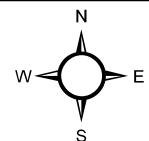




Legend

- Spill Origin
- Other Soil Sample Location
- Spill Path

0 150 300 600 Feet
1 inch = 319 feet



PROJECT NO:	018-065
DRAWN BY:	TPD
DATE:	12/15/2014

NEAL 7X
SPILL RESPONSE
CHEVRON USA, INC
RIO BLANCO COUNTY, COLORADO
NWNE S25 & SSE 24 T2N R103W



330 GRAND AVE, SUITE C
GRAND JUNCTION, CO 81501
TEL 970.549.1015

FIGURE

1

Table 1
Neal 7X
Soil Data Summary

SAMPLE SUMMARY	
Location Description	Neal 7X Spill
Sample Type	Soil

LABORATORY DATA SUMMARY															
Sample ID	NE7X-SS1	NE7X-SS1	NE7X-SS2	NEAL7X-SS2	NE7X-SS3	NEAL7X-SS3	NE7X-SS4	NE7X-SS4	NE7X-SS5	NE7X-BG1	NE7X-BG2	NE7X-BG3	COGCC TABLE 910-1 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"			
Sample Date	10/23/2014	10/17/2019	10/23/2014	7/11/2019	10/23/2014	7/11/2019	10/23/2014	10/17/2019	10/23/2014	10/23/2014	10/23/2014	10/23/2014			
Analytical Parameters															
TPH															
TPH Gasoline Range Organics	<3.0	NT	<3.1	NT	<3.1	NT	<2.9	NT	<2.8	NT	NT	NT	500	mg/kg	
TPH Diesel Range Organics	14	NT	14	NT	24	NT	29	NT	35	NT	NT	NT			
BTEX															
Benzene	<0.0036	NT	<0.037	NT	<0.037	NT	<0.034	NT	<0.033	NT	NT	NT	0.17	mg/kg	
Toluene	<0.0036	NT	<0.037	NT	<0.037	NT	<0.034	NT	<0.033	NT	NT	NT	85	mg/kg	
Ethylbenzene	<0.0036	NT	<0.037	NT	<0.037	NT	<0.034	NT	<0.033	NT	NT	NT	100	mg/kg	
Total Xylene	<0.110	NT	<0.110	NT	<0.110	NT	<0.100	NT	<0.100	NT	NT	NT	175	mg/kg	
Metals															
Arsenic	7.1	NT	7.6	NT	7.3	NT	7.5	NT	7.7	6.3	7.7	7.0	0.39	mg/kg	
Barium	3000	NT	460	NT	360	NT	220	NT	270	110	NT	NT	15,000	mg/kg	
Cadmium	<0.39	NT	<0.39	NT	<0.39	NT	<0.39	NT	<0.38	<0.38	NT	NT	70	mg/kg	
Chromium	28	NT	13	NT	11	NT	10	NT	13	10	NT	NT	NA	mg/kg	
Copper	16	NT	17	NT	14	NT	13	NT	16	12	NT	NT	3,100	mg/kg	
Lead	29	NT	25	NT	23	NT	23	NT	25	20	NT	NT	400	mg/kg	
Mercury	0.026	NT	0.026	NT	0.018	NT	0.028	NT	0.027	0.018	NT	NT	23	mg/kg	
Nickel	17	NT	18	NT	15	NT	15	NT	16	12	NT	NT	1,600	mg/kg	
Selenium	1.2	NT	1.5	NT	1.2	NT	1	NT	0.98	<0.77	NT	NT	390	mg/kg	
Silver	<0.39	NT	<0.39	NT	<0.39	NT	<0.39	NT	<0.38	<0.38	NT	NT	390	mg/kg	
Zinc	86	NT	88	NT	76	NT	79	NT	83	62	NT	NT	23,000	mg/kg	
SAR Metals Analysis															
Calcium	540	73	1100	110	240	140	260	80	100	98	NT	NT	NA	mg/L	
Magnesium	55	7.2	77	14	46	20	37	10	16	12	NT	NT	NA	mg/L	
Sodium	4600	27	4600	28	5000	29	3200	17	200	110	NT	NT	NA	mg/L	
Sodium Adsorption Ratio	51	0.82	36	0.67	77	0.62	49	0.48	4.80	2.8	NT	NT	<12	ratio	
Polynuclear Aromatic Hydrocarbons															
Acenaphthene	<0.0079	<0.00082	0.011	<0.019	<0.0080	NT	<0.0074	NT	<0.0074	NT	NT	NT	1,000	mg/kg	
Anthracene	0.026	<0.0014	0.021	<0.019	<0.0080	NT	<0.0074	NT	<0.0074	NT	NT	NT	1,000	mg/kg	
Benzo(a)anthracene	0.06	0.0039 J	0.04	<0.019	0.011	NT	0.0096	NT	<0.0074	NT	NT	NT	0.22	mg/kg	
Benzo(a)pyrene	0.066	<0.0012	0.059	<0.019	0.011	NT	0.0089	NT	<0.0074	NT	NT	NT	0.022	mg/kg	
Benzo(b)fluoranthene	0.076	<0.0010	0.052	<0.019	0.01	NT	0.0082	NT	<0.0074	NT	NT	NT	0.22	mg/kg	
Benzo(k)fluoranthene	0.032	<0.0012	0.025	<0.019	<0.0080	NT	<0.0074	NT	<0.0074	NT	NT	NT	2.2	mg/kg	
Chrysene	0.064	0.011	0.042	<0.019	<0.0080	NT	<0.0074	NT	<0.0074	NT	NT	NT	22	mg/kg	
Dibenzo(a,h)anthracene	0.011	0.0027	0.012	<0.019	<0.0080	NT	<0.0074	NT	<0.0074	NT	NT	NT	0.022	mg/kg	
Fluoranthene	0.11	<0.00078	0.098	<0.019	0.012	NT	0.014	NT	<0.0074	NT	NT	NT	1,000	mg/kg	
Fluorene	0.0091	<0.0014	0.014	<0.019	<0.0080	NT	<0.0074	NT	<0.0074	NT	NT	NT	1,000	mg/kg	
Indeno(1,2,3-cd)pyrene	0.04	<0.0015	0.023	<0.019	0.012	NT	<0.0074	NT	<0.0074	NT	NT	NT	0.22	mg/kg	
Napthalene	<0.0079	<0.0018	0.022	<0.019	<0.0080	NT	<0.0074	NT	<0.0074	NT	NT	NT	23	mg/kg	
Pyrene	0.091	<0.00070	0.082	<0.019	0.013	NT	0.01	NT	<0.0074	NT	NT	NT	1,000	mg/kg	
General Chemistry															
Chromium, Hexavalent	0.78	NT	<0.61	NT	<0.60	NT	<0.56	NT	<0.55	<0.53	NT	NT	23	mg/kg	
Chromium, Trivalent	27	NT	13	NT	10	NT	10	NT	13	10	NT	NT	120,000	mg/kg	
Specific Conductivity	26.0	0.65	29.0	0.88	26.0	1.1	18.0	0.62	1.7	0.58	NT	NT	<4 or 2 x the background	mmhos/cm	
pH	8.2	NT	7.8	NT	8.1	NT	8.4	NT	8.6	8.4	NT	NT	6-9	su	

mg/kg - milligrams per kilogram
mg/L - milligrams per liter
J - indicates an estimated value
mmhos/cm - millimhos per centimeter
mv - millivolts
su - standard units
NA - not applicable
NT - parameter was not tested

Over COGCC Table 910-1 concentration levels but under BACKGROUND level.

Over COGCC Table 910-1 concentration levels and not within BACKGROUND level.

Over COGCC Table 910-1 concentration levels



05-Nov-2014

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

Re: **Chevron Neal 7X Spill 10.23.14**

Work Order: **14101514**

Dear Tim,

ALS Environmental received 8 samples on 25-Oct-2014 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 34.

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

Sincerely,

A handwritten signature in cursive script that reads "Ann Preston".

Electronically approved by: Ann Preston

Ann Preston
Project Manager



Certificate No: MN 532786

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: Chevron Neal 7X Spill 10.23.14
Work Order: 14101514

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>
14101514-01	NE7X-SS1	Soil		10/23/2014 10:55	10/25/2014 10:00	<input type="checkbox"/>
14101514-02	NE7X-SS2	Soil		10/23/2014 11:05	10/25/2014 10:00	<input type="checkbox"/>
14101514-03	NE7X-BG1	Soil		10/23/2014 11:15	10/25/2014 10:00	<input type="checkbox"/>
14101514-04	NE7X-SS3	Soil		10/23/2014 11:20	10/25/2014 10:00	<input type="checkbox"/>
14101514-05	NE7X-BG2	Soil		10/23/2014 11:25	10/25/2014 10:00	<input type="checkbox"/>
14101514-06	NE7X-SS4	Soil		10/23/2014 11:55	10/25/2014 10:00	<input type="checkbox"/>
14101514-07	NE7X-SS5	Soil		10/23/2014 12:05	10/25/2014 10:00	<input type="checkbox"/>
14101514-08	NE7X-BG3	Soil		10/23/2014 12:15	10/25/2014 10:00	<input type="checkbox"/>

Client: Olsson Associates
Project: Chevron Neal 7X Spill 10.23.14
Work Order: 14101514

Case Narrative

Batch 64399 MS/MSD data for PAHs is not related to this project's samples. No data requires qualification.

Batch 64400 sample 14101514-06 RPD between the MS/MSD recoveries for DRO was above control limits. The individual MS/MSD recoveries met quality control criteria. No data requires qualification.

Batch 64413 sample 14101514-05 MSD recovery for Barium was : The MS and/or MSD recovery was outside of the control limit ; however, the result in the parent sample was greater than 4x the spiked amount. No qualification is required for Barium. The MS/MSD recoveries for Chromium were above the upper control limit. The corresponding result in the parent sample may be biased high for Chromium.

<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

<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
µg/Kg-dry	Micrograms per Kilogram Dry Weight
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: 05-Nov-14

Client: Olsson Associates

Project: Chevron Neal 7X Spill 10.23.14

Work Order: 14101514

Sample ID: NE7X-SS1

Lab ID: 14101514-01

Collection Date: 10/23/2014 10:55 AM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep: SW3541 / 10/28/14	Analyst: IT
DRO (C10-C28)	14		4.9	mg/Kg-dry	1	10/28/2014 07:46 PM
Surr: 4-Terphenyl-d14	65.2		39-133	%REC	1	10/28/2014 07:46 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015		Prep: SW5035 / 10/29/14	Analyst: IT
GRO (C6-C10)	ND		3.0	mg/Kg-dry	1	10/30/2014 12:29 PM
Surr: Toluene-d8	127		50-150	%REC	1	10/30/2014 12:29 PM
MERCURY BY CVAA						
			SW7471		Prep: SW7471 / 10/29/14	Analyst: LR
Mercury	0.026		0.018	mg/Kg-dry	1	10/30/2014 01:40 PM
METALS ANALYSIS BY ICP						
			SW846 6010C		Prep: SW3050B / 10/28/14	Analyst: JEC
Arsenic	7.1		0.39	mg/Kg-dry	1	10/29/2014 10:10 AM
Barium	3,000		0.39	mg/Kg-dry	1	10/29/2014 10:10 AM
Cadmium	ND		0.39	mg/Kg-dry	1	10/29/2014 10:10 AM
Chromium	28		0.39	mg/Kg-dry	1	10/29/2014 10:10 AM
Copper	16		0.39	mg/Kg-dry	1	10/29/2014 10:10 AM
Lead	29		0.39	mg/Kg-dry	1	10/29/2014 10:10 AM
Nickel	17		0.39	mg/Kg-dry	1	10/29/2014 10:10 AM
Selenium	1.2		0.78	mg/Kg-dry	1	10/29/2014 10:10 AM
Silver	ND		0.39	mg/Kg-dry	1	10/29/2014 10:10 AM
Zinc	86		0.78	mg/Kg-dry	1	10/29/2014 10:10 AM
SOLUBLE CATIONS FOR SAR						
			SW846 6010C		Prep: USDA Method 20B / 10/28/14	Analyst: JEC
Calcium	540		5.0	mg/L	10	10/28/2014 02:19 PM
Magnesium	55		2.0	mg/L	10	10/28/2014 02:19 PM
Sodium	4,600		20	mg/L	100	10/28/2014 03:39 PM
SODIUM ADSORPTION RATIO						
			USDA H60 METHOD		Prep: USDA Method 20B / 10/28/14	Analyst: JEC
Sodium Adsorption Ratio	51		0.010	none	1	10/28/2014
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 10/28/14	Analyst: RM
Acenaphthene	ND		7.9	µg/Kg-dry	1	10/31/2014 02:41 AM
Anthracene	26		7.9	µg/Kg-dry	1	10/31/2014 02:41 AM
Benzo(a)anthracene	60		7.9	µg/Kg-dry	1	10/31/2014 02:41 AM
Benzo(a)pyrene	66		7.9	µg/Kg-dry	1	10/31/2014 02:41 AM
Benzo(b)fluoranthene	76		7.9	µg/Kg-dry	1	10/31/2014 02:41 AM
Benzo(k)fluoranthene	32		7.9	µg/Kg-dry	1	10/31/2014 02:41 AM
Chrysene	64		7.9	µg/Kg-dry	1	10/31/2014 02:41 AM
Dibenzo(a,h)anthracene	11		7.9	µg/Kg-dry	1	10/31/2014 02:41 AM
Fluoranthene	110		7.9	µg/Kg-dry	1	10/31/2014 02:41 AM

