



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1245667  
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: \_\_\_\_\_



1245667

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](mailto: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
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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:  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

<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"/> Commingled <i>(Submit ACO-4)</i>	<b>PRODUCTION INTERVAL:</b> _____ _____
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Form	ACO1 - Well Completion
Operator	Gore Oil Company
Well Name	Kingsley 5
Doc ID	1245667

Tops

Name	Top	Datum
Anhydrite	1460	+708
B/Anhydrite	1506	+662
Topeka	3181	-1013
Oread	3349	-1181
Heebner	3420	-1252
Toronto	3440	1272
Lansing	3458	-1290
BKC	3708	1540
Marmaton	3772	1604
Arbuckle	3830	1662
Reagan Sand	3842	1674



## DRILL STEM TEST REPORT

Prepared For: **Gore Oil Company**

PO Box 2757  
Wichita, KS 67202

ATTN: Chuck Schmultz

### **Kingsley #5**

#### **17-14s-20w Ellis,KS**

Start Date: 2014.10.24 @ 16:47:00

End Date: 2014.10.25 @ 02:52:30

Job Ticket #: 60716                      DST #: 1

Trilobite Testing, Inc  
1515 Commerce Parkway Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.10.31 @ 08:31:37



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Gore Oil Company

**17-14s-20w Ellis,KS**

PO Box 2757  
Wichita, KS 67202

**Kingsley #5**

Job Ticket: 60716

**DST#: 1**

ATTN: Chuck Schmultz

Test Start: 2014.10.24 @ 16:47:00

## GENERAL INFORMATION:

Formation: **Oread**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:28:30

Time Test Ended: 02:52:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Phillip Gage

Unit No: 70

**Interval: 3345.00 ft (KB) To 3430.00 ft (KB) (TVD)**

Reference Elevations: 2170.00 ft (KB)

Total Depth: 3430.00 ft (KB) (TVD)

2162.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 8700 Outside**

Press@RunDepth: 91.19 psig @ 3346.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.10.24

End Date:

2014.10.25

Last Calib.: 2014.10.25

Start Time: 16:47:05

End Time:

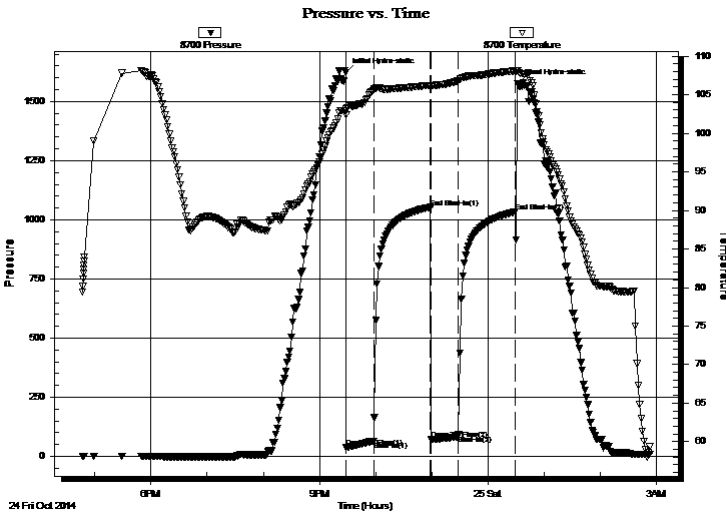
02:52:30

Time On Btm: 2014.10.24 @ 21:28:00

Time Off Btm: 2014.10.25 @ 00:31:30

**TEST COMMENT:** 30-IF-Built to 3 1/4"  
60-ISI-No Return  
30-FF-Built to 1 1/4"  
60-FSI-No Return

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1623.18	103.12	Initial Hydro-static
1	38.73	102.42	Open To Flow (1)
30	64.98	105.64	Shut-In(1)
90	1052.57	106.18	End Shut-In(1)
91	72.42	105.97	Open To Flow (2)
121	91.19	106.86	Shut-In(2)
181	1032.70	108.08	End Shut-In(2)
184	1574.28	108.16	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
141.00	M, w ith oil spots 100% m	0.88

## Gas Rates

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



# TRILOBITE TESTING, INC

## DRILL STEM TEST REPORT

Gore Oil Company

17-14s-20w Ellis,KS

PO Box 2757  
Wichita, KS 67202

**Kingsley #5**

Job Ticket: 60716

**DST#: 1**

ATTN: Chuck Schmultz

Test Start: 2014.10.24 @ 16:47:00

### GENERAL INFORMATION:

Formation: **Oread**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:28:30

Time Test Ended: 02:52:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Phillip Gage

Unit No: 70

Interval: **3345.00 ft (KB) To 3430.00 ft (KB) (TVD)**

Reference Elevations: 2170.00 ft (KB)

Total Depth: 3430.00 ft (KB) (TVD)

2162.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 8018**

**Inside**

Press@RunDepth: psig @ 3346.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.10.24

End Date:

2014.10.25

Last Calib.:

2014.10.25

Start Time: 16:47:05

End Time:

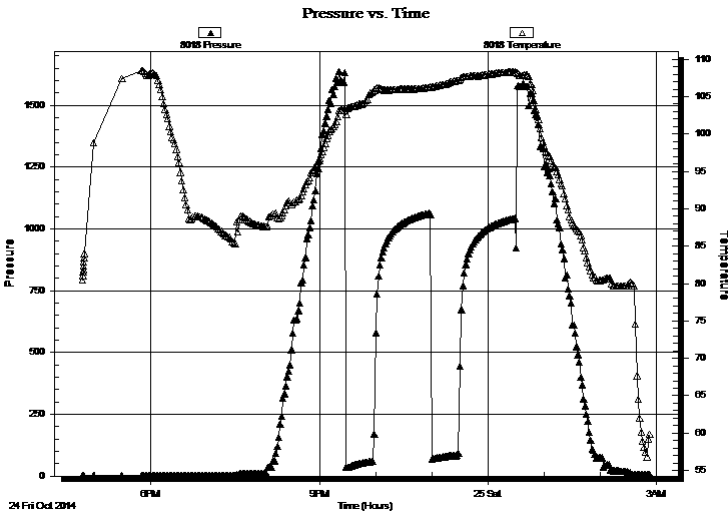
02:52:30

Time On Btm:

Time Off Btm:

TEST COMMENT: 30-IF-Built to 3 1/4"  
60-ISI-No Return  
30-FF-Built to 1 1/4"  
60-FSI-No Return

### PRESSURE SUMMARY



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

### Recovery

Length (ft)	Description	Volume (bbl)
141.00	M, w ith oil spots 100% m	0.88

### Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Gore Oil Company

**17-14s-20w Ellis,KS**

PO Box 2757  
Wichita, KS 67202

**Kingsley #5**

Job Ticket: 60716

**DST#: 1**

ATTN: Chuck Schmultz

Test Start: 2014.10.24 @ 16:47:00

## Tool Information

Drill Pipe:	Length: 3212.00 ft	Diameter: 3.80 inches	Volume: 45.06 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 45.65 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 46000.00 lb
Depth to Top Packer:	3345.00 ft			Final 49000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	85.00 ft			
Tool Length:	113.00 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			3318.00	
Shut In Tool	5.00			3323.00	
Hydraulic tool	5.00			3328.00	
Jars	5.00			3333.00	
Safety Joint	2.00			3335.00	
Packer	5.00			3340.00	28.00 Bottom Of Top Packer
Packer	5.00			3345.00	
Stubb	1.00			3346.00	
Recorder	0.00	8018	Inside	3346.00	
Recorder	0.00	8700	Outside	3346.00	
Perforations	16.00			3362.00	
Change Over Sub	1.00			3363.00	
Drill Pipe	63.00			3426.00	
Change Over Sub	1.00			3427.00	
Bullnose	3.00			3430.00	85.00 Bottom Packers & Anchor

**Total Tool Length: 113.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Gore Oil Company

**17-14s-20w Ellis,KS**

PO Box 2757  
Wichita, KS 67202

**Kingsley #5**

Job Ticket: 60716

**DST#: 1**

ATTN: Chuck Schmultz

Test Start: 2014.10.24 @ 16:47:00

## 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: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.67 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2500.00 ppm

Filter Cake: 2.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
141.00	M, w ith oil spots 100% m	0.885

Total Length: 141.00 ft      Total Volume: 0.885 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

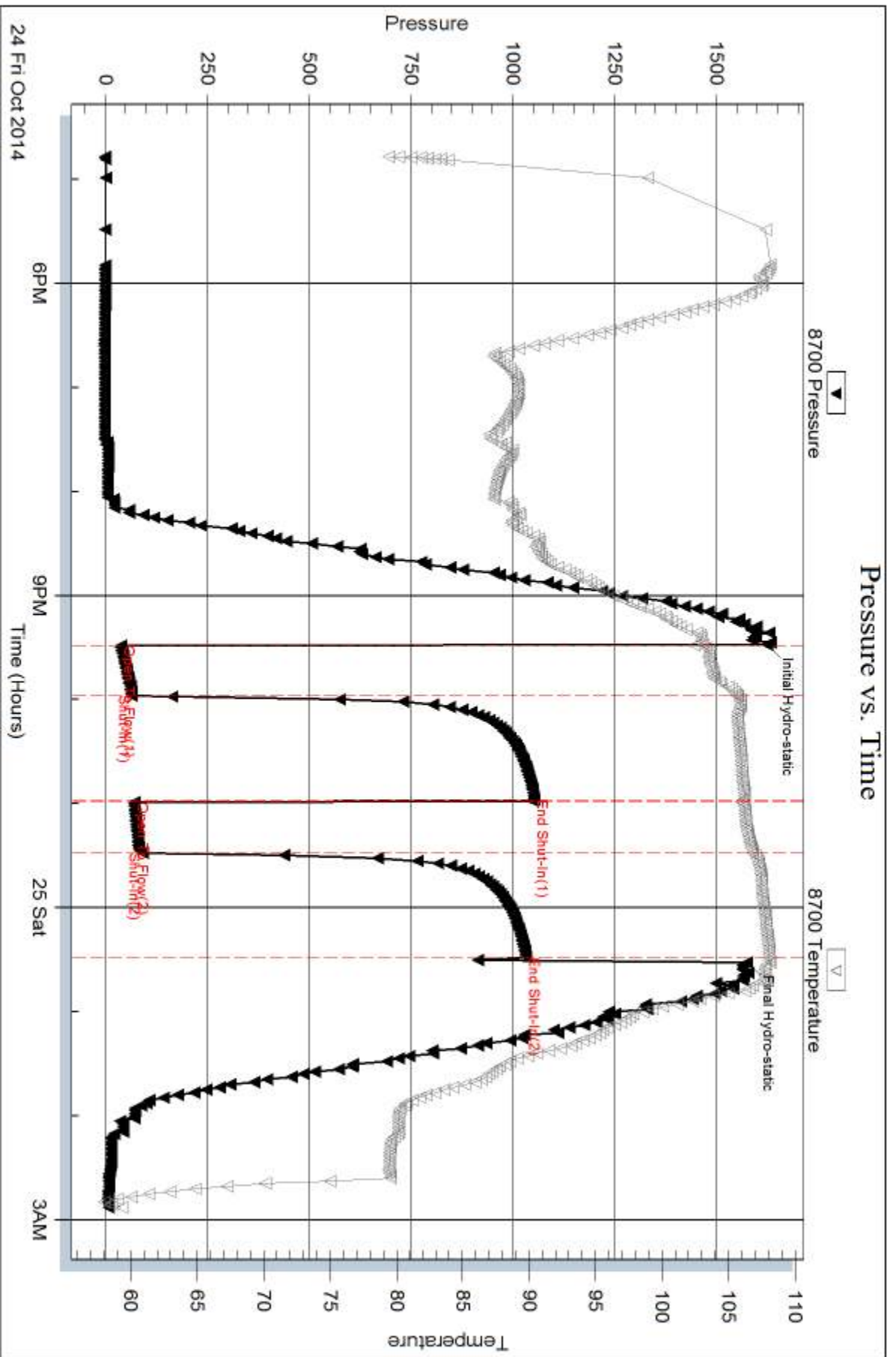
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





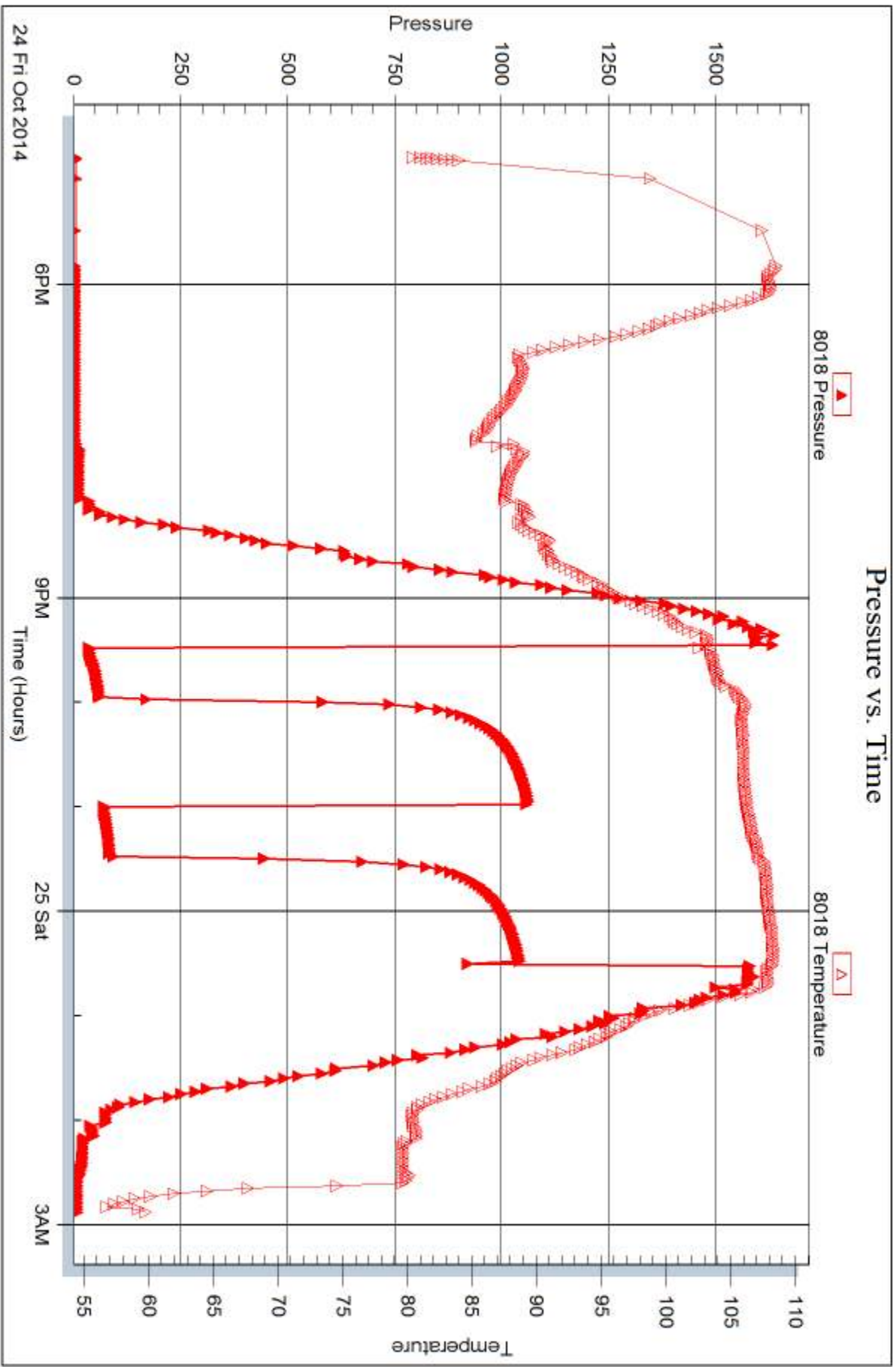
Serial #: 8018

Inside

Gore Oil Company

Kingsley #5

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 60716

Printed: 2014, 10, 31 @ 08:31:38



## DRILL STEM TEST REPORT

Prepared For: **Gore Oil Company**

PO Box 2757  
Wichita, KS 67202

ATTN: Chuck Schmultz

### **Kingsley #5**

#### **17-14s-20w Ellis,KS**

Start Date: 2014.10.25 @ 13:42:00

End Date: 2014.10.25 @ 23:31:00

Job Ticket #: 60717                      DST #: 2

Trilobite Testing, Inc  
1515 Commerce Parkway Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.10.31 @ 08:31:15



