



DRILL STEM TEST REPORT

Prepared For: **RJM Company**

P.O. Box 256
Clafin Ks, 67525-0256

ATTN: Jim Musgrove

Grasmick #1

34/15s/13w/Russell

Start Date: 2014.04.20 @ 09:40:00

End Date: 2014.04.20 @ 17:15:00

Job Ticket #: 19231 DST #: 1

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

Printed: 2014.04.20 @ 18:51:31



DRILL STEM TEST REPORT

RJM Company
 P.O. Box 256
 Claflin Ks, 67525-0256
 ATTN: Jim Musgrove

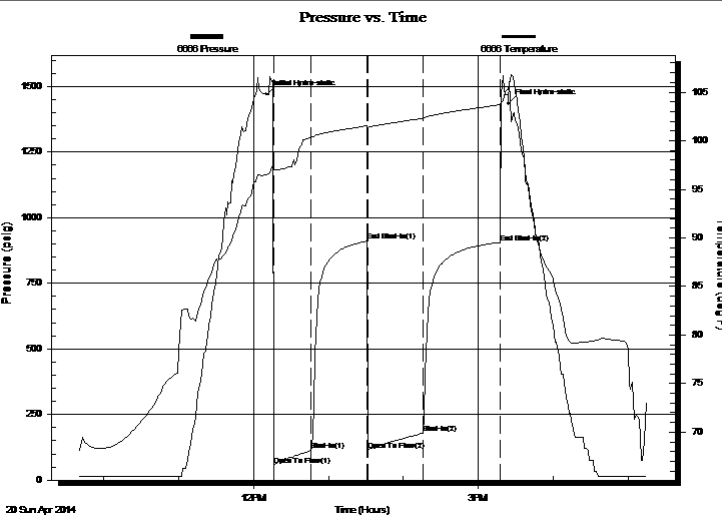
34/15s/13w/Russell
Grasmick #1
 Job Ticket: 19231 **DST#: 1**
 Test Start: 2014.04.20 @ 09:40:00

GENERAL INFORMATION:

Formation: **LKC A-F**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 12:16:30
 Time Test Ended: 17:15:00
 Interval: **3060.00 ft (KB) To 3120.00 ft (KB) (TVD)**
 Total Depth: 3120.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Poor
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Shane Konzem
 Unit No: 3335/50/Great Bend
 Reference Elevations: 1870.00 ft (KB)
 1862.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: 6666 Inside
 Press@RunDepth: 179.86 psig @ 3116.41 ft (KB) Capacity: 5000.00 psig
 Start Date: 2014.04.20 End Date: 2014.04.20 Last Calib.: 2014.04.20
 Start Time: 09:40:00 End Time: 17:15:00 Time On Btm: 2014.04.20 @ 12:10:30
 Time Off Btm: 2014.04.20 @ 15:24:00

TEST COMMENT: 1st Open/ 30 Minutes. Good blow built to the bottom of 5 gallon bucket in 14 minutes and 45 Seconds.
 1st Shut In/ 45 Minutes. Weak surface blow back.
 2nd Open/ 45 Minutes. Good blow built to bottom of 5 gallon bucket in 15 minutes.
 2nd Shut In/ 60 Minutes. Blow back built to 2 inches into bucket of water.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1470.58	96.55	Initial Hydro-static
6	57.37	97.04	Open To Flow (1)
36	112.63	100.34	Shut-In(1)
81	910.70	101.56	End Shut-In(1)
81	113.67	101.31	Open To Flow (2)
125	179.86	102.32	Shut-In(2)
188	905.60	103.71	End Shut-In(2)
194	1434.68	105.32	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
31.00	20% mud, 30% water, 40% oil, 10% Gas	0.43
63.00	25% water, 5% Gas, 10% Oil, 60% Mud	0.88
126.00	5% oil, 50% water, 45% Mud	1.77
63.00	25% Water, 75% Mud	0.88
0.00	409 foot gas	0.00
0.00	Chloride recov, 38000 ppm	0.00

Gas Rates

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



DRILL STEM TEST REPORT

RJM Company
 P.O. Box 256
 Claflin Ks, 67525-0256
 ATTN: Jim Musgrove

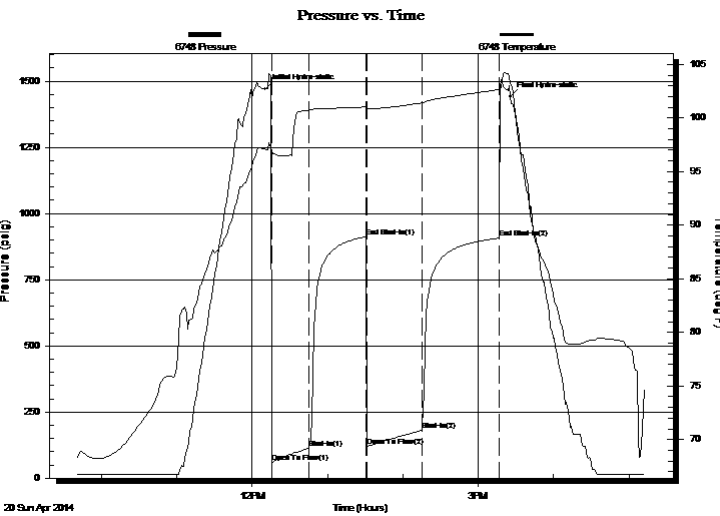
34/15s/13w/Russell
Grasmick #1
 Job Ticket: 19231 **DST#: 1**
 Test Start: 2014.04.20 @ 09:40:00

