



08-Feb-2019

Rachel Kattnig  
SGM Inc.  
118 W. 6th Street  
Suite 200  
Glenwood Springs, CO 81601

Re: **Mustang Resources**

Work Order: **1902118**

Dear Rachel,

ALS Environmental received 3 samples on 02-Feb-2019 10:15 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 29.

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

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**Client:** SGM Inc.  
**Project:** Mustang Resources  
**Work Order:** 1902118

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**Work Order Sample Summary**

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<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>
1902118-01	Sample Site 1	Soil		1/31/2019 16:30	2/2/2019 10:15	<input type="checkbox"/>
1902118-02	Sample Site 2	Soil		2/1/2019 15:30	2/2/2019 10:15	<input type="checkbox"/>
1902118-03	Sample Site 3	Soil		2/1/2019 16:00	2/2/2019 10:15	<input type="checkbox"/>

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**Client:** SGM Inc.  
**Project:** Mustang Resources  
**Work Order:** 1902118

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**Case Narrative**

Batch 131509, Method SVO\_8270\_S, Sample 1902118-02A: Low PAH surrogate recovery due to sample matrix effects confirmed by re-extraction.

Batch 131565, Method ICP\_6010\_S, Sample 1902118-01A MS/MSD: The MS/MSD recovery was above the upper control limit for Chromium. The corresponding result in the parent sample may be biased high.

Batch 131565, Method ICP\_6010\_S, Sample 1902118-01A MSD: The RPD between the MS and MSD was outside the control limit for Selenium. The corresponding result in the parent sample should be considered estimated.

<b><u>Qualifier</u></b>	<b><u>Description</u></b>
*	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.

<b><u>Acronym</u></b>	<b><u>Description</u></b>
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

<b><u>Units Reported</u></b>	<b><u>Description</u></b>
% of sample	Percent of Sample
µg/Kg-dry	Micrograms per Kilogram Dry Weight
mg/Kg	Milligrams per Kilogram
mg/Kg-dry	Milligrams per Kilogram Dry Weight
mg/L	Milligrams per Liter
mmhos/cm @25°C	Millimhos-Centimeter at 25 Degrees Celcius
none	

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s.u.      Standard Units

# ALS Group, USA

Date: 08-Feb-19

**Client:** SGM Inc.  
**Project:** Mustang Resources  
**Sample ID:** Sample Site 1  
**Collection Date:** 1/31/2019 04:30 PM

**Work Order:** 1902118  
**Lab ID:** 1902118-01  
**Matrix:** SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>							
			Method: SW8015M		Prep: SW3546 / 2/5/19		Analyst: <b>RP</b>
<b>DRO (C10-C28)</b>	<b>4.5</b>	<b>J</b>	<b>2.9</b>	<b>5.1</b>	<b>mg/Kg-dry</b>	<b>1</b>	2/6/2019 02:47
Surr: 4-Terphenyl-d14	75.5			33-111	%REC	1	2/6/2019 02:47
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>							
			Method: SW8015D		Prep: SW5035 / 2/5/19		Analyst: <b>RP</b>
<b>GRO (C6-C10)</b>	<b>110</b>		<b>2.2</b>	<b>5.3</b>	<b>mg/Kg</b>	<b>1</b>	2/5/2019 22:51
Surr: Toluene-d8	98.2			71-123	%REC	1	2/5/2019 22:51
<b>MERCURY BY CVAA</b>							
			Method: SW7471B		Prep: SW7471 / 2/6/19		Analyst: <b>RSB</b>
<b>Mercury</b>	<b>0.0088</b>	<b>J</b>	<b>0.0018</b>	<b>0.018</b>	<b>mg/Kg-dry</b>	<b>1</b>	2/6/2019 13:11
<b>METALS ANALYSIS BY ICP</b>							
			Method: SW846 6010C		Prep: SW3050B / 2/6/19		Analyst: <b>ABL</b>
<b>Arsenic</b>	<b>5.4</b>		<b>0.091</b>	<b>0.35</b>	<b>mg/Kg-dry</b>	<b>1</b>	2/6/2019 18:33
<b>Barium</b>	<b>170</b>		<b>0.14</b>	<b>0.35</b>	<b>mg/Kg-dry</b>	<b>1</b>	2/6/2019 18:33
<b>Boron</b>	<b>25</b>		<b>0.35</b>	<b>1.4</b>	<b>mg/Kg-dry</b>	<b>1</b>	2/6/2019 18:33
<b>Cadmium</b>	<b>0.48</b>	<b>J</b>	<b>0.033</b>	<b>0.70</b>	<b>mg/Kg-dry</b>	<b>1</b>	2/6/2019 18:33
<b>Chromium</b>	<b>9.4</b>		<b>0.020</b>	<b>0.35</b>	<b>mg/Kg-dry</b>	<b>1</b>	2/6/2019 18:33
<b>Copper</b>	<b>14</b>		<b>0.15</b>	<b>0.70</b>	<b>mg/Kg-dry</b>	<b>1</b>	2/6/2019 18:33
<b>Lead</b>	<b>8.4</b>		<b>0.074</b>	<b>0.35</b>	<b>mg/Kg-dry</b>	<b>1</b>	2/6/2019 18:33
<b>Nickel</b>	<b>13</b>		<b>0.14</b>	<b>0.35</b>	<b>mg/Kg-dry</b>	<b>1</b>	2/6/2019 18:33
<b>Selenium</b>	<b>0.23</b>	<b>J</b>	<b>0.20</b>	<b>0.70</b>	<b>mg/Kg-dry</b>	<b>1</b>	2/6/2019 18:33
Silver	U		0.043	0.35	mg/Kg-dry	1	2/6/2019 18:33
<b>Zinc</b>	<b>51</b>		<b>0.056</b>	<b>0.70</b>	<b>mg/Kg-dry</b>	<b>1</b>	2/6/2019 18:33
<b>SOLUBLE CATIONS FOR SAR</b>							
			Method: SW6020A		Prep: USDA Method 20B / 2/7/19		Analyst: <b>STP</b>
<b>Calcium</b>	<b>170</b>		<b>0.86</b>	<b>5.0</b>	<b>mg/L</b>	<b>10</b>	2/7/2019 18:38
<b>Magnesium</b>	<b>51</b>		<b>0.068</b>	<b>2.0</b>	<b>mg/L</b>	<b>10</b>	2/7/2019 18:38
<b>Sodium</b>	<b>110</b>		<b>0.34</b>	<b>2.0</b>	<b>mg/L</b>	<b>10</b>	2/7/2019 18:38
<b>SODIUM ADSORPTION RATIO</b>							
			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 2/7/19		Analyst: <b>STP</b>
<b>Sodium Adsorption Ratio</b>	<b>1.8</b>		<b>0.010</b>	<b>0.010</b>	<b>none</b>	<b>1</b>	2/7/2019
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>							
			Method: SW846 8270D		Prep: SW3546 / 2/5/19		Analyst: <b>KAW</b>
Acenaphthene	U		4.9	6.8	µg/Kg-dry	1	2/5/2019 21:25
Anthracene	U		4.8	6.8	µg/Kg-dry	1	2/5/2019 21:25
Benzo(a)anthracene	U		5.8	6.8	µg/Kg-dry	1	2/5/2019 21:25
Benzo(a)pyrene	U		4.1	6.8	µg/Kg-dry	1	2/5/2019 21:25
Benzo(b)fluoranthene	U		5.0	6.8	µg/Kg-dry	1	2/5/2019 21:25
Benzo(k)fluoranthene	U		5.1	6.8	µg/Kg-dry	1	2/5/2019 21:25
Chrysene	U		5.5	6.8	µg/Kg-dry	1	2/5/2019 21:25
Dibenzo(a,h)anthracene	U		3.7	6.8	µg/Kg-dry	1	2/5/2019 21:25

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

# ALS Group, USA

Date: 08-Feb-19

**Client:** SGM Inc.  
**Project:** Mustang Resources  
**Sample ID:** Sample Site 1  
**Collection Date:** 1/31/2019 04:30 PM

