



KANSAS CORPORATION COMMISSION 1099323  
OIL & GAS CONSERVATION DIVISION

Form ACO-1  
June 2009  
Form Must Be Typed  
Form must be Signed  
All blanks must be Filled

**WELL COMPLETION FORM**  
**WELL HISTORY - DESCRIPTION OF WELL & LEASE**

OPERATOR: License # 34259  
Name: JAG Operations, Inc.  
Address 1: 710 S. Front  
Address 2: PO BOX 628  
City: RUSSELL State: KS Zip: 67665 +  
Contact Person: Jack Yost  
Phone: ( 785 ) 483-0271  
CONTRACTOR: License # 33350  
Name: Southwind Drilling, Inc.  
Wellsite Geologist: Mike Bair  
Purchaser: \_\_\_\_\_

Designate Type of Completion:

- New Well     Re-Entry     Workover
- Oil     WSW     SWD     SIOW  
 Gas     D&A     ENHR     SIGW  
 OG     GSW     Temp. Abd.  
 CM (Coal Bed Methane)  
 Cathodic     Other (Core, Expl., etc.): \_\_\_\_\_

If Workover/Re-entry: Old Well Info as follows:

Operator: \_\_\_\_\_

Well Name: \_\_\_\_\_

Original Comp. Date: \_\_\_\_\_ Original Total Depth: \_\_\_\_\_

- Deepening     Re-perf.     Conv. to ENHR     Conv. to SWD  
 Conv. to GSW
- Plug Back: \_\_\_\_\_ Plug Back Total Depth \_\_\_\_\_  
 Commingled    Permit #: \_\_\_\_\_  
 Dual Completion    Permit #: \_\_\_\_\_  
 SWD    Permit #: \_\_\_\_\_  
 ENHR    Permit #: \_\_\_\_\_  
 GSW    Permit #: \_\_\_\_\_

<u>08/06/2012</u>	<u>08/13/2012</u>	<u>8/13/2012</u>
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-167-23815-00-00

Spot Description: \_\_\_\_\_  
NE NE NW NE Sec. 34 Twp. 13 S. R. 15  East  West  
170 Feet from  North /  South Line of Section  
1460 Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE     NW     SE     SW

County: Russell

Lease Name: Stranger Valley Well #: 1

Field Name: \_\_\_\_\_

Producing Formation: Not Producing

Elevation: Ground: 1920 Kelly Bushing: 1929

Total Depth: 3430 Plug Back Total Depth: \_\_\_\_\_

Amount of Surface Pipe Set and Cemented at: 212 Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set: \_\_\_\_\_ Feet

If Alternate II completion, cement circulated from: \_\_\_\_\_

feet depth to: \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

**Drilling Fluid Management Plan**

(Data must be collected from the Reserve Pit)

Chloride content: 1400 ppm Fluid volume: 4500 bbls

Dewatering method used: Evaporated

Location of fluid disposal if hauled offsite: \_\_\_\_\_

Operator Name: \_\_\_\_\_

Lease Name: \_\_\_\_\_ License #: \_\_\_\_\_

Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

County: \_\_\_\_\_ Permit #: \_\_\_\_\_

**AFFIDAVIT**

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

**KCC Office Use ONLY**

- Letter of Confidentiality Received  
Date: \_\_\_\_\_
- Confidential Release Date: \_\_\_\_\_
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT  I  II  III Approved by: Deanna Gamsor Date: 11/07/2012



1099323

Operator Name: JAG Operations, Inc. Lease Name: Stranger Valley Well #: 1  
 Sec. 34 Twp. 13 S. R. 15  East  West County: Russell

**INSTRUCTIONS:** Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Electric Log Run <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i>  List All E. Logs Run:  Dual Enduction Compensated Density/Neutron	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  Name Top Datum Attached Attached Attached
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CASING RECORD <input checked="" type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface Pipe	10	8.625	23	212	Common	150	3%cc 2%gel

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone	0-3430	60/40 Poz	245	3%cc 1/4" Flo Seal

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____		Liner Run: <input type="checkbox"/> Yes <input type="checkbox"/> No
Date of First, Resumed Production, SWD or ENHR. _____	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain) _____	
Estimated Production Per 24 Hours	Oil Bbls. _____ Gas Mcf _____ Water Bbls. _____	Gas-Oil Ratio _____ Gravity _____

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5) (Submit ACO-4)</i> <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	JAG Operations, Inc.
Well Name	Stranger Valley 1
Doc ID	1099323

Tops

Anhydrite	987	+940
Topeka	2819	-893
Heebner	3040	-1113
Toronto	3094	-1167
Lansing	3117	-1190
BKC	3340	-1413
Gorham Sand	3351	-1425
Arbuckle	3365	-1438
TD	3430	-1503

# QUALITY WELL SERVICE, INC.

5617

Home Office 324 Simpson St., Pratt, KS 67124

Heath's Cell 620-727-3410  
Office / Fax 620-672-3663

Rich's Cell 620-727-3409  
Brady's Cell 620-727-6964

Date	8-6-12	Sec.	34	Twp.	13	Range	15	County	Russell	State	KS	On Location		Finish	10:00pm - 10:30pm
Lease	Stranger Valley			Well No.	1			Location	S W of Russell Winto						
Contractor	Southwind #2							Owner	To Quality Well Service, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.						
Type Job								Charge To	JAG Operations						
Hole Size	12 1/4			T.D.	212			Street	PO-Box 628						
Csg.	8 5/8			Depth				City	Russell			State	KS 67106-0078		
Tbg. Size				Depth				The above was done to satisfaction and supervision of owner agent or contractor.							
Tool				Depth				Cement Amount Ordered	150sr com 3%cc 2%gel						
Cement Left in Csg.	15ft			Shoe Joint											
Meas Line				Displace	12.5										

**EQUIPMENT**

Pumptrk	No.	8	Cody	Common	150
Bulktrk	No.	4	Heath	Poz. Mix	
Bulktrk	No.			Gel.	3
Pickup	No.			Calcium	5

**JOB SERVICES & REMARKS**

Rat Hole	Salt
Mouse Hole	Flowseal
Centralizers	Kol-Seal
Baskets	Mud CLR 48
D/V or Port Collar	CFL-117 or CD110 CAF 38
Ran 5 JTS of 8 5/8 casing & landing it	Sand
	Handling 158
	Mileage 5

**FLOAT EQUIPMENT**

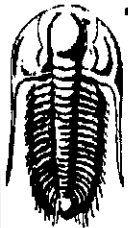
Est Circulation with mud pump	Guide Shoe
Hook up and mix 150sr sand disp with 125 bbl H2O!!	Centralizer
	Baskets
	AFU Inserts
	Float Shoe
	Latch Down
Cement did circulate!!	
	Pumptrk Charge surface
Thank You!!	Mileage 5

X Signature

*William Anderson*

Tax  
Discount  
Total Charge





**TRILOBITE TESTING, INC**

## DRILL STEM TEST REPORT

JAG Operations, Inc.

