



January 27, 2016

Mr. Gerald DeMers  
Environmental Engineer  
Wisconsin Department of Natural Resources  
141 NW Barstow Street, Room 180  
Waukesha, WI 53188

RE: Soil Disposal Information Associated with the R&R Excavating Site  
Located On Highway I in the Town of Cedarburg, Wisconsin — FEC  
Project No. 041013

Dear Mr. Demers:

As you are aware, **Friess Environmental Consulting, Inc. (FEC)** has submitted requests for disposal of soils from construction projects at the above-referenced site (the “Site”) under the Wisconsin Department of Natural Resources (DNR) low-hazard exemption (LHE) per s. 289.43(8) of the Wisconsin Statutes and/or the exemption per ch. NR 718.12 Wisconsin Administrative Code (WAC). The DNR did grant approval for six projects to dispose of soils in 2015. Several of the approvals required the submittal of an annual report to include a listing of projects that brought soils to the R&R Excavating site, an estimate of the remaining disposal capacity, and the results of groundwater sampling and analytical testing conducted at the Site. This letter provides documentation for soils disposed of in 2015 and the results of continued groundwater monitoring.

In 2015, FEC documented the disposal of 3,288 truckloads. It is estimated that each truck contained approximately 10 yards. As such, approximately 32,880 cubic yards of soil were disposed of at the Site in 2015. A summary of the filling operations per month for each project is included on the attached Table. It is estimated that the remaining capacity at the Site is approximately 507,000 cubic yards.

Placement of the soils at the Site did not occur within a floodplain; within 100 feet of any wetland or critical habitat area; within 300 feet of any navigable river, stream, lake, pond or flowage; within 100 feet of any on-site water supply well or 300 feet of any off-site water supply well, within 3 feet of the groundwater table, in an area where single family housing will be the final use, or as use as an exposed final grade layer.

The results of soil and groundwater analytical testing conducted on the source sites were provided to the DNR in each exemption request that was submitted and reviewed by the DNR. Most notable were the results of water leach tests performed on soils with concentrations above the DNR residual contaminant levels (RCLs), which did not indicate any concentrations that exceeded the DNR groundwater quality standards. This demonstrates that the PAH and metals detected within the soils are not considered a risk to readily leach. The exposure pathways are further protected with the conditions of the Site, including the final use of the Site as agricultural (no development or potable wells) and capping of the Site with at least 2 feet of clean material, and the approved reclamation plan for the Site.

On October 27, 2015 FEC collected a groundwater sample from MW-1 and a grab sample from the stormwater pond (SW). The water samples collected were submitted to a DNR-certified laboratory for analyses of volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs) and dissolved RCRA metals. No VOCs, PAHs or RCRA metals were detected in the water samples submitted with the exception of several low level "J Flag" concentrations. The results were below their applicable DNR groundwater quality standards. The analytical report is included with this letter.

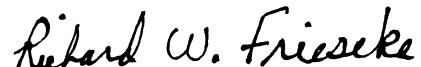
We hope this letter provides sufficient information regarding disposal of material in 2015 at the R&R Excavating Site. If you have any questions or comments regarding this submittal, please contact us at (414) 228-9815.

Respectfully,

**Friess Environmental Consulting, Inc.**



Trenton J. Ott  
Project Manager



Richard W. Frieske, P.E.  
President

CC: Mr. Barry Sullivan; Ozaukee County Resource Board  
Mr. Richard Charmoli; Charmoli Holdings, LLC

041013 2015

# Summary of 2015 Filling Operations

## R&R Excavating Site

### Town of Cedarburg

FEC Project #	Project Name	# of Truckloads	Month	Year
140406	North End III (1645 N Water St.)	12	January	2015
		84	March	2015
		61	July	2015
		77	September	2015
		42	October	2015
		2	November	2015
	Total	278		
140409	Echelon (Innovation Campus)	41	January	2015
		256	February	2015
		84	March	2015
		50	April	2015
		52	July	2015
		18	August	2015
	Total	501		
140103	Rivercrest	233	June	2015
		587	July	2015
		83	August	2015
		43	September	2015
		38	November	2015
		76	December	2015
	Total	1,060		
150310	Trio	21	July	2015
		19	August	2015
		43	September	2015
		46	October	2015
		11	November	2015
	Total	140		
150311	Rhythm	480	September	2015
		432	October	2015
		28	November	2015
		64	December	2015
	Total	1004		
150807	Greenwich Apartments	302	November	2015
		3	December	2015
	Total	305		
	GRAND TOTAL	3,288		

