

Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1241477  
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
-----------------------------------	-----------------	---

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: \_\_\_\_\_

1241477

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 <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
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:				

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> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
--	---	---

Form	ACO1 - Well Completion
Operator	H & C Oil Operating Inc.
Well Name	Berland Trust 35-1
Doc ID	1241477

Tops

Name	Top	Datum
Top Anhydrite	1628	+501
Base Anhydrite	1660	+469
Topeka	3127	-998
Heebner	3336	-1207
Toronto	3360	-1231
LKC	3378	-1249
BKC	3597	-1468
Marmaton	3640	-1511
Arbuckle	3720	-1591



# QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

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

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

No. 994

Date	1-9-15	Sec.	35	Twp.	8	Range	21	County	Carham	State	KS	On Location	1:30AM
Lease	Birkens Trust												
Well No.	35-1												
Contractor	American Energy												
Type Job	Six bore												
Hole Size	12 1/4												
Csg.	8 5/8												
Tbg. Size													
Tool													
Cement Left in Csg.	0												
Meas Line	Displace 1336												
<b>EQUIPMENT</b>													
Pumptrk	No.	Cementer											
	18	Helper											
Bulktrk	No.	Driver											
	9	Driver											
Bulktrk	No.	Driver											
	9	Driver											
<b>JOB SERVICES &amp; REMARKS</b>													
Remarks:													
Rat Hole													
Mouse Hole													
Centralizers													
Baskets													
D/N or Port Collar													
8 5/8 on bottom B+ Completion													
MIX BESSIE + Displace													
Cement + Centralizer													
<b>FLOAT EQUIPMENT</b>													
Baskets													
AFU Inserts	8 5/8 Sams												
Float Shoe													
Latch Down													
Pumptrk Charge	<del>0</del> Surface												
Mileage	42												
<b>QUALITY OILWELL CEMENTING</b>													
Signature: <i>Donald Paul</i>													
												Tax	
												Discount	
												Total Charge	

# QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

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

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

No. 6319

Date	1-15-15	35	8	21	Range	County	State	On Location	Finish
Lease	Berland Trust		Well No.	35-1		Location	Demarw to 390rd 1 1/4s 1/8w sinte		
Contractor	Americun Eagle		2						
Type Job	Pump								
Hole Size	7 7/8		T.D.	3815					
Csg.	D.P. 4 1/2		Depth	3606					
Tbg. Size									
Tool									
Cement Left in Csg.	Shoe Joint <del>1200</del>								
Meas Line	Displace mud/H2O								
<b>EQUIPMENT</b>									
Pumptrk	20	No.	Cementer	NICK					
Bulktrk	9	No.	Helper	TYLER					
Bulktrk	01	No.	Driver	BILLY					
<b>JOB SERVICES &amp; REMARKS</b>									
Remarks:	Common 174								
Rat Hole	30.5x								
Mouse Hole	72A								
Centralizers	Kol-Seal								
Baskets	Mud CLR 48								
DV or Port Collar	CFL-117 or CD110 CAF 38								
1st	3606' 50.5x								
2nd	1640' 50.5x								
3rd	900' 100.5x								
4th	290' 50.5x								
5th	40' 10.5x								
Rat	30.5x								
Pumptrk Charge <u>86.9</u> Mileage <u>42</u> <u>86.9</u>									
Signature									Tax
									Discount
									Total Charge

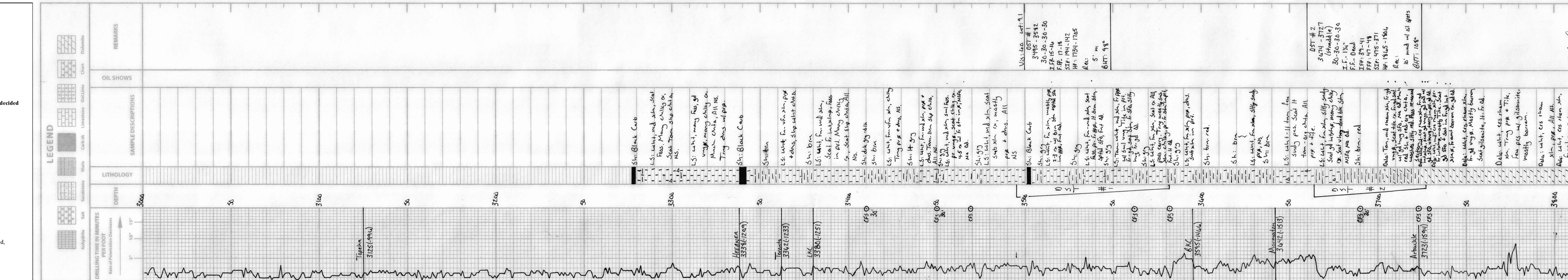
*[Handwritten Signature]*

<b>Marc A. Downing</b>		<b>Geologic Report</b>		
Consulting Petroleum Geologist		Drilling Time and Sample Log		
Operator <b>H&amp;C Oil Operating, Inc.</b>		KB	Elevation 2129	
Lease <b>Berland Trust</b> No. 35-1		DF	2127	
API # <b>15-065-24094-0000</b>		GL	2122	
Field <b>Wildcat</b>		Casing Record Surface		
Location <b>1900' FNL 1200' FEL</b>		8 5/8" @ 219'		
Sec. 35 Twp. 8s Rgc. 21w		Production None		
County <b>Graham</b> State <b>Kansas</b>		Electrical Surveys		
Formation		CNL/CDL, DIL, MEL		
Top Anhydrite	1625	1628	+501	+5
Base Anhydrite	1658	1660	+469	+3
Topeka	3125	3127	-998	+3
Heebner	3338	3336	-1207	+4
Toronto	3362	3360	-1231	+5
LKC	3380	3378	-1249	+5
BKC	3595	3597	-1468	+5
Marmaton	3642	3640	-1511	+3
Arbuckle	3723	3720	-1591	+12
Total Depth	3815	3813	-1684	
Reference Well For Structural Comparison		H&C Oil Operating		
Newell #23-1		330' FSL & 1850' FEL		
		Sec. 23-8s-21w		

Drilling Contractor	<b>American Eagle, Rig #2</b>	
Commenced	1-9-15	Completed 1-15-15
Samples Saved From	3250	To RTD
Drilling Time Kept From	3000	To RTD
Samples Examined From	3250	To RTD
Geological Supervision From	3000	To RTD

**Summary and Recommendations**  
 Due to structural position, DST recovery, and log evaluation, it was decided to plug and abandon the well.