34-13-15 Russell, Ks

PO Box 628  
Russell, Ks 67665

Stranger Valley #1

Job Ticket: 49284

DST#: 1

ATTN: Mike Bair

Test Start: 2012.08.10 @ 06:24:15

### GENERAL INFORMATION:

Formation: **LKC "A-C"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:53:45

Time Test Ended: 12:29:15

Test Type: Conventional Bottom Hole (Initial)

Tester: Brian Fairbank

Unit No: 41

Interval: **3070.00 ft (KB) To 3137.00 ft (KB) (TVD)**

Reference Elevations: 1928.00 ft (KB)

Total Depth: 3137.00 ft (KB) (TVD)

1920.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

**Serial #: 6752 Inside**

Press@RunDepth: 166.81 psig @ 3076.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.08.10

End Date:

2012.08.10

Last Calb.: 2012.08.10

Start Time: 06:24:16

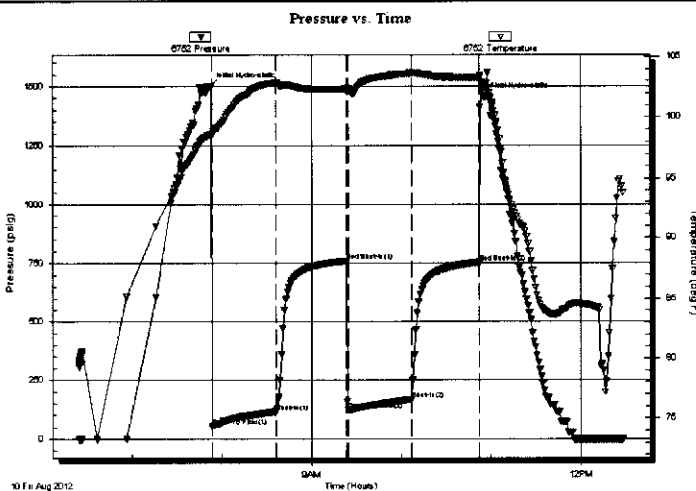
End Time:

12:29:15

Time On Btm: 2012.08.10 @ 07:52:15

Time Off Btm: 2012.08.10 @ 10:55:15

TEST COMMENT: IFP - BOB 6 min  
ISI - 2 1/2" blow back - died 21 min  
FFP - BOB 5 min  
FSI - BOB 10 min



### PRESSURE SUMMARY

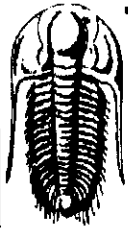
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1498.73	98.59	Initial Hydro-static
2	51.45	98.52	Open To Flow (1)
44	115.19	102.86	Shut-In(1)
91	761.35	102.36	End Shut-In(1)
92	122.79	102.36	Open To Flow (2)
135	166.81	103.66	Shut-In(2)
180	753.73	103.25	End Shut-In(2)
183	1457.38	102.78	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
125.00	SGOCWM 5%G, 5%O, 45%W, 45%M	1.75
30.00	SGO & WCM 40%G, 5%O, 5%W, 50%M	0.42
155.00	GOCM 60%G, 10%O, 30%M	2.17
0.00	1270' GIP	0.00

### Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**FLUID SUMMARY**

JAG Operations, Inc.

**34-13-15 Russell, Ks**

PO Box 628  
Russell, Ks 67665

**Stranger Valley #1**

Job Ticket: 49284

**DST#: 1**

ATTN: Mike Bair

Test Start: 2012.08.10 @ 06:24:15

### 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:

49000 ppm

Viscosity: 80.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
125.00	SGOCWM 5%G, 5%O, 45%W, 45%M	1.753
30.00	SGO & WCM 40%G, 5%O, 5%W, 50%M	0.421
155.00	GOCM 60%G, 10%O, 30%M	2.174
0.00	1270' GIP	0.000

