



DRILL STEM TEST REPORT

Prepared For: **Shelby Resources LLC**

2717 Canal BLVD.
Suite C
Hays Kansas, 67601

ATTN:

Eakin #7-7

7/22s/16w/Pawnee

Start Date: 2013.06.08 @ 03:45:00

End Date: 2013.06.08 @ 13:10:30

Job Ticket #: 17592 DST #: 1

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

Printed: 2013.06.08 @ 13:27:20



DRILL STEM TEST REPORT

Shelby Resources LLC

7/22s/16w/Pawnee

2717 Canal BLVD.
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ATTN:

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Job Ticket: 17592

DST#: 1

Test Start: 2013.06.08 @ 03:45:00

GENERAL INFORMATION:

Formation: **Conglomerate/Chert**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:44:00

Time Test Ended: 13:10:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Shane Konzem

Unit No: 3330/50/Great Bend

Interval: 3844.00 ft (KB) To 3867.00 ft (KB) (TVD)

Reference Elevations: 2019.00 ft (KB)

Total Depth: 3867.00 ft (KB) (TVD)

2006.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 13.00 ft

Serial #: 8405

Inside

Press @ RunDepth: 1132.86 psia @ 3863.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2013.06.08

End Date: 2013.06.08

Last Calib.: 2013.06.08

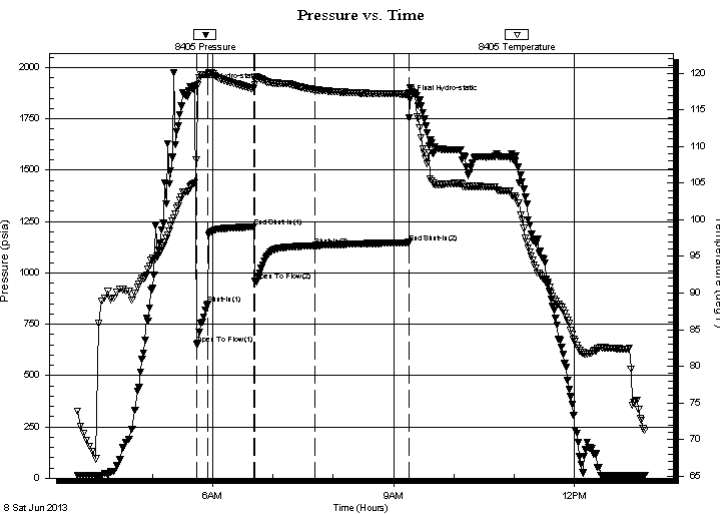
Start Time: 03:45:00

End Time: 13:10:30

Time On Btm: 2013.06.08 @ 05:38:30

Time Off Btm: 2013.06.08 @ 09:16:30

TEST COMMENT: 1st Open/ 10 Minutes. Strong blow built to bottom of 5 gallon bucket in 20 seconds.
1st Shut In/ 45 Minutes. Good blow back built to bottom of 5 gallon bucket in 4 Minutes then died back to 8 inches.
2nd Open/ 60 Minutes. Strong blow built to bottom of 5 gallon bucket in 40 seconds. Gas at surface. Gas was



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1902.33	104.68	Initial Hydro-static
6	651.87	108.21	Open To Flow (1)
17	848.57	119.82	Shut-In(1)
63	1223.61	117.87	End Shut-In(1)
64	958.89	118.43	Open To Flow (2)
123	1132.86	117.76	Shut-In(2)
217	1147.64	117.16	End Shut-In(2)
218	1845.40	117.95	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
3003.00	clean oil.	39.12
0.00	Oil gravity was 47	0.00

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	0.13	6.32	2.36
Last Gas Rate	0.13	4.03	1.51
Max. Gas Rate	0.13	6.32	2.36



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Deviated: No Whipstock: ft (KB)

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Time Test Ended: 13:10:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Shane Konzem

Unit No: 3330/50/Great Bend

Interval: 3844.00 ft (KB) To 3867.00 ft (KB) (TVD)

Reference Elevations: 2019.00 ft (KB)

Total Depth: 3867.00 ft (KB) (TVD)

2006.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 13.00 ft

Serial #: 8400 Outside

Press @ RunDepth: 1148.47 psia @ 3864.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2013.06.08

