



DRILL STEM TEST REPORT

Prepared For: **Samuel Gary Jr. & Associates**

1515 Wynkoop Suite 700
Denver CO 80202

ATTN: Chris Mitchel

Wahl Trust #1-32

32-14s-15w Russell,KS

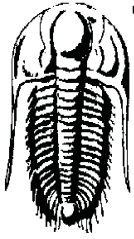
Start Date: 2012.09.25 @ 19:00:04

End Date: 2012.09.26 @ 02:15:19

Job Ticket #: 47873 DST #: 3

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2012.10.01 @ 14:34:44



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

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32-14s-15w Russell, KS

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Denver CO 80202

Wahl Trust #1-32

Job Ticket: 47873

DST#: 3

ATTN: Chris Mitchel

Test Start: 2012.09.25 @ 19:00:04

GENERAL INFORMATION:

Formation: **C-D**

Deviated: No Whipstock: 0.00 ft (KB)

Time Tool Opened: 20:23:19

Time Test Ended: 02:15:19

Test Type: Conventional Bottom Hole (Reset)

Tester: Jason McLemore

Unit No: 54

Interval: 3119.00 ft (KB) To 3161.00 ft (KB) (TVD)

Reference Elevations: 1885.00 ft (KB)

Total Depth: 3161.00 ft (KB) (TVD)

1877.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8789

Inside

Press@RunDepth: 112.35 psig @ 3156.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.09.25

End Date:

2012.09.26

Last Calib.:

2012.09.26

Start Time: 19:00:06

End Time:

02:15:19

Time On Btm:

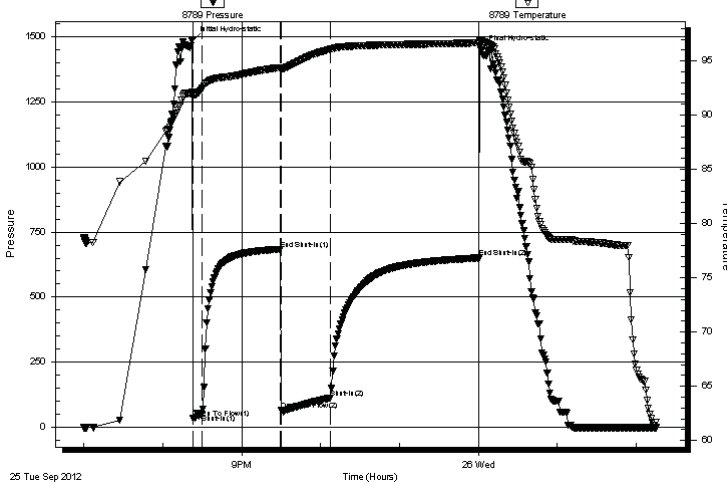
2012.09.25 @ 20:22:34

Time Off Btm:

2012.09.26 @ 00:02:04

TEST COMMENT: 5 Min. IFP-Strong, Built to 5" in 5 Min.
60 Min. ISI-Dead
30 Min. FFP-Strong, BOB in 5 Min.
120 Min. FSI-Blow back Built to 2"

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1486.66	92.18	Initial Hydro-static
1	35.54	91.83	Open To Flow (1)
8	48.97	92.41	Shut-In(1)
67	684.31	94.39	End Shut-In(1)
68	63.79	94.21	Open To Flow (2)
105	112.35	96.07	Shut-In(2)
218	650.63	96.67	End Shut-In(2)
220	1450.13	96.87	Final Hydro-static

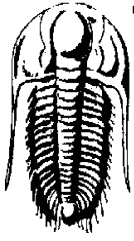
Recovery

Length (ft)	Description	Volume (bbl)
150.00	Muddy Water W/Oil Scum	1.83
60.00	Frothy Oil-50%G-50%O	0.84
0.00	690' Gas In Pipe	0.00

* Recovery from multiple tests

Gas Rates

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



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Job Ticket: 47873

DST#: 3

ATTN: Chris Mitchel

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Test Type: Conventional Bottom Hole (Reset)

Tester: Jason McLemore

Unit No: 54

Interval: **3119.00 ft (KB) To 3161.00 ft (KB) (TVD)**

Reference Elevations: 1885.00 ft (KB)

Total Depth: 3161.00 ft (KB) (TVD)

