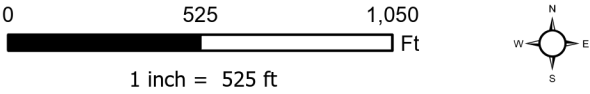




Legend

● Spill Origin ● Soil Sample Location ~ Spill Path



Project No: 018-065	Gray B5 Spill Chevron USA, Inc. Rio Blanco County, Colorado Mid Section 18 T2S R102W	 330 Grand Avenue, Unit C Grand Junction, CO 81501 970-549-1015	Figure
Map By: NDB			1
Date: 3/19/2020			

Table 1
Gray B5 Spill
Soil Data Summary

SAMPLE SUMMARY																												
Location Description		Gray B5 Spill																										
Sample Type		Soil																										
LABORATORY DATA SUMMARY																												
Sample ID	GB5-SS1	GB5-SS1	GB5-SS2	GB5-SS2	GB5-SS3	GB5-SS3	GB5-SS4	GB5-SS4	GB5-SS5	GB5-SS5	GB5-SS6	GB5-SS6	GB5-SS7	GB5-SS7	GB5-SS8	GB5-SS8	GB5-SS9	GB5-SS9	GB5-SS10	GB5-SS10	GB5-SS11	GB5-SS11	GB5-BG1	GB5-BG2	COGCC TABLE #10-1 CONCENTRATION LEVELS	UNITS		
Depth	0'-6"	0'-6"	0'-6"	0'-6"	0'-6"	0'-6"	0'-6"	0'-6"	0'-6"	0'-6"	0'-6"	0'-6"	0'-6"	0'-6"	0'-6"	0'-6"	0'-6"	0'-6"	0'-6"	0'-6"	0'-6"	0'-6"	0'-6"	0'-6"				
Sample Date	3/28/2016	5/7/2020	3/28/2016	5/7/2020	3/28/2016	5/7/2020	3/28/2016	5/7/2020	3/28/2016	5/7/2020	3/28/2016	5/7/2020	3/28/2016	5/7/2020	3/28/2016	5/7/2020	3/28/2016	5/7/2020	3/28/2016	5/7/2020	3/28/2016	5/7/2020	3/28/2016	5/7/2020	3/28/2016	5/7/2020		
Analytical Parameters																												
TPH																												
TPH Gasoline Range Organics		<4.2	NT	<3.4	NT	<3.7	NT	<3.5	NT	<3.7	NT	23	NT	<3.9	NT	<3.8	NT	<3.7	NT	<3.7	NT	<4.3	NT	NT	NT	500	mg/kg	
TPH Diesel Range Organics		14	NT	97	NT	13	NT	26	NT	11	NT	190	NT	16	NT	12	NT	7.1	NT	12	NT	21	NT	NT	NT	NT	mg/kg	
BTEX																												
Benzene		<0.050	NT	<0.041	NT	<0.044	NT	<0.030	NT	<0.030	NT	<0.030	NT	<0.030	NT	<0.030	NT	<0.030	NT	<0.030	NT	<0.030	NT	NT	NT	0.17	mg/kg	
Toluene		<0.050	NT	<0.041	NT	<0.044	NT	<0.030	NT	<0.030	NT	<0.030	NT	<0.030	NT	<0.030	NT	<0.030	NT	<0.030	NT	<0.030	NT	NT	NT	85	mg/kg	
Ethylbenzene		<0.050	NT	<0.041	NT	<0.044	NT	<0.030	NT	<0.030	NT	<0.030	NT	<0.030	NT	<0.030	NT	<0.030	NT	<0.030	NT	<0.030	NT	NT	NT	100	mg/kg	
Total Xylene		<0.15	NT	<0.12	NT	<0.13	NT	<0.090	NT	<0.090	NT	<0.090	NT	<0.090	NT	<0.090	NT	<0.090	NT	<0.090	NT	<0.090	NT	NT	NT	175	mg/kg	
Metals																												
Arsenic		11	NT	8.9	NT	11	NT	11	NT	11	NT	11	NT	12	NT	11	NT	10	NT	12	NT	11	NT	10	9.5	0.39	mg/kg	
Barium		130	NT	140	NT	190	NT	180	NT	170	NT	<0.0083	NT	190	NT	<0.011	NT	120	NT	300	NT	170	NT	170	NT	15,000	mg/kg	
Cadmium		<0.53	NT	<0.46	NT	<0.46	NT	<0.44	NT	<0.46	NT	<0.0083	NT	<0.46	NT	<0.011	NT	<0.41	NT	<0.46	NT	<0.44	NT	<0.45	NT	70	mg/kg	
Chromium		14	NT	13	NT	13	NT	12	NT	13	NT	<0.0083	NT	14	NT	<0.011	NT	11	NT	12	NT	13	NT	15	NT	NA	mg/kg	
Copper		18	NT	14	NT	16	NT	15	NT	15	NT	<0.0083	NT	17	NT	<0.011	NT	15	NT	18	NT	18	NT	15	NT	3,100	mg/kg	
Lead		17	NT	14	NT	18	NT	17	NT	<0.0083	NT	19	NT	<0.011	NT	<0.011	NT	15	NT	16	NT	16	NT	16	NT	400	mg/kg	
Mercury		0.38	NT	0.032	NT	0.024	NT	0.044	NT	0.044	NT	<0.0083	NT	0.052	NT	<0.011	NT	<0.016	NT	0.032	NT	0.018	NT	<0.015	NT	23	mg/kg	
Nickel		23	NT	18	NT	20	NT	18	NT	19	NT	<0.0083	NT	22	NT	<0.011	NT	17	NT	22	NT	20	NT	19	NT	1,600	mg/kg	
Selenium		2.7	NT	1.9	NT	2.1	NT	1.9	NT	1.7	NT	<0.0083	NT	2.1	NT	<0.011	NT	1.4	NT	2.1	NT	2.1	NT	1.7	NT	390	mg/kg	
Silver		<0.53	NT	<0.45	NT	<0.48	NT	<0.44	NT	0.46	NT	<0.0083	NT	<0.46	NT	<0.011	NT	<0.41	NT	<0.46	NT	<0.44	NT	<0.45	NT	390	mg/kg	
Zinc		130	NT	84	NT	100	NT	100	NT	94	NT	<0.0083	NT	110	NT	<0.011	NT	87	NT	110	NT	100	NT	91	NT	23,000	mg/kg	
SAR Metals Analysis																												
Calcium		470	70	620	58	260	61	100	54	38	56	81	45	74	67	40	34	38	130	37	65	68	39	120	NT	NA	mg/L	
Magnesium		300	17	70	15	45	14	17	<10	15	15	14	8.5	16	17	<10	12	12	29	<10	14	17	8	34	NT	NA	mg/L	
Sodium		3,600	101	1,400	3.4	1,400	1.9 J	2,200	5.8	780	43	1,100	4.1	720	3.7	920	19	600	19	650	3.3	790	24	29	NT	NA	mg/L	
Sodium Adsorption Ratio		32	0.28	14	0.10	21	0.058	55	0.19	30	1.3	30	0.15	20	0.11	36	0.72	24	0.39	28	0.097	22	0.91	0.60	NT	<12	ratio	
Polynuclear Aromatic Hydrocarbons																												
Acenaphthene		<0.012	NT	<0.0078	<0.0087	<0.0080	NT	<0.0079	NT	<0.0082	NT	<0.0083	<0.00084	<0.012	NT	<0.011	NT	<0.011	NT	<0.0080	NT	<0.017	NT	NT	NT	1,000	mg/kg	
Anthracene		<0.012	NT	0.021	<0.0015	<0.0080	NT	<0.0079	NT	<0.0082	NT	<0.0083	<0.0015	<0.012	NT	<0.011	NT	<0.011	NT	<0.0080	NT	<0.017	NT	NT	NT	1,000	mg/kg	
Benzo(a)anthracene		0.033	NT	0.038	<0.0018	0.013	NT	0.017	NT	<0.0082	NT	<0.0083	<0.0018	<0.012	NT	<0.011	NT	<0.011	NT	<0.0080	NT	<0.017	NT	NT	NT	0.22	mg/kg	
Benzo(a)pyrene		0.018	NT	0.027	<0.0012	<0.0080	NT	0.013	NT	<0.0082	NT	<0.0083	<0.0012	<0.012	NT	<0.011	NT	<0.011	NT	<0.0080	NT	<0.017	NT	NT	NT	0.022	mg/kg	
Benzo(b)fluoranthene		0.027	NT	0.039	<0.0011	0.012	NT	0.019	NT	<0.0082	NT	<0.0083	<0.0010	<0.012	NT	<0.011	NT	<0.011	NT	<0.0080	NT	<0.017	NT	NT	NT	0.22	mg/kg	
Benzo(k)fluoranthene		<0.012	NT	0.016	<0.0013	<0.0080	NT	<0.0079	NT	<0.0082	NT	<0.0083	<0.0013	<0.012	NT	<0.011	NT	<0.011	NT	<0.0080	NT	<0.017	NT	NT	NT	2.2	mg/kg	
Chrysene		0.025	NT	0.026	<0.0082	0.01	NT	0.012	NT	<0.0082	NT	<0.0083	<0.00089	<0.012	NT	<0.011	NT	<0.011	NT	<0.0080	NT	<0.017	NT	NT	NT	22	mg/kg	
Dibenz(a,h)anthracene		<0.012	NT	<0.0078	<0.0010	<0.0080	NT	<0.0079	NT	<0.0082	NT	<0.0083	<0.0010	<0.012	NT	<0.011	NT	<0.011	NT	<0.0080	NT	<0.017	NT	NT	NT	0.022	mg/kg	
Fluoranthene		0.081	NT	0.12	<0.0082	0.018	NT	0.037	NT	<0.0082	NT	<0.0083	<0.00080	<0.012	NT	<0.011	NT	<0.011	NT	<0.0080	NT	<0.017	NT	NT	NT	1,000	mg/kg	
Fluorene		<0.012	NT	<0.0078	<0.0015	<0.0080	NT	<0.0079	NT	<0.0082	NT	<0.0083	<0.0014	<0.012	NT	<0.011	NT	<0.011	NT	<0.0080	NT	<0.017	NT	NT	NT	1,000	mg/kg	
Indeno(1,2,3-cd)pyrene		0.02	NT	0.023	<0.0016	0.012	NT	0.014	NT	<0.0082	NT	<0.0083	<0.0016	<0.012	NT	<0.011	NT	<0.011	NT	<0.0080	NT	<0.017	NT	NT	NT	0.22	mg/kg	
Naphthalene		<0.012	NT	<0.0078	<0.0019	<0.0080	NT	<0.0079	NT	<0.0082	NT	<0.0083	<0.0019	<0.012	NT	<0.011	NT	<0.011	NT	<0.0080	NT	<0.017	NT	NT	NT	23	mg/kg	
Pyrene		0.081	NT	0.11	<0.00074	0.018	NT	0.038	NT	<0.0082	NT	<0.0083	<0.00071	<0.012	NT	<0.011	NT	<0.011	NT	<0.0080	NT	<0.017	NT	NT	NT	1,000	mg/kg	
General Chemistry																												
Chromium, Hexavalent		<1.3	NT	<1.2	NT	<1.2	NT	<1.2	NT	<1.2	NT	<1.3	NT	<1.3	NT	<1.3	NT	<1.2	NT	<1.2	NT	<1.4	NT	<1.1	NT	23	mg/kg	
Chromium, Trivalent		14	NT	13	NT	13	NT	12	NT	13	NT	14	NT	14	NT	11	NT	11	NT	12	NT	13	NT	15	NT	120,000	mg/kg	
Chromium, Total		22	0.46	11	0.42	8.4	0.39	9.1	0.35	4.1	0.35	4.1	0.35	4.8	0.35	4.8	0.35	4.0	0.35	4.0	0.35	4.0	0.33	1.1	NT	<4 or 2 x the background	mmhos/cm	
pH		8.2	NT	8.00	NT	8.3	NT	8.3	NT	8.3	NT	8.7	NT	8.8	NT	8.8	NT	8.8	NT	8.05	NT	8.6	NT	8.4	8.25	8.3	NT	su



11-Apr-2016

Tim Dobransky
Olsson Associates
760 Horizon Drive
Suite 102
Grand Junction, CO 81506

Re: **Gray B 5 Spill**

Work Order: **16031665**

Dear Tim,

ALS Environmental received 13 samples on 31-Mar-2016 10:00 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 NELAP standard requirements and QC 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 51.

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

Sincerely,

Chad Whelton

Electronically approved by: Chad Whelton

Chad Whelton
Project Manager



Certificate No: MN 998501

Report of Laboratory Analysis

ADDRESS 3352 128th Avenue Holland, Michigan 49424-9263 | PHONE (616) 399-6070 | FAX (616) 399-6185

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

Environmental 

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: Olsson Associates
Project: Gray B 5 Spill
Work Order: 16031665

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>
16031665-01	GB5-SS1	Soil		3/28/2016 11:40	3/31/2016 10:00	<input type="checkbox"/>
16031665-02	GB5-SS2	Soil		3/28/2016 11:50	3/31/2016 10:00	<input type="checkbox"/>
16031665-03	GB5-SS3	Soil		3/28/2016 12:15	3/31/2016 10:00	<input type="checkbox"/>
16031665-04	GB5-BG1	Soil		3/28/2016 12:25	3/31/2016 10:00	<input type="checkbox"/>
16031665-05	GB5-SS4	Soil		3/28/2016 12:35	3/31/2016 10:00	<input type="checkbox"/>
16031665-06	GB5-SS5	Soil		3/28/2016 13:00	3/31/2016 10:00	<input type="checkbox"/>
16031665-07	GB5-SS6	Soil		3/28/2016 13:20	3/31/2016 10:00	<input type="checkbox"/>
16031665-08	GB5-SS7	Soil		3/28/2016 13:30	3/31/2016 10:00	<input type="checkbox"/>
16031665-09	GB5-SS8	Soil		3/28/2016 13:45	3/31/2016 10:00	<input type="checkbox"/>
16031665-10	GB5-SS9	Soil		3/28/2016 14:25	3/31/2016 10:00	<input type="checkbox"/>
16031665-11	GB5-SS10	Soil		3/28/2016 14:35	3/31/2016 10:00	<input type="checkbox"/>
16031665-12	GB5-SS11	Soil		3/28/2016 14:45	3/31/2016 10:00	<input type="checkbox"/>
16031665-13	GB5-BG2	Soil		3/28/2016 14:55	3/31/2016 10:00	<input type="checkbox"/>

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not 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
n	Not offered for accreditation
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 PQL, 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
mg/Kg-dry	Milligrams per Kilogram Dry Weight
mg/L	Milligrams per Liter
mmhos/cm @25°C	Millimhos-Centimeter at 25 Degrees Celcius
none	
s.u.	Standard Units

ALS Group USA, Corp

Date: 11-Apr-16

Client: Olsson Associates
Project: Gray B 5 Spill
Sample ID: GB5-SS1
Collection Date: 3/28/2016 11:40 AM

Work Order: 16031665
Lab ID: 16031665-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep: SW3541 / 4/4/16	Analyst: IT
DRO (C10-C28)	14		7.4	mg/Kg-dry	1	4/4/2016 08:25 PM
Surr: 4-Terphenyl-d14	75.2		39-133	%REC	1	4/4/2016 08:25 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015D		Prep: SW5035 / 4/1/16	Analyst: IT
GRO (C6-C10)	ND		4.2	mg/Kg-dry	1	4/1/2016 02:33 PM
Surr: Toluene-d8	97.4		50-150	%REC	1	4/1/2016 02:33 PM
MERCURY BY CVAA						
			SW7471B		Prep: SW7471 / 4/7/16	Analyst: LR
Mercury	0.38		0.037	mg/Kg-dry	2	4/7/2016 03:51 PM
METALS ANALYSIS BY ICP						
			SW846 6010C		Prep: SW3050B / 3/31/16	Analyst: BL
Arsenic	11		0.53	mg/Kg-dry	1	3/31/2016 03:39 PM
Barium	130		0.53	mg/Kg-dry	1	3/31/2016 03:39 PM
Cadmium	ND		0.53	mg/Kg-dry	1	3/31/2016 03:39 PM
Chromium	14		0.53	mg/Kg-dry	1	3/31/2016 03:39 PM
Copper	18		0.53	mg/Kg-dry	1	3/31/2016 03:39 PM
Lead	17		0.53	mg/Kg-dry	1	3/31/2016 03:39 PM
Nickel	23		0.53	mg/Kg-dry	1	3/31/2016 03:39 PM
Selenium	2.7		1.1	mg/Kg-dry	1	3/31/2016 03:39 PM
Silver	ND		0.53	mg/Kg-dry	1	3/31/2016 03:39 PM
Zinc	130		1.1	mg/Kg-dry	1	3/31/2016 03:39 PM
SOLUBLE CATIONS FOR SAR						
			SW846 6010C		Prep: USDA Method 20B / 4/4/16	Analyst: BL
Calcium	470		25	mg/L	50	4/5/2016 12:15 PM
Magnesium	300		10	mg/L	50	4/5/2016 12:15 PM
Sodium	3,600		10	mg/L	50	4/5/2016 12:15 PM
SODIUM ADSORPTION RATIO						
			USDA H60 METHO		Prep: USDA Method 20B / 4/4/16	Analyst: BL
Sodium Adsorption Ratio	32		0.010	none	1	4/5/2016
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 4/4/16	Analyst: RM
Acenaphthene	ND		0.012	mg/Kg-dry	1	4/5/2016 10:33 PM
Anthracene	ND		0.012	mg/Kg-dry	1	4/5/2016 10:33 PM
Benzo(a)anthracene	0.033		0.012	mg/Kg-dry	1	4/5/2016 10:33 PM
Benzo(a)pyrene	0.018		0.012	mg/Kg-dry	1	4/5/2016 10:33 PM
Benzo(b)fluoranthene	0.027		0.012	mg/Kg-dry	1	4/5/2016 10:33 PM
Benzo(k)fluoranthene	ND		0.012	mg/Kg-dry	1	4/5/2016 10:33 PM
Chrysene	0.025		0.012	mg/Kg-dry	1	4/5/2016 10:33 PM
Dibenzo(a,h)anthracene	ND		0.012	mg/Kg-dry	1	4/5/2016 10:33 PM
Fluoranthene	0.081		0.012	mg/Kg-dry	1	4/5/2016 10:33 PM

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

ALS Group USA, Corp

Date: 11-Apr-16

Client: Olsson Associates
Project: Gray B 5 Spill
Sample ID: GB5-SS1
Collection Date: 3/28/2016 11:40 AM

Work Order: 16031665
Lab ID: 16031665-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorene	ND		0.012	mg/Kg-dry	1	4/5/2016 10:33 PM
Indeno(1,2,3-cd)pyrene	0.020		0.012	mg/Kg-dry	1	4/5/2016 10:33 PM
Naphthalene	ND		0.012	mg/Kg-dry	1	4/5/2016 10:33 PM
Pyrene	0.081		0.012	mg/Kg-dry	1	4/5/2016 10:33 PM
Surr: 2-Fluorobiphenyl	76.4		12-100	%REC	1	4/5/2016 10:33 PM
Surr: 4-Terphenyl-d14	113		25-137	%REC	1	4/5/2016 10:33 PM
Surr: Nitrobenzene-d5	81.8		37-107	%REC	1	4/5/2016 10:33 PM
VOLATILE ORGANIC COMPOUNDS			SW8260B	Prep: SW5035 / 4/1/16	Analyst: BG	
Benzene	ND		0.050	mg/Kg-dry	1	4/1/2016 11:24 PM
Ethylbenzene	ND		0.050	mg/Kg-dry	1	4/1/2016 11:24 PM
m,p-Xylene	ND		0.10	mg/Kg-dry	1	4/1/2016 11:24 PM
o-Xylene	ND		0.050	mg/Kg-dry	1	4/1/2016 11:24 PM
Toluene	ND		0.050	mg/Kg-dry	1	4/1/2016 11:24 PM
Xylenes, Total	ND		0.15	mg/Kg-dry	1	4/1/2016 11:24 PM
Surr: 1,2-Dichloroethane-d4	98.8		70-130	%REC	1	4/1/2016 11:24 PM
Surr: 4-Bromofluorobenzene	93.8		70-130	%REC	1	4/1/2016 11:24 PM
Surr: Dibromofluoromethane	99.7		70-130	%REC	1	4/1/2016 11:24 PM
Surr: Toluene-d8	99.0		70-130	%REC	1	4/1/2016 11:24 PM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO	Prep: USDA Method 20B / 4/4/16	Analyst: KF	
Electrical Conductivity @ Saturation	22		0.050	mmhos/cm @2	10	4/6/2016 12:39 PM
CHROMIUM, TRIVALENT			CALCULATION	Analyst: JJG		
Chromium, Trivalent	14		0.67	mg/Kg-dry	1	4/7/2016 08:09 AM
CHROMIUM, HEXAVALENT			SW7196A	Prep: SW3060A / 4/5/16	Analyst: MB	
Chromium, Hexavalent	ND		1.3	mg/Kg-dry	1	4/6/2016 04:30 PM
MOISTURE			SW3550C	Analyst: ED		
Moisture	25		0.050	% of sample	1	3/31/2016 06:46 PM
PH			SW9045D	Prep: EXTRACT / 4/1/16	Analyst: JB	
pH	8.2			s.u.	1	4/1/2016 01:30 PM

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

ALS Group USA, Corp

Date: 11-Apr-16

Client: Olsson Associates
Project: Gray B 5 Spill
Sample ID: GB5-SS2
Collection Date: 3/28/2016 11:50 AM