**Work Order:** 1902118  
**Lab ID:** 1902118-01  
**Matrix:** SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Fluoranthene	U		3.2	6.8	µg/Kg-dry	1	2/5/2019 21:25
Fluorene	U		4.9	6.8	µg/Kg-dry	1	2/5/2019 21:25
Indeno(1,2,3-cd)pyrene	U		4.7	6.8	µg/Kg-dry	1	2/5/2019 21:25
<b>Naphthalene</b>	<b>19</b>		<b>4.3</b>	<b>6.8</b>	<b>µg/Kg-dry</b>	1	2/5/2019 21:25
Pyrene	U		1.2	6.8	µg/Kg-dry	1	2/5/2019 21:25
Surr: 2-Fluorobiphenyl	55.4			44-107	%REC	1	2/5/2019 21:25
Surr: 4-Terphenyl-d14	59.8			52-123	%REC	1	2/5/2019 21:25
Surr: Nitrobenzene-d5	52.3			41-94	%REC	1	2/5/2019 21:25
<b>VOLATILE ORGANIC COMPOUNDS</b>			Method: <b>SW8260C</b>		Prep: SW5035 / 2/5/19		Analyst: <b>WH</b>
<b>Benzene</b>	<b>0.078</b>		<b>0.0054</b>	<b>0.032</b>	<b>mg/Kg</b>	1	2/5/2019 13:50
<b>Ethylbenzene</b>	<b>0.93</b>		<b>0.0067</b>	<b>0.032</b>	<b>mg/Kg</b>	1	2/5/2019 13:50
<b>m,p-Xylene</b>	<b>9.8</b>		<b>0.015</b>	<b>0.063</b>	<b>mg/Kg</b>	1	2/5/2019 13:50
<b>o-Xylene</b>	<b>1.5</b>		<b>0.012</b>	<b>0.032</b>	<b>mg/Kg</b>	1	2/5/2019 13:50
<b>Toluene</b>	<b>3.7</b>		<b>0.0087</b>	<b>0.032</b>	<b>mg/Kg</b>	1	2/5/2019 13:50
<b>Xylenes, Total</b>	<b>11</b>		<b>0.027</b>	<b>0.095</b>	<b>mg/Kg</b>	1	2/5/2019 13:50
Surr: 1,2-Dichloroethane-d4	96.9			70-130	%REC	1	2/5/2019 13:50
Surr: 4-Bromofluorobenzene	101			70-130	%REC	1	2/5/2019 13:50
Surr: Dibromofluoromethane	92.2			70-130	%REC	1	2/5/2019 13:50
Surr: Toluene-d8	103			70-130	%REC	1	2/5/2019 13:50
<b>ELECTRICAL CONDUCTIVITY (SAR)</b>			Method: <b>USDA H60 METHOD 2</b>		Prep: USDA Method 20B / 2/7/19		Analyst: <b>JB</b>
<b>Electrical Conductivity @ Saturation</b>	<b>1.6</b>		<b>0.011</b>	<b>0.10</b>	<b>mmhos/cm @25°</b>	20	2/7/2019 13:45
<b>CHROMIUM, TRIVALENT</b>			Method: <b>CALCULATION</b>				Analyst: <b>MB</b>
<b>Chromium, Trivalent</b>	<b>9.4</b>		<b>0.32</b>	<b>1.0</b>	<b>mg/Kg-dry</b>	1	2/7/2019 10:30
<b>CHROMIUM, HEXAVALENT</b>			Method: <b>SW7196A</b>		Prep: SW3060A / 2/5/19		Analyst: <b>JEB</b>
<b>Chromium, Hexavalent</b>	U		0.86	1.0	mg/Kg-dry	1	2/6/2019 14:30
<b>MOISTURE</b>			Method: <b>SW3550C</b>				Analyst: <b>KTP</b>
<b>Moisture</b>	<b>2.8</b>		<b>0.10</b>	<b>0.10</b>	<b>% of sample</b>	1	2/5/2019 12:54
<b>PH</b>			Method: <b>SW9045D</b>		Prep: EXTRACT / 2/5/19		Analyst: <b>RZM</b>
<b>pH</b>	<b>8.25</b>		<b>0.10</b>	<b>0.100</b>	<b>s.u.</b>	1	2/5/2019 15:08
<b>Temperature</b>	<b>21.6</b>		<b>0.10</b>	<b>0.100</b>	<b>C</b>	1	2/5/2019 15:08

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

# ALS Group, USA

Date: 08-Feb-19

**Client:** SGM Inc.  
**Project:** Mustang Resources  
**Sample ID:** Sample Site 2  
**Collection Date:** 2/1/2019 03:30 PM

**Work Order:** 1902118  
**Lab ID:** 1902118-02  
**Matrix:** SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>							
			Method: <b>SW8015M</b>		Prep: SW3546 / 2/5/19		Analyst: <b>RP</b>
DRO (C10-C28)	U		3.1	5.5	mg/Kg-dry	1	2/6/2019 03:16
Surr: 4-Terphenyl-d14	69.1			33-111	%REC	1	2/6/2019 03:16
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>							
			Method: <b>SW8015D</b>		Prep: SW5035 / 2/5/19		Analyst: <b>RP</b>
GRO (C6-C10)	U		2.7	6.5	mg/Kg	1	2/5/2019 23:21
Surr: Toluene-d8	90.6			71-123	%REC	1	2/5/2019 23:21
<b>MERCURY BY CVAA</b>							
			Method: <b>SW7471B</b>		Prep: SW7471 / 2/6/19		Analyst: <b>RSH</b>
Mercury	0.020		0.0018	0.018	mg/Kg-dry	1	2/6/2019 13:13
<b>METALS ANALYSIS BY ICP</b>							
			Method: <b>SW846 6010C</b>		Prep: SW3050B / 2/6/19		Analyst: <b>ABL</b>
Arsenic	7.4		0.12	0.44	mg/Kg-dry	1	2/6/2019 18:50
Barium	220		0.18	0.44	mg/Kg-dry	1	2/6/2019 18:50
Boron	25		0.44	1.8	mg/Kg-dry	1	2/6/2019 18:50
Cadmium	1.0		0.043	0.89	mg/Kg-dry	1	2/6/2019 18:50
Chromium	9.0		0.025	0.44	mg/Kg-dry	1	2/6/2019 18:50
Copper	15		0.20	0.89	mg/Kg-dry	1	2/6/2019 18:50
Lead	11		0.094	0.44	mg/Kg-dry	1	2/6/2019 18:50
Nickel	12		0.18	0.44	mg/Kg-dry	1	2/6/2019 18:50
Selenium	0.31	J	0.25	0.89	mg/Kg-dry	1	2/6/2019 18:50
Silver	U		0.055	0.44	mg/Kg-dry	1	2/6/2019 18:50
Zinc	52		0.071	0.89	mg/Kg-dry	1	2/6/2019 18:50
<b>SOLUBLE CATIONS FOR SAR</b>							
			Method: <b>SW6020A</b>		Prep: USDA Method 20B / 2/7/19		Analyst: <b>STP</b>
Calcium	28		0.86	5.0	mg/L	10	2/7/2019 18:45
Magnesium	11		0.068	2.0	mg/L	10	2/7/2019 18:45
Sodium	380		0.34	2.0	mg/L	10	2/7/2019 18:45
<b>SODIUM ADSORPTION RATIO</b>							
			Method: <b>USDA H60 METHOD 2</b>		Prep: USDA Method 20B / 2/7/19		Analyst: <b>STP</b>
Sodium Adsorption Ratio	15		0.010	0.010	none	1	2/7/2019
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>							
			Method: <b>SW846 8270D</b>		Prep: SW3546 / 2/5/19		Analyst: <b>KAW</b>
Acenaphthene	U		5.3	7.3	µg/Kg-dry	1	2/5/2019 21:49
Anthracene	U		5.2	7.3	µg/Kg-dry	1	2/5/2019 21:49
Benzo(a)anthracene	U		6.3	7.3	µg/Kg-dry	1	2/5/2019 21:49
Benzo(a)pyrene	U		4.5	7.3	µg/Kg-dry	1	2/5/2019 21:49
Benzo(b)fluoranthene	U		5.4	7.3	µg/Kg-dry	1	2/5/2019 21:49
Benzo(k)fluoranthene	U		5.5	7.3	µg/Kg-dry	1	2/5/2019 21:49
Chrysene	U		5.9	7.3	µg/Kg-dry	1	2/5/2019 21:49
Dibenzo(a,h)anthracene	U		3.9	7.3	µg/Kg-dry	1	2/5/2019 21:49

