



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Samuel Gary Jr, & Associates

32-14s-15w Russell KS

1515 Wynkoop St. Suite 700
Denver CO, 80202

Schmitt et al 1-32

Job Ticket: 47771

DST#: 3

ATTN: Chris Mitchell

Test Start: 2012.08.01 @ 11:23:00

GENERAL INFORMATION:

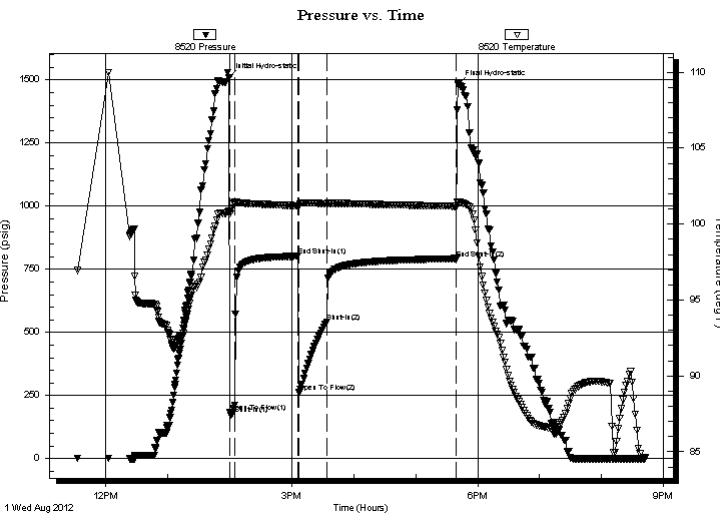
Formation: "F"
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 14:00:30
 Time Test Ended: 20:42:00
 Interval: **3188.00 ft (KB) To 3218.00 ft (KB) (TVD)**
 Total Depth: 3238.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Straddle (Reset)
 Tester: Cody Bloedorn
 Unit No: 38
 Reference Elevations: 1907.00 ft (KB)
 1897.00 ft (CF)
 KB to GR/CF: 10.00 ft

Serial #: 8520

Outside

Press @ Run Depth: 542.36 psig @ 3189.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.08.01 End Date: 2012.08.01 Last Calib.: 2012.08.01
 Start Time: 11:33:00 End Time: 20:42:00 Time On Btm: 2012.08.01 @ 13:59:30
 Time Off Btm: 2012.08.01 @ 17:41:00

TEST COMMENT: 05 - IF- B.O.B. in 1 Min.
 60 - ISF- 2" blow back in 5 Min, died in 17 Min.
 30 - FF- B.O.B. in 45 Seconds,
 120 - FSF- B.O.B. in 5 Min., G.T.S. in 12 Min.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1509.92	100.89	Initial Hydro-static
1	181.84	100.69	Open To Flow (1)
6	212.27	101.38	Shut-In(1)
67	802.10	101.22	End Shut-In(1)
68	261.84	101.22	Open To Flow (2)
95	542.36	101.32	Shut-In(2)
220	792.44	101.17	End Shut-In(2)
222	1479.79	101.46	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
62.00	GMW, 10%G, 30%M, 60%W	0.87
310.00	GW, 10%G, 90%W	4.35
496.00	GHOCWM, 10%W, 40%G, 50%O	6.96
186.00	GHOCWM, 30%W, 30%O, 40%G	2.61

* Recovery from multiple tests

Gas Rates

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



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GENERAL INFORMATION:

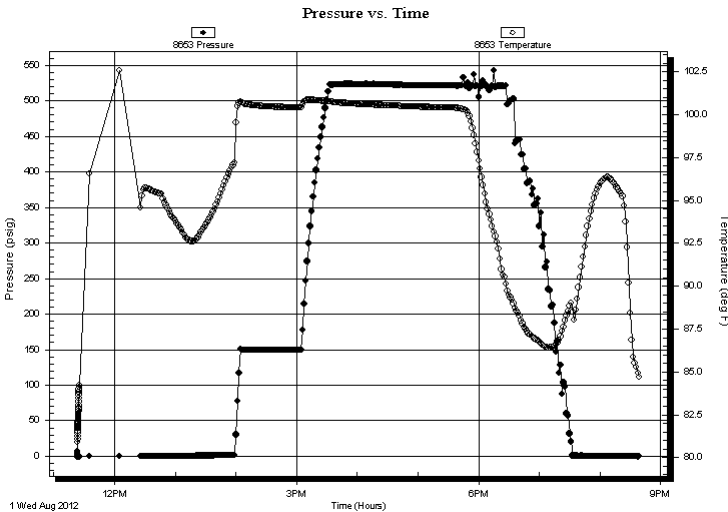
Formation: "F"
 Deviated: No Whipstock: ft (KB)
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 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Straddle (Reset)
 Tester: Cody Bloedorn
 Unit No: 38
 Reference Elevations: 1907.00 ft (KB)
 1897.00 ft (CF)
 KB to GR/CF: 10.00 ft

