23	1	8260B		2/2/2017	CJR	1
o-Xylene	< 0.044	mg/kg	0.044	0.14	1	8260B		2/2/2017	CJR	1
SUR - Toluene-d8	104	Rec %			1	8260B		2/2/2017	CJR	1
SUR - 1,2-Dichloroethane-d4	96	Rec %			1	8260B		2/2/2017	CJR	1
SUR - 4-Bromofluorobenzene	108	Rec %			1	8260B		2/2/2017	CJR	1
SUR - Dibromofluoromethane	95	Rec %			1	8260B		2/2/2017	CJR	1

Project Name IRGENS-BMO  
 Project # 16722-001

Invoice # E32409

Lab Code 5032409K  
 Sample ID SB-6 2-4'  
 Sample Matrix Soil  
 Sample Date 1/30/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	94.0	%			1	5021		2/1/2017	NJC	1
Inorganic										
Metals										
Lead, Total	4.62	mg/Kg	0.34	1.16	2	6010B		2/7/2017	CWT	1 49
Organic										
PAH SIM										
Acenaphthene	< 0.0135	mg/kg	0.0135	0.043	1	M8270C	2/6/2017	2/6/2017	NJC	1
Acenaphthylene	< 0.012	mg/kg	0.012	0.0381	1	M8270C	2/6/2017	2/6/2017	NJC	1
Anthracene	< 0.0124	mg/kg	0.0124	0.0395	1	M8270C	2/6/2017	2/6/2017	NJC	1
Benzo(a)anthracene	< 0.0116	mg/kg	0.0116	0.037	1	M8270C	2/6/2017	2/6/2017	NJC	1
Benzo(a)pyrene	< 0.0113	mg/kg	0.0113	0.0359	1	M8270C	2/6/2017	2/6/2017	NJC	1
Benzo(b)fluoranthene	< 0.013	mg/kg	0.013	0.0414	1	M8270C	2/6/2017	2/6/2017	NJC	1
Benzo(g,h,i)perylene	< 0.0114	mg/kg	0.0114	0.0363	1	M8270C	2/6/2017	2/6/2017	NJC	1
Benzo(k)fluoranthene	< 0.0117	mg/kg	0.0117	0.0371	1	M8270C	2/6/2017	2/6/2017	NJC	1
Chrysene	< 0.0138	mg/kg	0.0138	0.0439	1	M8270C	2/6/2017	2/6/2017	NJC	1
Dibenzo(a,h)anthracene	< 0.0142	mg/kg	0.0142	0.0453	1	M8270C	2/6/2017	2/6/2017	NJC	1
Fluoranthene	< 0.0131	mg/kg	0.0131	0.0418	1	M8270C	2/6/2017	2/6/2017	NJC	1
Fluorene	< 0.0135	mg/kg	0.0135	0.0431	1	M8270C	2/6/2017	2/6/2017	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.015	mg/kg	0.015	0.0476	1	M8270C	2/6/2017	2/6/2017	NJC	1
1-Methyl naphthalene	< 0.0143	mg/kg	0.0143	0.0456	1	M8270C	2/6/2017	2/6/2017	NJC	1
2-Methyl naphthalene	< 0.0119	mg/kg	0.0119	0.038	1	M8270C	2/6/2017	2/6/2017	NJC	1
Naphthalene	< 0.0122	mg/kg	0.0122	0.0387	1	M8270C	2/6/2017	2/6/2017	NJC	1
Phenanthrene	< 0.0109	mg/kg	0.0109	0.0347	1	M8270C	2/6/2017	2/6/2017	NJC	1
Pyrene	< 0.0126	mg/kg	0.0126	0.0401	1	M8270C	2/6/2017	2/6/2017	NJC	1
PCB'S										
PCB-1016	< 0.0035	mg/kg	0.0035	0.0117	1	EPA 8082A		2/7/2017	ESC	1
PCB-1221	< 0.0054	mg/kg	0.0054	0.0179	1	EPA 8082A		2/7/2017	ESC	1
PCB-1232	< 0.0042	mg/kg	0.0042	0.0139	1	EPA 8082A		2/7/2017	ESC	1
PCB-1242	< 0.0032	mg/kg	0.0032	0.0106	1	EPA 8082A		2/7/2017	ESC	1
PCB-1248	< 0.0032	mg/kg	0.0032	0.0105	1	EPA 8082A		2/7/2017	ESC	1
PCB-1254	< 0.0047	mg/kg	0.0047	0.0157	1	EPA 8082A		2/7/2017	ESC	1
PCB-1260	< 0.0049	mg/kg	0.0049	0.0165	1	EPA 8082A		2/7/2017	ESC	1
VOC's										
Benzene	< 0.03	mg/kg	0.03	0.96	1	8260B		2/2/2017	CJR	1
Bromobenzene	< 0.025	mg/kg	0.025	0.081	1	8260B		2/2/2017	CJR	1
Bromodichloromethane	< 0.074	mg/kg	0.074	0.24	1	8260B		2/2/2017	CJR	1
Bromoform	< 0.029	mg/kg	0.029	0.092	1	8260B		2/2/2017	CJR	1
tert-Butylbenzene	< 0.026	mg/kg	0.026	0.084	1	8260B		2/2/2017	CJR	1
sec-Butylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		2/2/2017	CJR	1
n-Butylbenzene	< 0.04	mg/kg	0.04	0.13	1	8260B		2/2/2017	CJR	1
Carbon Tetrachloride	< 0.016	mg/kg	0.016	0.053	1	8260B		2/2/2017	CJR	1
Chlorobenzene	< 0.013	mg/kg	0.013	0.04	1	8260B		2/2/2017	CJR	1
Chloroethane	< 0.091	mg/kg	0.091	0.29	1	8260B		2/2/2017	CJR	4
Chloroform	< 0.035	mg/kg	0.035	0.11	1	8260B		2/2/2017	CJR	1
Chloromethane	< 0.076	mg/kg	0.076	0.24	1	8260B		2/2/2017	CJR	1
2-Chlorotoluene	< 0.015	mg/kg	0.015	0.047	1	8260B		2/2/2017	CJR	1
4-Chlorotoluene	< 0.018	mg/kg	0.018	0.057	1	8260B		2/2/2017	CJR	1
1,2-Dibromo-3-chloropropane	< 0.058	mg/kg	0.058	0.18	1	8260B		2/2/2017	CJR	1

**Project Name** IRGENS-BMO  
**Project #** 16722-001

**Invoice #** E32409

**Lab Code** 5032409K  
**Sample ID** SB-6 2-4'  
**Sample Matrix** Soil  
**Sample Date** 1/30/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Dibromochloromethane	< 0.025	mg/kg	0.025	0.079	1	8260B	2/2/2017	2/2/2017	CJR	1
1,4-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B	2/2/2017	2/2/2017	CJR	1
1,3-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2-Dichlorobenzene	< 0.028	mg/kg	0.028	0.088	1	8260B	2/2/2017	2/2/2017	CJR	1
Dichlorodifluoromethane	< 0.048	mg/kg	0.048	0.15	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2-Dichloroethane	< 0.038	mg/kg	0.038	0.12	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1-Dichloroethane	< 0.034	mg/kg	0.034	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1-Dichloroethene	< 0.022	mg/kg	0.022	0.069	1	8260B	2/2/2017	2/2/2017	CJR	1
cis-1,2-Dichloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
trans-1,2-Dichloroethene	< 0.028	mg/kg	0.028	0.09	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2-Dichloropropane	< 0.035	mg/kg	0.035	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
2,2-Dichloropropane	< 0.037	mg/kg	0.037	0.12	1	8260B	2/2/2017	2/2/2017	CJR	1
1,3-Dichloropropane	< 0.025	mg/kg	0.025	0.079	1	8260B	2/2/2017	2/2/2017	CJR	1
Di-isopropyl ether	< 0.01	mg/kg	0.01	0.032	1	8260B	2/2/2017	2/2/2017	CJR	1
EDB (1,2-Dibromoethane)	< 0.023	mg/kg	0.023	0.072	1	8260B	2/2/2017	2/2/2017	CJR	1
Ethylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
Hexachlorobutadiene	< 0.085	mg/kg	0.085	0.27	1	8260B	2/2/2017	2/2/2017	CJR	1
Isopropylbenzene	< 0.034	mg/kg	0.034	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
p-Isopropyltoluene	< 0.029	mg/kg	0.029	0.093	1	8260B	2/2/2017	2/2/2017	CJR	1
Methylene chloride	< 0.15	mg/kg	0.15	0.46	1	8260B	2/2/2017	2/2/2017	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.05	mg/kg	0.05	0.16	1	8260B	2/2/2017	2/2/2017	CJR	1
Naphthalene	< 0.094	mg/kg	0.094	0.3	1	8260B	2/2/2017	2/2/2017	CJR	1
n-Propylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,2,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.88	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,1,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.09	1	8260B	2/2/2017	2/2/2017	CJR	1
Tetrachloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
Toluene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,4-Trichlorobenzene	< 0.064	mg/kg	0.064	0.2	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,3-Trichlorobenzene	< 0.066	mg/kg	0.066	0.21	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.96	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
Trichloroethene (TCE)	< 0.041	mg/kg	0.041	0.13	1	8260B	2/2/2017	2/2/2017	CJR	1
Trichlorofluoromethane	< 0.041	mg/kg	0.041	0.13	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.025	0.08	1	8260B	2/2/2017	2/2/2017	CJR	1
1,3,5-Trimethylbenzene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
Vinyl Chloride	< 0.019	mg/kg	0.019	0.062	1	8260B	2/2/2017	2/2/2017	CJR	1
m&p-Xylene	< 0.072	mg/kg	0.072	0.23	1	8260B	2/2/2017	2/2/2017	CJR	1
o-Xylene	< 0.044	mg/kg	0.044	0.14	1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - 4-Bromofluorobenzene	108	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - Dibromofluoromethane	92	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - Toluene-d8	99	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - 1,2-Dichloroethane-d4	98	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1

Project Name IRGENS-BMO  
 Project # 16722-001

Invoice # E32409

Lab Code 5032409L  
 Sample ID SB-6 6-8'  
 Sample Matrix Soil  
 Sample Date 1/30/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	82.8	%			1	5021		2/1/2017	NJC	1
Inorganic										
Metals										
Lead, Total	6.04	mg/Kg	0.17	0.58	1	6010B		2/7/2017	CWT	1
Organic										
PAH SIM										
Acenaphthene	< 0.0135	mg/kg	0.0135	0.043	1	M8270C	2/6/2017	2/6/2017	NJC	1
Acenaphthylene	< 0.012	mg/kg	0.012	0.0381	1	M8270C	2/6/2017	2/6/2017	NJC	1
Anthracene	< 0.0124	mg/kg	0.0124	0.0395	1	M8270C	2/6/2017	2/6/2017	NJC	1
Benzo(a)anthracene	< 0.0116	mg/kg	0.0116	0.037	1	M8270C	2/6/2017	2/6/2017	NJC	1
Benzo(a)pyrene	< 0.0113	mg/kg	0.0113	0.0359	1	M8270C	2/6/2017	2/6/2017	NJC	1
Benzo(b)fluoranthene	< 0.013	mg/kg	0.013	0.0414	1	M8270C	2/6/2017	2/6/2017	NJC	1
Benzo(g,h,i)perylene	< 0.0114	mg/kg	0.0114	0.0363	1	M8270C	2/6/2017	2/6/2017	NJC	1
Benzo(k)fluoranthene	< 0.0117	mg/kg	0.0117	0.0371	1	M8270C	2/6/2017	2/6/2017	NJC	1
Chrysene	< 0.0138	mg/kg	0.0138	0.0439	1	M8270C	2/6/2017	2/6/2017	NJC	1
Dibenzo(a,h)anthracene	< 0.0142	mg/kg	0.0142	0.0453	1	M8270C	2/6/2017	2/6/2017	NJC	1
Fluoranthene	< 0.0131	mg/kg	0.0131	0.0418	1	M8270C	2/6/2017	2/6/2017	NJC	1
Fluorene	< 0.0135	mg/kg	0.0135	0.0431	1	M8270C	2/6/2017	2/6/2017	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.015	mg/kg	0.015	0.0476	1	M8270C	2/6/2017	2/6/2017	NJC	1
1-Methyl naphthalene	< 0.0143	mg/kg	0.0143	0.0456	1	M8270C	2/6/2017	2/6/2017	NJC	1
2-Methyl naphthalene	< 0.0119	mg/kg	0.0119	0.038	1	M8270C	2/6/2017	2/6/2017	NJC	1
Naphthalene	< 0.0122	mg/kg	0.0122	0.0387	1	M8270C	2/6/2017	2/6/2017	NJC	1
Phenanthrene	< 0.0109	mg/kg	0.0109	0.0347	1	M8270C	2/6/2017	2/6/2017	NJC	1
Pyrene	< 0.0126	mg/kg	0.0126	0.0401	1	M8270C	2/6/2017	2/6/2017	NJC	1
PCB'S										
PCB-1016	< 0.0035	mg/kg	0.0035	0.0117	1	EPA 8082A		2/7/2017	ESC	1
PCB-1221	< 0.0054	mg/kg	0.0054	0.0179	1	EPA 8082A		2/7/2017	ESC	1
PCB-1232	< 0.0042	mg/kg	0.0042	0.0139	1	EPA 8082A		2/7/2017	ESC	1
PCB-1242	< 0.0032	mg/kg	0.0032	0.0106	1	EPA 8082A		2/7/2017	ESC	1
PCB-1248	< 0.0032	mg/kg	0.0032	0.0105	1	EPA 8082A		2/7/2017	ESC	1
PCB-1254	< 0.0047	mg/kg	0.0047	0.0157	1	EPA 8082A		2/7/2017	ESC	1
PCB-1260	< 0.0049	mg/kg	0.0049	0.0165	1	EPA 8082A		2/7/2017	ESC	1
VOC's										
Benzene	< 0.03	mg/kg	0.03	0.96	1	8260B		2/2/2017	CJR	1
Bromobenzene	< 0.025	mg/kg	0.025	0.081	1	8260B		2/2/2017	CJR	1
Bromodichloromethane	< 0.074	mg/kg	0.074	0.24	1	8260B		2/2/2017	CJR	1
Bromoform	< 0.029	mg/kg	0.029	0.092	1	8260B		2/2/2017	CJR	1
tert-Butylbenzene	< 0.026	mg/kg	0.026	0.084	1	8260B		2/2/2017	CJR	1
sec-Butylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		2/2/2017	CJR	1
n-Butylbenzene	< 0.04	mg/kg	0.04	0.13	1	8260B		2/2/2017	CJR	1
Carbon Tetrachloride	< 0.016	mg/kg	0.016	0.053	1	8260B		2/2/2017	CJR	1
Chlorobenzene	< 0.013	mg/kg	0.013	0.04	1	8260B		2/2/2017	CJR	1
Chloroethane	< 0.091	mg/kg	0.091	0.29	1	8260B		2/2/2017	CJR	4
Chloroform	< 0.035	mg/kg	0.035	0.11	1	8260B		2/2/2017	CJR	1
Chloromethane	< 0.076	mg/kg	0.076	0.24	1	8260B		2/2/2017	CJR	1
2-Chlorotoluene	< 0.015	mg/kg	0.015	0.047	1	8260B		2/2/2017	CJR	1
4-Chlorotoluene	< 0.018	mg/kg	0.018	0.057	1	8260B		2/2/2017	CJR	1
1,2-Dibromo-3-chloropropane	< 0.058	mg/kg	0.058	0.18	1	8260B		2/2/2017	CJR	1

Project Name IRGENS-BMO  
 Project # 16722-001

Invoice # E32409

Lab Code 5032409L  
 Sample ID SB-6 6-8'  
 Sample Matrix Soil  
 Sample Date 1/30/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Dibromochloromethane	< 0.025	mg/kg	0.025	0.079	1	8260B	2/2/2017	2/2/2017	CJR	1
1,4-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B	2/2/2017	2/2/2017	CJR	1
1,3-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2-Dichlorobenzene	< 0.028	mg/kg	0.028	0.088	1	8260B	2/2/2017	2/2/2017	CJR	1
Dichlorodifluoromethane	< 0.048	mg/kg	0.048	0.15	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2-Dichloroethane	< 0.038	mg/kg	0.038	0.12	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1-Dichloroethane	< 0.034	mg/kg	0.034	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1-Dichloroethene	< 0.022	mg/kg	0.022	0.069	1	8260B	2/2/2017	2/2/2017	CJR	1
cis-1,2-Dichloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
trans-1,2-Dichloroethene	< 0.028	mg/kg	0.028	0.09	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2-Dichloropropane	< 0.035	mg/kg	0.035	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
2,2-Dichloropropane	< 0.037	mg/kg	0.037	0.12	1	8260B	2/2/2017	2/2/2017	CJR	1
1,3-Dichloropropane	< 0.025	mg/kg	0.025	0.079	1	8260B	2/2/2017	2/2/2017	CJR	1
Di-isopropyl ether	< 0.01	mg/kg	0.01	0.032	1	8260B	2/2/2017	2/2/2017	CJR	1
EDB (1,2-Dibromoethane)	< 0.023	mg/kg	0.023	0.072	1	8260B	2/2/2017	2/2/2017	CJR	1
Ethylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
Hexachlorobutadiene	< 0.085	mg/kg	0.085	0.27	1	8260B	2/2/2017	2/2/2017	CJR	1
Isopropylbenzene	< 0.034	mg/kg	0.034	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
p-Isopropyltoluene	< 0.029	mg/kg	0.029	0.093	1	8260B	2/2/2017	2/2/2017	CJR	1
Methylene chloride	< 0.15	mg/kg	0.15	0.46	1	8260B	2/2/2017	2/2/2017	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.05	mg/kg	0.05	0.16	1	8260B	2/2/2017	2/2/2017	CJR	1
Naphthalene	< 0.094	mg/kg	0.094	0.3	1	8260B	2/2/2017	2/2/2017	CJR	1
n-Propylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,2,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.88	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,1,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.09	1	8260B	2/2/2017	2/2/2017	CJR	1
Tetrachloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
Toluene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,4-Trichlorobenzene	< 0.064	mg/kg	0.064	0.2	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,3-Trichlorobenzene	< 0.066	mg/kg	0.066	0.21	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.96	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
Trichloroethene (TCE)	< 0.041	mg/kg	0.041	0.13	1	8260B	2/2/2017	2/2/2017	CJR	1
Trichlorofluoromethane	< 0.041	mg/kg	0.041	0.13	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.025	0.08	1	8260B	2/2/2017	2/2/2017	CJR	1
1,3,5-Trimethylbenzene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
Vinyl Chloride	< 0.019	mg/kg	0.019	0.062	1	8260B	2/2/2017	2/2/2017	CJR	1
m&p-Xylene	< 0.072	mg/kg	0.072	0.23	1	8260B	2/2/2017	2/2/2017	CJR	1
o-Xylene	< 0.044	mg/kg	0.044	0.14	1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - 1,2-Dichloroethane-d4	98	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - 4-Bromofluorobenzene	110	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - Dibromofluoromethane	95	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - Toluene-d8	101	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1

Project Name IRGENS-BMO  
 Project # 16722-001

Invoice # E32409

Lab Code 5032409M  
 Sample ID TW-7 0-2'  
 Sample Matrix Soil  
 Sample Date 1/30/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	91.6	%			1	5021		2/1/2017	NJC	1
Inorganic										
Metals										
Lead, Total	4.80	mg/Kg	0.34	1.16	2	6010B		2/7/2017	CWT	1 49
Organic										
PAH SIM										
Acenaphthene	< 0.0135	mg/kg	0.0135	0.043	1	M8270C	2/6/2017	2/6/2017	NJC	1
Acenaphthylene	< 0.012	mg/kg	0.012	0.0381	1	M8270C	2/6/2017	2/6/2017	NJC	1
Anthracene	< 0.0124	mg/kg	0.0124	0.0395	1	M8270C	2/6/2017	2/6/2017	NJC	1
Benzo(a)anthracene	< 0.0116	mg/kg	0.0116	0.037	1	M8270C	2/6/2017	2/6/2017	NJC	1
Benzo(a)pyrene	< 0.0113	mg/kg	0.0113	0.0359	1	M8270C	2/6/2017	2/6/2017	NJC	1
Benzo(b)fluoranthene	< 0.013	mg/kg	0.013	0.0414	1	M8270C	2/6/2017	2/6/2017	NJC	1
Benzo(g,h,i)perylene	< 0.0114	mg/kg	0.0114	0.0363	1	M8270C	2/6/2017	2/6/2017	NJC	1
Benzo(k)fluoranthene	< 0.0117	mg/kg	0.0117	0.0371	1	M8270C	2/6/2017	2/6/2017	NJC	1
Chrysene	< 0.0138	mg/kg	0.0138	0.0439	1	M8270C	2/6/2017	2/6/2017	NJC	1
Dibenzo(a,h)anthracene	< 0.0142	mg/kg	0.0142	0.0453	1	M8270C	2/6/2017	2/6/2017	NJC	1
Fluoranthene	< 0.0131	mg/kg	0.0131	0.0418	1	M8270C	2/6/2017	2/6/2017	NJC	1
Fluorene	< 0.0135	mg/kg	0.0135	0.0431	1	M8270C	2/6/2017	2/6/2017	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.015	mg/kg	0.015	0.0476	1	M8270C	2/6/2017	2/6/2017	NJC	1
1-Methyl naphthalene	< 0.0143	mg/kg	0.0143	0.0456	1	M8270C	2/6/2017	2/6/2017	NJC	1
2-Methyl naphthalene	< 0.0119	mg/kg	0.0119	0.038	1	M8270C	2/6/2017	2/6/2017	NJC	1
Naphthalene	< 0.0122	mg/kg	0.0122	0.0387	1	M8270C	2/6/2017	2/6/2017	NJC	1
Phenanthrene	< 0.0109	mg/kg	0.0109	0.0347	1	M8270C	2/6/2017	2/6/2017	NJC	1
Pyrene	< 0.0126	mg/kg	0.0126	0.0401	1	M8270C	2/6/2017	2/6/2017	NJC	1
VOC's										
Benzene	< 0.03	mg/kg	0.03	0.96	1	8260B		2/2/2017	CJR	1
Bromobenzene	< 0.025	mg/kg	0.025	0.081	1	8260B		2/2/2017	CJR	1
Bromodichloromethane	< 0.074	mg/kg	0.074	0.24	1	8260B		2/2/2017	CJR	1
Bromoform	< 0.029	mg/kg	0.029	0.092	1	8260B		2/2/2017	CJR	1
tert-Butylbenzene	< 0.026	mg/kg	0.026	0.084	1	8260B		2/2/2017	CJR	1
sec-Butylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		2/2/2017	CJR	1
n-Butylbenzene	< 0.04	mg/kg	0.04	0.13	1	8260B		2/2/2017	CJR	1
Carbon Tetrachloride	< 0.016	mg/kg	0.016	0.053	1	8260B		2/2/2017	CJR	1
Chlorobenzene	< 0.013	mg/kg	0.013	0.04	1	8260B		2/2/2017	CJR	1
Chloroethane	< 0.091	mg/kg	0.091	0.29	1	8260B		2/2/2017	CJR	4
Chloroform	< 0.035	mg/kg	0.035	0.11	1	8260B		2/2/2017	CJR	1
Chloromethane	< 0.076	mg/kg	0.076	0.24	1	8260B		2/2/2017	CJR	1
2-Chlorotoluene	< 0.015	mg/kg	0.015	0.047	1	8260B		2/2/2017	CJR	1
4-Chlorotoluene	< 0.018	mg/kg	0.018	0.057	1	8260B		2/2/2017	CJR	1
1,2-Dibromo-3-chloropropane	< 0.058	mg/kg	0.058	0.18	1	8260B		2/2/2017	CJR	1
Dibromochloromethane	< 0.025	mg/kg	0.025	0.079	1	8260B		2/2/2017	CJR	1
1,4-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		2/2/2017	CJR	1
1,3-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		2/2/2017	CJR	1
1,2-Dichlorobenzene	< 0.028	mg/kg	0.028	0.088	1	8260B		2/2/2017	CJR	1
Dichlorodifluoromethane	< 0.048	mg/kg	0.048	0.15	1	8260B		2/2/2017	CJR	1
1,2-Dichloroethane	< 0.038	mg/kg	0.038	0.12	1	8260B		2/2/2017	CJR	1
1,1-Dichloroethane	< 0.034	mg/kg	0.034	0.11	1	8260B		2/2/2017	CJR	1
1,1-Dichloroethene	< 0.022	mg/kg	0.022	0.069	1	8260B		2/2/2017	CJR	1
cis-1,2-Dichloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B		2/2/2017	CJR	1



**Project Name** IRGENS-BMO  
**Project #** 16722-001

**Invoice #** E32409

**Lab Code** 5032409M  
**Sample ID** TW-7 0-2'  
**Sample Matrix** Soil  
**Sample Date** 1/30/2017

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
trans-1,2-Dichloroethene	< 0.028	mg/kg	0.028	0.09	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2-Dichloropropane	< 0.035	mg/kg	0.035	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
2,2-Dichloropropane	< 0.037	mg/kg	0.037	0.12	1	8260B	2/2/2017	2/2/2017	CJR	1
1,3-Dichloropropane	< 0.025	mg/kg	0.025	0.079	1	8260B	2/2/2017	2/2/2017	CJR	1
Di-isopropyl ether	< 0.01	mg/kg	0.01	0.032	1	8260B	2/2/2017	2/2/2017	CJR	1
EDB (1,2-Dibromoethane)	< 0.023	mg/kg	0.023	0.072	1	8260B	2/2/2017	2/2/2017	CJR	1
Ethylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
Hexachlorobutadiene	< 0.085	mg/kg	0.085	0.27	1	8260B	2/2/2017	2/2/2017	CJR	1
Isopropylbenzene	< 0.034	mg/kg	0.034	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
p-Isopropyltoluene	< 0.029	mg/kg	0.029	0.093	1	8260B	2/2/2017	2/2/2017	CJR	1
Methylene chloride	< 0.15	mg/kg	0.15	0.46	1	8260B	2/2/2017	2/2/2017	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.05	mg/kg	0.05	0.16	1	8260B	2/2/2017	2/2/2017	CJR	1
Naphthalene	< 0.094	mg/kg	0.094	0.3	1	8260B	2/2/2017	2/2/2017	CJR	1
n-Propylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,2,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.88	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,1,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.09	1	8260B	2/2/2017	2/2/2017	CJR	1
Tetrachloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
Toluene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,4-Trichlorobenzene	< 0.064	mg/kg	0.064	0.2	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,3-Trichlorobenzene	< 0.066	mg/kg	0.066	0.21	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.96	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
Trichloroethene (TCE)	< 0.041	mg/kg	0.041	0.13	1	8260B	2/2/2017	2/2/2017	CJR	1
Trichlorofluoromethane	< 0.041	mg/kg	0.041	0.13	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.025	0.08	1	8260B	2/2/2017	2/2/2017	CJR	1
1,3,5-Trimethylbenzene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
Vinyl Chloride	< 0.019	mg/kg	0.019	0.062	1	8260B	2/2/2017	2/2/2017	CJR	1
m&p-Xylene	< 0.072	mg/kg	0.072	0.23	1	8260B	2/2/2017	2/2/2017	CJR	1
o-Xylene	< 0.044	mg/kg	0.044	0.14	1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - Dibromofluoromethane	95	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - Toluene-d8	100	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - 1,2-Dichloroethane-d4	102	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - 4-Bromofluorobenzene	112	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1

**Project Name** IRGENS-BMO  
**Project #** 16722-001

**Invoice #** E32409

**Lab Code** 5032409N  
**Sample ID** TW-7 2-4'  
**Sample Matrix** Soil  
**Sample Date** 1/30/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	88.6	%			1	5021		2/1/2017	NJC	1
Inorganic										
Metals										
Lead, Total	2.14	mg/Kg	0.17	0.58	1	6010B		2/7/2017	CWT	1
Organic										
PAH SIM										
Acenaphthene	< 0.0135	mg/kg	0.0135	0.043	1	M8270C	2/6/2017	2/6/2017	NJC	1
Acenaphthylene	< 0.012	mg/kg	0.012	0.0381	1	M8270C	2/6/2017	2/6/2017	NJC	1
Anthracene	< 0.0124	mg/kg	0.0124	0.0395	1	M8270C	2/6/2017	2/6/2017	NJC	1
Benzo(a)anthracene	< 0.0116	mg/kg	0.0116	0.037	1	M8270C	2/6/2017	2/6/2017	NJC	1
Benzo(a)pyrene	< 0.0113	mg/kg	0.0113	0.0359	1	M8270C	2/6/2017	2/6/2017	NJC	1
Benzo(b)fluoranthene	< 0.013	mg/kg	0.013	0.0414	1	M8270C	2/6/2017	2/6/2017	NJC	1
Benzo(g,h,i)perylene	< 0.0114	mg/kg	0.0114	0.0363	1	M8270C	2/6/2017	2/6/2017	NJC	1
Benzo(k)fluoranthene	< 0.0117	mg/kg	0.0117	0.0371	1	M8270C	2/6/2017	2/6/2017	NJC	1
Chrysene	< 0.0138	mg/kg	0.0138	0.0439	1	M8270C	2/6/2017	2/6/2017	NJC	1
Dibenzo(a,h)anthracene	< 0.0142	mg/kg	0.0142	0.0453	1	M8270C	2/6/2017	2/6/2017	NJC	1
Fluoranthene	< 0.0131	mg/kg	0.0131	0.0418	1	M8270C	2/6/2017	2/6/2017	NJC	1
Fluorene	< 0.0135	mg/kg	0.0135	0.0431	1	M8270C	2/6/2017	2/6/2017	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.015	mg/kg	0.015	0.0476	1	M8270C	2/6/2017	2/6/2017	NJC	1
1-Methyl naphthalene	< 0.0143	mg/kg	0.0143	0.0456	1	M8270C	2/6/2017	2/6/2017	NJC	1
2-Methyl naphthalene	< 0.0119	mg/kg	0.0119	0.038	1	M8270C	2/6/2017	2/6/2017	NJC	1
Naphthalene	< 0.0122	mg/kg	0.0122	0.0387	1	M8270C	2/6/2017	2/6/2017	NJC	1
Phenanthrene	< 0.0109	mg/kg	0.0109	0.0347	1	M8270C	2/6/2017	2/6/2017	NJC	1
Pyrene	< 0.0126	mg/kg	0.0126	0.0401	1	M8270C	2/6/2017	2/6/2017	NJC	1
PCB'S										
PCB-1016	< 0.0035	mg/kg	0.0035	0.0117	1	EPA 8082A		2/7/2017	ESC	1
PCB-1221	< 0.0054	mg/kg	0.0054	0.0179	1	EPA 8082A		2/7/2017	ESC	1
PCB-1232	< 0.0042	mg/kg	0.0042	0.0139	1	EPA 8082A		2/7/2017	ESC	1
PCB-1242	< 0.0032	mg/kg	0.0032	0.0106	1	EPA 8082A		2/7/2017	ESC	1
PCB-1248	< 0.0032	mg/kg	0.0032	0.0105	1	EPA 8082A		2/7/2017	ESC	1
PCB-1254	< 0.0047	mg/kg	0.0047	0.0157	1	EPA 8082A		2/7/2017	ESC	1
PCB-1260	< 0.0049	mg/kg	0.0049	0.0165	1	EPA 8082A		2/7/2017	ESC	1
VOC's										
Benzene	< 0.03	mg/kg	0.03	0.96	1	8260B		2/2/2017	CJR	1
Bromobenzene	< 0.025	mg/kg	0.025	0.081	1	8260B		2/2/2017	CJR	1
Bromodichloromethane	< 0.074	mg/kg	0.074	0.24	1	8260B		2/2/2017	CJR	1
Bromoform	< 0.029	mg/kg	0.029	0.092	1	8260B		2/2/2017	CJR	1
tert-Butylbenzene	< 0.026	mg/kg	0.026	0.084	1	8260B		2/2/2017	CJR	1
sec-Butylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		2/2/2017	CJR	1
n-Butylbenzene	< 0.04	mg/kg	0.04	0.13	1	8260B		2/2/2017	CJR	1
Carbon Tetrachloride	< 0.016	mg/kg	0.016	0.053	1	8260B		2/2/2017	CJR	1
Chlorobenzene	< 0.013	mg/kg	0.013	0.04	1	8260B		2/2/2017	CJR	1
Chloroethane	< 0.091	mg/kg	0.091	0.29	1	8260B		2/2/2017	CJR	4
Chloroform	< 0.035	mg/kg	0.035	0.11	1	8260B		2/2/2017	CJR	1
Chloromethane	< 0.076	mg/kg	0.076	0.24	1	8260B		2/2/2017	CJR	1
2-Chlorotoluene	< 0.015	mg/kg	0.015	0.047	1	8260B		2/2/2017	CJR	1
4-Chlorotoluene	< 0.018	mg/kg	0.018	0.057	1	8260B		2/2/2017	CJR	1
1,2-Dibromo-3-chloropropane	< 0.058	mg/kg	0.058	0.18	1	8260B		2/2/2017	CJR	1

