



DRILL STEM TEST REPORT

Prepared For: **RJM Company**

Po Box 256 Claflin KS 67525+0256

ATTN: Jim Musgrove

Maurice Nordman #1

6-18s-14w Barton

Start Date: 2013.12.06 @ 10:45:00

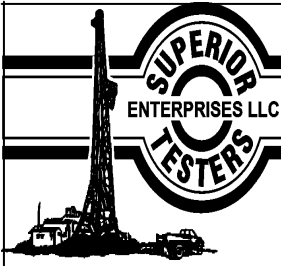
End Date: 2013.12.06 @ 17:34:30

Job Ticket #: 18471 DST #: 4

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

Printed: 2013.12.06 @ 17:49:49

RJM Company
6-18s-14w Barton
Maurice Nordman #1
DST # 4
Arbuckle
2013.12.06



DRILL STEM TEST REPORT

RJM Company
 Po Box 256 Claflin KS 67525+0256
 ATTN: Jim Musgrove

6-18s-14w Barton
Maurice Nordman #1
 Job Ticket: 18471 **DST#: 4**
 Test Start: 2013.12.06 @ 10:45:00

GENERAL INFORMATION:

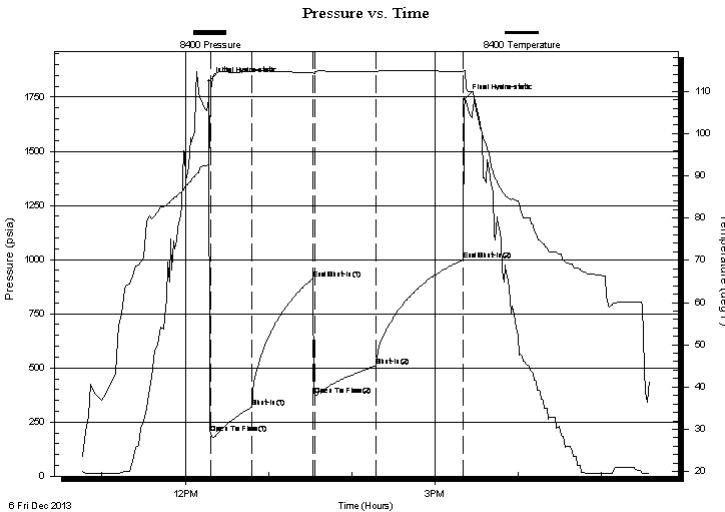
Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 12:18:30 Tester: Jared Scheck
 Time Test Ended: 17:34:30 Unit No: 3320-Great Bend-45
 Interval: **3484.00 ft (KB) To 3535.00 ft (KB) (TVD)** Reference Elevations: 1991.00 ft (KB)
 Total Depth: 3535.00 ft (KB) (TVD) 1984.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 7.00 ft

Serial #: 8400

Press@RunDepth: 509.81 psia @ ft (KB) Capacity: 5000.00 psia
 Start Date: 2013.12.06 End Date: 2013.12.06 Last Calib.: 2013.12.06
 Start Time: 10:45:00 End Time: 17:34:30 Time On Btm: 2013.12.06 @ 12:17:00
 Time Off Btm: 2013.12.06 @ 15:21:30

TEST COMMENT: 1st Opening 30 Minutes-Strong blow built bottom of bucket in 2 minutes
 1st Shut-in 45 Minutes-No blow back
 2nd Opeing 45 Minutes-Strong blow builtr bottom oc bucket in 3 minutes
 2ndf Shut-in 60 Minutes-No blow back

PRESSURE SUMMARY



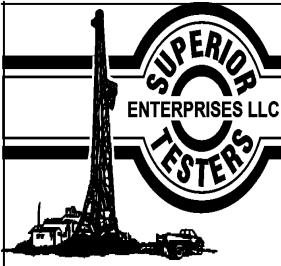
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1822.02	94.52	Initial Hydro-static
2	199.09	110.52	Open To Flow (1)
31	319.07	114.78	Shut-In(1)
75	912.05	114.50	End Shut-In(1)
76	373.43	114.34	Open To Flow (2)
121	509.81	114.78	Shut-In(2)
183	997.82	114.76	End Shut-In(2)
185	1741.29	114.97	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
240.00	w ater cut mud 40%w ater 60%mud	3.37
730.00	spot oil mud w ater 5%oil40%mud 55%w t	10.24
0.00	chlorides 23,000	0.00

Gas Rates

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



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6-18s-14w Barton
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 Test Start: 2013.12.06 @ 10:45:00