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Gore Oil Company

**17-14s-20w Ellis,KS**

PO Box 2757  
Wichita, KS 67202

**Kingsley #5**

Job Ticket: 60717

**DST#: 2**

ATTN: Chuck Schmultz

Test Start: 2014.10.25 @ 13:42:00

## GENERAL INFORMATION:

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

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:59:30

Time Test Ended: 23:31:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Phillip Gage

Unit No: 70

**Interval: 3447.00 ft (KB) To 3502.00 ft (KB) (TVD)**

Reference Elevations: 2170.00 ft (KB)

Total Depth: 3502.00 ft (KB) (TVD)

2162.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 8700**

**Outside**

Press@RunDepth: 536.70 psig @ 3448.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.10.25

End Date:

2014.10.25

Last Calib.:

2014.10.25

Start Time: 13:42:05

End Time:

23:31:00

Time On Btm:

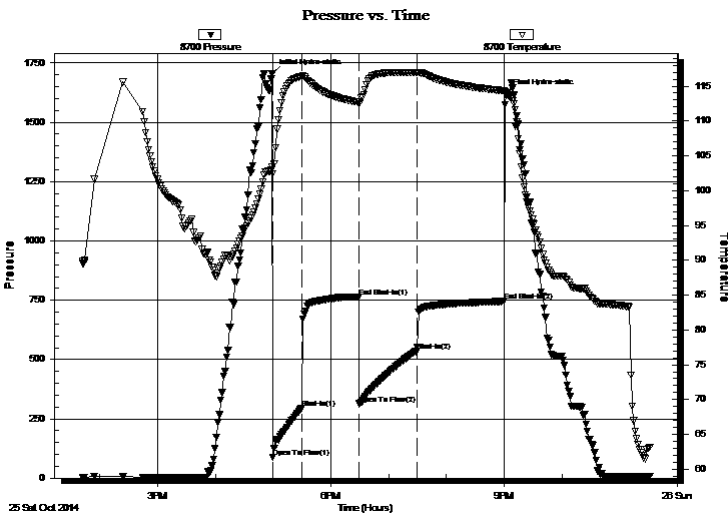
2014.10.25 @ 16:59:00

Time Off Btm:

2014.10.25 @ 21:01:30

**TEST COMMENT:** 30-IF-BOB in 5 mins.  
60-ISI-No Return  
60-FF-BOB in 7 mins.  
90-FSI-No Return

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1706.78	103.38	Initial Hydro-static
1	86.88	102.44	Open To Flow (1)
31	296.04	116.41	Shut-In(1)
90	764.88	112.68	End Shut-In(1)
91	313.53	112.51	Open To Flow (2)
150	536.70	116.95	Shut-In(2)
241	745.58	114.33	End Shut-In(2)
243	1623.11	114.00	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
819.00	SMCW, w ith oil spots, 10%m, 90%w	10.40
315.00	MCW, w ith oil spots, 30%m, 70%w	4.42

## Gas Rates

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

\* Recovery from multiple tests



TRILOBITE  
TESTING, INC.

# DRILL STEM TEST REPORT

Gore Oil Company

17-14s-20w Ellis,KS

PO Box 2757  
Wichita, KS 67202

Kingsley #5

Job Ticket: 60717

DST#: 2

ATTN: Chuck Schmultz

Test Start: 2014.10.25 @ 13:42:00

## GENERAL INFORMATION:

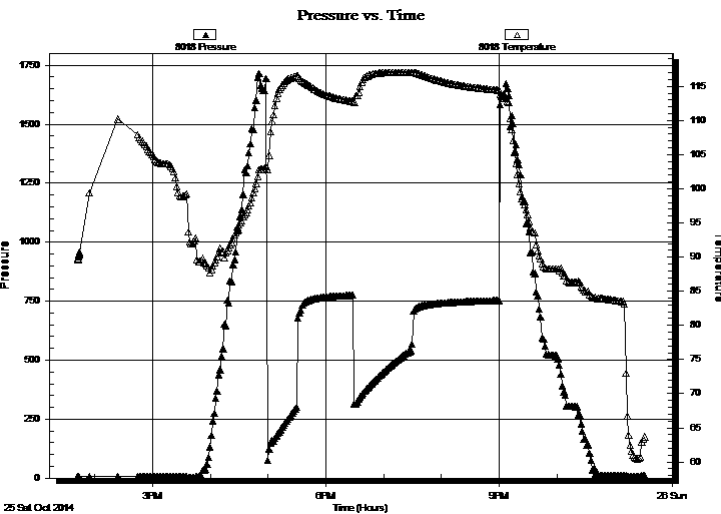
Formation: **LKC "A - C"**  
Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Reset)  
Time Tool Opened: 16:59:30 Tester: Phillip Gage  
Time Test Ended: 23:31:00 Unit No: 70  
Interval: **3447.00 ft (KB) To 3502.00 ft (KB) (TVD)** Reference Elevations: 2170.00 ft (KB)  
Total Depth: 3502.00 ft (KB) (TVD) 2162.00 ft (CF)  
Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 8.00 ft

## Serial #: 8018

Inside

Press@RunDepth: psig @ 3448.00 ft (KB) Capacity: 8000.00 psig  
Start Date: 2014.10.25 End Date: 2014.10.25 Last Calib.: 2014.10.25  
Start Time: 13:42:05 End Time: 23:31:00 Time On Btm:  
Time Off Btm:

TEST COMMENT: 30-IF-BOB in 5 mins.  
60-ISI-No Return  
60-FF-BOB in 7 mins.  
90-FSI-No Return



## PRESSURE SUMMARY

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

## Recovery

Length (ft)	Description	Volume (bbl)
819.00	SMCW, w ith oil spots, 10% m, 90% w	10.40
315.00	MCW, w ith oil spots, 30% m, 70% w	4.42

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Gore Oil Company

**17-14s-20w Ellis,KS**

PO Box 2757  
Wichita, KS 67202

**Kingsley #5**

Job Ticket: 60717

**DST#: 2**

ATTN: Chuck Schmultz

Test Start: 2014.10.25 @ 13:42:00

## Tool Information

Drill Pipe:	Length: 3305.00 ft	Diameter: 3.80 inches	Volume: 46.36 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 54000.00 lb
			<u>Total Volume: 46.95 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 45000.00 lb
Depth to Top Packer:	3447.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	55.00 ft			
Tool Length:	83.00 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			3420.00	
Shut In Tool	5.00			3425.00	
Hydraulic tool	5.00			3430.00	
Jars	5.00			3435.00	
Safety Joint	2.00			3437.00	
Packer	5.00			3442.00	28.00 Bottom Of Top Packer
Packer	5.00			3447.00	
Stubb	1.00			3448.00	
Recorder	0.00	8018	Inside	3448.00	
Recorder	0.00	8700	Outside	3448.00	
Perforations	18.00			3466.00	
Change Over Sub	1.00			3467.00	
Drill Pipe	31.00			3498.00	
Change Over Sub	1.00			3499.00	
Bullnose	3.00			3502.00	55.00 Bottom Packers & Anchor

**Total Tool Length: 83.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Gore Oil Company

**17-14s-20w Ellis,KS**

PO Box 2757  
Wichita, KS 67202

**Kingsley #5**

Job Ticket: 60717

**DST#: 2**

ATTN: Chuck Schmultz

Test Start: 2014.10.25 @ 13:42:00

### 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:

57000 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.18 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2500.00 ppm

Filter Cake: 2.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
819.00	SMCW, with oil spots, 10%m, 90%w	10.395
315.00	MCW, with oil spots, 30%m, 70%w	4.419

Total Length: 1134.00 ft      Total Volume: 14.814 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

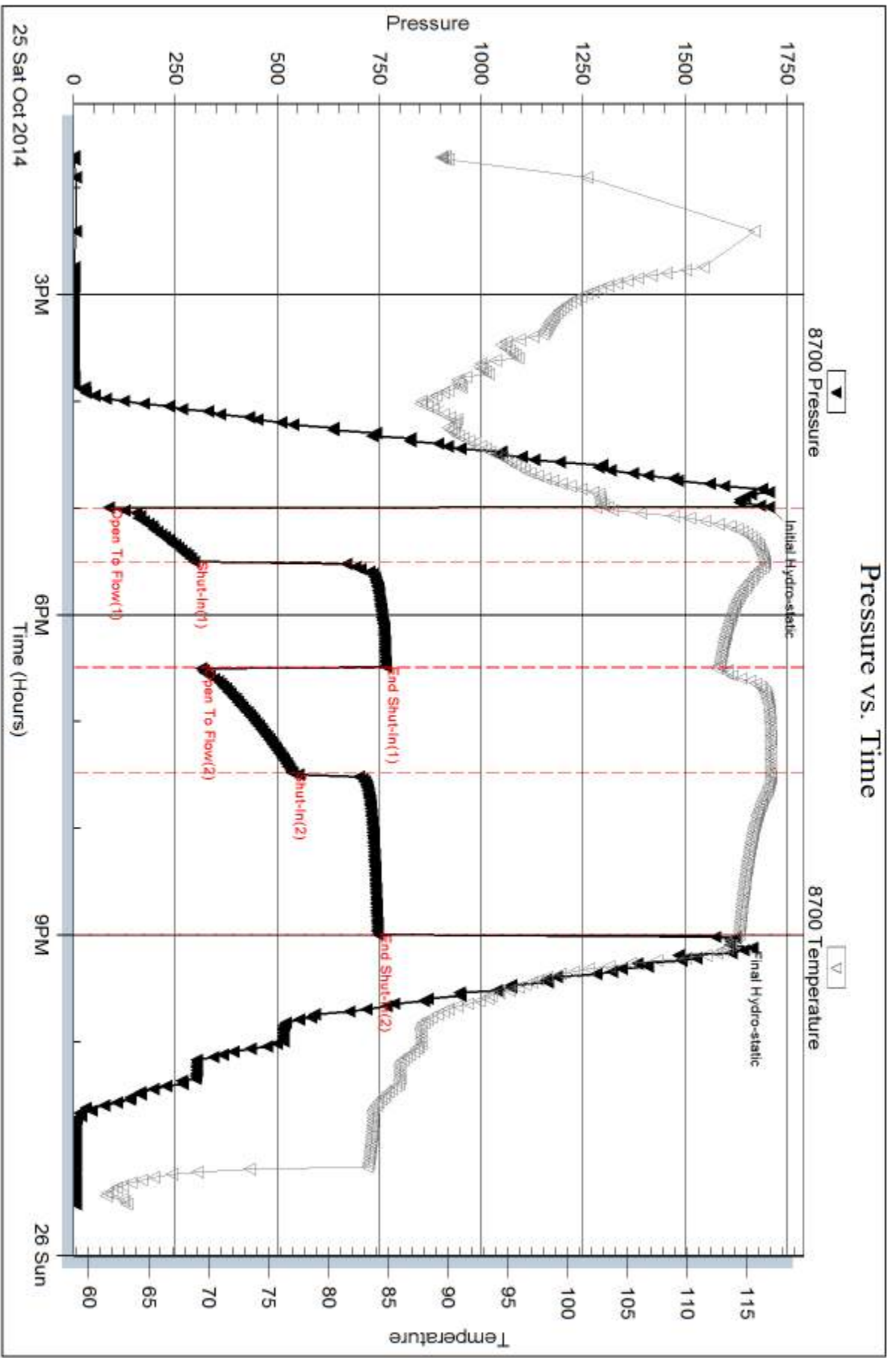
Recovery Comments: .17 @ 61 degrees = 57,000 Salinity

Serial #: 8700

Outside Gore Oil Company

Kingsley #5

DST Test Number: 2





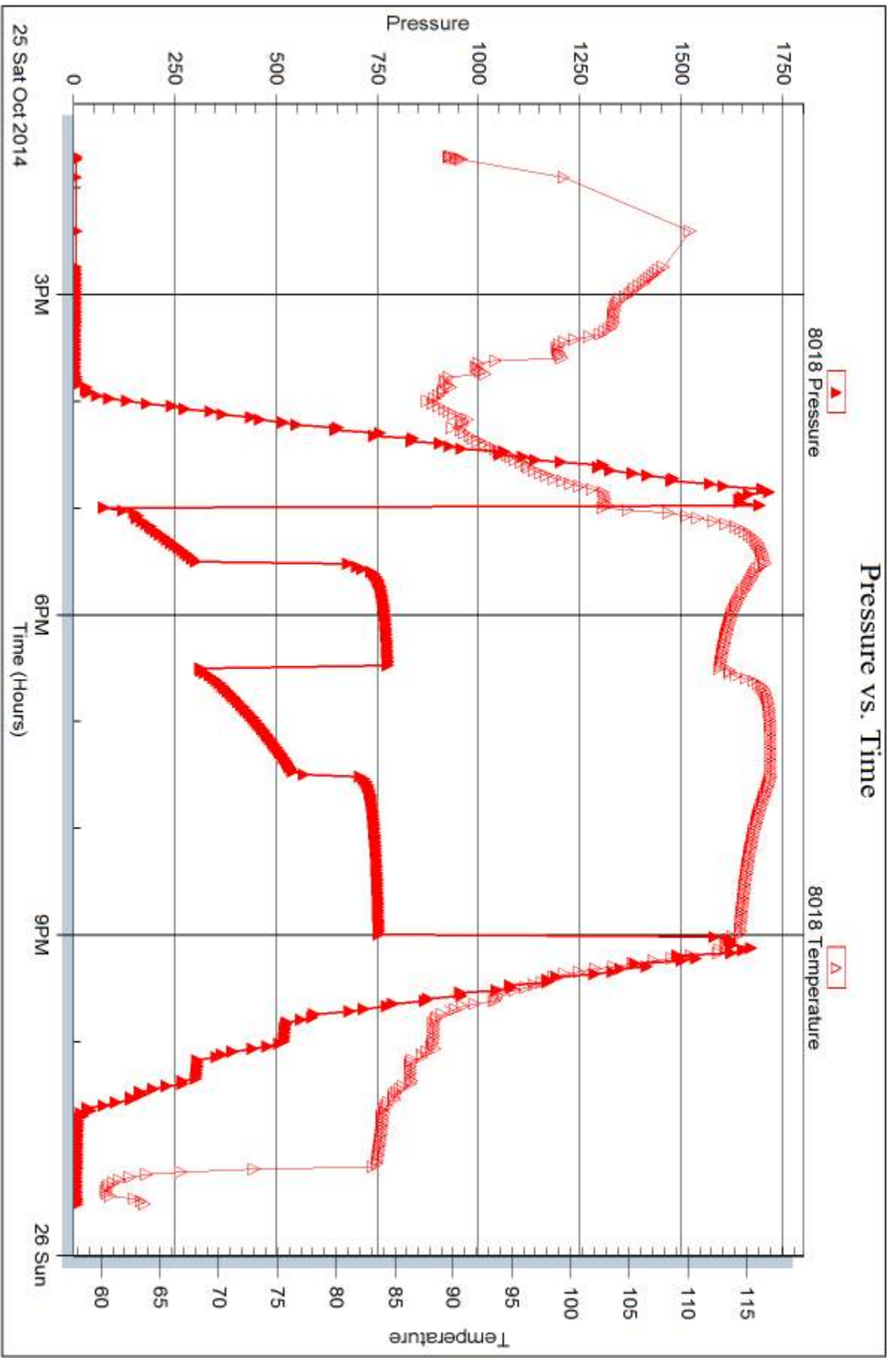
Serial #: 8018

Inside

Gore Oil Company

Kingsley #5

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 60717

Printed: 2014, 10, 31 @ 08:31:16



## DRILL STEM TEST REPORT

Prepared For: **Gore Oil Company**

PO Box 2757  
Wichita, KS 67202

ATTN: Chuck Schmultz

### **Kingsley #5**

#### **17-14s-20w Ellis,KS**

Start Date: 2014.10.26 @ 16:08:00

End Date: 2014.10.27 @ 02:19:00

Job Ticket #: 60718                      DST #: 3

Trilobite Testing, Inc  
1515 Commerce Parkway Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.10.31 @ 08:30:52