Work Order: 16031665
Lab ID: 16031665-02
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep: SW3541 / 4/4/16	Analyst: IT
DRO (C10-C28)	97		24	mg/Kg-dry	5	4/4/2016 07:55 PM
<i>Surr: 4-Terphenyl-d14</i>	72.2		39-133	%REC	5	4/4/2016 07:55 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015D		Prep: SW5035 / 4/1/16	Analyst: IT
GRO (C6-C10)	ND		3.4	mg/Kg-dry	1	4/1/2016 05:05 PM
<i>Surr: Toluene-d8</i>	97.0		50-150	%REC	1	4/1/2016 05:05 PM
MERCURY BY CVAA						
			SW7471B		Prep: SW7471 / 4/7/16	Analyst: LR
Mercury	0.032		0.014	mg/Kg-dry	1	4/7/2016 03:46 PM
METALS ANALYSIS BY ICP						
			SW846 6010C		Prep: SW3050B / 3/31/16	Analyst: BL
Arsenic	8.9		0.45	mg/Kg-dry	1	3/31/2016 03:44 PM
Barium	140		0.45	mg/Kg-dry	1	3/31/2016 03:44 PM
Cadmium	ND		0.45	mg/Kg-dry	1	3/31/2016 03:44 PM
Chromium	13		0.45	mg/Kg-dry	1	3/31/2016 03:44 PM
Copper	14		0.45	mg/Kg-dry	1	3/31/2016 03:44 PM
Lead	14		0.45	mg/Kg-dry	1	3/31/2016 03:44 PM
Nickel	18		0.45	mg/Kg-dry	1	3/31/2016 03:44 PM
Selenium	1.9		0.91	mg/Kg-dry	1	3/31/2016 03:44 PM
Silver	ND		0.45	mg/Kg-dry	1	3/31/2016 03:44 PM
Zinc	84		0.91	mg/Kg-dry	1	3/31/2016 03:44 PM
SOLUBLE CATIONS FOR SAR						
			SW846 6010C		Prep: USDA Method 20B / 4/4/16	Analyst: BL
Calcium	620		25	mg/L	50	4/5/2016 12:20 PM
Magnesium	70		10	mg/L	50	4/5/2016 12:20 PM
Sodium	1,400		10	mg/L	50	4/5/2016 12:20 PM
SODIUM ADSORPTION RATIO						
			USDA H60 METHO		Prep: USDA Method 20B / 4/4/16	Analyst: BL
Sodium Adsorption Ratio	14		0.010	none	1	4/5/2016
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 4/4/16	Analyst: RM
Acenaphthene	ND		0.0078	mg/Kg-dry	1	4/5/2016 10:53 PM
Anthracene	0.021		0.0078	mg/Kg-dry	1	4/5/2016 10:53 PM
Benzo(a)anthracene	0.038		0.0078	mg/Kg-dry	1	4/5/2016 10:53 PM
Benzo(a)pyrene	0.027		0.0078	mg/Kg-dry	1	4/5/2016 10:53 PM
Benzo(b)fluoranthene	0.039		0.0078	mg/Kg-dry	1	4/5/2016 10:53 PM
Benzo(k)fluoranthene	0.016		0.0078	mg/Kg-dry	1	4/5/2016 10:53 PM
Chrysene	0.026		0.0078	mg/Kg-dry	1	4/5/2016 10:53 PM
Dibenzo(a,h)anthracene	ND		0.0078	mg/Kg-dry	1	4/5/2016 10:53 PM
Fluoranthene	0.12		0.0078	mg/Kg-dry	1	4/5/2016 10:53 PM

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

ALS Group USA, Corp

Date: 11-Apr-16

Client: Olsson Associates
Project: Gray B 5 Spill
Sample ID: GB5-SS2
Collection Date: 3/28/2016 11:50 AM

Work Order: 16031665
Lab ID: 16031665-02
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorene	ND		0.0078	mg/Kg-dry	1	4/5/2016 10:53 PM
Indeno(1,2,3-cd)pyrene	0.023		0.0078	mg/Kg-dry	1	4/5/2016 10:53 PM
Naphthalene	ND		0.0078	mg/Kg-dry	1	4/5/2016 10:53 PM
Pyrene	0.11		0.0078	mg/Kg-dry	1	4/5/2016 10:53 PM
Surr: 2-Fluorobiphenyl	72.2		12-100	%REC	1	4/5/2016 10:53 PM
Surr: 4-Terphenyl-d14	98.6		25-137	%REC	1	4/5/2016 10:53 PM
Surr: Nitrobenzene-d5	69.6		37-107	%REC	1	4/5/2016 10:53 PM
VOLATILE ORGANIC COMPOUNDS			SW8260B	Prep: SW5035 / 4/1/16		Analyst: BG
Benzene	ND		0.041	mg/Kg-dry	1	4/1/2016 11:50 PM
Ethylbenzene	ND		0.041	mg/Kg-dry	1	4/1/2016 11:50 PM
m,p-Xylene	ND		0.081	mg/Kg-dry	1	4/1/2016 11:50 PM
o-Xylene	ND		0.041	mg/Kg-dry	1	4/1/2016 11:50 PM
Toluene	ND		0.041	mg/Kg-dry	1	4/1/2016 11:50 PM
Xylenes, Total	ND		0.12	mg/Kg-dry	1	4/1/2016 11:50 PM
Surr: 1,2-Dichloroethane-d4	97.8		70-130	%REC	1	4/1/2016 11:50 PM
Surr: 4-Bromofluorobenzene	96.0		70-130	%REC	1	4/1/2016 11:50 PM
Surr: Dibromofluoromethane	97.7		70-130	%REC	1	4/1/2016 11:50 PM
Surr: Toluene-d8	101		70-130	%REC	1	4/1/2016 11:50 PM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO	Prep: USDA Method 20B / 4/4/16		Analyst: KF
Electrical Conductivity @ Saturation	11		0.050	mmhos/cm @2	10	4/6/2016 12:39 PM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: JJG
Chromium, Trivalent	13		0.59	mg/Kg-dry	1	4/7/2016 08:09 AM
CHROMIUM, HEXAVALENT			SW7196A	Prep: SW3060A / 4/5/16		Analyst: MB
Chromium, Hexavalent	ND		1.2	mg/Kg-dry	1	4/6/2016 04:30 PM
MOISTURE			SW3550C			Analyst: ED
Moisture	15		0.050	% of sample	1	3/31/2016 06:46 PM
PH			SW9045D	Prep: EXTRACT / 4/1/16		Analyst: JB
pH	8.0			s.u.	1	4/1/2016 01:30 PM

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

ALS Group USA, Corp

Date: 11-Apr-16

Client: Olsson Associates

Project: Gray B 5 Spill

Sample ID: GB5-SS3

Collection Date: 3/28/2016 12:15 PM

Work Order: 16031665

Lab ID: 16031665-03

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep: SW3541 / 4/4/16	Analyst: IT
DRO (C10-C28)	13		5.0	mg/Kg-dry	1	4/4/2016 08:55 PM
Surr: 4-Terphenyl-d14	72.7		39-133	%REC	1	4/4/2016 08:55 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015D		Prep: SW5035 / 4/1/16	Analyst: IT
GRO (C6-C10)	ND		3.7	mg/Kg-dry	1	4/1/2016 02:58 PM
Surr: Toluene-d8	101		50-150	%REC	1	4/1/2016 02:58 PM
MERCURY BY CVAA						
			SW7471B		Prep: SW7471 / 4/7/16	Analyst: LR
Mercury	0.024		0.016	mg/Kg-dry	1	4/7/2016 03:53 PM
METALS ANALYSIS BY ICP						
			SW846 6010C		Prep: SW3050B / 3/31/16	Analyst: BL
Arsenic	11		0.48	mg/Kg-dry	1	3/31/2016 03:50 PM
Barium	190		0.48	mg/Kg-dry	1	3/31/2016 03:50 PM
Cadmium	ND		0.48	mg/Kg-dry	1	3/31/2016 03:50 PM
Chromium	13		0.48	mg/Kg-dry	1	3/31/2016 03:50 PM
Copper	16		0.48	mg/Kg-dry	1	3/31/2016 03:50 PM
Lead	18		0.48	mg/Kg-dry	1	3/31/2016 03:50 PM
Nickel	20		0.48	mg/Kg-dry	1	3/31/2016 03:50 PM
Selenium	2.1		0.95	mg/Kg-dry	1	3/31/2016 03:50 PM
Silver	ND		0.48	mg/Kg-dry	1	3/31/2016 03:50 PM
Zinc	100		0.95	mg/Kg-dry	1	3/31/2016 03:50 PM
SOLUBLE CATIONS FOR SAR						
			SW846 6010C		Prep: USDA Method 20B / 4/4/16	Analyst: BL
Calcium	260		25	mg/L	50	4/5/2016 12:26 PM
Magnesium	45		10	mg/L	50	4/5/2016 12:26 PM
Sodium	1,400		10	mg/L	50	4/5/2016 12:26 PM
SODIUM ADSORPTION RATIO						
			USDA H60 METHO		Prep: USDA Method 20B / 4/4/16	Analyst: BL
Sodium Adsorption Ratio	21		0.010	none	1	4/5/2016
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 4/4/16	Analyst: RM
Acenaphthene	ND		0.0080	mg/Kg-dry	1	4/5/2016 11:14 PM
Anthracene	ND		0.0080	mg/Kg-dry	1	4/5/2016 11:14 PM
Benzo(a)anthracene	0.013		0.0080	mg/Kg-dry	1	4/5/2016 11:14 PM
Benzo(a)pyrene	ND		0.0080	mg/Kg-dry	1	4/5/2016 11:14 PM
Benzo(b)fluoranthene	0.012		0.0080	mg/Kg-dry	1	4/5/2016 11:14 PM
Benzo(k)fluoranthene	ND		0.0080	mg/Kg-dry	1	4/5/2016 11:14 PM
Chrysene	0.010		0.0080	mg/Kg-dry	1	4/5/2016 11:14 PM
Dibenzo(a,h)anthracene	ND		0.0080	mg/Kg-dry	1	4/5/2016 11:14 PM
Fluoranthene	0.018		0.0080	mg/Kg-dry	1	4/5/2016 11:14 PM

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

ALS Group USA, Corp

Date: 11-Apr-16

Client: Olsson Associates

Project: Gray B 5 Spill

Sample ID: GB5-SS3

Collection Date: 3/28/2016 12:15 PM

Work Order: 16031665

Lab ID: 16031665-03

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorene	ND		0.0080	mg/Kg-dry	1	4/5/2016 11:14 PM
Indeno(1,2,3-cd)pyrene	0.012		0.0080	mg/Kg-dry	1	4/5/2016 11:14 PM
Naphthalene	ND		0.0080	mg/Kg-dry	1	4/5/2016 11:14 PM
Pyrene	0.018		0.0080	mg/Kg-dry	1	4/5/2016 11:14 PM
Surr: 2-Fluorobiphenyl	76.0		12-100	%REC	1	4/5/2016 11:14 PM
Surr: 4-Terphenyl-d14	106		25-137	%REC	1	4/5/2016 11:14 PM
Surr: Nitrobenzene-d5	96.1		37-107	%REC	1	4/5/2016 11:14 PM
VOLATILE ORGANIC COMPOUNDS			SW8260B	Prep: SW5035 / 4/1/16		Analyst: BG
Benzene	ND		0.044	mg/Kg-dry	1	4/1/2016 02:39 PM
Ethylbenzene	ND		0.044	mg/Kg-dry	1	4/1/2016 02:39 PM
m,p-Xylene	ND		0.088	mg/Kg-dry	1	4/1/2016 02:39 PM
o-Xylene	ND		0.044	mg/Kg-dry	1	4/1/2016 02:39 PM
Toluene	ND		0.044	mg/Kg-dry	1	4/1/2016 02:39 PM
Xylenes, Total	ND		0.13	mg/Kg-dry	1	4/1/2016 02:39 PM
Surr: 1,2-Dichloroethane-d4	91.8		70-130	%REC	1	4/1/2016 02:39 PM
Surr: 4-Bromofluorobenzene	96.0		70-130	%REC	1	4/1/2016 02:39 PM
Surr: Dibromofluoromethane	89.4		70-130	%REC	1	4/1/2016 02:39 PM
Surr: Toluene-d8	95.2		70-130	%REC	1	4/1/2016 02:39 PM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO	Prep: USDA Method 20B / 4/4/16		Analyst: KF
Electrical Conductivity @ Saturation	8.4		0.050	mmhos/cm @2	10	4/6/2016 12:39 PM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: JJG
Chromium, Trivalent	13		0.62	mg/Kg-dry	1	4/7/2016 08:09 AM
CHROMIUM, HEXAVALENT			SW7196A	Prep: SW3060A / 4/5/16		Analyst: MB
Chromium, Hexavalent	ND		1.2	mg/Kg-dry	1	4/6/2016 04:30 PM
MOISTURE			SW3550C			Analyst: ED
Moisture	19		0.050	% of sample	1	3/31/2016 06:46 PM
PH			SW9045D	Prep: EXTRACT / 4/1/16		Analyst: JB
pH	8.3			s.u.	1	4/1/2016 01:30 PM

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

ALS Group USA, Corp

Date: 11-Apr-16

Client: Olsson Associates

Project: Gray B 5 Spill

Sample ID: GB5-BG1

Collection Date: 3/28/2016 12:25 PM

Work Order: 16031665

Lab ID: 16031665-04

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA						
Mercury	ND		SW7471B 0.015	mg/Kg-dry	Prep: SW7471 / 4/7/16 1	Analyst: LR 4/7/2016 03:55 PM
METALS ANALYSIS BY ICP						
Arsenic	10		SW846 6010C 0.45	mg/Kg-dry	Prep: SW3050B / 3/31/16 1	Analyst: BL 3/31/2016 03:55 PM
Barium	170		0.45	mg/Kg-dry	1	3/31/2016 03:55 PM
Cadmium	ND		0.45	mg/Kg-dry	1	3/31/2016 03:55 PM
Chromium	15		0.45	mg/Kg-dry	1	3/31/2016 03:55 PM
Copper	15		0.45	mg/Kg-dry	1	3/31/2016 03:55 PM
Lead	16		0.45	mg/Kg-dry	1	3/31/2016 03:55 PM
Nickel	19		0.45	mg/Kg-dry	1	3/31/2016 03:55 PM
Selenium	1.7		0.89	mg/Kg-dry	1	3/31/2016 03:55 PM
Silver	ND		0.45	mg/Kg-dry	1	3/31/2016 03:55 PM
Zinc	91		0.89	mg/Kg-dry	1	3/31/2016 03:55 PM
SOLUBLE CATIONS FOR SAR						
Calcium	120		SW846 6010C 25	mg/L	Prep: USDA Method 20B / 4/4/16 50	Analyst: BL 4/5/2016 12:32 PM
Magnesium	34		10	mg/L	50	4/5/2016 12:32 PM
Sodium	29		10	mg/L	50	4/5/2016 12:32 PM
SODIUM ADSORPTION RATIO						
Sodium Adsorption Ratio	0.60		USDA H60 METHO 0.010	none	Prep: USDA Method 20B / 4/4/16 1	Analyst: BL 4/5/2016
ELECTRICAL CONDUCTIVITY (SAR)						
Electrical Conductivity @ Saturation	1.1		USDA H60 METHO 0.050	mmhos/cm @2	Prep: USDA Method 20B / 4/4/16 10	Analyst: KF 4/6/2016 12:39 PM
CHROMIUM, TRIVALENT						
Chromium, Trivalent	15		CALCULATION 0.58	mg/Kg-dry	1	Analyst: JJG 4/7/2016 08:09 AM
CHROMIUM, HEXAVALENT						
Chromium, Hexavalent	ND		SW7196A 1.1	mg/Kg-dry	Prep: SW3060A / 3/31/16 1	Analyst: MB 4/1/2016 11:00 AM
MOISTURE						
Moisture	14		SW3550C 0.050	% of sample	1	Analyst: ED 3/31/2016 06:46 PM
PH						
pH	8.3		SW9045D s.u.		Prep: EXTRACT / 4/1/16 1	Analyst: JB 4/1/2016 01:30 PM

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

ALS Group USA, Corp

Date: 11-Apr-16

Client: Olsson Associates

Project: Gray B 5 Spill

Sample ID: GB5-SS4

Collection Date: 3/28/2016 12:35 PM

Work Order: 16031665

Lab ID: 16031665-05

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep: SW3541 / 4/4/16	Analyst: IT
DRO (C10-C28)	26		4.9	mg/Kg-dry	1	4/4/2016 09:25 PM
<i>Surr: 4-Terphenyl-d14</i>	<i>69.0</i>		<i>39-133</i>	<i>%REC</i>	<i>1</i>	4/4/2016 09:25 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015D		Prep: SW5035 / 4/1/16	Analyst: IT
GRO (C6-C10)	ND		3.5	mg/Kg-dry	1	4/1/2016 05:30 PM
<i>Surr: Toluene-d8</i>	<i>103</i>		<i>50-150</i>	<i>%REC</i>	<i>1</i>	4/1/2016 05:30 PM
MERCURY BY CVAA						
			SW7471B		Prep: SW7471 / 4/7/16	Analyst: LR
Mercury	0.093		0.016	mg/Kg-dry	1	4/7/2016 03:58 PM
METALS ANALYSIS BY ICP						
			SW846 6010C		Prep: SW3050B / 3/31/16	Analyst: BL
Arsenic	11		0.44	mg/Kg-dry	1	3/31/2016 04:00 PM
Barium	180		0.44	mg/Kg-dry	1	3/31/2016 04:00 PM
Cadmium	ND		0.44	mg/Kg-dry	1	3/31/2016 04:00 PM
Chromium	12		0.44	mg/Kg-dry	1	3/31/2016 04:00 PM
Copper	15		0.44	mg/Kg-dry	1	3/31/2016 04:00 PM
Lead	18		0.44	mg/Kg-dry	1	3/31/2016 04:00 PM
Nickel	18		0.44	mg/Kg-dry	1	3/31/2016 04:00 PM
Selenium	1.9		0.88	mg/Kg-dry	1	3/31/2016 04:00 PM
Silver	ND		0.44	mg/Kg-dry	1	3/31/2016 04:00 PM
Zinc	100		0.88	mg/Kg-dry	1	3/31/2016 04:00 PM
SOLUBLE CATIONS FOR SAR						
			SW846 6010C		Prep: USDA Method 20B / 4/4/16	Analyst: BL
Calcium	100		25	mg/L	50	4/5/2016 12:43 PM
Magnesium	17		10	mg/L	50	4/5/2016 12:43 PM
Sodium	2,200		10	mg/L	50	4/5/2016 12:43 PM
SODIUM ADSORPTION RATIO						
			USDA H60 METHO		Prep: USDA Method 20B / 4/4/16	Analyst: BL
Sodium Adsorption Ratio	55		0.010	none	1	4/5/2016
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 4/4/16	Analyst: RM
Acenaphthene	ND		0.0079	mg/Kg-dry	1	4/5/2016 11:34 PM
Anthracene	ND		0.0079	mg/Kg-dry	1	4/5/2016 11:34 PM
Benzo(a)anthracene	0.017		0.0079	mg/Kg-dry	1	4/5/2016 11:34 PM
Benzo(a)pyrene	0.013		0.0079	mg/Kg-dry	1	4/5/2016 11:34 PM
Benzo(b)fluoranthene	0.019		0.0079	mg/Kg-dry	1	4/5/2016 11:34 PM
Benzo(k)fluoranthene	ND		0.0079	mg/Kg-dry	1	4/5/2016 11:34 PM
Chrysene	0.012		0.0079	mg/Kg-dry	1	4/5/2016 11:34 PM
Dibenzo(a,h)anthracene	ND		0.0079	mg/Kg-dry	1	4/5/2016 11:34 PM
Fluoranthene	0.037		0.0079	mg/Kg-dry	1	4/5/2016 11:34 PM

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

ALS Group USA, Corp

Date: 11-Apr-16

Client: Olsson Associates

Project: Gray B 5 Spill

Sample ID: GB5-SS4

Collection Date: 3/28/2016 12:35 PM

Work Order: 16031665

Lab ID: 16031665-05

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorene	ND		0.0079	mg/Kg-dry	1	4/5/2016 11:34 PM
Indeno(1,2,3-cd)pyrene	0.014		0.0079	mg/Kg-dry	1	4/5/2016 11:34 PM
Naphthalene	ND		0.0079	mg/Kg-dry	1	4/5/2016 11:34 PM
Pyrene	0.039		0.0079	mg/Kg-dry	1	4/5/2016 11:34 PM
Surr: 2-Fluorobiphenyl	78.5		12-100	%REC	1	4/5/2016 11:34 PM
Surr: 4-Terphenyl-d14	98.5		25-137	%REC	1	4/5/2016 11:34 PM
Surr: Nitrobenzene-d5	68.4		37-107	%REC	1	4/5/2016 11:34 PM
VOLATILE ORGANIC COMPOUNDS			SW8260B	Prep: SW5035 / 4/1/16	Analyst: BG	
Benzene	ND		0.030	mg/Kg-dry	1	4/2/2016 12:16 PM
Ethylbenzene	ND		0.030	mg/Kg-dry	1	4/2/2016 12:16 PM
m,p-Xylene	ND		0.060	mg/Kg-dry	1	4/2/2016 12:16 PM
o-Xylene	ND		0.030	mg/Kg-dry	1	4/2/2016 12:16 PM
Toluene	ND		0.030	mg/Kg-dry	1	4/2/2016 12:16 PM
Xylenes, Total	ND		0.090	mg/Kg-dry	1	4/2/2016 12:16 PM
Surr: 1,2-Dichloroethane-d4	97.0		70-130	%REC	1	4/2/2016 12:16 PM
Surr: 4-Bromofluorobenzene	97.4		70-130	%REC	1	4/2/2016 12:16 PM
Surr: Dibromofluoromethane	98.8		70-130	%REC	1	4/2/2016 12:16 PM
Surr: Toluene-d8	101		70-130	%REC	1	4/2/2016 12:16 PM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO	Prep: USDA Method 20B / 4/4/16	Analyst: KF	
Electrical Conductivity @ Saturation	13		0.12	mmhos/cm @2	25	4/6/2016 12:39 PM
CHROMIUM, TRIVALENT			CALCULATION	Analyst: JJG		
Chromium, Trivalent	12		0.60	mg/Kg-dry	1	4/7/2016 08:09 AM
CHROMIUM, HEXAVALENT			SW7196A	Prep: SW3060A / 4/5/16	Analyst: MB	
Chromium, Hexavalent	ND		1.2	mg/Kg-dry	1	4/6/2016 04:30 PM
MOISTURE			SW3550C	Analyst: ED		
Moisture	16		0.050	% of sample	1	4/1/2016 04:54 PM
PH			SW9045D	Prep: EXTRACT / 4/1/16	Analyst: JB	
pH	9.1			s.u.	1	4/1/2016 01:30 PM