**Table 1**  
**VOC Groundwater Analytical Results**  
**R&R Excavating Site - CDS**  
**Cedarburg, Wisconsin**

Sample Location	Sampling Date	Benzene (ppb)	Chloro-ethane (ppb)	1,1-DCA (ppb)	1,2-DCA (ppb)	1,1-DCE (ppb)	cis-1,2-DCE (ppb)	Ethyl-benzene (ppb)	MTBE (ppb)	Naphthalene (ppb)	Toluene (ppb)	1,1,1-TCA (ppb)	TCE (ppb)	Combined TMBs (ppb)	Vinyl Chloride (ppb)	Total Xylenes (ppb)
QP-1	6/7/12	<0.50	<1.40	<0.98	<0.50	<0.60	<0.74	<0.78	<0.80	<2.10	<0.53	<0.85	<0.47	<1.54	<0.18	<1.90
SW	10/27/15	<0.44	<0.65	<1.1	<0.48	<0.65	<0.45	<0.71	<1.1	<1.6	<0.44	<0.84	<0.47	<3.10	<0.17	<3.10
MW-1	8/22/12	<0.50	<1.40	<0.98	<0.50	<0.60	<0.74	<0.78	<0.80	<2.10	<0.53	<0.85	<0.47	<1.54	<0.18	<1.90
	8/30/13	<0.24	<0.63	<0.30	<0.41	<0.40	<0.38	<0.55	<0.23	<1.70	<0.69	<0.33	<0.33	<3.60	<0.18	<1.32
	12/6/13	<0.24	<0.63	<0.30	<0.41	<0.40	<0.38	<0.55	<0.23	<1.70	<0.69	<0.33	<0.33	<3.60	<0.18	<1.32
	5/9/14	<0.24	<0.63	<0.30	<0.41	<0.40	<0.38	<0.55	<0.23	<1.70	<0.69	<0.33	<0.33	<3.60	<0.18	<1.32
	9/10/14	<0.24	<0.63	<0.30	<0.41	<0.40	<0.38	<0.55	<0.23	<1.70	<0.69	<0.33	<0.33	<3.60	<0.18	<1.32
	10/27/15	<0.44	<0.65	<1.1	<0.48	<0.65	<0.45	<0.71	<1.1	<1.6	<0.44	<0.84	<0.47	<3.10	<0.17	<3.10
ES (ppb)	-	5	400	850	5	7	70	700	60	100	1,000	200	5	480	0.02	10,000
PAL (ppb)	-	0.5	80	85	0.5	0.7	7	140	12	10	200	40	0.5	96	0.2	1,000

Notes:

Concentrations that exceed their respective PALs are in *blue italics*.

Concentrations that exceed their respective ESs are in **red bold** type.

J Concentration detected slightly above LOD and likely attributable to sediment in sample or laboratory artifact

