



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1140586  
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: \_\_\_\_\_



1140586

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
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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> _____ <i>(Submit ACO-4)</i>	<b>PRODUCTION INTERVAL:</b> _____ _____
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## DRILL STEM TEST REPORT

Prepared For: **TDI Inc**

1310 Bison Rd  
Hays KS 67601-9696

ATTN: Tom Denning

### **Urban Unit #1**

### **11-15s-19w Ellis,KS**

Start Date: 2013.03.19 @ 22:10:49

End Date: 2013.03.20 @ 04:19:28

Job Ticket #: 50374                      DST #: 1

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

Printed: 2013.03.22 @ 09:55:15

TDI Inc  
11-15s-19w Ellis,KS  
Urban Unit #1  
DST # 1  
LKC A-C  
2013.03.19







**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

TDI Inc  
1310 Bison Rd  
Hays KS 67601-9696  
ATTN: Tom Denning

**11-15s-19w Ellis,KS**  
**Urban Unit #1**  
Job Ticket: 50374      **DST#: 1**  
Test Start: 2013.03.19 @ 22:10:49

**Tool Information**

Drill Pipe:	Length: 3290.00 ft	Diameter: 3.80 inches	Volume: 46.15 bbl	Tool Weight:	2200.00 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: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose:	55000.00 lb
			<u>Total Volume:</u>	Tool Chased	0.00 ft
				String Weight: Initial	46000.00 lb
Drill Pipe Above KB:	24.00 ft			Final	47000.00 lb
Depth to Top Packer:	3317.00 ft				
Depth to Bottom Packer:	ft				
Interval between Packers:	49.00 ft				
Tool Length:	70.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		
Tool Comments:					

<b>Tool Description</b>	<b>Length (ft)</b>	<b>Serial No.</b>	<b>Position</b>	<b>Depth (ft)</b>	<b>Accum. Lengths</b>
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Change Over Sub	1.00			3297.00	
Shut In Tool	5.00			3302.00	
Hydraulic tool	5.00			3307.00	
Packer	5.00			3312.00	21.00      Bottom Of Top Packer
Packer	5.00			3317.00	
Stubb	1.00			3318.00	
Perforations	12.00			3330.00	
Recorder	0.00	8369	Inside	3330.00	
Recorder	0.00	8700	Outside	3330.00	
Blank Spacing	33.00			3363.00	
Bullnose	3.00			3366.00	49.00      Bottom Packers & Anchor

**Total Tool Length: 70.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

TDI Inc  
1310 Bison Rd  
Hays KS 67601-9696  
ATTN: Tom Denning

**11-15s-19w Ellis,KS**  
**Urban Unit #1**  
Job Ticket: 50374      **DST#: 1**  
Test Start: 2013.03.19 @ 22:10:49

### 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:	53000 ppm
Viscosity: 50.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.18 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 1300.00 ppm			
Filter Cake: 1.00 inches			

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	890' GIP	0.000
30.00	SOCGW 20%G5%O75%W	0.148
155.00	GMO 20%G70%O10%M	2.174
30.00	O&GCM 10%G20%O70%M	0.421

Total Length: 215.00 ft      Total Volume: 2.743 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments: RW .18@55F