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



# ALS Group, USA

Date: 08-Feb-19

**Client:** SGM Inc.  
**Project:** Mustang Resources  
**Sample ID:** Sample Site 2  
**Collection Date:** 2/1/2019 03:30 PM

**Work Order:** 1902118  
**Lab ID:** 1902118-02  
**Matrix:** SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Fluoranthene	U		3.5	7.3	µg/Kg-dry	1	2/5/2019 21:49
Fluorene	U		5.3	7.3	µg/Kg-dry	1	2/5/2019 21:49
Indeno(1,2,3-cd)pyrene	U		5.1	7.3	µg/Kg-dry	1	2/5/2019 21:49
Naphthalene	U		4.7	7.3	µg/Kg-dry	1	2/5/2019 21:49
Pyrene	U		1.3	7.3	µg/Kg-dry	1	2/5/2019 21:49
Surr: 2-Fluorobiphenyl	44.9			44-107	%REC	1	2/5/2019 21:49
Surr: 4-Terphenyl-d14	48.4	S		52-123	%REC	1	2/5/2019 21:49
Surr: Nitrobenzene-d5	20.5	S		41-94	%REC	1	2/5/2019 21:49
<b>VOLATILE ORGANIC COMPOUNDS</b>			Method: <b>SW8260C</b>		Prep: SW5035 / 2/5/19		Analyst: <b>WH</b>
Benzene	U		0.0067	0.039	mg/Kg	1	2/5/2019 14:05
Ethylbenzene	<b>0.016</b>	J	<b>0.0082</b>	<b>0.039</b>	<b>mg/Kg</b>	1	2/5/2019 14:05
m,p-Xylene	<b>0.092</b>		<b>0.019</b>	<b>0.078</b>	<b>mg/Kg</b>	1	2/5/2019 14:05
o-Xylene	<b>0.024</b>	J	<b>0.015</b>	<b>0.039</b>	<b>mg/Kg</b>	1	2/5/2019 14:05
Toluene	<b>0.034</b>	J	<b>0.011</b>	<b>0.039</b>	<b>mg/Kg</b>	1	2/5/2019 14:05
Xylenes, Total	<b>0.12</b>	J	<b>0.034</b>	<b>0.12</b>	<b>mg/Kg</b>	1	2/5/2019 14:05
Surr: 1,2-Dichloroethane-d4	97.7			70-130	%REC	1	2/5/2019 14:05
Surr: 4-Bromofluorobenzene	99.1			70-130	%REC	1	2/5/2019 14:05
Surr: Dibromofluoromethane	95.2			70-130	%REC	1	2/5/2019 14:05
Surr: Toluene-d8	102			70-130	%REC	1	2/5/2019 14:05
<b>ELECTRICAL CONDUCTIVITY (SAR)</b>			Method: <b>USDA H60 METHOD 2</b>		Prep: USDA Method 20B / 2/7/19		Analyst: <b>JB</b>
Electrical Conductivity @ Saturation	<b>2.0</b>		<b>0.011</b>	<b>0.10</b>	mmhos/cm @25°	20	2/7/2019 13:45
<b>CHROMIUM, TRIVALENT</b>			Method: <b>CALCULATION</b>				Analyst: <b>MB</b>
Chromium, Trivalent	<b>9.0</b>		<b>0.35</b>	<b>1.1</b>	<b>mg/Kg-dry</b>	1	2/7/2019 10:30
<b>CHROMIUM, HEXAVALENT</b>			Method: <b>SW7196A</b>		Prep: SW3060A / 2/5/19		Analyst: <b>JEB</b>
Chromium, Hexavalent	U		0.95	1.1	mg/Kg-dry	1	2/6/2019 14:30
<b>MOISTURE</b>			Method: <b>SW3550C</b>				Analyst: <b>KTP</b>
Moisture	<b>13</b>		<b>0.10</b>	<b>0.10</b>	% of sample	1	2/5/2019 12:54
<b>PH</b>			Method: <b>SW9045D</b>		Prep: EXTRACT / 2/5/19		Analyst: <b>RZM</b>
pH	<b>9.18</b>		<b>0.10</b>	<b>0.100</b>	<b>s.u.</b>	1	2/5/2019 15:08
Temperature	<b>21.5</b>		<b>0.10</b>	<b>0.100</b>	<b>C</b>	1	2/5/2019 15:08

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

# ALS Group, USA

Date: 08-Feb-19

**Client:** SGM Inc.  
**Project:** Mustang Resources  
**Sample ID:** Sample Site 3  
**Collection Date:** 2/1/2019 04:00 PM

**Work Order:** 1902118  
**Lab ID:** 1902118-03  
**Matrix:** SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
<b>DIESEL RANGE ORGANICS BY GC-FID</b>							
			Method: <b>SW8015M</b>		Prep: SW3546 / 2/5/19		Analyst: <b>RP</b>
DRO (C10-C28)	U		3.0	5.2	mg/Kg-dry	1	2/6/2019 03:45
Surr: 4-Terphenyl-d14	67.7			33-111	%REC	1	2/6/2019 03:45
<b>GASOLINE RANGE ORGANICS BY GC-FID</b>							
			Method: <b>SW8015D</b>		Prep: SW5035 / 2/5/19		Analyst: <b>RP</b>
GRO (C6-C10)	U		2.4	5.7	mg/Kg	1	2/5/2019 23:50
Surr: Toluene-d8	90.2			71-123	%REC	1	2/5/2019 23:50
<b>MERCURY BY CVAA</b>							
			Method: <b>SW7471B</b>		Prep: SW7471 / 2/6/19		Analyst: <b>RSH</b>
Mercury	0.055		0.0018	0.018	mg/Kg-dry	1	2/6/2019 13:21
<b>METALS ANALYSIS BY ICP</b>							
			Method: <b>SW846 6010C</b>		Prep: SW3050B / 2/6/19		Analyst: <b>ABL</b>
Arsenic	5.5		0.11	0.43	mg/Kg-dry	1	2/6/2019 19:08
Barium	160		0.17	0.43	mg/Kg-dry	1	2/6/2019 19:08
Boron	30		0.43	1.7	mg/Kg-dry	1	2/6/2019 19:08
Cadmium	0.88		0.041	0.86	mg/Kg-dry	1	2/6/2019 19:08
Chromium	12		0.024	0.43	mg/Kg-dry	1	2/6/2019 19:08
Copper	24		0.19	0.86	mg/Kg-dry	1	2/6/2019 19:08
Lead	24		0.092	0.43	mg/Kg-dry	1	2/6/2019 19:08
Nickel	18		0.17	0.43	mg/Kg-dry	1	2/6/2019 19:08
Selenium	0.59	J	0.24	0.86	mg/Kg-dry	1	2/6/2019 19:08
Silver	U		0.054	0.43	mg/Kg-dry	1	2/6/2019 19:08
Zinc	71		0.069	0.86	mg/Kg-dry	1	2/6/2019 19:08
<b>SOLUBLE CATIONS FOR SAR</b>							
			Method: <b>SW6020A</b>		Prep: USDA Method 20B / 2/7/19		Analyst: <b>STP</b>
Calcium	130		0.86	5.0	mg/L	10	2/7/2019 18:47
Magnesium	12		0.068	2.0	mg/L	10	2/7/2019 18:47
Sodium	490		0.34	2.0	mg/L	10	2/7/2019 18:47
<b>SODIUM ADSORPTION RATIO</b>							
			Method: <b>USDA H60 METHOD 2</b>		Prep: USDA Method 20B / 2/7/19		Analyst: <b>STP</b>
Sodium Adsorption Ratio	11		0.010	0.010	none	1	2/7/2019
<b>SEMI-VOLATILE ORGANIC COMPOUNDS</b>							
			Method: <b>SW846 8270D</b>		Prep: SW3546 / 2/5/19		Analyst: <b>KAW</b>
Acenaphthene	U		5.0	7.0	µg/Kg-dry	1	2/5/2019 22:13
Anthracene	U		4.9	7.0	µg/Kg-dry	1	2/5/2019 22:13
Benzo(a)anthracene	11		6.0	7.0	µg/Kg-dry	1	2/5/2019 22:13
Benzo(a)pyrene	U		4.3	7.0	µg/Kg-dry	1	2/5/2019 22:13
Benzo(b)fluoranthene	U		5.2	7.0	µg/Kg-dry	1	2/5/2019 22:13
Benzo(k)fluoranthene	U		5.3	7.0	µg/Kg-dry	1	2/5/2019 22:13
Chrysene	U		5.6	7.0	µg/Kg-dry	1	2/5/2019 22:13
Dibenzo(a,h)anthracene	U		3.8	7.0	µg/Kg-dry	1	2/5/2019 22:13