Project Name IRGENS-BMO  
 Project # 16722-001

Invoice # E32409

Lab Code 5032409N  
 Sample ID TW-7 2-4'  
 Sample Matrix Soil  
 Sample Date 1/30/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Dibromochloromethane	< 0.025	mg/kg	0.025	0.079	1	8260B	2/2/2017	2/2/2017	CJR	1
1,4-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B	2/2/2017	2/2/2017	CJR	1
1,3-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2-Dichlorobenzene	< 0.028	mg/kg	0.028	0.088	1	8260B	2/2/2017	2/2/2017	CJR	1
Dichlorodifluoromethane	< 0.048	mg/kg	0.048	0.15	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2-Dichloroethane	< 0.038	mg/kg	0.038	0.12	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1-Dichloroethane	< 0.034	mg/kg	0.034	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1-Dichloroethene	< 0.022	mg/kg	0.022	0.069	1	8260B	2/2/2017	2/2/2017	CJR	1
cis-1,2-Dichloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
trans-1,2-Dichloroethene	< 0.028	mg/kg	0.028	0.09	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2-Dichloropropane	< 0.035	mg/kg	0.035	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
2,2-Dichloropropane	< 0.037	mg/kg	0.037	0.12	1	8260B	2/2/2017	2/2/2017	CJR	1
1,3-Dichloropropane	< 0.025	mg/kg	0.025	0.079	1	8260B	2/2/2017	2/2/2017	CJR	1
Di-isopropyl ether	< 0.01	mg/kg	0.01	0.032	1	8260B	2/2/2017	2/2/2017	CJR	1
EDB (1,2-Dibromoethane)	< 0.023	mg/kg	0.023	0.072	1	8260B	2/2/2017	2/2/2017	CJR	1
Ethylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
Hexachlorobutadiene	< 0.085	mg/kg	0.085	0.27	1	8260B	2/2/2017	2/2/2017	CJR	1
Isopropylbenzene	< 0.034	mg/kg	0.034	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
p-Isopropyltoluene	< 0.029	mg/kg	0.029	0.093	1	8260B	2/2/2017	2/2/2017	CJR	1
Methylene chloride	< 0.15	mg/kg	0.15	0.46	1	8260B	2/2/2017	2/2/2017	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.05	mg/kg	0.05	0.16	1	8260B	2/2/2017	2/2/2017	CJR	1
Naphthalene	< 0.094	mg/kg	0.094	0.3	1	8260B	2/2/2017	2/2/2017	CJR	1
n-Propylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,2,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.88	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,1,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.09	1	8260B	2/2/2017	2/2/2017	CJR	1
Tetrachloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
Toluene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,4-Trichlorobenzene	< 0.064	mg/kg	0.064	0.2	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,3-Trichlorobenzene	< 0.066	mg/kg	0.066	0.21	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.96	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
Trichloroethene (TCE)	< 0.041	mg/kg	0.041	0.13	1	8260B	2/2/2017	2/2/2017	CJR	1
Trichlorofluoromethane	< 0.041	mg/kg	0.041	0.13	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.025	0.08	1	8260B	2/2/2017	2/2/2017	CJR	1
1,3,5-Trimethylbenzene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
Vinyl Chloride	< 0.019	mg/kg	0.019	0.062	1	8260B	2/2/2017	2/2/2017	CJR	1
m&p-Xylene	< 0.072	mg/kg	0.072	0.23	1	8260B	2/2/2017	2/2/2017	CJR	1
o-Xylene	< 0.044	mg/kg	0.044	0.14	1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - 1,2-Dichloroethane-d4	89	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - 4-Bromofluorobenzene	105	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - Dibromofluoromethane	92	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - Toluene-d8	100	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1

Project Name IRGENS-BMO  
 Project # 16722-001

Invoice # E32409

Lab Code 5032409O  
 Sample ID TW-8 0-2'  
 Sample Matrix Soil  
 Sample Date 1/30/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	89.9	%			1	5021		2/1/2017	NJC	1
Inorganic										
Metals										
Lead, Total	3.52	mg/Kg	0.17	0.58	1	6010B		2/7/2017	CWT	1
Organic										
PAH SIM										
Acenaphthene	< 0.0135	mg/kg	0.0135	0.043	1	M8270C	2/6/2017	2/6/2017	NJC	1
Acenaphthylene	< 0.012	mg/kg	0.012	0.0381	1	M8270C	2/6/2017	2/6/2017	NJC	1
Anthracene	< 0.0124	mg/kg	0.0124	0.0395	1	M8270C	2/6/2017	2/6/2017	NJC	1
Benzo(a)anthracene	< 0.0116	mg/kg	0.0116	0.037	1	M8270C	2/6/2017	2/6/2017	NJC	1
Benzo(a)pyrene	< 0.0113	mg/kg	0.0113	0.0359	1	M8270C	2/6/2017	2/6/2017	NJC	1
Benzo(b)fluoranthene	< 0.013	mg/kg	0.013	0.0414	1	M8270C	2/6/2017	2/6/2017	NJC	1
Benzo(g,h,i)perylene	< 0.0114	mg/kg	0.0114	0.0363	1	M8270C	2/6/2017	2/6/2017	NJC	1
Benzo(k)fluoranthene	< 0.0117	mg/kg	0.0117	0.0371	1	M8270C	2/6/2017	2/6/2017	NJC	1
Chrysene	< 0.0138	mg/kg	0.0138	0.0439	1	M8270C	2/6/2017	2/6/2017	NJC	1
Dibenzo(a,h)anthracene	< 0.0142	mg/kg	0.0142	0.0453	1	M8270C	2/6/2017	2/6/2017	NJC	1
Fluoranthene	< 0.0131	mg/kg	0.0131	0.0418	1	M8270C	2/6/2017	2/6/2017	NJC	1
Fluorene	< 0.0135	mg/kg	0.0135	0.0431	1	M8270C	2/6/2017	2/6/2017	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.015	mg/kg	0.015	0.0476	1	M8270C	2/6/2017	2/6/2017	NJC	1
1-Methyl naphthalene	< 0.0143	mg/kg	0.0143	0.0456	1	M8270C	2/6/2017	2/6/2017	NJC	1
2-Methyl naphthalene	< 0.0119	mg/kg	0.0119	0.038	1	M8270C	2/6/2017	2/6/2017	NJC	1
Naphthalene	< 0.0122	mg/kg	0.0122	0.0387	1	M8270C	2/6/2017	2/6/2017	NJC	1
Phenanthrene	< 0.0109	mg/kg	0.0109	0.0347	1	M8270C	2/6/2017	2/6/2017	NJC	1
Pyrene	< 0.0126	mg/kg	0.0126	0.0401	1	M8270C	2/6/2017	2/6/2017	NJC	1
VOC's										
Benzene	< 0.03	mg/kg	0.03	0.96	1	8260B		2/2/2017	CJR	1
Bromobenzene	< 0.025	mg/kg	0.025	0.081	1	8260B		2/2/2017	CJR	1
Bromodichloromethane	< 0.074	mg/kg	0.074	0.24	1	8260B		2/2/2017	CJR	1
Bromoform	< 0.029	mg/kg	0.029	0.092	1	8260B		2/2/2017	CJR	1
tert-Butylbenzene	< 0.026	mg/kg	0.026	0.084	1	8260B		2/2/2017	CJR	1
sec-Butylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		2/2/2017	CJR	1
n-Butylbenzene	< 0.04	mg/kg	0.04	0.13	1	8260B		2/2/2017	CJR	1
Carbon Tetrachloride	< 0.016	mg/kg	0.016	0.053	1	8260B		2/2/2017	CJR	1
Chlorobenzene	< 0.013	mg/kg	0.013	0.04	1	8260B		2/2/2017	CJR	1
Chloroethane	< 0.091	mg/kg	0.091	0.29	1	8260B		2/2/2017	CJR	4
Chloroform	< 0.035	mg/kg	0.035	0.11	1	8260B		2/2/2017	CJR	1
Chloromethane	< 0.076	mg/kg	0.076	0.24	1	8260B		2/2/2017	CJR	1
2-Chlorotoluene	< 0.015	mg/kg	0.015	0.047	1	8260B		2/2/2017	CJR	1
4-Chlorotoluene	< 0.018	mg/kg	0.018	0.057	1	8260B		2/2/2017	CJR	1
1,2-Dibromo-3-chloropropane	< 0.058	mg/kg	0.058	0.18	1	8260B		2/2/2017	CJR	1
Dibromochloromethane	< 0.025	mg/kg	0.025	0.079	1	8260B		2/2/2017	CJR	1
1,4-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		2/2/2017	CJR	1
1,3-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		2/2/2017	CJR	1
1,2-Dichlorobenzene	< 0.028	mg/kg	0.028	0.088	1	8260B		2/2/2017	CJR	1
Dichlorodifluoromethane	< 0.048	mg/kg	0.048	0.15	1	8260B		2/2/2017	CJR	1
1,2-Dichloroethane	< 0.038	mg/kg	0.038	0.12	1	8260B		2/2/2017	CJR	1
1,1-Dichloroethane	< 0.034	mg/kg	0.034	0.11	1	8260B		2/2/2017	CJR	1
1,1-Dichloroethene	< 0.022	mg/kg	0.022	0.069	1	8260B		2/2/2017	CJR	1
cis-1,2-Dichloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B		2/2/2017	CJR	1

Project Name IRGENS-BMO  
 Project # 16722-001

Invoice # E32409

Lab Code 5032409O  
 Sample ID TW-8 0-2'  
 Sample Matrix Soil  
 Sample Date 1/30/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
trans-1,2-Dichloroethene	< 0.028	mg/kg	0.028	0.09	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2-Dichloropropane	< 0.035	mg/kg	0.035	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
2,2-Dichloropropane	< 0.037	mg/kg	0.037	0.12	1	8260B	2/2/2017	2/2/2017	CJR	1
1,3-Dichloropropane	< 0.025	mg/kg	0.025	0.079	1	8260B	2/2/2017	2/2/2017	CJR	1
Di-isopropyl ether	< 0.01	mg/kg	0.01	0.032	1	8260B	2/2/2017	2/2/2017	CJR	1
EDB (1,2-Dibromoethane)	< 0.023	mg/kg	0.023	0.072	1	8260B	2/2/2017	2/2/2017	CJR	1
Ethylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
Hexachlorobutadiene	< 0.085	mg/kg	0.085	0.27	1	8260B	2/2/2017	2/2/2017	CJR	1
Isopropylbenzene	< 0.034	mg/kg	0.034	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
p-Isopropyltoluene	< 0.029	mg/kg	0.029	0.093	1	8260B	2/2/2017	2/2/2017	CJR	1
Methylene chloride	< 0.15	mg/kg	0.15	0.46	1	8260B	2/2/2017	2/2/2017	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.05	mg/kg	0.05	0.16	1	8260B	2/2/2017	2/2/2017	CJR	1
Naphthalene	< 0.094	mg/kg	0.094	0.3	1	8260B	2/2/2017	2/2/2017	CJR	1
n-Propylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,2,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.88	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,1,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.09	1	8260B	2/2/2017	2/2/2017	CJR	1
Tetrachloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
Toluene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,4-Trichlorobenzene	< 0.064	mg/kg	0.064	0.2	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,3-Trichlorobenzene	< 0.066	mg/kg	0.066	0.21	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.96	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
Trichloroethene (TCE)	< 0.041	mg/kg	0.041	0.13	1	8260B	2/2/2017	2/2/2017	CJR	1
Trichlorofluoromethane	< 0.041	mg/kg	0.041	0.13	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.025	0.08	1	8260B	2/2/2017	2/2/2017	CJR	1
1,3,5-Trimethylbenzene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
Vinyl Chloride	< 0.019	mg/kg	0.019	0.062	1	8260B	2/2/2017	2/2/2017	CJR	1
m&p-Xylene	< 0.072	mg/kg	0.072	0.23	1	8260B	2/2/2017	2/2/2017	CJR	1
o-Xylene	< 0.044	mg/kg	0.044	0.14	1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - Toluene-d8	101	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - Dibromofluoromethane	97	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - 4-Bromofluorobenzene	115	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - 1,2-Dichloroethane-d4	102	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1

Project Name IRGENS-BMO  
 Project # 16722-001

Invoice # E32409

Lab Code 5032409P  
 Sample ID TW-8 2-4'  
 Sample Matrix Soil  
 Sample Date 1/30/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	88.7	%			1	5021		2/1/2017	NJC	1
Inorganic										
Metals										
Arsenic, Total	3.08	mg/Kg	0.33	1.09	1	6010B		2/6/2017	CWT	1
Barium, Total	15.8	mg/Kg	0.21	0.7	1	6010B		2/6/2017	CWT	1
Cadmium, Total	< 0.02	mg/Kg	0.08	0.25	1	6010B		2/6/2017	CWT	1
Chromium, Total	7.22	mg/Kg	0.08	0.26	1	6010B		2/6/2017	CWT	1
Lead, Total	4.86	mg/Kg	0.17	0.58	1	6010B		2/6/2017	CWT	1
Mercury, Total	< 0.0131	mg/kg	0.0131	0.0435	1	7471		2/1/2017	CWT	1
Selenium, Total	< 0.52	mg/Kg	0.52	1.73	1	6010B		2/6/2017	CWT	1
Silver, Total	< 0.57	mg/Kg	0.57	1.89	1	6010B		2/6/2017	CWT	1
Organic										
PAH SIM										
Acenaphthene	< 0.0135	mg/kg	0.0135	0.043	1	M8270C	2/6/2017	2/6/2017	NJC	1
Acenaphthylene	< 0.012	mg/kg	0.012	0.0381	1	M8270C	2/6/2017	2/6/2017	NJC	1
Anthracene	< 0.0124	mg/kg	0.0124	0.0395	1	M8270C	2/6/2017	2/6/2017	NJC	1
Benzo(a)anthracene	< 0.0116	mg/kg	0.0116	0.037	1	M8270C	2/6/2017	2/6/2017	NJC	1
Benzo(a)pyrene	< 0.0113	mg/kg	0.0113	0.0359	1	M8270C	2/6/2017	2/6/2017	NJC	1
Benzo(b)fluoranthene	< 0.013	mg/kg	0.013	0.0414	1	M8270C	2/6/2017	2/6/2017	NJC	1
Benzo(g,h,i)perylene	< 0.0114	mg/kg	0.0114	0.0363	1	M8270C	2/6/2017	2/6/2017	NJC	1
Benzo(k)fluoranthene	< 0.0117	mg/kg	0.0117	0.0371	1	M8270C	2/6/2017	2/6/2017	NJC	1
Chrysene	< 0.0138	mg/kg	0.0138	0.0439	1	M8270C	2/6/2017	2/6/2017	NJC	1
Dibenzo(a,h)anthracene	< 0.0142	mg/kg	0.0142	0.0453	1	M8270C	2/6/2017	2/6/2017	NJC	1
Fluoranthene	< 0.0131	mg/kg	0.0131	0.0418	1	M8270C	2/6/2017	2/6/2017	NJC	1
Fluorene	< 0.0135	mg/kg	0.0135	0.0431	1	M8270C	2/6/2017	2/6/2017	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.015	mg/kg	0.015	0.0476	1	M8270C	2/6/2017	2/6/2017	NJC	1
1-Methyl naphthalene	< 0.0143	mg/kg	0.0143	0.0456	1	M8270C	2/6/2017	2/6/2017	NJC	1
2-Methyl naphthalene	< 0.0119	mg/kg	0.0119	0.038	1	M8270C	2/6/2017	2/6/2017	NJC	1
Naphthalene	< 0.0122	mg/kg	0.0122	0.0387	1	M8270C	2/6/2017	2/6/2017	NJC	1
Phenanthrene	< 0.0109	mg/kg	0.0109	0.0347	1	M8270C	2/6/2017	2/6/2017	NJC	1
Pyrene	< 0.0126	mg/kg	0.0126	0.0401	1	M8270C	2/6/2017	2/6/2017	NJC	1
VOC's										
Benzene	< 0.03	mg/kg	0.03	0.96	1	8260B		2/2/2017	CJR	1
Bromobenzene	< 0.025	mg/kg	0.025	0.081	1	8260B		2/2/2017	CJR	1
Bromodichloromethane	< 0.074	mg/kg	0.074	0.24	1	8260B		2/2/2017	CJR	1
Bromoform	< 0.029	mg/kg	0.029	0.092	1	8260B		2/2/2017	CJR	1
tert-Butylbenzene	< 0.026	mg/kg	0.026	0.084	1	8260B		2/2/2017	CJR	1
sec-Butylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		2/2/2017	CJR	1
n-Butylbenzene	< 0.04	mg/kg	0.04	0.13	1	8260B		2/2/2017	CJR	1
Carbon Tetrachloride	< 0.016	mg/kg	0.016	0.053	1	8260B		2/2/2017	CJR	1
Chlorobenzene	< 0.013	mg/kg	0.013	0.04	1	8260B		2/2/2017	CJR	1
Chloroethane	< 0.091	mg/kg	0.091	0.29	1	8260B		2/2/2017	CJR	4
Chloroform	< 0.035	mg/kg	0.035	0.11	1	8260B		2/2/2017	CJR	1
Chloromethane	< 0.076	mg/kg	0.076	0.24	1	8260B		2/2/2017	CJR	1
2-Chlorotoluene	< 0.015	mg/kg	0.015	0.047	1	8260B		2/2/2017	CJR	1
4-Chlorotoluene	< 0.018	mg/kg	0.018	0.057	1	8260B		2/2/2017	CJR	1
1,2-Dibromo-3-chloropropane	< 0.058	mg/kg	0.058	0.18	1	8260B		2/2/2017	CJR	1
Dibromochloromethane	< 0.025	mg/kg	0.025	0.079	1	8260B		2/2/2017	CJR	1
1,4-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		2/2/2017	CJR	1

Project Name IRGENS-BMO  
 Project # 16722-001

Invoice # E32409

Lab Code 5032409P  
 Sample ID TW-8 2-4'  
 Sample Matrix Soil  
 Sample Date 1/30/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
1,3-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2-Dichlorobenzene	< 0.028	mg/kg	0.028	0.088	1	8260B	2/2/2017	2/2/2017	CJR	1
Dichlorodifluoromethane	< 0.048	mg/kg	0.048	0.15	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2-Dichloroethane	< 0.038	mg/kg	0.038	0.12	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1-Dichloroethane	< 0.034	mg/kg	0.034	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1-Dichloroethene	< 0.022	mg/kg	0.022	0.069	1	8260B	2/2/2017	2/2/2017	CJR	1
cis-1,2-Dichloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
trans-1,2-Dichloroethene	< 0.028	mg/kg	0.028	0.09	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2-Dichloropropane	< 0.035	mg/kg	0.035	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
2,2-Dichloropropane	< 0.037	mg/kg	0.037	0.12	1	8260B	2/2/2017	2/2/2017	CJR	1
1,3-Dichloropropane	< 0.025	mg/kg	0.025	0.079	1	8260B	2/2/2017	2/2/2017	CJR	1
Di-isopropyl ether	< 0.01	mg/kg	0.01	0.032	1	8260B	2/2/2017	2/2/2017	CJR	1
EDB (1,2-Dibromoethane)	< 0.023	mg/kg	0.023	0.072	1	8260B	2/2/2017	2/2/2017	CJR	1
Ethylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
Hexachlorobutadiene	< 0.085	mg/kg	0.085	0.27	1	8260B	2/2/2017	2/2/2017	CJR	1
Isopropylbenzene	< 0.034	mg/kg	0.034	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
p-Isopropyltoluene	< 0.029	mg/kg	0.029	0.093	1	8260B	2/2/2017	2/2/2017	CJR	1
Methylene chloride	< 0.15	mg/kg	0.15	0.46	1	8260B	2/2/2017	2/2/2017	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.05	mg/kg	0.05	0.16	1	8260B	2/2/2017	2/2/2017	CJR	1
Naphthalene	< 0.094	mg/kg	0.094	0.3	1	8260B	2/2/2017	2/2/2017	CJR	1
n-Propylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,2,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.88	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,1,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.09	1	8260B	2/2/2017	2/2/2017	CJR	1
Tetrachloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
Toluene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,4-Trichlorobenzene	< 0.064	mg/kg	0.064	0.2	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,3-Trichlorobenzene	< 0.066	mg/kg	0.066	0.21	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.96	1	8260B	2/2/2017	2/2/2017	CJR	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B	2/2/2017	2/2/2017	CJR	1
Trichloroethene (TCE)	< 0.041	mg/kg	0.041	0.13	1	8260B	2/2/2017	2/2/2017	CJR	1
Trichlorofluoromethane	< 0.041	mg/kg	0.041	0.13	1	8260B	2/2/2017	2/2/2017	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.025	0.08	1	8260B	2/2/2017	2/2/2017	CJR	1
1,3,5-Trimethylbenzene	< 0.032	mg/kg	0.032	0.1	1	8260B	2/2/2017	2/2/2017	CJR	1
Vinyl Chloride	< 0.019	mg/kg	0.019	0.062	1	8260B	2/2/2017	2/2/2017	CJR	1
m&p-Xylene	< 0.072	mg/kg	0.072	0.23	1	8260B	2/2/2017	2/2/2017	CJR	1
o-Xylene	< 0.044	mg/kg	0.044	0.14	1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - Dibromofluoromethane	92	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - Toluene-d8	102	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - 4-Bromofluorobenzene	105	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1
SUR - 1,2-Dichloroethane-d4	89	Rec %			1	8260B	2/2/2017	2/2/2017	CJR	1

**Project Name** IRGENS-BMO  
**Project #** 16722-001

**Invoice #** E32409

**Lab Code** 5032409Q  
**Sample ID** TW-1  
**Sample Matrix** Water  
**Sample Date** 1/30/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Inorganic										
Metals										
Lead, Dissolved	< 0.8	ug/L	0.8	2.6	1	7421		2/3/2017	CWT	1
Organic										
VOC's										
Benzene	< 0.17	ug/l	0.17	0.55	1	8260B		2/2/2017	CJR	1
Bromobenzene	< 0.43	ug/l	0.43	1.37	1	8260B		2/2/2017	CJR	1
Bromodichloromethane	< 0.31	ug/l	0.31	1	1	8260B		2/2/2017	CJR	1
Bromoform	< 0.49	ug/l	0.49	1.56	1	8260B		2/2/2017	CJR	1
tert-Butylbenzene	< 0.39	ug/l	0.39	1.23	1	8260B		2/2/2017	CJR	1
sec-Butylbenzene	< 0.24	ug/l	0.24	0.76	1	8260B		2/2/2017	CJR	1
n-Butylbenzene	< 0.34	ug/l	0.34	1.08	1	8260B		2/2/2017	CJR	1
Carbon Tetrachloride	< 0.21	ug/l	0.21	0.68	1	8260B		2/2/2017	CJR	1
Chlorobenzene	< 0.27	ug/l	0.27	0.86	1	8260B		2/2/2017	CJR	1
Chloroethane	< 0.5	ug/l	0.5	1.6	1	8260B		2/2/2017	CJR	1
Chloroform	< 0.96	ug/l	0.96	3.04	1	8260B		2/2/2017	CJR	1
Chloromethane	< 1.3	ug/l	1.3	4.15	1	8260B		2/2/2017	CJR	1
2-Chlorotoluene	< 0.36	ug/l	0.36	1.15	1	8260B		2/2/2017	CJR	1
4-Chlorotoluene	< 0.35	ug/l	0.35	1.11	1	8260B		2/2/2017	CJR	1
1,2-Dibromo-3-chloropropane	< 1.88	ug/l	1.88	5.98	1	8260B		2/2/2017	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.44	1	8260B		2/2/2017	CJR	1
1,4-Dichlorobenzene	< 0.42	ug/l	0.42	1.34	1	8260B		2/2/2017	CJR	1
1,3-Dichlorobenzene	< 0.45	ug/l	0.45	1.43	1	8260B		2/2/2017	CJR	1
1,2-Dichlorobenzene	< 0.34	ug/l	0.34	1.09	1	8260B		2/2/2017	CJR	1
Dichlorodifluoromethane	< 0.38	ug/l	0.38	1.2	1	8260B		2/2/2017	CJR	1
1,2-Dichloroethane	< 0.45	ug/l	0.45	1.43	1	8260B		2/2/2017	CJR	1
1,1-Dichloroethane	< 0.42	ug/l	0.42	1.34	1	8260B		2/2/2017	CJR	1
1,1-Dichloroethene	< 0.46	ug/l	0.46	1.47	1	8260B		2/2/2017	CJR	1
cis-1,2-Dichloroethene	< 0.41	ug/l	0.41	1.29	1	8260B		2/2/2017	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.12	1	8260B		2/2/2017	CJR	1
1,2-Dichloropropane	< 0.39	ug/l	0.39	1.24	1	8260B		2/2/2017	CJR	1
2,2-Dichloropropane	< 0.47	ug/l	0.47	1.49	1	8260B		2/2/2017	CJR	1
1,3-Dichloropropane	< 0.49	ug/l	0.49	1.55	1	8260B		2/2/2017	CJR	1
Di-isopropyl ether	< 0.26	ug/l	0.26	0.83	1	8260B		2/2/2017	CJR	1
EDB (1,2-Dibromoethane)	< 0.34	ug/l	0.34	1.09	1	8260B		2/2/2017	CJR	1
Ethylbenzene	< 0.2	ug/l	0.2	0.63	1	8260B		2/2/2017	CJR	1
Hexachlorobutadiene	< 1.47	ug/l	1.47	4.68	1	8260B		2/2/2017	CJR	1
Isopropylbenzene	< 0.29	ug/l	0.29	0.93	1	8260B		2/2/2017	CJR	1
p-Isopropyltoluene	< 0.28	ug/l	0.28	0.91	1	8260B		2/2/2017	CJR	1
Methylene chloride	< 0.94	ug/l	0.94	2.98	1	8260B		2/2/2017	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.82	ug/l	0.82	2.6	1	8260B		2/2/2017	CJR	1
Naphthalene	< 2.17	ug/l	2.17	6.9	1	8260B		2/2/2017	CJR	1
n-Propylbenzene	< 0.19	ug/l	0.19	0.62	1	8260B		2/2/2017	CJR	1
1,1,2,2-Tetrachloroethane	< 0.69	ug/l	0.69	2.21	1	8260B		2/2/2017	CJR	1
1,1,1,2-Tetrachloroethane	< 0.47	ug/l	0.47	1.48	1	8260B		2/2/2017	CJR	1
Tetrachloroethene	< 0.48	ug/l	0.48	1.52	1	8260B		2/2/2017	CJR	1
Toluene	< 0.67	ug/l	0.67	2.13	1	8260B		2/2/2017	CJR	1
1,2,4-Trichlorobenzene	< 1.29	ug/l	1.29	4.1	1	8260B		2/2/2017	CJR	1
1,2,3-Trichlorobenzene	< 0.83	ug/l	0.83	2.63	1	8260B		2/2/2017	CJR	1
1,1,1-Trichloroethane	< 0.35	ug/l	0.35	1.11	1	8260B		2/2/2017	CJR	1
1,1,2-Trichloroethane	< 0.65	ug/l	0.65	2.06	1	8260B		2/2/2017	CJR	1



**Project Name** IRGENS-BMO  
**Project #** 16722-001

**Invoice #** E32409

**Lab Code** 5032409Q  
**Sample ID** TW-1  
**Sample Matrix** Water  
**Sample Date** 1/30/2017

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
Trichloroethene (TCE)	< 0.45	ug/l	0.45	1.43	1	8260B		2/2/2017	CJR	1
Trichlorofluoromethane	< 0.64	ug/l	0.64	2.04	1	8260B		2/2/2017	CJR	1
1,2,4-Trimethylbenzene	< 1.14	ug/l	1.14	3.63	1	8260B		2/2/2017	CJR	1
1,3,5-Trimethylbenzene	< 0.91	ug/l	0.91	2.9	1	8260B		2/2/2017	CJR	1
Vinyl Chloride	< 0.19	ug/l	0.19	0.62	1	8260B		2/2/2017	CJR	1
m&p-Xylene	< 1.56	ug/l	1.56	4.95	1	8260B		2/2/2017	CJR	1
o-Xylene	< 0.39	ug/l	0.39	1.25	1	8260B		2/2/2017	CJR	1
SUR - 1,2-Dichloroethane-d4	97	REC %			1	8260B		2/2/2017	CJR	1
SUR - 4-Bromofluorobenzene	99	REC %			1	8260B		2/2/2017	CJR	1
SUR - Dibromofluoromethane	99	REC %			1	8260B		2/2/2017	CJR	1
SUR - Toluene-d8	99	REC %			1	8260B		2/2/2017	CJR	1