**Table 2**  
**Groundwater PAH & Metals Analytical Results**  
**R&R Excavating Site - CDS**  
**Cedarburg, Wisconsin**

Test Description	QP-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	SW-1	NR 140 PAL	NR 140 ES
Sample Date	6/7/12	8/22/12	8/31/12	8/30/13	12/6/13	5/9/14	9/10/14	10/27/15	10/27/15		
<b>Polynuclear Aromatic Hydrocarbons (µg/kg)</b>											
acenaphthene	<0.025	0.037J	<0.025	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	-	-
acenaphthylene	<0.019	<0.019	<0.019	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	-	-
anthracene	<0.018	0.02J	<0.018	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	600	3,000
benzo(a)anthracene	<0.024	0.026J	<0.024	<0.025	<0.025	0.031J	<0.025	<0.025	<0.025	-	-
benzo(a)pyrene	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.02	<0.02	<0.02	0.02	0.2
benzo(b)fluoranthene	<0.02	0.022J	<0.02	<0.02	<0.02	<0.02	<0.019	<0.019	<0.019	0.02	0.2
benzo(g,h,i)perylene	<0.019	0.021J	<0.019	<0.023	<0.023	<0.023	<0.024	<0.024	<0.024	-	-
benzo(k)fluoranthene	<0.022	<0.022	<0.022	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	-	-
chrysene	<0.019	0.021J	<0.019	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	0.02	0.2
dibenzo(a,h)anthracene	<0.019	<0.019	<0.019	<0.023	<0.023	<0.023	<0.028	<0.028	<0.028	-	-
fluoranthene	<0.022	0.043J	<0.022	<0.026	<0.026	<0.026	<0.022	<0.022	<0.022	80	400
fluorene	<0.02	0.027J	<0.02	<0.02	<0.02	<0.02	<0.022	<0.022	0.021J	80	400
indeno(1,2,3-cd)pyrene	<0.018	<0.018	<0.018	<0.027	<0.027	<0.027	<0.027	<0.027	<0.027	-	-
1-methylnaphthalene	<0.022	<0.022	<0.022	<0.019	<0.019	<0.019	<0.021	<0.021	<0.021	-	-
2-methylnaphthalene	<0.024	<0.024	<0.024	<0.016	<0.016	<0.016	<0.024	<0.024	<0.024	-	-
naphthalene	<0.021	<0.021	<0.021	<0.023	<0.023	<0.023	0.033J	0.029J	0.020J	10	100
phenanthrene	<0.019	<0.019	<0.019	0.035J	<0.018	<0.018	<0.018	<0.018	0.023J	-	-
pyrene	<0.02	0.036J	<0.02	<0.025	<0.025	<0.025	<0.022	<0.022	<0.022	50	250
<b>Metals (mg/kg)</b>											
arsenic	<0.25	0.61J	NA	<0.60	<0.6	<0.60	<0.6	<0.6	1.0J	5	50
barium	<0.36	63	NA	15.5	NA	18.3	NA	NA	NA	400	2,000
cadmium	<0.16	0.22J	NA	<0.50	NA	<0.50	NA	NA	NA	0.5	5
chromium	0.57	0.92J	NA	<2.60	NA	<2.60	NA	NA	NA	10	100
lead	<0.24	1.7	NA	<0.70	<0.7	<0.70	<0.7	<0.7	<0.7	1.5	15
mercury	0.02	<0.015	NA	<0.04	NA	<0.04	NA	NA	NA	0.2	2
selenium	<0.38	2.5	NA	<2.00	NA	<2.00	NA	NA	NA	10	50
silver	<0.31	<0.31	NA	<10.3	NA	<10.3	NA	NA	NA	10	50

Notes:

1. "—" = not analyzed or no standards have been established.

2. J Concentration detected slightly above LOD and likely attributable to sediment in sample .

3. Concentrations in **red bold** exceed their respective enforcement standards (ESs).

**Table 3**  
**Groundwater Elevation Measurements**  
**R&R Excavating Site - CDS**  
**Cedarburg, Wisconsin**

Well Number	Date	*Total Well Depth	Ground Surface Elevation	Top of Casing Elevation	*Depth to Water Below Casing	Groundwater Elevation	Groundwater Elevation Variation
MW-1	8/21/2012	90.00	832.30	835.50	70.21	<b>765.29</b>	-
	5/10/2013				66.87	<b>768.63</b>	3.34
	8/29/2013				69.82	<b>765.68</b>	-2.95
	12/6/2013				66.87	<b>768.63</b>	2.95
	5/9/2014				67.41	<b>768.09</b>	-0.54
	9/10/2014				65.40	<b>770.10</b>	2.01
	10/27/2015				59.57	<b>775.93</b>	

Notes:

1. \*Measured from the north rim of the top of well casing.
2. All measurements are presented in feet.
3. Elevations are referenced to monument benchmark SE 1/4 of the NE 1/4 corner of Section 22 T 10N R 21E which has an elevation of 833.26 feet.