Total Length: 310.00 ft      Total Volume: 4.348 bbl

Num Fluid Samples: 0

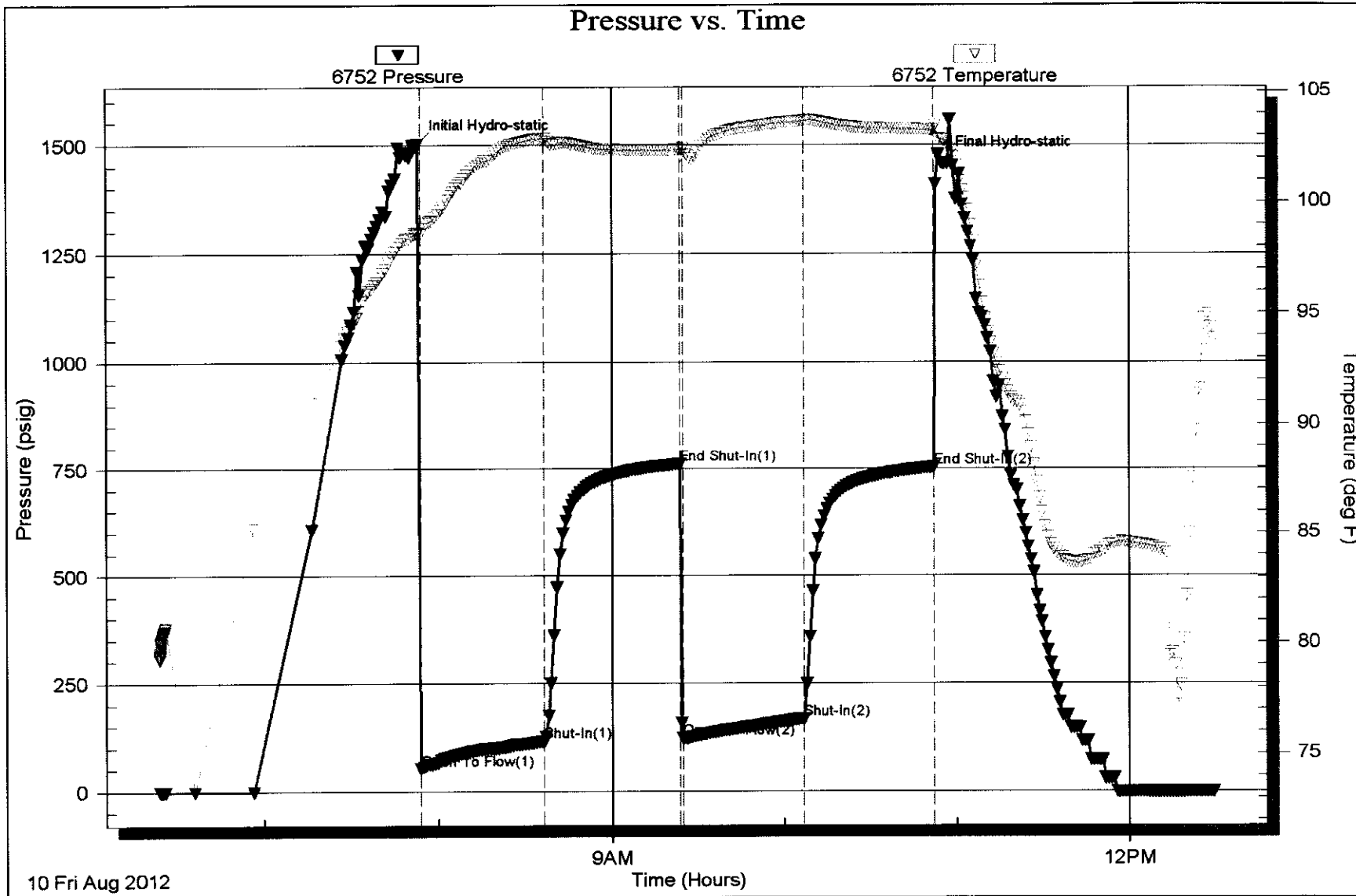
Num Gas Bombs: 0

Serial #:

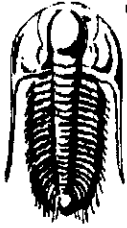
Laboratory Name:

Laboratory Location:

Recovery Comments:







**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

JAG Operations, Inc.

34-13-15 Russell, Ks

710 S. Front  
PO Box 628  
Russell, Ks 67665  
ATTN: Mike Bair

**Stranger Valley #1**

Job Ticket: 49285

**DST#: 2**

Test Start: 2012.08.11 @ 01:57:44

## GENERAL INFORMATION:

Formation: **LKC "H-J"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:18:44

Time Test Ended: 07:35:14

Test Type: Conventional Bottom Hole (Reset)

Tester: Brian Fairbank

Unit No: 41

Interval: **3237.00 ft (KB) To 3286.00 ft (KB) (TVD)**

Reference Elevations: 1928.00 ft (KB)

Total Depth: 3286.00 ft (KB) (TVD)

1920.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

**Serial #: 6741 Outside**

Press@RunDepth: 34.61 psig @ 3245.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.08.11

End Date:

2012.08.11

Last Calib.:

2012.08.11

Start Time: 01:57:45

End Time:

07:35:14

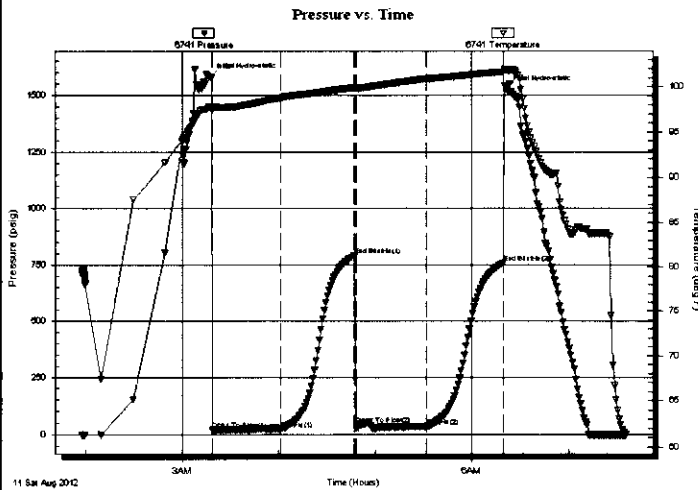
Time On Btm:

2012.08.11 @ 03:17:14

Time Off Btm:

2012.08.11 @ 06:21:14

**TEST COMMENT:** IFP - weak blow throughout sur - 2"  
ISI - no blow back  
FFP - weak to fair blow sur - 4 1/2"  
FSI - no blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1578.97	97.78	Initial Hydro-static
2	20.09	97.60	Open To Flow (1)
44	22.85	98.78	Shut-In(1)
90	791.52	99.91	End Shut-In(1)
91	45.08	99.85	Open To Flow (2)
135	34.61	100.90	Shut-In(2)
182	758.65	101.65	End Shut-In(2)
184	1523.90	101.88	Final Hydro-static

## Recovery

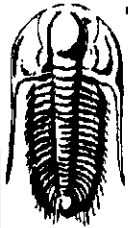
Length (ft)	Description	Volume (bbl)
40.00	GOCM 5%G, 35%O, 60%M	0.56
0.00	60' GIP	0.00

\* Recovery from multiple tests

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**FLUID SUMMARY**

JAG Operations, Inc.

