



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1166373
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 |
|-----------------------------------|-----------------|---|

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: _____



1166373

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 |
|----------------|-------|---------|------------|---|

| | |
|---|--|
| 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 |
|-----------------------------------|-----------|---------|-------------|---------------|---------|
| | | | | | |

| | | |
|--|---|---|
| DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i> | METHOD OF COMPLETION: <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> _____ <input type="checkbox"/> Other <i>(Specify)</i> _____ | PRODUCTION INTERVAL: _____ _____ |
|--|---|---|

| | |
|-----------|------------------------|
| Form | ACO1 - Well Completion |
| Operator | BEREXCO LLC |
| Well Name | Michael 2-22 |
| Doc ID | 1166373 |

Tops

| Name | Top | Datum |
|--------|------|-------|
| Oread | 3960 | -818 |
| LKC A | 4069 | -927 |
| LKC B | 4124 | -982 |
| LKC C | 4188 | -1046 |
| LKC D | 4230 | -1088 |
| LKC E | 4272 | -1130 |
| LKC F | 4310 | -1168 |
| Pawnee | 4452 | -1310 |
| RTD | 4550 | |
| LTD | 4548 | |

Conservation Division
Finney State Office Building
130 S. Market, Rm. 2078
Wichita, KS 67202-3802



Phone: 316-337-6200
Fax: 316-337-6211
<http://kcc.ks.gov/>

Mark Sievers, Chairman
Thomas E. Wright, Commissioner
Shari Feist Albrecht, Commissioner

Sam Brownback, Governor

November 08, 2013

Rodney Reynolds
BEREXCO LLC
2020 N. BRAMBLEWOOD
WICHITA, KS 67206-1094

Re: ACO1
API 15-153-20947-00-00
Michael 2-22
NE/4 Sec.22-01S-36W
Rawlins County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,
Rodney Reynolds

WELL FILE

ALLIED OIL & GAS SERVICES, LLC 061266

Federal Tax I.D. # 20-8651475

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

SERVICE POINT: Rockley

| | | | | | | | |
|--------------------------------|--------------------|---|-----------------|------------|-----------------------|-------------------------|--------------------------|
| DATE <u>9/8/13</u> | SEC. <u>22</u> | TWP. <u>1</u> | RANGE <u>30</u> | CALLED OUT | ON LOCATION | JOB START <u>2:30pm</u> | JOB FINISH <u>4:00pm</u> |
| LEASE <u>Michael</u> | WELL # <u>2-22</u> | LOCATION <u>Beardsley N TO AA W Baito</u> | | | COUNTY <u>Wheeler</u> | STATE <u>TX</u> | |
| OLD OR <u>NEW</u> (Circle one) | | N/A | | | | | |

| |
|---|
| CONTRACTOR <u>Berenco 2</u> |
| TYPE OF JOB <u>Surface</u> |
| HOLE SIZE <u>12 1/4</u> T.D. <u>310</u> |
| CASING SIZE <u>8 5/8</u> DEPTH <u>310</u> |
| TUBING SIZE DEPTH |
| DRILL PIPE DEPTH |
| TOOL DEPTH |
| PRES. MAX MINIMUM |
| MEAS. LINE SHOE JOINT |
| CEMENT LEFT IN CSG. <u>15'</u> |
| PERFS. |
| DISPLACEMENT <u>18 3/4 ABL 1/2</u> |

| |
|--|
| OWNER <u>Sims</u> |
| CEMENT AMOUNT ORDERED <u>225 cu</u> |
| <u>PROCL 270 gal</u> |
| COMMON <u>225</u> @ <u>402.50</u> |
| POZMIX @ |
| GEL <u>4</u> @ <u>23.40</u> <u>93.60</u> |
| CHLORIDE <u>8</u> @ <u>64.00</u> <u>512.00</u> |
| ASC @ |
| HANDLING <u>243.51</u> @ <u>2.40</u> <u>603.41</u> |
| MILEAGE <u>2.62 mi</u> @ <u>11.104700</u> <u>1443.52</u> |
| TOTAL <u>6680.03</u> |

EQUIPMENT

| |
|--|
| PUMP TRUCK CEMENTER <u>Alan Ryan</u> |
| # <u>372</u> HELPER <u>Wayne McGibby</u> |
| BULK TRUCK DRIVER <u>Eric Tullis</u> |
| # <u>566</u> |
| BULK TRUCK DRIVER |
| # |

REMARKS:

Mix cement, Displace cement, Shut in
Job complete
Cement did circulate
Alan Wayne, Sherry

SERVICE

| |
|--------------------------------------|
| DEPTH OF JOB |
| PUMP TRUCK CHARGE <u>1572.25</u> |
| EXTRA FOOTAGE @ |
| MILEAGE <u>50</u> @ <u>38.60</u> |
| MANIFOLD - Head <u>4.00</u> |
| <u>Late vehicle 50</u> @ <u>4.00</u> |
| TOTAL <u>1898.25</u> |

CHARGE TO: Berenco
 STREET _____
 CITY _____ STATE _____ ZIP _____

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.

SALES TAX (If Any) _____
 TOTAL CHARGES 8,578.28
 DISCOUNT 2401.91 IF PAID IN 30 DAYS
6,176.36 Net.

PRINTED NAME _____
 SIGNATURE Sandra Montano



CEMENTING LOG

STAGE NO. _____

Date 2/8/17 District Rockley Ticket No. 061266
 Company Araxco Rig Grades 2
 Lease Michael Well No. 2022
 County Bartons State KY
 Location _____ Field _____

CEMENT DATA:

Spacer Type: _____
 Amt. _____ Sks Yield _____ ft³/sk Density _____ PPG

LEAD: Pump Time _____ hrs. Type Don 30 PCC 2069
 Excess _____

Amt. 225 Sks Yield 1.94 ft³/sk Density 152 PPG

TAIL: Pump Time _____ hrs. Type _____
 Excess _____

Amt. _____ Sks Yield _____ ft³/sk Density _____ PPG

WATER: Lead 6.5 gals/sk Tail _____ gals/sk Total _____ Bbls.

Pump Trucks Used 372
 Bulk Equip. 500

Float Equip: Manufacturer _____
 Shoe: Type _____ Depth _____
 Float: Type _____ Depth _____
 Centralizers: Quantity _____ Plugs Top _____ Blm. _____
 Stage Collars _____
 Special Equip. _____
 Disp. Fluid Type H₂O Amt. 1874 Bbls. Weight 8.34 PPG
 Mud Type _____ Weight _____ PPG

CASING DATA: Conductor PTA Squeeze Misc
 Surface Intermediate Production Liner
 Size 8 1/2 Type Reg Weight 27 Collar _____

Casing Depths: Top 163 Bottom 310'

Drill Pipe: Size 4 1/2 Weight _____ Collars _____
 Open Hole: Size 12 1/4 T.D. _____ ft. P.B. to _____ ft.

CAPACITY FACTORS:

Casing: Bbls/Lin. ft. 0.0637 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. _____
 Bbls/Lin. ft. _____ Lin. ft./Bbl. _____
 Perforations: From _____ ft. to _____ ft. Amt. _____

COMPANY REPRESENTATIVE Milo

CEMENTER M

| TIME | PRESSURES PSI | | FLUID PUMPED DATA | | | REMARKS | |
|-------------|---------------|-------------------|-------------------|-------------|------------------------|--------------------------------|---------------------------|
| | AM/PM | DRILL PIPE CASING | ANNULUS | TOTAL FLUID | Pumped Per Time Period | | RATE Bbls Min. |
| <u>2:00</u> | | | | | | <u>Placement 570 mtg setup</u> | |
| | | | | | <u>35.0</u> | <u>4.0</u> | <u>mix cement</u> |
| | | | | | <u>1874</u> | <u>5.0</u> | <u>Displace cement</u> |
| | | | | | | | <u>Start</u> |
| <u>9:00</u> | | | | | | | <u>Job complete</u> |
| | | | | | | | <u>Cement Bed Grouted</u> |

ALLIED OIL & GAS SERVICES, LLC 061131

Federal Tax I.D. # 20-8651475

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

SERVICE POINT:
Oakley KS

| | | | | | | | |
|--|--------------------|--|-----------------|------------|---------------------------------------|--------------------------|-----------------------------|
| DATE <u>9/19/13</u> | SEC <u>22</u> | TWP. <u>1</u> | RANGE <u>36</u> | CALLED OUT | ON LOCATION <u>3:00 p.m.</u> | JOB START <u>10:00pm</u> | JOB FINISH <u>11:00 p.m</u> |
| LEASE <u>Michael</u> | WELL # <u>2-22</u> | LOCATION <u>Beardsly N to Rd AA, 5 1/2 W</u> | | | COUNTY <u>Wichita</u> | STATE <u>KS</u> | |
| OLD OR <input checked="" type="radio"/> NEW (Circle one) | | | <u>N+E into</u> | | County <u>Rawlins</u> State <u>KS</u> | | |

CONTRACTOR Bredco 2

TYPE OF JOB Production 5 1/2

HOLE SIZE 7 7/8 T.D. 4550'

CASING SIZE 5 1/2 / 15.5" DEPTH 4402'

TUBING SIZE _____ DEPTH _____

DRILL PIPE _____ DEPTH _____

TOOL _____ DEPTH _____

PRES. MAX _____ MINIMUM _____

MEAS. LINE _____ SHOE JOINT 42.50

CEMENT LEFT IN CSG. 42.50

PERFS. _____

DISPLACEMENT 103.76 bbl

OWNER Same

CEMENT

AMOUNT ORDERED 450 sks ALW 1/4" Flo-seal

250 sks Com 10% Salt 2% gel

5# Gilsomite

| | | |
|--------------------|-------------------------------------|-----------------------|
| COMMON | <u>250 sks @ 17.90</u> | <u>4475.00</u> |
| POZMIX | @ | |
| GEL | <u>5 sks @ 23.40</u> | <u>117.00</u> |
| CHLORIDE | @ | |
| ALW ALW | <u>450 sks @ 15.95</u> | <u>7177.50</u> |
| | @ | |
| Salt | <u>2 bks @ 26.35</u> | <u>685.00</u> |
| | @ | |
| Gilsomite | <u>1250 lbs @ .98</u> | <u>1225.00</u> |
| | @ | |
| Flo-seal | <u>113 lbs @ 2.97</u> | <u>334.11</u> |
| | @ | |
| | @ | |
| HANDLING | <u>810.21 ft³ @ 2.48</u> | <u>2009.32</u> |
| MILEAGE | <u>34.214 hrs @ 15.00</u> | <u>513.21</u> |
| | | <u>4447.83</u> |
| | | <u>TOTAL 20470.87</u> |

EQUIPMENT

PUMP TRUCK CEMENTER Paul Beaver

120 HELPER Tyler Flipse

BULK TRUCK

566 DRIVER Brandon Wilkinson

BULK TRUCK

600 DRIVER Alex (TWS)

REMARKS:

Drop ball circulate mix 15 sks in M.H
mix 20 sks in R.H. mix 415 sks ALW failed
by 250 sks Com 10% Salt 2% gel 5# Gilsomite
Shot down, washup pump & lines, release
plug. Displace with water 103.76 bbl.
lift pressure + 1200# handed plug @ 1800#
Float did hold. Cement did circulate
Lost circulation 90 bbl out on displacement

SERVICE

| | | |
|-------------------|------------------|----------------|
| DEPTH OF JOB | <u>4402'</u> | |
| PUMP TRUCK CHARGE | | <u>2765.75</u> |
| EXTRA FOOTAGE | @ | |
| MILEAGE MILV | <u>50 @ 7.70</u> | <u>385.00</u> |
| MANIFOLD Head | @ <u>275.00</u> | <u>N/C</u> |
| MILV | <u>50 @ 4.40</u> | <u>N/C</u> |
| | @ | |

TOTAL 3150.75

CHARGE TO: Berexo, LLC

STREET _____

CITY _____ STATE _____ ZIP _____

PLUG & FLOAT EQUIPMENT

| | | |
|--------------------|-------------------|----------------------|
| AFU Float shoe | <u>1 @ 232.00</u> | <u>232.00</u> |
| Latchdown Assembly | <u>1 @ 184.00</u> | <u>184.00</u> |
| Baskets | <u>3 @ 176.00</u> | <u>534.00</u> |
| Centralizers | <u>12 @ 37.00</u> | <u>444.00</u> |
| Scratchers | <u>20 @ 46.00</u> | <u>552.00</u> |
| | | <u>TOTAL 1946.00</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.

