



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

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

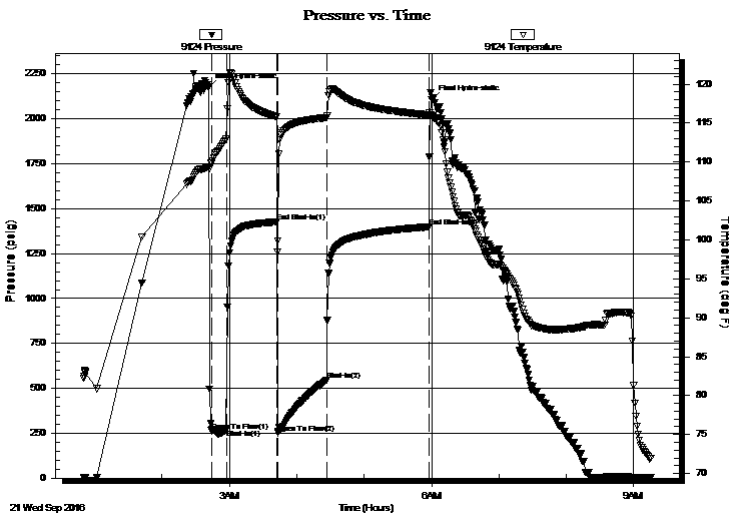
25-29s-19w Kiowa,KS
Yost C #2-25
Job Ticket: 63081 **DST#: 1**
Test Start: 2016.09.21 @ 00:50:00

GENERAL INFORMATION:

Formation: **Lansing B**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 02:43:45
Time Test Ended: 09:15:30
Interval: **4392.00 ft (KB) To 4425.00 ft (KB) (TVD)**
Total Depth: 4425.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole (Initial)
Tester: Jimmy Ricketts
Unit No: 80
Reference Elevations: 2312.00 ft (KB)
2301.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 9124 Outside
Press@RunDepth: 547.17 psig @ 4393.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2016.09.21 End Date: 2016.09.21 Last Calib.: 2016.09.21
Start Time: 00:50:05 End Time: 09:15:29 Time On Btm: 2016.09.21 @ 02:41:15
Time Off Btm: 2016.09.21 @ 06:00:00

TEST COMMENT: IF - Strong blow throughout initial flow period. Gas to surface 3 minutes into initial flow period.
FF - Strong blow throughout final flow period.
FS - Strong blow back during final shut-in period. Never did bleed off.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2175.12	109.37	Initial Hydro-static
3	263.48	109.86	Open To Flow (1)
16	270.66	112.94	Shut-In(1)
61	1425.94	115.83	End Shut-In(1)
62	252.04	98.50	Open To Flow (2)
106	547.17	115.72	Shut-In(2)
197	1398.17	116.04	End Shut-In(2)
199	2106.97	115.88	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
630.00	Water 100%W	7.98
400.00	Heavy G,W&M cut O 21%G 42%O 15%W5.612%M	

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	1.00	4.00	528.98
Last Gas Rate	0.25	62.00	121.20
Max. Gas Rate	0.25	67.00	129.13



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Job Ticket: 63081

DST#: 1

ATTN: George Payne/Jon Chr

Test Start: 2016.09.21 @ 00:50:00

GENERAL INFORMATION:

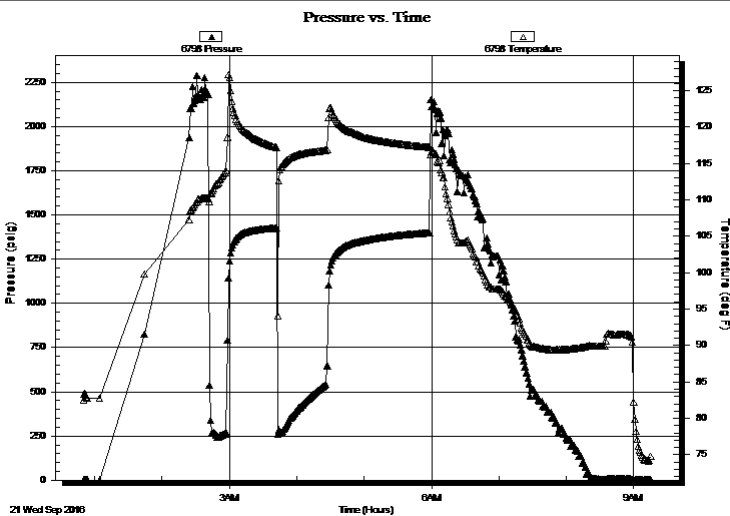
Formation: **Lansing B**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 02:43:45
 Tester: Jimmy Ricketts
 Time Test Ended: 09:15:30
 Unit No: 80
 Interval: **4392.00 ft (KB) To 4425.00 ft (KB) (TVD)**
 Reference Elevations: 2312.00 ft (KB)
 Total Depth: 4425.00 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: psig @ 4393.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2016.09.21 End Date: 2016.09.21 Last Calib.: 1899.12.30
 Start Time: 00:50:05 End Time: 09:15:44 Time On Btm:
 Time Off Btm:

TEST COMMENT: IF - Strong blow throughout initial flow period. Gas to surface 3 minutes into initial flow period.
 FF - Strong blow throughout final flow period.
 FS - Strong blow back during final shut-in period. Never did bleed off.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
630.00	Water 100%W	7.98
400.00	Heavy G,W&M cut O 21%G 42%O 15%W5.612%M	

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	1.00	4.00	528.98
Last Gas Rate	0.25	62.00	121.20
Max. Gas Rate	0.25	67.00	129.13



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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: 63081

DST#: 1

ATTN: George Payne/Jon Chr

Test Start: 2016.09.21 @ 00:50:00

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:

180000 ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbf

Water Loss: 10.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 8500.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
630.00	Water 100%W	7.981
400.00	Heavy G,W&M cut O 21%G 42%O 15%W & 2	5.611

Total Length: 1030.00 ft Total Volume: 13.592 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



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DRILL STEM TEST REPORT

GAS RATES

Herman L. Loeb, LLC.

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Yost C #2-25

Job Ticket: 63081

DST#: 1

ATTN: George Payne/Jon Chr

Test Start: 2016.09.21 @ 00:50:00

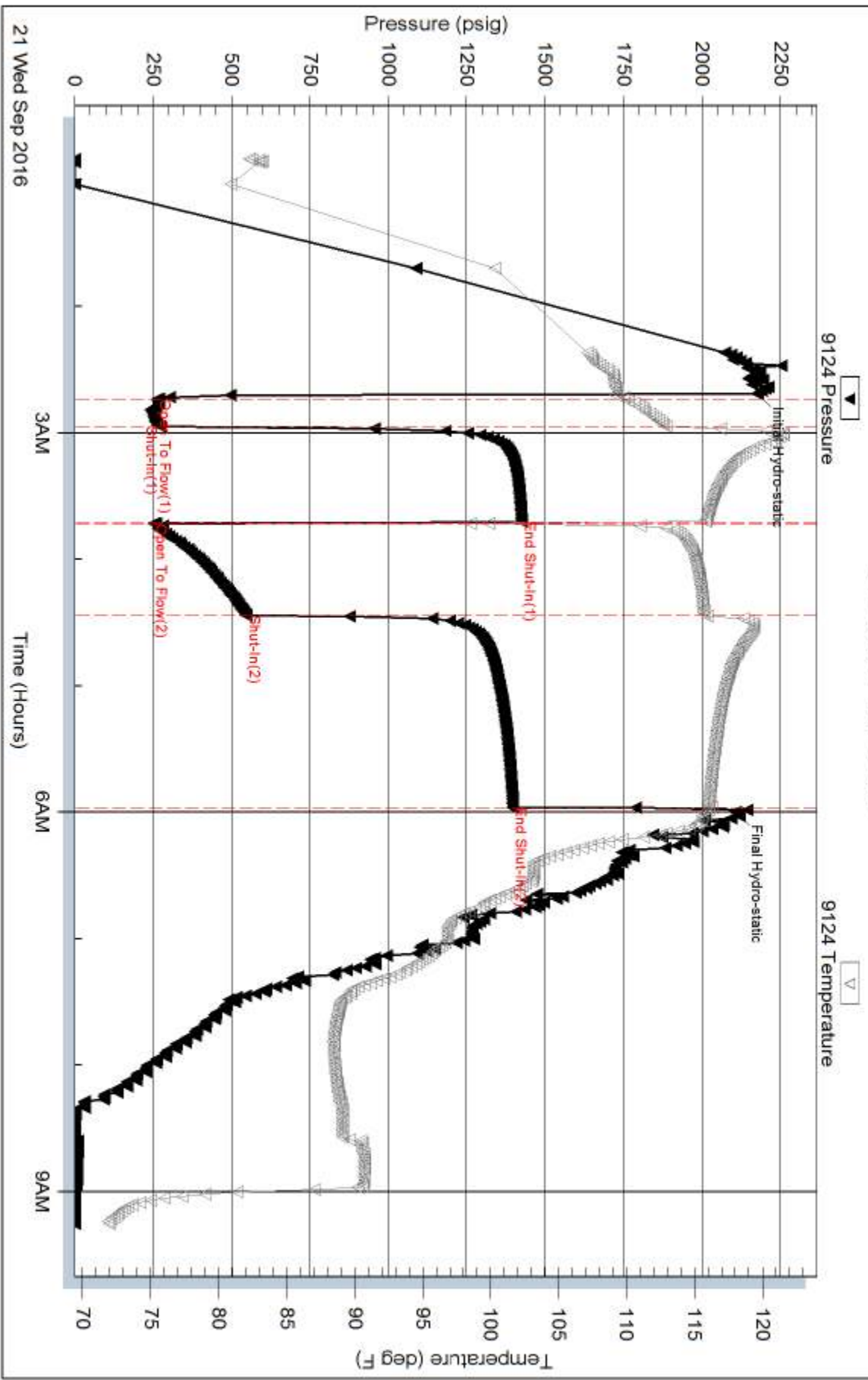
Gas Rates Information

Temperature: 59 (deg F)
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
1	13	1.00	4.00	528.98
1	15	1.00	4.00	528.98
2	10	0.25	51.00	103.75
2	20	0.25	65.00	125.96
2	30	0.25	67.00	129.13
2	40	0.25	64.00	124.37
2	45	0.25	62.00	121.20

Pressure vs. Time



Serial #: 6798

Inside

Herman L. Loeb, LLC.

Yost C#2-25

DST Test Number: 1

