



KANSAS CORPORATION COMMISSION 1094927  
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 # \_\_\_\_\_

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

Address 1: \_\_\_\_\_

Address 2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

CONTRACTOR: License # \_\_\_\_\_

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

Wellsite Geologist: \_\_\_\_\_

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 #: \_\_\_\_\_

Spud Date or Recompletion Date      Date Reached TD      Completion Date or Recompletion Date

API No. 15 - \_\_\_\_\_

Spot Description: \_\_\_\_\_

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

\_\_\_\_\_ Feet from  North /  South Line of Section

\_\_\_\_\_ Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE       NW       SE       SW

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

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

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

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

Amount of Surface Pipe Set and Cemented at: \_\_\_\_\_ 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: \_\_\_\_\_ ppm Fluid volume: \_\_\_\_\_ bbls

Dewatering method used: \_\_\_\_\_

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: \_\_\_\_\_ Date: \_\_\_\_\_



Operator Name: \_\_\_\_\_ Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

**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 type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No  Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i>  List All E. Logs Run: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  Name Top Datum
---	---

CASING RECORD <input 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

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
_____ Perforate _____ Protect Casing _____ Plug Back TD _____ Plug Off Zone				

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:  Yes  No

Date of First, Resumed Production, SWD or ENHR. \_\_\_\_\_ Producing Method:  Flowing  Pumping  Gas Lift  Other (Explain) \_\_\_\_\_

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
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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)</i> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: _____ _____
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# QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025

Home Office P.O. Box 32 Russell, KS 67665

No. 736

Cell 785-324-1041

24 13 16

Date	9-10-12	Sec.	31	Twp.	13	Range	16	County	Russell	State	KS	On Location		Finish	8:30pm
Lease	T. Hoffman	Well No.	24-1			Location						Cockburn 1W 6N 1W 1/5			
Contractor	Royal Rig 11							Owner							
Type Job	Spacer							To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cement and helper to assist owner or contractor to do work as listed.							
Hole Size	12 1/4			T.D.			221			Charge To					
Csg.	8 5/8			Depth			221			Bennet Schwitz					
Tbg. Size				Depth			Street								
Tool				Depth						City State					
Cement Left in Csg.	20ft			Shoe Joint			20ft			The above was done to satisfaction and supervision of owner agent or contractor.					
Meas Line				Displace			11.74 L/W			Cement Amount Ordered					

**EQUIPMENT**

Pumptrk	13	No.	Cementer	1	Common
			Helper		
Bulktrk	14	No.	Driver	1	Poz. Mix.
			Driver		
Bulktrk	15	No.	Driver	1	Gel.
			Driver		

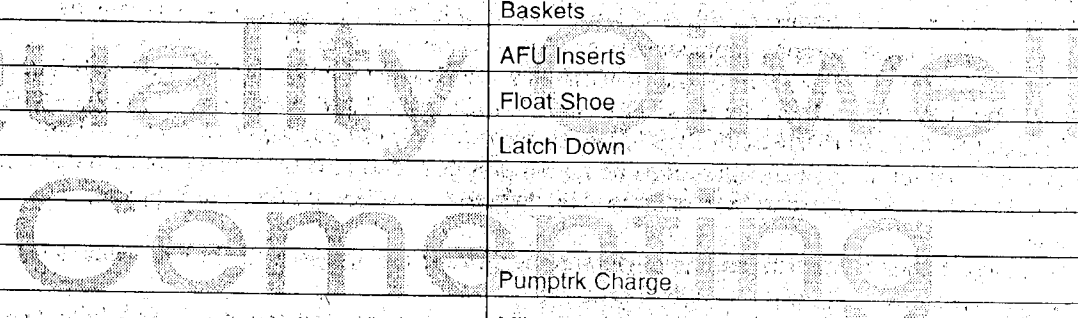
**JOB SERVICES & REMARKS**

Remarks:	Hulls
Rat Hole	Salt
Mouse Hole	Flowseal
Centralizers	Kol-Seal
Baskets	Mud CLR 48
D/V or Port Collar	CFL-117 or CD110 CAF 38
	Sand
	Handling
	Mileage

Cement and Circulate

**FLOAT EQUIPMENT**

Guide Shoe
Centralizer
Baskets
AFU Inserts
Float Shoe
Latch Down



Pumptrk Charge		Tax	
Mileage		Discount	
Signature		Total Charge	

X Signature

# QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025  
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 00000

Date	9-15-12	Sec.	24	Twp.	13	Range	16	County	RUSSELL	State	KANSAS	On Location		Finish	3:45pm
Lease								Well No.	Location						
T. HORMAN								24-1	CORMAN - 100 - 2nd - 1st 1/2 - 1st 1/2						
Contractor								Owner							
ROYAL #2								BENNETT & SCHULTE							
Type Job								To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.							
R. PLUG															
Hole Size				T.D.				Charge To							
7 7/8"				3460				BENNETT & SCHULTE							
Csg.				Depth				Street							
4 1/2"															
Tbg. Size				Depth				City State							
Tool				Depth				The above was done to satisfaction and supervision of owner agent or contractor.							
Cement Left in Csg.				Shoe Joint				Cement Amount Ordered							
								245 SKS 4 1/2" 4 1/2" 4 1/2"							
Meas Line Displace															
EQUIPMENT								Common							
Pumptrk #15 No. Cementer															
Helper NECK								Poz. Mix							
Bulktrk #4 No. Driver															
Driver LONNIE								Gel.							
Bulktrk #11 No. Driver															
Driver CESCO								Calcium							
JOB SERVICES & REMARKS								Hulls							
Remarks:								Salt							
Rat Hole 30 SKS								Flowseal							
Mouse Hole 15 SKS								Kol-Seal							
Centralizers								Mud CLR 48							
Baskets								CFL-117 or CD110 CAF 38							
D/V or Port Collar								Sand							
								Handling							
1st @ 3404								Mileage							
2nd @ 1067															
3rd @ 530								FLOAT EQUIPMENT							
4th @ 271								Guide Shoe							
5th @ 40								Centralizer							
RATHOLE								Baskets							
MOUSEHOLE								AFU Inserts							
								Float Shoe							
								Latch Down							
								Pumptrk Charge							
								Mileage							
THANK YOU!								Tax							
								Discount							
Signature								Total Charge							



## DRILL STEM TEST REPORT

Prepared For: **Bennett & Schulte Oil Co.**

PO Box 329  
Russell KS 67665

ATTN: Frank Schulte

**T Hoffman #27-1**

**24-13s-16w Ellis,KS**

Start Date: 2012.09.14 @ 22:01:00

End Date: 2012.09.15 @ 02:34:09

Job Ticket #: 49308                      DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.09.25 @ 08:55:39



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Bennett & Schulte Oil Co.

