Approach Environmental
success begins with the approach

P. O. Box 7192 (zip 71137-7192)
1000 Grimmet Dr.
Shreveport, LA 71107
Phone: (318) 222-2424
Fax: (318) 222-2425

November 5, 2018

Ms. Sarah A. Kirkpatrick
Bradley Murchison Kelly & Shea LLC
401 Edwards St, Suite 1000
Shreveport, LA 71101-5529

Re: LDNR Required Rig Supply Water Well Sampling
Nelson-77764Z Johnson # 2 Rig Supply Water Well
Section 21, Township 13 N, Range 15 W
Hand Held GPS (Rig Supply Water Well): 32.107044, -93.08925

Dear Ms. Kirkpatrick,

Approach Environmental, LLC (Approach Environmental) was retained by Bradley Murchison Kelly & Shea LLC to conduct a Water Well Sampling Project at the referenced location to analyze for Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX) as requested by the Louisiana Department of Natural Resources (LDNR). On October 24, 2018, Approach Environmental collected a groundwater sample from the referenced water well to evaluate the specific groundwater quality parameters as requested by the LDNR. The groundwater parameters are listed below as well as in the attached analytical data table.

The water well sampling activities included photo documentation of the water well, water well purging, obtaining GPS coordinates (via hand-held GPS), groundwater sampling, and preparation of a brief letter report presenting the analytical data and geographic location. The rig supply water well, Serial number 77764Z, is registered with the LDNR and has a recorded total depth of 280' below ground surface and a depth to water of 98' below ground surface on the registration form. A 300' long, decontaminated, electric water probe was used to measure the depth to water of the mentioned well and found that the water level was at 36.22' below ground surface. The well was purged by using a downhole pump connected to a generator. Water quality parameters (temperature, specific conductivity, and pH) were taken until they were relatively stable. Laboratory supplied sample containers and new nitrile gloves were used for the collection of samples and packaged on ice in an ice chest. Proper chain-of-custody procedures were followed and are documented with the attached laboratory report. The sample was, then, delivered to SGS Accutest

Laboratories (SGS Accutest), a Louisiana Department of Environmental Quality (LDEQ) approved laboratory (LDEQ Certification # 2048), for appropriate analysis as described herein.

An analytical data table presenting the analytical data, a Google Earth map illustrating the location of the referenced water well and E&P wells, photographic documentation, and the analytical laboratory report are attached for review. For the purpose of this report, analytical parameters that have listed or established standards or limits as established by LDEQ RECAP are compared with those applicable standards in the analytical data table. It should be noted that all samples were analyzed using method detection limits set by the laboratory. BTEX was not detected in the water sample.

Should you have any questions and/or comments, please do not hesitate to contact me at (318) 222-2424.

Sincerely,

Mark S. Moore
Louisiana Professional Geoscientist (P.G. #490)
Approach Environmental, L.L.C.

Encl./

Attachments Table of Contents

Nelson
Johnson # 2 Rig Supply Water Well
October 24, 2018 Analytical

ID	Purgeable Aromatics			
Analysis	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Xylenes (Total) mg/L
GW-SS	0.005	1.00	0.70	10
Johnson # 2 Water Well	<0.00023	<0.00023	<0.00023	<0.00039

ND = NON DETECT
NA=NOT APPLICABLE
All samples analyzed at Labarotory Method Detection Limits

North

0' 150' 300'

SCALE: 1"=300'

Approach Environmental
151 Freestate Blvd., Suite B
Shreveport, Louisiana 71107
Toll Free: (866) 674-1993 Fax: (318) 222-2425

DRAWN DATE:	DRAWN BY:	SCALE:
10/30/2018	TEM	Approx. 1"=300'