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

# ALS Group, USA

Date: 08-Feb-19

**Client:** SGM Inc.  
**Project:** Mustang Resources  
**Sample ID:** Sample Site 3  
**Collection Date:** 2/1/2019 04:00 PM

**Work Order:** 1902118  
**Lab ID:** 1902118-03  
**Matrix:** SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
<b>Fluoranthene</b>	<b>7.0</b>		<b>3.4</b>	<b>7.0</b>	<b>µg/Kg-dry</b>	1	2/5/2019 22:13
Fluorene	U		5.1	7.0	µg/Kg-dry	1	2/5/2019 22:13
Indeno(1,2,3-cd)pyrene	U		4.9	7.0	µg/Kg-dry	1	2/5/2019 22:13
Naphthalene	U		4.5	7.0	µg/Kg-dry	1	2/5/2019 22:13
Pyrene	U		1.3	7.0	µg/Kg-dry	1	2/5/2019 22:13
Surr: 2-Fluorobiphenyl	59.9			44-107	%REC	1	2/5/2019 22:13
Surr: 4-Terphenyl-d14	56.1			52-123	%REC	1	2/5/2019 22:13
Surr: Nitrobenzene-d5	42.8			41-94	%REC	1	2/5/2019 22:13
<b>VOLATILE ORGANIC COMPOUNDS</b>			Method: <b>SW8260C</b>		Prep: SW5035 / 2/5/19		Analyst: <b>WH</b>
<b>Benzene</b>	<b>0.0085</b>	J	<b>0.0058</b>	<b>0.034</b>	<b>mg/Kg</b>	1	2/5/2019 16:40
<b>Ethylbenzene</b>	<b>0.014</b>	J	<b>0.0072</b>	<b>0.034</b>	<b>mg/Kg</b>	1	2/5/2019 16:40
<b>m,p-Xylene</b>	<b>0.066</b>	J	<b>0.016</b>	<b>0.068</b>	<b>mg/Kg</b>	1	2/5/2019 16:40
<b>o-Xylene</b>	<b>0.019</b>	J	<b>0.013</b>	<b>0.034</b>	<b>mg/Kg</b>	1	2/5/2019 16:40
<b>Toluene</b>	<b>0.074</b>		<b>0.0093</b>	<b>0.034</b>	<b>mg/Kg</b>	1	2/5/2019 16:40
<b>Xylenes, Total</b>	<b>0.085</b>	J	<b>0.029</b>	<b>0.10</b>	<b>mg/Kg</b>	1	2/5/2019 16:40
Surr: 1,2-Dichloroethane-d4	98.8			70-130	%REC	1	2/5/2019 16:40
Surr: 4-Bromofluorobenzene	99.5			70-130	%REC	1	2/5/2019 16:40
Surr: Dibromofluoromethane	93.6			70-130	%REC	1	2/5/2019 16:40
Surr: Toluene-d8	103			70-130	%REC	1	2/5/2019 16:40
<b>ELECTRICAL CONDUCTIVITY (SAR)</b>			Method: <b>USDA H60 METHOD 2</b>		Prep: USDA Method 20B / 2/7/19		Analyst: <b>JB</b>
<b>Electrical Conductivity @ Saturation</b>	<b>3.3</b>		<b>0.011</b>	<b>0.10</b>	<b>mmhos/cm @25°</b>	20	2/7/2019 13:45
<b>CHROMIUM, TRIVALENT</b>			Method: <b>CALCULATION</b>				Analyst: <b>MB</b>
<b>Chromium, Trivalent</b>	<b>12</b>		<b>0.33</b>	<b>1.1</b>	<b>mg/Kg-dry</b>	1	2/7/2019 10:30
<b>CHROMIUM, HEXAVALENT</b>			Method: <b>SW7196A</b>		Prep: SW3060A / 2/5/19		Analyst: <b>JEB</b>
<b>Chromium, Hexavalent</b>	U		0.90	1.1	mg/Kg-dry	1	2/6/2019 14:30
<b>MOISTURE</b>			Method: <b>SW3550C</b>				Analyst: <b>KTP</b>
<b>Moisture</b>	<b>6.3</b>		<b>0.10</b>	<b>0.10</b>	<b>% of sample</b>	1	2/5/2019 12:54
<b>PH</b>			Method: <b>SW9045D</b>		Prep: EXTRACT / 2/5/19		Analyst: <b>RZM</b>
<b>pH</b>	<b>9.01</b>		<b>0.10</b>	<b>0.100</b>	<b>s.u.</b>	1	2/5/2019 15:08
<b>Temperature</b>	<b>21.6</b>		<b>0.10</b>	<b>0.100</b>	<b>C</b>	1	2/5/2019 15:08

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

Client: SGM Inc.  
 Work Order: 1902118  
 Project: Mustang Resources

**QC BATCH REPORT**

Batch ID: **131510** Instrument ID **GC8** Method: **SW8015M**

<b>MBLK</b>		Sample ID: <b>DBLKS1-131510-131510</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>2/5/2019 11:22 PM</b>		
Client ID:		Run ID: <b>GC8_190205A</b>				SeqNo: <b>5509367</b>		Prep Date: <b>2/5/2019</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	U	5.0								
Surr: 4-Terphenyl-d14	3.56	0	3.33	0	107	33-111	0			

<b>LCS</b>		Sample ID: <b>DLCSS1-131510-131510</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>2/5/2019 11:51 PM</b>		
Client ID:		Run ID: <b>GC8_190205A</b>				SeqNo: <b>5509368</b>		Prep Date: <b>2/5/2019</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	327.5	5.0	333	0	98.3	58-111	0			
Surr: 4-Terphenyl-d14	3.381	0	3.33	0	102	33-111	0			

<b>MS</b>		Sample ID: <b>1902087-01A MS</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>2/6/2019 12:21 PM</b>		
Client ID:		Run ID: <b>GC8_190205A</b>				SeqNo: <b>5509374</b>		Prep Date: <b>2/5/2019</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	300.4	4.8	319.9	0	93.9	58-111	0			
Surr: 4-Terphenyl-d14	2.964	0	3.199	0	92.7	33-111	0			

<b>MSD</b>		Sample ID: <b>1902087-01A MSD</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>2/6/2019 12:50 PM</b>		
Client ID:		Run ID: <b>GC8_190205A</b>				SeqNo: <b>5509375</b>		Prep Date: <b>2/5/2019</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	313.3	4.8	322.9	0	97	58-111	300.4	4.2	30	
Surr: 4-Terphenyl-d14	3.193	0	3.229	0	98.9	33-111	2.964	7.42	30	

The following samples were analyzed in this batch:

1902118-01A	1902118-02A	1902118-03A
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Client: SGM Inc.  
 Work Order: 1902118  
 Project: Mustang Resources

# QC BATCH REPORT

Batch ID: **131545** Instrument ID **GC10** Method: **SW8015D**

<b>MBLK</b>		Sample ID: <b>MBLK-131545-131545</b>				Units: <b>µg/Kg-dry</b>		Analysis Date: <b>2/5/2019 03:32 PM</b>		
Client ID:		Run ID: <b>GC10_190205A</b>				SeqNo: <b>5509167</b>		Prep Date: <b>2/5/2019</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10)	U	5,000								
Surr: Toluene-d8	4803	0	5000	0	96.1	71-123	0			

<b>LCS</b>		Sample ID: <b>LCS-131545-131545</b>				Units: <b>µg/Kg-dry</b>		Analysis Date: <b>2/5/2019 02:32 PM</b>		
Client ID:		Run ID: <b>GC10_190205A</b>				SeqNo: <b>5509166</b>		Prep Date: <b>2/5/2019</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10)	504000	5,000	500000	0	101	71-123	0			
Surr: Toluene-d8	5145	0	5000	0	103	71-123	0			