**34-13-15 Russell, Ks**

710 S. Front  
PO Box 628  
Russell, Ks 67665  
ATTN: Mike Bair

**Stranger Valley #1**

Job Ticket: 49285

**DST#: 2**

Test Start: 2012.08.11 @ 01:57:44

### 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: 49.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.59 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2000.00 ppm			
Filter Cake: inches			

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
40.00	GOOM 5%G, 35%O, 60%M	0.561
0.00	60' GIP	0.000

Total Length: 40.00 ft      Total Volume: 0.561 bbl

Num Fluid Samples: 0

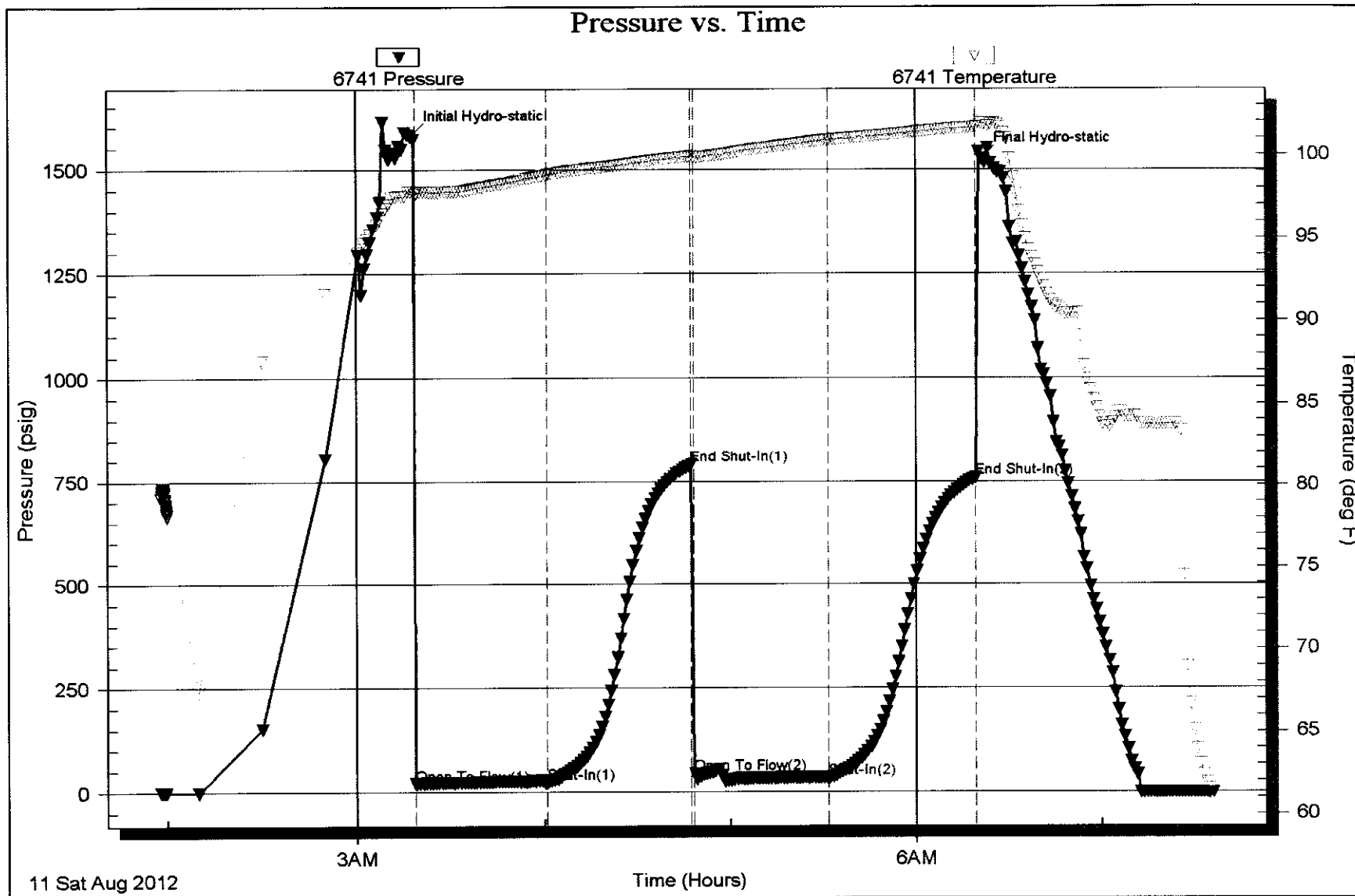
Num Gas Bombs: 0

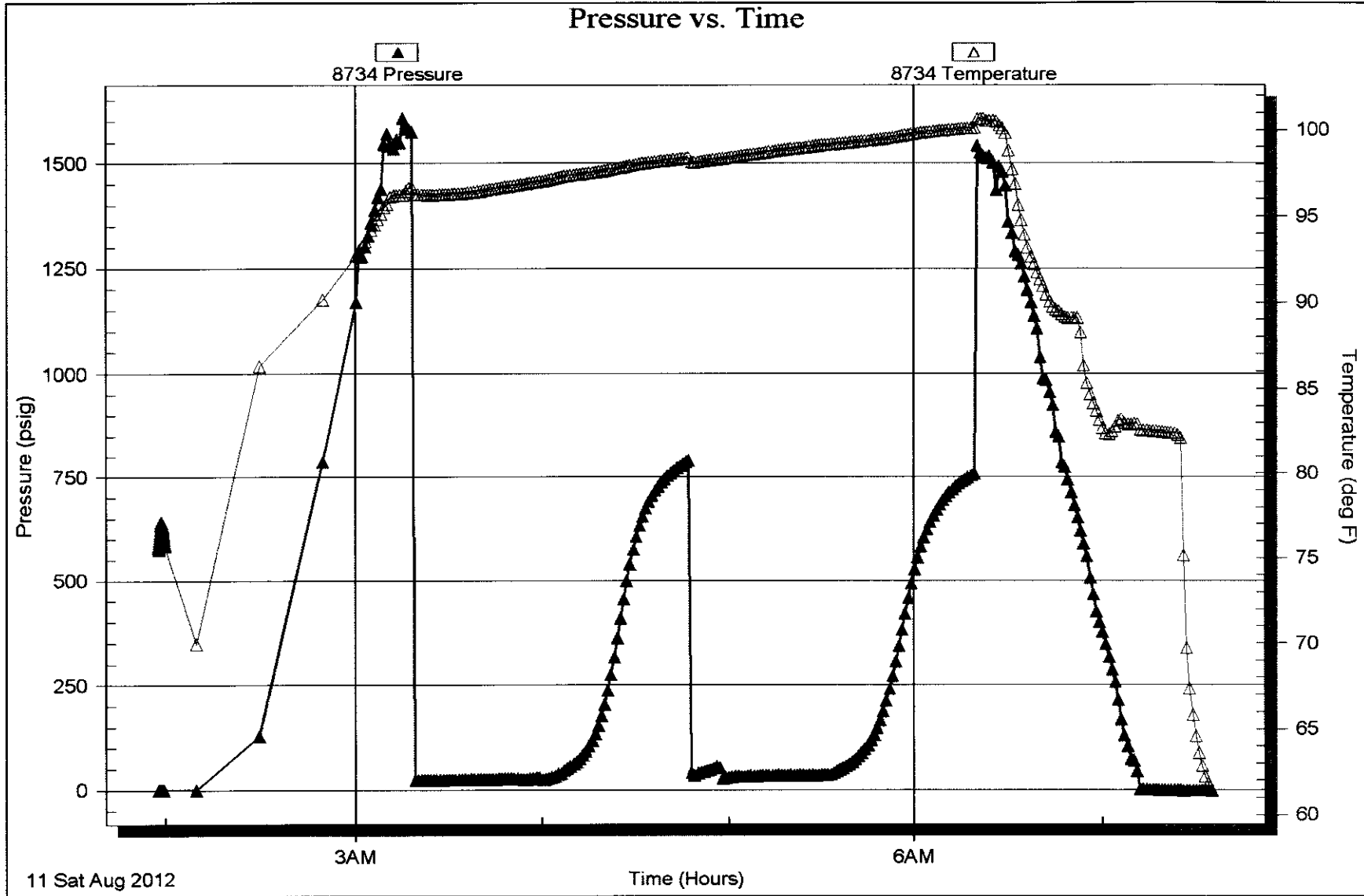
Serial #:

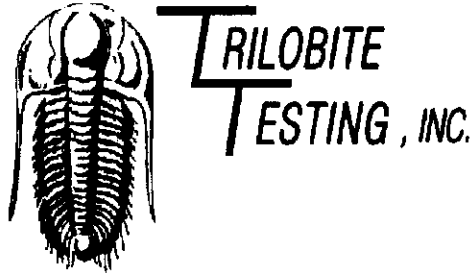
Laboratory Name:

Laboratory Location:

Recovery Comments:







## DRILL STEM TEST REPORT

Prepared For: **JAG Operations, Inc.**

PO Box 628  
Russell, KS 67665

ATTN: Mike Bair

### **Stranger Valley #1**

#### **34-13s-15w Russell, KS**

Start Date: 2012.08.11 @ 20:01:02

End Date: 2012.08.11 @ 23:03:01

Job Ticket #: 49286                      DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.08.15 @ 10:18:30



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

JAG Operations, Inc.

**34-13s-15w Russell, KS**

PO Box 628  
Russell, KS 67665

**Stranger Valley #1**

Job Ticket: 49286      **DST#: 3**

ATTN: Mike Bair

Test Start: 2012.08.11 @ 20:01:02

### GENERAL INFORMATION:

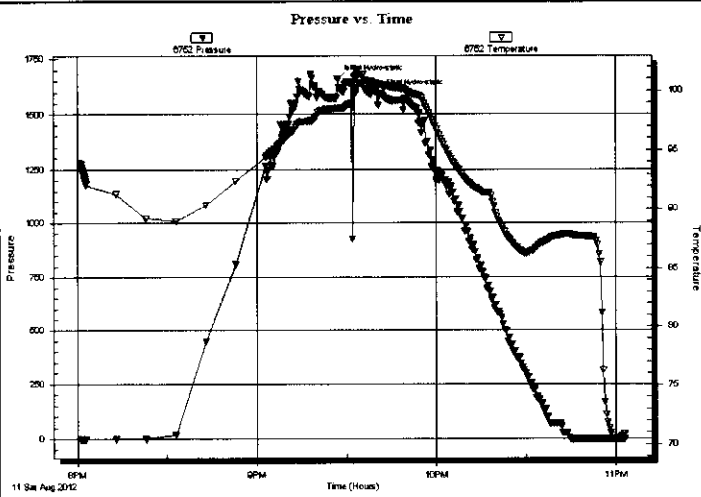
Formation: **Gorham Sand**  
 Deviated: No      Whipstock:      ft (KB)  
 Time Tool Opened:  
 Time Test Ended: 23:03:01  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Brian Fairbank  
 Unit No: 41  
 Interval: **3346.00 ft (KB) To 3365.00 ft (KB) (TVD)**  
 Reference Elevations: 1928.00 ft (KB)  
 Total Depth: 3365.00 ft (KB) (TVD)      1920.00 ft (CF)  
 Hole Diameter: 7.88 inches      Hole Condition: Good      KB to GR/CF: 8.00 ft

### Serial #: 6752

Inside

Press@RunDepth:      psig @ 3347.00 ft (KB)      Capacity: 8000.00 psig  
 Start Date: 2012.08.11      End Date: 2012.08.11      Last Calib.: 1899.12.30  
 Start Time: 20:01:02      End Time: 23:03:01      Time On Btm: 2012.08.11 @ 21:27:01  
 Time Off Btm: 2012.08.11 @ 21:41:01

TEST COMMENT: IFP -  
 ISI - PACKER FAILURE  
 FFP -  
 FSI -



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1658.92	98.54	Initial Hydro-static
14	1594.93	100.55	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)

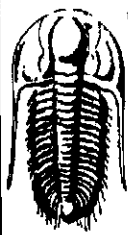
\* Recovery from multiple tests

### Gas Rates

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







**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

JAG Operations, Inc.