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

ALS Group USA, Corp

Date: 11-Apr-16

Client: Olsson Associates

Project: Gray B 5 Spill

Sample ID: GB5-SS5

Collection Date: 3/28/2016 01:00 PM

Work Order: 16031665

Lab ID: 16031665-06

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	11		SW8015M		Prep: SW3541 / 4/4/16	Analyst: IT
			5.1	mg/Kg-dry	1	4/4/2016 09:55 PM
Surr: 4-Terphenyl-d14	82.2		39-133	%REC	1	4/4/2016 09:55 PM
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		SW8015D		Prep: SW5035 / 4/1/16	Analyst: IT
			3.7	mg/Kg-dry	1	4/1/2016 05:55 PM
Surr: Toluene-d8	103		50-150	%REC	1	4/1/2016 05:55 PM
MERCURY BY CVAA						
Mercury	0.044		SW7471B		Prep: SW7471 / 4/7/16	Analyst: LR
			0.015	mg/Kg-dry	1	4/7/2016 04:11 PM
METALS ANALYSIS BY ICP						
Arsenic	11		SW846 6010C		Prep: SW3050B / 3/31/16	Analyst: BL
			0.46	mg/Kg-dry	1	3/31/2016 04:06 PM
Barium	170		0.46	mg/Kg-dry	1	3/31/2016 04:06 PM
Cadmium	ND		0.46	mg/Kg-dry	1	3/31/2016 04:06 PM
Chromium	13		0.46	mg/Kg-dry	1	3/31/2016 04:06 PM
Copper	15		0.46	mg/Kg-dry	1	3/31/2016 04:06 PM
Lead	17		0.46	mg/Kg-dry	1	3/31/2016 04:06 PM
Nickel	19		0.46	mg/Kg-dry	1	3/31/2016 04:06 PM
Selenium	1.7		0.93	mg/Kg-dry	1	3/31/2016 04:06 PM
Silver	ND		0.46	mg/Kg-dry	1	3/31/2016 04:06 PM
Zinc	94		0.93	mg/Kg-dry	1	3/31/2016 04:06 PM
SOLUBLE CATIONS FOR SAR						
			SW846 6010C		Prep: USDA Method 20B / 4/4/16	Analyst: BL
Calcium	38		25	mg/L	50	4/5/2016 12:48 PM
Magnesium	ND		10	mg/L	50	4/5/2016 12:48 PM
Sodium	780		10	mg/L	50	4/5/2016 12:48 PM
SODIUM ADSORPTION RATIO						
			USDA H60 METHO		Prep: USDA Method 20B / 4/4/16	Analyst: BL
Sodium Adsorption Ratio	30		0.010	none	1	4/5/2016
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 4/4/16	Analyst: RM
Acenaphthene	ND		0.0082	mg/Kg-dry	1	4/5/2016 11:55 PM
Anthracene	ND		0.0082	mg/Kg-dry	1	4/5/2016 11:55 PM
Benzo(a)anthracene	ND		0.0082	mg/Kg-dry	1	4/5/2016 11:55 PM
Benzo(a)pyrene	ND		0.0082	mg/Kg-dry	1	4/5/2016 11:55 PM
Benzo(b)fluoranthene	ND		0.0082	mg/Kg-dry	1	4/5/2016 11:55 PM
Benzo(k)fluoranthene	ND		0.0082	mg/Kg-dry	1	4/5/2016 11:55 PM
Chrysene	ND		0.0082	mg/Kg-dry	1	4/5/2016 11:55 PM
Dibenzo(a,h)anthracene	ND		0.0082	mg/Kg-dry	1	4/5/2016 11:55 PM
Fluoranthene	ND		0.0082	mg/Kg-dry	1	4/5/2016 11:55 PM

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

ALS Group USA, Corp

Date: 11-Apr-16

Client: Olsson Associates

Project: Gray B 5 Spill

Sample ID: GB5-SS5

Collection Date: 3/28/2016 01:00 PM

Work Order: 16031665

Lab ID: 16031665-06

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorene	ND		0.0082	mg/Kg-dry	1	4/5/2016 11:55 PM
Indeno(1,2,3-cd)pyrene	ND		0.0082	mg/Kg-dry	1	4/5/2016 11:55 PM
Naphthalene	ND		0.0082	mg/Kg-dry	1	4/5/2016 11:55 PM
Pyrene	ND		0.0082	mg/Kg-dry	1	4/5/2016 11:55 PM
Surr: 2-Fluorobiphenyl	94.3		12-100	%REC	1	4/5/2016 11:55 PM
Surr: 4-Terphenyl-d14	108		25-137	%REC	1	4/5/2016 11:55 PM
Surr: Nitrobenzene-d5	83.9		37-107	%REC	1	4/5/2016 11:55 PM
VOLATILE ORGANIC COMPOUNDS			SW8260B	Prep: SW5035 / 4/1/16		Analyst: BG
Benzene	ND		0.030	mg/Kg-dry	1	4/2/2016 12:42 PM
Ethylbenzene	ND		0.030	mg/Kg-dry	1	4/2/2016 12:42 PM
m,p-Xylene	ND		0.060	mg/Kg-dry	1	4/2/2016 12:42 PM
o-Xylene	ND		0.030	mg/Kg-dry	1	4/2/2016 12:42 PM
Toluene	ND		0.030	mg/Kg-dry	1	4/2/2016 12:42 PM
Xylenes, Total	ND		0.090	mg/Kg-dry	1	4/2/2016 12:42 PM
Surr: 1,2-Dichloroethane-d4	95.6		70-130	%REC	1	4/2/2016 12:42 PM
Surr: 4-Bromofluorobenzene	95.8		70-130	%REC	1	4/2/2016 12:42 PM
Surr: Dibromofluoromethane	95.8		70-130	%REC	1	4/2/2016 12:42 PM
Surr: Toluene-d8	100		70-130	%REC	1	4/2/2016 12:42 PM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO	Prep: USDA Method 20B / 4/4/16		Analyst: KF
Electrical Conductivity @ Saturation	4.1		0.12	mmhos/cm @2	25	4/6/2016 12:39 PM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: JJG
Chromium, Trivalent	13		0.62	mg/Kg-dry	1	4/7/2016 08:09 AM
CHROMIUM, HEXAVALENT			SW7196A	Prep: SW3060A / 4/5/16		Analyst: MB
Chromium, Hexavalent	ND		1.2	mg/Kg-dry	1	4/6/2016 04:30 PM
MOISTURE			SW3550C			Analyst: ED
Moisture	19		0.050	% of sample	1	4/1/2016 04:54 PM
PH			SW9045D	Prep: EXTRACT / 4/1/16		Analyst: JB
pH	8.7			s.u.	1	4/1/2016 01:30 PM

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

ALS Group USA, Corp

Date: 11-Apr-16

Client: Olsson Associates

Project: Gray B 5 Spill

Sample ID: GB5-SS6

Collection Date: 3/28/2016 01:20 PM

Work Order: 16031665

Lab ID: 16031665-07

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	190		SW8015M		Prep: SW3541 / 4/4/16	Analyst: IT
<i>Surr: 4-Terphenyl-d14</i>	<i>68.4</i>		<i>5.2</i>	<i>mg/Kg-dry</i>	<i>1</i>	<i>4/4/2016 10:25 PM</i>
			<i>39-133</i>	<i>%REC</i>	<i>1</i>	<i>4/4/2016 10:25 PM</i>
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	23		SW8015D		Prep: SW5035 / 4/1/16	Analyst: IT
<i>Surr: Toluene-d8</i>	<i>101</i>		<i>3.8</i>	<i>mg/Kg-dry</i>	<i>1</i>	<i>4/1/2016 06:20 PM</i>
			<i>50-150</i>	<i>%REC</i>	<i>1</i>	<i>4/1/2016 06:20 PM</i>
MERCURY BY CVAA						
Mercury	0.021		SW7471B		Prep: SW7471 / 4/7/16	Analyst: LR
			0.016	mg/Kg-dry	1	4/7/2016 04:13 PM
METALS ANALYSIS BY ICP						
Arsenic	11		SW846 6010C		Prep: SW3050B / 3/31/16	Analyst: BL
Barium	180		0.42	mg/Kg-dry	1	3/31/2016 04:11 PM
Cadmium	ND		0.42	mg/Kg-dry	1	3/31/2016 04:11 PM
Chromium	14		0.42	mg/Kg-dry	1	3/31/2016 04:11 PM
Copper	17		0.42	mg/Kg-dry	1	3/31/2016 04:11 PM
Lead	17		0.42	mg/Kg-dry	1	3/31/2016 04:11 PM
Nickel	21		0.42	mg/Kg-dry	1	3/31/2016 04:11 PM
Selenium	2.2		0.84	mg/Kg-dry	1	3/31/2016 04:11 PM
Silver	ND		0.42	mg/Kg-dry	1	3/31/2016 04:11 PM
Zinc	100		0.84	mg/Kg-dry	1	3/31/2016 04:11 PM
SOLUBLE CATIONS FOR SAR						
			SW846 6010C		Prep: USDA Method 20B / 4/4/16	Analyst: BL
Calcium	81		25	mg/L	50	4/5/2016 12:54 PM
Magnesium	14		10	mg/L	50	4/5/2016 12:54 PM
Sodium	1,100		10	mg/L	50	4/5/2016 12:54 PM
SODIUM ADSORPTION RATIO						
			USDA H60 METHO		Prep: USDA Method 20B / 4/4/16	Analyst: BL
Sodium Adsorption Ratio	30		0.010	none	1	4/5/2016
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 4/4/16	Analyst: RM
Acenaphthene	ND		0.0083	mg/Kg-dry	1	4/6/2016 12:15 AM
Anthracene	ND		0.0083	mg/Kg-dry	1	4/6/2016 12:15 AM
Benzo(a)anthracene	ND		0.0083	mg/Kg-dry	1	4/6/2016 12:15 AM
Benzo(a)pyrene	ND		0.0083	mg/Kg-dry	1	4/6/2016 12:15 AM
Benzo(b)fluoranthene	ND		0.0083	mg/Kg-dry	1	4/6/2016 12:15 AM
Benzo(k)fluoranthene	ND		0.0083	mg/Kg-dry	1	4/6/2016 12:15 AM
Chrysene	ND		0.0083	mg/Kg-dry	1	4/6/2016 12:15 AM
Dibenzo(a,h)anthracene	ND		0.0083	mg/Kg-dry	1	4/6/2016 12:15 AM
Fluoranthene	ND		0.0083	mg/Kg-dry	1	4/6/2016 12:15 AM

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

ALS Group USA, Corp

Date: 11-Apr-16

Client: Olsson Associates

Project: Gray B 5 Spill

Sample ID: GB5-SS6

Collection Date: 3/28/2016 01:20 PM

Work Order: 16031665

Lab ID: 16031665-07

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorene	ND		0.0083	mg/Kg-dry	1	4/6/2016 12:15 AM
Indeno(1,2,3-cd)pyrene	ND		0.0083	mg/Kg-dry	1	4/6/2016 12:15 AM
Naphthalene	ND		0.0083	mg/Kg-dry	1	4/6/2016 12:15 AM
Pyrene	ND		0.0083	mg/Kg-dry	1	4/6/2016 12:15 AM
Surr: 2-Fluorobiphenyl	78.2		12-100	%REC	1	4/6/2016 12:15 AM
Surr: 4-Terphenyl-d14	84.6		25-137	%REC	1	4/6/2016 12:15 AM
Surr: Nitrobenzene-d5	88.3		37-107	%REC	1	4/6/2016 12:15 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B	Prep: SW5035 / 4/1/16	Analyst: BG	
Benzene	ND		0.030	mg/Kg-dry	1	4/2/2016 01:07 AM
Ethylbenzene	ND		0.030	mg/Kg-dry	1	4/2/2016 01:07 AM
m,p-Xylene	ND		0.060	mg/Kg-dry	1	4/2/2016 01:07 AM
o-Xylene	ND		0.030	mg/Kg-dry	1	4/2/2016 01:07 AM
Toluene	ND		0.030	mg/Kg-dry	1	4/2/2016 01:07 AM
Xylenes, Total	ND		0.090	mg/Kg-dry	1	4/2/2016 01:07 AM
Surr: 1,2-Dichloroethane-d4	98.6		70-130	%REC	1	4/2/2016 01:07 AM
Surr: 4-Bromofluorobenzene	96.0		70-130	%REC	1	4/2/2016 01:07 AM
Surr: Dibromofluoromethane	98.2		70-130	%REC	1	4/2/2016 01:07 AM
Surr: Toluene-d8	98.6		70-130	%REC	1	4/2/2016 01:07 AM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO	Prep: USDA Method 20B / 4/4/16	Analyst: KF	
Electrical Conductivity @ Saturation	6.6		0.12	mmhos/cm @2	25	4/6/2016 12:39 PM
CHROMIUM, TRIVALENT			CALCULATION	Analyst: JJG		
Chromium, Trivalent	14		0.63	mg/Kg-dry	1	4/7/2016 08:09 AM
CHROMIUM, HEXAVALENT			SW7196A	Prep: SW3060A / 4/5/16	Analyst: MB	
Chromium, Hexavalent	ND		1.3	mg/Kg-dry	1	4/6/2016 04:30 PM
MOISTURE			SW3550C	Analyst: ED		
Moisture	21		0.050	% of sample	1	4/1/2016 04:54 PM
PH			SW9045D	Prep: EXTRACT / 4/1/16	Analyst: JB	
pH	9.4			s.u.	1	4/1/2016 01:30 PM

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

ALS Group USA, Corp

Date: 11-Apr-16

Client: Olsson Associates

Project: Gray B 5 Spill

Sample ID: GB5-SS7

Collection Date: 3/28/2016 01:30 PM

Work Order: 16031665

Lab ID: 16031665-08

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	16		SW8015M		Prep: SW3541 / 4/4/16	Analyst: IT
<i>Surr: 4-Terphenyl-d14</i>	<i>75.1</i>		<i>7.8</i>	<i>mg/Kg-dry</i>	<i>1</i>	<i>4/4/2016 11:25 PM</i>
			<i>39-133</i>	<i>%REC</i>	<i>1</i>	<i>4/4/2016 11:25 PM</i>
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		SW8015D		Prep: SW5035 / 4/1/16	Analyst: IT
<i>Surr: Toluene-d8</i>	<i>102</i>		<i>3.9</i>	<i>mg/Kg-dry</i>	<i>1</i>	<i>4/1/2016 06:45 PM</i>
			<i>50-150</i>	<i>%REC</i>	<i>1</i>	<i>4/1/2016 06:45 PM</i>
MERCURY BY CVAA						
Mercury	0.052		SW7471B		Prep: SW7471 / 4/7/16	Analyst: LR
			0.016	mg/Kg-dry	1	4/7/2016 04:15 PM
METALS ANALYSIS BY ICP						
Arsenic	12		SW846 6010C		Prep: SW3050B / 3/31/16	Analyst: BL
Barium	190		0.46	mg/Kg-dry	1	3/31/2016 04:17 PM
Cadmium	ND		0.46	mg/Kg-dry	1	3/31/2016 04:17 PM
Chromium	14		0.46	mg/Kg-dry	1	3/31/2016 04:17 PM
Copper	17		0.46	mg/Kg-dry	1	3/31/2016 04:17 PM
Lead	19		0.46	mg/Kg-dry	1	3/31/2016 04:17 PM
Nickel	22		0.46	mg/Kg-dry	1	3/31/2016 04:17 PM
Selenium	2.1		0.92	mg/Kg-dry	1	3/31/2016 04:17 PM
Silver	ND		0.46	mg/Kg-dry	1	3/31/2016 04:17 PM
Zinc	110		0.92	mg/Kg-dry	1	3/31/2016 04:17 PM
SOLUBLE CATIONS FOR SAR						
			SW846 6010C		Prep: USDA Method 20B / 4/4/16	Analyst: BL
Calcium	74		25	mg/L	50	4/5/2016 01:00 PM
Magnesium	16		10	mg/L	50	4/5/2016 01:00 PM
Sodium	720		10	mg/L	50	4/5/2016 01:00 PM
SODIUM ADSORPTION RATIO						
			USDA H60 METHO		Prep: USDA Method 20B / 4/4/16	Analyst: BL
Sodium Adsorption Ratio	20		0.010	none	1	4/5/2016
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 4/4/16	Analyst: RM
Acenaphthene	ND		0.012	mg/Kg-dry	1	4/6/2016 12:36 AM
Anthracene	ND		0.012	mg/Kg-dry	1	4/6/2016 12:36 AM
Benzo(a)anthracene	ND		0.012	mg/Kg-dry	1	4/6/2016 12:36 AM
Benzo(a)pyrene	ND		0.012	mg/Kg-dry	1	4/6/2016 12:36 AM
Benzo(b)fluoranthene	ND		0.012	mg/Kg-dry	1	4/6/2016 12:36 AM
Benzo(k)fluoranthene	ND		0.012	mg/Kg-dry	1	4/6/2016 12:36 AM
Chrysene	ND		0.012	mg/Kg-dry	1	4/6/2016 12:36 AM
Dibenzo(a,h)anthracene	ND		0.012	mg/Kg-dry	1	4/6/2016 12:36 AM
Fluoranthene	ND		0.012	mg/Kg-dry	1	4/6/2016 12:36 AM

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

ALS Group USA, Corp

Date: 11-Apr-16

Client: Olsson Associates

Project: Gray B 5 Spill

Sample ID: GB5-SS7

Collection Date: 3/28/2016 01:30 PM

Work Order: 16031665

Lab ID: 16031665-08

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorene	ND		0.012	mg/Kg-dry	1	4/6/2016 12:36 AM
Indeno(1,2,3-cd)pyrene	ND		0.012	mg/Kg-dry	1	4/6/2016 12:36 AM
Naphthalene	ND		0.012	mg/Kg-dry	1	4/6/2016 12:36 AM
Pyrene	ND		0.012	mg/Kg-dry	1	4/6/2016 12:36 AM
Surr: 2-Fluorobiphenyl	72.2		12-100	%REC	1	4/6/2016 12:36 AM
Surr: 4-Terphenyl-d14	109		25-137	%REC	1	4/6/2016 12:36 AM
Surr: Nitrobenzene-d5	79.1		37-107	%REC	1	4/6/2016 12:36 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B	Prep: SW5035 / 4/1/16	Analyst: BG	
Benzene	ND		0.030	mg/Kg-dry	1	4/2/2016 01:33 AM
Ethylbenzene	ND		0.030	mg/Kg-dry	1	4/2/2016 01:33 AM
m,p-Xylene	ND		0.060	mg/Kg-dry	1	4/2/2016 01:33 AM
o-Xylene	ND		0.030	mg/Kg-dry	1	4/2/2016 01:33 AM
Toluene	ND		0.030	mg/Kg-dry	1	4/2/2016 01:33 AM
Xylenes, Total	ND		0.090	mg/Kg-dry	1	4/2/2016 01:33 AM
Surr: 1,2-Dichloroethane-d4	96.8		70-130	%REC	1	4/2/2016 01:33 AM
Surr: 4-Bromofluorobenzene	98.8		70-130	%REC	1	4/2/2016 01:33 AM
Surr: Dibromofluoromethane	97.8		70-130	%REC	1	4/2/2016 01:33 AM
Surr: Toluene-d8	101		70-130	%REC	1	4/2/2016 01:33 AM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO	Prep: USDA Method 20B / 4/4/16	Analyst: KF	
Electrical Conductivity @ Saturation	3.8		0.12	mmhos/cm @2	25	4/6/2016 12:39 PM
CHROMIUM, TRIVALENT			CALCULATION	Analyst: JJG		
Chromium, Trivalent	14		0.64	mg/Kg-dry	1	4/7/2016 08:09 AM
CHROMIUM, HEXAVALENT			SW7196A	Prep: SW3060A / 4/5/16	Analyst: MB	
Chromium, Hexavalent	ND		1.3	mg/Kg-dry	1	4/6/2016 04:30 PM
MOISTURE			SW3550C	Analyst: ED		
Moisture	22		0.050	% of sample	1	4/1/2016 04:54 PM
PH			SW9045D	Prep: EXTRACT / 4/1/16	Analyst: JB	
pH	8.8			s.u.	1	4/1/2016 01:30 PM

