



DRILL STEM TEST REPORT

Prepared For: **Shelby Resources LLC**

13949 W Colfax bld.1 Sut 120
Lakewood ,Colorado 80401

ATTN: Jeremy Schwartz

Slattery #1-16

16-18s-14w

Start Date: 2019.10.02 @ 07:51:00

End Date: 2019.10.02 @ 12:15:00

Job Ticket #: 01373 DST #: 2

Eagle Testers
1309 Patton Road Great Bend, Kansas 67530
620-791-7394

Printed: 2019.10.02 @ 12:35:06



DRILL STEM TEST REPORT

Shelby Resources LLC

16-18s-14w

13949 W Colfax bld.1 Sut 120
Lakewood, Colorado 80401

Slattery #1-16

Job Ticket: 01373

DST#:2

ATTN: Jeremy Schwartz

Test Start: 2019.10.02 @ 07:51:00

GENERAL INFORMATION:

Formation: **kansas City "H-K"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:38:00

Time Test Ended: 12:15:00

Interval: **3353.00 ft (KB) To 3438.00 ft (KB) (TVD)**

Total Depth: 3438.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Test Type: Conventional Bottom Hole (Initial)

Tester: Gene Budig1

Unit No: 1

Reference Elevations: 1964.00 ft (KB)

1959.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 9139

Press@RunDepth: 72.68 psig @ ft (KB)

Start Date: 2019.10.02

End Date: 2019.10.02

Start Time: 07:51:00

End Time: 12:12:00

Capacity: psig

Last Calib.: 1899.12.30

Time On Btm: 2019.10.02 @ 09:29:30

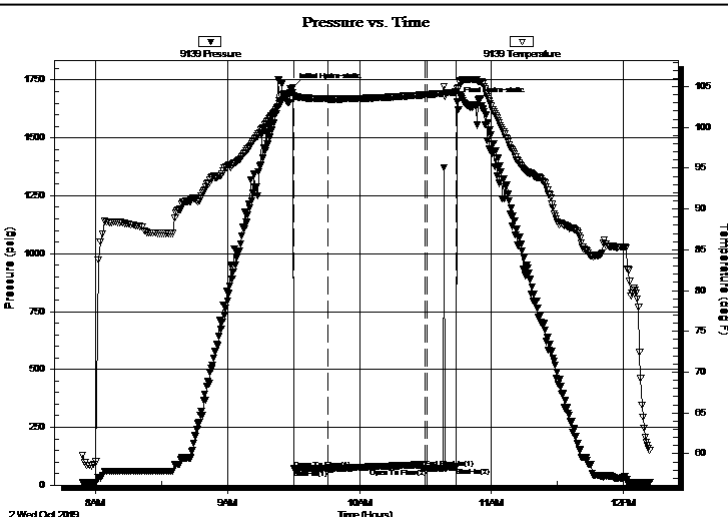
Time Off Btm: 2019.10.02 @ 10:44:30

TEST COMMENT: 1st Opening 15 Minutes weak 1/2 inblow decreased to weak surface blow

1st Shut-In 45 Minutes

2nd Opening 25 Minutes no blow flushed tool no help

2nd Shut-In None taken



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1716.64	104.25	Initial Hydro-static
1	69.95	103.87	Open To Flow (1)
16	70.06	103.49	Shut-In(1)
61	72.68	104.01	End Shut-In(1)
61	72.69	104.02	Open To Flow (2)
75	76.11	104.33	Shut-In(2)
75	1657.89	104.70	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	Drilling Mud32	0.10

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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16-18s-14w

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Lakewood, Colorado 80401

Slattery #1-16

Job Ticket: 01373

DST#:2

ATTN: Jeremy Schwartz

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GENERAL INFORMATION:

Formation: **kansas City "H-K"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:38:00

Time Test Ended: 12:15:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Gene Budig1

Unit No: 1

Interval: **3353.00 ft (KB) To 3438.00 ft (KB) (TVD)**

Reference Elevations: 1964.00 ft (KB)

Total Depth: 3438.00 ft (KB) (TVD)

