

DRILL STEM TEST REPORT

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

1515 Wynkoop St Suite 700
Denver CO 80202

ATTN: Clayton Camozzi

Wayne Funk #2-32

32-15s-15w Russell,KS

Start Date: 2012.02.29 @ 19:51:51

End Date: 2012.03.01 @ 03:28:51

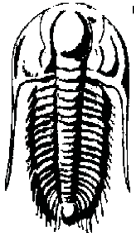
Job Ticket #: 44801 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.03.06 @ 14:53:17



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Samuel Gary Jr & Associates

32-15s-15w Russell,KS

1515 Wynkoop St Suite 700
Denver CO 80202

Wayne Funk #2-32

Job Ticket: 44801

DST#: 3

ATTN: Clayton Camozzi

Test Start: 2012.02.29 @ 19:51:51

GENERAL INFORMATION:

Formation: **Lansing-J-Pen lime**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:46:51

Time Test Ended: 03:28:51

Test Type: Conventional Straddle (Reset)

Tester: Jeff Brown

Unit No: 44

Interval: 3336.00 ft (KB) To 3418.00 ft (KB) (TVD)

Reference Elevations: 1900.00 ft (KB)

Total Depth: 3567.00 ft (KB) (TVD)

1890.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

Serial #: 8321

Inside

Press@RunDepth: 41.29 psig @ 3346.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.02.29

End Date: 2012.03.01

Last Calib.: 2012.03.01

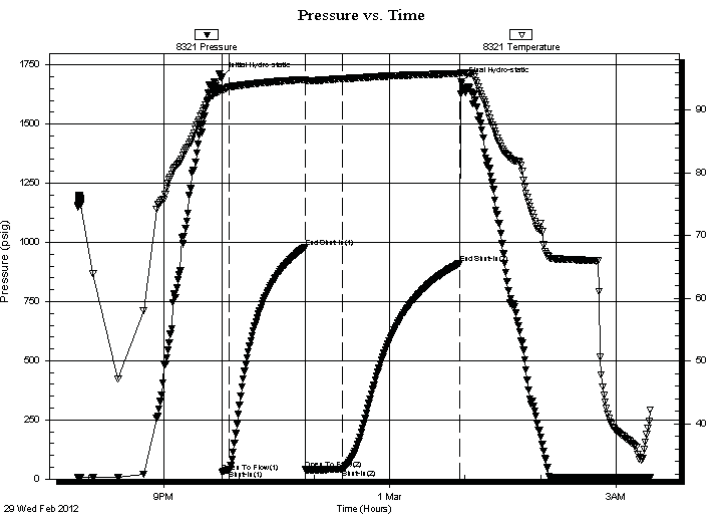
Start Time: 19:51:52

End Time: 03:27:51

Time On Btm: 2012.02.29 @ 21:46:21

Time Off Btm: 2012.03.01 @ 00:56:51

TEST COMMENT: IFP-5-min-Weak blow built to 3 in
ISI-60-Min-Weak surface blow back died out in 20 min
FFP-30-Min-Weak blow built to 1/4 in
FSI-90-Min-Dead no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1698.47	93.40	Initial Hydro-static
1	29.98	93.18	Open To Flow (1)
6	39.18	93.69	Shut-In(1)
66	979.67	94.85	End Shut-In(1)
67	40.21	94.67	Open To Flow (2)
96	41.29	94.98	Shut-In(2)
189	911.11	95.81	End Shut-In(2)
191	1678.01	95.94	Final Hydro-static

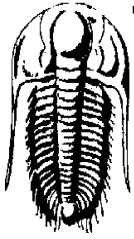
Recovery

Length (ft)	Description	Volume (bbl)
30.00	VSOCM 5% O95%M	0.42

* 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

32-15s-15w Russell,KS

1515 Wynkoop St Suite 700
Denver CO 80202

Wayne Funk #2-32

Job Ticket: 44801

DST#: 3

ATTN: Clayton Camozzi

Test Start: 2012.02.29 @ 19:51:51

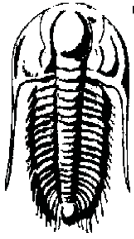
Tool Information

Drill Pipe:	Length: 3323.00 ft	Diameter: 3.80 inches	Volume: 46.61 bbl	Tool Weight: 2400.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 54000.00 lb
			<u>Total Volume: 46.61 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3336.00 ft			Final 49000.00 lb
Depth to Bottom Packer:	3418.00 ft			
Interval between Packers:	82.00 ft			
Tool Length:	266.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description