**24-13s-16w Ellis, KS**

PO Box 329  
Russell KS 67665

**T Hoffman #27-1**

Job Ticket: 49308

**DST#: 1**

ATTN: Frank Schulte

Test Start: 2012.09.14 @ 22:01:00

## GENERAL INFORMATION:

Formation: **LKC "A-B"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:08:40

Time Test Ended: 02:34:09

Test Type: Conventional Straddle (Initial)

Tester: Andy Carreira

Unit No: 39

**Interval: 3115.00 ft (KB) To 3195.00 ft (KB) (TVD)**

Reference Elevations: 1962.00 ft (KB)

Total Depth: 3455.00 ft (KB) (TVD)

1955.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

**Serial #: 8372 Outside**

Press @ Run Depth: 820.27 psig @ 3121.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.09.14

End Date:

2012.09.15

Last Calib.:

2012.09.15

Start Time: 22:01:05

End Time:

02:34:10

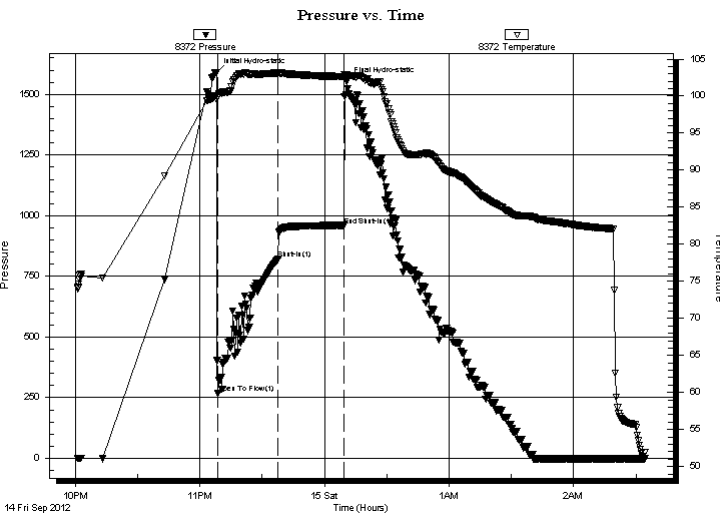
Time On Btm:

2012.09.14 @ 23:08:00

Time Off Btm:

2012.09.15 @ 00:10:40

TEST COMMENT: IF:(30min) BOB 30 seconds  
IS:(30min) No Return



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1590.58	100.09	Initial Hydro-static
1	268.27	100.02	Open To Flow (1)
30	820.27	103.13	Shut-In(1)
62	960.39	102.63	End Shut-In(1)
63	1552.44	102.81	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
1750.00	MW	24.55

## Gas Rates

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









**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Bennett & Schulte Oil Co.

**24-13s-16w Ellis,KS**

PO Box 329  
Russell KS 67665

**T Hoffman #27-1**

Job Ticket: 49308

**DST#: 1**

ATTN: Frank Schulte

Test Start: 2012.09.14 @ 22:01:00

## Tool Information

Drill Pipe:	Length: 3095.00 ft	Diameter: 3.80 inches	Volume: 43.41 bbl	Tool Weight: 4000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 26000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 45000.00 lb
			<u>Total Volume: 43.41 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 36000.00 lb
Depth to Top Packer:	3115.00 ft			Final 45000.00 lb
Depth to Bottom Packer:	3195.00 ft			
Interval between Packers:	80.00 ft			
Tool Length:	372.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		

Tool Comments: Misrun- Bottom Packer Failed

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3088.00	
Shut In Tool	5.00			3093.00	
Hydraulic tool	5.00			3098.00	
Jars	5.00			3103.00	
Safety Joint	3.00			3106.00	
Packer	5.00			3111.00	28.00 Bottom Of Top Packer
Packer	4.00			3115.00	
Perforations	5.00			3120.00	
Change Over Sub	1.00			3121.00	
Recorder	0.00	8017	Inside	3121.00	
Recorder	0.00	8372	Outside	3121.00	
Drill Pipe	63.00			3184.00	
Change Over Sub	1.00			3185.00	
Perforations	5.00			3190.00	
Blank Off Sub	1.00			3191.00	
Blank Spacing	4.00			3195.00	80.00 Tool Interval
Packer	4.00			3199.00	
Stubb	1.00			3200.00	
Perforations	3.00			3203.00	
Change Over Sub	1.00			3204.00	
Recorder	0.00	8647	Below	3204.00	
Drill Pipe	251.00			3455.00	
Change Over Sub	1.00			3456.00	
Bullnose	3.00			3459.00	264.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>372.00</b>				



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Bennett & Schulte Oil Co.

**24-13s-16w Ellis,KS**

PO Box 329  
Russell KS 67665

**T Hoffman #27-1**

Job Ticket: 49308

**DST#: 1**

ATTN: Frank Schulte

Test Start: 2012.09.14 @ 22:01:00

## 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: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 10.37 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1750.00	MW	24.548

Total Length: 1750.00 ft      Total Volume: 24.548 bbl

Num Fluid Samples: 0

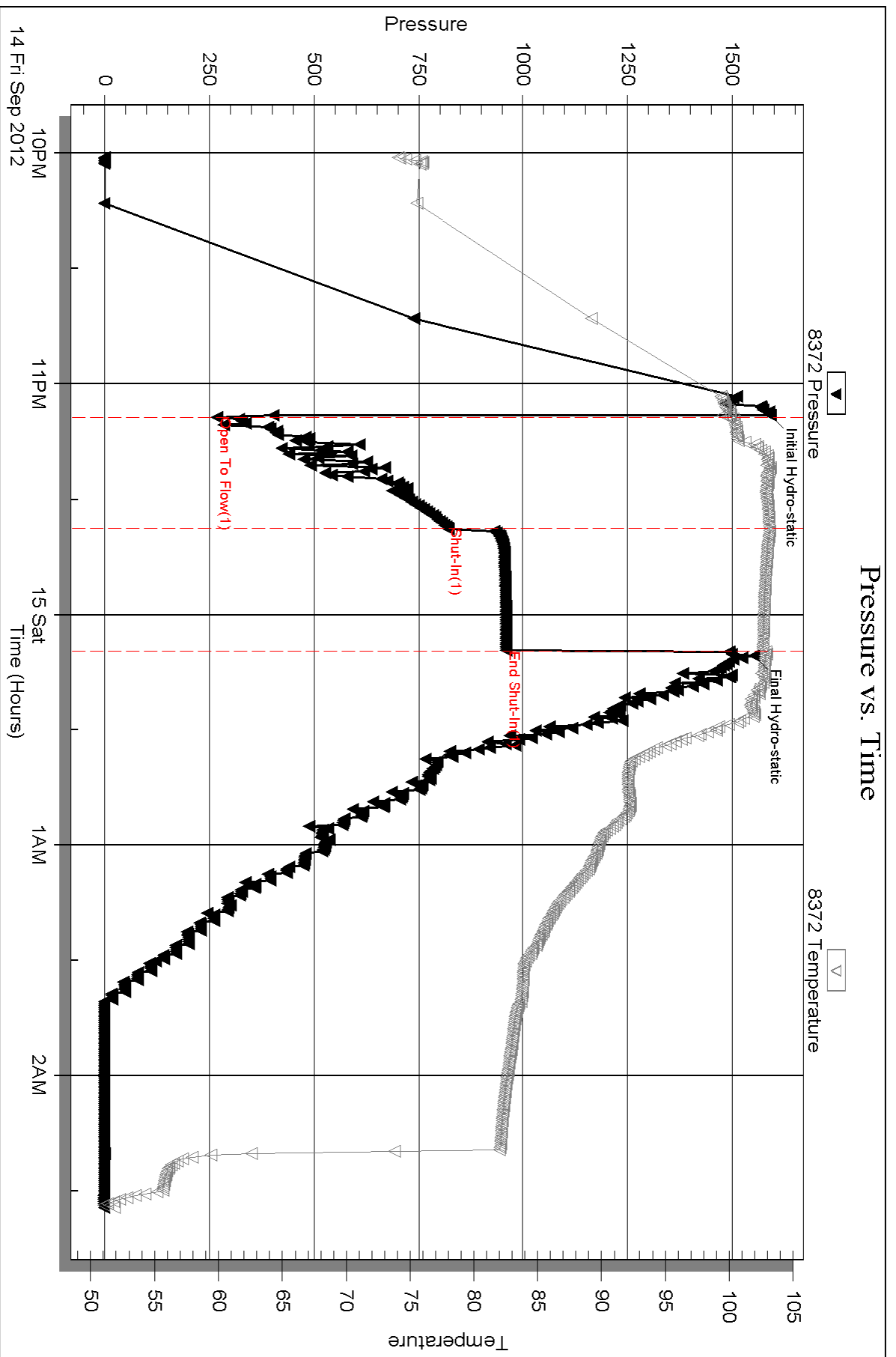
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Misrun- Bottom Packer Failed