Respectfully Submitted,  
 Marc A. Downing





## DRILL STEM TEST REPORT

Prepared For: **H&C Oil Operating Inc.**

PO Box 86  
Plainville, KS 67663

ATTN: Marc Downing

### **Berland Trust #35-1**

### **35-8s-21w Graham,KS**

Start Date: 2015.01.13 @ 14:12:06

End Date: 2015.01.13 @ 21:56:36

Job Ticket #: 61151                      DST #: 1

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

Printed: 2015.01.15 @ 13:19:45





**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

H&C Oil Operating Inc.

**35-8s-21w Graham,KS**

PO Box 86  
Plainville, KS 67663

**Berland Trust #35-1**

ATTN: Marc Downing

Job Ticket: 61151

**DST#: 1**

Test Start: 2015.01.13 @ 14:12:06

## GENERAL INFORMATION:

Formation: **KC "H-K"**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 17:57:06  
 Tester: Brannan Lonsdale  
 Time Test Ended: 21:56:36  
 Unit No: 62  
 Interval: **3495.00 ft (KB) To 3582.00 ft (KB) (TVD)**  
 Reference Elevations: 2130.00 ft (KB)  
 Total Depth: 3582.00 ft (KB) (TVD)  
 2122.00 ft (CF)  
 Hole Diameter: 7.88 inches  
 Hole Condition: Fair  
 KB to GR/CF: 8.00 ft

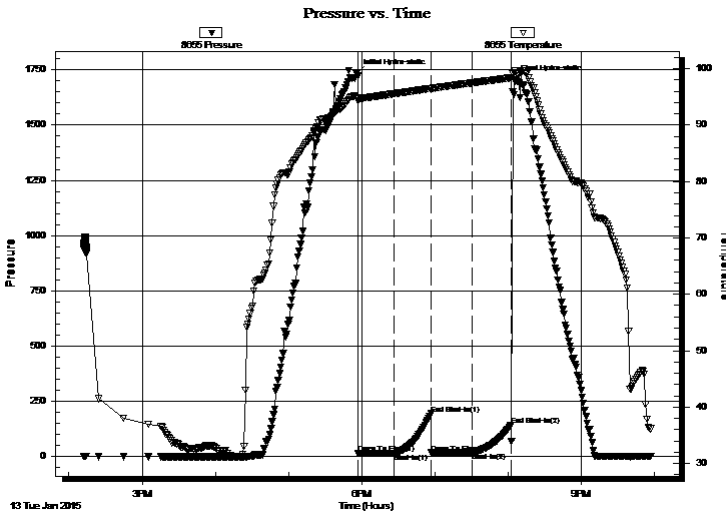
## Serial #: 8655

Outside

Press@RunDepth: 17.60 psig @ 3496.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2015.01.13 End Date: 2015.01.13 Last Calib.: 2015.01.13  
 Start Time: 14:12:07 End Time: 21:56:36 Time On Btm: 2015.01.13 @ 17:55:36  
 Time Off Btm: 2015.01.13 @ 20:05:06

TEST COMMENT: 30- IF- Slowly built to 3/4"  
 30- IS- No blow  
 30- FF- No blow  
 30- FSI- No blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1734.39	94.91	Initial Hydro-static
2	14.61	94.36	Open To Flow (1)
31	15.55	95.54	Shut-In(1)
61	193.61	96.52	End Shut-In(1)
62	16.62	96.47	Open To Flow (2)
95	17.60	97.50	Shut-In(2)
127	141.64	98.37	End Shut-In(2)
130	1705.39	99.63	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
5.00	M	0.02

## Gas Rates

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





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

H&C Oil Operating Inc.

**35-8s-21w Graham,KS**

PO Box 86  
Plainville, KS 67663

**Berland Trust #35-1**

Job Ticket: 61151

**DST#: 1**

ATTN: Marc Downing

Test Start: 2015.01.13 @ 14:12:06

## Tool Information

Drill Pipe:	Length: 3460.00 ft	Diameter: 3.75 inches	Volume: 47.27 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 31.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 58000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial 46000.00 lb
Depth to Top Packer:	3495.00 ft			Final 47000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	87.00 ft			
Tool Length:	107.00 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			3476.00	
Shut In Tool	5.00			3481.00	
Hydraulic tool	5.00			3486.00	
Packer	5.00			3491.00	20.00 Bottom Of Top Packer
Packer	4.00			3495.00	
Stubb	1.00			3496.00	
Recorder	0.00	8651	Inside	3496.00	
Recorder	0.00	8655	Outside	3496.00	
Perforations	18.00			3514.00	
Change Over Sub	1.00			3515.00	
Drill Pipe	63.00			3578.00	
Change Over Sub	1.00			3579.00	
Bullnose	3.00			3582.00	87.00 Bottom Packers & Anchor

**Total Tool Length: 107.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

H&C Oil Operating Inc.