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

ALS Group USA, Corp

Date: 05-Nov-14

Client: Olsson Associates

Project: Chevron Neal 7X Spill 10.23.14

Work Order: 14101514

Sample ID: NE7X-SS1

Lab ID: 14101514-01

Collection Date: 10/23/2014 10:55 AM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorene	9.1		7.9	µg/Kg-dry	1	10/31/2014 02:41 AM
Indeno(1,2,3-cd)pyrene	40		7.9	µg/Kg-dry	1	10/31/2014 02:41 AM
Naphthalene	ND		7.9	µg/Kg-dry	1	10/31/2014 02:41 AM
Pyrene	91		7.9	µg/Kg-dry	1	10/31/2014 02:41 AM
Surr: 2-Fluorobiphenyl	72.0		12-100	%REC	1	10/31/2014 02:41 AM
Surr: 4-Terphenyl-d14	77.5		25-137	%REC	1	10/31/2014 02:41 AM
Surr: Nitrobenzene-d5	57.2		37-107	%REC	1	10/31/2014 02:41 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B	Prep: SW5035 / 10/29/14 Analyst: RS		
Benzene	ND		36	µg/Kg-dry	1	11/1/2014 09:49 AM
Ethylbenzene	ND		36	µg/Kg-dry	1	11/1/2014 09:49 AM
m,p-Xylene	ND		73	µg/Kg-dry	1	11/1/2014 09:49 AM
o-Xylene	ND		36	µg/Kg-dry	1	11/1/2014 09:49 AM
Toluene	ND		36	µg/Kg-dry	1	11/1/2014 09:49 AM
Xylenes, Total	ND		110	µg/Kg-dry	1	11/1/2014 09:49 AM
Surr: 1,2-Dichloroethane-d4	101		70-130	%REC	1	11/1/2014 09:49 AM
Surr: 4-Bromofluorobenzene	96.7		70-130	%REC	1	11/1/2014 09:49 AM
Surr: Dibromofluoromethane	94.0		70-130	%REC	1	11/1/2014 09:49 AM
Surr: Toluene-d8	97.4		70-130	%REC	1	11/1/2014 09:49 AM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHOD	Prep: USDA Method 20B / 10/28/14 Analyst: JB		
Electrical Conductivity @ Saturation	26		0.050	mmhos/cm @25	10	10/28/2014 03:15 PM
CHROMIUM, TRIVALENT			CALCULATION	Analyst: MB		
Chromium, Trivalent	27		0.61	mg/Kg-dry	1	10/31/2014 05:30 PM
CHROMIUM, HEXAVALENT			SW7196A	Prep: SW3060A / 10/28/14 Analyst: MB		
Chromium, Hexavalent	0.78		0.59	mg/Kg-dry	1	10/29/2014 03:00 PM
MOISTURE			A2540 G	Analyst: EVB		
Moisture	18		0.050	% of sample	1	10/28/2014 07:45 PM
PH			SW9045D	Prep: EXTRACT / 10/28/14 Analyst: KF		
pH	8.2		s.u.		1	10/28/2014 01:21 PM

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

ALS Group USA, Corp

Date: 05-Nov-14

Client: Olsson Associates

Project: Chevron Neal 7X Spill 10.23.14

Sample ID: NE7X-SS2

Collection Date: 10/23/2014 11:05 AM

Work Order: 14101514

Lab ID: 14101514-02

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	14		SW8015M		Prep: SW3541 / 10/28/14	Analyst: IT
Surr: 4-Terphenyl-d14	62.0		5.0	mg/Kg-dry	1	10/28/2014 08:14 PM
			39-133	%REC	1	10/28/2014 08:14 PM
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		SW8015		Prep: SW5035 / 10/29/14	Analyst: IT
Surr: Toluene-d8	120		3.1	mg/Kg-dry	1	10/30/2014 12:53 PM
			50-150	%REC	1	10/30/2014 12:53 PM
MERCURY BY CVAA						
Mercury	0.026		SW7471		Prep: SW7471 / 10/29/14	Analyst: LR
			0.016	mg/Kg-dry	1	10/30/2014 01:42 PM
METALS ANALYSIS BY ICP						
Arsenic	7.6		SW846 6010C		Prep: SW3050B / 10/28/14	Analyst: JEC
Barium	460		0.39	mg/Kg-dry	1	10/29/2014 10:15 AM
Cadmium	ND		0.39	mg/Kg-dry	1	10/29/2014 10:15 AM
Chromium	13		0.39	mg/Kg-dry	1	10/29/2014 10:15 AM
Copper	17		0.39	mg/Kg-dry	1	10/29/2014 10:15 AM
Lead	25		0.39	mg/Kg-dry	1	10/29/2014 10:15 AM
Nickel	18		0.39	mg/Kg-dry	1	10/29/2014 10:15 AM
Selenium	1.5		0.77	mg/Kg-dry	1	10/29/2014 10:15 AM
Silver	ND		0.39	mg/Kg-dry	1	10/29/2014 10:15 AM
Zinc	88		0.77	mg/Kg-dry	1	10/29/2014 10:15 AM
SOLUBLE CATIONS FOR SAR						
Calcium	1,100		SW846 6010C		Prep: USDA Method 20B / 10/28/14	Analyst: JEC
Magnesium	77		5.0	mg/L	10	10/28/2014 02:24 PM
Sodium	4,600		2.0	mg/L	10	10/28/2014 02:24 PM
			20	mg/L	100	10/28/2014 03:45 PM
SODIUM ADSORPTION RATIO						
Sodium Adsorption Ratio	36		USDA H60 METHOD		Prep: USDA Method 20B / 10/28/14	Analyst: JEC
			0.010	none	1	10/28/2014
SEMI-VOLATILE ORGANIC COMPOUNDS						
Acenaphthene	11		SW846 8270D		Prep: SW3541 / 10/28/14	Analyst: RM
Anthracene	21		8.0	µg/Kg-dry	1	10/31/2014 03:01 AM
Benzo(a)anthracene	40		8.0	µg/Kg-dry	1	10/31/2014 03:01 AM
Benzo(a)pyrene	59		8.0	µg/Kg-dry	1	10/31/2014 03:01 AM
Benzo(b)fluoranthene	52		8.0	µg/Kg-dry	1	10/31/2014 03:01 AM
Benzo(k)fluoranthene	25		8.0	µg/Kg-dry	1	10/31/2014 03:01 AM
Chrysene	42		8.0	µg/Kg-dry	1	10/31/2014 03:01 AM
Dibenzo(a,h)anthracene	12		8.0	µg/Kg-dry	1	10/31/2014 03:01 AM
Fluoranthene	98		8.0	µg/Kg-dry	1	10/31/2014 03:01 AM

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

ALS Group USA, Corp

Date: 05-Nov-14

Client: Olsson Associates

Project: Chevron Neal 7X Spill 10.23.14

Sample ID: NE7X-SS2

Collection Date: 10/23/2014 11:05 AM

Work Order: 14101514

Lab ID: 14101514-02

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorene	14		8.0	µg/Kg-dry	1	10/31/2014 03:01 AM
Indeno(1,2,3-cd)pyrene	23		8.0	µg/Kg-dry	1	10/31/2014 03:01 AM
Naphthalene	22		8.0	µg/Kg-dry	1	10/31/2014 03:01 AM
Pyrene	82		8.0	µg/Kg-dry	1	10/31/2014 03:01 AM
Surr: 2-Fluorobiphenyl	77.6		12-100	%REC	1	10/31/2014 03:01 AM
Surr: 4-Terphenyl-d14	77.2		25-137	%REC	1	10/31/2014 03:01 AM
Surr: Nitrobenzene-d5	69.3		37-107	%REC	1	10/31/2014 03:01 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B	Prep: SW5035 / 10/29/14 Analyst: RS		
Benzene	ND		37	µg/Kg-dry	1	11/1/2014 09:25 AM
Ethylbenzene	ND		37	µg/Kg-dry	1	11/1/2014 09:25 AM
m,p-Xylene	ND		74	µg/Kg-dry	1	11/1/2014 09:25 AM
o-Xylene	ND		37	µg/Kg-dry	1	11/1/2014 09:25 AM
Toluene	ND		37	µg/Kg-dry	1	11/1/2014 09:25 AM
Xylenes, Total	ND		110	µg/Kg-dry	1	11/1/2014 09:25 AM
Surr: 1,2-Dichloroethane-d4	98.8		70-130	%REC	1	11/1/2014 09:25 AM
Surr: 4-Bromofluorobenzene	95.4		70-130	%REC	1	11/1/2014 09:25 AM
Surr: Dibromofluoromethane	93.4		70-130	%REC	1	11/1/2014 09:25 AM
Surr: Toluene-d8	98.2		70-130	%REC	1	11/1/2014 09:25 AM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHOD	Prep: USDA Method 20B / 10/28/14 Analyst: JB		
Electrical Conductivity @ Saturation	29		0.050	mmhos/cm @25	10	10/28/2014 03:15 PM
CHROMIUM, TRIVALENT			CALCULATION	Analyst: MB		
Chromium, Trivalent	13		0.61	mg/Kg-dry	1	10/31/2014 05:30 PM
CHROMIUM, HEXAVALENT			SW7196A	Prep: SW3060A / 10/28/14 Analyst: MB		
Chromium, Hexavalent	ND		0.61	mg/Kg-dry	1	10/29/2014 03:00 PM
MOISTURE			A2540 G	Analyst: EVB		
Moisture	19		0.050	% of sample	1	10/28/2014 07:45 PM
PH			SW9045D	Prep: EXTRACT / 10/28/14 Analyst: KF		
pH	7.8			s.u.	1	10/28/2014 01:21 PM

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

ALS Group USA, Corp

Date: 05-Nov-14

Client: Olsson Associates
Project: Chevron Neal 7X Spill 10.23.14
Sample ID: NE7X-BG1
Collection Date: 10/23/2014 11:15 AM

Work Order: 14101514
Lab ID: 14101514-03
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA						
Mercury	0.018		SW7471 0.014	mg/Kg-dry	Prep: SW7471 / 10/29/14 1	Analyst: LR 10/30/2014 01:44 PM
METALS ANALYSIS BY ICP						
Arsenic	6.3		SW846 6010C 0.38	mg/Kg-dry	Prep: SW3050B / 10/28/14 1	Analyst: JEC 10/29/2014 10:21 AM
Barium	110		0.38	mg/Kg-dry	1	10/29/2014 10:21 AM
Cadmium	ND		0.38	mg/Kg-dry	1	10/29/2014 10:21 AM
Chromium	10		0.38	mg/Kg-dry	1	10/29/2014 10:21 AM
Copper	12		0.38	mg/Kg-dry	1	10/29/2014 10:21 AM
Lead	20		0.38	mg/Kg-dry	1	10/29/2014 10:21 AM
Nickel	12		0.38	mg/Kg-dry	1	10/29/2014 10:21 AM
Selenium	ND		0.77	mg/Kg-dry	1	10/29/2014 10:21 AM
Silver	ND		0.38	mg/Kg-dry	1	10/29/2014 10:21 AM
Zinc	62		0.77	mg/Kg-dry	1	10/29/2014 10:21 AM
SOLUBLE CATIONS FOR SAR						
Calcium	98		SW846 6010C 5.0	mg/L	Prep: USDA Method 20B / 10/28/14 10	Analyst: JEC 10/28/2014 02:30 PM
Magnesium	12		2.0	mg/L	10	10/28/2014 02:30 PM
Sodium	110		2.0	mg/L	10	10/28/2014 02:30 PM
SODIUM ADSORPTION RATIO						
Sodium Adsorption Ratio	2.8		USDA H60 METHOD 0.010	none	Prep: USDA Method 20B / 10/28/14 1	Analyst: JEC 10/28/2014
ELECTRICAL CONDUCTIVITY (SAR)						
Electrical Conductivity @ Saturation	0.58		USDA H60 METHOD 0.050	mmhos/cm @25	Prep: USDA Method 20B / 10/28/14 10	Analyst: JB 10/28/2014 03:15 PM
CHROMIUM, TRIVALENT						
Chromium, Trivalent	10		CALCULATION 0.54	mg/Kg-dry	Analyst: MB 1	10/31/2014 05:30 PM
CHROMIUM, HEXAVALENT						
Chromium, Hexavalent	ND		SW7196A 0.53	mg/Kg-dry	Prep: SW3060A / 10/28/14 1	Analyst: MB 10/29/2014 03:00 PM
MOISTURE						
Moisture	6.8		A2540 G 0.050	% of sample	Analyst: EVB 1	10/28/2014 07:45 PM
PH						
pH	8.4		SW9045D	s.u.	Prep: EXTRACT / 10/28/14 1	Analyst: KF 10/28/2014 01:21 PM