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

ALS Group USA, Corp

Date: 11-Apr-16

Client: Olsson Associates

Project: Gray B 5 Spill

Sample ID: GB5-SS8

Collection Date: 3/28/2016 01:45 PM

Work Order: 16031665

Lab ID: 16031665-09

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep: SW3541 / 4/4/16	Analyst: IT
DRO (C10-C28)	12		6.9	mg/Kg-dry	1	4/4/2016 11:55 PM
Surr: 4-Terphenyl-d14	72.9		39-133	%REC	1	4/4/2016 11:55 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015D		Prep: SW5035 / 4/1/16	Analyst: IT
GRO (C6-C10)	ND		3.8	mg/Kg-dry	1	4/1/2016 07:10 PM
Surr: Toluene-d8	102		50-150	%REC	1	4/1/2016 07:10 PM
MERCURY BY CVAA						
			SW7471B		Prep: SW7471 / 4/7/16	Analyst: LR
Mercury	0.042		0.016	mg/Kg-dry	1	4/7/2016 04:24 PM
METALS ANALYSIS BY ICP						
			SW846 6010C		Prep: SW3050B / 3/31/16	Analyst: BL
Arsenic	11		0.42	mg/Kg-dry	1	3/31/2016 04:22 PM
Barium	160		0.42	mg/Kg-dry	1	3/31/2016 04:22 PM
Cadmium	ND		0.42	mg/Kg-dry	1	3/31/2016 04:22 PM
Chromium	11		0.42	mg/Kg-dry	1	3/31/2016 04:22 PM
Copper	15		0.42	mg/Kg-dry	1	3/31/2016 04:22 PM
Lead	16		0.42	mg/Kg-dry	1	3/31/2016 04:22 PM
Nickel	18		0.42	mg/Kg-dry	1	3/31/2016 04:22 PM
Selenium	1.8		0.84	mg/Kg-dry	1	3/31/2016 04:22 PM
Silver	ND		0.42	mg/Kg-dry	1	3/31/2016 04:22 PM
Zinc	94		0.84	mg/Kg-dry	1	3/31/2016 04:22 PM
SOLUBLE CATIONS FOR SAR						
			SW846 6010C		Prep: USDA Method 20B / 4/4/16	Analyst: BL
Calcium	40		25	mg/L	50	4/5/2016 01:05 PM
Magnesium	ND		10	mg/L	50	4/5/2016 01:05 PM
Sodium	920		10	mg/L	50	4/5/2016 01:05 PM
SODIUM ADSORPTION RATIO						
			USDA H60 METHO		Prep: USDA Method 20B / 4/4/16	Analyst: BL
Sodium Adsorption Ratio	36		0.010	none	1	4/5/2016
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 4/4/16	Analyst: RM
Acenaphthene	ND		0.011	mg/Kg-dry	1	4/6/2016 12:56 AM
Anthracene	ND		0.011	mg/Kg-dry	1	4/6/2016 12:56 AM
Benzo(a)anthracene	ND		0.011	mg/Kg-dry	1	4/6/2016 12:56 AM
Benzo(a)pyrene	ND		0.011	mg/Kg-dry	1	4/6/2016 12:56 AM
Benzo(b)fluoranthene	ND		0.011	mg/Kg-dry	1	4/6/2016 12:56 AM
Benzo(k)fluoranthene	ND		0.011	mg/Kg-dry	1	4/6/2016 12:56 AM
Chrysene	ND		0.011	mg/Kg-dry	1	4/6/2016 12:56 AM
Dibenzo(a,h)anthracene	ND		0.011	mg/Kg-dry	1	4/6/2016 12:56 AM
Fluoranthene	ND		0.011	mg/Kg-dry	1	4/6/2016 12:56 AM

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

ALS Group USA, Corp

Date: 11-Apr-16

Client: Olsson Associates
Project: Gray B 5 Spill
Sample ID: GB5-SS8
Collection Date: 3/28/2016 01:45 PM

Work Order: 16031665
Lab ID: 16031665-09
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorene	ND		0.011	mg/Kg-dry	1	4/6/2016 12:56 AM
Indeno(1,2,3-cd)pyrene	ND		0.011	mg/Kg-dry	1	4/6/2016 12:56 AM
Naphthalene	ND		0.011	mg/Kg-dry	1	4/6/2016 12:56 AM
Pyrene	ND		0.011	mg/Kg-dry	1	4/6/2016 12:56 AM
Surr: 2-Fluorobiphenyl	72.2		12-100	%REC	1	4/6/2016 12:56 AM
Surr: 4-Terphenyl-d14	91.1		25-137	%REC	1	4/6/2016 12:56 AM
Surr: Nitrobenzene-d5	80.2		37-107	%REC	1	4/6/2016 12:56 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B	Prep: SW5035 / 4/1/16	Analyst: BG	
Benzene	ND		0.030	mg/Kg-dry	1	4/2/2016 01:59 AM
Ethylbenzene	ND		0.030	mg/Kg-dry	1	4/2/2016 01:59 AM
m,p-Xylene	ND		0.060	mg/Kg-dry	1	4/2/2016 01:59 AM
o-Xylene	ND		0.030	mg/Kg-dry	1	4/2/2016 01:59 AM
Toluene	ND		0.030	mg/Kg-dry	1	4/2/2016 01:59 AM
Xylenes, Total	ND		0.090	mg/Kg-dry	1	4/2/2016 01:59 AM
Surr: 1,2-Dichloroethane-d4	96.6		70-130	%REC	1	4/2/2016 01:59 AM
Surr: 4-Bromofluorobenzene	97.8		70-130	%REC	1	4/2/2016 01:59 AM
Surr: Dibromofluoromethane	97.8		70-130	%REC	1	4/2/2016 01:59 AM
Surr: Toluene-d8	101		70-130	%REC	1	4/2/2016 01:59 AM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO	Prep: USDA Method 20B / 4/4/16	Analyst: KF	
Electrical Conductivity @ Saturation	4.8		0.12	mmhos/cm @2	25	4/6/2016 12:39 PM
CHROMIUM, TRIVALENT			CALCULATION	Analyst: JJG		
Chromium, Trivalent	11		0.63	mg/Kg-dry	1	4/7/2016 08:09 AM
CHROMIUM, HEXAVALENT			SW7196A	Prep: SW3060A / 4/5/16	Analyst: MB	
Chromium, Hexavalent	ND		1.3	mg/Kg-dry	1	4/6/2016 04:30 PM
MOISTURE			SW3550C	Analyst: ED		
Moisture	21		0.050	% of sample	1	4/1/2016 04:54 PM
PH			SW9045D	Prep: EXTRACT / 4/1/16	Analyst: JB	
pH	8.7			s.u.	1	4/1/2016 01:30 PM

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

ALS Group USA, Corp

Date: 11-Apr-16

Client: Olsson Associates

Project: Gray B 5 Spill

Sample ID: GB5-SS9

Collection Date: 3/28/2016 02:25 PM

Work Order: 16031665

Lab ID: 16031665-10

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	7.1		SW8015M		Prep: SW3541 / 4/4/16	Analyst: IT
			6.8	mg/Kg-dry	1	4/5/2016 12:25 PM
Surr: 4-Terphenyl-d14	81.2		39-133	%REC	1	4/5/2016 12:25 PM
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		SW8015D		Prep: SW5035 / 4/1/16	Analyst: IT
			3.7	mg/Kg-dry	1	4/1/2016 07:34 PM
Surr: Toluene-d8	102		50-150	%REC	1	4/1/2016 07:34 PM
MERCURY BY CVAA						
Mercury	ND		SW7471B		Prep: SW7471 / 4/7/16	Analyst: LR
			0.016	mg/Kg-dry	1	4/7/2016 04:33 PM
METALS ANALYSIS BY ICP						
Arsenic	10		SW846 6010C		Prep: SW3050B / 3/31/16	Analyst: BL
			0.41	mg/Kg-dry	1	3/31/2016 04:27 PM
Barium	120		0.41	mg/Kg-dry	1	3/31/2016 04:27 PM
Cadmium	ND		0.41	mg/Kg-dry	1	3/31/2016 04:27 PM
Chromium	11		0.41	mg/Kg-dry	1	3/31/2016 04:27 PM
Copper	15		0.41	mg/Kg-dry	1	3/31/2016 04:27 PM
Lead	15		0.41	mg/Kg-dry	1	3/31/2016 04:27 PM
Nickel	17		0.41	mg/Kg-dry	1	3/31/2016 04:27 PM
Selenium	1.4		0.82	mg/Kg-dry	1	3/31/2016 04:27 PM
Silver	ND		0.41	mg/Kg-dry	1	3/31/2016 04:27 PM
Zinc	87		0.82	mg/Kg-dry	1	3/31/2016 04:27 PM
SOLUBLE CATIONS FOR SAR						
			SW846 6010C		Prep: USDA Method 20B / 4/4/16	Analyst: BL
Calcium	38		25	mg/L	50	4/5/2016 01:27 PM
Magnesium	ND		10	mg/L	50	4/5/2016 01:27 PM
Sodium	600		10	mg/L	50	4/5/2016 01:27 PM
SODIUM ADSORPTION RATIO						
			USDA H60 METHO		Prep: USDA Method 20B / 4/4/16	Analyst: BL
Sodium Adsorption Ratio	24		0.010	none	1	4/5/2016
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 4/4/16	Analyst: RM
Acenaphthene	ND		0.011	mg/Kg-dry	1	4/6/2016 01:17 AM
Anthracene	ND		0.011	mg/Kg-dry	1	4/6/2016 01:17 AM
Benzo(a)anthracene	ND		0.011	mg/Kg-dry	1	4/6/2016 01:17 AM
Benzo(a)pyrene	ND		0.011	mg/Kg-dry	1	4/6/2016 01:17 AM
Benzo(b)fluoranthene	ND		0.011	mg/Kg-dry	1	4/6/2016 01:17 AM
Benzo(k)fluoranthene	ND		0.011	mg/Kg-dry	1	4/6/2016 01:17 AM
Chrysene	ND		0.011	mg/Kg-dry	1	4/6/2016 01:17 AM
Dibenzo(a,h)anthracene	ND		0.011	mg/Kg-dry	1	4/6/2016 01:17 AM
Fluoranthene	ND		0.011	mg/Kg-dry	1	4/6/2016 01:17 AM

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

ALS Group USA, Corp

Date: 11-Apr-16

Client: Olsson Associates

Project: Gray B 5 Spill

Sample ID: GB5-SS9

Collection Date: 3/28/2016 02:25 PM

Work Order: 16031665

Lab ID: 16031665-10

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorene	ND		0.011	mg/Kg-dry	1	4/6/2016 01:17 AM
Indeno(1,2,3-cd)pyrene	ND		0.011	mg/Kg-dry	1	4/6/2016 01:17 AM
Naphthalene	ND		0.011	mg/Kg-dry	1	4/6/2016 01:17 AM
Pyrene	ND		0.011	mg/Kg-dry	1	4/6/2016 01:17 AM
Surr: 2-Fluorobiphenyl	85.4		12-100	%REC	1	4/6/2016 01:17 AM
Surr: 4-Terphenyl-d14	103		25-137	%REC	1	4/6/2016 01:17 AM
Surr: Nitrobenzene-d5	85.5		37-107	%REC	1	4/6/2016 01:17 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B	Prep: SW5035 / 4/1/16	Analyst: BG	
Benzene	ND		0.030	mg/Kg-dry	1	4/2/2016 02:25 AM
Ethylbenzene	ND		0.030	mg/Kg-dry	1	4/2/2016 02:25 AM
m,p-Xylene	ND		0.060	mg/Kg-dry	1	4/2/2016 02:25 AM
o-Xylene	ND		0.030	mg/Kg-dry	1	4/2/2016 02:25 AM
Toluene	ND		0.030	mg/Kg-dry	1	4/2/2016 02:25 AM
Xylenes, Total	ND		0.090	mg/Kg-dry	1	4/2/2016 02:25 AM
Surr: 1,2-Dichloroethane-d4	98.2		70-130	%REC	1	4/2/2016 02:25 AM
Surr: 4-Bromofluorobenzene	93.4		70-130	%REC	1	4/2/2016 02:25 AM
Surr: Dibromofluoromethane	100		70-130	%REC	1	4/2/2016 02:25 AM
Surr: Toluene-d8	101		70-130	%REC	1	4/2/2016 02:25 AM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO	Prep: USDA Method 20B / 4/4/16	Analyst: KF	
Electrical Conductivity @ Saturation	2.7		0.12	mmhos/cm @2	25	4/6/2016 12:39 PM
CHROMIUM, TRIVALENT			CALCULATION	Analyst: JJG		
Chromium, Trivalent	11		0.62	mg/Kg-dry	1	4/7/2016 08:09 AM
CHROMIUM, HEXAVALENT			SW7196A	Prep: SW3060A / 4/5/16	Analyst: MB	
Chromium, Hexavalent	ND		1.2	mg/Kg-dry	1	4/6/2016 04:30 PM
MOISTURE			SW3550C	Analyst: ED		
Moisture	19		0.050	% of sample	1	4/1/2016 04:54 PM
PH			SW9045D	Prep: EXTRACT / 4/1/16	Analyst: JB	
pH	9.1			s.u.	1	4/1/2016 01:30 PM

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

ALS Group USA, Corp

Date: 11-Apr-16

Client: Olsson Associates

Project: Gray B 5 Spill

Sample ID: GB5-SS10

Collection Date: 3/28/2016 02:35 PM

Work Order: 16031665

Lab ID: 16031665-11

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	12		SW8015M		Prep: SW3541 / 4/4/16	Analyst: IT
Surr: 4-Terphenyl-d14	66.0		5.0	mg/Kg-dry	1	4/5/2016 12:55 PM
			39-133	%REC	1	4/5/2016 12:55 PM
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		SW8015D		Prep: SW5035 / 4/1/16	Analyst: IT
Surr: Toluene-d8	104		3.7	mg/Kg-dry	1	4/1/2016 07:59 PM
			50-150	%REC	1	4/1/2016 07:59 PM
MERCURY BY CVAA						
Mercury	0.032		SW7471B		Prep: SW7471 / 4/7/16	Analyst: LR
			0.016	mg/Kg-dry	1	4/7/2016 04:35 PM
METALS ANALYSIS BY ICP						
Arsenic	12		SW846 6010C		Prep: SW3050B / 3/31/16	Analyst: BL
Barium	300		0.46	mg/Kg-dry	1	3/31/2016 05:18 PM
Cadmium	ND		0.46	mg/Kg-dry	1	3/31/2016 05:18 PM
Chromium	12		0.46	mg/Kg-dry	1	3/31/2016 05:18 PM
Copper	18		0.46	mg/Kg-dry	1	3/31/2016 05:18 PM
Lead	19		0.46	mg/Kg-dry	1	3/31/2016 05:18 PM
Nickel	22		0.46	mg/Kg-dry	1	3/31/2016 05:18 PM
Selenium	2.1		0.92	mg/Kg-dry	1	3/31/2016 05:18 PM
Silver	ND		0.46	mg/Kg-dry	1	3/31/2016 05:18 PM
Zinc	110		0.92	mg/Kg-dry	1	3/31/2016 05:18 PM
SOLUBLE CATIONS FOR SAR						
			SW846 6010C		Prep: USDA Method 20B / 4/4/16	Analyst: BL
Calcium	37		25	mg/L	50	4/5/2016 01:33 PM
Magnesium	ND		10	mg/L	50	4/5/2016 01:33 PM
Sodium	650		10	mg/L	50	4/5/2016 01:33 PM
SODIUM ADSORPTION RATIO						
			USDA H60 METHO		Prep: USDA Method 20B / 4/4/16	Analyst: BL
Sodium Adsorption Ratio	26		0.010	none	1	4/5/2016
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 4/4/16	Analyst: RM
Acenaphthene	ND		0.0080	mg/Kg-dry	1	4/6/2016 01:37 AM
Anthracene	ND		0.0080	mg/Kg-dry	1	4/6/2016 01:37 AM
Benzo(a)anthracene	ND		0.0080	mg/Kg-dry	1	4/6/2016 01:37 AM
Benzo(a)pyrene	ND		0.0080	mg/Kg-dry	1	4/6/2016 01:37 AM
Benzo(b)fluoranthene	ND		0.0080	mg/Kg-dry	1	4/6/2016 01:37 AM
Benzo(k)fluoranthene	ND		0.0080	mg/Kg-dry	1	4/6/2016 01:37 AM
Chrysene	ND		0.0080	mg/Kg-dry	1	4/6/2016 01:37 AM
Dibenzo(a,h)anthracene	ND		0.0080	mg/Kg-dry	1	4/6/2016 01:37 AM
Fluoranthene	ND		0.0080	mg/Kg-dry	1	4/6/2016 01:37 AM

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

ALS Group USA, Corp

Date: 11-Apr-16

Client: Olsson Associates

Project: Gray B 5 Spill

Sample ID: GB5-SS10

Collection Date: 3/28/2016 02:35 PM

Work Order: 16031665

Lab ID: 16031665-11

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorene	ND		0.0080	mg/Kg-dry	1	4/6/2016 01:37 AM
Indeno(1,2,3-cd)pyrene	ND		0.0080	mg/Kg-dry	1	4/6/2016 01:37 AM
Naphthalene	ND		0.0080	mg/Kg-dry	1	4/6/2016 01:37 AM
Pyrene	ND		0.0080	mg/Kg-dry	1	4/6/2016 01:37 AM
Surr: 2-Fluorobiphenyl	62.4		12-100	%REC	1	4/6/2016 01:37 AM
Surr: 4-Terphenyl-d14	85.3		25-137	%REC	1	4/6/2016 01:37 AM
Surr: Nitrobenzene-d5	63.7		37-107	%REC	1	4/6/2016 01:37 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B	Prep: SW5035 / 4/1/16		Analyst: BG
Benzene	ND		0.030	mg/Kg-dry	1	4/2/2016 02:51 AM
Ethylbenzene	ND		0.030	mg/Kg-dry	1	4/2/2016 02:51 AM
m,p-Xylene	ND		0.060	mg/Kg-dry	1	4/2/2016 02:51 AM
o-Xylene	ND		0.030	mg/Kg-dry	1	4/2/2016 02:51 AM
Toluene	ND		0.030	mg/Kg-dry	1	4/2/2016 02:51 AM
Xylenes, Total	ND		0.090	mg/Kg-dry	1	4/2/2016 02:51 AM
Surr: 1,2-Dichloroethane-d4	96.9		70-130	%REC	1	4/2/2016 02:51 AM
Surr: 4-Bromofluorobenzene	99.0		70-130	%REC	1	4/2/2016 02:51 AM
Surr: Dibromofluoromethane	98.0		70-130	%REC	1	4/2/2016 02:51 AM
Surr: Toluene-d8	101		70-130	%REC	1	4/2/2016 02:51 AM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO	Prep: USDA Method 20B / 4/4/16		Analyst: KF
Electrical Conductivity @ Saturation	3.0		0.12	mmhos/cm @2	25	4/6/2016 12:39 PM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: JJG
Chromium, Trivalent	12		0.61	mg/Kg-dry	1	4/7/2016 08:09 AM
CHROMIUM, HEXAVALENT			SW7196A	Prep: SW3060A / 4/5/16		Analyst: MB
Chromium, Hexavalent	ND		1.2	mg/Kg-dry	1	4/6/2016 04:30 PM
MOISTURE			SW3550C			Analyst: ED
Moisture	19		0.050	% of sample	1	4/1/2016 04:54 PM
PH			SW9045D	Prep: EXTRACT / 4/1/16		Analyst: JB
pH	8.6			s.u.	1	4/1/2016 01:30 PM

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

ALS Group USA, Corp

Date: 11-Apr-16

Client: Olsson Associates

Project: Gray B 5 Spill

Sample ID: GB5-SS11

Collection Date: 3/28/2016 02:45 PM

Work Order: 16031665

Lab ID: 16031665-12

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	21		11	mg/Kg-dry	1	4/5/2016 01:25 AM
Surr: 4-Terphenyl-d14	76.6		39-133	%REC	1	4/5/2016 01:25 AM
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		4.3	mg/Kg-dry	1	4/1/2016 08:24 PM
Surr: Toluene-d8	103		50-150	%REC	1	4/1/2016 08:24 PM
MERCURY BY CVAA						
Mercury	0.018		0.018	mg/Kg-dry	1	4/7/2016 04:37 PM
METALS ANALYSIS BY ICP						
Arsenic	11		0.44	mg/Kg-dry	1	3/31/2016 05:23 PM
Barium	170		0.44	mg/Kg-dry	1	3/31/2016 05:23 PM
Cadmium	ND		0.44	mg/Kg-dry	1	3/31/2016 05:23 PM
Chromium	13		0.44	mg/Kg-dry	1	3/31/2016 05:23 PM
Copper	18		0.44	mg/Kg-dry	1	3/31/2016 05:23 PM
Lead	18		0.44	mg/Kg-dry	1	3/31/2016 05:23 PM
Nickel	20		0.44	mg/Kg-dry	1	3/31/2016 05:23 PM
Selenium	2.1		0.88	mg/Kg-dry	1	3/31/2016 05:23 PM
Silver	ND		0.44	mg/Kg-dry	1	3/31/2016 05:23 PM
Zinc	100		0.88	mg/Kg-dry	1	3/31/2016 05:23 PM
SOLUBLE CATIONS FOR SAR						
			SW846 6010C		Prep: USDA Method 20B / 4/4/16	Analyst: BL
Calcium	68		25	mg/L	50	4/5/2016 01:39 PM
Magnesium	17		10	mg/L	50	4/5/2016 01:39 PM
Sodium	790		10	mg/L	50	4/5/2016 01:39 PM
SODIUM ADSORPTION RATIO						
			USDA H60 METHO		Prep: USDA Method 20B / 4/4/16	Analyst: BL
Sodium Adsorption Ratio	22		0.010	none	1	4/5/2016
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 4/4/16	Analyst: RM
Acenaphthene	ND		0.017	mg/Kg-dry	1	4/6/2016 01:58 AM
Anthracene	ND		0.017	mg/Kg-dry	1	4/6/2016 01:58 AM
Benzo(a)anthracene	ND		0.017	mg/Kg-dry	1	4/6/2016 01:58 AM
Benzo(a)pyrene	ND		0.017	mg/Kg-dry	1	4/6/2016 01:58 AM
Benzo(b)fluoranthene	ND		0.017	mg/Kg-dry	1	4/6/2016 01:58 AM
Benzo(k)fluoranthene	ND		0.017	mg/Kg-dry	1	4/6/2016 01:58 AM
Chrysene	ND		0.017	mg/Kg-dry	1	4/6/2016 01:58 AM
Dibenzo(a,h)anthracene	ND		0.017	mg/Kg-dry	1	4/6/2016 01:58 AM
Fluoranthene	ND		0.017	mg/Kg-dry	1	4/6/2016 01:58 AM