1959.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 9119

Press@RunDepth: psig @ ft (KB)

Capacity: psig

Start Date: 2019.10.02

End Date: 2019.10.02

Last Calib.: 1899.12.30

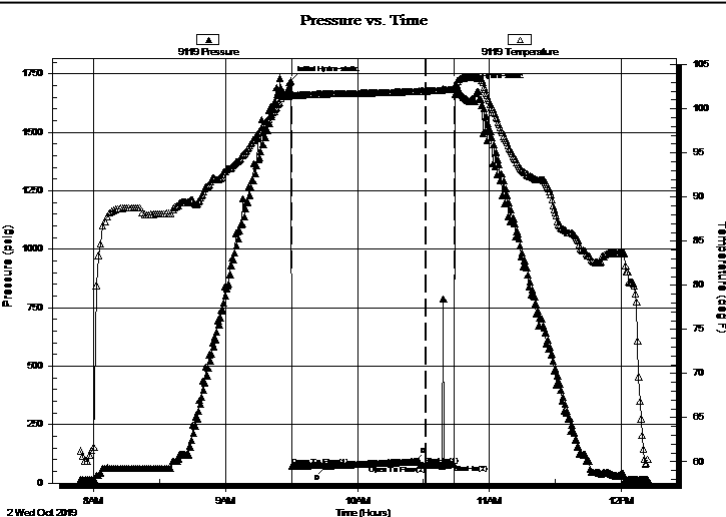
Start Time: 07:51:00

End Time: 12:12:00

Time On Btm: 2019.10.02 @ 09:29:30

Time Off Btm: 2019.10.02 @ 10:45:00

TEST COMMENT: 1st Opening 15 Minutes weak 1/2 inblow decreased to weak surface blow
1st Shut-In 45 Minutes
2nd Opening 25 Minutes no blow flushed tool no help
2nd Shut-In None taken



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1720.07	102.06	Initial Hydro-static
1	72.84	101.53	Open To Flow (1)
16	73.35	101.68	0
56	90.89	101.97	0
61	75.94	102.02	Shut-In(1)
62	75.99	102.02	Open To Flow (2)
75	79.26	102.17	Shut-In(2)
76	1691.76	102.74	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	Drilling Mud32	0.10

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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DRILL STEM TEST REPORT

TOOL DIAGRAM

Shelby Resources LLC

16-18s-14w

13949 W Colfax bld.1 Sut 120
Lakewood, Colorado 80401

Slattery #1-16

Job Ticket: 01373

DST#: 2

ATTN: Jeremy Schwartz

Test Start: 2019.10.02 @ 07:51:00

Tool Information

Drill Pipe:	Length: 3225.00 ft	Diameter: 3.80 inches	Volume: 45.24 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: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 85000.00 lb
		Total Volume:	45.83 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial 47000.00 lb
Depth to Top Packer:	3353.00 ft			Final 47000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	85.06 ft			
Tool Length:	115.06 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			3328.00	
Hydraulic tool	5.00			3333.00	
Jars	5.00			3338.00	
Safety Joint	5.00			3343.00	
Packer	5.00			3348.00	30.00 Bottom Of Top Packer
Packer	5.00		Fluid	3353.00	
Anchor	5.00			3358.00	
Change Over Sub	0.75			3358.75	
Drill Pipe	63.56			3422.31	
Change Over Sub	0.75		Inside	3423.06	
Anchor	10.00			3433.06	
Recorder	0.00	9119	Inside	3433.06	
Recorder	0.00	9139	Outside	3433.06	
Bullnose	5.00			3438.06	85.06 Bottom Packers & Anchor

Total Tool Length: 115.06



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FLUID SUMMARY

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Lakewood, Colorado 80401

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Job Ticket: 01373

DST#:2

ATTN: Jeremy Schwartz

Test Start: 2019.10.02 @ 07:51:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 52.00 sec/qt

Water Loss: 8.80 in³

Resistivity: ohm.m

Salinity: 7000.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	Drilling Mud32	0.098

Total Length: 20.00 ft

Total Volume: 0.098 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