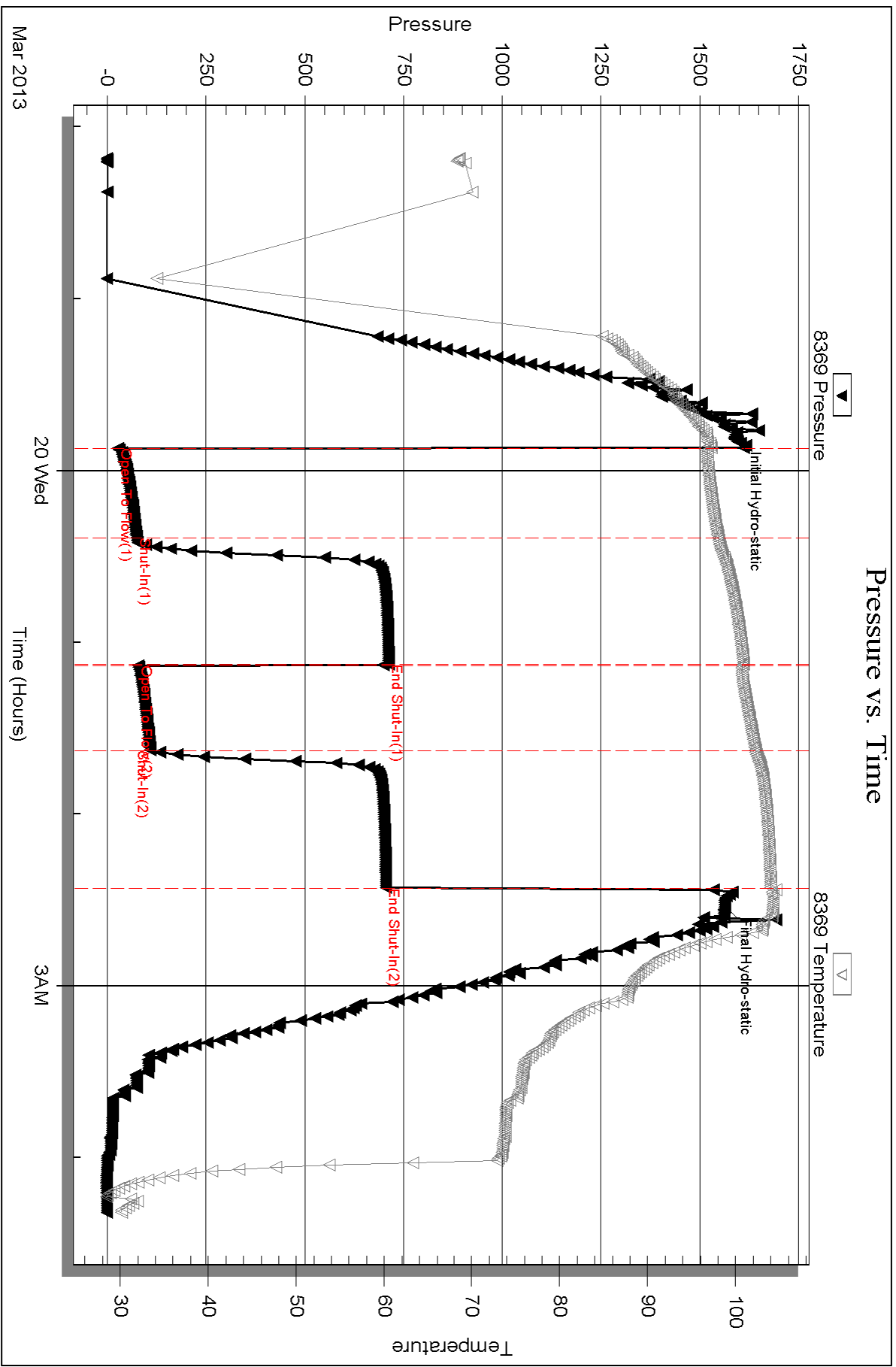
Serial #: 8369

Inside

TDI Inc

Urban Unit #1

DST Test Number: 1



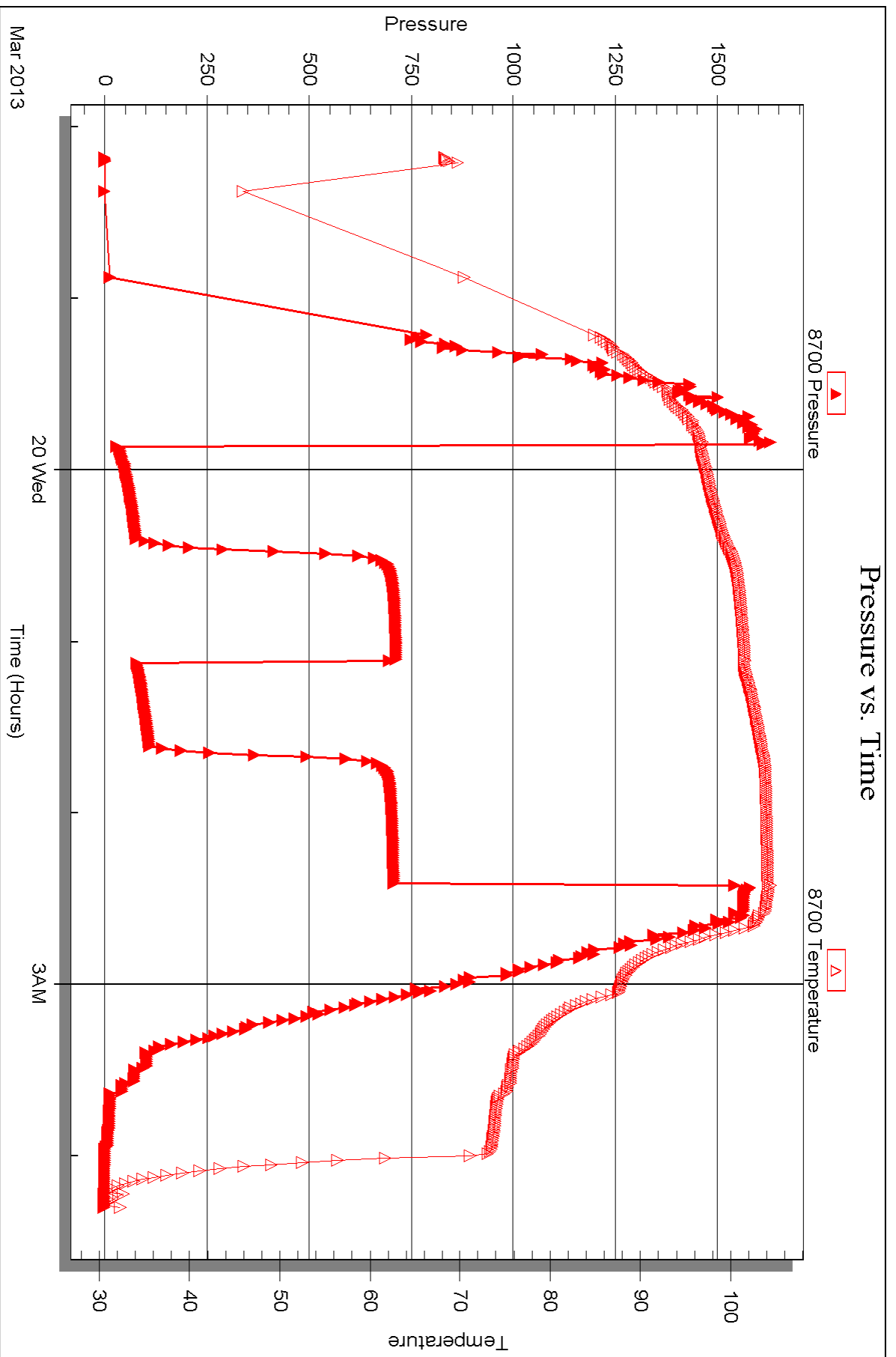


Serial #: 8700

Outside TDI Inc

Urban Unit #1

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 50374

Printed: 2013.03.22 @ 09:55:18



## DRILL STEM TEST REPORT

Prepared For: **TDI Inc**

1310 Bison Rd  
Hays KS 67601-9696

ATTN: Tom Denning

### **Urban Unit #1**

### **11-15s-19w Ellis,KS**

Start Date: 2013.03.20 @ 19:00:48

End Date: 2013.03.21 @ 01:52:12

Job Ticket #: 50375                      DST #: 2

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

Printed: 2013.03.22 @ 09:54:31

TDI Inc  
11-15s-19w Ellis,KS  
Urban Unit #1  
DST # 2  
LKC  
2013.03.20



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

TDI Inc  
 1310 Bison Rd  
 Hays KS 67601-9696  
 ATTN: Tom Denning

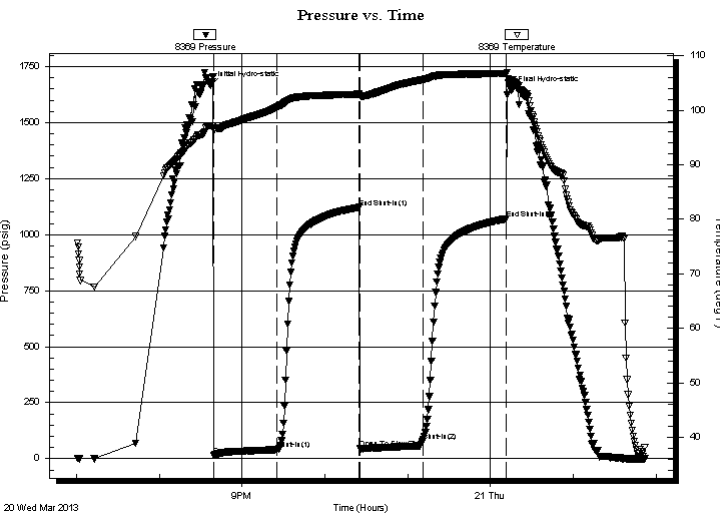
**11-15s-19w Ellis, KS**  
**Urban Unit #1**  
 Job Ticket: 50375      **DST#: 2**  
 Test Start: 2013.03.20 @ 19:00:48

## GENERAL INFORMATION:

Formation: **LKC**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 20:39:43  
 Time Test Ended: 01:52:12  
**Interval: 3460.00 ft (KB) To 3530.00 ft (KB) (TVD)**  
 Total Depth: 3530.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Ray Schwager  
 Unit No: 42  
 Reference Elevations: 2039.00 ft (KB)  
 2029.00 ft (CF)  
 KB to GR/CF: 10.00 ft

**Serial #: 8369 Inside**  
 Press @ Run Depth: 77.61 psig @ 3464.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2013.03.20 End Date: 2013.03.21 Last Calib.: 2013.03.21  
 Start Time: 19:00:48 End Time: 01:52:12 Time On Btm: 2013.03.20 @ 20:37:13  
 Time Off Btm: 2013.03.21 @ 00:14:57

**TEST COMMENT:** 45-IFP-w k bl thru-out 1/4" to 2" bl  
 60-ISIP-no bl  
 45-FFP-w k bl 1/4" bl  
 60-FSIP-no bl



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1666.78	97.17	Initial Hydro-static
3	15.79	96.36	Open To Flow (1)
48	40.97	100.55	Shut-In(1)
108	1121.53	102.95	End Shut-In(1)
108	44.81	102.65	Open To Flow (2)
154	77.61	105.60	Shut-In(2)
215	1070.44	106.70	End Shut-In(2)
218	1644.58	105.58	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
90.00	MW 15%M85%W	0.99

\* Recovery from multiple tests

## Gas Rates

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





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

TDI Inc  
1310 Bison Rd  
Hays KS 67601-9696  
ATTN: Tom Denning

**11-15s-19w Ellis,KS**  
**Urban Unit #1**  
Job Ticket: 50375      **DST#: 2**  
Test Start: 2013.03.20 @ 19:00:48

**Tool Information**

Drill Pipe:	Length: 3439.00 ft	Diameter: 3.80 inches	Volume: 48.24 bbl	Tool Weight:	2200.00 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: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose:	60000.00 lb
			<u>Total Volume: 48.39 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial	46000.00 lb
Depth to Top Packer:	3460.00 ft			Final	47000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	70.00 ft				
Tool Length:	91.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

<b>Tool Description</b>	<b>Length (ft)</b>	<b>Serial No.</b>	<b>Position</b>	<b>Depth (ft)</b>	<b>Accum. Lengths</b>
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Change Over Sub	1.00			3440.00	
Shut In Tool	5.00			3445.00	
Hydraulic tool	5.00			3450.00	
Packer	5.00			3455.00	21.00      Bottom Of Top Packer
Packer	5.00			3460.00	
Stubb	1.00			3461.00	
Perforations	3.00			3464.00	
Recorder	0.00	8369	Inside	3464.00	
Recorder	0.00	8700	Outside	3464.00	
Blank Spacing	63.00			3527.00	
Bullnose	3.00			3530.00	70.00      Bottom Packers & Anchor

**Total Tool Length: 91.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

TDI Inc  
1310 Bison Rd  
Hays KS 67601-9696  
ATTN: Tom Denning

**11-15s-19w Ellis,KS**  
**Urban Unit #1**  
Job Ticket: 50375      **DST#: 2**  
Test Start: 2013.03.20 @ 19:00:48

## 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:	65000 ppm
Viscosity: 52.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.79 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 1400.00 ppm			
Filter Cake: 1.00 inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
90.00	MW 15%M85%W	0.989

