

Confidentiality Requested:

☐ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1171697

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: _____



1171697

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 (Attach Additional Sheets)	☐ Yes ☐ No	☐ Log	Formation (Top), Depth and Datum	☐ Sample
Samples Sent to Geological Survey	☐ Yes ☐ No	Name	Top	Datum
Cores Taken	☐ Yes ☐ No			
Electric Log Run	☐ Yes ☐ No			
List All E. Logs Run:				

CASING RECORD ☐ New ☐ 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
____ Perforate				
____ Protect Casing				
____ Plug Back TD				
____ 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 (Amount and Kind of Material Used)		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

DISPOSITION OF GAS: ☐ Vented ☐ Sold ☐ Used on Lease (If vented, Submit ACO-18.)	METHOD OF COMPLETION: ☐ Open Hole ☐ Perf. ☐ Dually Comp. ☐ Commingled (Submit ACO-5) ☐ Other (Specify) _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	H & C Oil Operating Inc.
Well Name	Seymour 25-1
Doc ID	1171697

Tops

Name	Top	Datum
Top Anhydrite	1913	+561
Base Anhydrite	1948	+526
Heebner	3654	-1180
Lansing	3696	-1222
Stark	3945	-1471
BKC	4010	-1536
Fort Scott	4197	-1723
Mississippi	4296	-1822

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

December 05, 2013

Charles Ramsay
H & C Oil Operating Inc.
PO BOX 86
PLAINVILLE, KS 67663-0086

Re: ACO1
API 15-063-22151-00-00
Seymour 25-1
SE/4 Sec.25-15S-28W
Gove 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,
Charles Ramsay



DRILL STEM TEST REPORT

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

PO Box 86
Plainville KS 67663

ATTN: Marc Downing

Seymour #25-1

25-15s-28w Gove,KS

Start Date: 2013.11.27 @ 16:45:00

End Date: 2013.11.27 @ 23:54:15

Job Ticket #: 54578 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.12.04 @ 11:06:28



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

H&C Oil, Operating, Inc.

25-15s-28w Gove,KS

PO Box 86
Plainville KS 67663

Seymour #25-1

Job Ticket: 54578

DST#: 1

ATTN: Marc Downing

Test Start: 2013.11.27 @ 16:45:00

GENERAL INFORMATION:

Formation: **LKC " E "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:16:45

Time Test Ended: 23:54:15

Test Type: Conventional Bottom Hole (Initial)

Tester: Jace McKinney

Unit No: 46

Interval: 3767.00 ft (KB) To 3788.00 ft (KB) (TVD)

Total Depth: 3788.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 2474.00 ft (KB)

2463.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 8675 Inside

Press@RunDepth: 29.32 psig @ 3768.00 ft (KB)

Start Date: 2013.11.27

End Date:

2013.11.27

Start Time: 16:45:15

End Time:

23:54:15

Capacity: 8000.00 psig

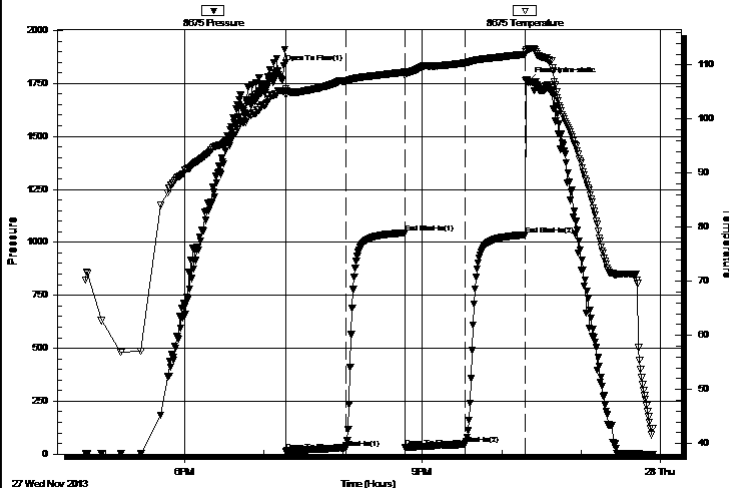
Last Calib.: 2013.11.27

Time On Btm:

Time Off Btm: 2013.11.27 @ 22:19:45

TEST COMMENT: Built to 2 1/2" blow
No return blow
Built to 1/4" blow
No return blow

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1847.31	105.58	Open To Flow (1)
1	14.29	104.46	Open To Flow (2)
45	29.32	107.04	Shut-In(1)
90	1044.87	108.69	End Shut-In(1)
91	32.00	108.03	Open To Flow (3)
136	46.10	110.38	Shut-In(2)
181	1035.45	111.97	End Shut-In(2)
183	1757.02	112.85	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
50.00	100%Mud with oil scum on top	0.25

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

H&C Oil, Operating, Inc.

25-15s-28w Gove,KS

PO Box 86
Plainville KS 67663

Seymour #25-1

Job Ticket: 54578

DST#: 1

ATTN: Marc Downing

Test Start: 2013.11.27 @ 16:45:00

GENERAL INFORMATION:

Formation: **LKC "E"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:16:45

Time Test Ended: 23:54:15

Test Type: Conventional Bottom Hole (Initial)

Tester: Jace McKinney

Unit No: 46

Interval: 3767.00 ft (KB) To 3788.00 ft (KB) (TVD)

Total Depth: 3788.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 2474.00 ft (KB)

2463.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 8650 Outside

Press@RunDepth: psig @ 3768.00 ft (KB)

Start Date: 2013.11.27

End Date:

2013.11.27

Start Time: 16:45:15

End Time:

23:54:00

Capacity: 8000.00 psig

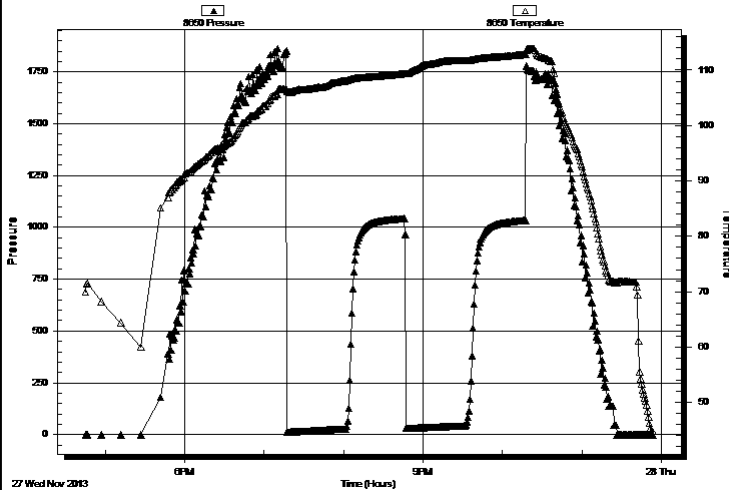
Last Calib.: 2013.11.28

Time On Btm:

Time Off Btm:

TEST COMMENT: Built to 2 1/2" blow
No return blow
Built to 1/4" blow
No return blow

Pressure vs. Time



PRESSURE SUMMARY

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

Length (ft)	Description	Volume (bbl)
50.00	100%Mud with oil scum on top	0.25

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

H&C Oil, Operating, Inc.

25-15s-28w Gove,KS

PO Box 86
Plainville KS 67663

Seymour #25-1

Job Ticket: 54578

DST#: 1

ATTN: Marc Downing

Test Start: 2013.11.27 @ 16:45:00

Tool Information

Drill Pipe:	Length:	3499.30 ft	Diameter:	3.80 inches	Volume:	49.09 bbl	Tool Weight:	1500.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:	30000.00 lb
Drill Collar:	Length:	276.89 ft	Diameter:	2.25 inches	Volume:	1.36 bbl	Weight to Pull Loose:	71000.00 lb
					Total Volume:	50.45 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		29.19 ft					String Weight: Initial	61000.00 lb
Depth to Top Packer:		3767.00 ft					Final	61000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		21.00 ft						
Tool Length:		41.00 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			3748.00	
Shut In Tool	5.00			3753.00	
Hydraulic tool	5.00			3758.00	
Packer	5.00			3763.00	20.00 Bottom Of Top Packer
Packer	4.00			3767.00	
Stubb	1.00			3768.00	
Recorder	0.00	8675	Inside	3768.00	
Recorder	0.00	8650	Outside	3768.00	
Perforations	17.00			3785.00	
Change Over Sub	0.00			3785.00	
Drill Pipe	0.00			3785.00	
Change Over Sub	0.00			3785.00	
Bullnose	3.00			3788.00	21.00 Bottom Packers & Anchor

Total Tool Length: 41.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

H&C Oil, Operating, Inc.

