



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1231637
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: _____

1231637

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

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

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

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

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

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

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

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD:	Size:	Set At:	Packer At:	Liner Run: <input type="checkbox"/> Yes <input type="checkbox"/> No
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Date of First, Resumed Production, SWD or ENHR.	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____
---	--

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	H & C Oil Operating Inc.
Well Name	North Fork Farms 36-1
Doc ID	1231637

All Electric Logs Run

Borehole compensated sonic log
Microresistivity
Dual induction log
Dual compensated porosity log

Form	ACO1 - Well Completion
Operator	H & C Oil Operating Inc.
Well Name	North Fork Farms 36-1
Doc ID	1231637

Tops

Name	Top	Datum
Top Anhydrite	1815	+557
Base Abhydrite	1860	+512
Topeka	3411	-1039
Heebner	3626	-1254
Toronto	3652	-1280
LKC	3664	-1292
BKC	3900	-1528
Arbuckle	4062	-1690



DRILL STEM TEST REPORT

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

PO Box 86
Plainville, KS 67663

ATTN: Mark Downing

36-11s-22w Trego, KS

North Fork Farms #36-1

Start Date: 2014.11.12 @ 17:45:00

End Date: 2014.11.13 @ 03:28:30

Job Ticket #: 62481 DST #: 1

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

Printed: 2014.11.17 @ 16:46:31



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

H&C Oil Operating

North Fork Farms #36-1

PO Box 86
Plainville, KS 67663

36-11s-22w Trego, KS

ATTN: Mark Downing

Job Ticket: 62481

DST#: 1

Test Start: 2014.11.12 @ 17:45:00

GENERAL INFORMATION:

Formation: **L.K.C. " E "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:14:30

Time Test Ended: 03:28:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Bob Hamel

Unit No: 72

Interval: 3730.00 ft (KB) To 3746.00 ft (KB) (TVD)

Reference Elevations: 2371.00 ft (KB)

Total Depth: 3746.00 ft (KB) (TVD)

2364.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 6772

Inside

Press@RunDepth: 14.34 psig @ 3733.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.11.12

End Date:

2014.11.13

Last Calib.: 2014.11.13

Start Time: 17:45:05

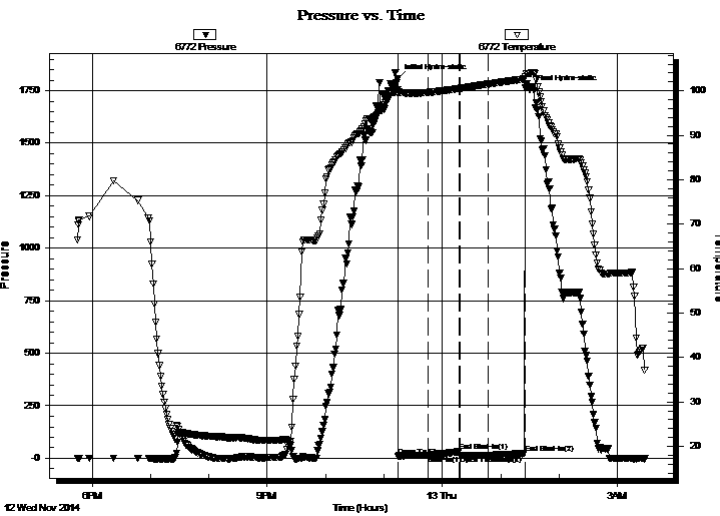
End Time:

03:28:30

Time On Btm: 2014.11.12 @ 23:14:00

Time Off Btm: 2014.11.13 @ 01:29:15

TEST COMMENT: I.F. - 30 - Weak blow built to 1"
I.S.I. -30 - No blow back
F.F. - 30 - Weak surface blow throughout
F.S.I. -30 - No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1807.83	100.29	Initial Hydro-static
1	10.81	99.45	Open To Flow (1)
32	13.34	99.64	Shut-In(1)
64	31.56	100.53	End Shut-In(1)
64	13.60	100.53	Open To Flow (2)
93	14.34	101.51	Shut-In(2)
131	22.63	102.68	End Shut-In(2)
136	1757.38	103.94	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2.00	S,O,S,M, 100%M FEW OIL SPECS	0.01

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

H&C Oil Operating

North Fork Farms #36-1

PO Box 86
Plainville, KS 67663

36-11s-22w Trego, KS

Job Ticket: 62481

DST#: 1

ATTN: Mark Downing

Test Start: 2014.11.12 @ 17:45:00

Tool Information

Drill Pipe:	Length: 3695.00 ft	Diameter: 3.80 inches	Volume: 51.83 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 32.00 ft	Diameter: 2.25 inches	Volume: 0.16 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 51.99 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3730.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	16.00 ft			
Tool Length:	36.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Change Over Sub	1.00			3711.00	
Shut In Tool	5.00			3716.00	
Hydraulic tool	5.00			3721.00	
Packer	5.00			3726.00	20.00 Bottom Of Top Packer
Packer	4.00			3730.00	
Stubb	1.00			3731.00	
Perforations	2.00			3733.00	
Recorder	0.00	6772	Inside	3733.00	
Recorder	0.00	8167	Outside	3733.00	
Perforations	10.00			3743.00	
Bullnose	3.00			3746.00	16.00 Bottom Packers & Anchor

Total Tool Length: 36.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

H&C Oil Operating

North Fork Farms #36-1

PO Box 86
Plainville, KS 67663

36-11s-22w Trego, KS

Job Ticket: 62481

DST#: 1

ATTN: Mark Downing

Test Start: 2014.11.12 @ 17:45:00

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: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.37 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2.00	S,O,S,M, 100%M FEW OIL SPECS	0.010

Total Length: 2.00 ft Total Volume: 0.010 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

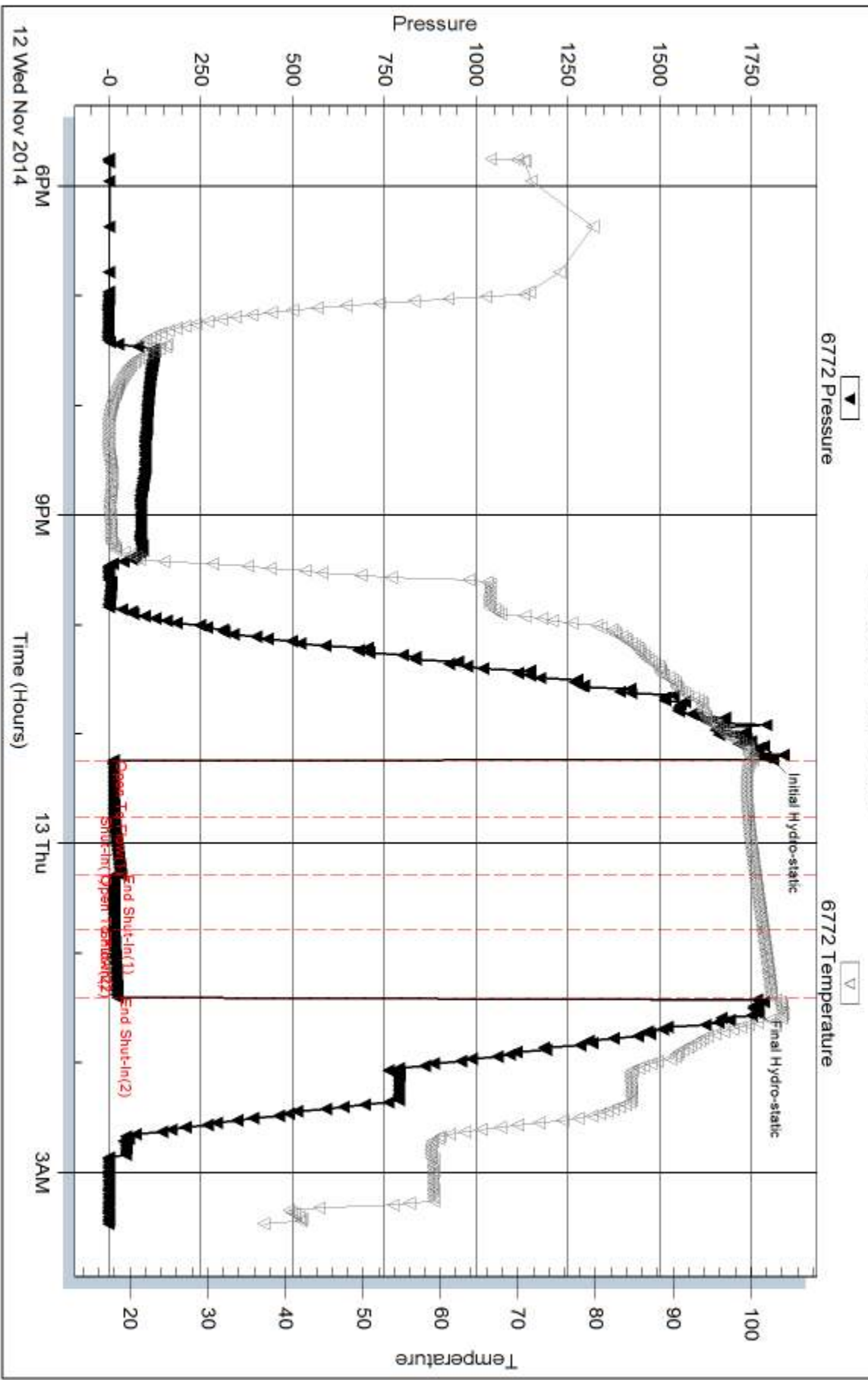
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

