

Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1252838  
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: \_\_\_\_\_

1252838

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
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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> _____
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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	Theresa 1-27
Doc ID	1252838

Tops

Name	Top	Datum
Anhydrite	3046	+87
Anhydrite (base)	3080	+53
Foraker	3647	-514
Topeka	3866	-733
Oread	3990	-857
Lansing A	4086	-953
Lansing B	4144	-1011
Lansing C	4206	-1073
Lansing D	4252	-1119
Lansing E	4294	-1161
Lansing F	4332	-1199
RTD	4400	-1267
LTD	4402	-1269



# ALLIED OIL & GAS SERVICES, LLC 064668

Federal Tax I.D. # 20-8651475

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

SERVICE POINT: Dock City

DATE <u>3-18-15</u>	SEC. <u>27</u>	TWP. <u>1</u>	RANGE <u>36</u>	CALLED OUT	ON LOCATION <u>5:00 am</u>	JOB START <u>5:15 am</u>	JOB FINISH <u>6:15 am</u>
LEASE <u>Theresa</u>		WELL # <u>1-27</u>		LOCATION <u>McDonald, N 10 Rd 2,</u>		COUNTY <u>Haskell</u>	STATE <u>OK</u>
OLD OR NEW (Circle one) <u>NEW</u>				<u>Y2E, 2 NE NE to rig</u>			

CONTRACTOR Beredas 10  
 TYPE OF JOB Surface  
 HOLE SIZE 12 1/4 T.D. 3061  
 CASING SIZE 5 7/8 DEPTH 307.79  
 TUBING SIZE \_\_\_\_\_ DEPTH \_\_\_\_\_  
 DRILL PIPE \_\_\_\_\_ DEPTH \_\_\_\_\_  
 TOOL \_\_\_\_\_ DEPTH \_\_\_\_\_  
 PRES. MAX \_\_\_\_\_ MINIMUM \_\_\_\_\_  
 MEAS. LINE \_\_\_\_\_ SHOE JOINT \_\_\_\_\_  
 CEMENT LEFT IN CSG. 151  
 PERFS. \_\_\_\_\_  
 DISPLACEMENT 18.74 bbl

OWNER same  
 CEMENT AMOUNT ORDERED 225 sfs cement 3% oil  
280 gal

**EQUIPMENT**

PUMP TRUCK # 431 CEMENTER Kelena Estabate  
 HELPER Paul Beaver  
 BULK TRUCK # 820/291 DRIVER Wayne McElghy  
 BULK TRUCK # \_\_\_\_\_ DRIVER \_\_\_\_\_

COMMON	<u>225 sfs</u>	@ <u>17.90</u>	<u>4027.50</u>
POZMIX		@	
GEL	<u>423 #</u>	@ <u>.50</u>	<u>211.50</u>
CHLORIDE	<u>635 #</u>	@ <u>1.10</u>	<u>698.50</u>
ASC		@	
		@	
Material Total			@ <u>4937.50</u>
		@	
		@	
		@	
		@	
		@	
HANDLING	<u>243.3 sfs</u>	@ <u>2.40</u>	<u>603.38</u>
MILEAGE	<u>111 tax 50 x</u>	<u>2.73</u>	<u>1526.25</u>

REMARKS:  
Mix 225 sfs cement  
Displace with water  
Calant did cement  
3.51 to pit

CHARGE TO: Beredas  
 STREET \_\_\_\_\_  
 CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

TOTAL \_\_\_\_\_

**SERVICE**

DEPTH OF JOB 307.79'  
 PUMP TRUCK CHARGE 1312.25  
 EXTRA FOOTAGE \_\_\_\_\_ @ \_\_\_\_\_  
 MILEAGE MIFAD 50 @ 7.70 385.00  
 MANIFOLD Swage @ 775.00 NC  
MFLV 50 @ 4.40 NC

TOTAL 4,026.88

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 Gilbert Davila Jr  
 SIGNATURE [Signature]

**PLUG & FLOAT EQUIPMENT**

\_\_\_\_\_ @ \_\_\_\_\_  
 \_\_\_\_\_ @ \_\_\_\_\_  
 \_\_\_\_\_ @ \_\_\_\_\_  
 \_\_\_\_\_ @ \_\_\_\_\_  
 \_\_\_\_\_ @ \_\_\_\_\_

TOTAL \_\_\_\_\_

SALES TAX (If Any) \_\_\_\_\_  
 TOTAL CHARGES 8,964.38  
 DISCOUNT 4,033.97 (45%) IF PAID IN 30 DAYS  
4,930.40 Net.



# CEMENTING LOG

STAGE NO. \_\_\_\_\_

Date 3-18-15 District Dakota, KS Ticket No. 64668  
 Company Beverly Co. Rig Beredco 10  
 Lease Theresa Well No. 1-27  
 County Rawlins State KS  
 Location 27-1-36 Field \_\_\_\_\_  
McDonald N to Z, Y & E, 2 NENE King

CASING DATA: Conductor  PTA  Squeeze  Misc   
 Surface  Intermediate  Production  Liner   
 Size 8 5/8 Type New Weight 23 # Collar \_\_\_\_\_

CEMENT DATA:  
 Spacer Type: \_\_\_\_\_  
 Amt. \_\_\_\_\_ Sks Yield \_\_\_\_\_ ft<sup>3</sup>/sk Density \_\_\_\_\_ PPG \_\_\_\_\_

LEAD: Pump Time \_\_\_\_\_ hrs. Type Conn 380 CC  
2 1/2 gals Excess \_\_\_\_\_  
 Amt. 225 Sks Yield 1.34 ft<sup>3</sup>/sk Density 15.02 PPG

TAIL: Pump Time \_\_\_\_\_ hrs. Type \_\_\_\_\_  
 Excess \_\_\_\_\_  
 Amt. \_\_\_\_\_ Sks Yield \_\_\_\_\_ ft<sup>3</sup>/sk Density \_\_\_\_\_ PPG  
 WATER: Lead \_\_\_\_\_ gals/sk Tail \_\_\_\_\_ gals/sk Total \_\_\_\_\_ Bbls.

Pump Trucks Used 431 - Paul  
 Bulk Equip. 870/241 - Wayne

Casing Depths: Top KB Bottom 302.29

Drill Pipe: Size \_\_\_\_\_ Weight \_\_\_\_\_ Collars \_\_\_\_\_  
 Open Hole: Size 12 1/4 T.D. 316 ft. P.B. to \_\_\_\_\_ ft.