25-15s-28w Gove,KS

PO Box 86
Plainville KS 67663

Seymour #25-1

Job Ticket: 54578

DST#: 1

ATTN: Marc Downing

Test Start: 2013.11.27 @ 16:45:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 51.00 sec/qt

Water Loss: 7.98 in³

Resistivity: ohm.m

Salinity: 1500.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
50.00	100%Mud w ith oil scum on top	0.246

Total Length: 50.00 ft

Total Volume: 0.246 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

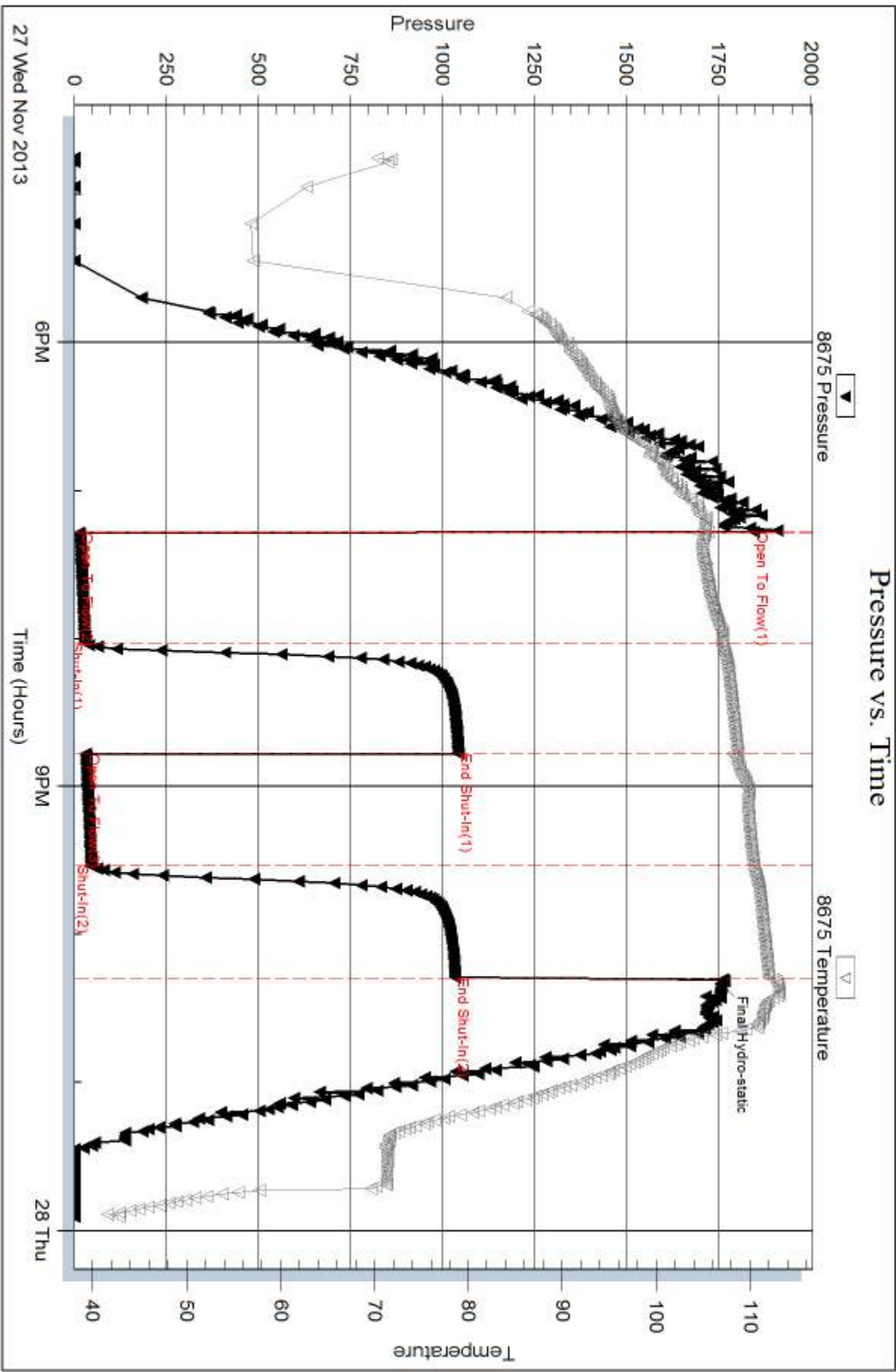
Serial #: 8675

Inside

H&C Oil, Operating, Inc.

Seymour #25-1

DST Test Number: 1

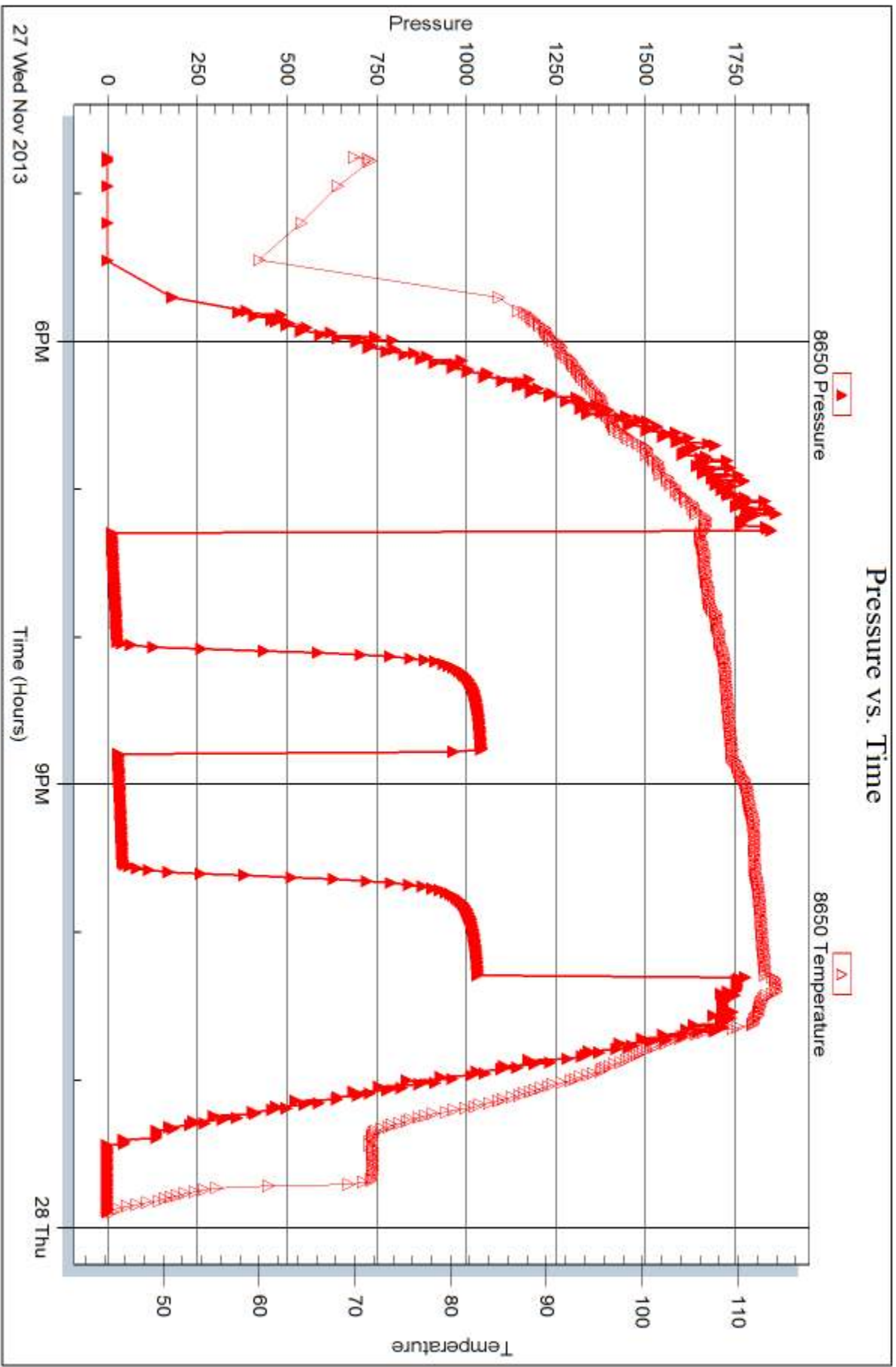


Serial #: 8650

Outside H&C Oil, Operating, Inc.

Seymour #25-1

DST Test Number: 1





DRILL STEM TEST REPORT

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

PO Box 86
Plainville KS 67663

ATTN: Marc Downing

Seymour #25-1

25-15s-28w Gove,KS

Start Date: 2013.11.28 @ 06:34:00

End Date: 2013.11.28 @ 15:36:45

Job Ticket #: 54579 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.12.04 @ 11:05:57



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

H&C Oil, Operating, Inc.