Project Name IRGENS-BMO  
 Project # 16722-001

Invoice # E32409

Lab Code 5032409R  
 Sample ID TW-3  
 Sample Matrix Water  
 Sample Date 1/30/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Inorganic										
Metals										
Lead, Dissolved	< 0.8	ug/L	0.8	2.6	1	7421		2/3/2017	CWT	1
Organic										
VOC's										
Benzene	< 0.17	ug/l	0.17	0.55	1	8260B		2/2/2017	CJR	1
Bromobenzene	< 0.43	ug/l	0.43	1.37	1	8260B		2/2/2017	CJR	1
Bromodichloromethane	< 0.31	ug/l	0.31	1	1	8260B		2/2/2017	CJR	1
Bromoform	< 0.49	ug/l	0.49	1.56	1	8260B		2/2/2017	CJR	1
tert-Butylbenzene	< 0.39	ug/l	0.39	1.23	1	8260B		2/2/2017	CJR	1
sec-Butylbenzene	< 0.24	ug/l	0.24	0.76	1	8260B		2/2/2017	CJR	1
n-Butylbenzene	< 0.34	ug/l	0.34	1.08	1	8260B		2/2/2017	CJR	1
Carbon Tetrachloride	< 0.21	ug/l	0.21	0.68	1	8260B		2/2/2017	CJR	1
Chlorobenzene	< 0.27	ug/l	0.27	0.86	1	8260B		2/2/2017	CJR	1
Chloroethane	< 0.5	ug/l	0.5	1.6	1	8260B		2/2/2017	CJR	1
Chloroform	< 0.96	ug/l	0.96	3.04	1	8260B		2/2/2017	CJR	1
Chloromethane	< 1.3	ug/l	1.3	4.15	1	8260B		2/2/2017	CJR	1
2-Chlorotoluene	< 0.36	ug/l	0.36	1.15	1	8260B		2/2/2017	CJR	1
4-Chlorotoluene	< 0.35	ug/l	0.35	1.11	1	8260B		2/2/2017	CJR	1
1,2-Dibromo-3-chloropropane	< 1.88	ug/l	1.88	5.98	1	8260B		2/2/2017	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.44	1	8260B		2/2/2017	CJR	1
1,4-Dichlorobenzene	< 0.42	ug/l	0.42	1.34	1	8260B		2/2/2017	CJR	1
1,3-Dichlorobenzene	< 0.45	ug/l	0.45	1.43	1	8260B		2/2/2017	CJR	1
1,2-Dichlorobenzene	< 0.34	ug/l	0.34	1.09	1	8260B		2/2/2017	CJR	1
Dichlorodifluoromethane	< 0.38	ug/l	0.38	1.2	1	8260B		2/2/2017	CJR	1
1,2-Dichloroethane	< 0.45	ug/l	0.45	1.43	1	8260B		2/2/2017	CJR	1
1,1-Dichloroethane	< 0.42	ug/l	0.42	1.34	1	8260B		2/2/2017	CJR	1
1,1-Dichloroethene	< 0.46	ug/l	0.46	1.47	1	8260B		2/2/2017	CJR	1
cis-1,2-Dichloroethene	< 0.41	ug/l	0.41	1.29	1	8260B		2/2/2017	CJR	1
trans-1,2-Dichloroethene	< 0.35	ug/l	0.35	1.12	1	8260B		2/2/2017	CJR	1
1,2-Dichloropropane	< 0.39	ug/l	0.39	1.24	1	8260B		2/2/2017	CJR	1
2,2-Dichloropropane	< 0.47	ug/l	0.47	1.49	1	8260B		2/2/2017	CJR	1
1,3-Dichloropropane	< 0.49	ug/l	0.49	1.55	1	8260B		2/2/2017	CJR	1
Di-isopropyl ether	< 0.26	ug/l	0.26	0.83	1	8260B		2/2/2017	CJR	1
EDB (1,2-Dibromoethane)	< 0.34	ug/l	0.34	1.09	1	8260B		2/2/2017	CJR	1
Ethylbenzene	< 0.2	ug/l	0.2	0.63	1	8260B		2/2/2017	CJR	1
Hexachlorobutadiene	< 1.47	ug/l	1.47	4.68	1	8260B		2/2/2017	CJR	1
Isopropylbenzene	< 0.29	ug/l	0.29	0.93	1	8260B		2/2/2017	CJR	1
p-Isopropyltoluene	0.42 "J"	ug/l	0.28	0.91	1	8260B		2/2/2017	CJR	1
Methylene chloride	< 0.94	ug/l	0.94	2.98	1	8260B		2/2/2017	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.82	ug/l	0.82	2.6	1	8260B		2/2/2017	CJR	1
Naphthalene	< 2.17	ug/l	2.17	6.9	1	8260B		2/2/2017	CJR	1
n-Propylbenzene	< 0.19	ug/l	0.19	0.62	1	8260B		2/2/2017	CJR	1
1,1,2,2-Tetrachloroethane	< 0.69	ug/l	0.69	2.21	1	8260B		2/2/2017	CJR	1
1,1,1,2-Tetrachloroethane	< 0.47	ug/l	0.47	1.48	1	8260B		2/2/2017	CJR	1
Tetrachloroethene	< 0.48	ug/l	0.48	1.52	1	8260B		2/2/2017	CJR	1
Toluene	< 0.67	ug/l	0.67	2.13	1	8260B		2/2/2017	CJR	1
1,2,4-Trichlorobenzene	< 1.29	ug/l	1.29	4.1	1	8260B		2/2/2017	CJR	1
1,2,3-Trichlorobenzene	< 0.83	ug/l	0.83	2.63	1	8260B		2/2/2017	CJR	1
1,1,1-Trichloroethane	< 0.35	ug/l	0.35	1.11	1	8260B		2/2/2017	CJR	1
1,1,2-Trichloroethane	< 0.65	ug/l	0.65	2.06	1	8260B		2/2/2017	CJR	1

**Project Name** IRGENS-BMO  
**Project #** 16722-001

**Invoice #** E32409

**Lab Code** 5032409R  
**Sample ID** TW-3  
**Sample Matrix** Water  
**Sample Date** 1/30/2017

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
Trichloroethene (TCE)	< 0.45	ug/l	0.45	1.43	1	8260B		2/2/2017	CJR	1
Trichlorofluoromethane	< 0.64	ug/l	0.64	2.04	1	8260B		2/2/2017	CJR	1
1,2,4-Trimethylbenzene	< 1.14	ug/l	1.14	3.63	1	8260B		2/2/2017	CJR	1
1,3,5-Trimethylbenzene	< 0.91	ug/l	0.91	2.9	1	8260B		2/2/2017	CJR	1
Vinyl Chloride	< 0.19	ug/l	0.19	0.62	1	8260B		2/2/2017	CJR	1
m&p-Xylene	< 1.56	ug/l	1.56	4.95	1	8260B		2/2/2017	CJR	1
o-Xylene	< 0.39	ug/l	0.39	1.25	1	8260B		2/2/2017	CJR	1
SUR - 1,2-Dichloroethane-d4	104	REC %			1	8260B		2/2/2017	CJR	1
SUR - 4-Bromofluorobenzene	101	REC %			1	8260B		2/2/2017	CJR	1
SUR - Dibromofluoromethane	103	REC %			1	8260B		2/2/2017	CJR	1
SUR - Toluene-d8	100	REC %			1	8260B		2/2/2017	CJR	1

Project Name IRGENS-BMO  
 Project # 16722-001

Invoice # E32409

Lab Code 5032409S  
 Sample ID TW-7  
 Sample Matrix Water  
 Sample Date 1/30/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Inorganic										
Metals										
Lead, Dissolved	< 4	ug/L	4	13	5	7421		2/3/2017	CWT	1 49
Organic										
PCB'S										
PCB-1016	< 0.1	ug/l	0.1	0.333	1	EPA 8082		2/6/2017	ESC	1
PCB-1221	< 0.243	ug/l	0.073	0.243	1	EPA 8082		2/6/2017	ESC	1
PCB-1232	< 0.14	ug/l	0.042	0.14	1	EPA 8082		2/6/2017	ESC	1
PCB-1242	< 0.047	ug/l	0.047	0.157	1	EPA 8082		2/6/2017	ESC	1
PCB-1248	< 0.086	ug/l	0.086	0.287	1	EPA 8082		2/6/2017	ESC	1
PCB-1254	< 0.047	ug/l	0.047	0.157	1	EPA 8082		2/6/2017	ESC	1
PCB-1260	< 0.12	ug/l	0.12	0.4	1	EPA 8082		2/6/2017	ESC	1
VOC's										
Benzene	< 1.7	ug/l	1.7	5.5	10	8260B		2/2/2017	CJR	1 49
Bromobenzene	< 4.3	ug/l	4.3	13.7	10	8260B		2/2/2017	CJR	1 49
Bromodichloromethane	< 3.1	ug/l	3.1	10	10	8260B		2/2/2017	CJR	1 49
Bromoform	< 4.9	ug/l	4.9	15.6	10	8260B		2/2/2017	CJR	1 49
tert-Butylbenzene	< 3.9	ug/l	3.9	12.3	10	8260B		2/2/2017	CJR	1 49
sec-Butylbenzene	< 2.4	ug/l	2.4	7.6	10	8260B		2/2/2017	CJR	1 49
n-Butylbenzene	< 3.4	ug/l	3.4	10.8	10	8260B		2/2/2017	CJR	1 49
Carbon Tetrachloride	< 2.1	ug/l	2.1	6.8	10	8260B		2/2/2017	CJR	1 49
Chlorobenzene	< 2.7	ug/l	2.7	8.6	10	8260B		2/2/2017	CJR	1 49
Chloroethane	< 5	ug/l	5	16	10	8260B		2/2/2017	CJR	1 49
Chloroform	< 9.6	ug/l	9.6	30.4	10	8260B		2/2/2017	CJR	1 49
Chloromethane	< 13	ug/l	13	41.5	10	8260B		2/2/2017	CJR	1 49
2-Chlorotoluene	< 3.6	ug/l	3.6	11.5	10	8260B		2/2/2017	CJR	1 49
4-Chlorotoluene	< 3.5	ug/l	3.5	11.1	10	8260B		2/2/2017	CJR	1 49
1,2-Dibromo-3-chloropropane	< 18.8	ug/l	18.8	59.8	10	8260B		2/2/2017	CJR	1 49
Dibromochloromethane	< 4.5	ug/l	4.5	14.4	10	8260B		2/2/2017	CJR	1 49
1,4-Dichlorobenzene	< 4.2	ug/l	4.2	13.4	10	8260B		2/2/2017	CJR	1 49
1,3-Dichlorobenzene	< 4.5	ug/l	4.5	14.3	10	8260B		2/2/2017	CJR	1 49
1,2-Dichlorobenzene	< 3.4	ug/l	3.4	10.9	10	8260B		2/2/2017	CJR	1 49
Dichlorodifluoromethane	< 3.8	ug/l	3.8	12	10	8260B		2/2/2017	CJR	1 49
1,2-Dichloroethane	< 4.5	ug/l	4.5	14.3	10	8260B		2/2/2017	CJR	1 49
1,1-Dichloroethane	< 4.2	ug/l	4.2	13.4	10	8260B		2/2/2017	CJR	1 49
1,1-Dichloroethene	< 4.6	ug/l	4.6	14.7	10	8260B		2/2/2017	CJR	1 49
cis-1,2-Dichloroethene	< 4.1	ug/l	4.1	12.9	10	8260B		2/2/2017	CJR	1 49
trans-1,2-Dichloroethene	< 3.5	ug/l	3.5	11.2	10	8260B		2/2/2017	CJR	1 49
1,2-Dichloropropane	< 3.9	ug/l	3.9	12.4	10	8260B		2/2/2017	CJR	1 49
2,2-Dichloropropane	< 4.7	ug/l	4.7	14.9	10	8260B		2/2/2017	CJR	1 49
1,3-Dichloropropane	< 4.9	ug/l	4.9	15.5	10	8260B		2/2/2017	CJR	1 49
Di-isopropyl ether	< 2.6	ug/l	2.6	8.3	10	8260B		2/2/2017	CJR	1 49
EDB (1,2-Dibromoethane)	< 3.4	ug/l	3.4	10.9	10	8260B		2/2/2017	CJR	1 49
Ethylbenzene	< 2	ug/l	2	6.3	10	8260B		2/2/2017	CJR	1 49
Hexachlorobutadiene	< 14.7	ug/l	14.7	46.8	10	8260B		2/2/2017	CJR	1 49
Isopropylbenzene	< 2.9	ug/l	2.9	9.3	10	8260B		2/2/2017	CJR	1 49
p-Isopropyltoluene	< 2.8	ug/l	2.8	9.1	10	8260B		2/2/2017	CJR	1 49
Methylene chloride	< 9.4	ug/l	9.4	29.8	10	8260B		2/2/2017	CJR	1 49
Methyl tert-butyl ether (MTBE)	< 8.2	ug/l	8.2	26	10	8260B		2/2/2017	CJR	1 49
Naphthalene	< 21.7	ug/l	21.7	69	10	8260B		2/2/2017	CJR	1 49
n-Propylbenzene	< 1.9	ug/l	1.9	6.2	10	8260B		2/2/2017	CJR	1 49

**Project Name** IRGENS-BMO  
**Project #** 16722-001

**Invoice #** E32409

**Lab Code** 5032409S  
**Sample ID** TW-7  
**Sample Matrix** Water  
**Sample Date** 1/30/2017

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
1,1,2,2-Tetrachloroethane	< 6.9	ug/l	6.9	22.1	10	8260B		2/2/2017	CJR	1 49
1,1,1,2-Tetrachloroethane	< 4.7	ug/l	4.7	14.8	10	8260B		2/2/2017	CJR	1 49
Tetrachloroethene	< 4.8	ug/l	4.8	15.2	10	8260B		2/2/2017	CJR	1 49
Toluene	< 6.7	ug/l	6.7	21.3	10	8260B		2/2/2017	CJR	1 49
1,2,4-Trichlorobenzene	< 12.9	ug/l	12.9	41	10	8260B		2/2/2017	CJR	1 49
1,2,3-Trichlorobenzene	< 8.3	ug/l	8.3	26.3	10	8260B		2/2/2017	CJR	1 49
1,1,1-Trichloroethane	< 3.5	ug/l	3.5	11.1	10	8260B		2/2/2017	CJR	1 49
1,1,2-Trichloroethane	< 6.5	ug/l	6.5	20.6	10	8260B		2/2/2017	CJR	1 49
Trichloroethene (TCE)	< 4.5	ug/l	4.5	14.3	10	8260B		2/2/2017	CJR	1 49
Trichlorofluoromethane	< 6.4	ug/l	6.4	20.4	10	8260B		2/2/2017	CJR	1 49
1,2,4-Trimethylbenzene	< 11.4	ug/l	11.4	36.3	10	8260B		2/2/2017	CJR	1 49
1,3,5-Trimethylbenzene	< 9.1	ug/l	9.1	29	10	8260B		2/2/2017	CJR	1 49
Vinyl Chloride	< 1.9	ug/l	1.9	6.2	10	8260B		2/2/2017	CJR	1 49
m&p-Xylene	< 15.6	ug/l	15.6	49.5	10	8260B		2/2/2017	CJR	1 49
o-Xylene	< 3.9	ug/l	3.9	12.5	10	8260B		2/2/2017	CJR	1 49
SUR - 1,2-Dichloroethane-d4	99	REC %				10 8260B		2/2/2017	CJR	1 49
SUR - 4-Bromofluorobenzene	99	REC %				10 8260B		2/2/2017	CJR	1 49
SUR - Dibromofluoromethane	99	REC %				10 8260B		2/2/2017	CJR	1 49
SUR - Toluene-d8	100	REC %				10 8260B		2/2/2017	CJR	1 49

Project Name IRGENS-BMO  
 Project # 16722-001

Invoice # E32409

Lab Code 5032409T  
 Sample ID TW-8  
 Sample Matrix Water  
 Sample Date 1/30/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Inorganic										
Metals										
Lead, Dissolved	< 0.8	ug/L	0.8	2.6	1	7421		2/3/2017	CWT	1
Organic										
VOC's										
Benzene	< 1.7	ug/l	1.7	5.5	10	8260B		2/2/2017	CJR	1 49
Bromobenzene	< 4.3	ug/l	4.3	13.7	10	8260B		2/2/2017	CJR	1 49
Bromodichloromethane	< 3.1	ug/l	3.1	10	10	8260B		2/2/2017	CJR	1 49
Bromoform	< 4.9	ug/l	4.9	15.6	10	8260B		2/2/2017	CJR	1 49
tert-Butylbenzene	< 3.9	ug/l	3.9	12.3	10	8260B		2/2/2017	CJR	1 49
sec-Butylbenzene	< 2.4	ug/l	2.4	7.6	10	8260B		2/2/2017	CJR	1 49
n-Butylbenzene	< 3.4	ug/l	3.4	10.8	10	8260B		2/2/2017	CJR	1 49
Carbon Tetrachloride	< 2.1	ug/l	2.1	6.8	10	8260B		2/2/2017	CJR	1 49
Chlorobenzene	< 2.7	ug/l	2.7	8.6	10	8260B		2/2/2017	CJR	1 49
Chloroethane	< 5	ug/l	5	16	10	8260B		2/2/2017	CJR	1 49
Chloroform	< 9.6	ug/l	9.6	30.4	10	8260B		2/2/2017	CJR	1 49
Chloromethane	< 13	ug/l	13	41.5	10	8260B		2/2/2017	CJR	1 49
2-Chlorotoluene	< 3.6	ug/l	3.6	11.5	10	8260B		2/2/2017	CJR	1 49
4-Chlorotoluene	< 3.5	ug/l	3.5	11.1	10	8260B		2/2/2017	CJR	1 49
1,2-Dibromo-3-chloropropane	< 18.8	ug/l	18.8	59.8	10	8260B		2/2/2017	CJR	1 49
Dibromochloromethane	< 4.5	ug/l	4.5	14.4	10	8260B		2/2/2017	CJR	1 49
1,4-Dichlorobenzene	< 4.2	ug/l	4.2	13.4	10	8260B		2/2/2017	CJR	1 49
1,3-Dichlorobenzene	< 4.5	ug/l	4.5	14.3	10	8260B		2/2/2017	CJR	1 49
1,2-Dichlorobenzene	< 3.4	ug/l	3.4	10.9	10	8260B		2/2/2017	CJR	1 49
Dichlorodifluoromethane	< 3.8	ug/l	3.8	12	10	8260B		2/2/2017	CJR	1 49
1,2-Dichloroethane	< 4.5	ug/l	4.5	14.3	10	8260B		2/2/2017	CJR	1 49
1,1-Dichloroethane	< 4.2	ug/l	4.2	13.4	10	8260B		2/2/2017	CJR	1 49
1,1-Dichloroethene	< 4.6	ug/l	4.6	14.7	10	8260B		2/2/2017	CJR	1 49
cis-1,2-Dichloroethene	< 4.1	ug/l	4.1	12.9	10	8260B		2/2/2017	CJR	1 49
trans-1,2-Dichloroethene	< 3.5	ug/l	3.5	11.2	10	8260B		2/2/2017	CJR	1 49
1,2-Dichloropropane	< 3.9	ug/l	3.9	12.4	10	8260B		2/2/2017	CJR	1 49
2,2-Dichloropropane	< 4.7	ug/l	4.7	14.9	10	8260B		2/2/2017	CJR	1 49
1,3-Dichloropropane	< 4.9	ug/l	4.9	15.5	10	8260B		2/2/2017	CJR	1 49
Di-isopropyl ether	< 2.6	ug/l	2.6	8.3	10	8260B		2/2/2017	CJR	1 49
EDB (1,2-Dibromoethane)	< 3.4	ug/l	3.4	10.9	10	8260B		2/2/2017	CJR	1 49
Ethylbenzene	< 2	ug/l	2	6.3	10	8260B		2/2/2017	CJR	1 49
Hexachlorobutadiene	< 14.7	ug/l	14.7	46.8	10	8260B		2/2/2017	CJR	1 49
Isopropylbenzene	< 2.9	ug/l	2.9	9.3	10	8260B		2/2/2017	CJR	1 49
p-Isopropyltoluene	< 2.8	ug/l	2.8	9.1	10	8260B		2/2/2017	CJR	1 49
Methylene chloride	< 9.4	ug/l	9.4	29.8	10	8260B		2/2/2017	CJR	1 49
Methyl tert-butyl ether (MTBE)	< 8.2	ug/l	8.2	26	10	8260B		2/2/2017	CJR	1 49
Naphthalene	< 21.7	ug/l	21.7	69	10	8260B		2/2/2017	CJR	1 49
n-Propylbenzene	< 1.9	ug/l	1.9	6.2	10	8260B		2/2/2017	CJR	1 49
1,1,2,2-Tetrachloroethane	< 6.9	ug/l	6.9	22.1	10	8260B		2/2/2017	CJR	1 49
1,1,1,2-Tetrachloroethane	< 4.7	ug/l	4.7	14.8	10	8260B		2/2/2017	CJR	1 49
Tetrachloroethene	< 4.8	ug/l	4.8	15.2	10	8260B		2/2/2017	CJR	1 49
Toluene	< 6.7	ug/l	6.7	21.3	10	8260B		2/2/2017	CJR	1 49
1,2,4-Trichlorobenzene	< 12.9	ug/l	12.9	41	10	8260B		2/2/2017	CJR	1 49
1,2,3-Trichlorobenzene	< 8.3	ug/l	8.3	26.3	10	8260B		2/2/2017	CJR	1 49
1,1,1-Trichloroethane	< 3.5	ug/l	3.5	11.1	10	8260B		2/2/2017	CJR	1 49
1,1,2-Trichloroethane	< 6.5	ug/l	6.5	20.6	10	8260B		2/2/2017	CJR	1 49

**Project Name** IRGENS-BMO  
**Project #** 16722-001

**Invoice #** E32409

**Lab Code** 5032409T  
**Sample ID** TW-8  
**Sample Matrix** Water  
**Sample Date** 1/30/2017

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
Trichloroethene (TCE)	< 4.5	ug/l	4.5	14.3	10	8260B		2/2/2017	CJR	1 49
Trichlorofluoromethane	< 6.4	ug/l	6.4	20.4	10	8260B		2/2/2017	CJR	1 49
1,2,4-Trimethylbenzene	< 11.4	ug/l	11.4	36.3	10	8260B		2/2/2017	CJR	1 49
1,3,5-Trimethylbenzene	< 9.1	ug/l	9.1	29	10	8260B		2/2/2017	CJR	1 49
Vinyl Chloride	< 1.9	ug/l	1.9	6.2	10	8260B		2/2/2017	CJR	1 49
m&p-Xylene	< 15.6	ug/l	15.6	49.5	10	8260B		2/2/2017	CJR	1 49
o-Xylene	< 3.9	ug/l	3.9	12.5	10	8260B		2/2/2017	CJR	1 49
SUR - 1,2-Dichloroethane-d4	101	REC %			10	8260B		2/2/2017	CJR	1 49
SUR - 4-Bromofluorobenzene	101	REC %			10	8260B		2/2/2017	CJR	1 49
SUR - Dibromofluoromethane	100	REC %			10	8260B		2/2/2017	CJR	1 49
SUR - Toluene-d8	99	REC %			10	8260B		2/2/2017	CJR	1 49

Project Name IRGENS-BMO  
 Project # 16722-001

Invoice # E32409

Lab Code 5032409U  
 Sample ID SB-5  
 Sample Matrix Water  
 Sample Date 1/30/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
VOC's										
Benzene	< 1.7	ug/l	1.7	5.5	10	8260B		2/2/2017	CJR	1 49
Bromobenzene	< 4.3	ug/l	4.3	13.7	10	8260B		2/2/2017	CJR	1 49
Bromodichloromethane	< 3.1	ug/l	3.1	10	10	8260B		2/2/2017	CJR	1 49
Bromoform	< 4.9	ug/l	4.9	15.6	10	8260B		2/2/2017	CJR	1 49
tert-Butylbenzene	< 3.9	ug/l	3.9	12.3	10	8260B		2/2/2017	CJR	1 49
sec-Butylbenzene	< 2.4	ug/l	2.4	7.6	10	8260B		2/2/2017	CJR	1 49
n-Butylbenzene	< 3.4	ug/l	3.4	10.8	10	8260B		2/2/2017	CJR	1 49
Carbon Tetrachloride	< 2.1	ug/l	2.1	6.8	10	8260B		2/2/2017	CJR	1 49
Chlorobenzene	< 2.7	ug/l	2.7	8.6	10	8260B		2/2/2017	CJR	1 49
Chloroethane	< 5	ug/l	5	16	10	8260B		2/2/2017	CJR	1 49
Chloroform	< 9.6	ug/l	9.6	30.4	10	8260B		2/2/2017	CJR	1 49
Chloromethane	< 13	ug/l	13	41.5	10	8260B		2/2/2017	CJR	1 49
2-Chlorotoluene	< 3.6	ug/l	3.6	11.5	10	8260B		2/2/2017	CJR	1 49
4-Chlorotoluene	< 3.5	ug/l	3.5	11.1	10	8260B		2/2/2017	CJR	1 49
1,2-Dibromo-3-chloropropane	< 18.8	ug/l	18.8	59.8	10	8260B		2/2/2017	CJR	1 49
Dibromochloromethane	< 4.5	ug/l	4.5	14.4	10	8260B		2/2/2017	CJR	1 49
1,4-Dichlorobenzene	< 4.2	ug/l	4.2	13.4	10	8260B		2/2/2017	CJR	1 49
1,3-Dichlorobenzene	< 4.5	ug/l	4.5	14.3	10	8260B		2/2/2017	CJR	1 49
1,2-Dichlorobenzene	< 3.4	ug/l	3.4	10.9	10	8260B		2/2/2017	CJR	1 49
Dichlorodifluoromethane	< 3.8	ug/l	3.8	12	10	8260B		2/2/2017	CJR	1 49
1,2-Dichloroethane	< 4.5	ug/l	4.5	14.3	10	8260B		2/2/2017	CJR	1 49
1,1-Dichloroethane	< 4.2	ug/l	4.2	13.4	10	8260B		2/2/2017	CJR	1 49
1,1-Dichloroethene	< 4.6	ug/l	4.6	14.7	10	8260B		2/2/2017	CJR	1 49
cis-1,2-Dichloroethene	< 4.1	ug/l	4.1	12.9	10	8260B		2/2/2017	CJR	1 49
trans-1,2-Dichloroethene	< 3.5	ug/l	3.5	11.2	10	8260B		2/2/2017	CJR	1 49
1,2-Dichloropropane	< 3.9	ug/l	3.9	12.4	10	8260B		2/2/2017	CJR	1 49
2,2-Dichloropropane	< 4.7	ug/l	4.7	14.9	10	8260B		2/2/2017	CJR	1 49
1,3-Dichloropropane	< 4.9	ug/l	4.9	15.5	10	8260B		2/2/2017	CJR	1 49
Di-isopropyl ether	< 2.6	ug/l	2.6	8.3	10	8260B		2/2/2017	CJR	1 49
EDB (1,2-Dibromoethane)	< 3.4	ug/l	3.4	10.9	10	8260B		2/2/2017	CJR	1 49
Ethylbenzene	< 2	ug/l	2	6.3	10	8260B		2/2/2017	CJR	1 49
Hexachlorobutadiene	< 14.7	ug/l	14.7	46.8	10	8260B		2/2/2017	CJR	1 49
Isopropylbenzene	< 2.9	ug/l	2.9	9.3	10	8260B		2/2/2017	CJR	1 49
p-Isopropyltoluene	< 2.8	ug/l	2.8	9.1	10	8260B		2/2/2017	CJR	1 49
Methylene chloride	< 9.4	ug/l	9.4	29.8	10	8260B		2/2/2017	CJR	1 49
Methyl tert-butyl ether (MTBE)	< 8.2	ug/l	8.2	26	10	8260B		2/2/2017	CJR	1 49
Naphthalene	< 21.7	ug/l	21.7	69	10	8260B		2/2/2017	CJR	1 49
n-Propylbenzene	< 1.9	ug/l	1.9	6.2	10	8260B		2/2/2017	CJR	1 49
1,1,2,2-Tetrachloroethane	< 6.9	ug/l	6.9	22.1	10	8260B		2/2/2017	CJR	1 49
1,1,1,2-Tetrachloroethane	< 4.7	ug/l	4.7	14.8	10	8260B		2/2/2017	CJR	1 49
Tetrachloroethene	< 4.8	ug/l	4.8	15.2	10	8260B		2/2/2017	CJR	1 49
Toluene	< 6.7	ug/l	6.7	21.3	10	8260B		2/2/2017	CJR	1 49
1,2,4-Trichlorobenzene	< 12.9	ug/l	12.9	41	10	8260B		2/2/2017	CJR	1 49
1,2,3-Trichlorobenzene	< 8.3	ug/l	8.3	26.3	10	8260B		2/2/2017	CJR	1 49
1,1,1-Trichloroethane	< 3.5	ug/l	3.5	11.1	10	8260B		2/2/2017	CJR	1 49
1,1,2-Trichloroethane	< 6.5	ug/l	6.5	20.6	10	8260B		2/2/2017	CJR	1 49
Trichloroethene (TCE)	< 4.5	ug/l	4.5	14.3	10	8260B		2/2/2017	CJR	1 49
Trichlorofluoromethane	< 6.4	ug/l	6.4	20.4	10	8260B		2/2/2017	CJR	1 49
1,2,4-Trimethylbenzene	< 11.4	ug/l	11.4	36.3	10	8260B		2/2/2017	CJR	1 49
1,3,5-Trimethylbenzene	< 9.1	ug/l	9.1	29	10	8260B		2/2/2017	CJR	1 49



Project Name IRGENS-BMO  
Project # 16722-001

Invoice # E32409

Lab Code 5032409U  
Sample ID SB-5  
Sample Matrix Water  
Sample Date 1/30/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Vinyl Chloride	< 1.9	ug/l	1.9	6.2	10	8260B		2/2/2017	CJR	1 49
m&p-Xylene	< 15.6	ug/l	15.6	49.5	10	8260B		2/2/2017	CJR	1 49
o-Xylene	< 3.9	ug/l	3.9	12.5	10	8260B		2/2/2017	CJR	1 49
SUR - Toluene-d8	98	REC %			10	8260B		2/2/2017	CJR	1 49
SUR - 1,2-Dichloroethane-d4	96	REC %			10	8260B		2/2/2017	CJR	1 49
SUR - 4-Bromofluorobenzene	101	REC %			10	8260B		2/2/2017	CJR	1 49
SUR - Dibromofluoromethane	101	REC %			10	8260B		2/2/2017	CJR	1 49

"J" Flag: Analyte detected between LOD and LOQ

LOD Limit of Detection

LOQ Limit of Quantitation

**Code**      **Comment**

- 1      Laboratory QC within limits.
- 4      The continuing calibration standard not within established limits.
- 46     Insufficient sample to reshoot.
- 49     Sample diluted to compensate for matrix interference.

CWT denotes sub contract lab - Certification #445126660

ESC denotes sub contract lab - Certification #998093910

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight. Subcontracted results are denoted by SUB in the analyst field.

Authorized Signature



21-Apr-2017

Cory Katzban  
The Sigma Group  
1300 W. Canal Street  
Milwaukee, WI 53233

Re: **Irgens - BMO (16722)**

Work Order: **1704959**

Dear Cory,

ALS Environmental received 7 samples on 18-Apr-2017 09:00 AM for the analyses presented in the following report.

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

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

The total number of pages in this report is 38.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Chad Whelton".

Electronically approved by: Bill Carey

Chad Whelton  
Project Manager

Certificate No: WI: 399084510

### Report of Laboratory Analysis

ADDRESS 3352 128th Ave Holland, Michigan 49424 | PHONE (616) 399-6070 | FAX (616) 399-6185

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental

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RIGHT SOLUTIONS RIGHT PARTNER

**Client:** The Sigma Group  
**Project:** Irgens - BMO (16722)  
**Work Order:** 1704959

**Work Order Sample Summary**

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1704959-01	SB-2-9 (2-4')	Soil		4/13/2017 11:08	4/18/2017 09:00	<input type="checkbox"/>
1704959-02	SB-2-10 (2-4')	Soil		4/13/2017 11:38	4/18/2017 09:00	<input type="checkbox"/>
1704959-03	SB-2-11 (2-4')	Soil		4/13/2017 12:05	4/18/2017 09:00	<input type="checkbox"/>
1704959-04	SB-2-12 (2-4')	Soil		4/13/2017 12:34	4/18/2017 09:00	<input type="checkbox"/>
1704959-05	Comp Outdoor	Soil		4/13/2017 14:00	4/18/2017 09:00	<input type="checkbox"/>
1704959-06	Comp Indoor	Soil		4/14/2017 16:00	4/18/2017 09:00	<input type="checkbox"/>
1704959-07	Comp Indoor	Tclp Extract		4/14/2017 16:00	4/18/2017 09:00	<input type="checkbox"/>

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

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

<u>Units Reported</u>	<u>Description</u>
% of sample	Percent of Sample
°F	Degrees Fahrenheit
µg/Kg-dry	Micrograms per Kilogram Dry Weight
µg/L	Micrograms per Liter
mg/Kg-dry	Milligrams per Kilogram Dry Weight
mg/L	Milligrams per Liter
s.u.	Standard Units

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**Client:** The Sigma Group  
**Project:** Irgens - BMO (16722)  
**Work Order:** 1704959

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**Case Narrative**

Samples for the above noted Work Order were received on 4/18/2017. The attached "Sample Receipt Checklist" documents the status of custody seals, container integrity, preservation, and temperature compliance.