<b>MS</b>		Sample ID: <b>1902118-03A MS</b>				Units: <b>µg/Kg-dry</b>		Analysis Date: <b>2/6/2019 12:19 PM</b>		
Client ID: <b>Sample Site 3</b>		Run ID: <b>GC10_190205A</b>				SeqNo: <b>5509185</b>		Prep Date: <b>2/5/2019</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10)	641000	5,700	567200	0	113	71-123	0			
Surr: Toluene-d8	5681	0	5672	0	100	71-123	0			

<b>MSD</b>		Sample ID: <b>1902118-03A MSD</b>				Units: <b>µg/Kg-dry</b>		Analysis Date: <b>2/6/2019 01:18 AM</b>		
Client ID: <b>Sample Site 3</b>		Run ID: <b>GC10_190205A</b>				SeqNo: <b>5509184</b>		Prep Date: <b>2/5/2019</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10)	616300	5,700	567200	0	109	71-123	641000	3.92	30	
Surr: Toluene-d8	5451	0	5672	0	96.1	71-123	5681	4.14	30	

The following samples were analyzed in this batch:

1902118-01A	1902118-02A	1902118-03A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** SGM Inc.  
**Work Order:** 1902118  
**Project:** Mustang Resources

## QC BATCH REPORT

Batch ID: **131588** Instrument ID **HG4** Method: **SW7471B**

<b>MBLK</b>		Sample ID: <b>MBLK-131588-131588</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>2/6/2019 01:06 PM</b>		
Client ID:		Run ID: <b>HG4_190206A</b>				SeqNo: <b>5509974</b>		Prep Date: <b>2/6/2019</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury U 0.020

<b>LCS</b>		Sample ID: <b>LCS-131588-131588</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>2/6/2019 01:08 PM</b>		
Client ID:		Run ID: <b>HG4_190206A</b>				SeqNo: <b>5509975</b>		Prep Date: <b>2/6/2019</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1734 0.020 0.1665 0 104 80-120 0

<b>MS</b>		Sample ID: <b>1902118-02A MS</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>2/6/2019 01:16 PM</b>		
Client ID: <b>Sample Site 2</b>		Run ID: <b>HG4_190206A</b>				SeqNo: <b>5509978</b>		Prep Date: <b>2/6/2019</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1519 0.016 0.1348 0 113 75-125 0

<b>MSD</b>		Sample ID: <b>1902118-02A MSD</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>2/6/2019 01:18 PM</b>		
Client ID: <b>Sample Site 2</b>		Run ID: <b>HG4_190206A</b>				SeqNo: <b>5509979</b>		Prep Date: <b>2/6/2019</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1411 0.016 0.1327 0 106 75-125 0.1519 7.36 35

The following samples were analyzed in this batch:

1902118-01A 1902118-02A 1902118-03A

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

Client: SGM Inc.  
 Work Order: 1902118  
 Project: Mustang Resources

## QC BATCH REPORT

Batch ID: **131565** Instrument ID **ICP2** Method: **SW846 6010C**

MBLK		Sample ID: <b>MBLK-131565-131565</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>2/6/2019 06:09 PM</b>		
Client ID:		Run ID: <b>ICP2_190206A</b>				SeqNo: <b>5510468</b>		Prep Date: <b>2/6/2019</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	U	0.25								
Barium	U	0.25								
Boron	U	0.99								
Cadmium	U	0.49								
Chromium	0.03714	0.25								J
Copper	U	0.49								
Lead	U	0.25								
Nickel	U	0.25								
Selenium	U	0.49								
Silver	0.05341	0.25								J
Zinc	0.0727	0.49								J

LCS		Sample ID: <b>LCS-131565-131565</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>2/6/2019 06:15 PM</b>		
Client ID:		Run ID: <b>ICP2_190206A</b>				SeqNo: <b>5510469</b>		Prep Date: <b>2/6/2019</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.466	0.24	4.789	0	93.2	80-120	0			
Barium	4.878	0.24	4.789	0	102	80-120	0			
Boron	24.53	0.96	23.95	0	102	80-120	0			
Cadmium	4.784	0.48	4.789	0	99.9	80-120	0			
Chromium	4.89	0.24	4.789	0	102	80-120	0			
Copper	5.04	0.48	4.789	0	105	80-120	0			
Lead	4.77	0.24	4.789	0	99.6	80-120	0			
Nickel	4.847	0.24	4.789	0	101	80-120	0			
Selenium	4.612	0.48	4.789	0	96.3	80-120	0			
Silver	4.93	0.24	4.789	0	103	80-120	0			
Zinc	4.825	0.48	4.789	0	101	80-120	0			

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

Client: SGM Inc.  
 Work Order: 1902118  
 Project: Mustang Resources

# QC BATCH REPORT

Batch ID: 131565 Instrument ID ICP2 Method: SW846 6010C

MS				Sample ID: 1902118-01AMS			Units: mg/Kg		Analysis Date: 2/6/2019 06:39 PM		
Client ID: Sample Site 1				Run ID: ICP2_190206A			SeqNo: 5510473		Prep Date: 2/6/2019		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	11.74	0.39	7.728	5.284	83.5	75-125	0				
Barium	173.4	0.39	7.728	164.5	115	75-125	0			O	
Boron	60.14	1.5	38.64	24.56	92.1	75-125	0				
Cadmium	7.233	0.77	7.728	0.4655	87.6	75-125	0				
Chromium	20.28	0.39	7.728	9.16	144	75-125	0			S	
Copper	21.92	0.77	7.728	13.71	106	75-125	0				
Lead	14.34	0.39	7.728	8.179	79.7	75-125	0				
Nickel	19.29	0.39	7.728	12.44	88.6	75-125	0				
Selenium	6.862	0.77	7.728	0.2192	86	75-125	0				
Silver	7.896	0.39	7.728	-0.1942	105	75-125	0				
Zinc	58.38	0.77	7.728	49.12	120	75-125	0			O	

MSD				Sample ID: 1902118-01AMS			Units: mg/Kg		Analysis Date: 2/6/2019 06:44 PM		
Client ID: Sample Site 1			Run ID: ICP2_190206A			SeqNo: 5510474		Prep Date: 2/6/2019		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	10.7	0.33	6.605	5.284	82.1	75-125	11.74	9.2	20		
Barium	171.9	0.33	6.605	164.5	113	75-125	173.4	0.836	20	O	
Boron	54.81	1.3	33.03	24.56	91.6	75-125	60.14	9.27	20		
Cadmium	6.176	0.66	6.605	0.4655	86.5	75-125	7.233	15.8	20		
Chromium	18.77	0.33	6.605	9.16	145	75-125	20.28	7.71	20	S	
Copper	20.67	0.66	6.605	13.71	105	75-125	21.92	5.86	20		
Lead	13.27	0.33	6.605	8.179	77.1	75-125	14.34	7.75	20		
Nickel	17.99	0.33	6.605	12.44	84.1	75-125	19.29	6.93	20		
Selenium	5.598	0.66	6.605	0.2192	81.4	75-125	6.862	20.3	20	R	
Silver	6.778	0.33	6.605	-0.1942	106	75-125	7.896	15.2	20		
Zinc	56.71	0.66	6.605	49.12	115	75-125	58.38	2.9	20	O	

The following samples were analyzed in this batch:

1902118-01A	1902118-02A	1902118-03A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.



