



DRILL STEM TEST REPORT

Prepared For: **MORRIS TERRY E. dba GLM COMPANY**

P.O. BOX 193
RUSSELL, KANSAS 67665-0192

ATTN: HERB DEINES

19-8S-22W GRAHAM

Start Date: 2015.08.10 @ 19:24:00

End Date: 2015.08.10 @ 00:00:00

Job Ticket #: 01231 DST #: 1

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

Printed: 2015.08.11 @ 01:29:57

MORRIS TERRY E. dba GLM COMPANY

19-8S-22W GRAHAM

DST # 1

KANSAS CITY

2015.08.10



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19-8S-22W GRAHAM

Job Ticket: 01231

DST#: 1

ATTN: HERB DEINES

Test Start: 2015.08.10 @ 19:24:00

GENERAL INFORMATION:

Formation: **KANSAS CITY**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:00:00

Time Test Ended: 00:00:00

Test Type: Conventional Bottom Hole (Initial)

Tester: GENE BUDIG

Unit No: 1

Interval: **3420.00 ft (KB) To 3505.00 ft (KB) (TVD)**

Reference Elevations: ft (KB)

Total Depth: 3505.00 ft (KB) (TVD)

ft (CF)

Hole Diameter: inches Hole Condition: Fair

KB to GR/CF: ft

Serial #: 9139

Outside

Press@RunDepth: 874.52 psia @ 3500.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2015.08.11

End Date: 2015.08.12

Last Calib.: 2015.08.11

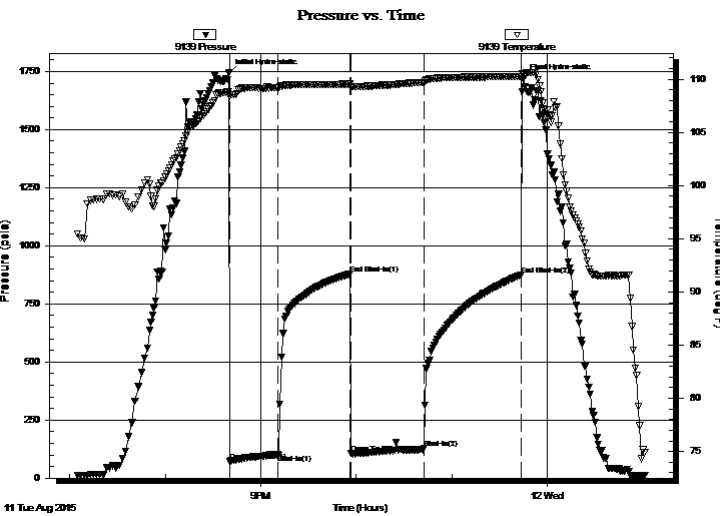
Start Time: 19:05:00

End Time: 01:01:30

Time On Btm: 2015.08.11 @ 20:40:00

Time Off Btm: 2015.08.11 @ 23:45:00

TEST COMMENT: 1ST OPENING 30 MINUTES VERY WEAK BUILDING BLOW BUILT TO 7 INCHES INTO THE WATER
 1ST SHUT-IN 45 MINUTES-NO BLOW BACK
 2ND OPENING 45 MINUTES VERY WEAK BUILDING BLOW BUILT TO 4 INCHES INTO THE WATER
 2ND SHUT-IN 60 MINUTES-NO BLOW BACK



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1742.41	108.81	Initial Hydro-static
1	73.78	108.36	Open To Flow (1)
31	101.52	109.22	Shut-In(1)
76	877.82	109.54	End Shut-In(1)
77	105.73	109.28	Open To Flow (2)
123	128.50	109.70	Shut-In(2)
184	874.52	110.26	End Shut-In(2)
185	1718.86	110.53	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	DRILLING MUD	1.68

Gas Rates

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



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Job Ticket: 01231

DST#: 1

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Formation: **KANSAS CITY**

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Time Test Ended: 00:00:00

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Tester: GENE BUDIG

Unit No: 1

Interval: **3420.00 ft (KB) To 3505.00 ft (KB) (TVD)**

Reference Elevations: ft (KB)