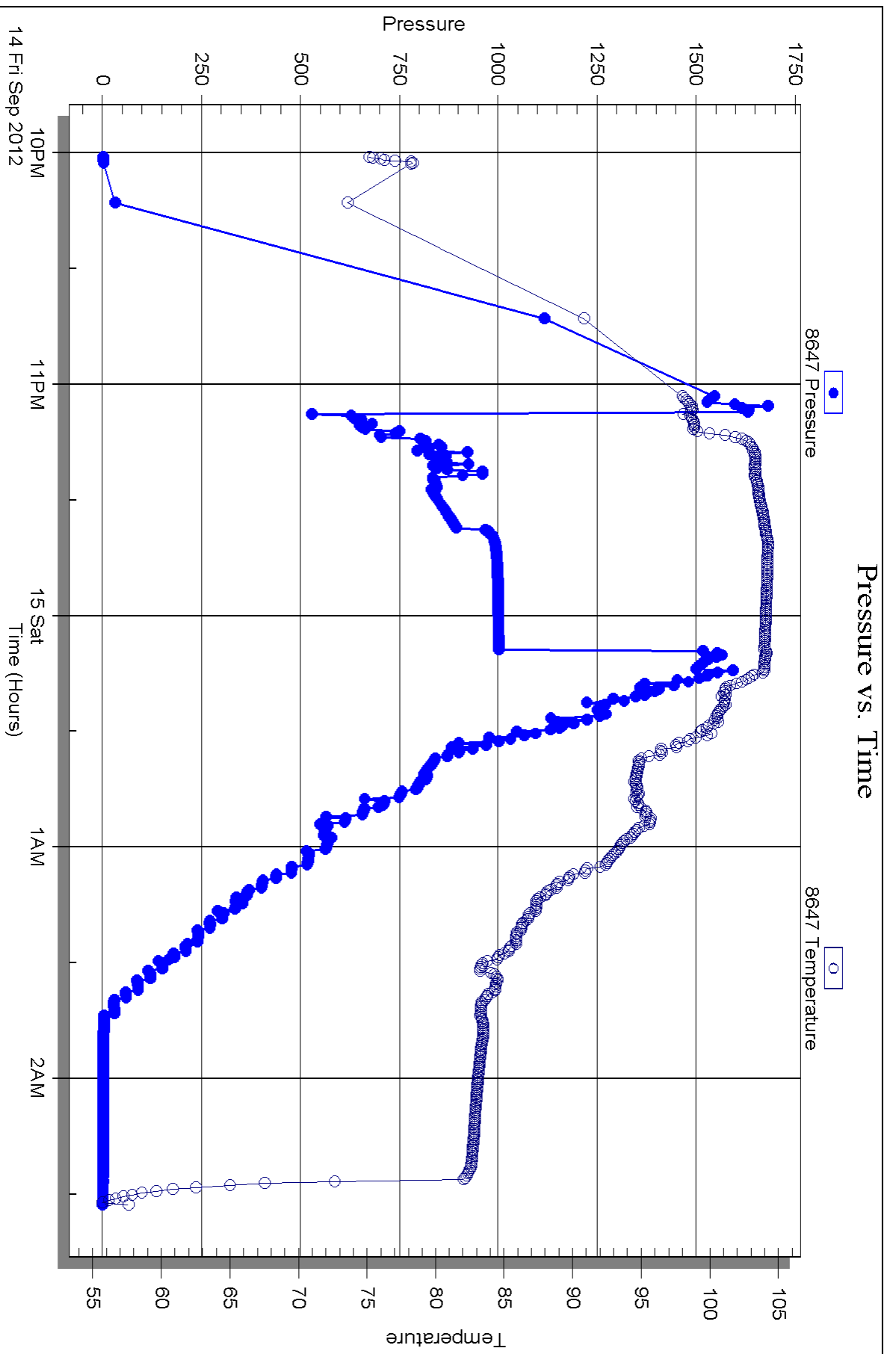


Serial #: 8647

Below (Strathtreit & Schulte Oil Co.

T Hoffman #27-1

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 49308

Printed: 2012.09.25 @ 08:55:44



## DRILL STEM TEST REPORT

Prepared For: **Bennett & Schulte Oil Co.**

PO Box 329  
Russell KS 67665

ATTN: Frank Schulte

**T Hoffman #27-1**

**24-13s-16w Ellis,KS**

Start Date: 2012.09.15 @ 03:07:05

End Date: 2012.09.15 @ 06:37:30

Job Ticket #: 49309                      DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.09.25 @ 08:54:45



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Bennett & Schulte Oil Co.

**24-13s-16w Ellis,KS**

PO Box 329  
Russell KS 67665

**T Hoffman #27-1**

ATTN: Frank Schulte

Job Ticket: 49309

**DST#: 2**

Test Start: 2012.09.15 @ 03:07:05

## GENERAL INFORMATION:

Formation: **LKC "A-B"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:09:20

Time Test Ended: 06:37:30

Test Type: Conventional Straddle (Reset)

Tester: Andy Carreira

Unit No: 39

**Interval: 3117.00 ft (KB) To 3195.00 ft (KB) (TVD)**

Reference Elevations: 1962.00 ft (KB)

Total Depth: 3460.00 ft (KB) (TVD)

1955.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

**Serial #: 8372 Outside**

Press @ Run Depth: 799.31 psig @ 3123.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.09.15 End Date: 2012.09.15

Last Calib.: 2012.09.15

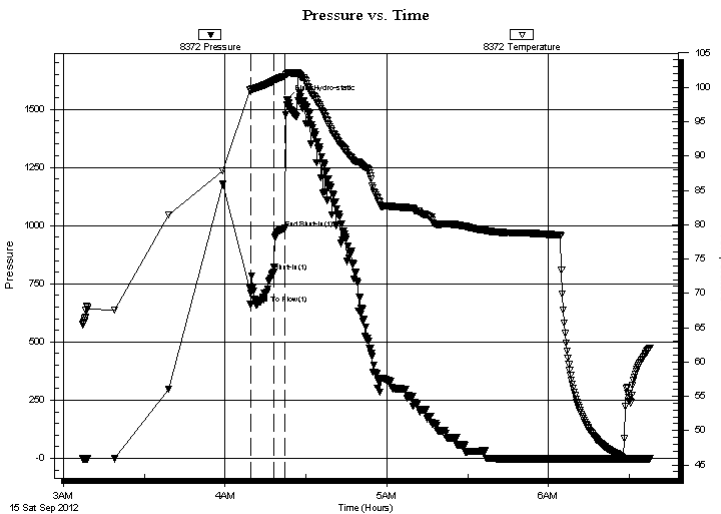
Start Time: 03:07:05 End Time: 06:37:30

Time On Btm:

Time Off Btm: 2012.09.15 @ 04:23:00

**TEST COMMENT:** IF:(10min) BOB 1 min.  
IS:(5min) No Return. Pulled Tool

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	661.73	99.60	Open To Flow (1)
9	799.31	100.96	Shut-In(1)
13	987.80	101.59	End Shut-In(1)
14	1542.15	102.03	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
950.00	MW	13.33

## Gas Rates

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

\* Recovery from multiple tests









**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Bennett & Schulte Oil Co.

**24-13s-16w Ellis,KS**

PO Box 329  
Russell KS 67665

**T Hoffman #27-1**

Job Ticket: 49309

**DST#: 2**

ATTN: Frank Schulte

Test Start: 2012.09.15 @ 03:07:05

## Tool Information

Drill Pipe:	Length: 3100.00 ft	Diameter: 3.80 inches	Volume: 43.48 bbl	Tool Weight: 4000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 44000.00 lb
			<u>Total Volume: 43.48 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	11.00 ft			String Weight: Initial 36000.00 lb
Depth to Top Packer:	3117.00 ft			Final 41000.00 lb
Depth to Bottom Packer:	3195.00 ft			
Interval between Packers:	78.00 ft			
Tool Length:	375.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3090.00	
Shut In Tool	5.00			3095.00	
Hydraulic tool	5.00			3100.00	
Jars	5.00			3105.00	
Safety Joint	3.00			3108.00	
Packer	5.00			3113.00	28.00 Bottom Of Top Packer
Packer	4.00			3117.00	
Perforations	5.00			3122.00	
Change Over Sub	1.00			3123.00	
Recorder	0.00	8017	Inside	3123.00	
Recorder	0.00	8372	Outside	3123.00	
Drill Pipe	63.00			3186.00	
Change Over Sub	1.00			3187.00	
Perforations	3.00			3190.00	
Blank Off Sub	1.00			3191.00	
Blank Spacing	4.00			3195.00	78.00 Tool Interval
Packer	4.00			3199.00	
Stubb	1.00			3200.00	
Perforations	8.00			3208.00	
Change Over Sub	1.00			3209.00	
Recorder	0.00	8647	Below	3209.00	
Drill Pipe	251.00			3460.00	
Change Over Sub	1.00			3461.00	
Bullnose	3.00			3464.00	269.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>375.00</b>				



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Bennett & Schulte Oil Co.

