



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Samuel Gary Jr & Assoc, Inc

11 5s 23w Norton, Ks

1315 Wynkoop, STE 700
Denver, Co 80202

Hager Trust 1-11

ATTN: Clayton Camozzi

Job Ticket: 52877

DST#: 2

Test Start: 2013.07.10 @ 05:47:00

GENERAL INFORMATION:

Formation: **LKC D-E**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:32:45

Time Test Ended: 13:53:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Bradley Walter

Unit No: 53

Interval: 3492.00 ft (KB) To 3531.00 ft (KB) (TVD)

Reference Elevations: 2255.00 ft (KB)

Total Depth: 3531.00 ft (KB) (TVD)

2247.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8678 Outside

Press @ Run Depth: 119.44 psig @ 3493.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.07.10

End Date:

2013.07.10

Last Calib.:

2013.07.10

Start Time: 05:47:05

End Time:

13:53:29

Time On Btm:

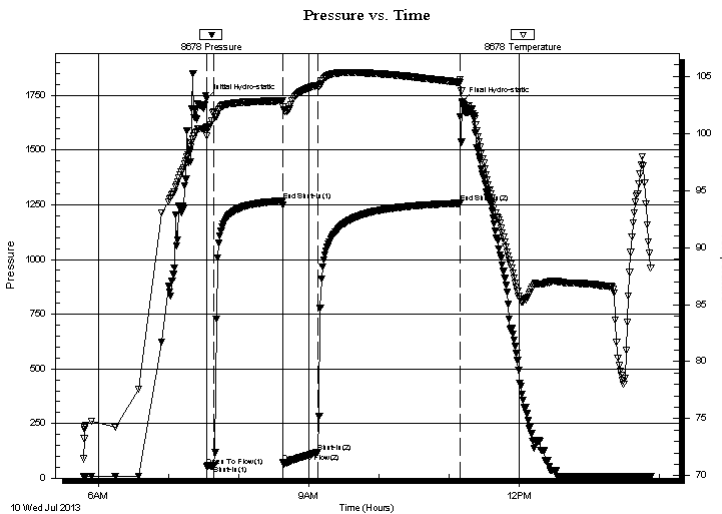
2013.07.10 @ 07:32:30

Time Off Btm:

2013.07.10 @ 11:11:30

TEST COMMENT: IF: 9" blow.
IS: No return.
FF: BOB @ 7 min.
FS: 2" return. receded to 1/2".

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1736.41	100.55	Initial Hydro-static
1	52.07	99.77	Open To Flow (1)
7	58.13	101.87	Shut-In(1)
65	1268.21	102.85	End Shut-In(1)
66	70.46	102.36	Open To Flow (2)
95	119.44	104.19	Shut-In(2)
217	1257.68	104.47	End Shut-In(2)
219	1721.69	102.71	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
100.00	sgocm 5g 35o 60m	1.12
170.00	gsmco 30g 5m 65o	2.38
0.00	350 GIP	0.00

Gas Rates

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

* Recovery from multiple tests



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Total Depth: 3531.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2255.00 ft (KB)

2247.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8522 Fluid

Press @ Run Depth: psig @ 3458.00 ft (KB)

Start Date: 2013.07.10

End Date: 2013.07.10

Start Time: 05:47:05

End Time: 13:54:44

Capacity: 8000.00 psig

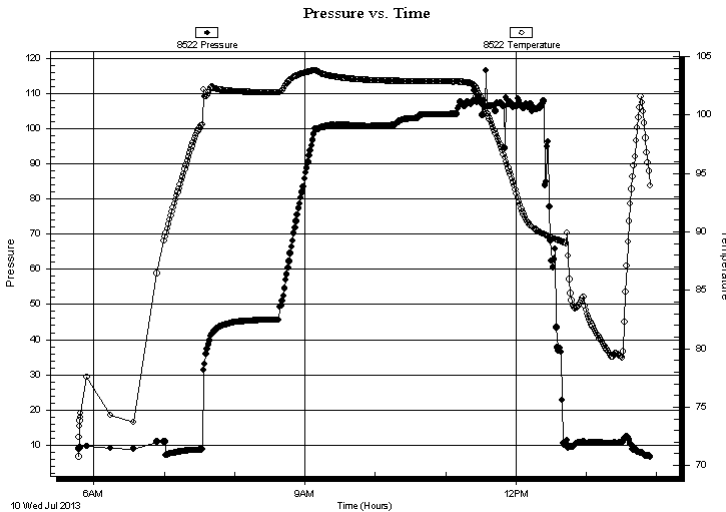
Last Calib.: 2013.07.10

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: 9" blow.
IS: No return.
FF: BOB @ 7 min.
FS: 2" return. receded to 1/2".

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
100.00	sgocm 5g 35o 60m	1.12
170.00	gsmco 30g 5m 65o	2.38
0.00	350 GIP	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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Job Ticket: 52877

DST#: 2

ATTN: Clayton Camozzi

Test Start: 2013.07.10 @ 05:47:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

32 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 59.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 400.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
100.00	sgocm 5g 35o 60m	1.120
170.00	gsmco 30g 5m 65o	2.385
0.00	350 GIP	0.000

Total Length: 270.00 ft Total Volume: 3.505 bbl

Num Fluid Samples: 0

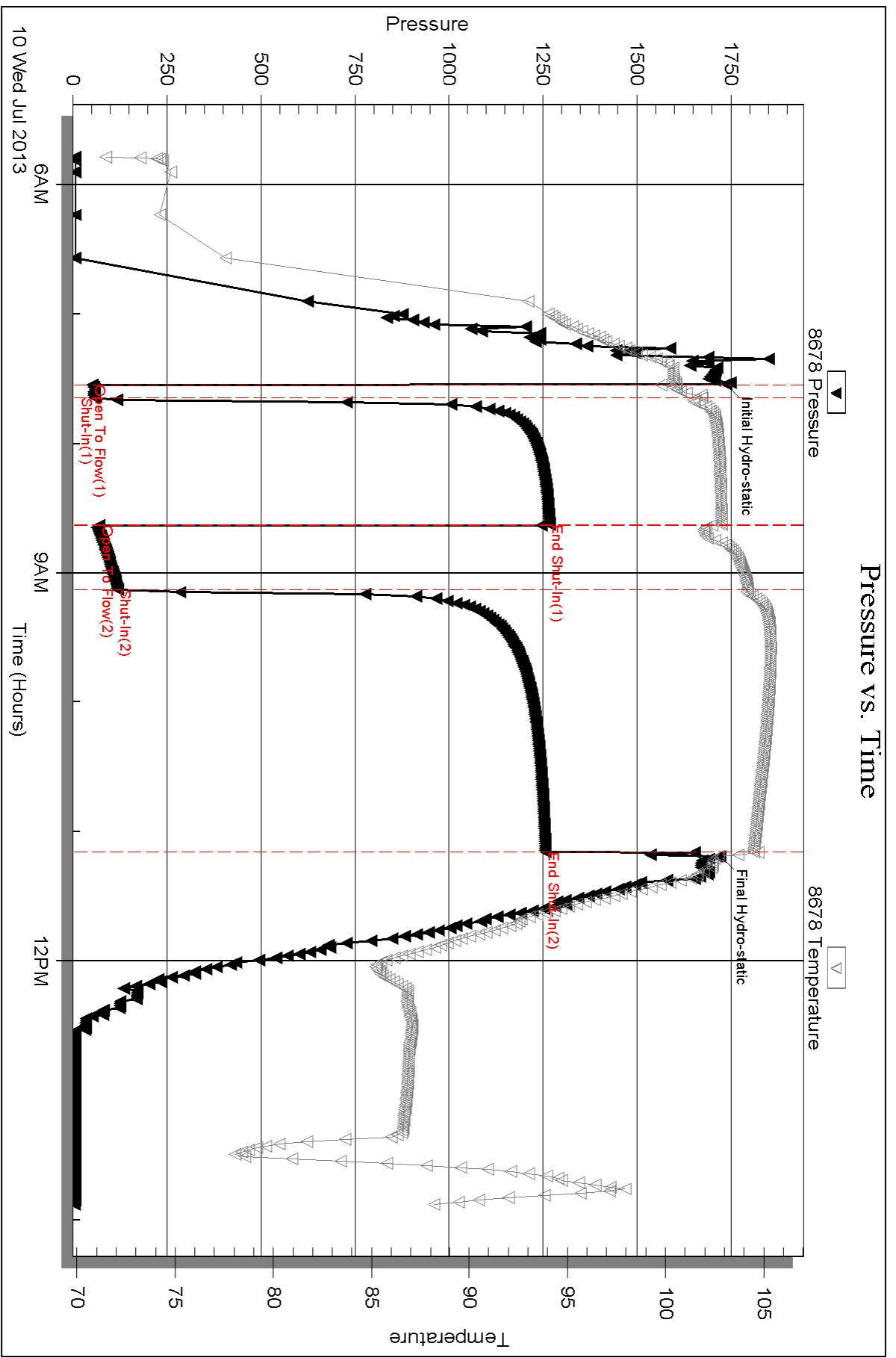
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Sampler - 2,000ml oil /600psi / 0.7 Cubic Ft Gas



Serial #: 8522

Fluid

Samuel Gary Jr & Assoc, Inc

Hager Trust 1-11

DST Test Number: 2

