



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1156550  
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

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
- Plug Back       Conv. to GSW       Conv. to Producer
- Commingled      Permit #: \_\_\_\_\_
- Dual Completion      Permit #: \_\_\_\_\_
- SWD      Permit #: \_\_\_\_\_
- ENHR      Permit #: \_\_\_\_\_
- GSW      Permit #: \_\_\_\_\_

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

GPS Location: Lat: \_\_\_\_\_, Long: \_\_\_\_\_  
(e.g. xx.xxxxx)      (e.g. -xxx.xxxxx)

Datum:  NAD27       NAD83       WGS84

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

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

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

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

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

Total Vertical 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

- Confidentiality Requested  
Date: \_\_\_\_\_
- Confidential Release Date: \_\_\_\_\_
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_



1156550

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

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

**INSTRUCTIONS:** Show important tops 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.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

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  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
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?  Yes  No *(If No, fill out Page Three of the ACO-1)*

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
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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 <i>(Explain)</i> _____
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Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

<b>DISPOSITION OF GAS:</b> <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<b>METHOD OF COMPLETION:</b> <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ <input type="checkbox"/> Other <i>(Specify)</i> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
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Conservation Division  
Finney State Office Building  
130 S. Market, Rm. 2078  
Wichita, KS 67202-3802



Phone: 316-337-6200  
Fax: 316-337-6211  
<http://kcc.ks.gov/>

Mark Sievers, Chairman  
Thomas E. Wright, Commissioner  
Shari Feist Albrecht, Commissioner

Sam Brownback, Governor

August 27, 2013

Brady Pfeiffer  
Norstar Petroleum, Inc.  
88 INVERNESS CIR E. UNIT F104  
ENGLEWOOD, CO 80112-5514

Re: ACO1  
API 15-039-21184-00-00  
Wilson 2-10  
SW/4 Sec.10-02S-27W  
Decatur County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,  
Brady Pfeiffer



TICKET NUMBER 38045  
 LOCATION Oakley, KS  
 FOREMAN Kelly Gabe

260973

PO Box 884, Chanute, KS 66720  
 620-431-9210 or 800-467-8676

FIELD TICKET & TREATMENT REPORT  
**CEMENT**

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
7-26-13	5734	Wilson #2-10	10	3	27	Decatur
CUSTOMER Norstar		Oderlin East to Rd 10E 5N E into	TRUCK #	DRIVER	TRUCK #	DRIVER
MAILING ADDRESS			4163	Cory		
CITY			693	Daniel		
STATE						
ZIP CODE						

KS

JOB TYPE Surface HOLE SIZE 12 1/4 HOLE DEPTH 240 CASING SIZE & WEIGHT 8 5/8 24#  
 CASING DEPTH 240 DRILL PIPE \_\_\_\_\_ TUBING \_\_\_\_\_ OTHER \_\_\_\_\_  
 SLURRY WEIGHT 148 SLURRY VOL \_\_\_\_\_ WATER gal/sk \_\_\_\_\_ CEMENT LEFT in CASING 20'  
 DISPLACEMENT 14 bbl DISPLACEMENT PSI \_\_\_\_\_ MIX PSI \_\_\_\_\_ RATE \_\_\_\_\_

REMARKS: safety meeting, rigged up on W2W #6, hooked up to circulate, mixed 165 sacks com 390cc 2% gel, displaced with 14 bbl water, shut in, washed out pump lines, rigged down.

Cement did circulate

Approx 2 bbl top pit

Thank You Kelly & crew

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
54015	1	PUMP CHARGE	<del>1150.00</del>	<del>1150.00</del>
5406	75 mi	MILEAGE	<del>5.25</del>	<del>393.75</del>
11045	165 sacks	Class A cement	<del>18.55</del>	<del>3060.75</del>
1102	4165#	Calcium chloride	<del>1.04</del>	<del>437.10</del>
118B	310#	Bentonite	<del>2.7</del>	<del>832.0</del>
5467A	7.76	Ton mileage delivery	<del>175</del>	<del>1018.50</del>
				<u>6143.80</u>
				<u>614.38</u>
				<u>5529.42</u>
				<u>230.46</u>
				<u>5759.88</u>

completed

260973

Ravin 3737

AUTHORIZATION [Signature] TITLE \_\_\_\_\_ DATE 7-26-13

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.









## DRILL STEM TEST REPORT

Prepared For: **Norstar Petroleum, Inc.**

88 Inverness CIR E Unit F104  
Englewood, CO 80112

ATTN: Tyler Sanders

### **Wilson #2-10**

### **10-2s-27w Decatur,KS**

Start Date: 2013.07.29 @ 23:47:00

End Date: 2013.07.30 @ 03:29:00

Job Ticket #: 52812                      DST #: 1

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

Printed: 2013.08.02 @ 08:49:27







**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

Norstar Petroleum, Inc.  
88 Inverness CIR E Unit F104  
Englewood, CO 80112  
ATTN: Tyler Sanders

**10-2s-27w Decatur, KS**  
**Wilson #2-10**  
Job Ticket: 52812      **DST#: 1**  
Test Start: 2013.07.29 @ 23:47:00

**GENERAL INFORMATION:**

Formation: **" Oread- Toronto "**

Deviated: No      Whipstock:      ft (KB)

Time Tool Opened:

Time Test Ended: 03:29:00

**Interval: 3327.00 ft (KB) To 3417.00 ft (KB) (TVD)**

Total Depth: 3417.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Test Type: Conventional Bottom Hole (Initial)

Tester: Sam Esparza

Unit No: 64

Reference Elevations: 2588.00 ft (KB)

2583.00 ft (CF)

KB to GR/CF: 5.00 ft

**Serial #: 6772      Outside**

Press @ Run Depth:      psig @      3328.00 ft (KB)

Start Date: 2013.07.29      End Date: 2013.07.30

Start Time: 23:47:05      End Time: 03:29:15

Capacity: 8000.00 psig

Last Calib.: 2013.07.30

Time On Btm:

Time Off Btm:

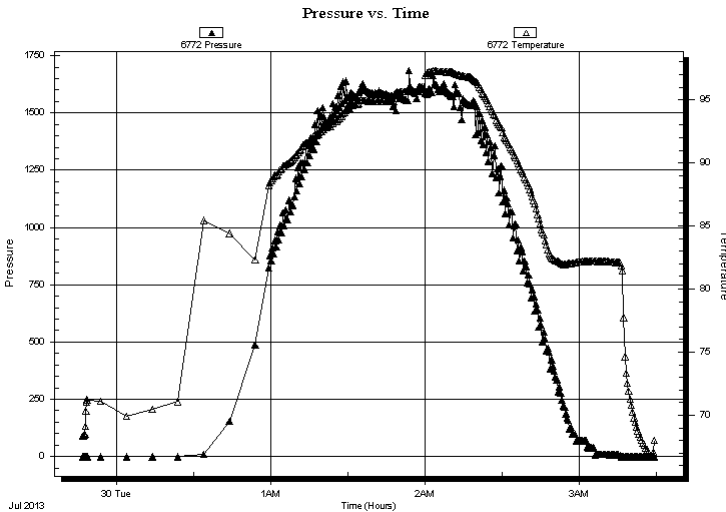
TEST COMMENT: IF:

IS:

FF: MIS- RUN PACKER FAILURE.

FS:

**PRESSURE SUMMARY**



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

**Recovery**

**Gas Rates**

Length (ft)	Description	Volume (bbl)
150.00	Mud 100m	0.99

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Norstar Petroleum, Inc.

**10-2s-27w Decatur,KS**

88 Inverness CIR E Unit F104  
Englewood, CO 80112

**Wilson #2-10**

Job Ticket: 52812

**DST#: 1**

ATTN: Tyler Sanders

Test Start: 2013.07.29 @ 23:47:00

## Tool Information

Drill Pipe:	Length: 3209.00 ft	Diameter: 3.80 inches	Volume: 45.01 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 45.61 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	32.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3327.00 ft			Final 40000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	90.00 ft			
Tool Length:	118.00 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	1.00			3300.00	
Shut In Tool	5.00			3305.00	
Hydraulic tool	5.00			3310.00	
Jars	5.00			3315.00	
Safety Joint	3.00			3318.00	
Packer	5.00			3323.00	28.00 Bottom Of Top Packer
Packer	4.00			3327.00	
Stubb	1.00			3328.00	
Recorder	0.00	6772	Outside	3328.00	
Recorder	0.00	8845	Outside	3328.00	
Perforations	19.00			3347.00	
Change Over Sub	1.00			3348.00	
Drill Pipe	63.00			3411.00	
Change Over Sub	1.00			3412.00	
Bullnose	5.00			3417.00	90.00 Bottom Packers & Anchor

**Total Tool Length: 118.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Norstar Petroleum, Inc.

**10-2s-27w Decatur,KS**

88 Inverness CIR E Unit F104  
Englewood, CO 80112

**Wilson #2-10**

Job Ticket: 52812

**DST#: 1**

ATTN: Tyler Sanders

Test Start: 2013.07.29 @ 23:47:00

## 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: 67.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.97 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 400.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
150.00	Mud 100m	0.993

Total Length: 150.00 ft      Total Volume: 0.993 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

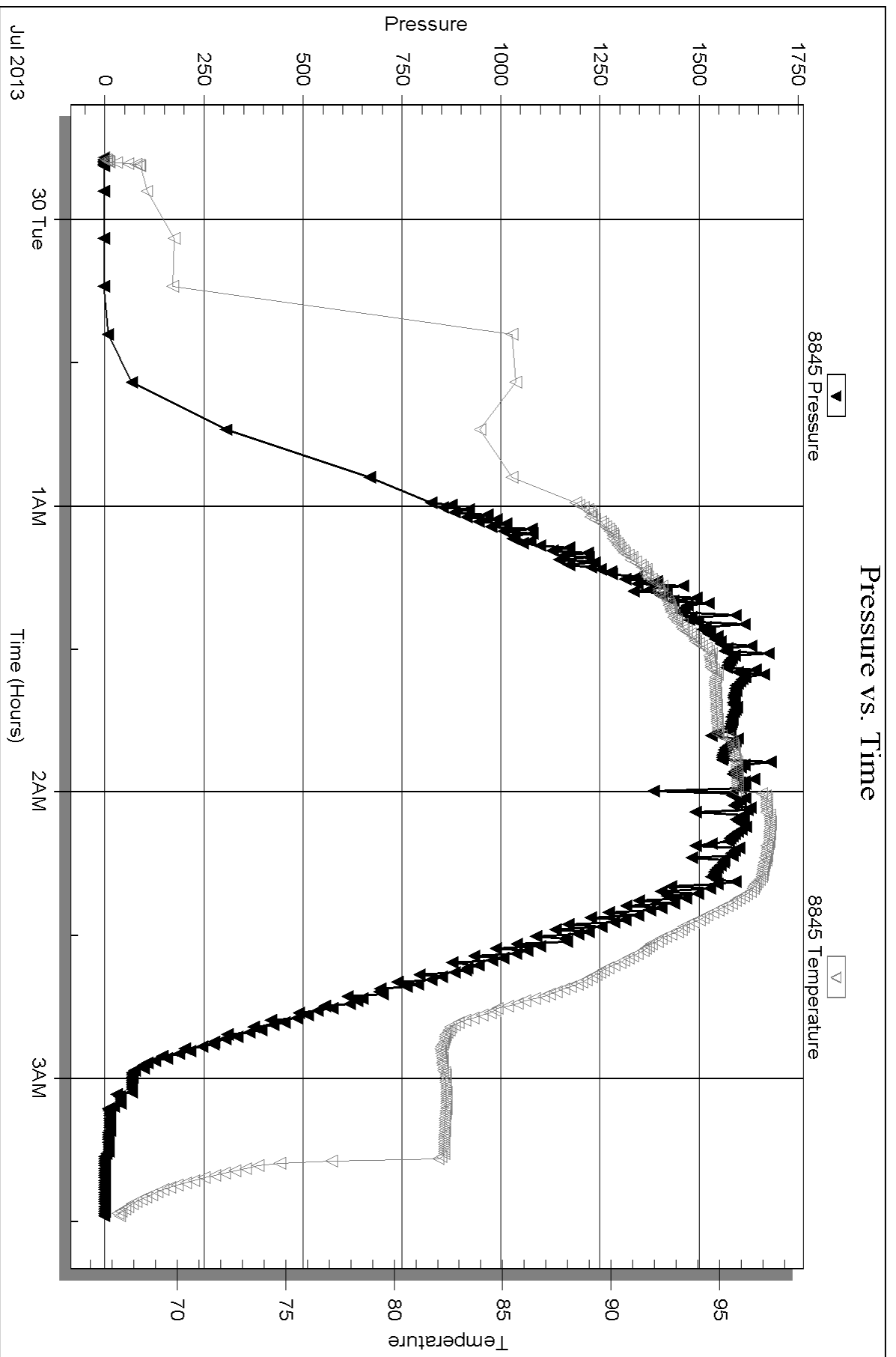
Recovery Comments:

Serial #: 8845

Outside Norstar Petroleum, Inc.

Wilson #2-10

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 52812

Printed: 2013.08.02 @ 08:49:30

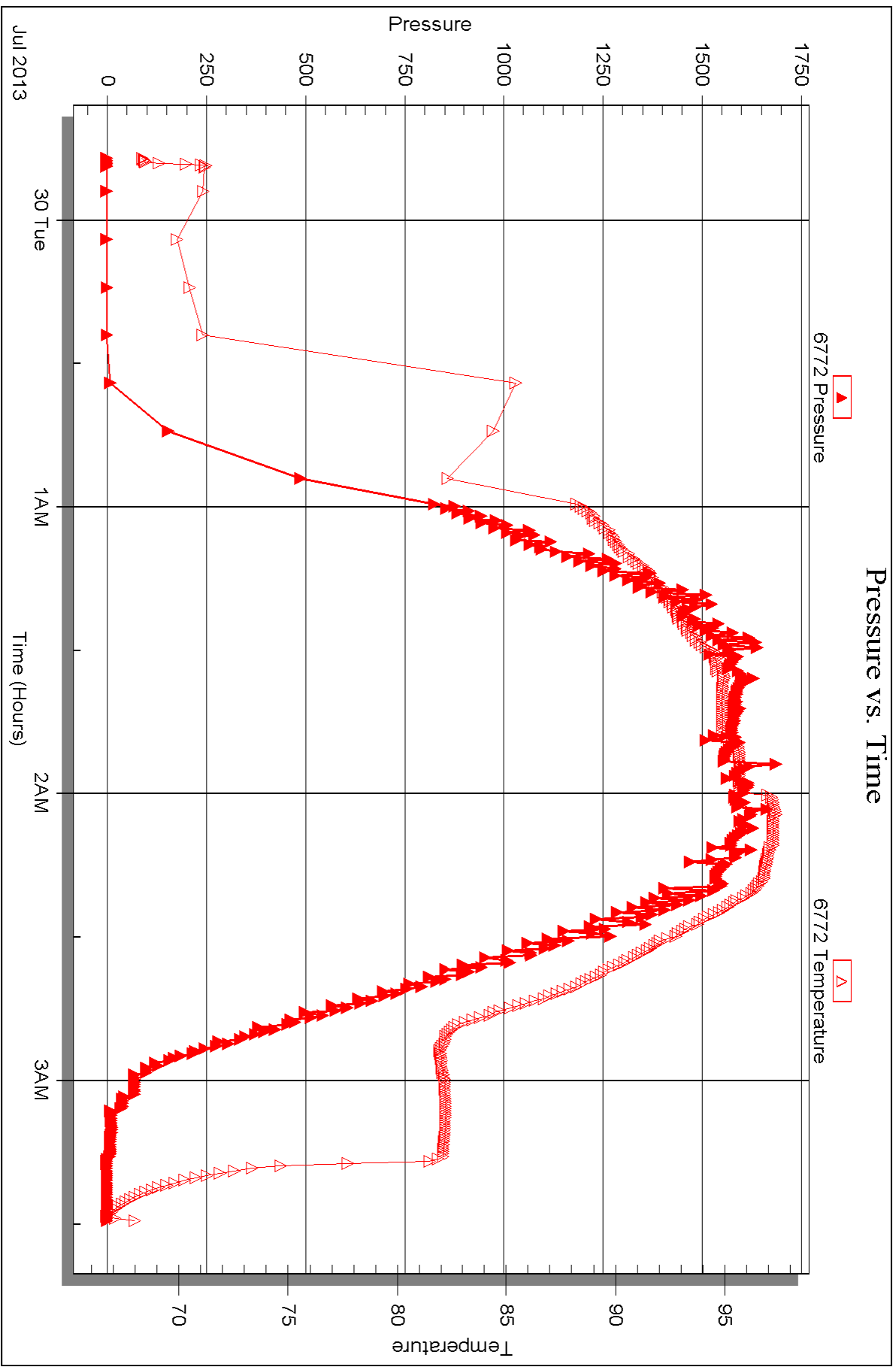


Serial #: 6772

Outside Norstar Petroleum, Inc.

Wilson #2-10

DST Test Number: 1





## DRILL STEM TEST REPORT

Prepared For: **Norstar Petroleum, Inc.**

88 Inverness CIR E Unit F104  
Englewood, CO 80112

ATTN: Tyler Sanders

### **Wilson #2-10**

### **10-2s-27w Decatur,KS**

Start Date: 2013.07.30 @ 03:44:00

End Date: 2013.07.30 @ 09:10:15

Job Ticket #: 52813                      DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.08.02 @ 08:48:48

Norstar Petroleum, Inc.

10-2s-27w Decatur,KS

Wilson #2-10

DST # 2

"Oread - Toronto"

2013.07.30



**TRILOBITE TESTING, INC.**

## DRILL STEM TEST REPORT

Norstar Petroleum, Inc.  
88 Inverness CIR E Unit F104  
Englewood, CO 80112  
ATTN: Tyler Sanders

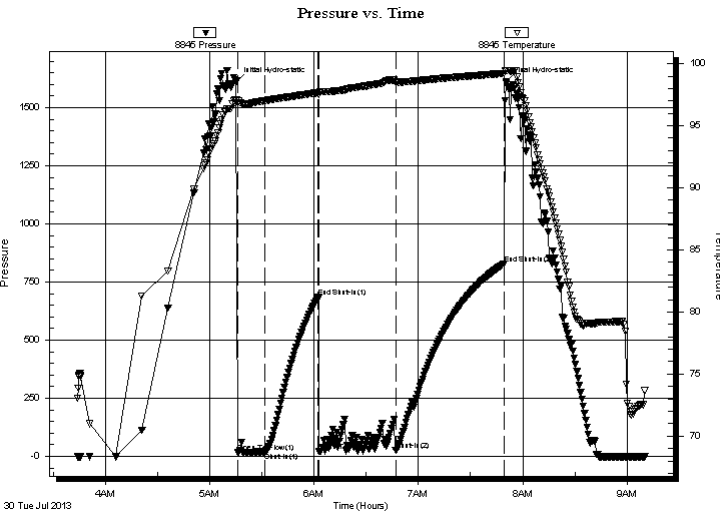
**10-2s-27w Decatur, KS**  
**Wilson #2-10**  
Job Ticket: 52813      **DST#: 2**  
Test Start: 2013.07.30 @ 03:44:00

### GENERAL INFORMATION:

Formation: " **Oread - Toronto** "  
Deviated: No Whipstock: ft (KB)      Test Type: Conventional Bottom Hole (Reset)  
Time Tool Opened: 05:16:00      Tester: Sam Esparza  
Time Test Ended: 09:10:15      Unit No: 64  
**Interval: 3336.00 ft (KB) To 3417.00 ft (KB) (TVD)**      Reference Elevations: 2588.00 ft (KB)  
Total Depth: 3417.00 ft (KB) (TVD)      2583.00 ft (CF)  
Hole Diameter: 7.88 inches Hole Condition: Good      KB to GR/CF: 5.00 ft

**Serial #: 8845      Outside**  
Press @ Run Depth: 25.21 psig @ 3337.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2013.07.30      End Date: 2013.07.30      Last Calib.: 2013.07.30  
Start Time: 03:44:05      End Time: 09:10:14      Time On Btm: 2013.07.30 @ 05:15:30  
Time Off Btm: 2013.07.30 @ 07:50:15

**TEST COMMENT:** IF: 1/4" Blow .  
IS: No Return.  
FF: No Blow .  
FS: No Return.



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1613.16	97.15	Initial Hydro-static
1	16.52	96.82	Open To Flow (1)
17	18.95	97.02	Shut-In(1)
47	685.35	97.66	End Shut-In(1)
48	21.07	97.53	Open To Flow (2)
92	25.21	98.55	Shut-In(2)
154	828.90	99.22	End Shut-In(2)
155	1612.10	99.44	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud 100m	0.02

\* Recovery from multiple tests

### Gas Rates

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



# TRILOBITE TESTING, INC.

## DRILL STEM TEST REPORT

Norstar Petroleum, Inc.  
 88 Inverness CIR E Unit F104  
 Englewood, CO 80112  
 ATTN: Tyler Sanders

10-2s-27w Decatur, KS

Wilson #2-10

Job Ticket: 52813

DST#: 2

Test Start: 2013.07.30 @ 03:44:00

### GENERAL INFORMATION:

Formation: " Oread - Toronto "

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:16:00

Time Test Ended: 09:10:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Sam Esparza

Unit No: 64

Interval: 3336.00 ft (KB) To 3417.00 ft (KB) (TVD)

Reference Elevations: 2588.00 ft (KB)

Total Depth: 3417.00 ft (KB) (TVD)

2583.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 6772 Outside

Press @ Run Depth: psig @ 3337.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.07.30 End Date: 2013.07.30

Last Calib.: 2013.07.30

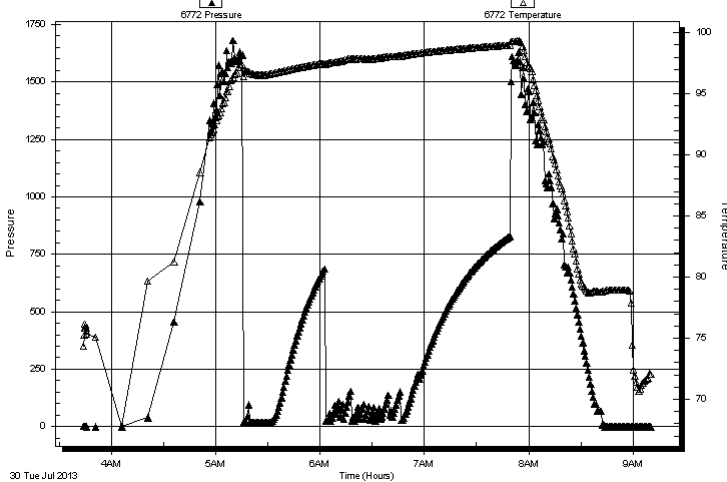
Start Time: 03:44:05 End Time: 09:10:29

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: 1/4" Blow .  
 IS: No Return.  
 FF: No Blow .  
 FS: No Return.

Pressure vs. Time



### PRESSURE SUMMARY

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

### Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud 100m	0.02

### Gas Rates

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

\* Recovery from multiple tests





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Norstar Petroleum, Inc.

**10-2s-27w Decatur,KS**

88 Inverness CIR E Unit F104  
Englewood, CO 80112

**Wilson #2-10**

Job Ticket: 52813

**DST#: 2**

ATTN: Tyler Sanders

Test Start: 2013.07.30 @ 03:44:00

## Tool Information

Drill Pipe:	Length: 3211.00 ft	Diameter: 3.80 inches	Volume: 45.04 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	30000.00 lb
Drill Collar:	Length: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose:	60000.00 lb
			<u>Total Volume: 45.64 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial	40000.00 lb
Depth to Top Packer:	3336.00 ft			Final	40000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	81.00 ft				
Tool Length:	109.00 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	1.00			3309.00	
Shut In Tool	5.00			3314.00	
Hydraulic tool	5.00			3319.00	
Jars	5.00			3324.00	
Safety Joint	3.00			3327.00	
Packer	5.00			3332.00	28.00 Bottom Of Top Packer
Packer	4.00			3336.00	
Stubb	1.00			3337.00	
Recorder	0.00	6772	Outside	3337.00	
Recorder	0.00	8845	Outside	3337.00	
Perforations	10.00			3347.00	
Change Over Sub	1.00			3348.00	
Drill Pipe	63.00			3411.00	
Change Over Sub	1.00			3412.00	
Bullnose	5.00			3417.00	81.00 Bottom Packers & Anchor

**Total Tool Length: 109.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Norstar Petroleum, Inc.

**10-2s-27w Decatur,KS**

88 Inverness CIR E Unit F104  
Englewood, CO 80112

**Wilson #2-10**

Job Ticket: 52813

**DST#: 2**

ATTN: Tyler Sanders

Test Start: 2013.07.30 @ 03:44:00

## 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: 67.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.97 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 400.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Mud 100m	0.025

Total Length: 5.00 ft      Total Volume: 0.025 bbl

Num Fluid Samples: 0

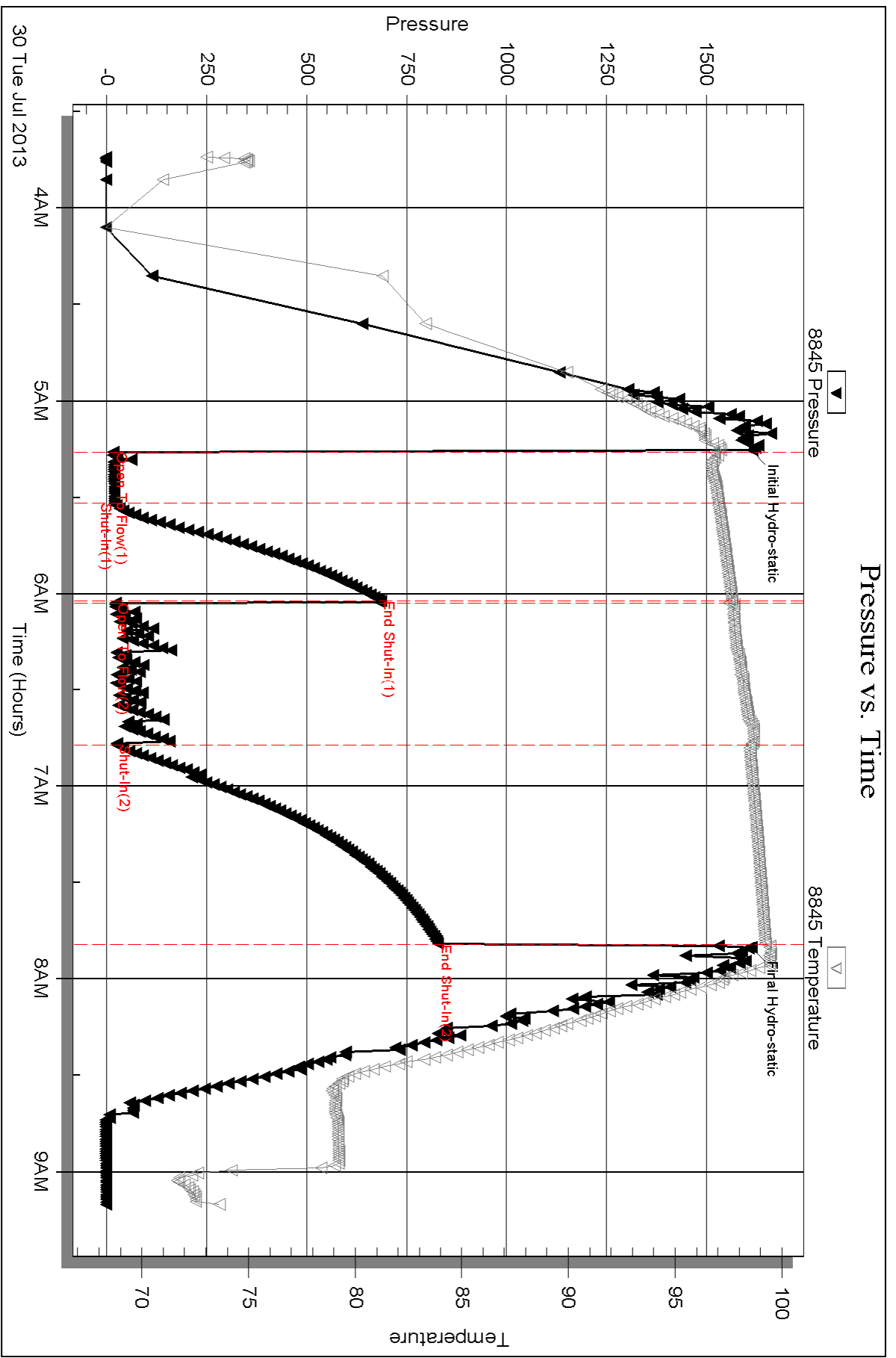
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

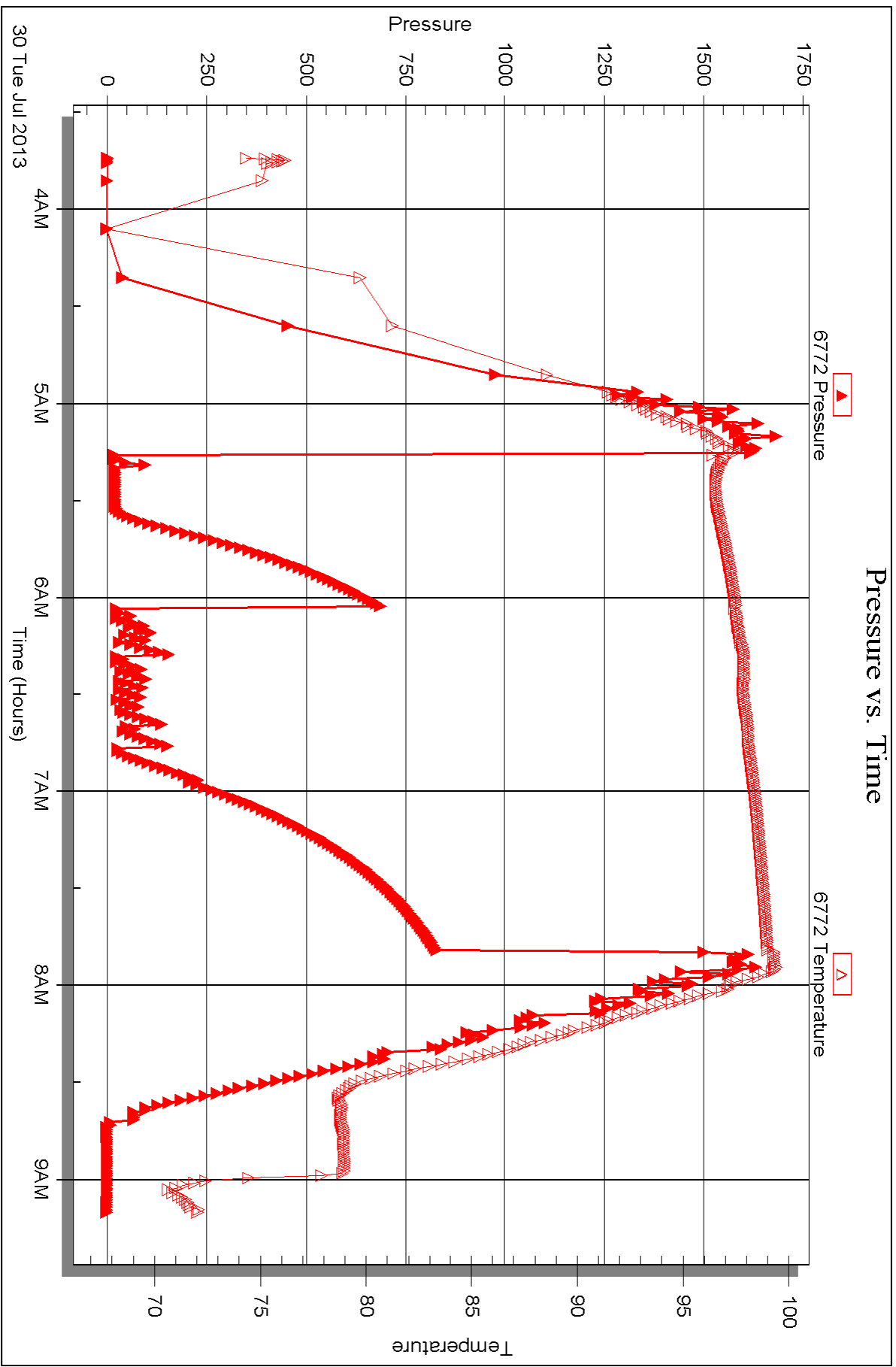


Serial #: 6772

Outside Norstar Petroleum, Inc.

Wilson #2-10

DST Test Number: 2







## DRILL STEM TEST REPORT

Prepared For: **Norstar Petroleum, Inc.**

88 Inverness CIR E Unit F104  
Englewood, CO 80112

ATTN: Tyler Sanders

### **Wilson #2-10**

### **10-2s-27w Decatur,KS**

Start Date: 2013.07.30 @ 16:52:00

End Date: 2013.07.30 @ 23:32:15

Job Ticket #: 52814                      DST #: 3

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

Printed: 2013.08.02 @ 08:43:38

Norstar Petroleum, Inc. 10-2s-27w Decatur,KS Wilson #2-10 DST # 3 LKC " C " 2013.07.30



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Norstar Petroleum, Inc.

**10-2s-27w Decatur, KS**

88 Inverness CIR E Unit F104  
Englewood, CO 80112

**Wilson #2-10**

Job Ticket: 52814

**DST#: 3**

ATTN: Tyler Sanders

Test Start: 2013.07.30 @ 16:52:00

## GENERAL INFORMATION:

Formation: **LKC " C "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:32:45

Time Test Ended: 23:32:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Sam Esparza

Unit No: 64

**Interval: 3438.00 ft (KB) To 3486.00 ft (KB) (TVD)**

Reference Elevations: 2588.00 ft (KB)

Total Depth: 3486.00 ft (KB) (TVD)

2583.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

**Serial #: 8845 Outside**

Press @ Run Depth: 103.41 psig @ 3439.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.07.30

End Date: 2013.07.30

Last Calib.: 2013.07.30

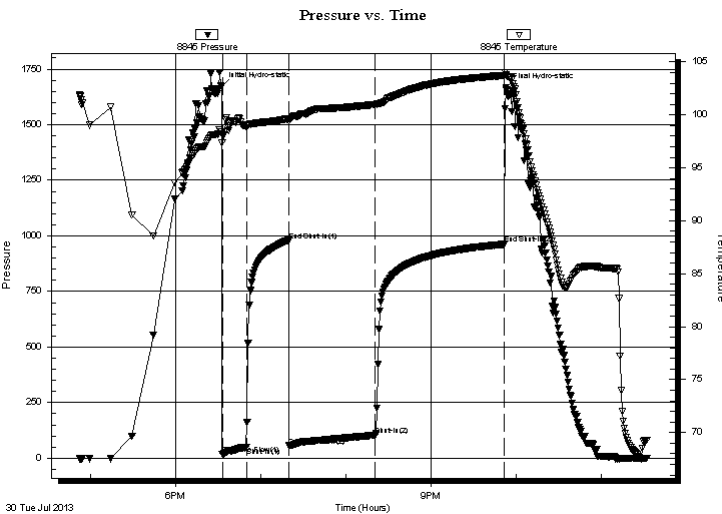
Start Time: 16:52:05

End Time: 23:32:14

Time On Btm: 2013.07.30 @ 18:32:30

Time Off Btm: 2013.07.30 @ 21:53:00

**TEST COMMENT:** IF: 2 3/4" Blow .  
IS: No Return.  
FF: 8" Blow .  
FS: No Return.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1672.85	98.42	Initial Hydro-static
1	17.39	97.36	Open To Flow (1)
18	51.04	98.95	Shut-In(1)
47	979.93	99.66	End Shut-In(1)
48	55.31	99.46	Open To Flow (2)
109	103.41	100.98	Shut-In(2)
200	962.43	103.73	End Shut-In(2)
201	1667.77	103.78	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
120.00	MCW ( Oil spots on top ) 30m 70w	0.59
35.00	WCM ( Oil Scum on top ) 20w 80m	0.47

## Gas Rates

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

\* Recovery from multiple tests





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Norstar Petroleum, Inc.

**10-2s-27w Decatur,KS**

88 Inverness CIR E Unit F104  
Englewood, CO 80112

**Wilson #2-10**

Job Ticket: 52814

**DST#: 3**

ATTN: Tyler Sanders

Test Start: 2013.07.30 @ 16:52:00

## Tool Information

Drill Pipe:	Length: 3308.00 ft	Diameter: 3.80 inches	Volume: 46.40 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	30000.00 lb
Drill Collar:	Length: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose:	55000.00 lb
			<u>Total Volume: 47.00 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial	40000.00 lb
Depth to Top Packer:	3438.00 ft			Final	40000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	48.00 ft				
Tool Length:	76.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

Change Over Sub	1.00			3411.00	
Shut In Tool	5.00			3416.00	
Hydraulic tool	5.00			3421.00	
Jars	5.00			3426.00	
Safety Joint	3.00			3429.00	
Packer	5.00			3434.00	28.00 Bottom Of Top Packer
Packer	4.00			3438.00	
Stubb	1.00			3439.00	
Recorder	0.00	6772	Outside	3439.00	
Recorder	0.00	8845	Outside	3439.00	
Perforations	9.00			3448.00	
Change Over Sub	1.00			3449.00	
Drill Pipe	31.00			3480.00	
Change Over Sub	1.00			3481.00	
Bullnose	5.00			3486.00	48.00 Bottom Packers & Anchor

**Total Tool Length: 76.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Norstar Petroleum, Inc.

**10-2s-27w Decatur,KS**

88 Inverness CIR E Unit F104  
Englewood, CO 80112

**Wilson #2-10**

Job Ticket: 52814

**DST#: 3**

ATTN: Tyler Sanders

Test Start: 2013.07.30 @ 16:52:00

## 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:

85000 ppm

Viscosity: 61.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.98 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 800.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
120.00	MCW ( Oil spots on top ) 30m 70w	0.590
35.00	WCM ( Oil Scum on top ) 20w 80m	0.473

Total Length: 155.00 ft      Total Volume: 1.063 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

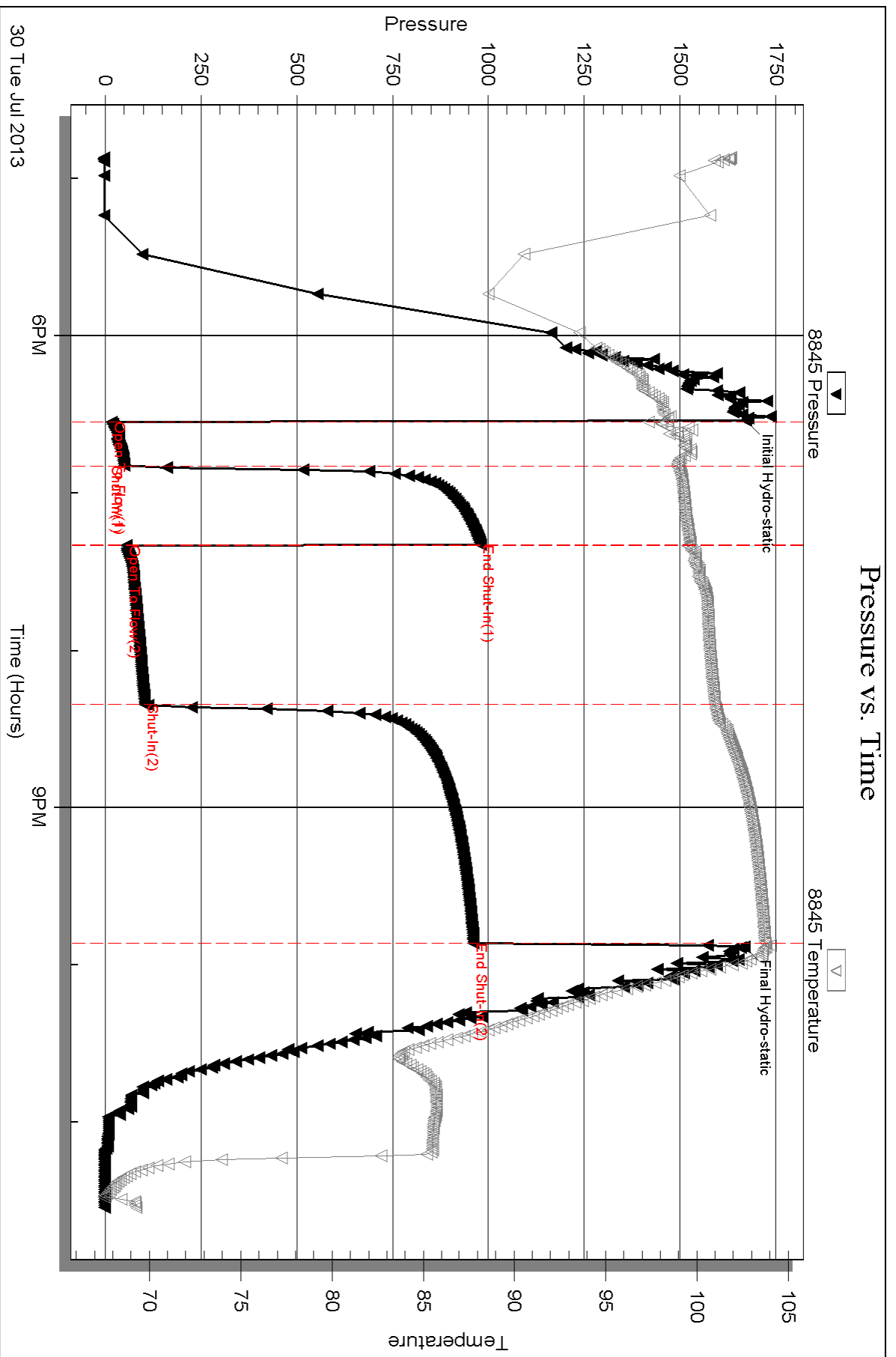
Recovery Comments: Water Salinity: .092 @ 71 Degrees= 85,000 ppm

Serial #: 8845

Outside Norstar Petroleum, Inc.

Wilson #2-10

DST Test Number: 3

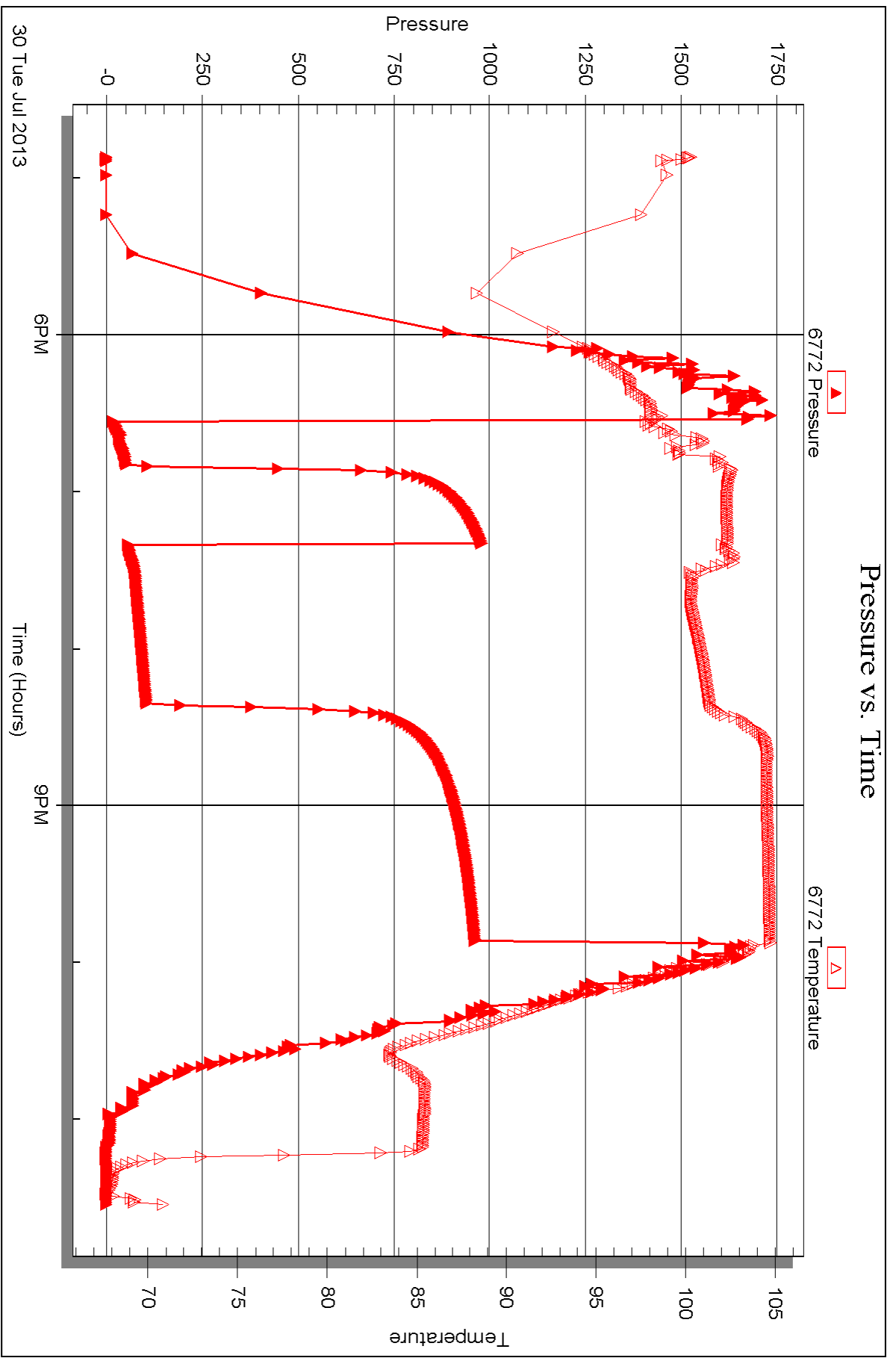


Serial #: 6772

Outside Norstar Petroleum, Inc.

Wilson #2-10

DST Test Number: 3



Triobite Testing, Inc

Ref. No: 52814

Printed: 2013.08.02 @ 08:43:42



## DRILL STEM TEST REPORT

Prepared For: **Norstar Petroleum, Inc.**

88 Inverness CIR E Unit F104  
Englewood, CO 80112

ATTN: Tyler Sanders

### **Wilson #2-10**

### **10-2s-27w Decatur,KS**

Start Date: 2013.07.31 @ 06:14:00

End Date: 2013.07.31 @ 13:15:30

Job Ticket #: 52815                      DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.08.02 @ 08:39:04

Norstar Petroleum, Inc. 10-2s-27w Decatur,KS Wilson #2-10 DST # 4 LKC " D " 2013.07.31





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Norstar Petroleum, Inc.

**10-2s-27w Decatur, KS**

88 Inverness CIR E Unit F104  
Englewood, CO 80112

**Wilson #2-10**

Job Ticket: 52815

**DST#: 4**

ATTN: Tyler Sanders

Test Start: 2013.07.31 @ 06:14:00

## GENERAL INFORMATION:

Formation: **LKC " D "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:08:00

Time Test Ended: 13:15:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Sam Esparza

Unit No: 64

**Interval: 3471.00 ft (KB) To 3520.00 ft (KB) (TVD)**

Reference Elevations: 2588.00 ft (KB)

Total Depth: 3520.00 ft (KB) (TVD)

2583.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

**Serial #: 8845 Outside**

Press @ Run Depth: 105.80 psig @ 3472.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.07.31

End Date:

2013.07.31

Last Calib.: 2013.07.31

Start Time: 06:14:05

End Time:

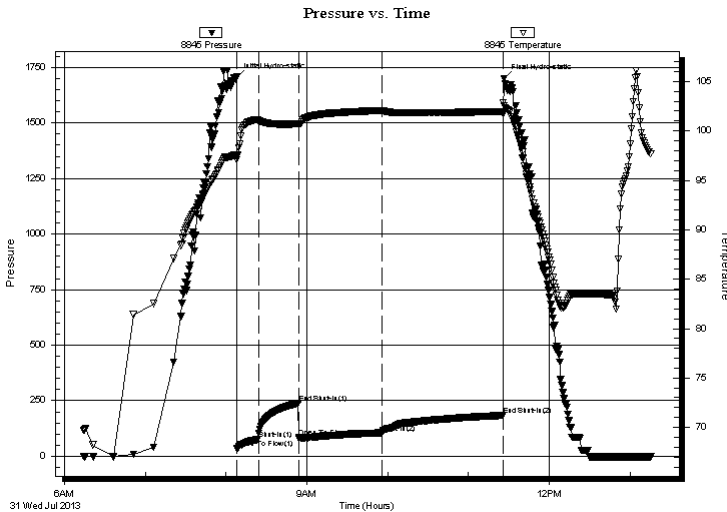
13:15:29

Time On Btm: 2013.07.31 @ 08:07:45

Time Off Btm: 2013.07.31 @ 11:26:30

**TEST COMMENT:** IF: 6 3/4" Blow .  
IS: No Return.  
FF: 7 3/4" Blow .  
FS: No Return.

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1705.75	97.54	Initial Hydro-static
1	34.45	97.07	Open To Flow (1)
16	75.05	101.09	Shut-In(1)
46	238.72	100.71	End Shut-In(1)
47	85.68	100.65	Open To Flow (2)
108	105.80	102.06	Shut-In(2)
198	183.99	101.98	End Shut-In(2)
199	1699.44	102.55	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
120.00	OMCW 5o 15m 80w	0.59
60.00	OWCM 10o 10w 80m	0.82
15.00	Clean Oil 100o	0.21

## Gas Rates

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

\* Recovery from multiple tests





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Norstar Petroleum, Inc.

**10-2s-27w Decatur,KS**

88 Inverness CIR E Unit F104  
Englewood, CO 80112

**Wilson #2-10**

Job Ticket: 52815

**DST#: 4**

ATTN: Tyler Sanders

Test Start: 2013.07.31 @ 06:14:00

## Tool Information

Drill Pipe:	Length: 3336.00 ft	Diameter: 3.80 inches	Volume: 46.80 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	30000.00 lb
Drill Collar:	Length: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose:	70000.00 lb
			<u>Total Volume: 47.40 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial	40000.00 lb
Depth to Top Packer:	3471.00 ft			Final	40000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	49.00 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
Change Over Sub	1.00			3444.00	
Shut In Tool	5.00			3449.00	
Hydraulic tool	5.00			3454.00	
Jars	5.00			3459.00	
Safety Joint	3.00			3462.00	
Packer	5.00			3467.00	28.00 Bottom Of Top Packer
Packer	4.00			3471.00	
Stubb	1.00			3472.00	
Recorder	0.00	6772	Outside	3472.00	
Recorder	0.00	8845	Outside	3472.00	
Perforations	10.00			3482.00	
Change Over Sub	1.00			3483.00	
Drill Pipe	31.00			3514.00	
Change Over Sub	1.00			3515.00	
Bullnose	5.00			3520.00	49.00 Bottom Packers & Anchor

**Total Tool Length: 77.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Norstar Petroleum, Inc.

**10-2s-27w Decatur,KS**

88 Inverness CIR E Unit F104  
Englewood, CO 80112

**Wilson #2-10**

Job Ticket: 52815

**DST#: 4**

ATTN: Tyler Sanders

Test Start: 2013.07.31 @ 06:14:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

34 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

85000 ppm

Viscosity: 63.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.98 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 800.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
120.00	OMCW 5o 15m 80w	0.590
60.00	OWCM 10o 10w 80m	0.823
15.00	Clean Oil 100o	0.210

Total Length: 195.00 ft      Total Volume: 1.623 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