**24-13s-16w Ellis,KS**

PO Box 329  
Russell KS 67665

**T Hoffman #27-1**

Job Ticket: 49309

**DST#: 2**

ATTN: Frank Schulte

Test Start: 2012.09.15 @ 03:07:05

## 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:

12500 ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 10.35 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
950.00	MW	13.326

Total Length: 950.00 ft      Total Volume: 13.326 bbl

Num Fluid Samples: 0

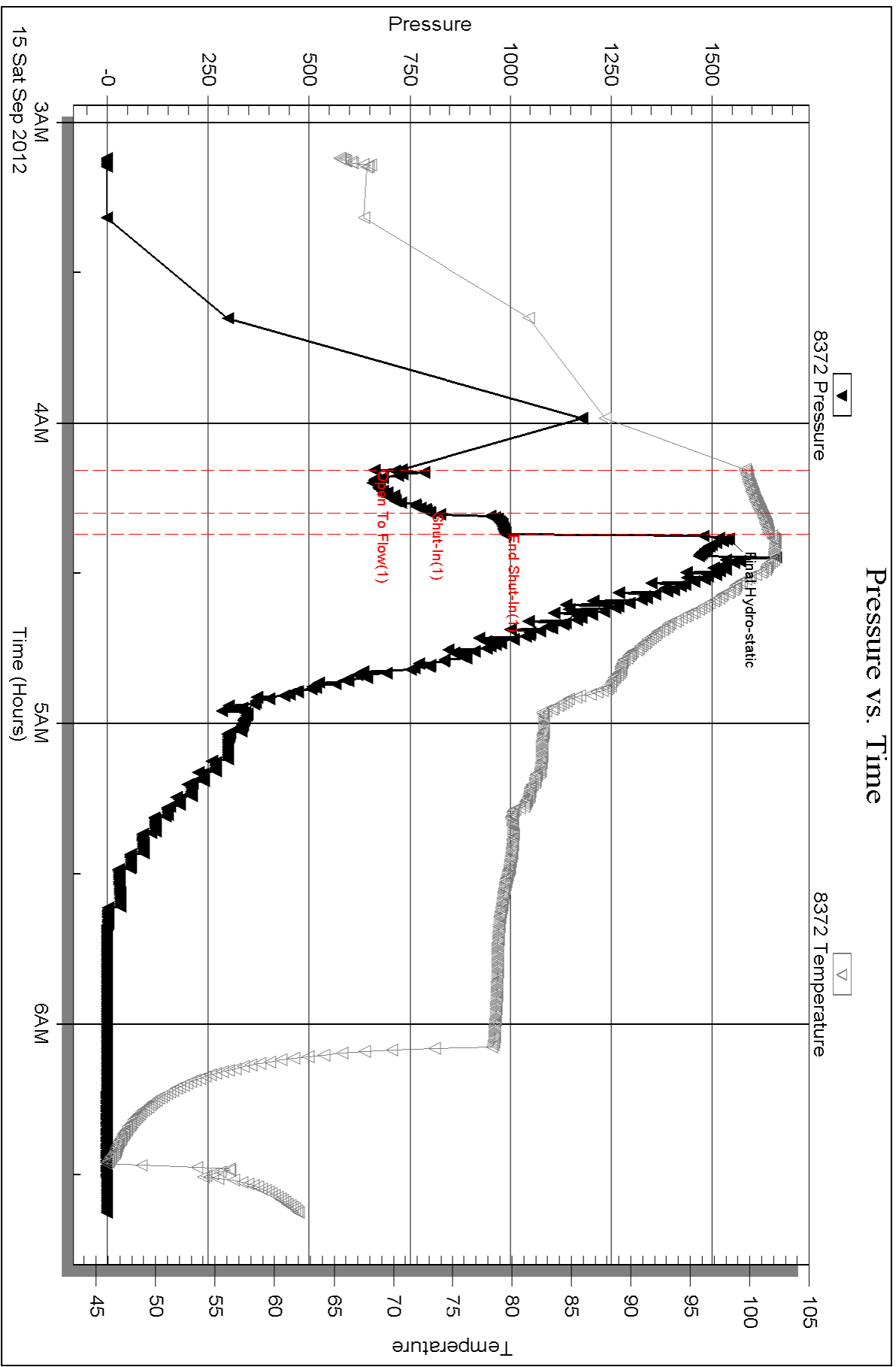
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