**34-13s-15w Russell, KS**

PO Box 628  
Russell, KS 67665

**Stranger Valley #1**

Job Ticket: 49286

**DST#: 3**

ATTN: Mike Bair

Test Start: 2012.08.11 @ 20:01:02

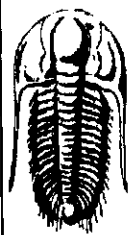
### Tool Information

Drill Pipe:	Length: 3323.00 ft	Diameter: 3.80 inches	Volume: 46.61 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: lb
			<u>Total Volume: 46.61 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	4.00 ft			String Weight: Initial lb
Depth to Top Packer:	3346.00 ft			Final lb
Depth to Bottom Packer:	ft			
Interval between Packers:	19.00 ft			
Tool Length:	46.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3324.00	
Hydraulic tool	5.00			3329.00	
Jars	5.00			3334.00	
Safety Joint	2.00			3336.00	
Packer	5.00			3341.00	27.00 Bottom Of Top Packer
Packer	5.00			3346.00	
Stubb	1.00			3347.00	
Recorder	0.00	6752	Inside	3347.00	
Recorder	0.00	6741	Outside	3347.00	
Perforations	15.00			3362.00	
Bullnose	3.00			3365.00	19.00 Bottom Packers & Anchor

**Total Tool Length: 46.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

JAG Operations, Inc.

**34-13s-15w Russell, KS**

PO Box 628  
Russell, KS 67665

**Stranger Valley #1**

Job Ticket: 49286      **DST#: 3**

ATTN: Mike Bair

Test Start: 2012.08.11 @ 20:01:02

## 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: 42.00 sec/qt	Cushion Volume: bbl		
Water Loss: 10.38 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 4000.00 ppm			
Filter Cake: inches			