25-15s-28w Gove,KS

PO Box 86
Plainville KS 67663

Seymour #25-1

Job Ticket: 54579

DST#: 2

ATTN: Marc Downing

Test Start: 2013.11.28 @ 06:34:00

GENERAL INFORMATION:

Formation: **LKC "F"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:13:00

Time Test Ended: 15:36:45

Test Type: Conventional Bottom Hole (Reset)

Tester: Jace McKinney

Unit No: 46

Interval: 3784.00 ft (KB) To 3803.00 ft (KB) (TVD)

Total Depth: 3803.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 2474.00 ft (KB)

2463.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 8675 Inside

Press@RunDepth: 1091.34 psig @ 3785.00 ft (KB)

Start Date: 2013.11.28

End Date:

2013.11.28

Start Time: 06:34:15

End Time:

15:36:45

Capacity: 8000.00 psig

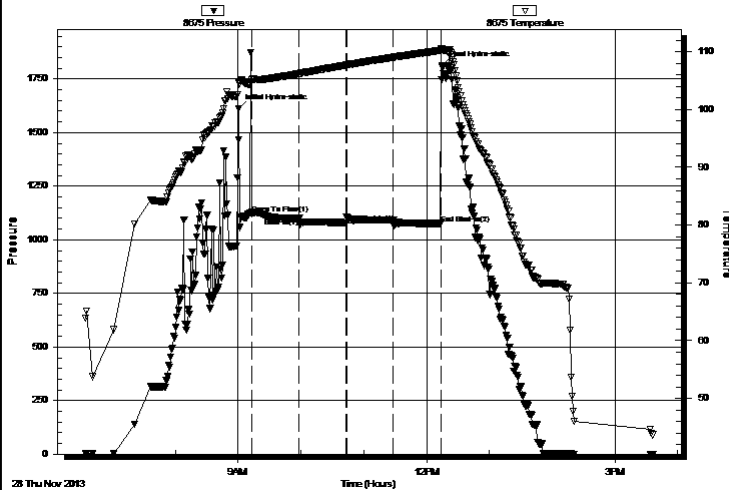
Last Calib.: 2013.11.28

Time On Btm: 2013.11.28 @ 09:00:45

Time Off Btm: 2013.11.28 @ 12:14:45

TEST COMMENT: Built to 3 1/2" blow
No return blow
Surface blow
No return blow

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1611.21	104.69	Initial Hydro-static
13	1121.86	104.82	Open To Flow (1)
58	1099.96	106.23	Shut-In(1)
103	1080.09	107.69	End Shut-In(1)
103	1106.00	107.72	Open To Flow (2)
148	1091.34	109.03	Shut-In(2)
193	1076.00	110.22	End Shut-In(2)
194	1812.79	110.53	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2136.00	Mud	27.44

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

H&C Oil, Operating, Inc.

25-15s-28w Gove,KS

PO Box 86
Plainville KS 67663

Seymour #25-1

Job Ticket: 54579

DST#: 2

ATTN: Marc Downing

Test Start: 2013.11.28 @ 06:34:00

GENERAL INFORMATION:

Formation: **LKC "F"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:13:00

Time Test Ended: 15:36:45

Test Type: Conventional Bottom Hole (Reset)

Tester: Jace McKinney

Unit No: 46

Interval: 3784.00 ft (KB) To 3803.00 ft (KB) (TVD)

Total Depth: 3803.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 2474.00 ft (KB)

2463.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 8650 Outside

Press@RunDepth: psig @ 3785.00 ft (KB)

Start Date: 2013.11.28

End Date:

2013.11.28

Start Time: 06:34:15

End Time:

14:24:45

Capacity: 8000.00 psig

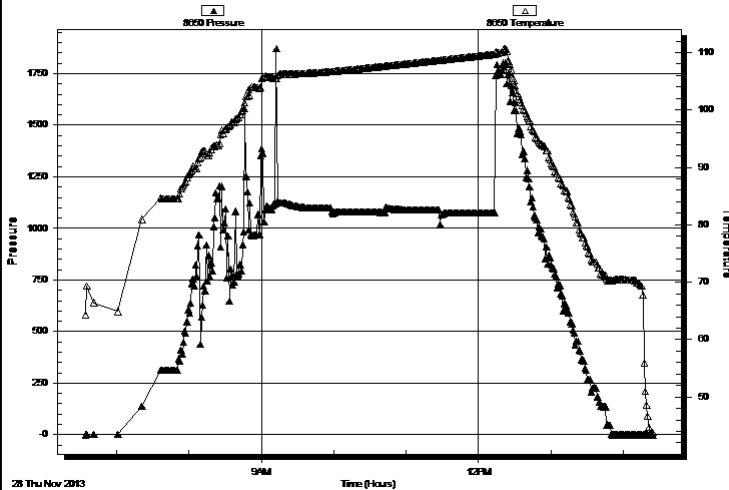
Last Calib.: 2013.11.28

Time On Btm:

Time Off Btm:

TEST COMMENT: Built to 3 1/2" blow
No return blow
Surface blow
No return blow

Pressure vs. Time



PRESSURE SUMMARY

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

Length (ft)	Description	Volume (bbl)
2136.00	Mud	27.44

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

H&C Oil, Operating, Inc.

25-15s-28w Gove,KS

PO Box 86
Plainville KS 67663

Seymour #25-1

Job Ticket: 54579

DST#: 2

ATTN: Marc Downing

Test Start: 2013.11.28 @ 06:34:00

Tool Information

Drill Pipe:	Length:	3498.58 ft	Diameter:	3.80 inches	Volume:	49.08 bbl	Tool Weight:	1500.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:	30000.00 lb
Drill Collar:	Length:	276.89 ft	Diameter:	2.25 inches	Volume:	1.36 bbl	Weight to Pull Loose:	80000.00 lb
					Total Volume:	50.44 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		11.47 ft					String Weight: Initial	70000.00 lb
Depth to Top Packer:		3784.00 ft					Final	70000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		19.00 ft						
Tool Length:		39.00 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			3765.00	
Shut In Tool	5.00			3770.00	
Hydraulic tool	5.00			3775.00	
Packer	5.00			3780.00	20.00 Bottom Of Top Packer
Packer	4.00			3784.00	
Stubb	1.00			3785.00	
Recorder	0.00	8675	Inside	3785.00	
Recorder	0.00	8650	Outside	3785.00	
Perforations	15.00			3800.00	
Change Over Sub	0.00			3800.00	
Drill Pipe	0.00			3800.00	
Change Over Sub	0.00			3800.00	
Bullnose	3.00			3803.00	19.00 Bottom Packers & Anchor

Total Tool Length: 39.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

H&C Oil, Operating, Inc.

25-15s-28w Gove,KS

PO Box 86
Plainville KS 67663

Seymour #25-1

Job Ticket: 54579

DST#: 2

ATTN: Marc Downing

Test Start: 2013.11.28 @ 06:34:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 51.00 sec/qt

Water Loss: 7.97 in³

Resistivity: ohm.m

Salinity: 1500.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2136.00	Mud	27.440

Total Length: 2136.00 ft Total Volume: 27.440 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Hit a bridge 23 stands off bottom, We set 10 to 15 thousands pounds went through, then the rest of the stands going in the hole was fine.

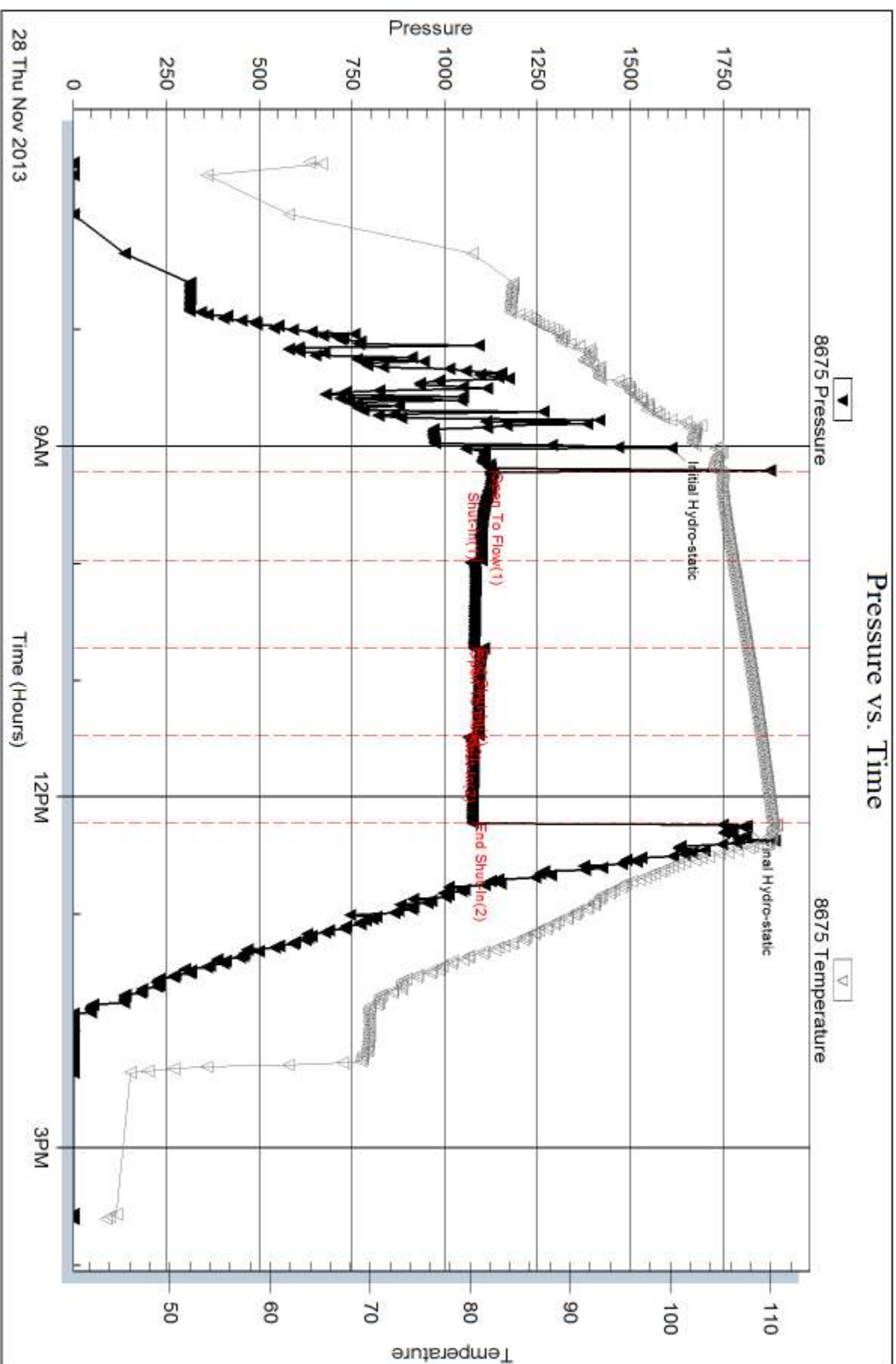
Serial #: 8675

Inside

H&C Oil, Operating, Inc.

