



DRILL STEM TEST REPORT

Prepared For: **Shelby Resources LLC**

2717 Canal Boulevard
Suite C
Hays, Kansas 67601

ATTN: Keith Reavis

Ideker #1-2

2/21S/19W/Pawnee

Start Date: 2013.06.25 @ 07:14:00

End Date: 2013.06.25 @ 12:43:30

Job Ticket #: 18135 DST #: 1

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

Printed: 2013.06.25 @ 13:01:40

Shelby Resources LLC
2/21S/19W/Pawnee
Ideker #1-2
DST # 1
Cherokee Sand
2013.06.25



DRILL STEM TEST REPORT

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2/21S/19W/Pawnee

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ATTN: Keith Reavis

Ideker #1-2

Job Ticket: 18135

DST#: 1

Test Start: 2013.06.25 @ 07:14:00

GENERAL INFORMATION:

Formation: **Cherokee Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:36:30

Time Test Ended: 12:43:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 3325 Great Bend/86

Interval: **4165.00 ft (KB) To 4236.00 ft (KB) (TVD)**

Reference Elevations: 2138.00 ft (KB)

Total Depth: 4236.00 ft (KB) (TVD)

2125.00 ft (CF)

Hole Diameter: 7.80 inches Hole Condition: Fair

KB to GR/CF: 13.00 ft

Serial #: **6749**

Inside

Press @ Run Depth: 311.12 psia @ 4232.37 ft (KB)

Capacity: 5000.00 psia

Start Date: 2013.06.25

End Date:

2013.06.25

Last Calib.:

2013.06.25

Start Time: 07:14:00

End Time:

12:43:30

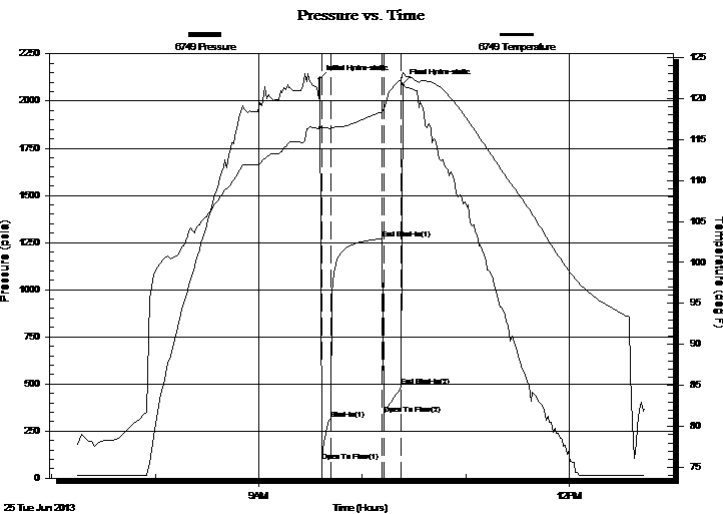
Time On Btm:

2013.06.25 @ 09:35:00

Time Off Btm:

2013.06.25 @ 10:23:30

TEST COMMENT: 1ST Open 5 Minutes/Dead no blow
1ST Shut In 30 Minutes/No blow back
2ND Open 10 Minutes/Dead/Check blow lines/Rubber line from manifold to bucket blocked/Blow to bottom of bucket/Pull test



PRESSURE SUMMARY

| Time (Min.) | Pressure (psia) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2114.35 | 116.35 | Initial Hydro-static |
| 2 | 91.22 | 116.36 | Open To Flow (1) |
| 7 | 311.12 | 116.31 | Shut-In(1) |
| 37 | 1269.66 | 118.38 | End Shut-In(1) |
| 38 | 339.46 | 118.71 | Open To Flow (2) |
| 48 | 485.33 | 122.32 | End Shut-In(2) |
| 49 | 2091.40 | 123.17 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|----------------------------------|--------------|
| 834.00 | Muddy Water | 8.69 |
| 0.00 | Mud 20% Water 80% | 0.00 |
| 0.00 | Recovery Chloride 33000 ppm | 0.00 |
| 0.00 | Recov. Resist. .18 ohms @ 98 deg | 0.00 |
| | | |
| | | |

Gas Rates

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



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Reference Elevations: 2138.00 ft (KB)

Total Depth: 4236.00 ft (KB) (TVD)

2125.00 ft (CF)

Hole Diameter: 7.80 inches Hole Condition: Fair

KB to GR/CF: 13.00 ft

Serial #: **6838** Outside

Press @ RunDepth: 1267.13 psia @ 4233.37 ft (KB)

Capacity: 5000.00 psia

Start Date: 2013.06.25

End Date:

2013.06.25

Last Calib.:

2013.06.25

Start Time: 07:14:00

End Time:

12:43:00

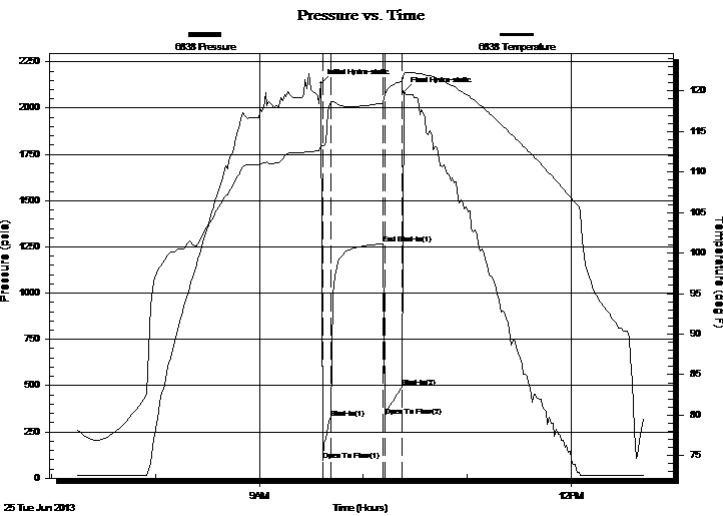
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1ST Shut In 30 Minutes/No blow back
2ND Open 10 Minutes/Dead/Check blow lines/Rubber line from manifold to bucket blocked/Blow to bottom of bucket/Pull test



PRESSURE SUMMARY

| Time (Min.) | Pressure (psia) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 2133.46 | 113.23 | Initial Hydro-static |
| 1 | 95.68 | 113.25 | Open To Flow (1) |
| 6 | 324.85 | 118.52 | Shut-In(1) |
| 36 | 1267.13 | 118.50 | End Shut-In(1) |
| 37 | 332.62 | 119.53 | Open To Flow (2) |
| 47 | 493.48 | 121.18 | Shut-In(2) |
| 48 | 2088.32 | 122.19 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|----------------------------------|--------------|
| 834.00 | Muddy Water | 8.69 |
| 0.00 | Mud 20% Water 80% | 0.00 |
| 0.00 | Recovery Chloride 33000 ppm | 0.00 |
| 0.00 | Recov. Resist. .18 ohms @ 98 deg | 0.00 |
| | | |
| | | |

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

Shelby Resources LLC

2/21S/19W/Pawnee

2717 Canal Boulevard
Suite C
Hays, Kansas 67601
ATTN: Keith Reavis

Ideker #1-2

Job Ticket: 18135

DST#: 1

Test Start: 2013.06.25 @ 07:14:00

Tool Information

| | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe: | Length: 3827.00 ft | Diameter: 3.80 inches | Volume: 53.68 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: 330.00 ft | Diameter: 2.25 inches | Volume: 1.62 bbl | Weight to Pull Loose: 90000.00 lb |
| | | | <u>Total Volume: 55.30 bbl</u> | Tool Chased 0.00 ft |
| Drill Pipe Above KB: | 19.00 ft | | | String Weight: Initial 76000.00 lb |
| Depth to Top Packer: | 4165.00 ft | | | Final 80000.00 lb |
| Depth to Bottom Packer: | ft | | | |
| Interval between Packers: | 71.37 ft | | | |
| Tool Length: | 98.37 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 | | | 4143.00 | |
| Hydraulic Tool | 5.00 | | | 4148.00 | |
| Jars | 5.00 | | | 4153.00 | |
| Safety Joint | 2.00 | | | 4155.00 | |
| Packer | 5.00 | | | 4160.00 | 27.00 Bottom Of Top Packer |
| Packer | 5.00 | | | 4165.00 | |
| Perforations | 6.00 | | | 4171.00 | |
| Change Over Sub | 0.75 | | | 4171.75 | |
| Drill Pipe | 31.87 | | | 4203.62 | |
| Change Over Sub | 0.75 | | | 4204.37 | |
| Anchor | 27.00 | | | 4231.37 | |
| Recorder | 1.00 | 6749 | Inside | 4232.37 | |
| Recorder | 1.00 | 6838 | Outside | 4233.37 | |
| Bullnose | 3.00 | | | 4236.37 | 71.37 Bottom Packers & Anchor |

Total Tool Length: 98.37



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FLUID SUMMARY

Shelby Resources LLC

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Job Ticket: 18135

DST#: 1

Test Start: 2013.06.25 @ 07:14:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 46.00 sec/qt
Water Loss: 9.59 in³
Resistivity: ohm.m
Salinity: 8300.00 ppm
Filter Cake: 1.00 inches

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

Oil API: deg API
Water Salinity: ppm

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|----------------------------------|---------------|
| 834.00 | Muddy Water | 8.693 |
| 0.00 | Mud 20% Water 80% | 0.000 |
| 0.00 | Recovery Chloride 33000 ppm | 0.000 |
| 0.00 | Recov. Resist. .18 ohms @ 98 deg | 0.000 |

Total Length: 834.00 ft Total Volume: 8.693 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

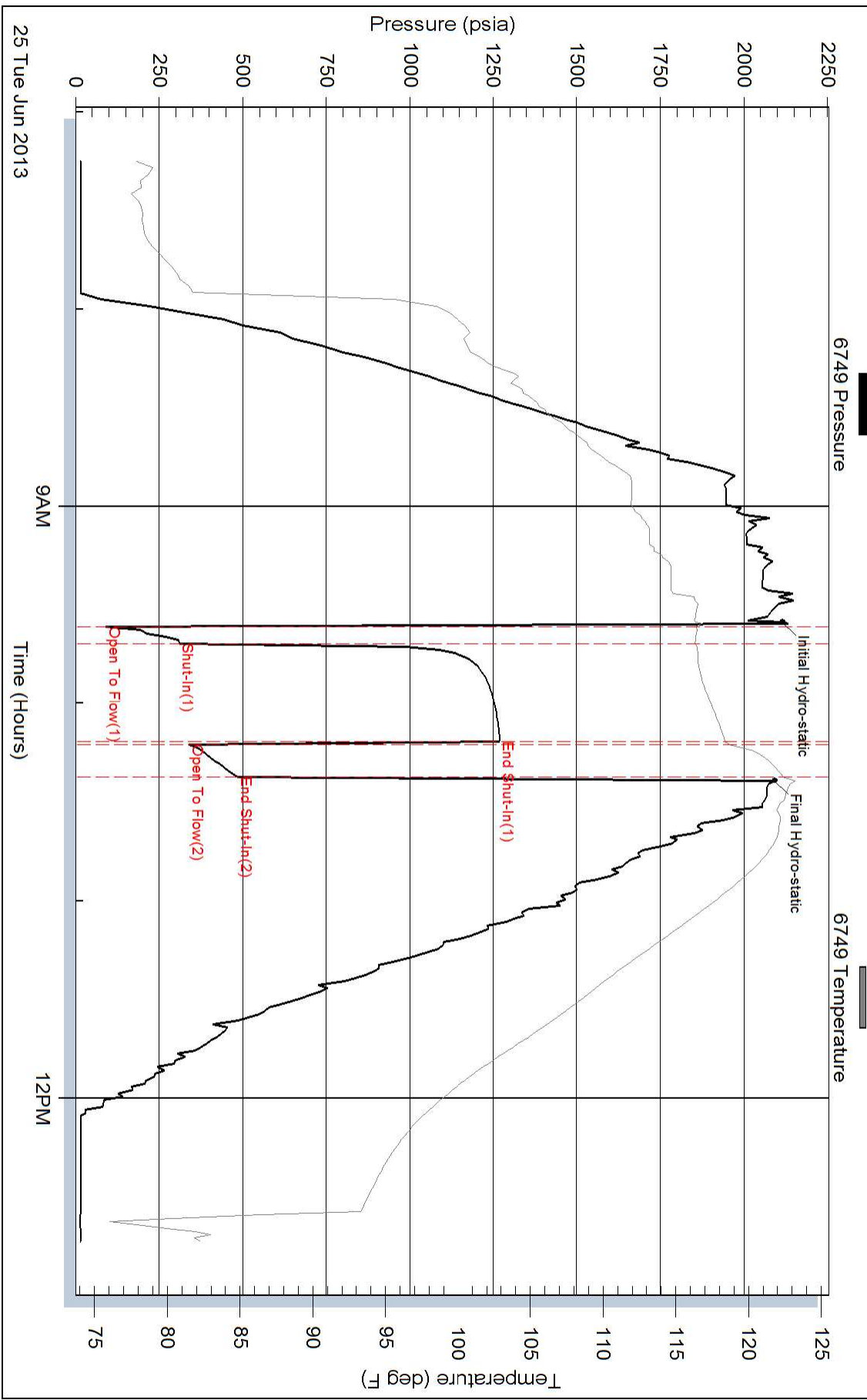
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



Pressure vs. Time