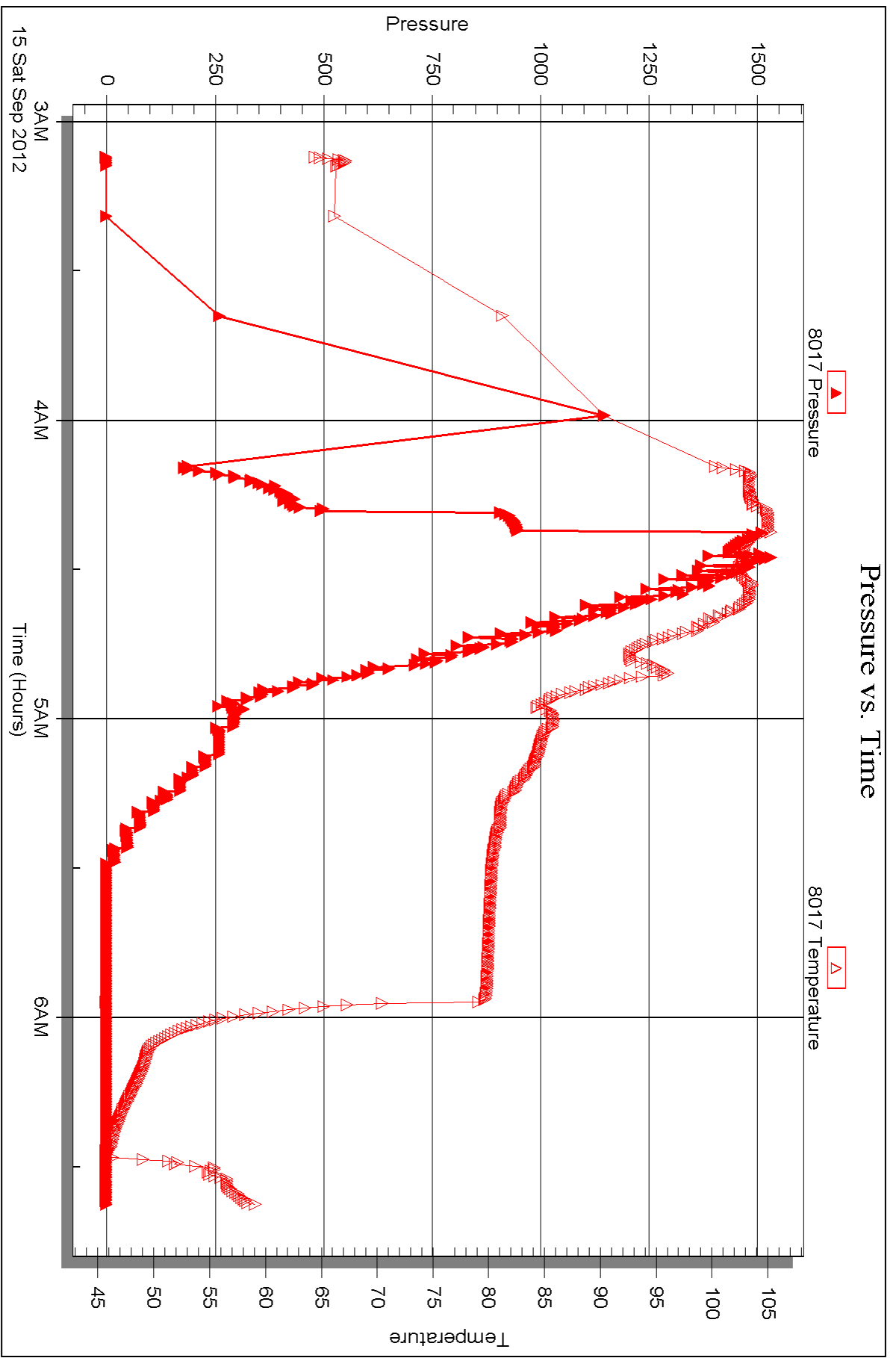
Serial #: 8017

Inside

Bennett & Schulte Oil Co.

T Hoffran #27-1

DST Test Number: 2

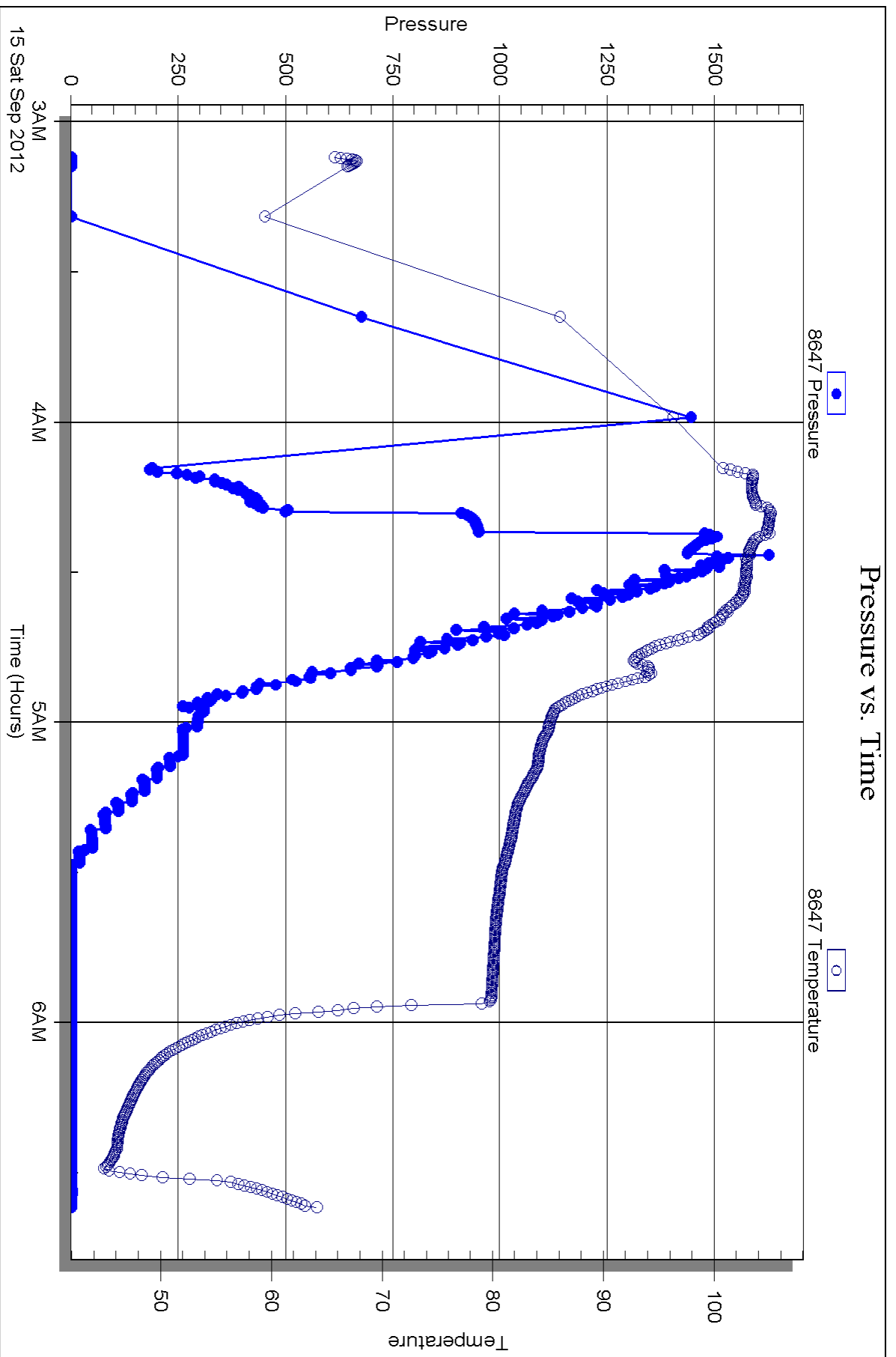


Serial #: 8647

Below (Strathtreit & Schulte Oil Co.

T Hoffran #27-1

DST Test Number: 2





## DRILL STEM TEST REPORT

Prepared For: **Bennett & Schulte Oil Co.**

PO Box 329  
Russell KS 67665

ATTN: Frank Schulte

**T Hoffman #27-1**

**24-13s-16w Ellis,KS**

Start Date: 2012.09.15 @ 07:19:05

End Date: 2012.09.15 @ 10:59:40

Job Ticket #: 49310                      DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.09.25 @ 08:53:47



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Bennett & Schulte Oil Co.

**24-13s-16w Ellis,KS**

PO Box 329  
Russell KS 67665

**T Hoffman #27-1**

Job Ticket: 49310

**DST#: 3**

ATTN: Frank Schulte

Test Start: 2012.09.15 @ 07:19:05

## GENERAL INFORMATION:

Formation: **LKC"A-B"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:34:00

Time Test Ended: 10:59:40

Test Type: Conventional Straddle (Reset)

Tester: Andy Carreira

Unit No: 39

**Interval: 3117.00 ft (KB) To 3195.00 ft (KB) (TVD)**

Reference Elevations: 1962.00 ft (KB)

Total Depth: 3455.00 ft (KB) (TVD)

1955.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

**Serial #: 8372 Outside**

Press @ RunDepth: 24.48 psig @ 3121.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.09.15 End Date: 2012.09.15

Last Calib.: 2012.09.15

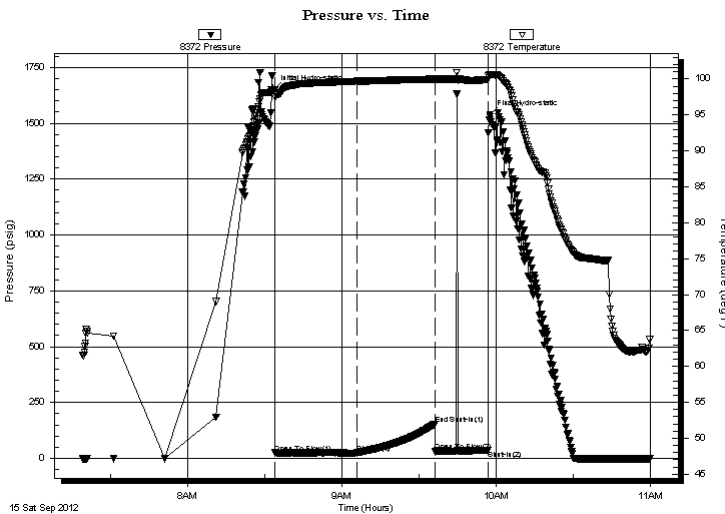
Start Time: 07:19:05 End Time: 10:59:40

Time On Btm: 2012.09.15 @ 08:33:20

Time Off Btm: 2012.09.15 @ 09:57:30

**TEST COMMENT:** IF:(30min) Blow died in 15 min.  
IS:(30min) No Return.  
FF:(15min) No Blow , Flushed, Surged, No Blow . Pulled Tool.

