



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Herman L. Loeb, LLC
 P.O. Box 838
 Lawrenceville, IL. 62439
 ATTN: Jon Christensen

28-27s-18w Kiowa Co.
Yost # 4-28
 Job Ticket: 64718 **DST#: 1**
 Test Start: 2018.10.09 @ 13:04:00

GENERAL INFORMATION:

Formation: **KC. "I" zone**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 20:24:15 Tester: Matt Smith
 Time Test Ended: 01:40:00 Unit No: 68
 Interval: **4392.00 ft (KB) To 4418.00 ft (KB) (TVD)** Reference Elevations: 2210.00 ft (KB)
 Total Depth: 4418.00 ft (KB) (TVD) 2199.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 11.00 ft

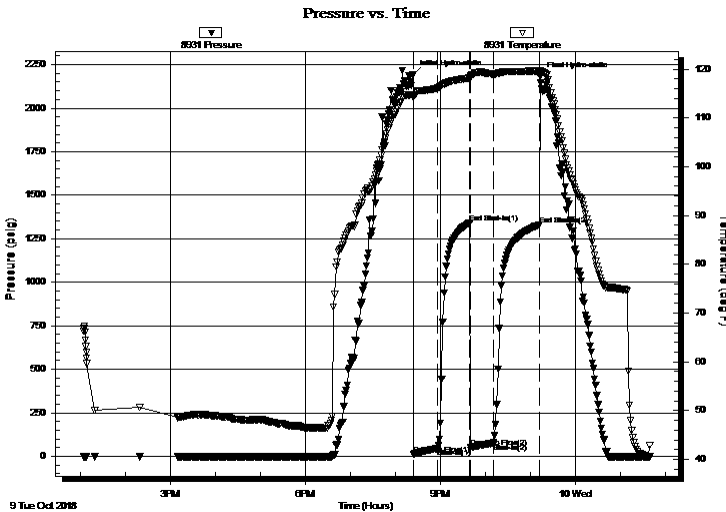
Serial #: 8931

Inside

Press@RunDepth: 75.39 psig @ 4393.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2018.10.09 End Date: 2018.10.10 Last Calib.: 2018.10.10
 Start Time: 13:04:05 End Time: 01:40:00 Time On Btm: 2018.10.09 @ 20:23:45
 Time Off Btm: 2018.10.09 @ 23:13:00

TEST COMMENT: IF: Weak blow . Built to 3 1/4".
 IS: No blow .
 FF: Weak - Fair blow . Built to 5 3/4".
 FS: No blow .

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2190.95	114.82	Initial Hydro-static
1	12.28	114.17	Open To Flow (1)
33	44.94	116.17	Shut-In(1)
76	1341.41	118.19	End Shut-In(1)
77	50.71	118.48	Open To Flow (2)
107	75.39	119.00	Shut-In(2)
169	1330.24	119.59	End Shut-In(2)
170	2179.58	119.75	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	Slight GMCW 5%g 27%m 68%w	0.30
60.00	MCW 45%m 55%w	0.30
10.00	OWCM 5%o 15%w 80%m	0.05
0.00	176' G.I.P.	0.00

Gas Rates

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



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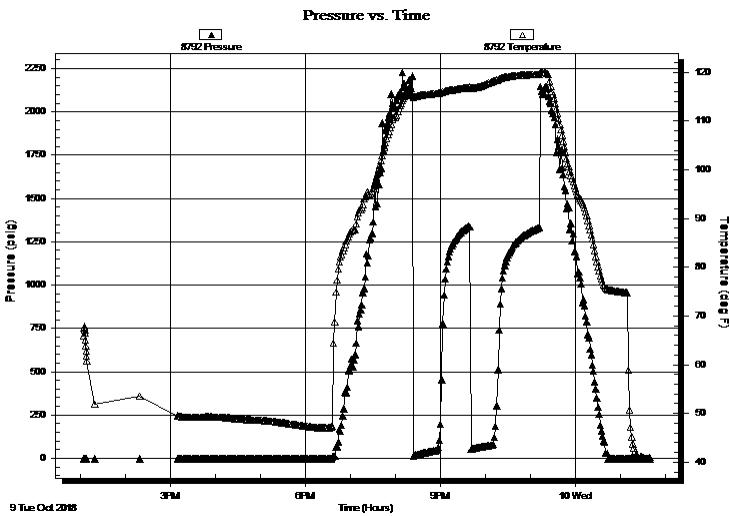
Serial #: 8792

Outside

Press@RunDepth: psig @ 4393.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2018.10.09 End Date: 2018.10.10 Last Calib.: 2018.10.10
Start Time: 13:04:10 End Time: 01:39:50 Time On Btm:
Time Off Btm:

TEST COMMENT: IF: Weak blow . Built to 3 1/4".
IS: No blow .
FF: Weak - Fair blow . Built to 5 3/4".
FS: No blow .

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
60.00	Slight GMCW 5%g 27%m 68%w	0.30
60.00	MCW 45%m 55%w	0.30
10.00	OWCM 5%o 15%w 80%m	0.05
0.00	176' G.I.P.	0.00

Gas Rates

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



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DRILL STEM TEST REPORT

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:	61000 ppm
Viscosity: 63.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.79 in ³	Gas Cushion Type:		
Resistivity: 6000.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: ppm			
Filter Cake: 0.20 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	Slight GMCW 5%g 27%m 68%w	0.295
60.00	MCW 45%m 55%w	0.295
10.00	OWCM 5%o 15%w 80%m	0.049
0.00	176' G.I.P.	0.000

Total Length: 130.00 ft Total Volume: 0.639 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #: none
 Laboratory Name: Laboratory Location:
 Recovery Comments: RW .25 @ 42.8 Degrees = 61000 Chlorides.
 176 Ft Gas In Pipe.
 Worked Drum plate on draw works.

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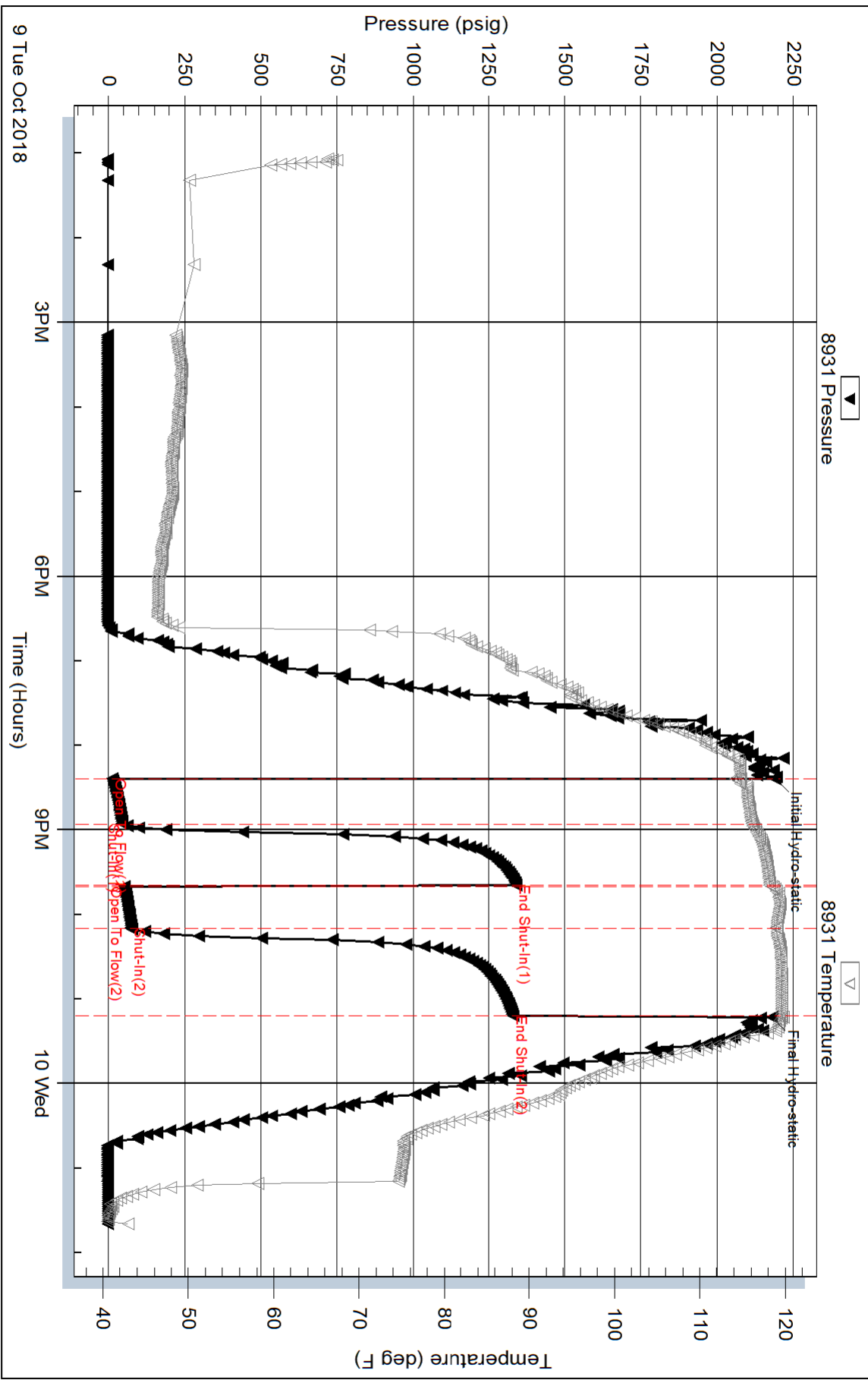
Inside

Herrnan L. Loeb, LLC

Yost #4-28

DST Test Number: 1

Pressure vs. Time



Serial #: 8792

Outside Herran L. Loeb, LLC

Yost #4-28

DST Test Number: 1