NELSON O&G, INC

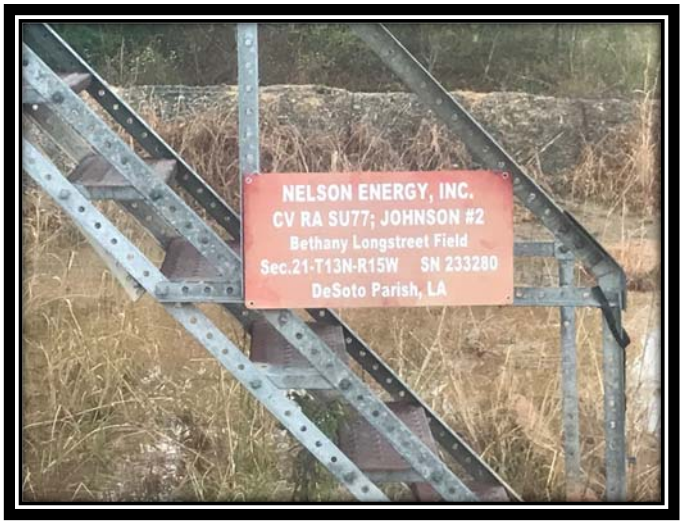
JOHNSON #2 WATER WELL; JOHNSON #2
SERIAL NOS. 77764Z; 233280
BETHANY LONGSTREET FIELD

AERIAL MAP
SEC:21, TWN: 13N, RGE: 15W
JOHNSON #2 WATER WELL (Via Handheld GPS): LAT: 32.107044, LONG: -93.908925
JOHNSON #2: LAT: 32.10740143, LONG: -93.90915706
DESOTO PARISH

FIGURE NUMBER

1

77764Z Johnson # 2 Rig Supply Water Well
Photos taken by Drake Duhon on October 24, 2018



Location sign


Water well before taking off top


Purging of well

Taking field water quality readings

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Approach Environmental, LLC

Nelson Energy-Desoto Parish, LA

77642 Johnson #2

SGS Job Number: LA49086

Sampling Date: 10/24/18

Report to:

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

ATTN: Mark S. Moore

Total number of pages in report: 14

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
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)

Sections: 1 2 3 4 5

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SGS North America Inc.

Sample Summary

Approach Environmental, LLC

Job No: LA49086

Nelson Energy-Desoto Parish, LA
Project No: 77642 Johnson #2

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
LA49086-1	10/24/18	09:20	JM	10/25/18	AQ	Ground Water	WATER SUPPLY WELL

Summary of Hits

Job Number: LA49086
Account: Approach Environmental, LLC
Project: Nelson Energy-Desoto Parish, LA
Collected: 10/24/18

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
LA49086-1	**WATER SUPPLY WELL**					

No hits reported in this sample.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	WATER SUPPLY WELL		
Lab Sample ID:	LA49086-1	**Date Sampled:**	10/24/18
Matrix:	AQ - Ground Water	**Date Received:**	10/25/18
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	Nelson Energy-Desoto Parish, LA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2J0056921.D	1	10/26/18 16:52	NN	n/a	n/a	V2J1650
Run #2							

	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	112%		84-124%
2037-26-5	Toluene-D8	97%		83-115%
460-00-4	4-Bromofluorobenzene	97%		89-111%

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SGS ACCUTEST

CHAIN OF CUSTODY

SGS Accutest - Scott
500 Ambassador Caffery Parkway, Scott, LA 70583
TEL. 337.237.4775 FAX: 337.237.7838
www.accutest.com

PAGE 1 OF 1

FED-EX Tracking # | Bottle Order Control #
SGS Accutest Quote # | SGS Accutest Job # LA 49086

Client / Reporting Information

Company Name: APPROACH ENV.
Street Address: 1000 Grimmett Dr.
City: Shreveport State: LA Zip:
Project Contact: MARK MOORE E-mail:
Phone #: 318-222-2424 Fax #:
Sampler(s) Name(s): JOHN MAGGIO Phone #:

Project Information

Project Name: Nelson Energy
Street:
City: DeSoto Parish State:
Project #: 77642 JOHNSON #2
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)

Company Name:
Street Address:
City State Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