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

ALS Group USA, Corp

Date: 05-Nov-14

Client: Olsson Associates

Project: Chevron Neal 7X Spill 10.23.14

Work Order: 14101514

Sample ID: NE7X-SS3

Lab ID: 14101514-04

Collection Date: 10/23/2014 11:20 AM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	24		SW8015M		Prep: SW3541 / 10/28/14	Analyst: IT
Surr: 4-Terphenyl-d14	71.0		5.0	mg/Kg-dry	1	10/28/2014 08:42 PM
			39-133	%REC	1	10/28/2014 08:42 PM
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		SW8015		Prep: SW5035 / 10/29/14	Analyst: IT
Surr: Toluene-d8	124		3.1	mg/Kg-dry	1	10/30/2014 01:18 PM
			50-150	%REC	1	10/30/2014 01:18 PM
MERCURY BY CVAA						
Mercury	0.018		SW7471		Prep: SW7471 / 10/29/14	Analyst: LR
			0.017	mg/Kg-dry	1	10/30/2014 01:47 PM
METALS ANALYSIS BY ICP						
Arsenic	7.3		SW846 6010C		Prep: SW3050B / 10/28/14	Analyst: JEC
Barium	360		0.39	mg/Kg-dry	1	10/29/2014 10:26 AM
Cadmium	ND		0.39	mg/Kg-dry	1	10/29/2014 10:26 AM
Chromium	11		0.39	mg/Kg-dry	1	10/29/2014 10:26 AM
Copper	14		0.39	mg/Kg-dry	1	10/29/2014 10:26 AM
Lead	23		0.39	mg/Kg-dry	1	10/29/2014 10:26 AM
Nickel	15		0.39	mg/Kg-dry	1	10/29/2014 10:26 AM
Selenium	1.2		0.79	mg/Kg-dry	1	10/29/2014 10:26 AM
Silver	ND		0.39	mg/Kg-dry	1	10/29/2014 10:26 AM
Zinc	76		0.79	mg/Kg-dry	1	10/29/2014 10:26 AM
SOLUBLE CATIONS FOR SAR						
Calcium	240		SW846 6010C		Prep: USDA Method 20B / 10/28/14	Analyst: JEC
Magnesium	46		5.0	mg/L	10	10/28/2014 02:42 PM
Sodium	5,000		2.0	mg/L	10	10/28/2014 02:42 PM
			20	mg/L	100	10/28/2014 03:56 PM
SODIUM ADSORPTION RATIO						
Sodium Adsorption Ratio	77		USDA H60 METHOD		Prep: USDA Method 20B / 10/28/14	Analyst: JEC
			0.010	none	1	10/28/2014
SEMI-VOLATILE ORGANIC COMPOUNDS						
Acenaphthene	ND		SW846 8270D		Prep: SW3541 / 10/28/14	Analyst: RM
Anthracene	ND		8.0	µg/Kg-dry	1	10/31/2014 03:21 AM
Benzo(a)anthracene	11		8.0	µg/Kg-dry	1	10/31/2014 03:21 AM
Benzo(a)pyrene	11		8.0	µg/Kg-dry	1	10/31/2014 03:21 AM
Benzo(b)fluoranthene	10		8.0	µg/Kg-dry	1	10/31/2014 03:21 AM
Benzo(k)fluoranthene	ND		8.0	µg/Kg-dry	1	10/31/2014 03:21 AM
Chrysene	ND		8.0	µg/Kg-dry	1	10/31/2014 03:21 AM
Dibenzo(a,h)anthracene	ND		8.0	µg/Kg-dry	1	10/31/2014 03:21 AM
Fluoranthene	12		8.0	µg/Kg-dry	1	10/31/2014 03:21 AM

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

ALS Group USA, Corp

Date: 05-Nov-14

Client: Olsson Associates

Project: Chevron Neal 7X Spill 10.23.14

Work Order: 14101514

Sample ID: NE7X-SS3

Lab ID: 14101514-04

Collection Date: 10/23/2014 11:20 AM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorene	ND		8.0	µg/Kg-dry	1	10/31/2014 03:21 AM
Indeno(1,2,3-cd)pyrene	12		8.0	µg/Kg-dry	1	10/31/2014 03:21 AM
Naphthalene	ND		8.0	µg/Kg-dry	1	10/31/2014 03:21 AM
Pyrene	13		8.0	µg/Kg-dry	1	10/31/2014 03:21 AM
Surr: 2-Fluorobiphenyl	80.0		12-100	%REC	1	10/31/2014 03:21 AM
Surr: 4-Terphenyl-d 14	77.4		25-137	%REC	1	10/31/2014 03:21 AM
Surr: Nitrobenzene-d5	64.3		37-107	%REC	1	10/31/2014 03:21 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B	Prep: SW5035 / 10/29/14		Analyst: RS
Benzene	ND		37	µg/Kg-dry	1	11/1/2014 09:01 AM
Ethylbenzene	ND		37	µg/Kg-dry	1	11/1/2014 09:01 AM
m,p-Xylene	ND		74	µg/Kg-dry	1	11/1/2014 09:01 AM
o-Xylene	ND		37	µg/Kg-dry	1	11/1/2014 09:01 AM
Toluene	ND		37	µg/Kg-dry	1	11/1/2014 09:01 AM
Xylenes, Total	ND		110	µg/Kg-dry	1	11/1/2014 09:01 AM
Surr: 1,2-Dichloroethane-d4	101		70-130	%REC	1	11/1/2014 09:01 AM
Surr: 4-Bromofluorobenzene	96.2		70-130	%REC	1	11/1/2014 09:01 AM
Surr: Dibromofluoromethane	93.6		70-130	%REC	1	11/1/2014 09:01 AM
Surr: Toluene-d8	98.4		70-130	%REC	1	11/1/2014 09:01 AM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHOD	Prep: USDA Method 20B / 10/28/14		Analyst: JB
Electrical Conductivity @ Saturation	26		0.050	mmhos/cm @25	10	10/28/2014 03:15 PM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: MB
Chromium, Trivalent	10		0.61	mg/Kg-dry	1	10/31/2014 05:30 PM
CHROMIUM, HEXAVALENT			SW7196A	Prep: SW3060A / 10/28/14		Analyst: MB
Chromium, Hexavalent	ND		0.60	mg/Kg-dry	1	10/29/2014 03:00 PM
MOISTURE			A2540 G			Analyst: EVB
Moisture	19		0.050	% of sample	1	10/28/2014 07:45 PM
PH			SW9045D	Prep: EXTRACT / 10/28/14		Analyst: KF
pH	8.1			s.u.	1	10/28/2014 01:21 PM

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

ALS Group USA, Corp**Date:** 05-Nov-14**Client:** Olsson Associates**Project:** Chevron Neal 7X Spill 10.23.14**Sample ID:** NE7X-BG2**Collection Date:** 10/23/2014 11:25 AM**Work Order:** 14101514**Lab ID:** 14101514-05**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS ANALYSIS BY ICP						
Arsenic	7.7		SW846 6010C 0.41	mg/Kg-dry	1	Prep: SW3050B / 10/28/14 Analyst: JEC 10/29/2014 10:31 AM
MOISTURE						
Moisture	8.2		A2540 G 0.050	% of sample	1	Analyst: EVB 10/28/2014 07:45 PM

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

ALS Group USA, Corp

Date: 05-Nov-14

Client: Olsson Associates

Project: Chevron Neal 7X Spill 10.23.14

Work Order: 14101514

Sample ID: NE7X-SS4

Lab ID: 14101514-06

Collection Date: 10/23/2014 11:55 AM

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	29		SW8015M		Prep: SW3541 / 10/28/14	Analyst: IT
Surr: 4-Terphenyl-d14	53.3		4.6	mg/Kg-dry	1	10/28/2014 07:19 PM
			39-133	%REC	1	10/28/2014 07:19 PM
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		SW8015		Prep: SW5035 / 10/29/14	Analyst: IT
Surr: Toluene-d8	127		2.9	mg/Kg-dry	1	10/30/2014 01:42 PM
			50-150	%REC	1	10/30/2014 01:42 PM
MERCURY BY CVAA						
Mercury	0.028		SW7471		Prep: SW7471 / 10/29/14	Analyst: LR
			0.016	mg/Kg-dry	1	10/30/2014 01:49 PM
METALS ANALYSIS BY ICP						
Arsenic	7.5		SW846 6010C		Prep: SW3050B / 10/28/14	Analyst: JEC
Barium	220		0.39	mg/Kg-dry	1	10/29/2014 11:04 AM
Cadmium	ND		0.39	mg/Kg-dry	1	10/29/2014 11:04 AM
Chromium	10		0.39	mg/Kg-dry	1	10/29/2014 11:04 AM
Copper	13		0.39	mg/Kg-dry	1	10/29/2014 11:04 AM
Lead	23		0.39	mg/Kg-dry	1	10/29/2014 11:04 AM
Nickel	15		0.39	mg/Kg-dry	1	10/29/2014 11:04 AM
Selenium	1.0		0.78	mg/Kg-dry	1	10/29/2014 11:04 AM
Silver	ND		0.39	mg/Kg-dry	1	10/29/2014 11:04 AM
Zinc	79		0.78	mg/Kg-dry	1	10/29/2014 11:04 AM
SOLUBLE CATIONS FOR SAR						
Calcium	260		SW846 6010C		Prep: USDA Method 20B / 10/28/14	Analyst: JEC
Magnesium	37		5.0	mg/L	10	10/28/2014 02:48 PM
Sodium	3,200		2.0	mg/L	10	10/28/2014 02:48 PM
			20	mg/L	100	10/28/2014 04:02 PM
SODIUM ADSORPTION RATIO						
Sodium Adsorption Ratio	49		USDA H60 METHOD		Prep: USDA Method 20B / 10/28/14	Analyst: JEC
			0.010	none	1	10/28/2014
SEMI-VOLATILE ORGANIC COMPOUNDS						
Acenaphthene	ND		SW846 8270D		Prep: SW3541 / 10/28/14	Analyst: RM
Anthracene	ND		7.4	µg/Kg-dry	1	10/31/2014 03:41 AM
Benzo(a)anthracene	9.6		7.4	µg/Kg-dry	1	10/31/2014 03:41 AM
Benzo(a)pyrene	8.9		7.4	µg/Kg-dry	1	10/31/2014 03:41 AM
Benzo(b)fluoranthene	8.2		7.4	µg/Kg-dry	1	10/31/2014 03:41 AM
Benzo(k)fluoranthene	ND		7.4	µg/Kg-dry	1	10/31/2014 03:41 AM
Chrysene	ND		7.4	µg/Kg-dry	1	10/31/2014 03:41 AM
Dibenzo(a,h)anthracene	ND		7.4	µg/Kg-dry	1	10/31/2014 03:41 AM
Fluoranthene	14		7.4	µg/Kg-dry	1	10/31/2014 03:41 AM

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

ALS Group USA, Corp

Date: 05-Nov-14

Client: Olsson Associates

Project: Chevron Neal 7X Spill 10.23.14

Sample ID: NE7X-SS4

Collection Date: 10/23/2014 11:55 AM

Work Order: 14101514

Lab ID: 14101514-06

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorene	ND		7.4	µg/Kg-dry	1	10/31/2014 03:41 AM
Indeno(1,2,3-cd)pyrene	ND		7.4	µg/Kg-dry	1	10/31/2014 03:41 AM
Naphthalene	ND		7.4	µg/Kg-dry	1	10/31/2014 03:41 AM
Pyrene	10		7.4	µg/Kg-dry	1	10/31/2014 03:41 AM
Surr: 2-Fluorobiphenyl	73.0		12-100	%REC	1	10/31/2014 03:41 AM
Surr: 4-Terphenyl-d 14	73.1		25-137	%REC	1	10/31/2014 03:41 AM
Surr: Nitrobenzene-d5	57.9		37-107	%REC	1	10/31/2014 03:41 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B	Prep: SW5035 / 10/29/14		Analyst: RS
Benzene	ND		34	µg/Kg-dry	1	11/1/2014 08:37 AM
Ethylbenzene	ND		34	µg/Kg-dry	1	11/1/2014 08:37 AM
m,p-Xylene	ND		69	µg/Kg-dry	1	11/1/2014 08:37 AM
o-Xylene	ND		34	µg/Kg-dry	1	11/1/2014 08:37 AM
Toluene	ND		34	µg/Kg-dry	1	11/1/2014 08:37 AM
Xylenes, Total	ND		100	µg/Kg-dry	1	11/1/2014 08:37 AM
Surr: 1,2-Dichloroethane-d4	100		70-130	%REC	1	11/1/2014 08:37 AM
Surr: 4-Bromofluorobenzene	94.8		70-130	%REC	1	11/1/2014 08:37 AM
Surr: Dibromofluoromethane	93.6		70-130	%REC	1	11/1/2014 08:37 AM
Surr: Toluene-d8	98.4		70-130	%REC	1	11/1/2014 08:37 AM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHOD	Prep: USDA Method 20B / 10/28/14		Analyst: JB
Electrical Conductivity @ Saturation	18		0.050	mmhos/cm @25	10	10/28/2014 03:15 PM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: MB
Chromium, Trivalent	10		0.57	mg/Kg-dry	1	10/31/2014 05:30 PM
CHROMIUM, HEXAVALENT			SW7196A	Prep: SW3060A / 10/28/14		Analyst: MB
Chromium, Hexavalent	ND		0.56	mg/Kg-dry	1	10/29/2014 03:00 PM
MOISTURE			A2540 G			Analyst: EVB
Moisture	12		0.050	% of sample	1	10/28/2014 07:45 PM
PH			SW9045D	Prep: EXTRACT / 10/28/14		Analyst: KF
pH	8.4			s.u.	1	10/28/2014 01:21 PM

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

ALS Group USA, Corp

Date: 05-Nov-14

Client: Olsson Associates

Project: Chevron Neal 7X Spill 10.23.14

Sample ID: NE7X-SS5

Collection Date: 10/23/2014 12:05 PM

Work Order: 14101514

Lab ID: 14101514-07

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	35		SW8015M		Prep: SW3541 / 10/28/14	Analyst: IT
Surr: 4-Terphenyl-d14	71.8		4.6	mg/Kg-dry	1	10/28/2014 09:09 PM
			39-133	%REC	1	10/28/2014 09:09 PM
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		SW8015		Prep: SW5035 / 10/29/14	Analyst: IT
Surr: Toluene-d8	122		2.8	mg/Kg-dry	1	10/30/2014 02:33 PM
			50-150	%REC	1	10/30/2014 02:33 PM
MERCURY BY CVAA						
Mercury	0.027		SW7471		Prep: SW7471 / 10/29/14	Analyst: LR
			0.018	mg/Kg-dry	1	10/30/2014 01:51 PM
METALS ANALYSIS BY ICP						
Arsenic	7.7		SW846 6010C		Prep: SW3050B / 10/28/14	Analyst: JEC
Barium	270		0.38	mg/Kg-dry	1	10/29/2014 11:09 AM
Cadmium	ND		0.38	mg/Kg-dry	1	10/29/2014 11:09 AM
Chromium	13		0.38	mg/Kg-dry	1	10/29/2014 11:09 AM
Copper	16		0.38	mg/Kg-dry	1	10/29/2014 11:09 AM
Lead	25		0.38	mg/Kg-dry	1	10/29/2014 11:09 AM
Nickel	16		0.38	mg/Kg-dry	1	10/29/2014 11:09 AM
Selenium	0.98		0.76	mg/Kg-dry	1	10/29/2014 11:09 AM
Silver	ND		0.38	mg/Kg-dry	1	10/29/2014 11:09 AM
Zinc	83		0.76	mg/Kg-dry	1	10/29/2014 11:09 AM
SOLUBLE CATIONS FOR SAR						
Calcium	100		SW846 6010C		Prep: USDA Method 20B / 10/28/14	Analyst: JEC
Magnesium	16		5.0	mg/L	10	10/28/2014 02:54 PM
Sodium	200		2.0	mg/L	10	10/28/2014 02:54 PM
SODIUM ADSORPTION RATIO						
Sodium Adsorption Ratio	4.8		USDA H60 METHOD		Prep: USDA Method 20B / 10/28/14	Analyst: JEC
			0.010	none	1	10/28/2014
SEMI-VOLATILE ORGANIC COMPOUNDS						
Acenaphthene	ND		SW846 8270D		Prep: SW3541 / 10/28/14	Analyst: RM
Anthracene	ND		7.4	µg/Kg-dry	1	10/31/2014 04:01 AM
Benzo(a)anthracene	ND		7.4	µg/Kg-dry	1	10/31/2014 04:01 AM
Benzo(a)pyrene	ND		7.4	µg/Kg-dry	1	10/31/2014 04:01 AM
Benzo(b)fluoranthene	ND		7.4	µg/Kg-dry	1	10/31/2014 04:01 AM
Benzo(k)fluoranthene	ND		7.4	µg/Kg-dry	1	10/31/2014 04:01 AM
Chrysene	ND		7.4	µg/Kg-dry	1	10/31/2014 04:01 AM
Dibenzo(a,h)anthracene	ND		7.4	µg/Kg-dry	1	10/31/2014 04:01 AM
Fluoranthene	ND		7.4	µg/Kg-dry	1	10/31/2014 04:01 AM

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

ALS Group USA, Corp

Date: 05-Nov-14

Client: Olsson Associates

Project: Chevron Neal 7X Spill 10.23.14

Sample ID: NE7X-SS5

Collection Date: 10/23/2014 12:05 PM

Work Order: 14101514

Lab ID: 14101514-07

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorene	ND		7.4	µg/Kg-dry	1	10/31/2014 04:01 AM
Indeno(1,2,3-cd)pyrene	ND		7.4	µg/Kg-dry	1	10/31/2014 04:01 AM
Naphthalene	ND		7.4	µg/Kg-dry	1	10/31/2014 04:01 AM
Pyrene	ND		7.4	µg/Kg-dry	1	10/31/2014 04:01 AM
Surr: 2-Fluorobiphenyl	78.0		12-100	%REC	1	10/31/2014 04:01 AM
Surr: 4-Terphenyl-d 14	76.9		25-137	%REC	1	10/31/2014 04:01 AM
Surr: Nitrobenzene-d5	59.7		37-107	%REC	1	10/31/2014 04:01 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B	Prep: SW5035 / 10/29/14		Analyst: RS
Benzene	ND		33	µg/Kg-dry	1	11/1/2014 08:13 AM
Ethylbenzene	ND		33	µg/Kg-dry	1	11/1/2014 08:13 AM
m,p-Xylene	ND		67	µg/Kg-dry	1	11/1/2014 08:13 AM
o-Xylene	ND		33	µg/Kg-dry	1	11/1/2014 08:13 AM
Toluene	ND		33	µg/Kg-dry	1	11/1/2014 08:13 AM
Xylenes, Total	ND		100	µg/Kg-dry	1	11/1/2014 08:13 AM
Surr: 1,2-Dichloroethane-d4	98.4		70-130	%REC	1	11/1/2014 08:13 AM
Surr: 4-Bromofluorobenzene	97.2		70-130	%REC	1	11/1/2014 08:13 AM
Surr: Dibromofluoromethane	92.2		70-130	%REC	1	11/1/2014 08:13 AM
Surr: Toluene-d8	98.6		70-130	%REC	1	11/1/2014 08:13 AM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHOD	Prep: USDA Method 20B / 10/28/14		Analyst: JB
Electrical Conductivity @ Saturation	1.7		0.050	mmhos/cm @25	10	10/28/2014 03:15 PM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: MB
Chromium, Trivalent	13		0.56	mg/Kg-dry	1	10/31/2014 05:30 PM
CHROMIUM, HEXAVALENT			SW7196A	Prep: SW3060A / 10/28/14		Analyst: MB
Chromium, Hexavalent	ND		0.55	mg/Kg-dry	1	10/29/2014 03:00 PM
MOISTURE			A2540 G			Analyst: EVB
Moisture	10		0.050	% of sample	1	10/28/2014 07:45 PM
PH			SW9045D	Prep: EXTRACT / 10/28/14		Analyst: KF
pH	8.6			s.u.	1	10/28/2014 01:21 PM

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

ALS Group USA, Corp**Date:** 05-Nov-14**Client:** Olsson Associates**Project:** Chevron Neal 7X Spill 10.23.14**Work Order:** 14101514**Sample ID:** NE7X-BG3**Lab ID:** 14101514-08**Collection Date:** 10/23/2014 12:15 PM**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS ANALYSIS BY ICP						
Arsenic	7.0		SW846 6010C 0.36	mg/Kg-dry	1	Prep: SW3050B / 10/28/14 Analyst: JEC 10/29/2014 11:15 AM
MOISTURE						
Moisture	4.7		A2540 G 0.050	% of sample	1	Analyst: EVB 10/28/2014 07:45 PM

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

Client: Olsson Associates

QC BATCH REPORT

Work Order: 14101514

Project: Chevron Neal 7X Spill 10.23.14

Batch ID: 64400

Instrument ID GC8

Method: SW8015M

MBLK		Sample ID: DBLKS1-64400-64400				Units:mg/Kg		Analysis Date: 10/28/2014 05:28 PM		
Client ID:			Run ID: GC8_141028A		SeqNo:3005474		Prep Date: 10/28/2014		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	1.237	0	2	0	61.9	39-133	0			

LCS		Sample ID: DLCSS1-64400-64400				Units: mg/Kg		Analysis Date: 10/28/2014 05:56 PM		
Client ID:		Run ID: GC8_141028A			SeqNo: 3005476		Prep Date: 10/28/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	172.6	5.0	200	0	86.3	61-109	0			
<i>Surr: 4-Terphenyl-d14</i>	<i>1.198</i>	<i>0</i>	<i>2</i>	<i>0</i>	<i>59.9</i>	<i>39-133</i>	<i>0</i>			

MS				Sample ID: 14101514-06A MS				Units:mg/Kg			Analysis Date: 10/28/2014 06:23 PM			
Client ID: NE7X-SS4				Run ID: GC8_141028A				SeqNo:3005478			Prep Date: 10/28/2014		DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
DRO (C10-C28)		484.7	8.1	644.2	25.14	71.3	48-110		0					
Surr: 4-Terphenyl-d14		2.641	0	3.221	0	82	39-133		0					

MSD				Sample ID: 14101514-06A MSD				Units:mg/Kg			Analysis Date: 10/28/2014 06:51 PM			
Client ID: NE7X-SS4				Run ID: GC8_141028A				SeqNo:3005480			Prep Date: 10/28/2014		DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
DRO (C10-C28)		301.6	8.0	321.4	25.14	86	48-110	484.7	46.6	30	R			
Surr: 4-Terphenyl-d14		2.232	0	3.214	0	69.4	39-133	2.641	16.8	30				

The following samples were analyzed in this batch:

14101514-01A	14101514-02A	14101514-04A
14101514-06A	14101514-07A	

Client: Olsson Associates
 Work Order: 14101514
 Project: Chevron Neal 7X Spill 10.23.14

QC BATCH REPORT

Batch ID: **64454** Instrument ID **GC10** Method: **SW8015**

MBLK		Sample ID: MBLK-64454-64454				Units: µg/Kg		Analysis Date: 10/30/2014 11:41 AM		
Client ID:		Run ID: GC10_141030A				SeqNo: 3009834		Prep Date: 10/29/2014		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								
<i>Surr: Toluene-d8</i>	5832	0	5000	0	117	50-150	0			

LCS		Sample ID: LCS-64454-64454				Units: µg/Kg		Analysis Date: 10/30/2014 11:18 AM		
Client ID:		Run ID: GC10_141030A				SeqNo: 3009833		Prep Date: 10/29/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	502200	2,500	500000	0	100	70-130	0			
<i>Surr: Toluene-d8</i>	5498	0	5000	0	110	50-150	0			

MS		Sample ID: 14101514-01A MS				Units: µg/Kg		Analysis Date: 10/30/2014 03:21 PM		
Client ID: NE7X-SS1		Run ID: GC10_141030A				SeqNo: 3009841		Prep Date: 10/29/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	583000	2,500	500000	0	117	70-130	0			
<i>Surr: Toluene-d8</i>	6203	0	5000	0	124	50-150	0			

MSD		Sample ID: 14101514-01A MSD				Units: µg/Kg		Analysis Date: 10/30/2014 04:33 PM		
Client ID: NE7X-SS1		Run ID: GC10_141030A				SeqNo: 3009842		Prep Date: 10/29/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	587900	2,500	500000	0	118	70-130	583000	0.827	30	
<i>Surr: Toluene-d8</i>	6057	0	5000	0	121	50-150	6203	2.38	30	

The following samples were analyzed in this batch:

14101514-01A	14101514-02A	14101514-04A
14101514-06A	14101514-07A	

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

Client: Olsson Associates
Work Order: 14101514
Project: Chevron Neal 7X Spill 10.23.14

QC BATCH REPORT

Batch ID: **64452** Instrument ID **HG1** Method: **SW7471**

MBLK		Sample ID: MBLK-64452-64452				Units: mg/Kg		Analysis Date: 10/30/2014 12:44 PM		
Client ID:		Run ID: HG1_141030A				SeqNo: 3008843		Prep Date: 10/29/2014		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-64452-64452				Units: mg/Kg		Analysis Date: 10/30/2014 12:46 PM		
Client ID:		Run ID: HG1_141030A				SeqNo: 3008844		Prep Date: 10/29/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1735 0.020 0.1665 0 104 80-120 0

MS		Sample ID: 14101490-05AMS				Units: mg/Kg		Analysis Date: 10/30/2014 01:19 PM		
Client ID:		Run ID: HG1_141030A				SeqNo: 3008862		Prep Date: 10/29/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1488 0.013 0.1101 0.02941 108 75-125 0

MSD		Sample ID: 14101490-05AMSD				Units: mg/Kg		Analysis Date: 10/30/2014 01:21 PM		
Client ID:		Run ID: HG1_141030A				SeqNo: 3008863		Prep Date: 10/29/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1484 0.013 0.1084 0.02941 110 75-125 0.1488 0.279 35

The following samples were analyzed in this batch:

14101514-01A	14101514-02A	14101514-03A
14101514-04A	14101514-06A	14101514-07A

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

Client: Olsson Associates
Work Order: 14101514
Project: Chevron Neal 7X Spill 10.23.14

QC BATCH REPORT

Batch ID: **64329** Instrument ID **ICP2** Method: **SW846 6010C**

DUP				Sample ID: 14101514-02BDUP				Units: mg/L		Analysis Date: 10/28/2014 02:36 PM	
Client ID: NE7X-SS2				Run ID: ICP2_141028A				SeqNo: 3004761		Prep Date: 10/28/2014	
										DF: 10	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Calcium	1074	5.0	0	0	0	0-0	1116	3.82			
Magnesium	75.64	2.0	0	0	0	0-0	77.06	1.86			

DUP				Sample ID: 14101514-02BDUP				Units: mg/L		Analysis Date: 10/28/2014 03:51 PM	
Client ID: NE7X-SS2				Run ID: ICP2_141028A				SeqNo: 3004772		Prep Date: 10/28/2014	
										DF: 100	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Sodium	4239	20	0	0	0	0-0	4572	7.56			

DUP				Sample ID: 14101514-02BDUP				Units: none		Analysis Date: 10/28/2014	
Client ID: NE7X-SS2				Run ID: SAR_141028A				SeqNo: 3004847		Prep Date: 10/28/2014	
										DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Sodium Adsorption Ratio	33.72	0.010	0	0	0		35.72	5.75	50		

The following samples were analyzed in this batch:

14101514-01B	14101514-02B	14101514-03B
14101514-04B	14101514-06B	14101514-07B

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

Client: Olsson Associates
 Work Order: 14101514
 Project: Chevron Neal 7X Spill 10.23.14

QC BATCH REPORT

Batch ID: **64413** Instrument ID **ICP2** Method: **SW846 6010C**

MBLK		Sample ID: MBLK-64413-64413				Units: mg/Kg		Analysis Date: 10/29/2014 09:59 AM		
Client ID:		Run ID: ICP2_141029A				SeqNo: 3006025		Prep Date: 10/28/2014		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	ND	0.25								
Copper	ND	0.50								
Lead	ND	0.25								
Nickel	ND	0.25								
Selenium	ND	0.50								
Silver	ND	0.25								
Zinc	0.2486	0.50								J

LCS		Sample ID: LCS-64413-64413				Units: mg/Kg		Analysis Date: 10/29/2014 10:04 AM		
Client ID:		Run ID: ICP2_141029A				SeqNo: 3006026		Prep Date: 10/28/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.808	0.25	5	0	96.2	80-120	0			
Barium	4.869	0.25	5	0	97.4	80-120	0			
Cadmium	4.57	0.50	5	0	91.4	80-120	0			
Chromium	5.061	0.25	5	0	101	80-120	0			
Copper	5.043	0.50	5	0	101	80-120	0			
Lead	4.965	0.25	5	0	99.3	80-120	0			
Nickel	4.79	0.25	5	0	95.8	80-120	0			
Selenium	4.833	0.50	5	0	96.7	80-120	0			
Silver	5.265	0.25	5	0	105	80-120	0			
Zinc	5.02	0.50	5	0	100	80-120	0			

