



DRILL STEM TEST REPORT

Prepared For: **Carrie Exploration & Development**

210 w 22nd Street Hays Ks 67601

ATTN: Jeff Lawler

Ricker #C-1

15-20s-10w Rice

Start Date: 2013.06.12 @ 08:48:00

End Date: 2013.06.12 @ 14:18:00

Job Ticket #: 17470 DST #: 4

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

Printed: 2013.06.12 @ 14:34:45



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 ATTN: Jeff Lawler

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Ricker #C-1
 Job Ticket: 17470 **DST#: 4**
 Test Start: 2013.06.12 @ 08:48:00

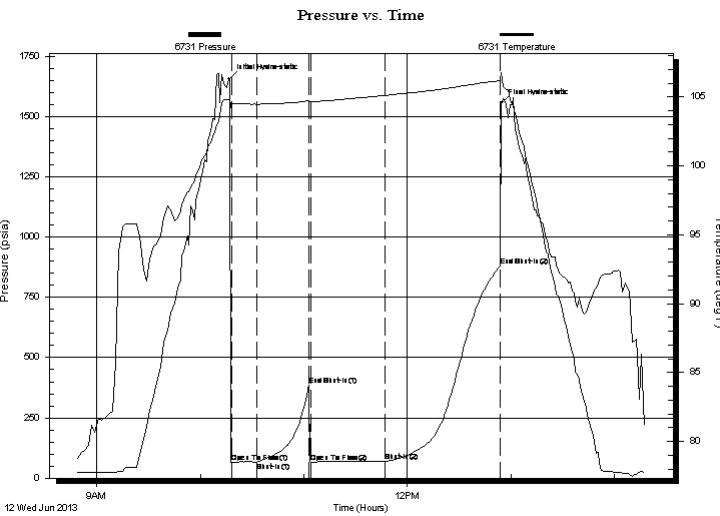
GENERAL INFORMATION:

Formation: **Simpson Sand**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 10:18:00
 Time Test Ended: 14:18:00
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Jared Scheck
 Unit No: 3320-Great Bend-50
 Interval: **3320.00 ft (KB) To 3389.00 ft (KB) (TVD)**
 Reference Elevations: 1837.00 ft (KB)
 Total Depth: 3389.00 ft (KB) (TVD)
 1829.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 KB to GR/CF: 8.00 ft

Serial #: 6731

Press@RunDepth: 69.95 psia @ ft (KB) Capacity: 5000.00 psia
 Start Date: 2013.06.12 End Date: 2013.06.12 Last Calib.: 2013.06.12
 Start Time: 08:48:00 End Time: 14:18:00 Time On Btm: 2013.06.12 @ 10:17:00
 Time Off Btm: 2013.06.12 @ 12:54:30

TEST COMMENT: 1st Opening 15 Minutes-Weak blow built 1/2 inch into water in 15 minutes
 1st Shut-in 30 Minutes-No blow back
 2nd Opening 45 Minutes-Weak blow built 6 inches into water in 45 minutes
 2nd Shut-in 60 Minutes-No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1655.73	104.91	Initial Hydro-static
1	66.65	104.57	Open To Flow (1)
16	67.37	104.48	Shut-In(1)
46	387.25	104.74	End Shut-In(1)
47	64.50	104.67	Open To Flow (2)
90	69.95	105.12	Shut-In(2)
157	879.45	106.19	End Shut-In(2)
158	1554.69	106.79	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
25.00	oil cut mud 30 %oil 70% mud	0.35
0.00	95 feet gas in pipe	0.00