SALES TAX (If Any) _____

TOTAL CHARGES 25,567.62

DISCOUNT 7,158.93 IF PAID IN 30 DAYS

18,408.68 Net.

PRINTED NAME _____

SIGNATURE E. Haves



CEMENTING LOG

STAGE NO. _____

Date 9/19/13 District Oakley Ticket No. 061131
 Company Bredco LLC Rig Bredco 2
 Lease Michael Well No. 2-22
 County Rawlins State KS
 Location 22-1-36 Field _____
Beardsly N to AA, S 1/2 W N+E into
 CASING DATA: Conductor PTA Squeeze Misc
 Surface Intermediate Production Liner
 Size 5 1/2 Type New Weight 15.5 Collar _____

Casing Depths: Top KB Bottom 4402

Drill Pipe: Size _____ Weight _____ Collars _____
 Open Hole: Size 7 7/8 T.D. 4550 ft. P.B. to _____ ft.

CAPACITY FACTORS:
 Casing: Bbls/Lin. ft. .0238 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. _____
 Bbls/Lin. ft. _____ Lin. ft./Bbl. _____

Perforations: From _____ ft. to _____ ft. Amt. _____

CEMENT DATA:
 Spacer Type: _____
 Amt. _____ Sks Yield _____ ft³/sk Density _____ PPG _____

LEAD: Pump Time _____ hrs. Type AWW 1/4" Flo-seal
 Excess _____
 Amt. 450 Sks Yield 1.76 ft³/sk Density 12.92 PPG _____

TAIL: Pump Time _____ hrs. Type Com 10% salt
2% gel 5% gilsonite
 Excess _____
 Amt. 250 Sks Yield 1.49 ft³/sk Density 14.56 PPG _____

WATER: Lead _____ gals/sk Tail _____ gals/sk Total _____ Bbls.

Pump Trucks Used 120 - Tyler
 Bulk Equip. 600 - Alex (TWS)
566 - Brandon

Float Equip: Manufacturer Industrial rubber
 Shoe: Type AFU Depth 4402
 Float: Type Latch down assembly Depth 4359.50
 Centralizers: Quantity 12 Plugs Top _____ Btm. _____
 Stage Collars _____
 Special Equip. Baskets, scratchers
 Disp. Fluid Type Water Amt. 103.76 Bbls. Weight _____ PPG
 Mud Type _____ Weight _____ PPG

COMPANY REPRESENTATIVE _____ CEMENTER Paul Beaver

| TIME | PRESSURES PSI | | FLUID PUMPED DATA | | | REMARKS |
|-------------------|-------------------|---------|-------------------|------------------------|----------------|---------------------------------------|
| | DRILL PIPE CASING | ANNULUS | TOTAL FLUID | Pumped Per Time Period | RATE Bbls Min. | |
| | | | | | | Hold Safety meeting |
| <u>10:00 p.m.</u> | | | | <u>5 bbl</u> | | Start water spacer |
| | | | | | | Start cement |
| | | | | | | mix 450 SKS AWW 1/4" Flo-seal |
| | | | | | | stop cement |
| | | | | | | start cement |
| | | | | | | mix 250 SKS Com 10% salt 2% gel 5% g. |
| | | | | | | stop cement |
| | | | | <u>6 Bbl</u> | | wash up pump + lines |
| | | | | <u>103.76 bbl</u> | | release plug |
| | | | | | | Displace with water |
| | | | | | | Plug did land @ 1800# |
| | | | | | | Lift pressure @ 1700# |
| | | | | | | Cement did circulate |
| | | | | | | lost circulation after |
| | | | | | | 90 lobl displacement |
| | | | | | | Hold Safety meeting |
| | | | | | | Thank you! |



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Berexco, LLC
 2020 N. Bramblewood
 Wichita, KS 67206
 ATTN: Ryan White

22/1s/36w Rawlins KS
Michael #2-22
 Job Ticket: 55079 **DST#: 1**
 Test Start: 2013.09.12 @ 08:30:00

GENERAL INFORMATION:

Formation: **Oread**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 10:52:30
 Time Test Ended: 19:53:00
 Interval: **3888.00 ft (KB) To 3972.00 ft (KB) (TVD)**
 Total Depth: 3972.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: James Winder
 Unit No: 57
 Reference Elevations: 3129.00 ft (KB)
 3118.00 ft (CF)
 KB to GR/CF: 11.00 ft

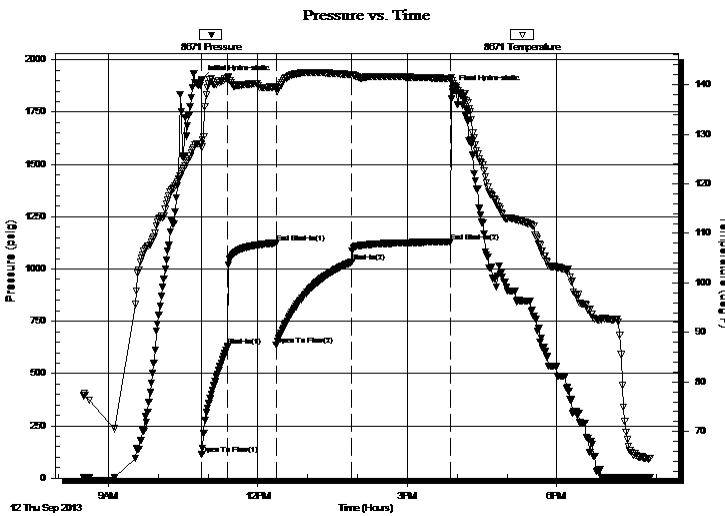
Serial #: 8671

Inside

Press @ Run Depth: 1032.64 psig @ 3889.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.09.12 End Date: 2013.09.12 Last Calib.: 2013.09.12
 Start Time: 08:30:05 End Time: 19:53:00 Time On Btm: 2013.09.12 @ 10:52:15
 Time Off Btm: 2013.09.12 @ 15:54:00

TEST COMMENT: 30 - IF: Blow built to BOB (11") in 1 3/4 min.
 60 - IS: Blow back built to 1 1/4"
 90 - FF: Blow built to BOB in 3 1/4 min.
 120 - FSI: Blow back built to BOB at 115 min.

PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1904.11 | 127.97 | Initial Hydro-static |
| 1 | 114.88 | 127.35 | Open To Flow (1) |
| 32 | 631.39 | 141.27 | Shut-In(1) |
| 90 | 1124.70 | 139.61 | End Shut-In(1) |
| 90 | 635.73 | 139.29 | Open To Flow (2) |
| 181 | 1032.64 | 142.01 | Shut-In(2) |
| 300 | 1130.79 | 141.26 | End Shut-In(2) |
| 302 | 1859.53 | 140.86 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|--------------------------------|--------------|
| 815.00 | SMCW w/OS 91%w, 8%m, 1%o | 6.62 |
| 650.00 | GWM w/OS 44%m, 42%w, 11%g, 3%o | 9.12 |
| 280.00 | WCGMO 42%o, 32%m, 13%g, 13%w | 3.93 |
| 280.00 | MCO 73%o, 20%m, 7%g | 3.93 |
| 270.00 | CGO 81%o, 19%g | 3.79 |
| 0.00 | GIP = 300' | 0.00 |

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Berexco, LLC

22/1s/36w Rawlins KS

2020 N. Bramblewood
Wichita, KS 67206

Michael #2-22

Job Ticket: 55079

DST#: 1

ATTN: Ryan White

Test Start: 2013.09.12 @ 08:30:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

19 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

13000 ppm

Viscosity: 63.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.20 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1100.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|--------------------------------|---------------|
| 815.00 | SMCW w/OS 91%w, 8%m, 1%o | 6.622 |
| 650.00 | GWM w/OS 44%m, 42%w, 11%g, 3%o | 9.118 |
| 280.00 | WCGMO 42%o, 32%m, 13%g, 13%w | 3.928 |
| 280.00 | MCO 73%o, 20%m, 7%g | 3.928 |
| 270.00 | CGO 81%o, 19%g | 3.787 |
| 0.00 | GIP = 300' | 0.000 |

Total Length: 2295.00 ft Total Volume: 27.383 bbl

Num Fluid Samples: 0

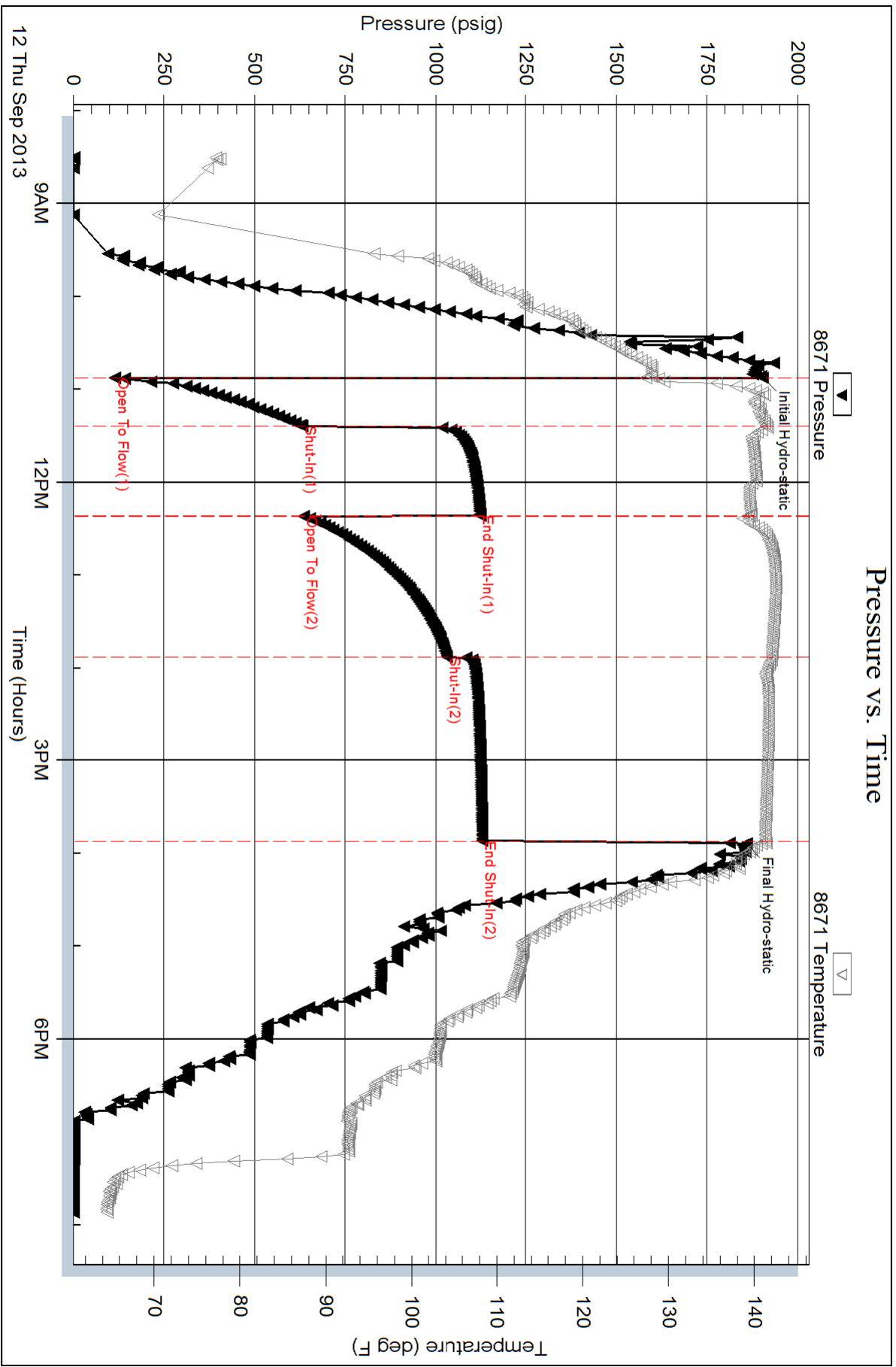
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Gravity = 19.6 api @ 66 deg F Corrected Gravity = 19 api
RW = .540 ohms @ 65.2 deg F Chlorides = 13,000 ppm
GIP = 300'





