



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1220506  
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

Form must be Typed  
Form must be Signed  
All blanks must be Filled

WELL COMPLETION FORM  
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Address 1: \_\_\_\_\_

Address 2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

CONTRACTOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Wellsite Geologist: \_\_\_\_\_

Purchaser: \_\_\_\_\_

Designate Type of Completion:

- New Well       Re-Entry       Workover
- Oil       WSW       SWD       SIOW
- Gas       D&A       ENHR       SIGW
- OG       GSW       Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic       Other (Core, Expl., etc.): \_\_\_\_\_

If Workover/Re-entry: Old Well Info as follows:

Operator: \_\_\_\_\_

Well Name: \_\_\_\_\_

Original Comp. Date: \_\_\_\_\_ Original Total Depth: \_\_\_\_\_

- Deepening       Re-perf.       Conv. to ENHR       Conv. to SWD
- Plug Back       Conv. to GSW       Conv. to Producer
- Commingled      Permit #: \_\_\_\_\_
- Dual Completion      Permit #: \_\_\_\_\_
- SWD      Permit #: \_\_\_\_\_
- ENHR      Permit #: \_\_\_\_\_
- GSW      Permit #: \_\_\_\_\_

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - \_\_\_\_\_

Spot Description: \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

\_\_\_\_\_ Feet from  North /  South Line of Section

\_\_\_\_\_ Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE       NW       SE       SW

GPS Location: Lat: \_\_\_\_\_, Long: \_\_\_\_\_  
(e.g. xx.xxxxx)      (e.g. -xxx.xxxxx)

Datum:  NAD27       NAD83       WGS84

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Field Name: \_\_\_\_\_

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total Vertical Depth: \_\_\_\_\_ Plug Back Total Depth: \_\_\_\_\_

Amount of Surface Pipe Set and Cemented at: \_\_\_\_\_ Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set: \_\_\_\_\_ Feet

If Alternate II completion, cement circulated from: \_\_\_\_\_

feet depth to: \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: \_\_\_\_\_ ppm Fluid volume: \_\_\_\_\_ bbls

Dewatering method used: \_\_\_\_\_

Location of fluid disposal if hauled offsite:

Operator Name: \_\_\_\_\_

Lease Name: \_\_\_\_\_ License #: \_\_\_\_\_

Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

County: \_\_\_\_\_ Permit #: \_\_\_\_\_

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

- Confidentiality Requested  
Date: \_\_\_\_\_
- Confidential Release Date: \_\_\_\_\_
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

1220506

Operator Name: \_\_\_\_\_ Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

**INSTRUCTIONS:** Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No  Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No  List All E. Logs Run: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  Name Top Datum
--	---

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?  Yes  No *(If No, fill out Page Three of the ACO-1)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD:	Size:	Set At:	Packer At:	Liner Run: <input type="checkbox"/> Yes <input type="checkbox"/> No
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Date of First, Resumed Production, SWD or ENHR.	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____
---	--

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

<b>DISPOSITION OF GAS:</b> <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<b>METHOD OF COMPLETION:</b> <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
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Form	ACO1 - Well Completion
Operator	BEREXCO LLC
Well Name	Daniel 1-19
Doc ID	1220506

Tops

Name	Top	Datum
Niobrara	1195	+2046
Ft. Hays Member	1655	+1586
Carlile Sh	1705	+1536
Dakota	2080	+1161
Cheyenne	2667	+574
Blaine	2987	+254
Stone Corral Anhydrite	3194	+47
Base Anhydrite	3224	+17
Chase Limestone	3392	-151
Neva	3650	-409
Red Eagle	3716	-475
Foraker	3772	-531
Wabaunsee	3908	-667
Topeka	3986	-745
Deer Creek Lime	4058	-817
Oread	4126	-885
Lansing/KS City A	4202	-961
LKC B	4263	-1022
LKC C	4318	-1077
LKC D	4360	-1119
LKC E	4408	-1167
LKC F	4452	-1211
Pawnee	4605	-1364
Ft. Scott	4642	-1401

Form	ACO1 - Well Completion
Operator	BEREXCO LLC
Well Name	Daniel 1-19
Doc ID	1220506

Tops

Name	Top	Datum
Cherokee	4694	-1453
RTD	4800	
LTD	4795	



# ALLIED OIL & GAS SERVICES, LLC 063357

Federal Tax I.D. # 20-8651475

REMIT TO P.O. BOX 93999  
SOUTHLAKE, TEXAS 76092

SERVICE POINT: Oakley

DATE <u>7/15/14</u>	SEC. <u>19</u>	TWP. <u>1</u>	RANGE <u>37</u>	CALLED OUT	ON LOCATION	JOB START <u>9:00</u>	JOB FINISH <u>2:00</u>
LEASE <u>Samuels</u>		WELL # <u>1</u>		LOCATION <u>near Kelsoe STO Rd AA</u>		COUNTY <u>Cherokee</u>	STATE <u>KS</u>
OLD OR NEW (Circle one) <u>NEW</u>				<u>1 1/2 E WINTO</u>			

CONTRACTOR Berexio 2 OWNER Same

TYPE OF JOB Surface

HOLE SIZE 12 1/4 T.D. 310'

CASING SIZE 8 5/8 DEPTH 310'

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG. 15'

PERFS.

DISPLACEMENT 18.79

CEMENT AMOUNT ORDERED 225 Con 3000CC  
270 gpl

COMMON <u>225</u>	@ <u>17.90</u>	<u>4022.50</u>
POZMIX	@	
GEL <u>423 lb</u>	@ <u>1.05</u>	<u>444.15</u>
CHLORIDE <u>635 lb</u>	@ <u>1.10</u>	<u>698.50</u>
ASC	@	
Material Total		<u>5170.15</u>
<u>(1002.74/3120)</u>		
HANDLING <u>31 CP</u>		@ <u>2.42</u> <u>608.41</u>
MILEAGE <u>231</u>		@ <u>2.42</u> <u>559.02</u>
<u>231 - 116/24 Tow 1526.20</u>		

EQUIPMENT

PUMP TRUCK	CEMENTER <u>Alan Ryan</u>
# <u>422-281</u>	HELPER <u>Kevin Ryan</u>
BULK TRUCK	
# <u>818</u>	DRIVER <u>Remond (TWS)</u>
BULK TRUCK	
#	DRIVER

REMARKS:

Run, gravel, mix cement Displace cement

Start

Cement did circulate

Thank You  
Alan Ryan, Remond

CHARGE TO: Berexio

STREET \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

SERVICE

DEPTH OF JOB		
PUMP TRUCK CHARGE		<u>1512.25</u>
EXTRA FOOTAGE	@ <u>20</u>	
MILEAGE <u>50</u>	@ <u>7.70</u>	<u>385.00</u>
MANIFOLD	@ <u>225</u>	<u>112.50</u>
Life Vehicle <u>50</u>	@ <u>4.90</u>	<u>245.00</u>
<u>(1218.51/3120)</u>		
TOTAL		<u>4081.46</u>

PLUG & FLOAT EQUIPMENT

	@	
	@	
	@	
	@	
	@	
TOTAL		

To: Allied Oil & Gas Services, LLC.

