KOLAR Document ID: 1325123

Confidentiality Requested:
☑ Yes ☐ No

# KANSAS CORPORATION COMMISSION
## OIL & GAS CONSERVATION DIVISION

**Form ACO-1**
January 2018
**Form must be Typed**
**Form must be Signed**
**All blanks must be Filled**

# WELL COMPLETION FORM
## WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 35300
Name: Coachman Energy Operating Company LLC
Address 1: 1125 17TH ST., SUITE 410
Address 2:
City: DENVER State: CO Zip: 80202 + __ __ __ __
Contact Person: Deb Smith
Phone: ( 720 ) 476-3678
CONTRACTOR: License # 5929
Name: Duke Drilling Co., Inc.
Wellsite Geologist: Charlie Sturdavant
Purchaser:

Designate Type of Completion:
☑ New Well ☐ Re-Entry ☐ Workover
☑ Oil ☐ WSW ☐ SWD
☐ Gas ☐ DH ☐ EOR
☐ OG ☐ GSW
☐ 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 EOR ☐ Conv. to SWD
☐ Plug Back ☐ Liner ☐ Conv. to GSW ☐ Conv. to Producer

☐ Commingled Permit #:
☐ Dual Completion Permit #:
☐ SWD Permit #:
☐ EOR Permit #:
☐ GSW Permit #:

10/26/2016 Spud Date or Recompletion Date
11/1/2016 Date Reached TD
12/6/2016 Completion Date or Recompletion Date

API No.: 15-051-26848-00-00
Spot Description:
SE - NE - SE - SW Sec. 25 Twp. 15 S. R. 20 ☐ East ☑ West
740 Feet from ☐ North / ☑ South Line of Section
2506 Feet from ☐ East / ☑ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☐ NE ☐ NW ☐ SE ☑ SW
GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Ellis
Lease Name: LEIKER Well #: 2-25-15-20
Field Name:
Producing Formation: Conglomerate Sand
Elevation: Ground: 2123 Kelly Bushing: 2131
Total Vertical Depth: 3800 Plug Back Total Depth: 3762
Amount of Surface Pipe Set and Cemented at: 1368 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: 58000 ppm Fluid volume: 140 bbls
Dewatering method used: Evaporated
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: 01/09/2017
☑ **Confidential Release Date:** 01/09/2019
☑ **Wireline Log Received** ☐ **Drill Stem Tests Received**
☑ **Geologist Report / Mud Logs Received**
☐ **UIC Distribution**
**ALT** ☑ **I** ☐ **II** ☐ **III** **Approved by:** Karen Ritter **Date:** 01/10/2017

Operator Name: Coachman Energy Operating Company LLC Lease Name: LEIKER Well #: 2-25-15-20

Sec. 25 Twp. 15 S. R. 20 ☐ East ☑ West County: Ellis

**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 *(Attach Additional Sheets)* | ☑ Yes | ☐ No |
| Samples Sent to Geological Survey | ☑ Yes | ☐ No |
| Cores Taken | ☐ Yes | ☑ No |
| Electric Log Run | ☑ Yes | ☐ No |
| Geologist Report / Mud Logs | ☐ Yes | ☐ No |

List All E. Logs Run:
Attached

☑ Log Formation (Top), Depth and Datum ☐ Sample

| Name | Top | Datum |
|---|---|---|
| Anhydrite | 1363 | +768 |
| Topeka | 3100 | -969 |
| Heebner | 3375 | -1244 |
| Lansing | 3422 | -1291 |
| BKC | 3664 | -1533 |
| Reagan | 3732 | -1601 |

CASING RECORD ☑ New ☐ 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 |
|---|---|---|---|---|---|---|---|
| Surface | 12.25 | 8.625 | 24 | 1368 | 80/20 Poz | 500 | 3%cc 2%gel |
| Production | 7.875 | 5.5 | 15.5 | 3787 | QPROC & QMDC | 280 | 1/4# Flo Seal |
| | | | | | | | |

ADDITIONAL CEMENTING / SQUEEZE RECORD

| Purpose: | Depth Top Bottom | Type of Cement | # Sacks Used | Type and Percent Additives |
|---|---|---|---|---|
| ☐ Perforate ☐ Protect Casing ☐ Plug Back TD ☐ Plug Off Zone | - | | | |
| | - | | | |

1. Did you perform a hydraulic fracturing treatment on this well? ☐ Yes ☑ No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? ☐ Yes ☐ No *(If No, skip question 3)*
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)*

| Date of first Production/Injection or Resumed Production/ Injection: | Producing Method: ☐ Flowing ☐ Pumping ☐ Gas Lift ☐ Other *(Explain)* |
|---|---|

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

| DISPOSITION OF GAS: | METHOD OF COMPLETION: | PRODUCTION INTERVAL: Top | Bottom |
|---|---|---|---|
| ☐ Vented ☐ Sold ☐ Used on Lease *(If vented, Submit ACO-18.)* | ☐ Open Hole ☑ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)* | 3747 - 3751 | |
| | | | |

| Shots Per Foot | Perforation Top | Perforation Bottom | Bridge Plug Type | Bridge Plug Set At | Acid, Fracture, Shot, Cementing Squeeze Record *(Amount and Kind of Material Used)* |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

| TUBING RECORD: | Size: | Set At: | Packer At: |
|---|---|---|---|
| | 2.375 | 3757 | None |

**Mail to: KCC - Conservation Division, 266 N. Main, Suite 220, Wichita, Kansas 67202**

| | |
|---|---|
| Form | ACO1 - Well Completion |
| Operator | Coachman Energy Operating Company LLC |
| Well Name | LEIKER 2-25-15-20 |
| Doc ID | 1325123 |

All Electric Logs Run

| |
|---|
| Density Neutron |
| Dual Induction |
| Microsensitivity |
| Borehole Compensated Sonic |
| Dual Comp Porosity |
| Radial Bond Log |
| Gamma Ray Caliper |

| | |
|---|---|
| Form | ACO1 - Well Completion |
| Operator | Coachman Energy Operating Company LLC |
| Well Name | LEIKER 2-25-15-20 |
| Doc ID | 1325123 |

Perforations

| Shots Per Foot | Perforation Record | Material Record | Depth |
|---|---|---|---|
| 4 | 3747 - 3751 | 100 Gal | 3751 |

| | |
|---|---|
| Form | ACO1 - Well Completion |
| Operator | Coachman Energy Operating Company LLC |
| Well Name | LEIKER 2-25-15-20 |
| Doc ID | 1325123 |

Casing

| Purpose Of String | Size Hole Drilled | Size Casing Set | Weight | Setting Depth | Type Of Cement | Number of Sacks Used | Type and Percent Additives |
|---|---|---|---|---|---|---|---|
| Surface | 12.25 | 8.625 | 24 | 1368 | 80/20 Poz | 500 | 3%cc 2%gel |
| Production | 7.875 | 5.5 | 15.5 | 3787 | QPROC & QMDC | 280 | 1/4# Flo Seal |
| | | | | | | | |
| | | | | | | | |

# DRILL STEM TEST REPORT

Coachman Energy Operating Company LLC

1125 17th St., Suite 410
Denver, CO 80202

ATTN: Charlie Sturdavant

**25-15S-20W Ellis, KS**

**Leiker #2-25-15-20**

Job Ticket: 61298 **DST#: 1**

Test Start: 2016.10.30 @ 18:20:16

## GENERAL INFORMATION:

Formation: **Lansing "A-F"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 21:22:46
Time Test Ended: 02:18:46

Test Type: Conventional Bottom Hole (Initial)
Tester: Brannan Lonsdale
Unit No: 73

**Interval: 3414.00 ft (KB) To 3506.00 ft (KB) (TVD)**
Total Depth: 3506.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

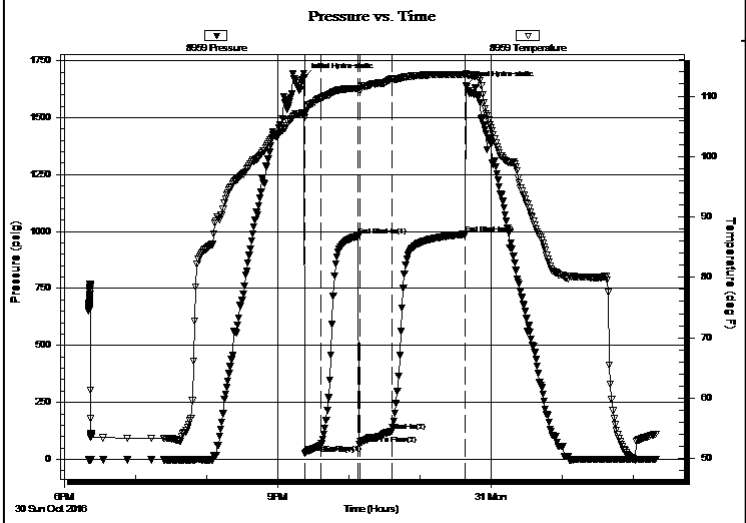
Reference Elevations: 2131.00 ft (KB)
2123.00 ft (CF)
KB to GR/CF: 8.00 ft

**Serial #: 8959** **Outside**

Press@RunDepth: 124.16 psig @ 3439.00 ft (KB)
Start Date: 2016.10.30 End Date: 2016.10.31
Start Time: 18:20:17 End Time: 02:18:46

Capacity: 8000.00 psig
Last Calib.: 2016.10.31
Time On Btm: 2016.10.30 @ 21:22:16
Time Off Btm: 2016.10.30 @ 23:38:46

TEST COMMENT: 15- IF- BOB 5mins
30- ISI- No blow
30- FF- BOB 1min, 5" initial surge
60- FSI- Surface blow




## PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|---|---|---|---|
| 0 | 1675.22 | 107.25 | Initial Hydro-static |
| 1 | 26.19 | 106.43 | Open To Flow (1) |
| 14 | 59.94 | 109.64 | Shut-In(1) |
| 46 | 980.71 | 111.31 | End Shut-In(1) |
| 47 | 65.66 | 111.05 | Open To Flow (2) |
| 74 | 124.16 | 112.94 | Shut-In(2) |
| 136 | 987.89 | 113.63 | End Shut-In(2) |
| 137 | 1639.00 | 113.76 | Final Hydro-static |

## Recovery

| Length (ft) | Description | Volume (bbl) |
|---|---|---|
| 62.00 | SGWMCO, 5%G 75%O 10%W 10%M | 0.88 |
| 125.00 | GMCO, 30%G 60%O 10%M | 1.77 |
| 31.00 | SOCM, 5%O 95%M | 0.44 |
| | | |
| | | |
| | | |

## Gas Rates

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

# DRILL STEM TEST REPORT

Coachman Energy Operating Company LLC

1125 17th St., Suite 410
Denver, CO 80202

ATTN: Charlie Sturdavant

**25-15S-20W Ellis, KS**

**Leiker #2-25-15-20**

Job Ticket: 61298 **DST#: 1**

Test Start: 2016.10.30 @ 18:20:16

## GENERAL INFORMATION:

Formation: **Lansing "A-F"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 21:22:46
Time Test Ended: 02:18:46

Test Type: Conventional Bottom Hole (Initial)
Tester: Brannan Lonsdale
Unit No: 73

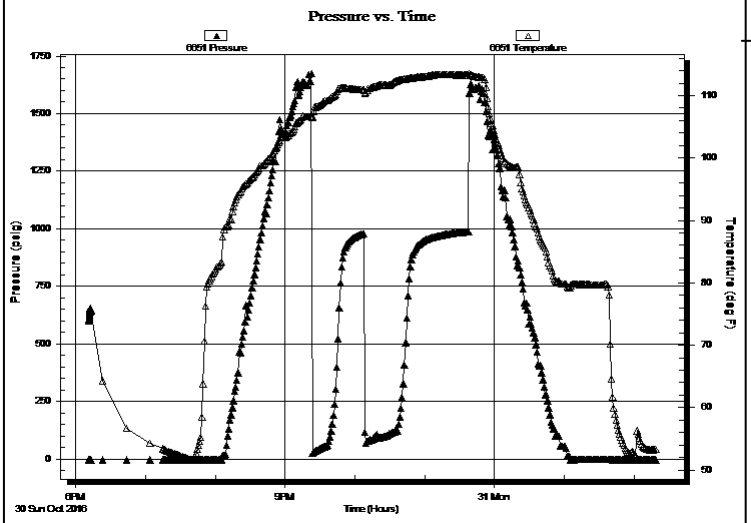
**Interval: 3414.00 ft (KB) To 3506.00 ft (KB) (TVD)**
Total Depth: 3506.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2131.00 ft (KB)
2123.00 ft (CF)
KB to GR/CF: 8.00 ft

**Serial #: 6651** **Inside**
Press@RunDepth: psig @ 3439.00 ft (KB)
Start Date: 2016.10.30 End Date: 2016.10.31
Start Time: 18:11:00 End Time: 02:18:29

Capacity: 8000.00 psig
Last Calib.: 2016.10.31
Time On Btm:
Time Off Btm:

TEST COMMENT: 15- IF- BOB 5mins
30- ISI- No blow
30- FF- BOB 1min, 5" initial surge
60- FSI- Surface blow




## PRESSURE SUMMARY

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

## Recovery

| Length (ft) | Description | Volume (bbl) |
|---|---|---|
| 62.00 | SGWMCO, 5%G 75%O 10%W 10%M | 0.88 |
| 125.00 | GMCO, 30%G 60%O 10%M | 1.77 |
| 31.00 | SOCM, 5%O 95%M | 0.44 |
| | | |
| | | |
| | | |

## Gas Rates

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

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Coachman Energy Operating Company LLC

1125 17th St., Suite 410
Denver, CO 80202

ATTN: Charlie Sturdavant

**25-15S-20W Ellis, KS**

**Leiker #2-25-15-20**

Job Ticket: 61298 **DST#: 1**

Test Start: 2016.10.30 @ 18:20:16

## Mud and Cushion Information

| | | | | | |
|---|---|---|---|---|---|
| Mud Type: | Gel Chem | Cushion Type: | | Oil API: | 28 deg API |
| Mud Weight: | 9.00 lb/gal | Cushion Length: | ft | Water Salinity: | 125000 ppm |
| Viscosity: | 46.00 sec/qt | Cushion Volume: | bbl | | |
| Water Loss: | 6.80 in³ | Gas Cushion Type: | | | |
| Resistivity: | ohm.m | Gas Cushion Pressure: | psig | | |
| Salinity: | 5200.00 ppm | | | | |
| Filter Cake: | inches | | | | |

## Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|---|---|---|
| 62.00 | SGWMCO, 5%G 75%O 10%W 10%M | 0.879 |
| 125.00 | GMCO, 30%G 60%O 10%M | 1.772 |
| 31.00 | SOCM, 5%O 95%M | 0.439 |

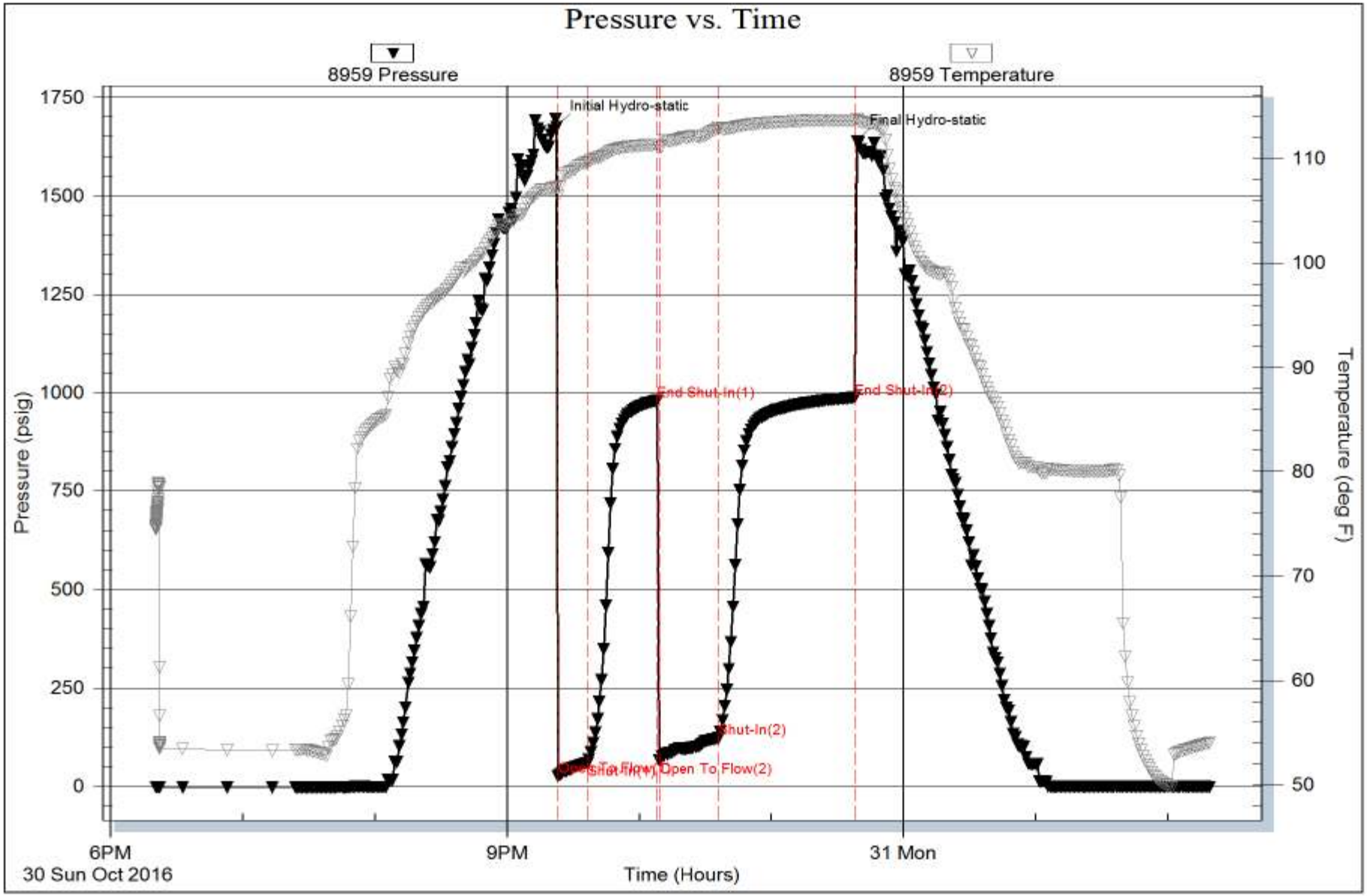
Total Length: 218.00 ft Total Volume: 3.090 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: Sampler: 800mL G & 1200mL O @ 750PSI
RW: .06@65deg

Serial #: 8959 **Outside** Coachman Energy Operating Company LLC Leiker #2-25-15-20 DST Test Number: 1