End Date: 2013.06.08

Last Calib.: 2013.06.08

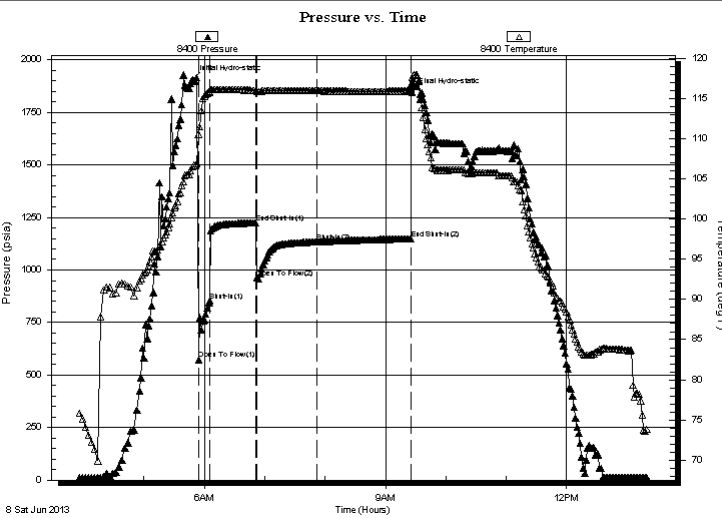
Start Time: 03:55:00

End Time: 13:20:00

Time On Btm: 2013.06.08 @ 05:48:00

Time Off Btm: 2013.06.08 @ 09:26:30

TEST COMMENT: 1st Open/ 10 Minutes. Strong blow built to bottom of 5 gallon bucket in 20 seconds.
1st Shut In/ 45 Minutes. Good blow back built to bottom of 5 gallon bucket in 4 Minutes then died back to 8 inches.
2nd Open/ 60 Minutes. Strong blow built to bottom of 5 gallon bucket in 40 seconds. Gas at surface. Gas was



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1907.00	106.50	Initial Hydro-static
6	574.05	110.60	Open To Flow (1)
17	854.34	115.90	Shut-In(1)
63	1224.57	116.01	End Shut-In(1)
64	961.16	115.88	Open To Flow (2)
124	1133.82	115.99	Shut-In(2)
217	1148.47	115.98	End Shut-In(2)
219	1846.18	117.60	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
3003.00	clean oil.	39.12
0.00	Oil gravity was 47	0.00

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	0.13	6.32	2.36
Last Gas Rate	0.13	4.03	1.51
Max. Gas Rate	0.13	6.32	2.36



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TOOL DIAGRAM

Shelby Resources LLC

7/22s/16w/Pawnee

2717 Canal BLVD.
Suite C
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ATTN:

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Job Ticket: 17592

DST#: 1

Test Start: 2013.06.08 @ 03:45:00

Tool Information

Drill Pipe:	Length: 3506.00 ft	Diameter: 3.80 inches	Volume: 49.18 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: 92000.00 lb
			<u>Total Volume: 50.80 bbl</u>	Tool Chased 5.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 74000.00 lb
Depth to Top Packer:	3844.00 ft			Final 88000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	23.00 ft			
Tool Length:	51.00 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-InTool	5.00		Inside	3821.00	
Hydraulic Tool	5.00			3826.00	
Jars	6.00			3832.00	
Safety Joint	2.00			3834.00	
Packer	5.00			3839.00	28.00 Bottom Of Top Packer
Packer	5.00			3844.00	
Anchor	18.00			3862.00	
Recorder	1.00	8405	Inside	3863.00	
Recorder	1.00	8400	Outside	3864.00	
Bullnose	3.00			3867.00	23.00 Bottom Packers & Anchor
Total Tool Length:	51.00				



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FLUID SUMMARY

Shelby Resources LLC

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Job Ticket: 17592

DST#: 1

Test Start: 2013.06.08 @ 03:45:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 48.00 sec/qt
Water Loss: 8.80 in³
Resistivity: ohm.m
Salinity: 4000.00 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
3003.00	clean oil.	39.118
0.00	Oil gravity w as 47	0.000

Total Length: 3003.00 ft Total Volume: 39.118 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Reversed all fluid out to transport truck.



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GAS RATES

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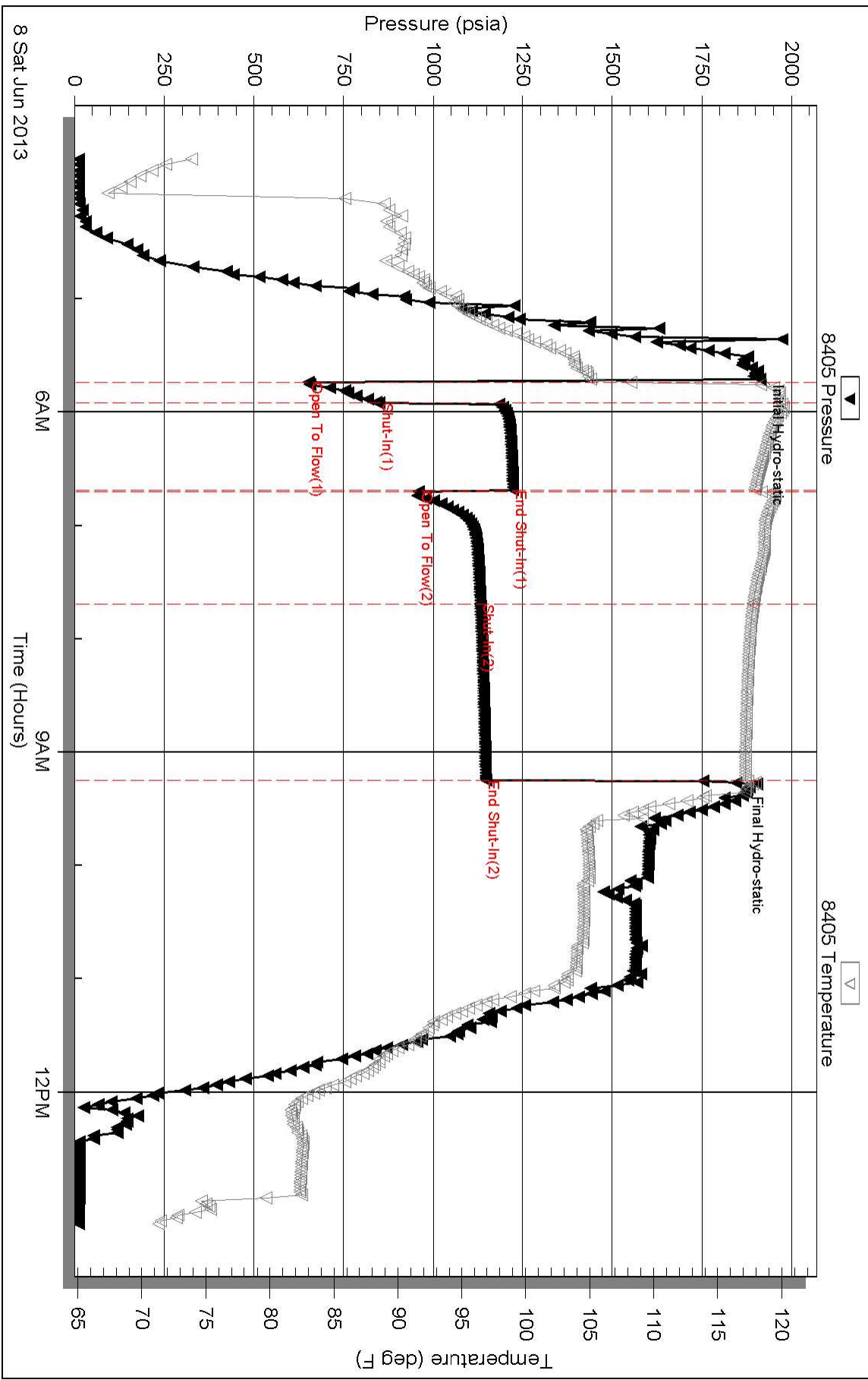
Gas Rates Information

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	5	0.13	6.32	2.36
2	5	0.13	6.32	2.36
2	10	0.13	4.90	1.83
2	20	0.13	4.03	1.51
2	30	0.13	4.03	1.51

Pressure vs. Time



Pressure vs. Time