Total Length: 90.00 ft      Total Volume: 0.989 bbl

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

Laboratory Name:      Laboratory Location:

Recovery Comments: RW .16@50F

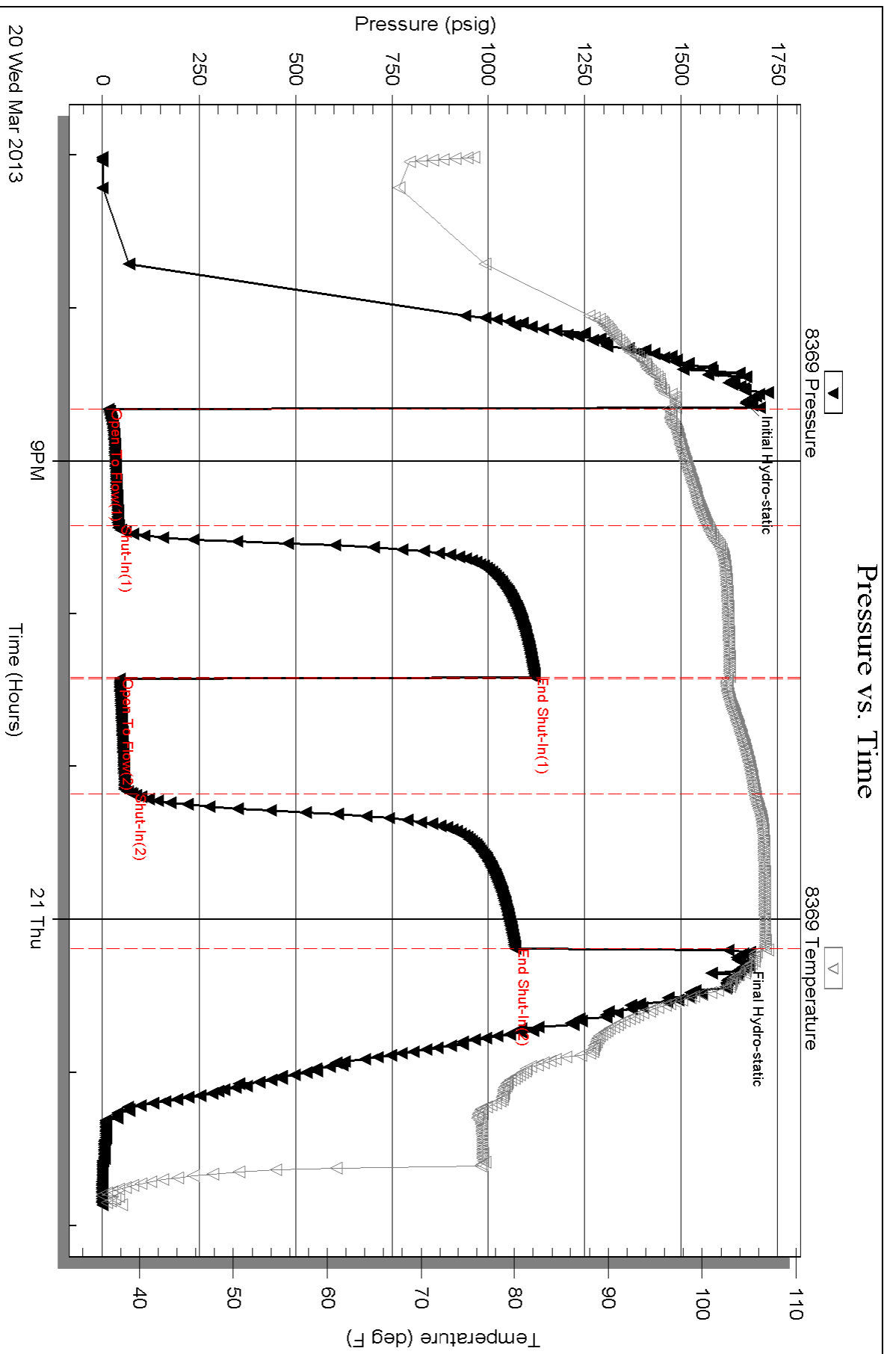
Serial #: 8369

Inside

TDI Inc

Urban Unit #1

DST Test Number: 2



Triobite Testing, Inc

Ref. No: 50375

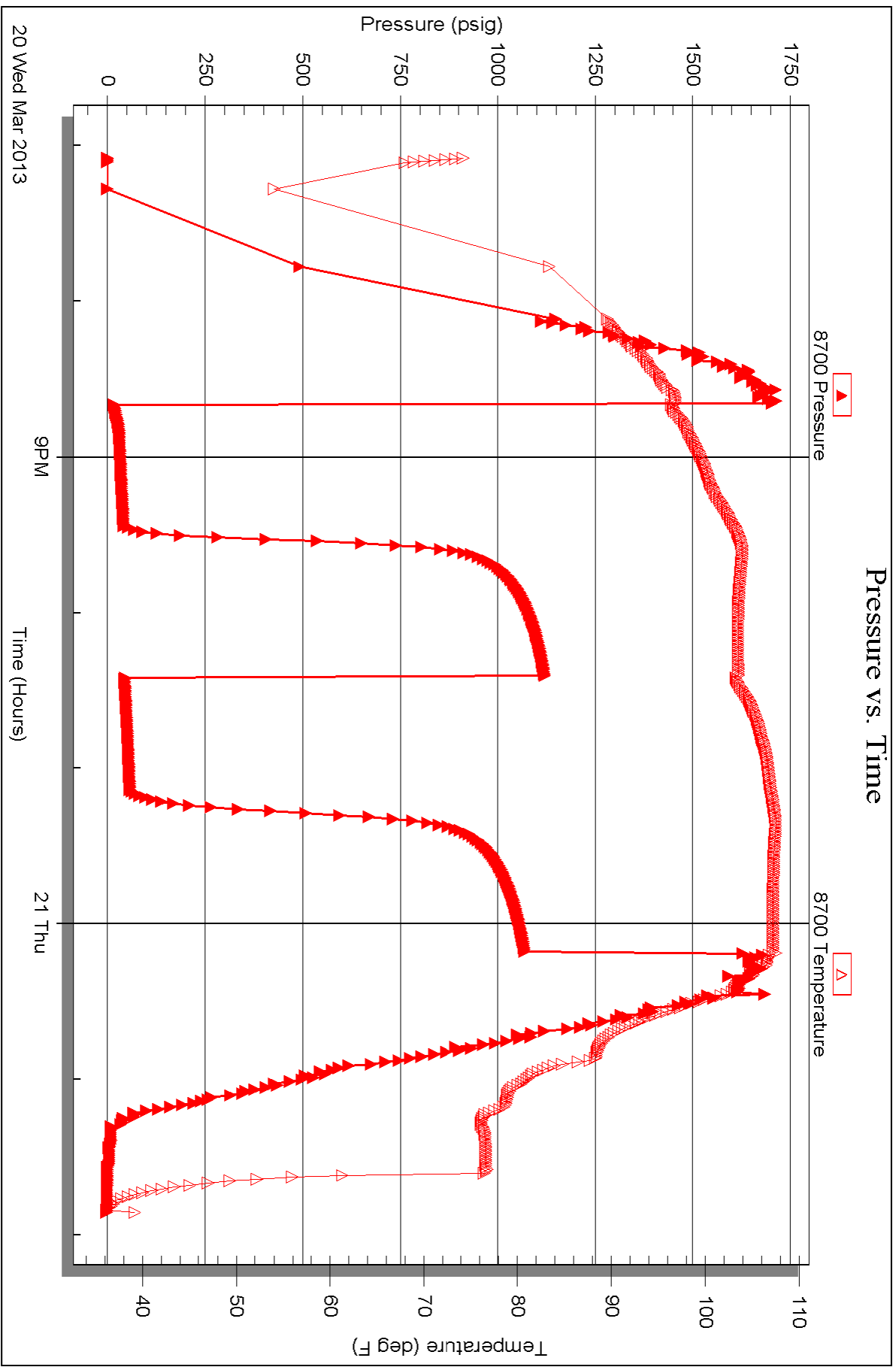
Printed: 2013.03.22 @ 09:54:35

Serial #: 8700

Outside TDI Inc

Urban Unit #1

DST Test Number: 2







# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 50374

Well Name & No. Urban Unit #1 Test No. 1 Date 3-19-13  
 Company TOI, Inc Elevation 2039 KB 2029 GL  
 Address 1310 'Bison Rd, Hays, Ks 67601-9696  
 Co. Rep / Geo. Jeff Lawler Rig Southwing rig 1  
 Location: Sec. 11 Twp. 15<sup>s</sup> Rge. 19<sup>w</sup> Co. ELLIS State Ks