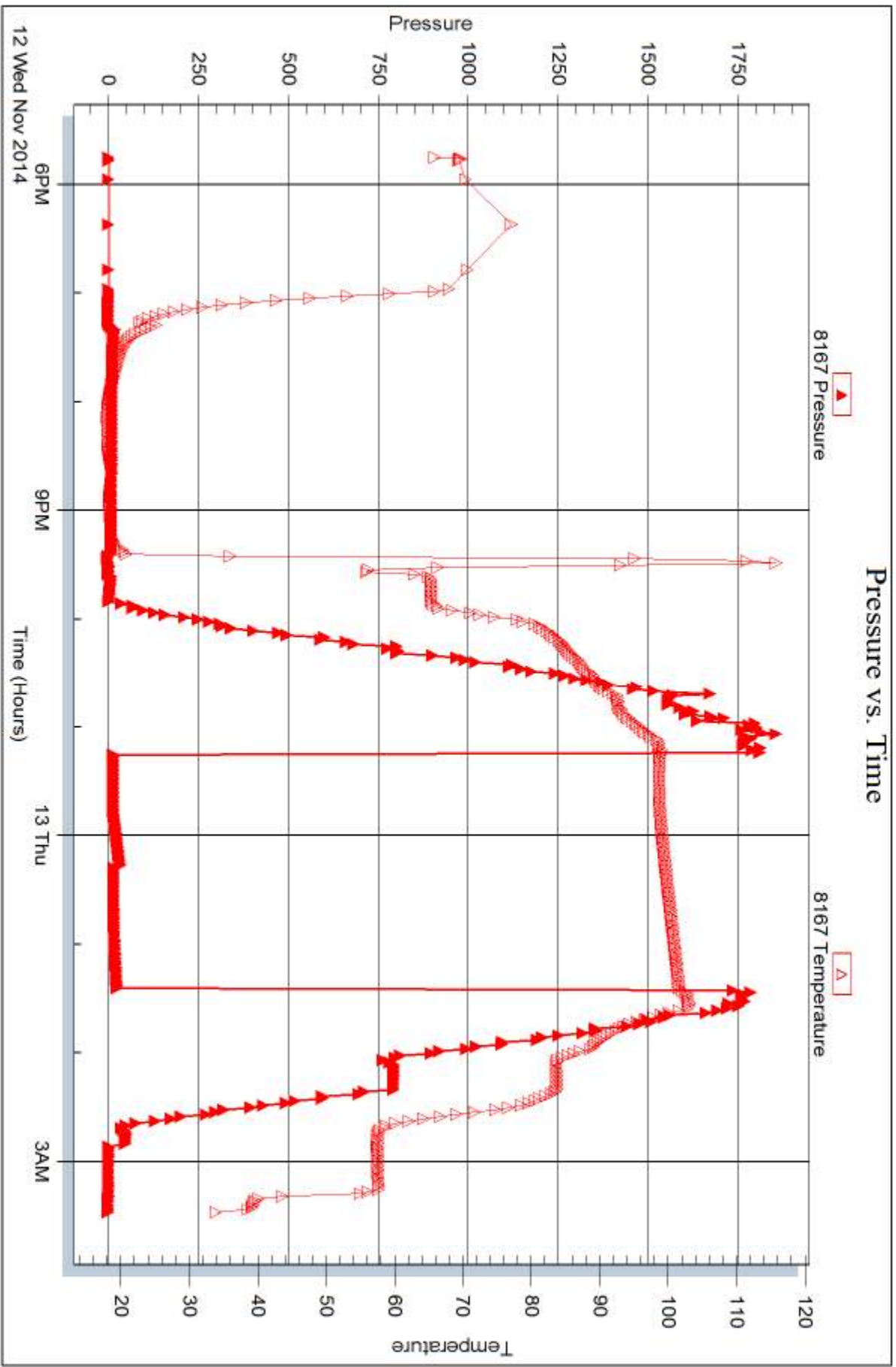


Serial #: 8167

Outside H&C Oil Operating

36-11s-22w Trego,KS

DST Test Number: 1





DRILL STEM TEST REPORT

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

PO Box 86
Plainville, KS 67663

ATTN: Mark Downing

36-11s-22w Trego,KS

North Fork Farms #36-1

Start Date: 2014.11.13 @ 18:45:00

End Date: 2014.11.14 @ 02:28:15

Job Ticket #: 62482 DST #: 2

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

Printed: 2014.11.17 @ 16:46:09

H&C Oil Operating

North Fork Farms #36-1

36-11s-22w Trego,KS

DST # 2

LKC " J-K "

2014.11.13



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

H&C Oil Operating

North Fork Farms #36-1

PO Box 86
Plainville, KS 67663

36-11s-22w Trego, KS

ATTN: Mark Downing

Job Ticket: 62482

DST#: 2

Test Start: 2014.11.13 @ 18:45:00

GENERAL INFORMATION:

Formation: **LKC " J-K"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:27:45

Time Test Ended: 02:28:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Bob Hamel

Unit No: 72

Interval: 3838.00 ft (KB) To 3879.00 ft (KB) (TVD)

Reference Elevations: 2371.00 ft (KB)

Total Depth: 3879.00 ft (KB) (TVD)

2364.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 6772 Inside

Press@RunDepth: 27.53 psig @ 3842.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.11.13 End Date: 2014.11.14

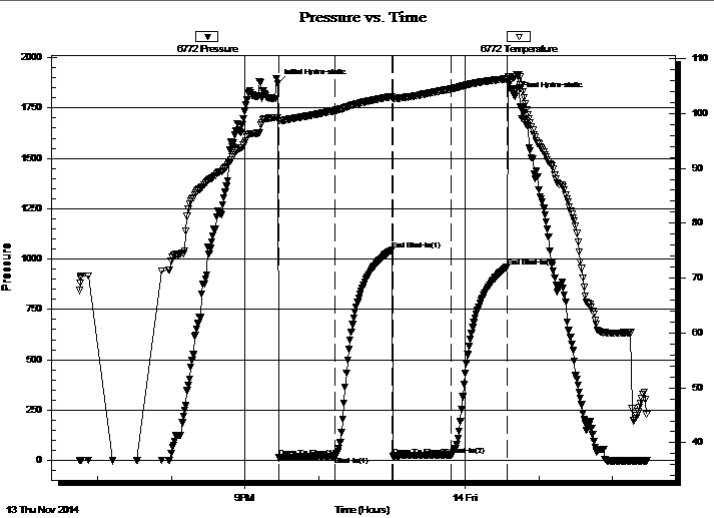
Last Calib.: 2014.11.14

Start Time: 18:45:05 End Time: 02:28:14

Time On Btm: 2014.11.13 @ 21:27:00

Time Off Btm: 2014.11.14 @ 00:40:30

TEST COMMENT: I.F. - 45 - Weak blow built to 2"
I.S.I. - 45 - No blow back
F.F. - 45 - Weak blow built to 1 1/4"
F.S.I. - 45 - No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1870.56	99.17	Initial Hydro-static
1	13.85	98.71	Open To Flow (1)
47	20.94	100.50	Shut-In(1)
93	1045.85	103.06	End Shut-In(1)
94	22.51	102.71	Open To Flow (2)
142	27.53	104.45	Shut-In(2)
187	960.50	106.31	End Shut-In(2)
194	1807.62	106.66	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	MUD 100%	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

North Fork Farms #36-1

PO Box 86
Plainville, KS 67663

36-11s-22w Trego, KS

Job Ticket: 62482

DST#: 2

ATTN: Mark Downing

Test Start: 2014.11.13 @ 18:45:00

Tool Information

Drill Pipe:	Length: 3821.00 ft	Diameter: 3.80 inches	Volume: 53.60 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 32.00 ft	Diameter: 2.25 inches	Volume: 0.16 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 53.76 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	35.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3838.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	41.00 ft			
Tool Length:	61.00 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			3819.00	
Shut In Tool	5.00			3824.00	
Hydraulic tool	5.00			3829.00	
Packer	5.00			3834.00	20.00 Bottom Of Top Packer
Packer	4.00			3838.00	
Stubb	1.00			3839.00	
Perforations	2.00			3841.00	
Change Over Sub	1.00			3842.00	
Recorder	0.00	6772	Inside	3842.00	
Recorder	0.00	8167	Outside	3842.00	
Drill Pipe	32.00			3874.00	
Change Over Sub	1.00			3875.00	
Perforations	1.00			3876.00	
Bullnose	3.00			3879.00	41.00 Bottom Packers & Anchor

Total Tool Length: 61.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

H&C Oil Operating

North Fork Farms #36-1

PO Box 86
Plainville, KS 67663

36-11s-22w Trego, KS

Job Ticket: 62482

DST#: 2

ATTN: Mark Downing

Test Start: 2014.11.13 @ 18:45:00

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: 49.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.78 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	MUD 100%	0.049

Total Length: 10.00 ft Total Volume: 0.049 bbl

Num Fluid Samples: 0

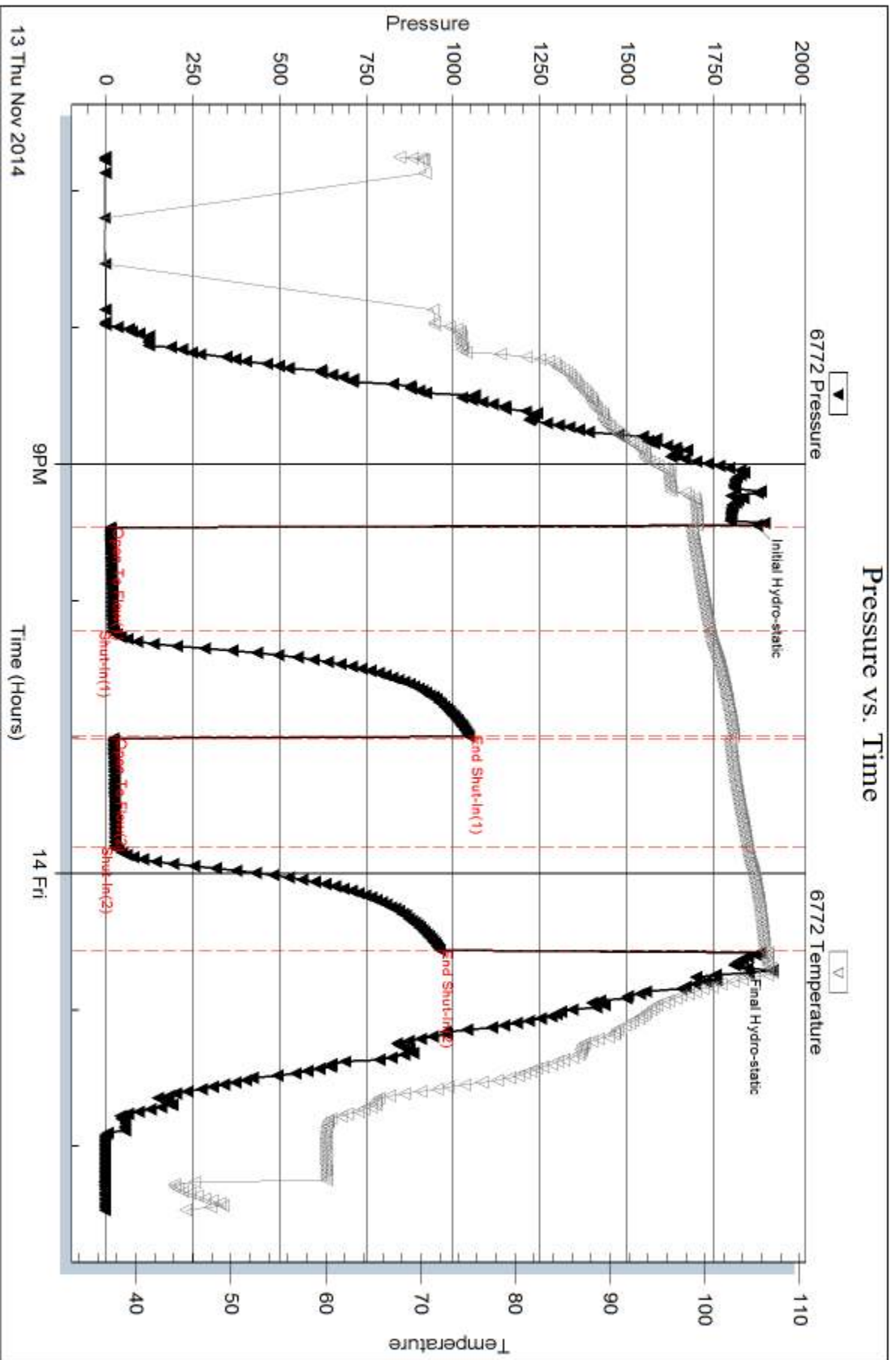
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