You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME \_\_\_\_\_

SIGNATURE Myelo L...

SALES TAX (If Any) \_\_\_\_\_

TOTAL CHARGES 2,197.61

DISCOUNT 2,851.25 (32%) IF PAID IN 30 DAYS

6,346.35 Net.



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Berexco LLC  
 2020 N. Bramblewood  
 Wichita KS 67206  
 ATTN: Pete Vollmer

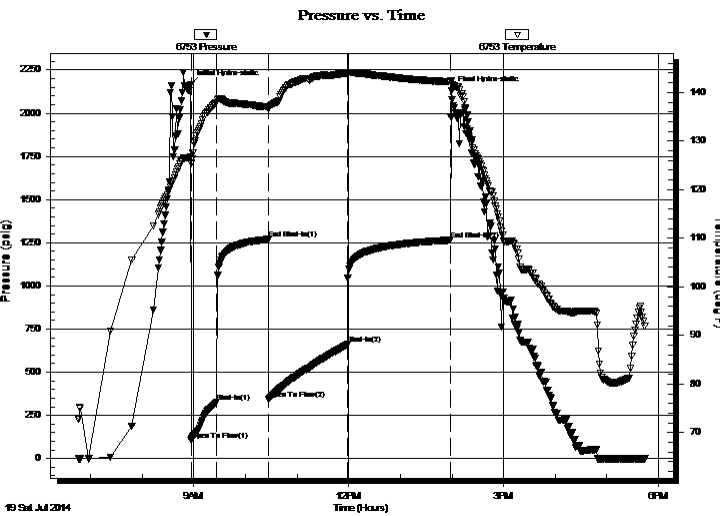
**19-1S-37W**  
**Daniel #1-19**  
 Job Ticket: 58457 **DST#: 1**  
 Test Start: 2014.07.19 @ 06:46:00

## GENERAL INFORMATION:

Formation: **KCL "B"**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 08:56:45 Tester: Royal Fisher  
 Time Test Ended: 17:44:45 Unit No: 54  
 Interval: **4216.00 ft (KB) To 4282.00 ft (KB) (TVD)** Reference Elevations: 3241.00 ft (KB)  
 Total Depth: 4282.00 ft (KB) (TVD) 3228.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 13.00 ft

**Serial #: 6753 Outside**  
 Press @ Run Depth: 661.40 psig @ 4217.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2014.07.19 End Date: 2014.07.19 Last Calib.: 2014.07.19  
 Start Time: 06:46:05 End Time: 17:44:45 Time On Btm: 2014.07.19 @ 08:56:30  
 Time Off Btm: 2014.07.19 @ 13:59:30

**TEST COMMENT:** 30 - IF - Surface blow built to bottom of the bucket in 11 min.  
 60 - ISI - No return  
 90 - FF - Surface blow built to bottom of the bucket in 13 min.  
 120 - FSI - No return



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2166.43	126.75	Initial Hydro-static
1	106.53	125.43	Open To Flow (1)
30	325.12	137.92	Shut-In(1)
90	1270.14	137.08	End Shut-In(1)
90	344.02	136.64	Open To Flow (2)
182	661.40	143.87	Shut-In(2)
302	1265.13	142.18	End Shut-In(2)
303	2128.87	142.19	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
940.00	OSMW - 5M - 95W - oil spots	8.38
533.00	OSWM - 55M - 45W - oil spots	7.48

## Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Berexco LLC  
2020 N. Bramblewood  
Wichita KS 67206  
ATTN: Pete Vollmer

**19-1S-37W**  
**Daniel #1-19**  
Job Ticket: 58457      **DST#: 1**  
Test Start: 2014.07.19 @ 06:46:00

## Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	21000 ppm
Viscosity: 72.00 sec/qt	Cushion Volume: bbl		
Water Loss: 5.20 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 1300.00 ppm			
Filter Cake: 2.00 inches			