Length (ft) Serial No. Position Depth (ft) Accum. Lengths

Recorder	0.00	8679	Fluid	3301.00		
Stubb	5.00			3306.00		
Shut In Tool	5.00			3311.00		
Sampler	3.00			3314.00		
Hydraulic tool	5.00			3319.00		
Jars	5.00			3324.00		
Safety Joint	3.00			3327.00		
Packer	4.00			3331.00	35.00	Bottom Of Top Packer
Packer	5.00			3336.00		
Stubb	1.00			3337.00		
Perforations	8.00			3345.00		
Change Over Sub	1.00			3346.00		
Recorder	0.00	8321	Inside	3346.00		
Recorder	0.00	8737	Outside	3346.00		
Change Over Sub	1.00			3347.00		
Drill Pipe	62.00			3409.00		
Perforations	5.00			3414.00		
Blank Off Sub	1.00			3415.00		
Stubb	3.00			3418.00	82.00	Tool Interval
Packer	1.00			3419.00		
Stubb	1.00			3420.00		
Change Over Sub	1.00			3421.00		
Recorder	0.00	8788	Below	3421.00		
Drill Pipe	125.00			3546.00		
Change Over Sub	1.00			3547.00		
Perforations	17.00			3564.00		



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DRILL STEM TEST REPORT

FLUID SUMMARY

Samuel Gary Jr & Associates

32-15s-15w Russell,KS

1515 Wynkoop St Suite 700
Denver CO 80202

Wayne Funk #2-32

Job Ticket: 44801

DST#: 3

ATTN: Clayton Camozzi

Test Start: 2012.02.29 @ 19:51:51

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:

ppm

Viscosity: 68.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 8700.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	VSOCM 5%O95%M	0.421

Total Length: 30.00 ft Total Volume: 0.421 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: 3500 mL of total fluid 50 mL of Oil
3450 mL of mud 200 PSI

