



DRILL STEM TEST REPORT

Prepared For: **SHELBY RESOURCES LLC**

2717 CANAL BLVD SUITE C
HAYS, KANSAS 67601

ATTN: KEITH REAVIS

STOSS 1-24

24-18s-14w BARTON

Start Date: 2016.09.12 @ 09:41:00

End Date: 2016.09.12 @ 00:00:00

Job Ticket #: 01129 DST #: 3

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

Printed: 2016.09.12 @ 16:59:56

SHELBY RESOURCES LLC
24-18s-14w BARTON
STOSS 1-24
DST # 3
LANSING H TO K
2016.09.12



DRILL STEM TEST REPORT

SHELBY RESOURCES LLC

24-18s-14w BARTON

2717 CANAL BLVD SUITE C
HAYS, KANSAS 67601

STOSS 1-24

Job Ticket: 01129

DST#: 3

ATTN: KEITH REAVIS

Test Start: 2016.09.12 @ 09:41:00

GENERAL INFORMATION:

Formation: **LANSING H TO K**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:12:00

Time Test Ended: 00:00:00

Test Type: Conventional Bottom Hole (Initial)

Tester: GENE BUDIG

Unit No: 1-19

Interval: **3275.00 ft (KB) To 3371.00 ft (KB) (TVD)**

Reference Elevations: 1908.00 ft (KB)

Total Depth: 3371.00 ft (KB) (TVD)

1897.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 9139

Outside

Press@RunDepth: 974.40 psia @ 3366.18 ft (KB)

Capacity: 5000.00 psia

Start Date: 2016.09.12

End Date:

2016.09.12

Last Calib.:

2016.09.12

Start Time: 09:41:00

End Time:

16:35:00

Time On Btm:

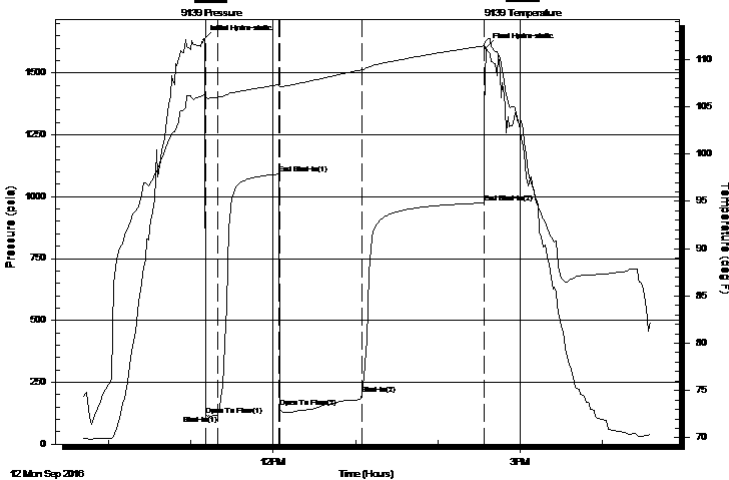
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Time Off Btm:

2016.09.12 @ 14:35:00

TEST COMMENT: 1ST OPENING 10 MINUTES-GOOD BLOW BUILT TO THE BOTTOM OF A 5 GALLON BUCKET IN 2 MINUTES
1ST SHUT-IN 45 MINUTES- NO BLOW BACK
2ND OPENING 60 MINUTES-STRONG BLOW BUILT TO BOTTOM OF THE BUCKET IN LESS THAN 1 MINUTE
2ND SHUT-IN 90 MINUTES-GOOD BLOW BACK GAS TO SURFACE ON THE SHUT-IN

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1633.26	106.28	Initial Hydro-static
1	118.26	105.93	Open To Flow (1)
10	115.64	106.00	Shut-In(1)
55	1090.41	107.39	End Shut-In(1)
55	150.76	107.14	Open To Flow (2)
115	199.59	108.93	Shut-In(2)
204	974.40	111.46	End Shut-In(2)
206	1601.29	111.99	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
45.00	CLEAN GASSY OIL GRAVITY 46 CORRE0.22)	
120.00	OIL AND GAS CUT MUD	1.27
0.00	5 GAS 25 OIL 70 MUD	0.00
180.00	MUDDY FROTHY OIL 15 WATER	2.52

Gas Rates

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



DRILL STEM TEST REPORT

SHELBY RESOURCES LLC

24-18s-14w BARTON

2717 CANAL BLVD SUITE C
HAYS, KANSAS 67601

STOSS 1-24

Job Ticket: 01129

DST#: 3

ATTN: KEITH REAVIS

Test Start: 2016.09.12 @ 09:41:00

GENERAL INFORMATION:

Formation: **LANSING H TO K**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:12:00

Time Test Ended: 00:00:00

Test Type: Conventional Bottom Hole (Initial)

Tester: GENE BUDIG

Unit No: 1-19

Interval: **3275.00 ft (KB) To 3371.00 ft (KB) (TVD)**

Reference Elevations: 1908.00 ft (KB)

