



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Samuel Gary Jr. & Associates Inc.

18/10s/30w Sheridan KS

1515 Wynkoop STE 700
Denver, CO 80202

Ottley #1-18

Job Ticket: 60839

DST#: 3

ATTN: Clayton Camozzi

Test Start: 2014.12.19 @ 14:00:00

GENERAL INFORMATION:

Formation: **LKC "K - L"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 16:01:15
 Time Test Ended: 21:30:30
 Interval: **4231.00 ft (KB) To 4267.00 ft (KB) (TVD)**
 Total Depth: 4267.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: James Winder
 Unit No: 83
 Reference Elevations: 2941.00 ft (KB)
 2933.00 ft (CF)
 KB to GR/CF: 8.00 ft

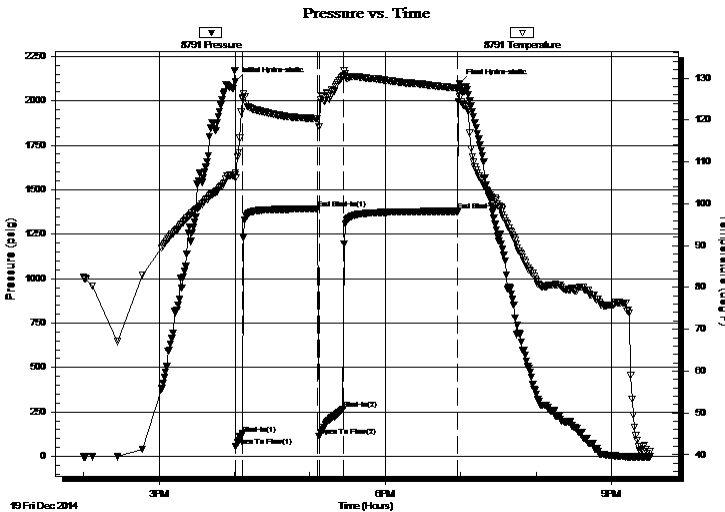
Serial #: 8791

Inside

Press @ Run Depth: 266.04 psig @ 4232.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.12.19 End Date: 2014.12.19 Last Calib.: 2014.12.19
 Start Time: 14:00:05 End Time: 21:30:29 Time On Btm: 2014.12.19 @ 16:01:00
 Time Off Btm: 2014.12.19 @ 18:58:45

TEST COMMENT: 5 - IF: Blow built to BOB (11") at 2 min. (Diesel in bucket)
 60 - IS: Occasional surface bubbles, No steady blow back
 20 - FF: Blow built to BOB at 2 min.
 90 - FS: Blow back built to 4", dieing back at 35 min.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2106.94	107.31	Initial Hydro-static
1	57.87	106.21	Open To Flow (1)
6	127.25	125.34	Shut-In(1)
66	1391.82	120.32	End Shut-In(1)
67	112.47	118.48	Open To Flow (2)
86	266.04	130.51	Shut-In(2)
177	1379.38	127.58	End Shut-In(2)
178	2095.26	126.70	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
255.00	SM/GWCO 58%o, 20%w, 18%g, 4%m	3.29
315.00	GMCO 43%o mix, 17% free o, 21%m, 19%g	4.42
45.00	GMCO 46% free o, 5% o mix, 38%m, 11%g	0.63
0.00	GIP = 580'	0.00

* Recovery from multiple tests

Gas Rates

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



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FLUID SUMMARY

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Ottley #1-18

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DST#: 3

ATTN: Clayton Camozzi

Test Start: 2014.12.19 @ 14:00:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 61.00 sec/qt
Water Loss: 7.95 in³
Resistivity: ohm.m
Salinity: 700.00 ppm
Filter Cake: 1.00 inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psig

Oil API: 39.8 deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
255.00	SM/GWCO 58%o, 20%w, 18%g, 4%m	3.295
315.00	GMCO 43%o mix, 17% free o, 21%m, 19%g	4.419
45.00	GMCO 46% free o, 5% o mix, 38%m, 11%g	0.631
0.00	GIP = 580'	0.000

Total Length: 615.00 ft Total Volume: 8.345 bbl

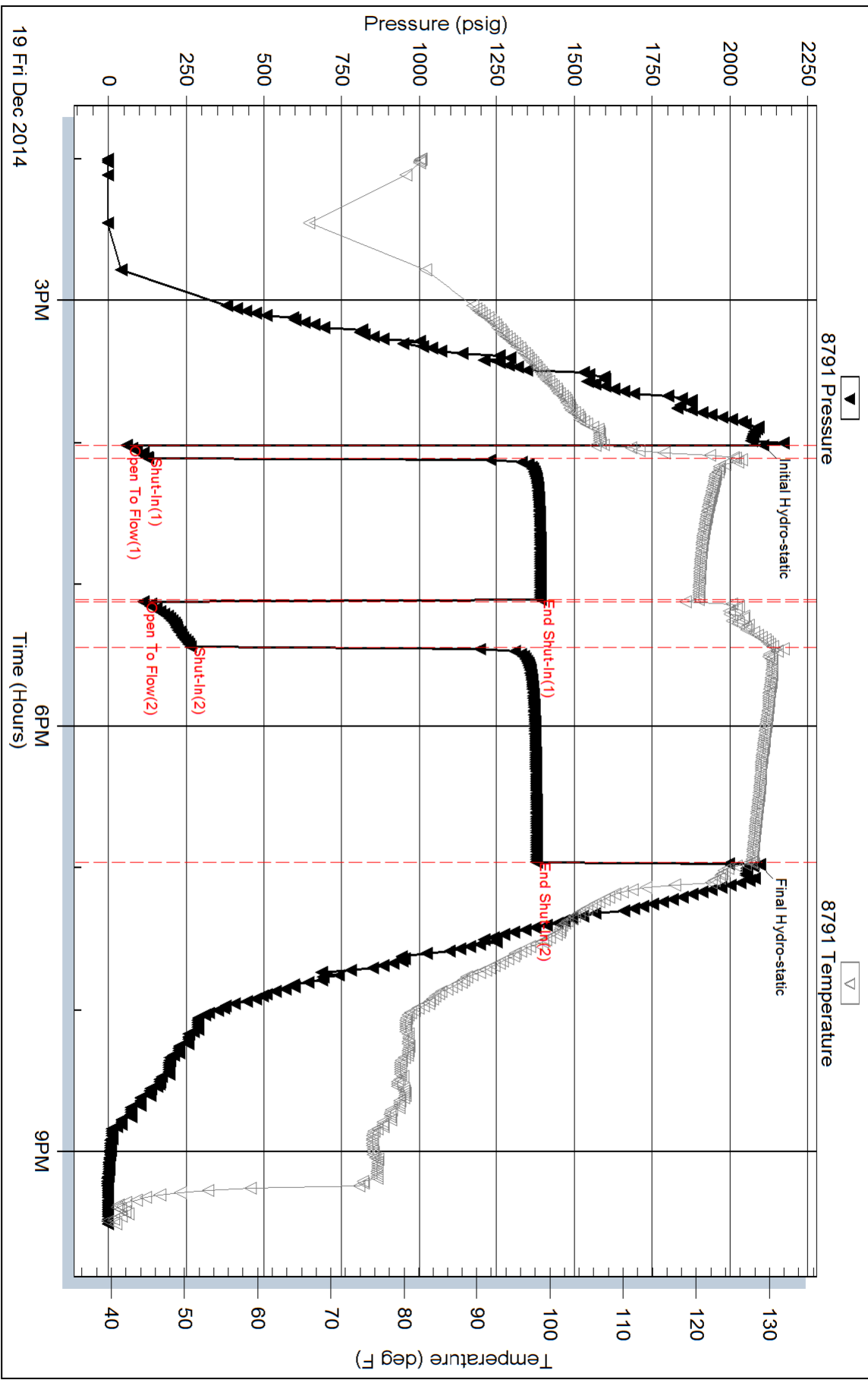
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

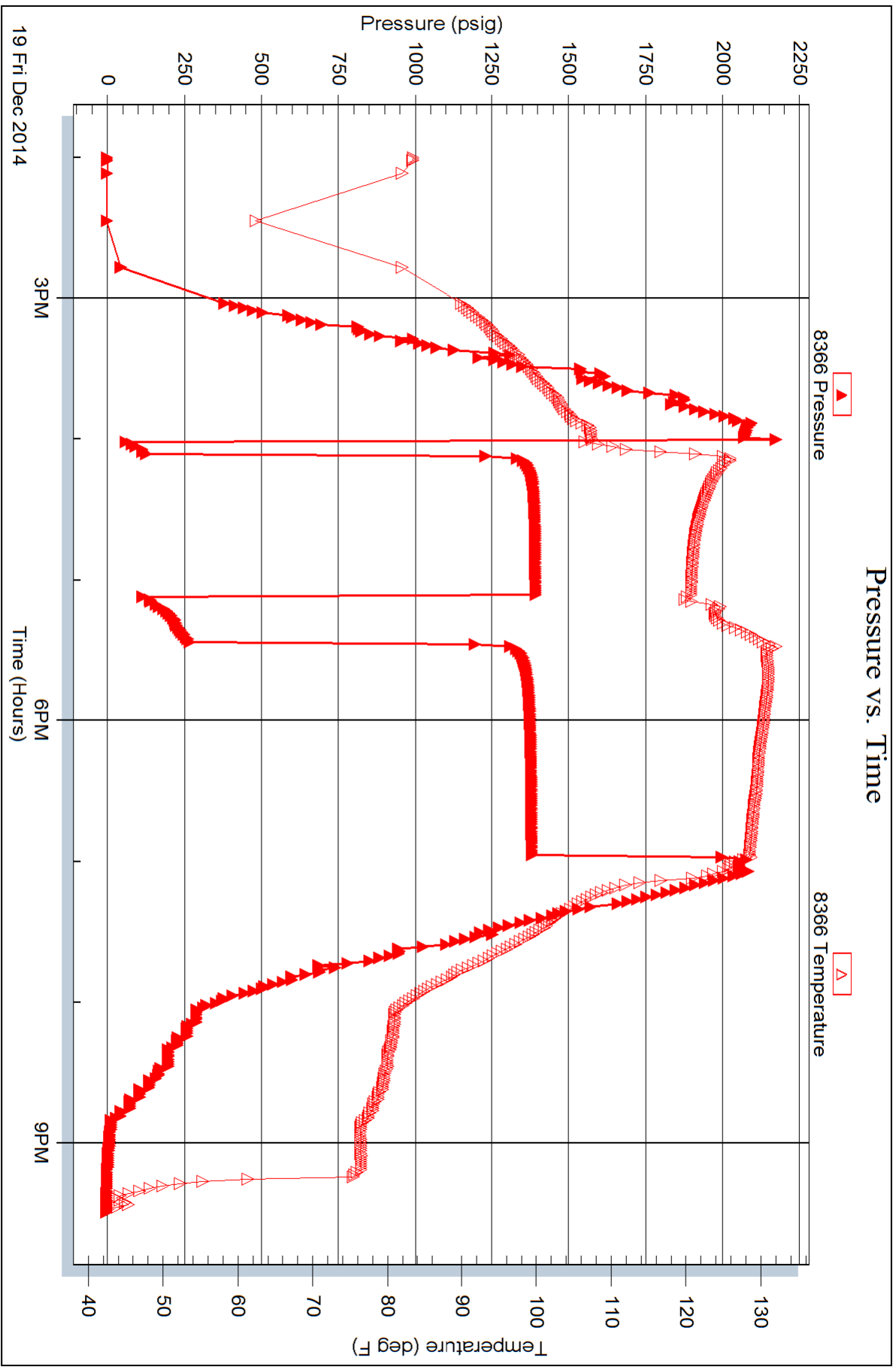
Laboratory Name: Laboratory Location:

Recovery Comments: Gravity = 37 api @ 32 deg F Corrected Gravity = 39.8 api

The top 360' had a mix of oil, gas, mud (looked to be mostly oil) I seperated the mixture amount and the clean free oil amount in the fluid description

Pressure vs. Time





Serial #: 8320

Fluid

Samuel Gary Jr. & Associates Inc.

Ottley #1-18

DST Test Number: 3