**35-8s-21w Graham,KS**

PO Box 86  
Plainville, KS 67663

**Berland Trust #35-1**

Job Ticket: 61151

**DST#: 1**

ATTN: Marc Downing

Test Start: 2015.01.13 @ 14:12:06

## 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: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.39 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1600.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	M	0.025

Total Length: 5.00 ft      Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

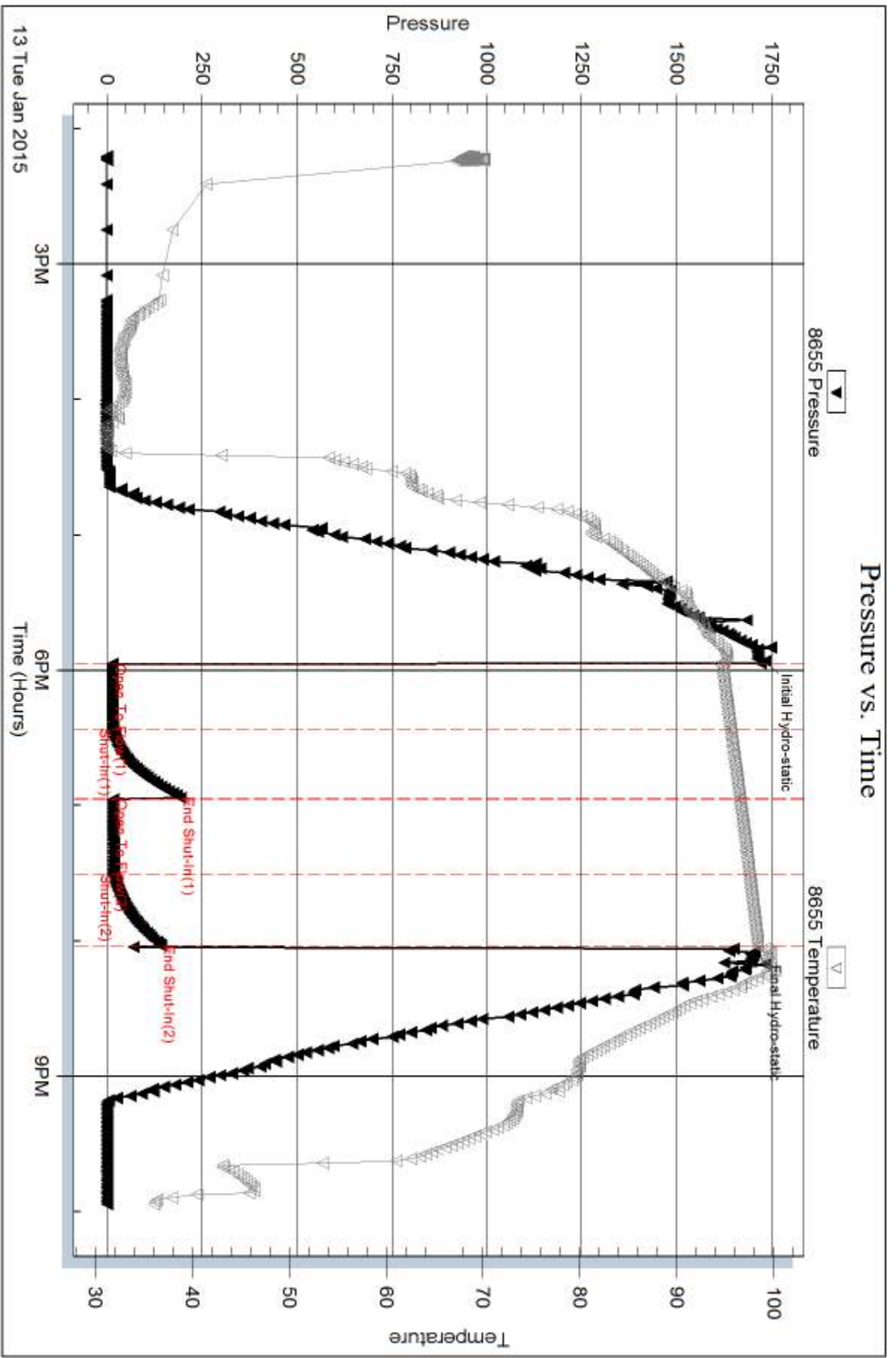
Recovery Comments:

Serial #: 8655

Outside H&C Oil Operating Inc.