Lab I.D. #	Quote No.:
Account No.:	Project #: <b>R&amp;R Excavating Site</b>
Sampler: (signature)	<b>Ruf</b>

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

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

Analysis Requested										Other Analysis		
DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	LEAD	X									
NITRATE/NITRITE	OIL & GREASE	X										
PCB	PAH (EPA 8270)	X										
PVOC (EPA 8021)	PVOC + NAPHTHALENE											
VOC DW (EPA 5422)	TOTAL SUSPENDED SOLIDS											
8-RCRA METALS	SULFATE											
VOC (EPA 8260)	X											
Arsenic												

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

**Please ↑ Filter & preserve for lead : Arsenic**

Relinquished By: (sign)	Time	Date	Received By: (sign)	Time	Date
<b>Ruf</b>	10/15/95	10/15/95	<b>Ruf</b>	10:00	10/15/95
Sample Integrity - To be completed by receiving lab.			Method of Shipment: <b>Ruf</b>		
Temp. of Temp. Blank _____ °C On Ice: X			Cooler seal intact upon receipt: X Yes No		
Received in Laboratory By: <b>Ruf</b>			Time: 8:00 Date: 10/15/95		

# Synergy Environmental Lab, INC.

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

RICK FRIESEKE  
FEC. INC.  
6637 N. SIDNEY PLACE  
MILWAUKEE, WI 53209

**Report Date** 02-Nov-15

**Project Name** R&R EXCAVATING  
**Project #** 041013

**Invoice #** E29937

**Lab Code** 5029937A  
**Sample ID** MW-1  
**Sample Matrix** Water  
**Sample Date** 10/27/2015

	<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>
<b>Inorganic</b>										
<b>Metals</b>										
Arsenic, Dissolved	< 0.6	ug/L	0.6	1.9	1	7060A		10/29/2015	CWT	1
Lead, Dissolved	< 0.7	ug/L	0.7	2.5	1	7421		10/30/2015	CWT	1
<b>Organic</b>										
<b>PAH SIM</b>										
Acenaphthene	< 0.02	ug/l	0.02	0.064	1	M8270C	10/29/2015	10/31/2015	MDK	1
Acenaphthylene	< 0.021	ug/l	0.021	0.068	1	M8270C	10/29/2015	10/31/2015	MDK	1
Anthracene	< 0.02	ug/l	0.02	0.064	1	M8270C	10/29/2015	10/31/2015	MDK	1
Benzo(a)anthracene	< 0.019	ug/l	0.019	0.062	1	M8270C	10/29/2015	10/31/2015	MDK	1
Benzo(a)pyrene	< 0.019	ug/l	0.019	0.062	1	M8270C	10/29/2015	10/31/2015	MDK	1
Benzo(b)fluoranthene	< 0.019	ug/l	0.019	0.062	1	M8270C	10/29/2015	10/31/2015	MDK	1
Benzo(g,h,i)perylene	< 0.024	ug/l	0.024	0.078	1	M8270C	10/29/2015	10/31/2015	MDK	1
Benzo(k)fluoranthene	< 0.018	ug/l	0.018	0.057	1	M8270C	10/29/2015	10/31/2015	MDK	1
Chrysene	< 0.017	ug/l	0.017	0.054	1	M8270C	10/29/2015	10/31/2015	MDK	1
Dibeno(a,h)anthracene	< 0.025	ug/l	0.025	0.081	1	M8270C	10/29/2015	10/31/2015	MDK	1
Fluoranthene	< 0.018	ug/l	0.018	0.057	1	M8270C	10/29/2015	10/31/2015	MDK	1
Fluorene	0.021 "J"	ug/l	0.017	0.054	1	M8270C	10/29/2015	10/31/2015	MDK	1
Indeno(1,2,3-cd)pyrene	< 0.018	ug/l	0.018	0.057	1	M8270C	10/29/2015	10/31/2015	MDK	1
1-Methyl naphthalene	< 0.018	ug/l	0.018	0.057	1	M8270C	10/29/2015	10/31/2015	MDK	1
2-Methyl naphthalene	< 0.017	ug/l	0.017	0.054	1	M8270C	10/29/2015	10/31/2015	MDK	1
Naphthalene	0.029 "J"	ug/l	0.018	0.057	1	M8270C	10/29/2015	10/31/2015	MDK	1
Phenanthrene	< 0.017	ug/l	0.017	0.054	1	M8270C	10/29/2015	10/31/2015	MDK	1
Pyrene	< 0.018	ug/l	0.018	0.057	1	M8270C	10/29/2015	10/31/2015	MDK	1
<b>VOC's</b>										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/30/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/30/2015	CJR	1
Bromodichloromethane	< 0.46	ug/l	0.46	1.5	1	8260B		10/30/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/30/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/30/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/30/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/30/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/30/2015	CJR	1

