



## DRILL STEM TEST REPORT

Prepared For: **Shelby Resources L.L.C**

445 Union Blvd Ste #208 Lakewood CO 80228

ATTN: Jeremy Schwartz

**W-S #1-15**

**15-18s-14W Barton**

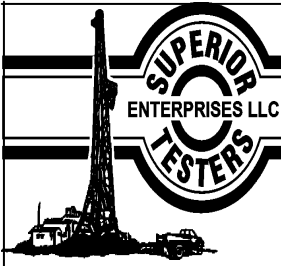
Start Date: 2013.07.10 @ 19:07:00

End Date: 2013.07.11 @ 02:54:00

Job Ticket #: 17005                      DST #: 1

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

Printed: 2013.07.11 @ 04:38:02



# DRILL STEM TEST REPORT

Shelby Resources L.L.C

**15-18s-14W Barton**

445 Union Blvd Ste #208 Lakewood CO 80228

**W-S #1-15**

Job Ticket: 17005

**DST#: 1**

ATTN: Jeremy Schwartz

Test Start: 2013.07.10 @ 19:07:00

## GENERAL INFORMATION:

Formation: **Lansing "H"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:09:30

Time Test Ended: 02:54:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Jared Scheck

Unit No: 3320-Great Bend-

**Interval: 3315.00 ft (KB) To 3340.00 ft (KB) (TVD)**

Reference Elevations: 1942.00 ft (KB)

Total Depth: 3340.00 ft (KB) (TVD)

1929.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 13.00 ft

## Serial #: 6731

Press@RunDepth: 852.42 psia @ ft (KB)

Capacity: 5000.00 psia

Start Date: 2013.07.10

End Date:

2013.07.11

Last Calib.:

2013.07.11

Start Time: 19:08:00

End Time:

02:54:00

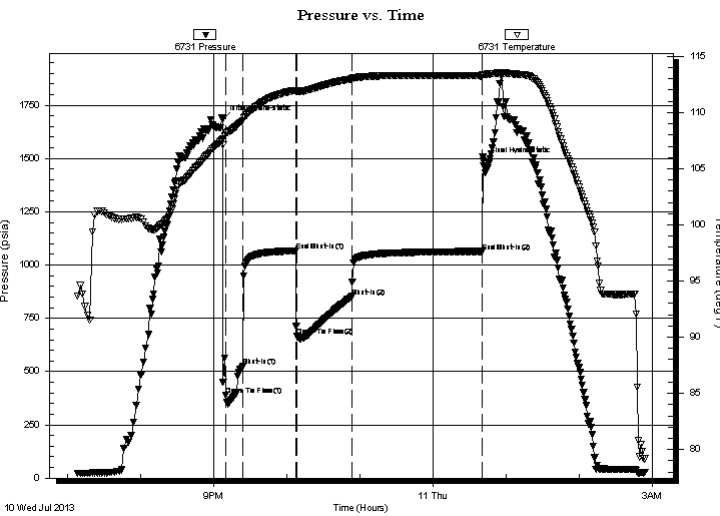
Time On Btm:

2013.07.10 @ 21:07:00

Time Off Btm:

2013.07.11 @ 00:41:00

**TEST COMMENT:** 1st Opening 15 Minutes-Strong blow built bottom of bucket in 1 minutes  
 1st Shut-in 45 Minutes-Bottom of bucket blow back gas to surface throughout shut-in  
 2nd Opening 45 Minutes-Strong blow built bottom of bucket in 1 minute gas to surface 1 minute into open  
 2nd Shut-in 90 Minutes-Bottom of bucket blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1680.76	107.63	Initial Hydro-static
3	389.73	108.22	Open To Flow (1)
17	523.69	109.29	Shut-In(1)
60	1066.31	111.97	End Shut-In(1)
61	664.71	111.86	Open To Flow (2)
106	852.42	112.99	Shut-In(2)
213	1064.07	113.26	End Shut-In(2)
214	1487.14	113.39	Final Hydro-static

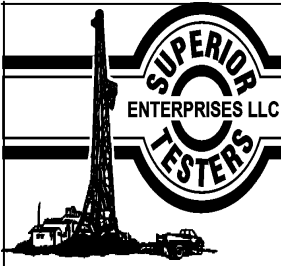
## Recovery

Length (ft)	Description	Volume (bbl)
120.00	Mud cut Oil 50%oil 50%mud	0.59
2844.00	Reversed out clean gassy oil	37.98
0.00		0.00

## Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	0.25	34.50	54.73
Last Gas Rate	0.25	34.50	54.73
Max. Gas Rate	0.25	34.50	54.73

\* Recovery from multiple tests



# DRILL STEM TEST REPORT

Shelby Resources L.L.C

**15-18s-14W Barton**

445 Union Blvd Ste #208 Lakewood CO 80228

**W-S #1-15**

Job Ticket: 17005

**DST#: 1**

ATTN: Jeremy Schwartz

Test Start: 2013.07.10 @ 19:07:00

## GENERAL INFORMATION:

Formation: **Lansing "H"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:09:30

Time Test Ended: 02:54:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Jared Scheck

Unit No: 3320-Great Bend-

**Interval: 3315.00 ft (KB) To 3340.00 ft (KB) (TVD)**

Reference Elevations: 1942.00 ft (KB)

Total Depth: 3340.00 ft (KB) (TVD)

1929.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 13.00 ft

## Serial #: 8525

Press@RunDepth: 1068.13 psia @ ft (KB)

Capacity: 5000.00 psia

Start Date: 2013.07.10

End Date: 2013.07.11

Last Calib.: 2013.07.11

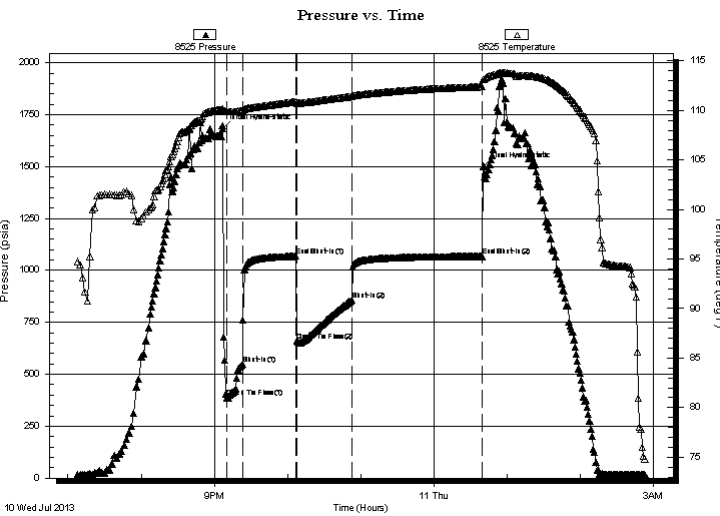
Start Time: 19:08:00

End Time: 02:52:30

Time On Btm: 2013.07.10 @ 21:07:00

Time Off Btm: 2013.07.11 @ 00:40:30

**TEST COMMENT:** 1st Opening 15 Minutes-Strong blow built bottom of bucket in 1 minutes  
 1st Shut-in 45 Minutes-Bottom of bucket blow back gas to surface throughout shut-in  
 2nd Opening 45 Minutes-Strong blow built bottom of bucket in 1 minute gas to surface 1 minute into open  
 2nd Shut-in 90 Minutes-Bottom of bucket blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1684.27	110.14	Initial Hydro-static
4	388.27	109.87	Open To Flow (1)
16	548.20	109.96	Shut-In(1)
60	1068.67	110.86	End Shut-In(1)
61	660.06	110.74	Open To Flow (2)
106	858.77	111.40	Shut-In(2)
213	1068.13	112.38	End Shut-In(2)
214	1501.19	113.07	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
120.00	Mud cut Oil 50%oil 50%mud	0.59
2844.00	Reversed out clean gassy oil	37.98
0.00		0.00

\* Recovery from multiple tests

## Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	0.25	34.50	54.73
Last Gas Rate	0.25	34.50	54.73
Max. Gas Rate	0.25	34.50	54.73



# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Shelby Resources L.L.C

**15-18s-14W Barton**

445 Union Blvd Ste #208 Lakewood CO 80228

**W-S #1-15**

Job Ticket: 17005

**DST#: 1**

ATTN: Jeremy Schwartz

Test Start: 2013.07.10 @ 19:07:00

## Tool Information

Drill Pipe:	Length: 2964.00 ft	Diameter: 3.80 inches	Volume: 41.58 bbl	Tool Weight: 1000.00 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: 85000.00 lb
			<u>Total Volume: 43.20 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	3315.00 ft			Final 80000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	25.00 ft			
Tool Length:	53.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments: Dropped bar / reversed out clean gassy oil /gravity oil 45

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-In Tool	5.00			3292.00	
Hydraulic Tool	5.00			3297.00	
Jars	6.00			3303.00	
Safety Joint	2.00			3305.00	
Packer	5.00			3310.00	28.00 Bottom Of Top Packer
Packer	5.00			3315.00	
Anchor	20.00			3335.00	
Recorder	1.00	6731	Inside	3336.00	
Recorder	1.00	8525	Outside	3337.00	
Bullnose	3.00			3340.00	25.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>53.00</b>				



# DRILL STEM TEST REPORT

## FLUID SUMMARY

Shelby Resources L.L.C

**15-18s-14W Barton**

445 Union Blvd Ste #208 Lakewood CO 80228

**W-S #1-15**

Job Ticket: 17005

**DST#: 1**

ATTN: Jeremy Schwartz

Test Start: 2013.07.10 @ 19:07:00

### 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: 48.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.19 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psia

Salinity: 5100.00 ppm

Filter Cake: 1.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	Mud cut Oil 50%oil 50%mud	0.590
2844.00	Reversed out clean gassy oil	37.981
0.00		0.000

Total Length: 2964.00 ft      Total Volume: 38.571 bbl

Num Fluid Samples: 0

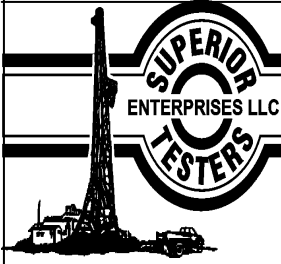
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: 2844 reversed out /Dropped bar/gas sample was taken/Gravity oil 45



# DRILL STEM TEST REPORT

**GAS RATES**

Shelby Resources L.L.C

**15-18s-14W Barton**

445 Union Blvd Ste #208 Lakewood CO 80228

**W-S #1-15**

Job Ticket: 17005

**DST#: 1**

ATTN: Jeremy Schwartz

Test Start: 2013.07.10 @ 19:07:00

## 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	0.25	34.50	54.73
2	20	0.25	34.50	54.73
2	30	0.25	34.50	54.73
2	40	0.25	34.50	54.73

### Pressure vs. Time