Seymour #25-1

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 54579

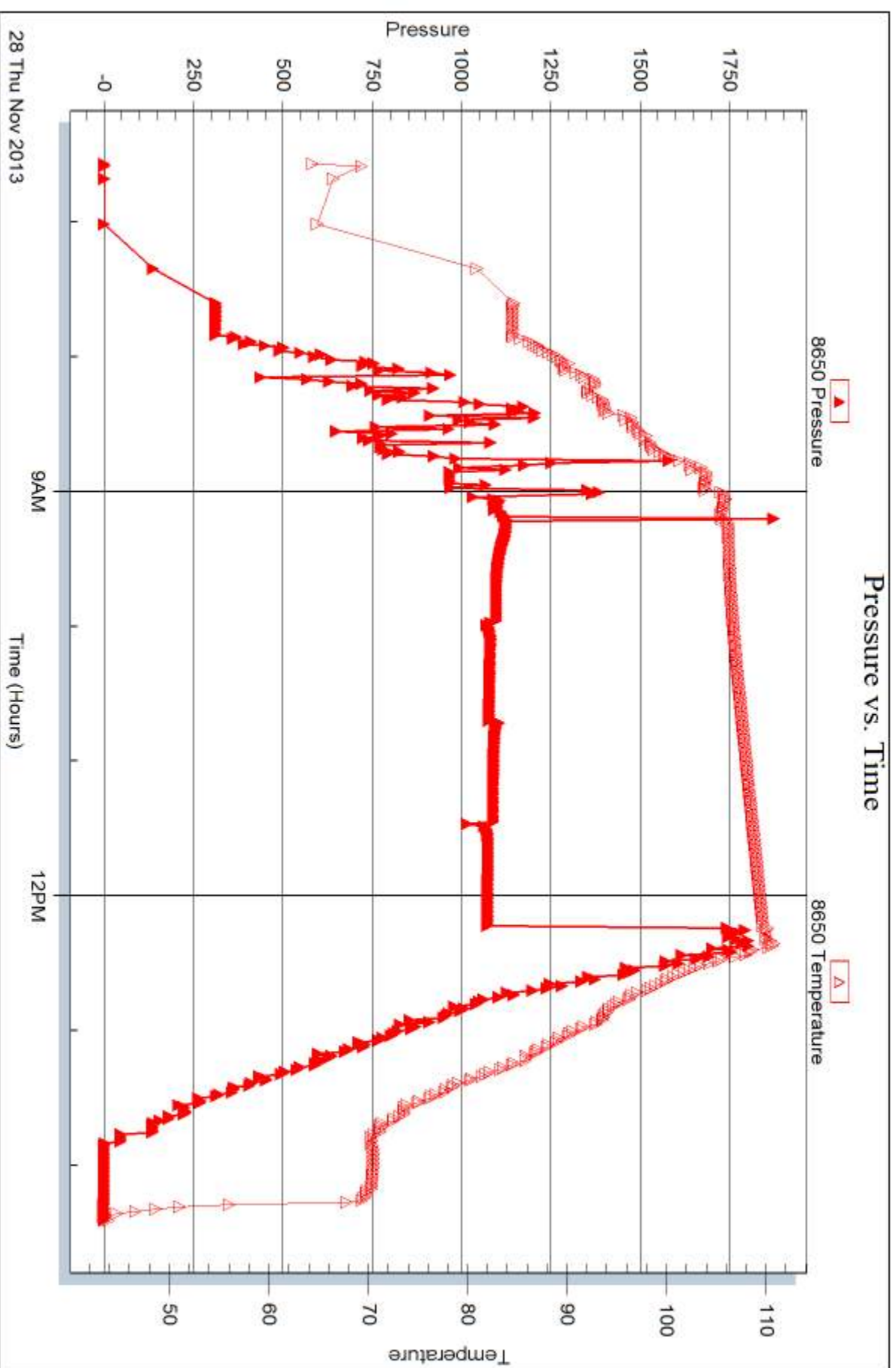
Printed: 2013.12.04 @ 11:05:59

Serial #: 8650

Outside H&C Oil, Operating, Inc.

Seymour #25-1

DST Test Number: 2





DRILL STEM TEST REPORT

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

PO Box 86
Plainville KS 67663

ATTN: Marc Downing

Seymour #25-1

25-15s-28w Gove,KS

Start Date: 2013.11.29 @ 13:30:00

End Date: 2013.11.29 @ 20:47:00

Job Ticket #: 54580 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.12.04 @ 11:05:21



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

H&C Oil, Operating, Inc.

25-15s-28w Gove,KS

PO Box 86
Plainville KS 67663

Seymour #25-1

Job Ticket: 54580

DST#: 3

ATTN: Marc Downing

Test Start: 2013.11.29 @ 13:30:00

GENERAL INFORMATION:

Formation: **LKC "K"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:16:45

Time Test Ended: 20:47:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Jace McKinney

Unit No: 46

Interval: 3943.00 ft (KB) To 3974.00 ft (KB) (TVD)

Reference Elevations: 2474.00 ft (KB)

Total Depth: 3974.00 ft (KB) (TVD)

2463.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 11.00 ft

Serial #: 8675 Inside

Press@RunDepth: 513.02 psig @ 3944.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.11.29

End Date:

2013.11.29

Last Calib.: 2013.11.29

Start Time: 13:30:15

End Time:

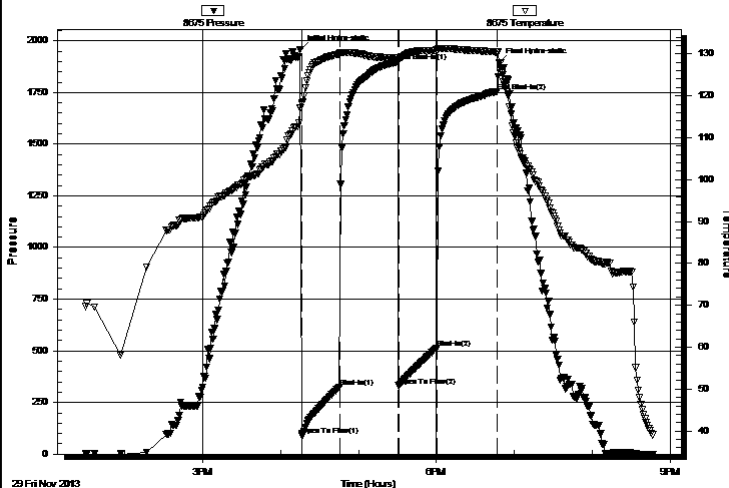
20:47:00

Time On Btm: 2013.11.29 @ 16:15:30

Time Off Btm: 2013.11.29 @ 18:48:00

TEST COMMENT: B.O.B in 4 min.
Bled off for 5 min. No return blow
B.O.B in 5 min.
Bled off for 5 min. No return blow

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1958.76	117.13	Initial Hydro-static
2	89.10	118.37	Open To Flow (1)
30	326.15	129.97	Shut-In(1)
75	1897.14	129.02	End Shut-In(1)
76	330.90	128.33	Open To Flow (2)
105	513.02	130.94	Shut-In(2)
152	1755.30	130.48	End Shut-In(2)
153	1896.21	127.84	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
751.00	100% Water	8.01
325.00	mcw 50%M 50%W	4.56

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

H&C Oil, Operating, Inc.

25-15s-28w Gove,KS

PO Box 86
Plainville KS 67663

Seymour #25-1

Job Ticket: 54580

DST#: 3

ATTN: Marc Downing

Test Start: 2013.11.29 @ 13:30:00

GENERAL INFORMATION:

Formation: **LKC "K"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:16:45

Time Test Ended: 20:47:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Jace McKinney

Unit No: 46

Interval: 3943.00 ft (KB) To 3974.00 ft (KB) (TVD)

Total Depth: 3974.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 2474.00 ft (KB)

2463.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 8650 Outside

Press@RunDepth: psig @ 3944.00 ft (KB)

Start Date: 2013.11.29

End Date:

2013.11.29

Start Time: 13:30:00

End Time:

20:47:00

Capacity: 8000.00 psig

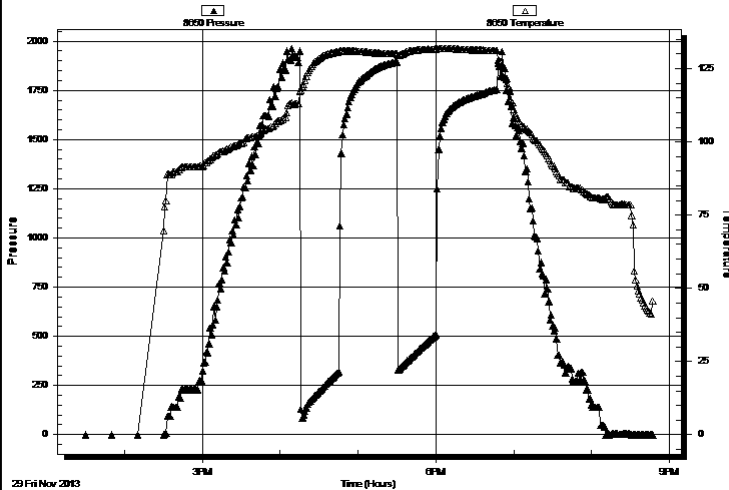
Last Calib.: 2013.11.29

Time On Btm:

Time Off Btm:

TEST COMMENT: B.O.B in 4 min.
Bled off for 5 min. No return blow
B.O.B in 5 min.
Bled off for 5 min. No return blow

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
751.00	100% Water	8.01
325.00	mcw 50%M 50%W	4.56

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.