MS		Sample ID: 14101514-05AMS				Units: mg/Kg		Analysis Date: 10/29/2014 10:37 AM		
Client ID: NE7X-BG2		Run ID: ICP2_141029A				SeqNo: 3006032		Prep Date: 10/28/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	15.49	0.37	7.496	7.025	113	75-125	0			
Barium	159.9	0.37	7.496	151.9	107	75-125	0			O
Cadmium	6.986	0.75	7.496	-0.0694	94.1	75-125	0			
Chromium	25.09	0.37	7.496	12.44	169	75-125	0			S
Copper	24.4	0.75	7.496	17.31	94.5	75-125	0			
Lead	31.32	0.37	7.496	24.02	97.3	75-125	0			
Nickel	24.36	0.37	7.496	17.43	92.4	75-125	0			
Selenium	9.126	0.75	7.496	1.308	104	75-125	0			
Silver	8.874	0.37	7.496	-0.0458	119	75-125	0			
Zinc	92.9	0.75	7.496	84.31	115	75-125	0			O

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

Client: Olsson Associates
Work Order: 14101514
Project: Chevron Neal 7X Spill 10.23.14

QC BATCH REPORT

Batch ID: **64413** Instrument ID **ICP2** Method: **SW846 6010C**

MSD		Sample ID: 14101514-05AMSD				Units: mg/Kg		Analysis Date: 10/29/2014 10:42 AM		
Client ID: NE7X-BG2		Run ID: ICP2_141029A				SeqNo: 3006033		Prep Date: 10/28/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	15.21	0.38	7.553	7.025	108	75-125	15.49	1.86	20	
Barium	154.5	0.38	7.553	151.9	35	75-125	159.9	3.41	20	SO
Cadmium	6.889	0.76	7.553	-0.0694	92.1	75-125	6.986	1.41	20	
Chromium	24.54	0.38	7.553	12.44	160	75-125	25.09	2.21	20	S
Copper	24.2	0.76	7.553	17.31	91.2	75-125	24.4	0.82	20	
Lead	30.86	0.38	7.553	24.02	90.5	75-125	31.32	1.48	20	
Nickel	24.11	0.38	7.553	17.43	88.4	75-125	24.36	1.03	20	
Selenium	8.839	0.76	7.553	1.308	99.7	75-125	9.126	3.19	20	
Silver	8.717	0.38	7.553	-0.0458	116	75-125	8.874	1.78	20	
Zinc	91.51	0.76	7.553	84.31	95.3	75-125	92.9	1.51	20	O

The following samples were analyzed in this batch:

14101514-01A	14101514-02A	14101514-03A
14101514-04A	14101514-05A	14101514-06A
14101514-07A	14101514-08A	

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

Client: Olsson Associates
 Work Order: 14101514
 Project: Chevron Neal 7X Spill 10.23.14

QC BATCH REPORT

Batch ID: **64399** Instrument ID **SVMS8** Method: **SW846 8270D**

MBLK		Sample ID: SBLKS1-64399-64399				Units: µg/Kg		Analysis Date: 10/28/2014 10:35 PM		
Client ID:		Run ID: SVMS8_141028A				SeqNo: 3007133		Prep Date: 10/28/2014		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	1244	0	1667	0	74.6	12-100	0			
Surr: 4-Terphenyl-d14	1528	0	1667	0	91.7	25-137	0			
Surr: Nitrobenzene-d5	1194	0	1667	0	71.6	37-107	0			

LCS		Sample ID: SLCSS1-64399-64399				Units: µg/Kg		Analysis Date: 10/28/2014 10:56 PM		
Client ID:		Run ID: SVMS8_141028A				SeqNo: 3007134		Prep Date: 10/28/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	566.7	6.7	666.7	0	85	45-110	0			
Anthracene	648.3	6.7	666.7	0	97.2	55-105	0			
Benzo(a)anthracene	631.3	6.7	666.7	0	94.7	50-110	0			
Benzo(a)pyrene	692	6.7	666.7	0	104	50-110	0			
Benzo(b)fluoranthene	668.3	6.7	666.7	0	100	45-115	0			
Benzo(k)fluoranthene	702.3	6.7	666.7	0	105	45-115	0			
Chrysene	658.3	6.7	666.7	0	98.7	55-110	0			
Dibenzo(a,h)anthracene	637.3	6.7	666.7	0	95.6	40-125	0			
Fluoranthene	640.3	6.7	666.7	0	96	55-115	0			
Fluorene	578.3	6.7	666.7	0	86.7	50-110	0			
Indeno(1,2,3-cd)pyrene	622.7	6.7	666.7	0	93.4	40-120	0			
Naphthalene	572	6.7	666.7	0	85.8	40-105	0			
Pyrene	648.7	6.7	666.7	0	97.3	45-125	0			
Surr: 2-Fluorobiphenyl	1323	0	1667	0	79.4	12-100	0			
Surr: 4-Terphenyl-d14	1609	0	1667	0	96.5	25-137	0			
Surr: Nitrobenzene-d5	1329	0	1667	0	79.7	37-107	0			

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

Client: Olsson Associates
 Work Order: 14101514
 Project: Chevron Neal 7X Spill 10.23.14

QC BATCH REPORT

Batch ID: **64399** Instrument ID **SVMS8** Method: **SW846 8270D**

MS				Sample ID: 14101382-01A MS				Units: µg/Kg		Analysis Date: 10/29/2014 01:07 AM	
Client ID:			Run ID: SVMS8_141028A			SeqNo: 3007138		Prep Date: 10/28/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	2924	13	1281	6923	-312	45-110	0			SO	
Anthracene	6902	13	1281	22700	-1230	55-105	0			SEO	
Benzo(a)anthracene	19560	13	1281	52500	-2570	50-110	0			SEO	
Benzo(a)pyrene	13290	13	1281	24000	-836	50-110	0			SEO	
Benzo(b)fluoranthene	39510	13	1281	78170	-3020	45-115	0			SEO	
Benzo(k)fluoranthene	11100	13	1281	13310	-172	45-115	0			SEO	
Chrysene	23920	13	1281	37100	-1030	55-110	0			SEO	
Dibenzo(a,h)anthracene	6048	13	1281	13120	-552	40-125	0			SEO	
Fluoranthene	52580	13	1281	108000	-4330	55-115	0			SEO	
Fluorene	2938	13	1281	6506	-279	50-110	0			SO	
Indeno(1,2,3-cd)pyrene	13170	13	1281	14600	-111	40-120	0			SEO	
Naphthalene	2071	13	1281	2950	-68.6	40-105	0			S	
Pyrene	35270	13	1281	71330	-2820	45-125	0			SEO	
Surr: 2-Fluorobiphenyl	2124	0	3202	0	66.3	12-100	0				
Surr: 4-Terphenyl-d14	1925	0	3202	0	60.1	25-137	0				
Surr: Nitrobenzene-d5	1927	0	3202	0	60.2	37-107	0				

MSD				Sample ID: 14101382-01A MSD			Units: µg/Kg		Analysis Date: 10/29/2014 01:27 AM		
Client ID:			Run ID: SVMS8_141028A			SeqNo: 3007139		Prep Date: 10/28/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	4327	13	1303	6923	-199	45-110	2924	38.7	30	SREO	
Anthracene	12120	13	1303	22700	-812	55-105	6902	54.9	30	SREO	
Benzo(a)anthracene	25030	13	1303	52500	-2110	50-110	19560	24.5	30	SEO	
Benzo(a)pyrene	15140	13	1303	24000	-680	50-110	13290	13	30	SEO	
Benzo(b)fluoranthene	33830	13	1303	78170	-3400	45-115	39510	15.5	30	SEO	
Benzo(k)fluoranthene	11560	13	1303	13310	-134	45-115	11100	4.12	30	SEO	
Chrysene	23350	13	1303	37100	-1060	55-110	23920	2.43	30	SEO	
Dibenzo(a,h)anthracene	6869	13	1303	13120	-480	40-125	6048	12.7	30	SEO	
Fluoranthene	79260	13	1303	108000	-2210	55-115	52580	40.5	30	SREO	
Fluorene	4390	13	1303	6506	-162	50-110	2938	39.6	30	SREO	
Indeno(1,2,3-cd)pyrene	12340	13	1303	14600	-173	40-120	13170	6.48	30	SEO	
Naphthalene	2173	13	1303	2950	-59.7	40-105	2071	4.78	30	S	
Pyrene	50130	13	1303	71330	-1630	45-125	35270	34.8	30	SREO	
Surr: 2-Fluorobiphenyl	1852	0	3257	0	56.9	12-100	2124	13.7	40		
Surr: 4-Terphenyl-d14	1577	0	3257	0	48.4	25-137	1925	19.9	40		
Surr: Nitrobenzene-d5	1720	0	3257	0	52.8	37-107	1927	11.4	40		

The following samples were analyzed in this batch:

14101514-01A	14101514-02A	14101514-04A
14101514-06A	14101514-07A	

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

Client: Olsson Associates
 Work Order: 14101514
 Project: Chevron Neal 7X Spill 10.23.14

QC BATCH REPORT

Batch ID: **64455** Instrument ID **VMS6** Method: **SW8260B**

MBLK				Sample ID: MBLK-64455-64455				Units: µg/Kg			Analysis Date: 10/29/2014 02:08 PM			
Client ID:				Run ID: VMS6_141029A				SeqNo:3007669			Prep Date: 10/29/2014		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	967	0	1000	0	96.7	70-130	0							
Surr: 4-Bromofluorobenzene	939	0	1000	0	93.9	70-130	0							
Surr: Dibromofluoromethane	963	0	1000	0	96.3	70-130	0							
Surr: Toluene-d8	978.5	0	1000	0	97.8	70-130	0							

LCS				Sample ID: LCS-64455-64455			Units: µg/Kg		Analysis Date: 10/29/2014 12:51 PM		
Client ID:			Run ID: VMS6_141029A			SeqNo:3007667		Prep Date: 10/29/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	1040	30	1000	0	104	75-125	0				
Ethylbenzene	1050	30	1000	0	105	75-125	0				
m,p-Xylene	2024	60	2000	0	101	80-125	0				
o-Xylene	991	30	1000	0	99.1	75-125	0				
Toluene	1015	30	1000	0	102	70-125	0				
Xylenes, Total	3015	90	3000	0	100	75-125	0				
Surr: 1,2-Dichloroethane-d4	996	0	1000	0	99.6	70-130	0				
Surr: 4-Bromofluorobenzene	962.5	0	1000	0	96.2	70-130	0				
Surr: Dibromofluoromethane	1010	0	1000	0	101	70-130	0				
Surr: Toluene-d8	980.5	0	1000	0	98	70-130	0				

MS				Sample ID: 14101623-01A MS				Units: µg/Kg		Analysis Date: 10/30/2014 09:40 PM	
Client ID:			Run ID: VMS9_141030A			SeqNo:3010523		Prep Date: 10/29/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	1006	30	1000	0	101	75-125	0				
Ethylbenzene	955.5	30	1000	0	95.6	75-125	0				
m,p-Xylene	1920	60	2000	0	96	80-125	0				
o-Xylene	957.5	30	1000	0	95.8	75-125	0				
Toluene	945	30	1000	0	94.5	70-125	0				
Xylenes, Total	2877	90	3000	0	95.9	75-125	0				
Surr: 1,2-Dichloroethane-d4	981.5	0	1000	0	98.2	70-130	0				
Surr: 4-Bromofluorobenzene	1032	0	1000	0	103	70-130	0				
Surr: Dibromofluoromethane	962.5	0	1000	0	96.2	70-130	0				
Surr: Toluene-d8	979	0	1000	0	97.9	70-130	0				

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

Client: Olsson Associates
Work Order: 14101514
Project: Chevron Neal 7X Spill 10.23.14

QC BATCH REPORT

Batch ID: **64455** Instrument ID **VMS6** Method: **SW8260B**

MSD				Sample ID: 14101623-01A MSD				Units: µg/Kg		Analysis Date: 10/30/2014 10:04 PM	
Client ID:			Run ID: VMS9_141030A			SeqNo: 3010525		Prep Date: 10/29/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	1000	30	1000	0	100	75-125	1006	0.548	30		
Ethylbenzene	954.5	30	1000	0	95.4	75-125	955.5	0.105	30		
m,p-Xylene	1923	60	2000	0	96.2	80-125	1920	0.182	30		
o-Xylene	959.5	30	1000	0	96	75-125	957.5	0.209	30		
Toluene	940	30	1000	0	94	70-125	945	0.531	30		
Xylenes, Total	2882	90	3000	0	96.1	75-125	2877	0.191	30		
Surr: 1,2-Dichloroethane-d4	981.5	0	1000	0	98.2	70-130	981.5	0	30		
Surr: 4-Bromofluorobenzene	1032	0	1000	0	103	70-130	1032	0.0969	30		
Surr: Dibromofluoromethane	970	0	1000	0	97	70-130	962.5	0.776	30		
Surr: Toluene-d8	983.5	0	1000	0	98.4	70-130	979	0.459	30		

The following samples were analyzed in this batch:

14101514-01A	14101514-02A	14101514-04A
14101514-06A	14101514-07A	

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

Client: Olsson Associates
Work Order: 14101514
Project: Chevron Neal 7X Spill 10.23.14

QC BATCH REPORT

Batch ID: **64329** Instrument ID **WETCHEM** Method: **USDA H60 Method**

DUP		Sample ID: 14101514-02B DUP				Units: mmhos/cm @25°C		Analysis Date: 10/28/2014 03:15 PM		
Client ID: NE7X-SS2		Run ID: WETCHEM_141028G				SeqNo: 3004555		Prep Date: 10/28/2014		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	27	0.050	0	0	0		28.7	6.1	50	

The following samples were analyzed in this batch:

14101514-01B	14101514-02B	14101514-03B
14101514-04B	14101514-06B	14101514-07B

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

Client: Olsson Associates
Work Order: 14101514
Project: Chevron Neal 7X Spill 10.23.14

QC BATCH REPORT

Batch ID: **64417** Instrument ID **WETCHEM** Method: **SW9045D**

LCS				Sample ID: LCS-64417-64417				Units: s.u.			Analysis Date: 10/28/2014 01:21 PM			
Client ID:				Run ID: WETCHEM_141028F				SeqNo: 3004381			Prep Date: 10/28/2014		DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
pH		4	0	4	0	100	90-110	0						