Samples were analyzed according to the analytical methodology previously transmitted in the "Work Order Acknowledgement". Methodologies are also documented in the "Analytical Result" section for each sample. Quality control results are listed in the "QC Report" section. Sample association for the reported quality control is located at the end of each batch summary. If applicable, results are appropriately qualified in the Analytical Result and QC Report sections. The "Qualifiers" section documents the various qualifiers, units, and acronyms utilized in reporting. A copy of the laboratory's scope of accreditation is available upon request.

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

**Volatile Organics:**

No other deviations or anomalies were noted.

**Extractable Organics:**

No other deviations or anomalies were noted.

**Metals:**

Batch 100784, Method HG\_7471\_S, Sample 1704959-05AMS: The MS recovery was above the upper control limit. The corresponding result in the parent sample was non-detect, therefore no qualification is necessary: Hg

Batch 100784, Method HG\_7471\_S, Sample 1704959-05AMSD: The MSD recovery was above the upper control limit. The corresponding result in the parent sample may be biased high for this analyte: Hg

Batch 100819, Method ICP\_6020\_S, Sample 1704959-05AMS: The MS recovery was outside of the control limit; however, the result in the parent sample is greater than 4x the spike amount. No qualification is required for this analyte: Pb

Batch 100819, Method ICP\_6020\_S, Sample 1704959-05AMS: The MS recovery was above the upper control limit. The corresponding result in the parent sample may be biased high for this analyte: Cr

Batch 100819, Method ICP\_6020\_S, Sample 1704959-05AMSD: The MSD recovery was

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**Client:** The Sigma Group  
**Project:** Irgens - BMO (16722)  
**Work Order:** 1704959

**Case Narrative**

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outside of the control limit; however, the result in the parent sample is greater than 4x the spike amount. No qualification is required for this analyte: Pb

Batch 100819, Method ICP\_6020\_S, Sample 1704959-05AMSD: The RPD between the MS and MSD was outside the control limit. The corresponding result in the parent sample should be considered estimated for this analyte: Pb

Batch 100819, Method ICP\_6020\_S, Sample 1704959-05AMSD: The MSD recovery was above the upper control limit. The corresponding result in the parent sample may be biased high for this analyte: Cr

Wet Chemistry:  
No other deviations or anomalies were noted.

# ALS Group, USA

Date: 21-Apr-17

**Client:** The Sigma Group  
**Project:** Irgens - BMO (16722)  
**Sample ID:** SB-2-9 (2-4')  
**Collection Date:** 4/13/2017 11:08 AM

**Work Order:** 1704959  
**Lab ID:** 1704959-01  
**Matrix:** SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
<b>ORGANIC COMPOUNDS BY GC-FID</b>							Analyst: <b>KYM</b>
Ethylene glycol	U		1.3	5.1	mg/Kg-dry	1	4/18/2017 16:29
<b>MOISTURE</b>							Analyst: <b>EDL</b>
Moisture	7.7		0.025	0.050	% of sample	1	4/18/2017 14:35

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

# ALS Group, USA

Date: 21-Apr-17

**Client:** The Sigma Group  
**Project:** Irgens - BMO (16722)  
**Sample ID:** SB-2-10 (2-4')  
**Collection Date:** 4/13/2017 11:38 AM

**Work Order:** 1704959  
**Lab ID:** 1704959-02  
**Matrix:** SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
<b>ORGANIC COMPOUNDS BY GC-FID</b>							
Ethylene glycol	U		1.3	5.1	mg/Kg-dry	1	4/18/2017 16:40
<b>MOISTURE</b>							
Moisture	6.4		0.025	0.050	% of sample	1	4/18/2017 14:35

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



# ALS Group, USA

Date: 21-Apr-17

**Client:** The Sigma Group  
**Project:** Irgens - BMO (16722)  
**Sample ID:** SB-2-11 (2-4')  
**Collection Date:** 4/13/2017 12:05 PM

**Work Order:** 1704959  
**Lab ID:** 1704959-03  
**Matrix:** SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
<b>ORGANIC COMPOUNDS BY GC-FID</b>							
Ethylene glycol	U		1.4	5.5	mg/Kg-dry	1	4/18/2017 16:50
<b>MOISTURE</b>							
Moisture	11		0.025	0.050	% of sample	1	4/18/2017 14:35

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

# ALS Group, USA

Date: 21-Apr-17

**Client:** The Sigma Group  
**Project:** Irgens - BMO (16722)  
**Sample ID:** SB-2-12 (2-4')  
**Collection Date:** 4/13/2017 12:34 PM

**Work Order:** 1704959  
**Lab ID:** 1704959-04  
**Matrix:** SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
<b>ORGANIC COMPOUNDS BY GC-FID</b>							
Ethylene glycol	U		1.3	5.1	mg/Kg-dry	1	4/18/2017 17:33
<b>MOISTURE</b>							
Moisture	6.9		0.025	0.050	% of sample	1	4/18/2017 14:35

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

**ALS Group, USA**

Date: 21-Apr-17

**Client:** The Sigma Group  
**Project:** Irgens - BMO (16722)  
**Sample ID:** Comp Outdoor  
**Collection Date:** 4/13/2017 02:00 PM

**Work Order:** 1704959  
**Lab ID:** 1704959-05  
**Matrix:** SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
<b>MERCURY BY CVAA</b>			Method: SW7471B			Prep: SW7471 / 4/18/17	Analyst: <b>JJB</b>
Mercury	0.065		0.0026	0.016	mg/Kg-dry	1	4/19/2017 18:49
<b>METALS BY ICP-MS</b>			Method: SW6020A			Prep: SW3050B / 4/19/17	Analyst: <b>JF</b>
Arsenic	3.4		0.25	1.7	mg/Kg-dry	4	4/20/2017 00:45
Barium	52		0.24	1.7	mg/Kg-dry	4	4/20/2017 00:45
Cadmium	0.070	J	0.014	0.69	mg/Kg-dry	4	4/20/2017 00:45
Chromium	6.4		0.082	1.7	mg/Kg-dry	4	4/20/2017 00:45
Lead	350		0.027	1.7	mg/Kg-dry	4	4/20/2017 00:45
Selenium	U		0.51	1.7	mg/Kg-dry	4	4/20/2017 00:45
Silver	0.031	J	0.014	1.7	mg/Kg-dry	4	4/20/2017 00:45
<b>MOISTURE</b>			Method: SW3550C				Analyst: <b>EDL</b>
Moisture	6.3		0.025	0.050	% of sample	1	4/18/2017 14:35

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

# ALS Group, USA

Date: 21-Apr-17

**Client:** The Sigma Group  
**Project:** Irgens - BMO (16722)  
**Sample ID:** Comp Indoor  
**Collection Date:** 4/14/2017 04:00 PM

**Work Order:** 1704959  
**Lab ID:** 1704959-06  
**Matrix:** SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>			Method: <b>PUBL-SW-141</b>		Prep: PUBL-SW-141 / 4/19/17 Analyst: <b>IT</b>		
<b>DRO (C10-C28)</b>	<b>11</b>		<b>0.53</b>	<b>5.3</b>	<b>mg/Kg-dry</b>	1	4/19/2017 16:28
<b>PCBS</b>			Method: <b>SW8082</b>		Prep: SW3546 / 4/19/17 Analyst: <b>EB</b>		
Aroclor 1016	U		9.0	70	µg/Kg-dry	1	4/20/2017 20:12
Aroclor 1221	U		9.0	70	µg/Kg-dry	1	4/20/2017 20:12
Aroclor 1232	U		9.0	70	µg/Kg-dry	1	4/20/2017 20:12
Aroclor 1242	U		9.0	70	µg/Kg-dry	1	4/20/2017 20:12
Aroclor 1248	U		9.0	70	µg/Kg-dry	1	4/20/2017 20:12
Aroclor 1254	U		6.3	70	µg/Kg-dry	1	4/20/2017 20:12
<b>Aroclor 1260</b>	<b>43</b>	J	<b>6.3</b>	<b>70</b>	<b>µg/Kg-dry</b>	1	4/20/2017 20:12
Aroclor 1262	U		6.3	70	µg/Kg-dry	1	4/20/2017 20:12
Aroclor 1268	U		6.3	70	µg/Kg-dry	1	4/20/2017 20:12
Surr: Decachlorobiphenyl	81.5			40-140	%REC	1	4/20/2017 20:12
Surr: Tetrachloro-m-xylene	78.5			45-124	%REC	1	4/20/2017 20:12
<b>CYANIDE, REACTIVE</b>			Method: <b>SW7.3.3.2</b>		Analyst: <b>EE</b>		
Cyanide, Reactive	U		19	110	mg/Kg-dry	1	4/20/2017 14:00
<b>FLASHPOINT/IGNITABILITY ANALYSIS</b>			Method: <b>SW1010A</b>		Analyst: <b>RZM</b>		
Flashpoint/Ignitability	>200		1.00	1.00	°F	1	4/20/2017 09:25
<b>MOISTURE</b>			Method: <b>SW3550C</b>		Analyst: <b>EDL</b>		
Moisture	7.3		0.025	0.050	% of sample	1	4/18/2017 16:28
<b>PH</b>			Method: <b>SW9045D</b>		Prep: EXTRACT / 4/19/17 Analyst: <b>RZM</b>		
pH	8.33		0.10	0.100	s.u.	1	4/20/2017 10:00
<b>SULFIDE, REACTIVE</b>			Method: <b>SW7.3.4.2</b>		Analyst: <b>EE</b>		
Sulfide, Reactive	U		40	110	mg/Kg-dry	1	4/20/2017 14:00

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

**ALS Group, USA**

Date: 21-Apr-17

**Client:** The Sigma Group  
**Project:** Irgens - BMO (16722)  
**Sample ID:** Comp Indoor  
**Collection Date:** 4/14/2017 04:00 PM

**Work Order:** 1704959  
**Lab ID:** 1704959-07  
**Matrix:** TCLP EXTRACT

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
<b>TCLP MERCURY BY CVAA</b>			Method: <b>SW7470A</b>		Prep: SW7470 / 4/19/17		Analyst: <b>JJB</b>
Mercury	U		0.00019	0.0020	mg/L	1	4/19/2017 18:22
<b>TCLP METALS ANALYSIS BY ICP-MS</b>			Method: <b>SW6020A</b>		Prep: SW3005A / 4/19/17		Analyst: <b>RH</b>
Arsenic	U		0.0087	0.050	mg/L	1	4/20/2017 15:42
<b>Barium</b>	<b>0.24</b>		<b>0.022</b>	<b>0.050</b>	<b>mg/L</b>	1	4/20/2017 15:42
<b>Cadmium</b>	<b>0.00083</b>	J	<b>0.00050</b>	<b>0.0020</b>	<b>mg/L</b>	1	4/20/2017 15:42
Chromium	U		0.0065	0.050	mg/L	1	4/20/2017 15:42
<b>Copper</b>	<b>0.0053</b>	J	<b>0.0028</b>	<b>0.050</b>	<b>mg/L</b>	1	4/20/2017 15:42
Lead	U		0.0033	0.050	mg/L	1	4/20/2017 15:42
<b>Nickel</b>	<b>0.028</b>	J	<b>0.0041</b>	<b>0.050</b>	<b>mg/L</b>	1	4/20/2017 15:42
Selenium	U		0.0090	0.050	mg/L	1	4/20/2017 15:42
Silver	U		0.00050	0.050	mg/L	1	4/20/2017 15:42
<b>Zinc</b>	<b>0.026</b>	J	<b>0.014</b>	<b>0.10</b>	<b>mg/L</b>	1	4/20/2017 15:42
<b>TCLP SEMI-VOLATILE ORGANICS</b>			Method: <b>SW8270D</b>		Prep: SW3510 / 4/19/17		Analyst: <b>RS</b>
1,4-Dichlorobenzene	U		6.4	100	µg/L	1	4/19/2017 18:50
2,4,5-Trichlorophenol	U		3.4	100	µg/L	1	4/19/2017 18:50
2,4,6-Trichlorophenol	U		5.0	100	µg/L	1	4/19/2017 18:50
2,4-Dinitrotoluene	U		8.4	100	µg/L	1	4/19/2017 18:50
Hexachloro-1,3-butadiene	U		5.6	100	µg/L	1	4/19/2017 18:50
Hexachlorobenzene	U		8.8	100	µg/L	1	4/19/2017 18:50
Hexachloroethane	U		4.2	100	µg/L	1	4/19/2017 18:50
m-Cresol	U		3.9	100	µg/L	1	4/19/2017 18:50
Nitrobenzene	U		5.2	100	µg/L	1	4/19/2017 18:50
o-Cresol	U		4.0	100	µg/L	1	4/19/2017 18:50
p-Cresol	U		3.9	100	µg/L	1	4/19/2017 18:50
Pentachlorophenol	U		19	100	µg/L	1	4/19/2017 18:50
Pyridine	U		2.0	200	µg/L	1	4/19/2017 18:50
Surr: 2,4,6-Tribromophenol	63.2			38-115	%REC	1	4/19/2017 18:50
Surr: 2-Fluorobiphenyl	59.4			32-100	%REC	1	4/19/2017 18:50
Surr: 2-Fluorophenol	46.6			22-59	%REC	1	4/19/2017 18:50
Surr: 4-Terphenyl-d14	81.0			23-112	%REC	1	4/19/2017 18:50
Surr: Nitrobenzene-d5	61.8			31-93	%REC	1	4/19/2017 18:50
Surr: Phenol-d6	32.7			13-36	%REC	1	4/19/2017 18:50
<b>TCLP VOLATILE ORGANICS</b>			Method: <b>SW8260B</b>		Leachate: SW1311 / 4/19/17		Analyst: <b>BG</b>
1,1-Dichloroethene	U		5.5	20	µg/L	20	4/19/2017 14:17
1,2-Dichloroethane	U		3.3	20	µg/L	20	4/19/2017 14:17
2-Butanone	U		12	100	µg/L	20	4/19/2017 14:17
Benzene	U		6.1	20	µg/L	20	4/19/2017 14:17

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

**ALS Group, USA**

Date: 21-Apr-17

**Client:** The Sigma Group  
**Project:** Irgens - BMO (16722)  
**Sample ID:** Comp Indoor  
**Collection Date:** 4/14/2017 04:00 PM

**Work Order:** 1704959  
**Lab ID:** 1704959-07  
**Matrix:** TCLP EXTRACT

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Carbon tetrachloride	U		6.2	20	µg/L	20	4/19/2017 14:17
Chlorobenzene	U		5.4	20	µg/L	20	4/19/2017 14:17
Chloroform	U		5.1	20	µg/L	20	4/19/2017 14:17
Tetrachloroethene	U		5.5	20	µg/L	20	4/19/2017 14:17
Trichloroethene	U		6.0	20	µg/L	20	4/19/2017 14:17
Vinyl chloride	U		4.1	20	µg/L	20	4/19/2017 14:17
Surr: 1,2-Dichloroethane-d4	100			70-130	%REC	20	4/19/2017 14:17
Surr: 4-Bromofluorobenzene	93.6			70-130	%REC	20	4/19/2017 14:17
Surr: Dibromofluoromethane	102			70-130	%REC	20	4/19/2017 14:17
Surr: Toluene-d8	91.5			70-130	%REC	20	4/19/2017 14:17

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

**Client:** The Sigma Group  
**Work Order:** 1704959  
**Project:** Irgens - BMO (16722)

**QC BATCH REPORT**

Batch ID: **100789** Instrument ID **GC8** Method: **PUBL-SW-141**

MBLK		Sample ID: <b>DBLKS1-100789-100789</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>4/19/2017 03:58 PM</b>		
Client ID:		Run ID: <b>GC8_170419A</b>		SeqNo: <b>4385694</b>		Prep Date: <b>4/19/2017</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	0.654	5.0								J

LCS		Sample ID: <b>DLCSS1-100789-100789</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>4/19/2017 03:28 PM</b>		
Client ID:		Run ID: <b>GC8_170419A</b>		SeqNo: <b>4385693</b>		Prep Date: <b>4/19/2017</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	8.014	5.0	10	0	80.1	70-120	0			

LCSD		Sample ID: <b>DLCSDS1-100789-100789</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>4/19/2017 04:57 PM</b>		
Client ID:		Run ID: <b>GC8_170419A</b>		SeqNo: <b>4385696</b>		Prep Date: <b>4/19/2017</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	7.18	5.0	10	0	71.8	70-120	8.014	11	20	

The following samples were analyzed in this batch: 1704959-06A

Client: The Sigma Group  
 Work Order: 1704959  
 Project: Irgens - BMO (16722)

# QC BATCH REPORT

Batch ID: **100792** Instrument ID **GC14** Method: **SW8082**

MBLK		Sample ID: <b>PBLKS1-100792-100792</b>				Units: <b>µg/Kg</b>		Analysis Date: <b>4/20/2017 07:00 PM</b>		
Client ID:		Run ID: <b>GC14_170421A</b>				SeqNo: <b>4388485</b>		Prep Date: <b>4/19/2017</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	U	67								
Aroclor 1221	U	67								
Aroclor 1232	U	67								
Aroclor 1242	U	67								
Aroclor 1248	U	67								
Aroclor 1254	U	67								
Aroclor 1260	U	67								
Aroclor 1262	U	67								
Aroclor 1268	U	67								
<i>Surr: Decachlorobiphenyl</i>	32.84	0	33.3	0	98.6	40-140	0			
<i>Surr: Tetrachloro-m-xylene</i>	31.9	0	33.3	0	95.8	45-124	0			

LCS		Sample ID: <b>PLCSS1-100792-100792</b>				Units: <b>µg/Kg</b>		Analysis Date: <b>4/20/2017 07:14 PM</b>		
Client ID:		Run ID: <b>GC14_170421A</b>				SeqNo: <b>4388486</b>		Prep Date: <b>4/19/2017</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	748	67	833	0	89.8	50-130	0			
Aroclor 1260	760.9	67	833	0	91.3	50-130	0			
<i>Surr: Decachlorobiphenyl</i>	66.99	0	66.6	0	101	40-140	0			
<i>Surr: Tetrachloro-m-xylene</i>	59.07	0	66.6	0	88.7	45-124	0			

MS		Sample ID: <b>1704899-02A MS</b>				Units: <b>µg/Kg</b>		Analysis Date: <b>4/20/2017 07:43 PM</b>		
Client ID:		Run ID: <b>GC14_170421A</b>				SeqNo: <b>4388488</b>		Prep Date: <b>4/19/2017</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	792.6	65	811.4	0	97.7	40-140	0			
Aroclor 1260	792	65	811.4	0	97.6	40-140	0			
<i>Surr: Decachlorobiphenyl</i>	33.57	0	32.44	0	103	40-140	0			
<i>Surr: Tetrachloro-m-xylene</i>	30.4	0	32.44	0	93.7	45-124	0			

MSD		Sample ID: <b>1704899-02A MSD</b>				Units: <b>µg/Kg</b>		Analysis Date: <b>4/20/2017 07:57 PM</b>		
Client ID:		Run ID: <b>GC14_170421A</b>				SeqNo: <b>4388489</b>		Prep Date: <b>4/19/2017</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	739.7	63	788.8	0	93.8	40-140	792.6	6.9	50	
Aroclor 1260	708.2	63	788.8	0	89.8	40-140	792	11.2	50	
<i>Surr: Decachlorobiphenyl</i>	29.71	0	31.53	0	94.2	40-140	33.57	12.2	50	
<i>Surr: Tetrachloro-m-xylene</i>	28.95	0	31.53	0	91.8	45-124	30.4	4.88	50	

The following samples were analyzed in this batch: 1704959-06A

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



Client: The Sigma Group  
 Work Order: 1704959  
 Project: Irgens - BMO (16722)

# QC BATCH REPORT

Batch ID: **R210127** Instrument ID **GC11** Method: **SW8015M**

MBLK		Sample ID: <b>MB-R210127-R210127</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>4/18/2017 04:16 PM</b>		
Client ID:		Run ID: <b>GC11_170418B</b>		SeqNo: <b>4385547</b>		Prep Date: <b>4/18/2017</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Ethylene glycol U 5.0

LCS		Sample ID: <b>LCS-R210127-R210127</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>4/18/2017 05:43 PM</b>		
Client ID:		Run ID: <b>GC11_170418B</b>		SeqNo: <b>4385548</b>		Prep Date: <b>4/18/2017</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Ethylene glycol 413.1 5.0 500 0 82.6 50-150 0

MS		Sample ID: <b>1704959-01A MS</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>4/18/2017 05:53 PM</b>		
Client ID: <b>SB-2-9 (2-4')</b>		Run ID: <b>GC11_170418B</b>		SeqNo: <b>4385553</b>		Prep Date: <b>4/18/2017</b>		DF: <b>2</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Ethylene glycol 878.8 9.4 1000 0 87.9 50-150 0

MSD		Sample ID: <b>1704959-01A MSD</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>4/18/2017 06:02 PM</b>		
Client ID: <b>SB-2-9 (2-4')</b>		Run ID: <b>GC11_170418B</b>		SeqNo: <b>4385554</b>		Prep Date: <b>4/18/2017</b>		DF: <b>2</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Ethylene glycol 940.6 9.4 1000 0 94.1 50-150 878.8 6.79 30

The following samples were analyzed in this batch:

1704959-01A	1704959-02A	1704959-03A
1704959-04A		

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

Client: The Sigma Group  
 Work Order: 1704959  
 Project: Irgens - BMO (16722)

# QC BATCH REPORT

Batch ID: **100784** Instrument ID **HG1** Method: **SW7471B**

<b>MBLK</b>		Sample ID: <b>MBLK-100784-100784</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>4/19/2017 06:35 PM</b>		
Client ID:		Run ID: <b>HG1_170419A</b>			SeqNo: <b>4386151</b>		Prep Date: <b>4/18/2017</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury U 0.020

<b>LCS</b>		Sample ID: <b>LCS-100784-100784</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>4/19/2017 06:46 PM</b>		
Client ID:		Run ID: <b>HG1_170419A</b>			SeqNo: <b>4386152</b>		Prep Date: <b>4/18/2017</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1817 0.020 0.1665 0 109 80-120 0

<b>MS</b>		Sample ID: <b>1704959-05AMS</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>4/19/2017 07:02 PM</b>		
Client ID: <b>Comp Outdoor</b>		Run ID: <b>HG1_170419A</b>			SeqNo: <b>4386155</b>		Prep Date: <b>4/18/2017</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.2115 0.015 0.1273 -0.0003102 166 75-125 0 S

<b>MSD</b>		Sample ID: <b>1704959-05AMSD</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>4/19/2017 07:04 PM</b>		
Client ID: <b>Comp Outdoor</b>		Run ID: <b>HG1_170419A</b>			SeqNo: <b>4386156</b>		Prep Date: <b>4/18/2017</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1941 0.014 0.1201 -0.0003102 162 75-125 0.2115 8.56 35 S

The following samples were analyzed in this batch: 1704959-05A

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

Client: The Sigma Group  
 Work Order: 1704959  
 Project: Irgens - BMO (16722)

# QC BATCH REPORT

Batch ID: **100806** Instrument ID **HG1** Method: **SW7470A (Dissolve)**

<b>MBLK</b>	Sample ID: <b>MBLK-100732-100806</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/19/2017 05:06 PM</b>			
Client ID:	Run ID: <b>HG1_170419A</b>			SeqNo: <b>4386107</b>		Prep Date: <b>4/19/2017</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury U 0.00020

<b>MBLK</b>	Sample ID: <b>MBLK-100806-100806</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/19/2017 05:12 PM</b>			
Client ID:	Run ID: <b>HG1_170419A</b>			SeqNo: <b>4386109</b>		Prep Date: <b>4/19/2017</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury U 0.00020

<b>LCS</b>	Sample ID: <b>LCS-100732-100806</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/19/2017 05:09 PM</b>			
Client ID:	Run ID: <b>HG1_170419A</b>			SeqNo: <b>4386108</b>		Prep Date: <b>4/19/2017</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.00201 0.00020 0.002 0 100 80-120 0

<b>LCS</b>	Sample ID: <b>LCS-100806-100806</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/19/2017 05:14 PM</b>			
Client ID:	Run ID: <b>HG1_170419A</b>			SeqNo: <b>4386110</b>		Prep Date: <b>4/19/2017</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.00203 0.00020 0.002 0 102 80-120 0

<b>MS</b>	Sample ID: <b>1704959-07AMS</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/19/2017 06:25 PM</b>			
Client ID: <b>Comp Indoor</b>	Run ID: <b>HG1_170419A</b>			SeqNo: <b>4386134</b>		Prep Date: <b>4/19/2017</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.0202 0.0020 0.02 0 101 75-125 0

<b>MSD</b>	Sample ID: <b>1704959-07AMSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/19/2017 06:27 PM</b>			
Client ID: <b>Comp Indoor</b>	Run ID: <b>HG1_170419A</b>			SeqNo: <b>4386135</b>		Prep Date: <b>4/19/2017</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.0204 0.0020 0.02 0 102 75-125 0.0202 0.985 20

The following samples were analyzed in this batch: 1704959-07A

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

Client: The Sigma Group  
 Work Order: 1704959  
 Project: Irgens - BMO (16722)

# QC BATCH REPORT

Batch ID: **100795** Instrument ID **ICPMS2** Method: **SW6020A**

MBLK		Sample ID: <b>MBLK-100795-100795</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/20/2017 03:32 PM</b>		
Client ID:		Run ID: <b>ICPMS2_170420A</b>			SeqNo: <b>4388969</b>		Prep Date: <b>4/19/2017</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	U	0.0050								
Barium	U	0.0050								
Cadmium	U	0.0020								
Chromium	U	0.0050								
Copper	U	0.0050								
Lead	U	0.0050								
Nickel	U	0.0050								
Selenium	U	0.0050								
Silver	U	0.0050								
Zinc	U	0.010								

LCS		Sample ID: <b>LCS-100795-100795</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/20/2017 03:37 PM</b>		
Client ID:		Run ID: <b>ICPMS2_170420A</b>			SeqNo: <b>4388970</b>		Prep Date: <b>4/19/2017</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.1037	0.0050	0.1	0	104	80-120	0			
Barium	0.1028	0.0050	0.1	0	103	80-120	0			
Cadmium	0.1037	0.0020	0.1	0	104	80-120	0			
Chromium	0.1003	0.0050	0.1	0	100	80-120	0			
Copper	0.1061	0.0050	0.1	0	106	80-120	0			
Lead	0.1007	0.0050	0.1	0	101	80-120	0			
Nickel	0.104	0.0050	0.1	0	104	80-120	0			
Selenium	0.1034	0.0050	0.1	0	103	80-120	0			
Silver	0.09935	0.0050	0.1	0	99.4	80-120	0			
Zinc	0.1023	0.010	0.1	0	102	80-120	0			

MS		Sample ID: <b>1704959-07AMS</b>				Units: <b>mg/L</b>		Analysis Date: <b>4/20/2017 03:47 PM</b>		
Client ID: <b>Comp Indoor</b>		Run ID: <b>ICPMS2_170420A</b>			SeqNo: <b>4388972</b>		Prep Date: <b>4/19/2017</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	1.056	0.050	1	-0.0003776	106	75-125	0			
Barium	1.313	0.050	1	0.2408	107	75-125	0			
Cadmium	0.9869	0.020	1	0.0008301	98.6	75-125	0			
Chromium	0.9701	0.050	1	0.0001591	97	75-125	0			
Copper	1.031	0.050	1	0.005269	103	75-125	0			
Lead	1.004	0.050	1	0.0006229	100	75-125	0			
Nickel	1.03	0.050	1	0.0283	100	75-125	0			
Selenium	1.053	0.050	1	0.0003901	105	75-125	0			
Silver	0.9146	0.050	1	0.0001528	91.4	75-125	0			
Zinc	1.038	0.10	1	0.02592	101	75-125	0			

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

**Client:** The Sigma Group  
**Work Order:** 1704959  
**Project:** Irgens - BMO (16722)

## QC BATCH REPORT

Batch ID: **100795**      Instrument ID **ICPMS2**      Method: **SW6020A**

MSD		Sample ID: 1704959-07AMSD				Units: mg/L		Analysis Date: 4/20/2017 03:52 PM		
Client ID: Comp Indoor		Run ID: ICPMS2_170420A			SeqNo: 4388973		Prep Date: 4/19/2017		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	1.035	0.050	1	-0.0003776	104	75-125	1.056	2.01	20	
Barium	1.273	0.050	1	0.2408	103	75-125	1.313	3.09	20	
Cadmium	0.9625	0.020	1	0.0008301	96.2	75-125	0.9869	2.5	20	
Chromium	0.9623	0.050	1	0.0001591	96.2	75-125	0.9701	0.807	20	
Copper	1.022	0.050	1	0.005269	102	75-125	1.031	0.877	20	
Lead	1.009	0.050	1	0.0006229	101	75-125	1.004	0.497	20	
Nickel	1.029	0.050	1	0.0283	100	75-125	1.03	0.0971	20	
Selenium	1.044	0.050	1	0.0003901	104	75-125	1.053	0.858	20	
Silver	0.9051	0.050	1	0.0001528	90.5	75-125	0.9146	1.04	20	
Zinc	1.03	0.10	1	0.02592	100	75-125	1.038	0.774	20	

The following samples were analyzed in this batch: 1704959-07A

Client: The Sigma Group  
 Work Order: 1704959  
 Project: Irgens - BMO (16722)

# QC BATCH REPORT

Batch ID: 100819 Instrument ID ICPMS1 Method: SW6020A

MBLK		Sample ID: MBLK-100819-100819				Units: mg/Kg		Analysis Date: 4/19/2017 06:35 PM		
Client ID:		Run ID: ICPMS1_170419A			SeqNo: 4386374		Prep Date: 4/19/2017		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	U	0.25								
Cadmium	U	0.10								
Chromium	0.02688	0.25								J
Lead	0.006595	0.25								J
Selenium	U	0.25								

LCS		Sample ID: LCS-100819-100819				Units: mg/Kg		Analysis Date: 4/19/2017 06:41 PM		
Client ID:		Run ID: ICPMS1_170419A			SeqNo: 4386375		Prep Date: 4/19/2017		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.742	0.25	5	0	94.8	80-120	0			
Cadmium	4.506	0.10	5	0	90.1	80-120	0			
Chromium	4.882	0.25	5	0	97.6	80-120	0			
Lead	5.785	0.25	5	0	116	80-120	0			

LCS		Sample ID: LCS-100819-100819				Units: mg/Kg		Analysis Date: 4/20/2017 04:56 PM		
Client ID:		Run ID: ICPMS1_170420A			SeqNo: 4388646		Prep Date: 4/19/2017		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Selenium	4.33	0.25	5	0	86.6	80-120	0			

MS		Sample ID: 1704959-05AMS				Units: mg/Kg		Analysis Date: 4/20/2017 12:51 AM		
Client ID: Comp Outdoor		Run ID: ICPMS1_170419A			SeqNo: 4386444		Prep Date: 4/19/2017		DF: 4	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	11.57	1.6	8.091	3.179	104	75-125	0			
Cadmium	7.757	0.65	8.091	0.06559	95.1	75-125	0			
Chromium	18.46	1.6	8.091	5.965	154	75-125	0			S
Lead	564.1	1.6	8.091	329.7	2900	75-125	0			SO
Selenium	7.896	1.6	8.091	0.3573	93.2	75-125	0			