Interval Tested 3317-3366 Zone Tested LKC A-C  
 Anchor Length 49 Drill Pipe Run 3290 Mud Wt. 9  
 Top Packer Depth 3312 Drill Collars Run 30 Vis 50  
 Bottom Packer Depth 3317 Wt. Pipe Run - WL 7.2  
 Total Depth 3366 Chlorides 1300 ppm System LCM 1#

Blow Description IFP - WEAK TO STRONG IN 6min  
ISIP - 1/4" Blow Back  
FFP - WEAK TO STRONG IN 4min  
FSDP - 1/4" Blow Back

Rec	Feet of	%gas	%oil	%water	%mud
<u>890</u>	<u>GIP</u>				
<u>30</u>	<u>SOC6W</u>	<u>20</u>	<u>5</u>	<u>75</u>	
<u>155</u>	<u>GMO</u>	<u>20</u>	<u>70</u>		<u>10</u>
<u>30</u>	<u>O46CM</u>	<u>10</u>	<u>20</u>		<u>70</u>
Rec	Feet of	%gas	%oil	%water	%mud

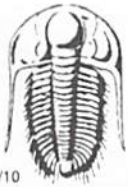
Rec Total 215 BHT 104 Gravity - API RW .18 @ 55 °F Chlorides 53000 ppm

(A) Initial Hydrostatic <u>1586</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>2030</u>
(B) First Initial Flow <u>27</u>	<input type="checkbox"/> Jars	T-Started <u>2210</u>
(C) First Final Flow <u>74</u>	<input type="checkbox"/> Safety Joint	T-Open <u>2355</u>
(D) Initial Shut-In <u>711</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>0225</u>
(E) Second Initial Flow <u>78</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>0419</u>
(F) Second Final Flow <u>110</u>	<input checked="" type="checkbox"/> Mileage <u>28RT</u> 43.40	Comments
(G) Final Shut-In <u>705</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>1562</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
	<input type="checkbox"/> Day Standby	Total <u>1193.40</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1193.40</u>	

Initial Open 30  
 Initial Shut-In 45  
 Final Flow 30  
 Final Shut-In 45

Approved By \_\_\_\_\_ Our Representative Ray Schwager *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. 50375

4/10

Well Name & No. Urban Unit #1 Test No. 2 Date 3-20-13  
 Company TDI, Inc Elevation 2039 KB 2029 GL  
 Address 1310 Bison Rd. Hays, Ks 67601-9696  
 Co. Rep / Geo. Jeff Lawler Rig Southwind rig 1  
 Location: Sec. 11 Twp. 15<sup>s</sup> Rge. 19<sup>w</sup> Co. Ellis State Ks

Interval Tested 3460-3530 Zone Tested LKC  
 Anchor Length 20' Drill Pipe Run 3439 Mud Wt. 9.2  
 Top Packer Depth 3455 Drill Collars Run 30 Vis 52  
 Bottom Packer Depth 3460 Wt. Pipe Run - WL 6.8  
 Total Depth 3530 Chlorides 1400 ppm System LCM 1#

Blow Description IFP - Weak Blow Thru-out 1/4" to 2" Blow  
ISIP - NO Blow  
FFP - Weak Blow Thru-out 1/4" Blow  
FSIP - NO Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>90</u>	<u>MW</u>		<u>85</u>	<u>15</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 90 BHT 106 Gravity - API RW .16 @ 50 ° F Chlorides 65000 ppm

(A) Initial Hydrostatic <u>1666</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>1850</u>
(B) First Initial Flow <u>15</u>	<input type="checkbox"/> Jars	T-Started <u>1900</u>
(C) First Final Flow <u>40</u>	<input type="checkbox"/> Safety Joint	T-Open <u>2040</u>
(D) Initial Shut-In <u>1121</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>0010</u>
(E) Second Initial Flow <u>44</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>0152</u>
(F) Second Final Flow <u>77</u>	<input checked="" type="checkbox"/> Mileage <u>28 RT</u> 43.40	Comments
(G) Final Shut-In <u>1070</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>1644</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer

Initial Open 45  
 Initial Shut-In 60  
 Final Flow 45  
 Final Shut-In 60

Sub Total 1193.40

MP/DST Disc't

Approved By \_\_\_\_\_ Our Representative Ray Schwager 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.





Scale 1:240 Imperial

Well Name: URBAN UNT #1  
 Surface Location: NE NW SW SE Sec. 11 - 15S - 19W  
 Bottom Location:  
 API: 15-051-26483-00-00  
 License Number: 4787  
 Spud Date: 3/15/2013 Time: 11:00 PM  
 Region: ELLIS COUNTY  
 Drilling Completed: 3/21/2013 Time: 3:52 PM  
 Surface Coordinates: 1220' FSL & 2025' FEL  
 Bottom Hole Coordinates:  
 Ground Elevation: 2029.00ft  
 K.B. Elevation: 2039.00ft  
 Logged Interval: 2850.00ft To: 3721.00ft  
 Total Depth: 3724.00ft  
 Formation: LANSING-KANSAS CITY  
 Drilling Fluid Type: FRESH WATER / CHEMICAL GEL

**OPERATOR**

Company: TDI, INC.  
 Address: 1310 BISON RD.  
 HAYS, KS 67601  
 Contact Geologist: TOM DENNING  
 Contact Phone Nbr: (785) 628-2593  
 Well Name: URBAN UNT #1  
 Location: NE NW SW SE Sec. 11 - 15S - 19W API: 15-051-26483-00-00  
 Pool: UNNAMED  
 State: KANSAS Country: USA

**SURFACE CO-ORDINATES**

Well Type: Vertical  
 Longitude: -99.4001305 Latitude: 38.7581742  
 N/S Co-ord: 1220' FSL  
 E/W Co-ord: 2025' FEL

**LOGGED BY**



Company: SOLUTIONS CONSULTING, INC.  
 Address: 108 W 35TH  
 HAYS, KS 67601  
 Phone Nbr: (785)259-3737  
 Logged By: Geologist Name: JEFF LAWLER

**CONTRACTOR**

Contractor: SOUTHWIND DRILLING, INC.  
 Rig #: 1  
 Rig Type: MUD ROTARY  
 Spud Date: 3/15/2013 Time: 11:00 PM  
 TD Date: 3/21/2013 Time: 3:52 PM  
 Rig Release: 3/22/2013 Time: 10:00 AM

**ELEVATIONS**

K.B. Elevation: 2039.00ft Ground Elevation: 2029.00ft  
 K.B. to Ground: 10.00ft

**NOTES**

**\*NOTE: THERE IS AN ~6' UPHOLE CORRECTION TO CORRELATE LOG CURVES TO DRILL TIME\***

DUE TO ECONOMICAL RECOVERY ON DRILL STEM TEST #1 AND LOG ANALYSIS 5 1/2" x 14# PRODUCTION CASING WAS RUN.