CAPACITY FACTORS:  
 Casing: Bbls/Lin. Ft. 0.64 Lin. ft./Bbl. \_\_\_\_\_  
 Open Holes: Bbls/Lin. Ft. \_\_\_\_\_ Lin. ft./Bbl. \_\_\_\_\_  
 Drill Pipe: Bbls/Lin. Ft. \_\_\_\_\_ Lin. ft./Bbl. \_\_\_\_\_  
 Annulus: Bbls/Lin. Ft. \_\_\_\_\_ Lin. ft./Bbl. \_\_\_\_\_  
 Perforations: From \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Amt. \_\_\_\_\_

Float Equip: Manufacturer \_\_\_\_\_  
 Shoe: Type \_\_\_\_\_ Depth \_\_\_\_\_  
 Float: Type \_\_\_\_\_ Depth \_\_\_\_\_  
 Centralizers: Quantity \_\_\_\_\_ Plugs Top \_\_\_\_\_ Btm. \_\_\_\_\_  
 Stage Collars \_\_\_\_\_  
 Special Equip. \_\_\_\_\_  
 Disp. Fluid Type Water Amt. 18.74 Bbls. Weight \_\_\_\_\_ PPG  
 Mud Type \_\_\_\_\_ Weight \_\_\_\_\_ PPG

COMPANY REPRESENTATIVE \_\_\_\_\_ CEMENTER L. Cabane

TIME	PRESSURES PSI		FLUID PUMPED DATA			REMARKS
	DRILL PIPE CASING	ANNULUS	TOTAL FLUID	Pumped Per Time Period	RATE Bbls Min.	
<u>5:30</u>						<u>Hold Safety Meeting</u>
<u>5:32</u>						<u>Start water</u>
						<u>Start cement 225 sks</u>
						<u>weigh cement 15 #</u>
						<u>stop cement</u>
				<u>30</u>		<u>wash up pump &amp; lines</u>
				<u>15.74</u>		<u>Displace with water</u>
						<u>Cement did circulate</u>
						<u>35 gal to pit</u>

Thank you  
Allied

Hold Safety meeting



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Berexco LLC  
2020 N Bramblewood  
Wichita KS 67206  
ATTN: Bryan Bynog

**27 1S 36W Rawlins KS**

**Theresa 1-27**

Job Ticket: 60824

**DST#: 1**

Test Start: 2015.03.21 @ 19:00:00

## GENERAL INFORMATION:

Formation: **LKC "A"**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 21:33:30  
 Time Test Ended: 03:16:00  
 Interval: **4025.00 ft (KB) To 4113.00 ft (KB) (TVD)**  
 Total Depth: 4113.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Robert Zodrow  
 Unit No: 66  
 Reference Elevations: 3133.00 ft (KB)  
 3122.00 ft (CF)  
 KB to GR/CF: 11.00 ft

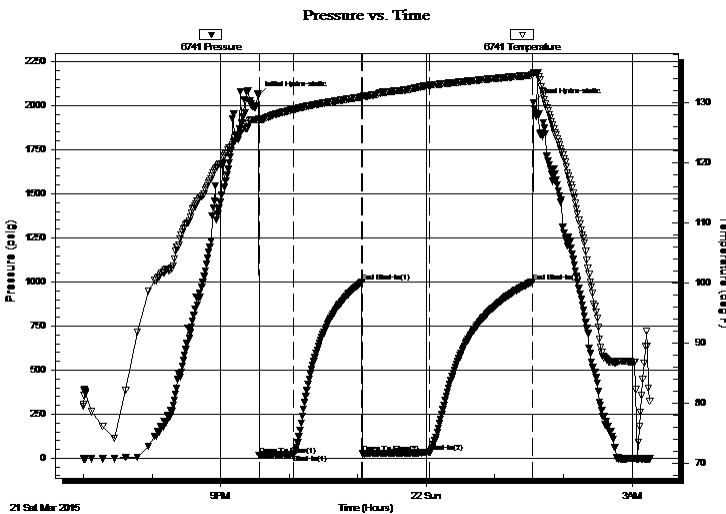
**Serial #: 6741**

**Inside**

Press @ Run Depth: 32.34 psig @ 4026.00 ft (KB)  
 Start Date: 2015.03.21 End Date: 2015.03.22  
 Start Time: 19:00:05 End Time: 03:15:59  
 Capacity: 8000.00 psig  
 Last Calib.: 2015.03.22  
 Time On Btm: 2015.03.21 @ 21:33:00  
 Time Off Btm: 2015.03.22 @ 01:33:30

**TEST COMMENT:** 30-IF- Blow built to 1/2" died back to 1/4"  
 60-ISI- No return  
 60-FF- No blow  
 90-FSI- No return

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2056.50	127.18	Initial Hydro-static
1	16.77	126.95	Open To Flow (1)
31	23.17	128.79	Shut-In(1)
91	1000.16	130.87	End Shut-In(1)
91	25.39	130.78	Open To Flow (2)
150	32.34	132.82	Shut-In(2)
240	1000.14	134.50	End Shut-In(2)
241	2018.77	134.91	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud w ith oil spots 100%M	0.02

## Gas Rates

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



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Berexco LLC  
 2020 N Bramblewood  
 Wichita KS 67206  
 ATTN: Bryan Bynog

**27 1S 36W Rawlins KS**

**Theresa 1-27**

Job Ticket: 60824

**DST#: 1**

Test Start: 2015.03.21 @ 19:00:00

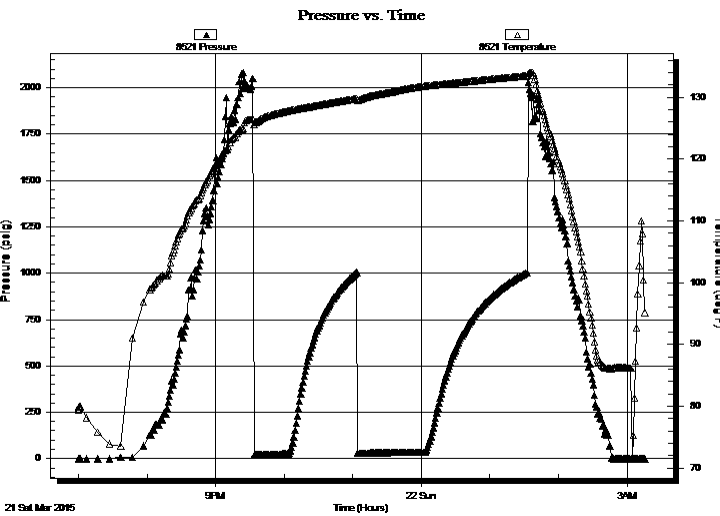
## GENERAL INFORMATION:

Formation: **LKC "A"**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 21:33:30  
 Time Test Ended: 03:16:00  
 Interval: **4025.00 ft (KB) To 4113.00 ft (KB) (TVD)**  
 Total Depth: 4113.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Robert Zodrow  
 Unit No: 66  
 Reference Elevations: 3133.00 ft (KB)  
 3122.00 ft (CF)  
 KB to GR/CF: 11.00 ft

**Serial #: 8521 Outside**

Press @ Run Depth: psig @ 4026.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2015.03.21 End Date: 2015.03.22 Last Calib.: 2015.03.22  
 Start Time: 19:00:05 End Time: 03:15:59 Time On Btm:  
 Time Off Btm:

**TEST COMMENT:** 30-IF- Blow built to 1/2" died back to 1/4"  
 60-ISI- No return  
 60-FF- No blow  
 90-FSI- No return



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

## Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud w ith oil spots 100%M	0.02

## Gas Rates

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





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Berexco LLC

**27 1S 36W Rawlins KS**

2020 N Bramblewood  
Wichita KS 67206

**Theresa 1-27**

Job Ticket: 60824

**DST#: 1**

ATTN: Bryan Bynog

Test Start: 2015.03.21 @ 19:00:00

## 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: 76.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.40 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 800.00 ppm

Filter Cake: 2.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Mud with oil spots 100%M	0.025

Total Length: 5.00 ft      Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

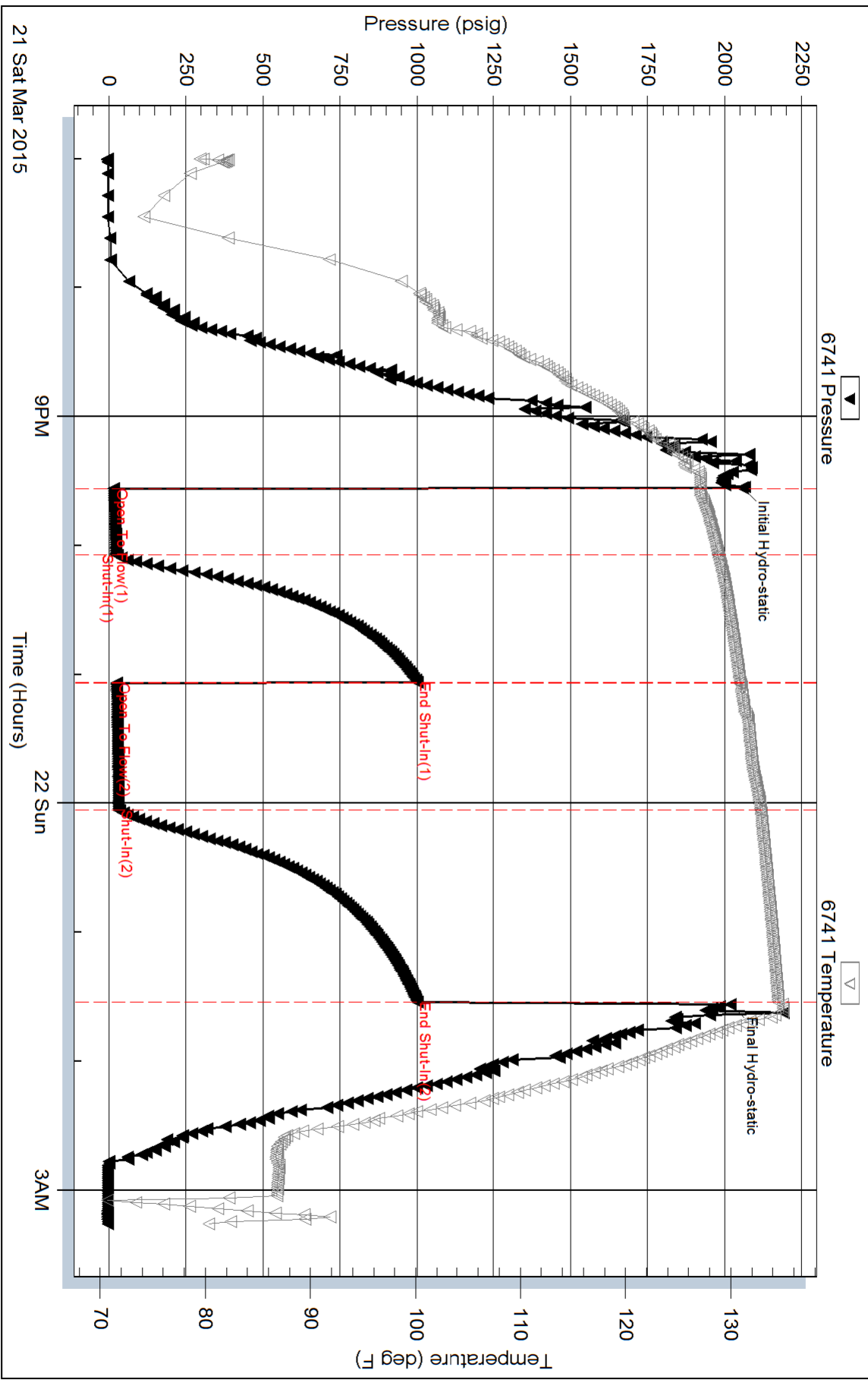
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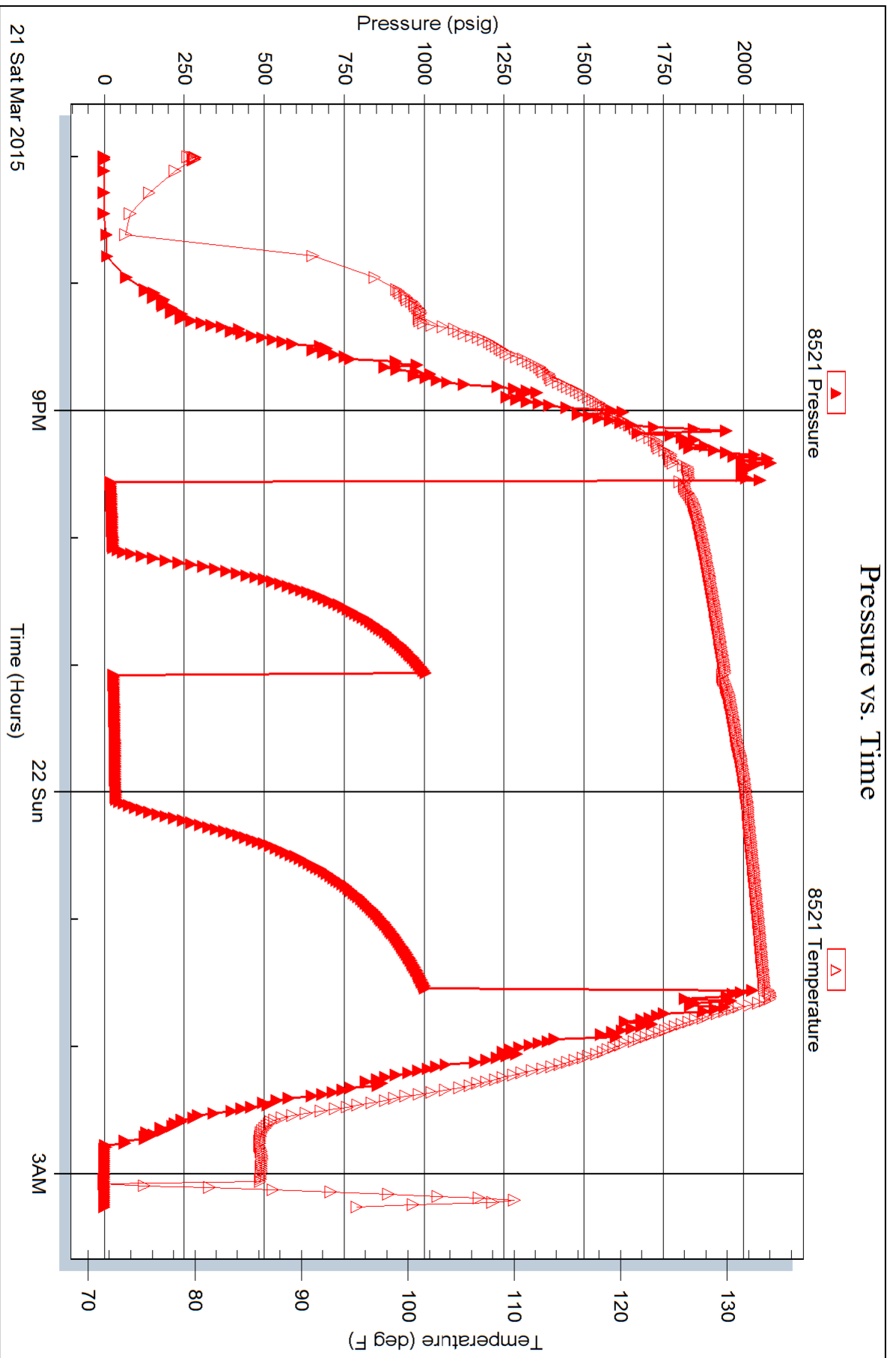
Laboratory Name:

Laboratory Location:

Recovery Comments:

# Pressure vs. Time







**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Berexco LLC  
 2020 N Bramblewood  
 Wichita KS 67206  
 ATTN: Bryan Bynog

**27 1S 36W Rawlins KS**

**Theresa 1-27**

Job Ticket: 60825

**DST#: 2**

Test Start: 2015.03.22 @ 17:20:00

## GENERAL INFORMATION:

Formation: **LKC "B&C"**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 20:08:00  
 Time Test Ended: 03:24:00  
 Interval: **4095.00 ft (KB) To 4225.00 ft (KB) (TVD)**  
 Total Depth: 4225.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Robert Zodrow  
 Unit No: 66  
 Reference Elevations: 3133.00 ft (KB)  
 3122.00 ft (CF)  
 KB to GR/CF: 11.00 ft

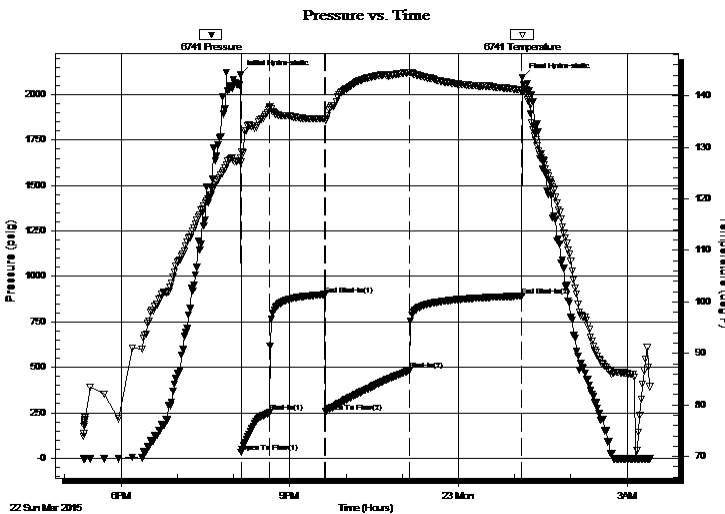
## Serial #: 6741

Inside

Press @ Run Depth: 482.27 psig @ 4096.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2015.03.22 End Date: 2015.03.23 Last Calib.: 2015.03.23  
 Start Time: 17:20:05 End Time: 03:24:00 Time On Btm: 2015.03.22 @ 20:07:30  
 Time Off Btm: 2015.03.23 @ 01:08:30

TEST COMMENT: 30-IF- Bob in 12 mins  
 60-ISI- No return  
 90-FF- Bob in 21 mins  
 120-FSI- No return

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2107.95	127.87	Initial Hydro-static
1	31.57	127.16	Open To Flow (1)
31	251.37	137.64	Shut-In(1)
90	900.63	135.60	End Shut-In(1)
91	255.83	135.27	Open To Flow (2)
181	482.27	144.47	Shut-In(2)
300	892.43	141.10	End Shut-In(2)
301	2093.52	140.97	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
820.00	MW 15%M 85%W	8.06
180.00	WM 10%W 90%M	2.63
60.00	OCM 2%O 98%M	0.88

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Berexco LLC

**27 1S 36W Rawlins KS**

2020 N Bramblewood  
Wichita KS 67206

**Theresa 1-27**

Job Ticket: 60825

**DST#: 2**

ATTN: Bryan Bynog

Test Start: 2015.03.22 @ 17:20:00

## 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:

35000 ppm

Viscosity: 59.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.80 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 900.00 ppm

Filter Cake: 2.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
820.00	MW 15%M 85%W	8.061
180.00	WM 10%W 90%M	2.632
60.00	OCM 2%O 98%M	0.877

Total Length: 1060.00 ft      Total Volume: 11.570 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

