



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Samuel Gary Jr & Assoc.

20 17s 12w Barton KS

1515 Wynkoop Ste 700
Denver CO 80202

Palmer Trust # 1-20

ATTN: Clayton Camozzi

Job Ticket: 52262

DST#: 2

Test Start: 2013.10.15 @ 03:33:00

GENERAL INFORMATION:

Formation: **LKC " A-E "**

Deviated: No Whipstock: 1891.00 ft (KB)

Time Tool Opened: 05:30:45

Time Test Ended: 12:27:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Jim Svaty

Unit No: 54

Interval: 3148.00 ft (KB) To 3193.00 ft (KB) (TVD)

Total Depth: 3193.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1891.00 ft (KB)

1883.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8789

Inside

Press @ Run Depth: 183.71 psig @ 3158.00 ft (KB)

Start Date: 2013.10.15

End Date: 2013.10.15

Start Time: 03:33:02

End Time: 12:26:45

Capacity: 8000.00 psig

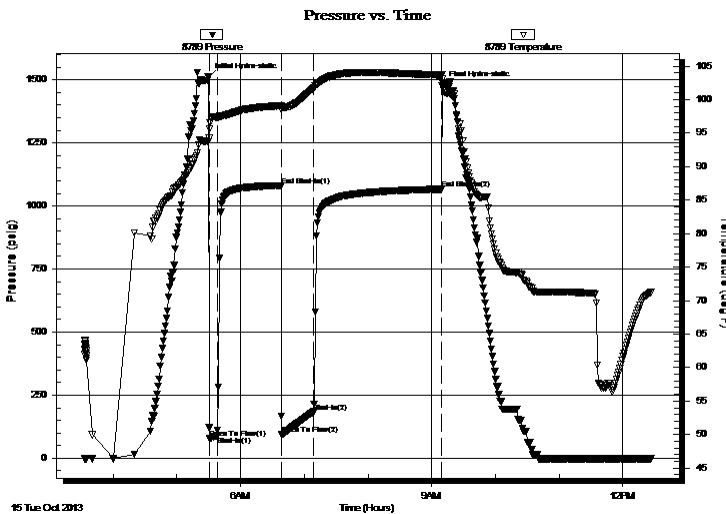
Last Calib.: 2013.10.15

Time On Btm: 2013.10.15 @ 05:29:30

Time Off Btm: 2013.10.15 @ 09:09:45

TEST COMMENT: 5-IFP- BOB in 30 sec.
60-ISIP- Surface Blow Building to 1/4in. Died in 24min.
30-FFP- BOB in 1min 30sec.
120-FSIP- BOB in 2 min.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1510.60	93.79	Initial Hydro-static
2	79.98	95.56	Open To Flow (1)
9	88.74	97.33	Shut-In(1)
69	1080.32	99.06	End Shut-In(1)
70	95.10	98.84	Open To Flow (2)
100	183.71	101.70	Shut-In(2)
220	1066.52	103.63	End Shut-In(2)
221	1477.99	103.73	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
67.00	OWCM 20%o 35%w 45%m	0.67
62.00	WMCO 5%w 10%m 85%o	0.87
288.00	GMCO 15%g 30%m 55%o	4.04
0.00	Gas to Surface	0.00

Gas Rates

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

* Recovery from multiple tests



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FLUID SUMMARY

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DST#: 2

ATTN: Clayton Camozzi

Test Start: 2013.10.15 @ 03:33:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

39 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

40000 ppm

Viscosity: 58.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.37 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5500.00 ppm

Filter Cake: 0.50 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
67.00	OWCM 20%o 35%w 45%m	0.667
62.00	WMCO 5%w 10%m 85%o	0.870
288.00	GMCO 15%g 30%m 55%o	4.040
0.00	Gas to Surface	0.000

Total Length: 417.00 ft

Total Volume: 5.577 bbl

Num Fluid Samples: 0

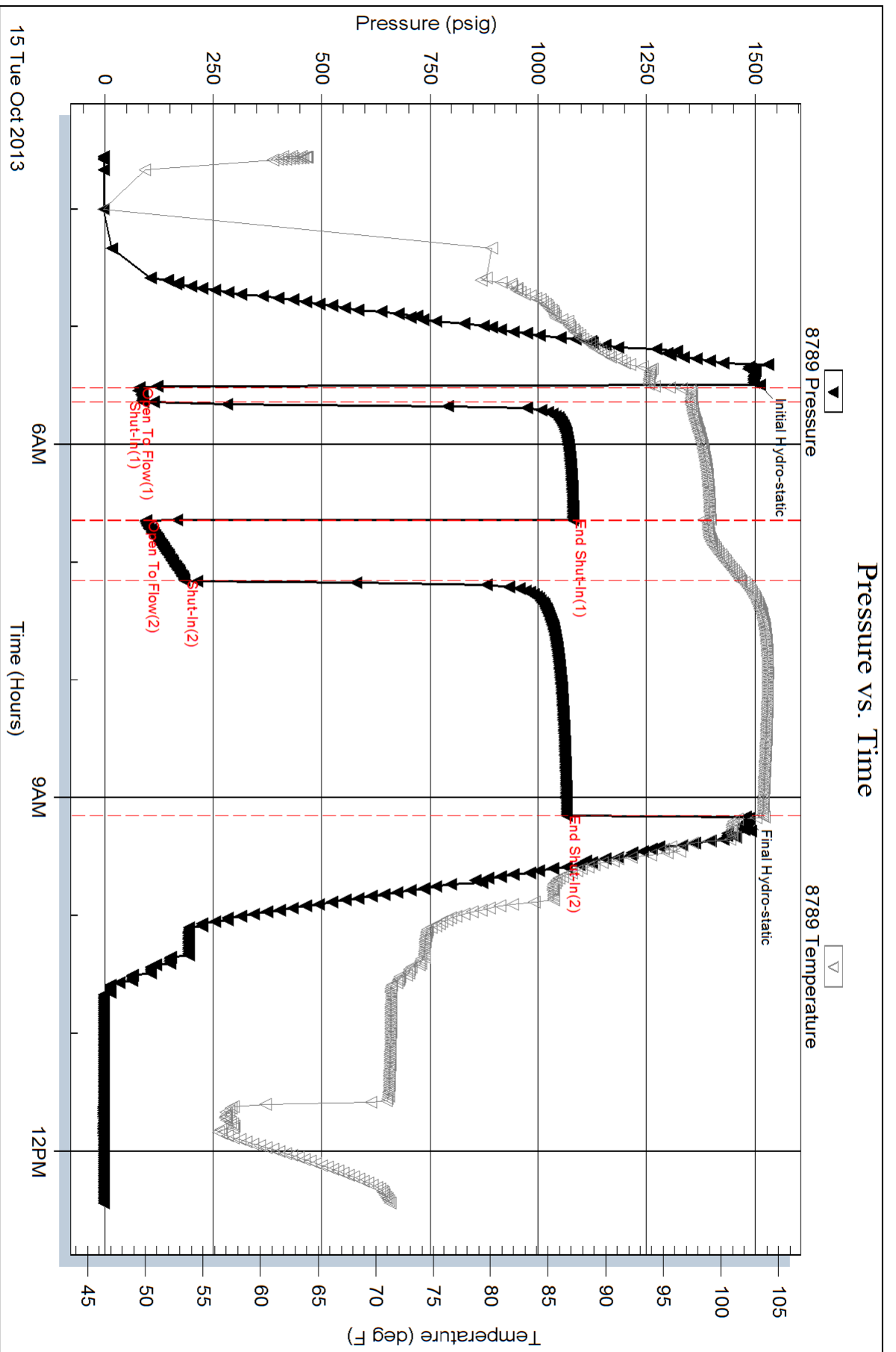
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: SAMPLER - 700psi - 2200ml CO - 39gravity
.232 @ 54



Serial #: 8289

Fluid

Samuel Gary Jr & Assoc.

Palmer Trust # 1-20

DST Test Number: 2