1877.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8289 Fluid

Press@RunDepth: psig @ 3084.00 ft (KB)

Start Date: 2012.09.25

End Date:

2012.09.26

Capacity: 8000.00 psig

Last Calib.:

2012.09.26

Start Time: 19:02:48

End Time:

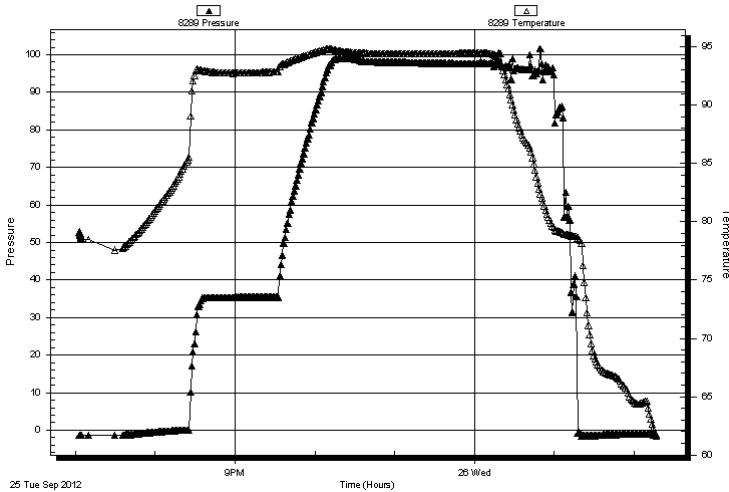
02:17:16

Time On Btm:

Time Off Btm:

TEST COMMENT: 5 Min. IFP-Strong, Built to 5" in 5 Min.
60 Min. ISI-Dead
30 Min. FFP-Strong, BOB in 5 Min.
120 Min. FSI-Blow back Built to 2"

Pressure vs. Time



PRESSURE SUMMARY

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

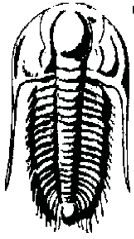
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60.00	Frothy Oil-50%G-50%O	0.84
0.00	690' Gas In Pipe	0.00

* Recovery from multiple tests

Gas Rates

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



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DRILL STEM TEST REPORT

TOOL DIAGRAM

Samuel Gary Jr. & Associates

32-14s-15w Russell, KS

1515 Wynkoop Suite 700
Denver CO 80202

Wahl Trust #1-32

Job Ticket: 47873

DST#: 3

ATTN: Chris Mitchel

Test Start: 2012.09.25 @ 19:00:04

Tool Information

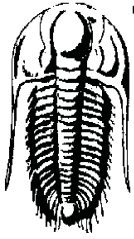
Drill Pipe:	Length: 3064.00 ft	Diameter: 3.80 inches	Volume: 42.98 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 43.13 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 44000.00 lb
Depth to Top Packer:	3119.00 ft			Final 45000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	42.00 ft			
Tool Length:	77.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Recorder	0.00	8289	Fluid	3084.00	
Change Over Sub	5.00			3089.00	
Shut In Tool	5.00			3094.00	
Sampler	3.00			3097.00	
Hydraulic tool	5.00			3102.00	
Jars	5.00			3107.00	
Safety Joint	2.00			3109.00	
Packer	5.00			3114.00	35.00 Bottom Of Top Packer
Packer	5.00			3119.00	
Stubb	1.00			3120.00	
Perforations	3.00			3123.00	
Change Over Sub	1.00			3124.00	
Blank Spacing	31.00			3155.00	
Change Over Sub	1.00			3156.00	
Recorder	0.00	8789	Inside	3156.00	
Recorder	0.00	8366	Outside	3156.00	
Perforations	2.00			3158.00	
Bullnose	3.00			3161.00	42.00 Bottom Packers & Anchor

Total Tool Length: 77.00



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FLUID SUMMARY

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Wahl Trust #1-32

Job Ticket: 47873

DST#: 3

ATTN: Chris Mitchel

Test Start: 2012.09.25 @ 19:00:04

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

53000 ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.17 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 7800.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
150.00	Muddy Water W/Oil Scum	1.831
60.00	Frothy Oil-50%G-50%O	0.842
0.00	690' Gas In Pipe	0.000