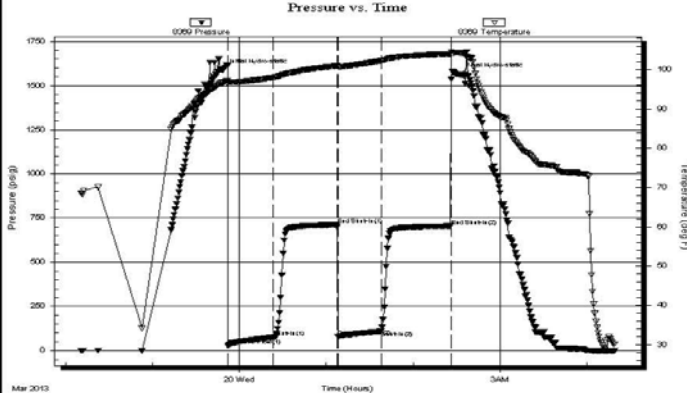
RESPECTFULLY SUBMITTED,  
 JEFF LAWLER

**WELL COMPARISON SHEET**

FORMATION	URBAN UNIT #1				LAWBANCO				STAAB ENERGY & LEASING				TDI, INC.			
	N2 NENESE 11-15-19				S2 NENESE 11-15-19				NW SESW 11-15-19				E2 NW NENE SW 11-15-19			
	2039		2056		2043		2031		2050							
	LOG TOPS	SAMPLE TOPS	COMP. CARD	LOG	SMPL.	COMP. CARD	LOG	SMPL.	COMP. CARD	LOG	SMPL.	COMP. CARD	LOG	SMPL.		
DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM			
ANHYDRITE TOP	4240	799	4244	799	4354	803	4354	793	4320	844	113	4350	800	4350	800	

ANTHRAHITE TOP	1276	763	1281	758	1287	769	-6	-11	1283	760	+3	-2	1264	767	-4	-9	1284	766	-3	-8
BASE	3002	-963	3005	-966	3016	-960	-3	-6	3009	-966	+3	+0	2998	-967	+4	+1	3013	-963	+0	-3
HEEBNER SHALE	3278	-1239	3285	-1246	3292	-1236	-3	-10	3287	-1244	+5	-2	3277	-1246	+7	+0	3290	-1240	+1	-6
TORONTO	3298	-1259	3313	-1274	3320	-1264	+5	-10	3310	-1267	+8	-7	3300	-1269	+10	-5	3314	-1264	+5	-10
LKC	3324	-1285	3330	-1291	3341	-1285	+0	-6	3334	-1291	+6	+0	3321	-1290	+5	-1	3337	-1287	+2	-4
BKC	3572	-1533	3577	-1538	3580	-1524	-9	-14	3580	-1537	+4	-1	3568	-1537	+4	-1	3582	-1532	-1	-6
CONGLOMERATE SAND					3634	-1578				3648	-1605							3674	-1624	
ARBUCKLE	3641	-1602	3647	-1608	3645	-1589	-13	-19	3675	-1632	+30	+24	3676	-1645	+43	+37	3704	-1654	+52	+46
RTD			3724	-1685	3750	-1694		+9	3702	-1659		-26	3680	-1649		-36	3750	-1700		+15
LTD	3721	-1682			3750	-1694	+12											3750	-1700	+18

**DST #1 LKC A-C 3317' - 3366'**


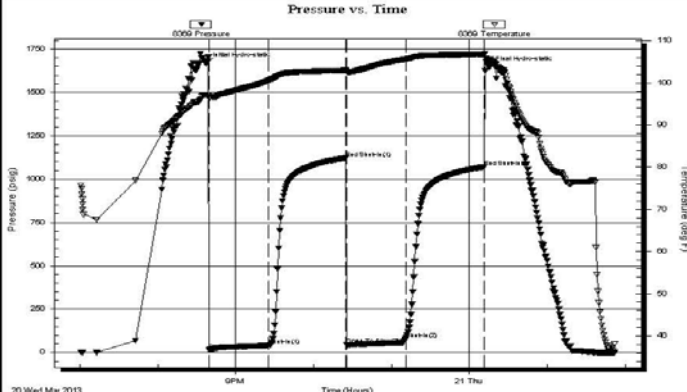
 <b>TRILOBITE TESTING, INC.</b>	<b>DRILL STEM TEST REPORT</b>																																					
	TDI Inc 1310 Bison Rd Hays Ks 67601-9696 ATTN: Tom Denning	<b>11-15s-19w Ellis</b> <b>Urban Unit #1</b> Job Ticket: 50374 <b>DST#: 1</b> Test Start: 2013.03.19 @ 22:10:49																																				
<b>GENERAL INFORMATION:</b> Formation: <b>LKC A-C</b> Deviated: No Whipstock: ft (KB) Time Tool Opened: 23:52:14 Time Test Ended: 04:19:28 Interval: <b>3317.00 ft (KB) To 3366.00 ft (KB) (TVD)</b> Total Depth: 3366.00 ft (KB) (TVD) Hole Diameter: 7.85 inches Hole Condition: Fair Test Type: Conventional Bottom Hole (Initial) Tester: Ray Schwager Unit No: 42 Reference Elevations: 2039.00 ft (KB) 2029.00 ft (CF) KB to GR/CF: 10.00 ft																																						
<b>Serial #: 8369 Inside</b> Press@RunDepth: 110.93 psig @ 3330.00 ft (KB)      Capacity: 8000.00 psig Start Date: 2013.03.19      End Date: 2013.03.20      Last Calib.: 2013.03.20 Start Time: 22:10:49      End Time: 04:19:28      Time On Btm: 2013.03.19 @ 23:48:44 Time Off Btm: 2013.03.20 @ 02:31:58																																						
<b>TEST COMMENT:</b> 30-IFP-w k to strg in 6min 45-ISIP-1/4"bl bk 30-FFP-w k to strg in 4 min 45-FSP-1/4"bl bk																																						
	<b>PRESSURE SUMMARY</b> <table border="1"> <thead> <tr> <th>Time (Min.)</th> <th>Pressure (psig)</th> <th>Temp (deg F)</th> <th>Annotation</th> </tr> </thead> <tbody> <tr><td>0</td><td>1586.92</td><td>96.76</td><td>Initial Hydro-static</td></tr> <tr><td>4</td><td>27.38</td><td>96.41</td><td>Open To Flow (1)</td></tr> <tr><td>35</td><td>74.96</td><td>98.02</td><td>Shut-In(1)</td></tr> <tr><td>79</td><td>711.68</td><td>100.91</td><td>End Shut-In(1)</td></tr> <tr><td>80</td><td>78.85</td><td>100.73</td><td>Open To Flow (2)</td></tr> <tr><td>110</td><td>110.93</td><td>102.25</td><td>Shut-In(2)</td></tr> <tr><td>158</td><td>705.41</td><td>103.99</td><td>End Shut-In(2)</td></tr> <tr><td>164</td><td>1562.66</td><td>104.26</td><td>Final Hydro-static</td></tr> </tbody> </table>		Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation	0	1586.92	96.76	Initial Hydro-static	4	27.38	96.41	Open To Flow (1)	35	74.96	98.02	Shut-In(1)	79	711.68	100.91	End Shut-In(1)	80	78.85	100.73	Open To Flow (2)	110	110.93	102.25	Shut-In(2)	158	705.41	103.99	End Shut-In(2)	164	1562.66	104.26	Final Hydro-static
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Trilobite Testing, Inc