**Client:** SGM Inc.  
**Work Order:** 1902118  
**Project:** Mustang Resources

## QC BATCH REPORT

Batch ID: **131612** Instrument ID **ICPMS3** Method: **SW6020A**

<b>DUP</b>		Sample ID: <b>1902118-01B DUP</b>				Units: <b>mg/L</b>		Analysis Date: <b>2/7/2019 06:40 PM</b>		
Client ID: <b>Sample Site 1</b>		Run ID: <b>ICPMS3_190207A</b>				SeqNo: <b>5512254</b>		Prep Date: <b>2/7/2019</b>		DF: <b>10</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	159.3	5.0	0	0	0	0-0	175	9.4		
Magnesium	46.13	2.0	0	0	0	0-0	51.31	10.6		
Sodium	97.84	2.0	0	0	0	0-0	106.6	8.57		

The following samples were analyzed in this batch:

1902118-01B 1902118-02B 1902118-03B

Batch ID: **131612** Instrument ID **SAR** Method: **USDA H60 Metho**

<b>DUP</b>		Sample ID: <b>1902118-01B DUP</b>				Units: <b>none</b>		Analysis Date: <b>2/7/2019</b>		
Client ID: <b>Sample Site 1</b>		Run ID: <b>SAR_190207A</b>				SeqNo: <b>5512863</b>		Prep Date: <b>2/7/2019</b>		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	1.756	0.010	0	0	0		1.822	3.67	50	

The following samples were analyzed in this batch:

1902118-01B 1902118-02B 1902118-03B

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

Client: SGM Inc.  
 Work Order: 1902118  
 Project: Mustang Resources

# QC BATCH REPORT

Batch ID: 131509 Instrument ID SVMS5 Method: SW846 8270D

MBLK		Sample ID: SBLKS1-131509-131509				Units: µg/Kg		Analysis Date: 2/5/2019 03:42 PM		
Client ID:		Run ID: SVMS5_190205A				SeqNo: 5509058		Prep Date: 2/5/2019		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	2561	0	3333	0	76.8	44-107	0			
Surr: 4-Terphenyl-d14	3095	0	3333	0	92.8	52-123	0			
Surr: Nitrobenzene-d5	2468	0	3333	0	74	41-94	0			

LCS		Sample ID: SLCSS1-131509-131509				Units: µg/Kg		Analysis Date: 2/5/2019 04:05 PM		
Client ID:		Run ID: SVMS5_190205A				SeqNo: 5509063		Prep Date: 2/5/2019		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	995.3	6.7	1333	0	74.7	55-101	0			
Anthracene	1213	6.7	1333	0	91	67-105	0			
Benzo(a)anthracene	1265	6.7	1333	0	94.9	68-105	0			
Benzo(a)pyrene	1283	6.7	1333	0	96.2	68-110	0			
Benzo(b)fluoranthene	1275	6.7	1333	0	95.6	65-110	0			
Benzo(k)fluoranthene	1247	6.7	1333	0	93.5	66-113	0			
Chrysene	1238	6.7	1333	0	92.9	68-108	0			
Dibenzo(a,h)anthracene	1231	6.7	1333	0	92.4	62-119	0			
Fluoranthene	1313	6.7	1333	0	98.5	67-106	0			
Fluorene	1075	6.7	1333	0	80.6	59-107	0			
Indeno(1,2,3-cd)pyrene	1243	6.7	1333	0	93.3	56-120	0			
Naphthalene	1065	6.7	1333	0	79.9	46-98	0			
Pyrene	1217	6.7	1333	0	91.3	60-119	0			
Surr: 2-Fluorobiphenyl	2296	0	3333	0	68.9	44-107	0			
Surr: 4-Terphenyl-d14	2847	0	3333	0	85.4	52-123	0			
Surr: Nitrobenzene-d5	2395	0	3333	0	71.8	41-94	0			

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

Client: SGM Inc.  
 Work Order: 1902118  
 Project: Mustang Resources

# QC BATCH REPORT

Batch ID: 131509 Instrument ID SVMS5 Method: SW846 8270D

MS				Sample ID: 1902099-09B MS				Units: µg/Kg		Analysis Date: 2/5/2019 06:15 PM	
Client ID:			Run ID: SVMS5_190205A			SeqNo: 5509068		Prep Date: 2/5/2019		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	913.4	6.6	1322	0	69.1	55-101	0				
Anthracene	1114	6.6	1322	0	84.2	67-105	0				
Benzo(a)anthracene	1112	6.6	1322	0	84.1	68-105	0				
Benzo(a)pyrene	1142	6.6	1322	0	86.3	68-110	0				
Benzo(b)fluoranthene	1091	6.6	1322	0	82.5	65-110	0				
Benzo(k)fluoranthene	1107	6.6	1322	0	83.7	66-113	0				
Chrysene	1099	6.6	1322	0	83.1	68-108	0				
Dibenzo(a,h)anthracene	1086	6.6	1322	0	82.1	62-119	0				
Fluoranthene	1168	6.6	1322	0	88.3	67-106	0				
Fluorene	990.7	6.6	1322	0	74.9	59-107	0				
Indeno(1,2,3-cd)pyrene	1096	6.6	1322	0	82.9	56-120	0				
Naphthalene	1002	6.6	1322	0	75.8	46-98	0				
Pyrene	1073	6.6	1322	0	81.2	60-119	0				
Surr: 2-Fluorobiphenyl	2223	0	3307	0	67.2	44-107	0				
Surr: 4-Terphenyl-d14	2425	0	3307	0	73.3	52-123	0				
Surr: Nitrobenzene-d5	2329	0	3307	0	70.4	41-94	0				

MSD				Sample ID: 1902099-09B MSD			Units: µg/Kg		Analysis Date: 2/5/2019 06:39 PM		
Client ID:			Run ID: SVMS5_190205A			SeqNo: 5509075		Prep Date: 2/5/2019		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	849.6	6.6	1322	0	64.3	55-101	913.4	7.23	30		
Anthracene	1021	6.6	1322	0	77.2	67-105	1114	8.7	30		
Benzo(a)anthracene	1039	6.6	1322	0	78.6	68-105	1112	6.73	30		
Benzo(a)pyrene	1051	6.6	1322	0	79.5	68-110	1142	8.23	30		
Benzo(b)fluoranthene	1039	6.6	1322	0	78.6	65-110	1091	4.87	30		
Benzo(k)fluoranthene	985.9	6.6	1322	0	74.6	66-113	1107	11.6	30		
Chrysene	1016	6.6	1322	0	76.9	68-108	1099	7.78	30		
Dibenzo(a,h)anthracene	1019	6.6	1322	0	77.1	62-119	1086	6.37	30		
Fluoranthene	1070	6.6	1322	0	81	67-106	1168	8.71	30		
Fluorene	938.9	6.6	1322	0	71	59-107	990.7	5.37	30		
Indeno(1,2,3-cd)pyrene	1072	6.6	1322	0	81.1	56-120	1096	2.22	30		
Naphthalene	921.1	6.6	1322	0	69.7	46-98	1002	8.42	30		
Pyrene	981.2	6.6	1322	0	74.2	60-119	1073	8.97	30		
Surr: 2-Fluorobiphenyl	2112	0	3306	0	63.9	44-107	2223	5.12	40		
Surr: 4-Terphenyl-d14	2328	0	3306	0	70.4	52-123	2425	4.06	40		
Surr: Nitrobenzene-d5	2153	0	3306	0	65.1	41-94	2329	7.88	40		

The following samples were analyzed in this batch:

1902118-01A 1902118-02A 1902118-03A

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

Client: SGM Inc.  
 Work Order: 1902118  
 Project: Mustang Resources

# QC BATCH REPORT

Batch ID: 131549 Instrument ID SVMS5 Method: SW846 8270D

MBLK				Sample ID: SBLKS1-131549-131549				Units: µg/Kg		Analysis Date: 2/6/2019 05:37 PM	
Client ID:			Run ID: SVMS5_190206A			SeqNo: 5510499		Prep Date: 2/6/2019		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	1711	0	3333	0	51.3	44-107		0			
Surr: 4-Terphenyl-d14	2671	0	3333	0	80.1	52-123		0			
Surr: Nitrobenzene-d5	1618	0	3333	0	48.5	41-94		0			