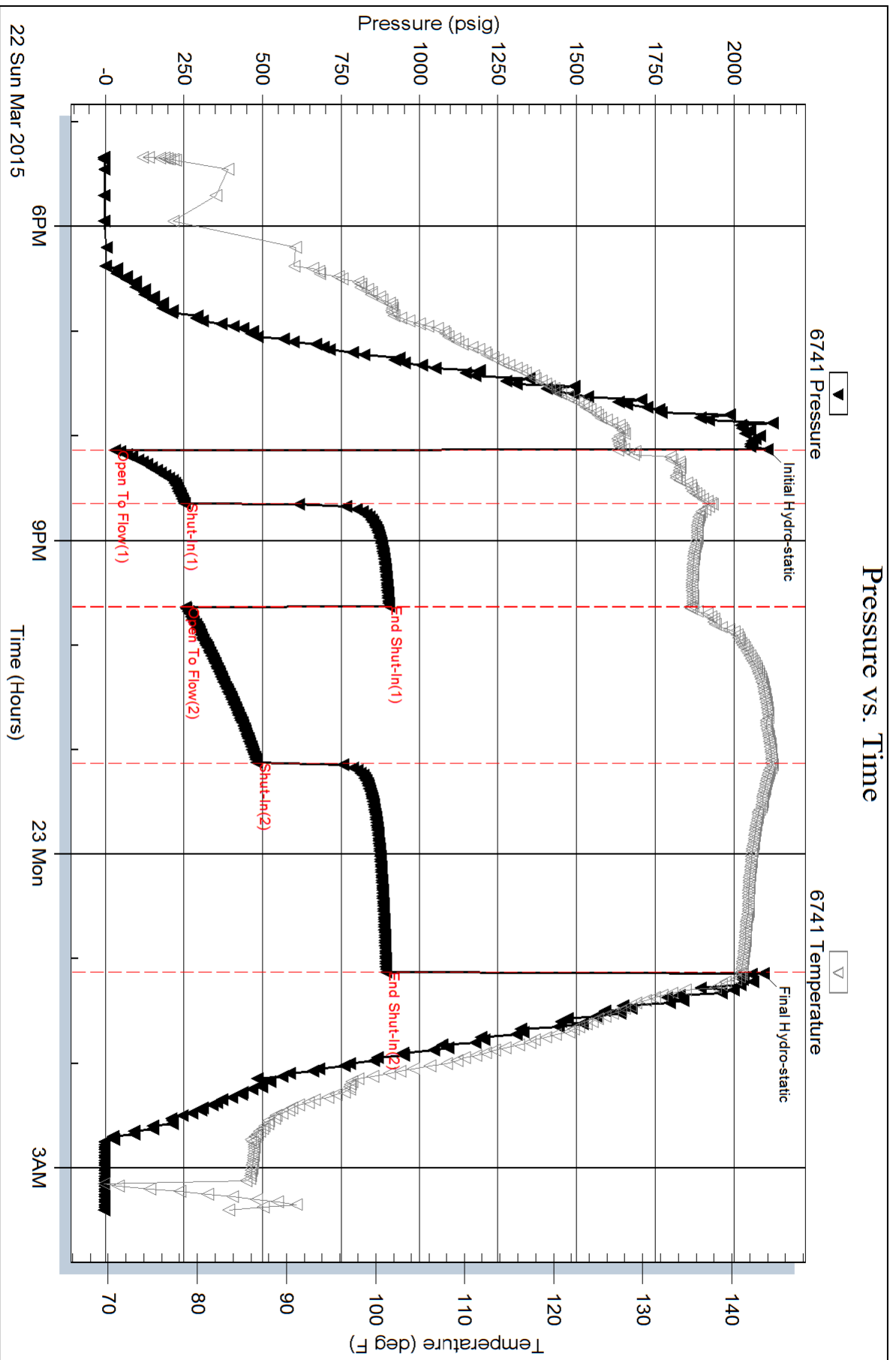
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .325 @ 54 Deg F = 35000

# Pressure vs. Time





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Berexco LLC  
2020 N Bramblewood  
Wichita KS 67206  
ATTN: Bryan Bynog

**27 1S 36W Rawlins KS**

**Theresa 1-27**

Job Ticket: 65001

**DST#: 3**

Test Start: 2015.03.23 @ 15:30:00

## GENERAL INFORMATION:

Formation: **LKC "D&E"**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 17:43:30  
 Time Test Ended: 00:37:00  
 Interval: **4215.00 ft (KB) To 4310.00 ft (KB) (TVD)**  
 Total Depth: 4310.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Robert Zodrow  
 Unit No: 66  
 Reference Elevations: 3133.00 ft (KB)  
 3122.00 ft (CF)  
 KB to GR/CF: 11.00 ft

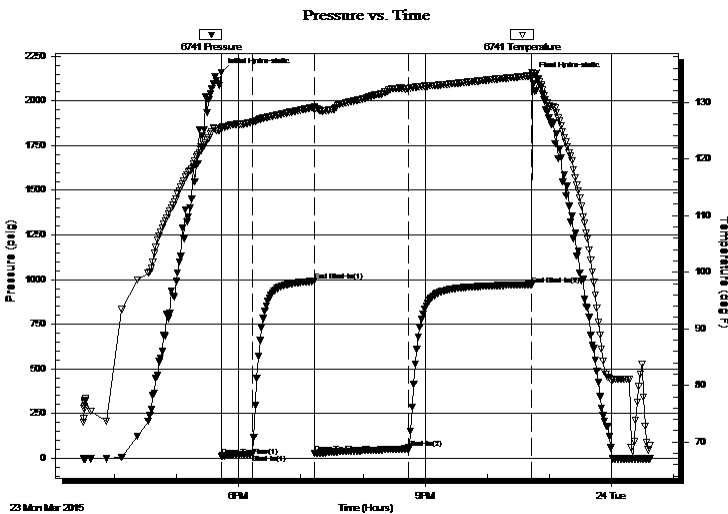
## Serial #: 6741

Inside

Press @ Run Depth: 54.49 psig @ 4216.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2015.03.23 End Date: 2015.03.24 Last Calib.: 2015.03.24  
 Start Time: 15:30:05 End Time: 00:37:00 Time On Btm: 2015.03.23 @ 17:43:00  
 Time Off Btm: 2015.03.23 @ 22:43:30

TEST COMMENT: 30-IF- Blow built to 3/4"  
 60-ISI- No return  
 90-FF- No blow  
 120-FSI- No return

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2160.05	125.45	Initial Hydro-static
1	12.47	125.33	Open To Flow (1)
30	24.93	126.45	Shut-In(1)
90	991.81	129.09	End Shut-In(1)
91	27.30	128.70	Open To Flow (2)
181	54.49	132.41	Shut-In(2)
300	972.41	134.68	End Shut-In(2)
301	2139.41	135.25	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
60.00	MUD 100%M	0.30