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

ALS Group USA, Corp

Date: 11-Apr-16

Client: Olsson Associates

Project: Gray B 5 Spill

Sample ID: GB5-SS11

Collection Date: 3/28/2016 02:45 PM

Work Order: 16031665

Lab ID: 16031665-12

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorene	ND		0.017	mg/Kg-dry	1	4/6/2016 01:58 AM
Indeno(1,2,3-cd)pyrene	ND		0.017	mg/Kg-dry	1	4/6/2016 01:58 AM
Naphthalene	ND		0.017	mg/Kg-dry	1	4/6/2016 01:58 AM
Pyrene	ND		0.017	mg/Kg-dry	1	4/6/2016 01:58 AM
Surr: 2-Fluorobiphenyl	74.4		12-100	%REC	1	4/6/2016 01:58 AM
Surr: 4-Terphenyl-d14	92.1		25-137	%REC	1	4/6/2016 01:58 AM
Surr: Nitrobenzene-d5	79.2		37-107	%REC	1	4/6/2016 01:58 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B	Prep: SW5035 / 4/1/16		Analyst: BG
Benzene	ND		0.030	mg/Kg-dry	1	4/2/2016 03:17 AM
Ethylbenzene	ND		0.030	mg/Kg-dry	1	4/2/2016 03:17 AM
m,p-Xylene	ND		0.060	mg/Kg-dry	1	4/2/2016 03:17 AM
o-Xylene	ND		0.030	mg/Kg-dry	1	4/2/2016 03:17 AM
Toluene	ND		0.030	mg/Kg-dry	1	4/2/2016 03:17 AM
Xylenes, Total	ND		0.090	mg/Kg-dry	1	4/2/2016 03:17 AM
Surr: 1,2-Dichloroethane-d4	94.5		70-130	%REC	1	4/2/2016 03:17 AM
Surr: 4-Bromofluorobenzene	96.1		70-130	%REC	1	4/2/2016 03:17 AM
Surr: Dibromofluoromethane	97.6		70-130	%REC	1	4/2/2016 03:17 AM
Surr: Toluene-d8	100		70-130	%REC	1	4/2/2016 03:17 AM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO	Prep: USDA Method 20B / 4/4/16		Analyst: KF
Electrical Conductivity @ Saturation	4.0		0.050	mmhos/cm @2	10	4/6/2016 12:39 PM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: JJG
Chromium, Trivalent	13		0.69	mg/Kg-dry	1	4/7/2016 08:09 AM
CHROMIUM, HEXAVALENT			SW7196A	Prep: SW3060A / 4/5/16		Analyst: MB
Chromium, Hexavalent	ND		1.4	mg/Kg-dry	1	4/6/2016 04:30 PM
MOISTURE			SW3550C			Analyst: ED
Moisture	27		0.050	% of sample	1	4/1/2016 04:54 PM
PH			SW9045D	Prep: EXTRACT / 4/1/16		Analyst: JB
pH	9.4			s.u.	1	4/1/2016 01:30 PM

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

ALS Group USA, Corp**Date:** 11-Apr-16**Client:** Olsson Associates**Project:** Gray B 5 Spill**Work Order:** 16031665**Sample ID:** GB5-BG2**Lab ID:** 16031665-13**Collection Date:** 3/28/2016 02:55 PM**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS ANALYSIS BY ICP						
Arsenic	9.5		SW846 6010C 0.40	mg/Kg-dry	Prep: SW3050B / 3/31/16 1	Analyst: BL 3/31/2016 05:28 PM
MOISTURE						
Moisture	9.8		SW3550C 0.050	% of sample	1	Analyst: ED 4/1/2016 04:54 PM

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

Client: Olsson Associates
Work Order: 16031665
Project: Gray B 5 Spill

QC BATCH REPORT

Batch ID: **84259** Instrument ID **GC8** Method: **SW8015M**

MBLK		Sample ID: DBLKS1-84259-84259				Units: mg/Kg		Analysis Date: 4/4/2016 05:55 PM		
Client ID:		Run ID: GC8_160404B				SeqNo: 3762518		Prep Date: 4/4/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	ND	5.0								
Surr: 4-Terphenyl-d14	1.558	0	2	0	77.9	39-133		0		

LCS		Sample ID: DLCSS1-84259-84259				Units: mg/Kg		Analysis Date: 4/4/2016 06:25 PM		
Client ID:		Run ID: GC8_160404B				SeqNo: 3762519		Prep Date: 4/4/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	145.4	5.0	200	0	72.7	61-109		0		
Surr: 4-Terphenyl-d14	1.233	0	2	0	61.7	39-133		0		

MS		Sample ID: 16031665-02A MS				Units: mg/Kg		Analysis Date: 4/4/2016 06:55 PM		
Client ID: GB5-SS2		Run ID: GC8_160404B				SeqNo: 3762520		Prep Date: 4/4/2016		DF: 5
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	222.1	21	165.8	82.21	84.4	48-110		0		
Surr: 4-Terphenyl-d14	1.166	0	1.658	0	70.3	39-133		0		

MSD		Sample ID: 16031665-02A MSD				Units: mg/Kg		Analysis Date: 4/4/2016 07:25 PM		
Client ID: GB5-SS2		Run ID: GC8_160404B				SeqNo: 3762521		Prep Date: 4/4/2016		DF: 5
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	169.1	21	165.8	82.21	52.4	48-110	222.1	27.1	30	
Surr: 4-Terphenyl-d14	1.185	0	1.658	0	71.5	39-133	1.166	1.69	30	

The following samples were analyzed in this batch:

16031665-01A	16031665-02A	16031665-03A
16031665-05A	16031665-06A	16031665-07A
16031665-08A	16031665-09A	16031665-10A
16031665-11A	16031665-12A	

Client: Olsson Associates
 Work Order: 16031665
 Project: Gray B 5 Spill

QC BATCH REPORT

Batch ID: **84206** Instrument ID **GC10** Method: **SW8015D**

MBLK		Sample ID: MBLK-84206-84206				Units: µg/Kg-dry		Analysis Date: 4/1/2016 12:53 PM		
Client ID:		Run ID: GC10_160401A				SeqNo: 3759697		Prep Date: 4/1/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	2,500								
Surr: Toluene-d8	4906	0	5000	0	98.1	50-150	0			

MBLK		Sample ID: MBLK-84206-84206				Units: µg/Kg		Analysis Date: 4/1/2016 02:03 PM		
Client ID:		Run ID: GC9_160401A				SeqNo: 3760346		Prep Date: 4/1/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	2,500								

LCS		Sample ID: LCS-84206-84206				Units: µg/Kg-dry		Analysis Date: 4/1/2016 12:27 PM		
Client ID:		Run ID: GC10_160401A				SeqNo: 3759696		Prep Date: 4/1/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	637800	2,500	500000	0	128	70-130	0			
Surr: Toluene-d8	5014	0	5000	0	100	50-150	0			

LCS		Sample ID: LCS-84206-84206				Units: µg/Kg		Analysis Date: 4/1/2016 01:09 PM		
Client ID:		Run ID: GC9_160401A				SeqNo: 3760345		Prep Date: 4/1/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	10330	2,500	10000	0	103	80-120	0			

LCSD		Sample ID: LCSD-84206-84206				Units: µg/Kg		Analysis Date: 4/1/2016 04:42 PM		
Client ID:		Run ID: GC9_160401A				SeqNo: 3760352		Prep Date: 4/1/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	9754	2,500	10000	0	97.5	80-120	10330	5.77	20	

MS		Sample ID: 16031665-03A MS				Units: µg/Kg-dry		Analysis Date: 4/1/2016 03:50 PM		
Client ID: GB5-SS3		Run ID: GC10_160401A				SeqNo: 3759741		Prep Date: 4/1/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	868400	3,700	734600	0	118	70-130	0			
Surr: Toluene-d8	7252	0	7346	0	98.7	50-150	0			

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

Client: Olsson Associates
Work Order: 16031665
Project: Gray B 5 Spill

QC BATCH REPORT

Batch ID: **84206** Instrument ID **GC10** Method: **SW8015D**

MSD		Sample ID: 16031665-03A MSD				Units: µg/Kg-dry		Analysis Date: 4/1/2016 04:15 PM		
Client ID: GB5-SS3		Run ID: GC10_160401A				SeqNo: 3759742		Prep Date: 4/1/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	813400	3,700	734600	0	111	70-130	868400	6.54	30	
<i>Surr: Toluene-d8</i>	<i>6995</i>	<i>0</i>	<i>7346</i>	<i>0</i>	<i>95.2</i>	<i>50-150</i>	<i>7252</i>	<i>3.61</i>	<i>30</i>	

The following samples were analyzed in this batch:

16031665-01A	16031665-02A	16031665-03A
16031665-05A	16031665-06A	16031665-07A
16031665-08A	16031665-09A	16031665-10A
16031665-11A	16031665-12A	

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

Client: Olsson Associates
Work Order: 16031665
Project: Gray B 5 Spill

QC BATCH REPORT

Batch ID: **84409** Instrument ID **HG1** Method: **SW7471B**

MBLK		Sample ID: MBLK-84409-84409				Units: mg/Kg		Analysis Date: 4/7/2016 03:28 PM		
Client ID:		Run ID: HG1_160407A				SeqNo: 3766647		Prep Date: 4/7/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury ND 0.020

LCS		Sample ID: LCS-84409-84409				Units: mg/Kg		Analysis Date: 4/7/2016 03:30 PM		
Client ID:		Run ID: HG1_160407A				SeqNo: 3766648		Prep Date: 4/7/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1675 0.020 0.1665 0 101 80-120 0

MS		Sample ID: 16031665-05AMS				Units: mg/Kg		Analysis Date: 4/7/2016 04:00 PM		
Client ID: GB5-SS4		Run ID: HG1_160407A				SeqNo: 3766731		Prep Date: 4/7/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.2051 0.013 0.1075 0.07756 119 75-125 0

MSD		Sample ID: 16031665-05AMSD				Units: mg/Kg		Analysis Date: 4/7/2016 04:02 PM		
Client ID: GB5-SS4		Run ID: HG1_160407A				SeqNo: 3766732		Prep Date: 4/7/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1806 0.013 0.1084 0.07756 95.1 75-125 0.2051 12.7 35

The following samples were analyzed in this batch:

16031665-01A	16031665-02A	16031665-03A
16031665-04A	16031665-05A	16031665-06A
16031665-07A	16031665-08A	16031665-09A
16031665-10A	16031665-11A	16031665-12A

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

Client: Olsson Associates
Work Order: 16031665
Project: Gray B 5 Spill

QC BATCH REPORT

Batch ID: **84168**

Instrument ID **ICP2**

Method: **SW846 6010C**

MBLK		Sample ID: MBLK-84168-84168				Units: mg/Kg		Analysis Date: 3/31/2016 02:02 PM		
Client ID:		Run ID: ICP2_160331B				SeqNo: 3757757		Prep Date: 3/31/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.25								
Barium	ND	0.25								
Cadmium	ND	0.50								
Chromium	0.01023	0.25								J
Copper	0.02845	0.50								J
Lead	ND	0.25								
Nickel	ND	0.25								
Selenium	ND	0.50								
Silver	ND	0.25								
Zinc	ND	0.50								

LCS		Sample ID: LCS-84168-84168				Units: mg/Kg		Analysis Date: 3/31/2016 02:08 PM		
Client ID:		Run ID: ICP2_160331B				SeqNo: 3757758		Prep Date: 3/31/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	5.682	0.25	5	0	114	80-120	0			
Barium	5.447	0.25	5	0	109	80-120	0			
Cadmium	5.405	0.50	5	0	108	80-120	0			
Copper	5.837	0.50	5	0	117	80-120	0			
Lead	5.817	0.25	5	0	116	80-120	0			
Nickel	5.555	0.25	5	0	111	80-120	0			
Selenium	5.652	0.50	5	0	113	80-120	0			
Silver	5.644	0.25	5	0	113	80-120	0			
Zinc	5.863	0.50	5	0	117	80-120	0			

LCS		Sample ID: LCS-84168-84168				Units: mg/Kg		Analysis Date: 3/31/2016 03:00 PM		
Client ID:		Run ID: ICP2_160331B				SeqNo: 3757767		Prep Date: 3/31/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium	5.276	0.25	5	0	106	80-120	0			

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

Client: Olsson Associates
Work Order: 16031665
Project: Gray B 5 Spill

QC BATCH REPORT

Batch ID: **84168**

Instrument ID **ICP2**

Method: **SW846 6010C**

MS				Sample ID: 16031679-01AMS			Units: mg/Kg		Analysis Date: 3/31/2016 02:32 PM		
Client ID:			Run ID: ICP2_160331B			SeqNo: 3757762		Prep Date: 3/31/2016		DF: 2	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	13.68	0.79	7.886	5.301	106	75-125	0				
Barium	15.34	0.79	7.886	8.964	80.9	75-125	0				
Cadmium	8.425	1.6	7.886	-0.1616	109	75-125	0				
Chromium	15.61	0.79	7.886	6.31	118	75-125	0				
Copper	13.85	1.6	7.886	6.032	99.2	75-125	0				
Lead	11.48	0.79	7.886	4.766	85.2	75-125	0				
Nickel	15.09	0.79	7.886	7.078	102	75-125	0				
Selenium	9.806	1.6	7.886	0.5669	117	75-125	0				
Silver	9.159	0.79	7.886	-0.04767	117	75-125	0				
Zinc	28.51	1.6	7.886	19.11	119	75-125	0				

MSD				Sample ID: 16031679-01AMSD			Units: mg/Kg		Analysis Date: 3/31/2016 02:38 PM		
Client ID:			Run ID: ICP2_160331B			SeqNo: 3757763		Prep Date: 3/31/2016		DF: 2	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	13.8	0.78	7.8	5.301	109	75-125	13.68	0.846	20		
Barium	16.6	0.78	7.8	8.964	97.9	75-125	15.34	7.9	20		
Cadmium	8.27	1.6	7.8	-0.1616	108	75-125	8.425	1.87	20		
Chromium	18.4	0.78	7.8	6.31	155	75-125	15.61	16.4	20	S	
Copper	14.73	1.6	7.8	6.032	111	75-125	13.85	6.11	20		
Lead	11.31	0.78	7.8	4.766	83.9	75-125	11.48	1.51	20		
Nickel	16.72	0.78	7.8	7.078	124	75-125	15.09	10.2	20		
Selenium	9.607	1.6	7.8	0.5669	116	75-125	9.806	2.05	20		
Silver	8.855	0.78	7.8	-0.04767	114	75-125	9.159	3.38	20		
Zinc	30.67	1.6	7.8	19.11	148	75-125	28.51	7.27	20	S	

The following samples were analyzed in this batch:

16031665-01A	16031665-02A	16031665-03A
16031665-04A	16031665-05A	16031665-06A
16031665-07A	16031665-08A	16031665-09A
16031665-10A	16031665-11A	16031665-12A
16031665-13A		

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

Client: Olsson Associates
Work Order: 16031665
Project: Gray B 5 Spill

QC BATCH REPORT

Batch ID: **84187** Instrument ID **SAR** Method: **USDA H60 Metho**

DUP		Sample ID: 16031665-04BDUP				Units: none		Analysis Date: 4/5/2016		
Client ID: GB5-BG1		Run ID: SAR_160405A				SeqNo: 3763097		Prep Date: 4/4/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	0.5843	0.010	0	0	0		0.6005	2.74	50	

The following samples were analyzed in this batch:

16031665-01B	16031665-02B	16031665-03B
16031665-04B	16031665-05B	16031665-06B
16031665-07B	16031665-08B	16031665-09B
16031665-10B	16031665-11B	16031665-12B

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

Client: Olsson Associates
 Work Order: 16031665
 Project: Gray B 5 Spill

QC BATCH REPORT

Batch ID: **84258** Instrument ID **SVMS8** Method: **SW846 8270D**

MBLK				Sample ID: SBLKS1-84258-84258				Units: µg/Kg		Analysis Date: 4/4/2016 07:43 PM	
Client ID:			Run ID: SVMS8_160404A			SeqNo: 3764546		Prep Date: 4/4/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	ND	6.7									
Anthracene	ND	6.7									
Benzo(a)anthracene	ND	6.7									
Benzo(a)pyrene	ND	6.7									
Benzo(b)fluoranthene	ND	6.7									
Benzo(k)fluoranthene	ND	6.7									
Chrysene	ND	6.7									
Dibenzo(a,h)anthracene	ND	6.7									
Fluoranthene	ND	6.7									
Fluorene	ND	6.7									
Indeno(1,2,3-cd)pyrene	ND	6.7									
Naphthalene	ND	6.7									
Pyrene	ND	6.7									
Surr: 2-Fluorobiphenyl	1198	0	1667	0	71.9	12-100	0				
Surr: 4-Terphenyl-d14	2164	0	1667	0	130	25-137	0				
Surr: Nitrobenzene-d5	1394	0	1667	0	83.7	37-107	0				

LCS				Sample ID: SLCSS1-84258-84258			Units: µg/Kg		Analysis Date: 4/4/2016 08:03 PM		
Client ID:			Run ID: SVMS8_160404A			SeqNo: 3764547		Prep Date: 4/4/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	506	6.7	666.7	0	75.9	45-110	0				
Anthracene	671	6.7	666.7	0	101	55-105	0				
Benzo(a)anthracene	607.7	6.7	666.7	0	91.1	50-110	0				
Benzo(a)pyrene	686	6.7	666.7	0	103	50-110	0				
Benzo(b)fluoranthene	739.7	6.7	666.7	0	111	45-115	0				
Benzo(k)fluoranthene	763.3	6.7	666.7	0	114	45-115	0				
Chrysene	620.7	6.7	666.7	0	93.1	55-110	0				
Dibenzo(a,h)anthracene	550.7	6.7	666.7	0	82.6	40-125	0				
Fluoranthene	626.3	6.7	666.7	0	93.9	55-115	0				
Fluorene	504.3	6.7	666.7	0	75.6	50-110	0				
Indeno(1,2,3-cd)pyrene	583.7	6.7	666.7	0	87.5	40-120	0				
Naphthalene	555	6.7	666.7	0	83.2	40-105	0				
Pyrene	793	6.7	666.7	0	119	45-125	0				
<i>Surr: 2-Fluorobiphenyl</i>	<i>1219</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>73.1</i>	<i>12-100</i>	<i>0</i>				
<i>Surr: 4-Terphenyl-d14</i>	<i>1887</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>113</i>	<i>25-137</i>	<i>0</i>				
<i>Surr: Nitrobenzene-d5</i>	<i>1488</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>89.3</i>	<i>37-107</i>	<i>0</i>				

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

Client: Olsson Associates
 Work Order: 16031665
 Project: Gray B 5 Spill

QC BATCH REPORT

Batch ID: **84258** Instrument ID **SVMS8** Method: **SW846 8270D**

MS				Sample ID: 1604099-03B MS				Units: µg/Kg		Analysis Date: 4/4/2016 11:57 PM	
Client ID:			Run ID: SVMS8_160404A			SeqNo: 3764551		Prep Date: 4/4/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	498.1	6.6	656.3	0	75.9	45-110	0				
Anthracene	616.6	6.6	656.3	0	93.9	55-105	0				
Benzo(a)anthracene	581.8	6.6	656.3	0	88.6	50-110	0				
Benzo(a)pyrene	684.1	6.6	656.3	0	104	50-110	0				
Benzo(b)fluoranthene	681.2	6.6	656.3	0	104	45-115	0				
Benzo(k)fluoranthene	664.5	6.6	656.3	0	101	45-115	0				
Chrysene	577.2	6.6	656.3	0	87.9	55-110	0				
Dibenzo(a,h)anthracene	764.5	6.6	656.3	0	116	40-125	0				
Fluoranthene	552.2	6.6	656.3	0	84.1	55-115	0				
Fluorene	537.1	6.6	656.3	0	81.8	50-110	0				
Indeno(1,2,3-cd)pyrene	858.1	6.6	656.3	0	131	40-120	0			S	
Naphthalene	517.1	6.6	656.3	0	78.8	40-105	0				
Pyrene	1107	6.6	656.3	0	169	45-125	0			S	
Surr: 2-Fluorobiphenyl	1263	0	1641	0	77	12-100	0				
Surr: 4-Terphenyl-d14	2543	0	1641	0	155	25-137	0			S	
Surr: Nitrobenzene-d5	1389	0	1641	0	84.7	37-107	0				