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Gore Oil Company

**17-14s-20w Ellis,KS**

PO Box 2757  
Wichita, KS 67202

**Kingsley #5**

Job Ticket: 60718

**DST#: 3**

ATTN: Chuck Schmultz

Test Start: 2014.10.26 @ 16:08:00

## GENERAL INFORMATION:

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

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:35:30

Time Test Ended: 02:19:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Phillip Gage

Unit No: 70

**Interval: 3575.00 ft (KB) To 3658.00 ft (KB) (TVD)**

Reference Elevations: 2170.00 ft (KB)

Total Depth: 3658.00 ft (KB) (TVD)

2162.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 8700 Outside**

Press@RunDepth: 37.97 psig @ 3576.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.10.26

End Date: 2014.10.27

Last Calib.: 2014.10.27

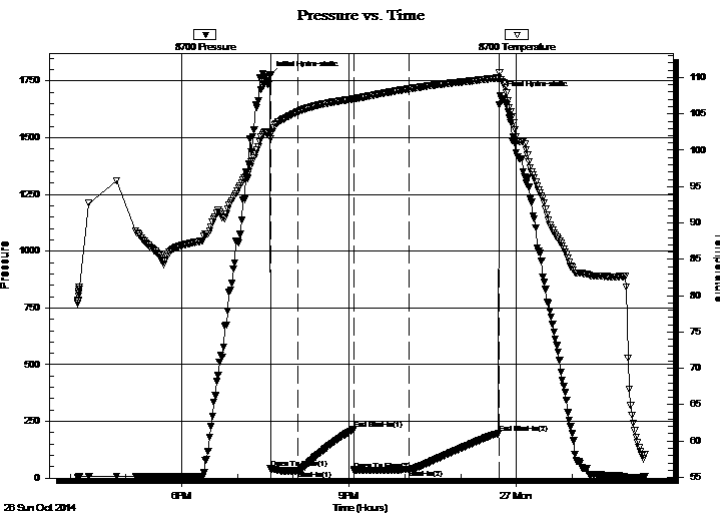
Start Time: 16:08:05

End Time: 02:19:00

Time On Btm: 2014.10.26 @ 19:35:00

Time Off Btm: 2014.10.26 @ 23:42:30

**TEST COMMENT:** 30-IF-Built to 6"  
60-ISI-No Return.  
60-FF-Built to 8"  
90-FSI-No Return.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1773.01	102.56	Initial Hydro-static
1	42.31	101.64	Open To Flow (1)
30	32.31	105.28	Shut-In(1)
90	214.94	107.07	End Shut-In(1)
91	34.98	107.03	Open To Flow (2)
150	37.97	108.45	Shut-In(2)
246	196.77	109.94	End Shut-In(2)
248	1685.53	110.67	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
20.00	M, w ith oil spots, 100%m	0.10
0.00	GIP-229'	0.00

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Gore Oil Company

**17-14s-20w Ellis,KS**

PO Box 2757  
Wichita, KS 67202

**Kingsley #5**

Job Ticket: 60718

**DST#: 3**

ATTN: Chuck Schmultz

Test Start: 2014.10.26 @ 16:08:00

## GENERAL INFORMATION:

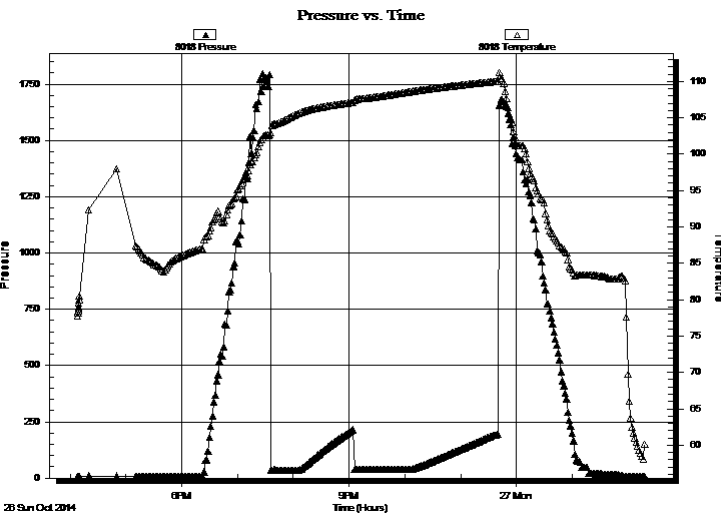
Formation: **LKC "H - J"**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 19:35:30  
 Time Test Ended: 02:19:00  
 Interval: **3575.00 ft (KB) To 3658.00 ft (KB) (TVD)**  
 Total Depth: 3658.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Phillip Gage  
 Unit No: 70  
 Reference Elevations: 2170.00 ft (KB)  
 2162.00 ft (CF)  
 KB to GR/CF: 8.00 ft

## Serial #: 8018

Inside

Press@RunDepth: psig @ 3576.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2014.10.26 End Date: 2014.10.27 Last Calib.: 2014.10.27  
 Start Time: 16:08:05 End Time: 02:19:00 Time On Btm:  
 Time Off Btm:

TEST COMMENT: 30-IF-Built to 6"  
 60-ISI-No Return.  
 60-FF-Built to 8"  
 90-FSI-No Return.



## PRESSURE SUMMARY

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

## Recovery

Length (ft)	Description	Volume (bbl)
20.00	M, with oil spots, 100% m	0.10
0.00	GIP-229'	0.00

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Gore Oil Company

**17-14s-20w Ellis,KS**

PO Box 2757  
Wichita, KS 67202

**Kingsley #5**

Job Ticket: 60718

**DST#: 3**

ATTN: Chuck Schmultz

Test Start: 2014.10.26 @ 16:08:00

## Tool Information

Drill Pipe:	Length: 3460.00 ft	Diameter: 3.80 inches	Volume: 48.53 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 54000.00 lb
			<u>Total Volume: 49.12 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	33.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3575.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	83.00 ft			
Tool Length:	111.00 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			3548.00	
Shut In Tool	5.00			3553.00	
Hydraulic tool	5.00			3558.00	
Jars	5.00			3563.00	
Safety Joint	2.00			3565.00	
Packer	5.00			3570.00	28.00 Bottom Of Top Packer
Packer	5.00			3575.00	
Stubb	1.00			3576.00	
Recorder	0.00	8018	Inside	3576.00	
Recorder	0.00	8700	Outside	3576.00	
Perforations	14.00			3590.00	
Change Over Sub	1.00			3591.00	
Drill Pipe	63.00			3654.00	
Change Over Sub	1.00			3655.00	
Bullnose	3.00			3658.00	83.00 Bottom Packers & Anchor

**Total Tool Length: 111.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Gore Oil Company

**17-14s-20w Ellis,KS**

PO Box 2757  
Wichita, KS 67202

**Kingsley #5**

Job Ticket: 60718

**DST#: 3**

ATTN: Chuck Schmultz

Test Start: 2014.10.26 @ 16:08:00

### Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 9.00 lb/gal  
Viscosity: 44.00 sec/qt  
Water Loss: 9.38 in<sup>3</sup>  
Resistivity: ohm.m  
Salinity: 3200.00 ppm  
Filter Cake: 1.50 inches

Cushion Type:  
Cushion Length: ft  
Cushion Volume: bbl  
Gas Cushion Type:  
Gas Cushion Pressure: psig

Oil API: deg API  
Water Salinity: ppm

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	M, with oil spots, 100%m	0.098
0.00	GIP-229'	0.000

Total Length: 20.00 ft      Total Volume: 0.098 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

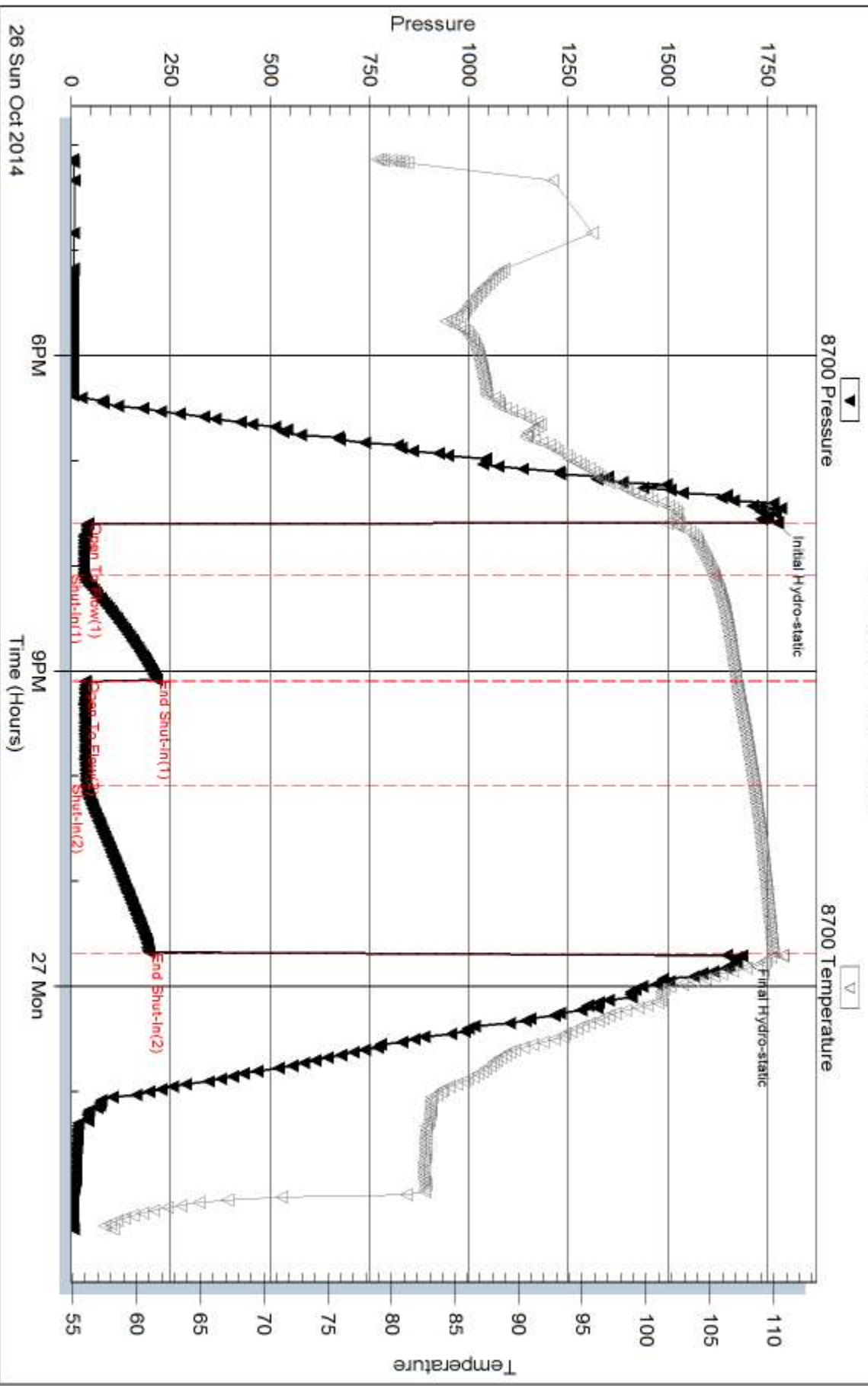
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time



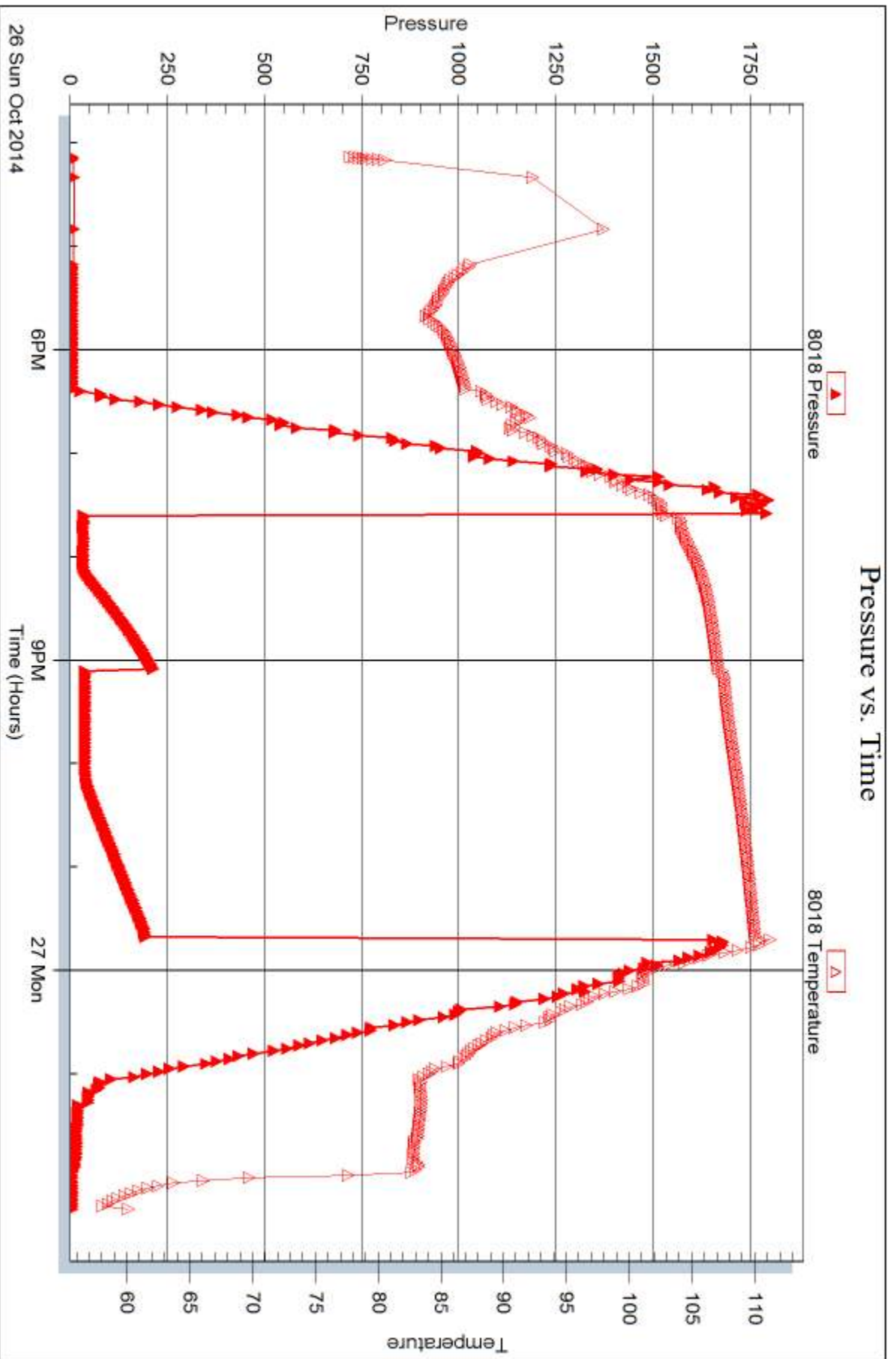
Serial #: 8018

Inside

Gore Oil Company

Kingsley #5

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 60718

Printed: 2014, 10, 31 @ 08:30:53





## DRILL STEM TEST REPORT

Prepared For: **Gore Oil Company**

PO Box 2757  
Wichita, KS 67202

ATTN: Chuck Schmultz

### **Kingsley #5**

#### **17-14s-20w Ellis,KS**

Start Date: 2014.10.27 @ 22:26:00

End Date: 2014.10.28 @ 07:20:30

Job Ticket #: 60719                      DST #: 4

Trilobite Testing, Inc  
1515 Commerce Parkway Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.10.31 @ 08:30:32