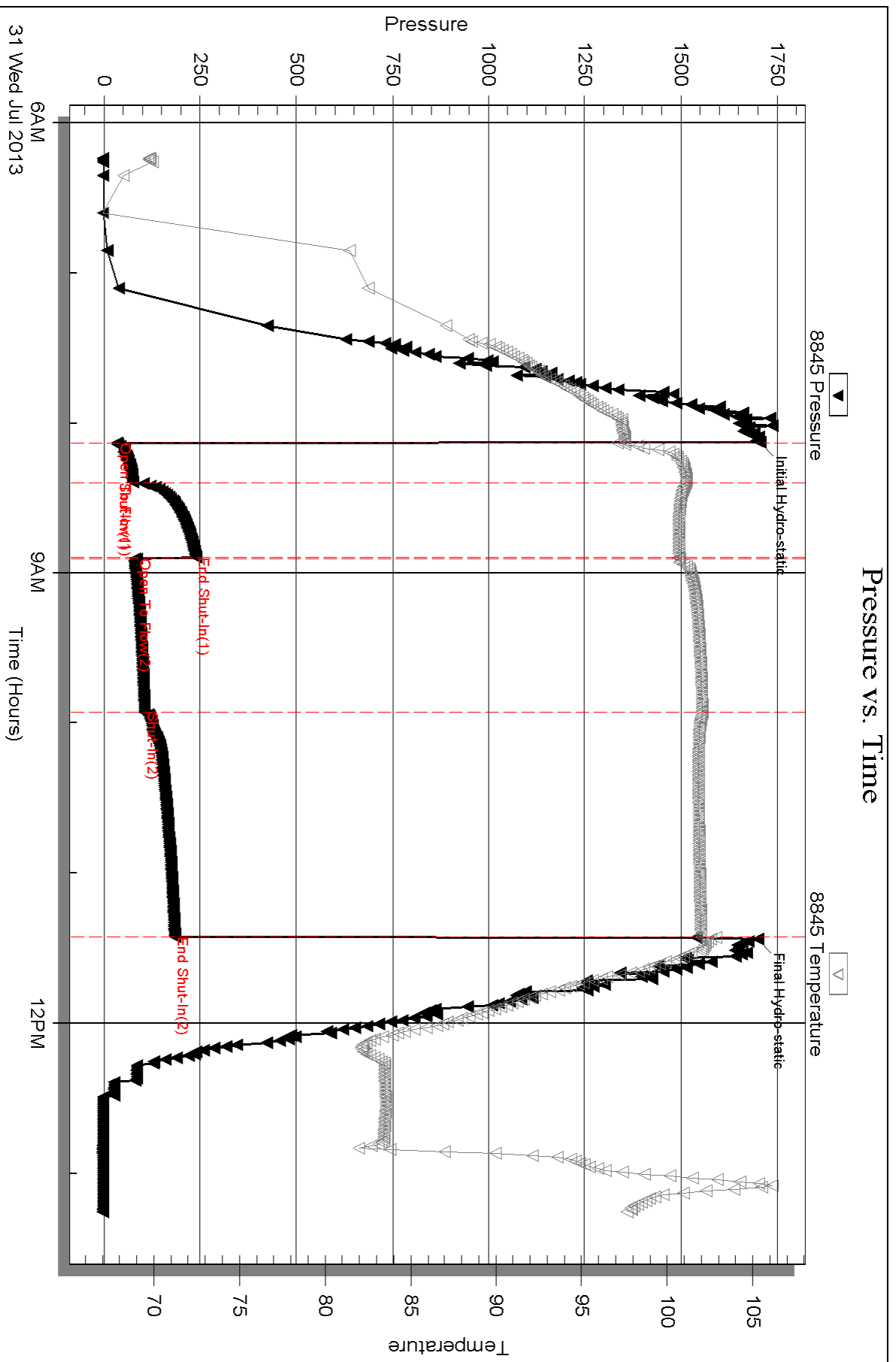
Laboratory Name:

Laboratory Location:

Recovery Comments: Oil API: 37 @ 90 degrees= 34 deg API

Water Salinity: .063 @ 96 degrees= 85,000 ppm

### Pressure vs. Time

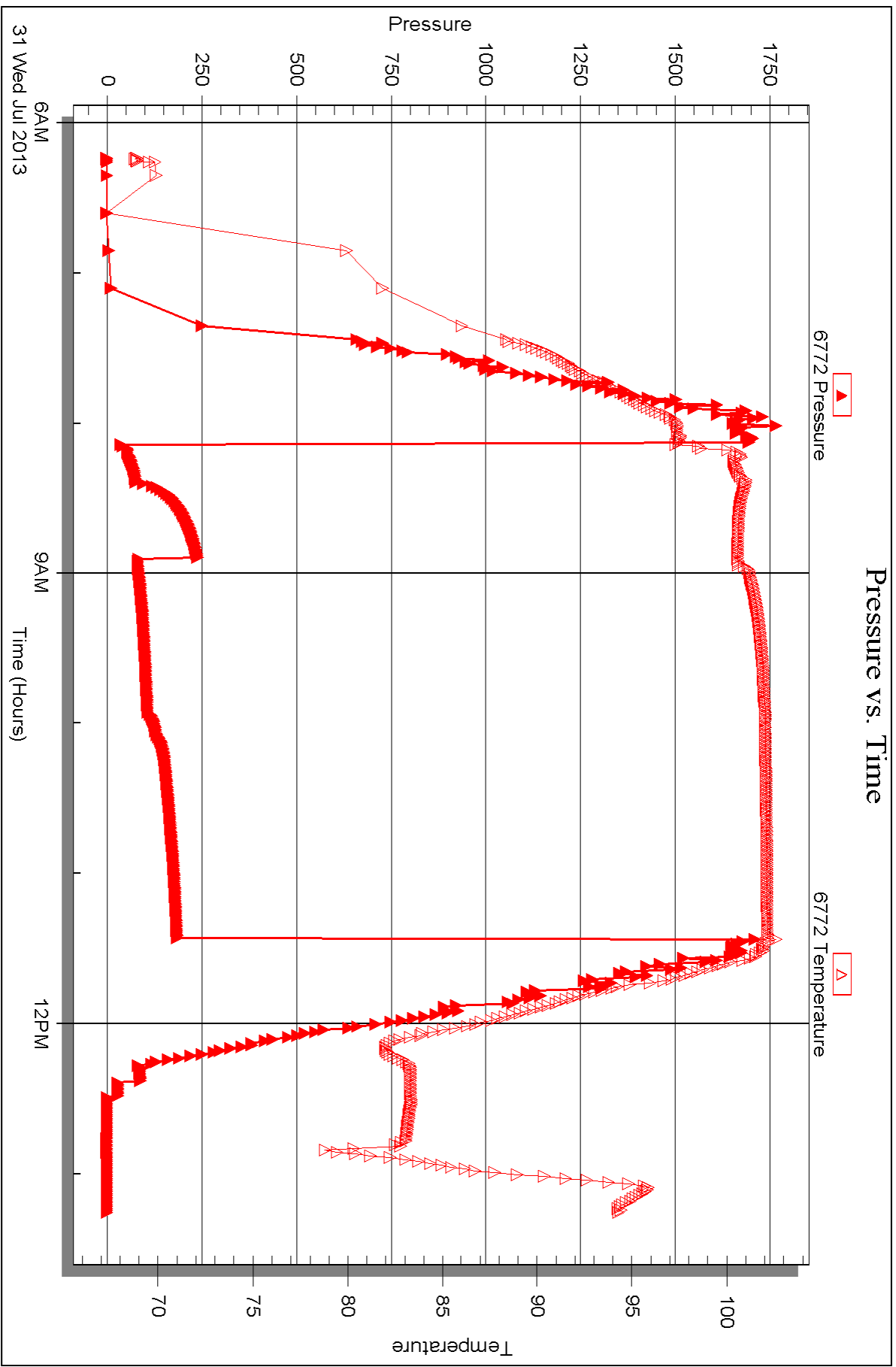


Serial #: 6772

Outside Norstar Petroleum, Inc.

Wilson #2-10

DST Test Number: 4





## DRILL STEM TEST REPORT

Prepared For: **Norstar Petroleum, Inc.**

88 Inverness CIR E Unit F104  
Englewood, CO 80112

ATTN: Tyler Sanders

### **Wilson #2-10**

### **10-2s-27w Decatur,KS**

Start Date: 2013.07.31 @ 18:32:00

End Date: 2013.08.01 @ 00:49:00

Job Ticket #: 53470                      DST #: 5

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

Printed: 2013.08.02 @ 08:38:24



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Norstar Petroleum, Inc.

**10-2s-27w Decatur, KS**

88 Inverness CIR E Unit F104  
Englewood, CO 80112

**Wilson #2-10**

Job Ticket: 53470

**DST#: 5**

ATTN: Tyler Sanders

Test Start: 2013.07.31 @ 18:32:00

## GENERAL INFORMATION:

Formation: **LKC "E"**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 20:42:15  
 Time Test Ended: 00:49:00  
 Interval: **3515.00 ft (KB) To 3550.00 ft (KB) (TVD)**  
 Total Depth: 3550.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Ryan Nichols  
 Unit No: 44  
 Reference Elevations: 2588.00 ft (KB)  
 2583.00 ft (CF)  
 KB to GR/CF: 5.00 ft

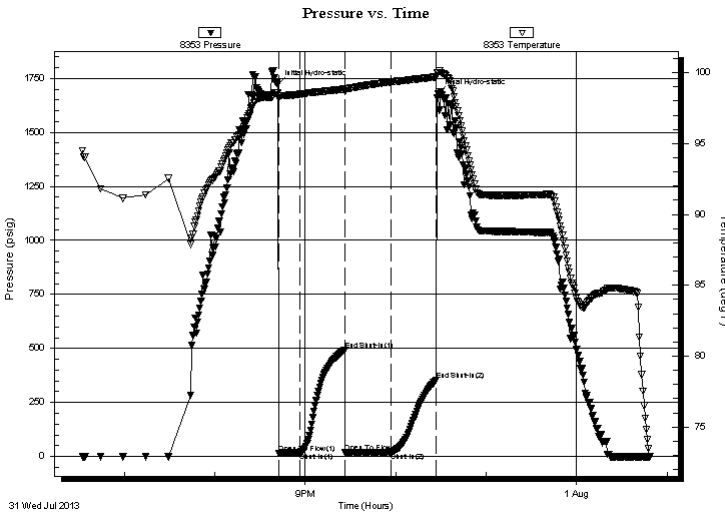
## Serial #: 8353

**Outside**

Press @ Run Depth: 20.22 psig @ 3516.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2013.07.31 End Date: 2013.08.01 Last Calib.: 2013.08.01  
 Start Time: 18:32:15 End Time: 00:49:00 Time On Btm: 2013.07.31 @ 20:42:00  
 Time Off Btm: 2013.07.31 @ 22:28:15

TEST COMMENT: 15 IF - Surface blow  
 30 ISI - No return  
 30 FF - No blow  
 30 FSI - No return

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1721.86	98.56	Initial Hydro-static
1	15.44	98.17	Open To Flow (1)
14	17.38	98.47	Shut-In(1)
45	494.45	98.84	End Shut-In(1)
45	17.57	98.70	Open To Flow (2)
75	20.22	99.34	Shut-In(2)
105	352.56	99.70	End Shut-In(2)
107	1681.03	100.02	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud - 100%M	0.02

\* Recovery from multiple tests

## Gas Rates

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







**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Norstar Petroleum, Inc.

**10-2s-27w Decatur,KS**

88 Inverness CIR E Unit F104  
Englewood, CO 80112

**Wilson #2-10**

Job Ticket: 53470

**DST#: 5**

ATTN: Tyler Sanders

Test Start: 2013.07.31 @ 18:32:00

## Tool Information

Drill Pipe:	Length: 3372.00 ft	Diameter: 3.80 inches	Volume: 47.30 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: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 47.90 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3515.00 ft			Final 40000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	35.00 ft			
Tool Length:	63.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

Change Over Sub	1.00			3488.00	
Shut In Tool	5.00			3493.00	
Hydraulic tool	5.00			3498.00	
Jars	5.00			3503.00	
Safety Joint	3.00			3506.00	
Packer	5.00			3511.00	28.00 Bottom Of Top Packer
Packer	4.00			3515.00	
Packer - Shale	0.00			3515.00	
Stubb	1.00			3516.00	
Recorder	0.00	8353	Outside	3516.00	
Recorder	0.00	8360	Outside	3516.00	
Perforations	31.00			3547.00	
Bullnose	3.00			3550.00	35.00 Bottom Packers & Anchor

**Total Tool Length: 63.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Norstar Petroleum, Inc.

**10-2s-27w Decatur,KS**

88 Inverness CIR E Unit F104  
Englewood, CO 80112

**Wilson #2-10**

Job Ticket: 53470

**DST#: 5**

ATTN: Tyler Sanders

Test Start: 2013.07.31 @ 18:32:00

## 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: 67.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.97 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 400.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Mud - 100%M	0.025

Total Length: 5.00 ft      Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

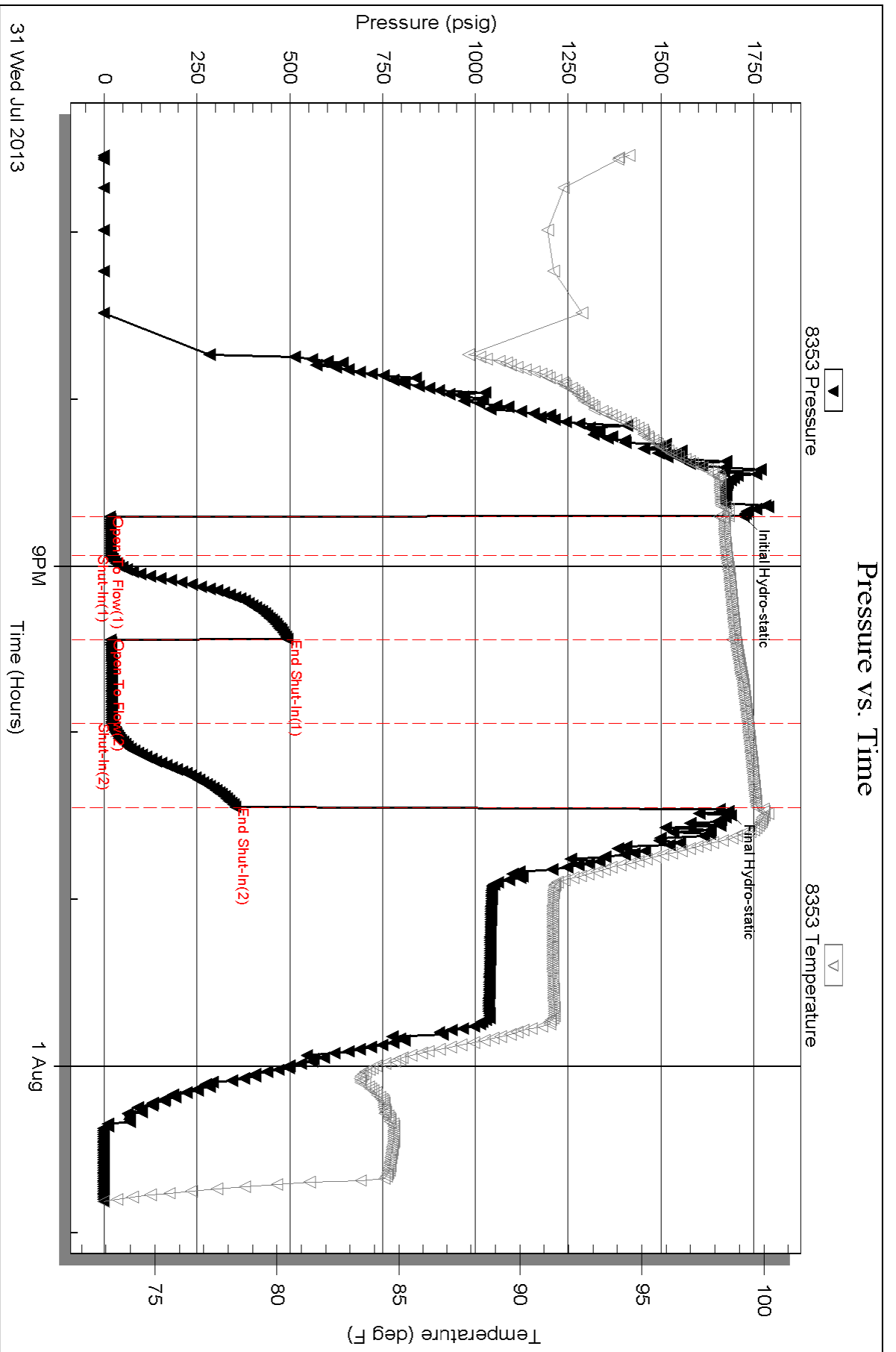
Recovery Comments:

Serial #: 8353

Outside Norstar Petroleum, Inc.

Wilson #2-10

DST Test Number: 5

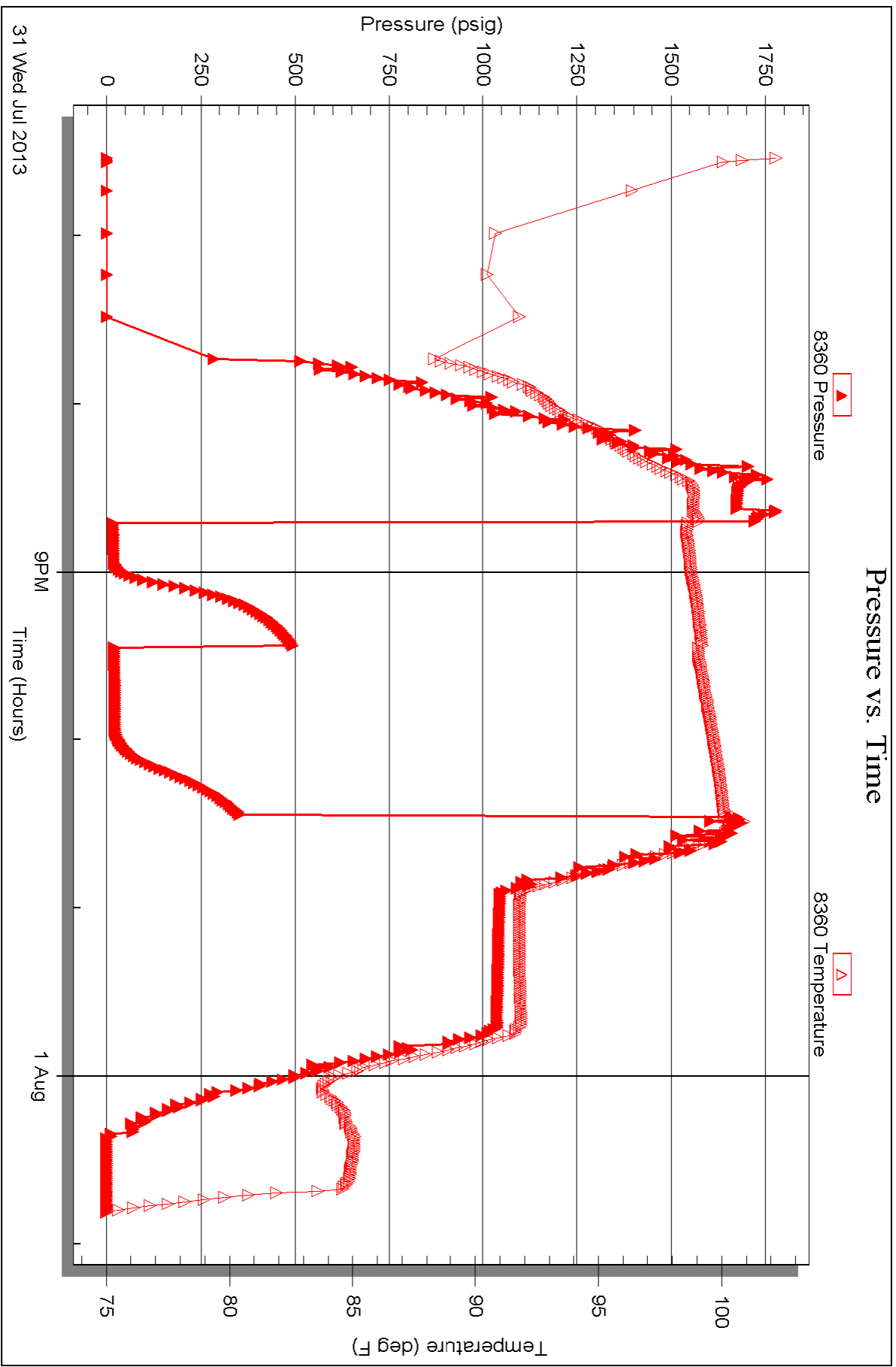


Serial #: 8360

Outside Norstar Petroleum, Inc.

Wilson #2-10

DST Test Number: 5





# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 52812

Well Name & No. Wilson #2-10 Test No. 1 Date 7/29/13  
 Company Norstar Petroleum, Inc. Elevation 2588 KB 2583 GL  
 Address 88 Inverness CIR E Unit F104 Englewood, CO 80112  
 Co. Rep / Geo. Tyler Sanders Rig WW #6  
 Location: Sec. 10 Twp. 2S Rge. 27W Co. Decatur State KS

Interval Tested 3327-3417 Zone Tested "Oread - Toronto"  
 Anchor Length 90' Drill Pipe Run 3209 Mud Wt. 9.0  
 Top Packer Depth 3323 Drill Collars Run 122 Vis 67  
 Bottom Packer Depth 3327 Wt. Pipe Run Ø WL 8.0  
 Total Depth 3417 Chlorides 400 ppm System LCM 4

Blow Description IF:  
ISI:  
FF: MIS-Run Packer Failure  
FSI:

Rec	Feet of	%gas	%oil	%water	%mud
<u>150</u>	<u>Mud</u>			<u>100</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 150 BHT N/A Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic  Test 950 T-On Location 19:45  
 (B) First Initial Flow  Jars 250 T-Started 23:47  
 (C) First Final Flow  Safety Joint 75 T-Open N/A  
 (D) Initial Shut-In  Circ Sub N/C T-Pulled N/A  
 (E) Second Initial Flow  Hourly Standby — T-Out 3:30  
 (F) Second Final Flow  Mileage 248 R/T 30rt 46.50 Comments projected time out- 20:30. Actual time out- 23:55  
 (G) Final Shut-In  Sampler — Lost Circ.  
 (H) Final Hydrostatic  Straddle —  Ruined Shale Packer —

Initial Open  Shale Packer 250  Ruined Packer —  
 Initial Shut-In  Extra Packer —  Extra Copies —  
 Final Flow  Extra Recorder — Sub Total 0  
 Final Shut-In  Day Standby — Total 1571.50  
 Accessibility — MP/DST Disc't —  
 Sub Total 1571.50

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

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# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 52813