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Berexco LLC

**27 1S 36W Rawlins KS**

2020 N Bramblewood  
Wichita KS 67206

**Theresa 1-27**

Job Ticket: 65001

**DST#: 3**

ATTN: Bryan Bynog

Test Start: 2015.03.23 @ 15:30:00

## 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: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.80 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1600.00 ppm

Filter Cake: 3.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	MUD 100%M	0.295

Total Length: 60.00 ft      Total Volume: 0.295 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

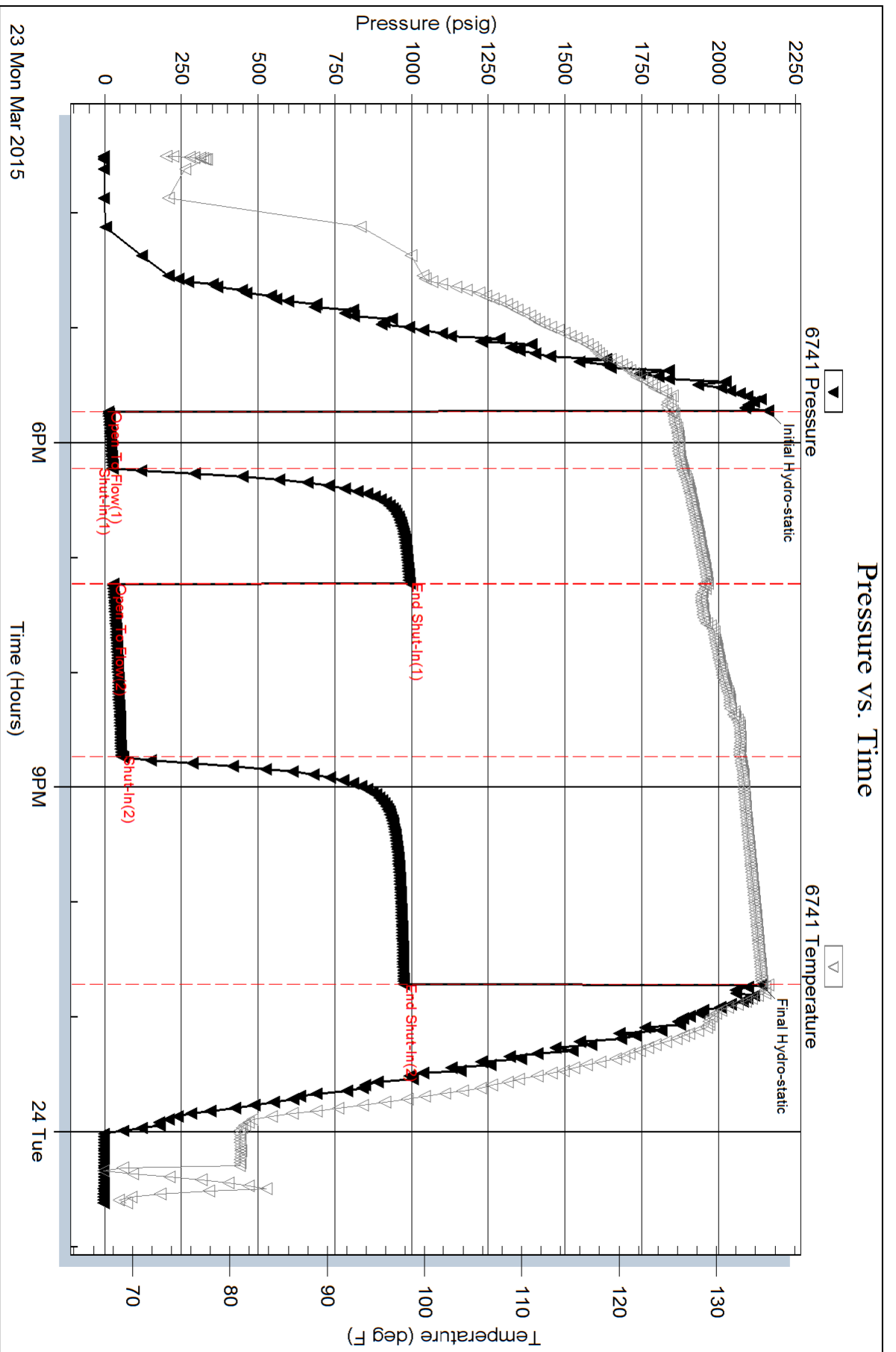
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





# ALLIED OIL & GAS SERVICES, LLC 064161

Federal Tax I.D. # 20-8651475

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

SERVICE POINT: Oakley, KS

DATE <u>3-25-15</u>	SEC. <u>27</u>	TWP. <u>1.5</u>	RANGE <u>36w</u>	CALLED OUT	ON LOCATION <u>11:00pm</u>	JOB START <u>12:30am</u>	JOB FINISH <u>1:30am</u>
LEASE <u>Theresa</u>	WELL # <u>127</u>	LOCATION <u>McDonald N to Rd Z,</u>	COUNTY <u>Rawlins</u>	STATE <u>KS</u>			
OLD OR NEW (Circle one)			<u>1/2 E, N+E into</u>				

CONTRACTOR Berexco 10

TYPE OF JOB PTA

HOLE SIZE	<u>7 7/8</u>	T.D.	<u>4660'</u>
CASING SIZE		DEPTH	
TUBING SIZE		DEPTH	
DRILL PIPE	<u>4 1/2</u>	DEPTH	<u>3060'</u>
TOOL		DEPTH	
PRES. MAX		MINIMUM	
MEAS. LINE		SHOE JOINT	
CEMENT LEFT IN CSG.			
PERFS.			
DISPLACEMENT	<u>5 bbl 400 30 bbl mud</u>		
EQUIPMENT			
PUMP TRUCK # <u>402</u>	CEMENTER <u>Paul Beaver</u>		
	HELPER <u>Brandon Wilkinson</u>		
BULK TRUCK # <u>870/241</u>	DRIVER <u>George Grant</u>		
BULK TRUCK #	DRIVER		

OWNER Same

CEMENT AMOUNT ORDERED 255 sks Lite  
60/40/4' gel 74# Flo-seal

COMMON	@	
POZMIX	@	
GEL	@	
CHLORIDE	@	
ASC	@	
<u>Lite</u>	<u>255 sks</u>	@ <u>18.92</u> <u>4824.60</u>
<u>Flo-seal</u>	<u>64 #</u>	@ <u>2.97</u> <u>190.08</u>
Material Total @ <u>5014.68</u>		
<u>(2005.87/40%)</u>		
HANDLING <u>273.87 #</u>	@ <u>2.48</u>	<u>679.20</u>
MILEAGE <u>11.44 hrs @ 150 min</u>	<u>2.75</u>	<u>1573.00</u>
TOTAL		

**REMARKS:**

mix 50 sks @ 3060'; Displace w/ mud  
mix 100 sks @ 2270'; Displace w/ mud  
mix 50 sks @ 360'  
mix 10 sks w/ plug @ 40'  
mix 30 sks in R.H.  
mix 15 sks in M.H.