## Recovery Information

Recovery Table

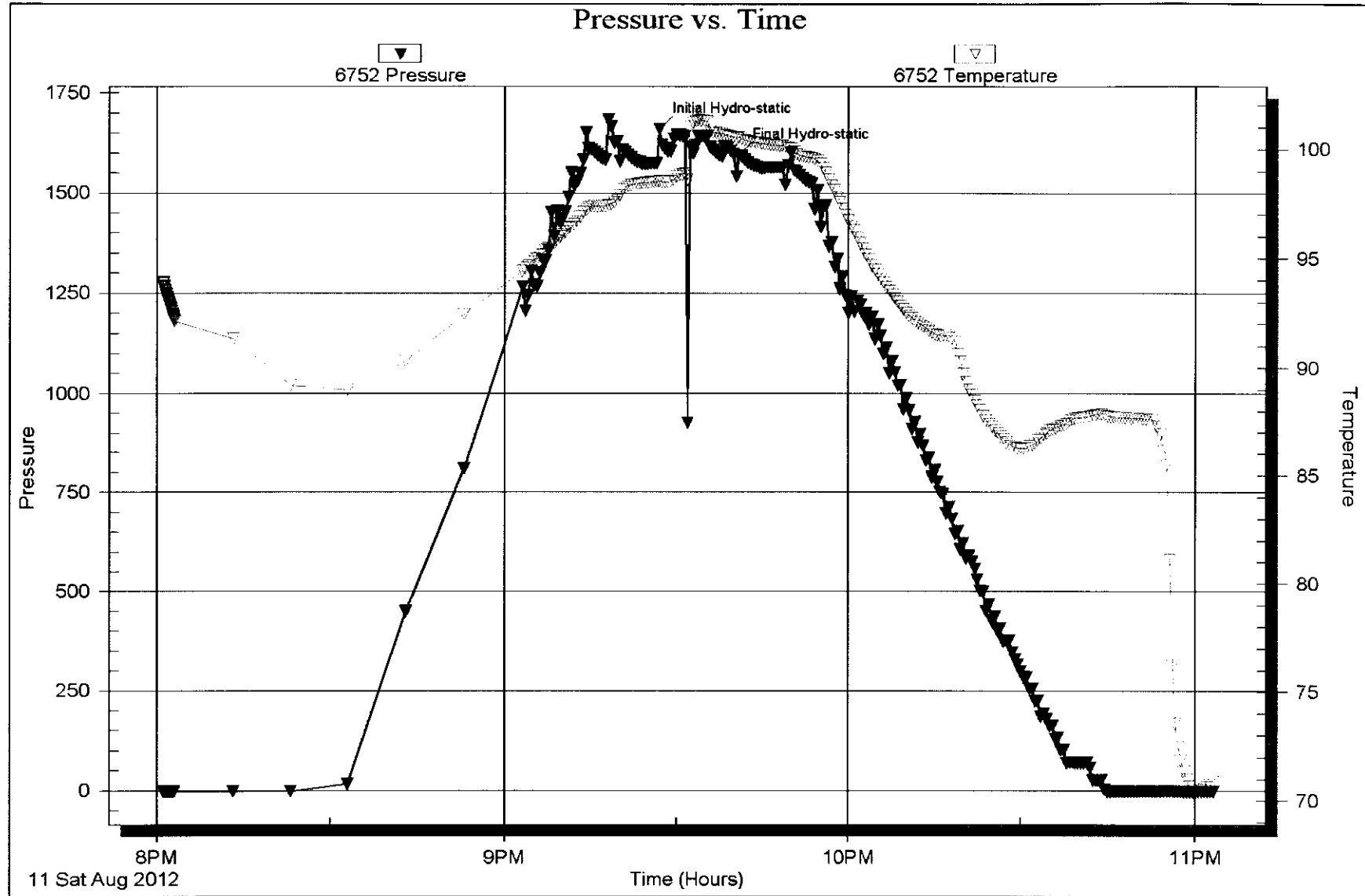
Length ft	Description	Volume bbl

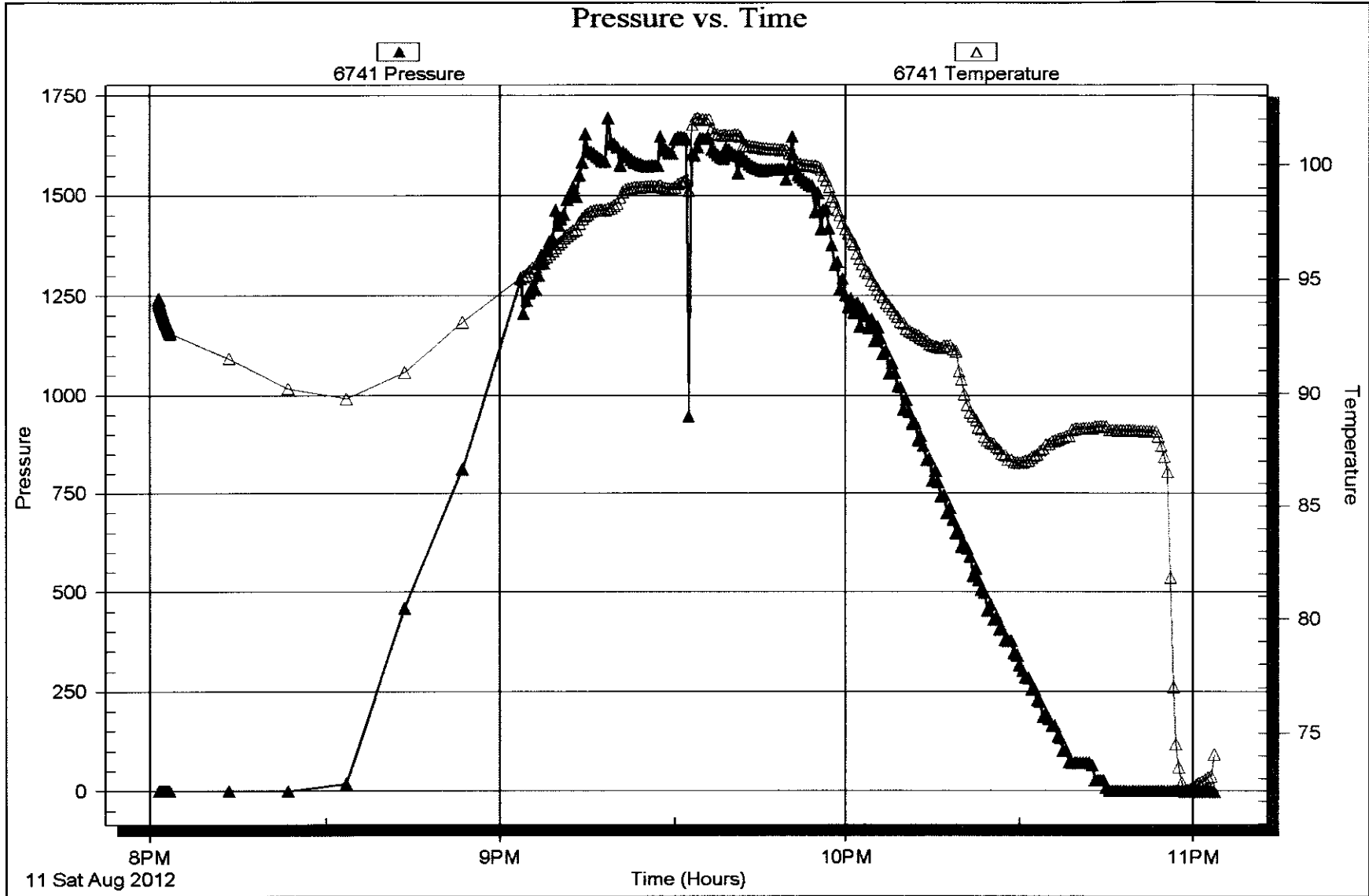
Total Length:                      ft      Total Volume:                      bbl

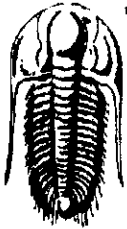
Num Fluid Samples: 0                      Num Gas Bombs: 0                      Serial #:

Laboratory Name:                      Laboratory Location:

Recovery Comments:







**TRILOBITE TESTING, INC**

**DRILL STEM TEST REPORT**

JAG Operations, Inc.  
 710 S. Front  
 PO Box 628  
 Russell, Ks 67665  
 ATTN: Mike Bair

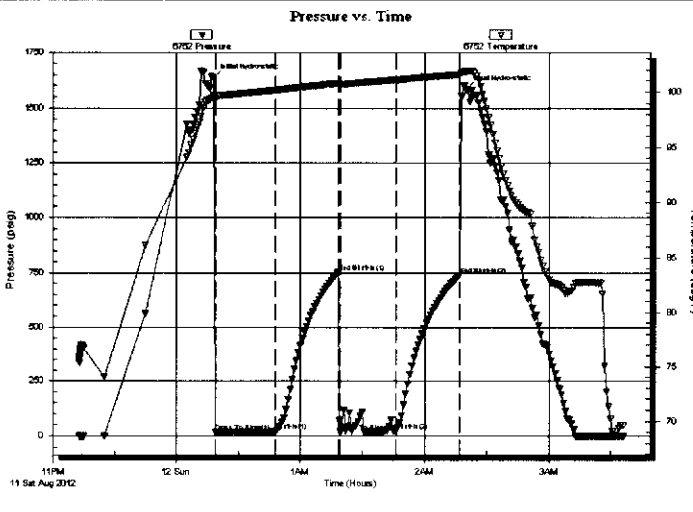
**34-13-15 Russell, Ks**  
**Stranger Valley #1**  
 Job Ticket: 49287 **DST#: 4**  
 Test Start: 2012.08.11 @ 23:13:01

**GENERAL INFORMATION:**

Formation: **Gorham Sand**  
 Deviated: **No** Whipstock: **ft (KB)** Test Type: **Conventional Bottom Hole (Reset)**  
 Time Tool Opened: 00:19:01 Tester: **Brian Fairbank**  
 Time Test Ended: 03:36:31 Unit No: **41**  
 Interval: **3322.00 ft (KB) To 3365.00 ft (KB) (TVD)** Reference Elevations: **1928.00 ft (KB)**  
 Total Depth: **3365.00 ft (KB) (TVD)** **1920.00 ft (CF)**  
 Hole Diameter: **7.88 inches** Hole Condition: **Good** KB to GR/CF: **8.00 ft**

**Serial #: 6752** **Inside**  
 Press@RunDepth: **20.05 psig @ 3326.00 ft (KB)** Capacity: **8000.00 psig**  
 Start Date: **2012.08.11** End Date: **2012.08.12** Last Calib.: **2012.08.12**  
 Start Time: **23:13:02** End Time: **03:36:31** Time On Btm: **2012.08.12 @ 00:18:01**  
 Time Off Btm: **2012.08.12 @ 02:20:01**

**TEST COMMENT:** IFF - 1/4" blow - died 10 min  
 ISI - no blow back  
 FFP - no blow  
 FSI - no blow back



**PRESSURE SUMMARY**

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1635.93	99.72	Initial Hydro-static
1	17.31	99.31	Open To Flow (1)
30	19.67	100.15	Shut-In(1)
61	753.48	100.77	End Shut-In(1)
62	19.54	100.64	Open To Flow (2)
88	20.05	101.07	Shut-In(2)
119	741.09	101.57	End Shut-In(2)
122	1582.85	101.84	Final Hydro-static

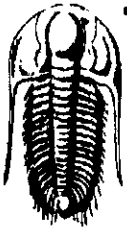
**Recovery**

Length (ft)	Description	Volume (bbl)
3.00	SOCM 5%O, 95%M	0.04
3.00	FREE OIL 95%O, 5%M	0.04

**Gas Rates**

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

\* Recovery from multiple tests



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**FLUID SUMMARY**

JAG Operations, Inc.

**34-13-15 Russell, Ks**

710 S. Front  
PO Box 628  
Russell, Ks 67665  
ATTN: Mike Bair

**Stranger Valley #1**

Job Ticket: 49287

**DST#: 4**

Test Start: 2012.08.11 @ 23:13:01

### Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 33 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: ppm
Viscosity: 42.00 sec/qt	Cushion Volume: bbl	
Water Loss: 10.39 in <sup>3</sup>	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 4000.00 ppm		
Filter Cake: inches		

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
3.00	SOCM 5%O, 95%M	0.042
3.00	FREE OIL 95%O, 5%M	0.042

Total Length: 6.00 ft      Total Volume: 0.084 bbl

Num Fluid Samples: 0

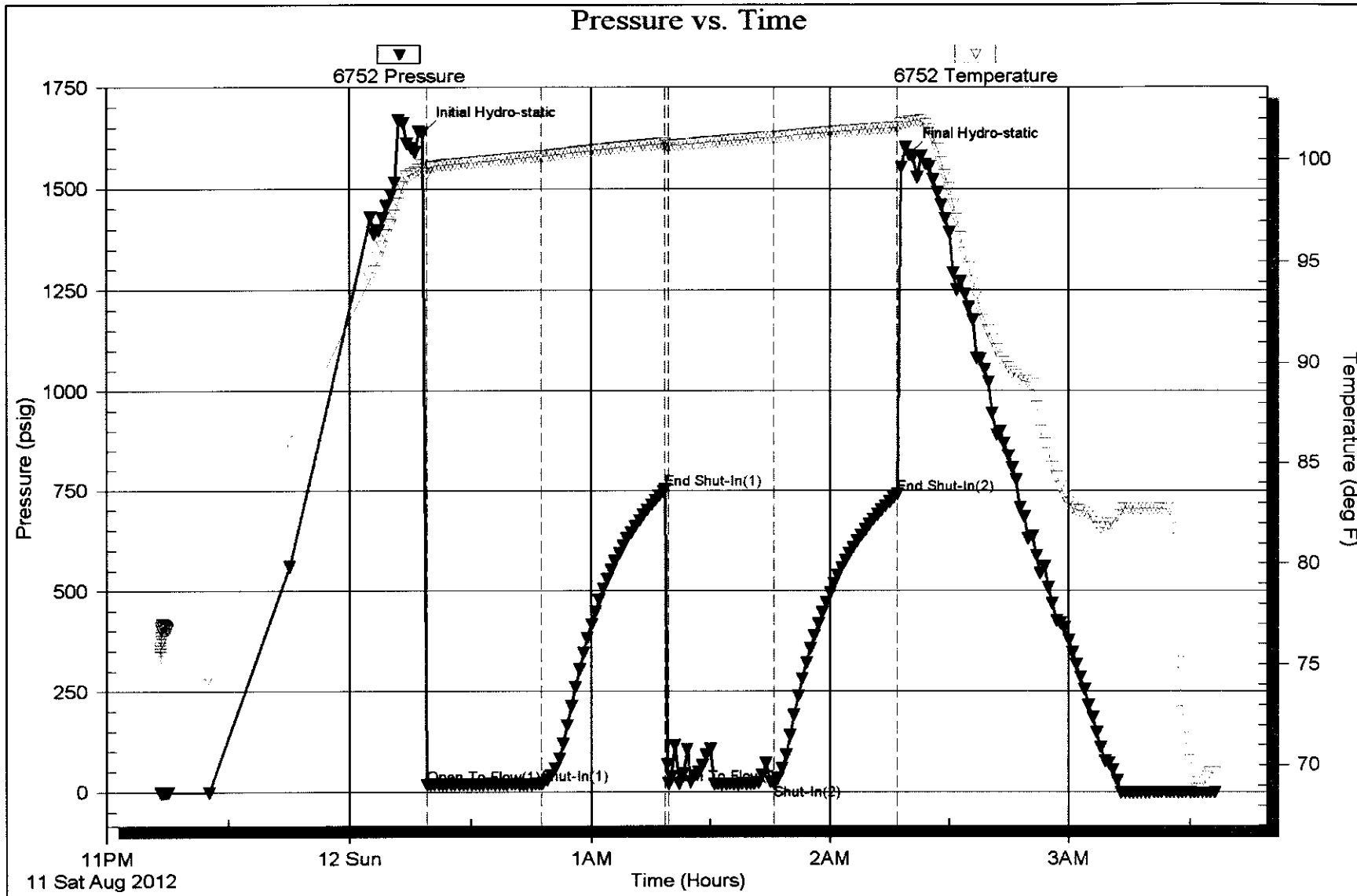
Num Gas Bombs: 0

Serial #:

Laboratory Name:

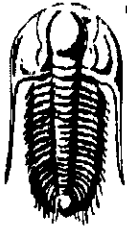
Laboratory Location:

Recovery Comments:









**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

JAG Operations, Inc.

**34-13-15 Russell, Ks**

710 S. Front  
PO Box 628  
Russell, Ks 67665  
ATTN: Mike Bair

**Stranger Valley #1**

Job Ticket: 49288

**DST#: 5**

Test Start: 2012.08.12 @ 17:30:33

**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:

26000 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 10.39 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: inches

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
120.00	MW 95%W, 5%M	1.683
1615.00	REVERSED OUT	22.654
155.00	MW 95%W, 5%M	2.174

Total Length: 1890.00 ft

Total Volume: 26.511 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

