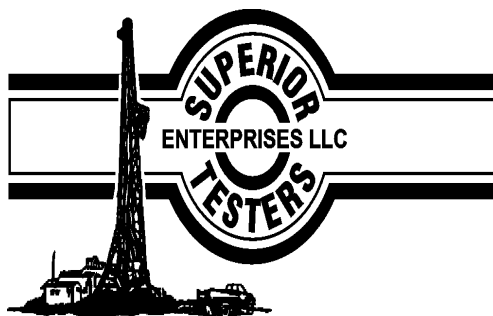




DRILL STEM TEST REPORT

Prepared For: **L B Exploration**

2135 2nd Rd Holyrood KS 67450+9021

ATTN: Steven Petermann

Petermann 28 #1

28-17-10 Ellsworth

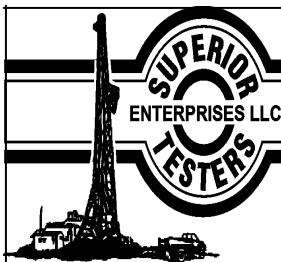
Start Date: 2013.08.19 @ 22:15:00

End Date: 2013.08.20 @ 06:01:00

Job Ticket #: 17024 DST #: 1

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

Printed: 2013.08.20 @ 06:18:00



DRILL STEM TEST REPORT

L B Exploration

28-17-10 Ellsworth

2135 2nd Rd Holyrood KS 67450+9021

Petermann 28 #1

ATTN: Steven Petermann

Job Ticket: 17024

DST#: 1

Test Start: 2013.08.19 @ 22:15:00

GENERAL INFORMATION:

Formation: **LCK**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:48:00

Time Test Ended: 06:01:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Jarefd Scheck

Unit No: 3320- Great Bend -60

Interval: **3138.00 ft (KB) To 3253.00 ft (KB) (TVD)**

Reference Elevations: 1840.00 ft (KB)

Total Depth: 3253.00 ft (KB) (TVD)

1830.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 6731

Press@RunDepth: 152.27 psia @ ft (KB)

Capacity: 5000.00 psia

Start Date: 2013.08.19

End Date:

2013.08.20

Last Calib.:

2013.08.20

Start Time: 22:15:00

End Time:

06:01:00

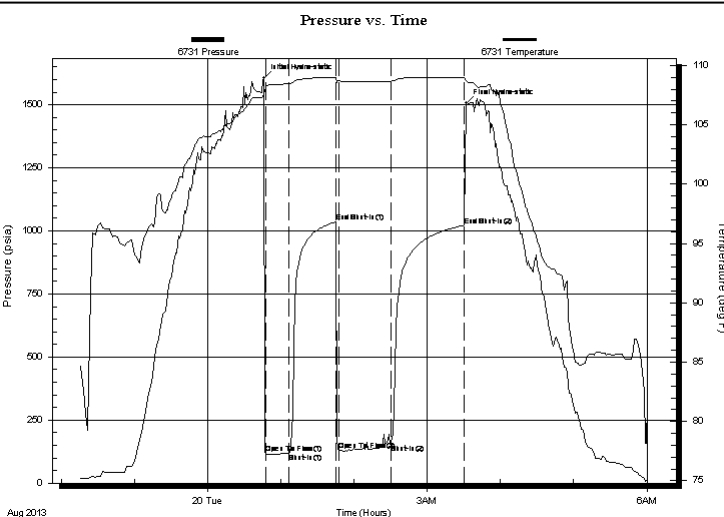
Time On Btm:

2013.08.20 @ 00:46:00

Time Off Btm:

2013.08.20 @ 03:32:00

TEST COMMENT: 1st Opening 20 Minutes-Weak blow built 5 1/2 inches into bucket w water in 20 minutes
1st Shut-in 40 Minutes-No blow back
2nd Opening 40 Minutes-Fair blow built 3 inches from bottom of buckert in 40 minutes
2nd SHut-in 60 MinutesNo blow back



PRESSURE SUMMARY

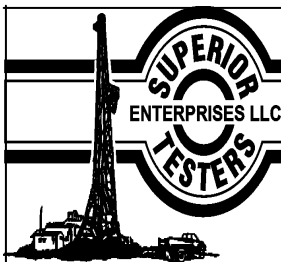
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1604.98	107.59	Initial Hydro-static
2	116.60	108.25	Open To Flow (1)
21	119.75	108.47	Shut-In(1)
59	1035.49	108.98	End Shut-In(1)
62	131.77	108.70	Open To Flow (2)
104	152.27	108.67	Shut-In(2)
164	1021.88	108.98	End Shut-In(2)
166	1506.22	108.69	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
110.00	oil cut mud 5%oil 95%mud	1.54

Gas Rates

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



DRILL STEM TEST REPORT

L B Exploration

28-17-10 Ellsworth

2135 2nd Rd Holyrood KS 67450+9021

Petermann 28 #1

ATTN: Steven Petermann

Job Ticket: 17024

DST#: 1

Test Start: 2013.08.19 @ 22:15:00

GENERAL INFORMATION:

Formation: **LCK**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:48:00

Time Test Ended: 06:01:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Jarefd Scheck