Berland Trust #35-1

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 61151

Printed: 2015.01.15 @ 13:19:46

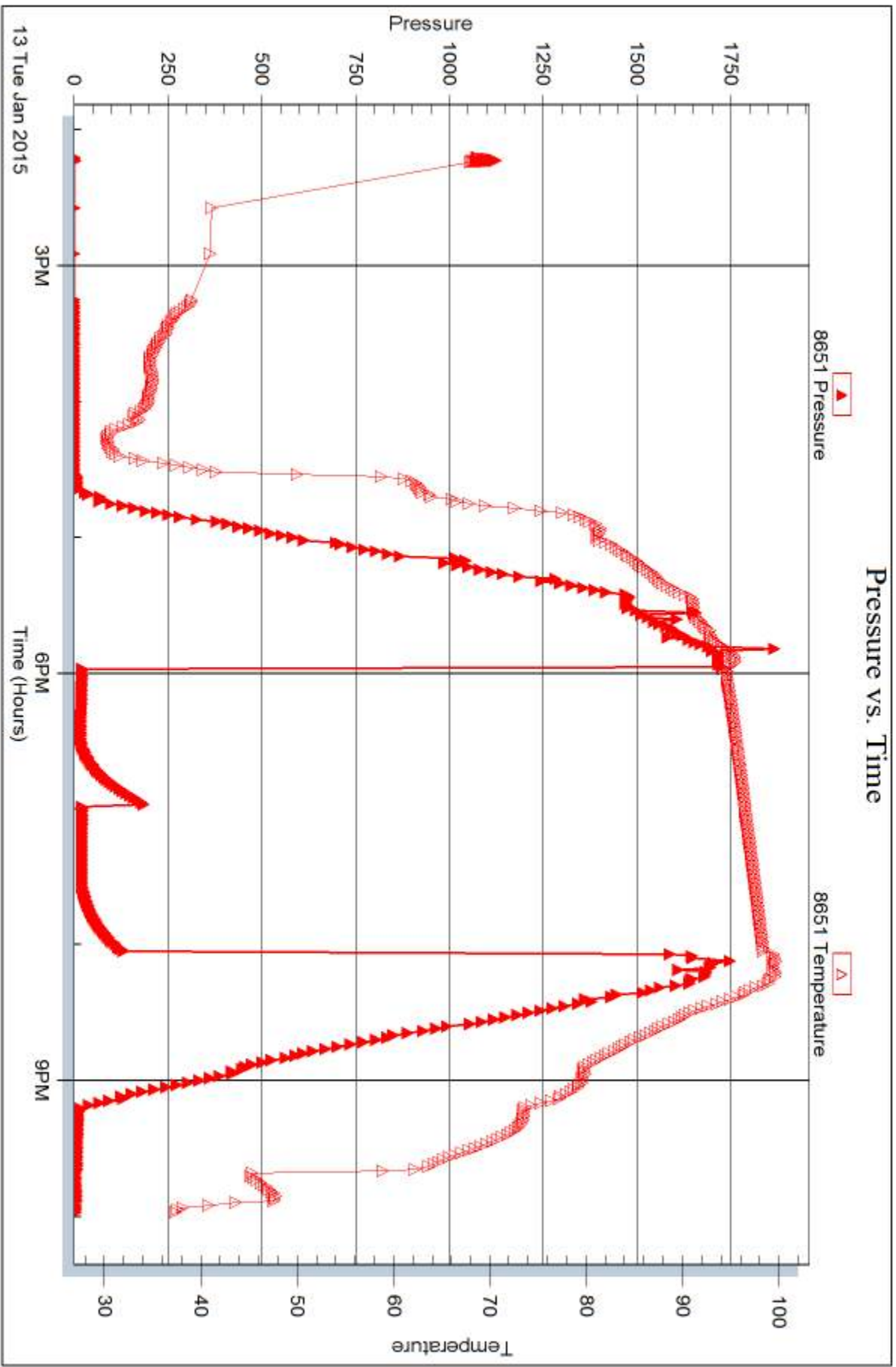
Serial #: 8651

Inside

H&C Oil Operating Inc.

Berland Trust #35-1

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 61151

Printed: 2015.01.15 @ 13:19:46



## DRILL STEM TEST REPORT

Prepared For: **H&C Oil Operating Inc.**

PO Box 86  
Plainville, KS 67663

ATTN: Marc Downing

**Berland Trust #35-1**

**35-8s-21w Graham,KS**

Start Date: 2015.01.15 @ 02:48:59

End Date: 2015.01.15 @ 09:13:29

Job Ticket #: 61152                      DST #: 2

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

Printed: 2015.01.15 @ 13:18:31



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

H&C Oil Operating Inc.

**35-8s-21w Graham,KS**

PO Box 86  
Plainville, KS 67663

**Berland Trust #35-1**

ATTN: Marc Downing

Job Ticket: 61152

**DST#: 2**

Test Start: 2015.01.15 @ 02:48:59

## GENERAL INFORMATION:

Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 05:23:59  
 Time Test Ended: 09:13:29  
 Interval: **3674.00 ft (KB) To 3727.00 ft (KB) (TVD)**  
 Total Depth: 3813.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Straddle (Reset)  
 Tester: Brannan Lonsdale  
 Unit No: 62  
 Reference Elevations: 2130.00 ft (KB)  
 2122.00 ft (CF)  
 KB to GR/CF: 8.00 ft

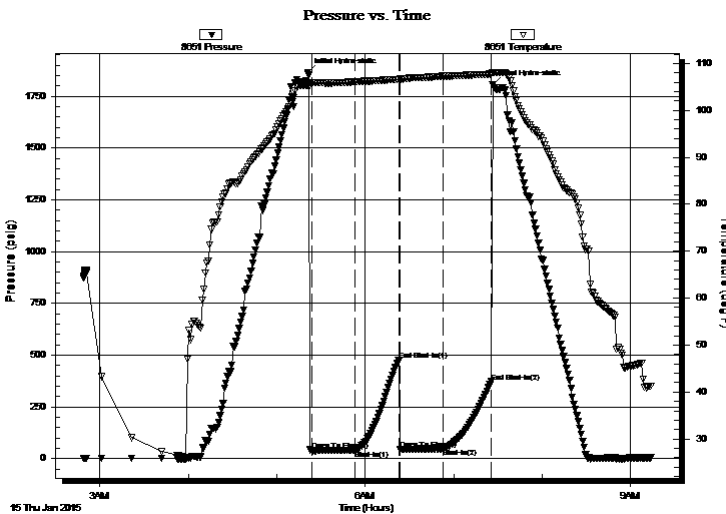
## Serial #: 8651

Inside

Press@RunDepth: 48.27 psig @ 3675.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2015.01.15 End Date: 2015.01.15 Last Calib.: 2015.01.15  
 Start Time: 02:49:00 End Time: 09:13:29 Time On Btm: 2015.01.15 @ 05:20:59  
 Time Off Btm: 2015.01.15 @ 07:26:29

TEST COMMENT: 30- IF- Slowly built to 1 1/4"  
 30- IS- No blow  
 30- FF- No blow  
 30- FSI- No blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1865.38	105.30	Initial Hydro-static
3	38.71	105.92	Open To Flow (1)
32	40.93	106.11	Shut-In(1)
62	474.53	106.63	End Shut-In(1)
63	46.86	106.67	Open To Flow (2)
92	48.27	107.30	Shut-In(2)
125	371.42	107.74	End Shut-In(2)
126	1806.18	108.11	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
10.00	M w/ few oil spots	0.05

\* Recovery from multiple tests

## Gas Rates

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







**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

H&C Oil Operating Inc.

