



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Herman L. Loeb, LLC.

25/29S/19W Kiowa, KS

P.O. Box 838
Lawrenceville, IL 62439
ATTN: George Payne/Jon Chr

Yost C 2-25

Job Ticket: 63082

DST#: 2

Test Start: 2016.09.21 @ 23:46:00

GENERAL INFORMATION:

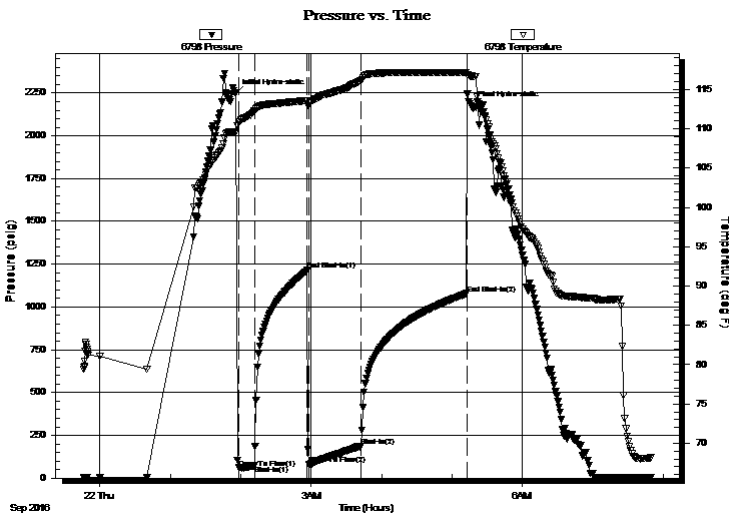
Formation: **Kansas City H**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 01:58:15 Tester: Jimmy Ricketts
 Time Test Ended: 07:49:45 Unit No: 80
 Interval: **4540.00 ft (KB) To 4564.00 ft (KB) (TVD)** Reference Elevations: 2312.00 ft (KB)
 Total Depth: 4564.00 ft (KB) (TVD) 2301.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 11.00 ft

Serial #: 6798

Inside

Press@RunDepth: 184.91 psig @ 4541.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2016.09.21 End Date: 2016.09.22 Last Calib.: 2016.09.21
 Start Time: 23:46:05 End Time: 07:49:44 Time On Btm: 2016.09.22 @ 01:55:45
 Time Off Btm: 2016.09.22 @ 05:16:00

TEST COMMENT: IF - Strong blow throughout initial flow period. Bottom of bucket in 45 seconds. Gas to surface at end of initial flow period 15 into initial flow period. 4 inch blow back during initial shut-in period.
 FF - Strong blow throughout final flow period. Strong blow back throughout final shut-in period.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2247.28	109.51	Initial Hydro-static
3	60.06	110.88	Open To Flow (1)
16	72.86	112.22	Shut-In(1)
61	1214.96	113.57	End Shut-In(1)
63	79.97	112.89	Open To Flow (2)
107	184.91	116.07	Shut-In(2)
197	1078.59	117.12	End Shut-In(2)
201	2174.18	116.69	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
50.00	VG M & W cut O 51%G 39%O 5%W 5%N0.25	
140.00	Gassy O & M 20%G 40%O 40%M	1.00
275.00	Clean O 100%O	3.86

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	7.90	8.35
Last Gas Rate	0.13	17.80	12.05
Max. Gas Rate	0.13	17.80	12.05



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Herman L. Loeb, LLC.

25/29S/19W Kiowa, KS

P.O. Box 838
Lawrenceville, IL 62439
ATTN: George Payne/Jon Chr

Yost C 2-25

Job Ticket: 63082

DST#: 2

Test Start: 2016.09.21 @ 23:46:00

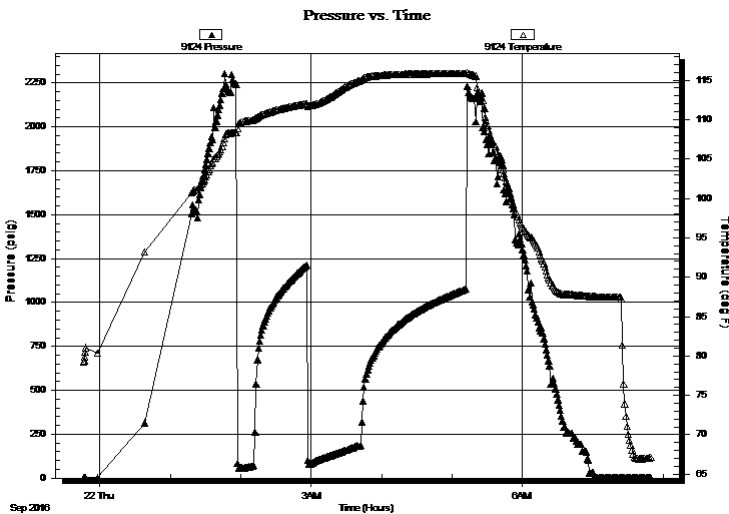
GENERAL INFORMATION:

Formation: **Kansas City H**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 01:58:15 Tester: Jimmy Ricketts
 Time Test Ended: 07:49:45 Unit No: 80
 Interval: **4540.00 ft (KB) To 4564.00 ft (KB) (TVD)** Reference Elevations: 2312.00 ft (KB)
 Total Depth: 4564.00 ft (KB) (TVD) 2301.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 11.00 ft

Serial #: 9124 Outside

Press@RunDepth: psig @ 4541.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2016.09.21 End Date: 2016.09.22 Last Calib.: 1899.12.30
 Start Time: 23:46:05 End Time: 07:49:29 Time On Btm:
 Time Off Btm:

TEST COMMENT: IF - Strong blow throughout initial flow period. Bottom of bucket in 45 seconds. Gas to surface at end of initial flow period 15 into initial flow period. 4 inch blow back during initial shut-in period.
 FF - Strong blow throughout final flow period. Strong blow back throughout final shut-in period.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
50.00	VG M & W cut O 51%G 39%O 5%W 5%N0.25	
140.00	Gassy O & M 20%G 40%O 40%M	1.00
275.00	Clean O 100%O	3.86

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	7.90	8.35
Last Gas Rate	0.13	17.80	12.05
Max. Gas Rate	0.13	17.80	12.05



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Herman L. Loeb, LLC.

25/29S/19W Kiowa, KS

P.O. Box 838
Lawrenceville, IL
62439

Yost C 2-25

Job Ticket: 63082

DST#: 2

ATTN: George Payne/Jon Chr

Test Start: 2016.09.21 @ 23:46:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

39.9 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 58.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.60 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 7800.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
50.00	VG M & W cut O 51%G 39%O 5%W 5%M	0.246
140.00	Gassy O & M 20%G 40%O 40%M	0.998
275.00	Clean O 100%O	3.858

Total Length: 465.00 ft

Total Volume: 5.102 bbl

Num Fluid Samples: 0

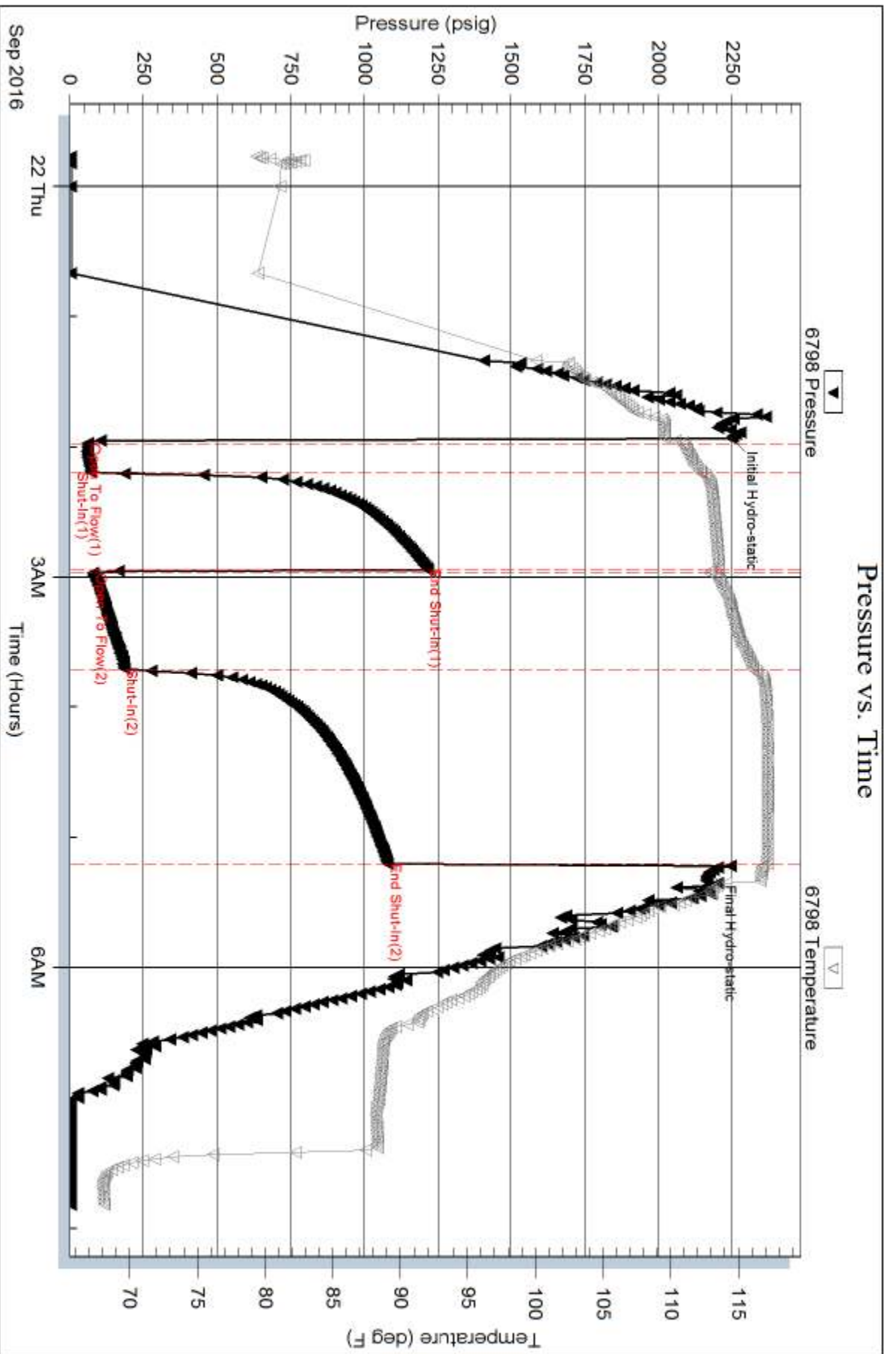
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



Serial #: 9124

Outside Herman L. Loeb, LLC.

Yost C-2-25

DST Test Number: 2