Total Depth: 3371.00 ft (KB) (TVD)

1897.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: **9119**

Inside

Press@RunDepth: 969.07 psia @ 3366.18 ft (KB)

Capacity: 5000.00 psia

Start Date: 2016.09.12

End Date:

2016.09.12

Last Calib.:

2016.09.12

Start Time: 09:40:00

End Time:

16:34:00

Time On Btm:

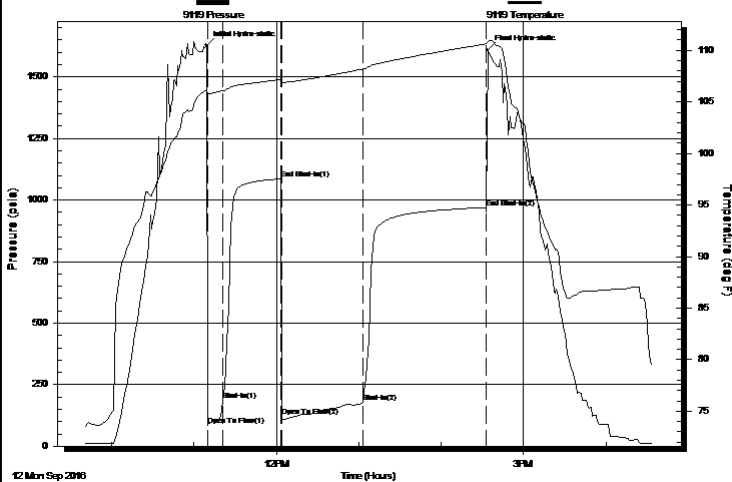
2016.09.12 @ 11:09:00

Time Off Btm:

2016.09.12 @ 14:34:00

TEST COMMENT: 1ST OPENING 10 MINUTES-GOOD BLOW BUILT TO THE BOTTOM OF A 5 GALLON BUCKET IN 2 MINUTES
1ST SHUT-IN 45 MINUTES- NO BLOW BACK
2ND OPENING 60 MINUTES-STRONG BLOW BUILT TO BOTTOM OF THE BUCKET IN LESS THAN 1 MINUTE
2ND SHUT-IN 90 MINUTES-GOOD BLOW BACK GAS TO SURFACE ON THE SHUT-IN

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1628.34	106.14	Initial Hydro-static
1	86.04	105.77	Open To Flow (1)
12	187.33	106.09	Shut-In(1)
54	1085.98	107.17	End Shut-In(1)
55	120.00	106.91	Open To Flow (2)
114	178.75	108.20	Shut-In(2)
204	969.07	110.63	End Shut-In(2)
205	1610.88	110.89	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
45.00	CLEAN GASSY OIL GRAVITY 46 CORRE0.22)	
120.00	OIL AND GAS CUT MUD	1.27
0.00	5 GAS 25 OIL 70 MUD	0.00
180.00	MUDDY FROTHY OIL 15 WATER	2.52

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

SHELBY RESOURCES LLC

24-18s-14w BARTON

2717 CANAL BLVD SUITE C
HAYS, KANSAS 67601

STOSS 1-24

Job Ticket: 01129

DST#: 3

ATTN: KEITH REAVIS

Test Start: 2016.09.12 @ 09:41:00

Tool Information

Drill Pipe:	Length: 3184.00 ft	Diameter: 3.80 inches	Volume: 44.66 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.86 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 90.00 ft	Diameter: 2.25 inches	Volume: 0.44 bbl	Weight to Pull Loose: 64000.00 lb
			Total Volume: 45.10 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial 51000.00 lb
Depth to Top Packer:	3275.00 ft			Final 54000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	96.18 ft			
Tool Length:	125.18 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			3251.00	
Hydraulic tool	5.00			3256.00	
Jars	7.00			3263.00	
Safety Joint	2.00		Fluid	3265.00	
Top Packer	5.00			3270.00	
Packer	5.00			3275.00	29.00 Bottom Of Top Packer
Anchor	3.00			3278.00	
Change Over Sub	0.75			3278.75	
Drill Pipe	63.68			3342.43	
Change Over Sub	0.75			3343.18	
Anchor	23.00			3366.18	
Recorder	0.00	9119	Inside	3366.18	
Recorder	0.00	9139	Outside	3366.18	
Bullnose	5.00			3371.18	96.18 Anchor Tool

Total Tool Length: 125.18



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FLUID SUMMARY

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Test Start: 2016.09.12 @ 09:41:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 55.00 sec/qt
Water Loss: 8.40 in³
Resistivity: ohm.m
Salinity: 3100.00 ppm
Filter Cake: 1.00 inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psia
Oil API: deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
45.00	CLEAN GASSY OIL GRAVITY 46 CORRECTE	0.221
120.00	OIL AND GAS CUT MUD	1.273
0.00	5 GAS 25 OIL 70 MUD	0.000
180.00	MUDDY FROTHY OIL 15 WATER	2.525

Total Length: 345.00 ft Total Volume: 4.019 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

Pressure vs. Time