Trilobite Testing, Inc Ref. No: 61298 Printed: 2016.10.31 @ 08:10:40

# DRILL STEM TEST REPORT

Coachman Energy Operating Company LLC

1125 17th St., Suite 410
Denver, CO 80202

ATTN: Charlie Sturdavant

**25-15S-20W Ellis, KS**

**Leiker #2-25-15-20**

Job Ticket: 61299 **DST#: 2**

Test Start: 2016.10.31 @ 18:17:32

## GENERAL INFORMATION:

Formation: **Lansing "H-K"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 20:40:32
Time Test Ended: 03:36:02

Test Type: Conventional Bottom Hole (Reset)
Tester: Brannan Lonsdale
Unit No: 73

**Interval: 3546.00 ft (KB) To 3640.00 ft (KB) (TVD)**
Total Depth: 3640.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

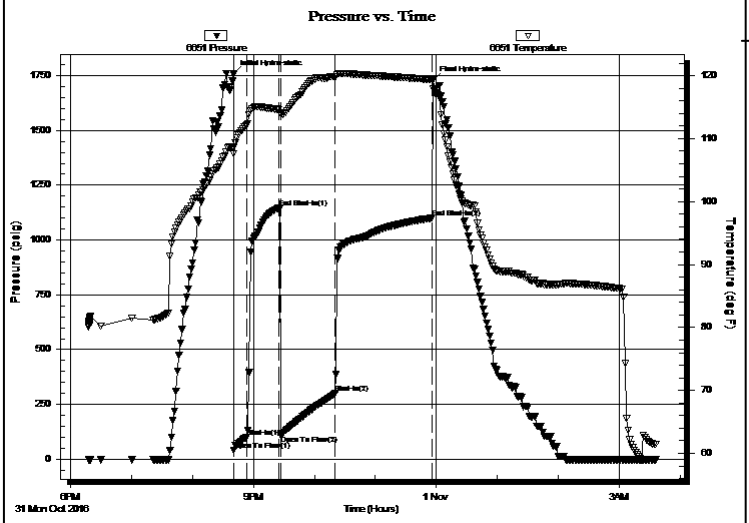
Reference Elevations: 2131.00 ft (KB)
2123.00 ft (CF)
KB to GR/CF: 8.00 ft

**Serial #: 6651** **Inside**

Press@RunDepth: 299.94 psig @ 3573.00 ft (KB)
Start Date: 2016.10.31 End Date: 2016.11.01
Start Time: 18:17:33 End Time: 03:36:02

Capacity: 8000.00 psig
Last Calib.: 2016.11.01
Time On Btm: 2016.10.31 @ 20:40:02
Time Off Btm: 2016.10.31 @ 23:57:02

TEST COMMENT: 15- IF- BOB 3mins
30- ISI- Built to 1.5" in 8mins then slowly died back to .5"
60- FF- BOB 3mins
90- FSI- BOB 2mins




## PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|---|---|---|---|
| 0 | 1757.00 | 108.60 | Initial Hydro-static |
| 1 | 40.94 | 107.58 | Open To Flow (1) |
| 14 | 100.22 | 112.27 | Shut-In(1) |
| 45 | 1147.44 | 114.64 | End Shut-In(1) |
| 47 | 109.58 | 114.01 | Open To Flow (2) |
| 101 | 299.94 | 119.84 | Shut-In(2) |
| 196 | 1099.70 | 119.38 | End Shut-In(2) |
| 197 | 1726.04 | 117.93 | Final Hydro-static |

## Recovery

| Length (ft) | Description | Volume (bbl) |
|---|---|---|
| 748.00 | GMCO, 30%G 10%M 60%O | 10.60 |
| 31.00 | CGO, 40%G 60%O | 0.44 |
| 0.00 | 2751' GIP | 0.00 |
| | | |
| | | |
| | | |

* Recovery from multiple tests

## Gas Rates

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

# DRILL STEM TEST REPORT

Coachman Energy Operating Company LLC

1125 17th St., Suite 410
Denver, CO 80202

ATTN: Charlie Sturdavant

**25-15S-20W Ellis, KS**

**Leiker #2-25-15-20**

Job Ticket: 61299 **DST#: 2**

Test Start: 2016.10.31 @ 18:17:32

## GENERAL INFORMATION:

Formation: **Lansing "H-K"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 20:40:32
Time Test Ended: 03:36:02

Test Type: Conventional Bottom Hole (Reset)
Tester: Brannan Lonsdale
Unit No: 73

**Interval: 3546.00 ft (KB) To 3640.00 ft (KB) (TVD)**
Total Depth: 3640.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

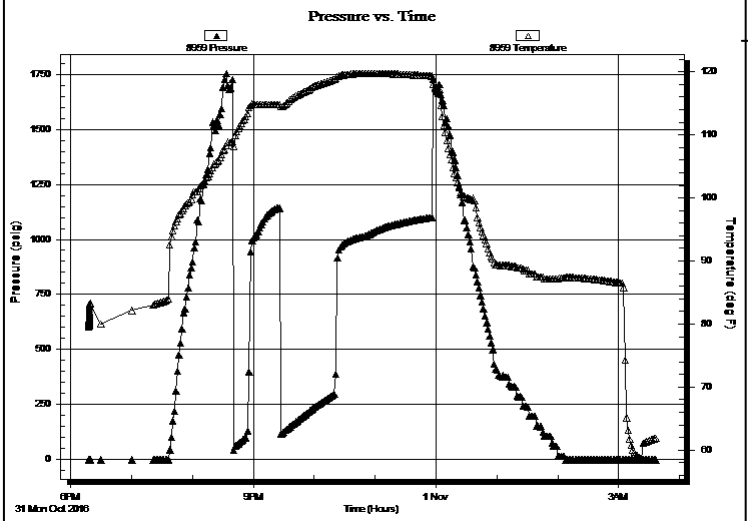
Reference Elevations: 2131.00 ft (KB)
2123.00 ft (CF)
KB to GR/CF: 8.00 ft

**Serial #: 8959**

Press@RunDepth: psig @ ft (KB)
Start Date: 2016.10.31 End Date: 2016.11.01
Start Time: 18:17:46 End Time: 03:36:15

Capacity: 8000.00 psig
Last Calib.: 2016.11.01
Time On Btm:
Time Off Btm:

TEST COMMENT: 15- IF- BOB 3mins
30- ISI- Built to 1.5" in 8mins then slowly died back to .5"
60- FF- BOB 3mins
90- FSI- BOB 2mins




## PRESSURE SUMMARY

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

## Recovery

| Length (ft) | Description | Volume (bbl) |
|---|---|---|
| 748.00 | GMCO, 30%G 10%M 60%O | 10.60 |
| 31.00 | CGO, 40%G 60%O | 0.44 |
| 0.00 | 2751' GIP | 0.00 |
| | | |
| | | |
| | | |

* Recovery from multiple tests

## Gas Rates

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

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Coachman Energy Operating Company LLC

1125 17th St., Suite 410
Denver, CO 80202

ATTN: Charlie Sturdavant

**25-15S-20W Ellis, KS**

**Leiker #2-25-15-20**

Job Ticket: 61299 **DST#: 2**

Test Start: 2016.10.31 @ 18:17:32

## Mud and Cushion Information

| | | | | | |
|---|---|---|---|---|---|
| Mud Type: | Gel Chem | Cushion Type: | | Oil API: | 35 deg API |
| Mud Weight: | 9.00 lb/gal | Cushion Length: | ft | Water Salinity: | ppm |
| Viscosity: | 49.00 sec/qt | Cushion Volume: | bbl | | |
| Water Loss: | 7.20 in³ | Gas Cushion Type: | | | |
| Resistivity: | ohm.m | Gas Cushion Pressure: | psig | | |
| Salinity: | 6600.00 ppm | | | | |
| Filter Cake: | inches | | | | |

## Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|---|---|---|
| 748.00 | GMCO, 30%G 10%M 60%O | 10.603 |
| 31.00 | CGO, 40%G 60%O | 0.439 |
| 0.00 | 2751' GIP | 0.000 |