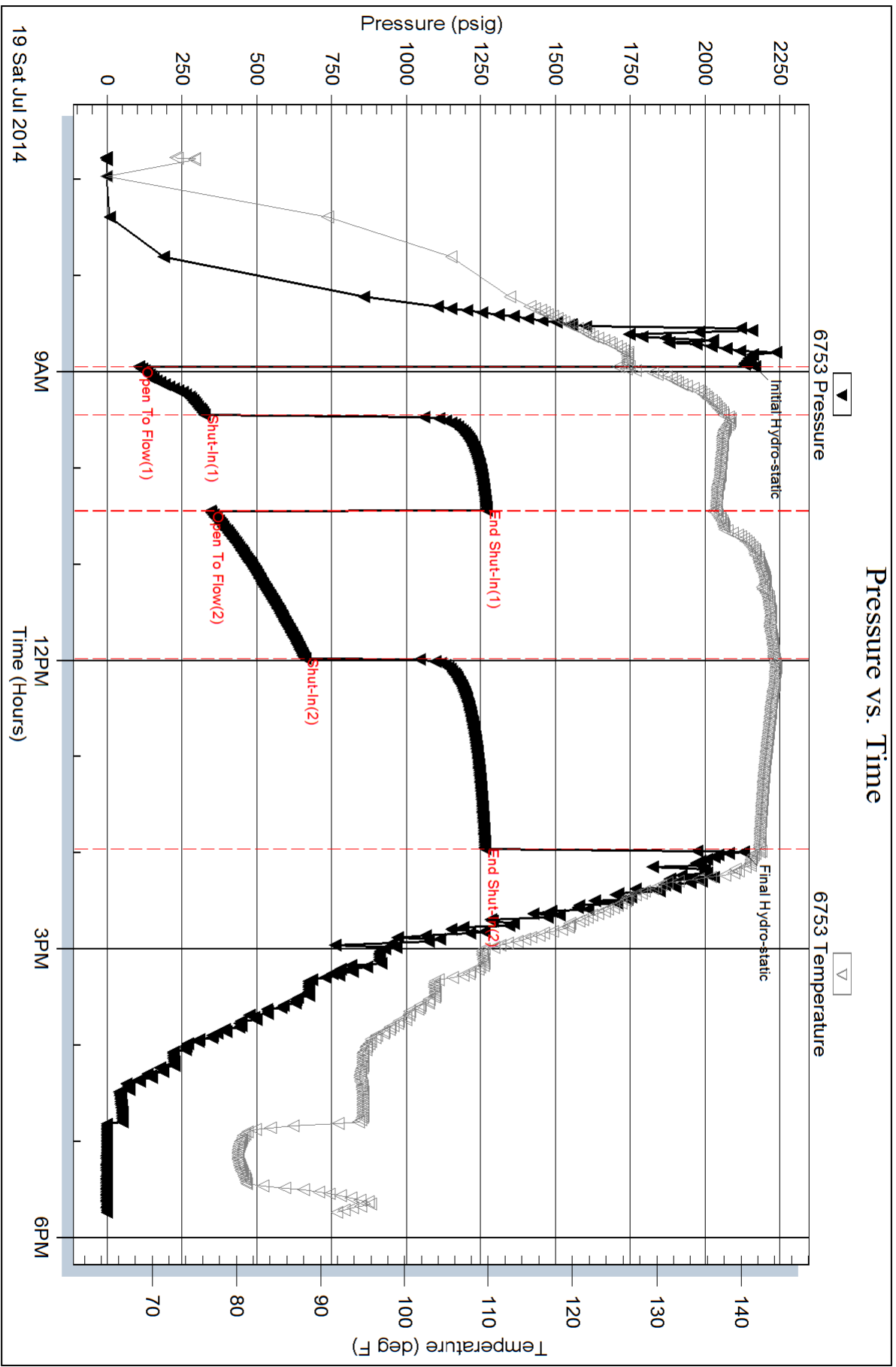
## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
940.00	OSMW - 5M - 95W - oil spots	8.377
533.00	OSWM - 55M - 45W - oil spots	7.477

Total Length: 1473.00 ft      Total Volume: 15.854 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:







**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Berexco LLC  
 2020 N. Bramblewood  
 Wichita KS 67206  
 ATTN: Pete Vollmer

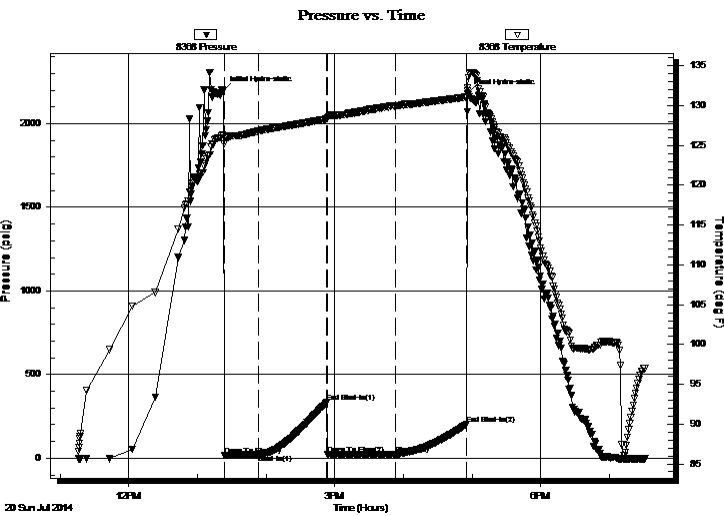
**19-1S-37W**  
**Daniel #1-19**  
 Job Ticket: 58458 **DST#: 2**  
 Test Start: 2014.07.20 @ 11:16:00

## GENERAL INFORMATION:

Formation: **KCL "C-E"**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 13:23:15  
 Time Test Ended: 19:31:30  
 Interval: **4302.00 ft (KB) To 4440.00 ft (KB) (TVD)**  
 Total Depth: 4440.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Royal Fisher  
 Unit No: 54  
 Reference Elevations: 3241.00 ft (KB)  
 3228.00 ft (CF)  
 KB to GR/CF: 13.00 ft

**Serial #: 8368** **Inside**  
 Press @ Run Depth: 25.24 psig @ 4303.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2014.07.20 End Date: 2014.07.20 Last Calib.: 2014.07.20  
 Start Time: 11:16:05 End Time: 19:31:29 Time On Btm: 2014.07.20 @ 13:23:00  
 Time Off Btm: 2014.07.20 @ 16:56:00

**TEST COMMENT:** 30 - IF - Surface blow built to 1/4' then died off in 12 min.  
 60 - ISI - No return  
 60 - FF - No surface blow  
 60 - FSI - No return



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2198.11	126.25	Initial Hydro-static
1	18.03	125.21	Open To Flow (1)
31	20.64	126.82	Shut-In(1)
90	333.91	128.33	End Shut-In(1)
91	22.04	128.33	Open To Flow (2)
150	25.24	129.95	Shut-In(2)
213	203.75	131.09	End Shut-In(2)
213	2179.31	132.22	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud - 100M	0.02

## Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Berexco LLC

**19-1S-37W**

2020 N. Bramblewood  
Wichita KS 67206

**Daniel #1-19**

Job Ticket: 58458

**DST#: 2**

ATTN: Pete Vollmer

Test Start: 2014.07.20 @ 11:16:00

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 70.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.20 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1200.00 ppm

Filter Cake: 2.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Mud - 100M	0.025

