



KANSAS CORPORATION COMMISSION 1065742  
OIL & GAS CONSERVATION DIVISION

Form ACO-1  
June 2009  
Form Must Be Typed  
Form must be Signed  
All blanks must be Filled

WELL COMPLETION FORM  
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 5123  
Name: Pickrell Drilling Company, Inc.  
Address 1: 100 S MAIN STE 505  
Address 2: \_\_\_\_\_  
City: WICHITA State: KS Zip: 67202 + 3738  
Contact Person: Larry J. Richardson  
Phone: ( 316 ) 262-8427  
CONTRACTOR: License # 5123  
Name: Pickrell Drilling Company, Inc.  
Wellsite Geologist: Roger Fisher  
Purchaser: N/A

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  
 Conv. to GSW  
 Plug Back: \_\_\_\_\_ Plug Back Total Depth  
 Commingled Permit #: \_\_\_\_\_  
 Dual Completion Permit #: \_\_\_\_\_  
 SWD Permit #: \_\_\_\_\_  
 ENHR Permit #: \_\_\_\_\_  
 GSW Permit #: \_\_\_\_\_

| 10/04/2011                        | 10/14/2011      | 10/15/2011                              |
|-----------------------------------|-----------------|---|
| Spud Date or<br>Recompletion Date | Date Reached TD | Completion Date or<br>Recompletion Date |

API No. 15 - 15-151-22380-00-00  
Spot Description: S/2 S/2 N/2 SE S2S2N2SE  
S2 S2 N2 SE Sec. 21 Twp. 27 S. R. 14  East  West  
1485 Feet from  North /  South Line of Section  
1320 Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:  
 NE  NW  SE  SW  
County: Pratt  
Lease Name: Pilot Knob 'A' Well #: 1  
Field Name: Wildcat  
Producing Formation: None  
Elevation: Ground: 2001 Kelly Bushing: 2006  
Total Depth: 4700 Plug Back Total Depth: \_\_\_\_\_  
Amount of Surface Pipe Set and Cemented at: 382 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: 8800 ppm Fluid volume: 400 bbls  
Dewatering method used: Hauled to Disposal  
Location of fluid disposal if hauled offsite:  
Operator Name: T & C Operating inc.  
Lease Name: Trenton License #: 31826  
Quarter NW Sec. 2 Twp. 30 S. R. 7  East  West  
County: Kingman Permit #: 15-095-01345

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

Letter of Confidentiality Received  
Date: \_\_\_\_\_  
 Confidential Release Date: \_\_\_\_\_  
 Wireline Log Received  
 Geologist Report Received  
 UIC Distribution  
ALT  I  II  III Approved by: Deanna Corlier Date: 11/01/2011



1065742

Operator Name: Pickrell Drilling Company, Inc. Lease Name: Pilot Knob 'A' Well #: 1  
 Sec. 21 Twp. 27 S. R. 14  East  West County: Pratt

**INSTRUCTIONS:** Show important tops and base 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. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

|   |  |
|---|--|
| Drill Stem Tests Taken <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No<br><i>(Attach Additional Sheets)</i><br><br>Samples Sent to Geological Survey <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No<br><br>Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No<br>Electric Log Run <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No<br>Electric Log Submitted Electronically <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No<br><i>(If no, Submit Copy)</i><br><br>List All E. Logs Run:<br><br>Dual Induction<br>Compensated Neutron | <input checked="" type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample<br><br>Name Top Datum<br>Attached Attached Attached |
|---|--|

| CASING RECORD <input checked="" 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 |
| Surface Casing  | 12.250            | 8.625                     | 23.00             | 382           | Class A        | 300          | 2%gel, 3% CC               |
|   |                   |                           |                   |               |                |              |                            |
|   |                   |                           |                   |               |                |              |                            |

| 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                     | -                |                |              |                            |

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

|   |           |  |                                   |
|---|-----------|--|-----------------------------------|
| TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ |           | Liner Run: <input type="checkbox"/> Yes <input checked="" 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 (Explain) _____ |                                   |
| Estimated Production Per 24 Hours                         | Oil Bbls. | Gas Mcf  | Water Bbls. Gas-Oil Ratio Gravity |

|   |  |  |
|---|--|--|
| DISPOSITION OF GAS:<br><input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease<br><i>(If vented, Submit ACO-18.)</i> | METHOD OF COMPLETION:<br><input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled<br><i>(Submit ACO-5) (Submit ACO-4)</i><br><input type="checkbox"/> Other (Specify) _____ | PRODUCTION INTERVAL:<br>_____<br>_____ |
|---|--|--|

|           |                                 |
|-----------|---------------------------------|
| Form      | ACO1 - Well Completion          |
| Operator  | Pickrell Drilling Company, Inc. |
| Well Name | Pilot Knob 'A' 1                |
| Doc ID    | 1065742                         |

Tops

|               |      |       |
|---------------|------|-------|
| Heebner       | 3739 | -1533 |
| Lansing       | 3921 | -1915 |
| Stark         | 4199 | -2193 |
| B/Kansas City | 4259 | -2253 |
| Conglomerate  | 4379 | -2373 |
| Mississippi   | 4391 | -2385 |
| Viola         | 4451 | -2445 |
| Simpson Shale | 4533 | -2527 |
| Simpson Sand  | 4544 | -2538 |
| Arbuckle      | 4637 | -2637 |







## DRILL STEM TEST REPORT

Prepared For: **Pickrell Drilling Company Incorporated**

100 South Main  
Suite 505  
Wichita, Kansas 67202+3738

ATTN: Roger Fisha

**21/27S/14W/Pratt**

**Pilot Knob A #1**

Start Date: 2011.10.10 @ 04:59:00

End Date: 2011.10.10 @ 14:50:00

Job Ticket #: 18782                      DST #: 1

Superior Testers Enterprises LLC  
PO Box 138 Great Bend KS 67530  
1-800-792-6902

Printed: 2011.10.10 @ 13:24:50

Pickrell Drilling Company Incorporated

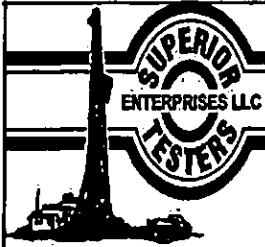
Pilot Knob A #1

21/27S/14W/Pratt

DST # 1

Kansas City Zone B

2011.10.10



# DRILL STEM TEST REPORT

Pickrell Drilling Company Incorporated

Pilot Knob A #1

100 South Main  
Suite 505  
Wichita, Kansas 67202+3738  
ATTN: Roger Fisha

21/27S/14W/Pratt

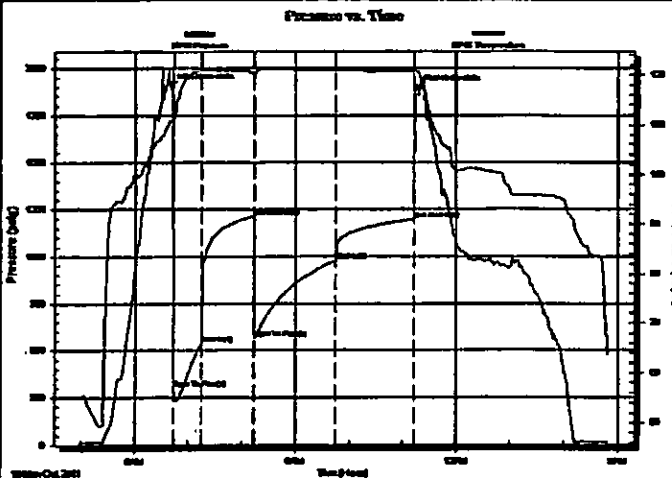
Job Ticket: 18782      DST#: 1  
Test Start: 2011.10.10 @ 04:59:00

## GENERAL INFORMATION:

Formation: Kansas City Zone B  
Deviated: No Whipstock      ft (KB)  
Time Tool Opened: 06:44:00  
Time Test Ended: 14:50:00  
Test Type: Conventional Bottom Hole (Initial)  
Tester: Ken Swinney  
Unit No: 3325 Pratt/16  
Interval: 3952.00 ft (KB) To 3970.00 ft (KB) (TVD)  
Reference Elevations: 1330.00 ft (KB)  
Total Depth: 3970.00 ft (KB) (TVD)      1320.00 ft (CF)  
Hole Diameter: 7.88 Inches Hole Condition: Fair      KB to GR/CF: 10.00 ft

Serial #: 6748      Outside  
Press@RunDepth: 977.78 psig @ 3967.00 ft (KB)      Capacity: 5000.00 psig  
Start Date: 2011.10.10      End Date: 2011.10.10      Last Calib.: 2011.10.10  
Start Time: 04:59:00      End Time: 14:50:00      Time On Btm: 2011.10.10 @ 06:40:00  
Time Off Btm: 2011.10.10 @ 11:17:30

TEST COMMENT: 1ST Open 30 Minutes/Strong blow /Blow built to bottom of bucket in 30 seconds/Gas to surface in 5 minutes  
1ST Shut In 60 Minutes/Blow back built to bottom of bucket  
2ND Open 90 Minutes/Strong blow /Blow built to bottom of bucket in 1 minute  
2ND Shut In 90 Minutes/Blow back built to bottom of bucket



## PRESSURE SUMMARY

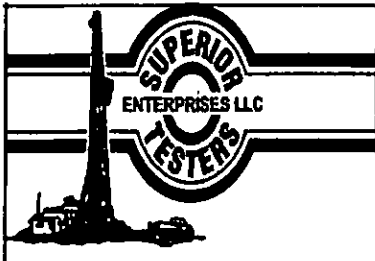
| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1904.01         | 110.77       | Initial Hydro-static |
| 4           | 299.74          | 110.84       | Open To Flow (1)     |
| 35          | 534.34          | 120.74       | Shut-in(1)           |
| 94          | 1214.29         | 120.69       | End Shut-in(1)       |
| 95          | 566.62          | 119.99       | Open To Flow (2)     |
| 185         | 977.78          | 121.00       | Shut-in(2)           |
| 274         | 1198.42         | 120.74       | End Shut-in(2)       |
| 278         | 1890.14         | 120.66       | Final Hydro-static   |

## Recovery

| Length (ft) | Description                      | Volume (bbl) |
|-------------|----------------------------------|--------------|
| 600.00      | Gassy oil                        | 7.61         |
| 0.00        | Gas 15% Oil 85%                  | 0.00         |
| 180.00      | Gassy oil cut w etery mud        | 2.63         |
| 0.00        | Gas 5% Oil 10% Water 20% Mud 65% | 0.00         |
| 1080.00     | Gassy water                      | 15.79        |
| 0.00        | Gas 10% Water 90%                | 0.00         |

## Gas Rates

|                | Choke (Inches) | Pressure (psig) | Gas Rate (Mcf/d) |
|----------------|----------------|-----------------|------------------|
| First Gas Rate | 0.75           | 4.84            | 77.79            |
| Last Gas Rate  | 0.13           | 5.35            | 2.05             |
| Max. Gas Rate  | 0.13           | 8.80            | 3.35             |



# DRILL STEM TEST REPORT

Rekreif Drilling Company Incorporated

Pilot Knob A #1

100 South Main  
Suite 505  
Wichita, Kansas 67202+3738  
ATTN: Roger Fisha

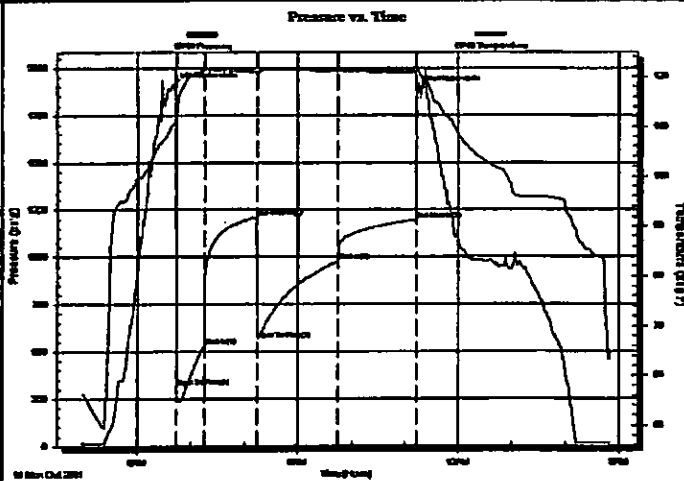
21/27S/14W/Pratt  
Job Ticket: 18782 DST#: 1  
Test Start: 2011.10.10 @ 04:59:00

## GENERAL INFORMATION:

Formation: Kansas City Zone B  
 Deviated: No Whipstock ft (KB)  
 Time Tool Opened: 06:44:00  
 Time Test Ended: 14:50:00  
 Interval: 3952.00 ft (KB) To 3970.00 ft (KB) (TVD)  
 Total Depth: 3970.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches  
 Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Ken Swinney  
 Unit No: 3325 Pratt/16  
 Reference Elevations: 1330.00 ft (KB)  
 1320.00 ft (CF)  
 KB to GR/CF: 10.00 ft

Serial #: 6749 Inside  
 Press@RunDepth: 1197.00 psig @ 3966.00 ft (KB) Capacity: 5000.00 psig  
 Start Date: 2011.10.10 End Date: 2011.10.10 Last Calib.: 2011.10.10  
 Start Time: 04:59:00 End Time: 14:50:30 Time On Btm: 2011.10.10 @ 06:40:00  
 Time Off Btm: 2011.10.10 @ 11:15:00

TEST COMMENT: 1ST Open 30 Mintues/Strong blow /Blow built to bottom of bucket in 30 seconds/Gas to surface in 5 minutes  
 1ST Shut In 60 Mintues/Blow back built to bottom of bucket  
 2ND Open 90 Mintues/Strong blow /Blow built to bottom of bucket in 1 minute  
 2ND Shut In 90 Mintues/Blow back built to bottom of bucket



## PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1905.01         | 110.50       | Initial Hydro-static |
| 4           | 313.21          | 110.74       | Open To Flow (1)     |
| 35          | 531.78          | 121.16       | Shut-In(1)           |
| 94          | 1212.22         | 121.04       | End Shut-In(1)       |
| 95          | 568.55          | 120.48       | Open To Flow (2)     |
| 185         | 976.18          | 121.25       | Shut-In(2)           |
| 274         | 1197.00         | 120.94       | End Shut-In(2)       |
| 275         | 1887.05         | 121.30       | Final Hydro-static   |

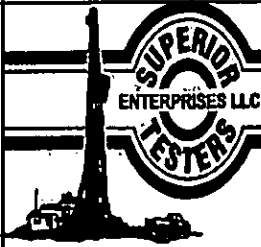
## Recovery

| Length (ft) | Description                      | Volume (bbl) |
|-------------|----------------------------------|--------------|
| 600.00      | Gassy oil                        | 7.61         |
| 0.00        | Gas 15% Oil 85%                  | 0.00         |
| 180.00      | Gassy oil cut w atery mud        | 2.63         |
| 0.00        | Gas 5% Oil 10% Water 20% Mud 65% | 0.00         |
| 1080.00     | Gassy water                      | 15.79        |
| 0.00        | Gas 10% Water 90%                | 0.00         |

## Gas Rates

|                | Choke (Inches) | Pressure (psig) | Gas Rate (Mcfd) |
|----------------|----------------|-----------------|-----------------|
| First Gas Rate | 0.75           | 4.84            | 77.79           |
| Last Gas Rate  | 0.13           | 5.35            | 2.05            |
| Max. Gas Rate  | 0.13           | 8.80            | 3.35            |





# DRILL STEM TEST REPORT

TOOL DIAGRAM

Pickrell Drilling Company Incorporated

Pilot Knob A #1

100 South Main  
 Suite 505  
 Wichita, Kansas 67202+3738  
 ATTN: Roger Fisha

21/27S/14W/Pratt

Job Ticket: 18782

DST#: 1

Test Start: 2011.10.10 @ 04:59:00

## Tool Information

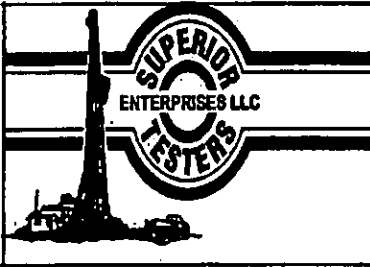
|                           |                    |                       |                                |                                    |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe:               | Length: 3832.00 ft | Diameter: 3.88 inches | Volume: 56.04 bbl              | Tool Weight: 2000.00 lb            |
| Heavy Wt. Pipe:           | Length: 0.00 ft    | Diameter: 0.00 inches | Volume: 0.00 bbl               | Weight set on Packer: 20000.00 lb  |
| Drill Collar:             | Length: 120.00 ft  | Diameter: 2.25 inches | Volume: 0.59 bbl               | Weight to Pull Loose: 60000.00 lb  |
|                           |                    |                       | <u>Total Volume: 56.63 bbl</u> | Tool Chased 0.00 ft                |
| Drill Pipe Above KB:      | 20.00 ft           |                       |                                | String Weight: Initial 50000.00 lb |
| Depth to Top Packer:      | 3952.00 ft         |                       |                                | Final 57000.00 lb                  |
| Depth to Bottom Packer:   | ft                 |                       |                                |                                    |
| Interval between Packers: | 18.00 ft           |                       |                                |                                    |
| Tool Length:              | 38.00 ft           |                       |                                |                                    |
| Number of Packers:        | 2                  | Diameter: 6.75 inches |                                |                                    |

Tool Comments:

## Tool Description

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths                |
|------------------|-------------|------------|----------|------------|-------------------------------|
| Shut-In tool     | 5.00        |            |          | 3937.00    |                               |
| HYD S.L Tool     | 5.00        |            |          | 3942.00    |                               |
| Packer           | 5.00        |            |          | 3947.00    | 20.00 Bottom Of Top Packer    |
| Packer           | 5.00        |            |          | 3952.00    |                               |
| Anchor           | 13.00       |            |          | 3965.00    |                               |
| Recorder         | 1.00        | 6749       | Inside   | 3966.00    |                               |
| Recorder         | 1.00        | 6748       | Outside  | 3967.00    |                               |
| Bull plug        | 3.00        |            |          | 3970.00    | 18.00 Bottom Packers & Anchor |

**Total Tool Length: 38.00**



# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Pickrell Drilling Company Incorporated

**Pilot Knob A #1**

100 South Mah  
 Suite 505  
 Wichita, Kansas 67202+3738  
 ATTN: Roger Fisha

**21/27S/14W/Pratt**  
 Job Ticket: 18782      **DST#: 1**  
 Test Start: 2011.10.10 @ 04:59:00

## Mud and Cushion Information

|                                  |                            |                 |         |
|----------------------------------|----------------------------|-----------------|---------|
| Mud Type: Gel Chem               | Cushion Type:              | Oil Apt:        | deg API |
| Mud Weight: 9.00 lb/gal          | Cushion Length: ft         | Water Salinity: | ppm     |
| Viscosity: 51.00 sec/qt          | Cushion Volume: bbl        |                 |         |
| Water Loss: 9.19 in <sup>3</sup> | Gas Cushion Type:          |                 |         |
| Resistivity: ohm.m               | Gas Cushion Pressure: psig |                 |         |
| Salinity: 4500.00 ppm            |                            |                 |         |
| Filter Cake: 1.00 inches         |                            |                 |         |

## Recovery Information

Recovery Table

| Length ft | Description                      | Volume bbl |
|-----------|----------------------------------|------------|
| 600.00    | Gassy oil                        | 7.610      |
| 0.00      | Gas 15% Oil 85%                  | 0.000      |
| 180.00    | Gassy oil cut watery mud         | 2.632      |
| 0.00      | Gas 5% Oil 10% Water 20% Mud 65% | 0.000      |
| 1080.00   | Gassy water                      | 15.794     |
| 0.00      | Gas 10% Water 90%                | 0.000      |
| 120.00    | Mud with show of oil             | 1.755      |
| 0.00      | Mud 98% 2%                       | 0.000      |
| 0.00      | Recovery Chlorides 110000 ppm    | 0.000      |
| 0.00      | Gravity of oil corrected 32      | 0.000      |

Total Length: 1980.00 ft      Total Volume: 27.791 bbl

Num Fluid Samples: 0

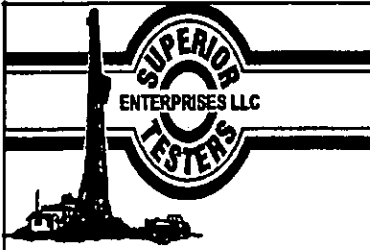
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



# DRILL STEM TEST REPORT

**GAS RATES**

Pickrell Drilling Company Incorporated

**Pilot Knob A #1**

100 South Main  
 Suite 505  
 Wichita, Kansas 67202+3738  
 ATTN: Roger Fisha

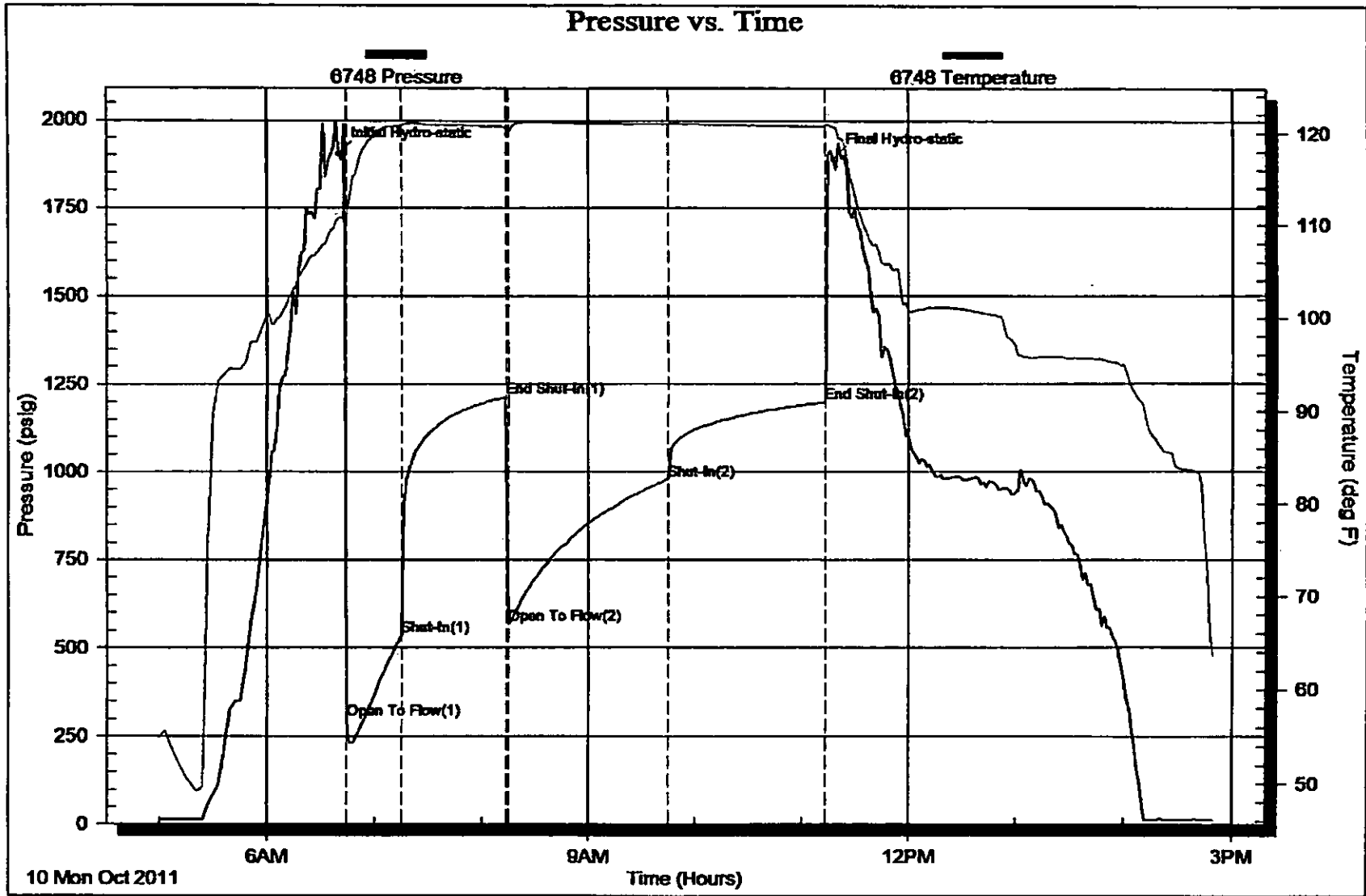
**21/27S/14W/Pratt**  
 Job Ticket: 18782      **DST#: 1**  
 Test Start: 2011.10.10 @ 04:59:00

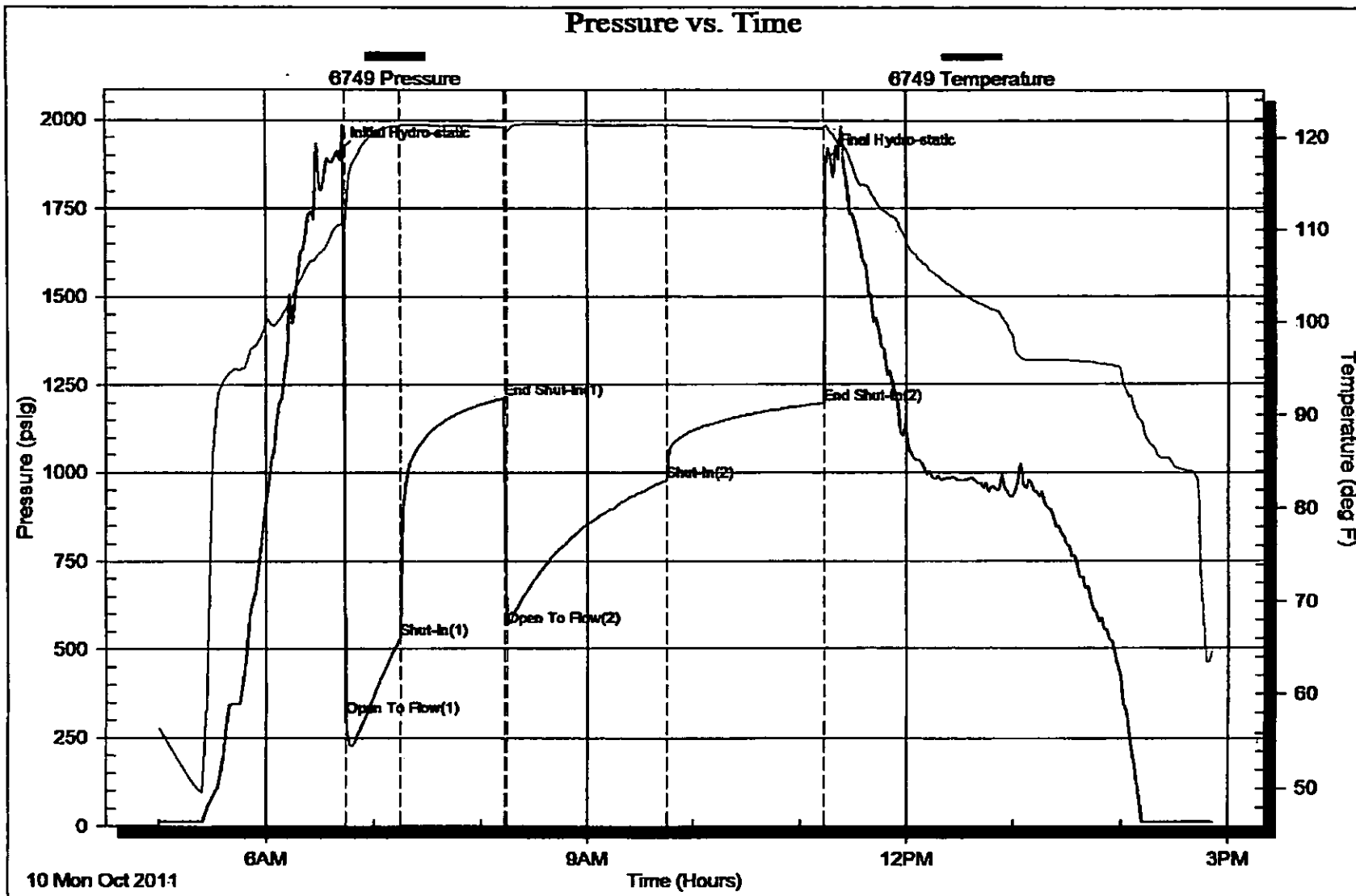
## Gas Rates Information

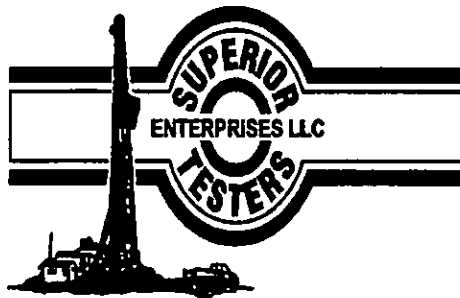
Temperature: 59 (deg F)  
 Relative Density: 0.65  
 Z Factor: 0.8

Gas Rates Table:

| Flow Period | Elapsed Time | Choke (Inches) | Pressure (psig) | Gas Rate (Mcf/d) |
|-------------|--------------|----------------|-----------------|------------------|
| 1           | 7            | 0.75           | 4.84            | 77.79            |
| 1           | 7            | 0.75           | 4.84            | 77.79            |
| 1           | 10           | 0.75           | 3.40            | 55.29            |
| 1           | 20           | 0.25           | 4.83            | 7.88             |
| 1           | 30           | 0.25           | 4.48            | 7.33             |
| 2           | 10           | 0.13           | 6.10            | 2.34             |
| 2           | 20           | 0.13           | 4.94            | 1.90             |
| 2           | 30           | 0.13           | 3.30            | 1.29             |
| 2           | 40           | 0.13           | 5.88            | 2.25             |
| 2           | 50           | 0.13           | 3.57            | 1.39             |
| 2           | 60           | 0.13           | 8.80            | 3.35             |
| 2           | 70           | 0.13           | 7.85            | 2.99             |
| 2           | 80           | 0.13           | 5.35            | 2.05             |







## DRILL STEM TEST REPORT

Prepared For: **Pickrell Drilling Company Incorporated**

100 South Main  
Suite 505  
Wichita, Kansas 67202+3738

ATTN: Roger Fisha

**21/27S/14W/Pratt**

**Pilot Knob A #1**

Start Date: 2011.10.12 @ 03:30:00

End Date: 2011.10.12 @ 08:19:00

Job Ticket #: 18783                      DST #: 2

Superior Testers Enterprises LLC  
PO Box 138 Great Bend KS 67530  
1-800-792-6902

Printed: 2011.10.12 @ 06:38:10

Pickrell Drilling Company Incorporated

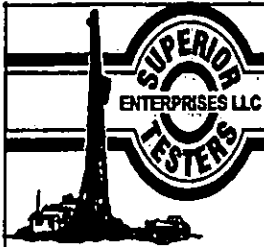
Pilot Knob A #1

21/27S/14W/Pratt

DST # 2

Mississippi

2011.10.12



# DRILL STEM TEST REPORT

Pickrell Drilling Company Incorporated

Pilot Knob A #1

100 South Main  
Suite 505  
Wichita, Kansas 67202+3738  
ATTN: Roger Fisha

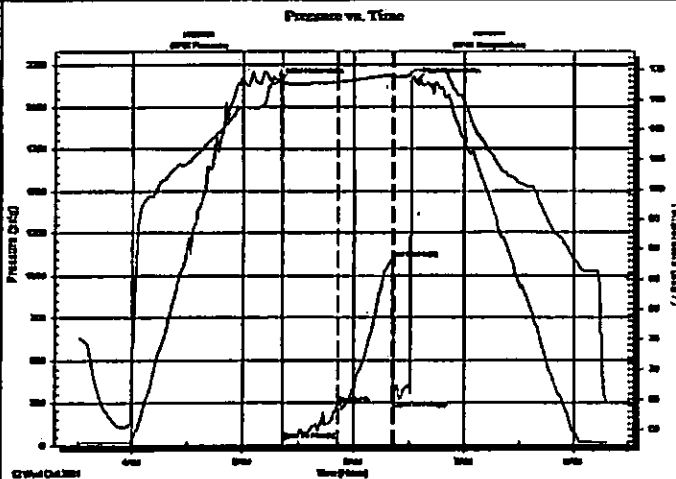
21/27S/14W/Pratt  
Job Ticket: 18783      DST#: 2  
Test Start: 2011.10.12 @ 03:30:00

## GENERAL INFORMATION:

Formation: Mississippian  
Deviated: No Whipstock      ft (KB)  
Time Tool Opened: 05:21:30  
Time Test Ended: 08:19:00  
Test Type: Conventional Bottom Hole (Initial)  
Tester: Ken Sw Inney  
Unit No: 3325 Pratt/16  
Interval: 4410.00 ft (KB) To 4420.00 ft (KB) (TVD)  
Reference Elevations: 1330.00 ft (KB)  
Total Depth: 4420.00 ft (KB) (TVD)      1320.00 ft (CF)  
Hole Diameter: 7.88 inches      Hole Condition: Fair      KB to GR/CF: 10.00 ft

Serial #: 6748      Outside  
Press@RunDepth: 242.75 psig @ 4417.00 ft (KB)      Capacity: 5000.00 psig  
Start Date: 2011.10.12      End Date: 2011.10.12      Last Calb.: 2011.10.12  
Start Time: 03:30:00      End Time: 08:19:00      Time On Btrc: 2011.10.12 @ 05:19:30  
Time Off Btrc: 2011.10.12 @ 06:34:00

TEST COMMENT: 1ST Open      30 Minutes/Weak blow /Blow built to 1/4 inch/Blow died in 25 minutes  
1ST Shut In      30 Minutes/No blow back  
2ND Open      10 Minutes/No blow /Pull tool



## PRESSURE SUMMARY

| Time (Mn.) | Pressure (psig) | Temp (deg F) | Annotation           |
|------------|-----------------|--------------|----------------------|
| 0          | 2153.89         | 117.86       | Initial Hydro-static |
| 2          | 31.90           | 117.73       | Open To Flow (1)     |
| 32         | 242.75          | 117.98       | Shut-in(1)           |
| 62         | 1098.93         | 119.06       | End Shut-in(1)       |
| 63         | 213.89          | 118.78       | Open To Flow (2)     |
| 75         | 2150.42         | 119.99       | Final Hydro-static   |

## Recovery

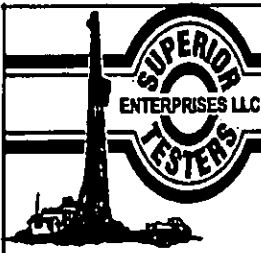
| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 5.00        | Mud 100%    | 0.02         |
|             |             |              |
|             |             |              |
|             |             |              |
|             |             | 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

## Gas Rates

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







# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Pickrell Drilling Company Incorporated  
 100 South Main  
 Suite 505  
 Wichita, Kansas 67202+3738  
 ATTN: Roger Fisha

**Pilot Knob A #1**  
**21/27S/14W/Pratt**  
 Job Ticket: 18783      **DST#: 2**  
 Test Start: 2011.10.12 @ 03:30:00

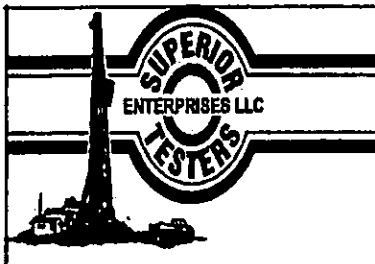
**Tool Information**

|                           |                    |                       |                                |                                    |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe:               | Length: 4273.00 ft | Diameter: 3.88 inches | Volume: 62.49 bbl              | Tool Weight: 2000.00 lb            |
| Heavy Wt. Pipe:           | Length: 0.00 ft    | Diameter: 0.00 inches | Volume: 0.00 bbl               | Weight set on Packer: 20000.00 lb  |
| Drill Collar:             | Length: 120.00 ft  | Diameter: 2.25 inches | Volume: 0.59 bbl               | Weight to Pull Loose: 60000.00 lb  |
|                           |                    |                       | <b>Total Volume: 63.08 bbl</b> | Tool Chased 0.00 ft                |
| Drill Pipe Above KB:      | 3.00 ft            |                       |                                | String Weight: Initial 53000.00 lb |
| Depth to Top Packer:      | 4410.00 ft         |                       |                                | Final 53000.00 lb                  |
| Depth to Bottom Packer:   | ft                 |                       |                                |                                    |
| Interval between Packers: | 10.00 ft           |                       |                                |                                    |
| Tool Length:              | 30.00 ft           |                       |                                |                                    |
| Number of Packers:        | 2                  | Diameter: 6.75 inches |                                |                                    |

Tool Comments:

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths                     |
|------------------|-------------|------------|----------|------------|------------------------------------|
| Shut-in tool     | 5.00        |            |          | 4395.00    |                                    |
| Hydraulic Tool   | 5.00        |            |          | 4400.00    |                                    |
| Packer           | 5.00        |            |          | 4405.00    | 20.00      Bottom Of Top Packer    |
| Packer           | 5.00        |            |          | 4410.00    |                                    |
| Anchor           | 5.00        |            |          | 4415.00    |                                    |
| Recorder         | 1.00        | 6749       | Inside   | 4416.00    |                                    |
| Recorder         | 1.00        | 6748       | Outside  | 4417.00    |                                    |
| Bull plug        | 3.00        |            |          | 4420.00    | 10.00      Bottom Packers & Anchor |

**Total Tool Length: 30.00**



# DRILL STEM TEST REPORT

FLUID SUMMARY

Pickrell Drilling Company Incorporated

Pilot Knob A #1

100 South Main  
 Suite 505  
 Wichita, Kansas 67202+3738  
 ATTN: Roger Fisha

21/27S/14W/Pratt  
 Job Ticket: 18783      DST#: 2  
 Test Start: 2011.10.12 @ 03:30:00

## Mud and Cushion Information

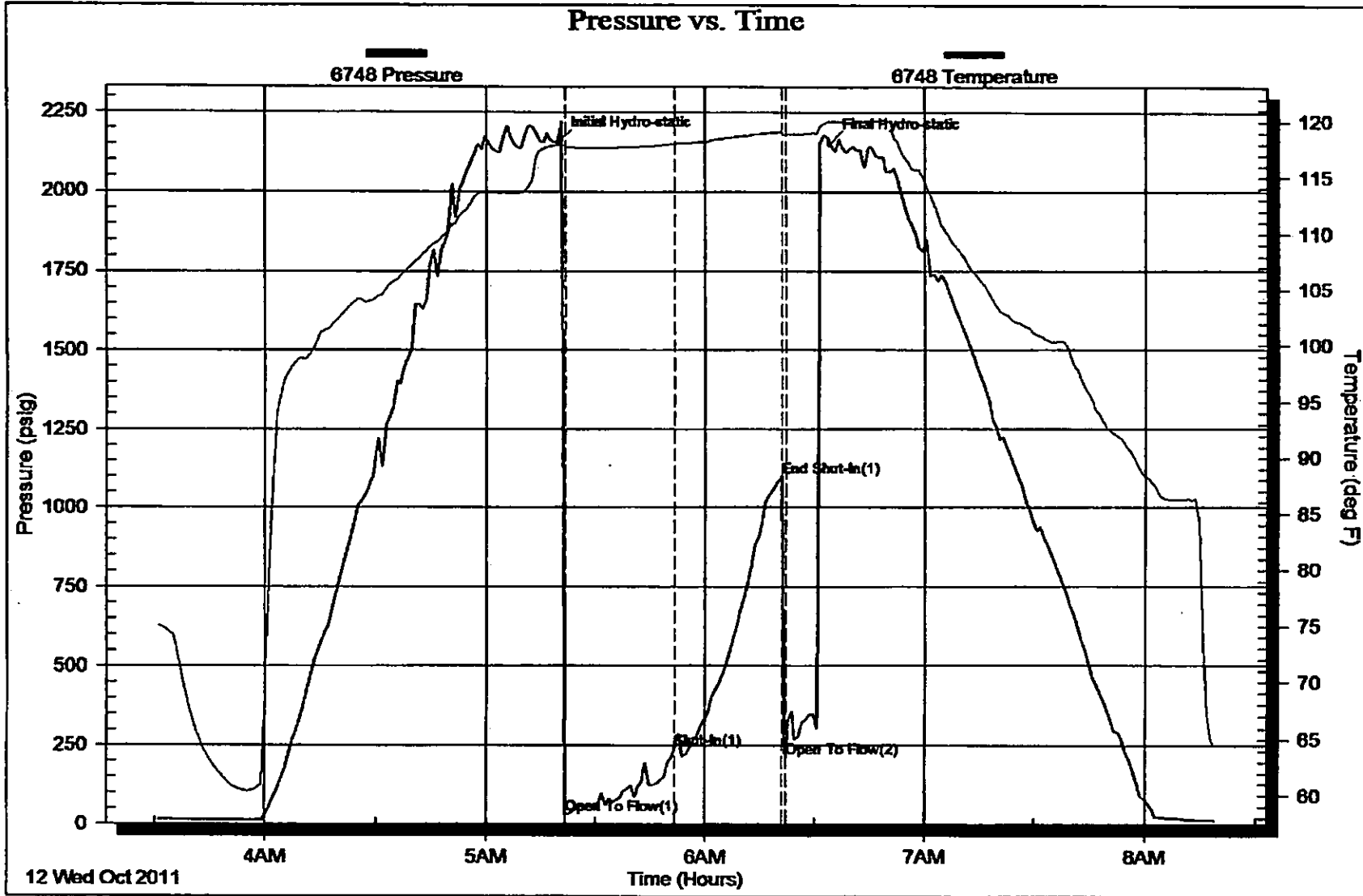
|                                   |                            |                 |         |
|-----------------------------------|----------------------------|-----------------|---------|
| Mud Type: Gel Chem                | Cushion Type:              | Oil API:        | deg API |
| Mud Weight: 9.00 lb/gal           | Cushion Length: ft         | Water Salinity: | ppm     |
| Viscosity: 71.00 sec/qt           | Cushion Volume: bbl        |                 |         |
| Water Loss: 10.99 in <sup>2</sup> | Gas Cushion Type:          |                 |         |
| Resistivity: ohm.m                | Gas Cushion Pressure: psig |                 |         |
| Salinity: 7500.00 ppm             |                            |                 |         |
| Filter Cake: 1.00 inches          |                            |                 |         |

## Recovery Information

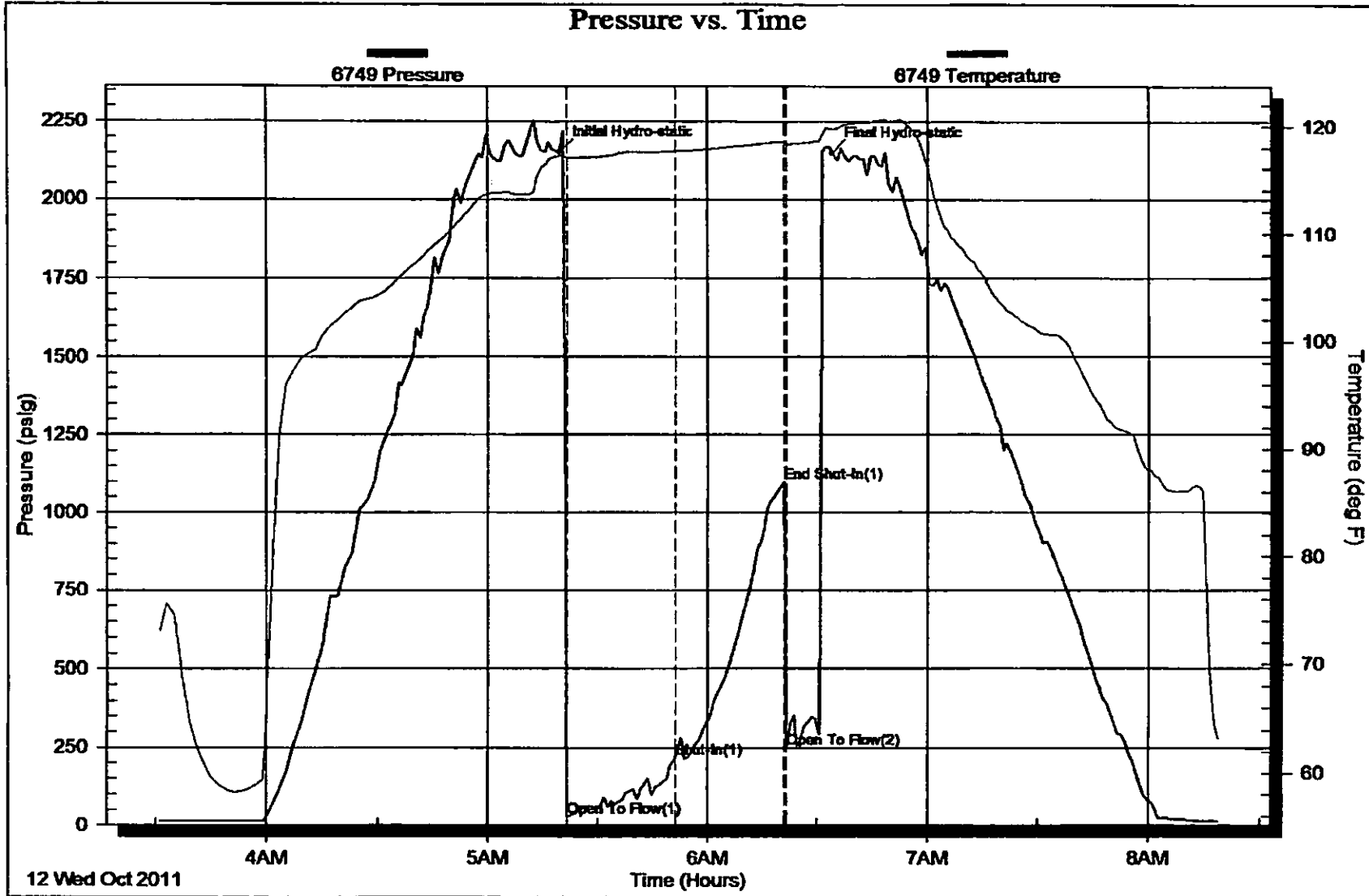
Recovery Table

| Length<br>ft | Description | Volume<br>bbl |
|--------------|-------------|---------------|
| 5.00         | Mud 100%    | 0.025         |

Total Length: 5.00 ft      Total Volume: 0.025 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:



12 Wed Oct 2011





## DRILL STEM TEST REPORT

Prepared For: **Pickrell Drilling Company Incorporated**

100 South Main  
Suite 505  
Wichita, Kansas 67202+3738

ATTN: Roger Fisher

**21/27S/14W/Pratt**

**Pilot Knob A #1**

Start Date: 2011.10.12 @ 19:50:00

End Date: 2011.10.13 @ 00:34:00

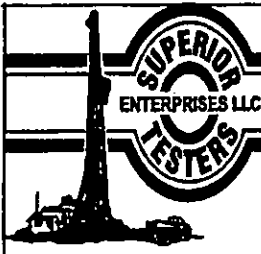
Job Ticket #: 18784                      DST #: 3

Superior Testers Enterprises LLC  
PO Box 138 Great Bend KS 67530  
1-800-792-6902

Printed: 2011.10.12 @ 22:56:34

Pickrell Drilling Company Incorporated    Pilot Knob A #1    21/27S/14W/Pratt    DST # 3    Viola    2011.10.12





# DRILL STEM TEST REPORT

Pickrell Drilling Company Incorporated  
 100 South Main  
 Suite 505  
 Wichita, Kansas 67202+3738  
 ATTN: Roger Fisher

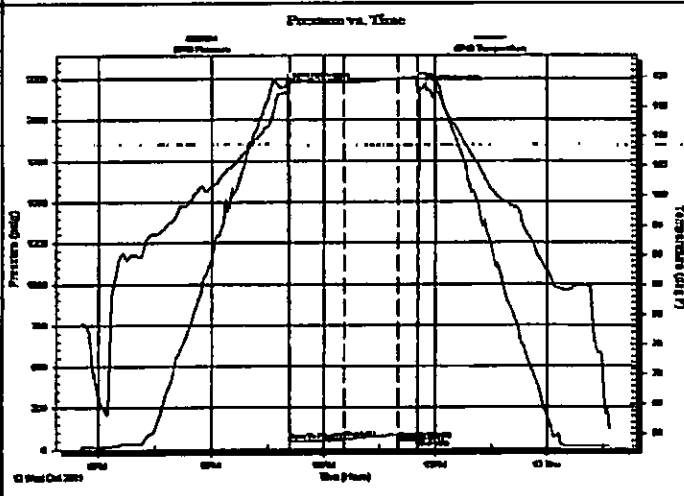
Pilot Knob A #1  
 21/27S/14W/Pratt  
 Job Ticket: 18784      DST#: 3  
 Test Start: 2011.10.12 @ 19:50:00

## GENERAL INFORMATION:

Formation: Viola  
 Deviated: No Whipstock      ft (KB)  
 Time Tool Opened: 21:41:30  
 Time Test Ended: 00:34:00  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Ken Swinney  
 Unit No: 3325 Pratt/16  
 Interval: 4477.00 ft (KB) To 4516.00 ft (KB) (TVD)  
 Reference Elevations: 1330.00 ft (KB)  
 Total Depth: 4516.00 ft (KB) (TVD)  
 1320.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair      KB to GR/CF: 10.00 ft

Serial #: 6749      Inside  
 Press@RunDepth: 84.27 psig @ 4512.00 ft (KB)      Capacity: 5000.00 psig  
 Start Date: 2011.10.12      End Date: 2011.10.13      Last Calib.: 2011.10.12  
 Start Time: 19:50:00      End Time: 00:34:00      Time On Btm: 2011.10.12 @ 21:40:00  
 Time Off Btm: 2011.10.12 @ 22:52:00

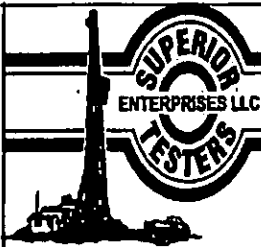
TEST COMMENT: 1ST Open      30 Minutes/Weak blow /Blow built to 1/4 inch/Blow died in 20 minutes  
 1ST Shut In      30 Minutes/No blow back  
 2ND Open      10 Minutes/No blow /10 minutes pull tool



| PRESSURE SUMMARY |                 |              |                      |
|------------------|-----------------|--------------|----------------------|
| Time (Min.)      | Pressure (psig) | Temp (deg F) | Annotation           |
| 0                | 2204.84         | 117.35       | Initial Hydro-static |
| 2                | 47.31           | 118.72       | Open To Flow (1)     |
| 31               | 58.48           | 119.21       | Shut-in(1)           |
| 60               | 84.27           | 119.64       | End Shut-in(1)       |
| 61               | 54.53           | 119.64       | Open To Flow (2)     |
| 71               | 56.22           | 119.93       | Shut-in(2)           |
| 72               | 2187.77         | 120.53       | Final Hydro-static   |

| Recovery    |             |              |
|-------------|-------------|--------------|
| Length (ft) | Description | Volume (bbl) |
| 5.00        | Mud 100%    | 0.02         |
|             |             |              |
|             |             |              |
|             |             |              |
|             |             |              |

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



# DRILL STEM TEST REPORT

TOOL DIAGRAM

Pickrell Drilling Company Incorporated

Pilot Knob A #1

100 South Main  
 Suite 505  
 Wichita, Kansas 67202+3738  
 ATTN: Roger Fisher

21/27S/14W/Pratt  
 Job Ticket: 18784      DST#: 3  
 Test Start: 2011.10.12 @ 19:50:00

## Tool Information

|                           |                    |                       |                                |                                   |
|---------------------------|--------------------|-----------------------|--------------------------------|-----------------------------------|
| Drill Pipe:               | Length: 4367.00 ft | Diameter: 3.88 inches | Volume: 63.86 bbl              | Tool Weight: 2000.00 lb           |
| Heavy Wt. Pipe:           | Length: 0.00 ft    | Diameter: 0.00 inches | Volume: 0.00 bbl               | Weight set on Packer: 20000.00 lb |
| Drill Collar:             | Length: 120.00 ft  | Diameter: 2.25 inches | Volume: 0.59 bbl               | Weight to Pull Loose: lb          |
|                           |                    |                       | <u>Total Volume: 64.45 bbl</u> | Tool Chased: ft                   |
| Drill Pipe Above KB:      | 30.00 ft           |                       |                                | String Weight: Initial lb         |
| Depth to Top Packer:      | 4477.00 ft         |                       |                                | Final lb                          |
| Depth to Bottom Packer:   | ft                 |                       |                                |                                   |
| Interval between Packers: | 39.00 ft           |                       |                                |                                   |
| Tool Length:              | 59.00 ft           |                       |                                |                                   |
| Number of Packers:        | 2                  | Diameter: 6.75 inches |                                |                                   |

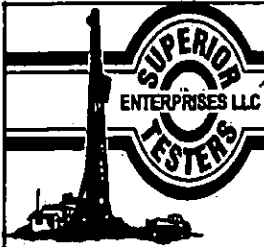
Tool Comments:

## Tool Description

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths                     |
|------------------|-------------|------------|----------|------------|------------------------------------|
| Shut-in tool     | 5.00        |            |          | 4462.00    |                                    |
| Hydraulic tool   | 5.00        |            |          | 4467.00    |                                    |
| Packer           | 5.00        |            |          | 4472.00    | 20.00      Bottom Of Top Packer    |
| Packer           | 5.00        |            |          | 4477.00    |                                    |
| Anchor           | 34.00       |            |          | 4511.00    |                                    |
| Recorder         | 1.00        | 6749       | Inside   | 4512.00    |                                    |
| Recorder         | 1.00        | 6748       | Outside  | 4513.00    |                                    |
| Bull plug        | 3.00        |            |          | 4516.00    | 39.00      Bottom Packers & Anchor |

**Total Tool Length: 59.00**





# DRILL STEM TEST REPORT

FLUID SUMMARY

Pickrell Drilling Company Incorporated

Pilot Knob A #1

100 South Main  
 Suite 505  
 Wichita, Kansas 67202+3738  
 ATTN: Roger Fisher

21/27S/14W/Pratt  
 Job Ticket: 18784      DST#: 3  
 Test Start: 2011.10.12 @ 19:50:00

## 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: 46.00 sec/qt           | Cushion Volume: bbl        |                 |         |
| Water Loss: 11.19 in <sup>2</sup> | Gas Cushion Type:          |                 |         |
| Resistivity: ohm.m                | Gas Cushion Pressure: psig |                 |         |
| Salinity: 8000.00 ppm             |                            |                 |         |
| Filter Cake: 1.00 inches          |                            |                 |         |

## Recovery Information

Recovery Table

| Length<br>ft | Description | Volume<br>bbl |
|--------------|-------------|---------------|
| 5.00         | Mud 100%    | 0.025         |

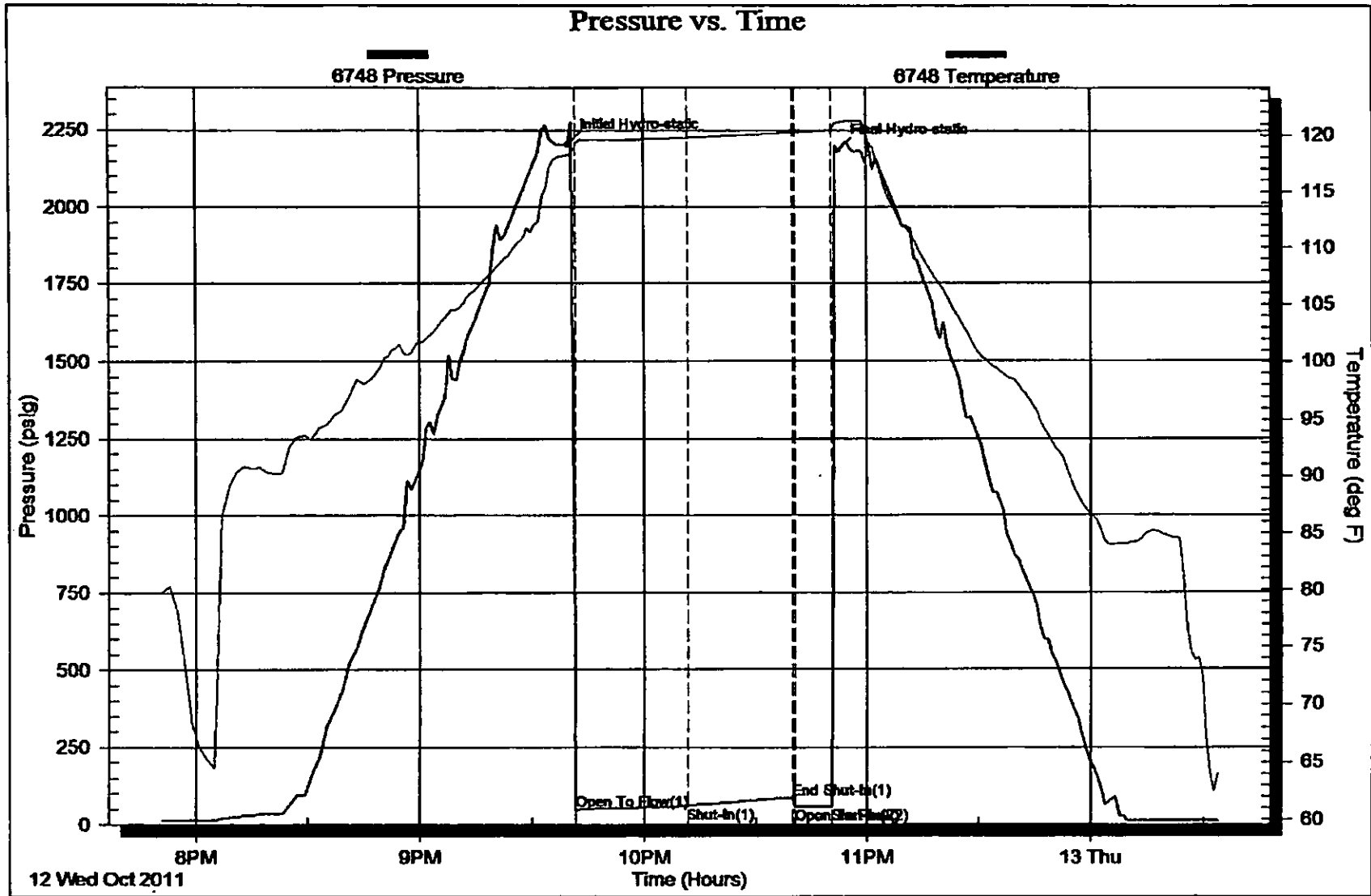
Total Length: 5.00 ft      Total Volume: 0.025 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:

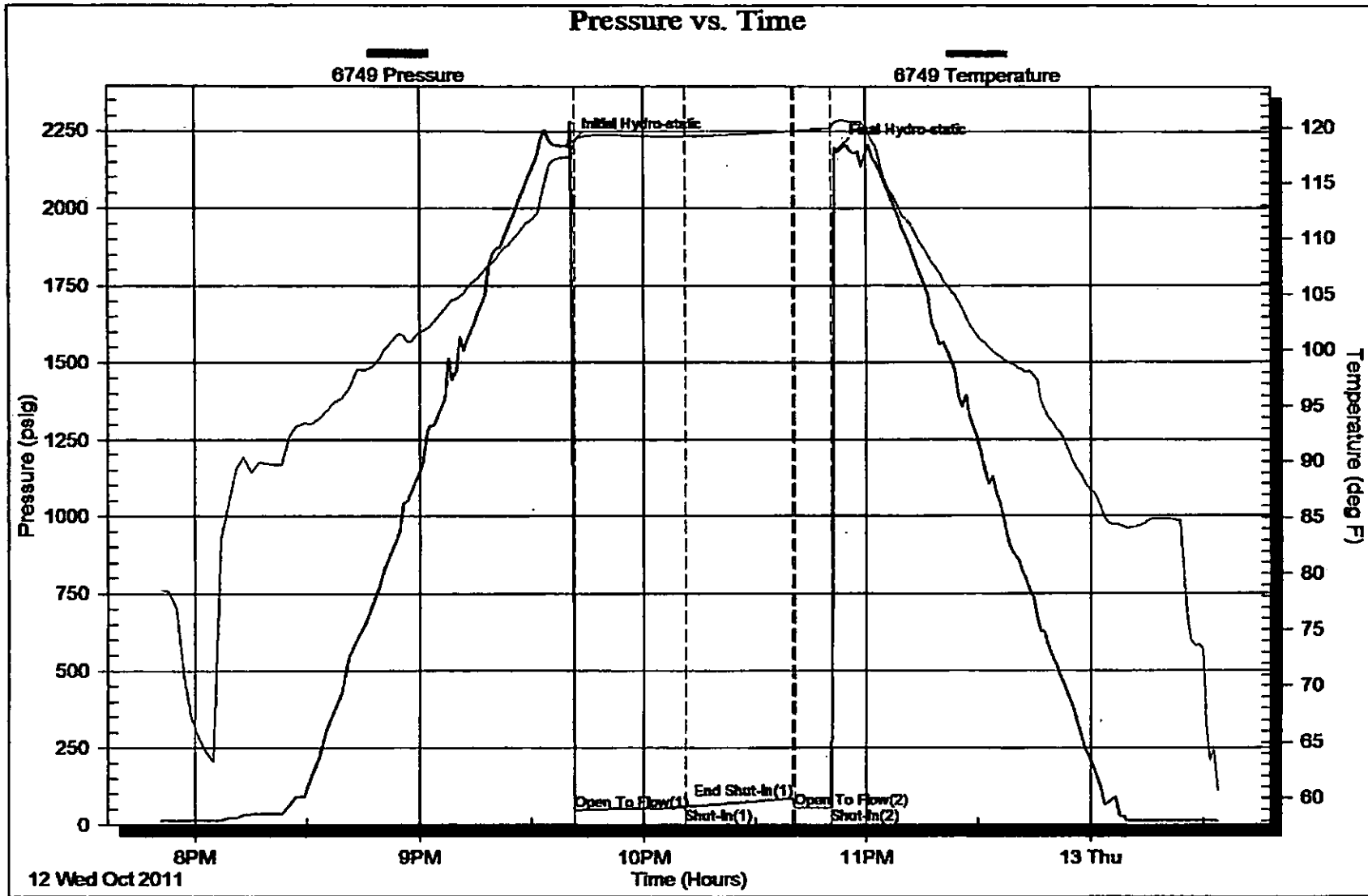
Serial #: 6748

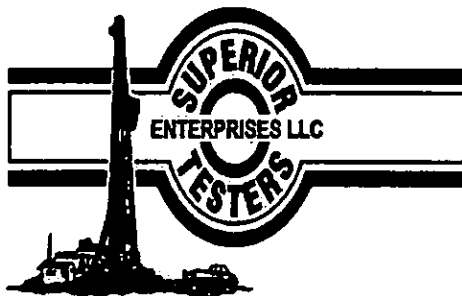
Outside Rickrell Drilling Company Incorporated

21/27S14W/Ratt

DST Test Number: 3







## DRILL STEM TEST REPORT

Prepared For: **Pickrell Drilling Company Incorporated**

100 South Main  
Suite 505  
Wichita, Kansas 67202+3738

ATTN: Roger Fisher

**21/27S/14W/Pratt**

**Pilot Knob A #1**

Start Date: 2011.10.13 @ 14:22:00

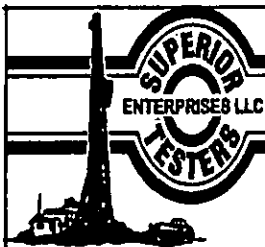
End Date: 2011.10.14 @ 00:56:00

Job Ticket #: 18785                      DST #: 4

Superior Testers Enterprises LLC  
PO Box 138 Great Bend KS 67530  
1-800-792-6902

Printed: 2011.10.13 @ 23:08:38

Pickrell Drilling Company Incorporated  
Pilot Knob A #1  
21/27S/14W/Pratt  
DST # 4  
Simpson Sand  
2011.10.13



# DRILL STEM TEST REPORT

Pickrell Drilling Company Incorporated

Pilot Knob A #1

100 South Main  
Suite 505  
Wichita, Kansas 67202+3738  
ATTN: Roger Fisher

21/27S/14W/Pratt

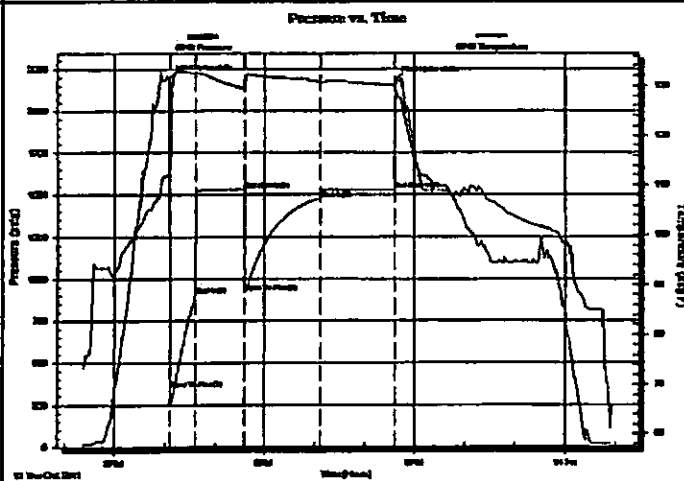
Job Ticket: 18785      DST#: 4  
Test Start: 2011.10.13 @ 14:22:00

## GENERAL INFORMATION:

Formation: Simpson Sand  
Deviated: No Whipstock      ft (KB)  
Time Tool Opened: 16:06:00  
Time Test Ended: 00:56:00  
Test Type: Conventional Bottom Hole (Initial)  
Tester: Ken Swinney  
Unit No: 3325 Pratt/16  
Interval: 4515.00 ft (KB) To 4554.00 ft (KB) (TVD)  
Reference Elevations: 1330.00 ft (KB)  
Total Depth: 4554.00 ft (KB) (TVD)      1320.00 ft (CF)  
Hole Diameter: 7.88 inches      Hole Condition: Fair      KB to GR/CF: 10.00 ft

Serial #: 6748      Outside  
Press@RunDepth: 1475.99 psig @ 4551.00 ft (KB)      Capacity: 5000.00 psig  
Start Date: 2011.10.13      End Date: 2011.10.14      Last Calib.: 2011.10.13  
Start Time: 14:22:00      End Time: 00:56:00      Time On Btm: 2011.10.13 @ 16:04:00  
Time Off Btm: 2011.10.13 @ 20:37:30

TEST COMMENT: 1ST Open      30 Minutes/Strong blow /Blow to bottom of bucket in 45 seconds  
1ST Shut In      60 Minutes/Gas to surface in 18 minutes/Blow back to bottom of bucket  
2ND Open      90 Minutes/Strong blow /Blow to bottom of bucket in 30 seconds  
2ND Shut In      90 Minutes/Blow back to bottom of bucket



## PRESSURE SUMMARY

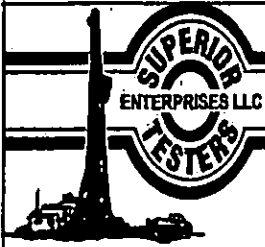
| Time (Mn.) | Pressure (psig) | Temp (deg F) | Annotation           |
|------------|-----------------|--------------|----------------------|
| 0          | 2193.73         | 112.17       | Initial Hydro-static |
| 2          | 347.69          | 111.13       | Open To Flow (1)     |
| 33         | 906.17          | 132.51       | Shut-In(1)           |
| 92         | 1530.23         | 129.63       | End Shut-In(1)       |
| 92         | 921.31          | 129.46       | Open To Flow (2)     |
| 183        | 1475.99         | 130.76       | Shut-In(2)           |
| 273        | 1531.46         | 130.03       | End Shut-In(2)       |
| 274        | 2182.81         | 129.17       | Final Hydro-static   |

## Recovery

| Length (ft) | Description                      | Volums (bbl) |
|-------------|----------------------------------|--------------|
| 900.00      | Oil and Mud cut Gassy Water      | 12.00        |
| 0.00        | Oil 5% Mud 10% Gas 20% Water 65% | 0.00         |
| 2280.00     | Mud cut Gassy Water              | 33.34        |
| 0.00        | Mud 2% Gas 5% Water 93%          | 0.00         |
| 180.00      | Mud 100%                         | 2.63         |
| 0.00        | Recovery Chlorides 51000 ppm     | 0.00         |

## Gas Rates

|                | Choke (Inches) | Pressure (psig) | Gas Rate (Mcf/d) |
|----------------|----------------|-----------------|------------------|
| First Gas Rate | 0.13           | 9.00            | 3.42             |
| Last Gas Rate  | 0.38           | 5.20            | 19.56            |
| Max. Gas Rate  | 0.25           | 10.20           | 16.40            |



# DRILL STEM TEST REPORT

Pickrell Drilling Company Incorporated

Pilot Knob A #1

100 South Main  
Suite 505  
Wichita, Kansas 67202+3738  
ATTN: Roger Fisher

21/27S/14W/Pratt

Job Ticket: 18785

DST#: 4

Test Start: 2011.10.13 @ 14:22:00

## GENERAL INFORMATION:

Formation: Simpson Sand

Deviated: No Whipstock ft (KB)

Time Tool Opened: 16:06:00

Time Test Ended: 00:56:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Pratt/16

Interval: 4515.00 ft (KB) To 4554.00 ft (KB) (TVD)

Total Depth: 4554.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1330.00 ft (KB)

1320.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 6749

Inside

Press@RunDepth: 1530.40 psig @ 4550.00 ft (KB)

Capacity: 5000.00 psig

Start Date: 2011.10.13

End Date:

2011.10.14

Last Calib.: 2011.10.13

Start Time: 14:22:00

End Time:

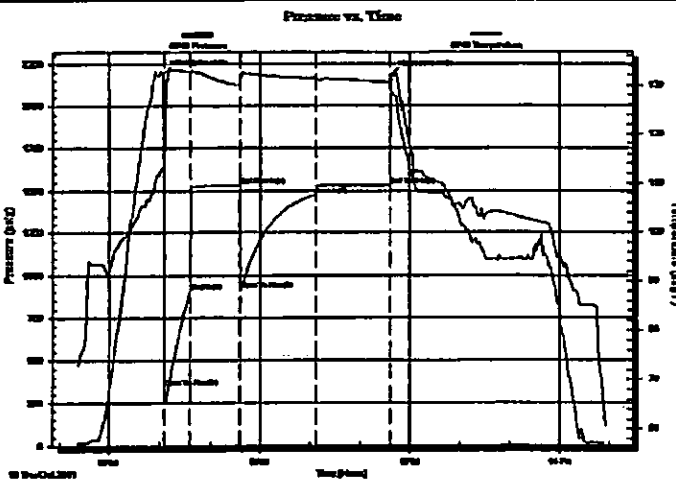
00:55:30

Time On Btm: 2011.10.13 @ 16:04:00

Time Off Btm: 2011.10.13 @ 20:38:30

## TEST COMMENT:

1ST Open 30 Minutes/Strong blow /Blow to bottom of bucket in 45 seconds  
 1ST Shut In 60 Minutes/Gas to surface in 18 minutes/Blow back to bottom of bucket  
 2ND Open 90 Minutes/Strong blow /Blow to bottom of bucket in 30 seconds  
 2ND Shut In 90 Minutes/Blow back to bottom of bucket



## PRESSURE SUMMARY

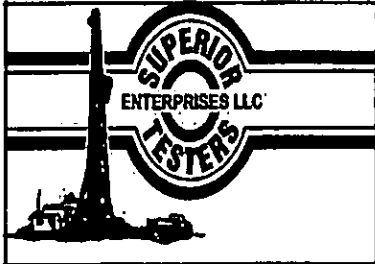
| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 2193.95         | 113.05       | Initial Hydro-static |
| 2           | 346.20          | 112.36       | Open To Flow (1)     |
| 32          | 907.92          | 132.65       | Shut-In(1)           |
| 91          | 1529.63         | 129.93       | End Shut-In(1)       |
| 92          | 920.49          | 130.44       | Open To Flow (2)     |
| 183         | 1474.28         | 131.48       | Shut-In(2)           |
| 273         | 1530.40         | 130.54       | End Shut-In(2)       |
| 275         | 2187.13         | 128.35       | Final Hydro-static   |

## Recovery

| Length (ft) | Description                      | Volume (bbl) |
|-------------|----------------------------------|--------------|
| 900.00      | Oil and Mud cut Gassy Water      | 12.00        |
| 0.00        | Oil 5% Mud 10% Gas 20% Water 65% | 0.00         |
| 2280.00     | Mud cut Gassy Water              | 33.34        |
| 0.00        | Mud 2% Gas 5% Water 93%          | 0.00         |
| 180.00      | Mud 100%                         | 2.63         |
| 0.00        | Recovery Chlorides 51000 ppm     | 0.00         |

## Gas Rates

|                | Choke (Inches) | Pressure (psig) | Gas Rate (Mc/d) |
|----------------|----------------|-----------------|-----------------|
| First Gas Rate | 0.13           | 9.00            | 3.42            |
| Last Gas Rate  | 0.38           | 5.20            | 19.56           |
| Max. Gas Rate  | 0.25           | 10.20           | 16.40           |



# DRILL STEM TEST REPORT

TOOL DIAGRAM

Pickrell Drilling Company Incorporated

Pilot Knob A #1

100 South Main  
 Suite 505  
 Wichita, Kansas 67202+3738  
 ATTN: Roger Fisher

21/27S/14W/Pratt  
 Job Ticket: 18785      DST#: 4  
 Test Start: 2011.10.13 @ 14:22:00

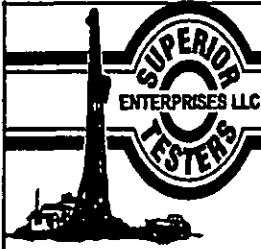
### Tool Information

|                           |                    |                       |                                |                                    |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe:               | Length: 4395.00 ft | Diameter: 3.88 inches | Volume: 64.27 bbl              | Tool Weight: 2000.00 lb            |
| Heavy Wt. Pipe:           | Length: 0.00 ft    | Diameter: 0.00 inches | Volume: 0.00 bbl               | Weight set on Packer: 20000.00 lb  |
| Drill Collar:             | Length: 120.00 ft  | Diameter: 2.25 inches | Volume: 0.59 bbl               | Weight to Pull Loose: 80000.00 lb  |
|                           |                    |                       | <u>Total Volume: 64.86 bbl</u> | Tool Chased: 0.00 ft               |
| Drill Pipe Above KB:      | 20.00 ft           |                       |                                | String Weight: Initial 54000.00 lb |
| Depth to Top Packer:      | 4515.00 ft         |                       |                                | Final 70000.00 lb                  |
| Depth to Bottom Packer:   | ft                 |                       |                                |                                    |
| Interval between Packers: | 39.00 ft           |                       |                                |                                    |
| Tool Length:              | 59.00 ft           |                       |                                |                                    |
| Number of Packers:        | 2                  | Diameter: 6.75 inches |                                |                                    |

Tool Comments:

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths                     |
|------------------|-------------|------------|----------|------------|------------------------------------|
| Shut-in tool     | 5.00        |            |          | 4500.00    |                                    |
| Hydraulic tool   | 5.00        |            |          | 4505.00    |                                    |
| Packer           | 5.00        |            |          | 4510.00    | 20.00      Bottom Of Top Packer    |
| Packer           | 5.00        |            |          | 4515.00    |                                    |
| Anchor           | 34.00       |            |          | 4549.00    |                                    |
| Recorder         | 1.00        | 6749       | Inside   | 4550.00    |                                    |
| Recorder         | 1.00        | 6748       | Outside  | 4551.00    |                                    |
| Bull plug        | 3.00        |            |          | 4554.00    | 39.00      Bottom Packers & Anchor |

**Total Tool Length: 59.00**



# DRILL STEM TEST REPORT

FLUID SUMMARY

Pickrell Drilling Company Incorporated

Pilot Knob A #1

100 South Main  
 Suite 505  
 Wichita, Kansas 67202+3738  
 ATTN: Roger Fisher

21/27S/14W/Pratt  
 Job Ticket: 18785      DST#: 4  
 Test Start: 2011.10.13 @ 14:22:00

## 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: 56.00 sec/qt          | Cushion Volume: bbl        |                 |         |
| Water Loss: 9.59 in <sup>3</sup> | Gas Cushion Type:          |                 |         |
| Resistivity: ohm.m               | Gas Cushion Pressure: psig |                 |         |
| Salinity: 8000.00 ppm            |                            |                 |         |
| Filter Cake: 1.00 inches         |                            |                 |         |

## Recovery Information

Recovery Table

| Length<br>ft | Description                      | Volume<br>bbl |
|--------------|----------------------------------|---------------|
| 900.00       | Oil and Mud cut Gassy Water      | 11.997        |
| 0.00         | Oil 5% Mud 10% Gas 20% Water 65% | 0.000         |
| 2280.00      | Mud cut Gassy Water              | 33.343        |
| 0.00         | Mud 2% Gas 5% Water 93%          | 0.000         |
| 180.00       | Mud 100%                         | 2.632         |
| 0.00         | Recovery Chlorides 51000 ppm     | 0.000         |
| 0.00         | Resistivity .22 @ 57 degrees     | 0.000         |

Total Length: 3360.00 ft      Total Volume: 47.972 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

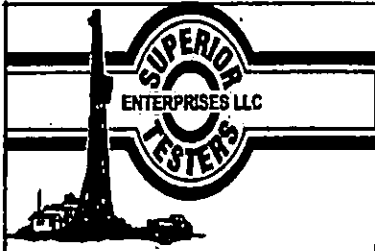
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





# DRILL STEM TEST REPORT

GAS RATES

Pickrell Drilling Company Incorporated

Pilot Knob A #1

100 South Main  
Suite 505  
Wichita, Kansas 67202+3738  
ATTN: Roger Fisher

21/27S/14W/Pratt  
Job Ticket: 18785      DST#:4  
Test Start: 2011.10.13 @ 14:22:00

## Gas Rates Information

Temperature: 59 (deg F)  
Relative Density: 0.65  
Z Factor: 0.8

Gas Rates Table

| Flow Period | Elapsed Time | Choke (inches) | Pressure (psig) | Gas Rate (Mcf/d) |
|-------------|--------------|----------------|-----------------|------------------|
| 2           | 10           | 0.13           | 9.00            | 3.42             |
| 2           | 10           | 0.13           | 9.00            | 3.42             |
| 2           | 10           | 0.13           | 9.00            | 3.42             |
| 2           | 20           | 0.13           | 7.90            | 3.01             |
| 2           | 30           | 0.13           | 6.80            | 2.60             |
| 2           | 40           | 0.13           | 6.80            | 2.60             |
| 2           | 50           | 0.13           | 8.85            | 3.74             |
| 2           | 60           | 0.25           | 10.20           | 18.40            |
| 2           | 70           | 0.38           | 5.20            | 19.56            |

Serial #: 6748

Outside Pickrell Drilling Company Incorporated

21/27S14W/Ratt

DST Test Number: 4