Total Depth: 3505.00 ft (KB) (TVD)

ft (CF)

Hole Diameter: inches Hole Condition: Fair

KB to GR/CF: ft

Serial #: 9119

Inside

Press@RunDepth: 875.47 psia @ 3500.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2015.08.11

End Date:

2015.08.12

Last Calib.: 2015.08.11

Start Time: 19:05:00

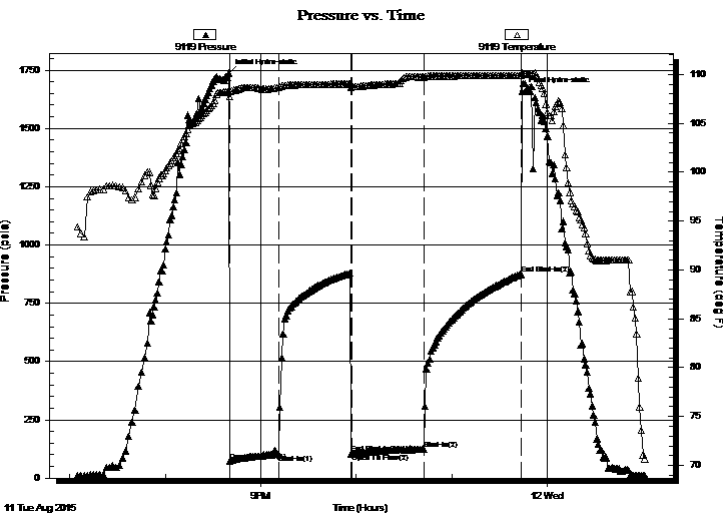
End Time:

01:01:30

Time On Btm: 2015.08.11 @ 20:40:00

Time Off Btm: 2015.08.11 @ 23:44:00

TEST COMMENT: 1ST OPENING 30 MINUTES VERY WEAK BUILDING BLOW BUILT TO 7 INCHES INTO THE WATER
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 2ND OPENING 45 MINUTES VERY WEAK BUILDING BLOW BUILT TO 4 INCHES INTO THE WATER
 2ND SHUT-IN 60 MINUTES-NO BLOW BACK



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1736.88	108.26	Initial Hydro-static
1	74.51	107.78	Open To Flow (1)
31	101.15	108.68	Shut-In(1)
77	104.82	108.71	End Shut-In(1)
77	105.23	108.83	Open To Flow (2)
123	125.15	109.72	Shut-In(2)
184	875.47	109.88	End Shut-In(2)
184	1659.10	110.15	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	DRILLING MUD	1.68

Gas Rates

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



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TOOL DIAGRAM

MORRIS TERRY E. dba GLM COMPANY

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ATTN: HERB DEINES

19-8S-22W GRAHAM

Job Ticket: 01231

DST#: 1

Test Start: 2015.08.10 @ 19:24:00

Tool Information

Drill Pipe:	Length: 3430.00 ft	Diameter: 3.80 inches	Volume: 48.11 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: 95000.00 lb
			<u>Total Volume: 48.11 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 44000.00 lb
Depth to Top Packer:	3420.00 ft			Final 44000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	85.00 ft			
Tool Length:	105.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			3405.00	
Hydraulic tool	5.00			3410.00	
Top Packer	5.00			3415.00	
Packer	5.00			3420.00	20.00 Bottom Of Top Packer
Anchor	5.00			3425.00	
Change Over Sub	0.75			3425.75	
Drill Pipe	63.50			3489.25	
Change Over Sub	0.75			3490.00	
Anchor	10.00			3500.00	
Recorder	0.00	9119	Inside	3500.00	
Recorder	0.00	9139	Outside	3500.00	
Bullnose	5.00			3505.00	85.00 Anchor Tool

Total Tool Length: 105.00



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FLUID SUMMARY

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Test Start: 2015.08.10 @ 19:24:00

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 50.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.99 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 800.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	DRILLING MUD	1.683