BTEX 8260
NOLD

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

SGS Accutest Sample #	Field ID / Point of Collection	Collection: Date	Time	Sampled By	Matrix	# Of bottles	Number of preserved Bottles: HCl	NaOH	ZnAcet+NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	TSP	NaHSO4	ENCORE	LAB USE ONLY
1	WATER SUPPLY WELL	10/24/18	9:20	JAM	GW	5	X											5
2	TRIP BLANK	10/24/18	17:30	JAM	TB	2	X											2

RUSH

Turnaround Time (Business days)

- [ ] Standard
- [ ] 5 Day Rush
- [ ] 4 Day RUSH
- [ ] 3 Day RUSH
- [x] 2 Day RUSH
- [ ] 1 Day RUSH
- [ ] other

Emergency & Rush T/A data available VIA Labtink

Approved By (SGS Accutest PM): / Date: BJV-8 VW

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULT1 (Level 3+4)
- [ ] REDT1 (Level3+S)
- [ ] Commercial "C"
- [ ] TRRP
- [ ] EDD Format
- [ ] State Forms
- [x] Other
- [ ] Other

Commercial "A" = Results Only.
Commercial "B" = Results + QC Summary
Commercial "C" = Results +QC & Surrogate Summary

Comments / Special Instructions

LABORATORY method Detection Limits set by LAB is NECESSARY

Note: Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date/Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	[illegible]	10/24/18 18:30	2 FED EX	2 FedEx	10/25/18 9:20	2 Walter Newsom
3	Walter Newsom	10/25/18 10:20	3 Mark Reid	4		4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal # CS/oc	Intact / Not intact	Preserved where applicable: On Ice / Cooler Temp. 1.2 DV439

Form:SM088-02CRev.Date:04/21/17

http://www.sgs.com/en/terms-and-conditions.

LA49086: Chain of Custody
Page 1 of 3

FedEx Express

Package US Airbill

FedEx Tracking Number 8101 2970 6860

Form ID No. 0200

Recipient's Copy

1 From

Date 10/24/18 [redacted]

Sender's Name [illegible] Phone 318 222-2424

Company Approach Env.

Address 1020 Gizzonett Dr.

Dept./Floor/Suite/Room

City Shreveport State LA ZIP 71107

2 Your Internal Billing Reference

3 To

Recipient's Name SAMPLE RECEIVING Phone (337) 237-4775

Company SGS Accutest

Address 109 Commission Blvd

Lafayette, LA 70508

We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept./Floor/Suite/Room

Hold Weekday — FedEx location address REQUIRED. NOT available for FedEx First Overnight.

Hold Saturday — FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City State ZIP

8101 2970 6860

4 Express Package Service *To most locations.

Packages up to 150 lbs. For packages over 150 lbs., use the FedEx Express Freight US Airbill.

Next Business Day

- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
- [x] FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
- [ ] FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

- [ ] FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.
- [ ] FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless Saturday Delivery is selected.
- [ ] FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging *Declared value limit $500.

- [ ] FedEx Envelope*
- [ ] FedEx Pak*
- [ ] FedEx Box
- [ ] FedEx Tube
- [x] Other

6 Special Handling and Delivery Signature Options Fees may apply. See the FedEx Service Guide.

- [ ] Saturday Delivery — NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.
- [ ] No Signature Required — Package may be left without obtaining a signature for delivery.
- [ ] Direct Signature — Someone at recipient's address may sign for delivery.
- [ ] Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only.

Does this shipment contain dangerous goods? One box must be checked.

- [x] No
- [ ] Yes — As per attached Shipper's Declaration.
- [ ] Yes — Shipper's Declaration not required.
- [ ] Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg

Restrictions apply for dangerous goods — see the current FedEx Service Guide.

- [ ] Cargo Aircraft Only

7 Payment *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below.

- [ ] Sender — Acct. No. in Section 1 will be billed.
- [ ] Recipient
- [x] Third Party
- [ ] Credit Card
- [ ] Cash/Check

[redacted]

Total Packages Total Weight lbs. Credit Card Auth.

