



DRILL STEM TEST REPORT

Prepared For: **Messenger Petroleum**

525 South Main Street
Kingman, KS 67068

ATTN: Frank Mize

Bauck LH #1

23-16S-16E Osage, KS

Start Date: 2014.05.20 @ 09:45:18

End Date: 2014.05.20 @ 17:27:03

Job Ticket #: 58805 DST #: 1

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.05.30 @ 10:21:59

Messenger Petroleum
23-16S-16E Osage, KS
Bauck LH #1
DST # 1
Mississippian
2014.05.20



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Messenger Petroleum
525 South Main Street
Kingman, KS 67068
ATTN: Frank Mize

23-16S-16E Osage, KS

Bauck LH #1

Job Ticket: 58805

DST#: 1

Test Start: 2014.05.20 @ 09:45:18

GENERAL INFORMATION:

Formation: **Mississippian**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:00:48

Time Test Ended: 17:27:03

Test Type: Conventional Bottom Hole (Initial)

Tester: Jimmy Ricketts

Unit No: 150

Interval: 1566.00 ft (KB) To 1577.00 ft (KB) (TVD)

Reference Elevations: 1108.00 ft (KB)

Total Depth: 1577.00 ft (KB) (TVD)

1098.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 10.00 ft

Serial #: 8969

Inside

Press@RunDepth: 20.59 psig @ 1567.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.05.20

End Date:

2014.05.20

Last Calib.:

2014.05.20

Start Time: 09:45:23

End Time:

17:27:02

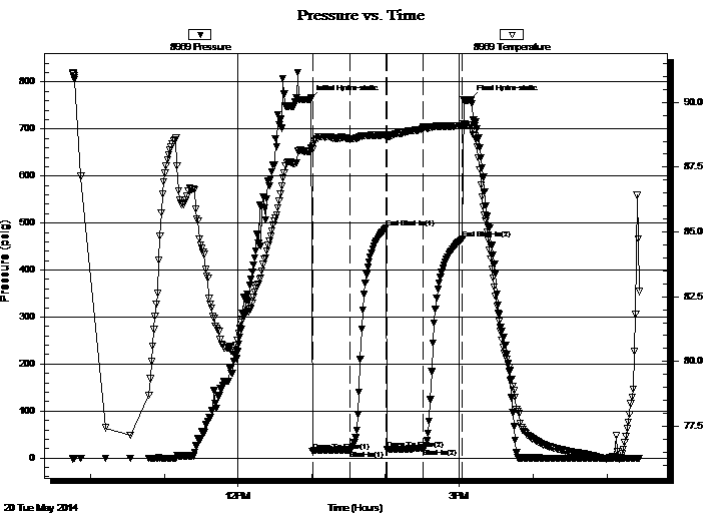
Time On Btm:

2014.05.20 @ 12:58:18

Time Off Btm:

2014.05.20 @ 15:08:33

TEST COMMENT: Weak 1/4 inch blow throughout initial flow period.
No blow final flow period.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	762.64	88.09	Initial Hydro-static
3	14.94	88.31	Open To Flow (1)
33	17.35	88.60	Shut-In(1)
63	489.45	88.75	End Shut-In(1)
63	17.89	88.59	Open To Flow (2)
93	20.59	89.05	Shut-In(2)
125	466.52	89.10	End Shut-In(2)
131	761.60	89.13	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Oil cut Mud 4% O & 96% M	0.02

Gas Rates

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



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DRILL STEM TEST REPORT

TOOL DIAGRAM

Messenger Petroleum

23-16S-16E Osage, KS

525 South Main Street
Kingman, KS 67068

Bauck LH #1

Job Ticket: 58805

DST#: 1

ATTN: Frank Mize

Test Start: 2014.05.20 @ 09:45:18

Tool Information

Drill Pipe:	Length: 1219.00 ft	Diameter: 3.80 inches	Volume: 17.10 bbl	Tool Weight: 2300.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 323.00 ft	Diameter: 2.25 inches	Volume: 1.59 bbl	Weight to Pull Loose: 21000.00 lb
			<u>Total Volume: 18.69 bbl</u>	Tool Chased 1.00 ft
Drill Pipe Above KB:	4.00 ft			String Weight: Initial 20000.00 lb
Depth to Top Packer:	1566.00 ft			Final 20000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	11.00 ft			
Tool Length:	39.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	2.00			1540.00	
Shut In Tool	5.00			1545.00	
Hydraulic tool	5.00			1550.00	
Jars	5.00			1555.00	
Safety Joint	2.00			1557.00	
Packer	5.00			1562.00	28.00 Bottom Of Top Packer
Packer	4.00			1566.00	
Stubb	1.00			1567.00	
Recorder	0.00	8969	Inside	1567.00	
Recorder	0.00	8968	Outside	1567.00	
Perforations	8.00			1575.00	
Bullnose	2.00			1577.00	11.00 Bottom Packers & Anchor

Total Tool Length: 39.00



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FLUID SUMMARY

Messenger Petroleum

23-16S-16E Osage, KS

525 South Main Street
Kingman, KS 67068

Bauck LH #1

Job Ticket: 58805

DST#: 1

ATTN: Frank Mize

Test Start: 2014.05.20 @ 09:45:18

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: 62.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 900.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Oil cut Mud 4% O & 96% M	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

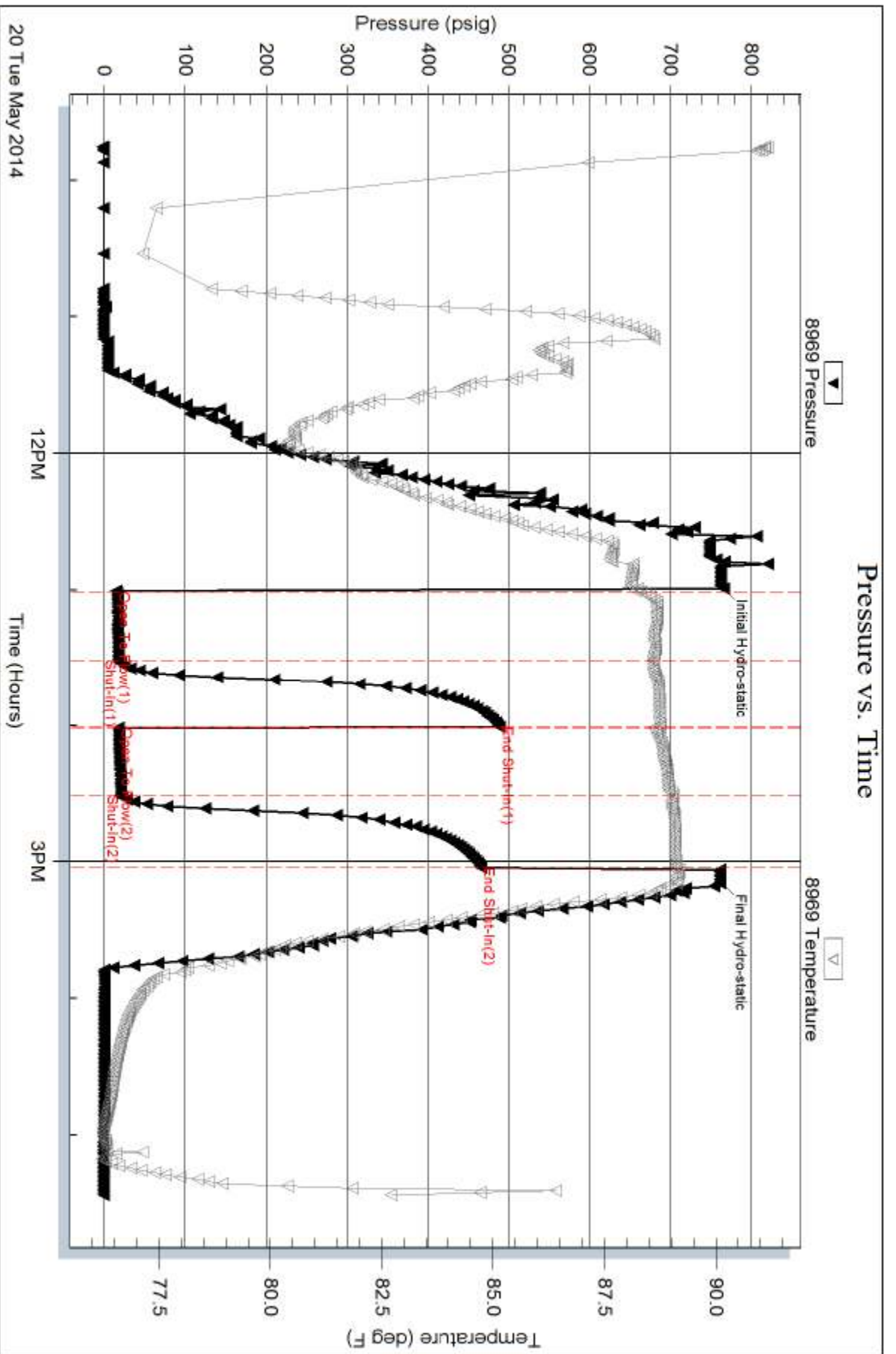
Serial #: 8969

Inside

Messenger Petroleum

Baucc LH#1

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 59805

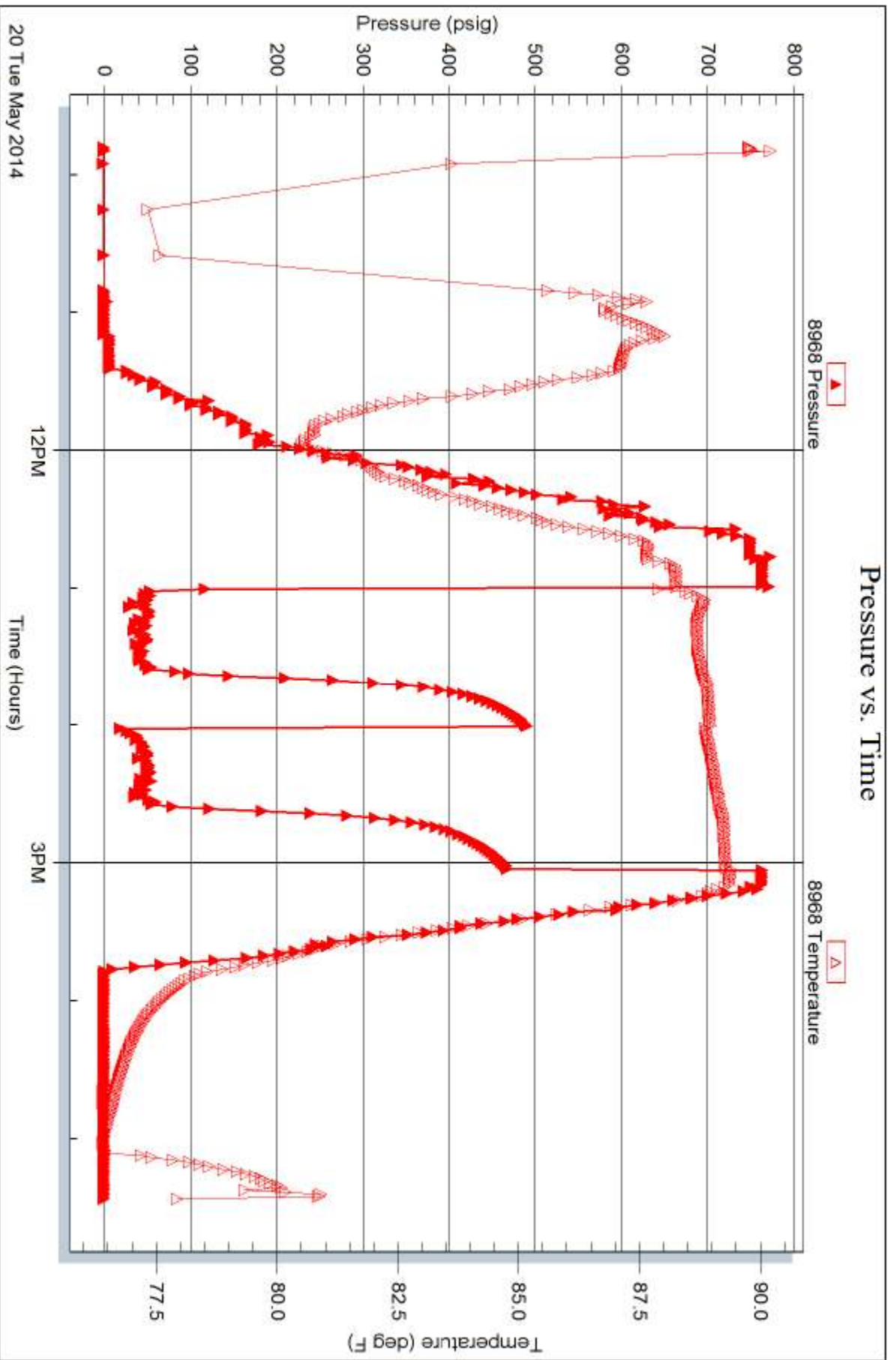
Printed: 2014.05.30 @ 10:22:01

Serial #: 8968

Outside Messenger Petroleum

Baucc LH#1

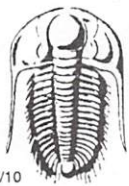
DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 59805

Printed: 2014.05.30 @ 10:22:01



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

58805

NO.

4/10

Well Name & No. Bayck LH #1 Test No. 1 Date 5-20-14
 Company Messenger Petroleum Elevation 1108 KB 1098 GL
 Address 525 S. Main St. Kingman, KS 67068
 Co. Rep / Geo. Frank Mize Rig Summit #1
 Location: Sec. 23 Twp. 16S Rge. 16E Co. Osage State KS

Interval Tested 1560-1577 Zone Tested Mississippian
 Anchor Length 11' Drill Pipe Run 1119 Mud Wt. 9.2
 Top Packer Depth 1561 Drill Collars Run 323 Vis 62
 Bottom Packer Depth 1560 Wt. Pipe Run 0 WL 9.8
 Total Depth 1577 Chlorides 900 ppm System LCM
 Blow Description Weak 1/4" blow throughout IFA
No blow F.E.P.

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>oil cut Mud</u>	<u>4</u>		<u>96</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 5 BHT 89 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 763 Test 1150 T-On Location 0230
 (B) First Initial Flow 15 Jars 250 T-Started 1030
 (C) First Final Flow 17 Safety Joint 75 T-Open 1301
 (D) Initial Shut-In 489 Circ Sub 3.5h 350 T-Pulled 1503
 (E) Second Initial Flow 18 Hourly Standby Suppose to be on T-Out 1700
 (F) Second Final Flow 21 Mileage 442 RT Bank between 4-5 Comments 8969 - 05:45:14 9:45:19
 (G) Final Shut-In 467 Sampler 685.10 8968 - 05:49:05 9:45:07
 (H) Final Hydrostatic 762 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 2510.10
 Accessibility _____ MP/DST Disc't _____
 Sub Total 2510.10

Approved By Frank Mize Our Representative Jimmy Ricketts
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