DUP				Sample ID: 14101458-01B DUP				Units: s.u.			Analysis Date: 10/28/2014 01:21 PM			
Client ID:				Run ID: WETCHEM_141028F				SeqNo: 3004383			Prep Date: 10/28/2014		DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
pH		7.73	0	0	0	0	0-0	7.67	0.779	20				

Sample ID: 14101514-01A DUP				Units: s.u.			Analysis Date: 10/28/2014 01:21 PM				
Client ID: NE7X-SS1			Run ID: WETCHEM_141028F			SeqNo: 3004389		Prep Date: 10/28/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
pH	8.29	0	0	0	0	0-0	8.17	1.46	20		

The following samples were analyzed in this batch:

14101514-01A	14101514-02A	14101514-03A
14101514-04A	14101514-06A	14101514-07A

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

Client: Olsson Associates
 Work Order: 14101514
 Project: Chevron Neal 7X Spill 10.23.14

QC BATCH REPORT

Batch ID: **64462** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK		Sample ID: MBLK-64462-64462				Units: mg/Kg		Analysis Date: 10/29/2014 03:00 PM		
Client ID:		Run ID: WETCHEM_141029K				SeqNo: 3007130		Prep Date: 10/28/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent ND 0.50

LCS		Sample ID: LCS-64462-64462				Units: mg/Kg		Analysis Date: 10/29/2014 03:00 PM		
Client ID:		Run ID: WETCHEM_141029K				SeqNo: 3007129		Prep Date: 10/28/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.82 0.50 2 0 91 80-120 0

MS		Sample ID: 14101514-03A MS				Units: mg/Kg		Analysis Date: 10/29/2014 03:00 PM		
Client ID: NE7X-BG1		Run ID: WETCHEM_141029K				SeqNo: 3007117		Prep Date: 10/28/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.588 0.49 1.961 0.06324 77.8 75-125 0

MS		Sample ID: 14101514-03A MSI				Units: mg/Kg		Analysis Date: 10/29/2014 03:00 PM		
Client ID: NE7X-BG1		Run ID: WETCHEM_141029K				SeqNo: 3007119		Prep Date: 10/28/2014		DF: 100
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 986.1 50 968 0.06324 102 75-125 0

MSD		Sample ID: 14101514-03A MSD				Units: mg/Kg		Analysis Date: 10/29/2014 03:00 PM		
Client ID: NE7X-BG1		Run ID: WETCHEM_141029K				SeqNo: 3007118		Prep Date: 10/28/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.713 0.50 1.992 0.06324 82.8 75-125 1.588 7.57 20

The following samples were analyzed in this batch:

14101514-01A	14101514-02A	14101514-03A
14101514-04A	14101514-06A	14101514-07A

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

Client: Olsson Associates
Work Order: 14101514
Project: Chevron Neal 7X Spill 10.23.14

QC BATCH REPORT

Batch ID: **R151418** Instrument ID **MOIST** Method: **A2540 G**

MBLK		Sample ID: WBLKS-R151418				Units: % of sample		Analysis Date: 10/28/2014 07:45 PM		
Client ID:		Run ID: MOIST_141028E				SeqNo: 3010006		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-R151418				Units: % of sample		Analysis Date: 10/28/2014 07:45 PM		
Client ID:		Run ID: MOIST_141028E				SeqNo: 3010005		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 99.99 0.050 100 0 100 99.5-100.5 0

DUP		Sample ID: 14101514-07A DUP				Units: % of sample		Analysis Date: 10/28/2014 07:45 PM		
Client ID: NE7X-SS5		Run ID: MOIST_141028E				SeqNo: 3009998		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 10.74 0.050 0 0 0 0-0 10.32 3.99 20

DUP		Sample ID: 14101549-01A DUP				Units: % of sample		Analysis Date: 10/28/2014 07:45 PM		
Client ID:		Run ID: MOIST_141028E				SeqNo: 3010001		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 2.09 0.050 0 0 0 0-0 2.19 4.67 20

The following samples were analyzed in this batch:

14101514-01A	14101514-02A	14101514-03A
14101514-04A	14101514-05A	14101514-06A
14101514-07A	14101514-08A	

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 5655

☐ 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

ALS Project Manager:

Work Order #

14101514

Customer Information

Purchase Order: _____
Work Order: _____
Company Name: Olason Associates
Send Report To: Tim Dobransky
Address: 760 Horizon Drive, Ste. 102
City/State/Zip: Grand Junction, CO 81506
Phone: 970.263.7800
Fax: 970.263.7456
e-Mail Address: tdobransky@olasonutltd.com

Project Information

Project Name: Chevron Naal 7X Spill
Project Number: 013.3287.100.100004
BRI To Company: Olason Associates
Invoice Attn: Tim Dobransky
Address: 760 Horizon Drive, Ste. 102
City/State/Zip: Grand Junction, CO 81506
Phone: 970.263.7800
Fax: 970.263.7456
e-Mail Address: _____

Parameter/Method Request for Analysis

A TPH (GRO & DRO)
B BTEX
C PAH (See Attached List) CO Table 910
D Electrical Conductivity
E Sodium Adsorption Ratio
F pH
G Metals (See Attached List) CO Table 910
H Arsenic Only
I _____
J _____

No.	Sample Description	Date	Time	Matrix	Pres.	# Batches	A	B	C	D	E	F	G	H	I	J	Hold
1	NE7X-SS1	10/23/14	1055	Soil	8	2	X	X	X	X	X	X	X				
2	NE7X-SS2	10/23/14	1105	Soil	8	2	X	X	X	X	X	X	X				
3	NE7X-BG1	10/23/14	1115	Soil	8	2				X	X	X	X				
4	NE7X-SS3	10/23/14	1120	Soil	8	2	X	X	X	X	X	X	X				
5	NE7X-BG2	10/23/14	1125	Soil	8	1								X			
6	NE7X-SS4	10/23/14	1155	Soil	8	2	X	X	X	X	X	X	X				
7	NE7X-SS5	10/23/14	1205	Soil	8	2	X	X	X	X	X	X	X				
8	NE7X-BG3	10/23/14	1215	Soil	8	1								X			
9																	
10																	
11																	
12																	

Sampler(s): Please Print & Sign: Tim Dobransky
Shipment Method: FedEx
Required Turnaround Time: ☒ STD 10 Wk Days ☐ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour
Results Due Date: _____
Relinquished by: [Signature] Date: 10/24/14 Time: 9:15
Received by: [Signature] Date: 10/24/14 Time: 1
Notes: Chevron Pricing Applies - Per Bruce Schlatter
Relinquished by: [Signature] Date: 10/24/14 Time: 1
Received by (Laboratory): [Signature] Date: 10/25/14 Time: 1000
Cooler Temp: 3.8C
QC Package: (Check Box Below)
☒ Level II: Standard QC
☐ Level III: Std QC + Raw Data
☐ 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.

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Sample Receipt Checklist

Client Name: **OLSSON**

Date/Time Received: **25-Oct-14 10:00**

Work Order: **14101514**

Received by: **TBB**

Checklist completed by <u><i>Ann Preston</i></u>	26-Oct-14	Reviewed by: <u><i>Ann Preston</i></u>	26-Oct-14
eSignature	Date	eSignature	Date

Matrices: **soil**

Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample(s) received on ice?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>3.8°C</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:			
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

From: (616) 399-8070
 Nick Martinez
 ALS Environmental
 127 E 1st Street

Origin ID: RLJA



Ship Date: 24OCT14
 ActWgt: 64.0 LB
 CAD: 2294840/NET3550

Dim: 24 X 15 X 15 IN

Parachute, CO 81835

BMP TO: (616) 399-8070

BILL RENDER

sample receiving
 ALS Laboratory Group
 3352 128TH AVE

HOLLAND, MI 49424

Delivery Address Bar Code



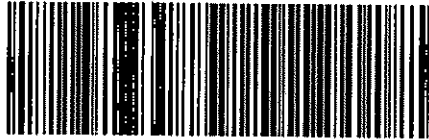
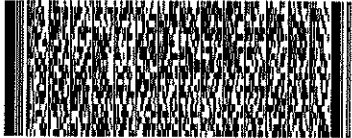
Ref # 102414-1
 Invoice #
 PO # Parachute
 Dept #

SATURDAY 12:00P
 PRIORITY OVERNIGHT

TRK# 7716 2326 5918
 6291

X0 HLMA

49424
 ME-US
 GRR



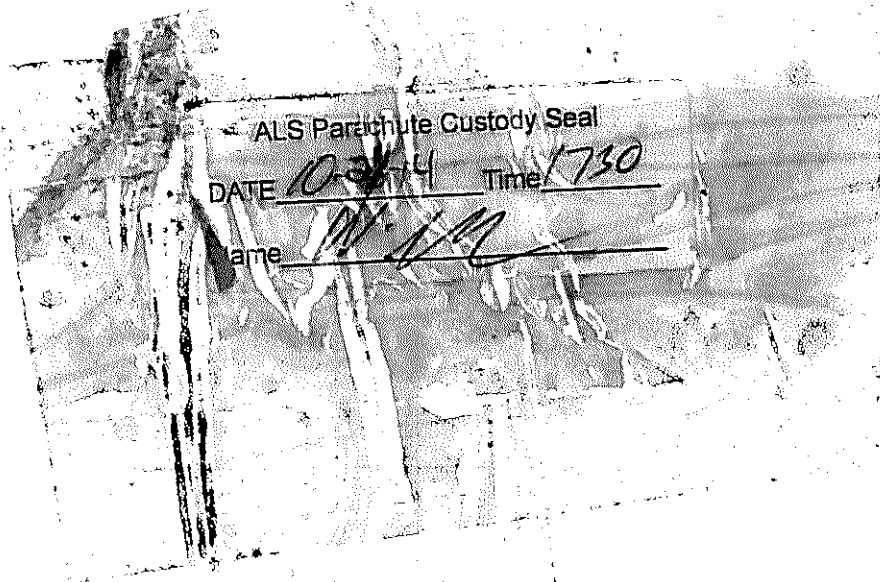
5201DFR5AC2

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 ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.





15-Aug-2019

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

Re: **Neal 7X Resample**

Work Order: **19070856**

Dear Tim,

ALS Environmental received 2 samples on 13-Jul-2019 10:00 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 13.

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: Neal 7X Resample
Work Order: 19070856

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>
19070856-01	NEAL7X-SS2	Soil		7/11/2019 10:00	7/13/2019 10:00	<input type="checkbox"/>
19070856-02	NEAL7X-SS3	Soil		7/11/2019 10:15	7/13/2019 10:00	<input type="checkbox"/>

Client: Entrada Consulting Group**Project:** Neal 7X Resample**Work Order:** 19070856**Case Narrative**

Batch 140427, Method SVO_8270_S, Sample 19070856-01A: Sample was analyzed outside of the holding time at the request of the client. Results should be considered estimated.

Batch R267784, Method MOISTURE, Sample 19070856-01A: Sample was analyzed outside of the holding time at the request of the client. Results should be considered estimated.

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

ALS Group, USA

Date: 15-Aug-19

Client: Entrada Consulting Group
Project: Neal 7X Resample
Sample ID: NEAL7X-SS2
Collection Date: 7/11/2019 10:00 AM

Work Order: 19070856
Lab ID: 19070856-01
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
SOLUBLE CATIONS FOR SAR							
			Method: SW6020A		Prep: USDA Method 20B / 7/18/19		Analyst: ABL
Calcium	110		2.5	5.0	mg/L	10	7/19/2019 00:06
Magnesium	14		0.50	2.0	mg/L	10	7/19/2019 00:06
Sodium	28		0.45	2.0	mg/L	10	7/19/2019 00:06
SODIUM ADSORPTION RATIO							
			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 7/18/19		Analyst: ABL
Sodium Adsorption Ratio	0.67		0.010	0.010	none	1	7/18/2019
SEMI-VOLATILE ORGANIC COMPOUNDS							
			Method: SW846 8270D		Prep: SW3546 / 8/7/19		Analyst: EE
Acenaphthene	U	H	0.014	0.019	mg/Kg-dry	1	8/9/2019 00:01
Anthracene	U	H	0.014	0.019	mg/Kg-dry	1	8/9/2019 00:01
Benzo(a)anthracene	U	H	0.017	0.019	mg/Kg-dry	1	8/9/2019 00:01
Benzo(a)pyrene	U	H	0.012	0.019	mg/Kg-dry	1	8/9/2019 00:01
Benzo(b)fluoranthene	U	H	0.014	0.019	mg/Kg-dry	1	8/9/2019 00:01
Benzo(k)fluoranthene	U	H	0.015	0.019	mg/Kg-dry	1	8/9/2019 00:01
Chrysene	U	H	0.016	0.019	mg/Kg-dry	1	8/9/2019 00:01
Dibenzo(a,h)anthracene	U	H	0.010	0.019	mg/Kg-dry	1	8/9/2019 00:01
Fluoranthene	U	H	0.0092	0.019	mg/Kg-dry	1	8/9/2019 00:01
Fluorene	U	H	0.014	0.019	mg/Kg-dry	1	8/9/2019 00:01
Indeno(1,2,3-cd)pyrene	U	H	0.013	0.019	mg/Kg-dry	1	8/9/2019 00:01
Naphthalene	U	H	0.012	0.019	mg/Kg-dry	1	8/9/2019 00:01
Pyrene	U	H	0.0035	0.019	mg/Kg-dry	1	8/9/2019 00:01
Surr: 2-Fluorobiphenyl	74.4			44-107	%REC	1	8/9/2019 00:01
Surr: 4-Terphenyl-d14	84.8			52-123	%REC	1	8/9/2019 00:01
Surr: Nitrobenzene-d5	77.9			41-94	%REC	1	8/9/2019 00:01
ELECTRICAL CONDUCTIVITY (SAR)							
			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 7/18/19		Analyst: QTN
Electrical Conductivity @ Saturation	0.88		0.011	0.10	mmhos/cm @25°	20	7/19/2019 10:33
MOISTURE							
			Method: SW3550C		Analyst: MMO		
Moisture	3.8	H	0.10	0.10	% of sample	1	8/7/2019 08:54