LCS				Sample ID: SLCSS1-131549-131549			Units: µg/Kg		Analysis Date: 2/6/2019 06:01 PM		
Client ID:			Run ID: SVMS5_190206A			SeqNo: 5510500		Prep Date: 2/6/2019		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	885.3	6.7	1333	0	66.4	55-101	0				
Anthracene	1137	6.7	1333	0	85.3	67-105	0				
Benzo(a)anthracene	1152	6.7	1333	0	86.4	68-105	0				
Benzo(a)pyrene	1159	6.7	1333	0	87	68-110	0				
Benzo(b)fluoranthene	1159	6.7	1333	0	86.9	65-110	0				
Benzo(k)fluoranthene	1196	6.7	1333	0	89.7	66-113	0				
Chrysene	1145	6.7	1333	0	85.9	68-108	0				
Dibenzo(a,h)anthracene	1100	6.7	1333	0	82.5	62-119	0				
Fluoranthene	1161	6.7	1333	0	87.1	67-106	0				
Fluorene	930.7	6.7	1333	0	69.8	59-107	0				
Indeno(1,2,3-cd)pyrene	1119	6.7	1333	0	83.9	56-120	0				
Naphthalene	908	6.7	1333	0	68.1	46-98	0				
Pyrene	1171	6.7	1333	0	87.8	60-119	0				
Surr: 2-Fluorobiphenyl	2031	0	3333	0	60.9	44-107	0				
Surr: 4-Terphenyl-d14	2831	0	3333	0	84.9	52-123	0				
Surr: Nitrobenzene-d5	2111	0	3333	0	63.3	41-94	0				

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

Client: SGM Inc.  
 Work Order: 1902118  
 Project: Mustang Resources

# QC BATCH REPORT

Batch ID: 131549 Instrument ID SVMS5 Method: SW846 8270D

MS				Sample ID: 1902178-03B MS			Units: µg/Kg		Analysis Date: 2/6/2019 06:25 PM	
Client ID:				Run ID: SVMS5_190206A			SeqNo: 5510501		Prep Date: 2/6/2019	
							DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	705.8	6.5	1298	0	54.4	55-101	0			S
Anthracene	957.8	6.5	1298	0	73.8	67-105	0			
Benzo(a)anthracene	989.6	6.5	1298	16.16	75	68-105	0			
Benzo(a)pyrene	1029	6.5	1298	15.52	78.1	68-110	0			
Benzo(b)fluoranthene	1001	6.5	1298	21.98	75.4	65-110	0			
Benzo(k)fluoranthene	984.4	6.5	1298	10.34	75	66-113	0			
Chrysene	998.7	6.5	1298	10.34	76.1	68-108	0			
Dibenzo(a,h)anthracene	1020	6.5	1298	0	78.6	62-119	0			
Fluoranthene	976.6	6.5	1298	17.46	73.9	67-106	0			
Fluorene	779.9	6.5	1298	0	60.1	59-107	0			
Indeno(1,2,3-cd)pyrene	1055	6.5	1298	0	81.2	56-120	0			
Naphthalene	730.5	6.5	1298	18.1	54.9	46-98	0			
Pyrene	1021	6.5	1298	16.16	77.4	60-119	0			
Surr: 2-Fluorobiphenyl	1621	0	3246	0	49.9	44-107	0			
Surr: 4-Terphenyl-d14	2427	0	3246	0	74.8	52-123	0			
Surr: Nitrobenzene-d5	1637	0	3246	0	50.4	41-94	0			

MSD				Sample ID: 1902178-03B MSD			Units: µg/Kg		Analysis Date: 2/6/2019 06:48 PM	
Client ID:				Run ID: SVMS5_190206A			SeqNo: 5510502		Prep Date: 2/6/2019	
							DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	856	6.6	1315	0	65.1	55-101	705.8	19.2	30	
Anthracene	1050	6.6	1315	0	79.9	67-105	957.8	9.18	30	
Benzo(a)anthracene	1029	6.6	1315	16.16	77	68-105	989.6	3.9	30	
Benzo(a)pyrene	1066	6.6	1315	15.52	79.9	68-110	1029	3.49	30	
Benzo(b)fluoranthene	1080	6.6	1315	21.98	80.4	65-110	1001	7.52	30	
Benzo(k)fluoranthene	1051	6.6	1315	10.34	79.1	66-113	984.4	6.51	30	
Chrysene	1012	6.6	1315	10.34	76.2	68-108	998.7	1.31	30	
Dibenzo(a,h)anthracene	994.7	6.6	1315	0	75.7	62-119	1020	2.52	30	
Fluoranthene	1070	6.6	1315	17.46	80	67-106	976.6	9.1	30	
Fluorene	922.4	6.6	1315	0	70.2	59-107	779.9	16.7	30	
Indeno(1,2,3-cd)pyrene	1065	6.6	1315	0	81	56-120	1055	0.995	30	
Naphthalene	938.2	6.6	1315	18.1	70	46-98	730.5	24.9	30	
Pyrene	1085	6.6	1315	16.16	81.3	60-119	1021	6.14	30	
Surr: 2-Fluorobiphenyl	1923	0	3287	0	58.5	44-107	1621	17.1	40	
Surr: 4-Terphenyl-d14	2496	0	3287	0	75.9	52-123	2427	2.78	40	
Surr: Nitrobenzene-d5	2032	0	3287	0	61.8	41-94	1637	21.5	40	

The following samples were analyzed in this batch:

1902118-02A

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

Client: SGM Inc.  
 Work Order: 1902118  
 Project: Mustang Resources

# QC BATCH REPORT

Batch ID: 131544 Instrument ID VMS7 Method: SW8260C

MBLK Sample ID: MBLK-131544-131544				Units: µg/Kg-dry			Analysis Date: 2/5/2019 12:30 PM			
Client ID:		Run ID: VMS7_190205A		SeqNo: 5509012		Prep Date: 2/5/2019		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	U	30								
Ethylbenzene	U	30								
m,p-Xylene	16.5	60								J
o-Xylene	U	30								
Toluene	U	30								
Xylenes, Total	U	90								
Surr: 1,2-Dichloroethane-d4	977.5	0	1000	0	97.8	70-130	0			
Surr: 4-Bromofluorobenzene	991	0	1000	0	99.1	70-130	0			
Surr: Dibromofluoromethane	944.5	0	1000	0	94.4	70-130	0			
Surr: Toluene-d8	1002	0	1000	0	100	70-130	0			

LCS Sample ID: LCS-131544-131544				Units: µg/Kg-dry			Analysis Date: 2/5/2019 12:45 PM			
Client ID:		Run ID: VMS7_190205A		SeqNo: 5509017		Prep Date: 2/5/2019		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1054	30	1000	0	105	75-125	0			
Ethylbenzene	1030	30	1000	0	103	75-125	0			
m,p-Xylene	2006	60	2000	0	100	80-125	0			
o-Xylene	1035	30	1000	0	104	75-125	0			
Toluene	1074	30	1000	0	107	70-125	0			
Xylenes, Total	3041	90	3000	0	101	75-125	0			
Surr: 1,2-Dichloroethane-d4	975.5	0	1000	0	97.6	70-130	0			
Surr: 4-Bromofluorobenzene	965.5	0	1000	0	96.6	70-130	0			
Surr: Dibromofluoromethane	1020	0	1000	0	102	70-130	0			
Surr: Toluene-d8	990.5	0	1000	0	99	70-130	0			

MS Sample ID: 1902118-03A MS				Units: µg/Kg-dry			Analysis Date: 2/5/2019 06:43 PM			
Client ID: Sample Site 3		Run ID: VMS7_190205A		SeqNo: 5509040		Prep Date: 2/5/2019		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1132	34	1134	8.509	99	75-125	0			
Ethylbenzene	1058	34	1134	13.61	92.1	75-125	0			
m,p-Xylene	2159	68	2269	66.37	92.2	80-125	0			
o-Xylene	1056	34	1134	18.72	91.4	75-125	0			
Toluene	1142	34	1134	74.31	94.2	70-125	0			
Xylenes, Total	3215	100	3403	85	92	75-125	0			
Surr: 1,2-Dichloroethane-d4	1144	0	1134	0	101	70-130	0			
Surr: 4-Bromofluorobenzene	1141	0	1134	0	101	70-130	0			
Surr: Dibromofluoromethane	1111	0	1134	0	97.9	70-130	0			
Surr: Toluene-d8	1104	0	1134	0	97.4	70-130	0			