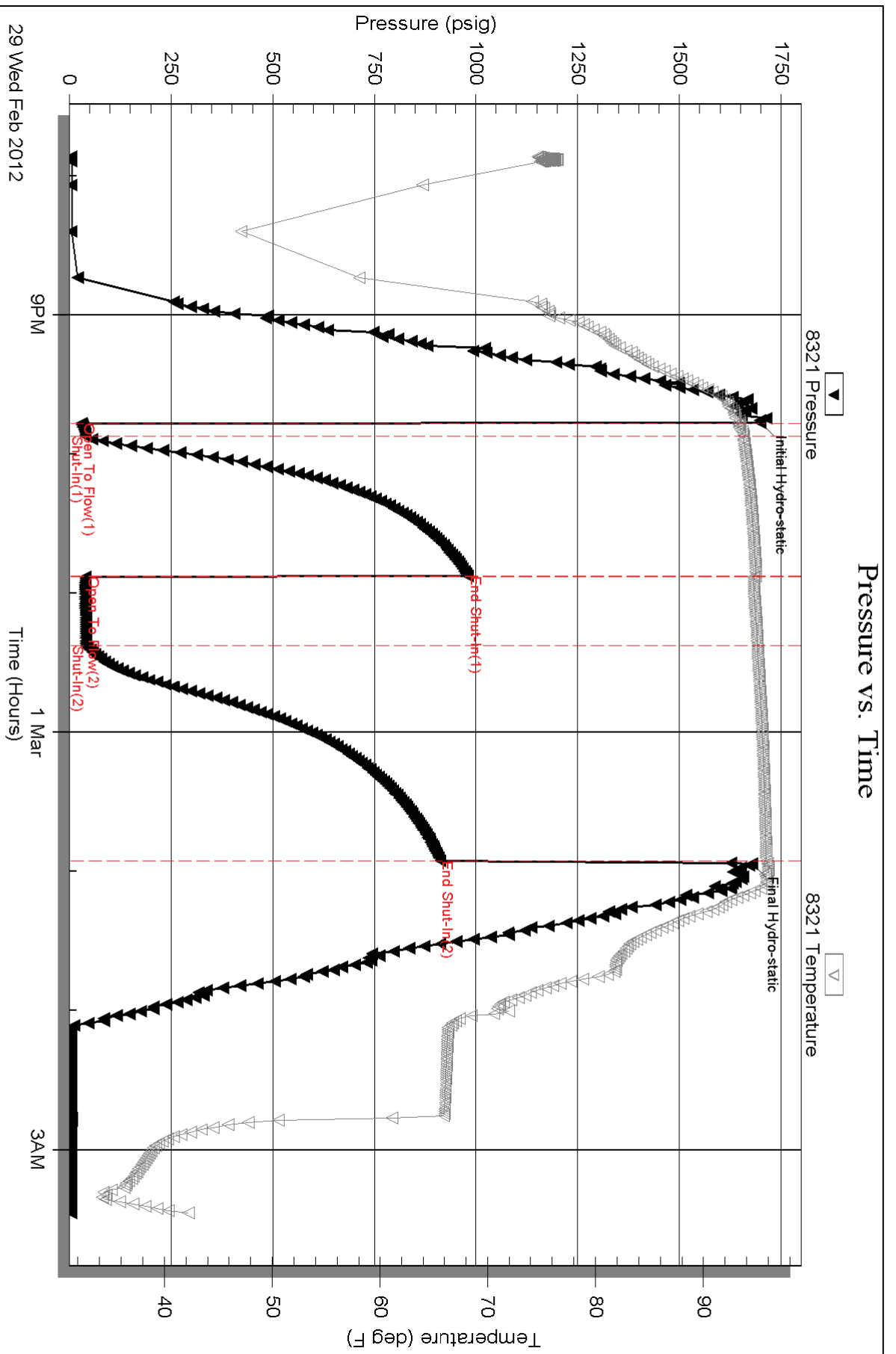
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Inside

Samuel Gary Jr & Associates

Wayne Funk #2-32

DST Test Number: 3



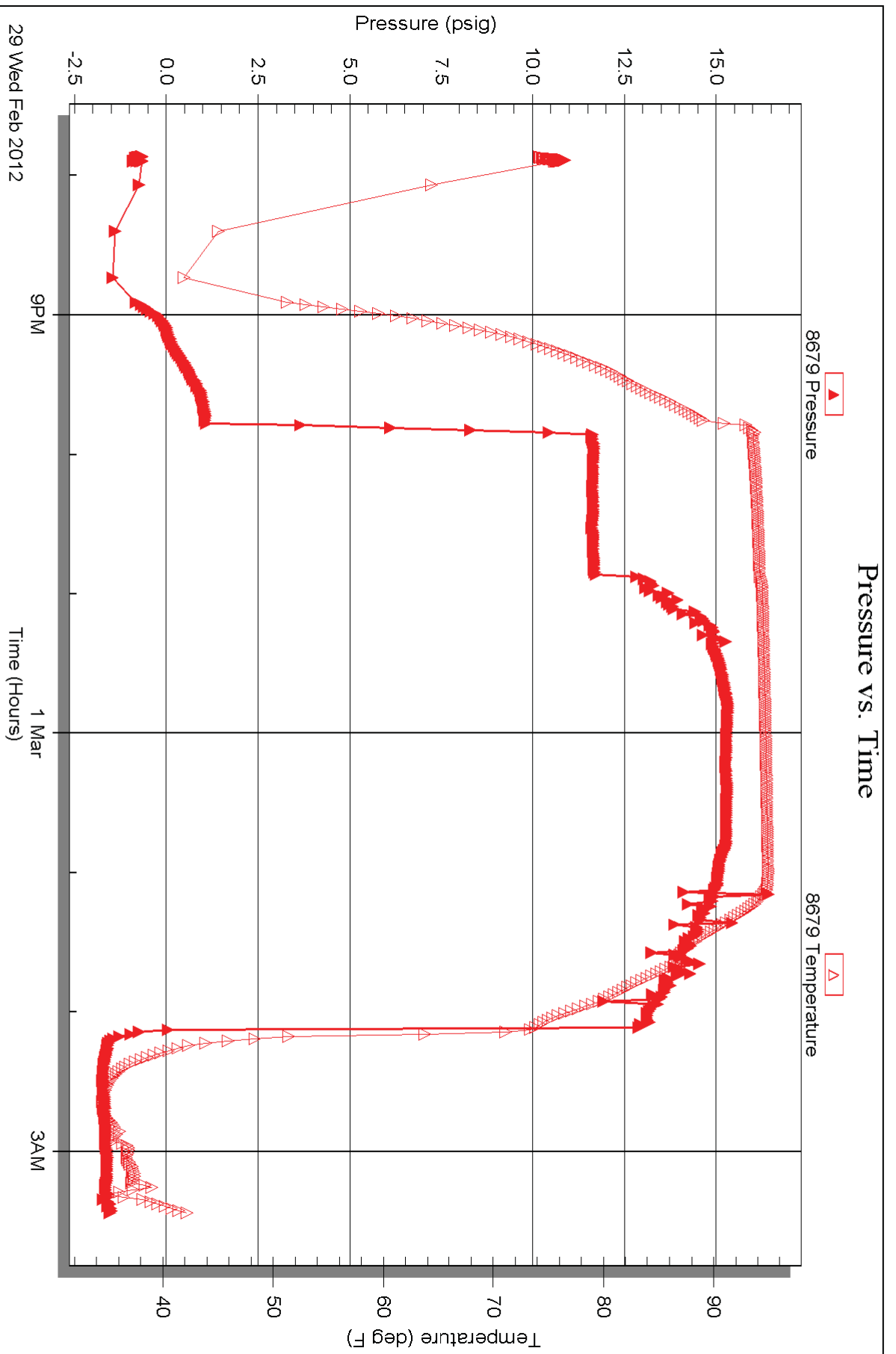
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Fluid

Samuel Gary Jr & Associates

Wayne Funk #2-32

DST Test Number: 3



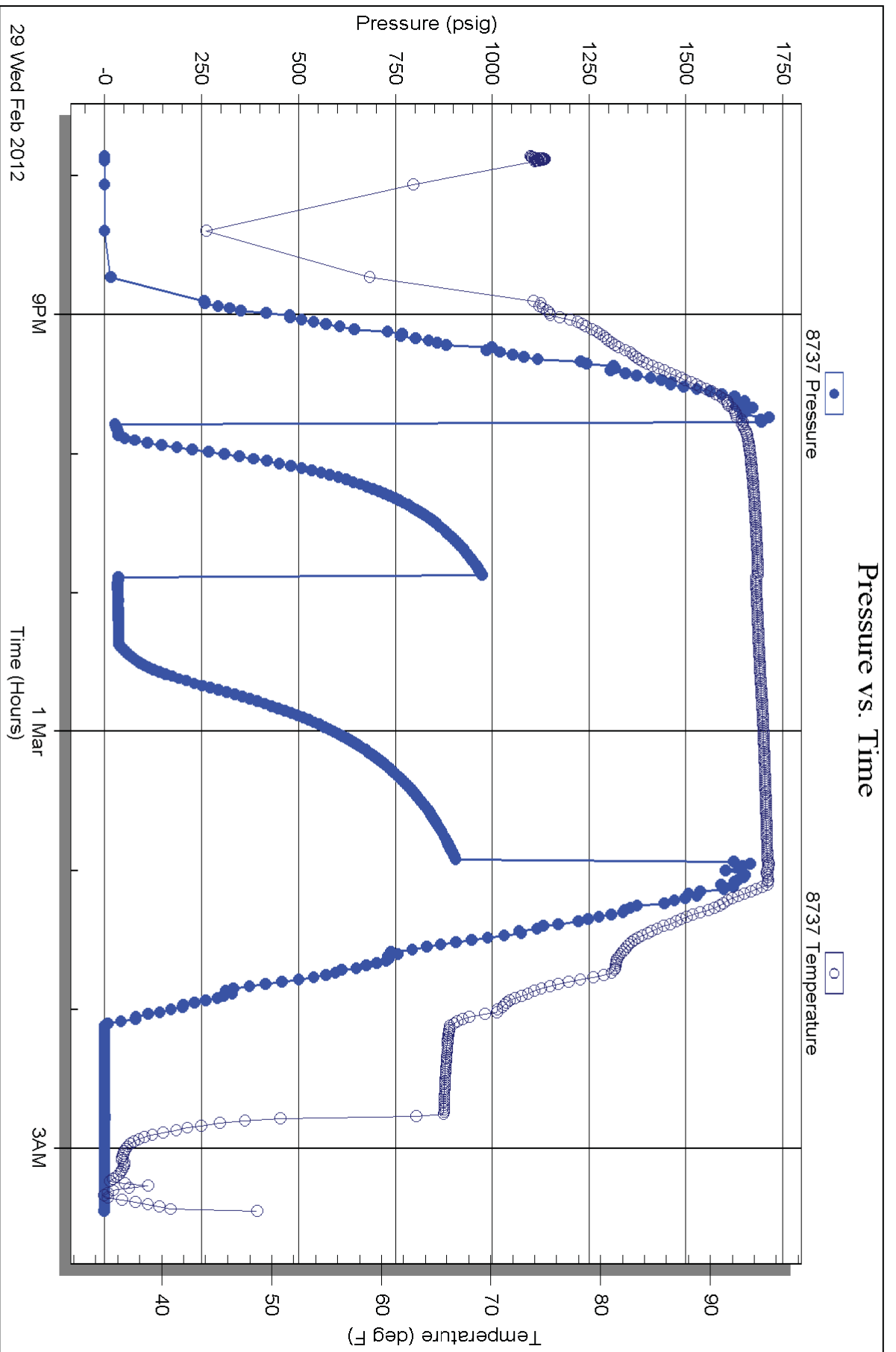
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Outside