Gas Rates

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



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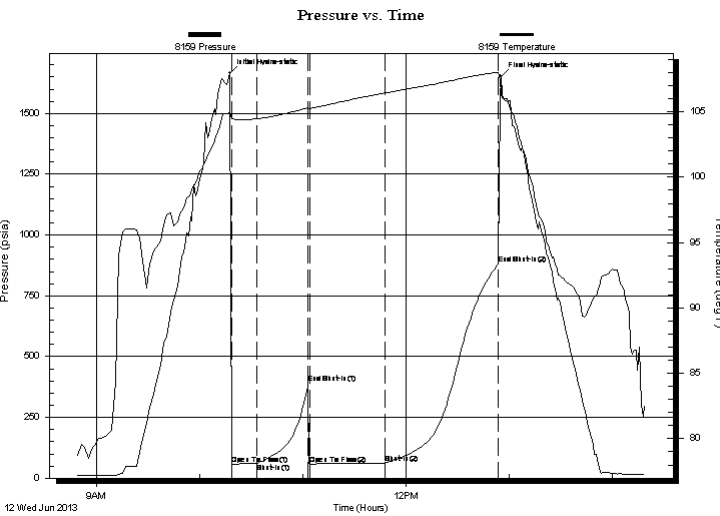
GENERAL INFORMATION:

Formation: **Simpson Sand**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 10:18:00
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Interval: 3320.00 ft (KB) To 3389.00 ft (KB) (TVD)
 Total Depth: 3389.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Jared Scheck
 Unit No: 3320-Great Bend-50
 Reference Elevations: 1837.00 ft (KB)
 1829.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: 8159

Press@RunDepth: 880.82 psia @ ft (KB) Capacity: 5000.00 psia
 Start Date: 2013.06.12 End Date: 2013.06.12 Last Calib.: 2013.06.12
 Start Time: 08:48:00 End Time: 14:18:30 Time On Btm: 2013.06.12 @ 10:17:30
 Time Off Btm: 2013.06.12 @ 12:55:00

TEST COMMENT: 1st Opening 15 Minutes-Weak blow built 1/2 inch into water in 15 minutes
 1st Shut-in 30 Minutes-No blow back
 2nd Opening 45 Minutes-Weak blow built 6 inches into water in 45 minutes
 2nd Shut-in 60 Minutes-No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1665.95	104.95	Initial Hydro-static
1	58.10	104.48	Open To Flow (1)
16	59.43	104.47	Shut-In(1)
46	389.58	105.34	End Shut-In(1)
47	57.09	105.26	Open To Flow (2)
90	62.61	106.43	Shut-In(2)
156	880.82	108.02	End Shut-In(2)
158	1653.45	106.42	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
25.00	oil cut mud 30 %oil 70%mud	0.35
0.00	95 feet gas in pipe	0.00

Gas Rates

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



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TOOL DIAGRAM

Carrie Exploration & Development
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Tool Information

Drill Pipe:	Length: 3303.00 ft	Diameter: 3.80 inches	Volume: 46.33 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose:	45000.00 lb
			<u>Total Volume: 46.33 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	3.00 ft			String Weight: Initial	38000.00 lb
Depth to Top Packer:	3320.00 ft			Final	38000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	69.00 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
Shut-In Tool	5.00			3305.00	
Hydraulic Tool	5.00			3310.00	
Packer	5.00			3315.00	20.00 Bottom Of Top Packer
Packer	5.00			3320.00	
Anchor	5.00			3325.00	
Change Over Sub	0.75			3325.75	
Drill Pipe	31.50			3357.25	
Change Over Sub	0.75			3358.00	
Anchor	26.00			3384.00	
Recorder	1.00	6731	Inside	3385.00	
Recorder	1.00	8159	Outside	3386.00	
Bullnose	3.00			3389.00	69.00 Bottom Packers & Anchor

Total Tool Length: 89.00



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FLUID SUMMARY

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Mud and Cushion Information

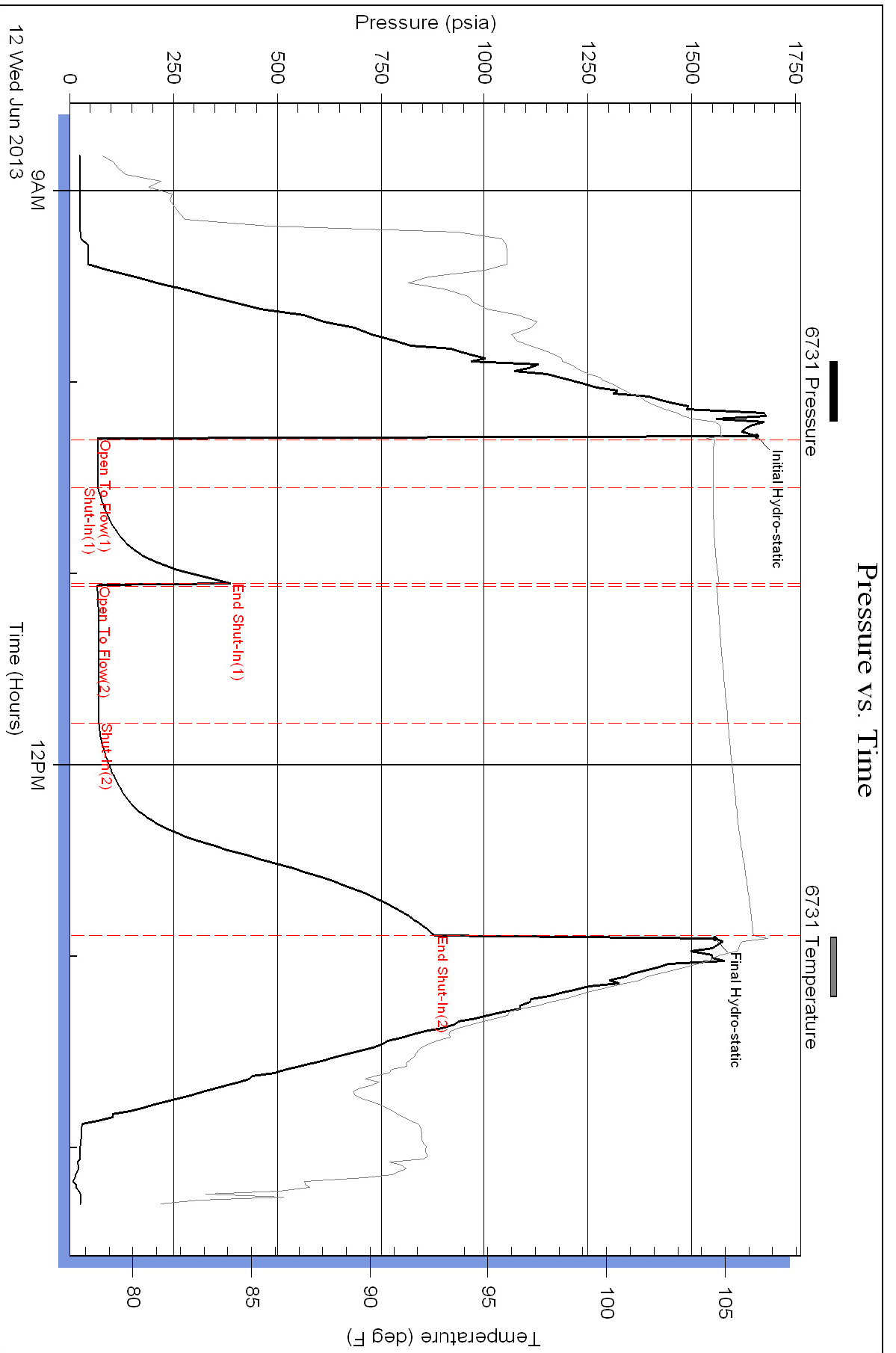
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: sec/qt	Cushion Volume: bbl		
Water Loss: in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
25.00	oil cut mud 30 %oil 70%mud	0.351
0.00	95 feet gas in pipe	0.000

Total Length: 25.00 ft Total Volume: bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:



Pressure vs. Time