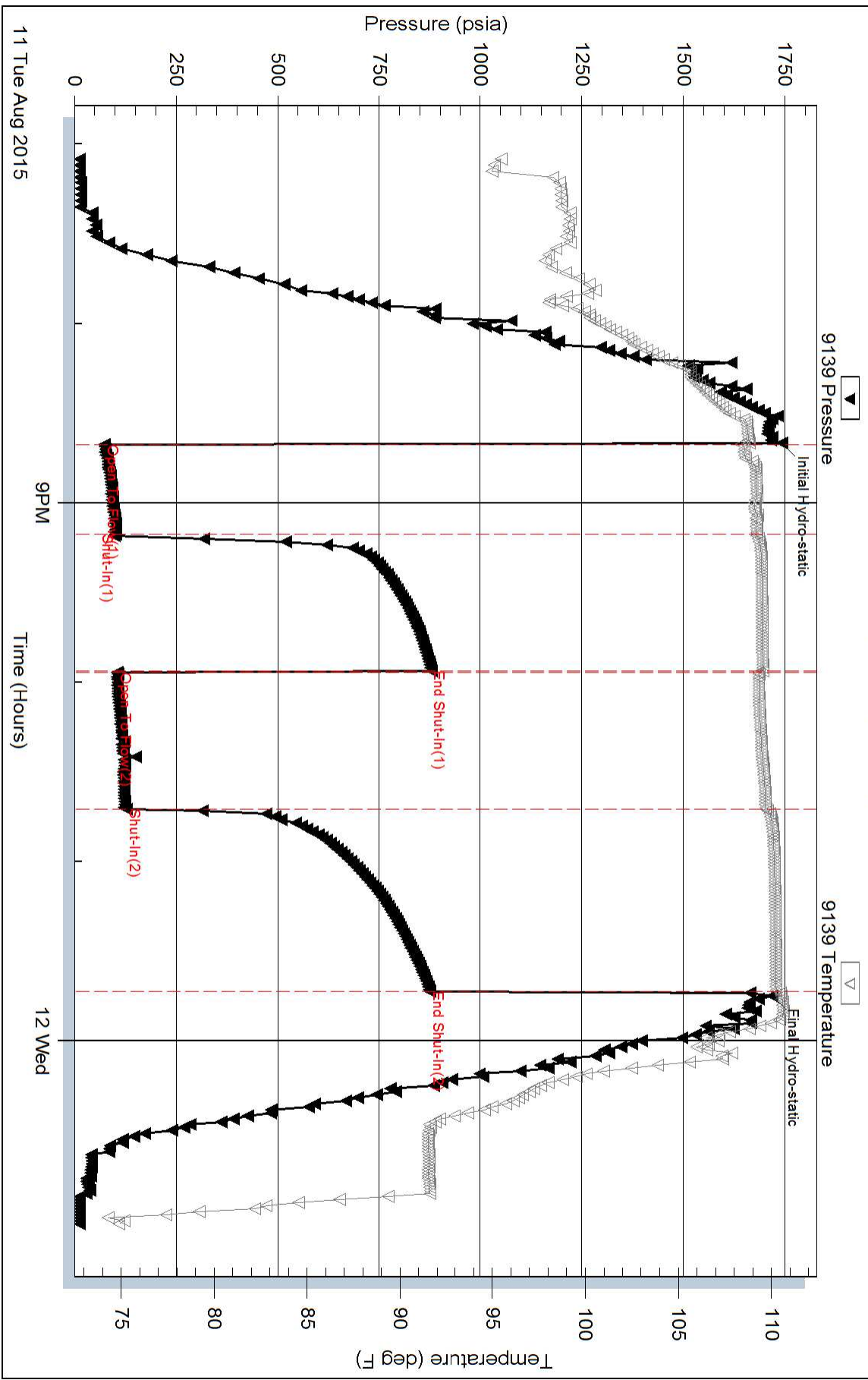
Total Length: 120.00 ft Total Volume: 1.683 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

Pressure vs. Time



Pressure vs. Time

