



04-Mar-2019

Eric Petterson
SGM Inc.
118 W. 6th Street
Suite 200
Glenwood Springs, CO 81601

Re: **Mustang Resources**

Work Order: **19021209**

Dear Eric,

ALS Environmental received 2 samples on 23-Feb-2019 12:00 PM 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 26.

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 

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RIGHT SOLUTIONS RIGHT PARTNER

Client: SGM Inc.
Project: Mustang Resources
Work Order: 19021209

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>
19021209-01	Sample Site 8	Soil		2/22/2019 14:00	2/23/2019 12:00	<input type="checkbox"/>
19021209-02	Sample Site 9	Soil		2/22/2019 14:10	2/23/2019 12:00	<input type="checkbox"/>

Client: SGM Inc.
Project: Mustang Resources
Work Order: 19021209

Case Narrative

Batch 132414, Method ICP_6010_S, Sample 19021209-01A 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 132414, Method ICP_6010_S, Sample 19021209-01A MS/MSD: The MS/MSD recoveries were outside of the control limits for Barium and Zinc; however, the results in the parent sample are greater than 4x the spike amount. No qualification is required.

Batch 132432, Method DRO_8015_S, Sample 19021209-01A MSD: The RPD between the MS and MSD was outside the control limit for DRO. The corresponding result in the parent sample should be considered estimated.

Batch 132460, Method VOC_8260_S, Sample 19021209-02A: The VOC reporting limits are elevated due to dilution needed to eliminate matrix-related interference.

<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
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	

s.u. Standard Units

ALS Group, USA

Date: 04-Mar-19

Client: SGM Inc.
Project: Mustang Resources
Sample ID: Sample Site 8
Collection Date: 2/22/2019 02:00 PM

Work Order: 19021209
Lab ID: 19021209-01
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID							
			Method: SW8015M		Prep: SW3546 / 2/26/19		Analyst: RP
DRO (C10-C28)	U		2.9	5.0	mg/Kg-dry	1	2/26/2019 17:51
Surr: 4-Terphenyl-d14	61.7			33-111	%REC	1	2/26/2019 17:51
GASOLINE RANGE ORGANICS BY GC-FID							
			Method: SW8015D		Prep: SW5035 / 2/26/19		Analyst: RP
GRO (C6-C10)	U		2.0	4.7	mg/Kg	1	2/28/2019 02:31
Surr: Toluene-d8	85.7			71-123	%REC	1	2/28/2019 02:31
MERCURY BY CVAA							
			Method: SW7471B		Prep: SW7471 / 2/25/19		Analyst: RSB
Mercury	0.016	J	0.0019	0.019	mg/Kg-dry	1	2/25/2019 17:34
METALS ANALYSIS BY ICP							
			Method: SW846 6010C		Prep: SW3050B / 2/26/19		Analyst: ABL
Arsenic	6.4		0.096	0.37	mg/Kg-dry	1	2/26/2019 23:19
Barium	230		0.15	0.37	mg/Kg-dry	1	2/26/2019 23:19
Boron	U		0.37	1.5	mg/Kg-dry	1	2/26/2019 23:19
Cadmium	0.38	J	0.035	0.74	mg/Kg-dry	1	2/26/2019 23:19
Chromium	6.8		0.021	0.37	mg/Kg-dry	1	2/26/2019 23:19
Copper	11		0.16	0.74	mg/Kg-dry	1	2/26/2019 23:19
Lead	9.1		0.078	0.37	mg/Kg-dry	1	2/26/2019 23:19
Nickel	9.5		0.15	0.37	mg/Kg-dry	1	2/26/2019 23:19
Selenium	0.22	J	0.21	0.74	mg/Kg-dry	1	2/26/2019 23:19
Silver	U		0.046	0.37	mg/Kg-dry	1	2/26/2019 23:19
Zinc	40		0.059	0.74	mg/Kg-dry	1	2/26/2019 23:19
SOLUBLE CATIONS FOR SAR							
			Method: SW6020A		Prep: USDA Method 20B / 3/1/19		Analyst: DSC
Calcium	88		0.86	5.0	mg/L	10	3/1/2019 12:39
Magnesium	43		0.068	2.0	mg/L	10	3/1/2019 12:39
Sodium	410		0.34	2.0	mg/L	10	3/1/2019 12:39
SODIUM ADSORPTION RATIO							
			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 3/1/19		Analyst: DSC
Sodium Adsorption Ratio	9.1		0.010	0.010	none	1	3/1/2019
SEMI-VOLATILE ORGANIC COMPOUNDS							
			Method: SW846 8270D		Prep: SW3546 / 2/26/19		Analyst: RM
Acenaphthene	U		4.8	6.7	µg/Kg-dry	1	2/26/2019 22:20
Anthracene	U		4.7	6.7	µg/Kg-dry	1	2/26/2019 22:20
Benzo(a)anthracene	U		5.8	6.7	µg/Kg-dry	1	2/26/2019 22:20
Benzo(a)pyrene	U		4.1	6.7	µg/Kg-dry	1	2/26/2019 22:20
Benzo(b)fluoranthene	U		5.0	6.7	µg/Kg-dry	1	2/26/2019 22:20
Benzo(k)fluoranthene	U		5.1	6.7	µg/Kg-dry	1	2/26/2019 22:20
Chrysene	U		5.4	6.7	µg/Kg-dry	1	2/26/2019 22:20
Dibenzo(a,h)anthracene	U		3.6	6.7	µg/Kg-dry	1	2/26/2019 22:20

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

ALS Group, USA

Date: 04-Mar-19

Client: SGM Inc.
Project: Mustang Resources
Sample ID: Sample Site 8
Collection Date: 2/22/2019 02:00 PM