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

ALS Group, USA

Date: 15-Aug-19

Client: Entrada Consulting Group
Project: Neal 7X Resample
Sample ID: NEAL7X-SS3
Collection Date: 7/11/2019 10:15 AM

Work Order: 19070856
Lab ID: 19070856-02
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
<hr/>							
SOLUBLE CATIONS FOR SAR			Method: SW6020A		Prep: USDA Method 20B / 7/18/19		Analyst: ABL
Calcium	140		2.5	5.0	mg/L	10	7/19/2019 00:08
Magnesium	20		0.50	2.0	mg/L	10	7/19/2019 00:08
Sodium	29		0.45	2.0	mg/L	10	7/19/2019 00:08
<hr/>							
SODIUM ADSORPTION RATIO			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 7/18/19		Analyst: ABL
Exchangeable Sodium Percentage	U		0.010	0.010	none	1	7/18/2019
Sodium Adsorption Ratio	0.62		0.010	0.010	none	1	7/18/2019
<hr/>							
ELECTRICAL CONDUCTIVITY (SAR)			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 7/18/19		Analyst: QTN
Electrical Conductivity @ Saturation	1.1		0.011	0.10	mmhos/cm @25°	20	7/19/2019 10:33

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

ALS Group, USA

Date: 15-Aug-19

Client: Entrada Consulting Group
Work Order: 19070856
Project: Neal 7X Resample

QC BATCH REPORT

Batch ID: **139454** Instrument ID **ICPMS3** Method: **SW6020A**

DUP		Sample ID: 19070844-01ADUP				Units: mg/L		Analysis Date: 7/18/2019 11:53 PM		
Client ID:		Run ID: ICPMS3_190718A				SeqNo: 5791938		Prep Date: 7/18/2019		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	100.8	5.0	0	0	0	0-0	91.46	9.7		
Magnesium	14.5	2.0	0	0	0	0-0	13.5	7.15		
Sodium	7.091	2.0	0	0	0	0-0	7.139	0.681		

The following samples were analyzed in this batch:

19070856-01A	19070856-02A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Entrada Consulting Group
 Work Order: 19070856
 Project: Neal 7X Resample

QC BATCH REPORT

Batch ID: 140427 Instrument ID SVMS9 Method: SW846 8270D

MBLK		Sample ID: SBLKS1-140427-140427				Units: µg/Kg		Analysis Date: 8/8/2019 06:39 PM		
Client ID:		Run ID: SVMS9_190808A				SeqNo: 5834259		Prep Date: 8/7/2019		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	U	6.7								
Anthracene	U	6.7								
Benzo(a)anthracene	U	6.7								
Benzo(a)pyrene	U	6.7								
Benzo(b)fluoranthene	U	6.7								
Benzo(k)fluoranthene	U	6.7								
Chrysene	U	6.7								
Dibenzo(a,h)anthracene	U	6.7								
Fluoranthene	U	6.7								
Fluorene	U	6.7								
Indeno(1,2,3-cd)pyrene	U	6.7								
Naphthalene	U	6.7								
Pyrene	U	6.7								
Surr: 2-Fluorobiphenyl	2475	0	3333	0	74.2	44-107	0			
Surr: 4-Terphenyl-d14	2836	0	3333	0	85.1	52-123	0			
Surr: Nitrobenzene-d5	2579	0	3333	0	77.4	41-94	0			

LCS		Sample ID: SLCSS1-140427-140427				Units: µg/Kg		Analysis Date: 8/8/2019 07:04 PM		
Client ID:		Run ID: SVMS9_190808A				SeqNo: 5834260		Prep Date: 8/7/2019		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1063	6.7	1333	0	79.7	55-101	0			
Anthracene	1103	6.7	1333	0	82.8	67-105	0			
Benzo(a)anthracene	1088	6.7	1333	0	81.6	68-105	0			
Benzo(a)pyrene	1199	6.7	1333	0	90	68-110	0			
Benzo(b)fluoranthene	1087	6.7	1333	0	81.6	65-110	0			
Benzo(k)fluoranthene	1114	6.7	1333	0	83.6	66-113	0			
Chrysene	1111	6.7	1333	0	83.3	68-108	0			
Dibenzo(a,h)anthracene	1139	6.7	1333	0	85.4	62-119	0			
Fluoranthene	1103	6.7	1333	0	82.7	67-106	0			
Fluorene	1108	6.7	1333	0	83.1	59-107	0			
Indeno(1,2,3-cd)pyrene	1124	6.7	1333	0	84.3	56-120	0			
Naphthalene	1014	6.7	1333	0	76.1	46-98	0			
Pyrene	1155	6.7	1333	0	86.7	60-119	0			
Surr: 2-Fluorobiphenyl	2501	0	3333	0	75	44-107	0			
Surr: 4-Terphenyl-d14	2797	0	3333	0	83.9	52-123	0			
Surr: Nitrobenzene-d5	2570	0	3333	0	77.1	41-94	0			

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

Client: Entrada Consulting Group
Work Order: 19070856
Project: Neal 7X Resample

QC BATCH REPORT

Batch ID: **140427** Instrument ID **SVMS9** Method: **SW846 8270D**

MS				Sample ID: 19080415-05B MS			Units: µg/Kg		Analysis Date: 8/8/2019 07:29 PM		
Client ID:			Run ID: SVMS9_190808A			SeqNo: 5834261		Prep Date: 8/7/2019		DF: 20	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	1111	130	1277	0	87	55-101	0				
Anthracene	1111	130	1277	0	87	67-105	0				
Benzo(a)anthracene	1149	130	1277	0	90	68-105	0				
Benzo(a)pyrene	1213	130	1277	0	95	68-110	0				
Benzo(b)fluoranthene	1022	130	1277	0	80	65-110	0				
Benzo(k)fluoranthene	1149	130	1277	0	90	66-113	0				
Chrysene	1149	130	1277	0	90	68-108	0				
Dibenzo(a,h)anthracene	1290	130	1277	0	101	62-119	0				
Fluoranthene	1137	130	1277	0	89	67-106	0				
Fluorene	1085	130	1277	0	85	59-107	0				
Indeno(1,2,3-cd)pyrene	1162	130	1277	0	91	56-120	0				
Naphthalene	1111	130	1277	0	87	46-98	0				
Pyrene	1226	130	1277	0	96	60-119	0				
Surr: 2-Fluorobiphenyl	2861	0	3192	0	89.6	44-107	0				
Surr: 4-Terphenyl-d14	3129	0	3192	0	98	52-123	0				
Surr: Nitrobenzene-d5	2720	0	3192	0	85.2	41-94	0				

MSD				Sample ID: 19080415-05B MSD				Units: µg/Kg		Analysis Date: 8/8/2019 07:54 PM	
Client ID:		Run ID: SVMS9_190808A			SeqNo: 5834262		Prep Date: 8/7/2019		DF: 20		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	1048	130	1309	0	80	55-101	1111	5.87	30		
Anthracene	1166	130	1309	0	89	67-105	1111	4.79	30		
Benzo(a)anthracene	1074	130	1309	0	82	68-105	1149	6.79	30		
Benzo(a)pyrene	1113	130	1309	0	85	68-110	1213	8.6	30		
Benzo(b)fluoranthene	1021	130	1309	0	78	65-110	1022	0.0165	30		
Benzo(k)fluoranthene	1035	130	1309	0	79	66-113	1149	10.5	30		
Chrysene	1139	130	1309	0	87	68-108	1149	0.875	30		
Dibenzo(a,h)anthracene	1152	130	1309	0	88	62-119	1290	11.3	30		
Fluoranthene	1100	130	1309	0	84	67-106	1137	3.27	30		
Fluorene	1218	130	1309	0	93	59-107	1085	11.5	30		
Indeno(1,2,3-cd)pyrene	1008	130	1309	0	77	56-120	1162	14.2	30		
Naphthalene	1035	130	1309	0	79	46-98	1111	7.13	30		
Pyrene	1179	130	1309	0	90	60-119	1226	3.94	30		
Surr: 2-Fluorobiphenyl	2868	0	3274	0	87.6	44-107	2861	0.258	40		
Surr: 4-Terphenyl-d14	2868	0	3274	0	87.6	52-123	3129	8.7	40		
Surr: Nitrobenzene-d5	2711	0	3274	0	82.8	41-94	2720	0.342	40		

The following samples were analyzed in this batch:

19070856-01A

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

Client: Entrada Consulting Group
Work Order: 19070856
Project: Neal 7X Resample

QC BATCH REPORT

Batch ID: **139454** Instrument ID **WETCHEM** Method: **USDA H60 Metho**

DUP		Sample ID: 19070844-01A DUP				Units: mmhos/cm @25°		Analysis Date: 7/19/2019 10:33 AM		
Client ID:		Run ID: WETCHEM_190719H				SeqNo: 5793429		Prep Date: 7/18/2019		DF: 20
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	0.628	0.10	0	0	0		0.584	7.26	50	

The following samples were analyzed in this batch:

19070856-01A	19070856-02A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Entrada Consulting Group
Work Order: 19070856
Project: Neal 7X Resample

QC BATCH REPORT

Batch ID: **R267784** Instrument ID **MOIST** Method: **SW3550C**

MBLK		Sample ID: WBLKS-R267784				Units: % of sample		Analysis Date: 8/7/2019 08:54 AM		
Client ID:		Run ID: MOIST_190807A		SeqNo: 5830248		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-R267784				Units: % of sample		Analysis Date: 8/7/2019 08:54 AM		
Client ID:		Run ID: MOIST_190807A		SeqNo: 5830247		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: 19080295-11A DUP				Units: % of sample		Analysis Date: 8/7/2019 08:54 AM		
Client ID:		Run ID: MOIST_190807A		SeqNo: 5830237		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 2.92 0.10 0 0 0 0-0 3.07 5.01 10

The following samples were analyzed in this batch:

19070856-01A

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 |

ALS Project Manager:						Work Order #: 9070856											
Customer Information						Project Information						Parameter/Method Request for Analysis					
Purchase Order			Project Name			A			TPH (GRO & DRO)								
Work Order			Project Number			B			BTEX								
Company Name			Bill To Company			C			PAH (See Attached List) CO Table 910								
Send Report To			Invoice Attn.			D			Electrical Conductivity								
Address			Address			E			Sodium Adsorption Ratio								
City/State/Zip			City/State/Zip			F			pH								
Phone			Phone			G			Metals (See Attached List) CO Table 910								
Fax			Fax			H			Arsenic Only								
e-Mail Address			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	NEAL7X-SS2	07/11/19	1000	Soil	8	1				X	X						
2	NEAL7X-SS3	07/11/19	1015	Soil	8	1				X							
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s): Please Print & Sign			Shipment Method:		Required Turnaround Time:			Results Due Date:	
Tim Dobransky			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 <input type="checkbox"/> Other _____				
Relinquished by:		Date:	Time:	Received by:		Notes:			
		7/12/19	1700			Chevron Pricing Applies - Per Bruce Schlatter			
Relinquished by:		Date:	Time:	Received by (Laboratory):		QC Package: (Check Box Below)			
		7-12-19	1630			<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 <input type="checkbox"/> Other: _____			
Logged by (Laboratory):		Date:	Time:	Checked by (Laboratory):		Cooler Temp.			
DFS		7/15/19	1500			SP2 4.8°C			
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.

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Sample Receipt Checklist

Client Name: **ENTRADA**

Date/Time Received: **13-Jul-19 10:00**

Work Order: **19070856**

Received by: **DS**

Checklist completed by Diane Shaw
eSignature

15-Jul-19
Date

Reviewed by: Chad Whelton
eSignature

16-Jul-19
Date

Matrices: **Soil**

Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample(s) received on ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>4.8/4.8 c</u>		<u>SR2</u>
Cooler(s)/Kit(s):	<u></u>		
Date/Time sample(s) sent to storage:	<u>7/15/2019 3:23:03 PM</u>		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:	<u>-</u>		

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:



05-Nov-2019

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

Re: **Chevron Neal 7X Spill**

Work Order: **19101625**

Dear Tim,

ALS Environmental received 2 samples on 19-Oct-2019 10:00 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 11.