MSD		Sample ID: 1704959-05AMSD				Units: mg/Kg		Analysis Date: 4/20/2017 12:57 AM		
Client ID: Comp Outdoor		Run ID: ICPMS1_170419A			SeqNo: 4386446		Prep Date: 4/19/2017		DF: 4	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	11.84	1.6	8.078	3.179	107	75-125	11.57	2.32	20	
Cadmium	7.8	0.65	8.078	0.06559	95.7	75-125	7.757	0.545	20	
Chromium	18.58	1.6	8.078	5.965	156	75-125	18.46	0.659	20	S
Lead	329.6	1.6	8.078	329.7	-1.62	75-125	564.1	52.5	20	SRO
Selenium	8.191	1.6	8.078	0.3573	97	75-125	7.896	3.66	20	

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

**Client:** The Sigma Group  
**Work Order:** 1704959  
**Project:** Irgens - BMO (16722)

## QC BATCH REPORT

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Batch ID: **100819**      Instrument ID **ICPMS1**      Method: **SW6020A**

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**The following samples were analyzed in this batch:**

1704959-05A
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Client: The Sigma Group  
 Work Order: 1704959  
 Project: Irgens - BMO (16722)

# QC BATCH REPORT

Batch ID: **100774** Instrument ID **SVMS5** Method: **SW8270D**

MBLK		Sample ID: <b>SBLKW1-100774-100774</b>				Units: <b>µg/L</b>		Analysis Date: <b>4/19/2017 03:44 PM</b>		
Client ID:		Run ID: <b>SVMS5_170419A</b>		SeqNo: <b>4387480</b>		Prep Date: <b>4/19/2017</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,4-Dichlorobenzene	U	5.0								
2,4,5-Trichlorophenol	U	5.0								
2,4,6-Trichlorophenol	U	5.0								
2,4-Dinitrotoluene	U	5.0								
Hexachloro-1,3-butadiene	U	5.0								
Hexachlorobenzene	U	5.0								
Hexachloroethane	U	5.0								
m-Cresol	U	5.0								
Nitrobenzene	U	5.0								
o-Cresol	U	5.0								
p-Cresol	U	5.0								
Pentachlorophenol	U	5.0								
Pyridine	U	10								
<i>Surr: 2,4,6-Tribromophenol</i>	<i>26.24</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>52.5</i>	<i>38-115</i>	<i>0</i>			
<i>Surr: 2-Fluorobiphenyl</i>	<i>27.88</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>55.8</i>	<i>32-100</i>	<i>0</i>			
<i>Surr: 2-Fluorophenol</i>	<i>20.46</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>40.9</i>	<i>22-59</i>	<i>0</i>			
<i>Surr: 4-Terphenyl-d14</i>	<i>33.99</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>68</i>	<i>23-112</i>	<i>0</i>			
<i>Surr: Nitrobenzene-d5</i>	<i>29.58</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>59.2</i>	<i>31-93</i>	<i>0</i>			
<i>Surr: Phenol-d6</i>	<i>12.6</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>25.2</i>	<i>13-36</i>	<i>0</i>			

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



Client: The Sigma Group  
 Work Order: 1704959  
 Project: Irgens - BMO (16722)

# QC BATCH REPORT

Batch ID: **100774** Instrument ID **SVMS5** Method: **SW8270D**

LCS		Sample ID: <b>SLCSW1-100774-100774</b>				Units: <b>µg/L</b>		Analysis Date: <b>4/19/2017 04:07 PM</b>		
Client ID:		Run ID: <b>SVMS5_170419A</b>		SeqNo: <b>4387481</b>		Prep Date: <b>4/19/2017</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,4-Dichlorobenzene	11.4	5.0	20	0	57	30-110	0			
2,4,5-Trichlorophenol	13.36	5.0	20	0	66.8	50-110	0			
2,4,6-Trichlorophenol	13.62	5.0	20	0	68.1	50-115	0			
2,4-Dinitrotoluene	13.68	5.0	20	0	68.4	50-120	0			
Hexachloro-1,3-butadiene	11.13	5.0	20	0	55.6	25-105	0			
Hexachlorobenzene	14.55	5.0	20	0	72.8	50-110	0			
Hexachloroethane	10.65	5.0	20	0	53.2	30-95	0			
m-Cresol	13.31	5.0	20	0	66.6	30-110	0			
Nitrobenzene	13.29	5.0	20	0	66.4	45-110	0			
o-Cresol	14.03	5.0	20	0	70.2	40-110	0			
p-Cresol	13.31	5.0	20	0	66.6	30-110	0			
Pentachlorophenol	10.5	5.0	20	0	52.5	40-115	0			
Pyridine	8.41	10	20	0	42	10-71	0			J
<i>Surr: 2,4,6-Tribromophenol</i>	33.55	0	50	0	67.1	38-115	0			
<i>Surr: 2-Fluorobiphenyl</i>	35.15	0	50	0	70.3	32-100	0			
<i>Surr: 2-Fluorophenol</i>	23.34	0	50	0	46.7	22-59	0			
<i>Surr: 4-Terphenyl-d14</i>	37.82	0	50	0	75.6	23-112	0			
<i>Surr: Nitrobenzene-d5</i>	37.53	0	50	0	75.1	31-93	0			
<i>Surr: Phenol-d6</i>	16.15	0	50	0	32.3	13-36	0			

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

Client: The Sigma Group  
 Work Order: 1704959  
 Project: Irgens - BMO (16722)

# QC BATCH REPORT

Batch ID: **100774** Instrument ID **SVMS5** Method: **SW8270D**

MS		Sample ID: <b>1704833-02A MS</b>				Units: <b>µg/L</b>		Analysis Date: <b>4/19/2017 04:30 PM</b>		
Client ID:		Run ID: <b>SVMS5_170419A</b>		SeqNo: <b>4387482</b>		Prep Date: <b>4/19/2017</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,4-Dichlorobenzene	238.2	100	400	0	59.6	30-110	0			
2,4,5-Trichlorophenol	263.8	100	400	11	63.2	50-110	0			
2,4,6-Trichlorophenol	284	100	400	7	69.2	50-115	0			
2,4-Dinitrotoluene	279.8	100	400	0	70	50-120	0			
Hexachloro-1,3-butadiene	234.6	100	400	0	58.6	25-105	0			
Hexachlorobenzene	268.2	100	400	0	67	50-110	0			
Hexachloroethane	228.8	100	400	0	57.2	30-95	0			
m-Cresol	354.8	100	400	80.2	68.6	30-110	0			
Nitrobenzene	250.2	100	400	0	62.6	45-110	0			
o-Cresol	311.8	100	400	0	78	40-110	0			
p-Cresol	354.8	100	400	80.2	68.6	30-110	0			
Pentachlorophenol	292	100	400	0	73	40-115	0			
Pyridine	214.2	200	400	0	53.6	10-80	0			
<i>Surr: 2,4,6-Tribromophenol</i>	<i>714.4</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>71.4</i>	<i>38-115</i>	<i>0</i>			
<i>Surr: 2-Fluorobiphenyl</i>	<i>681</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>68.1</i>	<i>32-100</i>	<i>0</i>			
<i>Surr: 2-Fluorophenol</i>	<i>477.2</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>47.7</i>	<i>22-59</i>	<i>0</i>			
<i>Surr: 4-Terphenyl-d14</i>	<i>765.6</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>76.6</i>	<i>23-112</i>	<i>0</i>			
<i>Surr: Nitrobenzene-d5</i>	<i>683.2</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>68.3</i>	<i>31-93</i>	<i>0</i>			
<i>Surr: Phenol-d6</i>	<i>342.6</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>34.3</i>	<i>13-36</i>	<i>0</i>			

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

Client: The Sigma Group  
 Work Order: 1704959  
 Project: Irgens - BMO (16722)

# QC BATCH REPORT

Batch ID: 100774 Instrument ID SVMS5 Method: SW8270D

MSD		Sample ID: 1704833-02A MSD				Units: µg/L		Analysis Date: 4/19/2017 04:54 PM		
Client ID:		Run ID: SVMS5_170419A		SeqNo: 4387483		Prep Date: 4/19/2017		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,4-Dichlorobenzene	228.8	100	400	0	57.2	30-110	238.2	4.03	30	
2,4,5-Trichlorophenol	265.8	100	400	11	63.7	50-110	263.8	0.755	30	
2,4,6-Trichlorophenol	278	100	400	7	67.8	50-115	284	2.14	30	
2,4-Dinitrotoluene	272.2	100	400	0	68	50-120	279.8	2.75	30	
Hexachloro-1,3-butadiene	227.8	100	400	0	57	25-105	234.6	2.94	30	
Hexachlorobenzene	256.2	100	400	0	64	50-110	268.2	4.58	30	
Hexachloroethane	221.4	100	400	0	55.4	30-95	228.8	3.29	30	
m-Cresol	361.4	100	400	80.2	70.3	30-110	354.8	1.84	30	
Nitrobenzene	239.6	100	400	0	59.9	45-110	250.2	4.33	30	
o-Cresol	314.6	100	400	0	78.6	40-110	311.8	0.894	30	
p-Cresol	361.4	100	400	80.2	70.3	30-110	354.8	1.84	30	
Pentachlorophenol	278.6	100	400	0	69.6	40-115	292	4.7	30	
Pyridine	216.8	200	400	0	54.2	10-80	214.2	1.21	30	
Surr: 2,4,6-Tribromophenol	696.2	0	1000	0	69.6	38-115	714.4	2.58	0	
Surr: 2-Fluorobiphenyl	664	0	1000	0	66.4	32-100	681	2.53	0	
Surr: 2-Fluorophenol	486	0	1000	0	48.6	22-59	477.2	1.83	0	
Surr: 4-Terphenyl-d14	750.2	0	1000	0	75	23-112	765.6	2.03	0	
Surr: Nitrobenzene-d5	653	0	1000	0	65.3	31-93	683.2	4.52	0	
Surr: Phenol-d6	361.4	0	1000	0	36.1	13-36	342.6	5.34	0	S

The following samples were analyzed in this batch:

1704959-07A

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

Client: The Sigma Group  
 Work Order: 1704959  
 Project: Irgens - BMO (16722)

# QC BATCH REPORT

Batch ID: **R210106a** Instrument ID **VMS5** Method: **SW8260B**

MBLK		Sample ID: <b>VBLKW1-170419-R210106a</b>				Units: <b>µg/L</b>		Analysis Date: <b>4/19/2017 12:58 PM</b>		
Client ID:		Run ID: <b>VMS5_170419A</b>			SeqNo: <b>4386745</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	U	1.0								
1,2-Dichloroethane	U	1.0								
2-Butanone	U	5.0								
Benzene	U	1.0								
Carbon tetrachloride	U	1.0								
Chlorobenzene	U	1.0								
Chloroform	U	1.0								
Tetrachloroethene	U	1.0								
Trichloroethene	U	1.0								
Vinyl chloride	U	1.0								
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.57</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97.8</i>	<i>75-120</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.23</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>96.2</i>	<i>80-110</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>19.38</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>96.9</i>	<i>85-115</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>18.48</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>92.4</i>	<i>85-110</i>	<i>0</i>			

LCS		Sample ID: <b>VLCSW1-170419-R210106a</b>				Units: <b>µg/L</b>		Analysis Date: <b>4/19/2017 11:38 AM</b>		
Client ID:		Run ID: <b>VMS5_170419A</b>			SeqNo: <b>4386740</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	19.49	1.0	20	0	97.4	70-145	0			
1,2-Dichloroethane	19.73	1.0	20	0	98.6	78-125	0			
2-Butanone	22.74	5.0	20	0	114	55-150	0			
Benzene	20.89	1.0	20	0	104	85-125	0			
Carbon tetrachloride	19.18	1.0	20	0	95.9	65-140	0			
Chlorobenzene	18.08	1.0	20	0	90.4	80-120	0			
Chloroform	20.3	1.0	20	0	102	80-130	0			
Tetrachloroethene	19.72	1.0	20	0	98.6	68-166	0			
Trichloroethene	19.85	1.0	20	0	99.2	84-130	0			
Vinyl chloride	13.24	1.0	20	0	66.2	50-136	0			
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>18.01</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>90</i>	<i>75-120</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>20.46</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>102</i>	<i>80-110</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>19.56</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97.8</i>	<i>85-115</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>19.43</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97.2</i>	<i>85-110</i>	<i>0</i>			

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

Client: The Sigma Group  
 Work Order: 1704959  
 Project: Irgens - BMO (16722)

# QC BATCH REPORT

Batch ID: **R210106a** Instrument ID **VMS5** Method: **SW8260B**

MS		Sample ID: 1704933-31B MS				Units: µg/L		Analysis Date: 4/19/2017 09:17 PM		
Client ID:		Run ID: VMS5_170419A			SeqNo: 4386769		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	20.94	1.0	20	0	105	70-145	0			
1,2-Dichloroethane	19.6	1.0	20	0	98	78-125	0			
2-Butanone	22.22	5.0	20	0	111	55-150	0			
Benzene	38.04	1.0	20	16.63	107	85-125	0			
Carbon tetrachloride	20.82	1.0	20	0	104	65-140	0			
Chlorobenzene	18.74	1.0	20	0	93.7	80-120	0			
Chloroform	20.56	1.0	20	0	103	80-130	0			
Tetrachloroethene	20.15	1.0	20	0	101	68-166	0			
Trichloroethene	19.89	1.0	20	0	99.4	84-130	0			
Vinyl chloride	13.78	1.0	20	0	68.9	50-136	0			
<i>Surr: 1,2-Dichloroethane-d4</i>	18.62	0	20	0	93.1	75-120	0			
<i>Surr: 4-Bromofluorobenzene</i>	21.27	0	20	0	106	80-110	0			
<i>Surr: Dibromofluoromethane</i>	19.34	0	20	0	96.7	85-115	0			
<i>Surr: Toluene-d8</i>	19.42	0	20	0	97.1	85-110	0			

MSD		Sample ID: 1704933-31B MSD				Units: µg/L		Analysis Date: 4/19/2017 09:43 PM		
Client ID:		Run ID: VMS5_170419A			SeqNo: 4386770		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	21.42	1.0	20	0	107	70-145	20.94	2.27	30	
1,2-Dichloroethane	20.09	1.0	20	0	100	78-125	19.6	2.47	30	
2-Butanone	22.49	5.0	20	0	112	55-150	22.22	1.21	30	
Benzene	38.12	1.0	20	16.63	107	85-125	38.04	0.21	30	
Carbon tetrachloride	21.71	1.0	20	0	109	65-140	20.82	4.19	30	
Chlorobenzene	19.23	1.0	20	0	96.2	80-120	18.74	2.58	30	
Chloroform	20.69	1.0	20	0	103	80-130	20.56	0.63	30	
Tetrachloroethene	20.88	1.0	20	0	104	68-166	20.15	3.56	30	
Trichloroethene	20.51	1.0	20	0	103	84-130	19.89	3.07	30	
Vinyl chloride	13.93	1.0	20	0	69.6	50-136	13.78	1.08	30	
<i>Surr: 1,2-Dichloroethane-d4</i>	18.61	0	20	0	93	75-120	18.62	0.0537	30	
<i>Surr: 4-Bromofluorobenzene</i>	20.76	0	20	0	104	80-110	21.27	2.43	30	
<i>Surr: Dibromofluoromethane</i>	19.45	0	20	0	97.2	85-115	19.34	0.567	30	
<i>Surr: Toluene-d8</i>	19.12	0	20	0	95.6	85-110	19.42	1.56	30	

The following samples were analyzed in this batch: 1704959-07A

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

**Client:** The Sigma Group  
**Work Order:** 1704959  
**Project:** Irgens - BMO (16722)

# QC BATCH REPORT

Batch ID: **100827**      Instrument ID **WETCHEM**      Method: **SW9045D**

<b>LCS</b>	Sample ID: <b>LCS-100827-100827</b>				Units: <b>s.u.</b>		Analysis Date: <b>4/20/2017 10:00 AM</b>			
Client ID:	Run ID: <b>WETCHEM_170420A</b>			SeqNo: <b>4387471</b>		Prep Date: <b>4/19/2017</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

pH                                      4.02      0.10      4                      0      100      90-110                      0

<b>DUP</b>	Sample ID: <b>1704959-06A DUP</b>				Units: <b>s.u.</b>		Analysis Date: <b>4/20/2017 10:00 AM</b>			
Client ID: <b>Comp Indoor</b>	Run ID: <b>WETCHEM_170420A</b>			SeqNo: <b>4387477</b>		Prep Date: <b>4/19/2017</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

pH                                      8.62      0.10      0                      0      0      0-0                      8.33      3.42      20

**The following samples were analyzed in this batch:**     

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

Client: The Sigma Group  
 Work Order: 1704959  
 Project: Irgens - BMO (16722)

# QC BATCH REPORT

Batch ID: **R210077** Instrument ID **MOIST** Method: **SW3550C**

<b>MBLK</b>	Sample ID: <b>WBLKS-R210077</b>		Units: % of sample			Analysis Date: <b>4/18/2017 02:35 PM</b>				
Client ID:	Run ID: <b>MOIST_170418B</b>		SeqNo: <b>4384191</b>		Prep Date:		DF: <b>1</b>			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture U 0.050

<b>LCS</b>	Sample ID: <b>LCS-R210077</b>		Units: % of sample			Analysis Date: <b>4/18/2017 02:35 PM</b>				
Client ID:	Run ID: <b>MOIST_170418B</b>		SeqNo: <b>4384190</b>		Prep Date:		DF: <b>1</b>			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 100 0.050 100 0 100 99.5-100.5 0

<b>DUP</b>	Sample ID: <b>1704781-28B DUP</b>		Units: % of sample			Analysis Date: <b>4/18/2017 02:35 PM</b>				
Client ID:	Run ID: <b>MOIST_170418B</b>		SeqNo: <b>4384172</b>		Prep Date:		DF: <b>1</b>			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 15.2 0.050 0 0 0 14.38 5.54 5 R

<b>DUP</b>	Sample ID: <b>1704838-01A DUP</b>		Units: % of sample			Analysis Date: <b>4/18/2017 02:35 PM</b>				
Client ID:	Run ID: <b>MOIST_170418B</b>		SeqNo: <b>4384183</b>		Prep Date:		DF: <b>1</b>			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 76.3 0.050 0 0 0 76.16 0.184 5

The following samples were analyzed in this batch:

1704959-01A	1704959-02A	1704959-03A
1704959-04A	1704959-05A	

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

Client: The Sigma Group  
 Work Order: 1704959  
 Project: Irgens - BMO (16722)

# QC BATCH REPORT

Batch ID: **R210080** Instrument ID **MOIST** Method: **SW3550C**

MBLK		Sample ID: <b>WBLKS-R210080</b>				Units: % of sample			Analysis Date: <b>4/18/2017 04:28 PM</b>		
Client ID:		Run ID: <b>MOIST_170418C</b>				SeqNo: <b>4384244</b>			Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Moisture U 0.050

LCS		Sample ID: <b>LCS-R210080</b>				Units: % of sample			Analysis Date: <b>4/18/2017 04:28 PM</b>		
Client ID:		Run ID: <b>MOIST_170418C</b>				SeqNo: <b>4384243</b>			Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Moisture 100 0.050 100 0 100 99.5-100.5 0

DUP		Sample ID: <b>1704884-01A DUP</b>				Units: % of sample			Analysis Date: <b>4/18/2017 04:28 PM</b>		
Client ID:		Run ID: <b>MOIST_170418C</b>				SeqNo: <b>4384229</b>			Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Moisture 6.66 0.050 0 0 0 6.72 0.897 5

DUP		Sample ID: <b>1704962-01B DUP</b>				Units: % of sample			Analysis Date: <b>4/18/2017 04:28 PM</b>		
Client ID:		Run ID: <b>MOIST_170418C</b>				SeqNo: <b>4384241</b>			Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Moisture 16.28 0.050 0 0 0 16.77 2.97 5

The following samples were analyzed in this batch: 1704959-06A

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



**Client:** The Sigma Group  
**Work Order:** 1704959  
**Project:** Irgens - BMO (16722)

# QC BATCH REPORT

Batch ID: **R210207**      Instrument ID **WETCHEM**      Method: **SW1010A**

<b>LCS</b>	Sample ID: <b>LCS-R210207-R210207</b>				Units: °F			Analysis Date: <b>4/20/2017 09:25 AM</b>		
Client ID:	Run ID: <b>WETCHEM_170420K</b>			SeqNo: <b>4388039</b>		Prep Date:		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Flashpoint/Ignitability      83      1.0      81      0      102      97-103      0

<b>DUP</b>	Sample ID: <b>1704936-01A DUP</b>				Units: °F			Analysis Date: <b>4/20/2017 09:25 AM</b>		
Client ID:	Run ID: <b>WETCHEM_170420K</b>			SeqNo: <b>4388043</b>		Prep Date:		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Flashpoint/Ignitability      U      1.0      0      0      0      0-0      0      0      10

**The following samples were analyzed in this batch:**     

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

**Client:** The Sigma Group  
**Work Order:** 1704959  
**Project:** Irgens - BMO (16722)

# QC BATCH REPORT

Batch ID: **R210209**      Instrument ID **WETCHEM**      Method: **SW7.3.4.2**

MBLK		Sample ID: <b>MB-R210209-R210209</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>4/20/2017 02:00 PM</b>		
Client ID:		Run ID: <b>WETCHEM_170420L</b>		SeqNo: <b>4388063</b>		Prep Date:		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfide, Reactive	U	100								

LCS		Sample ID: <b>LCS-R210209-R210209</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>4/20/2017 02:00 PM</b>		
Client ID:		Run ID: <b>WETCHEM_170420L</b>		SeqNo: <b>4388064</b>		Prep Date:		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfide, Reactive	1896	100	2149	0	88.2	60-120	0			

**The following samples were analyzed in this batch:**     

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

**Client:** The Sigma Group  
**Work Order:** 1704959  
**Project:** Irgens - BMO (16722)

# QC BATCH REPORT

Batch ID: **R210210**      Instrument ID **WETCHEM**      Method: **SW7.3.3.2**

MBLK		Sample ID: <b>MB-R210210-R210210</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>4/20/2017 02:00 PM</b>		
Client ID:		Run ID: <b>WETCHEM_170420M</b>		SeqNo: <b>4388070</b>		Prep Date:		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Reactive	U	100								

LCS		Sample ID: <b>LCS-R210210-R210210</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>4/20/2017 02:00 PM</b>		
Client ID:		Run ID: <b>WETCHEM_170420M</b>		SeqNo: <b>4388071</b>		Prep Date:		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Reactive	117.4	100	125	0	94	84-112	0			

MS		Sample ID: <b>1704766-01D MS</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>4/20/2017 02:00 PM</b>		
Client ID:		Run ID: <b>WETCHEM_170420M</b>		SeqNo: <b>4388073</b>		Prep Date:		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Reactive	235.4	100	250	0	94.1	84-112	0			

MSD		Sample ID: <b>1704766-01D MSD</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>4/20/2017 02:00 PM</b>		
Client ID:		Run ID: <b>WETCHEM_170420M</b>		SeqNo: <b>4388074</b>		Prep Date:		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Reactive	235.4	100	250	0	94.1	84-112	235.4	0	8	

**The following samples were analyzed in this batch:** 1704959-06A

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



Cincinnati, OH  
+1 513 733 5336

Fort Collins, CO  
+1 970 490 1511

Everett, WA  
+1 425 356 2600

Holland, MI  
+1 616 399 6070

# Chain of Custody Form

Houston, TX  
+1 281 530 5656

Spring City, PA  
+1 610 948 4903

Middletown, PA  
+1 717 944 5541

Salt Lake City, UT  
+1 801 266 7700

South Charleston, WV  
+1 304 356 3168

York, PA  
+1 717 505 5280

Page 1 of 1

COC ID: 42735

ALS Project Manager:

ALS Work Order #: 704959

Customer Information		Project Information		Parameter/Method Request for Analysis											
Purchase Order		Project Name	Irgens - BMO	A	Ethylene Glycol										
Work Order		Project Number	18722	B	RCRA Metals										
Company Name	The Sigma Group	Bill To Company	The Sigma Group	C	Waste Characterization - Normal TAT										
Send Report To	Cory Katzban	Invoice Attn	Accounts Payable	D											
Address	1300 W. Canal Street	Address	1300 W. Canal Street	E											
City/State/Zip	Milwaukee, WI 53233	City/State/Zip	Milwaukee, WI 53233	F											
Phone	(414) 643-4200	Phone	(414) 643-4200	G											
Fax	(414) 643-4210	Fax	(414) 643-4210	H											
e-Mail Address	ckatzban@thesigmagroup.com	e-Mail Address	ckatzban@thesigmagroup.com	I											
				J											

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	SB-2-9 (2-4')	4/13/17	11:08	SOIL	None	1	X										
2	SB-2-10 (2-4')	↓	11:38	↓	↓	↓	X										
3	SB-2-11 (2-4')	↓	12:05	↓	↓	↓	X										
4	SB-2-12 (2-4')	↓	12:34	↓	↓	↓	X										
5	Camp Outdoor	↓	2:00	↓	↓	↓		X									
6	Camp Indoor	4/14/17	4:00	↓	↓	6			X								
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign Steven Kikbert <i>Steven Kikbert</i>		Shipment Method Fed Ex		Turnaround Time in Business Days (BD) <input type="checkbox"/> 10 BD <input checked="" type="checkbox"/> 5 BD <input type="checkbox"/> 3 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> 1 BD				Results Due Date:			
Relinquished by: <i>Steven Kikbert</i>	Date: 4/17	Time: 10:00	Received by: Fed Ex	Notes: Normal Turn Around on Waste Characterization							
Relinquished by: Fed Ex	Date: 4/18/17	Time: 0900	Received by (Laboratory): <i>[Signature]</i>	Cooler ID: SR2	Cooler Temp: 4.2°C	QC Package: (Check One Box Below)					
Logged by (Laboratory): DES	Date: 4/18/17	Time: 1430	Checked by (Laboratory): <i>[Signature]</i>	<input type="checkbox"/> Level II Std QC <input type="checkbox"/> TRRP Checklist <input type="checkbox"/> Level III Std QC/Raw Data <input type="checkbox"/> TRRP Level IV <input type="checkbox"/> Level IV SW846/CLP <input type="checkbox"/> Other							
Preservative Key: 1-HCl 2-HNO <sub>3</sub> 3-H <sub>2</sub> SO <sub>4</sub> 4-NaOH 5-Na <sub>2</sub> S <sub>2</sub> O <sub>8</sub> 6-NaHSO <sub>4</sub> 7-Other 8-4°C 9-5035											

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

## Tom Beamish

---

**From:** Cory Katzban <ckatzban@thesigmagroup.com>  
**Sent:** Monday, April 17, 2017 3:26 PM  
**To:** Tom Beamish  
**Subject:** RE: Sigma Project #16722 - Irgens BMO - Incoming Samples

For all please, assuming 3 day TAT – 1.5 x standard cost?

Cory Katzban, E.I.T.  
Staff Engineer II  
The Sigma Group  
414.643.4138 (direct) | 414.588.8617 (cell)  
1300 W Canal Street, Milwaukee, WI 53233  
[ckatzban@thesigmagroup.com](mailto:ckatzban@thesigmagroup.com) | [www.thesigmagroup.com](http://www.thesigmagroup.com)



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**From:** Tom Beamish [mailto:Tom.Beamish@ALSGlobal.com]  
**Sent:** Monday, April 17, 2017 2:24 PM  
**To:** Cory Katzban <ckatzban@thesigmagroup.com>  
**Subject:** RE: Sigma Project #16722 - Irgens BMO - Incoming Samples

Will do, Cory – is that 3-day TAT for just the EG and RCRA metals, or for the waste characterization as well?

Regards,

**Tom Beamish**  
Senior Project Manager, Environmental  
Holland, MI Laboratory



**T** +1 616 399 6070 **D** +1 616 738 7318  
**F** +1 616 399 6185 **M** +1 616 836 5844  
[tom.beamish@alsglobal.com](mailto:tom.beamish@alsglobal.com)  
3352 128<sup>th</sup> Avenue  
Holland, MI 49424 USA

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[www.alsglobal.com](http://www.alsglobal.com)

**From:** Cory Katzban [mailto:ckatzban@thesigmagroup.com]  
**Sent:** Monday, April 17, 2017 3:06 PM  
**To:** Tom Beamish <Tom.Beamish@ALSGlobal.com>; Alex Csaszar <Alex.Csaszar@ALSGlobal.com>  
**Cc:** Chad Whelton <Chad.Whelton@ALSGlobal.com>  
**Subject:** RE: Sigma Project #16722 - Irgens BMO - Incoming Samples

Align Open End of FedEx Pouch Here

**ALS**  
3352 128th Avenue  
Holland, Michigan 49424  
Tel. +1 616 399 6070  
Fax. +1 616 399 6185

*Chad Wheton*

ALS  
3352 128TH AVE  
HOLLAND MI 49424  
99424-9283-82

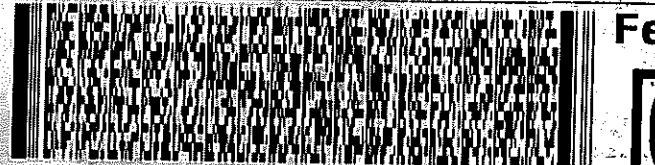
**CUSTODY SEAL**  
Date: 4/17/97  
Name: STEVEN KIKKERT  
Company: THE SIGMA GROUP  
Time: 10:00 AM

FROM: Steven Kikkert (414) 643-4200  
The Sigma Group  
1300 W CANAL ST  
MILWAUKEE WI 53233  
US

SHIP DATE: 17APR17  
ACTWT: 18.70 LB  
CAD: 6991747/SSFO18  
DIMMED: 14 X 14 X 1  
BILL 3rd PARTY

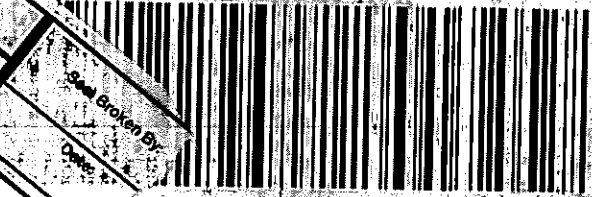
TO **Attn: Chad Wheton**  
**ALS**  
**3352 128TH AVE**

**HOLLAND MI 49424**  
(616) 399-6070



TRK# 7862 5968 5247

0417 3 (000 000 0000) 0 00 7862 5968 5247



Not Broken By  
Date:

Sample Receipt Checklist

Client Name: **SIGMAGROUP**

Date/Time Received: **18-Apr-17 09:00**

Work Order: **1704959**

Received by: **DS**

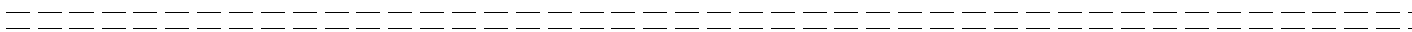
Checklist completed by Diane Shaw 18-Apr-17  
eSignature Date

Reviewed by: Tom Bramish 18-Apr-17  
eSignature Date

Matrices: Soil  
 Carrier name: FedEx

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample(s) received on ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>4.2/4.2 c</u>		<u>SR2</u>
Cooler(s)/Kit(s):	<u></u>		
Date/Time sample(s) sent to storage:	<u>4/18/2017 2:31:22 PM</u>		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:	<u></u>		

Login Notes:



Client Contacted: \_\_\_\_\_ Date Contacted: \_\_\_\_\_ Person Contacted: \_\_\_\_\_  
 Contacted By: \_\_\_\_\_ Regarding: \_\_\_\_\_

Comments:

CorrectiveAction:

CHAIN OF CUSTODY RECORD

# Synergy

Chain # **No 317**

Page **1** of **1**

## Environmental Lab, Inc.

1990 Prospect Ct. • Appleton, WI 54914  
920-830-2455 • FAX 920-733-0631

**Sample Handling Request**  
 Rush Analysis Date Required \_\_\_\_\_  
 (Rushes accepted only with prior authorization)  
 \_\_\_\_\_ Normal Turn Around

Lab I.D. # \_\_\_\_\_  
 Account No.: \_\_\_\_\_ Quote No.: Standard  
 Project #: 16722  
 Sampler: (signature) [Signature]

Project (Name / Location): Igens - BMO  
 Reports To: Cory Katzeban Invoice To: S A M E  
 Company: The Sigma Group, Inc. Company: S A M E  
 Address: 1300 W Canal St. Address: S A M E  
 City State Zip: Milwaukee, WI 53233 City State Zip: S A M E  
 Phone: 414-643-4200 Phone: S A M E  
 FAX: 414-643-4210 FAX: S A M E

Analysis Requested										Other Analysis									
DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	LEAD	NITRATE/NITRITE	OIL & GREASE	PAH (EPA 8270)	PCB	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	TOTAL SUSPENDED SOLIDS	VOC DW (EPA 542.2)	VOC (EPA 8260)	8-PCRA METALS	PID/ FID					

Lab I.D.	Sample I.D.	Collection Date	Time	Comp	Grab	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation
<u>5032782A</u>	<u>SB-2-1 (4-6)</u>	<u>4/14</u>	<u>1:36</u>		<u>X</u>	<u>N</u>	<u>3</u>	<u>SOIL</u>	<u>MeOH/None</u>
<u>B</u>	<u>SB-2-2 (5-7)</u>	<u>↓</u>	<u>1:24</u>		<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>
<u>C</u>	<u>SB-2-3 (5-7)</u>	<u>↓</u>	<u>1:08</u>		<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>
<u>D</u>	<u>SB-2-4 (4-6)</u>	<u>↓</u>	<u>11:26</u>		<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>
<u>E</u>	<u>SB-2-5 (4-6)</u>	<u>↓</u>	<u>11:08</u>		<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>
<u>F</u>	<u>SB-2-6 (5-7)</u>	<u>↓</u>	<u>10:14</u>		<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>
<u>G</u>	<u>SB-2-7 (2-4)</u>	<u>↓</u>	<u>2:26</u>		<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>
<u>H</u>	<u>Comp Outdoors</u>	<u>4/13</u>	<u>2:00</u>	<u>X</u>		<u>N</u>	<u>2</u>	<u>SOIL</u>	<u>MeOH/None</u>

Comments/Special Instructions (\*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge etc.)  
5-Day Turn Around  
cc: Steve Kicket per cont on 4-18-17 m.