Work Order: 19021209
Lab ID: 19021209-01
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Fluoranthene	11		3.2	6.7	µg/Kg-dry	1	2/26/2019 22:20
Fluorene	U		4.9	6.7	µg/Kg-dry	1	2/26/2019 22:20
Indeno(1,2,3-cd)pyrene	U		4.7	6.7	µg/Kg-dry	1	2/26/2019 22:20
Naphthalene	U		4.3	6.7	µg/Kg-dry	1	2/26/2019 22:20
Pyrene	U		1.2	6.7	µg/Kg-dry	1	2/26/2019 22:20
Surr: 2-Fluorobiphenyl	46.3			44-107	%REC	1	2/26/2019 22:20
Surr: 4-Terphenyl-d14	52.3			52-123	%REC	1	2/26/2019 22:20
Surr: Nitrobenzene-d5	43.8			41-94	%REC	1	2/26/2019 22:20
VOLATILE ORGANIC COMPOUNDS			Method: SW8260C		Prep: SW5035 / 2/26/19		Analyst: SHW
Benzene	U		0.0049	0.028	mg/Kg	1	2/27/2019 17:48
Ethylbenzene	0.012	J	0.0060	0.028	mg/Kg	1	2/27/2019 17:48
m,p-Xylene	0.17		0.014	0.057	mg/Kg	1	2/27/2019 17:48
o-Xylene	0.045		0.011	0.028	mg/Kg	1	2/27/2019 17:48
Toluene	0.041		0.0078	0.028	mg/Kg	1	2/27/2019 17:48
Xylenes, Total	0.22		0.025	0.085	mg/Kg	1	2/27/2019 17:48
Surr: 1,2-Dichloroethane-d4	99.2			70-130	%REC	1	2/27/2019 17:48
Surr: 4-Bromofluorobenzene	100			70-130	%REC	1	2/27/2019 17:48
Surr: Dibromofluoromethane	88.0			70-130	%REC	1	2/27/2019 17:48
Surr: Toluene-d8	97.8			70-130	%REC	1	2/27/2019 17:48
ELECTRICAL CONDUCTIVITY (SAR)			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 3/1/19		Analyst: JEB
Electrical Conductivity @ Saturation	3.1		0.011	0.10	mmhos/cm @25°	20	3/1/2019 14:00
CHROMIUM, TRIVALENT			Method: CALCULATION				Analyst: JB
Chromium, Trivalent	6.8		0.32	1.0	mg/Kg-dry	1	3/4/2019 09:00
CHROMIUM, HEXAVALENT			Method: SW7196A		Prep: SW3060A / 3/1/19		Analyst: JEB
Chromium, Hexavalent	U		0.91	1.1	mg/Kg-dry	1	3/2/2019 10:20
MOISTURE			Method: SW3550C				Analyst: DTV
Moisture	3.2		0.10	0.10	% of sample	1	2/25/2019 13:20
PH			Method: SW9045D		Prep: EXTRACT / 2/26/19		Analyst: RZM
pH	8.08		0.10	0.100	s.u.	1	2/27/2019 09:15
Temperature	23.2		0.10	0.100	C	1	2/27/2019 09:15

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

ALS Group, USA

Date: 04-Mar-19

Client: SGM Inc.
Project: Mustang Resources
Sample ID: Sample Site 9
Collection Date: 2/22/2019 02:10 PM

Work Order: 19021209
Lab ID: 19021209-02
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID							
			Method: SW8015M		Prep: SW3546 / 2/26/19		Analyst: RP
DRO (C10-C28)	33		2.9	5.2	mg/Kg-dry	1	2/26/2019 18:20
Surr: 4-Terphenyl-d14	68.8			33-111	%REC	1	2/26/2019 18:20
GASOLINE RANGE ORGANICS BY GC-FID							
			Method: SW8015D		Prep: SW5035 / 2/26/19		Analyst: RP
GRO (C6-C10)	18		1.9	4.6	mg/Kg	1	2/28/2019 03:00
Surr: Toluene-d8	98.8			71-123	%REC	1	2/28/2019 03:00
MERCURY BY CVAA							
			Method: SW7471B		Prep: SW7471 / 2/28/19		Analyst: RSB
Mercury	0.016	J	0.0017	0.017	mg/Kg-dry	1	2/28/2019 15:38
METALS ANALYSIS BY ICP							
			Method: SW846 6010C		Prep: SW3050B / 2/26/19		Analyst: ABL
Arsenic	6.1		0.098	0.38	mg/Kg-dry	1	2/26/2019 23:37
Barium	180		0.15	0.38	mg/Kg-dry	1	2/26/2019 23:37
Boron	U		0.38	1.5	mg/Kg-dry	1	2/26/2019 23:37
Cadmium	0.39	J	0.036	0.76	mg/Kg-dry	1	2/26/2019 23:37
Chromium	9.7		0.021	0.38	mg/Kg-dry	1	2/26/2019 23:37
Copper	15		0.17	0.76	mg/Kg-dry	1	2/26/2019 23:37
Lead	10		0.080	0.38	mg/Kg-dry	1	2/26/2019 23:37
Nickel	13		0.15	0.38	mg/Kg-dry	1	2/26/2019 23:37
Selenium	0.37	J	0.21	0.76	mg/Kg-dry	1	2/26/2019 23:37
Silver	U		0.047	0.38	mg/Kg-dry	1	2/26/2019 23:37
Zinc	53		0.061	0.76	mg/Kg-dry	1	2/26/2019 23:37
SOLUBLE CATIONS FOR SAR							
			Method: SW6020A		Prep: USDA Method 20B / 3/1/19		Analyst: DSC
Calcium	61		0.86	5.0	mg/L	10	3/1/2019 12:43
Magnesium	23		0.068	2.0	mg/L	10	3/1/2019 12:43
Sodium	290		0.34	2.0	mg/L	10	3/1/2019 12:43
SODIUM ADSORPTION RATIO							
			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 3/1/19		Analyst: DSC
Sodium Adsorption Ratio	8.1		0.010	0.010	none	1	3/1/2019
SEMI-VOLATILE ORGANIC COMPOUNDS							
			Method: SW846 8270D		Prep: SW3546 / 2/26/19		Analyst: RM
Acenaphthene	U		5.0	6.9	µg/Kg-dry	1	2/26/2019 22:41
Anthracene	U		4.9	6.9	µg/Kg-dry	1	2/26/2019 22:41
Benzo(a)anthracene	U		5.9	6.9	µg/Kg-dry	1	2/26/2019 22:41
Benzo(a)pyrene	U		4.2	6.9	µg/Kg-dry	1	2/26/2019 22:41
Benzo(b)fluoranthene	U		5.1	6.9	µg/Kg-dry	1	2/26/2019 22:41
Benzo(k)fluoranthene	U		5.2	6.9	µg/Kg-dry	1	2/26/2019 22:41
Chrysene	U		5.6	6.9	µg/Kg-dry	1	2/26/2019 22:41
Dibenzo(a,h)anthracene	U		3.7	6.9	µg/Kg-dry	1	2/26/2019 22:41

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

ALS Group, USA

Date: 04-Mar-19

Client: SGM Inc.
Project: Mustang Resources
Sample ID: Sample Site 9
Collection Date: 2/22/2019 02:10 PM

Work Order: 19021209
Lab ID: 19021209-02
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Fluoranthene	U		3.3	6.9	µg/Kg-dry	1	2/26/2019 22:41
Fluorene	U		5.0	6.9	µg/Kg-dry	1	2/26/2019 22:41
Indeno(1,2,3-cd)pyrene	U		4.8	6.9	µg/Kg-dry	1	2/26/2019 22:41
Naphthalene	41		4.4	6.9	µg/Kg-dry	1	2/26/2019 22:41
Pyrene	U		1.2	6.9	µg/Kg-dry	1	2/26/2019 22:41
Surr: 2-Fluorobiphenyl	52.7			44-107	%REC	1	2/26/2019 22:41
Surr: 4-Terphenyl-d14	56.5			52-123	%REC	1	2/26/2019 22:41
Surr: Nitrobenzene-d5	46.5			41-94	%REC	1	2/26/2019 22:41
VOLATILE ORGANIC COMPOUNDS			Method: SW8260C		Prep: SW5035 / 2/26/19		Analyst: SHW
Benzene	U		0.047	0.27	mg/Kg	10	2/27/2019 18:04
Ethylbenzene	U		0.058	0.27	mg/Kg	10	2/27/2019 18:04
m,p-Xylene	0.37	J	0.13	0.55	mg/Kg	10	2/27/2019 18:04
o-Xylene	U		0.11	0.27	mg/Kg	10	2/27/2019 18:04
Toluene	U		0.075	0.27	mg/Kg	10	2/27/2019 18:04
Xylenes, Total	0.37	J	0.24	0.82	mg/Kg	10	2/27/2019 18:04
Surr: 1,2-Dichloroethane-d4	99.5			70-130	%REC	10	2/27/2019 18:04
Surr: 4-Bromofluorobenzene	93.5			70-130	%REC	10	2/27/2019 18:04
Surr: Dibromofluoromethane	94.8			70-130	%REC	10	2/27/2019 18:04
Surr: Toluene-d8	102			70-130	%REC	10	2/27/2019 18:04
ELECTRICAL CONDUCTIVITY (SAR)			Method: USDA H60 METHOD 2		Prep: USDA Method 20B / 3/1/19		Analyst: JEB
Electrical Conductivity @ Saturation	1.9		0.011	0.10	mmhos/cm @25°	20	3/1/2019 14:00
CHROMIUM, TRIVALENT			Method: CALCULATION				Analyst: JB
Chromium, Trivalent	9.7		0.32	1.1	mg/Kg-dry	1	3/4/2019 09:00
CHROMIUM, HEXAVALENT			Method: SW7196A		Prep: SW3060A / 3/1/19		Analyst: JEB
Chromium, Hexavalent	U		0.89	1.1	mg/Kg-dry	1	3/2/2019 10:20
MOISTURE			Method: SW3550C				Analyst: DTV
Moisture	4.8		0.10	0.10	% of sample	1	2/25/2019 13:20
PH			Method: SW9045D		Prep: EXTRACT / 2/26/19		Analyst: RZM
pH	8.66		0.10	0.100	s.u.	1	2/27/2019 09:15
Temperature	23.0		0.10	0.100	C	1	2/27/2019 09:15

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

Client: SGM Inc.
 Work Order: 19021209
 Project: Mustang Resources

QC BATCH REPORT

Batch ID: **132432** Instrument ID **GC8** Method: **SW8015M**

MBLK		Sample ID: DBLKS1-132432-132432				Units: mg/Kg		Analysis Date: 2/26/2019 03:54 PM		
Client ID:		Run ID: GC8_190226A				SeqNo: 5538905		Prep Date: 2/26/2019		DF: 1
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 2.684 0 3.33 0 80.6 33-111 0

LCS		Sample ID: DLCSS1-132432-132432				Units: mg/Kg		Analysis Date: 2/26/2019 04:24 PM		
Client ID:		Run ID: GC8_190226A				SeqNo: 5538906		Prep Date: 2/26/2019		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28) 232.9 5.0 333 0 69.9 58-111 0
 Surr: 4-Terphenyl-d14 3.178 0 3.33 0 95.4 33-111 0

MS		Sample ID: 19021209-01A MS				Units: mg/Kg		Analysis Date: 2/26/2019 04:53 PM		
Client ID: Sample Site 8		Run ID: GC8_190226A				SeqNo: 5538907		Prep Date: 2/26/2019		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28) 205.6 4.8 321.4 0 64 58-111 0
 Surr: 4-Terphenyl-d14 2.543 0 3.214 0 79.1 33-111 0

MSD		Sample ID: 19021209-01A MSD				Units: mg/Kg		Analysis Date: 2/26/2019 05:22 PM		
Client ID: Sample Site 8		Run ID: GC8_190226A				SeqNo: 5538908		Prep Date: 2/26/2019		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28) 148 4.8 316.4 0 46.8 58-111 205.6 32.5 30 SR
 Surr: 4-Terphenyl-d14 1.895 0 3.164 0 59.9 33-111 2.543 29.2 30

The following samples were analyzed in this batch:

19021209-01A	19021209-02A
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Client: SGM Inc.
 Work Order: 19021209
 Project: Mustang Resources

QC BATCH REPORT

Batch ID: **132461** Instrument ID **GC9** Method: **SW8015D**

MBLK		Sample ID: MBLK-132461-132461				Units: µg/Kg-dry		Analysis Date: 2/27/2019 09:41 PM		
Client ID:		Run ID: GC9_190226C				SeqNo: 5540638		Prep Date: 2/26/2019		DF: 1
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	4370	0	5000	0	87.4	71-123	0			

LCS		Sample ID: LCS-132461-132461				Units: µg/Kg-dry		Analysis Date: 2/27/2019 08:43 PM		
Client ID:		Run ID: GC9_190226C				SeqNo: 5540637		Prep Date: 2/26/2019		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	477300	5,000	500000	0	95.5	71-123	0			
Surr: Toluene-d8	4727	0	5000	0	94.5	71-123	0			

MS		Sample ID: 19021222-08A MS				Units: µg/Kg-dry		Analysis Date: 2/28/2019 03:29 AM		
Client ID:		Run ID: GC9_190226C				SeqNo: 5540647		Prep Date: 2/26/2019		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	784800	7,900	786600	0	99.8	71-123	0			
Surr: Toluene-d8	7711	0	7866	0	98	71-123	0			

MSD		Sample ID: 19021222-08A MSD				Units: µg/Kg-dry		Analysis Date: 2/28/2019 03:58 AM		
Client ID:		Run ID: GC9_190226C				SeqNo: 5540648		Prep Date: 2/26/2019		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	791900	7,800	778000	0	102	71-123	784800	0.908	30	
Surr: Toluene-d8	7991	0	7780	0	103	71-123	7711	3.57	30	

The following samples were analyzed in this batch:

19021209-01A	19021209-02A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: SGM Inc.
 Work Order: 19021209
 Project: Mustang Resources

QC BATCH REPORT

Batch ID: **132389** Instrument ID **HG4** Method: **SW7471B**

MBLK		Sample ID: MBLK-132389-132389				Units: mg/Kg		Analysis Date: 2/25/2019 04:50 PM		
Client ID:		Run ID: HG4_190226A				SeqNo: 5536530		Prep Date: 2/25/2019		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury U 0.017

LCS		Sample ID: LCS-132389-132389				Units: mg/Kg		Analysis Date: 2/25/2019 04:52 PM		
Client ID:		Run ID: HG4_190226A				SeqNo: 5536531		Prep Date: 2/25/2019		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1568 0.018 0.1487 0 106 80-120 0

MS		Sample ID: 19021023-01Cms					Units: mg/Kg		Analysis Date: 2/25/2019 04:57 PM		
Client ID:			Run ID: HG4_190226A			SeqNo: 5536533		Prep Date: 2/25/2019		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Mercury 0.2473 0.019 0.1559 0.1685 50.6 75-125 0 S

MSD		Sample ID: 19021023-01Cmsd				Units: mg/Kg		Analysis Date: 2/25/2019 05:00 PM		
Client ID:			Run ID: HG4_190226A			SeqNo: 5536534		Prep Date: 2/25/2019		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.2744 0.019 0.1556 0.1685 68 75-125 0.2473 10.4 35 S

The following samples were analyzed in this batch:

19021209-01A

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

Client: SGM Inc.
 Work Order: 19021209
 Project: Mustang Resources

QC BATCH REPORT

Batch ID: **132552** Instrument ID **HG4** Method: **SW7471B**

MBLK		Sample ID: MBLK-132552-132552				Units: mg/kg		Analysis Date: 2/28/2019 03:26 PM		
Client ID:		Run ID: HG4_190228A				SeqNo: 5541524		Prep Date: 2/28/2019		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury U 0.020

LCS		Sample ID: LCS-132552-132552				Units: mg/kg		Analysis Date: 2/28/2019 03:28 PM		
Client ID:		Run ID: HG4_190228A				SeqNo: 5541525		Prep Date: 2/28/2019		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1694 0.020 0.1665 0 102 80-120 0

MS		Sample ID: 19021209-02AMS				Units: mg/Kg		Analysis Date: 2/28/2019 03:40 PM		
Client ID: Sample Site 9		Run ID: HG4_190228A				SeqNo: 5542239		Prep Date: 2/28/2019		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1509 0.016 0.1355 0.01557 99.9 75-125 0

MSD		Sample ID: 19021209-02AMSD				Units: mg/Kg		Analysis Date: 2/28/2019 03:43 PM		
Client ID: Sample Site 9		Run ID: HG4_190228A				SeqNo: 5542240		Prep Date: 2/28/2019		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1566 0.016 0.1354 0.01557 104 75-125 0.1509 3.66 35

The following samples were analyzed in this batch:

19021209-02A

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

Client: SGM Inc.
 Work Order: 19021209
 Project: Mustang Resources

QC BATCH REPORT

Batch ID: 132414 Instrument ID ICP2 Method: SW846 6010C

MBLK		Sample ID: MBLK-132414-132414				Units: mg/Kg		Analysis Date: 2/26/2019 10:55 PM		
Client ID:		Run ID: ICP2_190226A				SeqNo: 5538105		Prep Date: 2/26/2019		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	U	0.24								
Barium	U	0.24								
Boron	U	0.97								
Cadmium	U	0.49								
Chromium	0.03325	0.24								J
Copper	U	0.49								
Lead	U	0.24								
Nickel	U	0.24								
Selenium	U	0.49								
Silver	U	0.24								
Zinc	0.05258	0.49								J

LCS		Sample ID: LCS-132414-132414				Units: mg/Kg		Analysis Date: 2/26/2019 11:13 PM		
Client ID:		Run ID: ICP2_190226A				SeqNo: 5538108		Prep Date: 2/26/2019		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.856	0.25	4.96	0	97.9	80-120	0			
Barium	4.968	0.25	4.96	0	100	80-120	0			
Boron	24.7	0.99	24.8	0	99.6	80-120	0			
Cadmium	5.006	0.50	4.96	0	101	80-120	0			
Chromium	5.011	0.25	4.96	0	101	80-120	0			
Copper	5.332	0.50	4.96	0	107	80-120	0			
Lead	5.145	0.25	4.96	0	104	80-120	0			
Nickel	5.153	0.25	4.96	0	104	80-120	0			
Selenium	4.722	0.50	4.96	0	95.2	80-120	0			
Silver	5.346	0.25	4.96	0	108	80-120	0			
Zinc	5.009	0.50	4.96	0	101	80-120	0			

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

Client: SGM Inc.
 Work Order: 19021209
 Project: Mustang Resources

QC BATCH REPORT

Batch ID: 132414 Instrument ID ICP2 Method: SW846 6010C

MS				Sample ID: 19021209-01AMS			Units: mg/Kg		Analysis Date: 2/26/2019 11:25 PM	
Client ID: Sample Site 8				Run ID: ICP2_190226A			SeqNo: 5538110		Prep Date: 2/26/2019	
							DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	11.83	0.34	6.897	6.189	81.7	75-125	0			
Barium	228.8	0.34	6.897	223.5	76.5	75-125	0			O
Boron	23.79	1.4	34.48	-6.41	87.6	75-125	0			
Cadmium	6.621	0.69	6.897	0.3711	90.6	75-125	0			
Chromium	16.42	0.34	6.897	6.624	142	75-125	0			S
Copper	18.68	0.69	6.897	10.57	118	75-125	0			
Lead	14.48	0.34	6.897	8.794	82.5	75-125	0			
Nickel	15.98	0.34	6.897	9.148	99.1	75-125	0			
Selenium	6.09	0.69	6.897	0.2165	85.2	75-125	0			
Silver	7.066	0.34	6.897	-0.4708	109	75-125	0			
Zinc	49.42	0.69	6.897	39.11	149	75-125	0			SO

MSD				Sample ID: 19021209-01AMSD			Units: mg/Kg		Analysis Date: 2/26/2019 11:31 PM	
Client ID: Sample Site 8				Run ID: ICP2_190226A			SeqNo: 5538111		Prep Date: 2/26/2019	
							DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	11.76	0.34	6.812	6.189	81.8	75-125	11.83	0.535	20	
Barium	224.3	0.34	6.812	223.5	12.2	75-125	228.8	1.96	20	SO
Boron	23.58	1.4	34.06	-6.41	88.1	75-125	23.79	0.871	20	
Cadmium	6.424	0.68	6.812	0.3711	88.9	75-125	6.621	3.02	20	
Chromium	16.21	0.34	6.812	6.624	141	75-125	16.42	1.25	20	S
Copper	18.56	0.68	6.812	10.57	117	75-125	18.68	0.636	20	
Lead	14.1	0.34	6.812	8.794	77.9	75-125	14.48	2.66	20	
Nickel	15.88	0.34	6.812	9.148	98.8	75-125	15.98	0.649	20	
Selenium	5.695	0.68	6.812	0.2165	80.4	75-125	6.09	6.7	20	
Silver	6.936	0.34	6.812	-0.4708	109	75-125	7.066	1.86	20	
Zinc	48.97	0.68	6.812	39.11	145	75-125	49.42	0.918	20	SO

The following samples were analyzed in this batch:

19021209-01A	19021209-02A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: SGM Inc.
Work Order: 19021209
Project: Mustang Resources

QC BATCH REPORT

Batch ID: **132609** Instrument ID **ICPMS3** Method: **SW6020A**

DUP		Sample ID: 19021209-01BDUP				Units: mg/L		Analysis Date: 3/1/2019 12:41 PM		
Client ID: Sample Site 8		Run ID: ICPMS3_190301A				SeqNo: 5542460		Prep Date: 3/1/2019		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	93.19	5.0	0	0	0	0-0	87.94	5.8		
Magnesium	46.01	2.0	0	0	0	0-0	42.62	7.63		
Sodium	476.7	2.0	0	0	0	0-0	413.9	14.1		

The following samples were analyzed in this batch:

19021209-01B	19021209-02B
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Batch ID: **132609** Instrument ID **SAR** Method: **USDA H60 Metho**

DUP		Sample ID: 19021209-01BDUP				Units: none		Analysis Date: 3/1/2019		
Client ID: Sample Site 8		Run ID: SAR_190301A				SeqNo: 5542600		Prep Date: 3/1/2019		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	10.1	0.010	0	0	0		0			

The following samples were analyzed in this batch:

19021209-01B	19021209-02B
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: SGM Inc.
 Work Order: 19021209
 Project: Mustang Resources

QC BATCH REPORT

Batch ID: 132430 Instrument ID SVMS8 Method: SW846 8270D

MBLK				Sample ID: SBLKS1-132430-132430				Units: µg/Kg			Analysis Date: 2/26/2019 04:28 PM		
Client ID:			Run ID: SVMS8_190226A				SeqNo: 5539677		Prep Date: 2/26/2019		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	1969	0	3333	0	59.1	44-107	0						
Surr: 4-Terphenyl-d14	2335	0	3333	0	70.1	52-123	0						
Surr: Nitrobenzene-d5	1869	0	3333	0	56.1	41-94	0						

LCS				Sample ID: SLCSS1-132430-132430				Units: µg/Kg		Analysis Date: 2/26/2019 04:50 PM	
Client ID:			Run ID: SVMS8_190226A			SeqNo: 5539678		Prep Date: 2/26/2019		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	986.7	6.7	1333	0	74	55-101	0				
Anthracene	1241	6.7	1333	0	93.1	67-105	0				
Benzo(a)anthracene	1261	6.7	1333	0	94.6	68-105	0				
Benzo(a)pyrene	1271	6.7	1333	0	95.3	68-110	0				
Benzo(b)fluoranthene	1180	6.7	1333	0	88.5	65-110	0				
Benzo(k)fluoranthene	1059	6.7	1333	0	79.5	66-113	0				
Chrysene	1212	6.7	1333	0	90.9	68-108	0				
Dibenzo(a,h)anthracene	1422	6.7	1333	0	107	62-119	0				
Fluoranthene	1101	6.7	1333	0	82.6	67-106	0				
Fluorene	1003	6.7	1333	0	75.3	59-107	0				
Indeno(1,2,3-cd)pyrene	1467	6.7	1333	0	110	56-120	0				
Naphthalene	872	6.7	1333	0	65.4	46-98	0				
Pyrene	1189	6.7	1333	0	89.2	60-119	0				
Surr: 2-Fluorobiphenyl	2511	0	3333	0	75.3	44-107	0				
Surr: 4-Terphenyl-d14	2634	0	3333	0	79	52-123	0				
Surr: Nitrobenzene-d5	2302	0	3333	0	69.1	41-94	0				

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

Client: SGM Inc.
 Work Order: 19021209
 Project: Mustang Resources

QC BATCH REPORT

Batch ID: 132430 Instrument ID SVMS8 Method: SW846 8270D

MS				Sample ID: 19021230-02A MS			Units: µg/Kg		Analysis Date: 2/26/2019 05:42 PM		
Client ID:		Run ID: SVMS8_190226A			SeqNo: 5539679		Prep Date: 2/26/2019		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	902.8	6.3	1253	0	72.1	55-101	0				
Anthracene	1122	6.3	1253	7.749	89	67-105	0				
Benzo(a)anthracene	1162	6.3	1253	0	92.8	68-105	0				
Benzo(a)pyrene	1194	6.3	1253	0	95.3	68-110	0				
Benzo(b)fluoranthene	1123	6.3	1253	0	89.7	65-110	0				
Benzo(k)fluoranthene	972.9	6.3	1253	0	77.7	66-113	0				
Chrysene	1138	6.3	1253	0	90.9	68-108	0				
Dibenzo(a,h)anthracene	1320	6.3	1253	0	105	62-119	0				
Fluoranthene	1042	6.3	1253	10.33	82.4	67-106	0				
Fluorene	921.6	6.3	1253	0	73.6	59-107	0				
Indeno(1,2,3-cd)pyrene	1376	6.3	1253	0	110	56-120	0				
Naphthalene	807.5	6.3	1253	9.686	63.7	46-98	0				
Pyrene	1071	6.3	1253	12.27	84.5	60-119	0				
Surr: 2-Fluorobiphenyl	2321	0	3132	0	74.1	44-107	0				
Surr: 4-Terphenyl-d14	2386	0	3132	0	76.2	52-123	0				
Surr: Nitrobenzene-d5	2081	0	3132	0	66.4	41-94	0				

MSD				Sample ID: 19021230-02A MSD				Units: µg/Kg		Analysis Date: 2/26/2019 06:03 PM	
Client ID:			Run ID: SVMS8_190226A			SeqNo: 5539680		Prep Date: 2/26/2019		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	832	6.3	1263	0	65.9	55-101	902.8	8.16	30		
Anthracene	1039	6.3	1263	7.749	81.7	67-105	1122	7.66	30		
Benzo(a)anthracene	1040	6.3	1263	0	82.4	68-105	1162	11	30		
Benzo(a)pyrene	1072	6.3	1263	0	84.9	68-110	1194	10.8	30		
Benzo(b)fluoranthene	978	6.3	1263	0	77.4	65-110	1123	13.8	30		
Benzo(k)fluoranthene	830.8	6.3	1263	0	65.8	66-113	972.9	15.8	30	S	
Chrysene	981.1	6.3	1263	0	77.7	68-108	1138	14.8	30		
Dibenzo(a,h)anthracene	1264	6.3	1263	0	100	62-119	1320	4.37	30		
Fluoranthene	914.8	6.3	1263	10.33	71.6	67-106	1042	13	30		
Fluorene	835.8	6.3	1263	0	66.2	59-107	921.6	9.76	30		
Indeno(1,2,3-cd)pyrene	1298	6.3	1263	0	103	56-120	1376	5.84	30		
Naphthalene	728.4	6.3	1263	9.686	56.9	46-98	807.5	10.3	30		
Pyrene	962.8	6.3	1263	12.27	75.2	60-119	1071	10.6	30		
Surr: 2-Fluorobiphenyl	2114	0	3158	0	66.9	44-107	2321	9.32	40		
Surr: 4-Terphenyl-d14	2079	0	3158	0	65.8	52-123	2386	13.8	40		
Surr: Nitrobenzene-d5	1910	0	3158	0	60.5	41-94	2081	8.56	40		

The following samples were analyzed in this batch:

19021209-01A

19021209-02A

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

Client: SGM Inc.
 Work Order: 19021209
 Project: Mustang Resources

QC BATCH REPORT

Batch ID: 132460 Instrument ID VMS8 Method: SW8260C

MBLK Sample ID: MBLK-132460-132460				Units: µg/Kg-dry			Analysis Date: 2/26/2019 12:28 PM			
Client ID:		Run ID: VMS8_190226A		SeqNo: 5539117		Prep Date: 2/26/2019		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	U	60								
o-Xylene	U	30								
Toluene	U	30								
Xylenes, Total	U	90								
Surr: 1,2-Dichloroethane-d4	1018	0	1000	0	102	70-130	0			
Surr: 4-Bromofluorobenzene	995	0	1000	0	99.5	70-130	0			
Surr: Dibromofluoromethane	966.5	0	1000	0	96.6	70-130	0			
Surr: Toluene-d8	989.5	0	1000	0	99	70-130	0			

LCS Sample ID: LCS-132460-132460				Units: µg/Kg-dry			Analysis Date: 2/26/2019 11:40 AM			
Client ID:		Run ID: VMS8_190226A		SeqNo: 5539116		Prep Date: 2/26/2019		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1050	30	1000	0	105	75-125	0			
Ethylbenzene	1100	30	1000	0	110	75-125	0			
m,p-Xylene	2184	60	2000	0	109	80-125	0			
o-Xylene	1101	30	1000	0	110	75-125	0			
Toluene	1066	30	1000	0	107	70-125	0			
Xylenes, Total	3286	90	3000	0	110	75-125	0			
Surr: 1,2-Dichloroethane-d4	1004	0	1000	0	100	70-130	0			
Surr: 4-Bromofluorobenzene	1038	0	1000	0	104	70-130	0			
Surr: Dibromofluoromethane	1040	0	1000	0	104	70-130	0			
Surr: Toluene-d8	1021	0	1000	0	102	70-130	0			

MS Sample ID: 19021222-08A MS				Units: µg/Kg-dry			Analysis Date: 2/26/2019 08:17 PM			
Client ID:		Run ID: VMS8_190226A		SeqNo: 5539129		Prep Date: 2/26/2019		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1388	47	1573	0	88.2	75-125	0			
Ethylbenzene	1414	47	1573	0	89.9	75-125	0			
m,p-Xylene	2807	94	3146	0	89.2	80-125	0			
o-Xylene	1404	47	1573	0	89.2	75-125	0			
Toluene	1381	47	1573	0	87.8	70-125	0			
Xylenes, Total	4211	140	4720	0	89.2	75-125	0			
Surr: 1,2-Dichloroethane-d4	1553	0	1573	0	98.7	70-130	0			
Surr: 4-Bromofluorobenzene	1561	0	1573	0	99.2	70-130	0			
Surr: Dibromofluoromethane	1613	0	1573	0	103	70-130	0			
Surr: Toluene-d8	1557	0	1573	0	99	70-130	0			

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

Client: SGM Inc.
 Work Order: 19021209
 Project: Mustang Resources

QC BATCH REPORT

Batch ID: 132460 Instrument ID VMS8 Method: SW8260C

MSD				Sample ID: 19021222-08A MSD				Units: µg/Kg-dry		Analysis Date: 2/26/2019 08:33 PM	
Client ID:			Run ID: VMS8_190226A			SeqNo: 5539130		Prep Date: 2/26/2019		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	1396	47	1556	0	89.7	75-125	1388	0.526	30		
Ethylbenzene	1357	47	1556	0	87.2	75-125	1414	4.15	30		
m,p-Xylene	2735	93	3112	0	87.9	80-125	2807	2.6	30		
o-Xylene	1382	47	1556	0	88.8	75-125	1404	1.61	30		
Toluene	1332	47	1556	0	85.6	70-125	1381	3.64	30		
Xylenes, Total	4116	140	4668	0	88.2	75-125	4211	2.27	30		
Surr: 1,2-Dichloroethane-d4	1584	0	1556	0	102	70-130	1553	1.99	30		
Surr: 4-Bromofluorobenzene	1543	0	1556	0	99.2	70-130	1561	1.15	30		
Surr: Dibromofluoromethane	1551	0	1556	0	99.7	70-130	1613	3.92	30		
Surr: Toluene-d8	1504	0	1556	0	96.6	70-130	1557	3.46	30		

The following samples were analyzed in this batch:

19021209-01A	19021209-02A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: SGM Inc.
Work Order: 19021209
Project: Mustang Resources

QC BATCH REPORT

Batch ID: **132463** Instrument ID **WETCHEM** Method: **SW9045D**

LCS		Sample ID: LCS-132463-132463				Units: s.u.		Analysis Date: 2/27/2019 09:15 AM		
Client ID:		Run ID: WETCHEM_190227A		SeqNo: 5538196		Prep Date: 2/26/2019		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	3.92	0.10	4	0	98	90-110	0			

DUP				Sample ID: 19021209-01A DUP				Units: s.u.			Analysis Date: 2/27/2019 09:15 AM			
Client ID: Sample Site 8				Run ID: WETCHEM_190227A				SeqNo: 5538198			Prep Date: 2/26/2019		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual				
pH	8.29	0.10	0	0	0	0-0	8.08	2.57	20					
Temperature	23.2	0.10	0	0	0		23.2	0						

The following samples were analyzed in this batch:

19021209-01A	19021209-02A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: SGM Inc.
Work Order: 19021209
Project: Mustang Resources

QC BATCH REPORT

Batch ID: **132609** Instrument ID **WETCHEM** Method: **USDA H60 Metho**

DUP		Sample ID: 19021209-01BDUP				Units: mmhos/cm @25°		Analysis Date: 3/1/2019 02:00 PM		
Client ID: Sample Site 8		Run ID: WETCHEM_190301J				SeqNo: 5542656		Prep Date: 3/1/2019		DF: 20
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	3.104	0.10	0	0	0		3.114	0.322	50	

The following samples were analyzed in this batch:

19021209-01B	19021209-02B
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: SGM Inc.
 Work Order: 19021209
 Project: Mustang Resources

QC BATCH REPORT

Batch ID: **132638** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK		Sample ID: MBLK-132638-132638				Units: mg/Kg		Analysis Date: 3/2/2019 10:20 AM		
Client ID:		Run ID: WETCHEM_190302F		SeqNo: 5543097		Prep Date: 3/1/2019		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent U 1.0

LCS		Sample ID: LCS-132638-132638				Units: mg/Kg		Analysis Date: 3/2/2019 10:20 AM		
Client ID:		Run ID: WETCHEM_190302F		SeqNo: 5543098		Prep Date: 3/1/2019		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 4.66 1.0 5 0 93.2 80-120 0 0 0

MS		Sample ID: 19021209-01A MS				Units: mg/Kg		Analysis Date: 3/2/2019 10:20 AM		
Client ID: Sample Site 8		Run ID: WETCHEM_190302F		SeqNo: 5543100		Prep Date: 3/1/2019		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 3.566 1.0 5.051 -0.8854 88.1 75-125 0