MSD				Sample ID: 1604099-03B MSD				Units: µg/Kg		Analysis Date: 4/5/2016 12:17 AM	
Client ID:			Run ID: SVMS8_160404A			SeqNo: 3764552		Prep Date: 4/4/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	514.8	6.6	663	0	77.6	45-110	498.1	3.29	30		
Anthracene	610.6	6.6	663	0	92.1	55-105	616.6	0.973	30		
Benzo(a)anthracene	568.2	6.6	663	0	85.7	50-110	581.8	2.37	30		
Benzo(a)pyrene	669.6	6.6	663	0	101	50-110	684.1	2.15	30		
Benzo(b)fluoranthene	656.7	6.6	663	0	99	45-115	681.2	3.67	30		
Benzo(k)fluoranthene	651.7	6.6	663	0	98.3	45-115	664.5	1.94	30		
Chrysene	562.8	6.6	663	0	84.9	55-110	577.2	2.51	30		
Dibenzo(a,h)anthracene	747.1	6.6	663	0	113	40-125	764.5	2.3	30		
Fluoranthene	539	6.6	663	0	81.3	55-115	552.2	2.43	30		
Fluorene	375.6	6.6	663	0	56.6	50-110	537.1	35.4	30	R	
Indeno(1,2,3-cd)pyrene	843.3	6.6	663	0	127	40-120	858.1	1.74	30	S	
Naphthalene	562.5	6.6	663	0	84.8	40-105	517.1	8.41	30		
Pyrene	807.8	6.6	663	0	122	45-125	1107	31.2	30	R	
Surr: 2-Fluorobiphenyl	1285	0	1657	0	77.6	12-100	1263	1.74	40		
Surr: 4-Terphenyl-d14	1960	0	1657	0	118	25-137	2543	25.9	40		
Surr: Nitrobenzene-d5	1550	0	1657	0	93.5	37-107	1389	10.9	40		

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

Client: Olsson Associates
Work Order: 16031665
Project: Gray B 5 Spill

QC BATCH REPORT

Batch ID: **84258** Instrument ID **SVMS8** Method: **SW846 8270D**

The following samples were analyzed in this batch:

16031665-01A	16031665-02A	16031665-03A
16031665-05A	16031665-06A	16031665-07A
16031665-08A	16031665-09A	16031665-10A
16031665-11A	16031665-12A	

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

Client: Olsson Associates
 Work Order: 16031665
 Project: Gray B 5 Spill

QC BATCH REPORT

Batch ID: **84205** Instrument ID **VMS6** Method: **SW8260B**

MBLK Sample ID: MBLK-84205-84205				Units: µg/Kg-dry			Analysis Date: 4/1/2016 01:24 PM			
Client ID:		Run ID: VMS6_160401A		SeqNo: 3759398		Prep Date: 4/1/2016		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	30								
Ethylbenzene	ND	30								
m,p-Xylene	ND	60								
o-Xylene	ND	30								
Toluene	ND	30								
Xylenes, Total	ND	90								
Surr: 1,2-Dichloroethane-d4	915	0	1000	0	91.5	70-130	0			
Surr: 4-Bromofluorobenzene	969.5	0	1000	0	97	70-130	0			
Surr: Dibromofluoromethane	973	0	1000	0	97.3	70-130	0			
Surr: Toluene-d8	951	0	1000	0	95.1	70-130	0			

LCS Sample ID: LCS-84205-84205				Units: µg/Kg-dry			Analysis Date: 4/1/2016 12:10 PM			
Client ID:		Run ID: VMS6_160401A		SeqNo: 3759397		Prep Date: 4/1/2016		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1104	30	1000	0	110	75-125	0			
Ethylbenzene	1130	30	1000	0	113	75-125	0			
m,p-Xylene	2286	60	2000	0	114	80-125	0			
o-Xylene	1092	30	1000	0	109	75-125	0			
Toluene	1090	30	1000	0	109	70-125	0			
Xylenes, Total	3379	90	3000	0	113	75-125	0			
Surr: 1,2-Dichloroethane-d4	907	0	1000	0	90.7	70-130	0			
Surr: 4-Bromofluorobenzene	1005	0	1000	0	100	70-130	0			
Surr: Dibromofluoromethane	987	0	1000	0	98.7	70-130	0			
Surr: Toluene-d8	971	0	1000	0	97.1	70-130	0			

MS Sample ID: 16031665-03A MS				Units: µg/Kg-dry			Analysis Date: 4/1/2016 08:54 PM			
Client ID: GB5-SS3		Run ID: VMS6_160401A		SeqNo: 3760512		Prep Date: 4/1/2016		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1477	44	1469	0	101	75-125	0			
Ethylbenzene	1490	44	1469	0	101	75-125	0			
m,p-Xylene	2999	88	2938	0	102	80-125	0			
o-Xylene	1466	44	1469	0	99.8	75-125	0			
Toluene	1429	44	1469	0	97.2	70-125	0			
Xylenes, Total	4465	130	4407	0	101	75-125	0			
Surr: 1,2-Dichloroethane-d4	1338	0	1469	0	91	70-130	0			
Surr: 4-Bromofluorobenzene	1485	0	1469	0	101	70-130	0			
Surr: Dibromofluoromethane	1383	0	1469	0	94.2	70-130	0			
Surr: Toluene-d8	1390	0	1469	0	94.6	70-130	0			

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

Client: Olsson Associates
 Work Order: 16031665
 Project: Gray B 5 Spill

QC BATCH REPORT

Batch ID: **84205** Instrument ID **VMS6** Method: **SW8260B**

MSD				Sample ID: 16031665-03A MSD			Units: µg/Kg-dry		Analysis Date: 4/1/2016 09:19 PM		
Client ID: GB5-SS3			Run ID: VMS6_160401A			SeqNo: 3760513		Prep Date: 4/1/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	1480	44	1469	0	101	75-125	1477	0.199	30		
Ethylbenzene	1466	44	1469	0	99.8	75-125	1490	1.64	30		
m,p-Xylene	3010	88	2938	0	102	80-125	2999	0.367	30		
o-Xylene	1457	44	1469	0	99.2	75-125	1466	0.653	30		
Toluene	1417	44	1469	0	96.4	70-125	1429	0.826	30		
Xylenes, Total	4466	130	4407	0	101	75-125	4465	0.0329	30		
Surr: 1,2-Dichloroethane-d4	1320	0	1469	0	89.8	70-130	1338	1.33	30		
Surr: 4-Bromofluorobenzene	1467	0	1469	0	99.8	70-130	1485	1.19	30		
Surr: Dibromofluoromethane	1384	0	1469	0	94.2	70-130	1383	0.0531	30		
Surr: Toluene-d8	1388	0	1469	0	94.4	70-130	1390	0.159	30		

The following samples were analyzed in this batch:

16031665-01A	16031665-02A	16031665-03A
16031665-07A	16031665-08A	16031665-09A
16031665-10A	16031665-11A	16031665-12A

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

Client: Olsson Associates
 Work Order: 16031665
 Project: Gray B 5 Spill

QC BATCH REPORT

Batch ID: **84224** Instrument ID **VMS5** Method: **SW8260B**

MBLK				Sample ID: MBLK-84224-84224				Units: µg/Kg-dry			Analysis Date: 4/1/2016 09:15 PM			
Client ID:				Run ID: VMS5_160401A				SeqNo: 3760791			Prep Date: 4/1/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual				
Benzene	ND	30												
Ethylbenzene	ND	30												
m,p-Xylene	ND	60												
o-Xylene	ND	30												
Toluene	ND	30												
Xylenes, Total	ND	90												
Surr: 1,2-Dichloroethane-d4	977	0	1000	0	97.7	70-130	0							
Surr: 4-Bromofluorobenzene	932	0	1000	0	93.2	70-130	0							
Surr: Dibromofluoromethane	977	0	1000	0	97.7	70-130	0							
Surr: Toluene-d8	990	0	1000	0	99	70-130	0							

LCS					Sample ID: LCS-84224-84224			Units: µg/Kg-dry		Analysis Date: 4/1/2016 07:32 PM		
Client ID:			Run ID: VMS5_160401A			SeqNo: 3760790		Prep Date: 4/1/2016		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		
Benzene	1010	30	1000	0	101	75-125	0					
Ethylbenzene	1030	30	1000	0	103	75-125	0					
m,p-Xylene	2078	60	2000	0	104	80-125	0					
o-Xylene	1001	30	1000	0	100	75-125	0					
Toluene	1024	30	1000	0	102	70-125	0					
Xylenes, Total	3079	90	3000	0	103	75-125	0					
Surr: 1,2-Dichloroethane-d4	1002	0	1000	0	100	70-130	0					
Surr: 4-Bromofluorobenzene	975	0	1000	0	97.5	70-130	0					
Surr: Dibromofluoromethane	1010	0	1000	0	101	70-130	0					
Surr: Toluene-d8	992	0	1000	0	99.2	70-130	0					

MS				Sample ID: 16031651-11A MS			Units: µg/Kg-dry		Analysis Date: 4/2/2016 05:01 AM		
Client ID:			Run ID: VMS5_160401A			SeqNo: 3760807		Prep Date: 4/1/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	854	30	1000	0	85.4	75-125	0				
Ethylbenzene	838	30	1000	0	83.8	75-125	0				
m,p-Xylene	1692	60	2000	0	84.6	80-125	0				
o-Xylene	818	30	1000	0	81.8	75-125	0				
Toluene	844	30	1000	0	84.4	70-125	0				
Xylenes, Total	2510	90	3000	0	83.7	75-125	0				
Surr: 1,2-Dichloroethane-d4	985.5	0	1000	0	98.6	70-130	0				
Surr: 4-Bromofluorobenzene	972	0	1000	0	97.2	70-130	0				
Surr: Dibromofluoromethane	983.5	0	1000	0	98.4	70-130	0				
Surr: Toluene-d8	1000	0	1000	0	100	70-130	0				

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

Client: Olsson Associates
 Work Order: 16031665
 Project: Gray B 5 Spill

QC BATCH REPORT

Batch ID: **84224** Instrument ID **VMS5** Method: **SW8260B**

MSD				Sample ID: 16031651-11A MSD			Units: µg/Kg-dry		Analysis Date: 4/2/2016 05:27 AM		
Client ID:			Run ID: VMS5_160401A			SeqNo: 3760808		Prep Date: 4/1/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	865.5	30	1000	0	86.6	75-125	854	1.34	30		
Ethylbenzene	884.5	30	1000	0	88.4	75-125	838	5.4	30		
m,p-Xylene	1754	60	2000	0	87.7	80-125	1692	3.6	30		
o-Xylene	852	30	1000	0	85.2	75-125	818	4.07	30		
Toluene	877	30	1000	0	87.7	70-125	844	3.83	30		
Xylenes, Total	2606	90	3000	0	86.9	75-125	2510	3.75	30		
Surr: 1,2-Dichloroethane-d4	960.5	0	1000	0	96	70-130	985.5	2.57	30		
Surr: 4-Bromofluorobenzene	1002	0	1000	0	100	70-130	972	3.09	30		
Surr: Dibromofluoromethane	986.5	0	1000	0	98.6	70-130	983.5	0.305	30		
Surr: Toluene-d8	995.5	0	1000	0	99.6	70-130	1000	0.501	30		

The following samples were analyzed in this batch:

16031665-05A	16031665-06A
--------------	--------------

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

Client: Olsson Associates
Work Order: 16031665
Project: Gray B 5 Spill

QC BATCH REPORT

Batch ID: **84187** Instrument ID **WETCHEM** Method: **USDA H60 Metho**

DUP		Sample ID: 16031665-04B DUP				Units: mmhos/cm @25°		Analysis Date: 4/6/2016 12:39 PM		
Client ID: GB5-BG1		Run ID: WETCHEM_160406F				SeqNo: 3764782		Prep Date: 4/4/2016		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	1.123	0.050	0	0	0		1.064	5.4	50	

The following samples were analyzed in this batch:

16031665-01B	16031665-02B	16031665-03B
16031665-04B	16031665-05B	16031665-06B
16031665-07B	16031665-08B	16031665-09B
16031665-10B	16031665-11B	16031665-12B

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

Client: Olsson Associates
 Work Order: 16031665
 Project: Gray B 5 Spill

QC BATCH REPORT

Batch ID: **84207** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK		Sample ID: MBLK-84207-84207				Units: mg/Kg		Analysis Date: 4/1/2016 11:00 AM		
Client ID:		Run ID: WETCHEM_160401K		SeqNo: 3759668		Prep Date: 3/31/2016		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent ND 1.0

LCS		Sample ID: LCS-84207-84207				Units: mg/Kg		Analysis Date: 4/1/2016 11:00 AM		
Client ID:		Run ID: WETCHEM_160401K		SeqNo: 3759667		Prep Date: 3/31/2016		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 4.64 1.0 5 0 92.8 80-120 0

MS		Sample ID: 16031679-01A MS				Units: mg/Kg		Analysis Date: 4/1/2016 11:00 AM		
Client ID:		Run ID: WETCHEM_160401K		SeqNo: 3759662		Prep Date: 3/31/2016		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 4.336 0.93 4.673 0.1204 90.2 75-125 0

MS		Sample ID: 16031679-01A MSI				Units: mg/Kg		Analysis Date: 4/1/2016 11:00 AM		
Client ID:		Run ID: WETCHEM_160401K		SeqNo: 3759664		Prep Date: 3/31/2016		DF: 100		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 2886 92 3026 0.1204 95.4 75-125 0

MSD		Sample ID: 16031679-01A MSD				Units: mg/Kg		Analysis Date: 4/1/2016 11:00 AM		
Client ID:		Run ID: WETCHEM_160401K		SeqNo: 3759663		Prep Date: 3/31/2016		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 4.257 0.92 4.587 0.1204 90.2 75-125 4.336 1.85 20

The following samples were analyzed in this batch:

16031665-04A

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

Client: Olsson Associates
Work Order: 16031665
Project: Gray B 5 Spill

QC BATCH REPORT

Batch ID: **84216** Instrument ID **WETCHEM** Method: **SW9045D**

LCS		Sample ID: LCS-84216-84216				Units: s.u.		Analysis Date: 4/1/2016 01:30 PM		
Client ID:		Run ID: WETCHEM_160401D				SeqNo: 3759337		Prep Date: 4/1/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

pH 4.01 0 4 0 100 90-110 0

DUP		Sample ID: 16031665-01A DUP				Units: s.u.		Analysis Date: 4/1/2016 01:30 PM		
Client ID: GB5-SS1		Run ID: WETCHEM_160401D				SeqNo: 3759339		Prep Date: 4/1/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

pH 8.09 0 0 0 0 0-0 8.16 0.862 20

DUP				Sample ID: 16031665-06A DUP				Units: s.u.			Analysis Date: 4/1/2016 01:30 PM			
Client ID: GB5-SS5				Run ID: WETCHEM_160401D				SeqNo: 3759345			Prep Date: 4/1/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual				

pH 8.89 0 0 0 0 0-0 8.68 2.39 20

The following samples were analyzed in this batch:

16031665-01A	16031665-02A	16031665-03A
16031665-04A	16031665-05A	16031665-06A
16031665-07A	16031665-08A	16031665-09A
16031665-10A	16031665-11A	16031665-12A

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

Client: Olsson Associates
 Work Order: 16031665
 Project: Gray B 5 Spill

QC BATCH REPORT

Batch ID: **84340** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK		Sample ID: MBLK-84340-84340				Units: mg/Kg		Analysis Date: 4/6/2016 04:30 PM		
Client ID:		Run ID: WETCHEM_160406P		SeqNo: 3765234		Prep Date: 4/5/2016		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent ND 0.98

LCS		Sample ID: LCS-84340-84340				Units: mg/Kg		Analysis Date: 4/6/2016 04:30 PM		
Client ID:		Run ID: WETCHEM_160406P		SeqNo: 3765233		Prep Date: 4/5/2016		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 4.465 0.99 4.95 0 90.2 80-120 0

MS		Sample ID: 16031703-08A MS				Units: mg/Kg		Analysis Date: 4/6/2016 04:30 PM		
Client ID:		Run ID: WETCHEM_160406P		SeqNo: 3765228		Prep Date: 4/5/2016		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 4.465 0.99 4.95 0.2475 85.2 75-125 0

MS		Sample ID: 16031703-08A MSI				Units: mg/Kg		Analysis Date: 4/6/2016 04:30 PM		
Client ID:		Run ID: WETCHEM_160406P		SeqNo: 3765230		Prep Date: 4/5/2016		DF: 100		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 2185 99 2310 0.2475 94.6 75-125 0

MSD		Sample ID: 16031703-08A MSD				Units: mg/Kg		Analysis Date: 4/6/2016 04:30 PM		
Client ID:		Run ID: WETCHEM_160406P		SeqNo: 3765229		Prep Date: 4/5/2016		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 4.465 0.99 4.95 0.2475 85.2 75-125 4.465 0 20

The following samples were analyzed in this batch:

16031665-01A	16031665-02A	16031665-03A
16031665-05A	16031665-06A	16031665-07A
16031665-08A	16031665-09A	16031665-10A
16031665-11A	16031665-12A	

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

Client: Olsson Associates
Work Order: 16031665
Project: Gray B 5 Spill

QC BATCH REPORT

Batch ID: **R184610** Instrument ID **MOIST** Method: **SW3550C**

MBLK		Sample ID: WBLKS-R184610				Units: % of sample		Analysis Date: 3/31/2016 06:46 PM		
Client ID:		Run ID: MOIST_160331C				SeqNo: 3759284		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture ND 0.050

LCS		Sample ID: LCS-R184610				Units: % of sample		Analysis Date: 3/31/2016 06:46 PM		
Client ID:		Run ID: MOIST_160331C				SeqNo: 3759283		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 100 0.050 100 0 100 99.5-100.5 0

DUP				Sample ID: 16031664-02A DUP				Units: % of sample			Analysis Date: 3/31/2016 06:46 PM			
Client ID:				Run ID: MOIST_160331C				SeqNo: 3759263			Prep Date:		DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			

Moisture 85.5 0.050 0 0 0 85.17 0.387 20

DUP				Sample ID: 16031664-04A DUP				Units: % of sample			Analysis Date: 3/31/2016 06:46 PM			
Client ID:				Run ID: MOIST_160331C				SeqNo: 3759266			Prep Date:		DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			

Moisture 61.59 0.050 0 0 0 63.2 2.58 20

The following samples were analyzed in this batch:

16031665-01A	16031665-02A	16031665-03A
16031665-04A		

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

Client: Olsson Associates
Work Order: 16031665
Project: Gray B 5 Spill

QC BATCH REPORT

Batch ID: **R184659** Instrument ID **MOIST** Method: **SW3550C**

MBLK		Sample ID: WBLKS-R184659				Units: % of sample		Analysis Date: 4/1/2016 04:54 PM		
Client ID:		Run ID: MOIST_160401B				SeqNo: 3759945		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture ND 0.050

LCS		Sample ID: LCS-R184659				Units: % of sample		Analysis Date: 4/1/2016 04:54 PM		
Client ID:		Run ID: MOIST_160401B				SeqNo: 3759944		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 100 0.050 100 0 100 99.5-100.5 0

DUP		Sample ID: 16031665-12A DUP				Units: % of sample		Analysis Date: 4/1/2016 04:54 PM		
Client ID: GB5-SS11		Run ID: MOIST_160401B				SeqNo: 3759930		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 23.17 0.050 0 0 0 27.27 16.3 20

DUP		Sample ID: 1604053-01A DUP				Units: % of sample		Analysis Date: 4/1/2016 04:54 PM		
Client ID:		Run ID: MOIST_160401B				SeqNo: 3759943		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 7.85 0.050 0 0 0 7.69 2.06 20

The following samples were analyzed in this batch:

16031665-05A	16031665-06A	16031665-07A
16031665-08A	16031665-09A	16031665-10A
16031665-11A	16031665-12A	16031665-13A

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



Chain of Custody Form

Page 1 of 1

COC ID: 123456

☐ Cincinnati, OH
+1 513 733 5336

☐ Everett, WA
+1 425 356 2600

☐ Fort Collins, CO
+1 970 490 1511

☐ Holland, MI
+1 616 399 6070

☐ Houston, TX
+1 281 530 5656

☐ Middletown, PA
+1 717 944 5541

☐ Salt Lake City, UT
+1 801 266 7700

☐ Spring City, PA
+1 610 948 4903

☐ York, PA
+1 717 505 5280

Customer Information		Project Information		Parameter/Method Request for Analysis															
Purchase Order		Project Name	Gray B 5 Spill	A. TPH (GRO & DRO)															
Work Order		Project Number	013.3287.100.100004	B. BTEX															
Company Name	Olsson Associates	Bill To Company	Olsson Associates	C. PAH (See Attached List) CO Table 910															
Send Report To	Tim Dobransky	Invoice Attn	Tim Dobransky	D. Electrical Conductivity															
Address	760 Horizon Drive, Ste. 102	Address	760 Horizon Drive, Ste. 102	E. Sodium Adsorption Ratio															
City/State/Zip	Grand Junction, CO 81506	City/State/Zip	Grand Junction, CO 81506	F. pH															
Phone	870.263.7800	Phone	870.263.7800	G. Metals (See Attached List) CO Table 910															
Fax	870.263.7458	Fax	870.263.7458	H. Arsenic Only															
e-Mail Address	tdobransky@olssonconsulting.com	e-Mail Address		I.															
				J.															
No.	Sample Description	Date	Time	Matrix	Pres.	# Batches	A	B	C	D	E	F	G	H	I	J	Hold		
1	GB5-SS1	03/28/16	1140	Soil	8	2	X	X	X	X	X	X	X						
2	GB5-SS2	03/28/16	1150	Soil	8	2	X	X	X	X	X	X	X						
3	GB5-SS3	03/28/16	1215	Soil	8	2	X	X	X	X	X	X	X						
4	GB5-BG1	03/28/16	1225	Soil	8	2				X	X	X	X						
5	GB5-SS4	03/28/16	1235	Soil	8	2	X	X	X	X	X	X	X						
6	GB5-SS5	03/28/16	1300	Soil	8	2	X	X	X	X	X	X	X						
7	GB5-SS6	03/28/16	1320	Soil	8	2	X	X	X	X	X	X	X						
8	GB5-SS7	03/28/16	1330	Soil	8	2	X	X	X	X	X	X	X						
9	GB5-SS8	03/28/16	1345	Soil	8	2	X	X	X	X	X	X	X						
10	GB5-SS9	03/28/16	1425	Soil	8	2	X	X	X	X	X	X	X						
11	GB5-SS10	03/28/16	1435	Soil	8	2	X	X	X	X	X	X	X						
12	GB5-SS11	03/28/16	1445	Soil	8	2	X	X	X	X	X	X	X						
13	GB5-BG2	03/28/16	1455	Soil	8	1									X				
Sampler(s): Please Print & Sign		Shipment Method:		Required Turnaround Time:				Results Due Date:											
Jason McLarty		FedEx		<input checked="" type="checkbox"/> STD 10 Wk Days <input type="checkbox"/> 5 Wk Days <input type="checkbox"/> 2 Wk Days <input type="checkbox"/> 24 Hour															
Relinquished by:		Date:	Time:	Received by:		Notes:													
[Signature]		3/29/16	1200	[Signature]		3-29-16 1700													
Relinquished by:		Date:	Time:	Received by (Laboratory):		Cooler Temp.		QC Package: (Check Box Below)											
[Signature]		3-29-16	1230	[Signature]		3/31/16 1200		<input checked="" type="checkbox"/> Level II: Standard QC <input type="checkbox"/> Level III: Std QC + Raw Data <input type="checkbox"/> Level IV: SW846 CLP-Like											
Logged by (Laboratory):		Date:	Time:	Checked by (Laboratory):				Other:											
[Signature]		3/31/16	1115	[Signature]															
Preservative Key: 1-HCL 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4 degrees C 9-5035																			

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.