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

PO Box 86
Plainville, KS 67663

ATTN: Mark Downing

36-11s-22w Trego, KS

North Fork Farms #36-1

Start Date: 2014.11.14 @ 16:08:00

End Date: 2014.11.15 @ 00:06:00

Job Ticket #: 62483 DST #: 3

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

Printed: 2014.11.17 @ 16:45:43

H&C Oil Operating

North Fork Farms #36-1

36-11s-22w Trego, KS

DST # 3

Marmaton

2014.11.14



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

H&C Oil Operating

North Fork Farms #36-1

PO Box 86
Plainville, KS 67663

36-11s-22w Trego, KS

ATTN: Mark Downing

Job Ticket: 62483

DST#: 3

Test Start: 2014.11.14 @ 16:08:00

GENERAL INFORMATION:

Formation: **Marmaton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:45:45

Time Test Ended: 00:06:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Bob Hamel

Unit No: 72

Interval: 3983.00 ft (KB) To 4015.00 ft (KB) (TVD)

Reference Elevations: 2371.00 ft (KB)

Total Depth: 4015.00 ft (KB) (TVD)

2364.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 6772 Inside

Press@RunDepth: 27.78 psig @ 3986.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.11.14

End Date:

2014.11.15

Last Calib.: 2014.11.15

Start Time: 16:08:05

End Time:

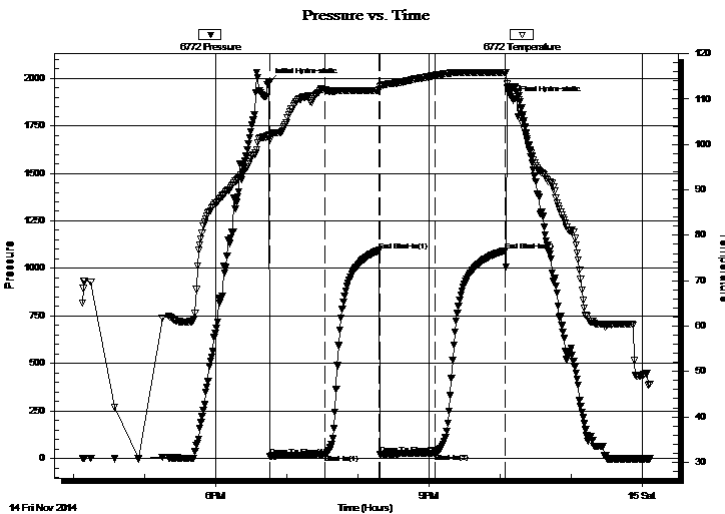
00:05:59

Time On Btm: 2014.11.14 @ 18:45:15

Time Off Btm: 2014.11.14 @ 22:10:45

TEST COMMENT: I.F. - 45 - Weak blow built to 2"
I.S.I. - 45 - Weak surface blow back at 20 min
F.F. - 45 - Weak blow built to 1"
F.S.I. - 45 - No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1976.70	102.15	Initial Hydro-static
1	10.68	100.93	Open To Flow (1)
47	21.08	112.02	Shut-In(1)
93	1094.84	111.94	End Shut-In(1)
94	23.13	112.63	Open To Flow (2)
140	27.78	115.21	Shut-In(2)
199	1093.43	115.84	End Shut-In(2)
206	1885.21	112.50	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
62.00	MUD 100%	0.58
1.00	C/O 100%	0.01

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

H&C Oil Operating

North Fork Farms #36-1

PO Box 86
Plainville, KS 67663

36-11s-22w Trego, KS

Job Ticket: 62483

DST#: 3

ATTN: Mark Downing

Test Start: 2014.11.14 @ 16:08:00

Tool Information

Drill Pipe:	Length: 3948.00 ft	Diameter: 3.80 inches	Volume: 55.38 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer:	30000.00 lb
Drill Collar:	Length: 32.00 ft	Diameter: 2.25 inches	Volume: 0.16 bbl	Weight to Pull Loose:	54000.00 lb
			<u>Total Volume: 55.54 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial	48000.00 lb
Depth to Top Packer:	3983.00 ft			Final	48000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	32.00 ft				
Tool Length:	52.00 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			3964.00	
Shut In Tool	5.00			3969.00	
Hydraulic tool	5.00			3974.00	
Packer	5.00			3979.00	20.00 Bottom Of Top Packer
Packer	4.00			3983.00	
Stubb	1.00			3984.00	
Perforations	2.00			3986.00	
Recorder	0.00	6772	Inside	3986.00	
Recorder	0.00	8167	Outside	3986.00	
Perforations	26.00			4012.00	
Bullnose	3.00			4015.00	32.00 Bottom Packers & Anchor

Total Tool Length: 52.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

H&C Oil Operating

North Fork Farms #36-1

PO Box 86
Plainville, KS 67663

36-11s-22w Trego, KS

Job Ticket: 62483

DST#: 3

ATTN: Mark Downing

Test Start: 2014.11.14 @ 16:08:00

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: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.78 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
62.00	MUD 100%	0.578
1.00	C/O 100%	0.014

