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## Technical Report for

**Approach Environmental, LLC**

**Comstock Oil & Gas, Desoto Parish, LA**

**Derrick 21HZ#1**

**SGS Job Number: LA48926**

**Sampling Date: 10/18/18**

### Report to:

**Approach Environmental, LLC  
1000 Grimmatt 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 #LA48926

Dear Mr. Moore,

The final report for SGS Job LA48926 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: LA48926

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

Sample Number	Collected		Matrix			Client Sample ID
	Date	Time By	Received	Code	Type	
LA48926-1	10/18/18	14:45 JM	10/19/18	AQ	Water	WATER SUPPLY WELL

## Summary of Hits

**Job Number:** LA48926  
**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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LA48926-1      WATER SUPPLY WELL

No hits reported in this sample.

## Sample Results

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## Report of Analysis

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## Report of Analysis

3.1  
3

<b>Client Sample ID:</b> WATER SUPPLY WELL	
<b>Lab Sample ID:</b> LA48926-1	<b>Date Sampled:</b> 10/18/18
<b>Matrix:</b> AQ - Water	<b>Date Received:</b> 10/19/18
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> Comstock Oil & Gas, Desoto Parish, LA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2X0055981.D	1	10/22/18 12:06	AR	n/a	n/a	V2X1276
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	94%		84-124%
2037-26-5	Toluene-D8	99%		83-115%
460-00-4	4-Bromofluorobenzene	94%		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

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### Custody Documents and Other Forms

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**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 #
Accutest Quote #
Bottle Order Control #
Accutest Job # LA48926

Client / Reporting Information, Project Information, Requested Analyses, Matrix Codes, Billing Information, Street Address, City, State, Zip, Project Manager, Attention, Collection table with columns for Date, Time, Matrix, # of bottles, and various chemical analysis types.

Turnaround Time (Business Days), Approved By (Accutest PM) / Date, Data Deliverable Information, Comments / Special Instructions. Includes handwritten notes: 'LABORATORY method detection limits set by the LAB is NECESSARY'.

Sample Custody must be documented below each time samples change possession, including courier delivery. Includes a table for Relinquished/Received by, Date/Time, and Custody Seal #.



ORIGIN: DLSMWA (318) 222-2424  
 APPROACH: ENV  
 1000 BRIMMETH DR  
 SHREVEPORT, LA 71107  
 UNITED STATES US

SHIP DATE: 18OCT18  
 ACT: 30.65 LB  
 CDD: 0659423  
 DIMS: 24x11x11  
 BILL THIRD PARTY

**TO**  
**SAMPLE RECEIVING**  
**SGS ACCUTEST**  
**109 COMMISSION BLVD**  
**LAFAYETTE LA 70508**

(820) 287-4775  
 REF1  
 38371

**FedEx**  
 EXPRESS  
 3182110812111

2 of 2  
 MPS# 7833 2642 0485  
 (0581)  
 Met# 81 01 2970 6804  
 (0200)  
**X1 LFTA**  
 LA-US LFT  
**70508**  
**FRI - 19 OCT 8:00A**  
**FIRST OVERNIGHT**



(5) Year (200) cod (w)  
 15129

## SGS Sample Receipt Summary

Job Number: LA48926

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 type="checkbox"/>            |           | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Trip Blank listed on COC:    | <input type="checkbox"/>            |           | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Samples preserved properly:  | <input checked="" type="checkbox"/> |           | <input type="checkbox"/>            |                          |
| 4. VOCs headspace free:         | <input checked="" 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> |
|--|

**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"/>            |                                     |
| 2. Bottles received for unspecified tests: | <input type="checkbox"/>            |           | <input checked="" type="checkbox"/> |                                     |
| 3. Sufficient volume recvd for analysis:   | <input checked="" type="checkbox"/> |           | <input type="checkbox"/>            |                                     |
| 4. Compositing instructions clear:         | <input type="checkbox"/>            |           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear:           | <input type="checkbox"/>            |           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

Comments

4.1  
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## MS Volatiles

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### QC Data Summaries

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**Includes the following where applicable:**

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

# Method Blank Summary

Job Number: LA48926  
 Account: APPRLAS Approach Environmental, LLC  
 Project: Comstock Oil & Gas, Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2X1276-MB2	2X0055979.D	1	10/22/18	AR	n/a	n/a	V2X1276

The QC reported here applies to the following samples:

Method: SW846 8260B

LA48926-1

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	92%	84-124%
2037-26-5	Toluene-D8	99%	83-115%
460-00-4	4-Bromofluorobenzene	96%	89-111%

# Blank Spike/Blank Spike Duplicate Summary

Job Number: LA48926  
 Account: APPRLAS Approach Environmental, LLC  
 Project: Comstock Oil & Gas, Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2X1276-BS1	2X0055973.D	1	10/22/18	AR	n/a	n/a	V2X1276
V2X1276-BSD1	2X0055975.D	1	10/22/18	AR	n/a	n/a	V2X1276

The QC reported here applies to the following samples:

Method: SW846 8260B

LA48926-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	20	20.1	101	21.1	106	5	82-119/30
100-41-4	Ethylbenzene	20	19.6	98	20.3	102	4	84-117/30
108-88-3	Toluene	20	21.1	106	22.1	111	5	80-121/30
1330-20-7	Xylene (total)	60	59.9	100	62.3	104	4	81-122/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
17060-07-0	1,2-Dichloroethane-D4	97%	96%	84-124%
2037-26-5	Toluene-D8	104%	99%	83-115%
460-00-4	4-Bromofluorobenzene	96%	94%	89-111%

\* = Outside of Control Limits.

5.2.1  
5

# Matrix Spike/Matrix Spike Duplicate Summary

Job Number: LA48926  
 Account: APPRLAS Approach Environmental, LLC  
 Project: Comstock Oil & Gas, Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
LA48916-9MS	2X0056013.D	100	10/22/18	AR	n/a	n/a	V2X1276
LA48916-9MSD	2X0056015.D	100	10/22/18	AR	n/a	n/a	V2X1276
LA48916-9 <sup>a</sup>	2X0056001.D	50	10/22/18	AR	n/a	n/a	V2X1276

The QC reported here applies to the following samples:

Method: SW846 8260B

LA48926-1

CAS No.	Compound	LA48916-9 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	925	2000	3050	106	2000	2860	97	6	31-161/15
100-41-4	Ethylbenzene	2030	2000	4040	101	2000	3940	96	3	47-146/30
108-88-3	Toluene	2810	2000	5130	116	2000	4920	106	4	36-155/17
1330-20-7	Xylene (total)	7340	6000	13700	106	6000	13200	98	4	41-154/29

CAS No.	Surrogate Recoveries	MS	MSD	LA48916-9	Limits
17060-07-0	1,2-Dichloroethane-D4	97%	100%	95%	84-124%
2037-26-5	Toluene-D8	103%	100%	99%	83-115%
460-00-4	4-Bromofluorobenzene	94%	97%	93%	89-111%

(a) Sample used for QC purposes only.

\* = Outside of Control Limits.

5.3.1  
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