Copyright 2011 by ALS Group

ORIGIN ID: RILA (816) 298-1033
NICK MARTINEZ
ALS ENVIRONMENTAL PARACHUTE
PARACHUTE SERVICE CENTER
127 EAST 1ST ST
PARACHUTE, CO 81635
UNITED STATES US

SHIP DATE: 28MAR18
ACTWGST: 55.00 LB
CAD: 2264840/NET 3730
DIMS: 24x15x15 IN
BILL SENDER

TO **SAMPLE RECEIVING**
ALS ENVIRONMENTAL HOLLAND LAB
3352 128TH AVE

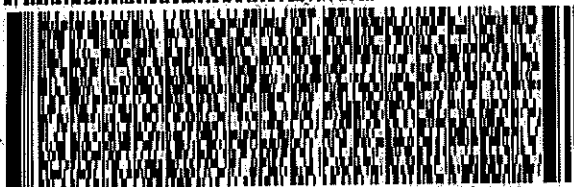
HOLLAND MI 49424

(816) 399-6070

REF 032916-1

#/V
PO: PARACHUTE

DEPT:



FedEx
Express



REL#
3785346

1 of 2

TRK#
0201

7759 8864 4532

MASTER

XX HLMA

WED - 30 MAR 10:30A
PRIORITY OVERNIGHT

49424

MI-US

GRR



540J1K05347ZTF

After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number. Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed with the shipping carrier within the time limit specified in the current FedEx Service Guide.

ALS Environmental

3352 128th Avenue

Holland, Michigan 49424

Tel. +1 616 399 6070

Fax. +1 616 399 6185

CUSTOMARY SEAL

Date:

Name:

Company:

Seal Broken By:

Date:

ORIGIN ID: RILA (616) 298-1033
 NICK MARTINEZ
 ALS ENVIRONMENTAL PARACHUTE
 PARACHUTE SERVICE CENTER
 127 EAST 1ST ST
 PARACHUTE, CO 81635
 UNITED STATES US

SHIP DATE: 29MAR16
 ACTWGT: 82.00 LB
 CAD: 2284840/NET3730
 DIMS: 14x28x15 IN

BILL SENDER

TO **SAMPLE RECEIVING**
ALS ENVIRONMENTAL HOLLAND LAB
3352 128TH AVE

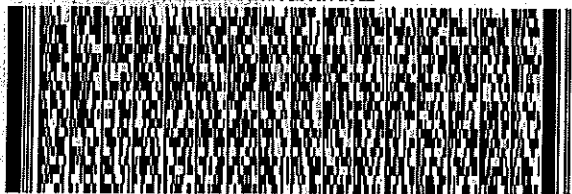
HOLLAND MI 49424

(616) 399-6070

REF: 032916-1

PO: PARACHUTE

DEPT:



FedEx
Express



REL#
3785348

2 of 2

MP#

0283

7759 8864 4750

Mstr# 7759 8864 4532

WED - 30 MAR 10:30A
PRIORITY OVERNIGHT

0201

XX HLMA

49424
MI-US GRR



5401/KC31/727F

After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number. Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on [fedex.com](http://fedex.com/FedEx). FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income, interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special, is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.



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

Name: _____
 Date: 30-MAR-2016
 Time: 17:30
 Signature: _____
 Title: _____

CUSTODY SEAL

Seal Broken By: _____
 Date: _____

Sample Receipt Checklist

Client Name: **OLSSON**

Date/Time Received: **31-Mar-16 10:00**

Work Order: **16031665**

Received by: **KRW**

Checklist completed by Keith Wurenga
eSignature

31-Mar-16
Date

Reviewed by: Chad Whelton
eSignature

31-Mar-16
Date

Matrices: **Soil**

Carrier name: **FedEx**

Shipping container/cooler in good condition? Yes ☒ No ☐ Not Present ☐

Custody seals intact on shipping container/cooler? Yes ☒ No ☐ Not Present ☐

Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒

Chain of custody present? Yes ☒ No ☐

Chain of custody signed when relinquished and received? Yes ☒ No ☐

Chain of custody agrees with sample labels? Yes ☒ No ☐

Samples in proper container/bottle? Yes ☒ No ☐

Sample containers intact? Yes ☐ No ☒

Sufficient sample volume for indicated test? Yes ☒ No ☐

All samples received within holding time? Yes ☒ No ☐

Container/Temp Blank temperature in compliance? Yes ☒ No ☐

Sample(s) received on ice? Yes ☒ No ☐

Temperature(s)/Thermometer(s): 4.8/4.8 5.2/5.2 C SR2

Cooler(s)/Kit(s):

Date/Time sample(s) sent to storage: 3/31/2016 11:41:34 AM

Water - VOA vials have zero headspace? Yes ☐ No ☐ No VOA vials submitted ☒

Water - pH acceptable upon receipt? Yes ☐ No ☐ N/A ☒

pH adjusted? Yes ☐ No ☐ N/A ☒

pH adjusted by:

Login Notes: Sample SS11 had a broken jar. Sample was transferred to another container.

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:



26-May-2020

Tim Dobransky
Entrada Consulting Group
240 Mesa Ave.
Grand Junction, CO 81501

Re: **Chevron Gray B5 Spill**

Work Order: **20050738**

Dear Tim,

ALS Environmental received 11 samples on 09-May-2020 10:30 AM for the analyses presented in the following report.

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

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

The total number of pages in this report is 24.

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

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

Sincerely,

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

Electronically approved by: Chad Whelton

Chad Whelton
Project Manager

Report of Laboratory Analysis

Certificate No: MN 026-999-449

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

Environmental 

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: Entrada Consulting Group
Project: Chevron Gray B5 Spill
Work Order: 20050738

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>
20050738-01	GB5-SS1	Soil		5/7/2020 11:00	5/9/2020 10:30	<input type="checkbox"/>
20050738-02	GB5-SS2	Soil		5/7/2020 11:10	5/9/2020 10:30	<input type="checkbox"/>
20050738-03	GB5-SS3	Soil		5/7/2020 11:20	5/9/2020 10:30	<input type="checkbox"/>
20050738-04	GB5-SS4	Soil		5/7/2020 11:30	5/9/2020 10:30	<input type="checkbox"/>
20050738-05	GB5-SS5	Soil		5/7/2020 11:40	5/9/2020 10:30	<input type="checkbox"/>
20050738-06	GB5-SS6	Soil		5/7/2020 11:50	5/9/2020 10:30	<input type="checkbox"/>
20050738-07	GB5-SS7	Soil		5/7/2020 12:00	5/9/2020 10:30	<input type="checkbox"/>
20050738-08	GB5-SS8	Soil		5/7/2020 12:05	5/9/2020 10:30	<input type="checkbox"/>
20050738-09	GB5-SS9	Soil		5/7/2020 12:15	5/9/2020 10:30	<input type="checkbox"/>
20050738-10	GB5-SS10	Soil		5/7/2020 12:25	5/9/2020 10:30	<input type="checkbox"/>
20050738-11	GB5-SS11	Soil		5/7/2020 12:30	5/9/2020 10:30	<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
Hr	BOD/CBOD - Sample was reset outside Hold Time, value should be considered estimated.
J	Analyte is present at an estimated concentration between the MDL and Report Limit
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

<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
°C	Degrees Celcius
mg/Kg-dry	Milligrams per Kilogram Dry Weight
mg/L	Milligrams per Liter
mmhos/cm @25°C	Millimhos-Centimeter at 25 Degrees Celcius
none	
s.u.	Standard Units

ALS Group, USA**Date:** 26-May-20

Client: Entrada Consulting Group
Project: Chevron Gray B5 Spill
Sample ID: GB5-SS1
Collection Date: 5/7/2020 11:00 AM

Work Order: 20050738
Lab ID: 20050738-01
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
SOLUBLE CATIONS FOR SAR			Method: SW6020B		Prep: USDA Method 20B / 5/18/20	Analyst: DSC	
Calcium	70		2.5	5.0	mg/L	10	5/18/2020 17:51
Magnesium	17		0.50	2.0	mg/L	10	5/18/2020 17:51
Sodium	10		0.45	2.0	mg/L	10	5/18/2020 17:51
SODIUM ADSORPTION RATIO			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 5/18/20	Analyst: STP	
Sodium Adsorption Ratio	0.28		0.010	0.010	none	1	5/18/2020
ELECTRICAL CONDUCTIVITY (SAR)			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 5/18/20	Analyst: QTN	
Electrical Conductivity @ Saturation	0.46		0.011	0.10	mmhos/cm @25°	20	5/19/2020 14:21

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

ALS Group, USA

Date: 26-May-20

Client: Entrada Consulting Group
Project: Chevron Gray B5 Spill
Sample ID: GB5-SS2
Collection Date: 5/7/2020 11:10 AM

Work Order: 20050738
Lab ID: 20050738-02
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
SOLUBLE CATIONS FOR SAR							
			Method: SW6020B		Prep: USDA Method 20B / 5/18/20		Analyst: DSC
Calcium	58		2.5	5.0	mg/L	10	5/18/2020 17:53
Magnesium	15		0.50	2.0	mg/L	10	5/18/2020 17:53
Sodium	3.4		0.45	2.0	mg/L	10	5/18/2020 17:53
SODIUM ADSORPTION RATIO							
			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 5/18/20		Analyst: STP
Sodium Adsorption Ratio	0.10		0.010	0.010	none	1	5/18/2020
POLYNUCLEAR AROMATIC HYDROCARBONS (PAHS)							
			Method: SW8270E		Prep: SW3546 / 5/15/20		Analyst: EEW
Acenaphthene	U		0.00087	0.0045	mg/Kg-dry	1	5/16/2020 16:26
Anthracene	U		0.0015	0.0045	mg/Kg-dry	1	5/16/2020 16:26
Benzo(a)anthracene	U		0.0018	0.0045	mg/Kg-dry	1	5/16/2020 16:26
Benzo(a)pyrene	U		0.0012	0.0045	mg/Kg-dry	1	5/16/2020 16:26
Benzo(b)fluoranthene	U		0.0011	0.0045	mg/Kg-dry	1	5/16/2020 16:26
Benzo(k)fluoranthene	U		0.0013	0.0045	mg/Kg-dry	1	5/16/2020 16:26
Chrysene	U		0.00092	0.0045	mg/Kg-dry	1	5/16/2020 16:26
Dibenzo(a,h)anthracene	U		0.0010	0.0045	mg/Kg-dry	1	5/16/2020 16:26
Fluoranthene	U		0.00082	0.0045	mg/Kg-dry	1	5/16/2020 16:26
Fluorene	U		0.0015	0.0045	mg/Kg-dry	1	5/16/2020 16:26
Indeno(1,2,3-cd)pyrene	U		0.0016	0.0045	mg/Kg-dry	1	5/16/2020 16:26
Naphthalene	U		0.0019	0.0045	mg/Kg-dry	1	5/16/2020 16:26
Pyrene	U		0.00074	0.0045	mg/Kg-dry	1	5/16/2020 16:26
Surr: 2-Fluorobiphenyl	57.4			20-140	%REC	1	5/16/2020 16:26
Surr: 4-Terphenyl-d14	43.0			22-172	%REC	1	5/16/2020 16:26
Surr: Nitrobenzene-d5	44.0			28-140	%REC	1	5/16/2020 16:26
ELECTRICAL CONDUCTIVITY (SAR)							
			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 5/18/20		Analyst: QTN
Electrical Conductivity @ Saturation	0.42		0.011	0.10	mmhos/cm @25°	20	5/19/2020 14:21
MOISTURE							
			Method: SW3550C				Analyst: KTP
Moisture	7.4		0.10	0.10	% of sample	1	5/20/2020 12:45

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

ALS Group, USA

Date: 26-May-20

Client: Entrada Consulting Group
Project: Chevron Gray B5 Spill
Sample ID: GB5-SS3
Collection Date: 5/7/2020 11:20 AM

Work Order: 20050738
Lab ID: 20050738-03
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
SOLUBLE CATIONS FOR SAR							
			Method: SW6020B		Prep: USDA Method 20B / 5/18/20		Analyst: DSC
Calcium	61		2.5	5.0	mg/L	10	5/18/2020 17:58
Magnesium	14		0.50	2.0	mg/L	10	5/18/2020 17:58
Sodium	1.9	J	0.45	2.0	mg/L	10	5/18/2020 17:58
SODIUM ADSORPTION RATIO							
			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 5/18/20		Analyst: STP
Sodium Adsorption Ratio	0.058		0.010	0.010	none	1	5/18/2020
ELECTRICAL CONDUCTIVITY (SAR)							
			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 5/18/20		Analyst: QTN
Electrical Conductivity @ Saturation	0.39		0.011	0.10	mmhos/cm @25°	20	5/19/2020 14:21

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

ALS Group, USA

Date: 26-May-20

Client: Entrada Consulting Group
Project: Chevron Gray B5 Spill
Sample ID: GB5-SS4
Collection Date: 5/7/2020 11:30 AM

Work Order: 20050738
Lab ID: 20050738-04
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
SOLUBLE CATIONS FOR SAR							
			Method: SW6020B		Prep: USDA Method 20B / 5/18/20		Analyst: DSC
Calcium	54		2.5	5.0	mg/L	10	5/18/2020 18:01
Magnesium	11		0.50	2.0	mg/L	10	5/18/2020 18:01
Sodium	5.8		0.45	2.0	mg/L	10	5/18/2020 18:01
SODIUM ADSORPTION RATIO							
			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 5/18/20		Analyst: STP
Sodium Adsorption Ratio	0.19		0.010	0.010	none	1	5/18/2020
ELECTRICAL CONDUCTIVITY (SAR)							
			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 5/18/20		Analyst: QTN
Electrical Conductivity @ Saturation	0.35		0.011	0.10	mmhos/cm @25°	20	5/19/2020 14:21
PH							
			Method: SW9045D		Prep: EXTRACT / 5/13/20		Analyst: QTN
pH	7.98		0.10	0.100	s.u.	1	5/14/2020 14:16
Temperature	20.5		0.10	0.100	°C	1	5/14/2020 14:16

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

ALS Group, USA

Date: 26-May-20

Client: Entrada Consulting Group
Project: Chevron Gray B5 Spill
Sample ID: GB5-SS5
Collection Date: 5/7/2020 11:40 AM

Work Order: 20050738
Lab ID: 20050738-05
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
<hr/>							
SOLUBLE CATIONS FOR SAR			Method: SW6020B		Prep: USDA Method 20B / 5/18/20		Analyst: DSC
Calcium	56		2.5	5.0	mg/L	10	5/18/2020 18:02
Magnesium	15		0.50	2.0	mg/L	10	5/18/2020 18:02
Sodium	43		0.45	2.0	mg/L	10	5/18/2020 18:02
<hr/>							
SODIUM ADSORPTION RATIO			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 5/18/20		Analyst: STP
Sodium Adsorption Ratio	1.3		0.010	0.010	none	1	5/18/2020
<hr/>							
ELECTRICAL CONDUCTIVITY (SAR)			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 5/18/20		Analyst: QTN
Electrical Conductivity @ Saturation	0.50		0.011	0.10	mmhos/cm @25°	20	5/19/2020 14:21

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

ALS Group, USA

Date: 26-May-20

Client: Entrada Consulting Group
Project: Chevron Gray B5 Spill
Sample ID: GB5-SS6
Collection Date: 5/7/2020 11:50 AM

Work Order: 20050738
Lab ID: 20050738-06
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
SOLUBLE CATIONS FOR SAR							
			Method: SW6020B		Prep: USDA Method 20B / 5/18/20		Analyst: DSC
Calcium	45		2.5	5.0	mg/L	10	5/18/2020 18:04
Magnesium	8.5		0.50	2.0	mg/L	10	5/18/2020 18:04
Sodium	4.1		0.45	2.0	mg/L	10	5/18/2020 18:04
SODIUM ADSORPTION RATIO							
			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 5/18/20		Analyst: STP
Sodium Adsorption Ratio	0.15		0.010	0.010	none	1	5/18/2020
POLYNUCLEAR AROMATIC HYDROCARBONS (PAHS)							
			Method: SW8270E		Prep: SW3546 / 5/15/20		Analyst: EEW
Acenaphthene	U		0.00084	0.0043	mg/Kg-dry	1	5/16/2020 16:41
Anthracene	U		0.0015	0.0043	mg/Kg-dry	1	5/16/2020 16:41
Benzo(a)anthracene	U		0.0018	0.0043	mg/Kg-dry	1	5/16/2020 16:41
Benzo(a)pyrene	U		0.0012	0.0043	mg/Kg-dry	1	5/16/2020 16:41
Benzo(b)fluoranthene	U		0.0010	0.0043	mg/Kg-dry	1	5/16/2020 16:41
Benzo(k)fluoranthene	U		0.0013	0.0043	mg/Kg-dry	1	5/16/2020 16:41
Chrysene	U		0.00089	0.0043	mg/Kg-dry	1	5/16/2020 16:41
Dibenzo(a,h)anthracene	U		0.0010	0.0043	mg/Kg-dry	1	5/16/2020 16:41
Fluoranthene	U		0.00080	0.0043	mg/Kg-dry	1	5/16/2020 16:41
Fluorene	U		0.0014	0.0043	mg/Kg-dry	1	5/16/2020 16:41
Indeno(1,2,3-cd)pyrene	U		0.0016	0.0043	mg/Kg-dry	1	5/16/2020 16:41
Naphthalene	U		0.0019	0.0043	mg/Kg-dry	1	5/16/2020 16:41
Pyrene	U		0.00071	0.0043	mg/Kg-dry	1	5/16/2020 16:41
Surr: 2-Fluorobiphenyl	66.9			20-140	%REC	1	5/16/2020 16:41
Surr: 4-Terphenyl-d14	67.9			22-172	%REC	1	5/16/2020 16:41
Surr: Nitrobenzene-d5	66.1			28-140	%REC	1	5/16/2020 16:41
ELECTRICAL CONDUCTIVITY (SAR)							
			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 5/18/20		Analyst: QTN
Electrical Conductivity @ Saturation	0.28		0.011	0.10	mmhos/cm @25°	20	5/19/2020 14:21
MOISTURE							
			Method: SW3550C				Analyst: KTP
Moisture	4.9		0.10	0.10	% of sample	1	5/20/2020 12:45
PH							
			Method: SW9045D		Prep: EXTRACT / 5/13/20		Analyst: QTN
pH	8.38		0.10	0.100	s.u.	1	5/14/2020 14:16
Temperature	20.5		0.10	0.100	°C	1	5/14/2020 14:16

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

ALS Group, USA

Date: 26-May-20

Client: Entrada Consulting Group
Project: Chevron Gray B5 Spill
Sample ID: GB5-SS7
Collection Date: 5/7/2020 12:00 PM

Work Order: 20050738
Lab ID: 20050738-07
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
SOLUBLE CATIONS FOR SAR			Method: SW6020B		Prep: USDA Method 20B / 5/18/20	Analyst: DSC	
Calcium	67		2.5	5.0	mg/L	10	5/18/2020 18:05
Magnesium	17		0.50	2.0	mg/L	10	5/18/2020 18:05
Sodium	3.7		0.45	2.0	mg/L	10	5/18/2020 18:05
SODIUM ADSORPTION RATIO			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 5/18/20	Analyst: STP	
Sodium Adsorption Ratio	0.11		0.010	0.010	none	1	5/18/2020

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

ALS Group, USA

Date: 26-May-20

Client: Entrada Consulting Group
Project: Chevron Gray B5 Spill
Sample ID: GB5-SS8
Collection Date: 5/7/2020 12:05 PM

Work Order: 20050738
Lab ID: 20050738-08
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
<hr/>							
SOLUBLE CATIONS FOR SAR			Method: SW6020B		Prep: USDA Method 20B / 5/19/20		Analyst: STP
Calcium	34		2.5	5.0	mg/L	10	5/19/2020 20:12
Magnesium	12		0.50	2.0	mg/L	10	5/19/2020 20:12
Sodium	19		0.45	2.0	mg/L	10	5/19/2020 20:12
SODIUM ADSORPTION RATIO			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 5/19/20		Analyst: STP
Sodium Adsorption Ratio	0.72		0.010	0.010	none	1	5/19/2020
ELECTRICAL CONDUCTIVITY (SAR)			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 5/19/20		Analyst: QTN
Electrical Conductivity @ Saturation	0.35		0.011	0.10	mmhos/cm @25°	20	5/19/2020 14:21