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1650.92	98.36	Initial Hydro-static
1	24.29	97.44	Open To Flow (1)
33	24.48	99.67	Shut-In(1)
63	152.53	99.98	End Shut-In(1)
63	32.32	99.93	Open To Flow (2)
84	35.62	99.92	Shut-In(2)
85	1537.54	100.64	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
25.00	Mud	0.35

\* Recovery from multiple tests

## Gas Rates

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









**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Bennett & Schulte Oil Co.

**24-13s-16w Ellis,KS**

PO Box 329  
Russell KS 67665

**T Hoffman #27-1**

Job Ticket: 49310

**DST#: 3**

ATTN: Frank Schulte

Test Start: 2012.09.15 @ 07:19:05

## Tool Information

Drill Pipe:	Length: 3095.00 ft	Diameter: 3.80 inches	Volume: 43.41 bbl	Tool Weight: 4000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 28000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 44000.00 lb
			<u>Total Volume: 43.41 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3117.00 ft			Final 38000.00 lb
Depth to Bottom Packer:	3195.00 ft			
Interval between Packers:	78.00 ft			
Tool Length:	369.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		
Tool Comments:				

## Tool Description

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

Change Over Sub	1.00			3090.00	
Shut In Tool	5.00			3095.00	
Hydraulic tool	5.00			3100.00	
Jars	5.00			3105.00	
Safety Joint	3.00			3108.00	
Packer	5.00			3113.00	28.00 Bottom Of Top Packer
Packer	4.00			3117.00	
Stubb	1.00			3118.00	
Perforations	2.00			3120.00	
Change Over Sub	1.00			3121.00	
Recorder	0.00	8017	Inside	3121.00	
Recorder	0.00	8372	Outside	3121.00	
Drill Pipe	63.00			3184.00	
Change Over Sub	1.00			3185.00	
Perforations	5.00			3190.00	
Blank Off Sub	1.00			3191.00	
Blank Spacing	4.00			3195.00	78.00 Tool Interval
Packer	4.00			3199.00	
Stubb	1.00			3200.00	
Perforations	3.00			3203.00	
Change Over Sub	1.00			3204.00	
Recorder	0.00	8647	Below	3204.00	
Drill Pipe	250.00			3454.00	
Change Over Sub	1.00			3455.00	
Bullnose	3.00			3458.00	263.00 Bottom Packers & Anchor

**Total Tool Length: 369.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Bennett & Schulte Oil Co.

**24-13s-16w Ellis,KS**

PO Box 329  
Russell KS 67665

**T Hoffman #27-1**

Job Ticket: 49310

**DST#: 3**

ATTN: Frank Schulte

Test Start: 2012.09.15 @ 07:19:05

## 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: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 10.36 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
25.00	Mud	0.351

Total Length: 25.00 ft      Total Volume: 0.351 bbl

Num Fluid Samples: 0

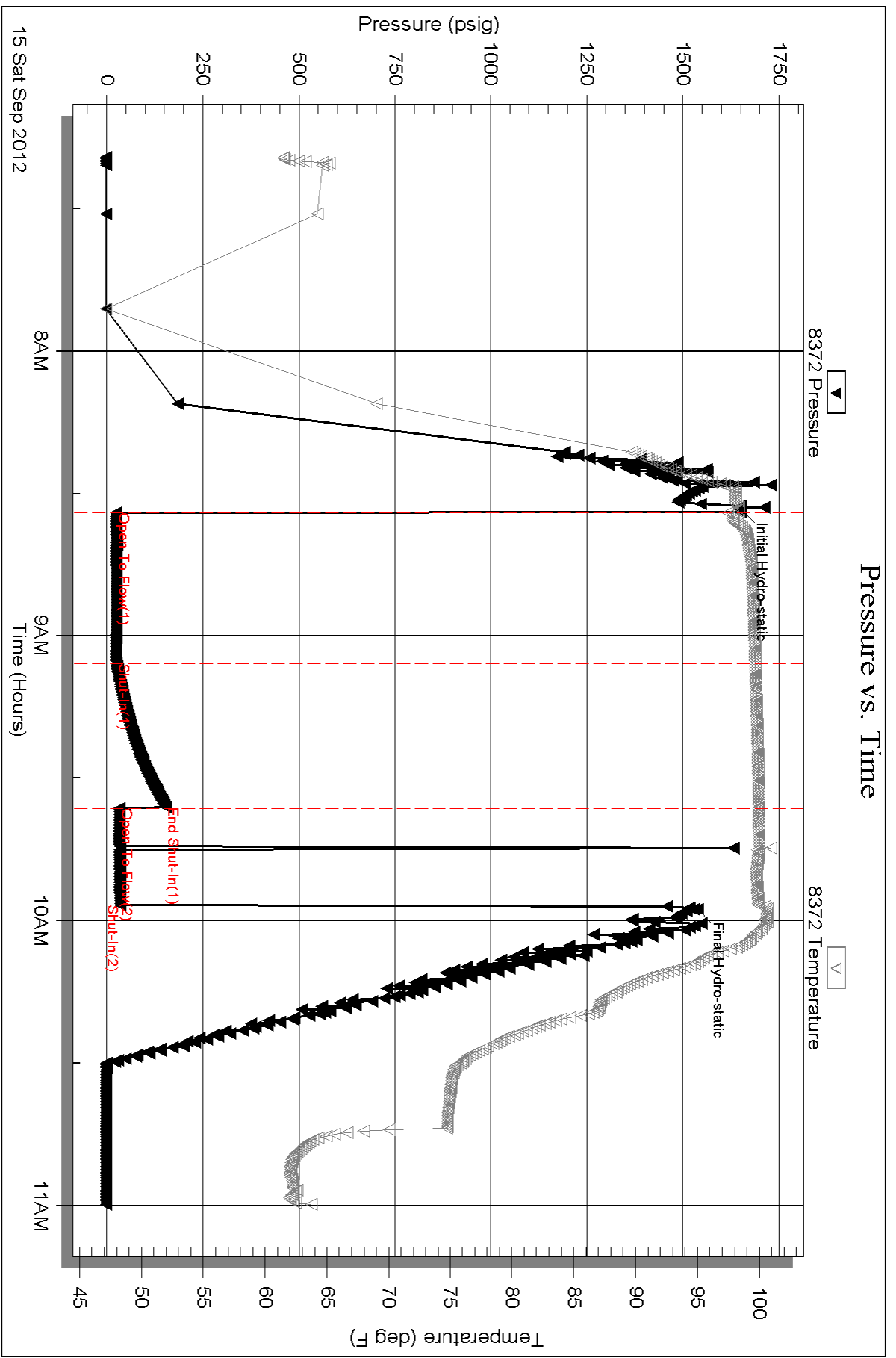
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