Total Length: 5.00 ft      Total Volume: 0.025 bbl

Num Fluid Samples: 0

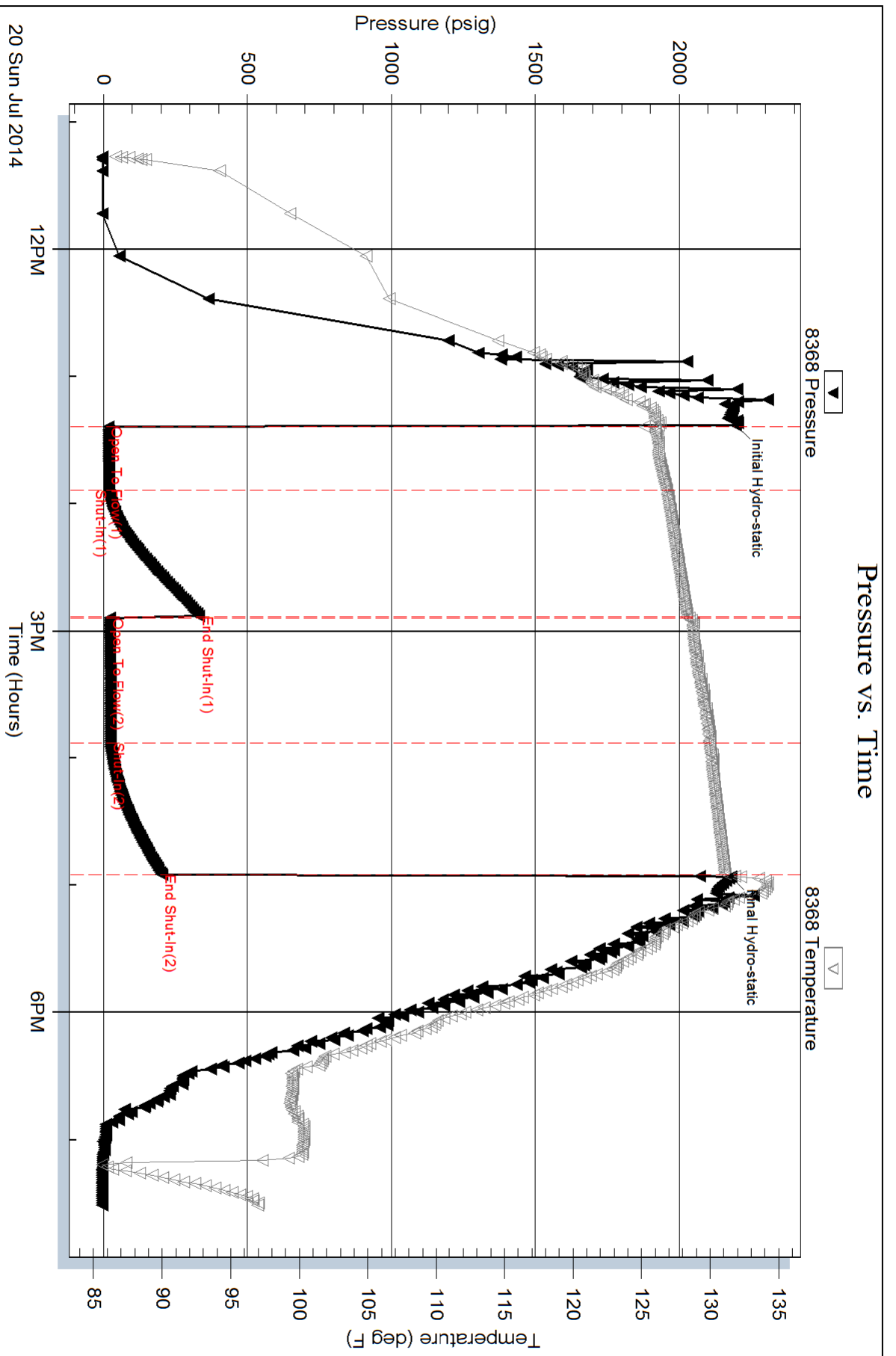
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Berexco LLC  
 2020 N. Bramblewood  
 Wichita KS 67206  
 ATTN: Pete Vollmer

**19-1S-37W**  
**Daniel #1-19**  
 Job Ticket: 58459 **DST#: 3**  
 Test Start: 2014.07.21 @ 17:59:00

## GENERAL INFORMATION:

Formation: **Pawnee & Ft Scott**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 20:45:00  
 Time Test Ended: 04:07:45  
 Interval: **4566.00 ft (KB) To 4656.00 ft (KB) (TVD)**  
 Total Depth: 4656.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Royal Fisher  
 Unit No: 54  
 Reference Elevations: 3241.00 ft (KB)  
 3228.00 ft (CF)  
 KB to GR/CF: 13.00 ft

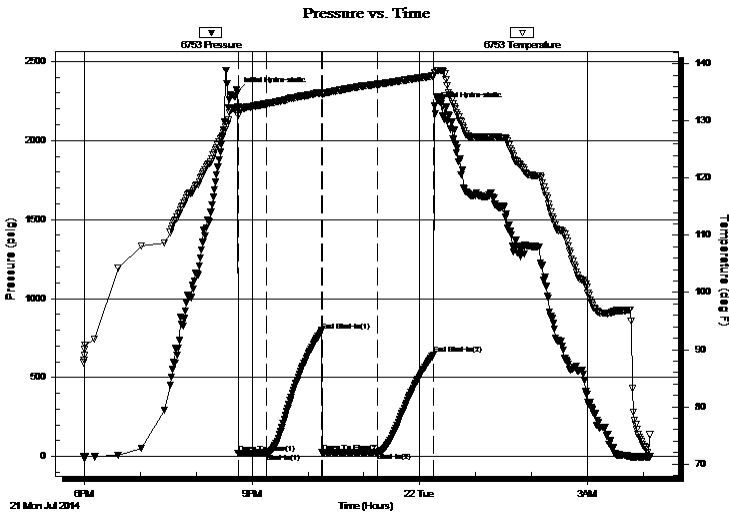
## Serial #: 6753

Outside

Press @ Run Depth: 28.80 psig @ 4567.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2014.07.21 End Date: 2014.07.22 Last Calib.: 2014.07.22  
 Start Time: 17:59:05 End Time: 04:07:45 Time On Btm: 2014.07.21 @ 20:44:45  
 Time Off Btm: 2014.07.22 @ 00:15:45

TEST COMMENT: 30 - IF - Surface blow built to a 1/2' dead in 12 min.  
 60 - ISI - No return  
 60 - FF - No surface blow  
 60 - FSI - No return

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2306.77	132.39	Initial Hydro-static
1	20.41	130.86	Open To Flow (1)
31	23.39	132.93	Shut-In(1)
90	796.45	134.95	End Shut-In(1)
91	24.82	134.65	Open To Flow (2)
150	28.80	136.41	Shut-In(2)
210	645.99	137.85	End Shut-In(2)
211	2216.71	138.40	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
20.00	Mud - 100M	0.10

## Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Berexco LLC

**19-1S-37W**

2020 N. Bramblewood  
Wichita KS 67206

**Daniel #1-19**

Job Ticket: 58459

**DST#: 3**

ATTN: Pete Vollmer

Test Start: 2014.07.21 @ 17:59:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 48.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.39 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 700.00 ppm

Filter Cake: 2.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	Mud - 100M	0.098

Total Length: 20.00 ft      Total Volume: 0.098 bbl

Num Fluid Samples: 0

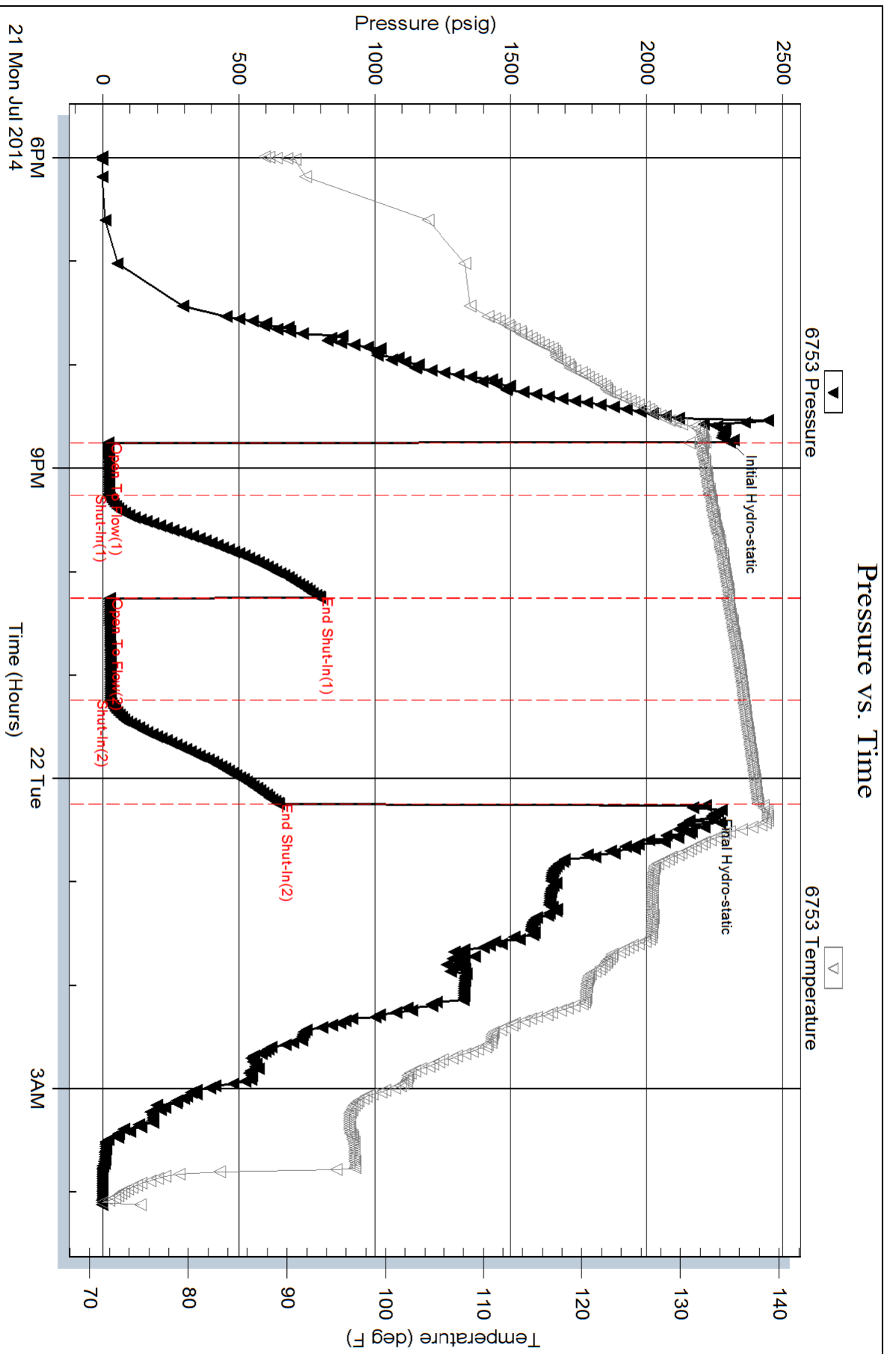
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



**BEREXCO LLC**

**DANIEL 1-19**

**SW SW SEC 19 T1S R37W**

**CHEYENNE COUNTY, KANSAS**

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## SUMMARY

The Berexco LLC Daniel 1-19 in Cheyenne County, Kansas spud July 15, 2014 and reached a total depth of 4800' on July 25, 2014. Wellsite geological supervision commenced at 3000'. The primary objectives of the wildcat were the Pennsylvanian Missourian Lansing-Kansas City limestones. Secondary zones of interests were the Foraker, Oread, and Pawnee limestones. The Daniel 1-19 was drilled using seismic and nearby well control.

On-site evaluation was by drill stem testing after sample analysis and consideration of structural position. Three DSTs were run.

### **Foraker, Wabaunsee, Topeka, and Oread**

The Foraker was clean non-porous limestone with dead oil staining. Minor oil shows in tight limestone were found in the Wabaunsee and Topeka but these did not merit drill stem testing. Oread samples were fossiliferous grainstone and mudstone with trace interparticle porosity, scattered oil staining, and good cuts. The overall lack of porosity and the results of DSTs on similar shows in nearby wells led to the decision not to test the Oread.

### **Lansing-Kansas City**

Only dead oil shows and no visible porosity were observed in the Lansing A.

DST 1 in the Lansing B recovered 1473 ft of watery mud with oil spots. Fair interparticle porosity with spotty black oil stain was observed in cuttings.

DST 2 in the combined Lansing C, D, and E recovered 5 ft of mud. Lansing C samples displayed scattered black oil stain, good fluorescence and cuts, but no visible porosity in chalky limestone. The Lansing D was mudstone with no shows or visible porosity. Lansing E samples displayed very spotty oil stain with fair fluorescence and cut from limited pin-point porosity in grainstone and chalky mudstone.

DST 3 in the combined Lansing F, Pawnee, and upper 20 ft of Fort Scott recovered 20 ft of mud with very poor flow pressures. The Lansing F was nonporous limestone with no sample show. The Pawnee was chalky mudstone devoid of porosity and shows. The Fort Scott included in the test exhibited questionable cuts and fluorescence in a few cuttings.