Total Length: 63.00 ft Total Volume: 0.592 bbl

Num Fluid Samples: 0

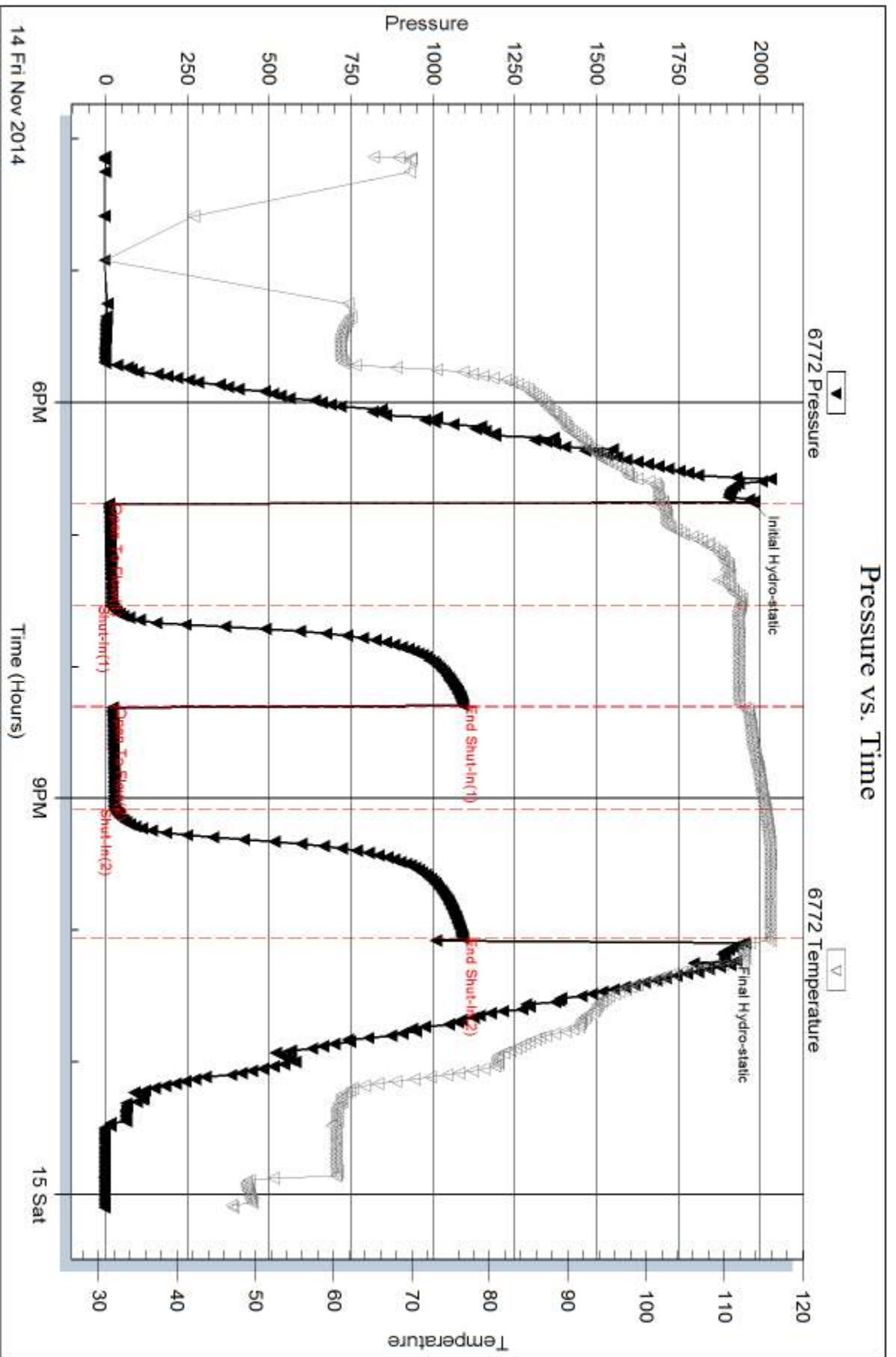
Num Gas Bombs: 0

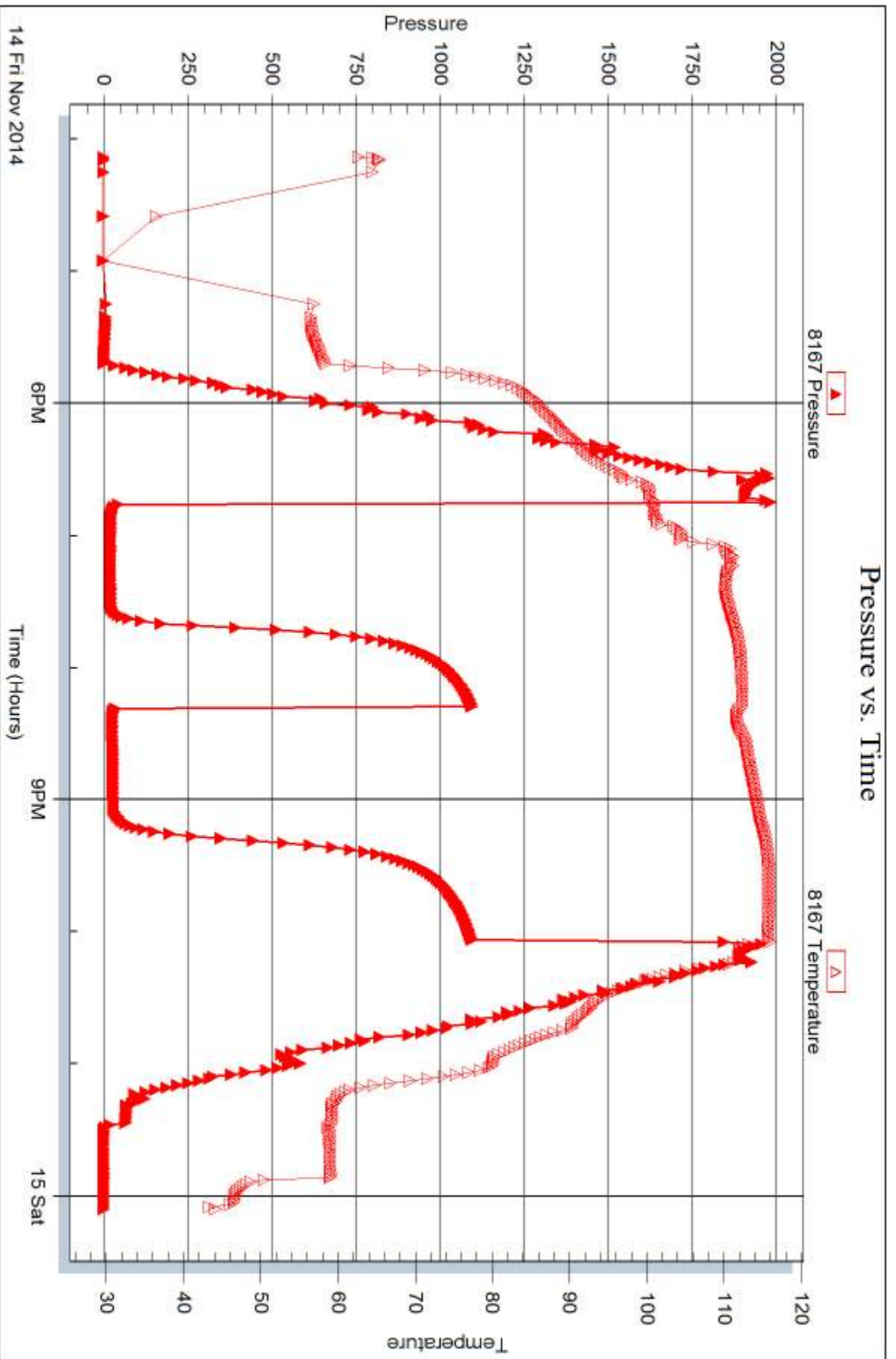
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

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

PO Box 86
Plainville, KS 67663

ATTN: Mark Downing

36-11s-22w Trego, KS

North Fork Farms #36-1

Start Date: 2014.11.15 @ 08:13:00

End Date: 2014.11.15 @ 14:49:45

Job Ticket #: 62484 DST #: 4

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

Printed: 2014.11.17 @ 16:45:20

H&C Oil Operating

North Fork Farms #36-1

36-11s-22w Trego, KS

DST # 4

Arbuckle

2014.11.15



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

H&C Oil Operating

North Fork Farms #36-1

PO Box 86
Plainville, KS 67663

36-11s-22w Trego, KS

ATTN: Mark Downing

Job Ticket: 62484

DST#: 4

Test Start: 2014.11.15 @ 08:13:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:42:30

Time Test Ended: 14:49:45

Test Type: Conventional Bottom Hole (Reset)

Tester: Bob Hamel

Unit No: 72

Interval: 4007.00 ft (KB) To 4065.00 ft (KB) (TVD)

Reference Elevations: 2371.00 ft (KB)

Total Depth: 4065.00 ft (KB) (TVD)

2364.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 6772 Inside

Press@RunDepth: 36.83 psig @ 4044.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.11.15 End Date: 2014.11.15

Last Calib.: 2014.11.15

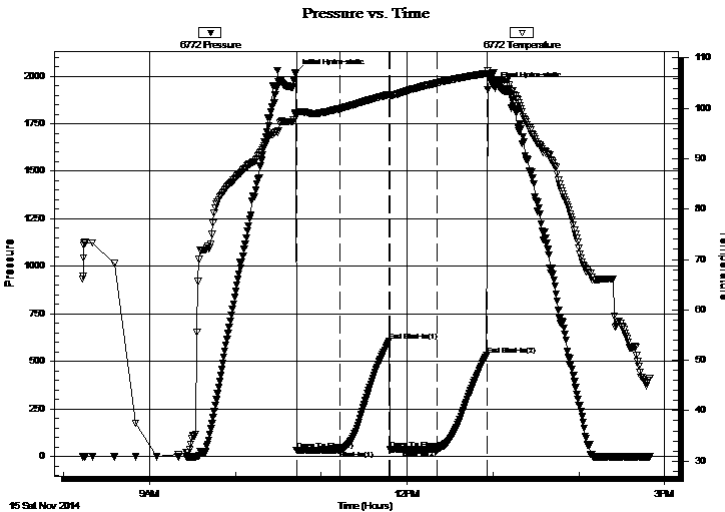
Start Time: 08:13:05 End Time: 14:49:44

Time On Btm: 2014.11.15 @ 10:41:45

Time Off Btm: 2014.11.15 @ 13:00:30

TEST COMMENT: I.F. - 30 - Weak blow built to 1"
I.S.I. - 30 - No blow back
F.F. - 30 - Weak blow built to 3/4"
F.S.I. - 30 - No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2015.86	99.11	Initial Hydro-static
1	33.23	98.65	Open To Flow (1)
32	34.40	99.93	Shut-In(1)
66	606.05	102.76	End Shut-In(1)
67	37.15	102.54	Open To Flow (2)
99	36.83	105.04	Shut-In(2)
134	532.68	106.93	End Shut-In(2)
139	1943.96	107.06	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
4.00	H ₂ O, C, M, 20% O 80% M	0.02

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

H&C Oil Operating

North Fork Farms #36-1

PO Box 86
Plainville, KS 67663

36-11s-22w Trego, KS

Job Ticket: 62484

DST#: 4

ATTN: Mark Downing

Test Start: 2014.11.15 @ 08:13:00

Tool Information

Drill Pipe:	Length: 3972.00 ft	Diameter: 3.80 inches	Volume: 55.72 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 32.00 ft	Diameter: 2.25 inches	Volume: 0.16 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 55.88 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	4007.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	58.00 ft			
Tool Length:	78.00 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			3988.00	
Shut In Tool	5.00			3993.00	
Hydraulic tool	5.00			3998.00	
Packer	5.00			4003.00	20.00 Bottom Of Top Packer
Packer	4.00			4007.00	
Stubb	1.00			4008.00	
Perforations	2.00			4010.00	
Change Over Sub	1.00			4011.00	
Drill Pipe	32.00			4043.00	
Change Over Sub	1.00			4044.00	
Recorder	0.00	6772	Inside	4044.00	
Recorder	0.00	8167	Outside	4044.00	
Perforations	18.00			4062.00	
Bullnose	3.00			4065.00	58.00 Bottom Packers & Anchor

Total Tool Length: 78.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

H&C Oil Operating

North Fork Farms #36-1

PO Box 86
Plainville, KS 67663

36-11s-22w Trego, KS

Job Ticket: 62484

DST#: 4

ATTN: Mark Downing

Test Start: 2014.11.15 @ 08:13:00

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: 56.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.38 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
4.00	H ₂ O,C,M, 20% O 80% M	0.020

Total Length: 4.00 ft Total Volume: 0.020 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6772