Sample Integrity - To be completed by receiving lab.  
 Method of Shipment: SM  
 Temp. of Temp. Blank \_\_\_\_\_ °C On Ice: X  
 Cooler seal intact upon receipt: X Yes \_\_\_\_\_ No

Relinquished By: (sign) [Signature] Time 12:00 Date 4/17  
 Received By: (sign) \_\_\_\_\_ Time \_\_\_\_\_ Date \_\_\_\_\_  
 Received in Laboratory By: [Signature] Time 8:00 Date 4/18/17



# Synergy Environmental Lab, INC.

1990 Prospect Ct., Appleton, WI 54914 \*P 920-830-2455 \* F 920-733-0631

CORY KATZBAN  
THE SIGMA GROUP, INC.  
1300 W. CANAL STREET  
MILWAUKEE, WI 53233

Report Date 21-Apr-17

Project Name IRGENS-BMO  
Project # 16722

Invoice # E32782

Lab Code 5032782A  
Sample ID SB-2-1 4-6  
Sample Matrix Soil  
Sample Date 4/14/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	86.8	%			1	5021		4/18/2017	NJC	1
Inorganic										
Metals										
Arsenic, Total	1.97	mg/Kg	0.33	1.09	1	6010B		4/19/2017	CWT	1
Barium, Total	50.0	mg/Kg	0.21	0.7	1	6010B		4/19/2017	CWT	1
Cadmium, Total	< 0.08	mg/Kg	0.08	0.25	1	6010B		4/19/2017	CWT	1
Chromium, Total	19.4	mg/Kg	0.08	0.26	1	6010B		4/19/2017	CWT	1
Lead, Total	7.94	mg/Kg	0.17	0.58	1	6010B		4/19/2017	CWT	1
Mercury, Total	< 0.019	mg/kg	0.019	0.064	1	7471		4/20/2017	CWT	1
Selenium, Total	< 0.52	mg/Kg	0.52	1.73	1	6010B		4/19/2017	CWT	1
Silver, Total	< 0.57	mg/Kg	0.57	1.89	1	6010B		4/19/2017	CWT	1
Organic										
PAH SIM										
Acenaphthene	< 0.0151	mg/kg	0.0151	0.0481	1	M8270C	4/20/2017	4/21/2017	NJC	1
Acenaphthylene	< 0.0159	mg/kg	0.0159	0.0508	1	M8270C	4/20/2017	4/21/2017	NJC	1
Anthracene	< 0.0109	mg/kg	0.0109	0.0345	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(a)anthracene	< 0.0116	mg/kg	0.0116	0.037	1	M8270C	4/20/2017	4/21/2017	NJC	2
Benzo(a)pyrene	< 0.0113	mg/kg	0.0113	0.0359	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(b)fluoranthene	< 0.013	mg/kg	0.013	0.041	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(g,h,i)perylene	< 0.0114	mg/kg	0.0114	0.036	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(k)fluoranthene	< 0.0147	mg/kg	0.0147	0.0469	1	M8270C	4/20/2017	4/21/2017	NJC	1
Chrysene	< 0.0121	mg/kg	0.0121	0.0383	1	M8270C	4/20/2017	4/21/2017	NJC	1
Dibenzo(a,h)anthracene	< 0.0078	mg/kg	0.0078	0.0251	1	M8270C	4/20/2017	4/21/2017	NJC	2
Fluoranthene	0.0197 "J"	mg/kg	0.0147	0.0469	1	M8270C	4/20/2017	4/21/2017	NJC	2
Fluorene	< 0.0179	mg/kg	0.0179	0.057	1	M8270C	4/20/2017	4/21/2017	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0114	mg/kg	0.0114	0.0362	1	M8270C	4/20/2017	4/21/2017	NJC	2
1-Methyl naphthalene	< 0.0203	mg/kg	0.0203	0.0645	1	M8270C	4/20/2017	4/21/2017	NJC	1
2-Methyl naphthalene	< 0.0113	mg/kg	0.0113	0.0358	1	M8270C	4/20/2017	4/21/2017	NJC	1

**Project Name** IRGENS-BMO  
**Project #** 16722

**Invoice #** E32782

**Lab Code** 5032782A  
**Sample ID** SB-2-1 4-6  
**Sample Matrix** Soil  
**Sample Date** 4/14/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Naphthalene	< 0.0153	mg/kg	0.0153	0.0486	1	M8270C	4/20/2017	4/21/2017	NJC	1
Phenanthrene	< 0.0111	mg/kg	0.0111	0.0352	1	M8270C	4/20/2017	4/21/2017	NJC	1
Pyrene	< 0.0153	mg/kg	0.0153	0.0487	1	M8270C	4/20/2017	4/21/2017	NJC	1
VOC's										
Benzene	< 0.03	mg/kg	0.03	0.96	1	8260B		4/18/2017	TCC	1
Bromobenzene	< 0.025	mg/kg	0.025	0.081	1	8260B		4/18/2017	TCC	1
Bromodichloromethane	< 0.074	mg/kg	0.074	0.24	1	8260B		4/18/2017	TCC	1
Bromoform	< 0.029	mg/kg	0.029	0.092	1	8260B		4/18/2017	TCC	1
tert-Butylbenzene	< 0.026	mg/kg	0.026	0.084	1	8260B		4/18/2017	TCC	1
sec-Butylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		4/18/2017	TCC	1
n-Butylbenzene	< 0.04	mg/kg	0.04	0.13	1	8260B		4/18/2017	TCC	1
Carbon Tetrachloride	< 0.016	mg/kg	0.016	0.053	1	8260B		4/18/2017	TCC	1
Chlorobenzene	< 0.013	mg/kg	0.013	0.04	1	8260B		4/18/2017	TCC	1
Chloroethane	< 0.091	mg/kg	0.091	0.29	1	8260B		4/18/2017	TCC	1
Chloroform	< 0.035	mg/kg	0.035	0.11	1	8260B		4/18/2017	TCC	1
Chloromethane	< 0.076	mg/kg	0.076	0.24	1	8260B		4/18/2017	TCC	1
2-Chlorotoluene	< 0.015	mg/kg	0.015	0.047	1	8260B		4/18/2017	TCC	1
4-Chlorotoluene	< 0.018	mg/kg	0.018	0.057	1	8260B		4/18/2017	TCC	1
1,2-Dibromo-3-chloropropane	< 0.058	mg/kg	0.058	0.18	1	8260B		4/18/2017	TCC	1
Dibromochloromethane	< 0.025	mg/kg	0.025	0.079	1	8260B		4/18/2017	TCC	1
1,4-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		4/18/2017	TCC	1
1,3-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		4/18/2017	TCC	1
1,2-Dichlorobenzene	< 0.028	mg/kg	0.028	0.088	1	8260B		4/18/2017	TCC	1
Dichlorodifluoromethane	< 0.048	mg/kg	0.048	0.15	1	8260B		4/18/2017	TCC	1
1,2-Dichloroethane	< 0.038	mg/kg	0.038	0.12	1	8260B		4/18/2017	TCC	1
1,1-Dichloroethane	< 0.034	mg/kg	0.034	0.11	1	8260B		4/18/2017	TCC	1
1,1-Dichloroethene	< 0.022	mg/kg	0.022	0.069	1	8260B		4/18/2017	TCC	1
cis-1,2-Dichloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B		4/18/2017	TCC	1
trans-1,2-Dichloroethene	< 0.028	mg/kg	0.028	0.09	1	8260B		4/18/2017	TCC	1
1,2-Dichloropropane	< 0.035	mg/kg	0.035	0.11	1	8260B		4/18/2017	TCC	1
1,3-Dichloropropane	< 0.025	mg/kg	0.025	0.079	1	8260B		4/18/2017	TCC	1
trans-1,3-Dichloropropene	< 0.022	mg/kg	0.022	0.068	1	8260B		4/18/2017	TCC	1
cis-1,3-Dichloropropene	< 0.039	mg/kg	0.039	0.12	1	8260B		4/18/2017	TCC	1
Di-isopropyl ether	< 0.01	mg/kg	0.01	0.032	1	8260B		4/18/2017	TCC	1
EDB (1,2-Dibromoethane)	< 0.023	mg/kg	0.023	0.072	1	8260B		4/18/2017	TCC	1
Ethylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		4/18/2017	TCC	1
Hexachlorobutadiene	< 0.085	mg/kg	0.085	0.27	1	8260B		4/18/2017	TCC	1
Isopropylbenzene	< 0.034	mg/kg	0.034	0.11	1	8260B		4/18/2017	TCC	1
p-Isopropyltoluene	< 0.029	mg/kg	0.029	0.093	1	8260B		4/18/2017	TCC	1
Methylene chloride	< 0.15	mg/kg	0.15	0.46	1	8260B		4/18/2017	TCC	1
Methyl tert-butyl ether (MTBE)	< 0.05	mg/kg	0.05	0.16	1	8260B		4/18/2017	TCC	1
Naphthalene	< 0.094	mg/kg	0.094	0.3	1	8260B		4/18/2017	TCC	1
n-Propylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		4/18/2017	TCC	1
1,1,2,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.88	1	8260B		4/18/2017	TCC	1
1,1,1,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.09	1	8260B		4/18/2017	TCC	1
Tetrachloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B		4/18/2017	TCC	1
Toluene	< 0.032	mg/kg	0.032	0.1	1	8260B		4/18/2017	TCC	1
1,2,4-Trichlorobenzene	< 0.064	mg/kg	0.064	0.2	1	8260B		4/18/2017	TCC	1
1,2,3-Trichlorobenzene	< 0.066	mg/kg	0.066	0.21	1	8260B		4/18/2017	TCC	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.96	1	8260B		4/18/2017	TCC	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B		4/18/2017	TCC	1
Trichloroethene (TCE)	< 0.041	mg/kg	0.041	0.13	1	8260B		4/18/2017	TCC	1

**Project Name** IRGENS-BMO  
**Project #** 16722

**Invoice #** E32782

**Lab Code** 5032782A  
**Sample ID** SB-2-1 4-6  
**Sample Matrix** Soil  
**Sample Date** 4/14/2017

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
Trichlorofluoromethane	< 0.041	mg/kg	0.041	0.13	1	8260B		4/18/2017	TCC	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.025	0.08	1	8260B		4/18/2017	TCC	1
1,3,5-Trimethylbenzene	< 0.032	mg/kg	0.032	0.1	1	8260B		4/18/2017	TCC	1
Vinyl Chloride	< 0.019	mg/kg	0.019	0.062	1	8260B		4/18/2017	TCC	1
m&p-Xylene	< 0.072	mg/kg	0.072	0.23	1	8260B		4/18/2017	TCC	1
o-Xylene	< 0.044	mg/kg	0.044	0.14	1	8260B		4/18/2017	TCC	1
SUR - 4-Bromofluorobenzene	95	Rec %			1	8260B		4/18/2017	TCC	1
SUR - Dibromofluoromethane	94	Rec %			1	8260B		4/18/2017	TCC	1
SUR - Toluene-d8	99	Rec %			1	8260B		4/18/2017	TCC	1
SUR - 1,2-Dichloroethane-d4	103	Rec %			1	8260B		4/18/2017	TCC	1

Project Name IRGENS-BMO  
 Project # 16722

Invoice # E32782

Lab Code 5032782B  
 Sample ID SB-2-2 5-7  
 Sample Matrix Soil  
 Sample Date 4/14/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	87.7	%			1	5021		4/18/2017	NJC	1
Inorganic										
Metals										
Lead, Total	4.86	mg/Kg	0.17	0.58	1	6010B		4/19/2017	CWT	1
Organic										
PAH SIM										
Acenaphthene	< 0.0151	mg/kg	0.0151	0.0481	1	M8270C	4/20/2017	4/21/2017	NJC	1
Acenaphthylene	< 0.0159	mg/kg	0.0159	0.0508	1	M8270C	4/20/2017	4/21/2017	NJC	1
Anthracene	< 0.0109	mg/kg	0.0109	0.0345	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(a)anthracene	< 0.0116	mg/kg	0.0116	0.037	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(a)pyrene	< 0.0113	mg/kg	0.0113	0.0359	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(b)fluoranthene	< 0.013	mg/kg	0.013	0.041	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(g,h,i)perylene	< 0.0114	mg/kg	0.0114	0.036	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(k)fluoranthene	< 0.0147	mg/kg	0.0147	0.0469	1	M8270C	4/20/2017	4/21/2017	NJC	1
Chrysene	< 0.0121	mg/kg	0.0121	0.0383	1	M8270C	4/20/2017	4/21/2017	NJC	1
Dibenzo(a,h)anthracene	< 0.0078	mg/kg	0.0078	0.0251	1	M8270C	4/20/2017	4/21/2017	NJC	1
Fluoranthene	< 0.0147	mg/kg	0.0147	0.0469	1	M8270C	4/20/2017	4/21/2017	NJC	1
Fluorene	< 0.0179	mg/kg	0.0179	0.057	1	M8270C	4/20/2017	4/21/2017	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0114	mg/kg	0.0114	0.0362	1	M8270C	4/20/2017	4/21/2017	NJC	1
1-Methyl naphthalene	< 0.0203	mg/kg	0.0203	0.0645	1	M8270C	4/20/2017	4/21/2017	NJC	1
2-Methyl naphthalene	< 0.0113	mg/kg	0.0113	0.0358	1	M8270C	4/20/2017	4/21/2017	NJC	1
Naphthalene	< 0.0153	mg/kg	0.0153	0.0486	1	M8270C	4/20/2017	4/21/2017	NJC	1
Phenanthrene	< 0.0111	mg/kg	0.0111	0.0352	1	M8270C	4/20/2017	4/21/2017	NJC	1
Pyrene	< 0.0153	mg/kg	0.0153	0.0487	1	M8270C	4/20/2017	4/21/2017	NJC	1
VOC's										
Benzene	< 0.03	mg/kg	0.03	0.96	1	8260B		4/18/2017	TCC	1
Bromobenzene	< 0.025	mg/kg	0.025	0.081	1	8260B		4/18/2017	TCC	1
Bromodichloromethane	< 0.074	mg/kg	0.074	0.24	1	8260B		4/18/2017	TCC	1
Bromoform	< 0.029	mg/kg	0.029	0.092	1	8260B		4/18/2017	TCC	1
tert-Butylbenzene	< 0.026	mg/kg	0.026	0.084	1	8260B		4/18/2017	TCC	1
sec-Butylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		4/18/2017	TCC	1
n-Butylbenzene	< 0.04	mg/kg	0.04	0.13	1	8260B		4/18/2017	TCC	1
Carbon Tetrachloride	< 0.016	mg/kg	0.016	0.053	1	8260B		4/18/2017	TCC	1
Chlorobenzene	< 0.013	mg/kg	0.013	0.04	1	8260B		4/18/2017	TCC	1
Chloroethane	< 0.091	mg/kg	0.091	0.29	1	8260B		4/18/2017	TCC	1
Chloroform	< 0.035	mg/kg	0.035	0.11	1	8260B		4/18/2017	TCC	1
Chloromethane	< 0.076	mg/kg	0.076	0.24	1	8260B		4/18/2017	TCC	1
2-Chlorotoluene	< 0.015	mg/kg	0.015	0.047	1	8260B		4/18/2017	TCC	1
4-Chlorotoluene	< 0.018	mg/kg	0.018	0.057	1	8260B		4/18/2017	TCC	1
1,2-Dibromo-3-chloropropane	< 0.058	mg/kg	0.058	0.18	1	8260B		4/18/2017	TCC	1
Dibromochloromethane	< 0.025	mg/kg	0.025	0.079	1	8260B		4/18/2017	TCC	1
1,4-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		4/18/2017	TCC	1
1,3-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		4/18/2017	TCC	1
1,2-Dichlorobenzene	< 0.028	mg/kg	0.028	0.088	1	8260B		4/18/2017	TCC	1
Dichlorodifluoromethane	< 0.048	mg/kg	0.048	0.15	1	8260B		4/18/2017	TCC	1
1,2-Dichloroethane	< 0.038	mg/kg	0.038	0.12	1	8260B		4/18/2017	TCC	1
1,1-Dichloroethane	< 0.034	mg/kg	0.034	0.11	1	8260B		4/18/2017	TCC	1
1,1-Dichloroethene	< 0.022	mg/kg	0.022	0.069	1	8260B		4/18/2017	TCC	1
cis-1,2-Dichloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B		4/18/2017	TCC	1

**Project Name** IRGENS-BMO  
**Project #** 16722

**Invoice #** E32782

**Lab Code** 5032782B  
**Sample ID** SB-2-2 5-7  
**Sample Matrix** Soil  
**Sample Date** 4/14/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
trans-1,2-Dichloroethene	< 0.028	mg/kg	0.028	0.09	1	8260B	4/18/2017	TCC		1
1,2-Dichloropropane	< 0.035	mg/kg	0.035	0.11	1	8260B	4/18/2017	TCC		1
1,3-Dichloropropane	< 0.025	mg/kg	0.025	0.079	1	8260B	4/18/2017	TCC		1
trans-1,3-Dichloropropene	< 0.022	mg/kg	0.022	0.068	1	8260B	4/18/2017	TCC		1
cis-1,3-Dichloropropene	< 0.039	mg/kg	0.039	0.12	1	8260B	4/18/2017	TCC		1
Di-isopropyl ether	< 0.01	mg/kg	0.01	0.032	1	8260B	4/18/2017	TCC		1
EDB (1,2-Dibromoethane)	< 0.023	mg/kg	0.023	0.072	1	8260B	4/18/2017	TCC		1
Ethylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B	4/18/2017	TCC		1
Hexachlorobutadiene	< 0.085	mg/kg	0.085	0.27	1	8260B	4/18/2017	TCC		1
Isopropylbenzene	< 0.034	mg/kg	0.034	0.11	1	8260B	4/18/2017	TCC		1
p-Isopropyltoluene	< 0.029	mg/kg	0.029	0.093	1	8260B	4/18/2017	TCC		1
Methylene chloride	< 0.15	mg/kg	0.15	0.46	1	8260B	4/18/2017	TCC		1
Methyl tert-butyl ether (MTBE)	< 0.05	mg/kg	0.05	0.16	1	8260B	4/18/2017	TCC		1
Naphthalene	< 0.094	mg/kg	0.094	0.3	1	8260B	4/18/2017	TCC		1
n-Propylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B	4/18/2017	TCC		1
1,1,2,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.88	1	8260B	4/18/2017	TCC		1
1,1,1,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.09	1	8260B	4/18/2017	TCC		1
Tetrachloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B	4/18/2017	TCC		1
Toluene	< 0.032	mg/kg	0.032	0.1	1	8260B	4/18/2017	TCC		1
1,2,4-Trichlorobenzene	< 0.064	mg/kg	0.064	0.2	1	8260B	4/18/2017	TCC		1
1,2,3-Trichlorobenzene	< 0.066	mg/kg	0.066	0.21	1	8260B	4/18/2017	TCC		1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.96	1	8260B	4/18/2017	TCC		1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B	4/18/2017	TCC		1
Trichloroethene (TCE)	< 0.041	mg/kg	0.041	0.13	1	8260B	4/18/2017	TCC		1
Trichlorofluoromethane	< 0.041	mg/kg	0.041	0.13	1	8260B	4/18/2017	TCC		1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.025	0.08	1	8260B	4/18/2017	TCC		1
1,3,5-Trimethylbenzene	< 0.032	mg/kg	0.032	0.1	1	8260B	4/18/2017	TCC		1
Vinyl Chloride	< 0.019	mg/kg	0.019	0.062	1	8260B	4/18/2017	TCC		1
m&p-Xylene	< 0.072	mg/kg	0.072	0.23	1	8260B	4/18/2017	TCC		1
o-Xylene	< 0.044	mg/kg	0.044	0.14	1	8260B	4/18/2017	TCC		1
SUR - Dibromofluoromethane	94	Rec %			1	8260B	4/18/2017	TCC		1
SUR - 4-Bromofluorobenzene	95	Rec %			1	8260B	4/18/2017	TCC		1
SUR - 1,2-Dichloroethane-d4	101	Rec %			1	8260B	4/18/2017	TCC		1
SUR - Toluene-d8	100	Rec %			1	8260B	4/18/2017	TCC		1

Project Name IRGENS-BMO  
 Project # 16722

Invoice # E32782

Lab Code 5032782C  
 Sample ID SB-2-3 5-7  
 Sample Matrix Soil  
 Sample Date 4/14/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	82.4	%			1	5021		4/18/2017	NJC	1
Inorganic										
Metals										
Lead, Total	7.01	mg/Kg	0.17	0.58	1	6010B		4/19/2017	CWT	1
Organic										
PAH SIM										
Acenaphthene	< 0.0151	mg/kg	0.0151	0.0481	1	M8270C	4/20/2017	4/21/2017	NJC	1
Acenaphthylene	< 0.0159	mg/kg	0.0159	0.0508	1	M8270C	4/20/2017	4/21/2017	NJC	1
Anthracene	< 0.0109	mg/kg	0.0109	0.0345	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(a)anthracene	< 0.0116	mg/kg	0.0116	0.037	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(a)pyrene	< 0.0113	mg/kg	0.0113	0.0359	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(b)fluoranthene	< 0.013	mg/kg	0.013	0.041	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(g,h,i)perylene	< 0.0114	mg/kg	0.0114	0.036	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(k)fluoranthene	< 0.0147	mg/kg	0.0147	0.0469	1	M8270C	4/20/2017	4/21/2017	NJC	1
Chrysene	< 0.0121	mg/kg	0.0121	0.0383	1	M8270C	4/20/2017	4/21/2017	NJC	1
Dibenzo(a,h)anthracene	< 0.0078	mg/kg	0.0078	0.0251	1	M8270C	4/20/2017	4/21/2017	NJC	1
Fluoranthene	< 0.0147	mg/kg	0.0147	0.0469	1	M8270C	4/20/2017	4/21/2017	NJC	1
Fluorene	< 0.0179	mg/kg	0.0179	0.057	1	M8270C	4/20/2017	4/21/2017	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0114	mg/kg	0.0114	0.0362	1	M8270C	4/20/2017	4/21/2017	NJC	1
1-Methyl naphthalene	< 0.0203	mg/kg	0.0203	0.0645	1	M8270C	4/20/2017	4/21/2017	NJC	1
2-Methyl naphthalene	< 0.0113	mg/kg	0.0113	0.0358	1	M8270C	4/20/2017	4/21/2017	NJC	1
Naphthalene	< 0.0153	mg/kg	0.0153	0.0486	1	M8270C	4/20/2017	4/21/2017	NJC	1
Phenanthrene	< 0.0111	mg/kg	0.0111	0.0352	1	M8270C	4/20/2017	4/21/2017	NJC	1
Pyrene	< 0.0153	mg/kg	0.0153	0.0487	1	M8270C	4/20/2017	4/21/2017	NJC	1
VOC's										
Benzene	< 0.03	mg/kg	0.03	0.96	1	8260B		4/18/2017	TCC	1
Bromobenzene	< 0.025	mg/kg	0.025	0.081	1	8260B		4/18/2017	TCC	1
Bromodichloromethane	< 0.074	mg/kg	0.074	0.24	1	8260B		4/18/2017	TCC	1
Bromoform	< 0.029	mg/kg	0.029	0.092	1	8260B		4/18/2017	TCC	1
tert-Butylbenzene	< 0.026	mg/kg	0.026	0.084	1	8260B		4/18/2017	TCC	1
sec-Butylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		4/18/2017	TCC	1
n-Butylbenzene	< 0.04	mg/kg	0.04	0.13	1	8260B		4/18/2017	TCC	1
Carbon Tetrachloride	< 0.016	mg/kg	0.016	0.053	1	8260B		4/18/2017	TCC	1
Chlorobenzene	< 0.013	mg/kg	0.013	0.04	1	8260B		4/18/2017	TCC	1
Chloroethane	< 0.091	mg/kg	0.091	0.29	1	8260B		4/18/2017	TCC	1
Chloroform	< 0.035	mg/kg	0.035	0.11	1	8260B		4/18/2017	TCC	1
Chloromethane	< 0.076	mg/kg	0.076	0.24	1	8260B		4/18/2017	TCC	1
2-Chlorotoluene	< 0.015	mg/kg	0.015	0.047	1	8260B		4/18/2017	TCC	1
4-Chlorotoluene	< 0.018	mg/kg	0.018	0.057	1	8260B		4/18/2017	TCC	1
1,2-Dibromo-3-chloropropane	< 0.058	mg/kg	0.058	0.18	1	8260B		4/18/2017	TCC	1
Dibromochloromethane	< 0.025	mg/kg	0.025	0.079	1	8260B		4/18/2017	TCC	1
1,4-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		4/18/2017	TCC	1
1,3-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		4/18/2017	TCC	1
1,2-Dichlorobenzene	< 0.028	mg/kg	0.028	0.088	1	8260B		4/18/2017	TCC	1
Dichlorodifluoromethane	< 0.048	mg/kg	0.048	0.15	1	8260B		4/18/2017	TCC	1
1,2-Dichloroethane	< 0.038	mg/kg	0.038	0.12	1	8260B		4/18/2017	TCC	1
1,1-Dichloroethane	< 0.034	mg/kg	0.034	0.11	1	8260B		4/18/2017	TCC	1
1,1-Dichloroethene	< 0.022	mg/kg	0.022	0.069	1	8260B		4/18/2017	TCC	1
cis-1,2-Dichloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B		4/18/2017	TCC	1

**Project Name** IRGENS-BMO  
**Project #** 16722

**Invoice #** E32782

**Lab Code** 5032782C  
**Sample ID** SB-2-3 5-7  
**Sample Matrix** Soil  
**Sample Date** 4/14/2017

	<b>Result</b>	<b>Unit</b>	<b>LOD</b>	<b>LOQ</b>	<b>Dil</b>	<b>Method</b>	<b>Ext Date</b>	<b>Run Date</b>	<b>Analyst</b>	<b>Code</b>
trans-1,2-Dichloroethene	< 0.028	mg/kg	0.028	0.09	1	8260B		4/18/2017	TCC	1
1,2-Dichloropropane	< 0.035	mg/kg	0.035	0.11	1	8260B		4/18/2017	TCC	1
1,3-Dichloropropane	< 0.025	mg/kg	0.025	0.079	1	8260B		4/18/2017	TCC	1
trans-1,3-Dichloropropene	< 0.022	mg/kg	0.022	0.068	1	8260B		4/18/2017	TCC	1
cis-1,3-Dichloropropene	< 0.039	mg/kg	0.039	0.12	1	8260B		4/18/2017	TCC	1
Di-isopropyl ether	< 0.01	mg/kg	0.01	0.032	1	8260B		4/18/2017	TCC	1
EDB (1,2-Dibromoethane)	< 0.023	mg/kg	0.023	0.072	1	8260B		4/18/2017	TCC	1
Ethylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		4/18/2017	TCC	1
Hexachlorobutadiene	< 0.085	mg/kg	0.085	0.27	1	8260B		4/18/2017	TCC	1
Isopropylbenzene	< 0.034	mg/kg	0.034	0.11	1	8260B		4/18/2017	TCC	1
p-Isopropyltoluene	< 0.029	mg/kg	0.029	0.093	1	8260B		4/18/2017	TCC	1
Methylene chloride	< 0.15	mg/kg	0.15	0.46	1	8260B		4/18/2017	TCC	1
Methyl tert-butyl ether (MTBE)	< 0.05	mg/kg	0.05	0.16	1	8260B		4/18/2017	TCC	1
Naphthalene	< 0.094	mg/kg	0.094	0.3	1	8260B		4/18/2017	TCC	1
n-Propylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		4/18/2017	TCC	1
1,1,2,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.88	1	8260B		4/18/2017	TCC	1
1,1,1,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.09	1	8260B		4/18/2017	TCC	1
Tetrachloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B		4/18/2017	TCC	1
Toluene	< 0.032	mg/kg	0.032	0.1	1	8260B		4/18/2017	TCC	1
1,2,4-Trichlorobenzene	< 0.064	mg/kg	0.064	0.2	1	8260B		4/18/2017	TCC	1
1,2,3-Trichlorobenzene	< 0.066	mg/kg	0.066	0.21	1	8260B		4/18/2017	TCC	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.96	1	8260B		4/18/2017	TCC	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B		4/18/2017	TCC	1
Trichloroethene (TCE)	< 0.041	mg/kg	0.041	0.13	1	8260B		4/18/2017	TCC	1
Trichlorofluoromethane	< 0.041	mg/kg	0.041	0.13	1	8260B		4/18/2017	TCC	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.025	0.08	1	8260B		4/18/2017	TCC	1
1,3,5-Trimethylbenzene	< 0.032	mg/kg	0.032	0.1	1	8260B		4/18/2017	TCC	1
Vinyl Chloride	< 0.019	mg/kg	0.019	0.062	1	8260B		4/18/2017	TCC	1
m&p-Xylene	< 0.072	mg/kg	0.072	0.23	1	8260B		4/18/2017	TCC	1
o-Xylene	< 0.044	mg/kg	0.044	0.14	1	8260B		4/18/2017	TCC	1
SUR - Toluene-d8	99	Rec %			1	8260B		4/18/2017	TCC	1
SUR - 1,2-Dichloroethane-d4	102	Rec %			1	8260B		4/18/2017	TCC	1
SUR - 4-Bromofluorobenzene	95	Rec %			1	8260B		4/18/2017	TCC	1
SUR - Dibromofluoromethane	93	Rec %			1	8260B		4/18/2017	TCC	1

Project Name IRGENS-BMO  
 Project # 16722

Invoice # E32782

Lab Code 5032782D  
 Sample ID SB-2-4 4-6  
 Sample Matrix Soil  
 Sample Date 4/14/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	84.5	%			1	5021		4/18/2017	NJC	1
Inorganic										
Metals										
Arsenic, Total	2.65	mg/Kg	0.33	1.09	1	6010B		4/19/2017	CWT	1
Barium, Total	14.4	mg/Kg	0.21	0.7	1	6010B		4/19/2017	CWT	1
Cadmium, Total	< 0.08	mg/Kg	0.08	0.25	1	6010B		4/19/2017	CWT	1
Chromium, Total	7.59	mg/Kg	0.08	0.26	1	6010B		4/19/2017	CWT	1
Lead, Total	5.24	mg/Kg	0.17	0.58	1	6010B		4/19/2017	CWT	1
Mercury, Total	< 0.019	mg/kg	0.019	0.064	1	7471		4/20/2017	CWT	1
Selenium, Total	< 0.52	mg/Kg	0.52	1.73	1	6010B		4/19/2017	CWT	1
Silver, Total	< 0.57	mg/Kg	0.57	1.89	1	6010B		4/19/2017	CWT	1
Organic										
PAH SIM										
Acenaphthene	< 0.0151	mg/kg	0.0151	0.0481	1	M8270C	4/20/2017	4/21/2017	NJC	1
Acenaphthylene	< 0.0159	mg/kg	0.0159	0.0508	1	M8270C	4/20/2017	4/21/2017	NJC	1
Anthracene	< 0.0109	mg/kg	0.0109	0.0345	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(a)anthracene	< 0.0116	mg/kg	0.0116	0.037	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(a)pyrene	< 0.0113	mg/kg	0.0113	0.0359	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(b)fluoranthene	< 0.013	mg/kg	0.013	0.041	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(g,h,i)perylene	< 0.0114	mg/kg	0.0114	0.036	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(k)fluoranthene	< 0.0147	mg/kg	0.0147	0.0469	1	M8270C	4/20/2017	4/21/2017	NJC	1
Chrysene	< 0.0121	mg/kg	0.0121	0.0383	1	M8270C	4/20/2017	4/21/2017	NJC	1
Dibenzo(a,h)anthracene	< 0.0078	mg/kg	0.0078	0.0251	1	M8270C	4/20/2017	4/21/2017	NJC	1
Fluoranthene	< 0.0147	mg/kg	0.0147	0.0469	1	M8270C	4/20/2017	4/21/2017	NJC	1
Fluorene	< 0.0179	mg/kg	0.0179	0.057	1	M8270C	4/20/2017	4/21/2017	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0114	mg/kg	0.0114	0.0362	1	M8270C	4/20/2017	4/21/2017	NJC	1
1-Methyl naphthalene	< 0.0203	mg/kg	0.0203	0.0645	1	M8270C	4/20/2017	4/21/2017	NJC	1
2-Methyl naphthalene	< 0.0113	mg/kg	0.0113	0.0358	1	M8270C	4/20/2017	4/21/2017	NJC	1
Naphthalene	< 0.0153	mg/kg	0.0153	0.0486	1	M8270C	4/20/2017	4/21/2017	NJC	1
Phenanthrene	< 0.0111	mg/kg	0.0111	0.0352	1	M8270C	4/20/2017	4/21/2017	NJC	1
Pyrene	< 0.0153	mg/kg	0.0153	0.0487	1	M8270C	4/20/2017	4/21/2017	NJC	1
VOC's										
Benzene	< 0.03	mg/kg	0.03	0.96	1	8260B		4/18/2017	TCC	1
Bromobenzene	< 0.025	mg/kg	0.025	0.081	1	8260B		4/18/2017	TCC	1
Bromodichloromethane	< 0.074	mg/kg	0.074	0.24	1	8260B		4/18/2017	TCC	1
Bromoform	< 0.029	mg/kg	0.029	0.092	1	8260B		4/18/2017	TCC	1
tert-Butylbenzene	< 0.026	mg/kg	0.026	0.084	1	8260B		4/18/2017	TCC	1
sec-Butylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		4/18/2017	TCC	1
n-Butylbenzene	< 0.04	mg/kg	0.04	0.13	1	8260B		4/18/2017	TCC	1
Carbon Tetrachloride	< 0.016	mg/kg	0.016	0.053	1	8260B		4/18/2017	TCC	1
Chlorobenzene	< 0.013	mg/kg	0.013	0.04	1	8260B		4/18/2017	TCC	1
Chloroethane	< 0.091	mg/kg	0.091	0.29	1	8260B		4/18/2017	TCC	1
Chloroform	< 0.035	mg/kg	0.035	0.11	1	8260B		4/18/2017	TCC	1
Chloromethane	< 0.076	mg/kg	0.076	0.24	1	8260B		4/18/2017	TCC	1
2-Chlorotoluene	< 0.015	mg/kg	0.015	0.047	1	8260B		4/18/2017	TCC	1
4-Chlorotoluene	< 0.018	mg/kg	0.018	0.057	1	8260B		4/18/2017	TCC	1
1,2-Dibromo-3-chloropropane	< 0.058	mg/kg	0.058	0.18	1	8260B		4/18/2017	TCC	1
Dibromochloromethane	< 0.025	mg/kg	0.025	0.079	1	8260B		4/18/2017	TCC	1
1,4-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		4/18/2017	TCC	1



Project Name IRGENS-BMO  
Project # 16722

Invoice # E32782

Lab Code 5032782D  
Sample ID SB-2-4 4-6  
Sample Matrix Soil  
Sample Date 4/14/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
1,3-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		4/18/2017	TCC	1
1,2-Dichlorobenzene	< 0.028	mg/kg	0.028	0.088	1	8260B		4/18/2017	TCC	1
Dichlorodifluoromethane	< 0.048	mg/kg	0.048	0.15	1	8260B		4/18/2017	TCC	1
1,2-Dichloroethane	< 0.038	mg/kg	0.038	0.12	1	8260B		4/18/2017	TCC	1
1,1-Dichloroethane	< 0.034	mg/kg	0.034	0.11	1	8260B		4/18/2017	TCC	1
1,1-Dichloroethene	< 0.022	mg/kg	0.022	0.069	1	8260B		4/18/2017	TCC	1
cis-1,2-Dichloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B		4/18/2017	TCC	1
trans-1,2-Dichloroethene	< 0.028	mg/kg	0.028	0.09	1	8260B		4/18/2017	TCC	1
1,2-Dichloropropane	< 0.035	mg/kg	0.035	0.11	1	8260B		4/18/2017	TCC	1
1,3-Dichloropropane	< 0.025	mg/kg	0.025	0.079	1	8260B		4/18/2017	TCC	1
trans-1,3-Dichloropropene	< 0.022	mg/kg	0.022	0.068	1	8260B		4/18/2017	TCC	1
cis-1,3-Dichloropropene	< 0.039	mg/kg	0.039	0.12	1	8260B		4/18/2017	TCC	1
Di-isopropyl ether	< 0.01	mg/kg	0.01	0.032	1	8260B		4/18/2017	TCC	1
EDB (1,2-Dibromoethane)	< 0.023	mg/kg	0.023	0.072	1	8260B		4/18/2017	TCC	1
Ethylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		4/18/2017	TCC	1
Hexachlorobutadiene	< 0.085	mg/kg	0.085	0.27	1	8260B		4/18/2017	TCC	1
Isopropylbenzene	< 0.034	mg/kg	0.034	0.11	1	8260B		4/18/2017	TCC	1
p-Isopropyltoluene	< 0.029	mg/kg	0.029	0.093	1	8260B		4/18/2017	TCC	1
Methylene chloride	< 0.15	mg/kg	0.15	0.46	1	8260B		4/18/2017	TCC	1
Methyl tert-butyl ether (MTBE)	< 0.05	mg/kg	0.05	0.16	1	8260B		4/18/2017	TCC	1
Naphthalene	< 0.094	mg/kg	0.094	0.3	1	8260B		4/18/2017	TCC	1
n-Propylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		4/18/2017	TCC	1
1,1,2,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.88	1	8260B		4/18/2017	TCC	1
1,1,1,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.09	1	8260B		4/18/2017	TCC	1
Tetrachloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B		4/18/2017	TCC	1
Toluene	< 0.032	mg/kg	0.032	0.1	1	8260B		4/18/2017	TCC	1
1,2,4-Trichlorobenzene	< 0.064	mg/kg	0.064	0.2	1	8260B		4/18/2017	TCC	1
1,2,3-Trichlorobenzene	< 0.066	mg/kg	0.066	0.21	1	8260B		4/18/2017	TCC	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.96	1	8260B		4/18/2017	TCC	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B		4/18/2017	TCC	1
Trichloroethene (TCE)	< 0.041	mg/kg	0.041	0.13	1	8260B		4/18/2017	TCC	1
Trichlorofluoromethane	< 0.041	mg/kg	0.041	0.13	1	8260B		4/18/2017	TCC	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.025	0.08	1	8260B		4/18/2017	TCC	1
1,3,5-Trimethylbenzene	< 0.032	mg/kg	0.032	0.1	1	8260B		4/18/2017	TCC	1
Vinyl Chloride	< 0.019	mg/kg	0.019	0.062	1	8260B		4/18/2017	TCC	1
m&p-Xylene	< 0.072	mg/kg	0.072	0.23	1	8260B		4/18/2017	TCC	1
o-Xylene	< 0.044	mg/kg	0.044	0.14	1	8260B		4/18/2017	TCC	1
SUR - 4-Bromofluorobenzene	96	Rec %			1	8260B		4/18/2017	TCC	1
SUR - Dibromofluoromethane	97	Rec %			1	8260B		4/18/2017	TCC	1
SUR - Toluene-d8	96	Rec %			1	8260B		4/18/2017	TCC	1
SUR - 1,2-Dichloroethane-d4	103	Rec %			1	8260B		4/18/2017	TCC	1

Project Name IRGENS-BMO  
 Project # 16722

Invoice # E32782

Lab Code 5032782E  
 Sample ID SB-2-5 4-6  
 Sample Matrix Soil  
 Sample Date 4/14/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	90.9	%			1	5021		4/18/2017	NJC	1
Inorganic										
Metals										
Arsenic, Total	2.43	mg/Kg	0.33	1.09	1	6010B		4/19/2017	CWT	1
Barium, Total	12.8	mg/Kg	0.21	0.7	1	6010B		4/19/2017	CWT	1
Cadmium, Total	< 0.08	mg/Kg	0.08	0.25	1	6010B		4/19/2017	CWT	1
Chromium, Total	6.23	mg/Kg	0.08	0.26	1	6010B		4/19/2017	CWT	1
Lead, Total	5.24	mg/Kg	0.17	0.58	1	6010B		4/19/2017	CWT	1
Mercury, Total	< 0.019	mg/kg	0.019	0.064	1	7471		4/20/2017	CWT	1
Selenium, Total	< 0.52	mg/Kg	0.52	1.73	1	6010B		4/19/2017	CWT	1
Silver, Total	< 0.57	mg/Kg	0.57	1.89	1	6010B		4/19/2017	CWT	1
Organic										
PAH SIM										
Acenaphthene	< 0.0151	mg/kg	0.0151	0.0481	1	M8270C	4/20/2017	4/21/2017	NJC	1
Acenaphthylene	< 0.0159	mg/kg	0.0159	0.0508	1	M8270C	4/20/2017	4/21/2017	NJC	1
Anthracene	< 0.0109	mg/kg	0.0109	0.0345	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(a)anthracene	0.0145 "J"	mg/kg	0.0116	0.037	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(a)pyrene	< 0.0113	mg/kg	0.0113	0.0359	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(b)fluoranthene	< 0.013	mg/kg	0.013	0.041	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(g,h,i)perylene	< 0.0114	mg/kg	0.0114	0.036	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(k)fluoranthene	< 0.0147	mg/kg	0.0147	0.0469	1	M8270C	4/20/2017	4/21/2017	NJC	1
Chrysene	< 0.0121	mg/kg	0.0121	0.0383	1	M8270C	4/20/2017	4/21/2017	NJC	1
Dibenzo(a,h)anthracene	< 0.0078	mg/kg	0.0078	0.0251	1	M8270C	4/20/2017	4/21/2017	NJC	1
Fluoranthene	< 0.0147	mg/kg	0.0147	0.0469	1	M8270C	4/20/2017	4/21/2017	NJC	1
Fluorene	< 0.0179	mg/kg	0.0179	0.057	1	M8270C	4/20/2017	4/21/2017	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0114	mg/kg	0.0114	0.0362	1	M8270C	4/20/2017	4/21/2017	NJC	1
1-Methyl naphthalene	< 0.0203	mg/kg	0.0203	0.0645	1	M8270C	4/20/2017	4/21/2017	NJC	1
2-Methyl naphthalene	< 0.0113	mg/kg	0.0113	0.0358	1	M8270C	4/20/2017	4/21/2017	NJC	1
Naphthalene	< 0.0153	mg/kg	0.0153	0.0486	1	M8270C	4/20/2017	4/21/2017	NJC	1
Phenanthrene	< 0.0111	mg/kg	0.0111	0.0352	1	M8270C	4/20/2017	4/21/2017	NJC	1
Pyrene	< 0.0153	mg/kg	0.0153	0.0487	1	M8270C	4/20/2017	4/21/2017	NJC	1
VOC's										
Benzene	< 0.03	mg/kg	0.03	0.96	1	8260B		4/18/2017	TCC	1
Bromobenzene	< 0.025	mg/kg	0.025	0.081	1	8260B		4/18/2017	TCC	1
Bromodichloromethane	< 0.074	mg/kg	0.074	0.24	1	8260B		4/18/2017	TCC	1
Bromoform	< 0.029	mg/kg	0.029	0.092	1	8260B		4/18/2017	TCC	1
tert-Butylbenzene	< 0.026	mg/kg	0.026	0.084	1	8260B		4/18/2017	TCC	1
sec-Butylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		4/18/2017	TCC	1
n-Butylbenzene	< 0.04	mg/kg	0.04	0.13	1	8260B		4/18/2017	TCC	1
Carbon Tetrachloride	< 0.016	mg/kg	0.016	0.053	1	8260B		4/18/2017	TCC	1
Chlorobenzene	< 0.013	mg/kg	0.013	0.04	1	8260B		4/18/2017	TCC	1
Chloroethane	< 0.091	mg/kg	0.091	0.29	1	8260B		4/18/2017	TCC	1
Chloroform	< 0.035	mg/kg	0.035	0.11	1	8260B		4/18/2017	TCC	1
Chloromethane	< 0.076	mg/kg	0.076	0.24	1	8260B		4/18/2017	TCC	1
2-Chlorotoluene	< 0.015	mg/kg	0.015	0.047	1	8260B		4/18/2017	TCC	1
4-Chlorotoluene	< 0.018	mg/kg	0.018	0.057	1	8260B		4/18/2017	TCC	1
1,2-Dibromo-3-chloropropane	< 0.058	mg/kg	0.058	0.18	1	8260B		4/18/2017	TCC	1
Dibromochloromethane	< 0.025	mg/kg	0.025	0.079	1	8260B		4/18/2017	TCC	1
1,4-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		4/18/2017	TCC	1

Project Name IRGENS-BMO  
 Project # 16722

Invoice # E32782

Lab Code 5032782E  
 Sample ID SB-2-5 4-6  
 Sample Matrix Soil  
 Sample Date 4/14/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
1,3-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B	4/18/2017	TCC		1
1,2-Dichlorobenzene	< 0.028	mg/kg	0.028	0.088	1	8260B	4/18/2017	TCC		1
Dichlorodifluoromethane	< 0.048	mg/kg	0.048	0.15	1	8260B	4/18/2017	TCC		1
1,2-Dichloroethane	< 0.038	mg/kg	0.038	0.12	1	8260B	4/18/2017	TCC		1
1,1-Dichloroethane	< 0.034	mg/kg	0.034	0.11	1	8260B	4/18/2017	TCC		1
1,1-Dichloroethene	< 0.022	mg/kg	0.022	0.069	1	8260B	4/18/2017	TCC		1
cis-1,2-Dichloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B	4/18/2017	TCC		1
trans-1,2-Dichloroethene	< 0.028	mg/kg	0.028	0.09	1	8260B	4/18/2017	TCC		1
1,2-Dichloropropane	< 0.035	mg/kg	0.035	0.11	1	8260B	4/18/2017	TCC		1
1,3-Dichloropropane	< 0.025	mg/kg	0.025	0.079	1	8260B	4/18/2017	TCC		1
trans-1,3-Dichloropropene	< 0.022	mg/kg	0.022	0.068	1	8260B	4/18/2017	TCC		1
cis-1,3-Dichloropropene	< 0.039	mg/kg	0.039	0.12	1	8260B	4/18/2017	TCC		1
Di-isopropyl ether	< 0.01	mg/kg	0.01	0.032	1	8260B	4/18/2017	TCC		1
EDB (1,2-Dibromoethane)	< 0.023	mg/kg	0.023	0.072	1	8260B	4/18/2017	TCC		1
Ethylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B	4/18/2017	TCC		1
Hexachlorobutadiene	< 0.085	mg/kg	0.085	0.27	1	8260B	4/18/2017	TCC		1
Isopropylbenzene	< 0.034	mg/kg	0.034	0.11	1	8260B	4/18/2017	TCC		1
p-Isopropyltoluene	< 0.029	mg/kg	0.029	0.093	1	8260B	4/18/2017	TCC		1
Methylene chloride	< 0.15	mg/kg	0.15	0.46	1	8260B	4/18/2017	TCC		1
Methyl tert-butyl ether (MTBE)	< 0.05	mg/kg	0.05	0.16	1	8260B	4/18/2017	TCC		1
Naphthalene	< 0.094	mg/kg	0.094	0.3	1	8260B	4/18/2017	TCC		1
n-Propylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B	4/18/2017	TCC		1
1,1,2,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.88	1	8260B	4/18/2017	TCC		1
1,1,1,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.09	1	8260B	4/18/2017	TCC		1
Tetrachloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B	4/18/2017	TCC		1
Toluene	< 0.032	mg/kg	0.032	0.1	1	8260B	4/18/2017	TCC		1
1,2,4-Trichlorobenzene	< 0.064	mg/kg	0.064	0.2	1	8260B	4/18/2017	TCC		1
1,2,3-Trichlorobenzene	< 0.066	mg/kg	0.066	0.21	1	8260B	4/18/2017	TCC		1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.96	1	8260B	4/18/2017	TCC		1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B	4/18/2017	TCC		1
Trichloroethene (TCE)	< 0.041	mg/kg	0.041	0.13	1	8260B	4/18/2017	TCC		1
Trichlorofluoromethane	< 0.041	mg/kg	0.041	0.13	1	8260B	4/18/2017	TCC		1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.025	0.08	1	8260B	4/18/2017	TCC		1
1,3,5-Trimethylbenzene	< 0.032	mg/kg	0.032	0.1	1	8260B	4/18/2017	TCC		1
Vinyl Chloride	< 0.019	mg/kg	0.019	0.062	1	8260B	4/18/2017	TCC		1
m&p-Xylene	< 0.072	mg/kg	0.072	0.23	1	8260B	4/18/2017	TCC		1
o-Xylene	< 0.044	mg/kg	0.044	0.14	1	8260B	4/18/2017	TCC		1
SUR - Dibromofluoromethane	94	Rec %			1	8260B	4/18/2017	TCC		1
SUR - Toluene-d8	99	Rec %			1	8260B	4/18/2017	TCC		1
SUR - 4-Bromofluorobenzene	97	Rec %			1	8260B	4/18/2017	TCC		1
SUR - 1,2-Dichloroethane-d4	105	Rec %			1	8260B	4/18/2017	TCC		1

Project Name IRGENS-BMO  
 Project # 16722

Invoice # E32782

Lab Code 5032782F  
 Sample ID SB-2-6 5-7  
 Sample Matrix Soil  
 Sample Date 4/14/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	90.8	%			1	5021		4/18/2017	NJC	1
Inorganic										
Metals										
Lead, Total	5.03	mg/Kg	0.17	0.58	1	6010B		4/19/2017	CWT	1
Organic										
PAH SIM										
Acenaphthene	< 0.0151	mg/kg	0.0151	0.0481	1	M8270C	4/20/2017	4/21/2017	NJC	1
Acenaphthylene	< 0.0159	mg/kg	0.0159	0.0508	1	M8270C	4/20/2017	4/21/2017	NJC	1
Anthracene	< 0.0109	mg/kg	0.0109	0.0345	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(a)anthracene	< 0.0116	mg/kg	0.0116	0.037	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(a)pyrene	< 0.0113	mg/kg	0.0113	0.0359	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(b)fluoranthene	< 0.013	mg/kg	0.013	0.041	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(g,h,i)perylene	< 0.0114	mg/kg	0.0114	0.036	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(k)fluoranthene	< 0.0147	mg/kg	0.0147	0.0469	1	M8270C	4/20/2017	4/21/2017	NJC	1
Chrysene	< 0.0121	mg/kg	0.0121	0.0383	1	M8270C	4/20/2017	4/21/2017	NJC	1
Dibenzo(a,h)anthracene	< 0.0078	mg/kg	0.0078	0.0251	1	M8270C	4/20/2017	4/21/2017	NJC	1
Fluoranthene	< 0.0147	mg/kg	0.0147	0.0469	1	M8270C	4/20/2017	4/21/2017	NJC	1
Fluorene	< 0.0179	mg/kg	0.0179	0.057	1	M8270C	4/20/2017	4/21/2017	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0114	mg/kg	0.0114	0.0362	1	M8270C	4/20/2017	4/21/2017	NJC	1
1-Methyl naphthalene	< 0.0203	mg/kg	0.0203	0.0645	1	M8270C	4/20/2017	4/21/2017	NJC	1
2-Methyl naphthalene	< 0.0113	mg/kg	0.0113	0.0358	1	M8270C	4/20/2017	4/21/2017	NJC	1
Naphthalene	< 0.0153	mg/kg	0.0153	0.0486	1	M8270C	4/20/2017	4/21/2017	NJC	1
Phenanthrene	< 0.0111	mg/kg	0.0111	0.0352	1	M8270C	4/20/2017	4/21/2017	NJC	1
Pyrene	< 0.0153	mg/kg	0.0153	0.0487	1	M8270C	4/20/2017	4/21/2017	NJC	1
VOC's										
Benzene	< 0.03	mg/kg	0.03	0.96	1	8260B		4/18/2017	TCC	1
Bromobenzene	< 0.025	mg/kg	0.025	0.081	1	8260B		4/18/2017	TCC	1
Bromodichloromethane	< 0.074	mg/kg	0.074	0.24	1	8260B		4/18/2017	TCC	1
Bromoform	< 0.029	mg/kg	0.029	0.092	1	8260B		4/18/2017	TCC	1
tert-Butylbenzene	< 0.026	mg/kg	0.026	0.084	1	8260B		4/18/2017	TCC	1
sec-Butylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		4/18/2017	TCC	1
n-Butylbenzene	< 0.04	mg/kg	0.04	0.13	1	8260B		4/18/2017	TCC	1
Carbon Tetrachloride	< 0.016	mg/kg	0.016	0.053	1	8260B		4/18/2017	TCC	1
Chlorobenzene	< 0.013	mg/kg	0.013	0.04	1	8260B		4/18/2017	TCC	1
Chloroethane	< 0.091	mg/kg	0.091	0.29	1	8260B		4/18/2017	TCC	1
Chloroform	< 0.035	mg/kg	0.035	0.11	1	8260B		4/18/2017	TCC	1
Chloromethane	< 0.076	mg/kg	0.076	0.24	1	8260B		4/18/2017	TCC	1
2-Chlorotoluene	< 0.015	mg/kg	0.015	0.047	1	8260B		4/18/2017	TCC	1
4-Chlorotoluene	< 0.018	mg/kg	0.018	0.057	1	8260B		4/18/2017	TCC	1
1,2-Dibromo-3-chloropropane	< 0.058	mg/kg	0.058	0.18	1	8260B		4/18/2017	TCC	1
Dibromochloromethane	< 0.025	mg/kg	0.025	0.079	1	8260B		4/18/2017	TCC	1
1,4-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		4/18/2017	TCC	1
1,3-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		4/18/2017	TCC	1
1,2-Dichlorobenzene	< 0.028	mg/kg	0.028	0.088	1	8260B		4/18/2017	TCC	1
Dichlorodifluoromethane	< 0.048	mg/kg	0.048	0.15	1	8260B		4/18/2017	TCC	1
1,2-Dichloroethane	< 0.038	mg/kg	0.038	0.12	1	8260B		4/18/2017	TCC	1
1,1-Dichloroethane	< 0.034	mg/kg	0.034	0.11	1	8260B		4/18/2017	TCC	1
1,1-Dichloroethene	< 0.022	mg/kg	0.022	0.069	1	8260B		4/18/2017	TCC	1
cis-1,2-Dichloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B		4/18/2017	TCC	1

Project Name IRGENS-BMO  
 Project # 16722

Invoice # E32782

Lab Code 5032782F  
 Sample ID SB-2-6 5-7  
 Sample Matrix Soil  
 Sample Date 4/14/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
trans-1,2-Dichloroethene	< 0.028	mg/kg	0.028	0.09	1	8260B		4/18/2017	TCC	1
1,2-Dichloropropane	< 0.035	mg/kg	0.035	0.11	1	8260B		4/18/2017	TCC	1
1,3-Dichloropropane	< 0.025	mg/kg	0.025	0.079	1	8260B		4/18/2017	TCC	1
trans-1,3-Dichloropropene	< 0.022	mg/kg	0.022	0.068	1	8260B		4/18/2017	TCC	1
cis-1,3-Dichloropropene	< 0.039	mg/kg	0.039	0.12	1	8260B		4/18/2017	TCC	1
Di-isopropyl ether	< 0.01	mg/kg	0.01	0.032	1	8260B		4/18/2017	TCC	1
EDB (1,2-Dibromoethane)	< 0.023	mg/kg	0.023	0.072	1	8260B		4/18/2017	TCC	1
Ethylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		4/18/2017	TCC	1
Hexachlorobutadiene	< 0.085	mg/kg	0.085	0.27	1	8260B		4/18/2017	TCC	1
Isopropylbenzene	< 0.034	mg/kg	0.034	0.11	1	8260B		4/18/2017	TCC	1
p-Isopropyltoluene	< 0.029	mg/kg	0.029	0.093	1	8260B		4/18/2017	TCC	1
Methylene chloride	< 0.15	mg/kg	0.15	0.46	1	8260B		4/18/2017	TCC	1
Methyl tert-butyl ether (MTBE)	< 0.05	mg/kg	0.05	0.16	1	8260B		4/18/2017	TCC	1
Naphthalene	< 0.094	mg/kg	0.094	0.3	1	8260B		4/18/2017	TCC	1
n-Propylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		4/18/2017	TCC	1
1,1,2,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.88	1	8260B		4/18/2017	TCC	1
1,1,1,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.09	1	8260B		4/18/2017	TCC	1
Tetrachloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B		4/18/2017	TCC	1
Toluene	< 0.032	mg/kg	0.032	0.1	1	8260B		4/18/2017	TCC	1
1,2,4-Trichlorobenzene	< 0.064	mg/kg	0.064	0.2	1	8260B		4/18/2017	TCC	1
1,2,3-Trichlorobenzene	< 0.066	mg/kg	0.066	0.21	1	8260B		4/18/2017	TCC	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.96	1	8260B		4/18/2017	TCC	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B		4/18/2017	TCC	1
Trichloroethene (TCE)	< 0.041	mg/kg	0.041	0.13	1	8260B		4/18/2017	TCC	1
Trichlorofluoromethane	< 0.041	mg/kg	0.041	0.13	1	8260B		4/18/2017	TCC	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.025	0.08	1	8260B		4/18/2017	TCC	1
1,3,5-Trimethylbenzene	< 0.032	mg/kg	0.032	0.1	1	8260B		4/18/2017	TCC	1
Vinyl Chloride	< 0.019	mg/kg	0.019	0.062	1	8260B		4/18/2017	TCC	1
m&p-Xylene	< 0.072	mg/kg	0.072	0.23	1	8260B		4/18/2017	TCC	1
o-Xylene	< 0.044	mg/kg	0.044	0.14	1	8260B		4/18/2017	TCC	1
SUR - 1,2-Dichloroethane-d4	105	Rec %			1	8260B		4/18/2017	TCC	1
SUR - 4-Bromofluorobenzene	95	Rec %			1	8260B		4/18/2017	TCC	1
SUR - Dibromofluoromethane	97	Rec %			1	8260B		4/18/2017	TCC	1
SUR - Toluene-d8	96	Rec %			1	8260B		4/18/2017	TCC	1

Project Name IRGENS-BMO  
 Project # 16722

Invoice # E32782

Lab Code 5032782G  
 Sample ID SB-2-7 2-4  
 Sample Matrix Soil  
 Sample Date 4/14/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	85.1	%			1	5021		4/18/2017	NJC	1
Inorganic										
Metals										
Lead, Total	3.06	mg/Kg	0.17	0.58	1	6010B		4/19/2017	CWT	1
Organic										
PAH SIM										
Acenaphthene	< 0.0151	mg/kg	0.0151	0.0481	1	M8270C	4/20/2017	4/21/2017	NJC	1
Acenaphthylene	< 0.0159	mg/kg	0.0159	0.0508	1	M8270C	4/20/2017	4/21/2017	NJC	1
Anthracene	< 0.0109	mg/kg	0.0109	0.0345	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(a)anthracene	< 0.0116	mg/kg	0.0116	0.037	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(a)pyrene	< 0.0113	mg/kg	0.0113	0.0359	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(b)fluoranthene	< 0.013	mg/kg	0.013	0.041	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(g,h,i)perylene	< 0.0114	mg/kg	0.0114	0.036	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(k)fluoranthene	< 0.0147	mg/kg	0.0147	0.0469	1	M8270C	4/20/2017	4/21/2017	NJC	1
Chrysene	< 0.0121	mg/kg	0.0121	0.0383	1	M8270C	4/20/2017	4/21/2017	NJC	1
Dibenzo(a,h)anthracene	< 0.0078	mg/kg	0.0078	0.0251	1	M8270C	4/20/2017	4/21/2017	NJC	1
Fluoranthene	< 0.0147	mg/kg	0.0147	0.0469	1	M8270C	4/20/2017	4/21/2017	NJC	1
Fluorene	< 0.0179	mg/kg	0.0179	0.057	1	M8270C	4/20/2017	4/21/2017	NJC	1
Indeno(1,2,3-cd)pyrene	< 0.0114	mg/kg	0.0114	0.0362	1	M8270C	4/20/2017	4/21/2017	NJC	1
1-Methyl naphthalene	< 0.0203	mg/kg	0.0203	0.0645	1	M8270C	4/20/2017	4/21/2017	NJC	1
2-Methyl naphthalene	< 0.0113	mg/kg	0.0113	0.0358	1	M8270C	4/20/2017	4/21/2017	NJC	1
Naphthalene	< 0.0153	mg/kg	0.0153	0.0486	1	M8270C	4/20/2017	4/21/2017	NJC	1
Phenanthrene	< 0.0111	mg/kg	0.0111	0.0352	1	M8270C	4/20/2017	4/21/2017	NJC	1
Pyrene	< 0.0153	mg/kg	0.0153	0.0487	1	M8270C	4/20/2017	4/21/2017	NJC	1
VOC's										
Benzene	< 0.03	mg/kg	0.03	0.96	1	8260B		4/18/2017	TCC	1
Bromobenzene	< 0.025	mg/kg	0.025	0.081	1	8260B		4/18/2017	TCC	1
Bromodichloromethane	< 0.074	mg/kg	0.074	0.24	1	8260B		4/18/2017	TCC	1
Bromoform	< 0.029	mg/kg	0.029	0.092	1	8260B		4/18/2017	TCC	1
tert-Butylbenzene	< 0.026	mg/kg	0.026	0.084	1	8260B		4/18/2017	TCC	1
sec-Butylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		4/18/2017	TCC	1
n-Butylbenzene	< 0.04	mg/kg	0.04	0.13	1	8260B		4/18/2017	TCC	1
Carbon Tetrachloride	< 0.016	mg/kg	0.016	0.053	1	8260B		4/18/2017	TCC	1
Chlorobenzene	< 0.013	mg/kg	0.013	0.04	1	8260B		4/18/2017	TCC	1
Chloroethane	< 0.091	mg/kg	0.091	0.29	1	8260B		4/18/2017	TCC	1
Chloroform	< 0.035	mg/kg	0.035	0.11	1	8260B		4/18/2017	TCC	1
Chloromethane	< 0.076	mg/kg	0.076	0.24	1	8260B		4/18/2017	TCC	1
2-Chlorotoluene	< 0.015	mg/kg	0.015	0.047	1	8260B		4/18/2017	TCC	1
4-Chlorotoluene	< 0.018	mg/kg	0.018	0.057	1	8260B		4/18/2017	TCC	1
1,2-Dibromo-3-chloropropane	< 0.058	mg/kg	0.058	0.18	1	8260B		4/18/2017	TCC	1
Dibromochloromethane	< 0.025	mg/kg	0.025	0.079	1	8260B		4/18/2017	TCC	1
1,4-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		4/18/2017	TCC	1
1,3-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		4/18/2017	TCC	1
1,2-Dichlorobenzene	< 0.028	mg/kg	0.028	0.088	1	8260B		4/18/2017	TCC	1
Dichlorodifluoromethane	< 0.048	mg/kg	0.048	0.15	1	8260B		4/18/2017	TCC	1
1,2-Dichloroethane	< 0.038	mg/kg	0.038	0.12	1	8260B		4/18/2017	TCC	1
1,1-Dichloroethane	< 0.034	mg/kg	0.034	0.11	1	8260B		4/18/2017	TCC	1
1,1-Dichloroethene	< 0.022	mg/kg	0.022	0.069	1	8260B		4/18/2017	TCC	1
cis-1,2-Dichloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B		4/18/2017	TCC	1