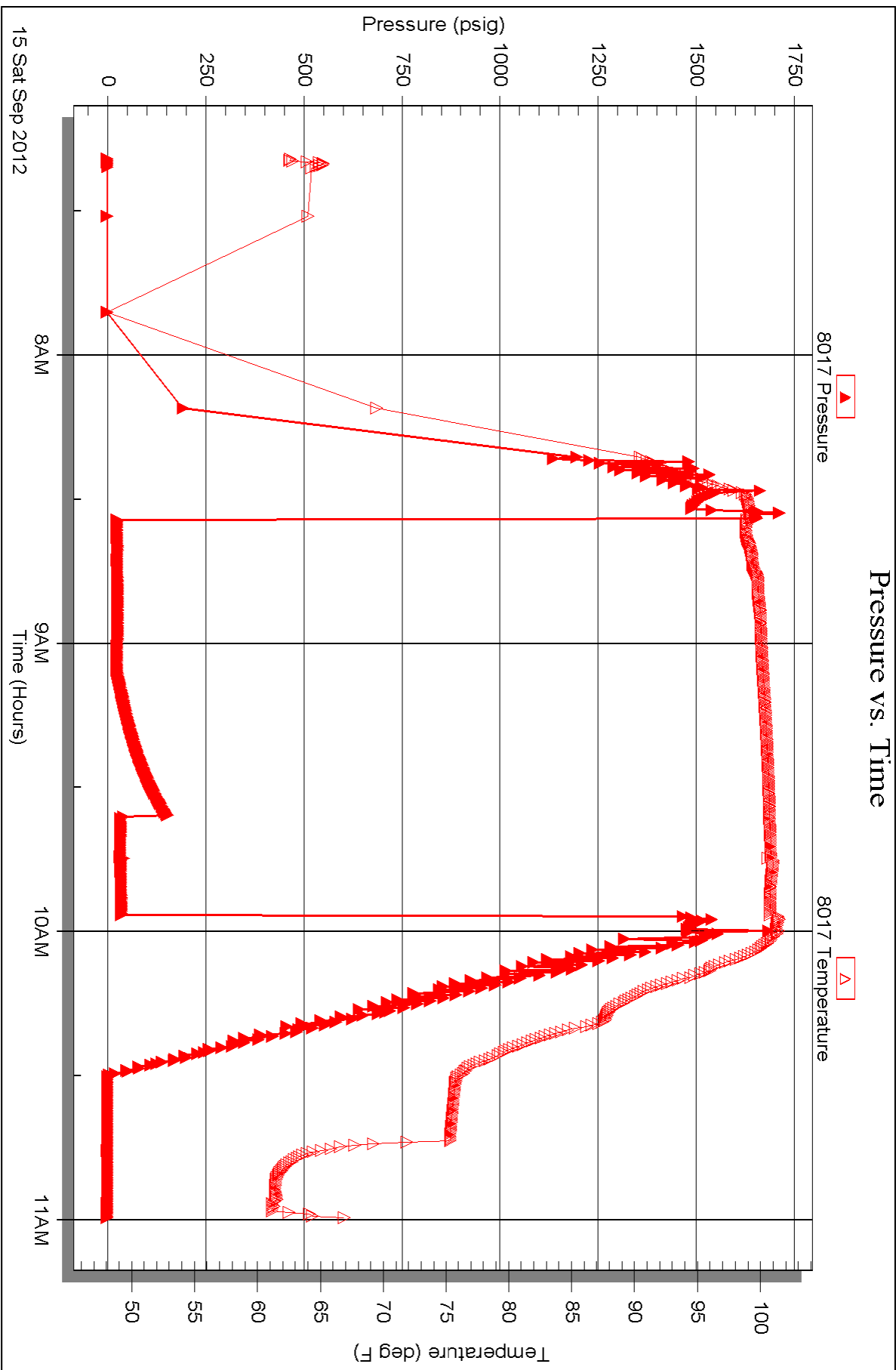
Serial #: 8017

Inside

Bennett & Schulte Oil Co.

T Hoffran #27-1

DST Test Number: 3

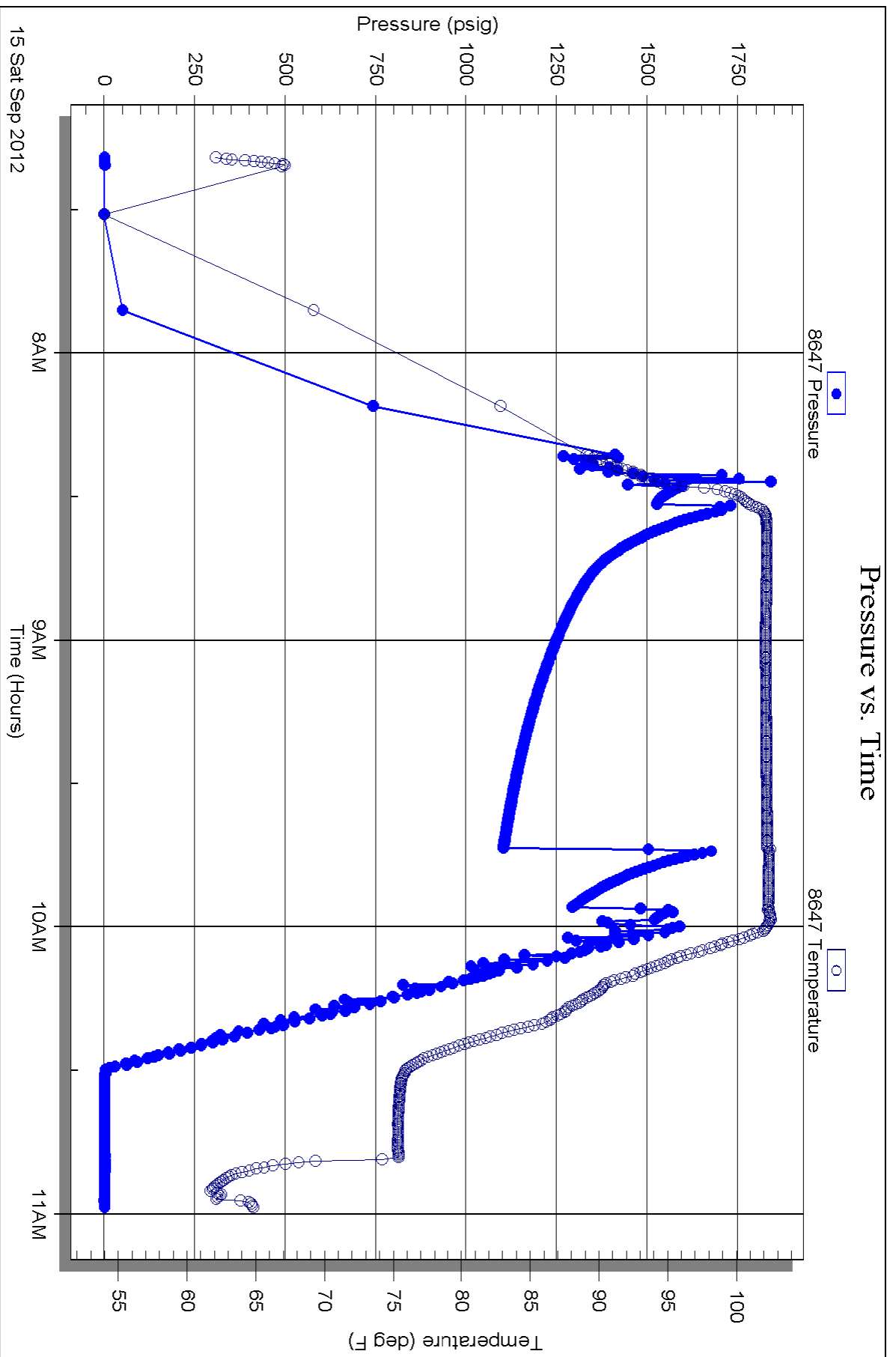


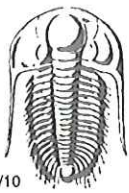
Serial #: 8647

Below (Strathtreit & Schulte Oil Co.

