



DRILL STEM TEST REPORT

Prepared For: **SHELBY RESOURCES L.L.C**

1217 CANAL BLVD SUITE C
HAYS KS 67601

ATTN: DEREK PATTERSON

25-21S-16W-PAWNEE

WFY UNIT #1

Start Date: 2010.02.13 @ 11:00:00

End Date: 2010.02.13 @ 18:13:00

Job Ticket #: 15890 DST #: 2

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

Printed: 2010.02.13 @ 17:57:52

SHELBY RESOURCES L.L.C
WFY UNIT #1
25-21S-16W-PAWNEE
DST # 2
ARBUCKLE
2010.02.13



DRILL STEM TEST REPORT

SHELBY RESOURCES L.L.C

WFY UNIT #1

1217 CANAL BLVD SUITE C
HAYS KS 67601

25-21S-16W-PAWNEE

ATTN: DEREK PATTERSON

Job Ticket: 15890

DST#: 2

Test Start: 2010.02.13 @ 11:00:00

GENERAL INFORMATION:

Formation: **ARBUCKLE**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:12:00

Time Test Ended: 18:13:00

Test Type: Conventional Bottom Hole (Initial)

Tester: DAVID NICHOLS

Unit No: 3345 63 M GB

Interval: 3782.00 ft (KB) To 3842.00 ft (KB) (TVD)

Reference Elevations: 1979.00 ft (KB)

Total Depth: 3842.00 ft (KB) (TVD)

1971.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8400

Inside

Press@RunDepth: 727.90 psia @ 3837.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2010.02.13

End Date: 2010.02.13

Last Calib.: 2010.02.13

Start Time: 11:00:00

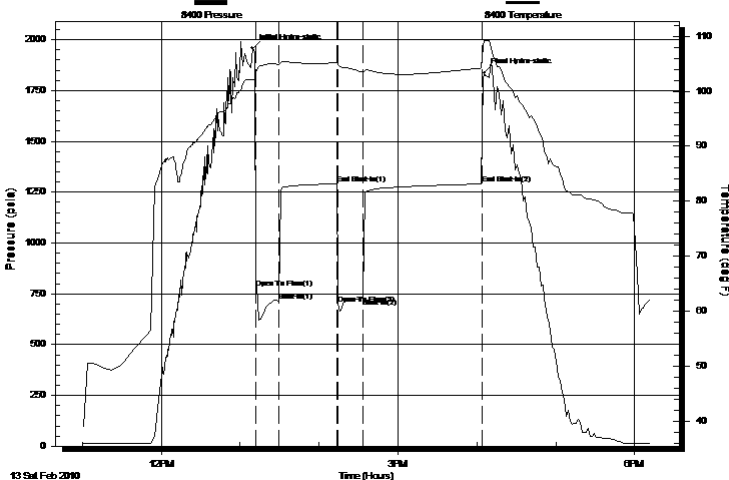
End Time: 18:13:00

Time On Btm: 2010.02.13 @ 13:09:30

Time Off Btm: 2010.02.13 @ 16:05:30

TEST COMMENT: 15-INITIAL OPENING STRONG BLOW BOTTOM OF THE BUCKET IN 10 SEC
45-INITIAL SHUT IN SURFACE BLOW BACK
20-FINAL OPENING STRONG BLOW BACK BOTTOM OF THE BUCKET IN 20 SEC
90-FINAL SHUT IN LEFT 2 INCH OPEN TO BLEED OF GAS

Pressure vs. Time



PRESSURE SUMMARY

| Time (Min.) | Pressure (psia) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1957.59 | 102.07 | Initial Hydro-static |
| 3 | 779.44 | 103.60 | Open To Flow (1) |
| 20 | 712.48 | 104.83 | Shut-In(1) |
| 64 | 1291.13 | 105.19 | End Shut-In(1) |
| 65 | 698.94 | 104.85 | Open To Flow (2) |
| 84 | 727.90 | 103.34 | Shut-In(2) |
| 174 | 1290.02 | 104.24 | End Shut-In(2) |
| 176 | 1836.07 | 109.19 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 240.00 | MUD 100%M | 1.47 |
| | | |
| | | |
| | | |

Gas Rates

| | Choke (inches) | Pressure (psia) | Gas Rate (Mcf/d) |
|----------------|----------------|-----------------|------------------|
| First Gas Rate | 1.00 | 99.00 | 2846.13 |
| Last Gas Rate | 1.00 | 99.00 | 2846.13 |



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25-21S-16W-PAWNEE

ATTN: DEREK PATTERSON

Job Ticket: 15890

DST#: 2

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Time Test Ended: 18:13:00

Test Type: Conventional Bottom Hole (Initial)

Tester: DAVID NICHOLS

Unit No: 3345 63 M GB

Interval: 3782.00 ft (KB) To 3842.00 ft (KB) (TVD)

Reference Elevations: 1979.00 ft (KB)

Total Depth: 3842.00 ft (KB) (TVD)

1971.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 4143 Outside

Press@RunDepth: 1284.97 psia @ 3837.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2010.02.13

End Date: 2010.02.13

Last Calib.: 2010.02.13

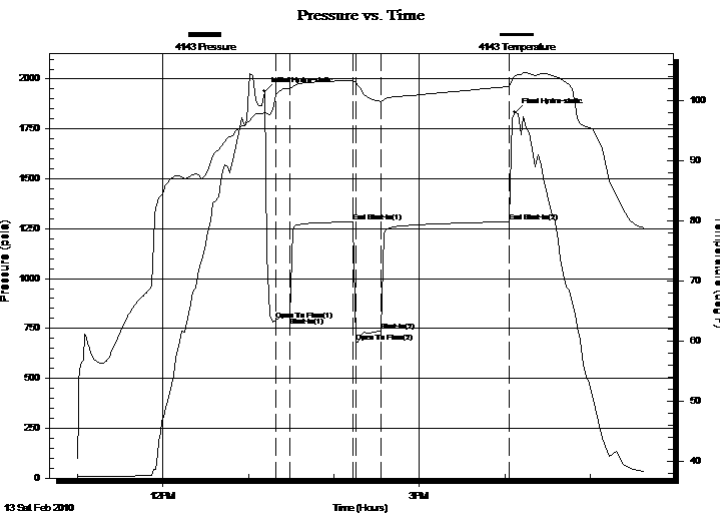
Start Time: 11:00:00

End Time: 17:38:09

Time On Btm: 2010.02.13 @ 13:11:09

Time Off Btm: 2010.02.13 @ 16:07:10

TEST COMMENT: 15-INITIAL OPENING STRONG BLOW BOTTOM OF THE BUCKET IN 10 SEC
45-INITIAL SHUT IN SURFACE BLOW BACK
20-FINAL OPENING STRONG BLOW BACK BOTTOM OF THE BUCKET IN 20 SEC
90-FINAL SHUT IN LEFT 2 INCH OPEN TO BLEED OF GAS



PRESSURE SUMMARY

| Time (Min.) | Pressure (psia) | Temp (deg F) | Annotation |
|-------------|-----------------|--------------|----------------------|
| 0 | 1937.89 | 97.95 | Initial Hydro-static |
| 9 | 793.75 | 101.04 | Open To Flow (1) |
| 19 | 809.07 | 102.05 | Shut-In(1) |
| 63 | 1285.01 | 103.43 | End Shut-In(1) |
| 65 | 681.62 | 103.05 | Open To Flow (2) |
| 83 | 738.86 | 99.94 | Shut-In(2) |
| 173 | 1284.97 | 102.39 | End Shut-In(2) |
| 177 | 1833.78 | 104.24 | Final Hydro-static |

Recovery

| Length (ft) | Description | Volume (bbl) |
|-------------|-------------|--------------|
| 240.00 | MUD 100%M | 1.47 |
| | | |
| | | |
| | | |
| | | |

Gas Rates

| | Choke (inches) | Pressure (psia) | Gas Rate (Mcf/d) |
|----------------|----------------|-----------------|------------------|
| First Gas Rate | 1.00 | 99.00 | 2846.13 |
| Last Gas Rate | 1.00 | 99.00 | 2846.13 |



DRILL STEM TEST REPORT

TOOL DIAGRAM

SHELBY RESOURCES L.L.C

WFY UNIT #1

1217 CANAL BLVD SUITE C
HAYS KS 67601

25-21S-16W-PAWNEE

Job Ticket: 15890

DST#: 2

ATTN: DEREK PATTERSON

Test Start: 2010.02.13 @ 11:00:00

Tool Information

| | | | | | |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------|-------------|
| Drill Pipe: | Length: 3546.00 ft | Diameter: 3.88 inches | Volume: 51.86 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: 210.00 ft | Diameter: 2.25 inches | Volume: 1.03 bbl | Weight to Pull Loose: | 90000.00 lb |
| | | | <u>Total Volume: 52.89 bbl</u> | Tool Chased | 0.00 ft |
| Drill Pipe Above KB: | 3.00 ft | | | String Weight: Initial | 65000.00 lb |
| Depth to Top Packer: | 3782.00 ft | | | Final | 70000.00 lb |
| Depth to Bottom Packer: | ft | | | | |
| Interval between Packers: | 60.00 ft | | | | |
| Tool Length: | 89.00 ft | | | | |
| Number of Packers: | 2 | Diameter: 6.75 inches | | | |
| Tool Comments: | | | | | |

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths |
|-------------------------|--------------------|-------------------|-----------------|-------------------|-----------------------|
|-------------------------|--------------------|-------------------|-----------------|-------------------|-----------------------|

| | | | | | |
|-----------------|-------|------|---------|---------|-------------------------------|
| Change Over Sub | 1.00 | | | 3754.00 | |
| Shut-In Tool | 5.00 | | | 3759.00 | |
| Hydroic Tool | 5.00 | | | 3764.00 | |
| Jars | 6.00 | | | 3770.00 | |
| Safety Joint | 2.00 | | | 3772.00 | |
| Packer | 5.00 | | | 3777.00 | 29.00 Bottom Of Top Packer |
| Packer | 5.00 | | | 3782.00 | |
| Change Over Sub | 0.75 | | | 3782.75 | |
| Drill Pipe | 31.50 | | | 3814.25 | |
| Change Over Sub | 0.75 | | | 3815.00 | |
| Perforations | 22.00 | | | 3837.00 | |
| Recorder | 0.00 | 8400 | Inside | 3837.00 | |
| Recorder | 0.00 | 4143 | Outside | 3837.00 | |
| Bullnose | 5.00 | | | 3842.00 | 60.00 Bottom Packers & Anchor |

Total Tool Length: 89.00



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FLUID SUMMARY

SHELBY RESOURCES L.L.C

WFY UNIT #1

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Job Ticket: 15890

DST#: 2

ATTN: DEREK PATTERSON

Test Start: 2010.02.13 @ 11:00:00

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: 57.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 13.40 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psia

Salinity: 16500.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

| Length ft | Description | Volume bbl |
|--------------|-------------|---------------|
| 240.00 | MUD 100%M | 1.471 |

Total Length: 240.00 ft Total Volume: 1.471 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



DRILL STEM TEST REPORT

GAS RATES

SHELBY RESOURCES L.L.C

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HAYS KS 67601

25-21S-16W-PAWNEE

Job Ticket: 15890

DST#: 2

ATTN: DEREK PATTERSON

Test Start: 2010.02.13 @ 11:00:00

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 (psia) | Gas Rate (Mcf/d) |
|-------------|--------------|----------------|-----------------|------------------|
| 2 | 10 | 1.00 | 99.00 | 2846.13 |
| 2 | 10 | 1.00 | 99.00 | 2846.13 |

Pressure vs. Time

