



## DRILL STEM TEST REPORT

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

1515 Wynkoop STE 700  
Denver CO 80202

ATTN: Clayton Camozzi

### **25-16s-16w Rush KS**

#### **Maier Family Trust #2-25**

Start Date: 2012.02.20 @ 17:25:27

End Date: 2012.02.21 @ 03:08:57

Job Ticket #: 46872                      DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2012.02.22 @ 10:06:05



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Samuel Gary Jr. & Associates Inc

**Maier Family Trust #2-25**

1515 Wynkoop STE 700  
Denver CO 80202

**25-16s-16w Rush KS**

Job Ticket: 46872

**DST#: 1**

ATTN: Clayton Camozzi

Test Start: 2012.02.20 @ 17:25:27

## GENERAL INFORMATION:

Formation: **KC"J"- Penn Sand**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 20:09:57  
 Time Test Ended: 03:08:57  
 Interval: **3446.00 ft (KB) To 3526.00 ft (KB) (TVD)**  
 Total Depth: 3526.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Brett Dickinson/Jim  
 Unit No: 47  
 Reference Elevations: 1966.00 ft (KB)  
 1956.00 ft (CF)  
 KB to GR/CF: 10.00 ft

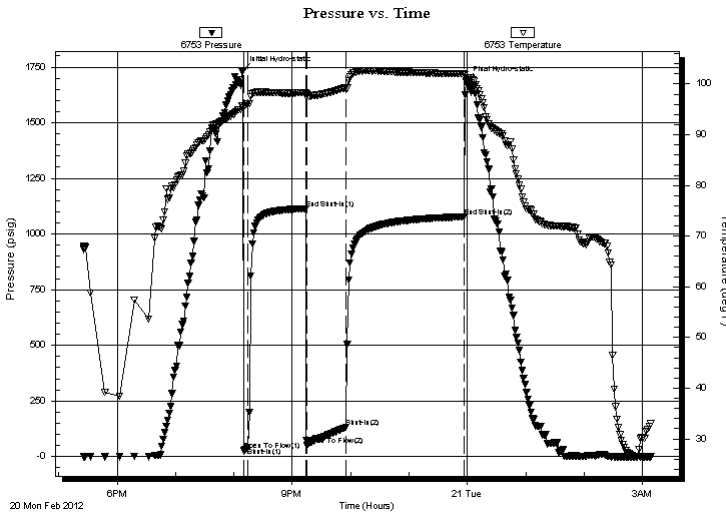
## Serial #: 6753

Inside

Press @ Run Depth: 131.12 psig @ 3447.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2012.02.20 End Date: 2012.02.21 Last Calib.: 2012.02.21  
 Start Time: 17:25:32 End Time: 03:08:57 Time On Btm: 2012.02.20 @ 20:09:27  
 Time Off Btm: 2012.02.20 @ 23:58:27

TEST COMMENT: 5min IF-8" blow  
 60min ISI-No blow  
 40min FF-BOB in 6 min  
 120min FSI- 7" blow died back to 4"

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1735.12	95.70	Initial Hydro-static
1	25.85	95.27	Open To Flow (1)
5	42.43	96.13	Shut-In(1)
65	1113.90	98.30	End Shut-In(1)
66	51.85	98.03	Open To Flow (2)
106	131.12	99.32	Shut-In(2)
227	1077.68	102.00	End Shut-In(2)
229	1688.63	101.33	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
155.00	GO 15%G 85%O	2.17
65.00	GMCO 15%G 30%M 55%O	0.91
60.00	OCM 55%M 40%O	0.84
0.00	150ft GIP	0.00