GENERAL INFORMATION:

Formation: **LKC A-F**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 12:16:30
 Time Test Ended: 17:15:00
Interval: 3060.00 ft (KB) To 3120.00 ft (KB) (TVD)
 Total Depth: 3120.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Poor
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Shane Konzem
 Unit No: 3335/50/Great Bend
 Reference Elevations: 1870.00 ft (KB)
 1862.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: 6748 Outside
 Press@RunDepth: 907.14 psig @ 3117.41 ft (KB) Capacity: 5000.00 psig
 Start Date: 2014.04.20 End Date: 2014.04.20 Last Calib.: 2014.04.20
 Start Time: 09:40:00 End Time: 17:13:00 Time On Btm: 2014.04.20 @ 12:10:30
 Time Off Btm: 2014.04.20 @ 15:25:30

TEST COMMENT: 1st Open/ 30 Minutes. Good blow built to the bottom of 5 gallon bucket in 14 minutes and 45 Seconds.
 1st Shut In/ 45 Minutes. Weak surface blow back.
 2nd Open/ 45 Minutes. Good blow built to bottom of 5 gallon bucket in 15 minutes.
 2nd Shut In/ 60 Minutes. Blow back built to 2 inches into bucket of water.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1471.54	97.06	Initial Hydro-static
5	59.79	96.43	Open To Flow (1)
35	113.95	100.74	Shut-In(1)
80	912.30	101.04	End Shut-In(1)
81	118.98	100.85	Open To Flow (2)
125	181.47	101.40	Shut-In(2)
187	907.14	102.66	End Shut-In(2)
195	1442.39	103.23	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
31.00	20% mud, 30% water, 40% oil, 10% Gas	0.43
63.00	25% water, 5% Gas, 10% Oil, 60% Mud	0.88
126.00	5% oil, 50% water, 45% Mud	1.77
63.00	25% Water, 75% Mud	0.88
0.00	409 foot gas	0.00
0.00	Chloride recov, 38000 ppm	0.00

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

RJM Company

34/15s/13w/Russell

P.O. Box 256
Clafin Ks, 67525-0256

Grasmick #1

Job Ticket: 19231

DST#: 1

ATTN: Jim Musgrove

Test Start: 2014.04.20 @ 09:40:00

Tool Information

Drill Pipe:	Length: 3053.00 ft	Diameter: 3.80 inches	Volume: 42.83 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: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 58000.00 lb
			<u>Total Volume: 42.83 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3060.00 ft			Final 51000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	60.41 ft			
Tool Length:	80.41 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			3045.00	
Hydraulic Tool	5.00			3050.00	
Top Packer	5.00			3055.00	
Packer	5.00			3060.00	20.00 Bottom Of Top Packer
Anchor	0.00			3060.00	
Change Over Sub	0.75			3060.75	
Drill Pipe	31.91			3092.66	
Change Over Sub	0.75			3093.41	
Anchor	22.00			3115.41	
Recorder	1.00	6666	Inside	3116.41	
Recorder	1.00	6748	Outside	3117.41	
Bull Plug	3.00			3120.41	60.41 Anchor Tool

Total Tool Length: 80.41



DRILL STEM TEST REPORT

FLUID SUMMARY

RJM Company

34/15s/13w/Russell

P.O. Box 256
Clafin Ks, 67525-0256

Grasmick #1

Job Ticket: 19231

DST#: 1

ATTN: Jim Musgrove

Test Start: 2014.04.20 @ 09:40:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 48.00 sec/qt
Water Loss: 8.79 in³
Resistivity: ohm.m
Salinity: 5000.00 ppm
Filter Cake: 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
31.00	20% mud, 30% water, 40% oil, 10% Gas	0.435
63.00	25% water, 5% Gas, 10% Oil, 60% Mud	0.884
126.00	5% oil, 50% water, 45% Mud	1.767
63.00	25% Water, 75% Mud	0.884
0.00	409 foot gas	0.000
0.00	Chloride recov, 38000 ppm	0.000
0.00	resist recov, .22 @ 50 degrees	0.000

Total Length: 283.00 ft Total Volume: 3.970 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

Serial #: 6666

Inside

RJM Company

Grasnick #1

DST Test Number: 1

