



DRILL STEM TEST REPORT

Prepared For: **LB Exploration**

2135 2nd Road
Holyrood, Kansas 67460

ATTN: Steven Peterson

14/32S/14W/Barber

Larkin 14

Start Date: 2011.10.06 @ 02:30:00

End Date: 2011.10.06 @ 10:54:30

Job Ticket #: 18779 DST #: 4

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

Printed: 2011.10.06 @ 09:22:40



DRILL STEM TEST REPORT

LB Exploration
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 Holyrood, Kansas 67460
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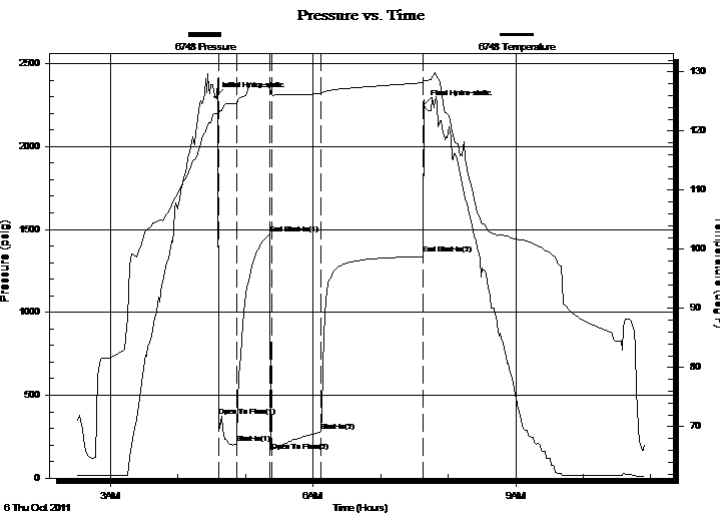
Larkin 14
14/32S/14W/Barber
 Job Ticket: 18779 **DST#: 4**
 Test Start: 2011.10.06 @ 02:30:00

GENERAL INFORMATION:

Formation: **Marmaton/Massey**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 04:36:30
 Time Test Ended: 10:54:30
 Interval: **4696.00 ft (KB) To 4754.00 ft (KB) (TVD)**
 Total Depth: 4754.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Ken Swinney
 Unit No: 3325 Pratt/96
 Reference Elevations: 2010.00 ft (KB)
 1997.00 ft (CF)
 KB to GR/CF: 13.00 ft

Serial #: 6748 Outside
 Press @ Run Depth: 280.28 psig @ 4751.48 ft (KB) Capacity: 5000.00 psig
 Start Date: 2011.10.06 End Date: 2011.10.06 Last Calib.: 2011.10.06
 Start Time: 02:30:00 End Time: 10:54:30 Time On Btm: 2011.10.06 @ 04:33:30
 Time Off Btm: 2011.10.06 @ 07:39:00

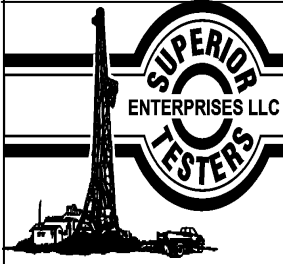
TEST COMMENT: 1ST Open 15 Minutes/Strong blow/Blow to bottom of bucket in 30 Seconds/Gas to surface in 5 minutes
 1ST Shut In 30 Minutes/Blow back built to 1 1/4 inch
 2ND Open 45 Minutes/Strong blow/Blow to bottom of bucket at open
 2ND Shut In 90 Minutes/Blow back built to bottom of bucket



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2301.02	122.98	Initial Hydro-static
3	371.15	122.71	Open To Flow (1)
19	207.40	124.56	Shut-In(1)
48	1470.66	127.45	End Shut-In(1)
50	163.59	126.22	Open To Flow (2)
94	280.28	126.37	Shut-In(2)
185	1350.99	128.20	End Shut-In(2)
186	2255.82	128.47	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
180.00	Gassy mud cut oily w ater	2.63
0.00	Gas 15% Mud 20% Oil 25% Water 40%	0.00
180.00	Gassy oil cut w ater	2.63
0.00	Gas 5% Oil 10% Water 85%	0.00
60.00	Oil and w ater cut gassy mud	0.88
0.00	Oil 10% Water 10% Mud 25% Gas 30%	0.00

Gas Rates			
	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	1.00	5.01	148.06
Last Gas Rate	0.75	4.21	68.02
Max. Gas Rate	0.75	8.44	134.02



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GENERAL INFORMATION:

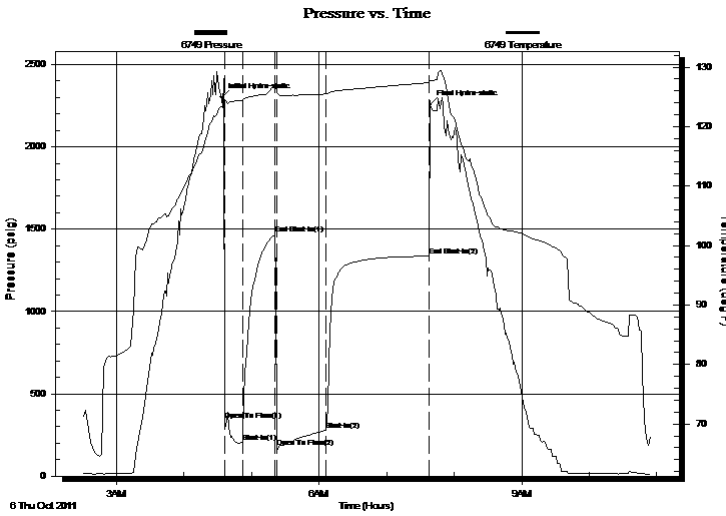
Formation: Marmaton/Massey		Test Type: Conventional Bottom Hole (Initial)
Deviated: No Whipstock: ft (KB)		Tester: Ken Swinney
Time Tool Opened: 04:36:30		Unit No: 3325 Pratt/96
Time Test Ended: 10:54:30		
Interval: 4696.00 ft (KB) To 4754.00 ft (KB) (TVD)		Reference Elevations: 2010.00 ft (KB)
Total Depth: 4754.00 ft (KB) (TVD)		1997.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Fair		KB to GR/CF: 13.00 ft

Serial #: 6749

Inside

Press @ Run Depth: 1337.07 psig @ 4750.48 ft (KB)	Capacity: 5000.00 psig
Start Date: 2011.10.06 End Date: 2011.10.06	Last Calib.: 2011.10.06
Start Time: 02:30:00 End Time: 10:54:30	Time On Btm: 2011.10.06 @ 04:33:30
	Time Off Btm: 2011.10.06 @ 07:39:00

TEST COMMENT: 1ST Open 15 Minutes/Strong blow/Blow to bottom of bucket in 30 Seconds/Gas to surface in 5 minutes
 1ST Shut In 30 Minutes/Blow back built to 1 1/4 inch
 2ND Open 45 Minutes/Strong blow/Blow to bottom of bucket at open
 2ND Shut In 90 Minutes/Blow back built to bottom of bucket



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2300.82	123.33	Initial Hydro-static
3	339.13	124.10	Open To Flow (1)
19	205.34	124.32	Shut-In(1)
48	1469.88	126.88	End Shut-In(1)
49	178.05	125.86	Open To Flow (2)
93	279.88	125.49	Shut-In(2)
184	1337.07	127.37	End Shut-In(2)
186	2254.97	127.65	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
180.00	Gassy mud cut oily w ater	2.63
0.00	Gas 15% Mud 20% Oil 25% Water 40%	0.00
180.00	Gassy oil cut w ater	2.63
0.00	Gas 5% Oil 10% Water 85%	0.00
60.00	Oil and w ater cut gassy mud	0.88
0.00	Oil 10% Water 10% Mud 25% Gas 30%	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	1.00	5.01	148.06
Last Gas Rate	0.75	4.21	68.02
Max. Gas Rate	0.75	8.44	134.02



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TOOL DIAGRAM

LB Exploration
 2135 2nd Road
 Holyrood, Kansas 67460
 ATTN: Steven Peterson

Larkin 14
14/32S/14W/Barber
 Job Ticket: 18779 **DST#: 4**
 Test Start: 2011.10.06 @ 02:30:00

Tool Information

Drill Pipe:	Length: 4695.00 ft	Diameter: 3.88 inches	Volume: 68.66 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose:	60000.00 lb
			<u>Total Volume: 68.66 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	27.75 ft			String Weight: Initial	49000.00 lb
Depth to Top Packer:	4696.00 ft			Final	50000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	58.48 ft				
Tool Length:	87.23 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			4672.25	
Hydraulic tool	5.00			4677.25	
Change over sub	0.75			4678.00	
Jars	6.00			4684.00	
Safety Joint	2.00			4686.00	
Packer	5.00			4691.00	28.75 Bottom Of Top Packer
Packer	5.00			4696.00	
Anchor	0.00			4696.00	
change over sub	0.75			4696.75	
drill pipe	31.98			4728.73	
change over sub	0.75			4729.48	
anchor	20.00			4749.48	
Recorder	1.00	6749	Inside	4750.48	
Recorder	1.00	6748	Outside	4751.48	
bull plug	3.00			4754.48	58.48 Bottom Packers & Anchor