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Gore Oil Company

**17-14s-20w Ellis,KS**

PO Box 2757  
Wichita, KS 67202

**Kingsley #5**

Job Ticket: 60719

**DST#: 4**

ATTN: Chuck Schmultz

Test Start: 2014.10.27 @ 22:26:00

## GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:34:30

Time Test Ended: 07:20:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Phillip Gage

Unit No: 70

**Interval: 3807.00 ft (KB) To 3838.00 ft (KB) (TVD)**

Reference Elevations: 2170.00 ft (KB)

Total Depth: 3838.00 ft (KB) (TVD)

2162.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 8700 Outside**

Press@RunDepth: 25.78 psig @ 3808.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.10.27

End Date:

2014.10.28

Last Calib.: 2014.10.28

Start Time: 22:26:05

End Time:

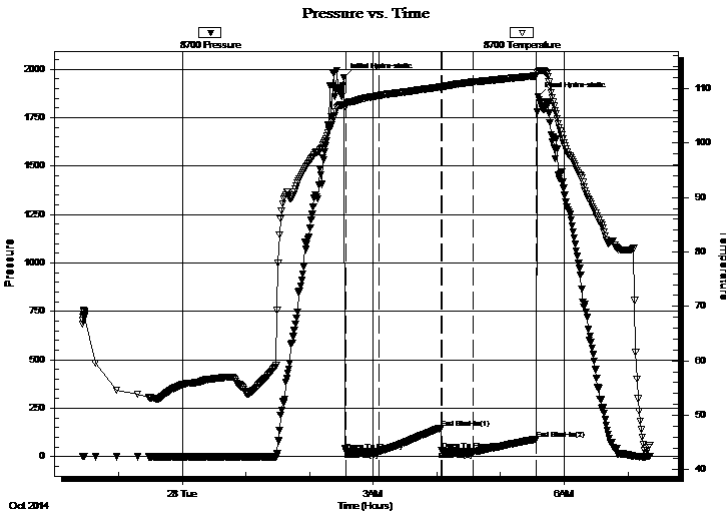
07:20:30

Time On Btm: 2014.10.28 @ 02:32:30

Time Off Btm: 2014.10.28 @ 05:35:30

TEST COMMENT: 30-IF-Built to 1"  
60-ISI-No Return  
30-FF-No Blow  
60-FSI-No Return

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1958.06	107.03	Initial Hydro-static
2	28.45	107.00	Open To Flow (1)
33	26.41	108.72	Shut-In(1)
91	148.12	110.30	End Shut-In(1)
92	30.44	110.30	Open To Flow (2)
122	25.78	111.22	Shut-In(2)
182	89.23	112.37	End Shut-In(2)
183	1860.82	113.13	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
10.00	SOCM, 10%o, 90%m	0.05
10.00	O, 100%o	0.05

\* Recovery from multiple tests

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Gore Oil Company

**17-14s-20w Ellis,KS**

PO Box 2757  
Wichita, KS 67202

**Kingsley #5**

Job Ticket: 60719

**DST#: 4**

ATTN: Chuck Schmultz

Test Start: 2014.10.27 @ 22:26:00

## Tool Information

Drill Pipe:	Length: 3679.00 ft	Diameter: 3.80 inches	Volume: 51.61 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 58000.00 lb
			<u>Total Volume: 52.20 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	3807.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	31.00 ft			
Tool Length:	59.00 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			3780.00	
Shut In Tool	5.00			3785.00	
Hydraulic tool	5.00			3790.00	
Jars	5.00			3795.00	
Safety Joint	2.00			3797.00	
Packer	5.00			3802.00	28.00 Bottom Of Top Packer
Packer	5.00			3807.00	
Stubb	1.00			3808.00	
Recorder	0.00	8018	Inside	3808.00	
Recorder	0.00	8700	Outside	3808.00	
Perforations	27.00			3835.00	
Bullnose	3.00			3838.00	31.00 Bottom Packers & Anchor

**Total Tool Length: 59.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Gore Oil Company

**17-14s-20w Ellis,KS**

PO Box 2757  
Wichita, KS 67202

**Kingsley #5**

Job Ticket: 60719

**DST#: 4**

ATTN: Chuck Schmultz

Test Start: 2014.10.27 @ 22:26:00

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

37 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

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

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3500.00 ppm

Filter Cake: 2.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
10.00	SOCM, 10%o, 90%m	0.049
10.00	O, 100%o	0.049

Total Length: 20.00 ft      Total Volume: 0.098 bbl

Num Fluid Samples: 0

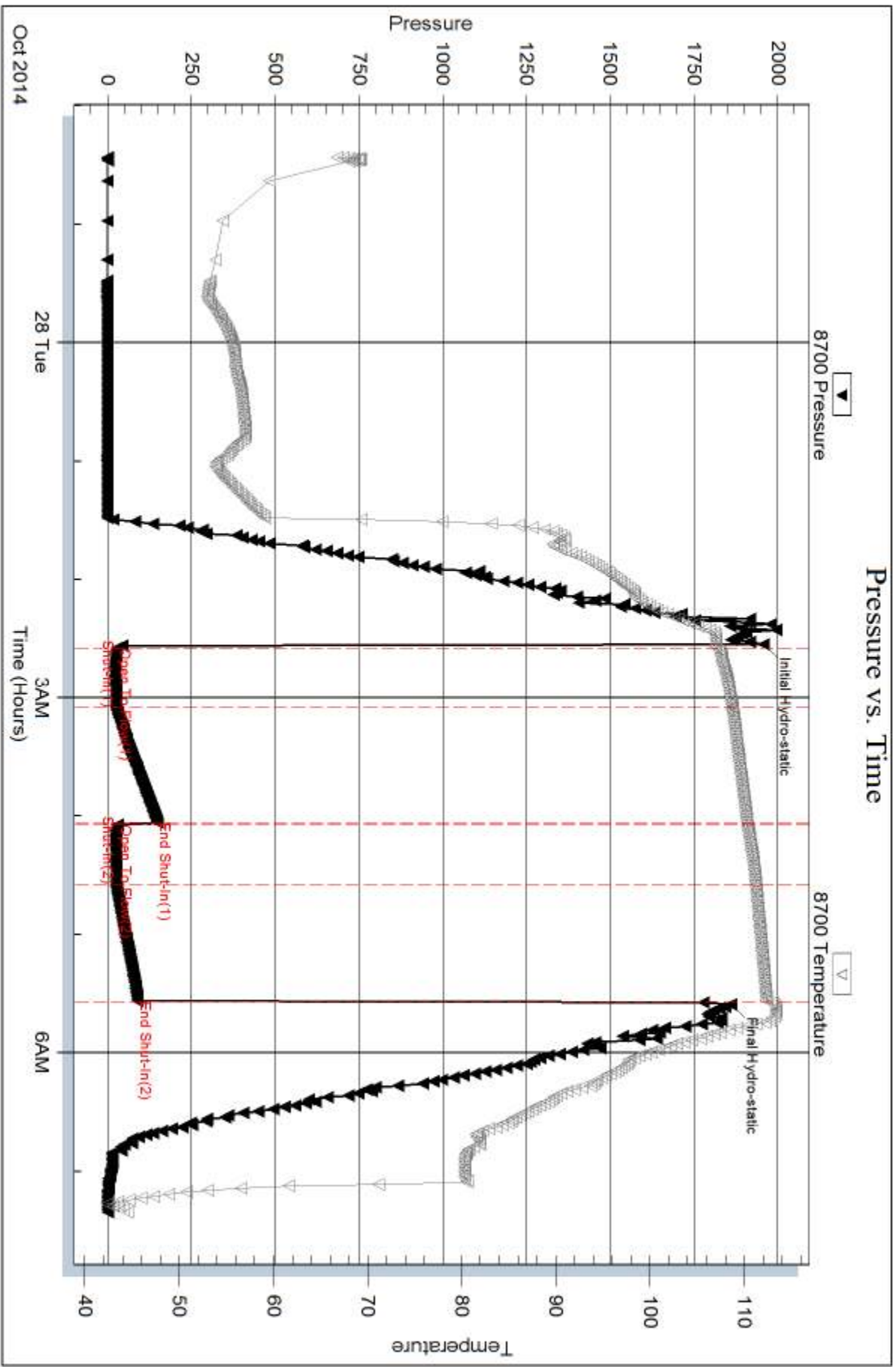
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



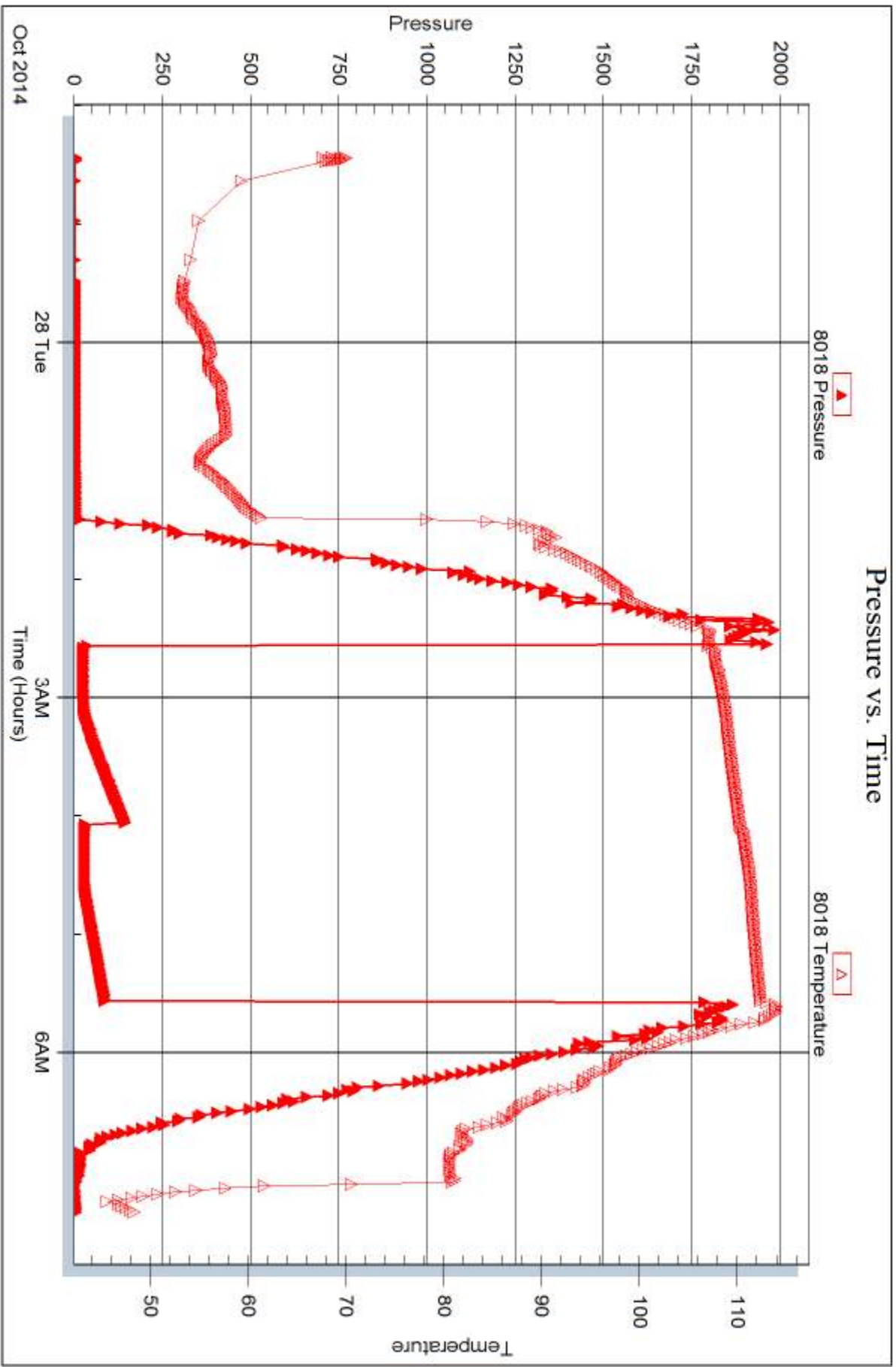
Serial #: 8018

Inside

Gore Oil Company

Kingsley #5

DST Test Number: 4



Trilobite Testing, Inc

Ref. No: 60719

Printed: 2014, 10, 31 @ 08:30:33



## DRILL STEM TEST REPORT

Prepared For: **Gore Oil Company**

PO Box 2757  
Wichita, KS 67202

ATTN: Chuck Schmultz

### **Kingsley #5**

#### **17-14s-20w Ellis,KS**

Start Date: 2014.10.28 @ 14:10:00

End Date: 2014.10.28 @ 21:53:00

Job Ticket #: 60720                      DST #: 5

Trilobite Testing, Inc  
1515 Commerce Parkway Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.10.31 @ 08:30:04





**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Gore Oil Company

**17-14s-20w Ellis,KS**

PO Box 2757  
Wichita, KS 67202

**Kingsley #5**

Job Ticket: 60720

**DST#: 5**

ATTN: Chuck Schmultz

Test Start: 2014.10.28 @ 14:10:00

## GENERAL INFORMATION:

Formation: **Reagan Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:53:30

Time Test Ended: 21:53:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Phillip Gage

Unit No: 70

**Interval: 3804.00 ft (KB) To 3846.00 ft (KB) (TVD)**

Reference Elevations: 2170.00 ft (KB)

Total Depth: 3846.00 ft (KB) (TVD)

2162.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 8700 Outside**

Press@RunDepth: 1165.42 psig @ 3805.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.10.28

End Date:

2014.10.28

Last Calib.:

2014.10.28

Start Time: 14:10:05

End Time:

21:52:59

Time On Btm:

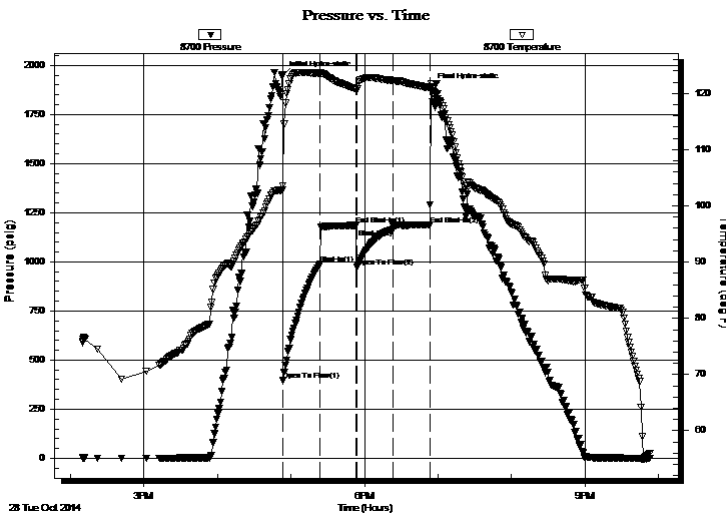
2014.10.28 @ 16:53:00

Time Off Btm:

2014.10.28 @ 18:54:00

TEST COMMENT: 30-IF-BOB in 1 min.  
30-ISI-No Return  
30-FF-BOB in 1 min.  
30-FSI-No Return

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1950.00	102.87	Initial Hydro-static
1	395.69	103.62	Open To Flow (1)
31	987.22	123.51	Shut-In(1)
60	1186.19	120.87	End Shut-In(1)
61	971.92	120.73	Open To Flow (2)
90	1165.42	122.26	Shut-In(2)
120	1187.68	120.96	End Shut-In(2)
121	1885.93	121.09	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
1638.00	SMCW, 10%m, 90%w	21.88
315.00	MCW, 20%m, 80%w	4.42
645.00	MCW, 50%m, 50%w	9.05

## Gas Rates

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

\* Recovery from multiple tests



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Gore Oil Company

17-14s-20w Ellis, KS

PO Box 2757  
Wichita, KS 67202

Kingsley #5

Job Ticket: 60720

DST#: 5

ATTN: Chuck Schmultz

Test Start: 2014.10.28 @ 14:10:00

## GENERAL INFORMATION:

Formation: **Reagan Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:53:30

Time Test Ended: 21:53:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Phillip Gage

Unit No: 70

Interval: **3804.00 ft (KB) To 3846.00 ft (KB) (TVD)**

Total Depth: 3846.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2170.00 ft (KB)

2162.00 ft (CF)

KB to GR/CF: 8.00 ft

**Serial #: 8018** Inside

Press@RunDepth: psig @ 3805.00 ft (KB)

Start Date: 2014.10.28

End Date: 2014.10.28

Start Time: 14:10:05

End Time: 21:52:59

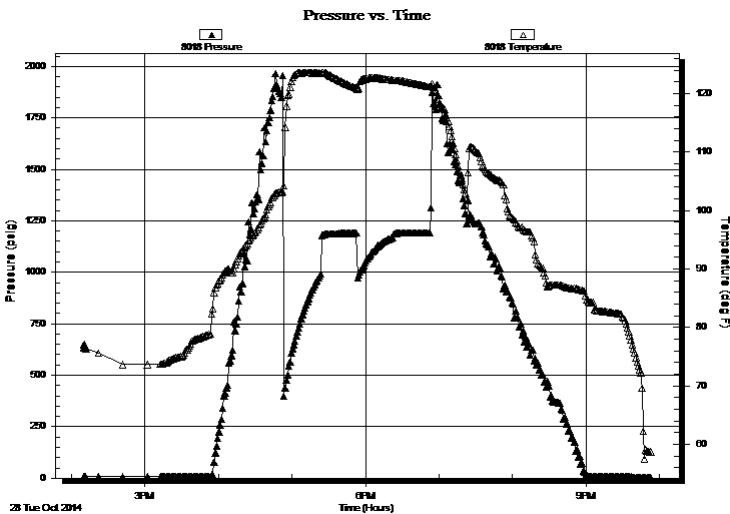
Capacity: 8000.00 psig

Last Calib.: 2014.10.28

Time On Btm:

Time Off Btm:

TEST COMMENT: 30-IF-BOB in 1 min.  
30-ISI-No Return  
30-FF-BOB in 1 min.  
30-FSI-No Return



## PRESSURE SUMMARY

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

## Recovery

Length (ft)	Description	Volume (bbl)
1638.00	SMCW, 10%m, 90%w	21.88
315.00	MCW, 20%m, 80%w	4.42
645.00	MCW, 50%m, 50%w	9.05

## Gas Rates

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

\* Recovery from multiple tests



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Gore Oil Company

**17-14s-20w Ellis,KS**

PO Box 2757  
Wichita, KS 67202

**Kingsley #5**

Job Ticket: 60720

**DST#: 5**

ATTN: Chuck Schmultz

Test Start: 2014.10.28 @ 14:10:00

## Tool Information

Drill Pipe:	Length: 3680.00 ft	Diameter: 3.80 inches	Volume: 51.62 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 62000.00 lb
			<u>Total Volume: 52.21 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3804.00 ft			Final 61000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	42.00 ft			
Tool Length:	70.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

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

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3777.00	
Shut In Tool	5.00			3782.00	
Hydraulic tool	5.00			3787.00	
Jars	5.00			3792.00	
Safety Joint	2.00			3794.00	
Packer	5.00			3799.00	28.00 Bottom Of Top Packer
Packer	5.00			3804.00	
Stubb	1.00			3805.00	
Recorder	0.00	8018	Inside	3805.00	
Recorder	0.00	8700	Outside	3805.00	
Perforations	5.00			3810.00	
Change Over Sub	1.00			3811.00	
Drill Pipe	31.00			3842.00	
Change Over Sub	1.00			3843.00	
Bullnose	3.00			3846.00	42.00 Bottom Packers & Anchor

**Total Tool Length: 70.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Gore Oil Company

**17-14s-20w Ellis,KS**

PO Box 2757  
Wichita, KS 67202

**Kingsley #5**

Job Ticket: 60720

**DST#: 5**

ATTN: Chuck Schmultz

Test Start: 2014.10.28 @ 14:10:00

## 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:

71000 ppm

Viscosity: 48.00 sec/qt

Cushion Volume:

bbbl

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

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 1.50 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1638.00	SMCW, 10%m, 90%w	21.884
315.00	MCW, 20%m, 80%w	4.419
645.00	MCW, 50%m, 50%w	9.048

Total Length: 2598.00 ft      Total Volume: 35.351 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

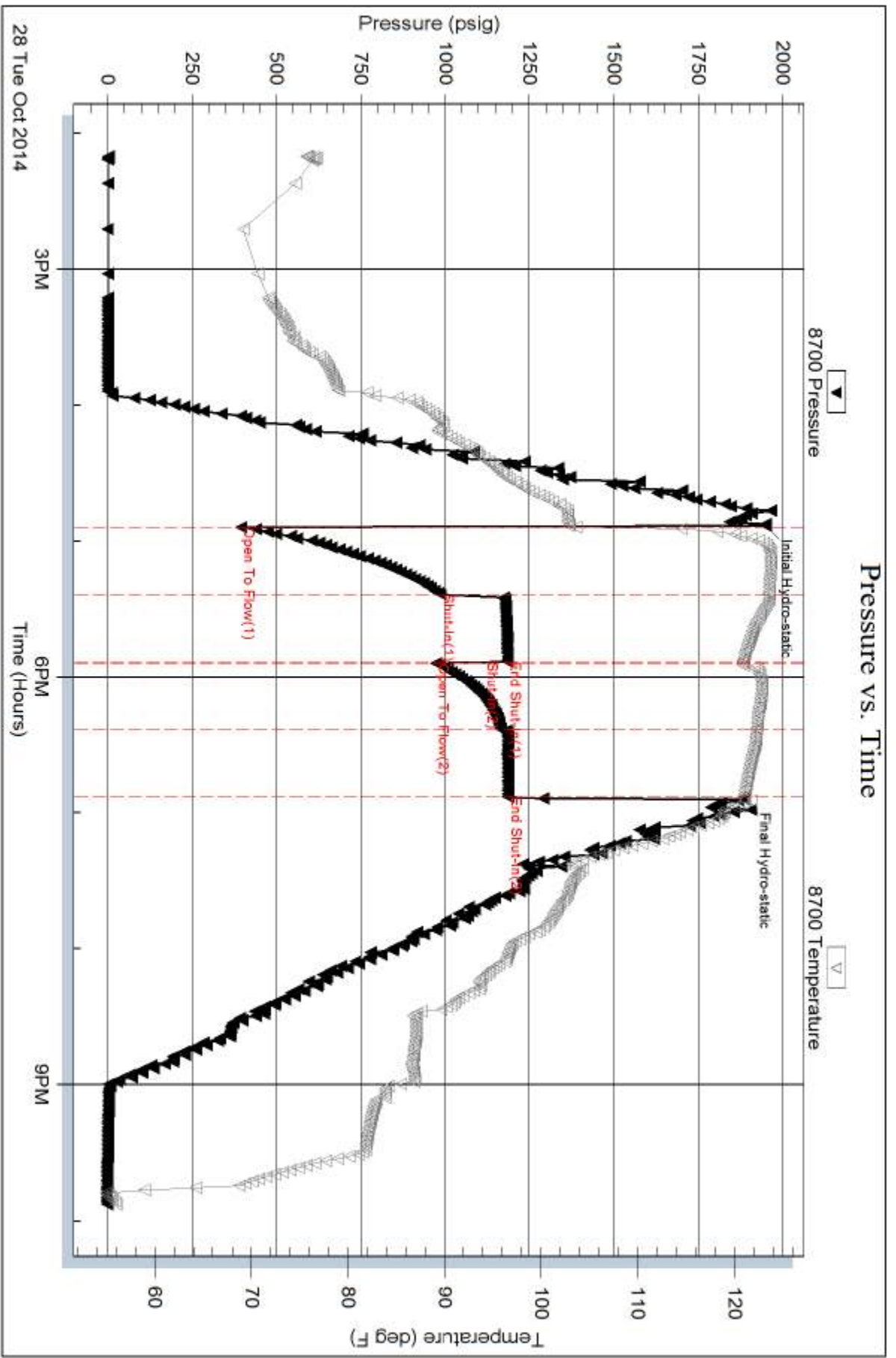
Recovery Comments: .28 @ 41 degrees = 71,000 Salinity

Serial #: 8700

Outside Gore Oil Company

Kingsley #5

DST Test Number: 5



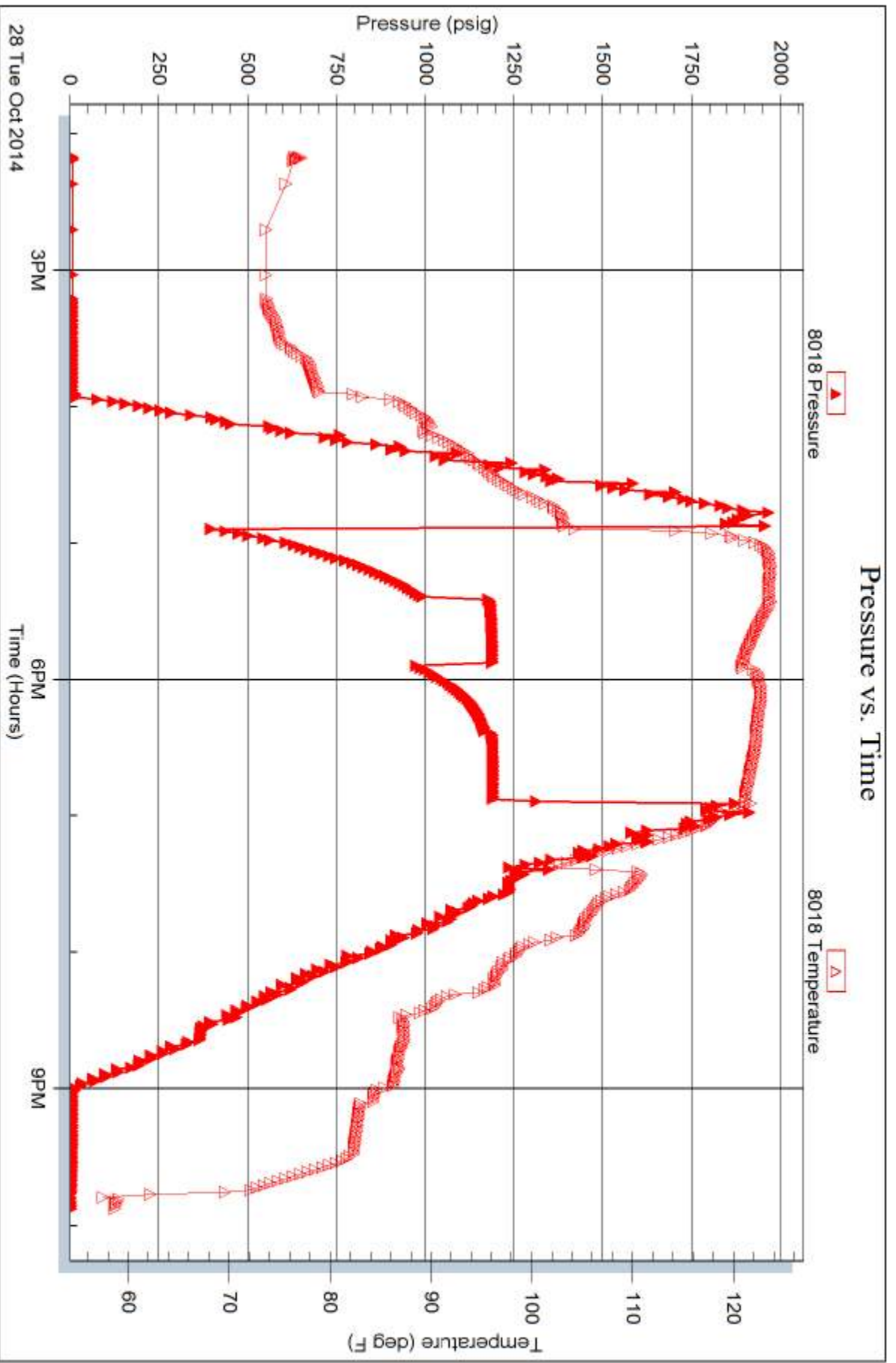
Serial #: 8018

Inside

Gore Oil Company

Kingsley #5

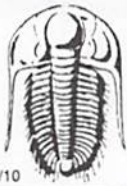
DST Test Number: 5



Trilobite Testing, Inc

Ref. No: 60720

Printed: 2014, 10, 31 @ 08:30:05



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. **60716**

4/10

Well Name & No. Kingsley #5 Test No. 1 Date 10-24-14  
 Company Gore Oil Company Elevation 2170 KB 2162 GL  
 Address 202 S St Francis P.O. Box 2757 Wichita, KS 67202  
 Co. Rep / Geo. Chuck Schmutz Rig Maverick 102  
 Location: Sec. 17 Twp. 14g Rge. 20w Co. Ellis State KS

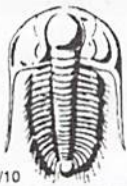
Interval Tested 3345-3430 Zone Tested Oread  
 Anchor Length 85' Drill Pipe Run 3212 Mud Wt. 8.7  
 Top Packer Depth 3340 Drill Collars Run 120 Vis 50  
 Bottom Packer Depth 3345 Wt. Pipe Run 0 WL 9.7  
 Total Depth 3430 Chlorides 2,500 ppm System LCM 2#  
 Blow Description IF Built to 3 1/4"  
ISI - No Return  
FF Built to 1 1/4"  
FSE - No Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>141'</u>	<u>M, with oil spots</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 141' BHT 108 Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic <u>1,623</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>16:40</u>
(B) First Initial Flow <u>38</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>16:47</u>
(C) First Final Flow <u>64</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>21:28</u>
(D) Initial Shut-In <u>1,052</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>00:28</u>
(E) Second Initial Flow <u>72</u>	<input checked="" type="checkbox"/> Hourly Standby <u>1h 100</u>	T-Out <u>02:52</u>
(F) Second Final Flow <u>91</u>	<input checked="" type="checkbox"/> Mileage <u>52 RT 80.60</u>	Comments _____
(G) Final Shut-In <u>1,032</u>	<input type="checkbox"/> Sampler _____	
(H) Final Hydrostatic <u>1,574</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Shale Packer _____
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Ruined Packer _____
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Extra Copies _____
Final Flow <u>30</u>	<input type="checkbox"/> Extra Recorder _____	Sub Total <u>0</u>
Final Shut-In <u>60</u>	<input type="checkbox"/> Day Standby _____	Total <u>1655.60</u>
	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____
	Sub Total <u>1655.60</u>	