Samuel Gary Jr & Associates

Wayne Funk #2-32

DST Test Number: 3

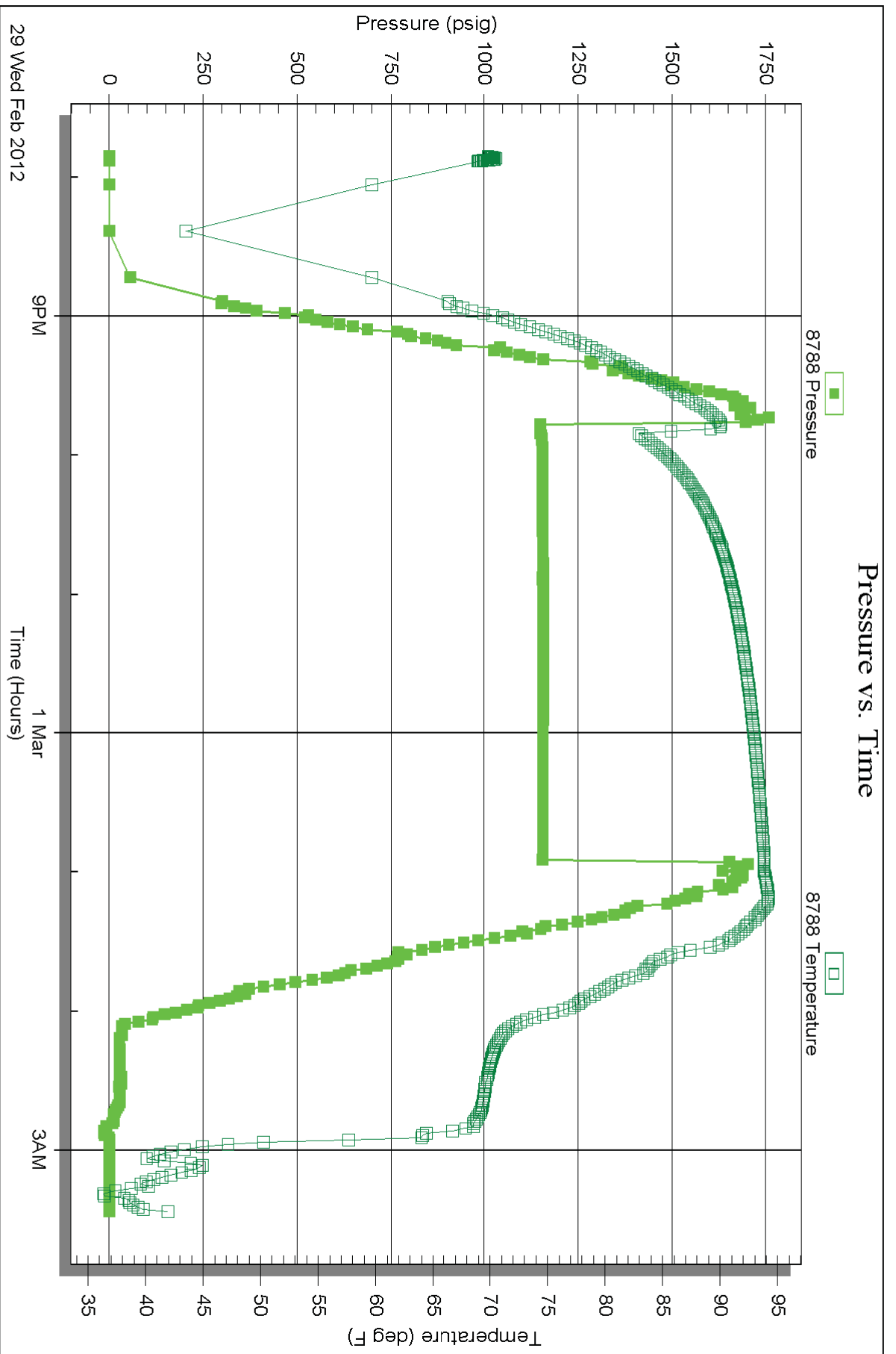


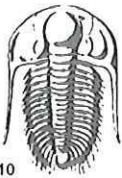
Serial #: 8788

Below (Stratton) Gary Jr & Associates

Wayne Funk #2-32

DST Test Number: 3





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Test Ticket

NO. 46399

4/10

Well Name & No. Wayne Funk 2-32 BY: _____ Test No. 1 Date 2-27-12
 Company SAMUEL GARY, JR + ASSOCIATES Elevation 1900 KB 180-1890 GL
 Address 1515 WYNKOOP ST SUITE 700 DENVER CO 80202
 Co. Rep / Geo. CLAYTON CAMOZZI Rig VAL #LP
 Location: Sec. 32 Twp. 15S Rge. 15W Co. RUSSELL State KS

Interval Tested 3138-3215 Zone Tested LARKING-A-D
 Anchor Length 77 Drill Pipe Run 3133 Mud Wt. 8.9
 Top Packer Depth 3133 Drill Collars Run 0 Vis 6.1
 Bottom Packer Depth 3138 Wt. Pipe Run 0 WL 7.2
 Total Depth 3215 Chlorides 2000 ppm System LCM 0

Blow Description PP-5 min - Weak Blow BUILT TO 1 1/2 IN
IS-60 min - Dead NO Blow Back
PP-90 min - Fair Blow BUILT TO 4 1/4 IN
ES-100 min - Dead NO Blow Back

Rec	Feet of	%gas	%oil	%water	%mud
<u>20</u>	<u>Mud with A SCUM of oil</u>				
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 20 BHT 91 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1529 Test 1125' T-On Location 16:06
 (B) First Initial Flow 31 Jars 250' T-Started 16:38
 (C) First Final Flow 35 Safety Joint 75' T-Open 18:42
 (D) Initial Shut-In 429 Circ Sub _____ T-Pulled 22:27
 (E) Second Initial Flow 35 Hourly Standby _____ T-Out 00:43
 (F) Second Final Flow 44 Mileage 60 RT 84' Comments _____
 (G) Final Shut-In 4060 Sampler 250' _____
 (H) Final Hydrostatic 1514 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Initial Open 5' Extra Recorder 200' Sub Total 0
 Initial Shut-In 200 Day Standby _____ Total 1984'
 Final Flow 40 Accessibility _____ MP/DST Disc't _____
 Final Shut-In 120 Sub Total 1984'