**35-8s-21w Graham,KS**

PO Box 86  
Plainville, KS 67663

**Berland Trust #35-1**

Job Ticket: 61152 **DST#: 2**

ATTN: Marc Downing

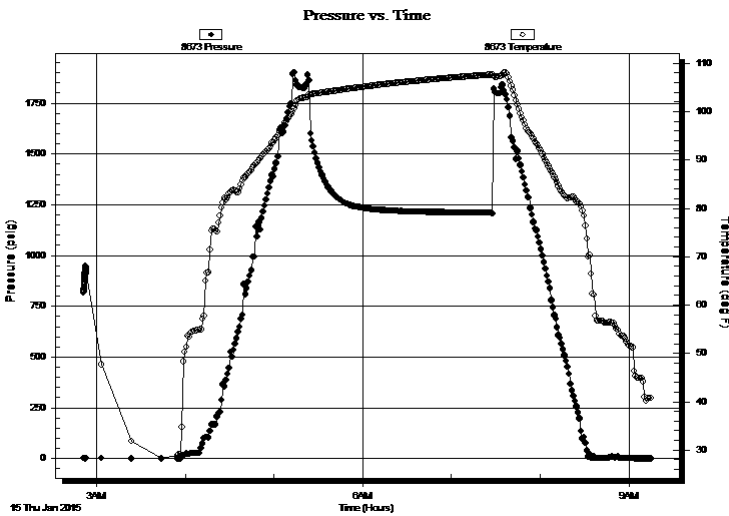
Test Start: 2015.01.15 @ 02:48:59

## GENERAL INFORMATION:

Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 05:23:59  
 Time Test Ended: 09:13:29  
 Interval: **3674.00 ft (KB) To 3727.00 ft (KB) (TVD)**  
 Total Depth: 3813.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Straddle (Reset)  
 Tester: Brannan Lonsdale  
 Unit No: 62  
 Reference Elevations: 2130.00 ft (KB)  
 2122.00 ft (CF)  
 KB to GR/CF: 8.00 ft

**Serial #: 8673 Below (Straddle)**  
 Press@RunDepth: psig @ 3746.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2015.01.15 End Date: 2015.01.15 Last Calib.: 2015.01.15  
 Start Time: 02:51:15 End Time: 09:15:14 Time On Btm:  
 Time Off Btm:

TEST COMMENT: 30- IF- Slowly built to 1 1/4"  
 30- IS- No blow  
 30- FF- No blow  
 30- FS- No blow



## PRESSURE SUMMARY

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

## Recovery

Length (ft)	Description	Volume (bbl)
10.00	M w/ few oil spots	0.05

## Gas Rates

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

\* Recovery from multiple tests



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

H&C Oil Operating Inc.

**35-8s-21w Graham,KS**

PO Box 86  
Plainville, KS 67663

**Berland Trust #35-1**

Job Ticket: 61152

**DST#: 2**

ATTN: Marc Downing

Test Start: 2015.01.15 @ 02:48:59

## Tool Information

Drill Pipe:	Length: 3646.00 ft	Diameter: 3.75 inches	Volume: 49.81 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 31.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 57000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3674.00 ft			Final 51000.00 lb
Depth to Bottom Packer:	3727.00 ft			
Interval between Packers:	53.00 ft			
Tool Length:	159.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

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

Change Over Sub	1.00			3655.00	
Shut In Tool	5.00			3660.00	
Hydraulic tool	5.00			3665.00	
Packer	5.00			3670.00	20.00 Bottom Of Top Packer
Packer	4.00			3674.00	
Stubb	1.00			3675.00	
Recorder	0.00	8651	Inside	3675.00	
Recorder	0.00	8655	Outside	3675.00	
Change Over Sub	1.00			3676.00	
Drill Pipe	31.00			3707.00	
Change Over Sub	1.00			3708.00	
Perforations	15.00			3723.00	
Blank Off Sub	1.00			3724.00	
Blank Spacing	3.00			3727.00	53.00 Tool Interval
Packer	1.00			3728.00	
Stubb	1.00			3729.00	
Perforations	16.00			3745.00	
Change Over Sub	1.00			3746.00	
Recorder	0.00	8673	Below	3746.00	
Drill Pipe	63.00			3809.00	
Change Over Sub	1.00			3810.00	
Bullnose	3.00			3813.00	86.00 Bottom Packers & Anchor

**Total Tool Length: 159.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

H&C Oil Operating Inc.