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Berexco, LLC
 2020 N. Bramblewood
 Wichita, KS 67206
 ATTN: Ryan White

22/1s/36w Rawlins KS
Michael #2-22
 Job Ticket: 55080 **DST#: 2**
 Test Start: 2013.09.13 @ 09:00:00

GENERAL INFORMATION:

Formation: **LKC "A"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 11:24:30
 Time Test Ended: 19:47:45
 Interval: **3990.00 ft (KB) To 4100.00 ft (KB) (TVD)**
 Total Depth: 4100.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: James Winder
 Unit No: 57
 Reference Elevations: 3129.00 ft (KB)
 3118.00 ft (CF)
 KB to GR/CF: 11.00 ft

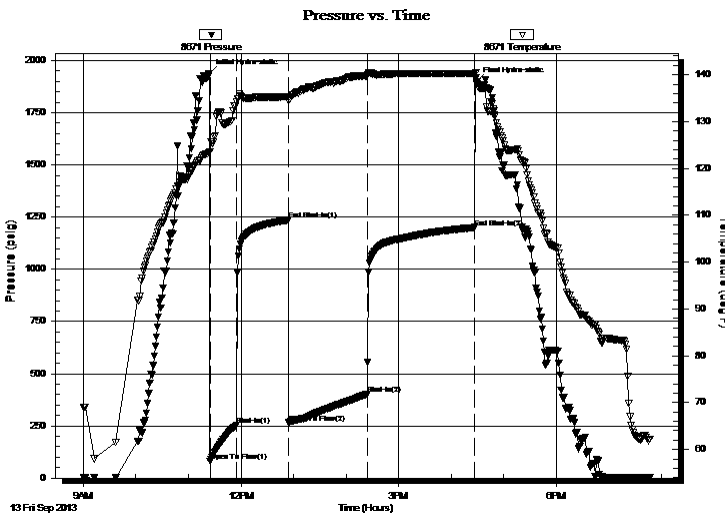
Serial #: 8671

Inside

Press @ Run Depth: 402.36 psig @ 3991.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.09.13 End Date: 2013.09.13 Last Calib.: 2013.09.13
 Start Time: 09:00:05 End Time: 19:47:45 Time On Btm: 2013.09.13 @ 11:24:00
 Time Off Btm: 2013.09.13 @ 16:29:30

TEST COMMENT: 30 - IF: 4" Blow at open, built to BOB (11") at 10 min.
 60 - IS: Blow back built to 1 3/4"
 90 - FF: Blow built to BOB at 22 min.
 120 - FS: Blow back built to BOB at 70 min.

PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1936.31 | 123.43 | Initial Hydro-static |
| 1 | 79.02 | 123.61 | Open To Flow (1) |
| 31 | 254.87 | 134.22 | Shut-In(1) |
| 90 | 1235.92 | 135.28 | End Shut-In(1) |
| 91 | 264.49 | 134.52 | Open To Flow (2) |
| 181 | 402.36 | 139.85 | Shut-In(2) |
| 304 | 1200.32 | 140.27 | End Shut-In(2) |
| 306 | 1900.65 | 138.15 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------------------------|--------------|
| 175.00 | MCW w/OS 66%w, 29%m, 3%g, 2%o | 0.86 |
| 265.00 | GOWCM 61%m, 18%g, 16%w, 5%o | 1.30 |
| 275.00 | GOM 42%m, 35%o, 23%g | 3.06 |
| 190.00 | SMCGO 70%o, 21%g, 9%m | 2.67 |
| 0.00 | GIP = 280' | 0.00 |

* 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

22/1s/36w Rawlins KS

2020 N. Bramblewood
Wichita, KS 67206

Michael #2-22

Job Ticket: 55080

DST#: 2

ATTN: Ryan White

Test Start: 2013.09.13 @ 09:00:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

26.6 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

19000 ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.60 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbbl |
|--------------|--------------------------------|----------------|
| 175.00 | MCW w/OS 66%w , 29%m, 3%g, 2%o | 0.861 |
| 265.00 | GOWCM 61%m, 18%g, 16%w , 5%o | 1.303 |
| 275.00 | GOM 42%m, 35%o, 23%g | 3.056 |
| 190.00 | SMCGO 70%o, 21%g, 9%m | 2.665 |
| 0.00 | GIP = 280' | 0.000 |

Total Length: 905.00 ft Total Volume: 7.885 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Gravity = 27 api @ 64 deg F Corrected Gravity = 26.6 api
RW = .395 ohms @ 64.3 deg F Chlorides = 19,000 ppm

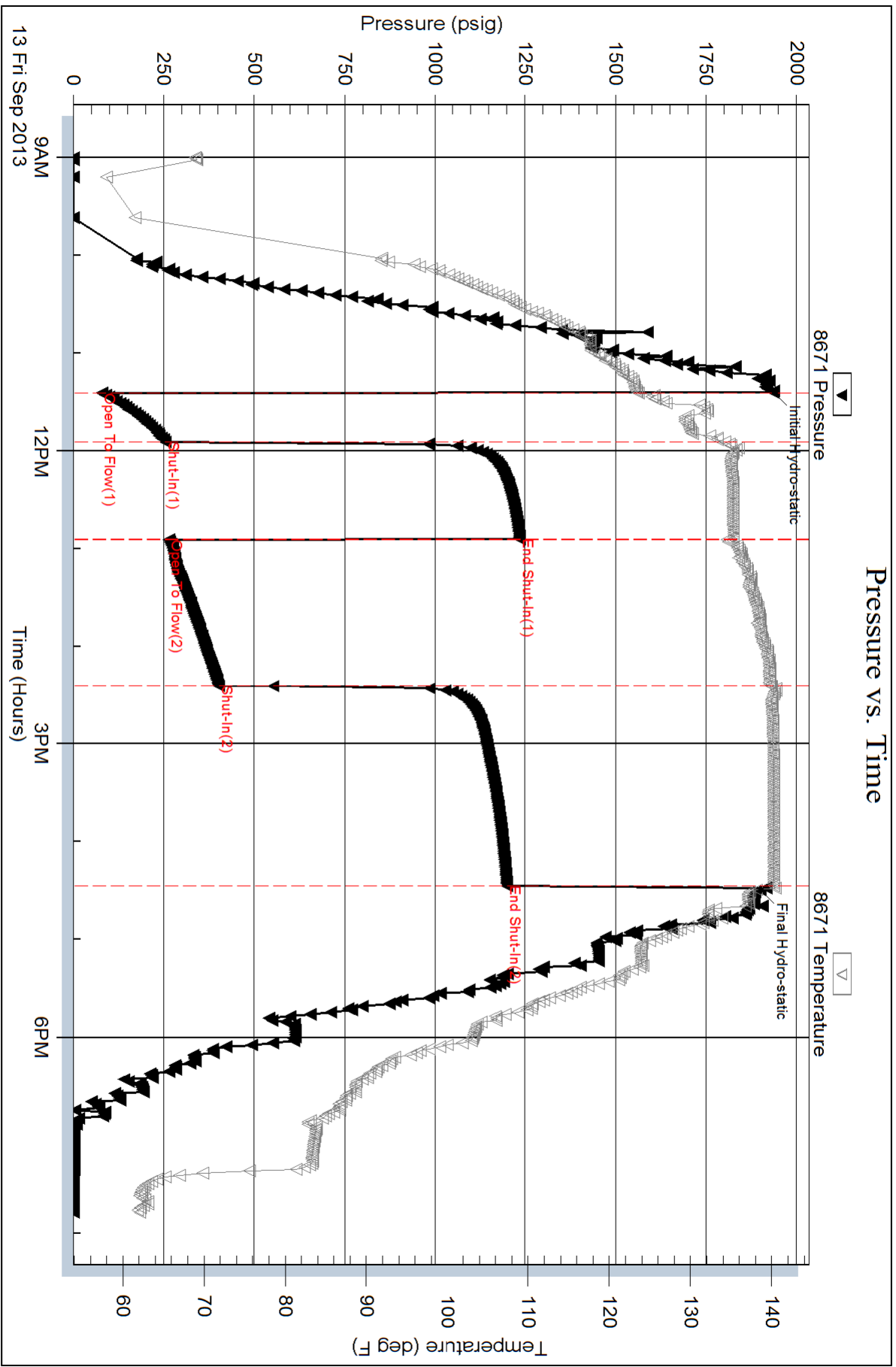
Serial #: 8671

Inside

Berexco, LLC

Michael #2-22

DST Test Number: 2





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Berexco, LLC
 2020 N. Bramblewood
 Wichita, KS 67206
 ATTN: Ryan White

22/1s/36w Rawlins KS

Michael #2-22

Job Ticket: 55081

DST#: 3

Test Start: 2013.09.14 @ 06:41:00

GENERAL INFORMATION:

Formation: **LKC "B"**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 08:44:00
 Tester: James Winder
 Time Test Ended: 16:19:00
 Unit No: 57
 Interval: **4090.00 ft (KB) To 4160.00 ft (KB) (TVD)**
 Reference Elevations: 3142.00 ft (KB)
 Total Depth: 4160.00 ft (KB) (TVD)
 3129.00 ft (CF)
 Hole Diameter: 7.88 inches
 Hole Condition: Fair
 KB to GR/CF: 13.00 ft