Approved By _____ Our Representative Jeff Brown

TriLOBite Testing Inc. shall not be liable for damaged of 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. 410 309 Date 2-27-12
 Company Name SAMUEL GARY JR & ASSOCIATES
 Lease Wayne Funk 2-32 Test No. 1
 County Russell Sec. 32 Twp. 15S Rng. 15W

SAMPLER RECOVERY

Gas _____ ML
 Oil _____ ML
 Mud 3500 ML
 Water _____ ML
 Other _____ ML
 Pressure 150 PSI ML
 Total 3500 ML

PIT MUD ANALYSIS

Chlorides _____ ppm.
 Resistivity _____ ohms @ _____ F
 Viscosity _____
 Mud Weight _____
 Filtrate _____
 Other _____
Mud with a scum of oil

SAMPLER ANALYSIS

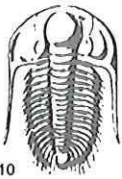
Resistivity _____ ohms @ _____ F
 Chlorides _____ ppm.
 Gravity _____ corrected @60F

PIPE RECOVERY

TOP
 Resistivity _____ ohms @ _____ F
 Chlorides _____ ppm.

MIDDLE
 Resistivity _____ ohms @ _____ F
 Chlorides _____ ppm.

BOTTOM
 Resistivity _____ ohms @ _____ F
 Chlorides _____ ppm.



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MAR 05 2012

Test Ticket

NO. 46400

BY: _____

Well Name & No. Wayne Funk 2-32 Test No. 2 Date 2-28-12
 Company Samuel Gary, JR + Associates Elevation 1900 KB 1890 GL
 Address 1515 Wynkoop ST Suite 700 Denver CO 80202
 Co. Rep / Geo. Clayton Camozzi Rig U9L #L0
 Location: Sec. 32 Twp. 15S Rge. 15W Co. Russell State KS

Interval Tested 3280-3336 Zone Tested Lancing - G-I
 Anchor Length 56 Drill Pipe Run 3257 Mud Wt. 9.1
 Top Packer Depth 3275 Drill Collars Run 0 Vis 50
 Bottom Packer Depth 3280 Wt. Pipe Run 0 WL 8.0
 Total Depth 3336 Chlorides 7000 ppm System LCM 0

Blow Description 1st-10-min - Weak Blow Built To 1/8 IN
1st-60-min - Dead No Blow Back
1st-15-min - Dead No Blow
1st-60-min - Dead No Blow Back

Rec	Feet of	%gas	%oil	%water	%mud
<u>1</u>	<u>MUD WITH A SCUM OF OIL</u>				
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 1 BHT 94 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1640 Test 1125 T-On Location 14:05
 (B) First Initial Flow 38 Jars 250 T-Started 15:16
 (C) First Final Flow 41 Safety Joint 75 T-Open 16:52
 (D) Initial Shut-In 49 Circ Sub _____ T-Pulled 19:17
 (E) Second Initial Flow 41 Hourly Standby _____ T-Out 21:18
 (F) Second Final Flow 41 Mileage 600 RT 84 Comments _____
 (G) Final Shut-In 49 Sampler 250 _____
 (H) Final Hydrostatic 1640 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder 200 Sub Total 0
 Day Standby _____ Total 1984
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1984

Initial Open 10
 Initial Shut-In 60
 Final Flow 15
 Final Shut-In 60

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TRILOBITE TESTING, INC.

P.O. Box 362 • Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 42400 Date 2-28-12
 Company Name Samuel Gary SR & Associates
 Lease Wayne Funk 2-32 Test No. 2
 County Russell Sec. 32 Twp. 15S Rng. 15W

SAMPLER RECOVERY

Gas _____ ML
 Oil _____ ML
 Mud 3500 ML
 Water _____ ML
 Other _____ ML
 Pressure 20 ML
 Total 3500 ML

PIT MUD ANALYSIS

Chlorides _____ ppm.
 Resistivity _____ ohms @ _____ F
 Viscosity _____
 Mud Weight _____
 Filtrate _____
 Other _____
mud with a scam of oil

SAMPLER ANALYSIS

Resistivity _____ ohms @ _____ F
 Chlorides _____ ppm.
 Gravity _____ corrected @60F

PIPE RECOVERY

TOP
 Resistivity _____ ohms @ _____ F
 Chlorides _____ ppm.
MIDDLE
 Resistivity _____ ohms @ _____ F
 Chlorides _____ ppm.
BOTTOM
 Resistivity _____ ohms @ _____ F
 Chlorides _____ ppm.