Well Name & No. Wilson #2-10 Test No. 2 Date 7/30/13  
 Company Norstar Petroleum, Inc. Elevation 2588 KB 2583 GL  
 Address 88 Inverness CIR E Unit F104 Englewood, CO 80112  
 Co. Rep / Geo. Tyler Sanders Rig LW#6  
 Location: Sec. 10 Twp. 27S Rge 27W Co. Decatur State KS

Interval Tested 3336-3417 Zone Tested "Orend - Toronto"  
 Anchor Length 81 Drill Pipe Run 3211 Mud Wt. 9.0  
 Top Packer Depth 3332 Drill Collars Run 122 Vis 67  
 Bottom Packer Depth 3336 Wt. Pipe Run Ø WL 8.0  
 Total Depth 3417 Chlorides 400 ppm System LCM 4

Blow Description IF: 1/4" Blow.  
IST: No Return.  
FF: No Blow.  
FST: No Return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>Mud</u>			<u>100</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 5 BHT 99 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic	<u>1613</u>	<input checked="" type="checkbox"/> Test	<u>1150</u>	T-On Location	<u>19:45 7/29/13</u>
(B) First Initial Flow	<u>17</u>	<input checked="" type="checkbox"/> Jars	<u>250</u>	T-Started	<u>03:44 7/30/13</u>
(C) First Final Flow	<u>19</u>	<input checked="" type="checkbox"/> Safety Joint	<u>75</u>	T-Open	<u>05:15</u>
(D) Initial Shut-In	<u>685</u>	<input checked="" type="checkbox"/> Circ Sub	<u>N/C</u>	T-Pulled	<u>07:48</u>
(E) Second Initial Flow	<u>21</u>	<input type="checkbox"/> Hourly Standby		T-Out	<u>09:09</u>
(F) Second Final Flow	<u>25</u>	<input checked="" type="checkbox"/> Mileage	<u>248 R/T</u>	Comments	<u>Hotel, Motel, Holiday Inn</u>
(G) Final Shut-In	<u>829</u>	<input type="checkbox"/> Sampler			
(H) Final Hydrostatic	<u>1612</u>	<input type="checkbox"/> Straddle		<input type="checkbox"/> Ruined Shale Packer	

Initial Open	<u>15</u>	<input checked="" type="checkbox"/> Shale Packer	<u>250</u>	<input type="checkbox"/> Ruined Packer	
Initial Shut-In	<u>30</u>	<input type="checkbox"/> Extra Packer		<input type="checkbox"/> Extra Copies	
Final Flow	<u>45</u>	<input type="checkbox"/> Extra Recorder		Sub Total	<u>0</u>
Final Shut-In	<u>60</u>	<input type="checkbox"/> Day Standby		Total	<u>1725</u>
		<input type="checkbox"/> Accessibility		MP/DST Disc't	
		Sub Total	<u>1725</u>		

Approved By Tyler Sanders Our Representative [Signature]

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# TRIBOLITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 52814

4/10

Well Name & No. Wilson #2-10 Test No. 3 Date 7/30/13  
 Company Norstar Petroleum, Inc. Elevation 2588 KB 2583 GL  
 Address 88 Inverness CIR E Unit F104 Englewood, CO 80112  
 Co. Rep / Geo. Tyler Sanders Rig WW #6  
 Location: Sec. 10 Twp. 2S Rge. 27W Co. Decatur State KS

Interval Tested 3438-3486 Zone Tested Lansing "C"  
 Anchor Length 48' Drill Pipe Run 3308 Mud Wt. 8.8  
 Top Packer Depth 3434 Drill Collars Run 122 Vis 61  
 Bottom Packer Depth 3438 Wt. Pipe Run 0 WL 8.0  
 Total Depth 3486 Chlorides 800 ppm System LCM 10

Blow Description IF: 2 3/4" Blow.  
ISI: No Return.  
FF: 8" Blow  
FSI: No Return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>35'</u>	<u>WCM (oil sum on top)</u>		<u>20</u>	<u>80</u>	
<u>120</u>	<u>MCW (oil spots on top)</u>		<u>70</u>	<u>30</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 155 BHT 104 Gravity — API RW .092 @ 71 °F Chlorides 85,000 ppm

(A) Initial Hydrostatic	<u>1673</u>	<input checked="" type="checkbox"/> Test	<u>1150</u>	T-On Location	<u>16:45</u>
(B) First Initial Flow	<u>17</u>	<input checked="" type="checkbox"/> Jars	<u>250</u>	T-Started	<u>16:52</u>
(C) First Final Flow	<u>51</u>	<input checked="" type="checkbox"/> Safety Joint	<u>75</u>	T-Open	<u>18:33</u>
(D) Initial Shut-In	<u>980</u>	<input checked="" type="checkbox"/> Circ Sub	<u>N/C</u>	T-Pulled	<u>21:58</u>
(E) Second Initial Flow	<u>55</u>	<input type="checkbox"/> Hourly Standby		T-Out	<u>23:33</u>
(F) Second Final Flow	<u>103</u>	<input checked="" type="checkbox"/> Mileage	<u>248 R/T</u> 46.50	Comments	
(G) Final Shut-In	<u>962</u>	<input type="checkbox"/> Sampler			
(H) Final Hydrostatic	<u>1668</u>	<input type="checkbox"/> Straddle		<input type="checkbox"/> Ruined Shale Packer	

Initial Open	<u>15</u>	<input checked="" type="checkbox"/> Shale Packer	<u>250</u>	<input type="checkbox"/> Ruined Packer	
Initial Shut-In	<u>30</u>	<input type="checkbox"/> Extra Packer		<input type="checkbox"/> Extra Copies	
Final Flow	<u>60</u>	<input type="checkbox"/> Extra Recorder		Sub Total	<u>0</u>
Final Shut-In	<u>90</u>	<input type="checkbox"/> Day Standby		Total	<u>1771.50</u>
		<input type="checkbox"/> Accessibility		MP/DST Disc't	
		Sub Total	<u>1771.50</u>		

Approved By Tyler Sanders Our Representative

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# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 52815

4/10

Well Name & No. Wilson #2-10 Test No. 4 Date 7/31/13  
 Company Norstar Petroleum, Inc. Elevation 2584 KB 2583 Gl.  
 Address 88 Inverness CIR E Unit F104 Englewood, CO 80112  
 Co. Rep / Geo. Tyler Sanders Rig WW#6  
 Location: Sec. 10 Twp. 2S Rge. 27W Co. Decatur State KS

Interval Tested 3471 - 3520 Zone Tested Lansing "D"  
 Anchor Length 49' Drill Pipe Run 3336 Mud Wt. 9.1  
 Top Packer Depth 3467 Drill Collars Run 122 Vis 63  
 Bottom Packer Depth 3471 Wt. Pipe Run 0 WL 8.0  
 Total Depth 3520 Chlorides 000 ppm System LCM 4

Blow Description IF: 6 3/4" Blow.  
FSI: No Return.  
FF: 7 3/4" Blow.  
FSI: No Return

Rec	Feet of	%gas	%oil	%water	%mud
15	Clean oil	100			
60	OWCM	10	10	80	
120	OmCW	5	80	15	

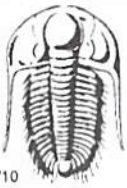
Rec Total 195 BHT 102 Gravity 34 API RW .063 @ 96 °F Chlorides 85,000 ppm

(A) Initial Hydrostatic <u>1706</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>5:50</u>
(B) First Initial Flow <u>34</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>6:14</u>
(C) First Final Flow <u>75</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>8:08</u>
(D) Initial Shut-In <u>239</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/C</u>	T-Pulled <u>11:26</u>
(E) Second Initial Flow <u>86</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>13:16</u>
(F) Second Final Flow <u>106</u>	<input checked="" type="checkbox"/> Mileage <u>248 R/H</u> 46.50	Comments <u>Gravity: 37 @ 90° = 34</u>
(G) Final Shut-In <u>184</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>1699</u>	<input type="checkbox"/> Straddle	

Initial Open <u>15</u>	<input checked="" type="checkbox"/> Shale Packer <u>250</u>	<input type="checkbox"/> Ruined Shale Packer
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Ruined Packer
Final Flow <u>60</u>	<input type="checkbox"/> Extra Recorder	<input type="checkbox"/> Extra Copies
Final Shut-In <u>90</u>	<input type="checkbox"/> Day Standby	Sub Total <u>0</u>
	<input type="checkbox"/> Accessibility	Total <u>1771.50</u>
	Sub Total <u>1771.50</u>	MP/IST Disc't

Approved By Tyler H. Sanders Our Representative [Signature]

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# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 53470

Well Name & No. Wilson # 2-10 Test No. 5 Date 7/31/13  
 Company Noistar Petroleum, Inc. Elevation 2586 KB 2583 GL  
 Address 48 Inverness CTR E Unit F 104 Englewood Co 80112  
 Co. Rep / Geo. Tyler Sanders Rig WW #6  
 Location: Sec. 10 Twp. 25 Rge. 27W Co. Decatur State K5

Interval Tested 3515-3550 Zone Tested LKC "E"  
 Anchor Length 35' Drill Pipe Run ~~3372~~ 3372' Mud Wt. 9.1  
 Top Packer Depth 3510 Drill Collars Run 122' Vis 63  
 Bottom Packer Depth 3515 Wt. Pipe Run 0' WL 8.0  
 Total Depth 3550 Chlorides 800 ppm System LCM 8

Blow Description IF - Surface blow  
ISI - No ~~return~~ return  
FF - No blow  
FSI - No return

Rec	Feet of	%gas	%oil	%water	%mud
<u>5'</u>	<u>Mud</u>			<u>100</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 5' BHT 100° Gravity — API RW — @ —° F Chlorides — ppm

(A) Initial Hydrostatic 1722  Test 1150 T-On Location 17:30  
 (B) First Initial Flow 15  Jars 250 T-Started 18:32  
 (C) First Final Flow 17  Safety Joint 75 T-Open 20:41  
 (D) Initial Shut-In 494  Circ Sub NC T-Pulled 22:26  
 (E) Second Initial Flow 18  Hourly Standby T-Out 00:49  
 (F) Second Final Flow 20  Mileage 30 RT X 2<sup>93</sup> Comments Loaded tabs @ 17:30 on 8/1/13  
 (G) Final Shut-In 353  Sampler  Ruined Shale Packer  
 (H) Final Hydrostatic 1681  Straddle  Ruined Packer

Initial Open 15  Shale Packer  Ruined Packer  
 Initial Shut-In 30  Extra Packer  Extra Copies  
 Final Flow 30  Extra Recorder Sub Total 0  
 Final Shut-In 30  Day Standby Total 1568  
 Accessibility MP/DST Disc't  
 Sub Total 1568

Approved By \_\_\_\_\_ Our Representative Tyler Sanders

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