**35-8s-21w Graham,KS**

PO Box 86  
Plainville, KS 67663

**Berland Trust #35-1**

Job Ticket: 61152

**DST#: 2**

ATTN: Marc Downing

Test Start: 2015.01.15 @ 02:48:59

## 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: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.38 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1600.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	Mw / few oil spots	0.049

Total Length: 10.00 ft      Total Volume: 0.049 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8651

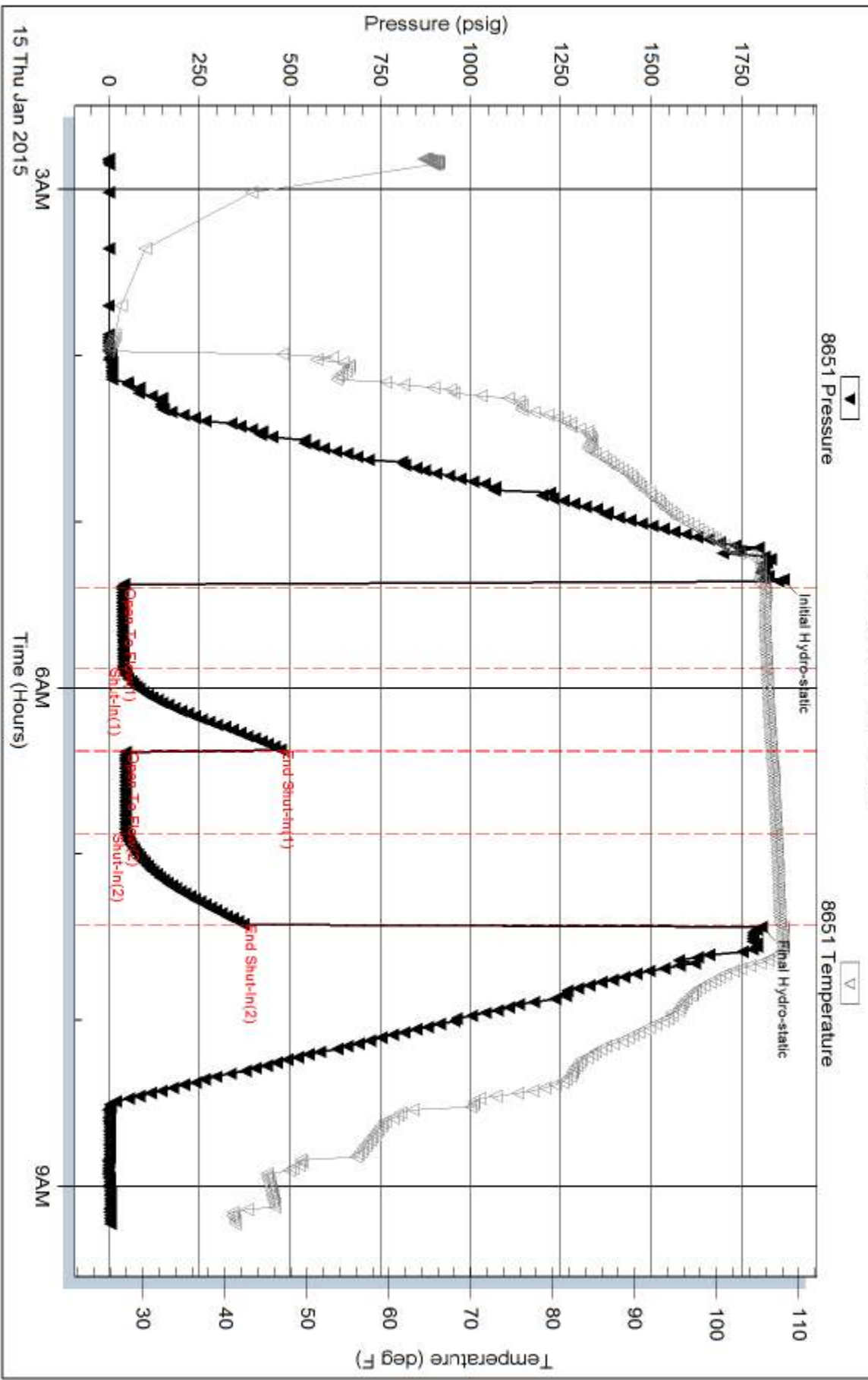
Inside

H&C Oil Operating Inc.