Total Length: 210.00 ft Total Volume: 2.673 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Sampler-200#- 1000ml Oil, 3000ml Water

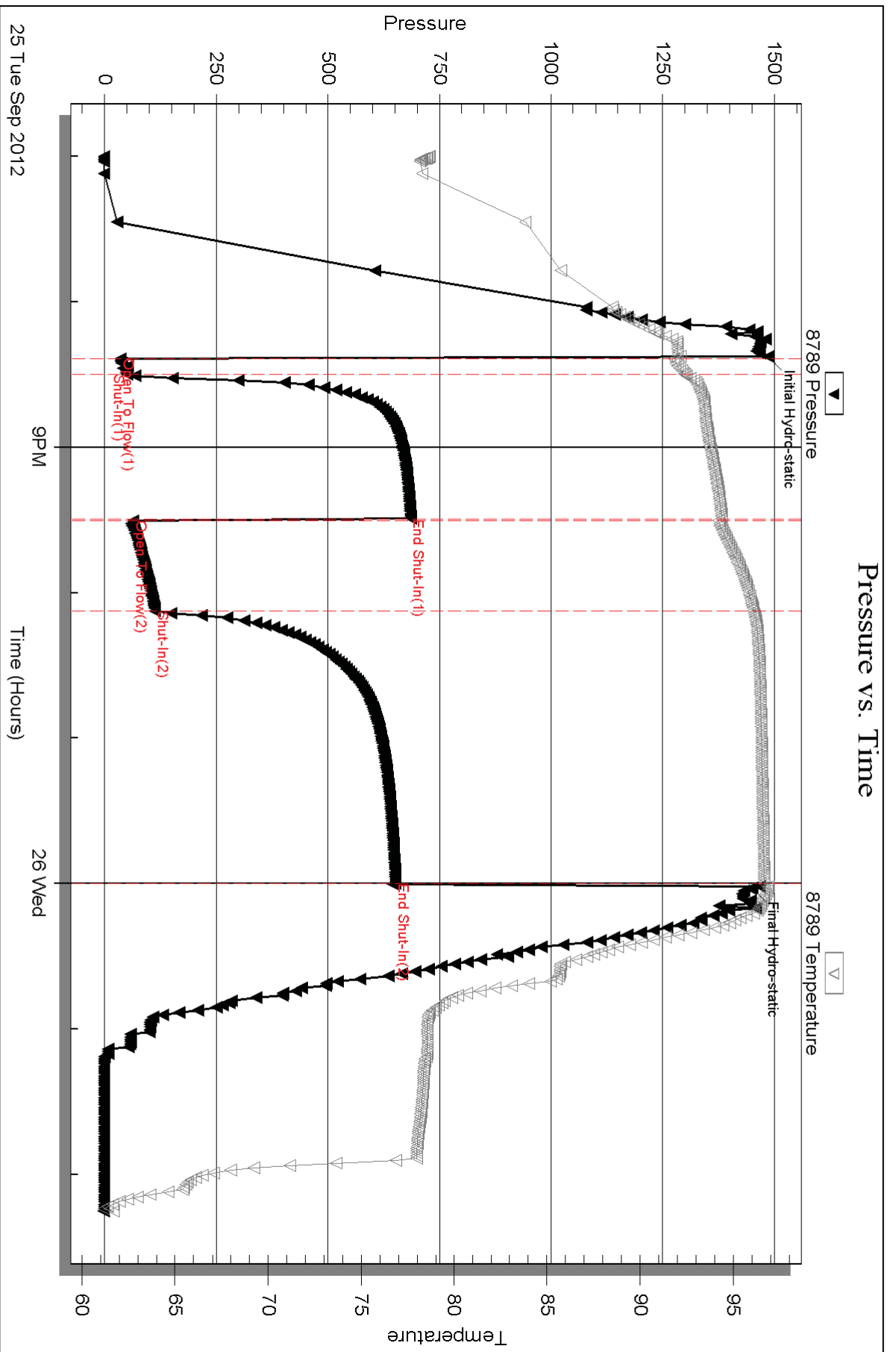
Serial #: 8789

Inside

Samuel Gary Jr. & Associates

Wahl Trust #1-32

DST Test Number: 3



Serial #: 8289

Fluid

Samuel Gary Jr. & Associates

Wahl Trust #1-32

DST Test Number: 3