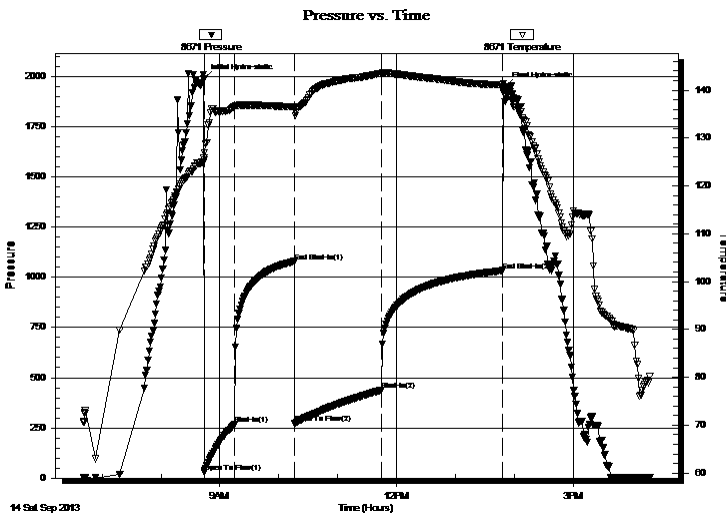
Serial #: 8671

Inside

Press @ Run Depth: 437.47 psig @ 4091.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.09.14 End Date: 2013.09.14 Last Calib.: 2013.09.14
 Start Time: 06:41:05 End Time: 16:19:00 Time On Btm: 2013.09.14 @ 08:43:45
 Time Off Btm: 2013.09.14 @ 13:51:15

TEST COMMENT: 30 - IF: 1" Blow at open, surging blow built to BOB (11") in 12 min.
 60 - IS: No blow back
 90 - FF: Blow built to BOB in 19 min.
 120 FSI: Blow back built to 1 1/2"

PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1989.83 | 125.83 | Initial Hydro-static |
| 1 | 29.30 | 125.45 | Open To Flow (1) |
| 31 | 266.23 | 136.50 | Shut-In(1) |
| 92 | 1079.04 | 136.49 | End Shut-In(1) |
| 92 | 271.85 | 135.92 | Open To Flow (2) |
| 181 | 437.47 | 143.55 | Shut-In(2) |
| 305 | 1033.34 | 141.03 | End Shut-In(2) |
| 308 | 1948.57 | 139.11 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------------------------|--------------|
| 528.00 | SMCW w/OS 91%w, 8%m, 1%o | 2.60 |
| 372.00 | SOC/GWM 50%m, 30%w, 11%g, 9%o | 5.22 |
| 45.00 | WOCM 48%m, 29%o, 20%w 3%g | 0.63 |
| | | |
| | | |

* 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

22/1s/36w Rawlins KS

2020 N. Bramblewood
Wichita, KS 67206

Michael #2-22

Job Ticket: 55081

DST#: 3

ATTN: Ryan White

Test Start: 2013.09.14 @ 06:41:00

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:

12000 ppm

Viscosity: 49.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1200.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbbl |
|--------------|-------------------------------|----------------|
| 528.00 | SMCW w/OS 91%w, 8%m, 1%o | 2.597 |
| 372.00 | SOC/GWM 50%m, 30%w, 11%g, 9%o | 5.218 |
| 45.00 | WOCM 48%m, 29%o, 20%w 3%g | 0.631 |

Total Length: 945.00 ft Total Volume: 8.446 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW = .443 ohms @ 84.7

Chlorides = 12,000 ppm

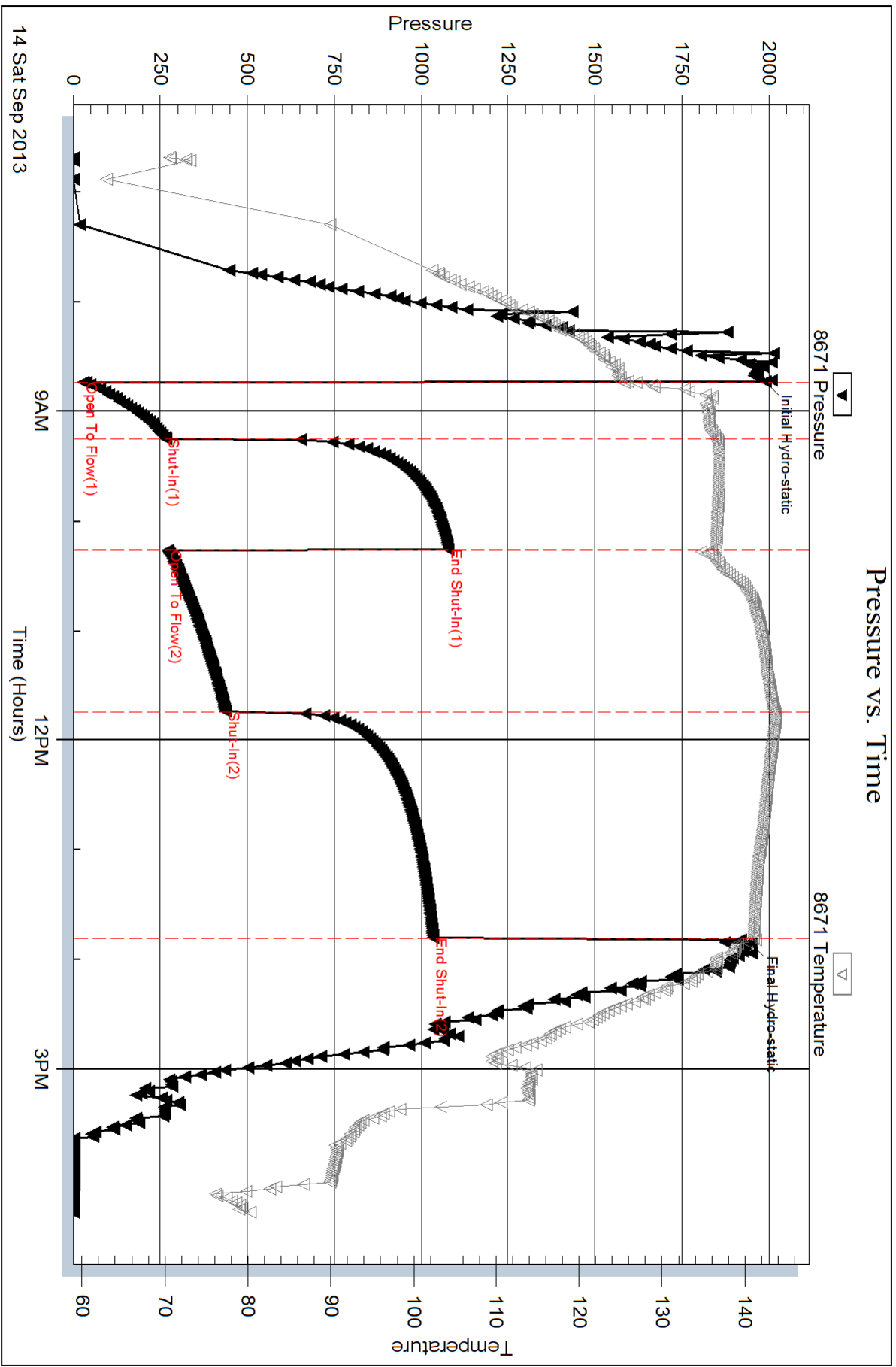
Serial #: 8671

Inside

Berexco, LLC

Michael #2-22

DST Test Number: 3





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Berexco, LLC
 2020 N. Bramblewood
 Wichita, KS 67206
 ATTN: Ryan White

22/1s/36w Rawlins KS
Michael #2-22
 Job Ticket: 55082 **DST#: 4**
 Test Start: 2013.09.15 @ 02:00:00

GENERAL INFORMATION:

Formation: **LKC "C"**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 04:34:15 Tester: James Winder
 Time Test Ended: 12:45:45 Unit No: 57
Interval: 4135.00 ft (KB) To 4205.00 ft (KB) (TVD)
 Reference Elevations: 3142.00 ft (KB)
 Total Depth: 4205.00 ft (KB) (TVD) 3129.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 13.00 ft

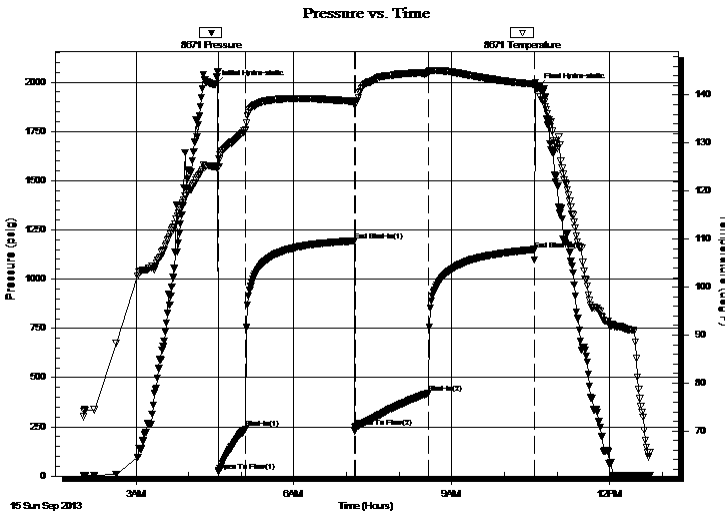
Serial #: 8671

Inside

Press @ Run Depth: 422.18 psig @ 4136.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.09.15 End Date: 2013.09.15 Last Calib.: 2013.09.15
 Start Time: 02:00:05 End Time: 12:45:45 Time On Btm: 2013.09.15 @ 04:30:45
 Time Off Btm: 2013.09.15 @ 10:37:15

TEST COMMENT: 30 - IF: Blow built to BOB (11") in 12 min.
 120 - IS: Blow back built to 1/2"
 90 - FF: Blow built to BOB in 18 min.
 120 - FS: Blow back built to 10 1/4"

PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1987.55 | 125.14 | Initial Hydro-static |
| 4 | 24.59 | 125.11 | Open To Flow (1) |
| 34 | 240.94 | 132.75 | Shut-In(1) |
| 159 | 1195.08 | 138.69 | End Shut-In(1) |
| 159 | 246.57 | 138.14 | Open To Flow (2) |
| 243 | 422.18 | 144.83 | Shut-In(2) |
| 364 | 1150.60 | 142.28 | End Shut-In(2) |
| 367 | 1970.12 | 141.70 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|------------------------------|--------------|
| 528.00 | SMCW w/OS 90%w, 8%m, 2%o | 2.60 |
| 186.00 | MW w/OS 56%w, 37%m, 4%g, 3%o | 2.61 |
| 61.00 | GOMW 32%w, 28%m, 25%o, 15%g | 0.86 |
| 155.00 | GO 85%o, 12%g, 3%m | 2.17 |
| 0.00 | GIP = 440' | 0.00 |

* 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

22/1s/36w Rawlins KS

2020 N. Bramblewood
Wichita, KS 67206

Michael #2-22

Job Ticket: 55082

DST#: 4

ATTN: Ryan White

Test Start: 2013.09.15 @ 02:00:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

29 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

15000 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.00 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1200.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbbl |
|--------------|-------------------------------|----------------|
| 528.00 | SMCW w/OS 90%w , 8%m, 2%o | 2.597 |
| 186.00 | MW w/OS 56%w , 37%m, 4%g, 3%o | 2.609 |
| 61.00 | GOMW 32%w , 28%m, 25%o, 15%g | 0.856 |
| 155.00 | GO 85%o, 12%g, 3%m | 2.174 |
| 0.00 | GIP = 440' | 0.000 |

Total Length: 930.00 ft Total Volume: 8.236 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