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

Client: SGM Inc.  
 Work Order: 1902118  
 Project: Mustang Resources

# QC BATCH REPORT

Batch ID: 131544 Instrument ID VMS7 Method: SW8260C

MSD				Sample ID: 1902118-03A MSD			Units: µg/Kg-dry		Analysis Date: 2/5/2019 06:58 PM	
Client ID: Sample Site 3				Run ID: VMS7_190205A			SeqNo: 5509044		Prep Date: 2/5/2019	
							DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1064	34	1134	8.509	93	75-125	1132	6.25	30	
Ethylbenzene	994.4	34	1134	13.61	86.4	75-125	1058	6.24	30	
m,p-Xylene	2002	68	2269	66.37	85.3	80-125	2159	7.52	30	
o-Xylene	1003	34	1134	18.72	86.8	75-125	1056	5.18	30	
Toluene	1096	34	1134	74.31	90.1	70-125	1142	4.1	30	
Xylenes, Total	3005	100	3403	85	85.8	75-125	3215	6.75	30	
Surr: 1,2-Dichloroethane-d4	1145	0	1134	0	101	70-130	1144	0.0496	30	
Surr: 4-Bromofluorobenzene	1145	0	1134	0	101	70-130	1141	0.397	30	
Surr: Dibromofluoromethane	1129	0	1134	0	99.5	70-130	1111	1.62	30	
Surr: Toluene-d8	1112	0	1134	0	98	70-130	1104	0.716	30	

The following samples were analyzed in this batch:

1902118-01A 1902118-02A 1902118-03A

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

Client: SGM Inc.  
 Work Order: 1902118  
 Project: Mustang Resources

# QC BATCH REPORT

Batch ID: **131538** Instrument ID **WETCHEM** Method: **SW7196A**

<b>MBLK</b>		Sample ID: <b>MBLK-131538-131538</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>2/6/2019 02:30 PM</b>		
Client ID:		Run ID: <b>WETCHEM_190206N</b>		SeqNo: <b>5510013</b>		Prep Date: <b>2/5/2019</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent U 1.0

<b>LCS</b>		Sample ID: <b>LCS-131538-131538</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>2/6/2019 02:30 PM</b>		
Client ID:		Run ID: <b>WETCHEM_190206N</b>		SeqNo: <b>5510014</b>		Prep Date: <b>2/5/2019</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 5.16 1.0 5 0 103 80-120 0

<b>MS</b>		Sample ID: <b>1902087-01A MS</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>2/6/2019 02:30 PM</b>		
Client ID:		Run ID: <b>WETCHEM_190206N</b>		SeqNo: <b>5510016</b>		Prep Date: <b>2/5/2019</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 4.388 0.97 4.854 0.2857 84.5 75-125 0

<b>MS</b>		Sample ID: <b>1902087-01A MSI</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>2/6/2019 02:30 PM</b>		
Client ID:		Run ID: <b>WETCHEM_190206N</b>		SeqNo: <b>5510018</b>		Prep Date: <b>2/5/2019</b>		DF: <b>100</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 2085 100 2134 0.2857 97.7 75-125 0

<b>MSD</b>		Sample ID: <b>1902087-01A MSD</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>2/6/2019 02:30 PM</b>		
Client ID:		Run ID: <b>WETCHEM_190206N</b>		SeqNo: <b>5510017</b>		Prep Date: <b>2/5/2019</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 4.305 0.95 4.762 0.2857 84.4 75-125 4.388 1.92 20

The following samples were analyzed in this batch:

1902118-01A	1902118-02A	1902118-03A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.



**Client:** SGM Inc.  
**Work Order:** 1902118  
**Project:** Mustang Resources

## QC BATCH REPORT

Batch ID: **131555** Instrument ID **WETCHEM** Method: **SW9045D**

LCS				Sample ID: LCS-131555-131555				Units: s.u.			Analysis Date: 2/5/2019 03:08 PM			
Client ID:				Run ID: WETCHEM_190205N				SeqNo: 5508374			Prep Date: 2/5/2019		DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
pH		3.91	0.10	4	0	97.8	90-110	0						

DUP				Sample ID: 1902118-01A DUP				Units: s.u.			Analysis Date: 2/5/2019 03:08 PM			
Client ID: Sample Site 1				Run ID: WETCHEM_190205N				SeqNo: 5508381			Prep Date: 2/5/2019		DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
pH		8.39	0.10	0	0	0	0-0	8.25	1.68	20				
Temperature		21.6	0.10	0	0	0		21.6	0					

The following samples were analyzed in this batch:

1902118-01A	1902118-02A	1902118-03A
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**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** SGM Inc.  
**Work Order:** 1902118  
**Project:** Mustang Resources

## QC BATCH REPORT

Batch ID: **131612** Instrument ID **WETCHEM** Method: **USDA H60 Metho**

<b>DUP</b>		Sample ID: <b>1902118-01B DUP</b>				Units: <b>mmhos/cm @25°</b>		Analysis Date: <b>2/7/2019 01:45 PM</b>		
Client ID: <b>Sample Site 1</b>		Run ID: <b>WETCHEM_190207H</b>				SeqNo: <b>5511685</b>		Prep Date: <b>2/7/2019</b>		DF: <b>20</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	1.466	0.10	0	0	0		1.588	7.99	50	

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

1902118-01B	1902118-02B	1902118-03B
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**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** SGM Inc.  
**Work Order:** 1902118  
**Project:** Mustang Resources

## QC BATCH REPORT

Batch ID: **R254331** Instrument ID **MOIST** Method: **SW3550C**

<b>MBLK</b>		Sample ID: <b>WBLKS-R254331</b>				Units: % of sample		Analysis Date: <b>2/5/2019 12:54 PM</b>		
Client ID:		Run ID: <b>MOIST_190205A</b>				SeqNo: <b>5509249</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture U 0.10

<b>LCS</b>		Sample ID: <b>LCS-R254331</b>				Units: % of sample		Analysis Date: <b>2/5/2019 12:54 PM</b>		
Client ID:		Run ID: <b>MOIST_190205A</b>				SeqNo: <b>5509248</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 100 0.10 100 0 100 98-102 0

<b>DUP</b>		Sample ID: <b>1902099-05B DUP</b>				Units: % of sample		Analysis Date: <b>2/5/2019 12:54 PM</b>		
Client ID:		Run ID: <b>MOIST_190205A</b>				SeqNo: <b>5509232</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 24.63 0.10 0 0 0 0-0 22.36 9.66 10

<b>DUP</b>		Sample ID: <b>1902099-07B DUP</b>				Units: % of sample		Analysis Date: <b>2/5/2019 12:54 PM</b>		
Client ID:		Run ID: <b>MOIST_190205A</b>				SeqNo: <b>5509235</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 17.59 0.10 0 0 0 0-0 17.35 1.37 10

The following samples were analyzed in this batch:

1902118-01A	1902118-02A	1902118-03A
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**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.




WORKORDER #	1902 <sup>118</sup> <del>2000</del>
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Form 202r8

[illegible]

\*Time Zone (Circle): EST CST MST PST Matrix: O = oil S = soil NS = non-soil solid W = water L = liquid E = extract F = filter

**For metals or anions, please detail analytes below.**

<b>Comments:</b>  <div style="text-align: center;">  </div>	<b>QC PACKAGE (check below)</b>	
		LEVEL II (Standard QC)
		LEVEL III (Std QC + forms)
		LEVEL IV (Std QC + forms + raw data)
<b>Preservative Key:</b> 1-HCl   2-HNO <sub>3</sub> 3-H <sub>2</sub> SO <sub>4</sub> 4-NaOH   5-NaHSO <sub>4</sub> 7-Other   8-4 degrees C   9-5035		

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY	<i>Rachel Kattig</i>	Rachel Kattig	2/1/19	4:45
RECEIVED BY	<i>M</i>	<i>M</i>	2-1-19	4:45
RELINQUISHED BY				
RECEIVED BY	<i>Diane F. Shaw</i>	Diane F. Shaw	2/2/19	1015
RELINQUISHED BY				
RECEIVED BY				

Sample Receipt Checklist

Client Name: **SGM**

Date/Time Received: **02-Feb-19 10:15**

Work Order: **1902118**

Received by: **DS**

Checklist completed by Diane Shaw  
eSignature

05-Feb-19  
Date

Reviewed by: Chad Whelton  
eSignature

05-Feb-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>3.2/3.2 c</u>		<u>SR2</u>
Cooler(s)/Kit(s):	<u></u>		
Date/Time sample(s) sent to storage:	<u>2/5/2019 10:23:36 AM</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:

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Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction: