



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Outlaw Well Service LLC

4 8s 21w Graham

1408 Weat 42nd
Hays KS 67601

Paris # 1

ATTN: Steve Reed

Job Ticket: 50452

DST#: 2

Test Start: 2013.08.08 @ 00:43:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: 2022.00 ft (KB)

Time Tool Opened: 02:22:30

Time Test Ended: 07:36:00

Test Type: Conventional Straddle (Reset)

Tester: Jim Svaty

Unit No: 54

Interval: 3512.00 ft (KB) To 3556.00 ft (KB) (TVD)

Reference Elevations: 2022.00 ft (KB)

Total Depth: 3620.00 ft (KB) (TVD)

2015.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 8289 Outside

Press @ Run Depth: 39.37 psig @ 3515.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.08.08

End Date:

2013.08.08

Last Calib.:

2013.08.08

Start Time: 00:43:02

End Time:

07:36:00

Time On Btm:

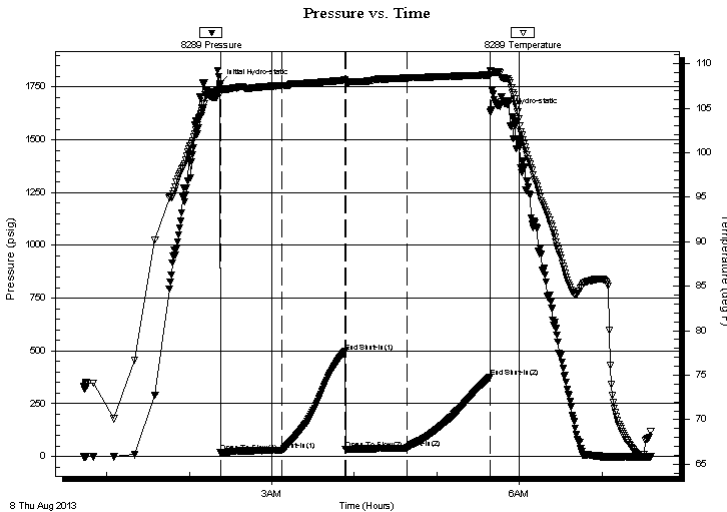
2013.08.08 @ 02:22:15

Time Off Btm:

2013.08.08 @ 05:39:00

TEST COMMENT: 45-IFP- Surface Blow in 2min. Building to 2 in.
45-ISIP- No Blow
45-FFP- Very Weak Surface Blow in 9 min.
60-FSIP- No Blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1765.58	107.44	Initial Hydro-static
1	17.91	106.82	Open To Flow (1)
46	29.87	107.51	Shut-In(1)
91	495.99	108.15	End Shut-In(1)
92	32.49	107.98	Open To Flow (2)
136	39.37	108.38	Shut-In(2)
197	377.71	108.73	End Shut-In(2)
197	1630.86	109.24	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
50.00	OCM 2%o 98%o	0.70
8.00	MCO 20%o 80%o	0.11

Gas Rates

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

* Recovery from multiple tests



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FLUID SUMMARY

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4 8s 21w Graham

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Paris # 1

Job Ticket: 50452

DST#: 2

ATTN: Steve Reed

Test Start: 2013.08.08 @ 00:43:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

23 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.80 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4300.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
50.00	OCM 2%o 98%m	0.701
8.00	MCO 20%m 80%o	0.112

Total Length: 58.00 ft Total Volume: 0.813 bbl

Num Fluid Samples: 0

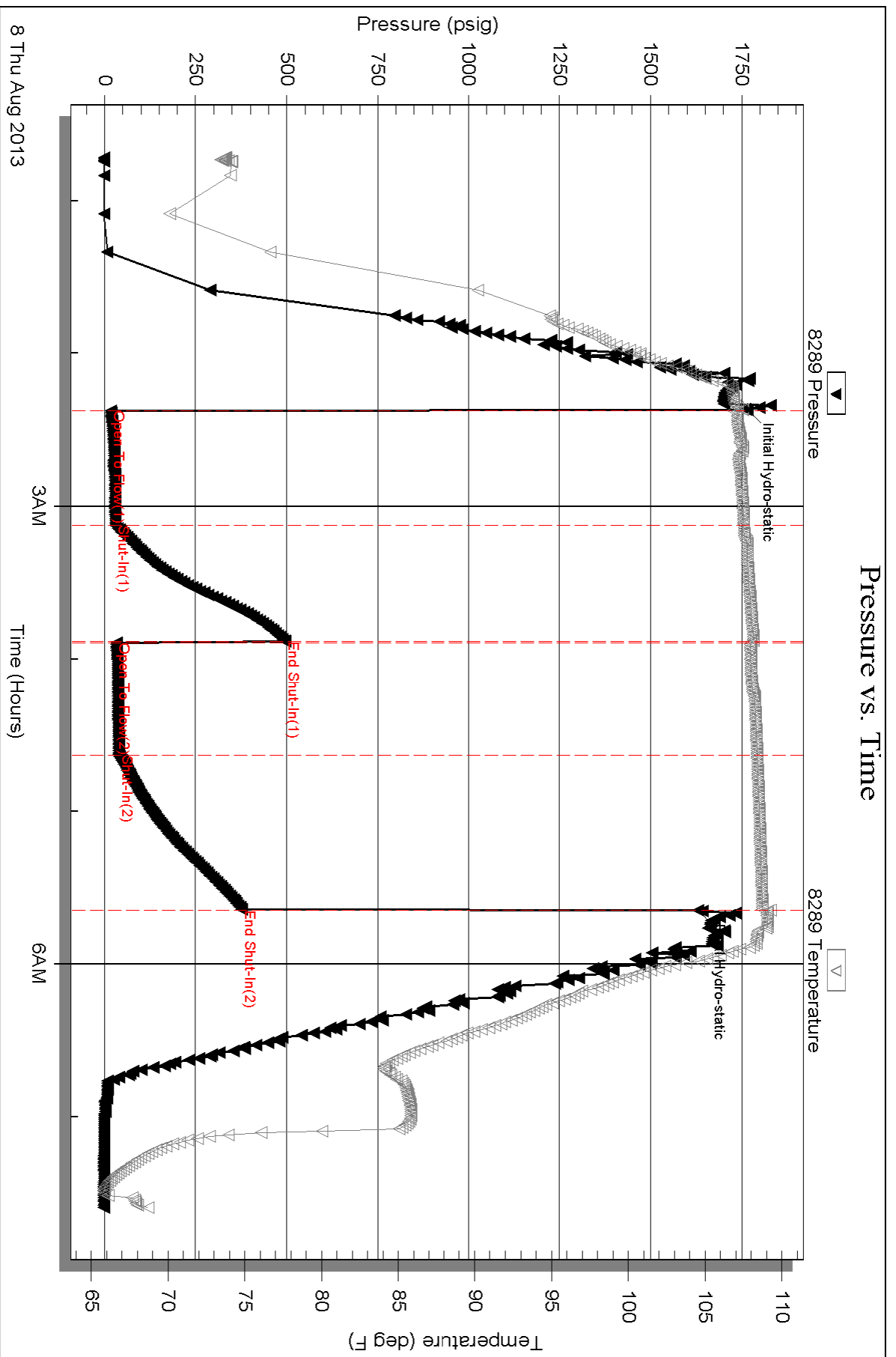
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



Serial #: 6668

Below (Straddle) Well Service LLC

Paris # 1

DST Test Number: 2

