

# ALS Group, USA

Date: 26-Jul-17

**Client:** HRL Compliance Solutions, Inc  
**Project:** Laramie Energy - Mesa 13W Pit  
**Sample ID:** 13W Pit Solids Composite  
**Collection Date:** 7/24/2017 01:25 PM

**Work Order:** 17071256  
**Lab ID:** 17071256-01  
**Matrix:** SOLID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>						
<b>DRO (C10-C28)</b>	<b>10,000</b>		<b>380</b>	<b>mg/Kg-dry</b>	50	7/25/2017 09:33 PM
Surr: 4-Terphenyl-d14	75.1		34-130	%REC	50	7/25/2017 09:33 PM
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>						
<b>GRO (C6-C10)</b>	<b>3,500</b>		<b>130</b>	<b>mg/Kg</b>	10	7/26/2017 08:15 AM
Surr: Toluene-d8	115		71-123	%REC	10	7/26/2017 08:15 AM
<b>METALS ANALYSIS BY ICP</b>						
<b>Arsenic</b>	<b>14</b>		<b>0.61</b>	<b>mg/Kg-dry</b>	1	7/25/2017 11:32 PM
Cadmium	ND		1.2	mg/Kg-dry	1	7/25/2017 11:32 PM
<b>Chromium</b>	<b>120</b>		<b>0.61</b>	<b>mg/Kg-dry</b>	1	7/25/2017 11:32 PM
<b>Copper</b>	<b>88</b>		<b>1.2</b>	<b>mg/Kg-dry</b>	1	7/25/2017 11:32 PM
<b>Lead</b>	<b>80</b>		<b>0.61</b>	<b>mg/Kg-dry</b>	1	7/25/2017 11:32 PM
<b>Nickel</b>	<b>42</b>		<b>0.61</b>	<b>mg/Kg-dry</b>	1	7/25/2017 11:32 PM
<b>Selenium</b>	<b>3.7</b>		<b>1.2</b>	<b>mg/Kg-dry</b>	1	7/25/2017 11:32 PM
Silver	ND		0.61	mg/Kg-dry	1	7/25/2017 11:32 PM
<b>Zinc</b>	<b>160</b>		<b>1.2</b>	<b>mg/Kg-dry</b>	1	7/25/2017 11:32 PM
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>						
<b>Acenaphthene</b>	<b>ND</b>		<b>0.32</b>	<b>mg/Kg-dry</b>	5	7/26/2017 01:20 PM
Anthracene	ND		0.32	mg/Kg-dry	5	7/26/2017 01:20 PM
Benzo(a)anthracene	ND		0.32	mg/Kg-dry	5	7/26/2017 01:20 PM
Benzo(a)pyrene	ND		0.32	mg/Kg-dry	5	7/26/2017 01:20 PM
Benzo(b)fluoranthene	ND		0.32	mg/Kg-dry	5	7/26/2017 01:20 PM
Benzo(k)fluoranthene	ND		0.32	mg/Kg-dry	5	7/26/2017 01:20 PM
Chrysene	ND		0.32	mg/Kg-dry	5	7/26/2017 01:20 PM
Dibenzo(a,h)anthracene	ND		0.32	mg/Kg-dry	5	7/26/2017 01:20 PM
Fluoranthene	ND		0.32	mg/Kg-dry	5	7/26/2017 01:20 PM
<b>Fluorene</b>	<b>3.5</b>		<b>0.32</b>	<b>mg/Kg-dry</b>	5	7/26/2017 01:20 PM
Indeno(1,2,3-cd)pyrene	ND		0.32	mg/Kg-dry	5	7/26/2017 01:20 PM
<b>Naphthalene</b>	<b>6.5</b>		<b>0.32</b>	<b>mg/Kg-dry</b>	5	7/26/2017 01:20 PM
Pyrene	ND		0.32	mg/Kg-dry	5	7/26/2017 01:20 PM
Surr: 2-Fluorobiphenyl	33.3		20-140	%REC	5	7/26/2017 01:20 PM
Surr: 4-Terphenyl-d14	21.0	S	22-172	%REC	5	7/26/2017 01:20 PM
Surr: Nitrobenzene-d5	76.3		8-140	%REC	5	7/26/2017 01:20 PM
<b>VOLATILE ORGANIC COMPOUNDS</b>						
<b>Benzene</b>	<b>1.3</b>		<b>0.83</b>	<b>mg/Kg</b>	10	7/26/2017 11:52 AM
<b>Ethylbenzene</b>	<b>5.0</b>		<b>0.83</b>	<b>mg/Kg</b>	10	7/26/2017 11:52 AM
<b>m,p-Xylene</b>	<b>110</b>		<b>1.7</b>	<b>mg/Kg</b>	10	7/26/2017 11:52 AM
<b>o-Xylene</b>	<b>16</b>		<b>0.83</b>	<b>mg/Kg</b>	10	7/26/2017 11:52 AM

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

PRELIMINARY

# ALS Group, USA

Date: 26-Jul-17

**Client:** HRL Compliance Solutions, Inc  
**Project:** Laramie Energy - Mesa 13W Pit  
**Sample ID:** 13W Pit Solids Composite  
**Collection Date:** 7/24/2017 01:25 PM

**Work Order:** 17071256  
**Lab ID:** 17071256-01  
**Matrix:** SOLID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>Toluene</b>	<b>32</b>		<b>0.83</b>	<b>mg/Kg</b>	10	7/26/2017 11:52 AM
<b>Xylenes, Total</b>	<b>130</b>		<b>2.5</b>	<b>mg/Kg</b>	10	7/26/2017 11:52 AM
Surr: 1,2-Dichloroethane-d4	97.4		70-130	%REC	10	7/26/2017 11:52 AM
Surr: 4-Bromofluorobenzene	104		70-130	%REC	10	7/26/2017 11:52 AM
Surr: Dibromofluoromethane	92.9		70-130	%REC	10	7/26/2017 11:52 AM
Surr: Toluene-d8	109		70-130	%REC	10	7/26/2017 11:52 AM
<b>CHROMIUM, HEXAVALENT</b>			<b>SW7196A</b>		Prep: SW3060A 7/25/17 20:00	Analyst: <b>LW</b>
Chromium, Hexavalent	ND		1.6	mg/Kg-dry	1	7/26/2017 01:00 PM
<b>MOISTURE</b>			<b>SW3550C</b>			Analyst: <b>SBR</b>
Moisture	<b>38</b>		<b>0.050</b>	% of sample	1	7/25/2017 02:23 PM
<b>PH</b>			<b>SW9045D</b>		Prep: EXTRACT 7/26/17 15:52	Analyst: <b>RZM</b>
pH	<b>7.07</b>		<b>0.100</b>	s.u.	1	7/26/2017 04:00 PM

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

PRELIMINARY