## Gas Rates

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







**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Samuel Gary Jr. & Associates Inc

**Maier Family Trust #2-25**

1515 Wynkoop STE 700  
Denver CO 80202

**25-16s-16w Rush KS**

Job Ticket: 46872

**DST#: 1**

ATTN: Clayton Camozzi

Test Start: 2012.02.20 @ 17:25:27

## Tool Information

Drill Pipe:	Length: 3416.00 ft	Diameter: 3.80 inches	Volume: 47.92 bbl	Tool Weight: 2500.00 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: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 55000.00 lb
			Total Volume: 47.92 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	4.00 ft			String Weight: Initial 51000.00 lb
Depth to Top Packer:	3446.00 ft			Final 53000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	80.00 ft			
Tool Length:	114.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	5.00			3417.00	
Recorder	0.00	8319	Fluid	3417.00	
Shut In Tool	5.00			3422.00	
Sampler	2.00			3424.00	
Hydraulic tool	5.00			3429.00	
Jars	5.00			3434.00	
Safety Joint	2.00			3436.00	
Packer	5.00			3441.00	34.00 Bottom Of Top Packer
Packer	5.00			3446.00	
Stubb	1.00			3447.00	
Recorder	0.00	6753	Inside	3447.00	
Recorder	0.00	8369	Outside	3447.00	
Perforations	2.00			3449.00	
Change Over Sub	1.00			3450.00	
Drill Pipe	63.00			3513.00	
Change Over Sub	1.00			3514.00	
Perforations	9.00			3523.00	
Bullnose	3.00			3526.00	80.00 Bottom Packers & Anchor

**Total Tool Length: 114.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Samuel Gary Jr. & Associates Inc

**Maier Family Trust #2-25**

1515 Wynkoop STE 700  
Denver CO 80202

**25-16s-16w Rush KS**

Job Ticket: 46872

**DST#: 1**

ATTN: Clayton Camozzi

Test Start: 2012.02.20 @ 17:25:27

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

37 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.19 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6300.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
155.00	GO 15%G 85%O	2.174
65.00	GMCO 15%G 30%M 55%O	0.912
60.00	OCM 55%M 40%O	0.842
0.00	150ft GIP	0.000

Total Length: 280.00 ft      Total Volume: 3.928 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Sampler Data 2800ml O 1200G 350PSI