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 Neal 7X Spill
Work Order: 19101625

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>
19101625-01	NE7X-SS1	Soil		10/17/2019 12:15	10/19/2019 10:00	<input type="checkbox"/>
19101625-02	NE7X-SS4	Soil		10/17/2019 12:25	10/19/2019 10:00	<input type="checkbox"/>

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
**	Estimated Value
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
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
mg/Kg-dry	Milligrams per Kilogram Dry Weight
mg/L	Milligrams per Liter
mmhos/cm @25°C	Millimhos-Centimeter at 25 Degrees Celcius
none	

ALS Group, USA

Date: 05-Nov-19

Client: Entrada Consulting Group
Project: Chevron Neal 7X Spill
Sample ID: NE7X-SS1
Collection Date: 10/17/2019 12:15 PM

Work Order: 19101625
Lab ID: 19101625-01
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
SOLUBLE CATIONS FOR SAR							
			Method: SW6020A		Prep: USDA Method 20B / 10/31/19		Analyst: STP
Calcium	73		2.5	5.0	mg/L	10	11/1/2019 18:10
Magnesium	7.2		0.50	2.0	mg/L	10	11/1/2019 18:10
Sodium	27		0.45	2.0	mg/L	10	11/1/2019 18:10
SODIUM ADSORPTION RATIO							
			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 10/31/19		Analyst: STP
Sodium Adsorption Ratio	0.82		0.010	0.010	none	1	11/1/2019
POLYNUCLEAR AROMATIC HYDROCARBONS (PAHS)							
			Method: SW846 8270D		Prep: SW3546 / 10/24/19		Analyst: EEW
Acenaphthene	U		0.00082	0.0042	mg/Kg-dry	1	10/25/2019 11:51
Anthracene	U		0.0014	0.0042	mg/Kg-dry	1	10/25/2019 11:51
Benzo(a)anthracene	0.0039	J	0.0017	0.0042	mg/Kg-dry	1	10/25/2019 11:51
Benzo(a)pyrene	U		0.0012	0.0042	mg/Kg-dry	1	10/25/2019 11:51
Benzo(b)fluoranthene	U		0.0010	0.0042	mg/Kg-dry	1	10/25/2019 11:51
Benzo(k)fluoranthene	U		0.0012	0.0042	mg/Kg-dry	1	10/25/2019 11:51
Chrysene	0.011		0.00087	0.0042	mg/Kg-dry	1	10/25/2019 11:51
Dibenzo(a,h)anthracene	0.0027	J	0.00099	0.0042	mg/Kg-dry	1	10/25/2019 11:51
Fluoranthene	U		0.00078	0.0042	mg/Kg-dry	1	10/25/2019 11:51
Fluorene	U		0.0014	0.0042	mg/Kg-dry	1	10/25/2019 11:51
Indeno(1,2,3-cd)pyrene	U		0.0015	0.0042	mg/Kg-dry	1	10/25/2019 11:51
Naphthalene	U		0.0018	0.0042	mg/Kg-dry	1	10/25/2019 11:51
Pyrene	U		0.00070	0.0042	mg/Kg-dry	1	10/25/2019 11:51
Surr: 2-Fluorobiphenyl	36.1			20-140	%REC	1	10/25/2019 11:51
Surr: 4-Terphenyl-d14	25.5			22-172	%REC	1	10/25/2019 11:51
Surr: Nitrobenzene-d5	48.9			28-140	%REC	1	10/25/2019 11:51
ELECTRICAL CONDUCTIVITY (SAR)							
			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 10/31/19		Analyst: QTN
Electrical Conductivity @ Saturation	0.65		0.011	0.10	mmhos/cm @25°	20	11/1/2019 09:40
MOISTURE							
			Method: SW3550C				Analyst: KTP
Moisture	2.6		0.10	0.10	% of sample	1	10/23/2019 12:40

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

ALS Group, USA

Date: 05-Nov-19

Client: Entrada Consulting Group
Project: Chevron Neal 7X Spill
Sample ID: NE7X-SS4
Collection Date: 10/17/2019 12:25 PM

Work Order: 19101625
Lab ID: 19101625-02
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
<hr/>							
SOLUBLE CATIONS FOR SAR			Method: SW6020A		Prep: USDA Method 20B / 10/31/19		Analyst: STP
Calcium	80		2.5	5.0	mg/L	10	11/1/2019 18:13
Magnesium	10		0.50	2.0	mg/L	10	11/1/2019 18:13
Sodium	17		0.45	2.0	mg/L	10	11/1/2019 18:13
SODIUM ADSORPTION RATIO			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 10/31/19		Analyst: STP
Sodium Adsorption Ratio	0.48		0.010	0.010	none	1	11/1/2019
ELECTRICAL CONDUCTIVITY (SAR)			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 10/31/19		Analyst: QTN
Electrical Conductivity @ Saturation	0.62		0.011	0.10	mmhos/cm @25°	20	11/1/2019 09:40

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

Client: Entrada Consulting Group
Work Order: 19101625
Project: Chevron Neal 7X Spill

QC BATCH REPORT

Batch ID: **144954** Instrument ID **ICPMS3** Method: **SW6020A**

DUP		Sample ID: 19101625-01BDUP				Units: mg/L		Analysis Date: 11/1/2019 06:12 PM		
Client ID: NE7X-SS1		Run ID: ICPMS3_191101A				SeqNo: 6029626		Prep Date: 10/31/2019		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	30.19	5.0	0	0	0	0-0	73.01	83		
Magnesium	4.399	2.0	0	0	0	0-0	7.221	48.6		
Sodium	14.52	2.0	0	0	0	0-0	27.37	61.4		

The following samples were analyzed in this batch:

19101625-01B	19101625-02A
--------------	--------------

Batch ID: **144954** Instrument ID **SAR** Method: **USDA H60 Metho**

DUP		Sample ID: 19101625-01BDUP				Units: none		Analysis Date: 11/1/2019		
Client ID: NE7X-SS1		Run ID: SAR_191101A				SeqNo: 6031905		Prep Date: 10/31/2019		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	0.6533	0.010	0	0	0		0.8179	22.4	50	

The following samples were analyzed in this batch:

19101625-01B	19101625-02A
--------------	--------------

Client: Entrada Consulting Group
 Work Order: 19101625
 Project: Chevron Neal 7X Spill

QC BATCH REPORT

Batch ID: **144545** Instrument ID **SVMS6** Method: **SW846 8270D**

MBLK		Sample ID: SBLKS1-144545-144545				Units: µg/Kg		Analysis Date: 10/25/2019 11:26 A		
Client ID:		Run ID: SVMS6_191025A				SeqNo: 6011885		Prep Date: 10/24/2019		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	3111	0	3333	0	93.3	20-140	0			
Surr: 4-Terphenyl-d14	2067	0	3333	0	62	22-172	0			
Surr: Nitrobenzene-d5	3089	0	3333	0	92.7	28-140	0			

LCS		Sample ID: SLCSS1-144545-144545				Units: µg/Kg		Analysis Date: 10/25/2019 12:00 P		
Client ID:		Run ID: SVMS6_191024A				SeqNo: 6011600		Prep Date: 10/24/2019		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1156	4.2	1333	0	86.7	40-140	0			
Anthracene	1247	4.2	1333	0	93.6	40-140	0			
Benzo(a)anthracene	1136	4.2	1333	0	85.2	40-140	0			
Benzo(a)pyrene	1216	4.2	1333	0	91.2	40-140	0			
Benzo(b)fluoranthene	1175	4.2	1333	0	88.1	40-140	0			
Benzo(k)fluoranthene	1180	4.2	1333	0	88.5	40-140	0			
Chrysene	1096	4.2	1333	0	82.2	40-140	0			
Dibenzo(a,h)anthracene	1173	4.2	1333	0	88	40-140	0			
Fluoranthene	1203	4.2	1333	0	90.2	40-140	0			
Fluorene	1255	4.2	1333	0	94.2	40-140	0			
Indeno(1,2,3-cd)pyrene	1309	4.2	1333	0	98.2	40-140	0			
Naphthalene	1229	4.2	1333	0	92.2	40-140	0			
Pyrene	1116	4.2	1333	0	83.8	40-140	0			
Surr: 2-Fluorobiphenyl	3123	0	3333	0	93.7	20-140	0			
Surr: 4-Terphenyl-d14	2125	0	3333	0	63.8	22-172	0			
Surr: Nitrobenzene-d5	2914	0	3333	0	87.4	28-140	0			

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

Client: Entrada Consulting Group
 Work Order: 19101625
 Project: Chevron Neal 7X Spill

QC BATCH REPORT

Batch ID: **144545** Instrument ID **SVMS6** Method: **SW846 8270D**

MS				Sample ID: 19101759-07A MS		Units: µg/Kg		Analysis Date: 10/25/2019 12:16 P		
Client ID:		Run ID: SVMS6_191024A			SeqNo: 6011601		Prep Date: 10/24/2019		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	1042	4.2	1330	0	78.4	40-140	0			
Anthracene	1140	4.2	1330	0	85.7	40-140	0			
Benzo(a)anthracene	1024	4.2	1330	4.751	76.7	40-140	0			
Benzo(a)pyrene	1063	4.2	1330	0	79.9	40-140	0			
Benzo(b)fluoranthene	1069	4.2	1330	3.924	80.1	40-140	0			
Benzo(k)fluoranthene	1033	4.2	1330	2.627	77.5	40-140	0			
Chrysene	975.3	4.2	1330	4.702	73	40-140	0			
Dibenzo(a,h)anthracene	1024	4.2	1330	0	77	40-140	0			
Fluoranthene	1082	4.2	1330	0	81.4	40-140	0			
Fluorene	1108	4.2	1330	0	83.4	40-140	0			
Indeno(1,2,3-cd)pyrene	1143	4.2	1330	0	86	40-140	0			
Naphthalene	1133	4.2	1330	0	85.2	40-140	0			
Pyrene	983	4.2	1330	0	73.9	40-140	0			
Surr: 2-Fluorobiphenyl	2828	0	3325	0	85.1	20-140	0			
Surr: 4-Terphenyl-d14	1912	0	3325	0	57.5	22-172	0			
Surr: Nitrobenzene-d5	2872	0	3325	0	86.4	28-140	0			

MSD				Sample ID: 19101759-07A MSD			Units: µg/Kg		Analysis Date: 10/25/2019 12:31 P		
Client ID:		Run ID: SVMS6_191024A			SeqNo: 6011602		Prep Date: 10/24/2019		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	1106	4.1	1319	0	83.9	40-140	1042	5.93	30		
Anthracene	1209	4.1	1319	0	91.7	40-140	1140	5.91	30		
Benzo(a)anthracene	1134	4.1	1319	4.751	85.6	40-140	1024	10.1	30		
Benzo(a)pyrene	1188	4.1	1319	0	90.1	40-140	1063	11.1	30		
Benzo(b)fluoranthene	1184	4.1	1319	3.924	89.5	40-140	1069	10.2	30		
Benzo(k)fluoranthene	1126	4.1	1319	2.627	85.2	40-140	1033	8.65	30		
Chrysene	1087	4.1	1319	4.702	82.1	40-140	975.3	10.9	30		
Dibenzo(a,h)anthracene	1148	4.1	1319	0	87	40-140	1024	11.4	30		
Fluoranthene	1141	4.1	1319	0	86.6	40-140	1082	5.31	30		
Fluorene	1181	4.1	1319	0	89.6	40-140	1108	6.36	30		
Indeno(1,2,3-cd)pyrene	1281	4.1	1319	0	97.1	40-140	1143	11.3	30		
Naphthalene	1199	4.1	1319	0	90.9	40-140	1133	5.68	30		
Pyrene	1093	4.1	1319	0	82.9	40-140	983	10.6	30		
Surr: 2-Fluorobiphenyl	3006	0	3297	0	91.2	20-140	2828	6.08	0		
Surr: 4-Terphenyl-d14	2093	0	3297	0	63.5	22-172	1912	9.07	0		
Surr: Nitrobenzene-d5	2889	0	3297	0	87.6	28-140	2872	0.582	0		

The following samples were analyzed in this batch:

19101625-01A

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

Client: Entrada Consulting Group
Work Order: 19101625
Project: Chevron Neal 7X Spill

QC BATCH REPORT

Batch ID: **R273683** Instrument ID **MOIST** Method: **SW3550C**

MBLK		Sample ID: WBLKS-R273683				Units: % of sample		Analysis Date: 10/23/2019 12:40 P		
Client ID:		Run ID: MOIST_191023B				SeqNo: 6008950		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-R273683					Units: % of sample		Analysis Date: 10/23/2019 12:40 P		
Client ID:			Run ID: MOIST_191023B			SeqNo: 6008949		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: 19101712-10B DUP					Units: % of sample		Analysis Date: 10/23/2019 12:40 P	
Client ID:			Run ID: MOIST_191023B			SeqNo: 6008941		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 27.81 0.10 0 0 0 0-0 27.37 1.59 10

DUP		Sample ID: 19101759-04A DUP					Units: % of sample		Analysis Date: 10/23/2019 12:40 P	
Client ID:			Run ID: MOIST_191023B			SeqNo: 6008946		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 5.75 0.10 0 0 0 0-0 5.85 1.72 10

The following samples were analyzed in this batch:

19101625-01A

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

Sample Receipt Checklist

Client Name: **ENTRADA**

Date/Time Received: **19-Oct-19 10:00**

Work Order: **19101625**

Received by: **DS**

Checklist completed by Diane Shaw 21-Oct-19
eSignature Date

Reviewed by: Chad Whelton 21-Oct-19
eSignature Date

Matrices: **Soil**

Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample(s) received on ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>2.8/2.8 c</u>		<u>SR2</u>
Cooler(s)/Kit(s):	<u></u>		
Date/Time sample(s) sent to storage:	<u>10/21/2019 2:23:15 PM</u>		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:	<u></u>		

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:



Chain of Custody 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 |

ALS Project Manager:				Work Order #: <u>19101628</u>															
Customer Information				Project Information				Parameter/Method Request for Analysis											
Purchase Order				Project Name		Chevron Neal 7X 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		Dana Mack		D		Electrical Conductivity									
Address				Address		760 Horizon Drive, Ste. 102		E		Sodium Adsorption Ratio									
City/State/Zip				City/State/Zip		Grand Junction, CO 81506		F		pH									
Phone				Phone		970.263.7800		G		Metals (See Attached List) CO Table 910									
Fax				Fax		970.263.7456		H		Arsenic Only									
e-Mail Address		tdobransky@entradainc.com		e-Mail Address		dmack@olssonassociates.com		I											
								J											

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	NE7X-SS1	10/17/19	1215	Soil	8	2			X	X	X						
2	NE7X-SS4	10/17/19	1225	Soil	8	1				X	X						
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s): Please Print & Sign <u>Tim Dobransky</u>			Shipment Method: FedEx		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				Results Due Date:		
Relinquished by: <u>[Signature]</u>		Date: 10/18/19	Time:	Received by: <u>[Signature]</u>		Notes: Chevron Pricing Applies - Per Bruce Schlatter					
Relinquished by: <u>[Signature]</u>		Date: 10-18-19	Time: 1830	Received by (Laboratory): <u>[Signature]</u> 10/19/19 1000		Cooler Temp: x					
Logged by (Laboratory): <u>DES</u>		Date: 10/21/19	Time: 1400	Checked by (Laboratory): <u>[Signature]</u>		QC Package: (Check Box Below)					
Preservative Key: 1-HCL 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4 degrees C 9-5035						Level II: Standard QC					
						Level III: Std QC + Raw Data					
						Level IV: SW846 CLP-Like					
						Other:					

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

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