25-15s-28w Gove,KS

PO Box 86
Plainville KS 67663

Seymour #25-1

Job Ticket: 54580

DST#: 3

ATTN: Marc Downing

Test Start: 2013.11.29 @ 13:30:00

Tool Information

Drill Pipe:	Length:	3656.34 ft	Diameter:	3.80 inches	Volume:	51.29 bbl	Tool Weight:	1500.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:	30000.00 lb
Drill Collar:	Length:	276.89 ft	Diameter:	2.25 inches	Volume:	1.36 bbl	Weight to Pull Loose:	74000.00 lb
					Total Volume:	52.65 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		10.23 ft					String Weight: Initial	62000.00 lb
Depth to Top Packer:		3943.00 ft					Final	64000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		31.00 ft						
Tool Length:		51.00 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			3924.00	
Shut In Tool	5.00			3929.00	
Hydraulic tool	5.00			3934.00	
Packer	5.00			3939.00	20.00 Bottom Of Top Packer
Packer	4.00			3943.00	
Stubb	1.00			3944.00	
Recorder	0.00	8675	Inside	3944.00	
Recorder	0.00	8650	Outside	3944.00	
Perforations	27.00			3971.00	
Change Over Sub	0.00			3971.00	
Drill Pipe	0.00			3971.00	
Change Over Sub	0.00			3971.00	
Bullnose	3.00			3974.00	31.00 Bottom Packers & Anchor

Total Tool Length: 51.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

H&C Oil, Operating, Inc.

25-15s-28w Gove,KS

PO Box 86
Plainville KS 67663

Seymour #25-1

Job Ticket: 54580

DST#: 3

ATTN: Marc Downing

Test Start: 2013.11.29 @ 13:30:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 53.00 sec/qt

Water Loss: 8.78 in³

Resistivity: ohm.m

Salinity: 3000.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
751.00	100% Water	8.012
325.00	mcw 50%M 50%W	4.559

Total Length: 1076.00 ft Total Volume: 12.571 bbl

Num Fluid Samples: 0

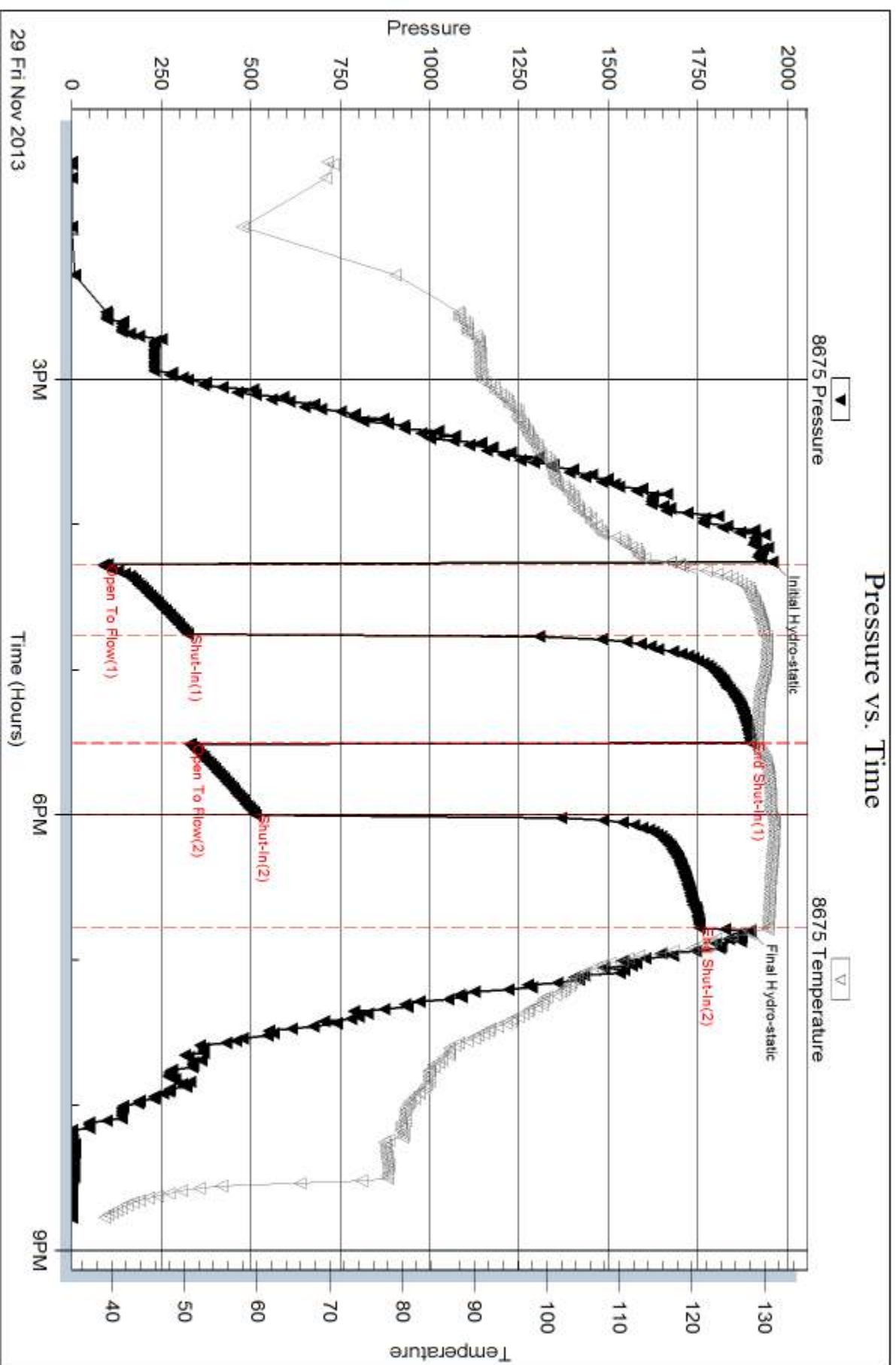
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW: .38 @ 40 F = 30,000

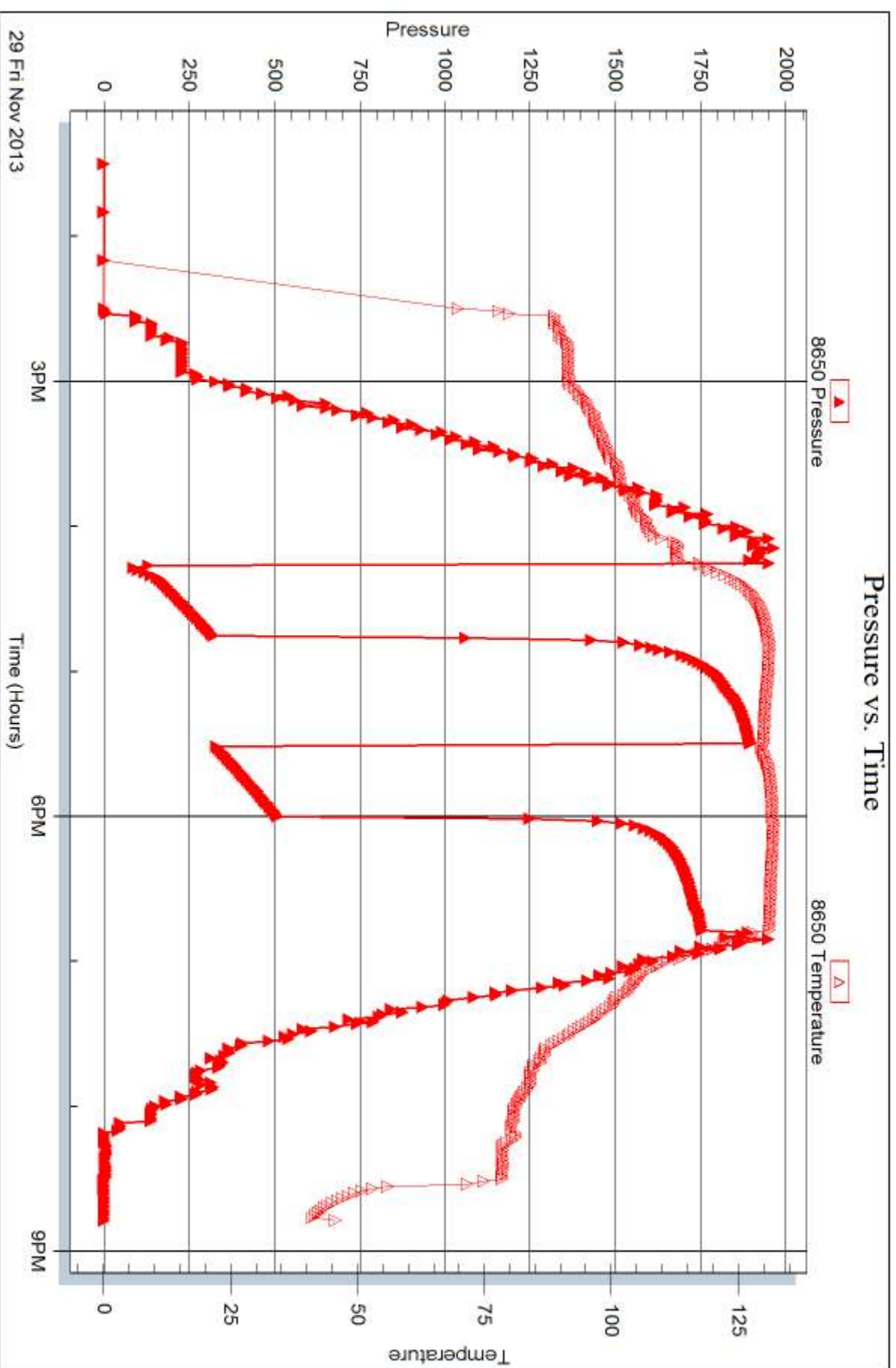


Serial #: 8650

Outside H&C Oil, Operating, Inc.