T Hoffman #27-1

DST Test Number: 3





# TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

No Charge

## Test Ticket

NO. 49308 | 8030

Well Name & No. T HOFFMAN 27-1 Test No. 1 Date 9-14-12  
 Company BENNETT & SCHULTE OIL CO Elevation 1962 KB 1955 GL  
 Address PO BOX 329 RUSSELL KS 67665  
 Co. Rep / Geo. FRANK SCHULTE Rig ROYAL RIG 2  
 Location: Sec. 24 Twp. 13S Rge. 16W Co. ELLIS State KS

Interval Tested 3115-3195 Zone Tested LKC "A-B"  
 Anchor Length 80 Drill Pipe Run 3095 Mud Wt. 9.3  
 Top Packer Depth 3115 Drill Collars Run 0 Vis 5-1  
 Bottom Packer Depth 3195 Wt. Pipe Run 0 WL 10.4  
 Total Depth 3455 Chlorides 3000 ppm System LCM 1#  
 Blow Description GF: BOB 30 SEC.  
ISI: NO RETURN, PULL TOOL  
FP: -  
FST: -

Rec	Feet of	%gas	%oil	%water	%mud
<u>1750</u>	<u>Feet of MW</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

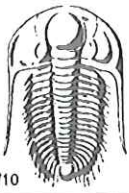
Rec Total 1750' BHT 1020 Gravity \_\_\_\_\_ API RW .828 @ 46° F Chlorides 12500 ppm

(A) Initial Hydrostatic <u>1590</u>	<input checked="" type="checkbox"/> Test <u>e</u>	T-On Location <u>20.52</u>
(B) First Initial Flow <u>268</u>	<input checked="" type="checkbox"/> Jars <u>e</u>	T-Started <u>22:01</u>
(C) First Final Flow <u>820</u>	<input checked="" type="checkbox"/> Safety Joint <u>e</u>	T-Open <u>23:08</u>
(D) Initial Shut-In <u>960</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>00:08</u>
(E) Second Initial Flow _____	<input type="checkbox"/> Hourly Standby _____	T-Out <u>02:34</u>
(F) Second Final Flow _____	<input checked="" type="checkbox"/> Mileage <u>32RT</u>	Comments <u>MISRUN - BOTTOM PACKER FAILED</u>
(G) Final Shut-In _____	<input type="checkbox"/> Sampler _____	<input type="checkbox"/> Ruined Shale Packer _____
(H) Final Hydrostatic <u>1552</u>	<input checked="" type="checkbox"/> Straddle <u>e</u>	<input type="checkbox"/> Ruined Packer _____
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Extra Copies _____
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Packer _____	Sub Total _____
Final Flow _____	<input type="checkbox"/> Extra Recorder _____	Total <u>N/C</u>
Final Shut-In _____	<input type="checkbox"/> Day Standby _____	MP/DST Disc't _____
	<input type="checkbox"/> Accessibility _____	
	Sub Total _____	

Approved By \_\_\_\_\_ Our Representative [Signature]

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# TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

No Charge

## Test Ticket

NO. 49309

4/10

Well Name & No. T Hoffman 27-1 Test No. 2 Date 9-15-12  
 Company BENNETT & Schulte oil co Elevation 1962 KB 1955 GL  
 Address PO BOX 329 Russell Ks 67665  
 Co. Rep / Geo. FRANK Schulte Rig Royal Rig 2  
 Location: Sec. 24 Twp. 135 Rge. 16W Co. Ellis State Ks

Interval Tested 3117 - 3195 Zone Tested LKC A-B"  
 Anchor Length 78' Drill Pipe Run 3100 Mud Wt. 9.3  
 Top Packer Depth 3117 Drill Collars Run 0 Vis 57  
 Bottom Packer Depth 3195 Wt. Pipe Run 0 WL 10.4  
 Total Depth 3460 Chlorides 3000 ppm System LCM 1#

Blow Description LF: BOB, 1 min.  
FSI: NO RETURN Pulled Tool  
FF  
FSI

Rec	Feet of	%gas	%oil	%water	%mud
<u>950</u>	<u>MW</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

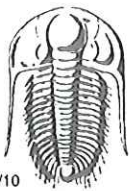
Rec Total 950 BHT \_\_\_\_\_ Gravity \_\_\_\_\_ API RW 828 @ 46 ° F Chlorides 12500 ppm

(A) Initial Hydrostatic \_\_\_\_\_  Test \_\_\_\_\_ T-On Location \_\_\_\_\_  
 (B) First Initial Flow ~~799~~ 661 661  Jars \_\_\_\_\_ T-Started 03:07  
 (C) First Final Flow ~~987~~ 799 799  Safety Joint \_\_\_\_\_ T-Open 04:10  
 (D) Initial Shut-In 987  Circ Sub \_\_\_\_\_ T-Pulled 04:25  
 (E) Second Initial Flow \_\_\_\_\_  Hourly Standby \_\_\_\_\_ T-Out 06:38  
 (F) Second Final Flow \_\_\_\_\_  Mileage \_\_\_\_\_ Comments Mis Run -  
 (G) Final Shut-In \_\_\_\_\_  Sampler \_\_\_\_\_ Packer Failure  
 (H) Final Hydrostatic 1542  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_

Initial Open 10  Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Initial Shut-In 5  Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Final Flow \_\_\_\_\_  Extra Recorder \_\_\_\_\_ Sub Total \_\_\_\_\_  
 Final Shut-In \_\_\_\_\_  Day Standby \_\_\_\_\_ Total N/L  
 Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total \_\_\_\_\_

Approved By \_\_\_\_\_ Our Representative [Signature]

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# TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

## Test Ticket

NO. 49310

Well Name & No. T Hoffmann 27-1 Test No. 3 Date 9-15-12  
 Company Bennett & Schulte oil Co. Elevation 1962 KB 1955 GL  
 Address PO BOX 329 Russell Ks 67665  
 Co. Rep / Geo. FRANK Schulte Rig Royal Rig #2  
 Location: Sec. 24 Twp. 13S Rge. 16W Co. Ellis State Ks

Interval Tested 3117-3195 Zone Tested LKC A-B"  
 Anchor Length 78' Drill Pipe Run 3095 Mud Wt. 9.3  
 Top Packer Depth ~~3112~~ 3117 Drill Collars Run 0 Vis 51  
 Bottom Packer Depth ~~3117~~ 3195 Wt. Pipe Run 0 WL 10.4  
 Total Depth 3455 Chlorides 3000 ppm System LCM 1#

Blow Description IF: Blow died in 15 min  
ISI: NO RETURN  
FF: NO BLOW, Flushed, Surged, NO BLOW, Pulled tool  
FSTI:

Rec	Feet of	%gas	%oil	%water	%mud
<u>25</u>	<u>Mud</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 25 BHT 99' Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic 1650  Test 1150 T-On Location \_\_\_\_\_  
 (B) First Initial Flow 24  Jars 250 T-Started 07:19  
 (C) First Final Flow 24  Safety Joint 75' T-Open 08:35  
 (D) Initial Shut-In 152  Circ Sub \_\_\_\_\_ T-Pulled 09:50  
 (E) Second Initial Flow 32  Hourly Standby \_\_\_\_\_ T-Out 11:00  
 (F) Second Final Flow 35  Mileage 32 RT Comments \_\_\_\_\_  
 (G) Final Shut-In \_\_\_\_\_  Sampler \_\_\_\_\_ 0 wet 2625  
 (H) Final Hydrostatic 1537  Straddle 1000 rig time - cut  
 Shale Packer \_\_\_\_\_  Ruined Shale Packer check  
 Extra Packer \_\_\_\_\_  Ruined Packer for  
 Extra Recorder \_\_\_\_\_  Extra Copies difference  
 Initial Open 30 Sub Total \_\_\_\_\_ Total \_\_\_\_\_  
 Initial Shut-In 30 MP/DST Disc't \_\_\_\_\_  
 Final Flow 15  
 Final Shut-In \_\_\_\_\_  
 Sub Total 2124.60

Approved By \_\_\_\_\_ Our Representative [Signature]

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