Serial #: 8653 Fluid

Press @ Run Depth: psig @ 3154.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.08.01 End Date: 2012.08.01 Last Calib.: 2012.08.01
 Start Time: 11:23:01 End Time: 20:40:00 Time On Btm:
 Time Off Btm:

TEST COMMENT: 05 - IF- B.O.B. in 1 Min.
 60 - ISF- 2" blow back in 5 Min, died in 17 Min.
 30 - FF- B.O.B. in 45 Seconds,
 120 - FSF- B.O.B. in 5 Min., G.T.S. in 12 Min.

PRESSURE SUMMARY



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

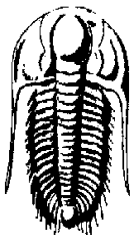
Recovery

Length (ft)	Description	Volume (bbl)
62.00	GMW, 10%G, 30%M, 60%W	0.87
310.00	GW, 10%G, 90%W	4.35
496.00	GHOCWM, 10%W, 40%G, 50%O	6.96
186.00	GHOCWM, 30%W, 30%O, 40%G	2.61

* Recovery from multiple tests

Gas Rates

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



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ATTN: Chris Mitchell

Job Ticket: 47771

DST#: 3

Test Start: 2012.08.01 @ 11:23:00

GENERAL INFORMATION:

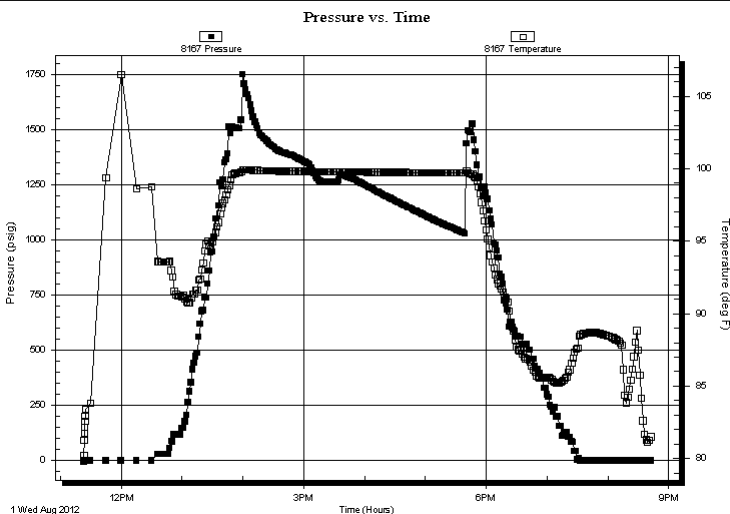
Formation: "F"
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 14:00:30
Time Test Ended: 20:42:00
Interval: **3188.00 ft (KB) To 3218.00 ft (KB) (TVD)**
Total Depth: 3238.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Straddle (Reset)
Tester: Cody Bloedorn
Unit No: 38
Reference Elevations: 1907.00 ft (KB)
1897.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 8167

Below (Straddle)

Press @ RunDepth: psig @ 3223.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2012.08.01 End Date: 2012.08.01 Last Calib.: 2012.08.01
Start Time: 11:23:05 End Time: 20:42:30 Time On Btm:
Time Off Btm:

TEST COMMENT: 05 - IF- B.O.B. in 1 Min.
60 - IS- 2" blow back in 5 Min, died in 17 Min.
30 - FF- B.O.B. in 45 Seconds,
120 - FS- B.O.B. in 5 Min., G.T.S. in 12 Min.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
62.00	GMW, 10%G, 30%M, 60%W	0.87
310.00	GW, 10%G, 90%W	4.35
496.00	GHOCWM, 10%W, 40%G, 50%O	6.96
186.00	GHOCWM, 30%W, 30%O, 40%G	2.61

* Recovery from multiple tests

Gas Rates

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



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DST#: 3

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Test Start: 2012.08.01 @ 11:23:00

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:

70000 ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.39 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3800.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
62.00	GMW, 10%G, 30%M, 60%W	0.870
310.00	GW, 10%G, 90%W	4.348
496.00	GHOCWM, 10%W, 40%G, 50%O	6.958
186.00	GHOCWM, 30%W, 30%O, 40%G	2.609

Total Length: 1054.00 ft Total Volume: 14.785 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

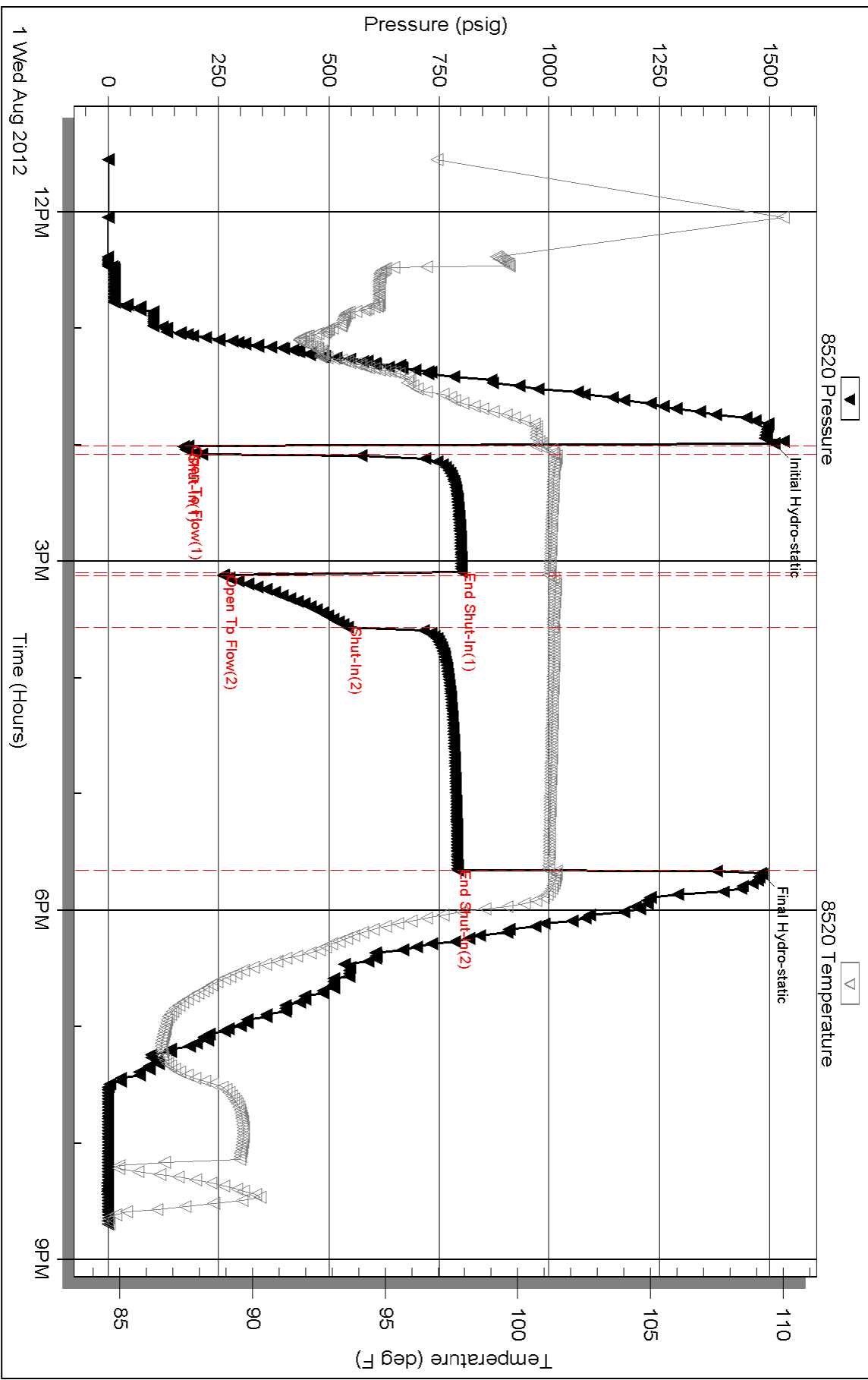
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: .15 @ 80 Degrees = 70000

Pressure vs. Time



Serial #: 8653

Fluid

Samuel Gary Jr, & Associates

Schnittl et al 1-32

DST Test Number: 3