Serial #: 6753

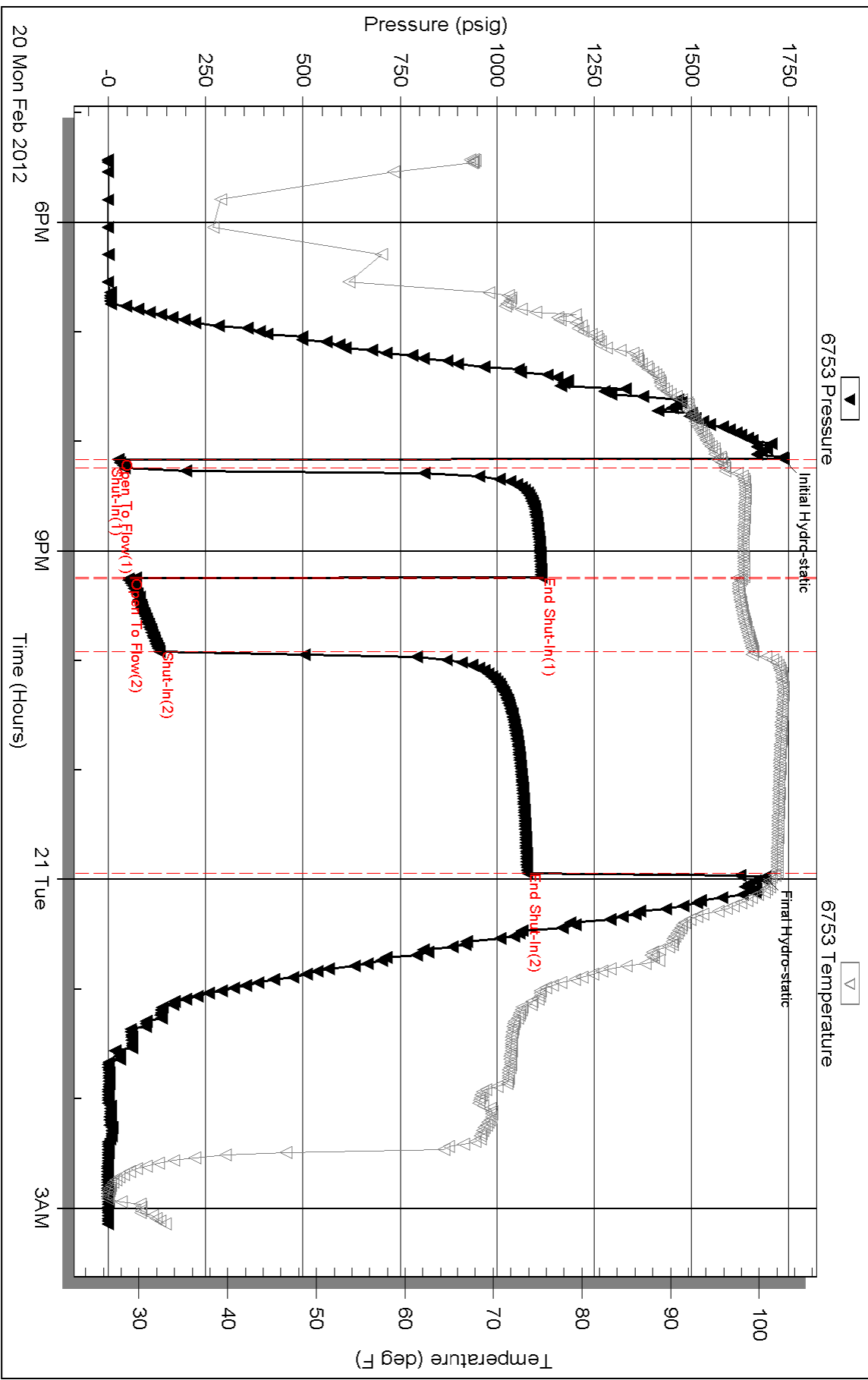
Inside

Samuel Gary Jr. & Associates Inc

25-16s-16w Rush KS

DST Test Number: 1

### Pressure vs. Time



Triobite Testing, Inc

Ref. No: 46872

Printed: 2012.02.22 @ 10:06:07

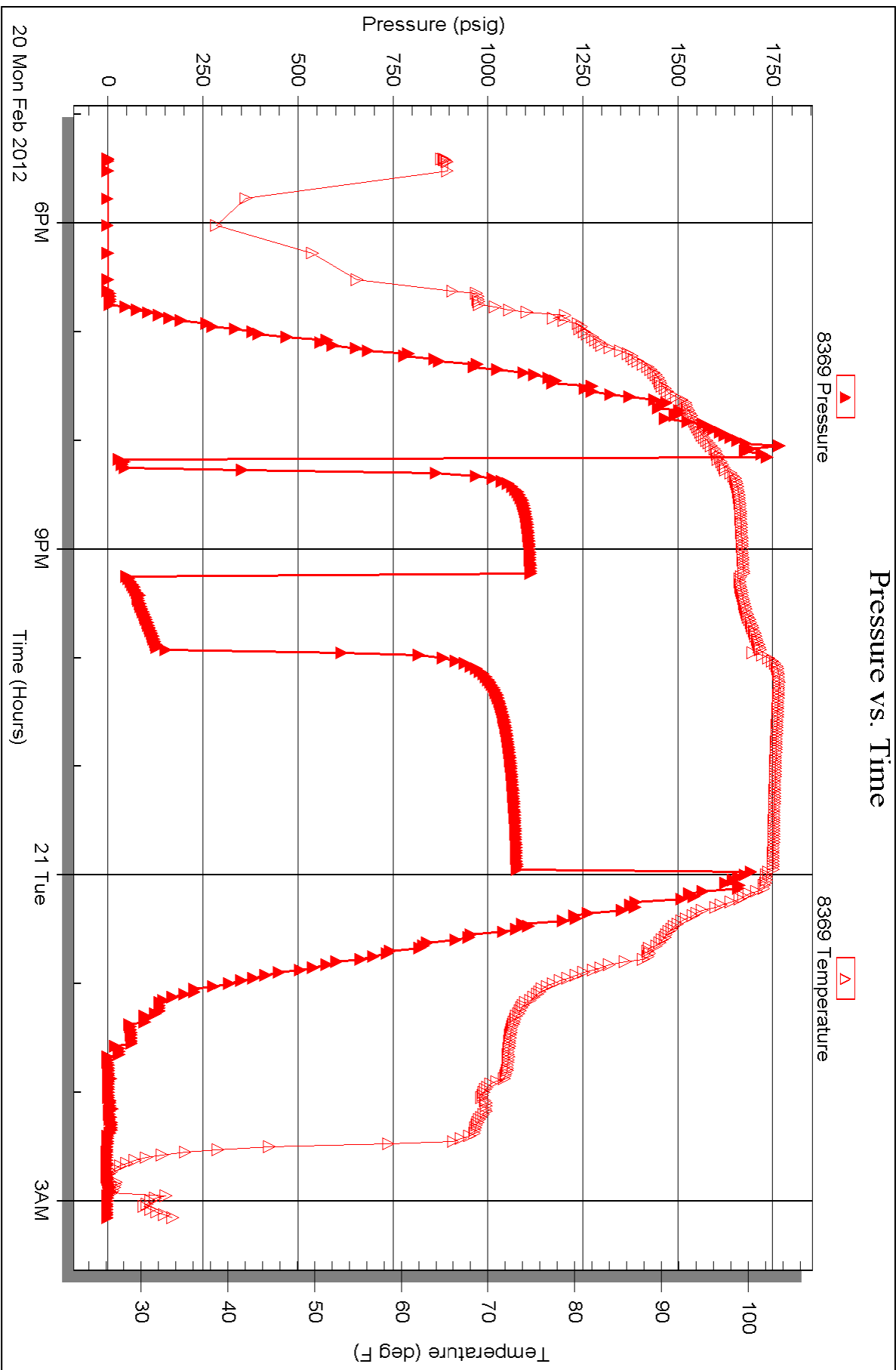
Serial #: 8369

Outside

Samuel Gary Jr. & Associates Inc

25-16s-16w Rush KS

DST Test Number: 1





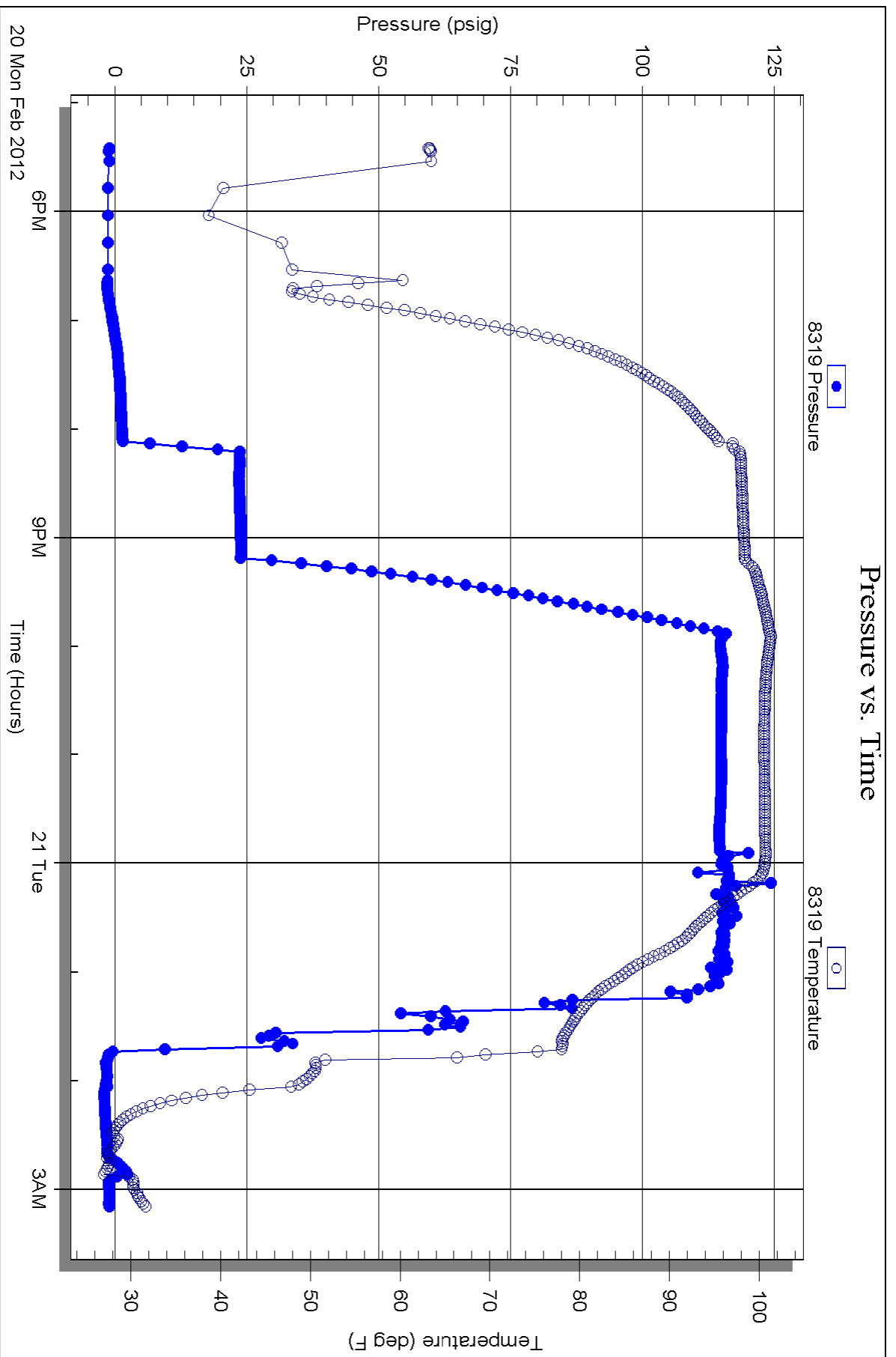
Serial #: 8319

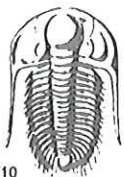
Fluid

Samuel Gary Jr. & Associates Inc

25-16s-16w Rush KS

DST Test Number: 1





# TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

## Test Ticket

RECEIVED  
FEB 21 2012

NO. 46872

4/10

BY: \_\_\_\_\_

Well Name & No. Maier Family Trust #2-25 Test No. 1 Date 2/20/12

Company Samuel Gary, Jr. and Associates Elevation 1966 KB 1956 GL

Address 1515 Wynkoop, STE 700 Denver CO 80202

Co. Rep / Geo. Clayton Rig Val Rig #6

Location: Sec. 25 Twp. 16S Rge. 16W Co. Rush State KS

Interval Tested 3446 - 3526 Zone Tested KC<sup>15</sup>" - Penn Sand

Anchor Length 80 Drill Pipe Run \_\_\_\_\_ Mud Wt. 9.3

Top Packer Depth 3441 Drill Collars Run \_\_\_\_\_ Vis 52

Bottom Packer Depth 3446 Wt. Pipe Run \_\_\_\_\_ WL 9.2

