



DRILL STEM TEST REPORT

Prepared For: **Shelby Resource LLC**

2717 Canal Blvd.
Hays Kansas 67601

ATTN: Jeremy Schwartz

Viola 1-35

35-21s-16w-Pawnee

Start Date: 2014.04.28 @ 05:22:00

End Date: 2014.04.28 @ 12:29:30

Job Ticket #: 18316 DST #: 1

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

Printed: 2014.04.28 @ 14:22:59



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Job Ticket: 18316

DST#: 1

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Test Start: 2014.04.28 @ 05:22:00

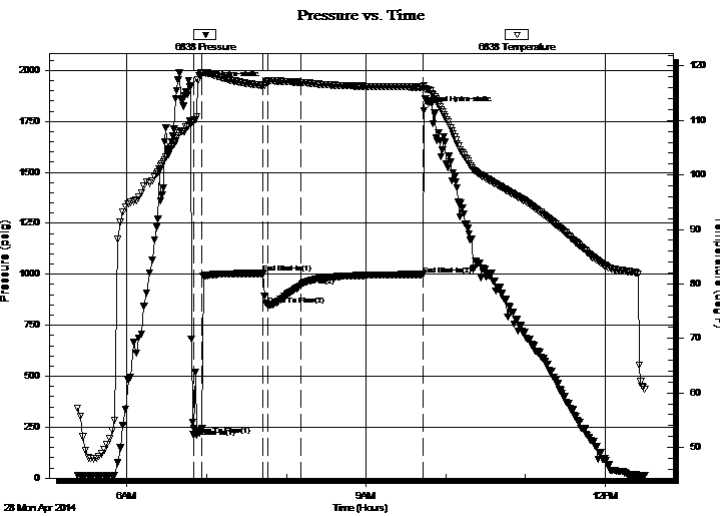
GENERAL INFORMATION:

Formation: **Conglomerate**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 06:50:00
 Time Test Ended: 12:29:30
 Interval: **3784.00 ft (KB) To 3812.00 ft (KB) (TVD)**
 Total Depth: 3812.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Dustin Ellis
 Unit No: 3315-Great Bend-55
 Reference Elevations: 1990.00 ft (KB)
 1977.00 ft (CF)
 KB to GR/CF: 13.00 ft

Serial #: 6838

Press@RunDepth: 943.16 psig @ ft (KB) Capacity: 5000.00 psig
 Start Date: 2014.04.28 End Date: 2014.04.28 Last Calib.: 1899.12.30
 Start Time: 05:23:00 End Time: 12:29:30 Time On Btm: 2014.04.28 @ 06:48:00
 Time Off Btm: 2014.04.28 @ 09:43:30

TEST COMMENT: 1st Open 10 minutes Strong building blow built to the bottom of a 5 gallon bucket of water in 1.5 minutes.
 1st Shut in 45 minutes No blow back.
 2nd Open 30 minutes Strong building blow built to the bottom of a 5 gallon bucket of water in 1.5 minutes.
 2nd Shut in 90 minutes Yes blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1923.96	109.92	Initial Hydro-static
2	212.68	109.83	Open To Flow (1)
9	245.73	118.83	Shut-In(1)
55	1004.11	116.42	End Shut-In(1)
58	849.88	117.11	Open To Flow (2)
83	943.16	116.99	Shut-In(2)
175	998.90	116.13	End Shut-In(2)
176	1803.81	116.37	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
732.00	Gas cut muddy oil	6.88
0.00	Oil 40% Gas 10% Mud 40% Water 10%	0.00
915.00	Water 100%	12.84
0.00	1510 Gas in pipe.	0.00
0.00	Chlorides 41,000 .3ohms@55degrees	0.00

Gas Rates

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



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Job Ticket: 18316

DST#: 1

ATTN: Jeremy Schwartz

Test Start: 2014.04.28 @ 05:22:00

GENERAL INFORMATION:

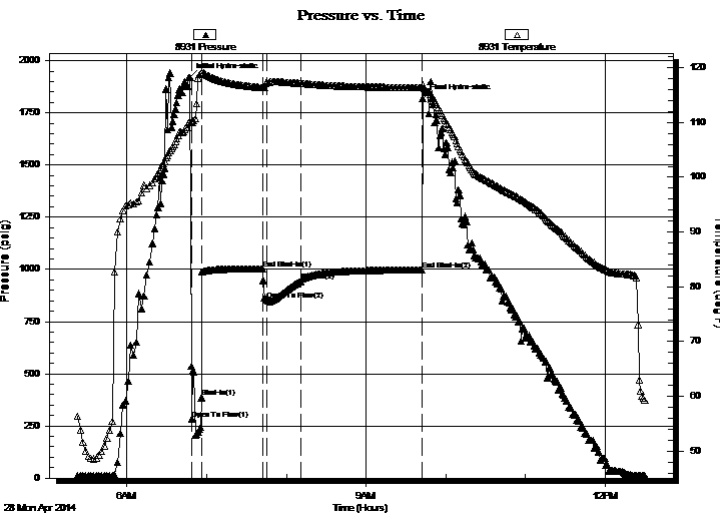
Formation: **Conglomerate**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 06:50:00
 Time Test Ended: 12:29:30
 Interval: **3784.00 ft (KB) To 3812.00 ft (KB) (TVD)**
 Total Depth: 3812.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Dustin Ellis
 Unit No: 3315-Great Bend-55
 Reference Elevations: 1990.00 ft (KB)
 1977.00 ft (CF)
 KB to GR/CF: 13.00 ft

Serial #: 8931

Outside

Press@RunDepth: 998.11 psig @ 3807.00 ft (KB) Capacity: 5000.00 psig
 Start Date: 2014.04.28 End Date: 2014.04.28 Last Calib.: 2014.04.28
 Start Time: 05:23:00 End Time: 12:29:30 Time On Btm: 2014.04.28 @ 06:47:30
 Time Off Btm: 2014.04.28 @ 09:42:30

TEST COMMENT: 1st Open 10 minutes Strong building blow built to the bottom of a 5 gallon bucket of water in 1.5 minutes.
 1st Shut in 45 minutes No blow back.
 2nd Open 30 minutes Strong building blow built to the bottom of a 5 gallon bucket of water in 1.5 minutes.
 2nd Shut in 90 minutes Yes blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1920.86	110.15	Initial Hydro-static
2	282.36	110.08	Open To Flow (1)
9	386.22	119.06	Shut-In(1)
55	1003.23	116.37	End Shut-In(1)
58	852.67	117.31	Open To Flow (2)
83	942.88	117.13	Shut-In(2)
175	998.11	116.36	End Shut-In(2)
175	1819.72	116.81	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
732.00	Gas cut muddy oil	6.88
0.00	Oil 40% Gas 10% Mud 40% Water 10%	0.00
915.00	Water 100%	12.84
0.00	1510 Gas in pipe.	0.00
0.00	Chlorides 41,000 .3ohms@55degrees	0.00

Gas Rates

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



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TOOL DIAGRAM

Shelby Resource LLC

35-21s-16w-Pawnee

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Hays Kansas 67601

Viola 1-35

Job Ticket: 18316

DST#: 1

ATTN: Jeremy Schwartz

Test Start: 2014.04.28 @ 05:22:00

Tool Information

Drill Pipe:	Length: 3397.00 ft	Diameter: 3.80 inches	Volume: 47.65 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: 371.42 ft	Diameter: 2.25 inches	Volume: 1.83 bbl	Weight to Pull Loose: 93000.00 lb
			<u>Total Volume: 49.48 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	12.42 ft			String Weight: Initial 75000.00 lb
Depth to Top Packer:	3784.00 ft			Final 80000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	28.00 ft			
Tool Length:	56.00 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			3761.00	
Hydraulic tool	5.00			3766.00	
Jars	6.00			3772.00	
Safety Joint	2.00			3774.00	
Top Packer	5.00			3779.00	
Packer	5.00			3784.00	28.00 Bottom Of Top Packer
Perforations	23.00			3807.00	
Recorder	0.00	6839	Inside	3807.00	
Recorder	0.00	8931	Outside	3807.00	
Bull Plug	5.00			3812.00	28.00 Anchor Tool
Total Tool Length:	56.00				



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FLUID SUMMARY

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DST#: 1

ATTN: Jeremy Schwartz

Test Start: 2014.04.28 @ 05:22:00

Mud and Cushion Information

Mud Type: Gel Chem
 Mud Weight: 9.00 lb/gal
 Viscosity: 57.00 sec/qt
 Water Loss: 9.19 in³
 Resistivity: ohm.m
 Salinity: 4600.00 ppm
 Filter Cake: 1.00 inches

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

Oil API: deg API
 Water Salinity: ppm

Recovery Information

Recovery Table

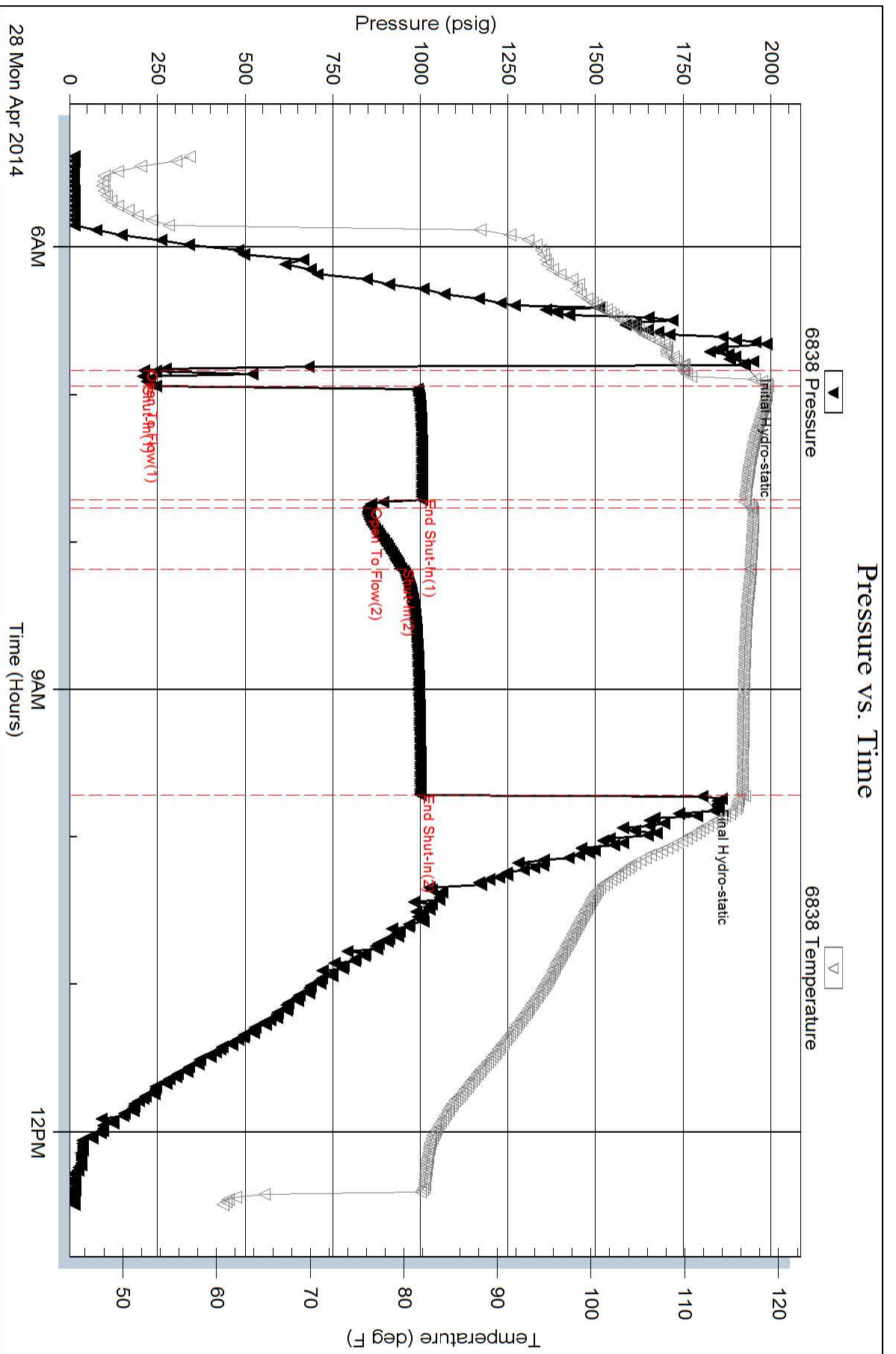
Length ft	Description	Volume bbl
732.00	Gas cut muddy oil	6.885
0.00	Oil 40% Gas 10% Mud 40% Water 10%	0.000
915.00	Water 100%	12.835
0.00	1510 Gas in pipe.	0.000
0.00	Chlorides 41,000 .3ohms@55degrees	0.000

Total Length: 1647.00 ft Total Volume: 19.720 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:



Pressure vs. Time

