



DRILL STEM TEST REPORT

Prepared For: **Woolsey Operating Co**

125 N. Market STE1000
Wichita KS 67202+1729

ATTN: Bill Klaver

McElwain #1

20-28s-19w Kiowa,KS

Start Date: 2019.02.11 @ 16:26:00

End Date: 2019.02.11 @ 23:40:39

Job Ticket #: 64988 DST #: 3

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
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Printed: 2019.02.13 @ 15:34:07



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Woolsey Operating Co

20-28s-19w Kiowa,KS

125 N. Market STE1000
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McElwain #1

Job Ticket: 64988

DST#: 3

ATTN: Bill Klaver

Test Start: 2019.02.11 @ 16:26:00

GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:38:10

Time Test Ended: 23:40:39

Test Type: Conventional Bottom Hole (Initial)

Tester: Benny Mulligan

Unit No: 66

Interval: 4928.00 ft (KB) To 4950.00 ft (KB) (TVD)

Reference Elevations: 2298.00 ft (KB)

Total Depth: 4950.00 ft (KB) (TVD)

2288.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 6772 Inside

Press@RunDepth: 78.09 psig @ 4929.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2019.02.11

End Date:

2019.02.11

Last Calib.:

2019.02.11

Start Time: 16:26:01

End Time:

23:40:40

Time On Btm:

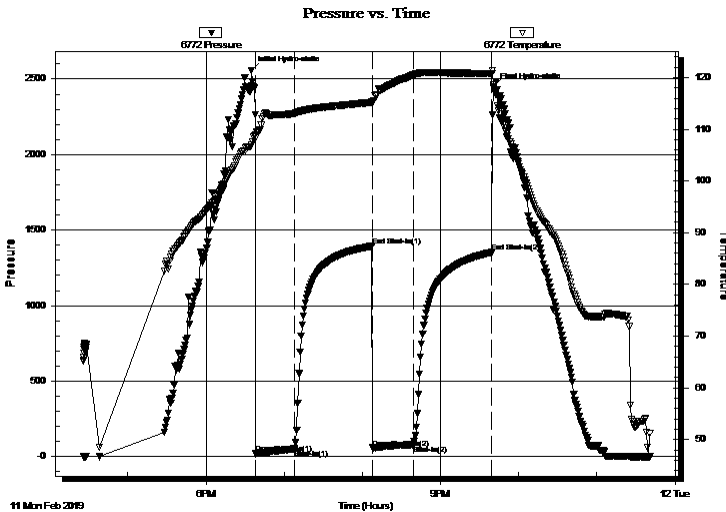
2019.02.11 @ 18:34:50

Time Off Btm:

2019.02.11 @ 21:40:39

TEST COMMENT: I.F.-30- built to 2 1/2 "
I.S.I.-60- no blow back
F.F.-30- no blow
F.S.I.-60-no blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2557.43	107.01	Initial Hydro-static
4	19.10	108.47	Open To Flow (1)
33	51.29	113.05	Shut-In(1)
93	1393.72	115.22	End Shut-In(1)
94	57.74	115.25	Open To Flow (2)
124	78.09	120.50	Shut-In(2)
185	1352.97	120.79	End Shut-In(2)
186	2446.77	118.19	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	MCW 20%M 80%W	0.30
70.00	HMCW 40%M 60%W	0.42

Gas Rates

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



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TOOL DIAGRAM

Woolsey Operating Co

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Test Start: 2019.02.11 @ 16:26:00

Tool Information

Drill Pipe:	Length: 4786.00 ft	Diameter: 3.88 inches	Volume: 69.99 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 70.59 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 69000.00 lb
Depth to Top Packer:	4928.00 ft			Final 69000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	22.00 ft			
Tool Length:	49.00 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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Change Over Sub	1.00			4902.00	
Shut In Tool	5.00			4907.00	
Hydraulic tool	5.00			4912.00	
Jars	5.00			4917.00	
Safety Joint	2.00			4919.00	
Packer	5.00			4924.00	27.00 Bottom Of Top Packer
Packer	4.00			4928.00	
Stubb	1.00			4929.00	
Recorder	0.00	6772	Inside	4929.00	
Recorder	0.00	6769	Outside	4929.00	
Perforations	18.00			4947.00	
Bullnose	3.00			4950.00	22.00 Bottom Packers & Anchor

Total Tool Length: 49.00



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FLUID SUMMARY

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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:

65000 ppm

Viscosity: 69.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	MCW 20%M 80%W	0.295
70.00	HMCW 40%M 60%W	0.422

Total Length: 130.00 ft

Total Volume: 0.717 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