Unit No: 3320- Great Bend -60

Interval: **3138.00 ft (KB) To 3253.00 ft (KB) (TVD)**

Reference Elevations: 1840.00 ft (KB)

Total Depth: 3253.00 ft (KB) (TVD)

1830.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 8159

Press@RunDepth: 1026.19 psia @ ft (KB)

Capacity: 5000.00 psia

Start Date: 2013.08.19

End Date:

2013.08.20

Last Calib.:

2013.08.20

Start Time: 22:15:00

End Time:

06:00:30

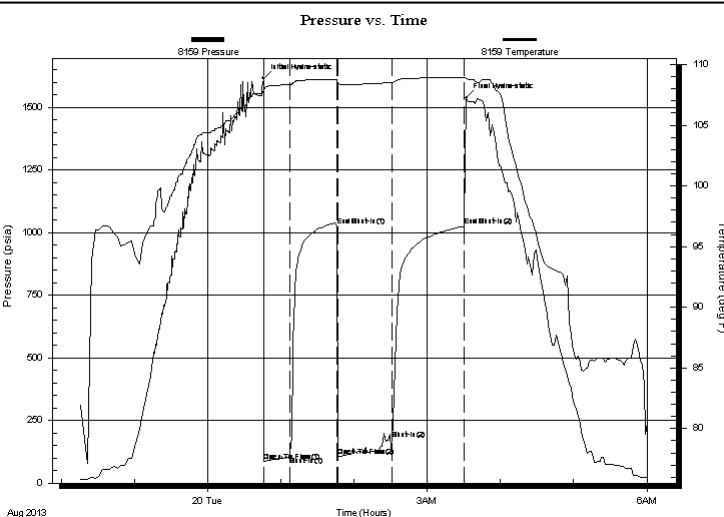
Time On Btm:

2013.08.20 @ 00:45:50

Time Off Btm:

2013.08.20 @ 03:32:00

TEST COMMENT: 1st Opening 20 Minutes-Weak blow built 5 1/2 inches into bucket w ater in 20 minutes
1st Shut-in 40 Minutes-No blow back
2nd Opening 40 Minutes-Fair blow built 3 inches from bottom of buckert in 40 minutes
2nd SHut-in 60 MinutesNo blow back



PRESSURE SUMMARY

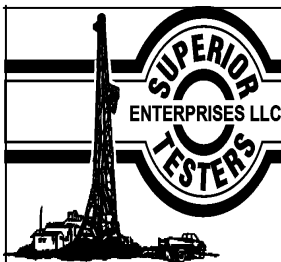
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1617.45	107.89	Initial Hydro-static
1	86.60	107.78	Open To Flow (1)
22	105.68	108.34	Shut-In(1)
60	1028.38	108.73	End Shut-In(1)
61	107.31	108.43	Open To Flow (2)
106	175.19	108.50	Shut-In(2)
165	1026.19	108.94	End Shut-In(2)
167	1538.32	108.84	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
110.00	oil cut mud 5%oil 95%mud	1.54

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

L B Exploration

28-17-10 Ellsworth

2135 2nd Rd Holyrood KS 67450+9021

Petermann 28 #1

Job Ticket: 17024

DST#: 1

ATTN: Steven Petermann

Test Start: 2013.08.19 @ 22:15:00

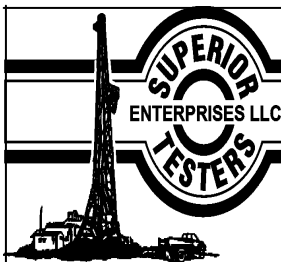
Tool Information

Drill Pipe:	Length:	3122.00 ft	Diameter:	3.80 inches	Volume:	43.79 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:	50000.00 lb
					Total Volume:	43.79 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		4.00 ft					String Weight: Initial	45000.00 lb
Depth to Top Packer:		3138.00 ft					Final	45000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		115.00 ft						
Tool Length:		135.00 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			3123.00	
Hydraulic Tool	5.00			3128.00	
Packer	5.00			3133.00	20.00 Bottom Of Top Packer
Packer	5.00			3138.00	
Anchor	10.00			3148.00	
Change Over Sub	0.75			3148.75	
Drill Pipe	63.50			3212.25	
Change Over Sub	0.75			3213.00	
Anchor	35.00			3248.00	
Recorder	1.00	6731	Inside	3249.00	
Recorder	1.00	8159	Outside	3250.00	
Bullnose	3.00			3253.00	115.00 Bottom Packers & Anchor

Total Tool Length: 135.00



DRILL STEM TEST REPORT

FLUID SUMMARY

L B Exploration

28-17-10 Ellsworth

2135 2nd Rd Holyrood KS 67450+9021

Petermann 28 #1

Job Ticket: 17024

DST#: 1

ATTN: Steven Petermann

Test Start: 2013.08.19 @ 22:15:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 54.00 sec/qt

Water Loss: 7.20 in³

Resistivity: ohm.m

Salinity: 1600.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

Oil API:

Water Salinity:

deg API

ppm

ft

bbl

psia

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
110.00	oil cut mud 5%oil 95%mud	1.543

Total Length: 110.00 ft

Total Volume: 1.543 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