**Project Name** R&R EXCAVATING  
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**Sample Date** 10/27/2015

	<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>
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/30/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/30/2015	CJR	1
Chloroform	< 0.43	ug/l	0.43	1.4	1	8260B		10/30/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/30/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/30/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/30/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/30/2015	CJR	1
Dibromochloromethane	< 0.45	ug/l	0.45	1.4	1	8260B		10/30/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/30/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/30/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/30/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/30/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/30/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/30/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/30/2015	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/30/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/30/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/30/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/30/2015	CJR	4
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/30/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/30/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/30/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/30/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/30/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/30/2015	CJR	1
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/30/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/30/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/30/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/30/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/30/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/30/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/30/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/30/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/30/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/30/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/30/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/30/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/30/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/30/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/30/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/30/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/30/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/30/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/30/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/30/2015	CJR	1
SUR - Dibromofluoromethane	99	REC %			1	8260B		10/30/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	101	REC %			1	8260B		10/30/2015	CJR	1
SUR - 4-Bromofluorobenzene	118	REC %			1	8260B		10/30/2015	CJR	1
SUR - Toluene-d8	114	REC %			1	8260B		10/30/2015	CJR	1

Project Name R&amp;R EXCAVATING

Invoice # E29937

Project # 041013

Lab Code 5029937B

Sample ID SW

Sample Matrix Water

Sample Date 10/27/2015

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
<b>Inorganic</b>										
<b>Metals</b>										
Arsenic, Dissolved	1.0 "J"	ug/L	0.6	1.9	1	7060A		10/29/2015	CWT	1
Lead, Dissolved	< 0.7	ug/L	0.7	2.5	1	7421		10/30/2015	CWT	1
<b>Organic</b>										
<b>PAH SIM</b>										
Acenaphthene	< 0.02	ug/l	0.02	0.064	1	M8270C	10/29/2015	10/31/2015	MDK	1