### **Plugged and Abandoned**

After wireline logs the Daniel 1-19 was plugged and abandoned in accordance with the Kansas Corporation Commission, Oil & Gas Conservation Division.

Peter J. Vollmer  
Consulting Wellsite Geologist, WPG #3369  
July 2014

Berexco LLC  
Daniel 1-19

## WELL DATA

OPERATOR: Berexco LLC  
2020 North Bramblewood Drive  
Wichita, Kansas 67206

WELL NAME: Daniel 1-19

SURFACE LOCATION: 660' FSL & 660' FWL  
SW SW Sec. 19, T1S, R37W  
Cheyenne County, KS

LATITUDE & LONGITUDE: 39.9468757, -101.5199323 (From State, calculated from footages)

BOTTOM HOLE LOCATION: Vertical hole

ELEVATIONS: 3228' GL      3241' KB

API NUMBER: 15-023-21402

BASIN: Mid-Continental Arch

FIELD: Wildcat

HOLE SIZE: 12 1/4" to 310'; 7 7/8" to 4800'

CASING: 8 5/8" J-55 24# STC set to 310' KB

SPUD DATE: July 15, 2014

TD DATE: July 25, 2014

TOTAL DEPTH: 4800' Rig TD    4795' Log TD

LAST FORMATION: Pennsylvanian Cherokee

WELL STATUS: Plugged and abandoned

OPERATOR  
REPRESENTATIVE: Dana Wreath - Vice President

WELLSITE GEOLOGIST: Peter J. Vollmer

**FORMATION TOPS**

Formation	Sample Top	Log Top	Log TVD	Log Datum
KB				3241
Pierre Sh	Cased	Cased	N/A	N/A
Niobrara Fm	N/A	1195	1195	+2046
Fort Hays Ls Mbr	N/A	1655	1655	+1586
Carlile Sh	N/A	1705	1705	+1536
Dakota	N/A	2080	2080	+1161
Cheyenne	N/A	2667	2667	+574
Blaine	N/A	2987	2987	+254
Stone Corral Anhydrite	3196	3194	3194	+47
Base Anhydrite	3229	3224	3224	+17
Chase Limestone	3392	3392	3392	-151
Neva	3652	3650	3650	-409
Red Eagle	3702	3716	3716	-475
Foraker	3772	3772	3772	-531
Wabaunsee	3918	3908	3908	-667
Topeka	3982	3986	3986	-745
Deer Creek Lime	4070	4058	4058	-817
Oread	4124	4126	4126	-885
Lansing-Kansas City				
"A"	4205	4202	4202	-961
"B"	4265	4263	4263	-1022
"C"	4319	4318	4318	-1077
"D"	4363	4360	4360	-1119
"E"	4416	4408	4408	-1167
"F"	4451	4452	4452	-1211
Pawnee	4605	4605	4605	-1364
Ft Scott	4636	4642	4642	-1401
Cherokee	4700	4694	4694	-1453
TD Driller	4800			
TD Logger		4795	4795	-1554

## LITHOLOGY AND SHOWS

The following descriptions are interpretive. Rig crew members collected unlagged samples from 3500' to 4800' TD. Depths are rig depths except where noted as wireline.

3500' – 3550'	SHALE: light reddish brown to reddish orange, firm to soft, fissile to blocky, very silty, sandy in part, non to slightly calcareous.
3550' – 3570'	LIMESTONE: white to light gray to light brown, occasional reddish brown mottled, firm to hard, cryptocrystalline, occasional fossil fragments, chalky, slightly argillaceous in part, gray Shale partings, occasional Sand, tight, no show.
3570' – 3620'	SHALE: reddish brown, soft to firm, sub blocky, non calcareous, occasional silty, well/trace interbedded LIMESTONE: white to light gray, firm to hard, cryptocrystalline, tight, no shows.
3620' – 3640'	SILTY SANDSTONE: reddish brown, soft to very friable, very fine grained grading to silt, angular, moderately sorted, non to slightly calcareous, argillaceous to clay matrix, no visible porosity, no show.
3640' – 3652'	SHALE: reddish brown, firm to hard, fissile to blocky, very silty, sandy in part, non to slightly calcareous, trace light gray Limestone.
NEVA	SAMPLE TOP: 3652'      LOG TOP: 3650'      SUBSEA: -409'
3652' – 3660'	LIMESTONE: white to light gray, hard, mudstone, slightly chalky, scattered black Algal stain, tight, no show.
3660' – 3666'	SANDSTONE: very light gray to off white, friable to firm, very fine grained, sub rounded to rounded, well sorted, calcareous cement, occasional clay filled, no visible porosity, no shows.
3666' – 3702'	SHALE: reddish brown, firm to hard, fissile to blocky, very silty, sandy in part, non to slightly calcareous, trace light gray Limestone.
RED EAGLE	SAMPLE TOP: 3702'      LOG TOP: 3716'      SUBSEA: -475'
3702' – 3718'	LIMESTONE: light gray to gray to grayish brown, hard, cryptocrystalline, occasional slightly argillaceous, occasional reddish brown SHALE, tight, no shows.
3718' – 3772'	SHALE: reddish brown, soft to firm, sub blocky, non calcareous, occasionally moderately to very silty, occasional light gray Limestone and Sandstone stringers.