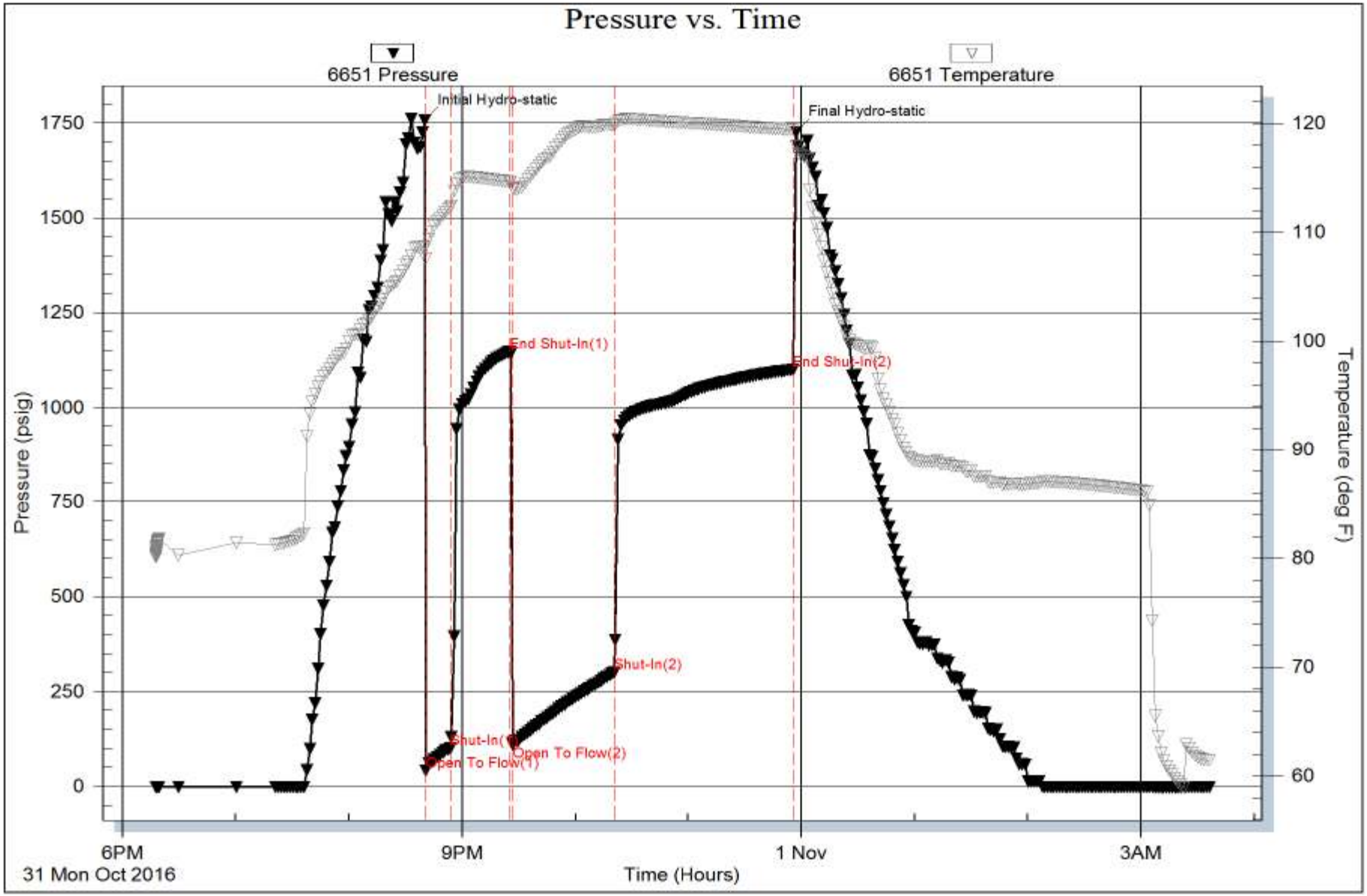
Total Length: 779.00 ft Total Volume: 11.042 bbl

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

Laboratory Name: Laboratory Location:

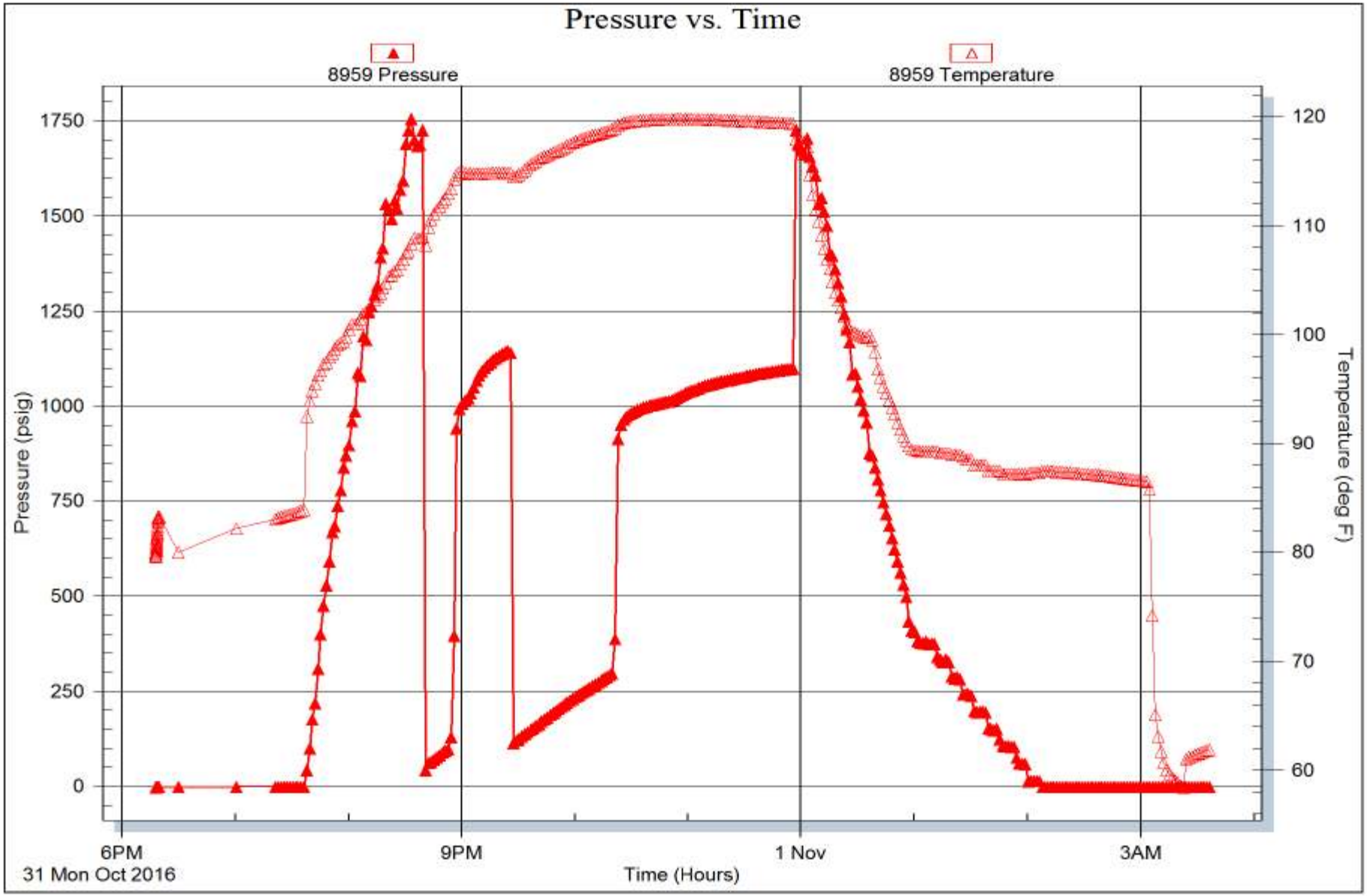
Recovery Comments: Sampler: 2000mL CO @ 750PSI

Serial #: 6651 **Inside** Coachman Energy Operating Company LLC Leiker #2-25-15-20 DST Test Number: 2




Trilobite Testing, Inc Ref. No: 61299 Printed: 2016.11.01 @ 07:49:04

Serial #: 8959 Coachman Energy Operating Company LLC Leiker #2-25-15-20 DST Test Number: 2




Trilobite Testing, Inc Ref. No: 61299 Printed: 2016.11.01 @ 07:49:04

Scale 1:240 Imperial

| | | | |
|---|---|---|---|
| Well Name: | Leiker # 2-25-15-20 | | |
| Surface Location: | 740'FSL, 2506' FWL, Sec 25-T15S-R20W | | |
| Bottom Location: | | | |
| API: | 15-051-26848 | | |
| License Number: | | | |
| Spud Date: | 10/25/2016 | Time: | 6:45 PM |
| Region: | Ellis County | | |
| Drilling Completed: | 2/2/2011 | Time: | 5:50 PM |
| Surface Coordinates: | 141865 & 1573086.9 | | |
| Bottom Hole Coordinates: | | | |
| Ground Elevation: | 2123.00ft | | |
| K.B. Elevation: | 2131.00ft | | |
| Logged Interval: | 0.00ft | To: | 0.00ft |
| Total Depth: | 0.00ft | | |
| Formation: | Reagan | | |
| Drilling Fluid Type: | Chemical/Fresh Water Gel | | |

**OPERATOR**

| | | | |
|---|---|---|---|
| Company: | Cynosure Energy, LLC | | |
| Address: | 1401 17th Street, Suite 850<br>Denver, CO 80202<br>Phone: 720-476-3678 | | |
| Contact Geologist: | Gene Davis | | |
| Contact Phone Nbr: | 720-272-9620 | | |
| Well Name: | Leiker # 2-25-15-20 | | |
| Location: | 740'FSL, 2506' FWL, Sec 25-T15S-R20W | | |
| API: | 15-051-26848 | | |
| Pool: | | Field: | |
| State: | Kansas | Country: | USA |

**LOGGED BY**

Charlie Sturdavant Consulting

| | | | |
|---|---|---|---|
| Company: | Charlie Sturdavant Consulting | | |
| Address: | 920 12th Street<br>Golden, CO 80401 | | |
| Phone Nbr: | 303-907-2295----303-384-9481 | | |
| Logged By: | Geologist | Name: | Charlie Sturdavant |

**NOTES**

**Daily Drilling Report**

**Well Comparison Sheet**

## SURFACE CO-ORDINATES

| | |
|---|---|
| Well Type: | Vertical |
| Longitude: | 99.4961290 |
| Latitude: | 38.713187528 |
| N/S Co-ord: | 141865 |
| E/W Co-ord: | 1573086.9 |

## CONTRACTOR

| | | | |
|---|---|---|---|
| Contractor: | 620-793-0840 | | |
| Rig #: | 2 | | |
| Rig Type: | mud rotary | | |
| Spud Date: | 10/25/2016 | Time: | 6:45 PM |
| TD Date: | 2/2/2011 | Time: | 5:50 PM |
| Rig Release: | | Time: | |

## ELEVATIONS

| | | | |
|---|---|---|---|
| K.B. Elevation: | 2131.00ft | Ground Elevation: | 2123.00ft |
| K.B. to Ground: | 8.00ft | | |