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



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. **60717**

4/10

Well Name & No. Kingsley #5 Test No. 2 Date 10-25-14  
 Company Cove Oil Company Elevation 2170 KB 2162 GL  
 Address 202 S St Francis P.O. Box 2757 Wichita, KS 67202  
 Co. Rep / Geo. Chuck Schmultz Rig Maverick 10'2  
 Location: Sec. 17 Twp. 14S Rge. 20W Co. Ellis State KS

Interval Tested 3447-3502 Zone Tested Lansing "A-B-C"  
 Anchor Length 55' Drill Pipe Run 3305 Mud Wt. 8.7  
 Top Packer Depth 3447 Drill Collars Run 120 Vis 50  
 Bottom Packer Depth 3447 Wt. Pipe Run 0 WL 9.2  
 Total Depth 3502 Chlorides 2,500 ppm System LCM 2#

Blow Description IF BOBIN 5mhs  
EST No Return  
FF BOBIN 7mhs  
FST - No Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>819'</u>	<u>SMCW, with oil spots</u>			<u>90</u>	<u>10</u>
<u>315'</u>	<u>MCW, with oil spots</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 1,134 BHT 114 Gravity — API RW 17 @ 61 °F Chlorides 53,000 ppm

(A) Initial Hydrostatic <u>1706</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>13:41</u>
(B) First Initial Flow <u>86</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>13:42</u>
(C) First Final Flow <u>296</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>17:00</u>
(D) Initial Shut-In <u>764</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>21:00</u>
(E) Second Initial Flow <u>313</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>23:33</u>
(F) Second Final Flow <u>536</u>	<input checked="" type="checkbox"/> Mileage <u>52 RT</u> 80.60	Comments
(G) Final Shut-In <u>745</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>1,623</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer

Initial Open 30  
 Initial Shut-In 60  
 Final Flow 60  
 Final Shut-In 90

Sub Total 1555.60 Total 1555.60 MP/DST Disc't

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





# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. **60718**

4/10

Well Name & No. Kingsley #5 Test No. 3 Date 10-26-14  
 Company Cave Oil Company Elevation 2170 KB 2162 GL  
 Address 202 S St Francis P.O. Box 2757 Wichita, KS 67202  
 Co. Rep / Geo. Chuck Schmeltz Rig Maverick 102  
 Location: Sec. 17 Twp. 14S Rge. 20W Co. ELLIS State KS

Interval Tested 3575-3658 Zone Tested LKC "H-I-J"  
 Anchor Length 83' Drill Pipe Run 3460 Mud Wt. 9.2  
 Top Packer Depth 3570 Drill Collars Run 120 Vis 44  
 Bottom Packer Depth 3575 Wt. Pipe Run 0 WL 9.4  
 Total Depth 3658 Chlorides 3,200 ppm System LCM 1 1/2 #  
 Blow Description IF- Built to 6"  
ISI- No Return  
FF- Built to 8"  
FSI- No Return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>20'</u>	<u>M, with oil spots</u>				<u>100</u>
<u>0</u>	<u>GIP-229"</u>	<u>100</u>			

Rec Total 20' BHT 110 Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ ° F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic <u>1,773</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>16:05</u>
(B) First Initial Flow <u>42</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>16:08</u>
(C) First Final Flow <u>32</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>19:35</u>
(D) Initial Shut-In <u>214</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>23:35</u>
(E) Second Initial Flow <u>34</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>02:19</u>
(F) Second Final Flow <u>37</u>	<input checked="" type="checkbox"/> Mileage <u>52 RT</u> 80.60	Comments _____
(G) Final Shut-In <u>196</u>	<input type="checkbox"/> Sampler _____	
(H) Final Hydrostatic <u>1,685</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Shale Packer _____
	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Ruined Packer _____
Initial Open <u>30</u>	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Extra Copies _____
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Recorder _____	Sub Total <u>0</u>
Final Flow <u>60</u>	<input type="checkbox"/> Day Standby _____	Total <u>1555.60</u>
Final Shut-In <u>90</u>	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____
	Sub Total <u>1555.60</u>	

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



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 60719

4/10

Well Name & No. Kingsley #5 Test No. 4 Date 10-27-14  
 Company Gore Oil Company Elevation 2170 KB 2162 GL  
 Address 202 S St Francis P.O. Box 2757 Wichita, KS 67202  
 Co. Rep / Geo. Chuck Schmutz Rig Mareack 102  
 Location: Sec. 17 Twp. 14S Rge. 20W Co. Ellis State KS

Interval Tested 3807-3838 Zone Tested ~~Wagon Wheel~~ Arbuckle  
 Anchor Length 31' Drill Pipe Run 3679 Mud Wt. 9.1  
 Top Packer Depth 3802 Drill Collars Run 120 Vis 54  
 Bottom Packer Depth 3807 Wt. Pipe Run 0 WL 9.2  
 Total Depth 3838 Chlorides 3,500 ppm System LCM 2#  
 Blow Description IF Built to 1"  
ISF No Return  
FF- No Blow  
FSE No Return

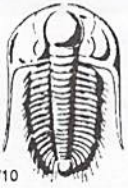
Rec	Feet of	%gas	%oil	%water	%mud
<u>10'</u>	<u>50CM</u>		<u>10</u>		<u>90</u>
<u>10'</u>	<u>0</u>		<u>100</u>		
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 20' BHT 113 Gravity 37 API RW — F Chlorides — ppm

(A) Initial Hydrostatic <u>1,958</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>22:25</u>
(B) First Initial Flow <u>28</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>22:26</u>
(C) First Final Flow <u>26</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>02:34</u>
(D) Initial Shut-In <u>148</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>05:34</u>
(E) Second Initial Flow <u>30</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>07:21</u>
(F) Second Final Flow <u>25</u>	<input checked="" type="checkbox"/> Mileage <u>57 RT</u> 80.60	Comments
(G) Final Shut-In <u>89</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>1,860</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Final Flow <u>30</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Final Shut-In <u>60</u>	<input type="checkbox"/> Day Standby	Total <u>1555.60</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1555.60</u>	

Approved By \_\_\_\_\_ Our Representative Phillip Long Thank You

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# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. **60720**

4/10

Well Name & No. Kingsley #5 Test No. 5 Date 10-28-14  
 Company Core Oil Company Elevation 2170 KB 2162 GL  
 Address 202 S St Francis P.O. Box 2757 Wichita, KS 67202  
 Co. Rep / Geo. Chuck Schmutz Rig Maverick 102  
 Location: Sec. 17 Twp. 14S Rge. 20W Co. Ellis State KS

Interval Tested 3804-3846 Zone Tested Reagan Sand  
 Anchor Length 42' Drill Pipe Run 368 Mud Wt. 9.2  
 Top Packer Depth 3799 Drill Collars Run 120 Vis 48  
 Bottom Packer Depth 3804 Wt. Pipe Run 0 WL 9.2  
 Total Depth 3846 Chlorides 5,000 ppm System LCM 1 1/2#  
 Blow Description IF- BOB in 1 min.  
ISI- No Return  
FF- BOB in 1 min.  
FSI- No Return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>1638'</u>	<u>SNCW</u>		<u>90</u>	<u>10</u>	
<u>3151'</u>	<u>MCW</u>		<u>80</u>	<u>20</u>	
<u>645'</u>	<u>MCW</u>		<u>50</u>	<u>50</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total ~~2598~~ 2598 BHT 123 Gravity — API RW +28 @ 41 °F Chlorides 7,000 ppm  
 (A) Initial Hydrostatic 1950  Test 1150 T-On Location 14.08  
 (B) First Initial Flow 395'  Jars 250 T-Started 14.10  
 (C) First Final Flow 987  Safety Joint 75 T-Open 16.54  
 (D) Initial Shut-In 1,186  Circ Sub \_\_\_\_\_ T-Pulled 18.54  
 (E) Second Initial Flow 971  Hourly Standby \_\_\_\_\_ T-Out 21.54  
 (F) Second Final Flow 1,165  Mileage 52 RT x 2 Comments Loaded Tools  
 (G) Final Shut-In 1,187  Sampler \_\_\_\_\_ 80.60+80.60 on 10-29-14 at 10:30am  
 (H) Final Hydrostatic 1,885  Straddle \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_  
 Day Standby \_\_\_\_\_  
 Accessibility \_\_\_\_\_

Initial Open 30  
 Initial Shut-In 01030  
 Final Flow 30  
 Final Shut-In 30  
 Sub Total 0  
 Total 1636.20  
 MP/DST Disc't \_\_\_\_\_  
 Sub Total 1636.20

Approved By \_\_\_\_\_ Our Representative Philip Lee Ray Hank Lee  
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# CHARLES SCHMALTZ

CONSULTING GEOLOGIST  
WICHITA, KANSAS

## GEOLOGIC REPORT LOG

COMPANY GORE OIL Co

WELL KINGSLEY #5

FIELD SRRING BROOK

LOCATION 2150' FSL - 1100' FEL

SEC 17 TWP 14S RGE 20W

COUNTY ELLIS

STATE KANSAS

MUD COMPANY ANDY'S MUD CO.

CONTRACTOR MAVERICK DRLG CO. RIG#102

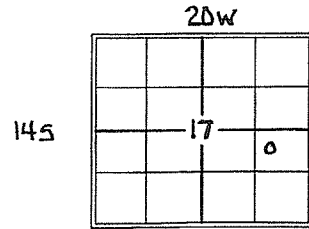
COMMENCED 7 Oct 2014 COMPLETED 29 Oct 2014

CASING RECORD:

SURFACE 8 5/8 @ 263' PRODUCTION NA

TOTAL DEPTH DRLS. 3900

TOTAL DEPTH LOG 3902



PRODUCTION: \_\_\_\_\_

ELEVATION: KB 2168

DF \_\_\_\_\_

CL 2162

KB \_\_\_\_\_

DRILLING MEASURED FROM KB

SAMPLES SAVED FROM 10' - 3000 TO RTD

DRILLING TIME KEPT FROM 1' - 3000 TO RTD

SAMPLES EXAMINED FROM 3000 TO RTD

GEOLOGICAL SUPERVISION FROM 2940 TO TOTAL DEPTH

DRILL STEM TESTS TRILOBITE TESTING CO.

ELECTRICAL SURVEYS PIONEER ENERGY SERVICES

DIL \_\_\_\_\_

CN-CD \_\_\_\_\_

MEI \_\_\_\_\_

### FORMATION TOPS & STRUCTURAL POSITION

FORMATION	SAMPLE TOP	ELECTRIC LOG TOP	SUB-SEA DATUM	STRUCTURAL POSITION
ANHYDRITE - TOP	NA	1460	+708	
ANHYDRITE - BASE	1508	1506	+662	
TOREKA	3180	3181	-1013	
OREAD	3349	3349	-1181	
HEEBNER	3420	3420	-1252	
TORONTO	3438	3440	-1272	
LANSING	3459	3458	-1290	
BKC	3709	3708	-1540	
MARMATON	3772	3772	-1604	
ARBUCKLE	3831	3830	-1662	
REAGAN SD	3842	3842	-1674	
TOTAL DEPTH	3900	3902	-1734	

REFERENCE WELL FOR STRUCTURE \_\_\_\_\_

### DRILL STEM TESTS

No.	Interval	IFP/Time	ISIP/Time	FFP/Time	FSIP/Time	IHH-FHH	RECOVERY
1	3345 - 3430 OREAD	38 <sup>#</sup> -64 <sup>#</sup> 30"	1052 <sup>#</sup> 60"	72 <sup>#</sup> -91 <sup>#</sup> 30"	1032 <sup>#</sup> 60"	1623 <sup>#</sup> 1574 <sup>#</sup> 108°F	140' MUD w/ OIL SPOTS
2	3447 - 3502 LANS 'A-C'	86 <sup>#</sup> -296 <sup>#</sup> 30"	764 <sup>#</sup> 60"	313 <sup>#</sup> -536 <sup>#</sup> 60"	745 <sup>#</sup> 90"	1706 <sup>#</sup> 1623 <sup>#</sup> 114°F	315' MCW w/ OIL SPOTS 819' SMCW w/ OIL SPOTS
3	3575 - 3658 LANS 'H-J'	42 <sup>#</sup> -32 <sup>#</sup> 30"	214 <sup>#</sup> 60"	34 <sup>#</sup> -37 <sup>#</sup> 60"	196 <sup>#</sup> 90"	1773 <sup>#</sup> 1685 <sup>#</sup> 110°F	229' GIP 20' MUD w/ OIL SPOTS
4	3807 - 3838	28 <sup>#</sup> -26 <sup>#</sup> 30"	148 <sup>#</sup> 60"	30 <sup>#</sup> -25 <sup>#</sup> 30"	89 <sup>#</sup> 60"	1958 <sup>#</sup> 1860 <sup>#</sup> 113°F	10' CO - GR 37° 10' SDCM
5	3804 - 3846	395 <sup>#</sup> -987 <sup>#</sup> 30"	1186 <sup>#</sup> 30"	971 <sup>#</sup> -1165 <sup>#</sup> 30"	1187 <sup>#</sup> 30"	1950 <sup>#</sup> 1885 <sup>#</sup> 123°F	645' MW 315' MCW 1638' SMCW

### BIT RECORD

NO	SIZE	MAKE	TYPE	DEPTH OUT	FEET	HOURS
1	12 1/4	JZ	RR	266	266	5
2	7 7/8	JZ	ENPD123	3900	3634	89

### PIPE STRAPS & DEV. SURVEYS

DEVIATION SURVEYS:

@ 266' - 1/2°

@ 2478' - 3/4°

@ 3480' - 3/4°

PIPE STRAP:

@ 3430' - 0.24 SHDRT

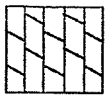
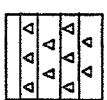
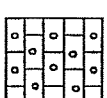
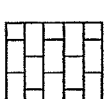



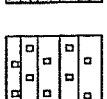
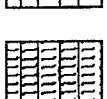
### DAILY PENETRATION

DATE	DEPTH
10-7	MIRT
10-8/10-10	DOWN
10-11	186'
10-12	636'
10-13/10-14	DOWN
10-15	1425'
10-16	2155'
10-17/10-21	DOWN
10-22	2308'
10-23	2644'
10-24	3280'
10-25	3490'
10-26	3552'
10-27	3658'

### MUD RECORD

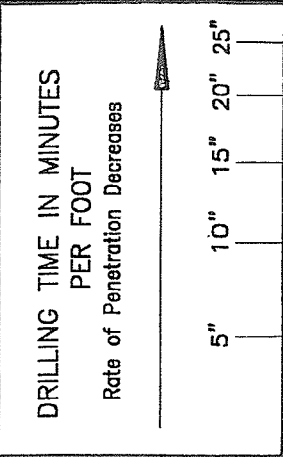
MUD TYPE:		PUMP SIZE:				BPS:					
NO	DATE	DEPTH	ACTIVITY	WT	VIS	TL	VP	PH	CS	LCM	CHL
3	10-23	2840	DRLG	8.7	51	8.4	15	11.5	1 1/2/23	3 <sup>#</sup>	2500
4	10-24	3430	DRLG	8.7	50	9.2	12	10.5	10/20	2 <sup>#</sup>	2500
5	10-25	3502	DST <sup>#</sup> 2	9.3	49	8.8	14	10.0	10/20	2 <sup>#</sup>	3000
6	10-26	3608	DRLG	9.2	44	9.4	5	9.5	8/16	1.5 <sup>#</sup>	3200
7	10-27	3705	DRLG	9.1	54	9.2	19	10.0	13/23	2 <sup>#</sup>	3500
8	10-28	3843	CFS	9.2	48	9.2	21	9.0	12/23	1.5 <sup>#</sup>	5000