Ref. No: 50374

Printed: 2013.03.20 @ 08:07:56

**DST #2 LKC H-J 3460' - 3530'**

 <b>TRILOBITE TESTING, INC.</b>	<b>DRILL STEM TEST REPORT</b>																																					
	TDI Inc 1310 Bison Rd Hays Ks 67601-9696 ATTN: Tom Denning	<b>11-15s-19w Ellis</b> <b>Urban Unit #1</b> Job Ticket: 50375 <b>DST#: 2</b> Test Start: 2013.03.20 @ 19:00:48																																				
<b>GENERAL INFORMATION:</b> Formation: <b>LKC</b> Deviated: No Whipstock: ft (KB) Time Tool Opened: 20:39:43 Time Test Ended: 01:52:12 Interval: <b>3460.00 ft (KB) To 3530.00 ft (KB) (TVD)</b> Total Depth: 3530.00 ft (KB) (TVD) Hole Diameter: 7.85 inches Hole Condition: Fair Test Type: Conventional Bottom Hole (Reset) Tester: Ray Schwager Unit No: 42 Reference Elevations: 2039.00 ft (KB) 2029.00 ft (CF) KB to GR/CF: 10.00 ft																																						
<b>Serial #: 8369 Inside</b> Press@RunDepth: 77.61 psig @ 3464.00 ft (KB)      Capacity: 8000.00 psig Start Date: 2013.03.20      End Date: 2013.03.21      Last Calib.: 2013.03.21 Start Time: 19:00:48      End Time: 01:52:12      Time On Btm: 2013.03.20 @ 20:37:13 Time Off Btm: 2013.03.21 @ 00:14:57																																						
<b>TEST COMMENT:</b> 45-IFP-w k bl thru-out 1/4"to 2"bl 60-ISIP-no bl 45-FFP-w k bl 1/4"bl 60-FSP-no bl																																						
	<b>PRESSURE SUMMARY</b> <table border="1"> <thead> <tr> <th>Time (Min.)</th> <th>Pressure (psig)</th> <th>Temp (deg F)</th> <th>Annotation</th> </tr> </thead> <tbody> <tr><td>0</td><td>1666.78</td><td>97.17</td><td>Initial Hydro-static</td></tr> <tr><td>3</td><td>15.79</td><td>96.36</td><td>Open To Flow (1)</td></tr> <tr><td>48</td><td>40.97</td><td>100.55</td><td>Shut-In(1)</td></tr> <tr><td>108</td><td>1121.53</td><td>102.95</td><td>End Shut-In(1)</td></tr> <tr><td>108</td><td>44.81</td><td>102.65</td><td>Open To Flow (2)</td></tr> <tr><td>154</td><td>77.61</td><td>105.60</td><td>Shut-In(2)</td></tr> <tr><td>215</td><td>1070.44</td><td>106.70</td><td>End Shut-In(2)</td></tr> <tr><td>218</td><td>1644.58</td><td>105.58</td><td>Final Hydro-static</td></tr> </tbody> </table>		Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation	0	1666.78	97.17	Initial Hydro-static	3	15.79	96.36	Open To Flow (1)	48	40.97	100.55	Shut-In(1)	108	1121.53	102.95	End Shut-In(1)	108	44.81	102.65	Open To Flow (2)	154	77.61	105.60	Shut-In(2)	215	1070.44	106.70	End Shut-In(2)	218	1644.58	105.58	Final Hydro-static
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Recovery			Gas Rates		
Length (ft)	Description	Volume (bbl)	Choke (inches)	Pressure (psig)	Gas Rate (Mcft/d)
90.00	MW 15% M85% W	0.99			

Trilobite Testing, Inc

Ref. No: 50375

Printed: 2013.03.21 @ 07:59:25

### ROCK TYPES

Cht vari	Dolsec	shale, gry	Ss
Chtcongl	Lmst fw7>	Carbon Sh	
Dolprim	shale, gm	shale, red	

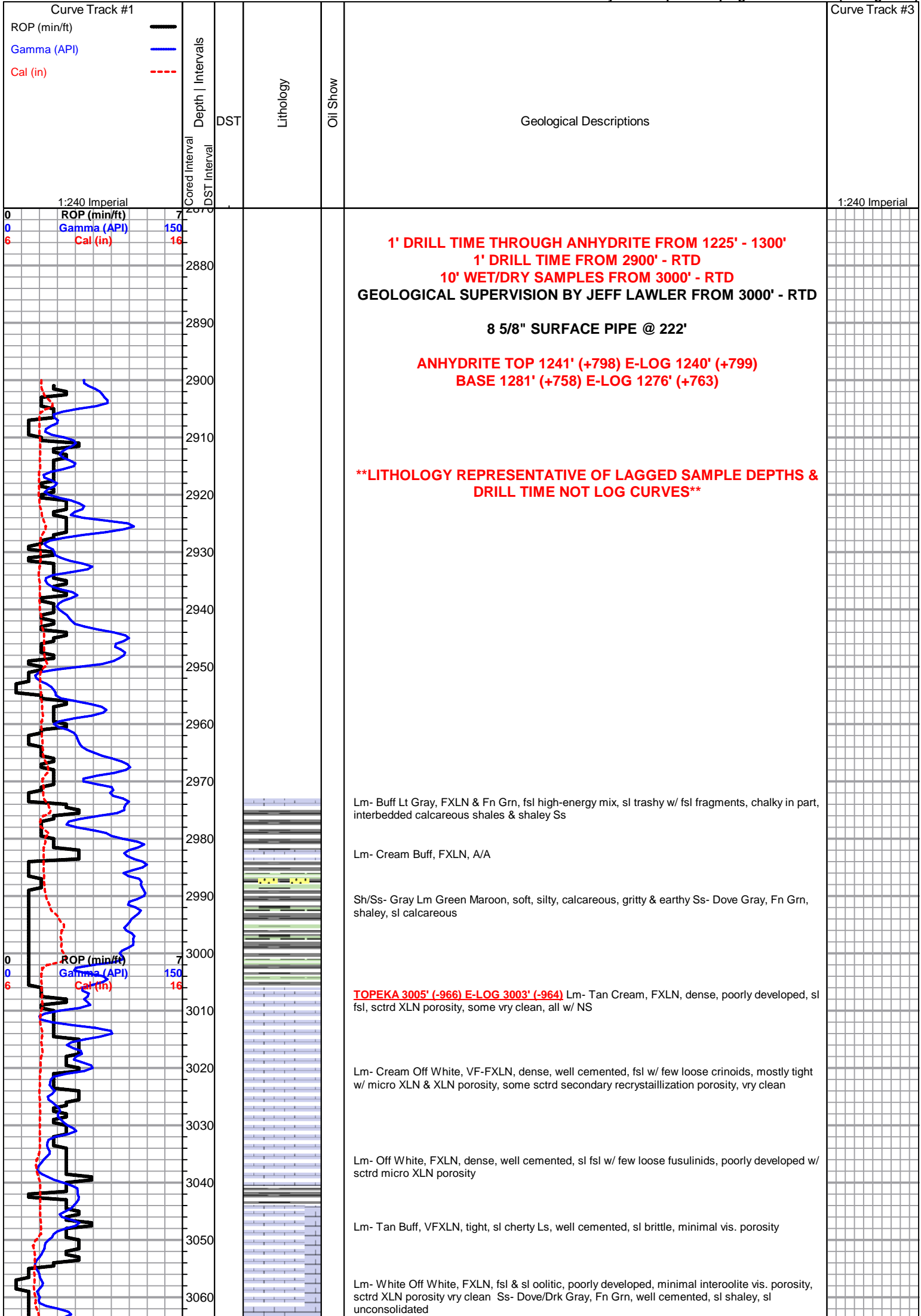
### ACCESSORIES

<b>STRINGER</b>	<b>TEXTURE</b>
Sandstone	Chalky
carb shale	

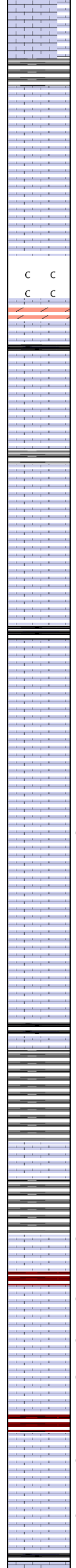
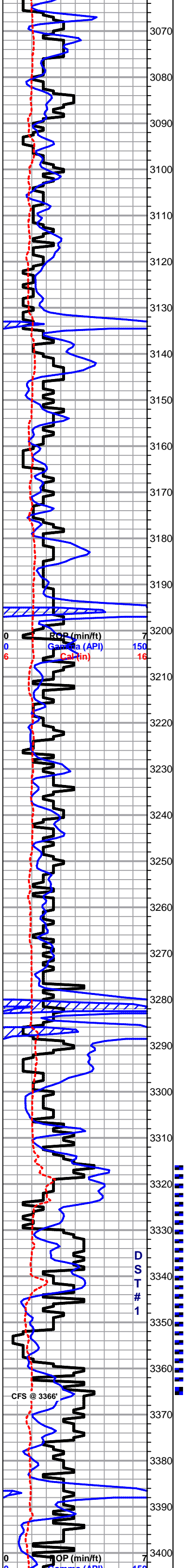
### OTHER SYMBOLS

<b>DST</b>
DST Int
DST alt

Printed by GEOstrip VC Striplog version 4.0.7.0 (www.grsi.ca)







Lm- Tan Buff, VF-FXLN, mix of tight well cemented cherty Ls & gritty, sub-sucrosic well cemented, poorly developed dolomitic Ls w/ mostly consistant vry fn ppt porosity throughout

Sh- Drk & Lt Gray White Lm Green, soft, silty, calcareous, gummy white chalk, sl waxy, dense & blocky