## LITHOLOGY AND SHOWS

FORAKER	SAMPLE TOP: 3772'	LOG TOP: 3772'	SUBSEA: -531'
3772' – 3780'	LIMESTONE: light gray to dark gray, mottled in part, hard, packstone to grainstone, abundant fossil fragments, pellets, rare black asphalt specks (dead oil), very tight, faint yellowish green fluorescence, occasional weak pale greenish cuts, very poor show.		
3780' – 3786'	SHALE: light gray to greenish gray, firm, blocky, non to slightly calcareous, Limestone stringers.		
3786' – 3804'	LIMESTONE: white to light gray, firm to hard, cryptocrystalline, chalky, fossil fragments, algal stain, tight to trace intercrystalline porosity, no shows.		
3804' – 3814'	SANDSTONE: very light gray to white, friable, very fine grained, subangular to subrounded, well sorted, calcareous cement, clay fill, black specks, tight to trace porosity, no shows.		
3814' – 3834'	SHALE: reddish brown, soft to firm, sub blocky, non calcareous, occasional silty, occasional light gray chalky Limestone stringers.		
3834' – 3842'	LIMESTONE: pale gray to dark gray, firm to hard, mudstone to wackestone, occasional fossil fragment, sandy in part, slightly argillaceous, tight, no show.		
3842' – 3882'	SHALY SILTSTONE: reddish brown to light gray, mottled, firm to friable, very fine grained grading to silt, argillaceous in part, reddish brown Shale partings, tight, no show.		
3882' – 3896'	LIMESTONE: white to light gray, occasional reddish brown mottled, firm to hard, mudstone, slightly argillaceous in part, gray to dark gray Shale partings, tight, no show.		
3896' – 3918'	SHALE: reddish brown, firm, blocky, occasional SHALE: gray to dark gray, firm, fissile, slightly carbonaceous, calcareous.		
WABAUNSEE	SAMPLE TOP: 3918'	LOG TOP: 3908'	SUBSEA: -667'
3918' – 3936'	LIMESTONE: white to light gray, with light reddish brown mottled, soft to firm, cryptocrystalline, chalky texture, reddish brown SHALE partings, occasional fossil fragments, trace black heavy oil material, faint yellowish green fluorescence, slow pale green white cut.		
3936' – 3956'	LIMESTONE: white to light gray, occasional reddish brown mottled, firm to hard, mudstone, reddish brown Shale stringers, scattered black pellets, tight, no show.		
3956' – 3982'	SHALE: reddish brown, soft to firm, sub blocky, non calcareous, occasional silty, occasional light gray chalky Limestone stringers, gummy to sticky.		

## LITHOLOGY AND SHOWS

TOPEKA	SAMPLE TOP: 3982'	LOG TOP: 3986'	SUBSEA: -745'
3982' – 4000'	LIMESTONE: white to light gray, with light reddish brown mottled, soft to firm, grainstone, oolites, fossil fragments, spotty black heavy oil material, no visible porosity, pale yellowish white fluorescence, diffuse pale yellowish white cut, poor show.		
4000' – 4014'	SHALE: gray to dark gray, firm, platy to fissile, n to slightly calcareous, dull.		
4014' – 4030'	LIMESTONE: light gray to white, hard to firm, cryptocrystalline, fossil fragment, opaque chert, dark gray SHALE stringers, tight, no shows.		
4030' – 4070'	SHALE: reddish brown, soft to firm, sub blocky, non calcareous, occasional silty, clayey, white Limestone stringers.		
DEER CREEK LIME	SAMPLE TOP: 4070'	LOG TOP: 4058'	SUBSEA: -817'
4070' – 4082'	LIMESTONE: white to light brown, hard to firm, mudstone, chalky, fossil fragments (Fusulinids), occasional brownish red partings and inclusions, rare black asphalt stain, tight, no shows.		
4082' – 4124'	SHALE: reddish brown, brownish maroon, grayish green, firm, blocky, occasional slightly calcareous, non to slightly silty in part, occasional thin SANDSTONE stringers, waxy in part, occasional clayey to sticky, occasional LIMESTONE: light brown, hard, mudstone, abundant black pellets, tight, no shows.		
OREAD	SAMPLE TOP: 4124'	LOG TOP: 4126'	SUBSEA: -885'
4124' – 4140'	LIMESTONE: cream to white, firm to hard, mudstone to grainstone, fossil fragments (Brachiopod, Crinoid, Fusulinids), occasional oolites, occasional patchy black heavy oil stain, predominately tight to trace interparticle porosity, patchy bright yellowish white fluorescence, immediate blooming yellowish white cuts, with slow streaming yellowish white cuts, fair show.		
4140' – 4154'	LIMESTONE: white to light gray, hard to firm, mudstone, very chalky, occasional fossil, tight, no shows.		
4154' – 4158'	SHALE: dark gray to gray, firm, fissile, slightly carbonaceous in part, n to slightly calcareous, fossil fragments.		
4158' – 4168'	LIMESTONE: gray to light gray, firm to hard, mudstone, occasional fossil, becoming shaly at base, tight, no show.		

## LITHOLOGY AND SHOWS

4168' – 4205'	SHALE: reddish brown to maroon, firm to soft, blocky, non to slightly calcareous, occasional very silty, dull to earthy, occasional gummy.
LANSING– KANSAS CITY “A”	SAMPLE TOP: 4205'      LOG TOP: 4202'      SUBSEA: –961'
4205' – 4216'	LIMESTONE: white to light gray, hard, mudstone, fossil fragments, chalky, trace black asphalt material dead oil, no visible porosity, no show.
4216' – 4230'	LIMESTONE: gray to light gray, hard, mudstone, occasional fossil (Ostracods), slightly argillaceous in part, rare black oil stain, tight, predominately no show.
4230' – 4238'	SANDSTONE: white to light gray, firm to friable, very fine grained, well rounded, well sorted, calcareous cement, clay filled, black dead oil specks, no visible porosity, no show.
4238' – 4265'	SHALE: reddish brown, soft to firm, subblocky, non to slightly calcareous, clayey, occasional argillaceous LIMESTONE stringers.
LANSING– KANSAS CITY “B”	SAMPLE TOP: 4265'      LOG TOP: 4263      SUBSEA: –1022'
4265' – 4282'	LIMESTONE: white to very light gray, firm to hard, mudstone to packstone, occasional fossil fragment, pyrite, occasional spotty heavy black oil, trace intergranular porosity and trace vuggy porosity, bright yellowish white fluorescence, instant blooming bright yellowish white cuts, fair show.
4282' – 4296'	SHALE: gray to dark gray to black, firm, sub blocky, non to slightly calcareous, fossil fragments (Brachiopod), pyrite, very slightly carbonaceous in part.
4296' – 4302'	LIMESTONE: white to light gray, hard, mudstone, occasional fossil, chalky texture, clean, tight, no show.
4302' – 4319'	SHALE: gray to dark gray, firm, sub blocky to fissile, non to slightly calcareous, fossil fragments, occasional very slightly carbonaceous.

## LITHOLOGY AND SHOWS

LANSING-  
KANSAS CITY "C"

SAMPLE TOP: 4319' LOG TOP: 4318' SUBSEA: -1077'

4319' - 4336'

LIMESTONE: light gray to white, firm, mudstone to packstone, fossil fragment, predominant chalky texture, abundant patchy heavy black oil specks, no free oil, predominately no visible porosity, occasional trace moldic porosity, bright yellowish white fluorescence, instant yellowish white diffuse cuts, good show with very poor porosity.