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

ALS Group, USA**Date:** 26-May-20

Client: Entrada Consulting Group
Project: Chevron Gray B5 Spill
Sample ID: GB5-SS9
Collection Date: 5/7/2020 12:15 PM

Work Order: 20050738
Lab ID: 20050738-09
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
<hr/>							
SOLUBLE CATIONS FOR SAR			Method: SW6020B		Prep: USDA Method 20B / 5/19/20		Analyst: STP
Calcium	130		2.5	5.0	mg/L	10	5/19/2020 20:44
Magnesium	29		0.50	2.0	mg/L	10	5/19/2020 20:44
Sodium	19		0.45	2.0	mg/L	10	5/19/2020 20:44
SODIUM ADSORPTION RATIO			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 5/19/20		Analyst: STP
Sodium Adsorption Ratio	0.39		0.010	0.010	none	1	5/19/2020
PH			Method: SW9045D		Prep: EXTRACT / 5/13/20		Analyst: QTN
pH	8.05		0.10	0.100	s.u.	1	5/14/2020 14:16
Temperature	20.5		0.10	0.100	°C	1	5/14/2020 14:16

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

ALS Group, USA

Date: 26-May-20

Client: Entrada Consulting Group
Project: Chevron Gray B5 Spill
Sample ID: GB5-SS10
Collection Date: 5/7/2020 12:25 PM

Work Order: 20050738
Lab ID: 20050738-10
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
<hr/>							
SOLUBLE CATIONS FOR SAR			Method: SW6020B		Prep: USDA Method 20B / 5/19/20		Analyst: STP
Calcium	65		2.5	5.0	mg/L	10	5/19/2020 20:46
Magnesium	14		0.50	2.0	mg/L	10	5/19/2020 20:46
Sodium	3.3		0.45	2.0	mg/L	10	5/19/2020 20:46
<hr/>							
SODIUM ADSORPTION RATIO			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 5/19/20		Analyst: STP
Sodium Adsorption Ratio	0.097		0.010	0.010	none	1	5/19/2020

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

ALS Group, USA

Date: 26-May-20

Client: Entrada Consulting Group
Project: Chevron Gray B5 Spill
Sample ID: GB5-SS11
Collection Date: 5/7/2020 12:30 PM

Work Order: 20050738
Lab ID: 20050738-11
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
SOLUBLE CATIONS FOR SAR							
			Method: SW6020B		Prep: USDA Method 20B / 5/19/20		Analyst: STP
Calcium	39		2.5	5.0	mg/L	10	5/19/2020 20:48
Magnesium	8.0		0.50	2.0	mg/L	10	5/19/2020 20:48
Sodium	24		0.45	2.0	mg/L	10	5/19/2020 20:48
SODIUM ADSORPTION RATIO							
			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 5/19/20		Analyst: STP
Sodium Adsorption Ratio	0.91		0.010	0.010	none	1	5/19/2020
ELECTRICAL CONDUCTIVITY (SAR)							
			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 5/19/20		Analyst: QTN
Electrical Conductivity @ Saturation	0.33		0.011	0.10	mmhos/cm @25°	20	5/19/2020 14:21
PH							
			Method: SW9045D		Prep: EXTRACT / 5/13/20		Analyst: QTN
pH	8.25		0.10	0.100	s.u.	1	5/14/2020 14:16
Temperature	20.5		0.10	0.100	°C	1	5/14/2020 14:16

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

Client: Entrada Consulting Group
Work Order: 20050738
Project: Chevron Gray B5 Spill

QC BATCH REPORT

Batch ID: **156116** Instrument ID **ICPMS4** Method: **SW6020B**

DUP		Sample ID: 20050738-03ADUP				Units: mg/L		Analysis Date: 5/18/2020 05:59 PM		
Client ID: GB5-SS3		Run ID: ICPMS4_200518A				SeqNo: 6422812		Prep Date: 5/18/2020		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	68.29	5.0	0	0	0	0-0	60.72	11.7		
Magnesium	14.96	2.0	0	0	0	0-0	13.55	9.9		
Sodium	2.309	2.0	0	0	0	0-0	1.908	19		

The following samples were analyzed in this batch:

20050738-01A	20050738-02A	20050738-03A
20050738-04A	20050738-05A	20050738-06A
20050738-07A		

Client: Entrada Consulting Group
Work Order: 20050738
Project: Chevron Gray B5 Spill

QC BATCH REPORT

Batch ID: **156190** Instrument ID **ICPMS4** Method: **SW6020B**

DUP		Sample ID: 20050738-11ADUP				Units: mg/L		Analysis Date: 5/19/2020 08:49 PM		
Client ID: GB5-SS11		Run ID: ICPMS4_200519A				SeqNo: 6426335		Prep Date: 5/19/2020		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	50.54	5.0	0	0	0	0-0	38.89	26.1		
Magnesium	9.342	2.0	0	0	0	0-0	8.04	15		
Sodium	26.29	2.0	0	0	0	0-0	23.77	10.1		

The following samples were analyzed in this batch:

20050738-08A	20050738-09A	20050738-10A
20050738-11A		

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

Client: Entrada Consulting Group
Work Order: 20050738
Project: Chevron Gray B5 Spill

QC BATCH REPORT

Batch ID: **156116** Instrument ID **SAR** Method: **USDA H60 Metho**

DUP		Sample ID: 20050738-03ADUP				Units: none		Analysis Date: 5/18/2020		
Client ID: GB5-SS3		Run ID: SAR_200518A				SeqNo: 6422864		Prep Date: 5/18/2020		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	0.06594	0.010	0	0	0		0.05764	13.4	50	

The following samples were analyzed in this batch:

20050738-01A	20050738-02A	20050738-03A
20050738-04A	20050738-05A	20050738-06A
20050738-07A		

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

Client: Entrada Consulting Group
Work Order: 20050738
Project: Chevron Gray B5 Spill

QC BATCH REPORT

Batch ID: **156190** Instrument ID **SAR** Method: **USDA H60 Metho**

DUP		Sample ID: 20050738-11ADUP				Units: none		Analysis Date: 5/19/2020		
Client ID: GB5-SS11		Run ID: SAR_200519A				SeqNo: 6428454		Prep Date: 5/19/2020		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	0.8916	0.010	0	0	0		0.9065	1.66	50	

The following samples were analyzed in this batch:

20050738-08A	20050738-09A	20050738-10A
20050738-11A		

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

Client: Entrada Consulting Group
 Work Order: 20050738
 Project: Chevron Gray B5 Spill

QC BATCH REPORT

Batch ID: **156025** Instrument ID **SVMS6** Method: **SW8270E**

MBLK		Sample ID: SBLKS1-156025-156025				Units: µg/Kg		Analysis Date: 5/16/2020 01:20 PM		
Client ID:		Run ID: SVMS6_200516A				SeqNo: 6419654		Prep Date: 5/15/2020		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	U	4.2								
Anthracene	U	4.2								
Benzo(a)anthracene	U	4.2								
Benzo(a)pyrene	U	4.2								
Benzo(b)fluoranthene	U	4.2								
Benzo(k)fluoranthene	U	4.2								
Chrysene	U	4.2								
Dibenzo(a,h)anthracene	U	4.2								
Fluoranthene	U	4.2								
Fluorene	U	4.2								
Indeno(1,2,3-cd)pyrene	U	4.2								
Naphthalene	U	4.2								
Pyrene	U	4.2								
Surr: 2-Fluorobiphenyl	3362	0	3333	0	101	20-140	0			
Surr: 4-Terphenyl-d14	3631	0	3333	0	109	22-172	0			
Surr: Nitrobenzene-d5	3087	0	3333	0	92.6	28-140	0			

LCS		Sample ID: SLCSS1-156025-156025				Units: µg/Kg		Analysis Date: 5/16/2020 02:37 PM		
Client ID:		Run ID: SVMS6_200516A				SeqNo: 6419655		Prep Date: 5/15/2020		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1179	4.2	1333	0	88.5	40-140	0			
Anthracene	1294	4.2	1333	0	97.1	40-140	0			
Benzo(a)anthracene	1253	4.2	1333	0	94	40-140	0			
Benzo(a)pyrene	1270	4.2	1333	0	95.3	40-140	0			
Benzo(b)fluoranthene	1156	4.2	1333	0	86.7	40-140	0			
Benzo(k)fluoranthene	1182	4.2	1333	0	88.6	40-140	0			
Chrysene	1234	4.2	1333	0	92.6	40-140	0			
Dibenzo(a,h)anthracene	1197	4.2	1333	0	89.8	40-140	0			
Fluoranthene	1239	4.2	1333	0	93	40-140	0			
Fluorene	1203	4.2	1333	0	90.2	40-140	0			
Indeno(1,2,3-cd)pyrene	1168	4.2	1333	0	87.6	40-140	0			
Naphthalene	1338	4.2	1333	0	100	40-140	0			
Pyrene	1148	4.2	1333	0	86.1	40-140	0			
Surr: 2-Fluorobiphenyl	2913	0	3333	0	87.4	20-140	0			
Surr: 4-Terphenyl-d14	3423	0	3333	0	103	22-172	0			
Surr: Nitrobenzene-d5	2687	0	3333	0	80.6	28-140	0			

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

Client: Entrada Consulting Group
 Work Order: 20050738
 Project: Chevron Gray B5 Spill

QC BATCH REPORT

Batch ID: **156025** Instrument ID **SVMS6** Method: **SW8270E**

MS				Sample ID: 20050798-02B MS			Units: µg/Kg		Analysis Date: 5/16/2020 02:53 PM		
Client ID:		Run ID: SVMS6_200516A			SeqNo: 6419656		Prep Date: 5/15/2020		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	1048	4.1	1314	0	79.8	40-140		0			
Anthracene	1145	4.1	1314	0	87.2	40-140		0			
Benzo(a)anthracene	1134	4.1	1314	0	86.3	40-140		0			
Benzo(a)pyrene	1130	4.1	1314	0	86	40-140		0			
Benzo(b)fluoranthene	1057	4.1	1314	0	80.4	40-140		0			
Benzo(k)fluoranthene	1045	4.1	1314	0	79.5	40-140		0			
Chrysene	1102	4.1	1314	0	83.9	40-140		0			
Dibenzo(a,h)anthracene	1032	4.1	1314	0	78.6	40-140		0			
Fluoranthene	1136	4.1	1314	0	86.5	40-140		0			
Fluorene	1072	4.1	1314	0	81.6	40-140		0			
Indeno(1,2,3-cd)pyrene	979.4	4.1	1314	0	74.5	40-140		0			
Naphthalene	1197	4.1	1314	0	91.1	40-140		0			
Pyrene	1021	4.1	1314	0	77.7	40-140		0			
Surr: 2-Fluorobiphenyl	2821	0	3286	0	85.9	20-140		0			
Surr: 4-Terphenyl-d14	3298	0	3286	0	100	22-172		0			
Surr: Nitrobenzene-d5	2590	0	3286	0	78.8	28-140		0			

MSD				Sample ID: 20050798-02B MSD			Units: µg/Kg		Analysis Date: 5/16/2020 03:08 PM	
Client ID:		Run ID: SVMS6_200516A			SeqNo: 6419657		Prep Date: 5/15/2020		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1176	4.1	1302	0	90.3	40-140	1048	11.5	30	
Anthracene	1284	4.1	1302	0	98.6	40-140	1145	11.4	30	
Benzo(a)anthracene	1249	4.1	1302	0	95.9	40-140	1134	9.66	30	
Benzo(a)pyrene	1256	4.1	1302	0	96.5	40-140	1130	10.6	30	
Benzo(b)fluoranthene	1111	4.1	1302	0	85.3	40-140	1057	4.92	30	
Benzo(k)fluoranthene	1203	4.1	1302	0	92.4	40-140	1045	14.1	30	
Chrysene	1236	4.1	1302	0	94.9	40-140	1102	11.5	30	
Dibenzo(a,h)anthracene	1178	4.1	1302	0	90.5	40-140	1032	13.2	30	
Fluoranthene	1209	4.1	1302	0	92.9	40-140	1136	6.24	30	
Fluorene	1200	4.1	1302	0	92.1	40-140	1072	11.3	30	
Indeno(1,2,3-cd)pyrene	1188	4.1	1302	0	91.2	40-140	979.4	19.2	30	
Naphthalene	1334	4.1	1302	0	102	40-140	1197	10.8	30	
Pyrene	1160	4.1	1302	0	89.1	40-140	1021	12.7	30	
Surr: 2-Fluorobiphenyl	3293	0	3256	0	101	20-140	2821	15.4	0	
Surr: 4-Terphenyl-d14	3422	0	3256	0	105	22-172	3298	3.69	0	
Surr: Nitrobenzene-d5	2779	0	3256	0	85.4	28-140	2590	7.06	0	

The following samples were analyzed in this batch:

20050738-02B	20050738-06B
--------------	--------------

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

Client: Entrada Consulting Group
Work Order: 20050738
Project: Chevron Gray B5 Spill

QC BATCH REPORT

Batch ID: **155915** Instrument ID **WETCHEM** Method: **SW9045D**

LCS				Sample ID: LCS-155915-155915				Units: s.u.			Analysis Date: 5/14/2020 02:16 PM			
Client ID:				Run ID: WETCHEM_200514L				SeqNo: 6415087			Prep Date: 5/13/2020		DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			

pH 4 0.10 4 0 100 90-110 0

DUP				Sample ID: 20050735-01A DUP				Units: s.u.			Analysis Date: 5/14/2020 02:16 PM			
Client ID:				Run ID: WETCHEM_200514L				SeqNo: 6415090			Prep Date: 5/13/2020		DF: 1	
Analyte		Result		PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		

pH 7.96 0.10 0 0 0 0-0 7.99 0.376 20

Temperature 20.4 0.10 0 0 0 20.5 0.489

DUP				Sample ID: 20050842-01A DUP				Units: s.u.		Analysis Date: 5/14/2020 02:16 PM			
Client ID:				Run ID: WETCHEM_200514L				SeqNo: 6415099		Prep Date: 5/13/2020		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			

pH 8.84 0.10 0 0 0 0-0 8.79 0.567 20

Temperature 20.4 0.10 0 0 0 20.4 0

The following samples were analyzed in this batch:

20050738-04A	20050738-06A	20050738-09A
20050738-11A		

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

Client: Entrada Consulting Group
Work Order: 20050738
Project: Chevron Gray B5 Spill

QC BATCH REPORT

Batch ID: **R289018** Instrument ID **MOIST** Method: **SW3550C**

MBLK		Sample ID: WBLKS-R289018					Units: % of sample		Analysis Date: 5/20/2020 12:45 PM		
Client ID:			Run ID: MOIST_200520C			SeqNo: 6430521		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Moisture U 0.10

LCS		Sample ID: LCS-R289018					Units: % of sample		Analysis Date: 5/20/2020 12:45 PM		
Client ID:			Run ID: MOIST_200520C			SeqNo: 6430520		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Moisture 100 0.10 100 0 100 98-102 0

DUP				Sample ID: 20050730-01A DUP				Units: % of sample			Analysis Date: 5/20/2020 12:45 PM												
Client ID:				Run ID: MOIST_200520C				SeqNo: 6430506			Prep Date:		DF: 1										
Analyte				Result		PQL		SPK Val		SPK Ref Value		%REC		Control Limit		RPD Ref Value		%RPD		RPD Limit		Qual	

Moisture 5.49 0.10 0 0 0 0-0 5.48 0.182 10

DUP		Sample ID: 20051115-02B DUP				Units: % of sample		Analysis Date: 5/20/2020 12:45 PM		
Client ID:		Run ID: MOIST_200520C			SeqNo: 6430514		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 18.14 0.10 0 0 0 0-0 17.29 4.8 10

The following samples were analyzed in this batch:

20050738-02B	20050738-06B
--------------	--------------

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



Chain of Custody Form

Page 1 of 1

COC ID: 123456

- | | | |
|--|--|--|
| <input type="checkbox"/> Cincinnati, OH
+1 513 733 5336 | <input checked="" type="checkbox"/> Holland, MI
+1 616 399 6070 | <input type="checkbox"/> Salt Lake City, UT
+1 801 266 7700 |
| <input type="checkbox"/> Everett, WA
+1 425 356 2600 | <input type="checkbox"/> Houston, TX
+1 281 530 5656 | <input type="checkbox"/> Spring City, PA
+1 610 948 4903 |
| <input type="checkbox"/> Fort Collins, CO
+1 970 490 1511 | <input type="checkbox"/> Middletown, PA
+1 717 944 5541 | <input type="checkbox"/> York, PA
+1 717 505 5280 |

Customer Information			ALS Project Manager:				Work Order #: <u>20050738</u>												
Project Information			Parameter/Method Request for Analysis																
Purchase Order	Project Name: <u>Chevron Gray B5 Spill</u>		A. TPH (GRO & DRO)																
Work Order	Project Number: <u>018-065</u>		B. BTEX																
Company Name: <u>Entrada Consulting Group</u>	Bill To Company: <u>Entrada Consulting Group</u>		C. PAH (See Attached List) CO Table 910																
Send Report To: <u>Tim Dobransky</u>	Invoice Attn: <u>Tim Dobransky</u>		D. Electrical Conductivity																
Address: <u>330 Grand Ave, STE C</u>	Address:		E. Sodium Adsorption Ratio																
City/State/Zip: <u>Grand Junction, CO 81501</u>	City/State/Zip:		F. pH																
Phone: <u>970.549.1015</u>	Phone:		G. Metals (See Attached List) CO Table 910																
Fax:	Fax:		H. Arsenic Only																
e-Mail Address: <u>tdobransky@entradaconsulting.com</u>	e-Mail Address:		I.																
			J.																
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold		
1	GB5-SS1	5/7/20	1100	Soil	8	1				X	X								
2	GB5-SS2	5/7/20	1110	Soil	8	2			X	X	X								
3	GB5-SS3	5/7/20	1120	Soil	8	1				X	X								
4	GB5-SS4	5/7/20	1130	Soil	8	1				X	X	X							
5	GB5-SS5	5/7/20	1140	Soil	8	1				X	X								
6	GB5-SS6	5/7/20	1150	Soil	8	2			X	X	X	X							
7	GB5-SS7	5/7/20	1200	Soil	8	1					X								
	GB5-SS8	5/7/20	1205	Soil	8	1				X	X								
	GB5-SS9	5/7/20	1215	Soil	8	1					X	X							
	GB5-SS10	5/7/20	1225	Soil	8	1					X								
	GB5-SS11	5/7/20	1230	Soil	8	1				X	X	X							
Sampler(s): Please Print & Sign <u>Tim Dobransky</u>			Shipment Method: <u>FedEx</u>		Required Turnaround Time: <input checked="" type="checkbox"/> STD 10 Wk Days <input type="checkbox"/> 5 Wk Days <input type="checkbox"/> 2 Wk Days <input type="checkbox"/> 24 Hour <input type="checkbox"/> Other _____				Results Due Date:										
Relinquished by:		Date:	Time:	Received by:		Notes: <u>Chevron Pricing Applies - Per Bruce Schlatter</u>													
Relinquished by: <u>[Signature]</u>		Date: <u>5-8-20</u>	Time: <u>1630</u>	Received by (Laboratory): <u>[Signature]</u>		Cooler Temp: <u>3.6°C</u>													
Logged by (Laboratory): <u>DFS</u>		Date: <u>5/11/20</u>	Time: <u>1045</u>	Checked by (Laboratory):		QC Package: (Check Box Below)													
						<input checked="" type="checkbox"/> Level II: Standard QC <input type="checkbox"/> Level III: Std QC + Raw Data <input type="checkbox"/> Level IV: SW846 CLP-Like Other: _____													
Preservative Key: 1-HCL 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4 degrees C 9-5035																			

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.

Copyright 2011 by ALS Group

Sample Receipt Checklist

Client Name: **ENTRADA**

Date/Time Received: **09-May-20 10:30**

Work Order: **20050738**

Received by: **DS**

Checklist completed by **Diane Shaw**

11-May-20

Reviewed by: **Alex J. Csaszar**

11-May-20

eSignature

Date

eSignature

Date

Matrices: **Soil**

Carrier name: **FedEx**

Shipping container/cooler in good condition? Yes ☒ No ☐ Not Present ☐

Custody seals intact on shipping container/cooler? Yes ☐ No ☐ Not Present ☒

Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒

Chain of custody present? Yes ☒ No ☐

Chain of custody signed when relinquished and received? Yes ☒ No ☐

Chain of custody agrees with sample labels? Yes ☒ No ☐

Samples in proper container/bottle? Yes ☒ No ☐

Sample containers intact? Yes ☒ No ☐

Sufficient sample volume for indicated test? Yes ☒ No ☐

All samples received within holding time? Yes ☒ No ☐

Container/Temp Blank temperature in compliance? Yes ☒ No ☐

Sample(s) received on ice? Yes ☒ No ☐

Temperature(s)/Thermometer(s): **3.6/3.6 c** **SR1**

Cooler(s)/Kit(s):

Date/Time sample(s) sent to storage: **5/11/2020 4:56:18 PM**

Water - VOA vials have zero headspace? Yes ☐ No ☐ No VOA vials submitted ☒

Water - pH acceptable upon receipt? Yes ☐ No ☐ N/A ☒

pH adjusted? Yes ☐ No ☐ N/A ☒

pH adjusted by:

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction: