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Automated Report

Technical Report for

Approach Environmental, LLC

Comstock Oil & Gas, Desoto Parish, LA

Mason 21HZ#1

SGS Job Number: LA48927

Sampling Date: 10/18/18

Report to:

**Approach Environmental, LLC
1000 Grimmer Drive
Shreveport, LA 71107
marksm@approachenv.com**

ATTN: Mark S. Moore

Total number of pages in report: 15



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Ron Benjamin
Ron Benjamin
Lab Director

Client Service contact: Amy Jackson 337-237-4775

Certifications: LDEQ(2048), LDHH(LA150012), AR(14-045-04), AZ(AZ0805), FL(E87657), IL(200082), KY(#31), NC(487), SC(73004001), NJ(LA007), TX(T104704186-15-7), WV(257)

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Test results relate only to samples analyzed.



October 24, 2018

Approach Environmental, LLC
ATTN: Mark Moore
1000 Grimmatt Drive
Shreveport, LA 71107

RE: SGS Job #LA48927

Dear Mr. Moore,

The final report for SGS Job LA48927 has been amended from the original. This report replaces in its entirety any previously submitted copy.

The results for all samples are reported using the method detection limits (MDLs). Any concentrations detected between the MDL and reporting limit (RL) are qualified with a "J" for estimated concentration. The changes are included in this revised report.

Sincerely,

A handwritten signature in black ink that reads 'Amy Jackson'.

Amy Jackson
Environment, Health and Safety
Project Manager
SGS-Scott

SGS IS THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY.

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Sample Summary

Approach Environmental, LLC

Job No: LA48927

Comstock Oil & Gas, Desoto Parish, LA
Project No: Mason 21HZ#1

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
LA48927-1	10/18/18	16:45 JM	10/19/18	AQ	Ground Water	WATER SUPPLY WELL

Summary of Hits

Job Number: LA48927
Account: Approach Environmental, LLC
Project: Comstock Oil & Gas, Desoto Parish, LA
Collected: 10/18/18

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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LA48927-1 WATER SUPPLY WELL

No hits reported in this sample.

Sample Results

Report of Analysis

Report of Analysis

3.1
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Client Sample ID: WATER SUPPLY WELL	
Lab Sample ID: LA48927-1	Date Sampled: 10/18/18
Matrix: AQ - Ground Water	Date Received: 10/19/18
Method: SW846 8260B	Percent Solids: n/a
Project: Comstock Oil & Gas, Desoto Parish, LA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G086372.D	1	10/23/18 12:37	LS	n/a	n/a	V1G4559
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.0010	0.00023	mg/l	
108-88-3	Toluene	ND	0.0010	0.00023	mg/l	
100-41-4	Ethylbenzene	ND	0.0010	0.00023	mg/l	
1330-20-7	Xylene (total)	ND	0.0020	0.00039	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	107%		84-124%
2037-26-5	Toluene-D8	95%		83-115%
460-00-4	4-Bromofluorobenzene	93%		89-111%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



ACCUTEST

CHAIN OF CUSTODY

SGS Accutest Inc.-Lafayette
500 Ambassador Caffery Pkwy, Scott, LA 70583
TEL:337-237-4775 FAX: 337-237-7838
www.accutest.com

FED-EX Tracking #
Batch Order Control #
Accutest Quote #
Accutest Job # LA48927

Client / Reporting Information
Project Information
Requested Analyses
Matrix Codes
Collection table with columns for Date, Time, COSMOPRAB, Matrix, # of bottles, and various analysis codes.

Turnaround Time (Business Days)
Approved By (Accutest PM): I Date:
Date Deliverable Information
Comments / Special Instructions: LABORATORY method verification limits set by the LAB is NECESSARY

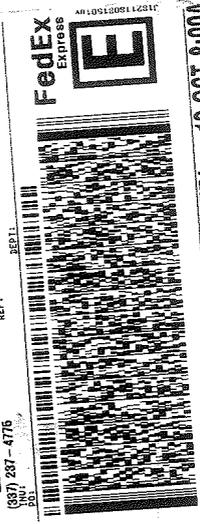
Sample Custody must be documented below each time samples change possession, including courier delivery.
Table with columns for Requisitioned By, Date Time, Received By, and Date Time for multiple steps.

SHIP DATE: 18OCT18
 ACT/AGT: 30.60 / BFE1922
 DAD: 0859 / 0859
 DIMS: 441.413 IN
 BILL THIRD PARTY

ORIGIN: INDIAVA (318) 222-2424
 1000 GRIMMETT DR
 SHREVEPORT, LA 71107
 UNITED STATES US

TO **SAMPLE RECEIVING**
SGS ACCUTEST
109 COMMISSION BLVD

LAFAYETTE LA 70508



FRI - 19 OCT 8:00A
FIRST OVERNIGHT

2 of 2
 MPS# 7833 2642 0485
 (0581)
 Mstr# 8101 2870 6804
X1 LEFTA

70508
 LA-US
 LFT



① Verp (Kew) col (w)
BPS1

② Verp (Kew) col (w)
BPS1

LA48927: Chain of Custody
 Page 2 of 3

SGS Sample Receipt Summary

Job Number: LA48927

Client: APPROACH

Project: COMSTOCK OIL & GAS

Date / Time Received: 10/19/2018 9:10:00 AM

Delivery Method: FedEx

Airbill #'s: 783326420485

Cooler Temps (Initial/Adjusted): #1: (1.6/1.6);

Cooler Security

- | | |
|---|---|
| <p><u>Y or N</u></p> <p>1. Custody Seals Present: <input checked="" type="checkbox"/> <input type="checkbox"/></p> <p>2. Custody Seals Intact: <input checked="" type="checkbox"/> <input type="checkbox"/></p> | <p><u>Y or N</u></p> <p>3. COC Present: <input checked="" type="checkbox"/> <input type="checkbox"/></p> <p>4. Smpl Dates/Time OK: <input checked="" type="checkbox"/> <input type="checkbox"/></p> |
|---|---|

Cooler Temperature

- | | |
|---|--|
| <p><u>Y or N</u></p> <p>1. Temp criteria achieved: <input checked="" type="checkbox"/> <input type="checkbox"/></p> <p>2. Thermometer ID: <u>DV441;</u></p> <p>3. Cooler media: <u>Ice (direct contact)</u></p> <p>4. No. Coolers: <u>1</u></p> | |
|---|--|

Quality Control Preservation

- | | <u>Y</u> | <u>or</u> | <u>N</u> | <u>N/A</u> |
|---------------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|
| 1. Trip Blank present / cooler: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Trip Blank listed on COC: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Samples preserved properly: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. VOCs headspace free: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Sample Integrity - Documentation

- | | |
|--|---|
| <p><u>Y or N</u></p> <p>1. Sample labels present on bottles: <input checked="" type="checkbox"/> <input type="checkbox"/></p> <p>2. Container labeling complete: <input checked="" type="checkbox"/> <input type="checkbox"/></p> <p>3. Sample container label / COC agree: <input checked="" type="checkbox"/> <input type="checkbox"/></p> | <p><u>Y or N</u></p> <p>1. Sample recvd within HT: <input checked="" type="checkbox"/> <input type="checkbox"/></p> <p>2. All containers accounted for: <input checked="" type="checkbox"/> <input type="checkbox"/></p> <p>3. Condition of sample: <u>Intact</u></p> |
|--|---|

Sample Integrity - Condition

- | | |
|---|--|
| <p><u>Y or N</u></p> <p>1. Sample recvd within HT: <input checked="" type="checkbox"/> <input type="checkbox"/></p> <p>2. All containers accounted for: <input checked="" type="checkbox"/> <input type="checkbox"/></p> <p>3. Condition of sample: <u>Intact</u></p> | |
|---|--|

Sample Integrity - Instructions

- | | <u>Y</u> | <u>or</u> | <u>N</u> | <u>N/A</u> |
|---|-------------------------------------|--------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Bottles received for unspecified tests | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Sufficient volume recvd for analysis: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Compositing instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Comments

LA48927: Chain of Custody

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MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: LA48927
 Account: APPRLAS Approach Environmental, LLC
 Project: Comstock Oil & Gas, Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1G4559-MB2	1G086368.D	1	10/23/18	LS	n/a	n/a	V1G4559

The QC reported here applies to the following samples:

Method: SW846 8260B

LA48927-1

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.23	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.23	ug/l	
108-88-3	Toluene	ND	1.0	0.23	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.39	ug/l	

CAS No.	Surrogate Recoveries	Limits	
17060-07-0	1,2-Dichloroethane-D4	103%	84-124%
2037-26-5	Toluene-D8	94%	83-115%
460-00-4	4-Bromofluorobenzene	92%	89-111%

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Blank Spike/Blank Spike Duplicate Summary

Job Number: LA48927
 Account: APPRLAS Approach Environmental, LLC
 Project: Comstock Oil & Gas, Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1G4559-BS1	1G086362.D	1	10/23/18	LS	n/a	n/a	V1G4559
V1G4559-BSD1	1G086364.D	1	10/23/18	LS	n/a	n/a	V1G4559

The QC reported here applies to the following samples:

Method: SW846 8260B

LA48927-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	20	19.8	99	20.5	103	3	82-119/30
100-41-4	Ethylbenzene	20	20.2	101	21.3	107	5	84-117/30
108-88-3	Toluene	20	20.6	103	21.9	110	6	80-121/30
1330-20-7	Xylene (total)	60	63.5	106	66.4	111	4	81-122/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
17060-07-0	1,2-Dichloroethane-D4	108%	104%	84-124%
2037-26-5	Toluene-D8	94%	95%	83-115%
460-00-4	4-Bromofluorobenzene	97%	98%	89-111%

* = Outside of Control Limits.

5.2.1
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Matrix Spike/Matrix Spike Duplicate Summary

Job Number: LA48927
 Account: APPRLAS Approach Environmental, LLC
 Project: Comstock Oil & Gas, Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
LA48927-1MS	1G086374.D	5	10/23/18	LS	n/a	n/a	V1G4559
LA48927-1MSD	1G086376.D	5	10/23/18	LS	n/a	n/a	V1G4559
LA48927-1	1G086372.D	1	10/23/18	LS	n/a	n/a	V1G4559

The QC reported here applies to the following samples:

Method: SW846 8260B

LA48927-1

CAS No.	Compound	LA48927-1 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	100	96.8	97	100	91.8	92	5	31-161/15
100-41-4	Ethylbenzene	ND	100	97.0	97	100	93.7	94	3	47-146/30
108-88-3	Toluene	ND	100	100	100	100	93.6	94	7	36-155/17
1330-20-7	Xylene (total)	ND	300	302	101	300	288	96	5	41-154/29

CAS No.	Surrogate Recoveries	MS	MSD	LA48927-1	Limits
17060-07-0	1,2-Dichloroethane-D4	108%	108%	107%	84-124%
2037-26-5	Toluene-D8	97%	97%	95%	83-115%
460-00-4	4-Bromofluorobenzene	97%	96%	93%	89-111%

* = Outside of Control Limits.

5.3.1
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