4336' - 4363'

SHALE: gray to dark gray, firm, sub blocky, non to slightly calcareous, occasional slightly carbonaceous, fossil fragment, occasional Limestone stringer.

LANSING-  
KANSAS CITY "D"

SAMPLE TOP: 4363' LOG TOP: 4360' SUBSEA: -1119'

4363' - 4376'

LIMESTONE: cream to white, firm, mudstone to wackestone, fossil fragments, very chalky texture, no visible porosity, no shows.

4376' - 4384'

SHALE: gray to dark gray, firm, sub blocky, non to slightly calcareous, pyrite.

4384' - 4390'

LIMESTONE: light gray, hard, mudstone, very chalky, tight, no show.

4390' - 4416'

SHALE: reddish brown, soft to firm, subblocky, non to slightly calcareous, clayey, occasional Siltstone and LIMESTONE stringers.

LANSING-  
KANSAS CITY "E"

SAMPLE TOP: 4416' LOG TOP: 4408' SUBSEA: -1167'

4416' - 4426'

LIMESTONE: white, firm to soft, mudstone to grainstone, peloids, slightly chalky in part, fossil fragment, occasional patchy black oil stain, trace vuggy porosity, bright yellowish white fluorescence, immediate blooming yellowish white cuts, poor show.

4426' - 4451'

SHALE: dark reddish brown to reddish brown to gray, firm, blocky to platy, non calcareous, moderately to very silty, SILTSTONE: maroon, friable, grading to very fine grained sand, clay fill.



## LITHOLOGY AND SHOWS

### LANSING- KANSAS CITY "F"

SAMPLE TOP: 4451'    LOG TOP: 4452'    SUBSEA: -1211'

- 4451' – 4460'    LIMESTONE: cream to white to light gray, firm to hard, mudstone, very chalky texture, occasional fossil fragment, very tight, no shows.
- 4460' – 4476'    SHALE: gray to dark gray to black to reddish brown, firm, platy, non to slightly calcareous, occasionally slightly carbonaceous, disseminated pyrite, plant remains.
- 4476' – 4488'    LIMESTONE: white to light gray, firm to hard, mudstone, slightly chalky texture, fossil fragments, gray Shale partings, tight, no shows.
- 4488' – 4520'    SHALE: brownish red, firm, blocky, non calcareous, with interbedded white Limestone stringers.
- 4520' – 4534'    LIMESTONE: white to cream, with reddish brown mottled, mudstone, fossil, occasional red SHALE partings, tight, no shows.
- 4534' – 4550'    SHALE: dark reddish brown, firm to hard, blocky to platy, non calcareous, moderately to very silty.
- 4550' – 4570'    LIMESTONE: gray to white to cream, hard, cryptocrystalline, fossil fragments, gray Shale partings, dense, tight, no shows.
- 4570' – 4605'    SHALE: gray to dark gray to dark gray green, hard to firm, sub blocky, non calcareous, fossil (Brachiopod).

### PAWNEE

SAMPLE TOP: 4605'    LOG TOP: 4605'    SUBSEA: -1364'

- 4605' – 4626'    LIMESTONE: light gray to very light gray to cream, hard, mudstone, slightly to moderately chalky, rare fossil fragment(Crinoid), clean, tight, no shows.
- 4626' – 4636'    SHALE: gray to dark gray to black, hard to firm, sub blocky to fissile, n calcareous, fossil (Brachiopod), carbonaceous in part.

### FORT SCOTT

SAMPLE TOP: 4636'    LOG TOP: 4642'    SUBSEA: -1401'

- 4636' – 4666'    LIMESTONE: light gray to light brown, firm, very fine to microcrystalline in part, predominant mudstone, rare fossil fragment, trace patchy brown to black oil stain (three pieces), trace intercrystalline porosity, rare pale yellow fluorescence, slow dull yellow diffuse cut, with very slow streaming faint dull yellow cut.

## LITHOLOGY AND SHOWS

4666' – 4676'	SHALE: gray to dark gray, firm, blocky to fissile, occasional carbonaceous at top, disseminated pyrite.
4676' – 4700'	LIMESTONE: white to light gray to gray, firm to hard, mudstone to wackestone, rare fossil fragment, tight, occasional sandy, no shows.
CHEROKEE	SAMPLE TOP: 4700'      LOG TOP: 4694'      SUBSEA: -1453'
4700' – 4708'	SHALE: black to dark gray to gray, firm, blocky to fissile, occasional carbonaceous, trace pyrite, plant remains, thin black slightly argillaceous Coal stringers.
4708' – 4744'	LIMESTONE: white to light gray, firm to hard, mudstone to wackestone, occasional fossil fragments (Brachiopod), slightly sandy in part, slightly argillaceous in part, light gray Shale stringers, tight, no shows.
4744' – 4768'	SHALE: gray to very dark gray, firm, fissile to platy, non to slightly calcareous, occasional slightly carbonaceous, pyrite.
4768' – 4794'	LIMESTONE: gray to light gray, firm to hard, mudstone to wackestone, occasional fossil fragment (Brachiopod), slightly sandy in part, slightly argillaceous in part, opaque chert, tight, no shows.
4794' – 4800' TD	SANDSTONE: white to very light gray, friable, fine grained, well rounded, well sorted, weak silica cement, occasional black dead oil specks, tight, no shows.

**SERVICES**

CONTRACTOR:	Beredco Drilling Inc., Rig 2	
Toolpusher:	Milo Salinas	
DRILLING FLUIDS:	Morgan Mud, Inc.	McCook, ND
Mud Type:	Freshwater Chemical	308-340-5946
Engineer:	Dave Korte	
MUD LOGGING:	None	
WELLSITE GEOLOGY:	T. M. McCoy & Co., Inc. Peter J. Vollmer	Wilson, WY 307-733-4332
DRILL STEM TESTING:	Trilobite Testing, Inc. Royal Fisher DST 1: 4216' - 4282' LKC "B" DST 2: 4302' - 4440' LKC "C" - "E" DST 3: 4566' - 4656' Pawnee & Fort Scott	Hays, KS 785- 625-4778
DIRECTIONAL DRILLING:	None	
WIRELINE LOGS:	Pioneer Energy Services RAG: Surface casing - TD Micro: 3500' - TD Dan Schmidt	Hays, KS 785-625-3858