Acenaphthylene	< 0.021	ug/l	0.021	0.068	1	M8270C	10/29/2015	10/31/2015	MDK	1
Anthracene	< 0.02	ug/l	0.02	0.064	1	M8270C	10/29/2015	10/31/2015	MDK	1
Benzo(a)anthracene	< 0.019	ug/l	0.019	0.062	1	M8270C	10/29/2015	10/31/2015	MDK	1
Benzo(a)pyrene	< 0.019	ug/l	0.019	0.062	1	M8270C	10/29/2015	10/31/2015	MDK	1
Benzo(b)fluoranthene	< 0.019	ug/l	0.019	0.062	1	M8270C	10/29/2015	10/31/2015	MDK	1
Benzo(g,h,i)perylene	< 0.024	ug/l	0.024	0.078	1	M8270C	10/29/2015	10/31/2015	MDK	1
Benzo(k)fluoranthene	< 0.018	ug/l	0.018	0.057	1	M8270C	10/29/2015	10/31/2015	MDK	1
Chrysene	< 0.017	ug/l	0.017	0.054	1	M8270C	10/29/2015	10/31/2015	MDK	1
Dibenz(a,h)anthracene	< 0.025	ug/l	0.025	0.081	1	M8270C	10/29/2015	10/31/2015	MDK	1
Fluoranthene	< 0.018	ug/l	0.018	0.057	1	M8270C	10/29/2015	10/31/2015	MDK	1
Fluorene	< 0.017	ug/l	0.017	0.054	1	M8270C	10/29/2015	10/31/2015	MDK	1
Indeno(1,2,3-cd)pyrene	< 0.018	ug/l	0.018	0.057	1	M8270C	10/29/2015	10/31/2015	MDK	1
1-Methyl naphthalene	< 0.018	ug/l	0.018	0.057	1	M8270C	10/29/2015	10/31/2015	MDK	1
2-Methyl naphthalene	< 0.017	ug/l	0.017	0.054	1	M8270C	10/29/2015	10/31/2015	MDK	1
Naphthalene	0.020 "J"	ug/l	0.018	0.057	1	M8270C	10/29/2015	10/31/2015	MDK	1
Phenanthrene	0.023 "J"	ug/l	0.017	0.054	1	M8270C	10/29/2015	10/31/2015	MDK	1
Pyrene	< 0.018	ug/l	0.018	0.057	1	M8270C	10/29/2015	10/31/2015	MDK	1
<b>VOC's</b>										
Benzene	< 0.44	ug/l	0.44	1.4	1	8260B		10/30/2015	CJR	1
Bromobenzene	< 0.48	ug/l	0.48	1.5	1	8260B		10/30/2015	CJR	1
Bromodichloromethane	7.4	ug/l	0.46	1.5	1	8260B		10/30/2015	CJR	1
Bromoform	< 0.46	ug/l	0.46	1.5	1	8260B		10/30/2015	CJR	1
tert-Butylbenzene	< 1.1	ug/l	1.1	3.4	1	8260B		10/30/2015	CJR	1
sec-Butylbenzene	< 1.2	ug/l	1.2	3.8	1	8260B		10/30/2015	CJR	1
n-Butylbenzene	< 1	ug/l	1	3.3	1	8260B		10/30/2015	CJR	1
Carbon Tetrachloride	< 0.51	ug/l	0.51	1.6	1	8260B		10/30/2015	CJR	1
Chlorobenzene	< 0.46	ug/l	0.46	1.4	1	8260B		10/30/2015	CJR	1
Chloroethane	< 0.65	ug/l	0.65	2.1	1	8260B		10/30/2015	CJR	1
Chloroform	9.1	ug/l	0.43	1.4	1	8260B		10/30/2015	CJR	1
Chloromethane	< 1.9	ug/l	1.9	6	1	8260B		10/30/2015	CJR	1
2-Chlorotoluene	< 0.4	ug/l	0.4	1.3	1	8260B		10/30/2015	CJR	1
4-Chlorotoluene	< 0.63	ug/l	0.63	2	1	8260B		10/30/2015	CJR	1
1,2-Dibromo-3-chloropropane	< 1.4	ug/l	1.4	4.5	1	8260B		10/30/2015	CJR	1
Dibromochloromethane	2.9	ug/l	0.45	1.4	1	8260B		10/30/2015	CJR	1
1,4-Dichlorobenzene	< 0.49	ug/l	0.49	1.6	1	8260B		10/30/2015	CJR	1
1,3-Dichlorobenzene	< 0.52	ug/l	0.52	1.6	1	8260B		10/30/2015	CJR	1
1,2-Dichlorobenzene	< 0.46	ug/l	0.46	1.5	1	8260B		10/30/2015	CJR	1
Dichlorodifluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/30/2015	CJR	1
1,2-Dichloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/30/2015	CJR	1
1,1-Dichloroethane	< 1.1	ug/l	1.1	3.6	1	8260B		10/30/2015	CJR	1
1,1-Dichloroethene	< 0.65	ug/l	0.65	2.1	1	8260B		10/30/2015	CJR	1
cis-1,2-Dichloroethene	< 0.45	ug/l	0.45	1.4	1	8260B		10/30/2015	CJR	1
trans-1,2-Dichloroethene	< 0.54	ug/l	0.54	1.7	1	8260B		10/30/2015	CJR	1
1,2-Dichloropropane	< 0.43	ug/l	0.43	1.37	1	8260B		10/30/2015	CJR	1
2,2-Dichloropropane	< 3.1	ug/l	3.1	9.8	1	8260B		10/30/2015	CJR	4
1,3-Dichloropropane	< 0.42	ug/l	0.42	1.3	1	8260B		10/30/2015	CJR	1
Di-isopropyl ether	< 0.44	ug/l	0.44	1.4	1	8260B		10/30/2015	CJR	1
EDB (1,2-Dibromoethane)	< 0.63	ug/l	0.63	2	1	8260B		10/30/2015	CJR	1
Ethylbenzene	< 0.71	ug/l	0.71	2.3	1	8260B		10/30/2015	CJR	1
Hexachlorobutadiene	< 2.2	ug/l	2.2	7.1	1	8260B		10/30/2015	CJR	1
Isopropylbenzene	< 0.82	ug/l	0.82	2.6	1	8260B		10/30/2015	CJR	1