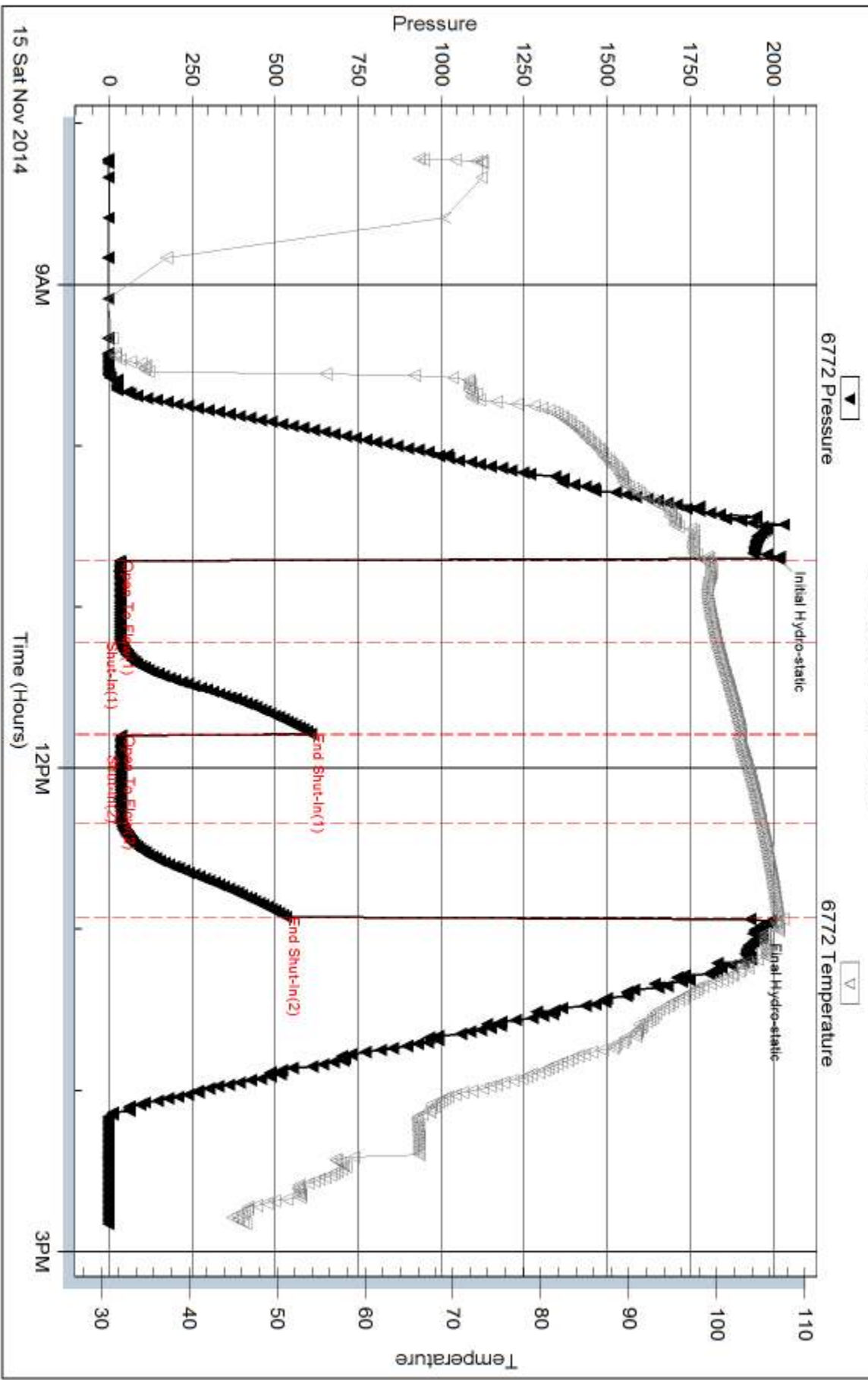
Inside

H&C Oil Operating

36-11s-22w Trego,KS

DST Test Number: 4

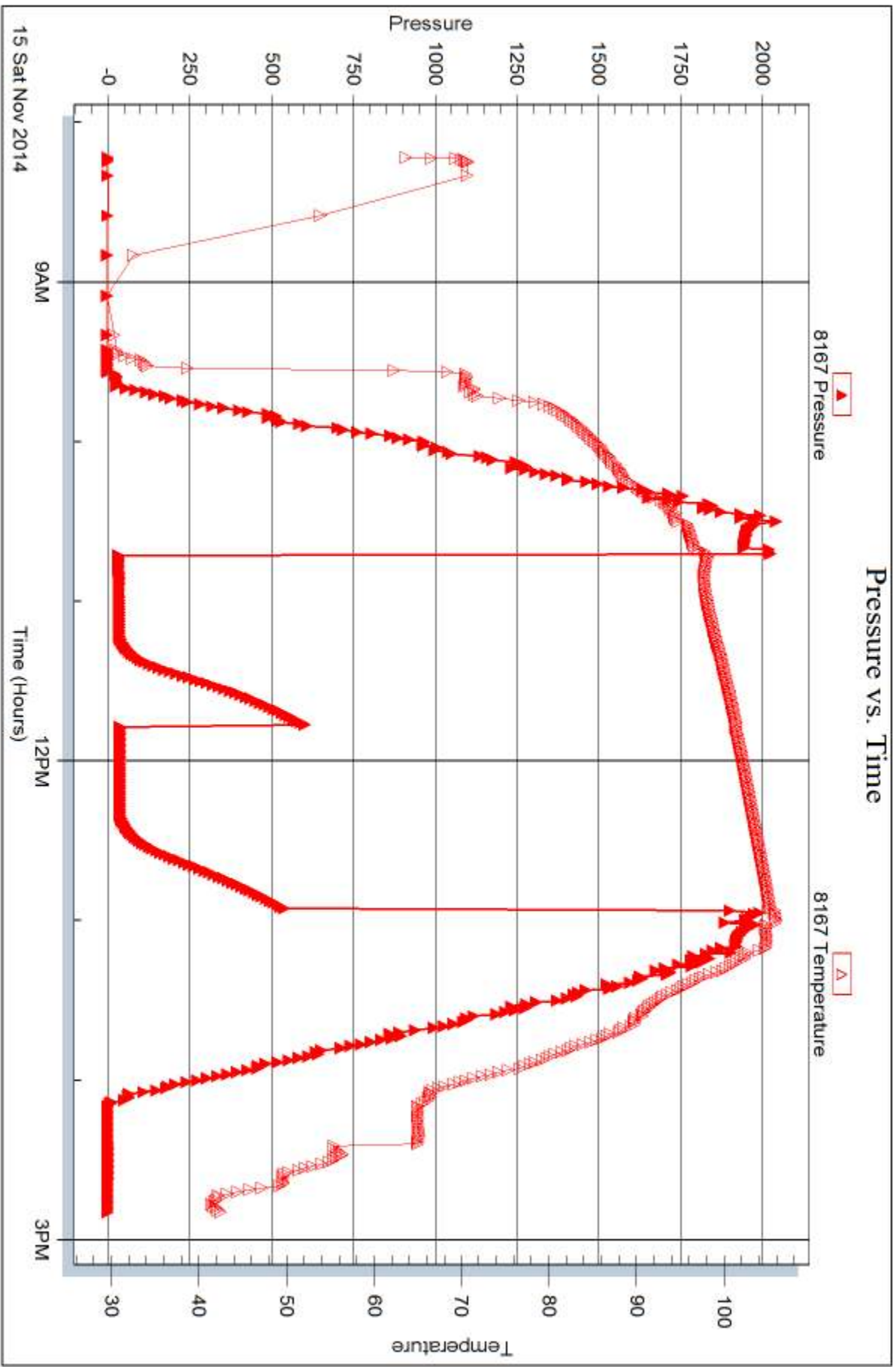
Pressure vs. Time



Trilobite Testing, Inc

Ref. No: 62484

Printed: 2014.11.17 @ 16:45:21





DRILL STEM TEST REPORT

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

PO Box 86
Plainville, KS 67663

ATTN: Mark Downing

36-11s-22w Trego, KS

North Fork Farms #36-1

Start Date: 2014.11.16 @ 09:14:00

End Date: 2014.11.16 @ 15:47:00

Job Ticket #: 62485 DST #: 5

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

Printed: 2014.11.17 @ 16:44:47

H&C Oil Operating

North Fork Farms #36-1

36-11s-22w Trego, KS

DST # 5

Arbuckle

2014.11.16



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

H&C Oil Operating

North Fork Farms #36-1

PO Box 86
Plainville, KS 67663

36-11s-22w Trego, KS

ATTN: Mark Downing

Job Ticket: 62485

DST#: 5

Test Start: 2014.11.16 @ 09:14:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:06:15

Time Test Ended: 15:47:00

Test Type: Conventional Straddle (Reset)

Tester: Bob Hamel

Unit No: 72

Interval: 4064.00 ft (KB) To 4096.00 ft (KB) (TVD)

Reference Elevations: 2371.00 ft (KB)

Total Depth: 4154.00 ft (KB) (TVD)

2364.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 8167 Outside

Press@RunDepth: 298.31 psig @ 4065.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.11.16

End Date: 2014.11.16

Last Calib.: 2014.11.16

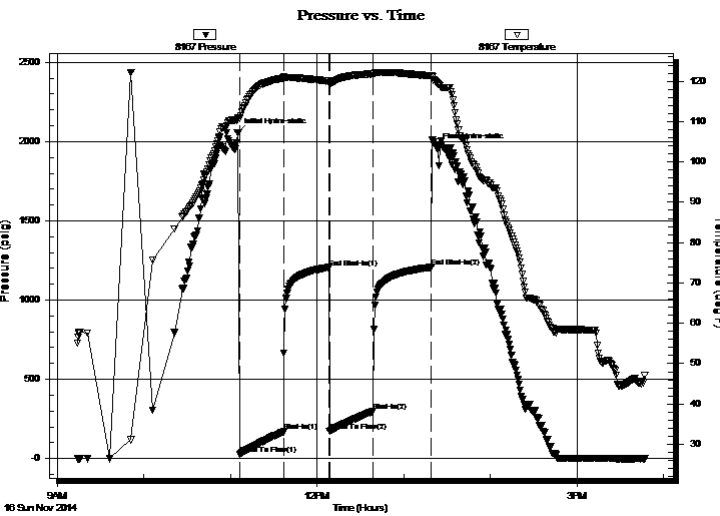
Start Time: 09:14:05

End Time: 15:46:59

Time On Btm: 2014.11.16 @ 11:05:15

Time Off Btm: 2014.11.16 @ 13:22:15

TEST COMMENT: I.F. - 30 - BOB in 8 min
I.S.I. - 30 - No blow back
F.F. - 30 - BOB in 8 1/2 min
F.S.I. - 30 - No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2055.40	110.89	Initial Hydro-static
1	24.79	110.77	Open To Flow (1)
32	169.45	120.78	Shut-In(1)
63	1205.59	120.00	End Shut-In(1)
64	174.07	119.67	Open To Flow (2)
94	298.31	121.82	Shut-In(2)
134	1206.87	121.31	End Shut-In(2)
137	1964.41	119.74	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
756.00	M,C,W, 10%M 90%W	10.31
3.00	S,O,C,M,W, 10%O 40%M 50%W	0.04

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

H&C Oil Operating

North Fork Farms #36-1

PO Box 86
Plainville, KS 67663

36-11s-22w Trego, KS

Job Ticket: 62485

DST#: 5

ATTN: Mark Downing

Test Start: 2014.11.16 @ 09:14:00

Tool Information

Drill Pipe:	Length: 4027.00 ft	Diameter: 3.80 inches	Volume: 56.49 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 32.00 ft	Diameter: 2.25 inches	Volume: 0.16 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 56.65 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	4064.00 ft			Final 54000.00 lb
Depth to Bottom Packer:	4096.00 ft			
Interval between Packers:	32.00 ft			
Tool Length:	109.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