MS		Sample ID: 19021209-01A MSI				Units: mg/Kg		Analysis Date: 3/2/2019 10:20 AM		
Client ID: Sample Site 8		Run ID: WETCHEM_190302F		SeqNo: 5543102		Prep Date: 3/1/2019		DF: 100		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1522 97 2499 -0.8854 60.9 75-125 0 S

MSD		Sample ID: 19021209-01A MSD				Units: mg/Kg		Analysis Date: 3/2/2019 10:20 AM		
Client ID: Sample Site 8		Run ID: WETCHEM_190302F		SeqNo: 5543101		Prep Date: 3/1/2019		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 3.248 0.99 4.95 -0.8854 83.5 75-125 3.566 9.34 20

The following samples were analyzed in this batch:

19021209-01A	19021209-02A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: SGM Inc.
 Work Order: 19021209
 Project: Mustang Resources

QC BATCH REPORT

Batch ID: **R255509** Instrument ID **MOIST** Method: **SW3550C**

MBLK		Sample ID: WBLKS-R255509					Units: % of sample		Analysis Date: 2/25/2019 01:20 PM		
Client ID:			Run ID: MOIST_190225B			SeqNo: 5536936		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-R255509					Units: % of sample		Analysis Date: 2/25/2019 01:20 PM		
Client ID:			Run ID: MOIST_190225B			SeqNo: 5536935		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Moisture 99.98 0.10 100 0 100 98-102 0

DUP				Sample ID: 19021205-25A DUP				Units: % of sample			Analysis Date: 2/25/2019 01:20 PM			
Client ID:				Run ID: MOIST_190225B				SeqNo: 5536926			Prep Date:		DF: 1	
Analyte				Result		PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 4.66 0.10 0 0 0 0-0 4.7 0.855 10

DUP				Sample ID: 19021205-26A DUP				Units: % of sample			Analysis Date: 2/25/2019 01:20 PM			
Client ID:				Run ID: MOIST_190225B				SeqNo: 5536928			Prep Date:		DF: 1	
Analyte				Result		PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 4.63 0.10 0 0 0 0-0 4.98 7.28 10

The following samples were analyzed in this batch:

19021209-01A	19021209-02A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.



☐ ALS Environmental
10450 Stancliff Rd. #210
Houston, Texas 77099
(Tel) 281.530.5656
(Fax) 281.530.5887

Chain of Custody Form

Page 1 of 1

☒ ALS Environmental
3352 128th Avenue
Holland, Michigan 49424
(Tel) 616.399.6070
(Fax) 616.399.6185

ALS Project Manager:				ALS Work Order #: <u>1902209</u>															
Customer Information				Project Information				Parameter/Method Request for Analysis											
Purchase Order				Project Name		Mustang Resources		A		910-1									
Work Order				Project Number		2019-123.001		B											
Company Name		SGM		Bill To Company		SGM		C											
Send Report To		Eric Petterson & Rachel Kattnig		Invoice Attn.		Keely Camilletti		D											
Address		118 W. 6th St. Suite 200		Address		118 W. 6th St. Suite 200		E											
								F											
City/State/Zip		Glenwood Springs, CO 81601		City/State/Zip		Glenwood Springs, CO 81601		G											
Phone		970-945-1004		Phone		970-384-9047		H											
Fax		970-945-5948		Fax		970-945-5948		I											
e-Mail Address		ericp@sgm-inc.com & rachelk@sgm-inc.com		keelyc@sgm-inc.com				J											

No.	Sample Description	Date	Time	Matrix	Pres. Key Numbers	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	Sample Site 8	2/22/19	2pm	S	8	3	X										
2	Sample Site 9	2/22/19	2:10 pm	S	8	3	X										
3				S	8	3											
4				S	8	3											
5				S	8	3											
6				S	8	3											
7				S	8	3											
8				S	8	3											
9				S	8	3											
10				S	8	3											

Sampler(s): Please Print & Sign <i>Rachel Kattnig</i>			Shipment Method:		Turnaround Time in Business Days (BD): <input type="checkbox"/> 10 BD <input checked="" type="checkbox"/> 5 BD <input type="checkbox"/> 3 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> 1 BD				<input checked="" type="checkbox"/> Other <u>or 7 bd</u>		Results Due Date: <u>3/5/2019</u>	
Relinquished by: <i>Rachel Kattnig</i>		Date: <u>2/22/19</u>	Time: <u>3pm</u>	Received by: <i>W.M.</i>		Date: <u>2-22-19</u>	Time: <u>3:11p</u>	Notes:				
Relinquished by: <i>h</i>		Date: <u>2-22-19</u>	Time: <u>1:50</u>	Received by (Laboratory): <i>SS</i>		Date: <u>2/23/19</u>	Time: <u>1200</u>	ALS Cooler ID: <u>SR2</u>		Cooler Temp: <u>4.2°C</u>	QC Package: (Check Box Below)	
Logged by (Laboratory): <i>DFS</i>		Date: <u>2/25/19</u>	Time: <u>1115</u>	Checked by (Laboratory): <i>@</i>							<input type="checkbox"/> Level II: Standard QC <input type="checkbox"/> Level III: Raw Data <input type="checkbox"/> TRRP LRC <input type="checkbox"/> TRRP Level IV <input type="checkbox"/> Level IV: SW846 Methods/CLP like <input type="checkbox"/> Other:	

Preservative Key: 1-HCl 2-HNO₃ 3-H₂SO₄ 4-NaOH 5-Na₂S₂O₃ 6-NaHSO₄ 7-Other 8-None/4°C

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

Sample Receipt Checklist

Client Name: **SGM**

Date/Time Received: **23-Feb-19 12:00**

Work Order: **19021209**

Received by: **DS**

Checklist completed by Diane Shaw 25-Feb-19
eSignature Date

Reviewed by: Chad Whelton 26-Feb-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>4.2/4.2 c</u>		<u>SR2</u>
Cooler(s)/Kit(s):	<u></u>		
Date/Time sample(s) sent to storage:	<u>2/25/2019 11:13:52 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:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction: