

## DRILL STEM TEST REPORT

Prepared For: **Downing-Nelson Oil Co Inc**

PO Box 1019  
Hays KS 67601

ATTN: Ron Nelson

### **Schmeidler #9**

### **14-13s-21w-Trego,KS**

Start Date: 2011.12.10 @ 04:35:17

End Date: 2011.12.10 @ 11:53:17

Job Ticket #: 46237                      DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2011.12.12 @ 16:31:10



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Downing-Nelson Oil Co Inc

**14-13s-21w-Trego,KS**

PO Box 1019  
Hays KS 67601

**Schmeidler #9**

Job Ticket: 46237

**DST#: 1**

ATTN: Ron Nelson

Test Start: 2011.12.10 @ 04:35:17

## GENERAL INFORMATION:

Formation: **Marmaton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:44:47

Time Test Ended: 11:53:17

Test Type: Conventional Bottom Hole (Initial)

Tester: Jeff Brown

Unit No: 44

**Interval: 3813.00 ft (KB) To 3845.00 ft (KB) (TVD)**

Reference Elevations: 2193.00 ft (KB)

Total Depth: 3845.00 ft (KB) (TVD)

2185.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 8321**

**Inside**

Press @ Run Depth: 94.27 psig @ 3817.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.12.10

End Date:

2011.12.10

Last Calib.: 2011.12.10

Start Time: 04:35:18

End Time:

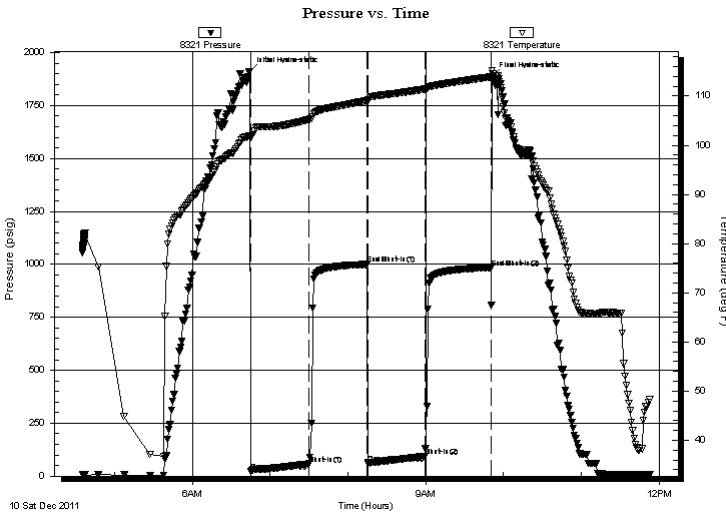
11:53:17

Time On Btm: 2011.12.10 @ 06:44:17

Time Off Btm: 2011.12.10 @ 09:51:17

**TEST COMMENT:** IFP-Good blow BOB in 13 1/2 min  
ISI-Weak surface blow back built to 1/8 in  
FFP-Good Blow BOB in 12 min  
FSI-Weak surface blow built to 1 1/2 in

## PRESSURE SUMMARY



| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1911.98         | 101.98       | Initial Hydro-static |
| 1           | 23.19           | 101.67       | Open To Flow (1)     |
| 46          | 58.12           | 105.23       | Shut-In(1)           |
| 91          | 1000.41         | 109.11       | End Shut-In(1)       |
| 91          | 63.01           | 108.95       | Open To Flow (2)     |
| 135         | 94.27           | 111.44       | Shut-In(2)           |
| 186         | 985.31          | 113.91       | End Shut-In(2)       |
| 187         | 1887.27         | 115.23       | Final Hydro-static   |

## Recovery

| Length (ft) | Description        | Volume (bbl) |
|-------------|--------------------|--------------|
| 62.00       | MCGO 20%M25%G55%O  | 0.60         |
| 136.00      | Gassy Oil 60%G40%O | 1.91         |
| 0.00        | 567-GIP            | 0.00         |
|             |                    |              |
|             |                    |              |

## Gas Rates

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





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TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Downing-Nelson Oil Co Inc

**14-13s-21w-Trego,KS**

PO Box 1019  
Hays KS 67601

**Schmeidler #9**

Job Ticket: 46237

**DST#: 1**

ATTN: Ron Nelson

Test Start: 2011.12.10 @ 04:35:17

## Tool Information

|                           |                    |                       |                                |                                    |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe:               | Length: 3774.00 ft | Diameter: 3.80 inches | Volume: 52.94 bbl              | Tool Weight: 2000.00 lb            |
| Heavy Wt. Pipe:           | Length: 0.00 ft    | Diameter: 2.70 inches | Volume: 0.00 bbl               | Weight set on Packer: 20000.00 lb  |
| Drill Collar:             | Length: 30.00 ft   | Diameter: 2.25 inches | Volume: 0.15 bbl               | Weight to Pull Loose: 64000.00 lb  |
|                           |                    |                       | <u>Total Volume: 53.09 bbl</u> | Tool Chased 0.00 ft                |
| Drill Pipe Above KB:      | 11.00 ft           |                       |                                | String Weight: Initial 52000.00 lb |
| Depth to Top Packer:      | 3813.00 ft         |                       |                                | Final 54000.00 lb                  |
| Depth to Bottom Packer:   | ft                 |                       |                                |                                    |
| Interval between Packers: | 32.00 ft           |                       |                                |                                    |
| Tool Length:              | 52.00 ft           |                       |                                |                                    |
| Number of Packers:        | 2                  | Diameter: 6.75 inches |                                |                                    |

Tool Comments:

## Tool Description

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths                |
|------------------|-------------|------------|----------|------------|-------------------------------|
| Change Over Sub  | 1.00        |            |          | 3794.00    |                               |
| Shut In Tool     | 5.00        |            |          | 3799.00    |                               |
| Hydraulic tool   | 5.00        |            |          | 3804.00    |                               |
| Packer           | 4.00        |            |          | 3808.00    | 20.00 Bottom Of Top Packer    |
| Packer           | 5.00        |            |          | 3813.00    |                               |
| Stubb            | 1.00        |            |          | 3814.00    |                               |
| Perforations     | 3.00        |            |          | 3817.00    |                               |
| Recorder         | 0.00        | 8321       | Inside   | 3817.00    |                               |
| Recorder         | 0.00        | 8737       | Outside  | 3817.00    |                               |
| Perforations     | 25.00       |            |          | 3842.00    |                               |
| Bullnose         | 3.00        |            |          | 3845.00    | 32.00 Bottom Packers & Anchor |

**Total Tool Length: 52.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Downing-Nelson Oil Co Inc

**14-13s-21w-Trego,KS**

PO Box 1019  
Hays KS 67601

**Schmeidler #9**

Job Ticket: 46237

**DST#: 1**

ATTN: Ron Nelson

Test Start: 2011.12.10 @ 04:35:17

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

39 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 58.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.78 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2500.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

| Length<br>ft | Description        | Volume<br>bbbl |
|--------------|--------------------|----------------|
| 62.00        | MCOG 20%M25%G55%O  | 0.596          |
| 136.00       | Gassy Oil 60%G40%O | 1.908          |
| 0.00         | 567-GIP            | 0.000          |

Total Length: 198.00 ft

Total Volume: 2.504 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

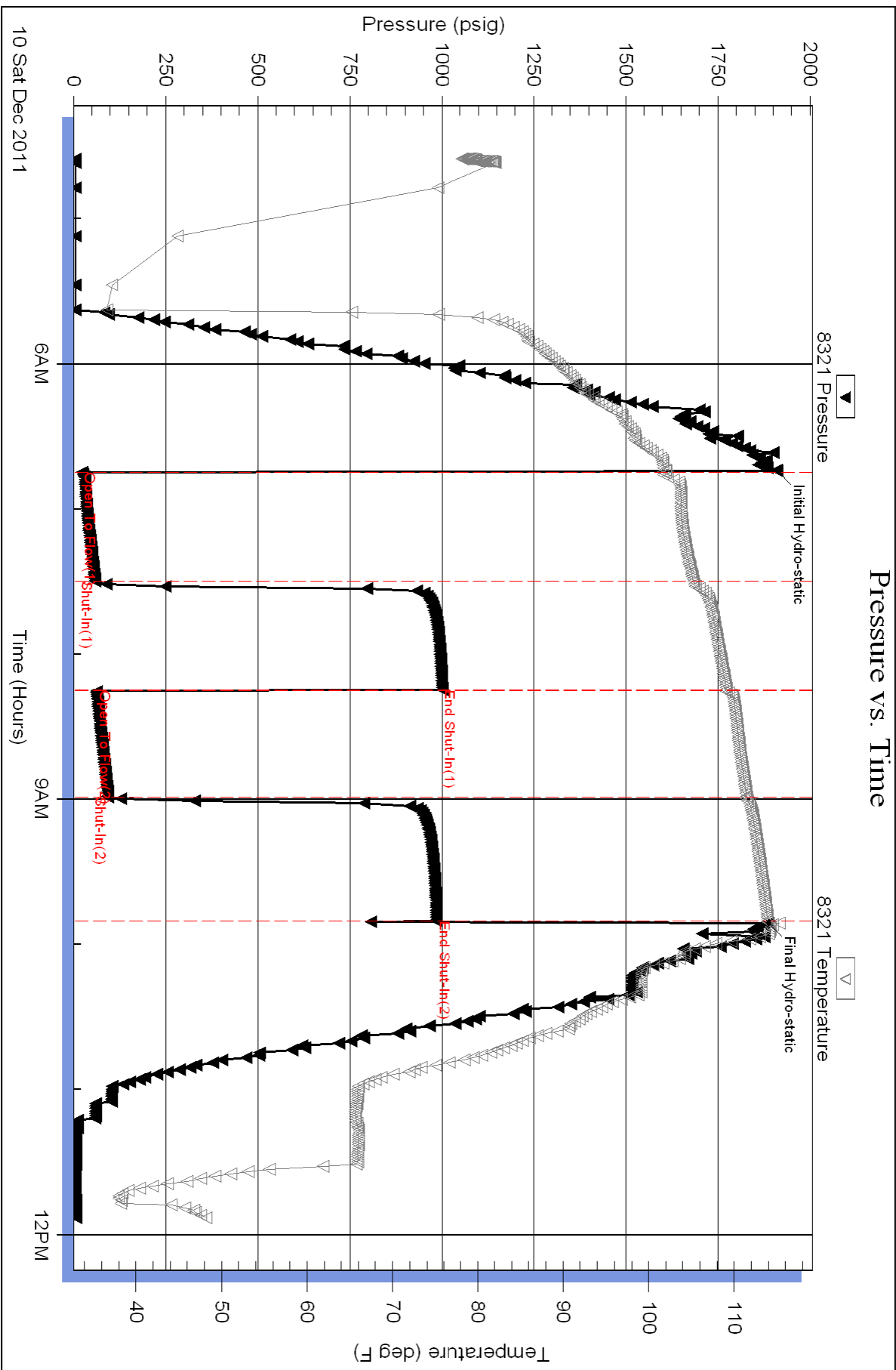
Serial #: 8321

Inside

Dow nings-Nelson Oil Co Inc

Schmedler #9

DST Test Number: 1

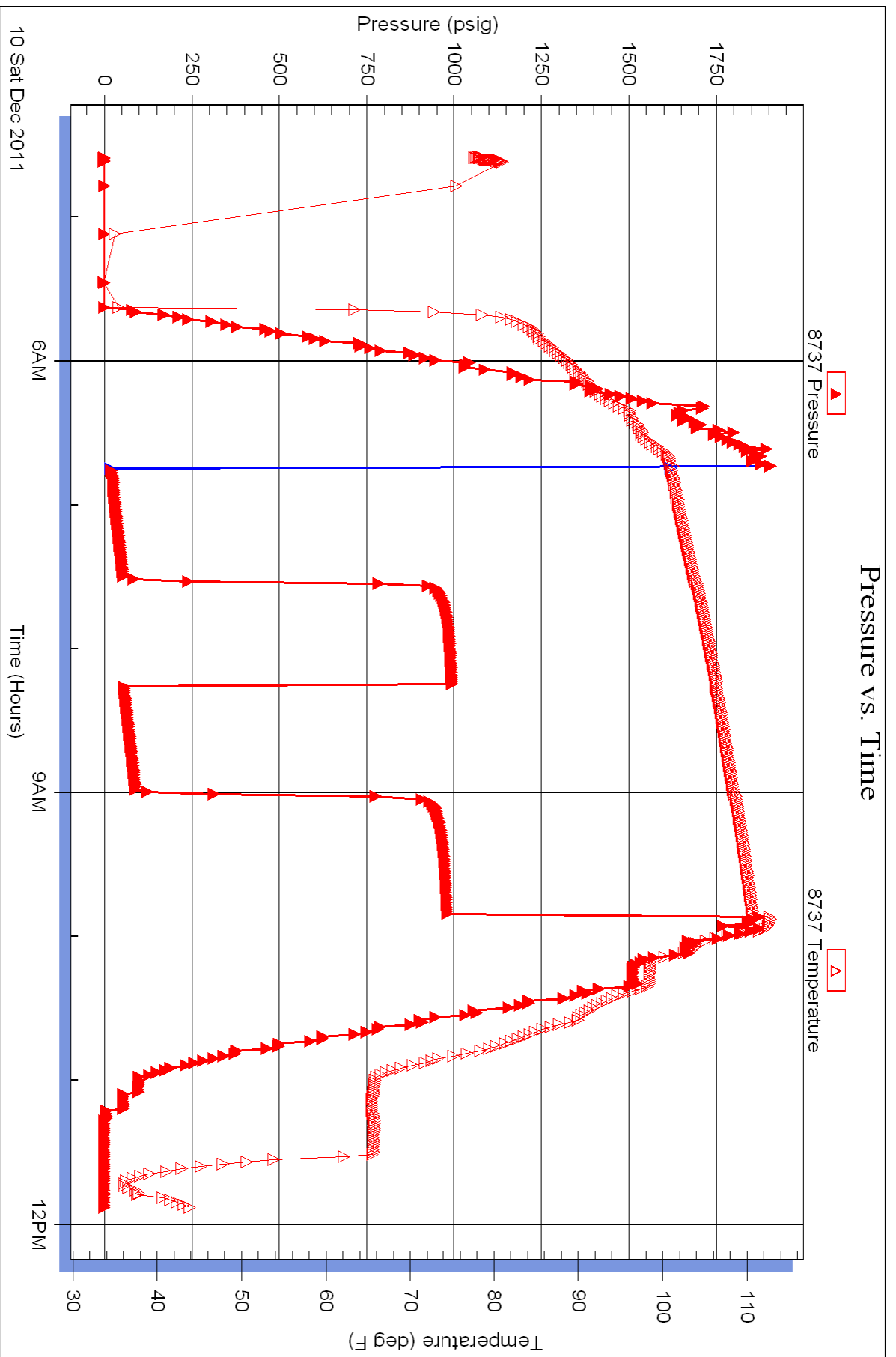


Serial #: 8737

Outside Dow nging-Nelson Oil Co Inc

Schmedler #9

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 46237

Printed: 2011.12.12 @ 16:31:13



# TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED  
DEC 12 2011

## Test Ticket

NO. 46237

Well Name & No. Schmeidler #9 BY: \_\_\_\_\_ Test No. 1 Date 12-10-11  
 Company Downing-Nelson Oil Co INC Elevation 2193 KB 2185 GL  
 Address PO Box 1019 Hays KS 67601  
 Co. Rep / Geo. Mark Downing Rig Discovery Rig #1  
 Location: Sec. 14 Twp. 13 S Rge. 21 W Co. Trego State KS

Interval Tested 3813 - 3845 Zone Tested Marmaton  
 Anchor Length 32 Drill Pipe Run 3774 Mud Wt. 8.9  
 Top Packer Depth 3808 Drill Collars Run 30 Vis 58  
 Bottom Packer Depth 3813 Wt. Pipe Run 0 WL 8.8  
 Total Depth 3845 Chlorides 2500 ppm System LCM 2#

Blow Description FP - Good Blow Bob IN 13 1/2 min  
IS - Weak Blow Back Built TO 1/8 IN  
FP - Good Blow Back Built TO BOB IN 12 min  
IS - Weak Blow Back Built TO 1/8 IN

| Rec         | Feet of           | %gas      | %oil      | %water    | %mud |
|-------------|-------------------|-----------|-----------|-----------|------|
| <u>402</u>  | <u>MC GO</u>      | <u>25</u> | <u>55</u> | <u>20</u> |      |
| <u>1360</u> | <u>GASSY OIL</u>  | <u>40</u> | <u>40</u> |           |      |
|             | <u>SLOT - GIP</u> |           |           |           |      |
|             |                   |           |           |           |      |
|             |                   |           |           |           |      |

Rec Total 198 BHT 114 Gravity 39 API RW @ \_\_\_\_\_ ° F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic 1912  Test 1125 T-On Location 8:08  
 (B) First Initial Flow 23  Jars T-Started 4:35  
 (C) First Final Flow 58  Safety Joint T-Open 6:44  
 (D) Initial Shut-In 1000  Circ Sub T-Pulled 9:44  
 (E) Second Initial Flow 203  Hourly Standby T-Out 11:53  
 (F) Second Final Flow 94  Mileage 54 RT 75.60 Comments \_\_\_\_\_  
 (G) Final Shut-In 985  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1827  Straddle  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer  Ruined Packer \_\_\_\_\_  
 Extra Packer  Extra Copies \_\_\_\_\_  
 Extra Recorder Sub Total 0  
 Day Standby Total 1200.60  
 Accessibility MP/DST Disc't \_\_\_\_\_  
 Sub Total 1200.60

Initial Open 45  
 Initial Shut-In 45  
 Final Flow 45  
 Final Shut-In 45  
 Approved By \_\_\_\_\_ Our Representative Jeff Brown

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