### LEGEND

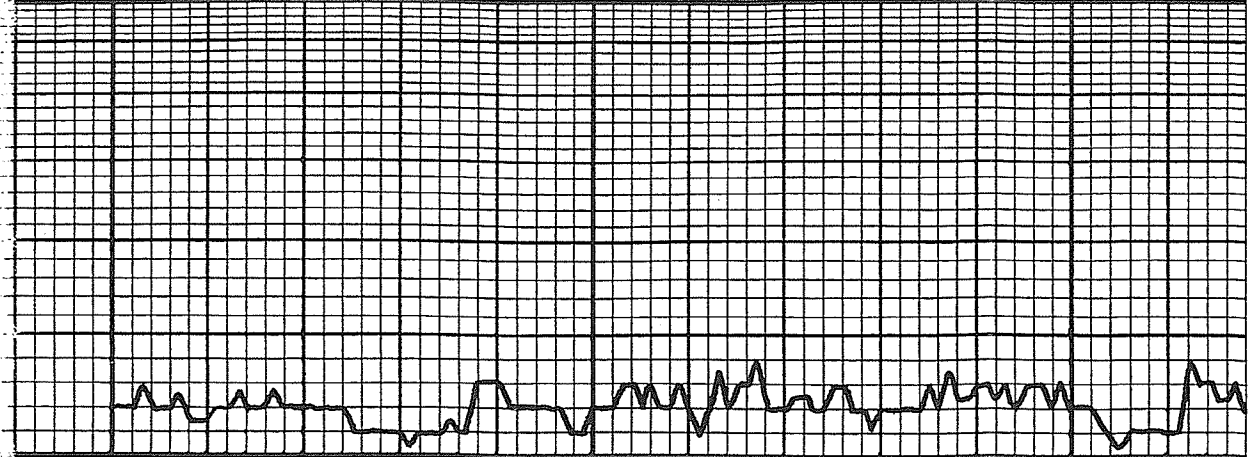
-  Dolomite
-  Chert
-  Col. Lime
-  Limestone
-  Carb sh
-  Shale
-  Sandstone
-  Salt
-  Anhydrite

LEGEND

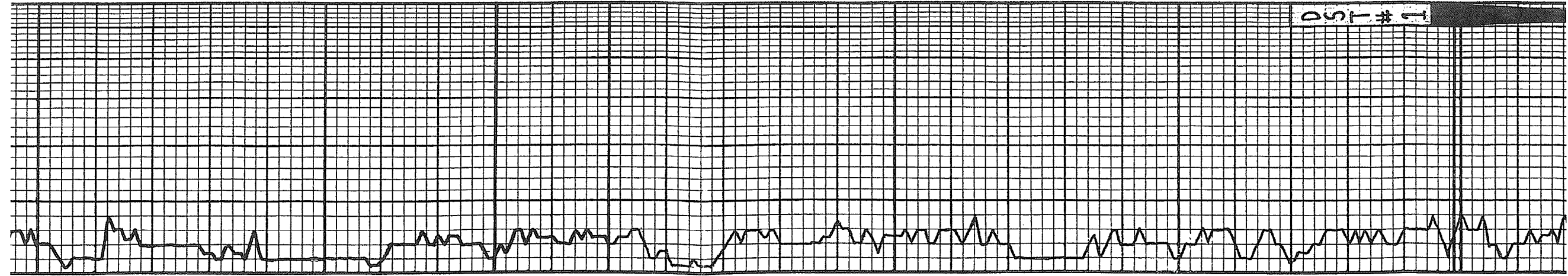
	Anhydrite		Salt		Sandstone		Shale		Carb sh		Limestone		Ool.Lime		Chert		Dolomite
--	-----------	--	------	--	-----------	--	-------	--	---------	--	-----------	--	----------	--	-------	--	----------



DEPTH	LITHOLOGY	SAMPLE DESCRIPTIONS	OIL SHOWS	REMARKS
1450				
60				
70				
80				
90				
1500				
10				ANHYDRITE - BASE
20				1508
30				(+1660)



3000		ls: tan, fn-med xtn, granular, calcatic in part, pr inter-xtn $\phi$ ; ls: grey dolomite in part, shaley, no vis $\phi$ , no show		
10		ls: as above w/ ls: grey, tan, fn-med xtn, mottled, sl. dolomite w/ inter-beaded grey shale; no show		
20		ls: tan, grey-brown, fn-med xtn, no vis $\phi$ , no show; w/ sh: grey, sn: lt. grey silty, micaceous; no show		
30		sh: grey, lt. grey, silty, micaceous in part		
40		sh: green, calc.; ls: brown, grey, brown, fn-med xtn, sl. foss, no vis $\phi$ , no show		
3050		ls: as above w/ sect ls: brown, vfn xtn dense; sh: grey		
60		ls: brown, grey, vfn-fn xtn, dense w/ some med xtn, sl. foss, mottled in part, no vis $\phi$ , no show		
70		ls: brown, grey, fn-med xtn, sl. foss, no vis $\phi$ , no show		
80		ls: brown, dk brown, grey, dk grey, vfn-some med xtn, mottled in part, vsl foss, no vis $\phi$ , no show		
90		ls: tan, brown, grey, micro xtn, dense; some fn-med xtn, foss in part (fusulinids); no vis $\phi$ , no show		
3100		sh: lt. grey, vsl silty, micaceous; few ps green sh.		
10		ls: tan, brown, grey, fn-med xtn, sl. foss, mottled in part; fr glauconitic, no calc. fr. sh.		



D S T # 1

3100		Some fr.-meactin, foss in part (lusinides), no vis $\emptyset$ , no show
10		sh: lt. grey, v sil; silty, micaceous; few pcs green sh.
20		ls: tan, brown, grey, fr.-med xtn, sil foss, mottled in part, tr glauconitic, no vis $\emptyset$ , no show.
30		ls: as above w/ few pcs tan fr.-med xtn calcitic no vis $\emptyset$ no show
40		ls: as above w/ ls: tan, frxtln, chalky w/ sh: lt. grey, grey, sil micaceous, dolomitic in part; no vis $\emptyset$ , no show
3150		sh: lt. grey, grey sil silty dolomitic in part
60		sh: as above w/ sh: arex dk arex silty in part scat ls inclusions
70		ls: tan, grey, fr.-med xtn, detrital, mottled, sil foss, no vis $\emptyset$ , no show
80		ls: as above; w/ sh: grey, grey, green
90		ls: tan, fr.-med xtn, sil calcitic, sil foss, no vis $\emptyset$ , no show
3200		ls: as above, w/ ls: brown, grey, dk grey, fr.-med xtn, sil foss, dense
10		ls: as above w/ few pcs grey, sil calc sh.
20		ls: off wh, tan, lt. brown, fr.-med xtn, granular, v sil sandy, sil calcitic & foss, fr-fr ppt $\emptyset$ , no fluor, cut, st, or odor. NSD
30		ls: brown, grey, grey-brown, fr.-med xtn, detrital, foss in part, no vis $\emptyset$ , NS.
40		sh: lt. grey, silty - sil sandy sh; arex: ls: lt. brown, fr.-med xtn, sil calcitic, v sil dolomitic, no show.
3250		ls: tan, brown, grey, v fr - some, med xtn, sil foss, mottled; cpl pcs w/ fr interxtn $\emptyset$ ; no show
60		ls: as above; no show
70		ls: tan, brown, fr.-med xtn, foss, detrital, no vis $\emptyset$ , no show
80		ls: off wh, tan, fr.-med xtn, sil calcitic, v sil foss, granular, scat pr-fr ppt & interxtn $\emptyset$ ; no fluor, cut, st, or odor
90		ls: as above; no show; w/ ls: brown, grey, micro - some med xtn, sil foss, dense
3300		ls: tan, brown, grey, fr.-med xtn, sil foss, detrital, scat in fr-bedded grey sh; few pcs green sh
10		ls: as above; w/ scat grey, green sh
20		ls: tan, fr.-med xtn, granular, sil foss, scat pr interxtn $\emptyset$ , no show. ls: tan, grey, v fr - frxtln, dense.
30		ls: tan, lt. brown, frxtln, granular, sil calcitic, scat pr ppt & interxtn $\emptyset$ , no show
40		ls: tan, grey, v fr - some med xtn, calcitic in part, no vis $\emptyset$ ; considerable grey, green sh.
3350		ls: tan, grey, fr.-med xtn, sil foss, no vis $\emptyset$ , sh: grey, dk grey, some black
60		ls: tan, grey, fr.-med xtn, dense ls: tan, fr-x-tn, granular, sil foss, sil calcitic, qpp pr ppt & vuggy $\emptyset$ cpl pcs w/ pr spotty sh w/ crust cut only, no show FD, no odor. ls: dk brown, dk arex, fr med xtn.

TOPEKA

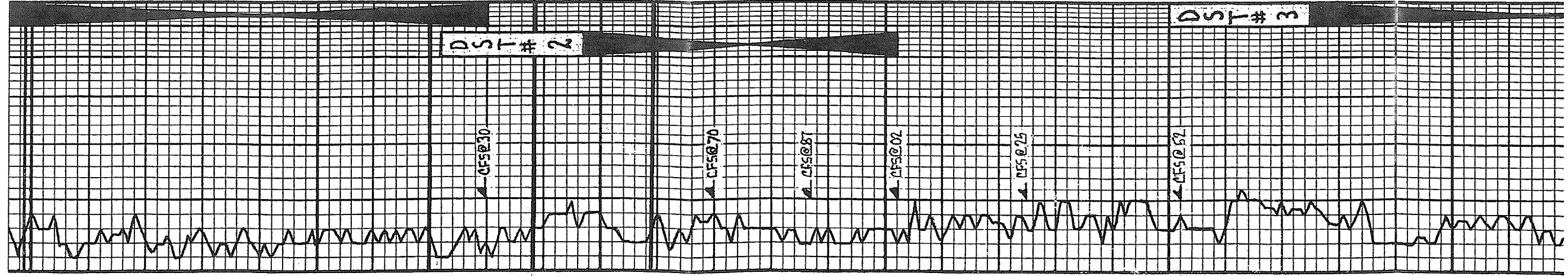
3180 (-1012)

OREAD

3349 (-1181)

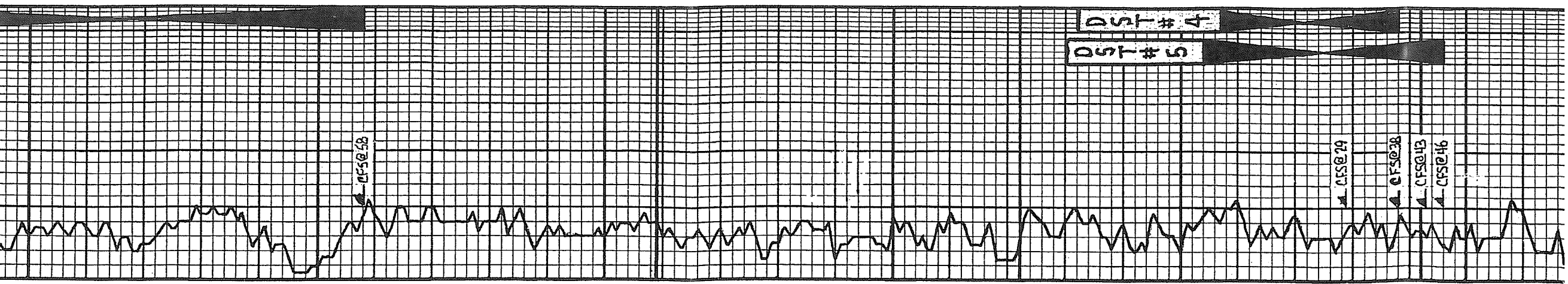
DST # 1

(3349 - 3474)



3350	sh: grey, dk grey, some black
60	ls: tan, grey, fm-med xln, dense
70	ls: tan, fm xln, granular, sil foss, sil calcite, cap pr ppt & vuggy $\emptyset$ , ep1 pcs w/ pr spotty w/ crush cut only, no show $\emptyset$ , no odor.
80	ls: dk brown, dk grey, fm-med xln, dense.
90	ls: tan, fm-med xln, granular, fr-gd ppt vuggy por (3-4 pcs/tray), otherwise vpr - pr $\emptyset$ vry scat pr spots st, 4 pcs total w/ fr-gd st w/ scat, 3 pcs w/ 5-FSG & few gas bubbles, v flt/flur, v wk cat, no odor.
3400	ls: tan, brown, some grey, fm-med xln, v scat pr interxtn $\emptyset$ , no flur, st, cut, or odor: NSD
10	ls: as above; no show, w/ sh grey
20	ls: tan, brown, grey, vfn. some med xln, dense, w/ sh: grey
30	sh: dk grey, black
40	ls: lt. brown, lt grey, vfn-fm xln, dense.
450	sh: lt-dk grey, sil calc., few pcs green, rust
60	ls: off wh, tan, lt brown, vry, fr - fm xln, v sil foss, no vis $\emptyset$ ; $\Delta$ wh, lt grey, fresh op $\rightarrow$ semi trans, no show
70	sh: mostly lt grey, sil silty, some grey, green
80	ls: off wh, greyish-wh, fm-med xln, sil foss, scat pcs $\emptyset$ , detrital, mostly pr spotty (few pcs fr-gd) interparticle $\emptyset$ pr spotty (few pcs fr-gd) st w/ scat, S-tr FSG, fr. crush odor.
90	ls: tan, brown, some grey, fm-med xln, no vis $\emptyset$ ; sh: grey, dolomite $\rightarrow$ dol; grey, fm xln, shaley; sil: grey, sil sandy sh: grey, green, some brown
3500	ls: off wh, tan, fm-med xln, v sil foss, sil $\emptyset$ , scat pr - fr fr interxtn & vuggy $\emptyset$ , tr pr intercol $\emptyset$ , scat pr - fr st, w/ some scat, vssed w/ few gas bubbles, v fr odor
10	ls: tan, lt. brown, vfn-fm xln, no vis $\emptyset$ , NS odor
20	sh: grey, green-grey
30	ls: tan, fm-med xln, sil foss, scat vfn - pr interxtn por, scat pr spotty st in $\emptyset$ , ep1 pcs w/ minute ppt's $\emptyset$ , no odor
40	ls: as above; most dense, w/ tr show as above, w/ sh: grey
3550	ls: tan, fm-med xln, sil foss, cool, most well cemented, scat pr - few pcs fr intercol $\emptyset$ , pr - fr intercol st, rare ppt $\emptyset$ , no odor
60	ls: tan, vfn-fm xln, mostly dense, few isolated vugs w/ hvy dk st, NSD, no odor.
70	ls: tan, lt brown, fm-med xln, no vis $\emptyset$ , no show
80	ls: tan, lt brown, mica - fm xln, dense few pcs $\Delta$ ; lt grey, fresh, oparane
90	ls & few pcs $\Delta$ , as above.
3600	ls: as above, w/ sh: grey, gm-grey
10	ls: tan, lt brown, off wh, fm-med xln, sil granular, cherty in part, scatter interxtn $\emptyset$ , no st-flur, cut, odor
20	ls: as above, dense, no vis $\emptyset$ , NS
30	ls: as above, w/ sh: grey, few pcs brown

OREAU	(-1181)
3349	(-1181)
DST # 1	(3345 - 3430)
30" - 60" - 30" - 60"	
IFP: SURF BLOW BLDG TO 3 1/4"	
ISIP: NO BLOW	
FFP: SURF BLOW BLDG TO 1 1/4"	
RECOVERED:	
140' MUD w/ OIL SPOTS	
HSP: 1623# - 1574#	
FP: 38#-64/72#-91#	
SIP: 1052# - 1032#	
BHT: 108° F	
HEEBNER	(-1252)
3420	(-1252)
TORONTO	(-1270)
3438	(-1270)
LANSING	(-1291)
3459	(-1291)
DST # 2	(3447 - 3502)
30" - 60" - 60" - 90"	
IFP: BOB IN 5"	
ISIP: NO BLOW	
FFP: BOB IN 7"	
FSIP: NO BLOW	
RECOVERED:	
315' MCM w/ OIL SPOTS	
(30% M, 70% W)	
819' SMCW w/ OIL SPOTS	
(10% M, 90% W)	
CHL: 57000 PPM SYS: 2500 PPM	
HSP: 1706# - 1623#	
FP: 86#-206/313#-536	
SIP: 764# - 745#	
BHT: 114° F	
DST # 3	(3575 - 3658)
30" - 60" - 60" - 90"	
IFP: SURF BLOW BLDG TO 6"	
ISIP: NO BLOW	
FFP: 4" BLOW BLDG TO 6"	
FSIP: NO BLOW	
RECOVERED:	
229' GIP	
IN MIN. W/ NO SHOW	