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RECEIVED
MAR 05 2012

Test Ticket

NO. 44801

Well Name & No. Wayne Funk 2-32 Test No. 2 Date 2-29-12
 Company SAMUEL GARY, JR & ASSOCIATES Elevation 1900 KB 1890 GL
 Address 1515 WYNKOOP ST SUITE 700 DENVER CO 80202
 Co. Rep / Geo. CLAYTON CAMOZZI Rig Val #10
 Location: Sec. 32 Twp. 15s Rge. 15W Co. Russell State KS

Interval Tested 3336-3418 Zone Tested LANSING - S - PEN LIME
 Anchor Length 82-Anchor 149-Tail Drill Pipe Run 3323 Mud Wt. 9.3
 Top Packer Depth 3331 Drill Collars Run 0 Vis 6.8
 Bottom Packer Depth 3336 Wt. Pipe Run 0 WL 8.8
 Total Depth 3567 Chlorides 8700 ppm System LCM 0

Blow Description FP-5min-weak Blow Built TO 3 IN
ISI-60min-weak surface Blow Back Died out IN 20min
FP-30min-Weak Blow Built TO 1/4 IN
ISI-90-min-Dead NO Blow Back

Rec	Feet of	%gas	%oil	%water	%mud
<u>30</u>	<u>150cm</u>		<u>5</u>		<u>95</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

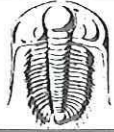
Rec Total 30 BHT 94 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1698 Test 1125 T-On Location 19:26
 (B) First Initial Flow 30 Jars 250 T-Started 19:57
 (C) First Final Flow 39 Safety Joint 75 T-Open 21:48
 (D) Initial Shut-In 980 Circ Sub _____ T-Pulled 00:53
 (E) Second Initial Flow 40 Hourly Standby _____ T-Out 3:28
 (F) Second Final Flow 41 Mileage 60 RT 84 Comments _____
 (G) Final Shut-In 911 Sampler 250 Ruined Shale Packer _____
 (H) Final Hydrostatic 1678 Straddle 600 Ruined Packer _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder 200 Sub Total 0
 Day Standby _____ Total 2584
 Accessibility _____ MP/DST Disc't _____
 Sub Total 2584

Initial Open 5
 Initial Shut-In 600
 Final Flow 30
 Final Shut-In 90

Approved By _____ Our Representative Jeff Brown

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FLUID SAMPLER DATA

Ticket No. 44801 Date 2-29-12
 Company Name SAM Gary JR + ASSOCIATES
 Lease Wayne Funk 2-32 Test No. 3
 County Russell Sec. 32 Twp. 15s Rng. 15W

SAMPLER RECOVERY

Gas _____ ML
 Oil 50 ML
 Mud 3450 ML
 Water _____ ML
 Other _____ ML
 Pressure 2000 PSI ML
 Total 3500 ML

PIT MUD ANALYSIS

Chlorides _____ ppm.
 Resistivity _____ ohms @ _____ F
 Viscosity _____
 Mud Weight _____
 Filtrate _____
 Other _____
USOCM 5% 0 95% M

SAMPLER ANALYSIS

Resistivity _____ ohms @ _____ F
 Chlorides _____ ppm.
 Gravity _____ corrected @ 60F

PIPE RECOVERY

TOP
 Resistivity _____ ohms @ _____ F
 Chlorides _____ ppm.
MIDDLE
 Resistivity _____ ohms @ _____ F
 Chlorides _____ ppm.
BOTTOM
 Resistivity _____ ohms @ _____ F
 Chlorides _____ ppm.