†Our liability is limited to US$100 unless you declare a higher value. See the current FedEx Service Guide for details.

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fedex.com 1.800.GoFedEx 1.800.463.3339

#1/5 = 40ml w/ HCL — (BJV-8 (VW))

#2/2 = 40ml w/ HCL

2 / 5 / 1

LA49086: Chain of Custody

Page 2 of 3

SGS Sample Receipt Summary

Job Number: LA49086 **Client:** APPROACH ENV. **Project:** NELSON ENERGY

Date / Time Received: 10/25/2018 10:20:00 AM **Delivery Method:** FedEx **Airbill #'s:** 8101 2970 6860

Cooler Temps (Initial/Adjusted): #1: (1.2/1.2); DV439

Cooler Security

	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature

	Y	or	N
1. Temp criteria achieved:	☑		☐

2. Thermometer ID: DV439;
3. Cooler media: Ice (direct contact)
4. No. Coolers: 1

Quality Control _Preservation

	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation

	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition

	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐

3. Condition of sample: Intact

Sample Integrity - Instructions

	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

LA49086: 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: LA49086
Account: APPRLAS Approach Environmental, LLC
Project: Nelson Energy-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2J1650-MB2	2J0056911.D	1	10/26/18	NN	n/a	n/a	V2J1650

The QC reported here applies to the following samples: **Method:** SW846 8260B

LA49086-1

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	108%	84-124%
2037-26-5	Toluene-D8	98%	83-115%
460-00-4	4-Bromofluorobenzene	96%	89-111%

Blank Spike/Blank Spike Duplicate Summary

Job Number: LA49086
Account: APPRLAS Approach Environmental, LLC
Project: Nelson Energy-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2J1650-BS1	2J0056905.D	1	10/26/18	NN	n/a	n/a	V2J1650
V2J1650-BSD1	2J0056907.D	1	10/26/18	NN	n/a	n/a	V2J1650

The QC reported here applies to the following samples: **Method:** SW846 8260B

LA49086-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	20	18.9	95	19.5	98	3	82-119/30
100-41-4	Ethylbenzene	20	19.6	98	20.6	103	5	84-117/30
108-88-3	Toluene	20	18.8	94	19.7	99	5	80-121/30
1330-20-7	Xylene (total)	60	59.3	99	61.9	103	4	81-122/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
17060-07-0	1,2-Dichloroethane-D4	101%	98%	84-124%
2037-26-5	Toluene-D8	99%	99%	83-115%
460-00-4	4-Bromofluorobenzene	101%	101%	89-111%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: LA49086
Account: APPRLAS Approach Environmental, LLC
Project: Nelson Energy-Desoto Parish, LA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
LA49027-3MS	2J0056943.D	5	10/26/18	NN	n/a	n/a	V2J1650
LA49027-3MSD	2J0056945.D	5	10/26/18	NN	n/a	n/a	V2J1650
LA49027-3	2J0056941.D	1	10/26/18	NN	n/a	n/a	V2J1650

The QC reported here applies to the following samples: **Method:** SW846 8260B

LA49086-1

CAS No.	Compound	LA49027-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		100	98.4	98	100	98.8	99	0	31-161/15
100-41-4	Ethylbenzene	ND		100	101	101	100	102	102	1	47-146/30
108-88-3	Toluene	ND		100	98.2	98	100	96.8	97	1	36-155/17
1330-20-7	Xylene (total)	ND		300	305	102	300	309	103	1	41-154/29

CAS No.	Surrogate Recoveries	MS	MSD	LA49027-3	Limits
17060-07-0	1,2-Dichloroethane-D4	104%	102%	114%	84-124%
2037-26-5	Toluene-D8	98%	97%	98%	83-115%
460-00-4	4-Bromofluorobenzene	100%	100%	96%	89-111%

* = Outside of Control Limits.