



DRILL STEM TEST REPORT

Prepared For: **GLOBE OPERATING INC.**

P.O. BOX 12
GREAT BEND ,KANSAS 67530

ATTN: JASON ALM

DEWERFF 2

12-22S-12W STAFFORD

Start Date: 2017.03.11 @ 08:04:00

End Date: 2017.03.11 @ 14:09:00

Job Ticket #: 01158 DST #: 1

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

Printed: 2017.03.11 @ 14:35:00



DRILL STEM TEST REPORT

GLOBE OPERATING INC.

12-22S-12W STAFFORD

P.O. BOX 12
GREAT BEND, KANSAS 67530

DEWERFF 2

Job Ticket: 01158

DST#: 1

ATTN: JASON ALM

Test Start: 2017.03.11 @ 08:04:00

GENERAL INFORMATION:

Formation: **LANSING KANSAS CITY**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:44:00

Time Test Ended: 14:09:00

Test Type: Conventional Bottom Hole (Initial)

Tester: GENE BUDIG

Unit No: 1-

Interval: **3372.00 ft (KB) To 3425.00 ft (KB) (TVD)**

Total Depth: 3425.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1876.00 ft (KB)

1868.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 9139

Inside

Press@RunDepth: 926.12 psia @ 3420.14 ft (KB)

Start Date: 2017.03.11

End Date:

2017.03.11

Capacity: 5000.00 psia

Last Calib.: 2017.03.11

Start Time: 08:04:00

End Time:

14:08:30

Time On Btm: 2017.03.11 @ 09:42:00

Time Off Btm: 2017.03.11 @ 12:15:30

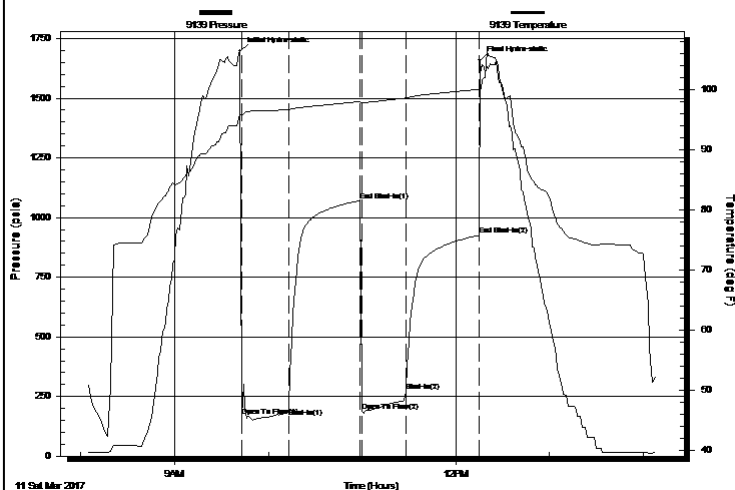
TEST COMMENT: 1ST OPENING 30 MINUTES GOOD BLOW BOTTOM OF THE BUCKET IN 1 MINUTE GAS IN 6 MINUTES

1ST SHUT-IN 45 MINUTES

2ND OPENING 30 MINUTES STRONG BLOW SEE GAS FLOW REPORT

2ND SHUT-IN 45 MINUTES GOOD BLOW BACK

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1697.06	95.77	Initial Hydro-static
1	166.89	95.62	Open To Flow (1)
31	199.95	96.63	Shut-In(1)
77	1069.23	97.98	End Shut-In(1)
78	189.16	97.78	Open To Flow (2)
106	273.42	98.56	Shut-In(2)
153	926.12	99.99	End Shut-In(2)
154	1659.42	100.24	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	THICK HEAVY MUD	1.68
60.00	MUDDY WATER 70 WATER 30 MUD	0.84
60.00	SLIGHTLY MUDDY WATER 90 WATER (0.84)	
180.00	WATER CHLORIDES 68,000	2.52

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	1.00	6.23	179.10
Last Gas Rate	1.00	4.01	115.28
Max. Gas Rate	1.00	6.23	179.10



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Total Depth: 3425.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1876.00 ft (KB)

1868.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 91916 Outside

Press@RunDepth: 925.07 psia @ 3420.14 ft (KB)

Start Date: 2017.03.11

End Date:

2017.03.11

Capacity: 5000.00 psia

Last Calib.: 2017.03.11

Start Time: 08:04:00

End Time:

14:08:00

Time On Btm: 2017.03.11 @ 09:42:00

Time Off Btm: 2017.03.11 @ 12:16:00

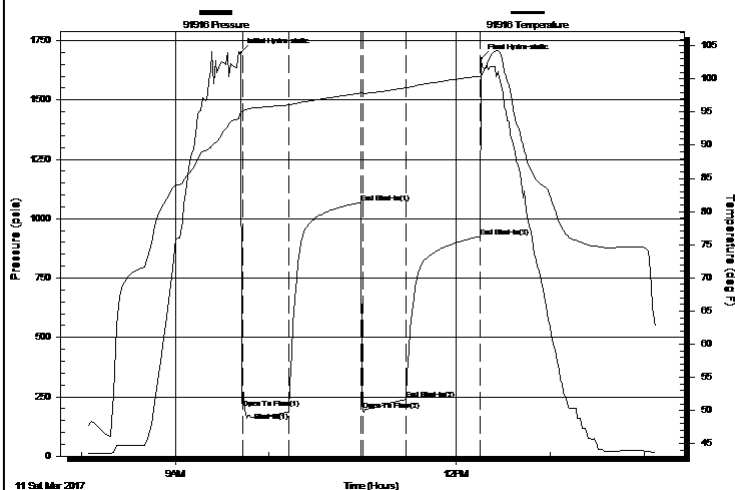
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1ST SHUT-IN 45 MINUTES

2ND OPENING 30 MINUTES STRONG BLOW SEE GAS FLOW REPORT

2ND SHUT-IN 45 MINUTES GOOD BLOW BACK

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1698.36	94.92	Initial Hydro-static
1	201.24	95.18	Open To Flow (1)
31	185.72	96.06	Shut-In(1)
77	1067.42	97.87	End Shut-In(1)
78	194.15	97.84	Open To Flow (2)
106	238.39	98.64	End Shut-In(2)
153	925.07	100.40	End Shut-In(3)
154	1672.72	100.45	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	THICK HEAVY MUD	1.68
60.00	MUDDY WATER 70 WATER 30 MUD	0.84
60.00	SLIGHTLY MUDDY WATER 90 WATER 10 MUD	0.84
180.00	WATER CHLORIDES 68,000	2.52

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	1.00	6.23	179.10
Last Gas Rate	1.00	4.01	115.28
Max. Gas Rate	1.00	6.23	179.10



DRILL STEM TEST REPORT

TOOL DIAGRAM

GLOBE OPERATING INC.

12-22S-12W STAFFORD

P.O. BOX 12
GREAT BEND, KANSAS 67530

DEWERFF 2

Job Ticket: 01158

DST#: 1

ATTN: JASON ALM

Test Start: 2017.03.11 @ 08:04:00

Tool Information

Drill Pipe:	Length: 3377.00 ft	Diameter: 3.80 inches	Volume: 47.37 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 68000.00 lb
			Total Volume: 47.37 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 46000.00 lb
Depth to Top Packer:	3372.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	53.14 ft			
Tool Length:	73.14 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3357.00	
Hydraulic tool	5.00			3362.00	
Top Packer	5.00			3367.00	
Packer	5.00			3372.00	20.00 Bottom Of Top Packer
Anchor	5.00			3377.00	
Change Over Sub	0.75			3377.75	
Drill Pipe	31.64			3409.39	
Change Over Sub	0.75			3410.14	
Anchor	10.00			3420.14	
Recorder	0.00	9139	Inside	3420.14	
Recorder	0.00	91916	Outside	3420.14	
Bullnose	5.00			3425.14	53.14 Anchor Tool

Total Tool Length: 73.14



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FLUID SUMMARY

GLOBE OPERATING INC.

12-22S-12W STAFFORD

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Job Ticket: 01158

DST#: 1

ATTN: JASON ALM

Test Start: 2017.03.11 @ 08:04:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 48.00 sec/qt

Water Loss: 9.20 in³

Resistivity: ohm.m

Salinity: 6500.00 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

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	THICK HEAVY MUD	1.683
60.00	MUDDY WATER 70 WATER 30 MUD	0.842
60.00	SLIGHTLY MUDDY WATER 90 WATER 10 MU	0.842
180.00	WATER CHLORIDES 68,000	2.525

Total Length: 420.00 ft

Total Volume: 5.892 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



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GAS RATES

GLOBE OPERATING INC.

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Job Ticket: 01158

DST#: 1

ATTN: JASON ALM

Test Start: 2017.03.11 @ 08:04:00

Gas Rates Information

Temperature: 59 (deg F)
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
1	10	1.00	6.23	179.10
1	20	1.00	5.67	163.01
1	30	1.00	5.08	146.04
2	10	1.00	5.54	159.27
2	20	1.00	4.01	115.28
2	30	1.00	4.01	115.28

Pressure vs. Time