Total Depth 3526 Chlorides 6,300 ppm System LCM \_\_\_\_\_

Blow Description IF - 8in blow

ISF - No blow

FF - BOB in 6min

FSF - 7in blow died back to 4in blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>153</u>	<u>60</u>	<u>15</u>	<u>85</u>		
<u>65</u>	<u>GMCO</u>	<u>15</u>	<u>55</u>	<u>30</u>	
<u>60</u>	<u>OCM</u>	<u>5</u>	<u>40</u>	<u>55</u>	
<u>        </u>	<u>150 FT GFP</u>				
<u>        </u>					

Rec Total 280 BHT 102 Gravity 37 API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic 1,735  Test 1125 T-On Location 16:45

(B) First Initial Flow 26  Jars 250 T-Started 17:25

(C) First Final Flow 42  Safety Joint 75 T-Open 20:03

(D) Initial Shut-In 1,114  Circ Sub \_\_\_\_\_ T-Pulled 23:50

(E) Second Initial Flow 52  Hourly Standby \_\_\_\_\_ T-Out 3:05

(F) Second Final Flow 131  Mileage 64RT x2 179<sup>20</sup> Comments loaded tools

(G) Final Shut-In 1,078  Sampler 250 2/21 2pm

(H) Final Hydrostatic 1,689  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_

Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_

Initial Open 5  Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_

Initial Shut-In 60  Extra Recorder 200 Sub Total 0

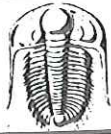
Final Flow 40  Day Standby \_\_\_\_\_ Total 2079.20