Project Name R&amp;R EXCAVATING

Invoice # E29937

Project # 041013

Lab Code 5029937B

Sample ID SW

Sample Matrix Water

Sample Date 10/27/2015

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
p-Isopropyltoluene	< 1.1	ug/l	1.1	3.5	1	8260B		10/30/2015	CJR	1
Methylene chloride	< 1.3	ug/l	1.3	4.2	1	8260B		10/30/2015	CJR	1
Methyl tert-butyl ether (MTBE)	< 1.1	ug/l	1.1	3.7	1	8260B		10/30/2015	CJR	1
Naphthalene	< 1.6	ug/l	1.6	5.2	1	8260B		10/30/2015	CJR	1
n-Propylbenzene	< 0.77	ug/l	0.77	2.4	1	8260B		10/30/2015	CJR	1
1,1,2,2-Tetrachloroethane	< 0.52	ug/l	0.52	1.7	1	8260B		10/30/2015	CJR	1
1,1,1,2-Tetrachloroethane	< 0.48	ug/l	0.48	1.5	1	8260B		10/30/2015	CJR	1
Tetrachloroethene	< 0.49	ug/l	0.49	1.5	1	8260B		10/30/2015	CJR	1
Toluene	< 0.44	ug/l	0.44	1.4	1	8260B		10/30/2015	CJR	1
1,2,4-Trichlorobenzene	< 1.7	ug/l	1.7	5.6	1	8260B		10/30/2015	CJR	1
1,2,3-Trichlorobenzene	< 2.7	ug/l	2.7	8.6	1	8260B		10/30/2015	CJR	1
1,1,1-Trichloroethane	< 0.84	ug/l	0.84	2.7	1	8260B		10/30/2015	CJR	1
1,1,2-Trichloroethane	< 0.48	ug/l	0.48	1.52	1	8260B		10/30/2015	CJR	1
Trichloroethene (TCE)	< 0.47	ug/l	0.47	1.5	1	8260B		10/30/2015	CJR	1
Trichlorofluoromethane	< 0.87	ug/l	0.87	2.8	1	8260B		10/30/2015	CJR	1
1,2,4-Trimethylbenzene	< 1.6	ug/l	1.6	5	1	8260B		10/30/2015	CJR	1
1,3,5-Trimethylbenzene	< 1.5	ug/l	1.5	4.8	1	8260B		10/30/2015	CJR	1
Vinyl Chloride	< 0.17	ug/l	0.17	0.54	1	8260B		10/30/2015	CJR	1
m&p-Xylene	< 2.2	ug/l	2.2	6.9	1	8260B		10/30/2015	CJR	1
o-Xylene	< 0.9	ug/l	0.9	2.9	1	8260B		10/30/2015	CJR	1
SUR - Toluene-d8	119	REC %			1	8260B		10/30/2015	CJR	1
SUR - 1,2-Dichloroethane-d4	94	REC %			1	8260B		10/30/2015	CJR	1
SUR - 4-Bromofluorobenzene	131	REC %			1	8260B		10/30/2015	CJR	1
SUR - Dibromofluoromethane	104	REC %			1	8260B		10/30/2015	CJR	1

"J" Flag: Analyte detected between LOD and LOQ

LOD Limit of Detection

LOQ Limit of Quantitation

Code	Comment
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- |   |  |
|---|--|
| 1 | Laboratory QC within limits.                                       |
| 4 | The continuing calibration standard not within established limits. |

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