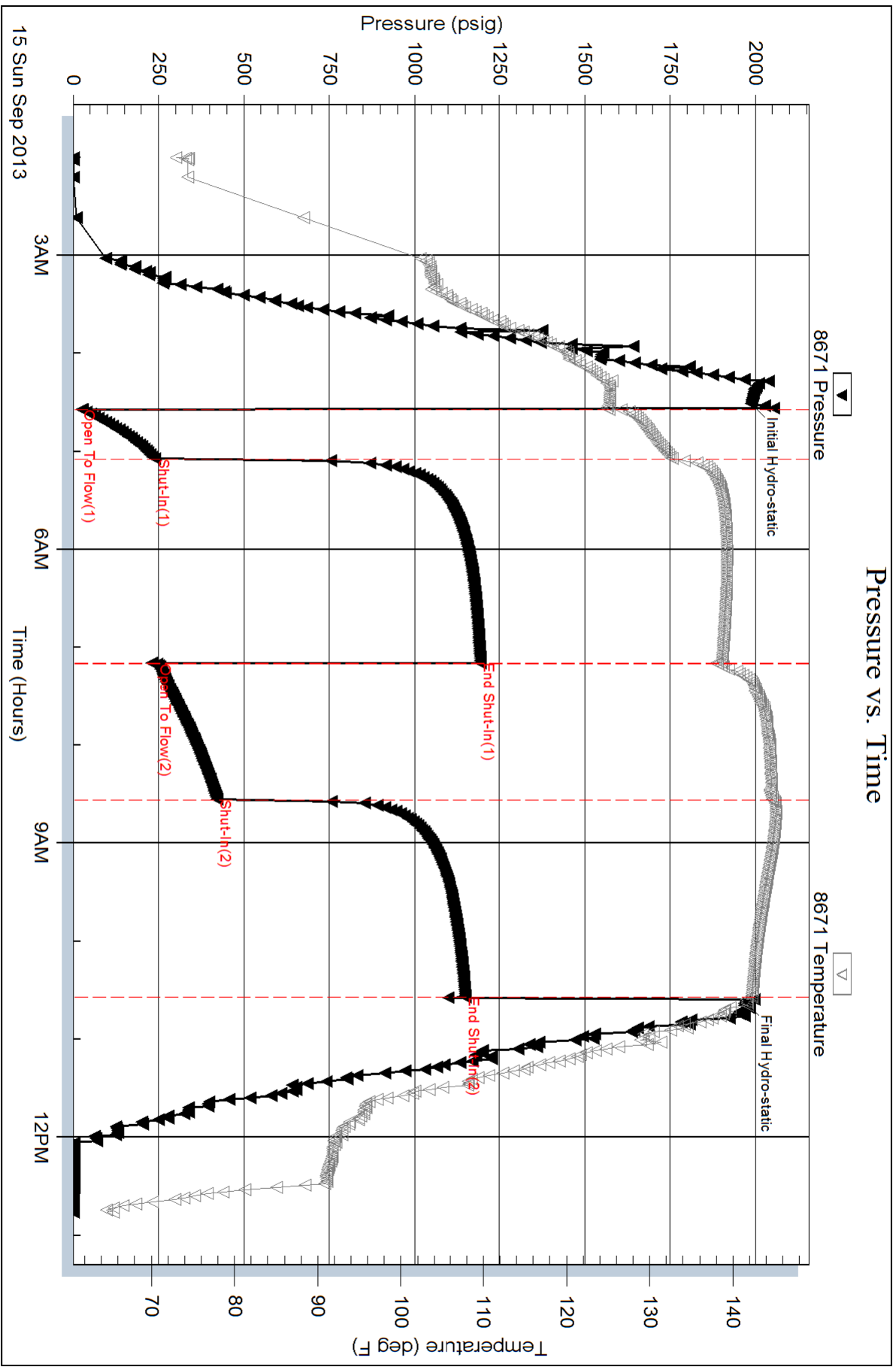
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Gravity = 29.4 api @ 64 deg F Corrected Gravity = 29 api

RW = .493 ohms @ 63.2 deg F Chlorides = 15,000 ppm





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Berexco, LLC
 2020 N. Bramblewood
 Wichita, KS 67206
 ATTN: Ryan White

22/1s/36w Rawlins KS
Michael #2-22
 Job Ticket: 55083 **DST#: 5**
 Test Start: 2013.09.15 @ 23:43:00

GENERAL INFORMATION:

Formation: **LKC "D"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 02:06:30
 Time Test Ended: 09:12:30
 Interval: **4198.00 ft (KB) To 4250.00 ft (KB) (TVD)**
 Total Depth: 4250.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: James Winder
 Unit No: 57
 Reference Elevations: 3142.00 ft (KB)
 3129.00 ft (CF)
 KB to GR/CF: 13.00 ft

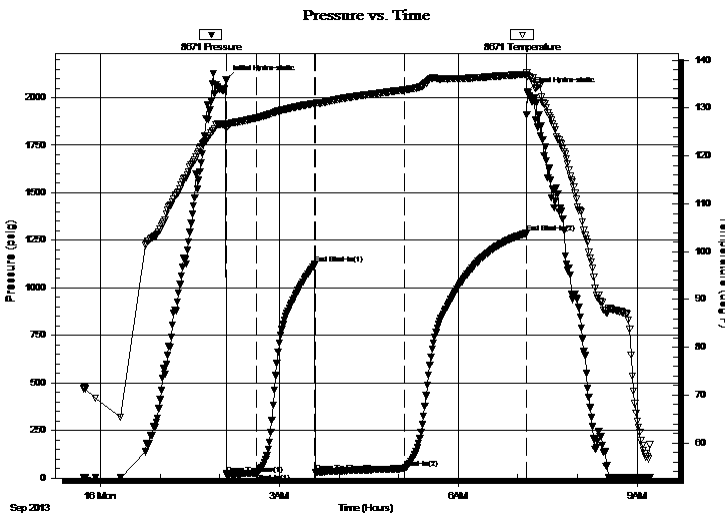
Serial #: 8671

Inside

Press @ Run Depth: 50.48 psig @ 4199.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.09.15 End Date: 2013.09.16 Last Calib.: 2013.09.16
 Start Time: 23:43:05 End Time: 09:12:30 Time On Btm: 2013.09.16 @ 02:06:15
 Time Off Btm: 2013.09.16 @ 07:09:45

TEST COMMENT: 30 - IF: Blow built to 2"
 60 - IS: No blow back
 90 - FF: Blow started at 11 min., built to 3"
 120 - FSI: No blow back

PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2093.61 | 126.59 | Initial Hydro-static |
| 1 | 20.90 | 125.76 | Open To Flow (1) |
| 31 | 26.92 | 127.93 | Shut-In(1) |
| 90 | 1123.68 | 131.00 | End Shut-In(1) |
| 91 | 29.30 | 130.95 | Open To Flow (2) |
| 180 | 50.48 | 133.78 | Shut-In(2) |
| 303 | 1287.68 | 137.04 | End Shut-In(2) |
| 304 | 2030.38 | 136.65 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|---------------------|--------------|
| 45.00 | MCO 59%o, 35%m, 6%g | 0.22 |
| 40.00 | MCO 80%o, 20%m | 0.20 |
| | | |
| | | |

* 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

22/1s/36w Rawlins KS

2020 N. Bramblewood
Wichita, KS 67206

Michael #2-22

Job Ticket: 55083

DST#: 5

ATTN: Ryan White

Test Start: 2013.09.15 @ 23:43:00

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: 66.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.60 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1500.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|---------------------|---------------|
| 45.00 | MCO 59%o, 35%m, 6%g | 0.221 |
| 40.00 | MCO 80%o, 20%m | 0.197 |

Total Length: 85.00 ft Total Volume: 0.418 bbl

Num Fluid Samples: 0

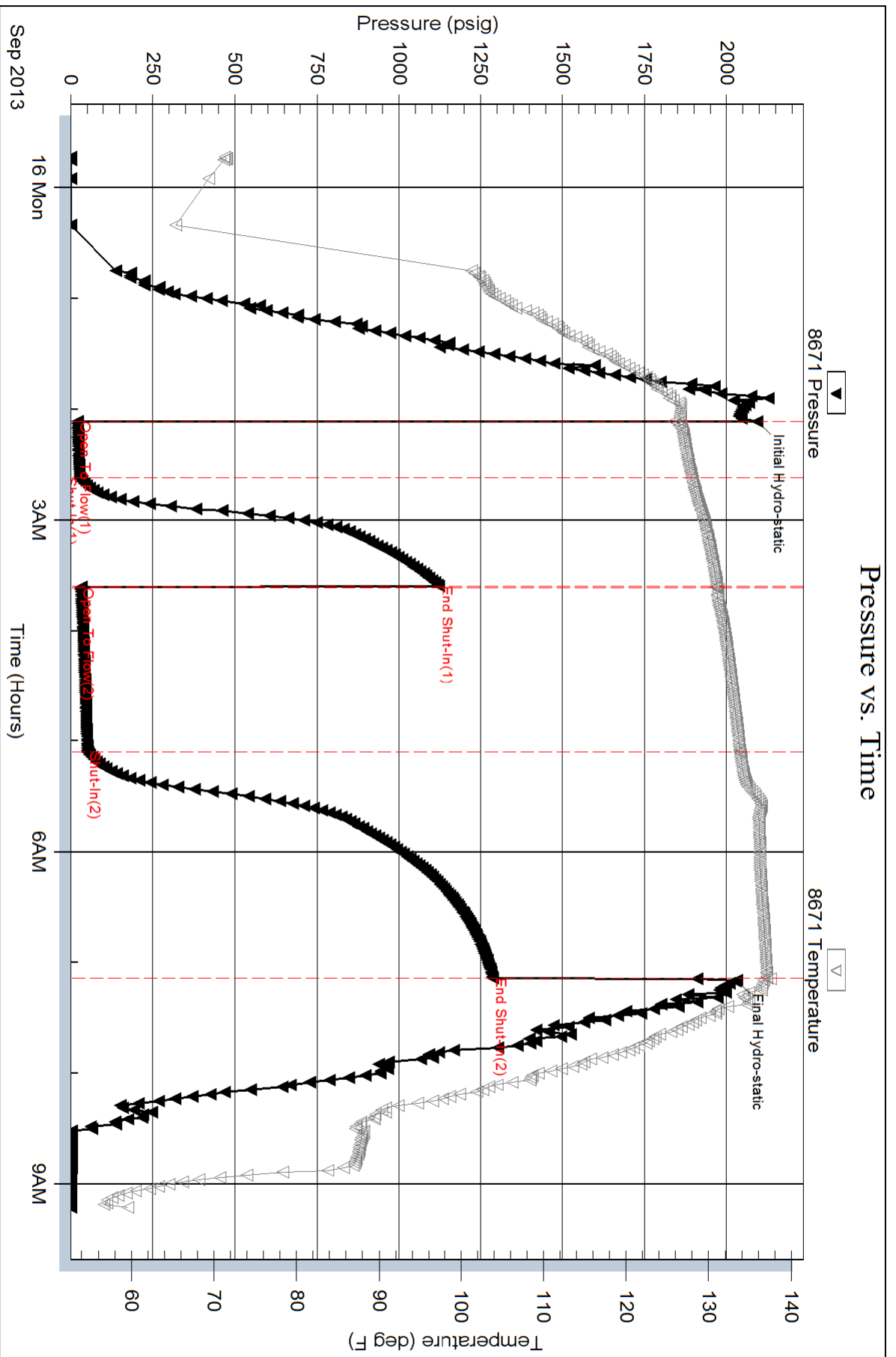
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Berexco, LLC
2020 N. Bramblewood
Wichita, KS 67206
ATTN: Ryan White