Seymour #25-1

DST Test Number: 3





DRILL STEM TEST REPORT

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

PO Box 86
Plainville KS 67663

ATTN: Marc Downing

Seymour #25-1

25-15s-28w Gove,KS

Start Date: 2013.11.29 @ 21:55:00

End Date: 2013.11.30 @ 04:36:00

Job Ticket #: 54581 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.12.04 @ 11:00:17



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

H&C Oil, Operating, Inc.

25-15s-28w Gove, KS

PO Box 86
Plainville KS 67663

Seymour #25-1

Job Ticket: 54581

DST#: 4

ATTN: Marc Downing

Test Start: 2013.11.29 @ 21:55:00

GENERAL INFORMATION:

Formation: **LKC "F"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:49:00

Time Test Ended: 04:36:00

Test Type: Conventional Straddle (Reset)

Tester: Jace McKinney

Unit No: 46

Interval: 3794.00 ft (KB) To 3798.00 ft (KB) (TVD)

Reference Elevations: 2474.00 ft (KB)

Total Depth: 3974.00 ft (KB) (TVD)

2463.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 11.00 ft

Serial #: 8675 Inside

Press@RunDepth: 77.16 psig @ 3785.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.11.29

End Date:

2013.11.30

Last Calib.: 2013.11.30

Start Time: 21:55:15

End Time:

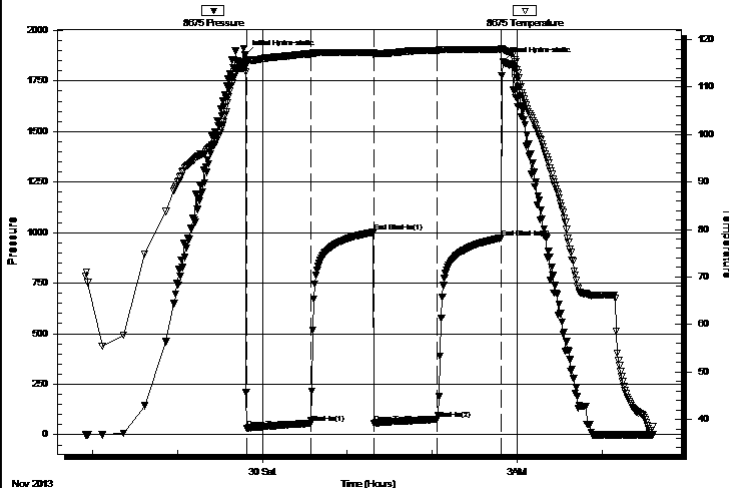
04:36:00

Time On Btm: 2013.11.29 @ 23:48:15

Time Off Btm: 2013.11.30 @ 02:50:00

TEST COMMENT: Built to 5" blow
No return blow
Built to 3/4" blow
No return blow

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1882.08	114.34	Initial Hydro-static
1	32.00	115.32	Open To Flow (1)
46	57.17	116.98	Shut-In(1)
91	1002.21	117.31	End Shut-In(1)
91	58.37	116.66	Open To Flow (2)
136	77.16	117.72	Shut-In(2)
181	973.26	117.95	End Shut-In(2)
182	1846.44	117.87	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	100% Mud w with oiln spots	0.59

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

H&C Oil, Operating, Inc.

25-15s-28w Gove,KS

PO Box 86
Plainville KS 67663

Seymour #25-1

Job Ticket: 54581

DST#: 4

ATTN: Marc Downing

Test Start: 2013.11.29 @ 21:55:00

GENERAL INFORMATION:

Formation: **LKC "F"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:49:00

Time Test Ended: 04:36:00

Test Type: Conventional Straddle (Reset)

Tester: Jace McKinney

Unit No: 46

Interval: 3794.00 ft (KB) To 3798.00 ft (KB) (TVD)

Total Depth: 3974.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 2474.00 ft (KB)

2463.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 8650 Outside

Press@RunDepth: psig @ 3785.00 ft (KB)

Start Date: 2013.11.29

End Date:

2013.11.30

Start Time: 21:55:15

End Time:

04:35:45

Capacity: 8000.00 psig

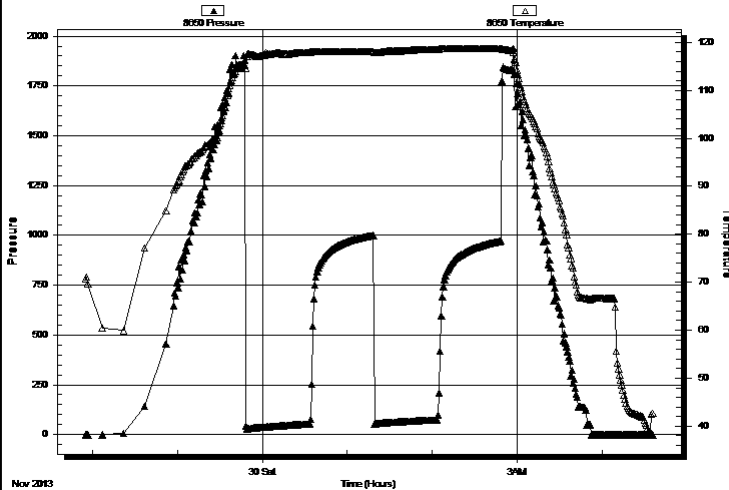
Last Calib.: 2013.11.30

Time On Btm:

Time Off Btm:

TEST COMMENT: Built to 5" blow
No return blow
Built to 3/4" blow
No return blow

Pressure vs. Time



PRESSURE SUMMARY

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

Length (ft)	Description	Volume (bbl)
120.00	100% Mud w with oiln spots	0.59

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

H&C Oil, Operating, Inc.

25-15s-28w Gove,KS

PO Box 86
Plainville KS 67663

Seymour #25-1

Job Ticket: 54581

DST#: 4

ATTN: Marc Downing

Test Start: 2013.11.29 @ 21:55:00

GENERAL INFORMATION:

Formation: **LKC "F"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:49:00

Time Test Ended: 04:36:00

Test Type: Conventional Straddle (Reset)

Tester: Jace McKinney

Unit No: 46

Interval: 3794.00 ft (KB) To 3798.00 ft (KB) (TVD)

Total Depth: 3974.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 2474.00 ft (KB)

2463.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 6672 Below (Straddle)

Press@RunDepth: psig @ 3812.00 ft (KB)

Start Date: 2013.11.29

End Date:

2013.11.30

Start Time: 21:55:01

End Time:

04:37:00

Capacity: 8000.00 psig

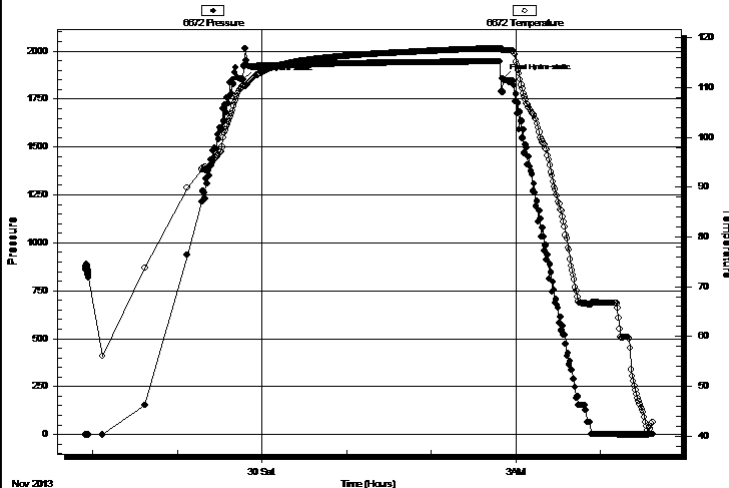
Last Calib.: 1899.12.30

Time On Btm: 2013.11.29 @ 23:46:45

Time Off Btm: 2013.11.30 @ 02:50:45

TEST COMMENT: Built to 5" blow
No return blow
Built to 3/4" blow
No return blow

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1851.65	110.31	Initial Hydro-static
184	1857.92	117.51	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	100% Mud w with oiln spots	0.59

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

H&C Oil, Operating, Inc.