Lm- Cream Tan, VF-FXLN, dense, well cemented, poorly developed mix of sl fsl cherty Ls & gritty, mostly tight dolomitic Ls

Lm/Chert- FXLN, Cream, sl fsl & trahsy, loosely cemented, chalky in part Chert- Drk Gray sl fsl fresh bedded chert

Lm- Tan Cream, Vf Grn & FXLN, mix of lithofied mud matrix w/o vis. grains/porosity, & vry fsl, poorly developed w/ sctrd XLN porosity, clean & barren

Sh- White, abundant gummy white chalk

Lm- Buff, FXLN, fsl, gritty, sl dolomitic Ls, loosely cemented, massive, heavily mottled & sl unconsolidated

Sh- Black Gray, fissile, slaty, carbonaceous, silty & calcareous

Lm- Cream Buff, FXLN, gritty sub-sucrosic & sucrosic, loosely cemented dolomitic Ls, sctrd mottling, sl unconsolidated, dense XLN porosity, NS

Sh- Gray Lm Green White, sandy shales & gummy white chalk

Lm- Cream Tan, Crypto XLN, tight chert & cherty Ls, no vis. grains/porosity

Lm- Tan Cream, FXLN, gritty dolomitic Ls, loosely cemented & sl unconsolidated, sctrd mottling, NS

Lm- Cream Lt Green Tint, Fn Grn, gritty, dense, algal Ls, no vis. porosity

Sh- Black Lm Green Gray, fissile, carbonaceous, sl sandy, silty & calcareous

Lm- Cream Tan, FXLN, fsl, poorly developed, well cemented, sctrd XLN porosity, some sctrd mottling

Lm- Buff Lt Gray, A/A w/ few chips of fsl sl cherty Ls

Lm- Cream Off White, F-Med Grn, sl chalky, loosely cemented, sctrd mottling, some sl dolomitic Ls w/ sctrd XLN porosity

Lm- Tan Cream, FXLN, sl fs, poorly developed, most w/ dense micro XLN porosity & sctrd secondary recrystallizaton porosity, 1 chip w/ LT BRWN FLAKEY STN, NO SFO, NO ODR

Lm- Cream Off White, FXLN, gritty sl dolomitic Ls, few chips of fsl fresh bedded chert

Lm- Cream Off White, FXLN, dense, well cemented, poorly developed, tight w/ minimal vis. porosity

**HEEBNER 3285' (-1246) E-LOG 3278' (-1239)** Sh- Black Maroon Gray Lm Green, fissile, soft, carbonaceous, gritty & earthy, sl waxy & some sl sandy

Sh- Lt Gray Lm Green, soft, silty, sl sandy

**TORONTO 3313' (-1274) E-LOG 3298' (-1259)** Lm- White Off White, Vf Grn & VFXLN, dense mix of chalky mud supported matrix & poorly developed VFXLN w/ minimal vis. porosity, vry clean, barren

**LKC 3330' (-1291) E-LOG 3325' (-1286)** Lm- White Off White, VF-FXLN, poorly developed mix, mostly tight w/ sctrd micro XLN & XLN porosity, 2 chips w/ rare fn ppt porosity, WK SPOTTY STN, VRY SL SFO, NO ODR

Sh- Maroon, gritty & earthy, few gummy clumps

Lm- Tan, FXLN, dense, loosely cemented, dense micro XLN & micro XLN porosity, LT SPT STN, 1 CHIP w/ SL SFO, PR-FR ODR

Lm- Off White Cream, FXLN, oomoldic/sl oolitic, moderately well developed w/ partial to full skeletal dissolution & moderate intervugular connectivity, LT BRWN STN, SL SHW GSY FRO, FR-GD ODR, OIL SCUM ON TOP OF WET CUP

Lm- Cream Tan, FXLN, sl fsl, loosely cemented, sctrd XLN porosity, LT SCTRD STN, SL GSY SHEEN, ODR A/A

Sh- Maroon Gray Lm Green, gritty & earthy, soft, sl silty, sl waxy & dense

Lm- White Off White, VF-FXLN, mostly dense, well cemented, poorly developed w/ minimal vis. porosity, several chips sl fsl, moderately developed w/ sctrd inter fsl fn ppt porosity, WK SPOTTY STN, SL FLAKEY, NO SFO, PR-FNT ODR

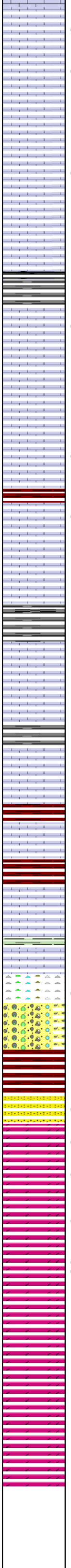
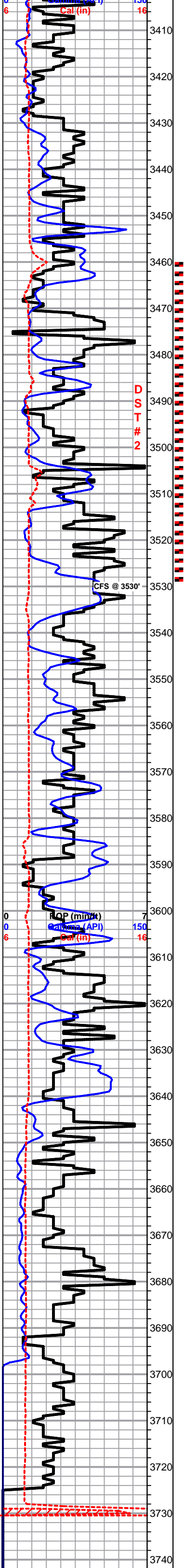
Lm- White Off White, FXLN, dense, well cemented, sctrd development w/ sctrd XLN porosity, WK SPOTTY STN, NO SFO, PR-FNT ODR

Sh- Black Maroon Gray White, dense & blocky, carbonaceous, gritty & earthy, gummy white clumps

SHORT TRIP SURVEY 1 dgr STRAP +2.03'

DST #1 LKC A-C 3317' - 3366'

CFS @ 3366'



clumps

3410 Lm- Off White, VFXLN, dense, vry well cemented, massive, sctrd sub-cavernous porosity w/ recrystallization w/in, LT BRWN STN, SL GSY SHN, NO SFO, FNT ODR

3420 Lm- Cream Tan Buff Off White, mix of oolitic biomicrite w/ clean siliceous cementation, no vis. porosity, poorly developed oolitic Ls w/ minimal vis. porosity, 1-2 chips of oolitic grainstone, & oolitic/sl oomoldic, moderately developed w/ sctrd interoolitic & rare vuggy porosity, SCTRD LT STN, NO SFO, FNT-PR ODR

3430 Lm- White Off White, VF-FXLN, dense, poorly developed w/ micro XLN porosity, chalky in part, vry clean

3440 Lm- Cream Buff, FXLN, oomoldic, partailly/mostly dissolved skeletal cavity, moderate intervugular connectivity & vuggy porosity, SCTRD LT STN, NO SFO, VRY SL GSY SHEEN, FNT ODR

3450 Lm- Cream Buff, Crypto-VFXLN, dense, well cemented, tight w/o vis. porosity, few chips of fresh bedded chert

3460 Sh- Black Gray Maroon, dense & well compacted, carbonaceous, slick blocky slivers, & gritty & earthy

3470 Lm- White Cream, FXLN, mix of sl oolitic w/ sctrd ppt interoolitic porosity, some w/ DRK RESIDUAL STN, NO SFO, some w/ LT BRWN STN, NO SFO, ALL W/ FNT ODR, and VF-FXLN, dense, well cemented, poorly developed w/ minimal vis. porosity, clean & barren

3480 Lm- Cream Off White, VF-FXLN, dense, mostly tight w/ sctrd micro XLN & XLN porosity, sl chalky in part, vry clean

3490 Lm- Cream Tan, FXLN, mix of moderately developed oolitic, few small chips of pearl shaped oolitic grainstone, LT BRWN STN, VRY SL SFO, PR-FNT ODR, FXLN, vry sctrd fn ppt & XLN porosity, clean & barren, sl chalky in part, few chips of chalky carry LT STN