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

Change Over Sub	1.00			4045.00	
Shut In Tool	5.00			4050.00	
Hydraulic tool	5.00			4055.00	
Packer	5.00			4060.00	20.00 Bottom Of Top Packer
Packer	4.00			4064.00	
Stubb	1.00			4065.00	
Recorder	0.00	6772	Inside	4065.00	
Recorder	0.00	8167	Outside	4065.00	
Perforations	11.00			4076.00	
Perforations	15.00			4091.00	
Blank Off Sub	1.00			4092.00	
Top of straddle packer	4.00			4096.00	32.00 Tool Interval
Packer	0.00			4096.00	
Stubb	1.00			4097.00	
Perforations	19.00			4116.00	
Change Over Sub	1.00			4117.00	
Recorder	0.00	8845	Below	4117.00	
Drill Pipe	32.00			4149.00	
Change Over Sub	1.00			4150.00	
Bullnose	3.00			4153.00	57.00 Bottom Packers & Anchor

Total Tool Length: 109.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

H&C Oil Operating

North Fork Farms #36-1

PO Box 86
Plainville, KS 67663

36-11s-22w Trego, KS

Job Ticket: 62485

DST#: 5

ATTN: Mark Downing

Test Start: 2014.11.16 @ 09:14:00

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:

39000 ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.36 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
756.00	M,C,W, 10%M 90%W	10.313
3.00	S,O,C,M,W, 10%O 40%M 50%W	0.042

Total Length: 759.00 ft Total Volume: 10.355 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

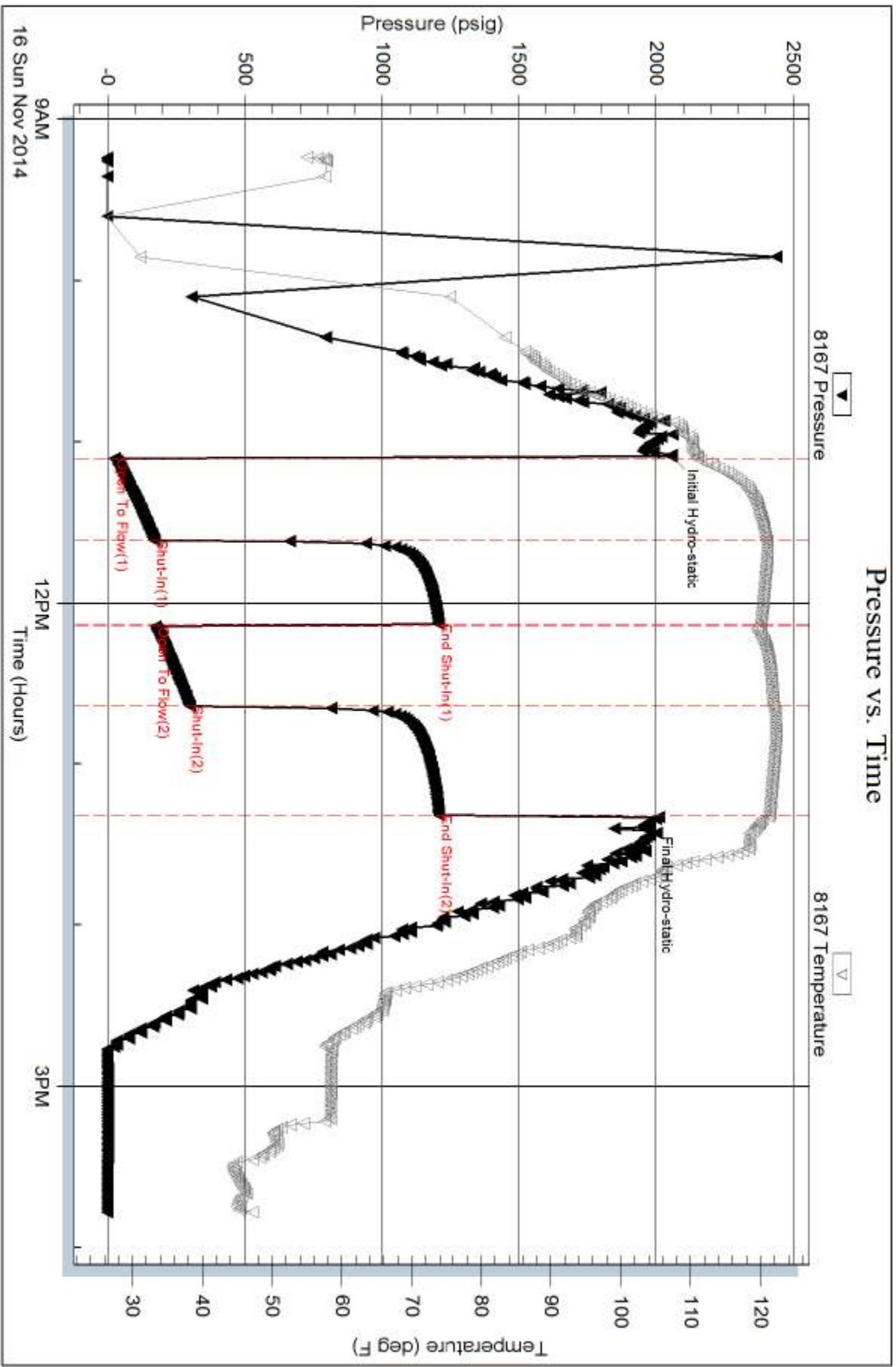
Recovery Comments: R.W. = .31 @ 45.4 DEG