25-15s-28w Gove,KS

PO Box 86
Plainville KS 67663

Seymour #25-1

Job Ticket: 54581

DST#: 4

ATTN: Marc Downing

Test Start: 2013.11.29 @ 21:55:00

Tool Information

Drill Pipe:	Length: 3497.78 ft	Diameter: 3.80 inches	Volume: 49.06 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	30000.00 lb
Drill Collar:	Length: 276.89 ft	Diameter: 2.25 inches	Volume: 1.36 bbl	Weight to Pull Loose:	70000.00 lb
		Total Volume:	50.42 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	10.67 ft			String Weight: Initial	60000.00 lb
Depth to Top Packer:	3784.00 ft			Final	60000.00 lb
Depth to Bottom Packer:	3798.00 ft				
Interval between Packers:	14.00 ft				
Tool Length:	208.00 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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Shut In Tool	5.00			3769.00	
Hydraulic tool	5.00			3774.00	
Packer	5.00			3779.00	20.00 Bottom Of Top Packer
Packer	5.00			3784.00	
Stubb	1.00			3785.00	
Recorder	0.00	8675	Inside	3785.00	
Recorder	0.00	8650	Outside	3785.00	
Perforations	12.00			3797.00	
Change Over Sub	0.00			3797.00	
drill Pipe	0.00			3797.00	
change Over Sub	0.00			3797.00	
Perforations	0.00			3797.00	
Blank Off Sub	1.00			3798.00	14.00 Tool Interval
Packer	3.00			3801.00	
Stubb	1.00			3802.00	
Perforations	9.00			3811.00	
Change Over Sub	1.00			3812.00	
Recorder	0.00	6672	Below	3812.00	
Drill Pipe	156.00			3968.00	
Change Over Sub	1.00			3969.00	
Bullnose	3.00			3972.00	174.00 Bottom Packers & Anchor

Total Tool Length: 208.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

H&C Oil, Operating, Inc.

25-15s-28w Gove,KS

PO Box 86
Plainville KS 67663

Seymour #25-1

Job Ticket: 54581

DST#: 4

ATTN: Marc Downing

Test Start: 2013.11.29 @ 21:55:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 53.00 sec/qt

Water Loss: 7.99 in³

Resistivity: ohm.m

Salinity: 2000.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	100% Mud with oiln spots	0.590

Total Length: 120.00 ft

Total Volume: 0.590 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

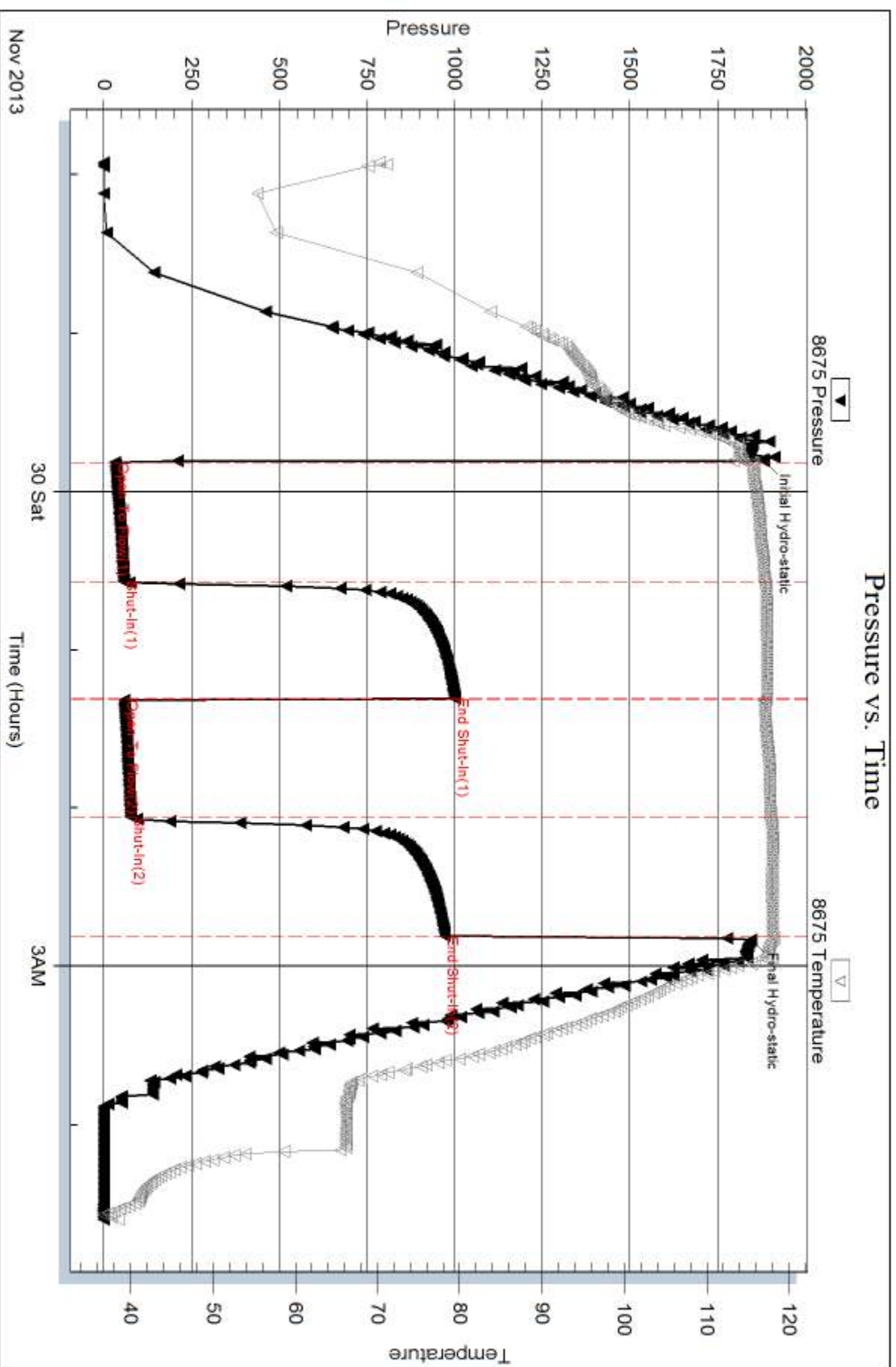
Serial #: 8675

Inside

H&C Oil, Operating, Inc.

Seymour #25-1

DST Test Number: 4

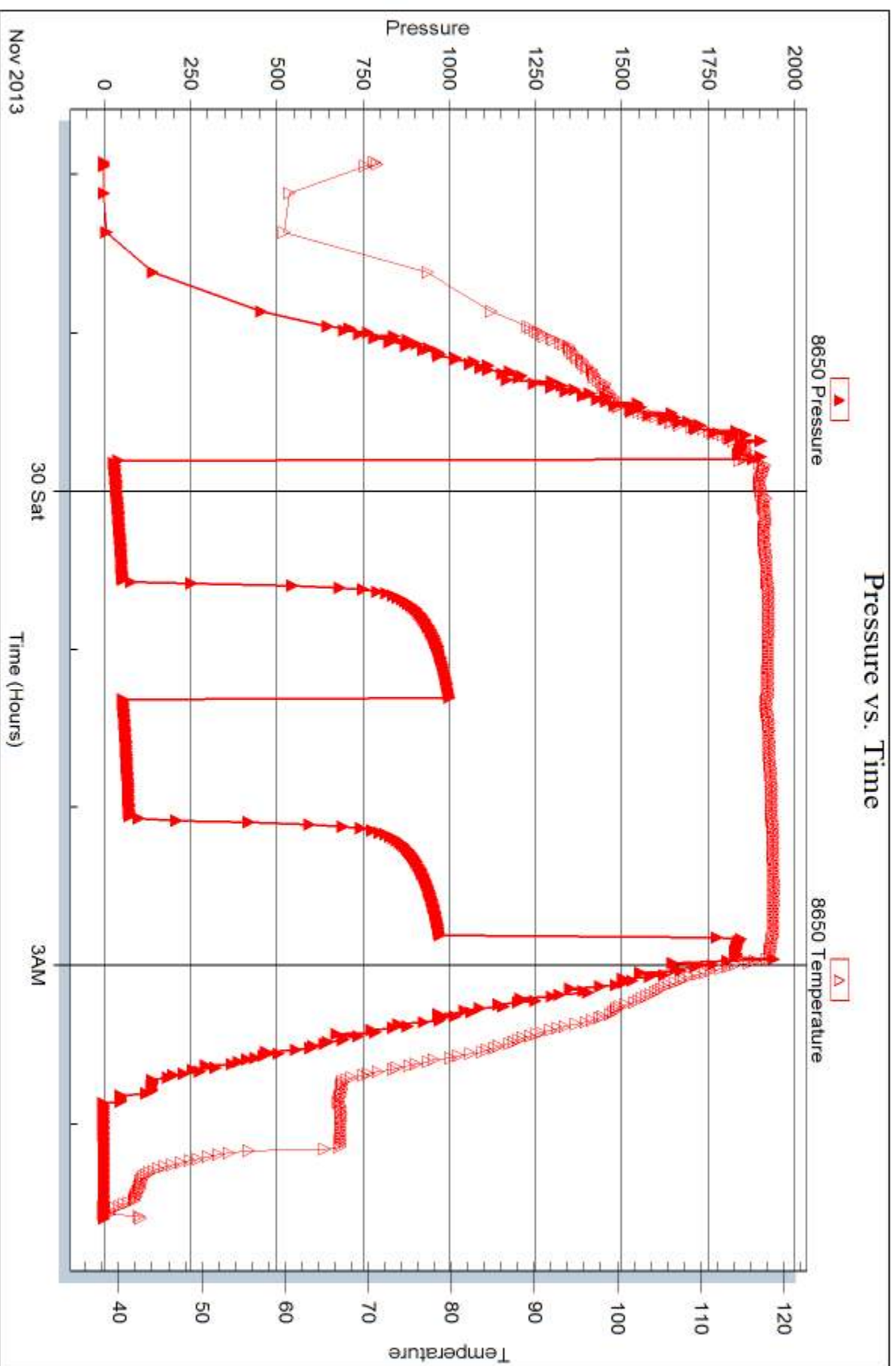


Serial #: 8650

Outside H&C Oil, Operating, Inc.