Berland Trust #35-1

DST Test Number: 2

### Pressure vs. Time

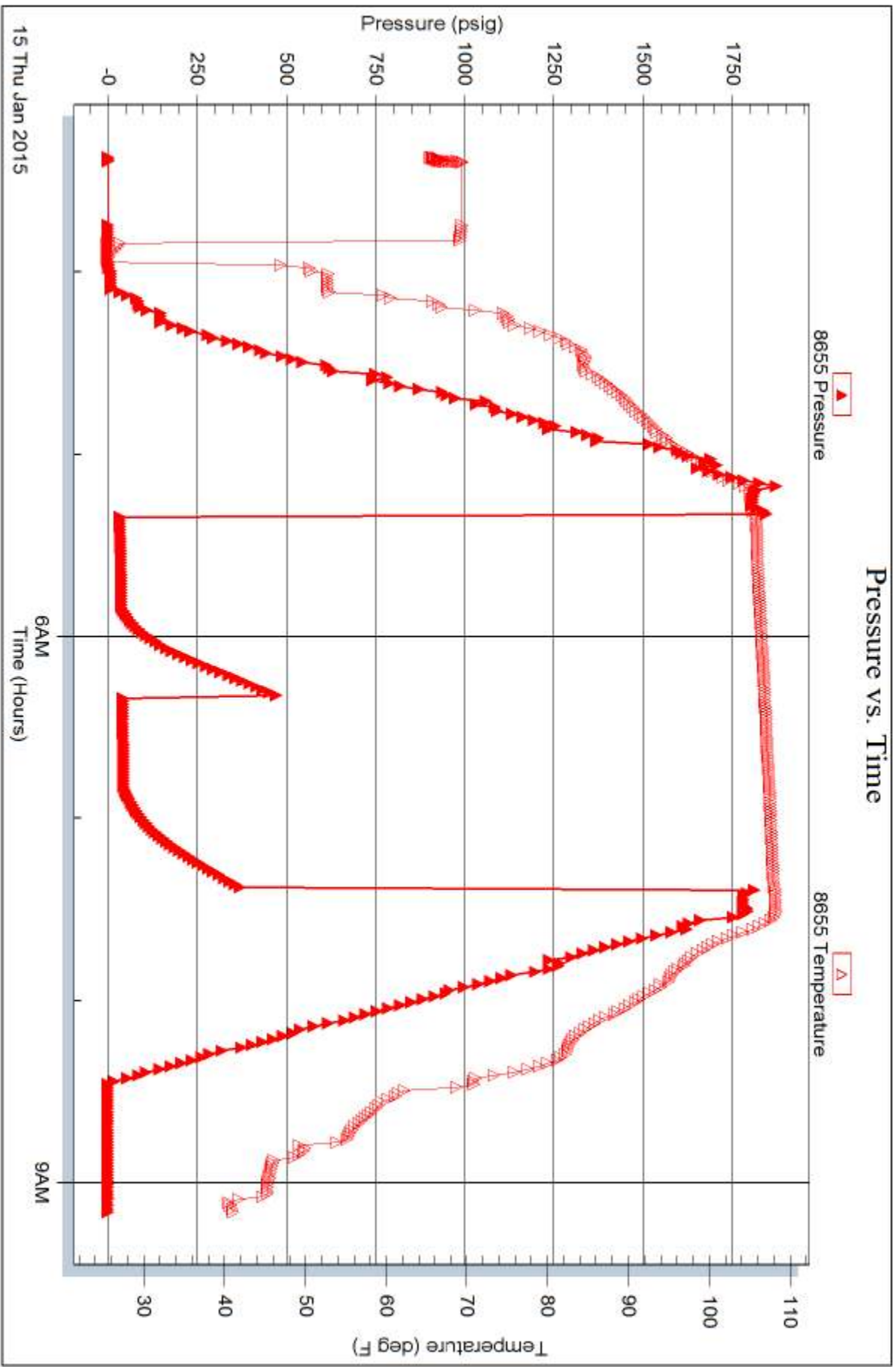


Serial #: 8655

Outside H&C Oil Operating Inc.

Berland Trust #35-1

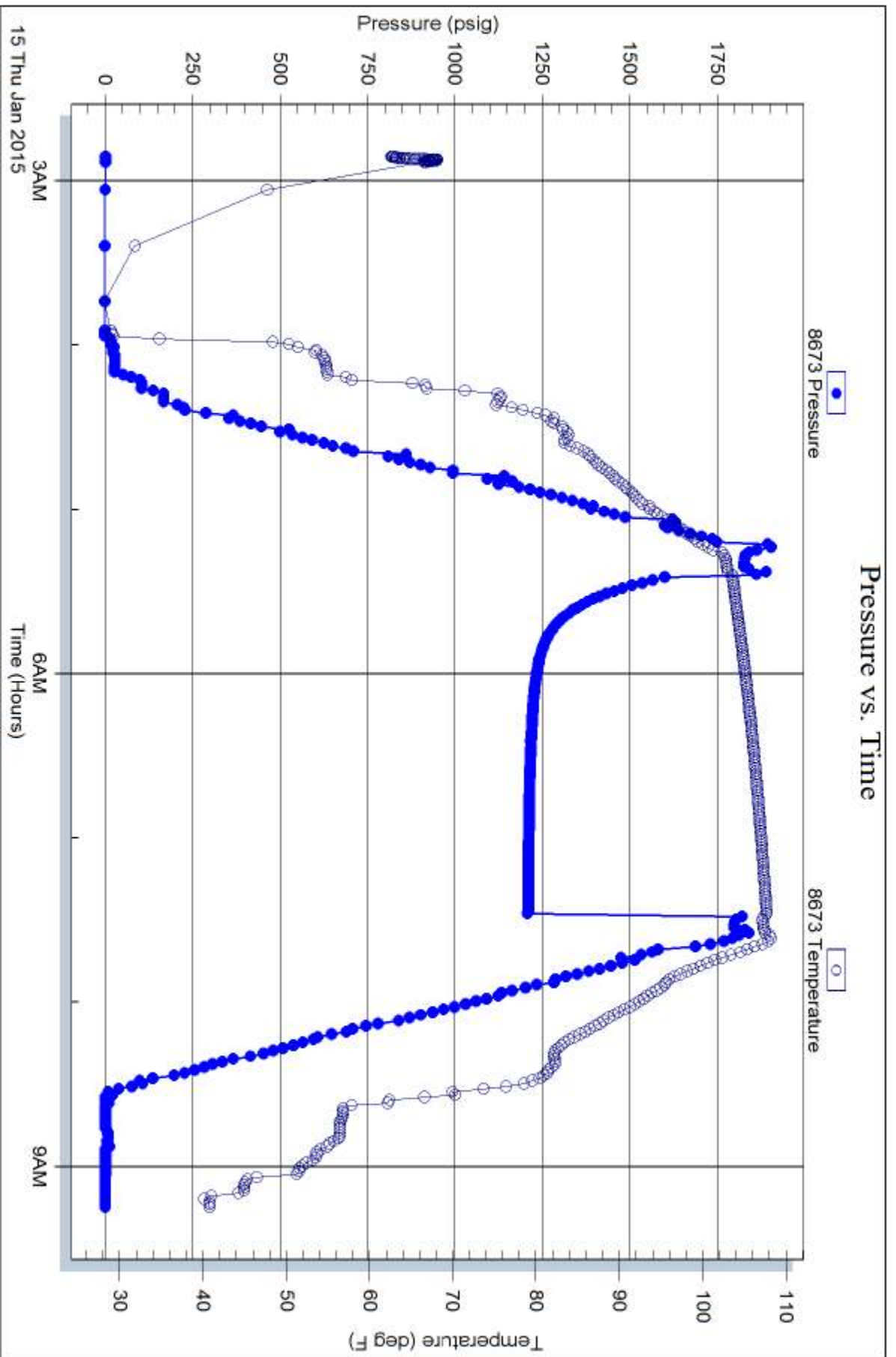
DST Test Number: 2



Triobite Testing, Inc

Ref. No: 61152

Printed: 2015.01.15 @ 13:18:33





# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 61151

Well Name & No. Berland Trust #35-1 Test No. 1 Date 1/13/15  
 Company H&C Oil Operating Inc. Elevation 2130 KB 2122 GL  
 Address PO Box 86 Plainville, KS 67663  
 Co. Rep / Geo. Marc Downing Rig American Eagle #2  
 Location: Sec. 35 Twp. 8 S Rge. 21 W Co. Graham State KS