## ROCK TYPES

- Lmst fw<7
- Lmst fw7>
- shale, grn
- shale, gry
- Carbon Sh
- shale, red

## ACCESSORIES

**MINERAL**
- Argillaceous
- Calcareous
- Chert White
- Chert, dark
- Dolomitic
- Euhed rhombs of dol or
- Nodules

**FOSSIL**
- Bioclastic or Fragmental
- Brachiopod
- Bryozoa
- Crinoids
- Foraminifera
- Fussilinid
- Oolite
- Oolites
- Pelloids
- Pellets
- Spicules

**STRAT./SED. STRUCTS**
- Stylolite

**STRINGER**
- Shale
- green shale

**TEXTURE**
- Chalky

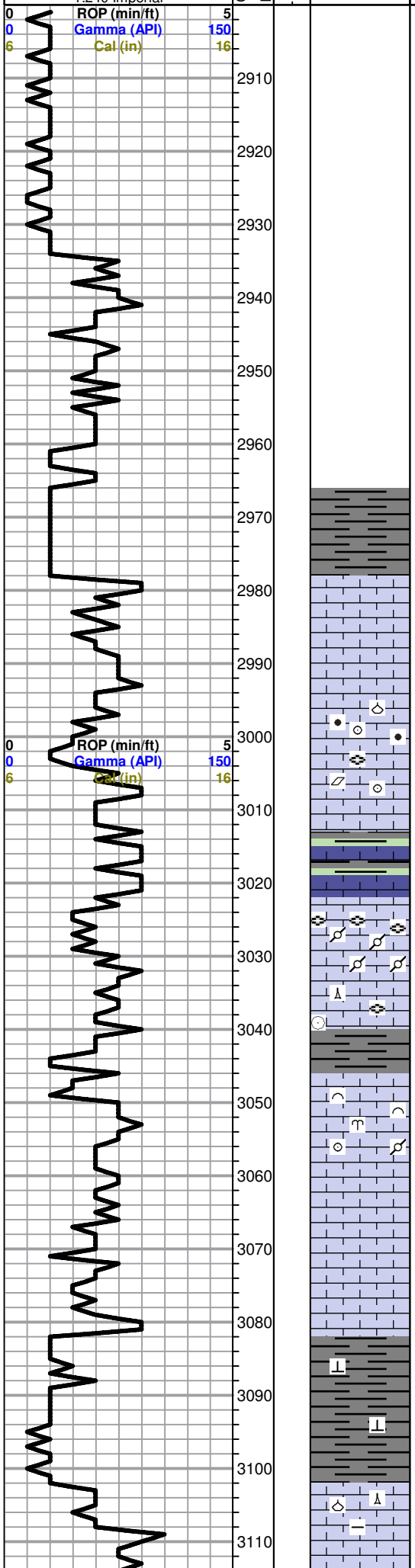
## OTHER SYMBOLS

**MISC**
- Daily Report
- Digital Photo
- Document
- Folder
- Link
- Vertical Log File
- Horizontal Log File
- Core Log File
- Drill Cuttings Rpt

**DST**
- DST Int
- DST alt

**Printed by GEOstrip VC Striplog version 4.0.8.15 (www.grsi.ca)**

| Curve Track #1 | Depth \| Intervals | DST | Lithology | Oil Show | Geological Descriptions | TG, C1 - C5 |
|---|---|---|---|---|---|---|
| ROP (min/ft)<br>Gamma (API)<br>Cal (in) | Interval<br>Interval | | | | | |






# Cynosure-Leiker # 2-25-15-20
# 740' FSL & 2506' FWL Sec 25-T15S-R20W
# Ellis County, Kansas
# KB = 2131'

**Geologist on location @ 1310 hrs, 3012'**

## Stottler 2934 (-803)

## Tarkio 2978 (-847)

**10' samples begin @ 3000'**

Limestone: brown, brachiopods, med-xln oolitic-pelletal grainstone to micro-xln mudstone, recrystalized, well-cemented, no shows.

Limestone: lt gray to tan, sparry calcite patches, tr small mud/shale clasts, tr fussulinids, packstone, tr inter-xln porosity, no shows.

Limestone: cream to lt tan, micro-xln mudstone to vf-xln grainstone w/ fosslil frags to 1mm, thin streaks of gray to lt greenish-gray shale.

Limestone: lt gray to brownish-gray, fussulinid packstone to pelletal (0.1 to 1.5mm in dia) packstone ( mottled gray and lt tan), fair inter-xln porosity, no shows.

Limestone: lt tan, spicules, random oolites, finely granular, tr crinoids, tr fussulinids, grainstone, tight, no shows.

Shale: lumps of mushy gray shale.

Limestone: brown to grayish-brown, bioclastic, bryozoans, oolitic, pelletal, f-xln, sli arg., grainstone, no shows.

Shale: gray, calcareous, soft to firm, sli silty.

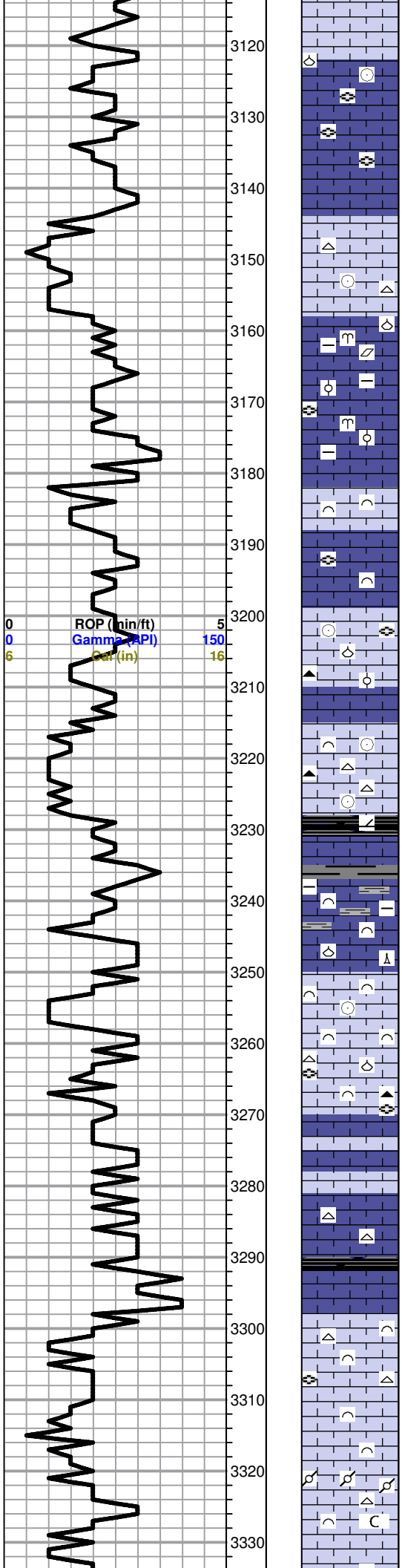
## Topeka 3102 (-971)

Limestone: brown to mottled brown and tan, brachiopods, crinoid discs, spicules, set in a f-xln matrix, sli arg., packstone, no shows.

Limestone: lt tan to cream, brachiopods, fusculinids, set in a vf-xln

1:240 Imperial

Mud-Co, Mud check
2809' @ 0710 hrs.
10/29/2016
Vis. 51, Wt. 8.8
PV 15, YP 23
WL 6.8, Cake 1/32"
pH 11.5, Ca Tr
CHL 5,200 ppm
Sol 3.3, LCM 3
DMC: $2,470.69
CMC: $6,701.01




Limestone: lt tan to cream, brachioods, fussulinids, set in a vf-xln matrix, grainstone to micro-xln mudatone, tight, no shows.

Limestone: lt brown to tan, finely granular to micro-xln mudstone, fussulinids, crinoids, brach., sli arg., wackestone, no shows.

Limestone: grayish-brown, argillaceous, fussulinids, f-xln matrix, wackestone, no shows.

Limestone: lt tan to tan, finely-granular, tr crinoids, soft to chalky, tr frosted tan chert, grainstone, fair inter-xln porosity, no shows.

Limestone: gray to grayish-brown, fragmental, f-xln, tr bryozozns, spicules, brachiopods, sparry calcite patches, fussulinids, rare oolites, argillaceous, wackestone, tight, no shows.

Limestone: tan to brown, mottled, bioclastic grainstone, med-xln, fair inter-xln porosity, no shows.

Limestone: tan to brown, bioclastic, argillaceous, f-xln-granular, small fussulinids, wackestone, no shows.

Limestone: tan, sli arg, bioclastic packstone, fossil debris, fusulinids, crinoids, brachiopods, oolites, set in a f- to med-xln matrix, tight, no shows. Tr dark gray fossiliferous chert.

Limestone: lt tan, micro-xln mudstone to f-xln, bioclastic-fragmental grainstone, tr crinoids, tight to fair inter-xln porosity, no shows.

Tr tan to dark gray vitreous chert, tr fossils.

## King Hill 3228 (-1097)

Shale: black, carbonaceous, soft, dolomitic.

Shale: gray to dark gray, calc, firm.

Limestone: tan to brown, arg., w/ dark brown, gray, whispy shale streaks, f-xln, fossil debris, spicules, no shows.

Limestone: lt tan, bioclastic grainstone, f-xln, tr crinoid, recrystallized, fair inter-xln porosity, no shows.

Limestone: lt tan, f-xln, recrystallized, brachiopods, fussulinids, former grainstone, w/ chert: lt tan to gray, fussulinids, frosted, tight, no shows.

Streaks of lt tan micro-xln mudstone

Limestone: tan to lt brown to grayish-tan, tight, micro-xln mudstone, tr lt tan frosted chert.