22/1s/36w Rawlins KS
Michael #2-22
Job Ticket: 55084 **DST#: 6**
Test Start: 2013.09.16 @ 18:28:00

GENERAL INFORMATION:

Formation: **LKC "E"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 20:59:45
Time Test Ended: 06:21:45
Interval: **4250.00 ft (KB) To 4290.00 ft (KB) (TVD)**
Total Depth: 4290.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole (Reset)
Tester: James Winder
Unit No: 57
Reference Elevations: 3142.00 ft (KB)
3129.00 ft (CF)
KB to GR/CF: 13.00 ft

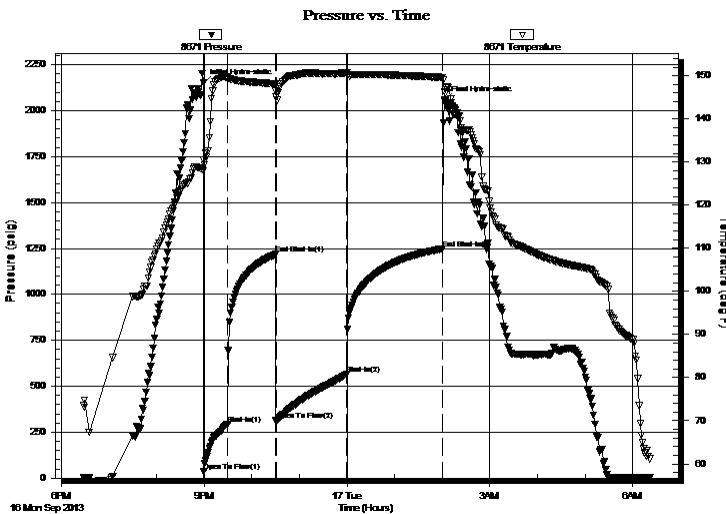
Serial #: 8671

Inside

Press @ Run Depth: 563.94 psig @ 4251.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2013.09.16 End Date: 2013.09.17 Last Calib.: 2013.09.17
Start Time: 18:28:05 End Time: 06:21:45 Time On Btm: 2013.09.16 @ 20:59:00
Time Off Btm: 2013.09.17 @ 02:02:45

TEST COMMENT: 30 - IF: Surging blow, built to BOB (11") in 4 1/2 min.
60 - IS: Blow back built to BOB at 17 min.
90 - FF: Blow built to BOB in 6 1/2 min.
120 - FS: Blow back built to 10"

PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2149.52 | 127.99 | Initial Hydro-static |
| 1 | 36.18 | 130.47 | Open To Flow (1) |
| 31 | 292.18 | 149.21 | Shut-In(1) |
| 91 | 1217.59 | 148.11 | End Shut-In(1) |
| 92 | 312.68 | 145.22 | Open To Flow (2) |
| 181 | 563.94 | 150.67 | Shut-In(2) |
| 302 | 1248.56 | 149.63 | End Shut-In(2) |
| 304 | 2056.36 | 146.26 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|------------------------------|--------------|
| 88.00 | SO/WCM 60%o, 30%w, 7%o, 3%g | 0.43 |
| 1187.00 | Rev. Out CGO 87%o, 11%g, 2%m | 12.64 |
| 5.00 | CO 96%o, 2%g, 2%m | 0.07 |
| 0.00 | GIP = 1025' | 0.00 |
| | | |
| | | |

* 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

22/1s/36w Rawlins KS

2020 N. Bramblewood
Wichita, KS 67206

Michael #2-22

Job Ticket: 55084

DST#: 6

ATTN: Ryan White

Test Start: 2013.09.16 @ 18:28:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 57.00 sec/qt
Water Loss: 5.60 in³
Resistivity: ohm.m
Salinity: 1800.00 ppm
Filter Cake: 2.00 inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psig

Oil API: 31.6 deg API
Water Salinity: 14000 ppm

Recovery Information

Recovery Table

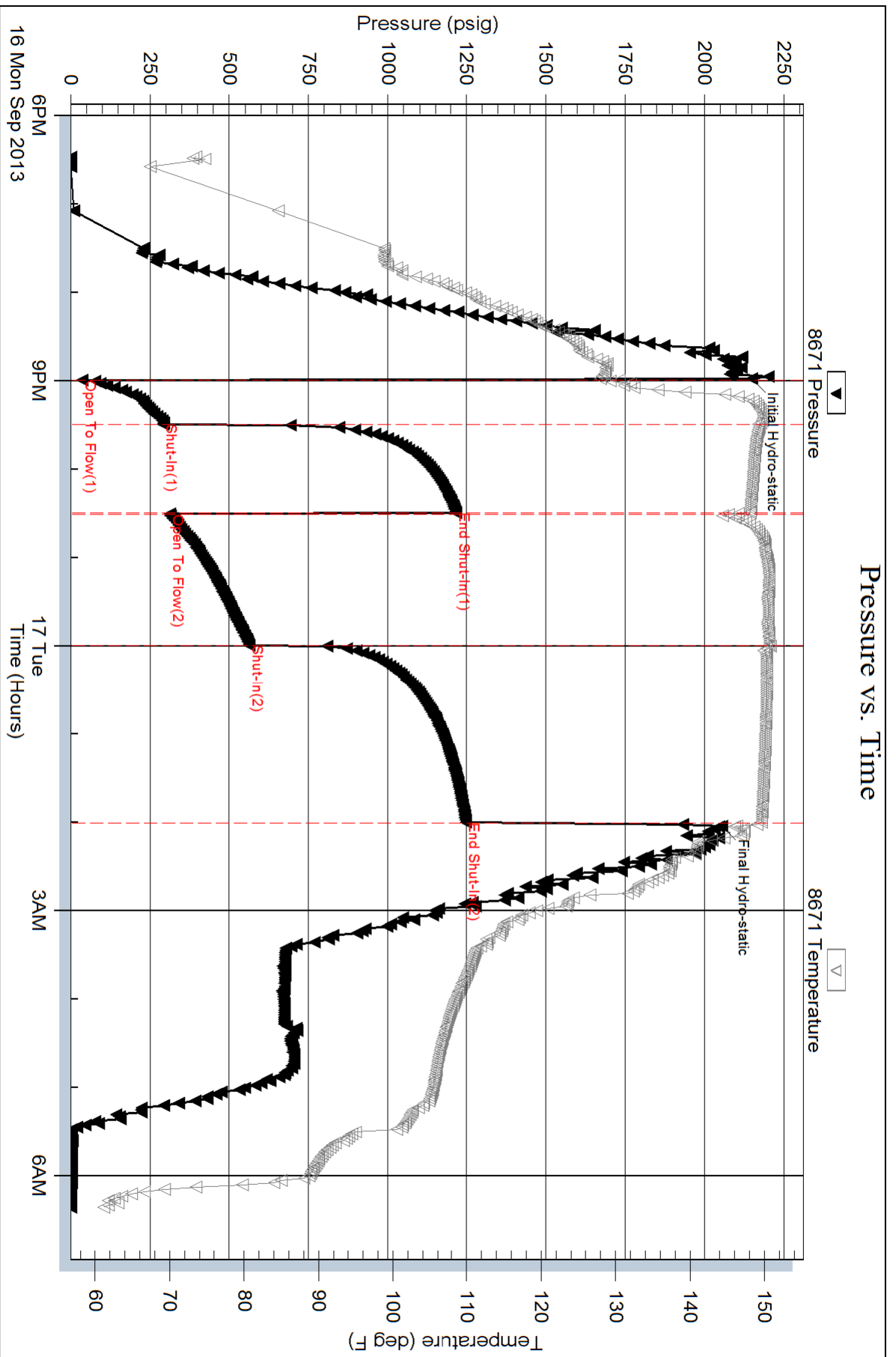
| Length ft | Description | Volume bbl |
|--------------|------------------------------|---------------|
| 88.00 | SO/WCM 60%m, 30%w, 7%o, 3%g | 0.433 |
| 1187.00 | Rev. Out CGO 87%o, 11%g, 2%m | 12.642 |
| 5.00 | CO 96%o, 2%g, 2%m | 0.070 |
| 0.00 | GIP = 1025' | 0.000 |

Total Length: 1280.00 ft Total Volume: 13.145 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments: Gravity = 31.8 api @ 62 deg F Corrected Gravity = 31.6 api
RW = .548 ohms @ 60.2 deg F Chlorides = 14,000 ppm
GIP = 1025'





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Berexco, LLC
 2020 N. Bramblewood
 Wichita, KS 67206
 ATTN: Ryan White

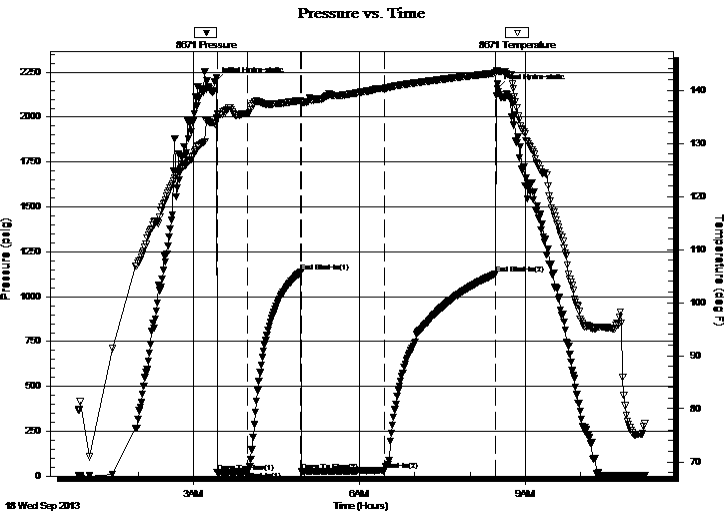
22/1s/36w Rawlins KS
Michael #2-22
 Job Ticket: 55085 **DST#: 7**
 Test Start: 2013.09.18 @ 00:55:00

GENERAL INFORMATION:

Formation: **Pawnee**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 03:25:15
 Time Test Ended: 11:10:15
 Interval: **4425.00 ft (KB) To 4475.00 ft (KB) (TVD)**
 Total Depth: 4475.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: James Winder
 Unit No: 57
 Reference Elevations: 3142.00 ft (KB)
 3129.00 ft (CF)
 KB to GR/CF: 13.00 ft

Serial #: 8671 Inside
 Press @ Run Depth: 30.95 psig @ 4426.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.09.18 End Date: 2013.09.18 Last Calib.: 2013.09.18
 Start Time: 00:55:05 End Time: 11:10:15 Time On Btm: 2013.09.18 @ 03:23:00
 Time Off Btm: 2013.09.18 @ 08:29:45

TEST COMMENT: 30 - IF: 1/4" Blow at open, dead at 11 min.
 60 - IS: No blow back
 90 - FF: No blow
 120 FSI: No blow back



PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2198.40 | 133.85 | Initial Hydro-static |
| 3 | 19.68 | 134.71 | Open To Flow (1) |
| 36 | 25.01 | 135.54 | Shut-In(1) |
| 94 | 1136.82 | 138.07 | End Shut-In(1) |
| 94 | 24.96 | 137.68 | Open To Flow (2) |
| 185 | 30.95 | 140.34 | Shut-In(2) |
| 305 | 1125.28 | 143.19 | End Shut-In(2) |
| 307 | 2159.10 | 143.64 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-----------------------|--------------|
| 45.00 | Mud 100% w /trace oil | 0.22 |
| | | |
| | | |
| | | |
| | | |