Final Shut-In 120  Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_

Sub Total 2079.20

Approved By \_\_\_\_\_ Our Representative But Dulin + Jim

Trilobite Testing Inc. shall not be liable for damaged or any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



# TRILOBITE TESTING, INC.

P.O. Box 362 • Hays, Kansas 67601

## FLUID SAMPLER DATA

Ticket No. 46872 Date 2/20/12  
 Company Name Samuel Gary, Jr and Associates  
 Lease Maier Family Trust #225 Test No. 1  
 County Rush Sec. 25 Twp. 16s Rng. 16w

### SAMPLER RECOVERY

### PIT MUD ANALYSIS

Gas	<u>1200</u>	ML	Chlorides	<u>6,300</u>	ppm.
Oil	<u>2800</u>	ML	Resistivity	_____	ohms @ _____ F
Mud	_____	ML	Viscosity	<u>52</u>	_____
Water	_____	ML	Mud Weight	<u>9.3</u>	_____
Other	_____	ML	Filtrate	<u>9.2</u>	_____
Pressure	<u>350 PSI</u>	ML	Other	_____	_____
Total	<u>4,000</u>	ML			

### SAMPLER ANALYSIS

### PIPE RECOVERY

Resistivity	_____	ohms @ _____	F	<b>TOP</b>			
Chlorides	_____	ppm.		Resistivity	_____	ohms @ _____	F
Gravity	<u>37</u>	corrected @60F		Chlorides	_____	ppm.	
				<b>MIDDLE</b>			
				Resistivity	_____	ohms @ _____	F
				Chlorides	_____	ppm.	
				<b>BOTTOM</b>			
				Resistivity	_____	ohms @ _____	F
				Chlorides	_____	ppm.	