Project Name IRGENS-BMO  
 Project # 16722

Invoice # E32782

Lab Code 5032782G  
 Sample ID SB-2-7 2-4  
 Sample Matrix Soil  
 Sample Date 4/14/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
trans-1,2-Dichloroethene	< 0.028	mg/kg	0.028	0.09	1	8260B		4/18/2017	TCC	1
1,2-Dichloropropane	< 0.035	mg/kg	0.035	0.11	1	8260B		4/18/2017	TCC	1
1,3-Dichloropropane	< 0.025	mg/kg	0.025	0.079	1	8260B		4/18/2017	TCC	1
trans-1,3-Dichloropropene	< 0.022	mg/kg	0.022	0.068	1	8260B		4/18/2017	TCC	1
cis-1,3-Dichloropropene	< 0.039	mg/kg	0.039	0.12	1	8260B		4/18/2017	TCC	1
Di-isopropyl ether	< 0.01	mg/kg	0.01	0.032	1	8260B		4/18/2017	TCC	1
EDB (1,2-Dibromoethane)	< 0.023	mg/kg	0.023	0.072	1	8260B		4/18/2017	TCC	1
Ethylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		4/18/2017	TCC	1
Hexachlorobutadiene	< 0.085	mg/kg	0.085	0.27	1	8260B		4/18/2017	TCC	1
Isopropylbenzene	< 0.034	mg/kg	0.034	0.11	1	8260B		4/18/2017	TCC	1
p-Isopropyltoluene	< 0.029	mg/kg	0.029	0.093	1	8260B		4/18/2017	TCC	1
Methylene chloride	< 0.15	mg/kg	0.15	0.46	1	8260B		4/18/2017	TCC	1
Methyl tert-butyl ether (MTBE)	< 0.05	mg/kg	0.05	0.16	1	8260B		4/18/2017	TCC	1
Naphthalene	< 0.094	mg/kg	0.094	0.3	1	8260B		4/18/2017	TCC	1
n-Propylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		4/18/2017	TCC	1
1,1,2,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.88	1	8260B		4/18/2017	TCC	1
1,1,1,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.09	1	8260B		4/18/2017	TCC	1
Tetrachloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B		4/18/2017	TCC	1
Toluene	< 0.032	mg/kg	0.032	0.1	1	8260B		4/18/2017	TCC	1
1,2,4-Trichlorobenzene	< 0.064	mg/kg	0.064	0.2	1	8260B		4/18/2017	TCC	1
1,2,3-Trichlorobenzene	< 0.066	mg/kg	0.066	0.21	1	8260B		4/18/2017	TCC	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.96	1	8260B		4/18/2017	TCC	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B		4/18/2017	TCC	1
Trichloroethene (TCE)	< 0.041	mg/kg	0.041	0.13	1	8260B		4/18/2017	TCC	1
Trichlorofluoromethane	< 0.041	mg/kg	0.041	0.13	1	8260B		4/18/2017	TCC	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.025	0.08	1	8260B		4/18/2017	TCC	1
1,3,5-Trimethylbenzene	< 0.032	mg/kg	0.032	0.1	1	8260B		4/18/2017	TCC	1
Vinyl Chloride	< 0.019	mg/kg	0.019	0.062	1	8260B		4/18/2017	TCC	1
m&p-Xylene	< 0.072	mg/kg	0.072	0.23	1	8260B		4/18/2017	TCC	1
o-Xylene	< 0.044	mg/kg	0.044	0.14	1	8260B		4/18/2017	TCC	1
SUR - Toluene-d8	97	Rec %			1	8260B		4/18/2017	TCC	1
SUR - Dibromofluoromethane	99	Rec %			1	8260B		4/18/2017	TCC	1
SUR - 1,2-Dichloroethane-d4	106	Rec %			1	8260B		4/18/2017	TCC	1
SUR - 4-Bromofluorobenzene	94	Rec %			1	8260B		4/18/2017	TCC	1

Project Name IRGENS-BMO  
 Project # 16722

Invoice # E32782

Lab Code 5032782H  
 Sample ID COMP OUTDOOR  
 Sample Matrix Soil  
 Sample Date 4/14/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	87.0	%			1	5021		4/18/2017	NJC	1
Organic										
PAH SIM										
Acenaphthene	< 0.0151	mg/kg	0.0151	0.0481	1	M8270C	4/20/2017	4/21/2017	NJC	1
Acenaphthylene	< 0.0159	mg/kg	0.0159	0.0508	1	M8270C	4/20/2017	4/21/2017	NJC	1
Anthracene	0.0151 "J"	mg/kg	0.0109	0.0345	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(a)anthracene	0.05	mg/kg	0.0116	0.037	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(a)pyrene	0.055	mg/kg	0.0113	0.0359	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(b)fluoranthene	0.117	mg/kg	0.013	0.041	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(g,h,i)perylene	0.054	mg/kg	0.0114	0.036	1	M8270C	4/20/2017	4/21/2017	NJC	1
Benzo(k)fluoranthene	0.108	mg/kg	0.0147	0.0469	1	M8270C	4/20/2017	4/21/2017	NJC	1
Chrysene	0.056	mg/kg	0.0121	0.0383	1	M8270C	4/20/2017	4/21/2017	NJC	1
Dibenzo(a,h)anthracene	< 0.0078	mg/kg	0.0078	0.0251	1	M8270C	4/20/2017	4/21/2017	NJC	1
Fluoranthene	0.114	mg/kg	0.0147	0.0469	1	M8270C	4/20/2017	4/21/2017	NJC	1
Fluorene	< 0.0179	mg/kg	0.0179	0.057	1	M8270C	4/20/2017	4/21/2017	NJC	1
Indeno(1,2,3-cd)pyrene	0.051	mg/kg	0.0114	0.0362	1	M8270C	4/20/2017	4/21/2017	NJC	1
1-Methyl naphthalene	< 0.0203	mg/kg	0.0203	0.0645	1	M8270C	4/20/2017	4/21/2017	NJC	1
2-Methyl naphthalene	< 0.0113	mg/kg	0.0113	0.0358	1	M8270C	4/20/2017	4/21/2017	NJC	1
Naphthalene	< 0.0153	mg/kg	0.0153	0.0486	1	M8270C	4/20/2017	4/21/2017	NJC	1
Phenanthrene	0.056	mg/kg	0.0111	0.0352	1	M8270C	4/20/2017	4/21/2017	NJC	1
Pyrene	0.097	mg/kg	0.0153	0.0487	1	M8270C	4/20/2017	4/21/2017	NJC	1
VOC's										
Benzene	< 0.03	mg/kg	0.03	0.96	1	8260B		4/18/2017	TCC	1
Bromobenzene	< 0.025	mg/kg	0.025	0.081	1	8260B		4/18/2017	TCC	1
Bromodichloromethane	< 0.074	mg/kg	0.074	0.24	1	8260B		4/18/2017	TCC	1
Bromoform	< 0.029	mg/kg	0.029	0.092	1	8260B		4/18/2017	TCC	1
tert-Butylbenzene	< 0.026	mg/kg	0.026	0.084	1	8260B		4/18/2017	TCC	1
sec-Butylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		4/18/2017	TCC	1
n-Butylbenzene	< 0.04	mg/kg	0.04	0.13	1	8260B		4/18/2017	TCC	1
Carbon Tetrachloride	< 0.016	mg/kg	0.016	0.053	1	8260B		4/18/2017	TCC	1
Chlorobenzene	< 0.013	mg/kg	0.013	0.04	1	8260B		4/18/2017	TCC	1
Chloroethane	< 0.091	mg/kg	0.091	0.29	1	8260B		4/18/2017	TCC	1
Chloroform	< 0.035	mg/kg	0.035	0.11	1	8260B		4/18/2017	TCC	1
Chloromethane	< 0.076	mg/kg	0.076	0.24	1	8260B		4/18/2017	TCC	1
2-Chlorotoluene	< 0.015	mg/kg	0.015	0.047	1	8260B		4/18/2017	TCC	1
4-Chlorotoluene	< 0.018	mg/kg	0.018	0.057	1	8260B		4/18/2017	TCC	1
1,2-Dibromo-3-chloropropane	< 0.058	mg/kg	0.058	0.18	1	8260B		4/18/2017	TCC	1
Dibromochloromethane	< 0.025	mg/kg	0.025	0.079	1	8260B		4/18/2017	TCC	1
1,4-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		4/18/2017	TCC	1
1,3-Dichlorobenzene	< 0.037	mg/kg	0.037	0.12	1	8260B		4/18/2017	TCC	1
1,2-Dichlorobenzene	< 0.028	mg/kg	0.028	0.088	1	8260B		4/18/2017	TCC	1
Dichlorodifluoromethane	< 0.048	mg/kg	0.048	0.15	1	8260B		4/18/2017	TCC	1
1,2-Dichloroethane	< 0.038	mg/kg	0.038	0.12	1	8260B		4/18/2017	TCC	1
1,1-Dichloroethane	< 0.034	mg/kg	0.034	0.11	1	8260B		4/18/2017	TCC	1
1,1-Dichloroethene	< 0.022	mg/kg	0.022	0.069	1	8260B		4/18/2017	TCC	1
cis-1,2-Dichloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B		4/18/2017	TCC	1
trans-1,2-Dichloroethene	< 0.028	mg/kg	0.028	0.09	1	8260B		4/18/2017	TCC	1
1,2-Dichloropropane	< 0.035	mg/kg	0.035	0.11	1	8260B		4/18/2017	TCC	1
1,3-Dichloropropane	< 0.025	mg/kg	0.025	0.079	1	8260B		4/18/2017	TCC	1



Project Name IRGENS-BMO  
 Project # 16722

Invoice # E32782

Lab Code 5032782H  
 Sample ID COMP OUTDOOR  
 Sample Matrix Soil  
 Sample Date 4/14/2017

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
trans-1,3-Dichloropropene	< 0.022	mg/kg	0.022	0.068	1	8260B		4/18/2017	TCC	1
cis-1,3-Dichloropropene	< 0.039	mg/kg	0.039	0.12	1	8260B		4/18/2017	TCC	1
Di-isopropyl ether	< 0.01	mg/kg	0.01	0.032	1	8260B		4/18/2017	TCC	1
EDB (1,2-Dibromoethane)	< 0.023	mg/kg	0.023	0.072	1	8260B		4/18/2017	TCC	1
Ethylbenzene	< 0.035	mg/kg	0.035	0.11	1	8260B		4/18/2017	TCC	1
Hexachlorobutadiene	< 0.085	mg/kg	0.085	0.27	1	8260B		4/18/2017	TCC	1
Isopropylbenzene	< 0.034	mg/kg	0.034	0.11	1	8260B		4/18/2017	TCC	1
p-Isopropyltoluene	< 0.029	mg/kg	0.029	0.093	1	8260B		4/18/2017	TCC	1
Methylene chloride	< 0.15	mg/kg	0.15	0.46	1	8260B		4/18/2017	TCC	1
Methyl tert-butyl ether (MTBE)	< 0.05	mg/kg	0.05	0.16	1	8260B		4/18/2017	TCC	1
Naphthalene	< 0.094	mg/kg	0.094	0.3	1	8260B		4/18/2017	TCC	1
n-Propylbenzene	< 0.033	mg/kg	0.033	0.1	1	8260B		4/18/2017	TCC	1
1,1,2,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.88	1	8260B		4/18/2017	TCC	1
1,1,1,2-Tetrachloroethane	< 0.028	mg/kg	0.028	0.09	1	8260B		4/18/2017	TCC	1
Tetrachloroethene	< 0.032	mg/kg	0.032	0.1	1	8260B		4/18/2017	TCC	1
Toluene	< 0.032	mg/kg	0.032	0.1	1	8260B		4/18/2017	TCC	1
1,2,4-Trichlorobenzene	< 0.064	mg/kg	0.064	0.2	1	8260B		4/18/2017	TCC	1
1,2,3-Trichlorobenzene	< 0.066	mg/kg	0.066	0.21	1	8260B		4/18/2017	TCC	1
1,1,1-Trichloroethane	< 0.03	mg/kg	0.03	0.96	1	8260B		4/18/2017	TCC	1
1,1,2-Trichloroethane	< 0.033	mg/kg	0.033	0.11	1	8260B		4/18/2017	TCC	1
Trichloroethene (TCE)	< 0.041	mg/kg	0.041	0.13	1	8260B		4/18/2017	TCC	1
Trichlorofluoromethane	< 0.041	mg/kg	0.041	0.13	1	8260B		4/18/2017	TCC	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.025	0.08	1	8260B		4/18/2017	TCC	1
1,3,5-Trimethylbenzene	< 0.032	mg/kg	0.032	0.1	1	8260B		4/18/2017	TCC	1
Vinyl Chloride	< 0.019	mg/kg	0.019	0.062	1	8260B		4/18/2017	TCC	1
m&p-Xylene	< 0.072	mg/kg	0.072	0.23	1	8260B		4/18/2017	TCC	1
o-Xylene	< 0.044	mg/kg	0.044	0.14	1	8260B		4/18/2017	TCC	1
SUR - Toluene-d8	95	Rec %			1	8260B		4/18/2017	TCC	1
SUR - 1,2-Dichloroethane-d4	87	Rec %			1	8260B		4/18/2017	TCC	1
SUR - 4-Bromofluorobenzene	88	Rec %			1	8260B		4/18/2017	TCC	1
SUR - Dibromofluoromethane	103	Rec %			1	8260B		4/18/2017	TCC	1

"J" Flag: Analyte detected between LOD and LOQ

LOD Limit of Detection

LOQ Limit of Quantitation

**Code Comment**

- 1 Laboratory QC within limits.
- 2 Relative percent difference failed for laboratory spiked samples.

CWT denotes sub contract lab - Certification #445126660

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight. Subcontracted results are denoted by SUB in the analyst field.

Authorized Signature

**Table 1 (cont'd)**  
**Soil Analytical Results**  
**WWB Development LLC - BMO Site - 770 N Water Street Basement and Outdoor, Milwaukee, Wisconsin**  
**Sigma Project No. 16722**

Soil Sample Location:		COMP OUTDOOR				
Sample Depth (feet bgs):		Composite				
Sample Collection Date:		4/13/17				
Depth to Groundwater (feet bgs):						
Unsaturated/Smear Zone (U) or Saturated (S):		U				
Organic Vapor Monitor	ppm	0.1	NS	NS	NS	NS
<b>Detected VOCs</b>		<b>Not Detected</b>				
<b>PAHs</b>						
Acenaphthene	mg/kg	<0.0151	NS	3,590	45,200	NS
Acenaphthylene	mg/kg	<0.0159	NS	NS	NS	NS
Anthracene	mg/kg	<b>0.0151 J</b>	196,9492	17,900	100,000	NS
Benzo(a)anthracene	mg/kg	<b>0.05</b>	NS	1.14	20.8	NS
Benzo(a)pyrene	mg/kg	<b>0.055</b>	0.47	0.115	2.11	NS
Benzo(b)fluoranthene	mg/kg	<b>0.117</b>	0.4793	1.15	21.1	NS
Benzo(ghi)perylene	mg/kg	<b>0.054</b>	NS	NS	NS	NS
Benzo(k)fluoranthene	mg/kg	<b>0.108</b>	NS	11.5	211	NS
Chrysene	mg/kg	<b>0.056</b>	0.1446	115	2,110	NS
Dibenzo(a,h)anthracene	mg/kg	<0.0078	NS	0.115	2.11	NS
Fluoranthene	mg/kg	<b>0.114</b>	88,8778	2,390	30,100	NS
Fluorene	mg/kg	<0.0179	14,8299	2,390	30,100	NS
Indeno(1,2,3-cd)pyrene	mg/kg	<b>0.051</b>	NS	1.15	21.1	NS
1-Methylnaphthalene	mg/kg	<0.0203	NS	17.6	72.7	NS
2-Methylnaphthalene	mg/kg	<0.0113	NS	239	3,010	NS
Naphthalene	mg/kg	<0.0153	0.6582	5.52	24.1	NS
Phenanthrene	mg/kg	<b>0.056</b>	NS	NS	NS	NS
Pyrene	mg/kg	<b>0.097</b>	54,5455	1,790	22,600	NS
<b>RCRA Metals</b>						
Arsenic	mg/kg	{ <b>[3.4]</b> }	0.584	0.677	3	8
Barium	mg/kg	<b>52</b>	164.8	15,300	100,000	364
Cadmium	mg/kg	<b>0.070 J</b>	0.752	71.1	985	1
Chromium	mg/kg	<b>6.4</b>	360,000	NS	NS	44
Lead	mg/kg	<b>350</b>	27	400	800	52
Mercury	mg/kg	<b>0.065</b>	0.208	3.13	3.13	NS
Selenium	mg/kg	<0.51	0.52	391	5,840	NS
Silver	mg/kg	<b>0.031 J</b>	0.8491	391	5,840	NS

Notes:

- Unsaturated/smear zone versus saturated soil conditions based on: (1) measured water levels in adjacent/nearby monitoring wells, or (2) soil moisture conditions recorded on soil boring logs during drilling.
- Analytical units: mg/kg = milligrams per kilogram (equivalent to parts per million, ppm)
- NA = not analyzed
- Groundwater Pathway RCL = Residual Contaminant Level for protection of groundwater as presented on the WDNR's RCL Spreadsheet (dated May 2017) referenced in WDNR guidance document PUB-RR-890 "Soil Residual Contaminant Level Determinations Using the US EPA Regional Screening Level Web Calculator", dated June 2014
- Non-Industrial Direct Contact RCL = Residual Contaminant Level for protection of direct contact at a non-industrial property as presented on the WDNR's RCL Spreadsheet (dated May 2017) with default input parameters as referenced in WDNR guidance document PUB-RR-890 "Soil Residual Contaminant Level Determinations Using the US EPA Regional Screening Level Web Calculator", dated June 2014
- Industrial Direct Contact RCL = Residual Contaminant Level for protection of direct contact at an industrial property as presented on the WDNR's RCL Spreadsheet (dated May 2017) with default input parameters as referenced in WDNR guidance document PUB-RR-890 "Soil Residual Contaminant Level Determinations Using the US EPA Regional Screening Level Web Calculator", dated June 2014
- Background Threshold Value = Non-outlier trace element maximum levels in Wisconsin surface soils from USGS report "Distribution and Variation of Arsenic in Wisconsin Surface Soils, With Data on Other Trace Elements" (revised February 2013).
- NS = no standard established
- Laboratory flags: "J" = Analyte detected between Limit of Detection and Limit of Quantitation
- Exceedances:
  - BOLD** = Concentration exceeds Groundwater Pathway RCL
  - [ ]** = Concentration exceeds Non-Industrial Direct Contact RCL (any depth)
  - { }** = Concentration exceeds Industrial Direct Contact RCL (any depth)
  - BOLD** = Detected Compound
- Comp outdoor = composite sample of soil collected from outdoor borings within auto-banking drive area

**Table 1**  
**Soil Analytical Results - Executive Garage**  
**WWB Development LLC - BMO Site - 778 N Water Street & 769 N. Broadway Street, Milwaukee, Wisconsin**  
**Sigma Project No. 16722**

Soil Sample Location:	TW-1		SB-2		TW-3		SB-4		SB-5		SB-6		TW-7		TW-8		Groundwater Pathway RCL <sup>4</sup>	Non-Industrial Direct Contact RCL <sup>5</sup>	Industrial Direct Contact RCL <sup>6</sup>	Background Threshold Value <sup>7</sup>	
	0 - 2	4 - 6	2 - 4	6 - 8	0 - 2	2 - 4	0 - 2	4 - 6	0 - 2	2 - 4	2 - 4	6 - 8	0 - 2	2 - 4	0 - 2	2 - 4					
Sample Depth (feet bgs):	1/30/17																				
Sample Collection Date:																					
Depth to Groundwater (feet bgs):	5		4.5+/-		3		2+/-		4		6.5+/-		6.5		0-1						
Unsaturated/Smear Zone (U) or Saturated (S):	U	U	U	S	U	U/S	U	S	U	U	U	U/S	U	U	U/S	S					
Organic Vapor Monitor	ppm	0.8	1.1	1.1	13.1	0.7	1.2	1.5	1.2	19.8	1.7	1.5	1.9	0.7	0.9	0.6	NS	NS	NS	NS	
<b>Detected VOCs</b>																					
1,2,4-Trimethylbenzene	mg/kg	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.083	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	1.3821	219	219	NS	
Xylenes (total)	mg/kg	<0.116	<0.116	<0.116	<0.116	<0.116	<0.116	<0.116	<0.116	0.102 J	<0.116	<0.116	<0.116	<0.116	<0.116	<0.116	3.96	260	260	NS	
<b>PAHs</b>																					
Acenaphthene	mg/kg	<0.0135	<0.0135	<0.0135	<0.0135	<0.0135	<0.0135	<0.0135	<0.0135	<0.0135	<0.0135	<0.0135	<0.0135	<0.0135	<0.0135	<0.0135	NS	3,590	45,200	NS	
Acenaphthylene	mg/kg	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	NS	NS	NS	NS	
Anthracene	mg/kg	<0.0124	<0.0124	<0.0124	<0.0124	<0.0124	<0.0124	<0.0124	<0.0124	<0.0124	<0.0124	<0.0124	<0.0124	<0.0124	<0.0124	<0.0124	196.9492	17,900	100,000	NS	
Benzo(a)anthracene	mg/kg	<0.0116	<0.0116	<0.0116	<0.0116	<0.0116	<0.0116	<0.0116	<0.0116	0.0118 J	<0.0116	<0.0116	<0.0116	<0.0116	<0.0116	<0.0116	NS	1.14	20.8	NS	
Benzo(a)pyrene	mg/kg	<0.0113	<0.0113	<0.0113	<0.0113	<0.0113	<0.0113	<0.0113	<0.0113	<0.0113	<0.0113	<0.0113	<0.0113	<0.0113	<0.0113	<0.0113	0.47	0.115	2.11	NS	
Benzo(b)fluoranthene	mg/kg	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	0.4793	1.15	21.1	NS	
Benzo(ghi)perylene	mg/kg	<0.0114	<0.0114	<0.0114	<0.0114	<0.0114	<0.0114	<0.0114	<0.0114	<0.0114	<0.0114	<0.0114	<0.0114	<0.0114	<0.0114	<0.0114	NS	NS	NS	NS	
Benzo(k)fluoranthene	mg/kg	<0.0117	<0.0117	<0.0117	<0.0117	<0.0117	<0.0117	<0.0117	<0.0117	<0.0117	<0.0117	<0.0117	<0.0117	<0.0117	<0.0117	<0.0117	NS	11.5	211	NS	
Chrysene	mg/kg	<0.0138	<0.0138	<0.0138	<0.0138	<0.0138	<0.0138	<0.0138	<0.0138	0.015 J	<0.0138	<0.0138	<0.0138	<0.0138	<0.0138	<0.0138	0.1446	115	2,110	NS	
Dibenzo(a,h)anthracene	mg/kg	<0.0142	<0.0142	<0.0142	<0.0142	<0.0142	<0.0142	<0.0142	<0.0142	<0.0142	<0.0142	<0.0142	<0.0142	<0.0142	<0.0142	<0.0142	NS	0.115	2.11	NS	
Fluoranthene	mg/kg	<0.0131	<0.0131	<0.0131	<0.0131	<0.0131	<0.0131	<0.0131	<0.0131	0.0273 J	<0.0131	<0.0131	<0.0131	<0.0131	<0.0131	<0.0131	88.8778	2,390	30,100	NS	
Fluorene	mg/kg	<0.0135	<0.0135	<0.0135	<0.0135	<0.0135	<0.0135	<0.0135	<0.0135	<0.0135	<0.0135	<0.0135	<0.0135	<0.0135	<0.0135	<0.0135	14.8299	2,390	30,100	NS	
Indeno(1,2,3-cd)pyrene	mg/kg	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	NS	1.15	21.1	NS	
1-Methylnaphthalene	mg/kg	<0.0143	<0.0143	<0.0143	0.0211 J	<0.0143	<0.0143	<0.0143	<0.0143	0.017 J	<0.0143	<0.0143	<0.0143	<0.0143	<0.0143	<0.0143	NS	17.6	72.7	NS	
2-Methylnaphthalene	mg/kg	<0.0119	<0.0119	<0.0119	<0.0119	<0.0119	<0.0119	<0.0119	<0.0119	0.0148 J	<0.0119	<0.0119	<0.0119	<0.0119	<0.0119	<0.0119	NS	239	3,010	NS	
Naphthalene	mg/kg	<0.0122	<0.0122	<0.0122	<0.0122	<0.0122	<0.0122	<0.0122	<0.0122	<0.0122	<0.0122	<0.0122	<0.0122	<0.0122	<0.0122	<0.0122	0.6582	5.52	24.1	NS	
Phenanthrene	mg/kg	<0.0109	<0.0109	<0.0109	0.0128 J	<0.0109	<0.0109	<0.0109	<0.0109	0.0168 J	<0.0109	<0.0109	<0.0109	<0.0109	<0.0109	<0.0109	NS	NS	NS	NS	
Pyrene	mg/kg	<0.0126	<0.0126	<0.0126	<0.0126	<0.0126	<0.0126	<0.0126	<0.0126	0.0245 J	<0.0126	<0.0126	<0.0126	<0.0126	<0.0126	<0.0126	54.5455	1,790	22,600	NS	
<b>RCRA Metals</b>																					
Arsenic	mg/kg	NA	{60.6}	NA	NA	NA	NA	NA	NA	NA	{3.91}	NA	NA	NA	NA	NA	{3.08}	0.584	0.677	3	8
Barium	mg/kg	NA	132	NA	NA	NA	NA	NA	NA	NA	21.8	NA	NA	NA	NA	NA	NA	164.8	15,300	100,000	364
Cadmium	mg/kg	NA	1.33	NA	NA	NA	NA	NA	NA	NA	<0.02	NA	NA	NA	NA	NA	<0.02	0.752	71.1	985	1
Chromium	mg/kg	NA	20.7	NA	NA	NA	NA	NA	NA	NA	8.21	NA	NA	NA	NA	NA	7.22	360,000	NS	NS	44
Lead	mg/kg	5.22	65.5	3.45	8.83	3.69	3.82	3.64	4.67	1.3	9.45	4.62	6.04	4.8	2.14	3.52	4.86	27	400	800	52
Mercury	mg/kg	NA	<0.0131	NA	NA	NA	NA	NA	NA	NA	<0.0131	NA	NA	NA	NA	NA	<0.0131	0.208	3.13	3.13	NS
Selenium	mg/kg	NA	54	NA	NA	NA	NA	NA	NA	NA	<0.52	NA	NA	NA	NA	NA	<0.52	0.52	391	5,840	NS
Silver	mg/kg	NA	15.2	NA	NA	NA	NA	NA	NA	NA	<0.57	NA	NA	NA	NA	NA	<0.57	0.8491	391	5,840	NS
<b>PCBs</b>																					
PCB-1016	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0035	<0.0035	NA	<0.0035	NA	NA	0.0094	4.11	28	NS
PCB-1221	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0054	<0.0054	NA	<0.0054	NA	NA	0.0094	0.213	0.883	NS
PCB-1232	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0042	<0.0042	NA	<0.0042	NA	NA	0.0094	0.19	0.792	NS
PCB-1242	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0032	<0.0032	NA	<0.0032	NA	NA	0.0094	0.235	0.972	NS
PCB-1248	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0032	<0.0032	NA	<0.0032	NA	NA	0.0094	0.236	0.975	NS
PCB-1254	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0047	<0.0047	NA	<0.0047	NA	NA	0.0094	0.239	0.988	NS
PCB-1260	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0049	<0.0049	NA	<0.0049	NA	NA	0.0094	0.243	1	NS

- Notes:
- Unsaturated/smear zone versus saturated soil conditions based on: (1) measured water levels in adjacent/nearby monitoring wells, or (2) soil moisture conditions recorded on soil boring logs during drilling.
  - Analytical units: mg/kg = milligrams per kilogram (equivalent to parts per million, ppm)
  - NA = not analyzed
  - Groundwater Pathway RCL = Residual Contaminant Level for protection of groundwater as presented on the WDNR's RCL Spreadsheet (dated May 2017) referenced in WDNR guidance document PUB-RR-890 "Soil Residual Contaminant Level Determinations Using the US EPA Regional Screening Level Web Calculator", dated June 2014
  - Non-Industrial Direct Contact RCL = Residual Contaminant Level for protection of direct contact at a non-industrial property as presented on the WDNR's RCL Spreadsheet (dated May 2017) with default input parameters as referenced in WDNR guidance document PUB-RR-890 "Soil Residual Contaminant Level Determinations Using the US EPA Regional Screening Level Web Calculator", dated June 2014
  - Industrial Direct Contact RCL = Residual Contaminant Level for protection of direct contact at an industrial property as presented on the WDNR's RCL Spreadsheet (dated May 2017) with default input parameters as referenced in WDNR guidance document PUB-RR-890 "Soil Residual Contaminant Level Determinations Using the US EPA Regional Screening Level Web Calculator", dated June 2014
  - Background Threshold Value = Non-outlier trace element maximum levels in Wisconsin surface soils from USGS report "Distribution and Variation of Arsenic in Wisconsin Surface Soils, With Data on Other Trace Elements" (revised February 2013).
  - NS = no standard established
  - Laboratory flags: "J" = Analyte detected between Limit of Detection and Limit of Quantitation
  - Exceedances:
    - BOLD** = Concentration exceeds Groundwater Pathway RCL
    - [ ] = Concentration exceeds Non-Industrial Direct Contact RCL (any depth)
    - { } = Concentration exceeds Industrial Direct Contact RCL (any depth)