* 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

22/1s/36w Rawlins KS

2020 N. Bramblewood
Wichita, KS 67206

Michael #2-22

Job Ticket: 55085

DST#: 7

ATTN: Ryan White

Test Start: 2013.09.18 @ 00:55:00

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: 5.60 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|----------------------|---------------|
| 45.00 | Mud 100% w/trace oil | 0.221 |

Total Length: 45.00 ft Total Volume: 0.221 bbl

Num Fluid Samples: 0

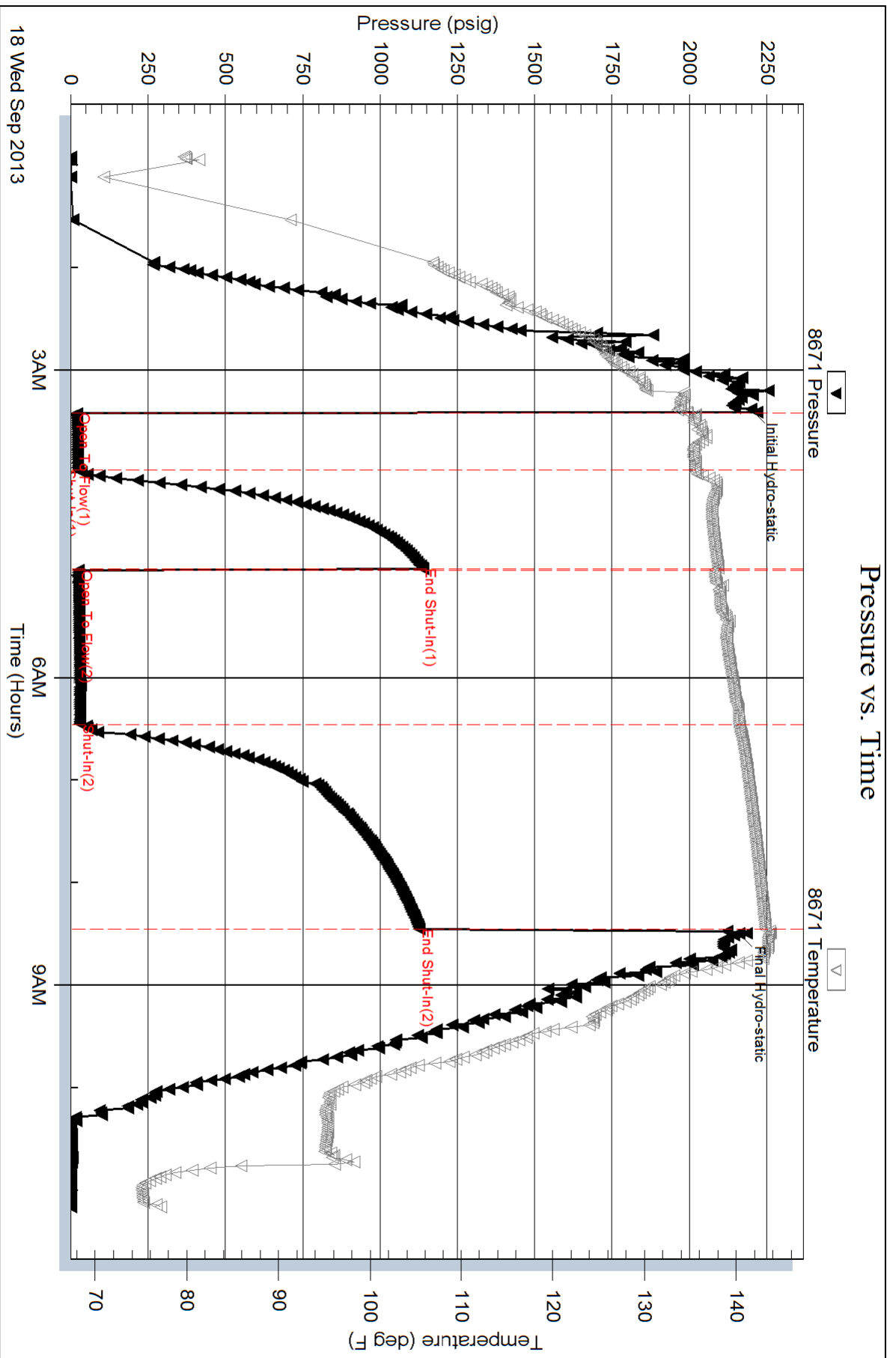
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



T. M. MCCOY & CO., INC.

CONSULTING GEOLOGISTS
P.O. BOX 608 · WILSON, WYOMING 83014 · 307-733-4332

Scale 1:240 (5"=100") Imperial
Measured Depth Log

WELL FILE

Well Name: Michael 2-22
Location: Rawlins County, Kansas
License Number: 15-153-20947
Spud Date: 9/9/2013
Surface Coordinates: N 39.95284
W 101.34325

Region: Wildcat
Drilling Completed: 9/18/2013

Bottom Hole Coordinates: N 39.95284
W 101.34325

Ground Elevation (ft): 3129' K.B. Elevation (ft): 3142'
Logged Interval (ft): 3500 To: 4500 Total Depth (ft): 4500

Formation: Lansing Kansas City
Type of Drilling Fluid: Water Based Mud

Printed by WellSight Log Viewer from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: Berexco LLC
Address: 2020 N. Bramblewood
Wichita, Kansas 67206

GEOLOGIST

Name: Ryan A. White
Company: T. M. McCoy & Co., Inc.
Address:

Comments

ROCK TYPES

| | | | | | | | |
|--|--------------|--|-----------------|--|---------------------|--|-------------------|
| | Chert-light | | Halite | | Sh gray-brown | | Siltstone gray |
| | Chert-dark | | Coal | | Sh green | | Siltstone brown |
| | Dolomite | | Bentonite | | Sh gray | | Siltstone red-brn |
| | Limestone | | Clystn | | Sh gray-red | | Sandstone |
| | Marl | | Limy sh blk-brn | | Sh red-brown | | Cement |
| | Marl red-brn | | Limy sh gray | | Silty shale red-brn | | |
| | Anhydrite | | Sh blk-brn | | Siltstone green | | |

ACCESSORIES

FOSSIL

MINERAL

| | |
|--|------------|
| | Anhy |
| | Arg |
| | Calc |
| | Carb |
| | Chalcedony |
| | Chtdk |
| | Chtlt |

| | |
|--|--------|
| | Dol |
| | Glau |
| | Gyp |
| | Minxl |
| | Nodule |
| | Pyr |
| | Sandy |
| | Silt |
| | Sil |

STRINGER

| | |
|--|----------------|
| | Sltstrg gray |
| | Sltstrg brn |
| | Sltstrg rd-brn |
| | Shstrg gybrn |
| | Shstrg red-brn |
| | Shstrg gy red |
| | Arg |
| | Bent |
| | Dol |
| | Ls |

| | |
|--|----------------|
| | Sltstrg gray |
| | Ssstrg |
| | Anhystrg |
| | Shstrg gy-grn |
| | Shstrg brn-blk |
| | Chtstrg |
| | Salt strg |