Serial #: 8167

Outside H&C Oil Operating

36-11s-22w Trego,KS

DST Test Number: 5



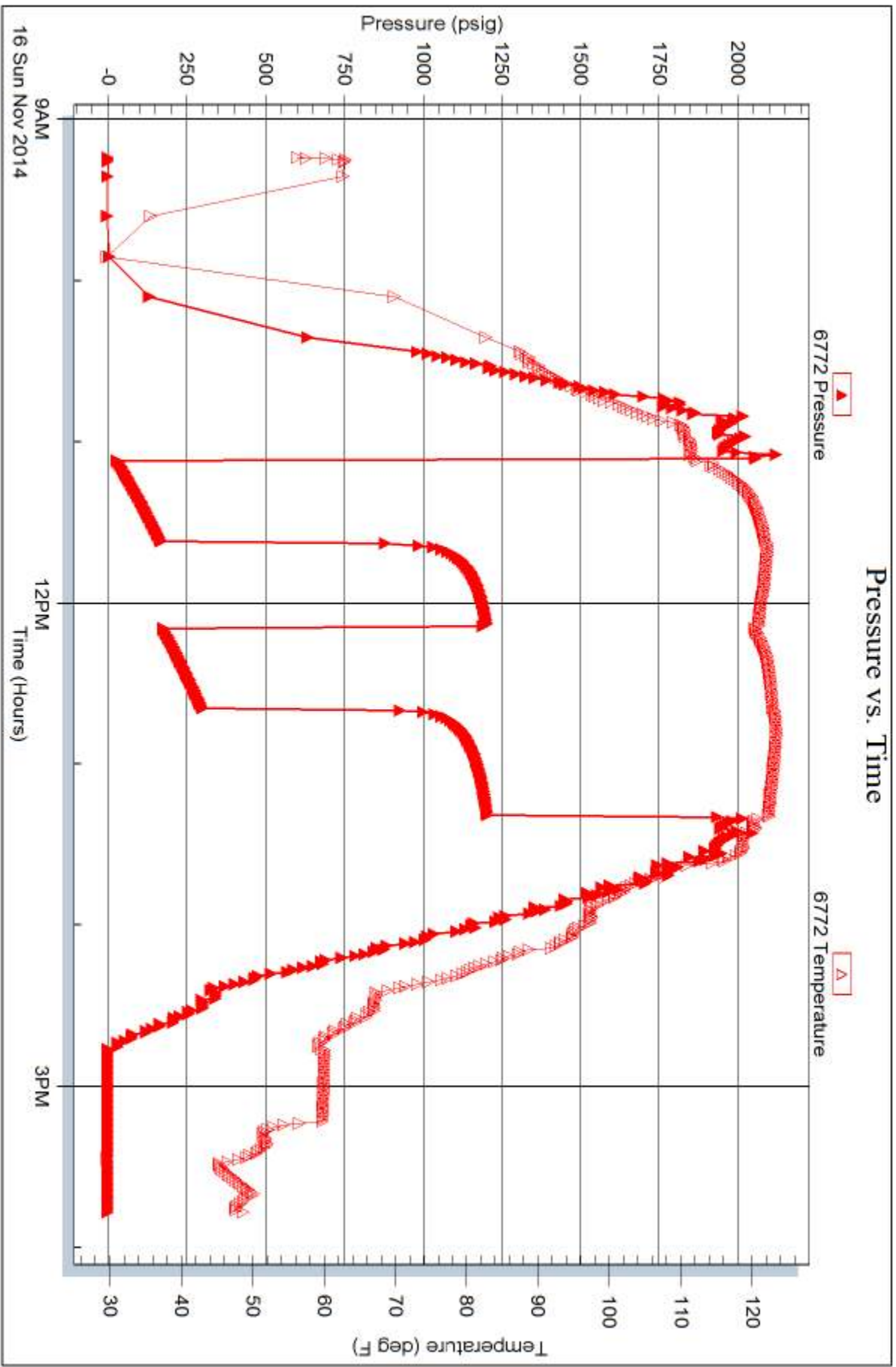
Serial #: 6772

Inside

H&C Oil Operating

36-11s-22w Trego,KS

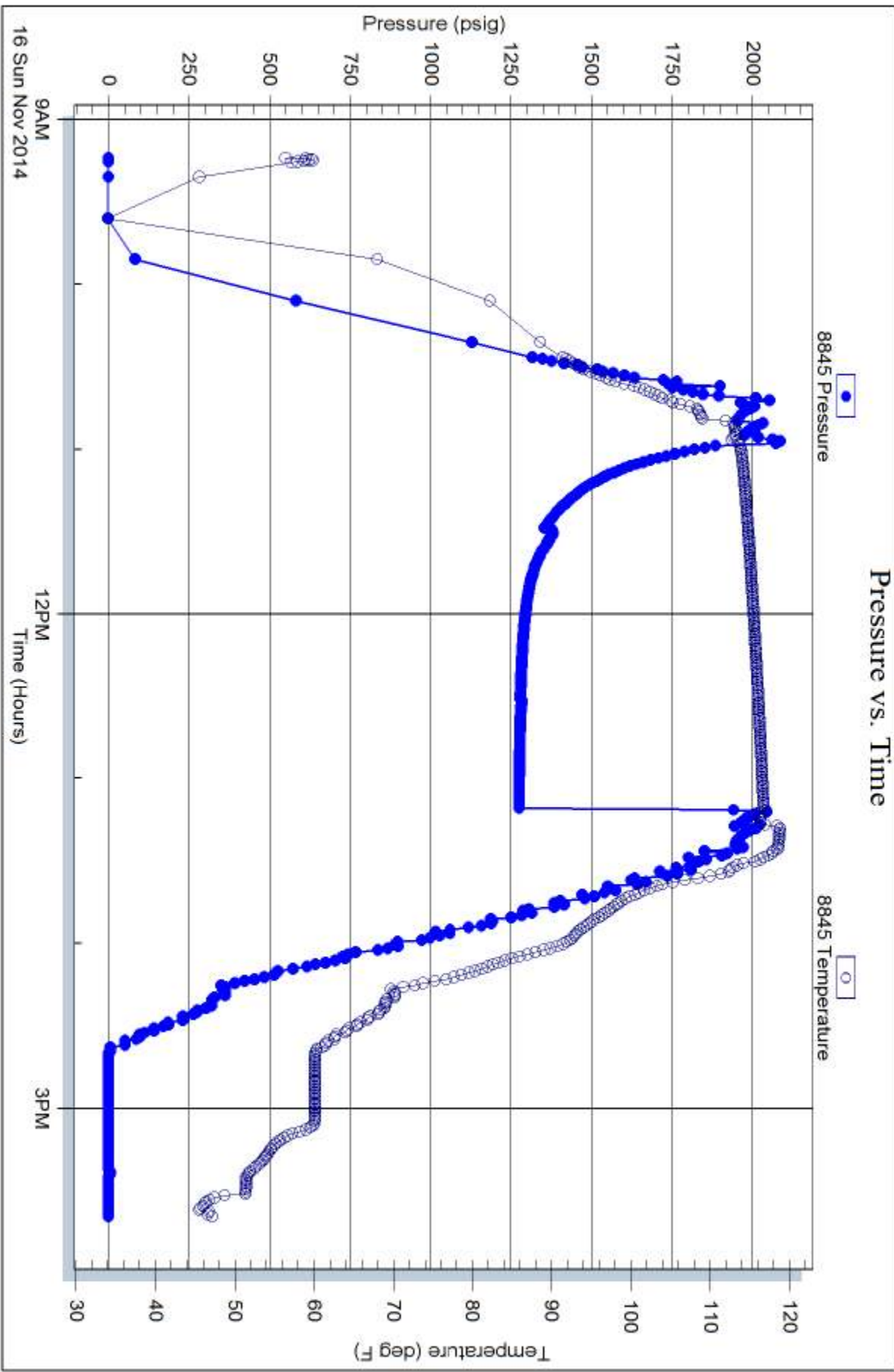
DST Test Number: 5



Trilobite Testing, Inc

Ref. No: 62485

Printed: 2014.11.17 @ 16:44:49





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 62481

Well Name & No. North Fork Farms #36-1 Test No. 1 Date 11-12/11-13
 Company H+C oil operating inc. Elevation 2371 KB 2364 GL
 Address P.O. Box 86 Plainville KS. 67663
 Co. Rep / Geo. Mark Downing / Charles R. Ramsey Rig DiSCO #1
 Location: Sec. 36 Twp. 11 S. Rge. 22 W. Co. Trego State KS.

Interval Tested 3730 - 46 Zone Tested L.K.C. "E"
 Anchor Length 16' Drill Pipe Run 3695 Mud Wt. 9.0
 Top Packer Depth 3725 Drill Collars Run 32' Vis 56
 Bottom Packer Depth 3730 Wt. Pipe Run — WL 8.4
 Total Depth 3746 Chlorides 500 ppm System LCM 1#

Blow Description I.F.-30-1/8" INT. Blow Built to 1"
~~IS.I-30-NO B.B.~~
~~EF.F-30-1/8" INT. Built to 1/4"~~
F.S.I-30-NO B.B.

Rec	Feet of	%gas	%oil	%water	%mud
Rec <u>2'</u>	Feet of <u>S, O, S, M (few oil specs)</u>	%gas	%oil	%water <u>100</u>	%mud
Rec	Feet of <u>(Show of oil in test tools)</u>	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 2' BHT 103.9 Gravity 1150 API RW @ °F Chlorides ppm
 (A) Initial Hydrostatic 1,808 Test 1150 T-On Location 16:52:00
 (B) First Initial Flow 11 Jars — T-Started 17:45:00
 (C) First Final Flow 13 Safety Joint — T-Open 23:13:00
 (D) Initial Shut-In 32 Circ Sub — T-Pulled 01:13:00
 (E) Second Initial Flow 14 Hourly Standby — T-Out 03:28:30
 (F) Second Final Flow 14 Mileage 68 / R.T. 105.40 Comments —
 (G) Final Shut-In 23 Sampler — "Thank-you"
 (H) Final Hydrostatic 1,757 Straddle — Ruined Shale Packer —
 Shale Packer — Ruined Packer —
 Extra Packer — Extra Copies —
 Initial Open 30 Extra Recorder — Sub Total 0
 Initial Shut-In 30 Day Standby — Total 1255.40
 Final Flow 30 Accessibility — MP/DST Disc't —
 Final Shut-In 30 Sub Total 1255.40

Approved By _____ Our Representative [Signature]

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. 62482

Well Name & No. North Fork Farms #36-1 Test No. 2 Date 11-13/11-14
 Company H+C oil operating inc. Elevation 2371 KB 2364 GL
 Address P.O. Box 86 Plainville KS. 67663
 Co. Rep / Geo. Mark Downing / Charles R. Ramsey Rig DISCO #1
 Location: Sec. 36 Twp. 11-S. Rge. 22 W. Co. rego State KS.

Interval Tested 3838-3879 Zone Tested h.k.c. "J+K"
 Anchor Length 41 Drill Pipe Run 3821 Mud Wt. 9.1
 Top Packer Depth 3833 Drill Collars Run 32 Vis 49
 Bottom Packer Depth 3838 Wt. Pipe Run — WL 8.8
 Total Depth 3879 Chlorides 500 ppm System LCM 2

Blow Description IF-45-1/4" INT. Blow Built to 2"
I.S.I-45-No B.B.
F.F-45-1/8" INT. Blow Built to 1/4"
F.S.I-45-No B.B.

Rec	Feet of	%gas	%oil	%water	%mud
Rec <u>10'</u>	Feet of <u>Mud</u>				<u>100%</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 10' BHT 106.7 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 1,871 Test 1150 T-On Location 18:45:00
 (B) First Initial Flow 14 Jars T-Started 19:15:00
 (C) First Final Flow 21 Safety Joint T-Open 21:57:00
 (D) Initial Shut-In 1,046 Circ Sub T-Pulled 00:57:00
 (E) Second Initial Flow 23 Hourly Standby T-Out 02:28:15
 (F) Second Final Flow 28 Mileage 68 / Ret. 105.40 Comments "thank-you"
 (G) Final Shut-In 961 Sampler Ruined Shale Packer
 (H) Final Hydrostatic 1,808 Straddle Ruined Packer
 Initial Open 45 Shale Packer Extra Copies
 Initial Shut-In 45 Extra Packer Sub Total 0
 Final Flow 45 Extra Recorder Total 1255.40
 Final Shut-In 45 Day Standby MP/DST Disc't
 Sub Total 1255.40 Accessibility

Approved By _____ Our Representative Bob Hame

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. 62483

Well Name & No. North Fork Farms #36-1 Test No. 3 Date 11-14
 Company Hoc oil operating inc. Elevation 2371 KB 2364 GL
 Address P.O. Box 86 Plainville KS. 67663
 Co. Rep / Geo. Mark Downing / Charles R. Ramsey Rig Disc #1
 Location: Sec. 36 Twp. N-S. Rge. 22 - W. Co. Trego State KS

Interval Tested 3983 - 4015 Zone Tested Macmorton
 Anchor Length 32' Drill Pipe Run 3948 Mud Wt. 9.2
 Top Packer Depth 3978 Drill Collars Run 32 Vis 56
 Bottom Packer Depth 3983 Wt. Pipe Run --- WL 8.8
 Total Depth 4015 Chlorides 1000 ppm System LCM 1 1/2

Blow Description I.F. - 45 - 1/4 INT. Blow Built to 2"
I.S.I. - 45 - W.S.B. Started @ 20 min. No Build
F.F. - 45 - 1/8" INT. Blow Built to 1"
F.S.I. - 45 - No B.B.

Rec	Feet of	%gas	%oil	%water	%mud
Rec <u>1'</u>	Feet of <u>cl</u>	%gas	<u>100</u> %oil	%water	%mud
Rec <u>62'</u>	Feet of <u>Mud</u>	%gas	%oil	%water <u>100</u>	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 63' BHT 112.5 Gravity 1250 API RW --- @ --- °F Chlorides --- ppm

(A) Initial Hydrostatic 1928 Test 1250 T-On Location 15:45:00
 (B) First Initial Flow 11 Jars --- T-Started 16:08:00
 (C) First Final Flow 21 Safety Joint --- T-Open 18:47:00
 (D) Initial Shut-In 1095 Circ Sub --- T-Pulled 21:50:00
 (E) Second Initial Flow 23 Hourly Standby --- T-Out 40:06:00
 (F) Second Final Flow 28 Mileage 68. R.T. 105.40 Comments "Thank-you"
 (G) Final Shut-In 4093 Sampler ---
 (H) Final Hydrostatic 1885 Straddle --- Ruined Shale Packer ---
 Shale Packer --- Ruined Packer ---
 Extra Packer --- Extra Copies ---
 Initial Open 45 Extra Recorder --- Sub Total 0
 Initial Shut-In 45 Day Standby --- Total 1355.40
 Final Flow 45 Accessibility --- MP/DST Disc't ---
 Final Shut-In 45 Sub Total 1355.40

Approved By _____ Our Representative Bob Hamel

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. 62484

Well Name & No. North Fork Farms #36-1 Test No. 4 Date 11-15
 Company H+C oil operations inc. Elevation 2371 KB 2364 GL
 Address Po Box 86 Plainville KS. 67663
 Co. Rep / Geo. Mark Downing / Charles R. Ramsey Rig Disco #1
 Location: Sec. 36 Twp. 11-S Rge. 22-W Co. Trego State KS.