Interval Tested 3495 - 3582 Zone Tested KC "H-K"  
 Anchor Length 87' Drill Pipe Run 3460 Mud Wt. 9.1  
 Top Packer Depth 3490 Drill Collars Run 31 Vis 60  
 Bottom Packer Depth 3495 Wt. Pipe Run          WL 6.4  
 Total Depth 3582 Chlorides 1,600 ppm System LCM 2<sup>+</sup>

Blow Description IF - slowly built to 3/4"  
ISI - No blow  
PF - No blow  
PSI - No blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>M</u>				
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 5' BHT 98° Gravity          API RW          @          °F Chlorides          ppm

(A) Initial Hydrostatic <u>1734</u>	<input checked="" type="checkbox"/> Test <u>1050</u>	T-On Location <u>1331</u>
(B) First Initial Flow <u>15</u>	<input type="checkbox"/> Jars <u>        </u>	T-Started <u>1412</u>
(C) First Final Flow <u>16</u>	<input type="checkbox"/> Safety Joint <u>        </u>	T-Open <u>1758</u>
(D) Initial Shut-In <u>194</u>	<input type="checkbox"/> Circ Sub <u>        </u>	T-Pulled <u>1958</u>
(E) Second Initial Flow <u>17</u>	<input type="checkbox"/> Hourly Standby <u>        </u>	T-Out <u>2159</u>
(F) Second Final Flow <u>18</u>	<input checked="" type="checkbox"/> Mileage <u>102 102 RT</u>	Comments <u>        </u>
(G) Final Shut-In <u>142</u>	<input type="checkbox"/> Sampler <u>        </u>	<u>        </u>
(H) Final Hydrostatic <u>1705</u>	<input type="checkbox"/> Straddle <u>        </u>	<input type="checkbox"/> Ruined Shale Packer <u>        </u>

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

Extra Packer           
 Extra Recorder           
 Day Standby           
 Accessibility         

Sub Total 1152

Total 1152  
 MP/DST Disc't         

Approved By          Our Representative Brannan Lonsdale

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. 61152

Well Name & No. Berland Trust #35-1 Test No. 2 Date 1/15/15  
 Company H+C Oil Operating Inc. Elevation 2130 KB 2122 GL  
 Address PO Box 86 Plainville, KS 67663  
 Co. Rep / Geo. Marc Downing Rig American Eagle #2  
 Location: Sec. 35 Twp. 8 S Rge. 21 W Co. Araham State KS

Interval Tested 3674-3727 Zone Tested Arbuckle  
 Anchor Length 53' Tail 86' Drill Pipe Run 3646 Mud Wt. 9.1  
 Top Packer Depth 3669-3674 Drill Collars Run 31 Vis 60  
 Bottom Packer Depth 3727 Wt. Pipe Run          WL 6.4  
 Total Depth 3813 Chlorides 6600 ppm System LCM 2<sup>#</sup>

Blow Description IF - Slowly built to 1 1/4"  
ISI - No blow  
PF - No blow  
FSI - No blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>10</u>	<u>M w/ few oil spots</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 10' BHT 108° Gravity          API RW         @         ° F Chlorides          ppm

(A) Initial Hydrostatic <u>1865</u>	<input checked="" type="checkbox"/> Test <u>1050</u>	T-On Location <u>0216</u>
(B) First Initial Flow <u>39</u>	<input type="checkbox"/> Jars <u>        </u>	T-Started <u>0249</u>
(C) First Final Flow <u>41</u>	<input type="checkbox"/> Safety Joint <u>        </u>	T-Open <u>0522</u>
(D) Initial Shut-In <u>475</u>	<input type="checkbox"/> Circ Sub <u>        </u>	T-Pulled <u>0722</u>
(E) Second Initial Flow <u>47</u>	<input type="checkbox"/> Hourly Standby <u>        </u>	T-Out <u>0913</u>
(F) Second Final Flow <u>48</u>	<input checked="" type="checkbox"/> Mileage <u>102 RT</u> 102	Comments <u>        </u>
(G) Final Shut-In <u>371</u>	<input type="checkbox"/> Sampler <u>        </u>	
(H) Final Hydrostatic <u>1806</u>	<input checked="" type="checkbox"/> Straddle <u>600</u>	<input type="checkbox"/> Ruined Shale Packer <u>        </u>
	<input type="checkbox"/> Shale Packer <u>        </u>	<input type="checkbox"/> Ruined Packer <u>        </u>
Initial Open <u>30</u>	<input type="checkbox"/> Extra Packer <u>        </u>	<input type="checkbox"/> Extra Copies <u>        </u>
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Recorder <u>        </u>	Sub Total <u>0</u>
Final Flow <u>30</u>	<input checked="" type="checkbox"/> Day Standby <u>        </u>	Total <u>1752</u>
Final Shut-In <u>30</u>	<input type="checkbox"/> Accessibility <u>        </u>	MP/DST Disc't <u>        </u>
	Sub Total <u>1752</u>	

Approved By          Our Representative Brannan Lonsdale

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.