Total Tool Length: 87.23



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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: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 45.00 sec/qt	Cushion Volume: bbl		
Water Loss: 11.19 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 8000.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
180.00	Gassy mud cut oily w ater	2.632
0.00	Gas 15% Mud 20% Oil 25% Water 40%	0.000
180.00	Gassy oil cut w ater	2.632
0.00	Gas 5% Oil 10% Water 85%	0.000
60.00	Oil and w ater cut gassy mud	0.877
0.00	Oil 10% Water 10% Mud 25% Gas 30%	0.000

Total Length: 420.00 ft Total Volume: 6.141 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:



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GAS RATES

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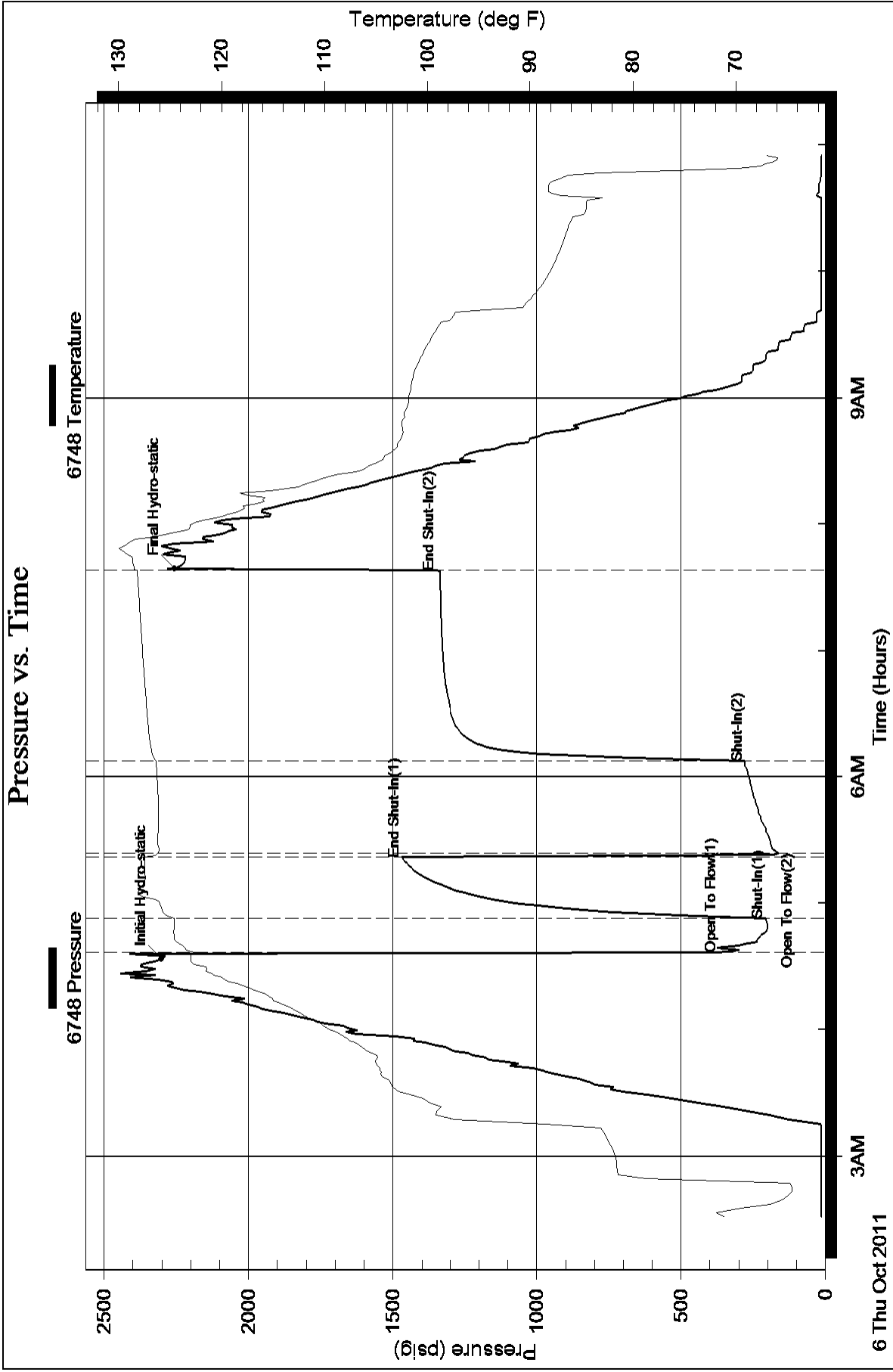
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Gas Rates Information

Temperature: 59 (deg F)
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
1	10	1.00	5.01	148.06
1	10	1.00	5.01	148.06
2	5	0.75	8.44	134.02
2	10	0.75	8.19	130.03
2	20	0.75	5.75	92.00
2	30	0.75	4.21	68.02



Pressure vs. Time