## Queen Hill 3290 (-1159)

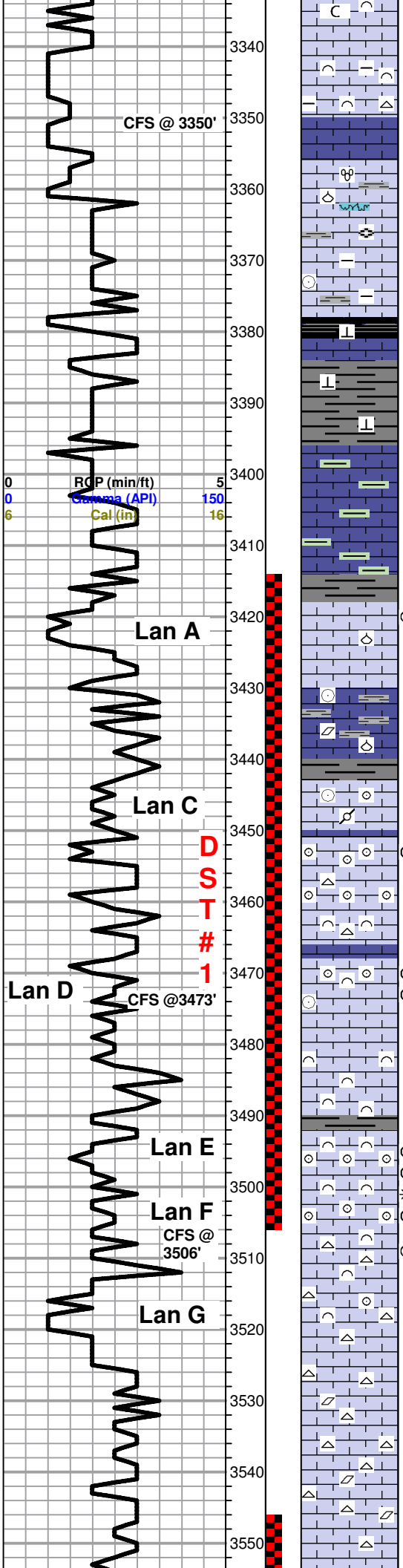
Black shale.

Limestone: tan, micro-xln mudstone.

Limestone: lt gray to tan, bioclastic grainstone, f-xln, w/ frosted chert of same colors, recrystallized, fusulinids, oolites, fair inter-xln porosity, no shows.

Limestone: mottled gray and tan, pelletal grainstone, chalky, other ls as above w/ tan chert.

Limestone: white, chalky, to soft fragmental grainstone, no shows.




Limestone: lt gray to salt and pepper, sli arg bioclastic grainstone, f-xln, good inter-xln porosity, silicified in parts to chert of same character, no shows.

Limestone: lt brown to tan micro-xln mudstone, tight, no shows.

Limestone: lt brown f-xln, sli arg, thin whispy brown shale laminations, possible stylolites, recrystalized grainstone, fusulinids, forams, brach., no shows.

crinoids.

## Heebner 3378 (-1247)

Shale: black, carbonaceous, hard, brittle, calcareous, combustible.

Shale: gray to lt gray soft and mushy, calc.

## Toronto 3396 (-1265)

Limestone: white to vy lt gray, dense, hard, micro-xln mudstone, tr green shale streaks and patches.

Limestone: white to cream to vy lt gray, vf- to micro-xln mudstone, thin lt green shale separations, tight, no shows.

## Lansing 3418 (-1287)

Limestone: lt tan, vf- to f-xln, tr brachiopods, recrystallizwd, one frag had minor secondary pinpoint porosity w/ spotty oil show, slow to good cut w/ bright yellow fluor, weak odor.

Limestone: white to grayish-brown, brachiopods, crinoids, set in a vf-xln matrix, thin whispy brown shale laminations, sli arg., sparry calcite (possibly part of larger brach shells), wackestone.

Limestone: tan to brown, recrystallized, f- to med-xln, former grainstone, crinoids, pellets, oolites, sparry calcite, tight, no shows.

Limestone: cream to lt tan, oolitic grainstone, recrystallized, good inter-xln porosity, fair to good secondary pinpoint porosity, all is saturated w/ live brown oil. strong hydrocarbon aroma, dull yellow fluor, instant streaming cut w/ bright yellow fluor.

Limestone: cream, oolitic-bioclastic grainstone w/ white vitreous chert, well-cemented, no shows.

Limestone: white to cream, oolitic-bioclastic grainstone w/ secondary inter-xln and pinpoint porosity w/ fair to good show of free oil, slow to excellent cut. Some oil-filled vugs. Crinoids.

Leiker 2-25-15-20 dst1-P.10001.jpg

Limestone: white to cream, semi-translucent, recrystallized bioclastic grainstone, tight, no shows. Still carrying frags from above w/ oil shows and aroma.

Limestone: lt tan, oolitic to bioclastic grainstone, well-developes secondary inter-xln porsity, pinpoint porosity and druzzy-lined vugs, very strong oil aroma, saturated to spotty show of free oil, instant streaming cut.

Limestone: white to cream, oolitic-bioclastic grainstone, druzzy-lined vugs and fractures, excellent pinpoint porosity, inter-oolite porosity, all is oil-stained, very strong hydrocarbon aroma, instant streaming cut. Gas bubbles emanate from pores.

Tr white to lt tan vitreous chert w/ preserved oolites and fossils.

Limestone: white to cream, recrystallized oolitic-bioclastic grainstone, chert: lt grayish-tan to white to mottled, fossiliferous, oolites, vitreous, rock is tight, no shows. Still a few frags w/ oil stn.

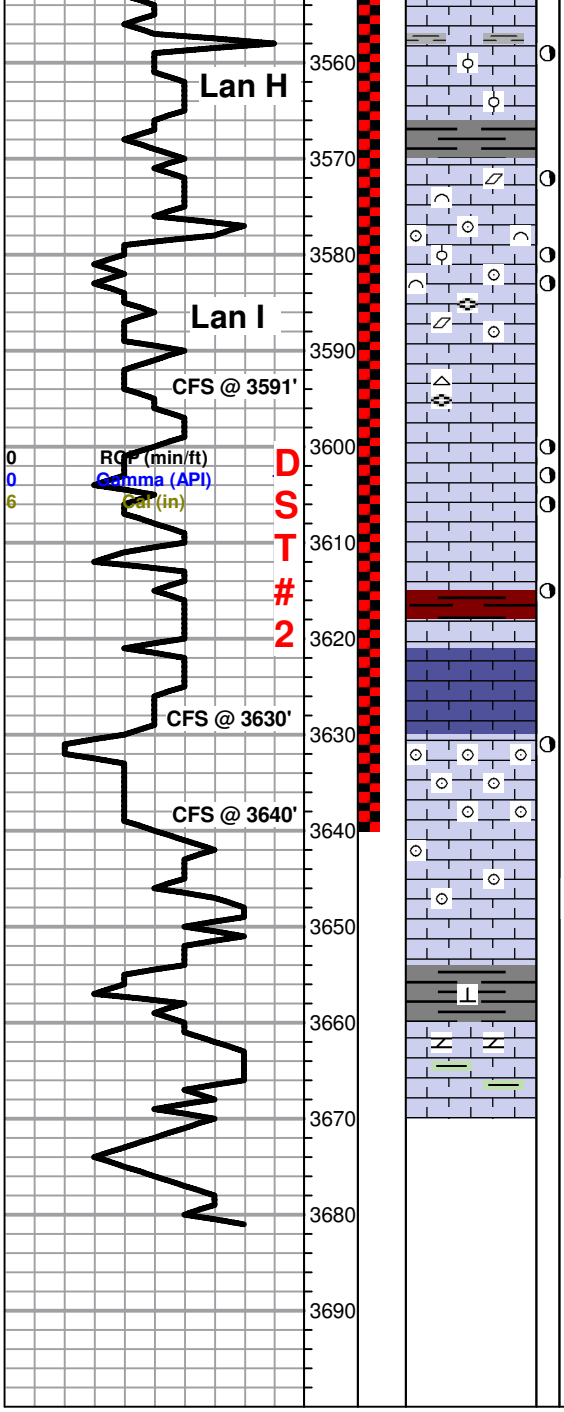
Limestone: white, recrystallized grainstone, ghost fossils and oolites, sparry calcite streaks and patches, hard to chalky, w/ chert as above.

Mud-Co, Mud check
3424' @ 0635 hrs.
10/30/2016
Vis. 46, Wt. 9.0
PV 15, YP 20
WL 6.8, Cake 1/32"
pH 11.0, Ca Tr
CHL 5,200 ppm
Sol 4.7, LCM 2
DMC: $425.65
CMC: $7,126.66

**WO Mud Pump @ 3419'**

**DST # 1: 3414'-3506', Rec: 62' SGWMCO (5% G, 10% W, 10% M, 75% Oil, 125' GMCO (30% G, 10% M, 60% Oil), 31' SOCM (5% O, 95% M), SIP: 981-988#**

**Strap: 0.9' long to board.**
**Deviation: 3/4 degree.**




Shale: gray, firm to hard, calcareous.

Limestone: white to lt cream, recrystallized oolitic grainstone, some evidence of subareal exposure, brown shale infill of weathered porosity, tr pinpoint secondary porosity w/ very slight oil fill, slight odor, fair cut.

Limestone: cream to vy lt gray, bioclastic grainstone, fossil frags, oolites, sparry calcite, recrystallized, fair inter-xln porosity, fair secondary pinpoint porosity, micro-vugs, spotty stain of brown oil, instant streaming cut.

Limestone is same as above, but the fragments w/ shows are fewer, and may be cavings from above.

After resuming drilling, the next sample had an abundance of frags w/ good pinpoint, fracture, and vuggy porosity w/ oil staining.

Limestone: cream to white, recrystallized grainstone, sparry calcite, ghost oolites and fossil frags, white to lt tan chert w/ fusulinids, tight, except for the frag w/ secondary pinpoint and micro-vuggy porosity with spotty oil shows, live oil, good cut.

Shale: dark gray, flakey blades, firm.

Maroon shale, sample washes red. Limestone below has red shale infill of fine, spotty secondary porosity at the top due to erosional exposure. Limestone below is recrystallized grainstone, oolites, spotty show of oil in the secondary porosity.

Limestone: vy lt gray to lt tan, partially translucent, micro-xln mudstone to wackestone w/ very few fossil frags, weak oil shows are still present (cavings?) as are flakey dk gray shale frags.

Limestone: white to lt tan, oolitic grainstone w/ a few fossil frags, (ooids are 0.2-0.75mm in dia.), pyritized brachiopods in gray shale, some frags w/ secondary pinpoint to vuggy porosity have live oil stain and black, flakey gilsonite to dead oil, live oil has good cut.

Leiker # 2 DST # 2 P. 10001.jpg

## Base Kansas City 3654 (-1523)

Shale: gray, calc, firm, blades to blocky.

Limestone: tan to lt brown, recrystallized grainstone, tr nodules from subareal exposure, tr brown shale infill at surface, tr of green shale partings, mostly med-xln, no shows.

**DST # 2: 3546'-3640', Rec: 2751' GIP, 748' GMCO (60% oil, 30% gas, 10% mud), 31' GCO (60% oil, 40% gas), SIP: 1147-1100#. Sample chamber: 200ml oil, 35 gravity.**

**Leiker 2-25-15-20 dst1-P.10001.jpg**

TRILOBITE TESTING, INC

# DRILL STEM TEST REPORT

Coachman Energy Operating Company LLC

1125 17th St., Suite 410
Denver, CO 80202

ATTN: Charlie Sturdavant

**25-15S-20W Ellis, KS**

**Leiker #2-25-15-20**

Job Ticket: 61298 **DST#: 1**

Test Start: 2016.10.30 @ 18:20:16

## GENERAL INFORMATION:

Formation: **Lansing "A-F"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 21:22:46
Time Test Ended: 02:18:46

Test Type: Conventional Bottom Hole (Initial)
Tester: Brannan Lonsdale
Unit No: 73

**Interval: 3414.00 ft (KB) To 3506.00 ft (KB) (TVD)**
Total Depth: 3506.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

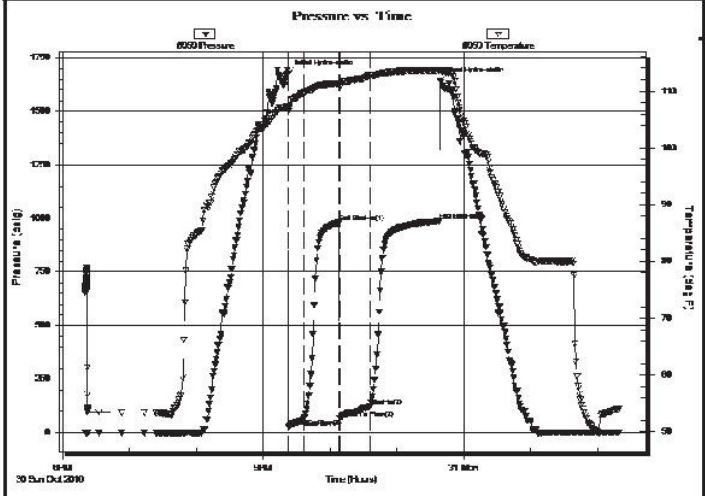
Reference Elevations: 2131.00 ft (KB)
2123.00 ft (CF)
KB to GR/CF: 8.00 ft

**Serial #: 8959** **Outside**

Press@RunDepth: 124.16 psig @ 3439.00 ft (KB)
Start Date: 2016.10.30 End Date: 2016.10.31
Start Time: 18:20:17 End Time: 02:18:46

Capacity: 8000.00 psig
Last Calib.: 2016.10.31
Time On Btm: 2016.10.30 @ 21:22:16
Time Off Btm: 2016.10.30 @ 23:38:46

TEST COMMENT: 15- IF- BOB 5mins
30- ISI- No blow
30- FF- BOB 1min, 5" initial surge
60- FSI- Surface blow




## PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|---|---|---|---|
| 0 | 1675.22 | 107.25 | Initial Hydro-static |
| 1 | 26.19 | 106.43 | Open To Flow (1) |
| 14 | 59.94 | 109.64 | Shut-In(1) |
| 46 | 980.71 | 111.31 | End Shut-In(1) |
| 47 | 65.66 | 111.05 | Open To Flow (2) |
| 74 | 124.16 | 112.94 | Shut-In(2) |
| 136 | 987.89 | 113.63 | End Shut-In(2) |
| 137 | 1639.00 | 113.76 | Final Hydro-static |

## Recovery

| Length (ft) | Description | Volume (bbl) |
|---|---|---|
| 62.00 | SGWMCO, 5%G 75%O 10%W 10%M | 0.88 |
| 125.00 | GMCO, 30%G 60%O 10%M | 1.77 |
| 31.00 | SOCM, 5%O 95%M | 0.44 |
| | | |
| | | |
| | | |

## Gas Rates

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

TRILOBITE TESTING, INC

# DRILL STEM TEST REPORT

Coachman Energy Operating Company LLC

1125 17th St., Suite 410
Denver, CO 80202

ATTN: Charlie Sturdavant

**25-15S-20W Ellis, KS**

**Leiker #2-25-15-20**

Job Ticket: 61299 **DST#: 2**

Test Start: 2016.10.31 @ 18:17:32

## GENERAL INFORMATION:

Formation: **Lansing "H-K"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 20:40:32
Time Test Ended: 03:36:02

Test Type: Conventional Bottom Hole (Reset)
Tester: Brannan Lonsdale
Unit No: 73

**Interval: 3546.00 ft (KB) To 3640.00 ft (KB) (TVD)**
Total Depth: 3640.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

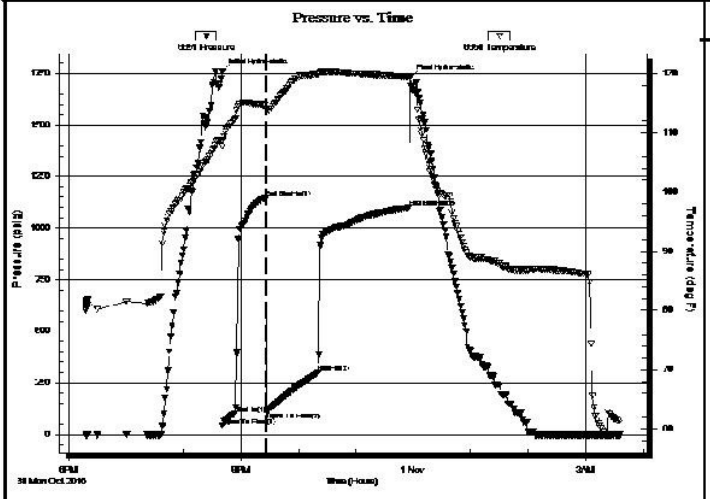
Reference Elevations: 2131.00 ft (KB)
2123.00 ft (CF)
KB to GR/CF: 8.00 ft

**Serial #: 6651** **Inside**

Press@RunDepth: 299.94 psig @ 3573.00 ft (KB)
Start Date: 2016.10.31 End Date: 2016.11.01
Start Time: 18:17:33 End Time: 03:36:02

Capacity: 8000.00 psig
Last Calib.: 2016.11.01
Time On Btm: 2016.10.31 @ 20:40:02
Time Off Btm: 2016.10.31 @ 23:57:02

TEST COMMENT: 15- IF- BOB 3mins
30- ISI- Built to 1.5" in 8mins then slowly died back to .5"
60- FF- BOB 3mins
90- FSI- BOB 2mins




## PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation |
|---|---|---|---|
| 0 | 1757.00 | 108.60 | Initial Hydro-static |
| 1 | 40.94 | 107.58 | Open To Flow (1) |
| 14 | 100.22 | 112.27 | Shut-In(1) |
| 45 | 1147.44 | 114.64 | End Shut-In(1) |
| 47 | 109.58 | 114.01 | Open To Flow (2) |
| 101 | 299.94 | 119.84 | Shut-In(2) |
| 196 | 1099.70 | 119.38 | End Shut-In(2) |
| 197 | 1726.04 | 117.93 | Final Hydro-static |

## Recovery

| Length (ft) | Description | Volume (bbl) |
|---|---|---|
| 748.00 | GMCO, 30%G 10%M 60%O | 10.60 |
| 31.00 | CGO, 40%G 60%O | 0.44 |
| 0.00 | 2751' GIP | 0.00 |
| | | |
| | | |
| | | |

* Recovery from multiple tests

## Gas Rates

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

BP

1473

REC[illegible]
NOV 0[illegible] 2016

**Date:** 11/2/2016
**Invoice #** 3062
**P.O.#:**
**Due Date:** 12/2/2016
**Division:** *Russell*

**QUALITY OILWELL CEMENTING, INC.**
PO Box 32 - 740 West Wichita Ave, Russell KS 67665
Phone:785-324-1041 fax:785-483-1087
Email: cementing@ruraltel.net

# Invoice

**Contact:**
CYNOSURE ENERGY LLC
**Address/Job Location:**

1125 17th Street, Suite 410
DENVER CO 80113

**Reference:**
LEIKER 2 SEC 25-15-20

**Description of Work:**
PROD STRING

| Services / Items Included: | Quantity | Price | Taxable | Item | Quantity | Price | Taxable |
|---|---|---|---|---|---|---|---|
| Labor | | $ 479.24 | No | Flo Seal | 40 | $51.57 | Yes |
| Pro-C Cement | 175 | $ 2,030.42 | Yes | Pump Truck Mileage-Job to Nearest Camp | 19 | $55.11 | No |
| Multi Density- 80/20 | 150 | $ 1,692.02 | Yes | Bulk Truck Mileage-Job to Nearest Bulk Plant | 19 | $42.86 | No |
| Gilsonite | 850 | $ 821.84 | Yes | | | | |
| 5 1/2" Turbolizer | 10 | $ 464.10 | Yes | | | | |
| 5 1/2" Basket | 2 | $ 360.96 | Yes | | | | |
| Mud Clear | 500 | $ 238.49 | Yes | | | | |
| Auto Fill Float Shoe, 5 1/2" | 1 | $ 216.58 | Yes | | | | |
| Bulk Truck Matl-Material Service Charge | 354 | $ 228.18 | No | | | | |
| Latch Down Plug & Baffle, 5 1/2" | 1 | $ 171.46 | Yes | | | | |
| Salt (Fine) | 17 | $ 143.55 | Yes | | | | |

**Invoice Terms:**
Net 30

| | | |
|---|---|---|
| *SubTotal:* | $ | *6,996.38* |
| *Discount Available ONLY if Invoice is Paid & Received within listed terms of invoice:* | $ | (174.91) |
| SubTotal for Taxable Items: | $ | 6,036.21 |
| SubTotal for Non-Taxable Items: | $ | 785.27 |
| Total: | $ | 6,821.47 |
| *7.00% Ellis County Sales Tax* Tax: | $ | 422.53 |
| **Amount Due:** | **$** | **7,244.00** |
| **Applied Payments:** | | |
| **Balance Due:** | **$** | **7,244.00** |

**Thank You For Your Business!**

Past Due Invoices are subject to a service charge (annual rate of 24%)
This does not include any applicable taxes unless it is listed.


***APPROVED***
***By Charles Ramsay at 5:46 pm, Nov 15, 2016***

# QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025 Home Office P.O. Box 32 Russell, KS 67665 No. 3062
Cell 785-324-1041

| Date | Sec. | Twp. | Range | County | State | On Location | Finish |
|---|---|---|---|---|---|---|---|
| 11-2-16 | 25 | 15 | 20 | Ellis | KS | | 4:45pm |

Location Schoenchen 8W

Lease Leiker Well No. 2

Contractor Duke

Type Job Production String

Hole Size 7 7/8 T.D. 3800

Csg. 5 1/2 15.50 Depth 3789

Tbg. Size Depth

Tool Depth

Cement Left in Csg. 20.20 Shoe Joint 20.20

Meas Line Displace 89 3/4 BL

**EQUIPMENT**

Pumptrk 18 No. Cementer Nia
Helper Rick
Bulktrk 14 No. Driver
Driver Rick
Bulktrk 15 No. Driver
Driver Doug

**JOB SERVICES & REMARKS**

Remarks:

Rat Hole 30SK

Mouse Hole 15SK

Centralizers

Baskets

D/V or Port Collar

5 1/2 Set @ 3789. Insert @ 3769
Est. Circulation. Pump 500 gal mud Clear
Plug Rathole mouse hole. Cement 5 1/2
+ Displace Plug.
Lift Pressure 900 #
Land Plug 1500 #

Owner

To Quality Oilwell Cementing, Inc.
You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.

Charge To Cynosure Energy

Street

City State

The above was done to satisfaction and supervision of owner agent or contractor.

Cement Amount Ordered 175 QPro C 150 QMDC 1/4# Flo
500 gal mud Clear

| | |
|---|---|
| Common | 175 QPRO C |
| Poz. Mix | 150 50/50 QMDC |
| Gel. | |
| Calcium | |
| Hulls | |
| Salt | 17 |
| Flowseal | 40# |
| Kol-Seal | 850# |
| Mud CLR 48 | |
| CFL-117 or CD110 CAF 38 | 500 gal |
| Sand | |
| Handling | 354 |
| Mileage | |

**FLOAT EQUIPMENT**

| | |
|---|---|
| Guide Shoe | |
| Centralizer | 9 8 Turbo's |
| Baskets | 2 |
| AFU Inserts | |
| Float Shoe | 1 |
| Latch Down | 1 |

| | |
|---|---|
| Pumptrk Charge | prod string |
| Mileage | 19 |
| Tax | |
| Discount | |
| Total Charge | |

X Signature Rob Hawke

1473 RECEIVED

NOV 01 2016

BT

**QUALITY OILWELL CEMENTING, INC.**
PO Box 32 - 740 West Wichita Ave, Russell KS 67665
Phone:785-324-1041 fax:785-483-1087
Email: cementing@ruralTel.net

**Date:** 10/27/2016
**Invoice #** 3059
**P.O.#:**
**Due Date:** 11/26/2016
**Division:** *Russell*

# Invoice

**Contact:**
CYNOSURE ENERGY LLC
**Address/Job Location:**

1125 17th Street, Suite 410
DENVER CO 80113

APPROVED
*Bob Plante*

**Reference:**
LEIKER 2 SEC 25-15-20

**Description of Work:**
LONG SURFACE JOB

| Services / Items Included: | Quantity | Price | Taxable |
|---|---|---|---|
| Labor | | $ 473.54 | No |
| Common-Class A | 400 | $ 4,229.05 | Yes |
| Calcium Chloride | 21 | $ 749.00 | Yes |
| POZ Mix-Standard | 100 | $ 445.83 | Yes |
| Bulk Truck Matl-Material Service Charge | 553 | $ 352.21 | No |
| 8 5/8" Basket | 1 | $ 224.19 | Yes |
| Premium Gel (Bentonite) | 10 | $ 184.70 | Yes |
| 8 5/8" Centralizer | 3 | $ 122.29 | Yes |
| 8 5/8" Top Rubber Plug | 1 | $ 77.70 | Yes |
| Baffle Plate Aluminum, 8 5/8" | 1 | $ 68.79 | Yes |
| Pump Truck Mileage-Job to Nearest Camp | 19 | $ 54.46 | No |

| Item | Quantity | Price | Taxable |
|---|---|---|---|
| Bulk Truck Mileage-Job to Nearest Bulk Plant | 19 | $42.35 | No |

**Invoice Terms:**
Net 30

| | | |
|---|---|---|
| *SubTotal:* | $ | *7,024.10* |
| *Discount Available ONLY if Invoice is Paid & Received within listed terms of invoice:* | $ | (175.60) |
| SubTotal for Taxable Items: | $ | 5,949.01 |
| SubTotal for Non-Taxable Items: | $ | 899.49 |
| Total: | $ | 6,848.50 |
| *7.00% Ellis County Sales Tax* Tax: | $ | 416.43 |
| **Amount Due:** | **$** | **7,264.93** |
| **Applied Payments:** | | |
| **Balance Due:** | **$** | **7,264.93** |

Discount Amount

**Thank You For Your Business!**

Past Due Invoices are subject to a service charge (annual rate of 24%)
This does not include any applicable taxes unless it is listed.

# QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025 Home Office P.O. Box 32 Russell, KS 67665 No. 3059

Cell 785-324-1041

| Date | Sec. | Twp. | Range | County | State | On Location | Finish |
|---|---|---|---|---|---|---|---|
| 10-27-16 | 25 | 15 | 20 | Ellis | KS | | 1:30 A.m. |

Location Schoenchen 8 1/2W Vinto

Lease Leiker Well No. 2

Contractor Duke #2

Type Job Surface

Hole Size 12 1/4 T.D. 1371

Csg. 8 5/8 Depth 1368

Tbg. Size Depth

Tool Depth

Cement Left in Csg. 8' Shoe Joint 8'

Meas Line Displace 86 1/2 BC

**EQUIPMENT**

Pumptrk 16 No. Cementer Craig

Helper

Bulktrk 15 No. Driver Billy

Driver

Bulktrk 21 No. Driver Tim.

Driver

**JOB SERVICES & REMARKS**

Remarks:

8 5/8 on bottom. Est. Circulation.

Bottle serv. 1360. Mix 500 sk 4

Displace Plug.

Cement Circulated!

Lift pressure 900#

Plug landed 1200#

Shut in 500#

Owner

To Quality Oilwell Cementing, Inc.
You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.

Charge To Coachmen Energy

Street

City State

The above was done to satisfaction and supervision of owner agent or contractor.

Cement Amount Ordered 500 sk 3% cc 2% Gel 1/2# FC

| | |
|---|---|
| Common | 400 |
| Poz. Mix | 100 |
| Gel. | 10 |
| Calcium | 21 |
| Hulls | |
| Salt | |
| Flowseal | |
| Kol-Seal | |
| Mud CLR 48 | |
| CFL-117 or CD110 CAF 38 | |
| Sand | |
| Handling | 531 |
| Mileage | |

**FLOAT EQUIPMENT** 8 5/8

| | |
|---|---|
| Guide Shoe | |
| Centralizer | 3 |
| Baskets | 1 |
| ~~AFU Inserts~~ | Bottle Plate |
| ~~Float Shoe~~ | Rubber Plug |
| Latch Down | |
| Pumptrk Charge | Long Surface |
| Mileage | 19 |
| Tax | |
| Discount | |
| Total Charge | |

X Signature Bob Plant