3600	10	20	30	40	3650	60	70	80	90	3700	10	20	30	40	3750	60	70	80	90	3800	10	20	30	40	3850	60	
<p>ls: tan, lt brown, off wh, fr-med xtn, sh. calc. cement, cherty in part, scat. v. calc. interxtn <math>\emptyset</math>, no st. fluor, rust, odor</p> <p>ls: as above, dense, no vis <math>\emptyset</math>, NS</p> <p>ls: as above, w/ sh: grey, few pcs brown</p> <p>ls: tan, lt grey, fr-med xtn, scat vpr. pr fine ppt <math>\emptyset</math>, pr spotty - cpl pcs fr st w/ pr scat, NSF0, no odor</p> <p>ls: tan, lt brown, grey, vfn-fnxtn, dense, no vis <math>\emptyset</math>, no show</p> <p>sh: grey, greenish-grey</p> <p>ls: wh, lt grey, fr-med xtn, ool &amp; ool, fr-ool ool <math>\emptyset</math>, fr-ool st w/ fr scat, F-GSF0, vpr gassey, fr odor.</p> <p>ls: off wh, tan, lt brown, vfn-some med xtn, slt ool, no vis <math>\emptyset</math>, no show</p> <p>sh: grey, dk. grey</p> <p>ls: tan, lt brown, lt green vfn-fnxtn, slt ool, well cemented, no vis <math>\emptyset</math>, no show</p> <p>ls: tan, lt brown, lt grey-brown, vfn-fnxtn, slt ool, cpl pcs w/ vpr interxtn <math>\emptyset</math>, tr pr st, NSF0, no odor; ls: wh, frxtn chalk</p> <p>ls: as above, no show</p> <p>sh: grey, rust, brown, scat ls. inclusions</p> <p>ls: tan, brown, lt grey, fr-med xtn, slt ool, scat red sh matrix, sh: grey, rust, brown</p> <p>ls: as above; scat pcs w/ rust-red sh matrix; sh: rust, brown, grey, scat ls inclusions</p> <p>sh: rust, brown, some green, grey</p> <p>ls: off wh, lt grey, fr-med xtn, scat pcs w/ rust shale matrix</p> <p>ls: off wh, grey, fr-med xtn, dense; scat pcs w/ red-rust shale matrix, sh: rust, brown, some grey, green</p> <p>some as above, w/ few pcs mudiest</p> <p><math>\Delta</math>: lt grey, tan, ool, orange, fresh, op <math>\rightarrow</math> semi-trans; considerable sh: rust, brown, grey; ls: off wh, lt grey, fr-med xtn, dense</p> <p><math>\Delta</math> as above, w/ scat ls; contact, ls: brown, grey, vfn-fnxtn, dense; sh: rust, brown, grey</p> <p><math>\Delta</math> tan, fresh, semi-trans; <math>\Delta</math>: wh, fresh, slt weathered, vpr st, NSF0; sh: brown, grey; ls: grey, frxtn, dense; <math>\Delta</math>: grey, fresh, opaque</p> <p>as above; w/ considerable, orange, fresh, semi-trans <math>\Delta</math></p> <p>ss: fr grained, grey, well-sorted, well-sorted; considerable, dead oil residue; no show like oil or st; sh: rust, brown, grey, slt sandy ss: as above, w/ calc cement &amp; sh matrix, no vis <math>\emptyset</math>, no show; sh: as above</p> <p>ool: lt grey, fr-med xtn, fr-some ad interxtn <math>\emptyset</math>, fr st w/ scat, fr cut, NSF0, od odor.</p> <p>ool: as above w/ few clusters, ss: wh, tan, clear, med grained, well sorted, scat calc cement; fr-some od, intergrn <math>\emptyset</math> fr st w/ scat, NSF0, no odor</p> <p>ss: as above, w/ few in show, rest 5% of sh w/ pr spotty st &amp; rare ppt FO, calc. cement; pr-fr intergrained <math>\emptyset</math>,</p>																											

IFP: SURF BLOW BLDG TD 6"  
 ISIP: NO BLOW  
 FFP: 4" BLOW BLDG TD 8"  
 FSIP: NO BLOW

RECOVERED:  
 229' GIP  
 20' MUD w/ OIL SPOTS  
 HSP: 1773# - 1685#  
 FP: 42# 327 34#-37#  
 SIP: 214# - 198#  
 BHT: 110° F

BKC  
 3709 (-1541)

MARMATON  
 3772 (-1604)

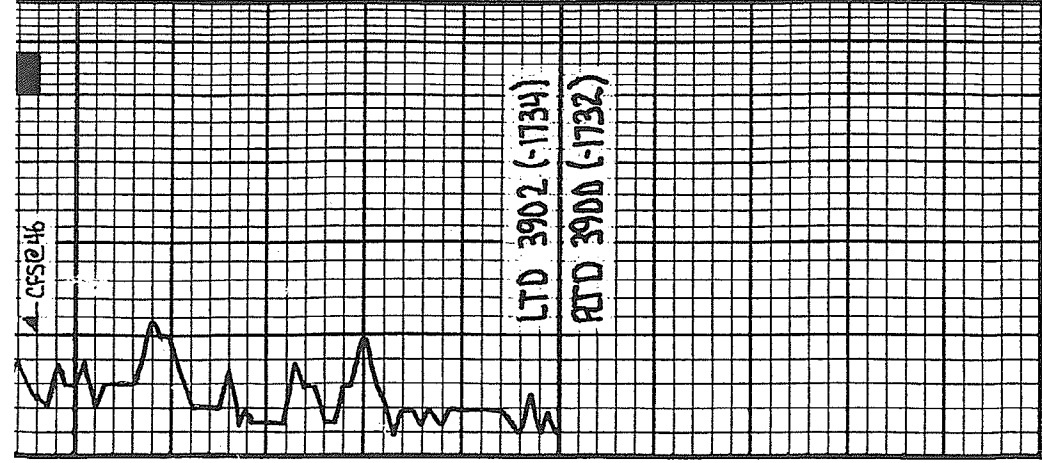
DST # 4  
 (3807 - 3838)  
 30" - 60" - 30" - 60"  
 IFP: SURF BLOW BLDG TD 1"  
 FFP: NO BLOW

RECOVERED:  
 10' CD - 62.37°  
 10' SOLEM (10% O, 90% M)  
 HSP: 1958# - 1860#  
 FP: 28# 26/30#-25#  
 SIP: 148# - 89#  
 BHT: 113° F

REAGAN SAND  
 3842 (-1674)

DST # 5  
 (3804 - 3846)  
 30" - 30" - 30" - 30"  
 IFP: BOB IN 1"





3850

60

70

80

90

3900

DEPTH

DRILLING TIME Minutes/Foot

Rate of Penetration Decreases

<p>SS: as above, w/ new cement 5-50% wt, tan, clear, med grained, well sorted, scat calc cement; pr- some od intergrained dr-ft st w/ scat fr slow cut, SSFO, no odor</p>	<p>LITHOLOGY</p>
<p>SS: as above, w/ dr. in show, est 5% of spl w/ dr spath, st &amp; rare dr-ft FO.</p>	
<p>SS: clear, wh, tan, fr- med xtn, scat calc cement; pr-ft intergrained dr, no fluor, cut, st, odor, NSO</p>	
<p>SS: as above, scat calc cement &amp; pyrite inclusions; considerable pyrite pits</p>	
<p>SS: clear, wh, tan, fr- med grained, well-sorted, scat calc cement, pr-ft intergrained dr, no show</p>	
<p>SS: as above, no show</p>	
<p> </p>	
<p> </p>	
<p> </p>	
<p> </p>	

SAMPLE DESCRIPTIONS

OIL SHOWS

REMARKS

384Z (-16/4)

@ CFS 3843

@ CFS 3846

DST #5  
 (3804 - 3846)  
 30" - 30" - 30" - 30"  
 IFP: BOB IN 1"  
 FSP: NO BLOW  
 FFP: BOB IN 1"  
 FSP: NO BLOW  
**RECOVERED:**  
 645' MW (50% M, 50% BW)  
 315' MCW (20% M, 80% BW)  
 1638' SMCW (10% M, 90% BW)  
 CHL: 71000 PPM SVS: 5000 PPM  
 HSP: 1950# - 1885#  
 FFP: 995# - 987# / 971# - 1165#  
 SIP: 1186# - 1187#  
 BHT: 123°F

# ALLIED OIL & GAS SERVICES, LLC 055519

Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 31  
RUSSELL, KANSAS 67665

SERVICE POINT:  
Russell

DATE <u>10.11.14</u>	SEC. <u>17</u>	TWP. <u>14</u>	RANGE <u>20</u>	CALLED OUT	ON LOCATION	JOB START <u>100</u>	JOB FINISH <u>205</u>
LEASE <u>Kingsley</u>	WELL.# <u>5</u>		LOCATION <u>Ellis, Bs</u>		COUNTY <u>Ellis</u>	STATE <u>Ks</u>	
OLD OR <input checked="" type="radio"/> NEW (Circle one)			Location <u>Ellis High School 65 W into</u>				

CONTRACTOR Marrick  
TYPE OF JOB Surface  
HOLE SIZE 12 1/4 T.D.  
CASING SIZE 8 3/4 DEPTH 260'  
TUBING SIZE DEPTH  
DRILL PIPE DEPTH  
TOOL DEPTH  
PRES. MAX MINIMUM  
MEAS. LINE SHOE JOINT  
CEMENT LEFT IN CSG.  
PERFS.  
DISPLACEMENT 15.97 H<sub>2</sub>O

OWNER  
CEMENT AMOUNT ORDERED 165 am  
+ 27 gal + 3 f.c.c.  
COMMON 165 sc @ 17.9 \$ 2,953.50  
POZMIX @  
GEL 310.2 lb @ .50 \$ 155.10  
CHLORIDE 465.3 lb @ 1.10 \$ 511.83  
ASC @  
@  
@  
@  
@  
@  
@  
@  
@  
HANDLING 165 @ 2.48 \$ 409.20  
MILEAGE 193.88 @ 2.75 \$ 533.15  
TOTAL \$ 4,547.78

EQUIPMENT  
PUMP TRUCK CEMENTER Danny P. Lanman  
# 417 HELPER Danny S  
BULK TRUCK DRIVER Tracy J.  
# 410 DRIVER  
# DRIVER

REMARKS:  
Cement to Surface  
See County Job Log

SERVICE  
DEPTH OF JOB 260'  
PUMP TRUCK CHARGE @ 1,512.25  
EXTRA FOOTAGE @  
MILEAGE Heavy 50 @ 7.7 \$ 385.00  
MANIFOLD High 95 @ 4.4 \$ 110.00  
@  
@

CHARGE TO: Gore Dick  
STREET  
CITY STATE ZIP

Line 589.92 TOTAL \$ 2,007.25

To: Allied Oil & Gas Services, LLC.  
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PLUG & FLOAT EQUIPMENT  
@  
@  
@  
@  
@  
TOTAL 0

PRINTED NAME David Yott

SALES TAX (if Any)  
TOTAL CHARGES \$ 6,570.03  
DISCOUNT \$ 1,314.00 (20%)  
IF PAID IN 30 DAYS  
Net 5,256.03

SIGNATURE [Signature]

# ALLIED OIL & GAS SERVICES, LLC 055601

Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 31  
RUSSELL, KANSAS 67665

SERVICE POINT:  
Russell Ks.

DATE <u>10-29-14</u>	SEC. <u>17</u>	TWP. <u>14</u>	RANGE <u>30</u>	CALLED OUT <u>1000 AM</u>	ON LOCATION <u>1000 PM</u>	JOB START <u>6:30 PM</u>	JOB FINISH <u>7:30 PM</u>
LEASE <u>Kinsley</u>	WELL# <u>5</u>	LOCATION <u>Ellis, Kansas</u>			COUNTY <u>Ellis</u>	STATE <u>Ks</u>	
OLD OR <u>NEW</u> (Circle one)		<u>Ellis High School G-S-W-into</u>					

CONTRACTOR maverick #102  
 TYPE OF JOB P+A - new well  
 HOLE SIZE 7 7/8" D. 3900'  
 CASING SIZE 8 5/8" DEPTH 266'  
 TUBING SIZE \_\_\_\_\_ DEPTH \_\_\_\_\_  
 DRILL PIPE 4 1/2" DEPTH \_\_\_\_\_  
 TOOL \_\_\_\_\_ DEPTH \_\_\_\_\_  
 PRES. MAX \_\_\_\_\_ MINIMUM \_\_\_\_\_  
 MEAS. LINE \_\_\_\_\_ SHOE JOINT \_\_\_\_\_  
 CEMENT LEFT IN CSG. \_\_\_\_\_  
 PERFS. \_\_\_\_\_  
 DISPLACEMENT \_\_\_\_\_


OWNER \_\_\_\_\_  
 CEMENT AMOUNT ORDERED 270 60/40 Poz 4% gel  
 COMMON 270 @ \_\_\_\_\_  
~~POZ 4%~~ 60/40 4% gel @ 18.92 5108.40  
 GEL @ \_\_\_\_\_  
 CHLORIDE @ \_\_\_\_\_  
 ASC @ \_\_\_\_\_  
Flo-seal 1/4" #59 @ 2.97 175.23  
 @ \_\_\_\_\_  
 @ \_\_\_\_\_  
Material @ \_\_\_\_\_ 5283.63  
Disc @ 1479.40  
 @ \_\_\_\_\_  
 @ \_\_\_\_\_  
 HANDLING 270 SKS @ 2.48 669.60  
 MILEAGE 29.25 T/m 2.25 800.94  
 TOTAL \_\_\_\_\_

EQUIPMENT  
 PUMP TRUCK CEMENTER Allen Worth  
 # 409 HELPER Nathan Donner  
 BULK TRUCK  
 # 985-292 DRIVER Jon Price  
 BULK TRUCK  
 # \_\_\_\_\_ DRIVER \_\_\_\_\_

REMARKS:  
 \_\_\_\_\_  
 \_\_\_\_\_  
SEE Cement Job Log.

CHARGE TO: Gore Oil Company  
 STREET \_\_\_\_\_  
 CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

To: Allied Oil & Gas Services, LLC.  
 You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME David Yott  
 SIGNATURE 

SERVICE  
 DEPTH OF JOB \_\_\_\_\_  
 PUMP TRUCK CHARGE 2688.95  
 EXTRA FOOTAGE @ \_\_\_\_\_  
 MILEAGE 2.5 LV ME. @ 4.40 110.00  
 MANIFOLD @ \_\_\_\_\_  
50 HV ME @ 2.70 385.00  
 @ \_\_\_\_\_  
Disc 1266.80 TOTAL 4524.29

PLUG & FLOAT EQUIPMENT  
8 5/8 wooden Plug @ 110.00 110.00  
 @ \_\_\_\_\_  
 @ \_\_\_\_\_  
 @ \_\_\_\_\_  
 @ \_\_\_\_\_  
Disc 30.80 TOTAL 110.00

SALES TAX (If Any) \_\_\_\_\_  
 TOTAL CHARGES 9917.92  
 DISCOUNT \_\_\_\_\_ IF PAID IN 30 DAYS  
82777.02  
Discount Total  
\$7140.90