3500 Sh- Maroon Lm Green, red wash & gummy argillaceous clumps

3510 Lm- Cream Tan, F-Med XLN, oolitic/sctrd oomoldic, moderately to moderately well developed, vry loosely to well cemented, LT BRWN STN, 1-2 CHIPS W/ VRY SL SFO, PR ODR

3520 Lm- White Off White, VF-FXLN, dense, vry well cemented, tight w/ minimal vis. porosity, vry clean

3530 Sh- Black Gray Lm Green, few chips of fissile carbonaceous shale, slick well compacted slivers, sl waxy

3540 Lm- Cream Off White, Crypto-FXLN, poorly developed, mostly tight w/o vis porosity to sl sctrd XLN porosity, vry clean, barren

3550 Lm- White Off White, FXLN, dense, loosely cemented & sl crumbly, sctrd soft white chalk, minimal vis.to sctrd micro XLN porosity

3560 Lm/Chert- White Ivory Cream, VF-FXLN mix, dense brittle cherty Ls w/ rare micro XLN porosity, sl fsl fresh bedded chert, & few chips of sl dolomitic chert, all w/ minimal vis. & no effective porosity, vry clean

3570 **BKC 3577' (-1538) E-LOG 3572' (-1533)** Sh- Maroon, gritty & earthy, some dense & nearly lithofied, some red wash, sandy shales

3580 Lm- Cream Off White, Crypto-VFXLN, dense, sl cherty Ls, tight w/ no vis. porosity

3590 Sh- Maroon, mix of dense & blocky, shaley Ss & sandy lime

3600 Lm- Cream Off White, VFXLN, dense, well cemented, cherty Ls w/ minimal vis. porosity, 1-2 chips w/ RARE BLK EDGE STN, NO SFO, NO ODR

3610 Chert- Salmon Semi-Translucent Golden Brown, mix of fresh bedded & weatherd chert, few chips of gritty sl dolomitic chert, few chips of tan bedded chert w/ vry sctrd ppt porosity, DRK BRWN STN, VRY SL SFO, NO ODR

3620 Cherty Conglomerate- A/A w/ more weathered chert, red wash shale & conglomerate ls

3630 Ss- Clear to Sl Frosted, sub-rounded, lightly cemented & friable, mostly consolidated, some sl shaley, SAT DRK STN, GD FO UPON CRUSH, NO ODR

3640 **ARBUCKLE 3547' (-1608) E-LOG 3640' (-1601)** Dolomite- Ivory, Med XLN, well developed, euhedral rhombs, loosely cemented, GD consistant ppt porosity throughout, DRK SCTRD STN, FR SFO, VRY FNT ODR

3650 Dolomite- Sandy dolomite, mature rounded grains w/ lt dolomitic cementation, HCL completely dissolved chip, friable, moderately sorted, DRK BLK SAT STN, GD SFO, PR ODR

3660 Dolomite- Ivory, Med-Crs XLN, vry well developed euhedral rhombs, sl friable, consistant ppt porosity throughout, NEARLY SAT STN, GD SFO, PR ODR

3670 Dolomite-Cream Off White, Med-Crse XLN, unconsolidated w/ mature sctrd rounded to sub-rounded qtz. inclusions, vry friable to well cemented, vry well developed to poorly developed, DRK BRWN STN, PR-GD SFO UPON CRUSH, FNT ODR

3680 Dolomite- Ivory Cream, FXLN, dense, most well cemented, poorly developed, sub-sucrosic w/ consistant XLN porosity, barren

3690 Dolomite- A/A w/ few chips of limey dolomite and sl cherty dolomite, all clean & barren

3700 Dolomite- A/A, few chips sl shaley, several chips of gummy white chalk, & bone white fresh bedded chert

3710 Dolomite- Cream, F-Med XLN, sl developed w/ mostly consistant vry fn ppt porosity, some vry loosely cemented & crumbly, most well cemented, all clean & barren

3720

3730 **RTD 3724' (-1685) LTD 3721' (-1682) @ 15:52 3/21/2013**

3740

DST #2  
LKC H-J  
3460' - 3530'

\*PROBLEMS W/  
AUTO DRILLER  
FROM  
~3505' - 3530'

\*NO AUTO  
DRILLER AFTER  
DST #2 TO TD\*

SURVEY 3/4  
dgr.





# QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025

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

No. 6628

Cell 785-324-1041

Date	3-15-13	Sec.	11	Twp.	15	Range	19	County	Ellis	State	Ks	On Location		Finish	8:30 PM
Lease								Location				Antonino, Ks - 2S, 1/2 W, N Into			
Urban unit								Well No. 1				Owner			
Contractor Southwind								#1				To Quality Oilwell Cementing, Inc.			
Type Job Surface												You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.			
Hole Size 12 1/4"				T.D. 224'				Charge To TDI Inc.							
Csg. 8 5/8"				Depth 222'				Street							
Tbg. Size				Depth				City				State			
Tool				Depth				The above was done to satisfaction and supervision of owner agent or contractor.							
Cement Left in Csg. 15'				Shoe Joint 15'				Cement Amount Ordered 150 Sx Common 3% CC							
Meas Line				Displace 13 Bcs				2 1/2 gal							
<b>EQUIPMENT</b>								Common 150							
Pumptrk 16				No. Cementer				Franz				Poz. Mix			
Bulktrk 10				No. Driver				Rick				Gel. 3			
Bulktrk				No. Driver				Clayton				Calcium 5			
<b>JOB SERVICES &amp; REMARKS</b>								Hulls							
Remarks: Cement did Circulate.								Salt							
Rat Hole								Flowseal							
Mouse Hole								Kol-Seal							
Centralizers								Mud CLR 48							
Baskets								CFL-117 or CD110 CAF 38							
D/V or Port Collar								Sand							
								Handling 158							
								Mileage							
<b>FLOAT EQUIPMENT</b>															
								Guide Shoe							
								Centralizer							
								Baskets							
								AFU Inserts							
								Float Shoe							
								Latch Down							
								Pumptrk Charge Surface							
								Mileage 12							
								Tax							
								Discount							
								Total Charge							
Signature <i>Raj K</i>															

**JOB LOG**

**SWIFT Services, Inc.**

DATE 3-22-13 PAGE NO. 1

CUSTOMER *T D I* WELL NO. #1 LEASE *Urban Trust* JOB TYPE *2-stage* TICKET NO. *23955*

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	0550							<i>on loc w/ FE.</i>
								<i>RTD 3724'</i>
								<i>5 1/2" x 14" x 3721' x 42'</i>
								<i>Cent 1, 3, 5, 7, 8, 10, 12, 56</i>
								<i>Back 2, 13, 57</i>
								<i>D.V. 57 @ 1285'</i>
	0615							<i>start FE</i>
	0805							<i>Break Circ</i>
	0905	5	0					<i>start Pre-flushes 500 gal Mud flush 20 bbl KCL flush</i>
	0911	5	32/0					<i>start 150 sks EA-2 Cement</i>
	0918		36					<i>End Cement</i>
								<i>Wash P+L</i>
								<i>Drop LD Plug</i>
	0924	6	0			150		<i>start Displacement</i>
	0934	5	60			250		<i>Catch Cement 20 bbl KCL in last</i>
	0940		89.5			650/1500		<i>Land Plug of Displacement</i>
								<i>Release Pressure / Float Held</i>
								<i>Drop Opening Plug</i>
	0945	2.5	7/4					<i>Plug RHYMTH 30/15 sks SMD Cement</i>
	0950					1100		<i>Open D.V. Tool.</i>
	0951	5	0			150		<i>start 155 sks SMD Cement</i>
	1008		86					<i>End Cement</i>
								<i>Drop Closing Plug</i>
	1012	5	0			150		<i>start Displacement</i>
	1014	4	09			200		<i>Circulate Cement</i>
	1020		31			400/1500		<i>Land Plug</i>
								<i>Release Pressure</i>
								<i>Float Held</i>
								<i>circ 40 sks to pit</i>
								<i>Thank you</i>
								<i>Nick, David E. &amp; Isaac</i>

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

May 21, 2013

Tom Denning  
TDI, Inc.  
1310 BISON RD  
HAYS, KS 67601-9696

Re: ACO1  
API 15-051-26483-00-00  
Urban Unit 1  
SE/4 Sec.11-15S-19W  
Ellis 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,  
Tom Denning