Thank You!  
Paul + crew

CHARGE TO: Berexco IIc

STREET \_\_\_\_\_

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

**SERVICE**

DEPTH OF JOB	<u>3060'</u>
PUMP TRUCK CHARGE	<u>2600.47</u>
EXTRA FOOTAGE	@
MILEAGE <u>M/H</u>	<u>50</u> @ <u>7.70</u> <u>385.00</u>
MANIFOLD	@
<u>M/LV</u>	<u>50</u> @ <u>4.40</u> <u>N/C</u>
<u>(2095.06/40%)</u>	
TOTAL <u>5,237.67</u>	

**PLUG & FLOAT EQUIPMENT**

<u>8 5/8 Wooden Plug</u>	@	<u>110.00</u>
	@	
	@	
	@	
	@	
TOTAL <u>110.00</u>		

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 Gilbert Davis Jr

SIGNATURE [Signature]

SALES TAX (if Any) \_\_\_\_\_

TOTAL CHARGES 10,362.35

DISCOUNT 4,100.94 (40%) IF PAID IN 30 DAYS

6,261.41 Net.



# CEMENTING LOG

STAGE NO. \_\_\_\_\_

Date 3-25-15 District Oakley, KS Ticket No. 64161  
 Company Berexco Rig Berexco 10  
 Lease 4th rise Well No. 1-27  
 County Rawlins State KS  
 Location 27-1-36 Field \_\_\_\_\_

CEMENT DATA:  
 Spacer Type: water  
 Amt. \_\_\_\_\_ Sks Yield \_\_\_\_\_ ft<sup>3</sup>/sk Density \_\_\_\_\_ PPG \_\_\_\_\_

LEAD: Pump Time \_\_\_\_\_ hrs. Type \_\_\_\_\_  
 Excess \_\_\_\_\_

Amt. \_\_\_\_\_ Sks Yield \_\_\_\_\_ ft<sup>3</sup>/sk Density \_\_\_\_\_ PPG \_\_\_\_\_

TAIL: Pump Time \_\_\_\_\_ hrs. Type 60/40 4/4 gel  
1/4 # F 16 seal Excess \_\_\_\_\_

Amt. 255 Sks Yield 1.42 ft<sup>3</sup>/sk Density 13.82 PPG \_\_\_\_\_

WATER: Lead 6.9 gals/sk Tail \_\_\_\_\_ gals/sk Total \_\_\_\_\_ Bbls. \_\_\_\_\_

Pump Trucks Used 422 - Brandon

Bulk Equip. 890/211 - George

CASING DATA: Conductor  PTA  Squeeze  Misc   
 Surface  Intermediate  Production  Liner   
 Size \_\_\_\_\_ Type \_\_\_\_\_ Weight \_\_\_\_\_ Collar \_\_\_\_\_

Casing Depths: Top \_\_\_\_\_ Bottom \_\_\_\_\_

Drill Pipe: Size 4 1/2 Weight \_\_\_\_\_ Collars \_\_\_\_\_

Open Hole: Size \_\_\_\_\_ T.D. 4100 ft. P.B. to 3060 ft.

**CAPACITY FACTORS:**

Casing: Bbls/Lin. ft. \_\_\_\_\_ Lin. ft./Bbl. \_\_\_\_\_

Open Holes: Bbls/Lin. ft. \_\_\_\_\_ Lin. ft./Bbl. \_\_\_\_\_

Drill Pipe: Bbls/Lin. ft. 0.1422 Lin. ft./Bbl. \_\_\_\_\_

Annulus: Bbls/Lin. ft. \_\_\_\_\_ Lin. ft./Bbl. \_\_\_\_\_

Bbls/Lin. ft. \_\_\_\_\_ Lin. ft./Bbl. \_\_\_\_\_

Perforations: From \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Amt. \_\_\_\_\_

Float Equip: Manufacturer \_\_\_\_\_

Shoe: Type \_\_\_\_\_ Depth \_\_\_\_\_

Float: Type \_\_\_\_\_ Depth \_\_\_\_\_

Centralizers: Quantity \_\_\_\_\_ Plugs Top \_\_\_\_\_ Btm. \_\_\_\_\_

Stage Collars \_\_\_\_\_

Special Equip. 8 5/8 wooden plug

Disp. Fluid Type water/mud Amt. \_\_\_\_\_ Bbls. Weight \_\_\_\_\_ PPG \_\_\_\_\_

Mud Type 5/32 Weight \_\_\_\_\_ PPG \_\_\_\_\_

COMPANY REPRESENTATIVE \_\_\_\_\_

CEMENTER Paul B

TIME AM/PM	PRESSURES PSI		FLUID PUMPED DATA			REMARKS
	DRILL PIPE CASING	ANNULUS	TOTAL FLUID	Pumped Per Time Period	RATE Bbls Min.	
			5	5		Hold Safety meeting pump water spacer mix 50 sks @ 1300' @ 14 # wash up pump + lines Displace w/ mud pump water spacer mix 100 sks @ 270' @ 14 # wash up pump + lines Displace w/ mud mix 50 sks @ 360' @ 13.5 # mix 10 sks @ 40' w/ plug mix 30 sks in R.H. mix 15 sks in M.H.
			8	13		
			5	18		
			30	48		
			5	53		
			16	69		
			5	74		
			13	87		
			8	95		
			2	97		
			5	102		
			3	105		

FINAL DISP. PRESS: \_\_\_\_\_ PSI BUMP PLUG TO \_\_\_\_\_ PSI BLEEDBACK \_\_\_\_\_ BBLs. THANK YOU

**BEREXCO, LLC.  
THERESA #1-27  
W2NENENW SECTION 27 1S-36W  
RAWLINS COUNTY, KANSAS**

**GEOLOGIST  
WILLIAM B. BYNOG**

## RESUME

OPERATOR: BEREXCO, LLC.