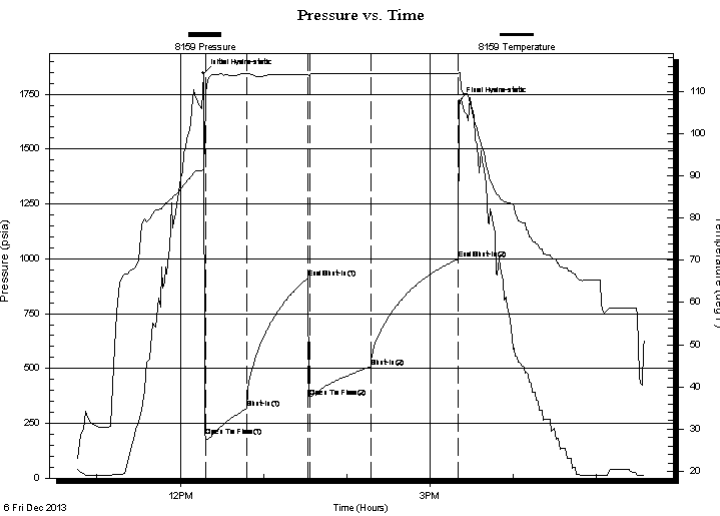
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 Total Depth: 3535.00 ft (KB) (TVD) 1984.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 7.00 ft

Serial #: 8159

Press@RunDepth: 997.82 psia @ ft (KB) Capacity: 5000.00 psia
 Start Date: 2013.12.06 End Date: 2013.12.06 Last Calib.: 2013.12.06
 Start Time: 10:45:00 End Time: 17:34:30 Time On Btm: 2013.12.06 @ 12:16:30
 Time Off Btm: 2013.12.06 @ 15:21:00

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PRESSURE SUMMARY

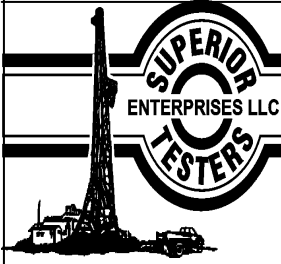
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1846.01	91.51	Initial Hydro-static
2	190.24	106.93	Open To Flow (1)
32	318.44	114.25	Shut-In(1)
76	912.20	113.96	End Shut-In(1)
77	370.45	113.61	Open To Flow (2)
121	507.76	114.27	Shut-In(2)
184	997.82	114.28	End Shut-In(2)
185	1718.27	114.54	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
240.00	w ater cut mud 40%w ater 60%mud	3.37
730.00	spot oil mud w ater 5%oil40%mud 55%w	10.24
0.00	chlorides 23,000	0.00

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

RJM Company
 Po Box 256 Claflin KS 67525+0256
 A T T N : Jim Musgrove

6-18s-14w Barton
Maurice Nordman #1
 Job Ticket: 18471 **DST#: 4**
 Test Start: 2013.12.06 @ 10:45:00

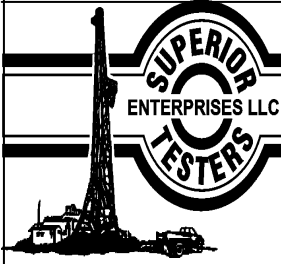
Tool Information

Drill Pipe:	Length: 3476.00 ft	Diameter: 3.80 inches	Volume: 48.76 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:	80000.00 lb
			<u>Total Volume: 48.76 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial	53000.00 lb
Depth to Top Packer:	3484.00 ft			Final	60000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	51.00 ft				
Tool Length:	71.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			
Tool Comments:					

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut-In Tool	5.00			3469.00	
Hydraulic Tool	5.00			3474.00	
Packer	5.00			3479.00	20.00 Bottom Of Top Packer
Packer	5.00			3484.00	
Anchor	46.00			3530.00	
Recorder	1.00		Inside	3531.00	
Recorder	1.00		Outside	3532.00	
Bullnose	3.00			3535.00	51.00 Bottom Packers & Anchor

Total Tool Length: 71.00



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FLUID SUMMARY

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Job Ticket: 18471 **DST#: 4**
Test Start: 2013.12.06 @ 10:45:00

Mud and Cushion Information

Mud Type:		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
240.00	w ater cut mud 40%w ater 60%mud	3.367
730.00	spot oil mud w ater 5%oil40%mud 55%w ater	10.240
0.00	chlorides 23,000	0.000

Total Length: 970.00 ft Total Volume: 13.607 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Pressure vs. Time