TEXTURE

| | |
|--|----------|
| | Microxln |
|--|----------|

OTHER SYMBOLS

DENSITY

ROUNDING

EVENT

Isotube

POROSITY

ROUNDING

EVENT

Iso-tube
Csg shoe

OIL SHOW

INTERVAL

Off btm

Connection

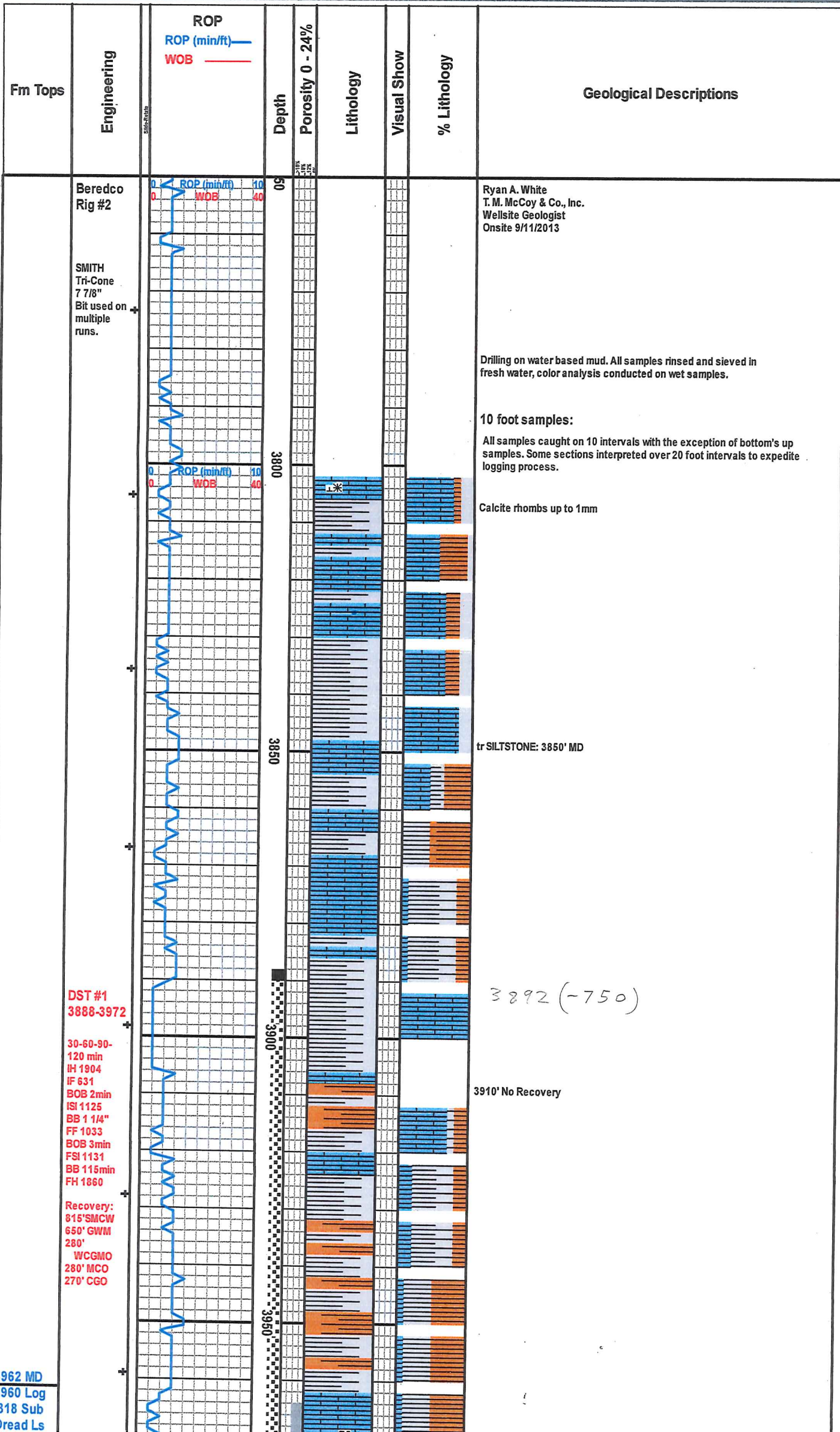
Fm-bit line

New symbol

Flare

SORTING

Slide
Rotate



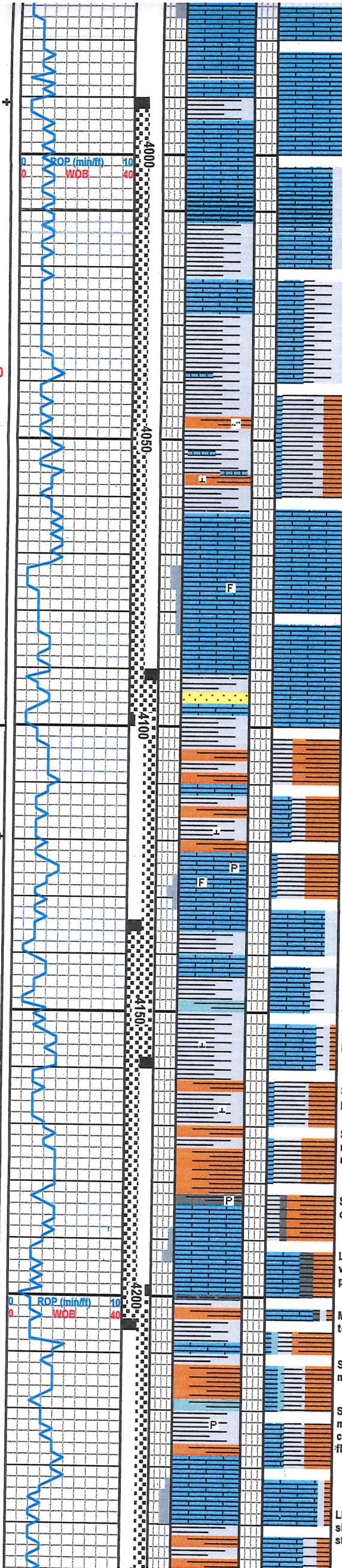
Lansing Kansas City Group

4063 MD
4069 Log
-927 Sub
LKC "A"

4123 MD
8124 Log
-982 Sub
LKC "B"

4184 MD
4188 Log
-1046 Sub
LKC "C"

4228 MD
4230 Log
-1088 Sub
LKC "D"



LIMESTONE: grainstone, some, visible dark brown oil and strong petroliferous odor.

LIMESTONE: Light brownish gray (5YR 6/1), very hard, blocky cuttings, micrite, tight, pale dull yellow fluorescence.

SHALE: medium gray (N5) to medium dark gray (N4), firm, platy cuttings, slightly calcareous, no fluorescence.

SHALE: moderate brown (5YR 3/4), moderately soft, sub blocky cuttings, gritty, silty, calcareous, no fluorescence.

LIMESTONE: moderate yellowish brown (10YR 5/4), locally very pale orange (10YR 8/2), firm, blocky cuttings, micrite, less commonly peloidal, local vugs and fenestral porosity, oil staining, rare ammonite fossils, pale yellow to yellow fluorescence.

LIMESTONE: as above, oil staining and porosity significantly reduced.

4100' trace SANDSTONE

SHALE: moderate brown (5YR 3/4), moderately firm, platy to sub platy cuttings, generally smooth, locally gritty/silty, calcareous.

SHALE: medium gray (N5) to medium dark gray (N4), moderately soft, calcareous, local yellow fluorescence,

LIMESTONE: white (N9) to grayish orange (10YR 7/4), hard, sub blocky cuttings, fossiliferous, subhedral pyrite, common vugs, dark brown oil staining, pale yellow to yellow fluorescence.

SHALE: medium dark gray (N4) to medium light gray (N3), moderately firm, smooth, sub platy cuttings, locally calcareous.

trace greenish gray SHALE

LIMESTONE: white (N9) to grayish orange (10YR 7/4), hard, sub blocky cuttings, rare vugs, rare dark brown oil staining.

SHALE: dark gray (N3) to medium gray (N4), moderately firm, smooth, platy to fissile cuttings, commonly calcareous.

SHALE: moderate brown (5YR 3/4) to moderate reddish brown (10R 4/6), moderately soft, rarely silty, chips exhibit slight swelling in H2O, rare gray reduction spots (<1mm), slightly calcareous, no fluorescence.

SHALE: Dark gray (N1) to black (N0), moderately firm, platy cuttings, non-calcareous, disseminated pyrite, no fluorescence.

LIMESTONE: light brownish gray (5YR 6/1), firm, sub platy cuttings, varied textures, fossiliferous, well preserved ammonite, slight porosity and oil staining, yellow fluorescence.

Mud increased from 9.1 to 9.3 after DST#4 and prior to drilling LKC "D" Zone.

SHALE: moderate brown (5YR 3/4), platy and sub platy cuttings, moderately firm, smooth, slightly calcareous, no fluorescence.

SHALE: medium dark gray (N4) to medium light gray (N6), moderately firm, calcareous when lighter shades of gray, common pyrite, rare thin (< 1mm) black lamina, no fluorescence.

LIMESTONE: light brownish gray (5YR 6/1), firm, sub blocky, micrite, slightly chalky, locally grainstone, porous when grainstone, local oil staining, yellow fluorescence with splotches of bright yellow.

4268 MD
4272 Log
-1130 Sub
LKC "E"

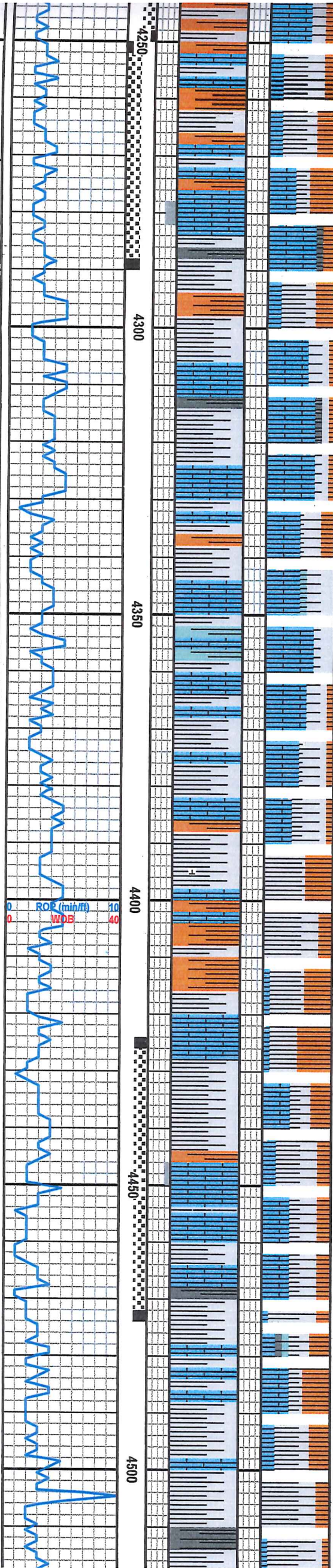
4306 MD
4310 Log
-1168 Sub
LKC "F"

4446 MD
4452 Log
-1310 Sub
Pawnee
Fm

BB none
FH 2030
Recovery:
40' MCO
45' MCO
DST #6
4250-4290
30-60-90-
120 Min
IH 2150
IF 292
BB 11"
surging
ISI 1218
BOB 17min
FF 584
BOB 7min
FSI 1249
BB 10"
FH 2056
Recovery:
5' CO
1187' CGO
Rev out
88'SOWCM

DST #7
4425-4475
30-60-90-
120 Min
IH 2198
IF 25
BB 114"
ISI 1137
BB none
FF 31
BB none
FSI 1125
BB none
FH 2159
Recovery:
45' M

Repair mud pumps



SHALE: medium dark gray (N4), platy to fissile cuttings, moderately soft, commonly non-calcareous, trace pale yellow fluorescence.

SHALE: moderate brown (5YR 3/4), moderately soft, irregular cuttings, locally gritty and silty, slightly calcareous, slightly expanding, no fluorescence.

LIMESTONE: white (N9) to light brownish gray (5YR 6/1), sub blocky, firm, micrite, locally soft and chalky, trace finestral porosity, rare oil staining, pale yellow fluorescence, locally yellow.

SHALE: grayish black (N2), moderately firm, fissile cuttings, non-calcareous.

LIMESTONE: light brownish gray (5YR 6/1), very firm, micrite, no visible porosity.

SHALE: grayish black (N2), moderately firm, fissile, non-calcareous.

LIMESTONE: as above, locally chalky and moderately firm.

SHALE: grayish green (5G 5/2), smooth, calcareous.

LIMESTONE: light brownish gray (5YR 6/1), very firm, micrite, local grainstone, no visible porosity.

SHALE: medium gray (N5) to medium dark gray (N4), moderately firm, smooth, sub platy, calcareous.

SHALE: medium gray (N5) to greenish gray (5G 6/1), moderately firm, smooth, sub platy, calcareous.

SHALE: moderate red (5R 5/4), moderately firm, gritty, silty, slightly calcareous.

LIMESTONE: light brownish gray (5YR 6/1) to white (N9), firm, blocky cuttings, micrite, no visible porosity.

SHALE: medium gray (N5), moderately firm, platy, slightly calcareous, trace disseminated black mica.

LIMESTONE: light brownish gray (5YR 6/1), firm, locally grainstone, trace light brown oil staining, fair porosity.

Polymict sample, likely circulating downhole debris.

LIMESTONE: white (N9) to very light gray (N8), rounded cuttings, moderately firm, chalky, dull yellow mineral fluorescence.

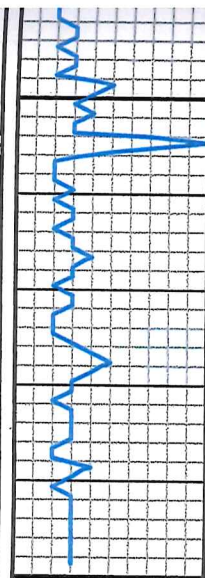
SHALE: moderate reddish brown (10R 4/6) and grayish red (10R 4/2), moderately firm, slightly gritty/silty, no fluorescence.

SHALE: light medium gray (N6), sub-platy cuttings with rounded edges, moderately firm, smooth, slightly calcareous, no fluorescence.

Repair mud pumps

TOTAL DEPTH:
4550'

19:00
9/18/13



4500

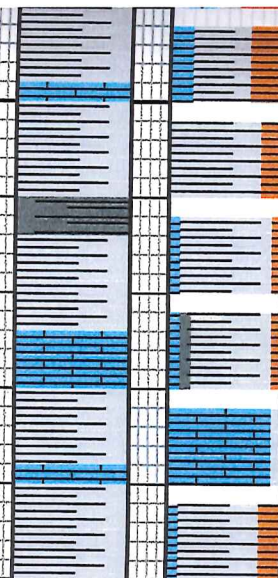
4550

4600

4650

4700

ROP (min/ft) 10
WDE 40



SHALE: moderate reddish brown (10R 4/6) and grayish red (10R 4/2), moderately firm, slightly gritty/silty, no fluorescence.

SHALE: light medium gray (N6), sub-platy cuttings with rounded edges, moderately firm, smooth, slightly calcareous, no fluorescence.

SHALE: brownish black (5YR 2/1), thin platy, moderately firm, slightly earthy/gritty, non-calcareous, no fluorescence.

SHALE: light medium gray (N6), sub-platy cuttings, moderately firm, smooth, slightly calcareous, no fluorescence.