WELL NAME & NUMBER: THERESA #1-27

LOCATION: W2NENENW SECTION 27 1S-36W

COUNTY: RAWLINS

STATE: KANSAS

SPUD DATE: 3-17-2015 COMPLETION DATE: 3-24-2015

ELEVATIONS: GL: 3122 KB: 3133

CONTRACTOR: BEREDCO RIG 10

LOGS: LOG TECH TYPES: RAG, MICROLOG

WELLSITE ENGINEER: NONE

MUD COMPANY: MORGAN MUD

MUD TYPE & ENGINEER: FRESH CHEMICAL

GEOLOGIST: WILLIAM B. BYNOG

HOLE SIZE: 7 7/8

MUD LOGGING BY: NONE

DRILL STEM TEST COMPANY: TRILOBITE

DRILL STEM TEST: DST#1 4025-4113, DST#2 4095-4225, and  
DST #3 4215-4310

WELL STATUS: P & A

## **DISCUSSION**

Theresa #1-27 1S-36W was drilled a total depth of 4400 feet testing the Lansing Kansas City in Rawlins County, Kansas. This well was drilled with the help of seismic data and well control.

Structurally, Theresa #1-27 came in 24 feet low to the prognosis and low to productive wells in the area.

As a result of running low there were either tight zones with fair shows or wet zones with fair porosity development.

There were minor shows of dead oil up hole in the Foraker and lower Wabaunsee formations, none worthy of a drill stem test. The Lansing A zone was the first good show and was tested on drill stem test #1 recovering only 5 feet of mud with oil spots. The B zone was associated with a good drilling break and had good sample shows. Drill stem test #2 on the B zone recovered 1060 feet of muddy water or watery mud with 60 feet of oil cut mud. The C and E zones both had oil shows and were tested together on drill stem test #3 recovering 60 feet of mud.

Logs agreed with sample evaluation recording fair porosity development but low resistive, porous zones indicating water or depleted reservoirs.

A decision was made to plug and abandon based on the poor drill stem test recoveries and log calculations.

## THERESA #1-27 SAMPLE DESCRIPTIONS

3500-44 SHALE red,firm,argillaceous,silty in part

3544-64 LIMESTONE pale gray,slightly hard,fossils,chalky in part, poor vis porosity,no shows

3544-3600 SHALE as above

3600-20 LIMESTONE gray,very hard,dense,chalky in part, poor porosity,no shows abundant  
Chert white,ornd

3620-44 SHALE red,firm,becoming very silty

FORAKER

3644-58 LIMESTONE white,firm,very oolitic,chalky,poor intergranular porosity,spotty black  
dead stain, no live oil

3658-81 LIMESTONE dark gray brown,very hard,dense,fossils,poor porosity,no shows with very  
thin SHALE as above

3681-92 LIMESTONE white,soft,very sandy,chalky,poor vis porosity,no shows

3692-3730 SHALE red,gray,firm,very silty

3730-40 LIMESTONE buff,pale gray,hard,blocky,dense,sandy in part,chalky in part poor  
porosity,no shows

3740-60 SHALE red,very soft,very argillaceous

## THERESA #1-27 SAMPLE DESCRIPTIONS

3760-70 LIMESTONE buff,very hard,dense,sandy in part,blocky,no shows

3760-3810 SHALE red,very soft,very argillaceous

3810-42 LIMESTONE off white,slightly hard,oolitic,chalky,poor vis intergranular porosity,spotty dead black stain,no free oil with thin SHALE as above

3842-62 SHALE red,very soft,very argillaceous

TOPEKA

3862-3904 LIMESTONE buff,pale yell,very hard,dense,crptoxln, blocky,no shows some Chert orange with thin SHALE as above

3904-26 SANDSTONE translucent,pale yell,unconsolidated,m to coarse grained,rounded, some very large grains,good porosity,no shows

3964-50 SHALE red,firm,very silty

3950-79 SHALE red,maroon,firm,silty becoming argillaceous

OREAD

3979-96 LIMESTONE white,firm,micxln,chalky in part,fair crystalline porosity,no shows

3996-4010 LIMESTONE pale gray brown,very hard,very dense,crptoxln,no shows



## THERESA #1-27 SAMPLE DESCRIPTIONS

4010-30 LIMESTONE gray,gray brown ,very hard,very dense,crptoxln, blocky,abundant Chert orange,no shows

4030-60 SHALE black,gray black,firm,fissile,slightly carbonaceous with thin LIMESTONE gray brown,very hard,very dense,blocky,crptoxln,no shows

4060-81 Shale red,soft,very argillaceous

LANSING A

4081-90 LIMESTONE off white,firm,oolitic,good oomoldic porspty to even light brown stain,good cut,no free oil

4090-4100 LIMESTONE buff,hard,dense,micxln,poor porosity,no shows

4100-11 SANDSTONE pale gray,friable,very fine to fine good,rounded,wsrtd,fair intergranular porosity,very spotty live light brown stain,poor cut,no free oil with thin SHALE as above

4111-44 SHALE red,soft,argillaceous

B

4144-50 LIMESTONE white,firm,oolitic,chalky in part,fair intergranular and pinpoint vuggy porosity,spotty live brown stain,good cut,fair show free oil

4150-54 LIMESTONE as above with black asphalt stain,good cut,no free oil

## THERESA #1-27 SAMPLE DESCRIPTIONS

4154-58 LIMESTONE buff,very hard,dense,crptoxln,no shows

4158-68 SHALE green,firm,fissile

4168-75 LIMESTONE buff,very hard,dense,no shows

4175-4202 SHALE red,soft,very argillaceous

C

4202-10 LIMESTONE white,firm,chalky,slightly oolitic,poor pinpoint vuggy porosity,spotty black asphalt dead stain,no free oil

4210-20 LIMESTONE pale gray white,slightly hard,very chalky in part,poor vis porosity,no shows

4220-46 SHALE red,firm,fissile,argillaceous

D

4246-62 LIMESTONE buff,pale gray,very hard,dense,chalky in part,poor porosity,no shows

4262-90 SHALE as above becoming slightly hard,fissile

E

4290-95 LIMESTONE white,slightly hard,micrpxln,chalky in part,poor crystalline porosity,very spotty faint brown stain,weak cut,no free oil

## THERESA #1-27 SAMPLE DESCRIPTIONS

4295-4306 LIMESTONE white,firm,very chalky,poor vis porosity,no shows

4306-28 SHALE red,soft,very argillaceous

F

4328-40 LIMESTONE white,buff,hard,fnly microcrystalline,chalky in part poor porosity,no shows

4340-50 SHALE as above

4350-60 LIMESTONE buff,pale gray,hard,dense,vfny microcrystalline, poor porosity,no shows  
with thin SHALE as above

RTD 4400'

LTD 4402'