Interval Tested 4007-4065 Zone Tested Arbu Chle
 Anchor Length 58' Drill Pipe Run 3972 Mud Wt. 9.2
 Top Packer Depth 4002 Drill Collars Run 32 Vis 56
 Bottom Packer Depth 4007 Wt. Pipe Run — WL 8.8
 Total Depth 4065 Chlorides 1,000 ppm System LCM 1 1/2
 Blow Description IF-30-1/8" INT. Blow Built to 1"
I.S.I-30-No B.B.
E.F-30-1/8" INT. Blow Built to 3/4"
E.S.I-30-No B.B.

Rec	Feet of	%gas	%oil	%water	%mud
Rec <u>4'</u>	Feet of <u>H,O,C,M</u>	%gas <u>20</u>	%oil <u>—</u>	%water <u>80</u>	%mud <u>—</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 4' BHT 107.1 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 2016 Test 1250 T-On Location 07:45:00
 (B) First Initial Flow 33 Jars — T-Started 08:15:00
 (C) First Final Flow 34 Safety Joint — T-Open 10:42:00
 (D) Initial Shut-In 606 Circ Sub — T-Pulled 12:42:00
 (E) Second Initial Flow 37 Hourly Standby — T-Out 14:49:45
 (F) Second Final Flow 37 Mileage 68 / R.T. 105.40 Comments —
 (G) Final Shut-In 533 Sampler — "Thank-you"
 (H) Final Hydrostatic 1944 Straddle — Ruined Shale Packer —
 Shale Packer — Ruined Packer —
 Extra Packer — Extra Copies —
 Initial Open 80 Extra Recorder — Sub Total 0
 Initial Shut-In 80 Day Standby — Total 1355.40
 Final Flow 80 Accessibility — MP/DST Disc't —
 Final Shut-In 80 Sub Total 1355.40

Approved By _____ Our Representative Bob Howard
 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. 62485

Well Name & No. North Fork Farms #36-1 Test No. 5 Date 11-16
 Company H&C oil generating inc. Elevation 2371 KB 2364 GL
 Address P.O. Box 86 Plainsville KS. 67663
 Co. Rep / Geo. Mark Downing / Charles R. Ramsey Rig Disco #1
 Location: Sec. 36 Twp. 19-S Rge. 22-W Co. Hrego State KS.

Interval Tested 4096-4064 Zone Tested ArbuCKTe
 Anchor Length 32' Drill Pipe Run 4027 Mud Wt. 9.2
 Top Packer Depth 4064-4059 Drill Collars Run 32 Vis 56
 Bottom Packer Depth 4096 (Shale) Wt. Pipe Run — WL 8.8
 Total Depth 4154 Chlorides 1000 ppm System LCM 1 1/2

Blow Description I.F.-30-1/2" INT. Blow Built to B.O.B in 8 min.
I.S.I.-30-No B.B.
F.F.-30-1/2" INT. Blow Built to B.O.B in 8 1/2 min.
F.S.I.-30-No B.B.

Rec	Feet of	%gas	%oil	%water	%mud
Rec <u>3</u>	Feet of <u>S.O.C, M, W</u>	%gas <u>10</u>	%oil <u>50</u>	%water <u>40</u>	%mud
Rec <u>756</u>	Feet of <u>MC, W</u>	%gas	%oil <u>90</u>	%water <u>10</u>	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 759 BHT 119.7 Gravity — API RW. 31 @ 95.4 °F Chlorides 39000 ppm

(A) Initial Hydrostatic 2055 Test 1250 T-On Location 07:45:00
 (B) First Initial Flow 25 Jars T-Started 09:14:00
 (C) First Final Flow 169 Safety Joint T-Open 11:04:00
 (D) Initial Shut-In 1206 Circ Sub T-Pulled 13:04:00
 (E) Second Initial Flow 174 Hourly Standby T-Out 15:47:00
 (F) Second Final Flow 298 Mileage 68/R.T. 105.40 Comments Straddle
 (G) Final Shut-In 1207 Sampler 600 'thank you'
 (H) Final Hydrostatic 1964 Straddle Ruined Shale Packer
 Shale Packer Ruined Packer
 Extra Packer Extra Copies
 Extra Recorder Sub Total 0
 Day Standby Total 1955.40
 Accessibility MP/DST Disc't
 Sub Total 1955.40

Approved By _____ Our Representative [Signature]

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Marc A. Downing		Geologic Report		
Consulting Petroleum Geologist		Drilling Time and Sample Log		
Operator H&C Oil Operating, Inc.		Elevation 2372		
Lease North Fork Farms No. 36-1		2364		
API # 15-195-22971-0000		Casing Record Surface		
Field Shaw Creek Southeast		8 5/8" @ 223' Production		
Location 1320' FSL & 500' FEL		None		
Sec. 36 Twp. 11s Rge. 22w		Electrical Surveys		
County Trego State Kansas		CNL/CDL, DIL, MEL, SONIC		
Formation	Sample tops	Log Tops	Datum	Struct Comp
Top Anhydrite	1817	1815	+557	+6
Base Anhydrite	1862	1860	+512	+5
Topeka	3411	3411	-1039	+12
Heebner	3628	3626	-1254	+15
Toronto	3653	3652	-1280	+8
LKC	3665	3664	-1292	+13
BKC	3902	3900	-1528	+16
Marmaton	3977	3976	-1604	+15
Re-worked Arbuckle	4042	4042	-1670	NA
Arbuckle	4063	4062	-1690	+38
Total Depth	4154	4154	-1782	
Reference Well For Structural Comparison Kansas Oil Corporation Musgrave #1 SE SW SE		Sec. 36-11s-22w		

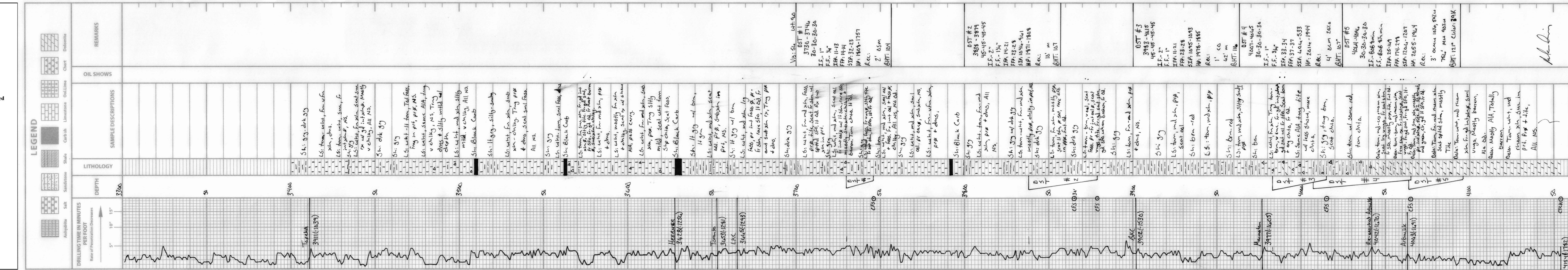
Drilling Contractor	Discovery Drilling, Rig #1
Commenced	11-8-14
Completed	11-16-14
Samples Saved From	3400 To RTD
Drilling Time Kept From	3300 To RTD
Samples Examined From	3400 To RTD
Geological Supervision From	3300 To RTD

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



QUALITY CILWELL 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. 6305

Date	11-8-14	Sec.	36	Twp.	11	Range	22	County	Trego	State	KS	On Location		Finish	6:15 P.M.
------	---------	------	----	------	----	-------	----	--------	-------	-------	----	-------------	--	--------	-----------

Lease North Fork Farms Well No. 36-1
Location Ryan to IRD w to 340 RD W 3/4 E N 1/4

Contractor Discovery
Type Job Surface
Hole Size 12 1/4
Csg. 8 5/8
T.D. 223
Depth 222.82
Tbg. Size
Tool
Cement Left in Csg. 15
Shoe Joint 15
Displace 13 1/4

Owner
To Quality Oilwell Cementing, Inc.
You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.

Charge To H & C
Street
City
State

The above was done to satisfaction and supervision of owner agent or contractor.
Cement Amount Ordered 150 Com 3% CC 29 gal

EQUIPMENT

Pumptrk	20	No.	Cementer	<u>Nick</u>
Bulktrk	15	No.	Driver	<u>Lorraine M</u>
Bulktrk	PH	No.	Driver	<u>Billy</u>

JOB SERVICES & REMARKS

Remarks: Cement Did Circulate
Rat Hole
Mouse Hole
Centralizers
Baskets
D/V or Port Collar

Common 150
Poz. Mix 3
Gel. 3
Calcium 3
Hulls
Salt
Flowseal
Kol-Seal
Mud CLR 48
CFL-117 or CD110 CAF 38
Sand
Handling 158
Mileage
Guide Shoe
Centralizer
Baskets
AFU Inserts
Float Shoe
Latch Down

FLOAT EQUIPMENT
Pumptrk Charge Surface
Mileage 28

Signature	<u>[Signature]</u>	Tax	
		Discount	
		Total Charge	

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

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

No. 845

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

Date	11-16-2014	Sec.	36	Twp.	11	Range	22	County	TRAYCO	State	KANSAS	On Location	1230 AM	Finish	1230 AM	
Lease	NEARTH FEAK FARM Well No. 36-1															
Contractor	Discovery Data Rig #1 "CASE"															
Type Job	Rotary Plug															
Hole Size	7 7/8															
Csg.	8 5/8 Surface															
Tbg. Size	8 5/8 Surface															
Tool	T.D. 4154'															
Cement Left in Csg.	Depth 223'															
Meas Line	Depth															
	Shoe Joint															
	Displace															
	EQUIPMENT															
Pumptrk	18	No.	Cementer													
		Helper	GLEN G.													
Bulktrk	4	No.	Driver													
		Driver	CODY B.													
		Driver	RYAN M.													
		Driver														
		Driver														
JOB SERVICES & REMARKS																
Remarks:																
Rat Hole																
Mouse Hole																
Centralizers																
Baskets																
D/V or Port Collar																
	50 SX @ 40SD "AAB"															
	50 SX @ 1840															
	100 SX @ 1000															
	50 SX @ 280															
	10 SA @ 40' w/ plug															
	30 SA @ Box hole															
	15 ST @ Mouse hole															
	FLOAT EQUIPMENT															
	Guide Shoe															
	Centralizer															
	Baskets															
	AFU inserts															
	Float Shoe															
	Latch Down															
	8 5/8 wooden wire Pkg XI															
	Pumptrk Charge plus															
	Mileage 28															
	Tax															
	Discount															
	Total Charge															

X Signature *W. M. [Signature]*