Seymour #25-1

DST Test Number: 4

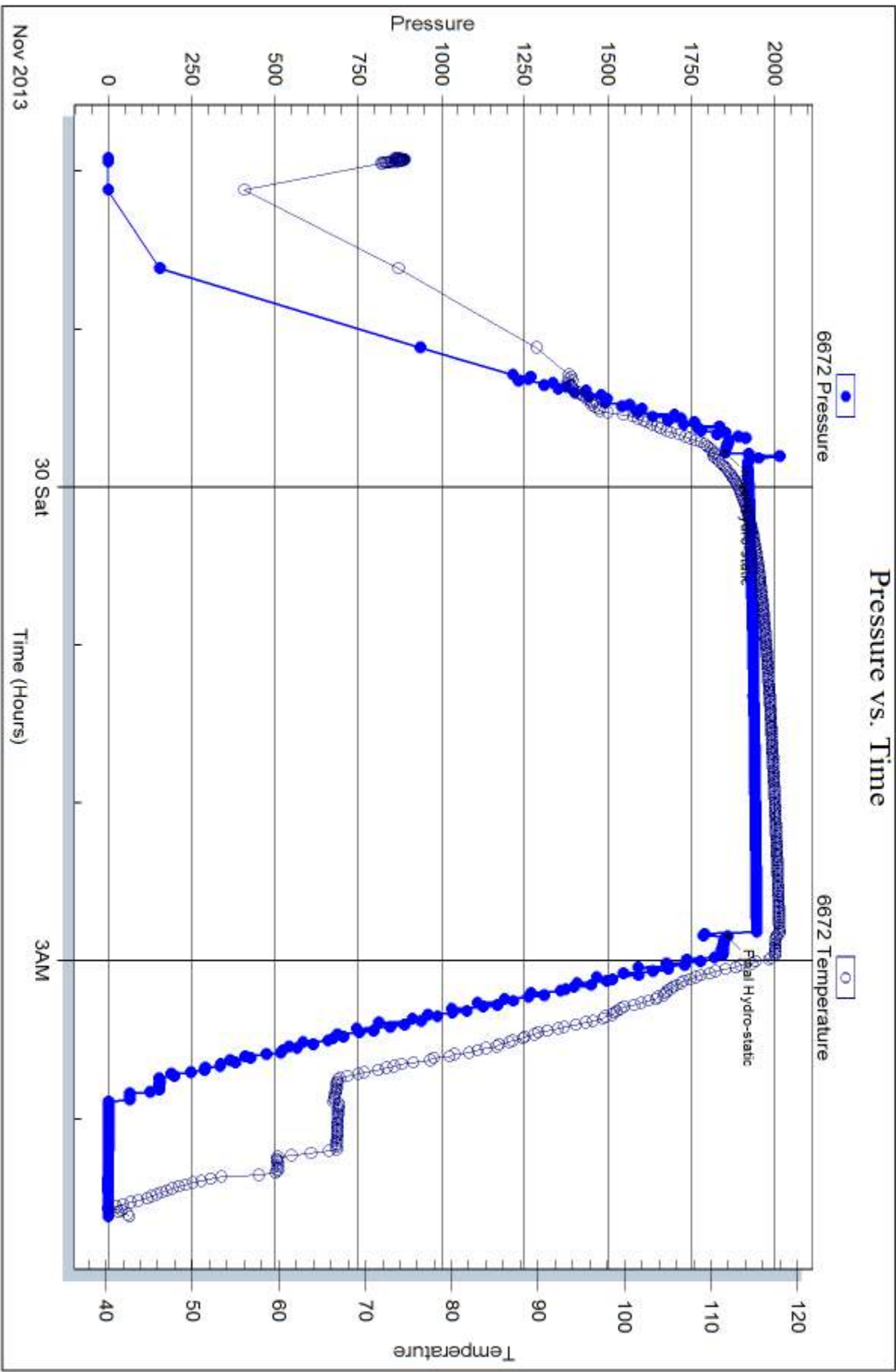


Serial #: 6672

Below (Stratton), Operating, Inc.

Seymour #25-1

DST Test Number: 4





DRILL STEM TEST REPORT

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

PO Box 86
Plainville KS 67663

ATTN: Marc Downing

Seymour #25-1

25-15s-28w Gove,KS

Start Date: 2013.12.01 @ 04:15:00

End Date: 2013.12.01 @ 11:10:00

Job Ticket #: 54582 DST #: 5

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.12.04 @ 10:53:20



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

H&C Oil, Operating, Inc.

25-15s-28w Gove,KS

PO Box 86
Plainville KS 67663

Seymour #25-1

Job Ticket: 54582

DST#: 5

ATTN: Marc Downing

Test Start: 2013.12.01 @ 04:15:00

GENERAL INFORMATION:

Formation: **Myric Station**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:14:30

Time Test Ended: 11:10:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Jace McKinney

Unit No: 46

Interval: 4133.00 ft (KB) To 4185.00 ft (KB) (TVD)

Total Depth: 4185.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 2474.00 ft (KB)

2463.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 8675 Inside

Press@RunDepth: 20.53 psig @ 4134.00 ft (KB)

Start Date: 2013.12.01

End Date:

2013.12.01

Start Time: 04:15:15

End Time:

11:10:00

Capacity: 8000.00 psig

Last Calib.: 2013.12.01

Time On Btm: 2013.12.01 @ 06:14:15

Time Off Btm: 2013.12.01 @ 09:16:15

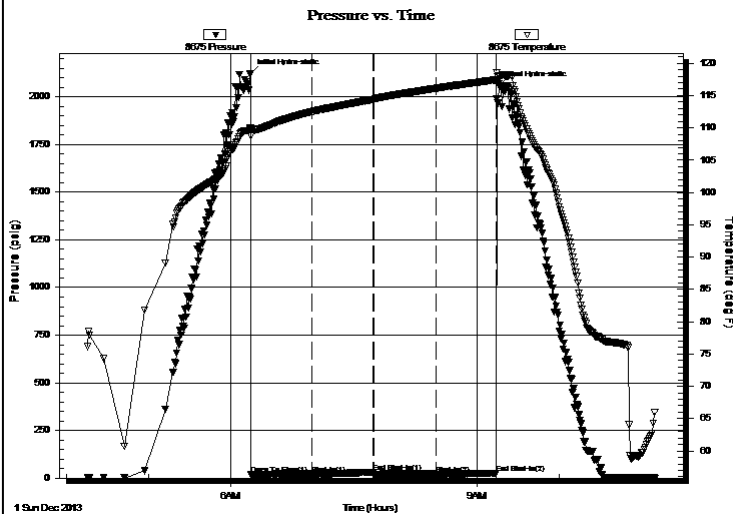
TEST COMMENT: Built to 1 1/2" blow, died to 3/4" blow

No return blow

No blow

No return blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2123.64	110.06	Initial Hydro-static
1	18.01	108.69	Open To Flow (1)
45	21.35	112.51	Shut-In(1)
90	30.86	114.41	End Shut-In(1)
91	20.25	114.42	Open To Flow (2)
136	20.53	116.13	Shut-In(2)
180	26.62	117.45	End Shut-In(2)
182	2057.08	118.03	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	100% Mud	0.15

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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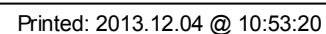
* Recovery from multiple tests



Test Start: 2013.12.01 @ 04:15:00

KB to GR/CF: 11.00 ft

No return blow





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

H&C Oil, Operating, Inc.

25-15s-28w Gove,KS

PO Box 86
Plainville KS 67663

Seymour #25-1

Job Ticket: 54582

DST#: 5

ATTN: Marc Downing

Test Start: 2013.12.01 @ 04:15:00

Tool Information

Drill Pipe:	Length:	3844.58 ft	Diameter:	3.80 inches	Volume:	53.93 bbl	Tool Weight:	1500.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:	30000.00 lb
Drill Collar:	Length:	276.89 ft	Diameter:	2.25 inches	Volume:	1.36 bbl	Weight to Pull Loose:	72000.00 lb
					Total Volume:	55.29 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		8.47 ft					String Weight: Initial	62000.00 lb
Depth to Top Packer:		4133.00 ft					Final	62000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		52.00 ft						
Tool Length:		72.00 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			4114.00	
Shut In Tool	5.00			4119.00	
Hydraulic tool	5.00			4124.00	
Packer	5.00			4129.00	20.00 Bottom Of Top Packer
Packer	4.00			4133.00	
Stubb	1.00			4134.00	
Recorder	0.00	8675	Inside	4134.00	
Recorder	0.00	8650	Outside	4134.00	
Perforations	15.00			4149.00	
Change Over Sub	1.00			4150.00	
Drill Pipe	31.00			4181.00	
Change Over Sub	1.00			4182.00	
Bullnose	3.00			4185.00	52.00 Bottom Packers & Anchor

Total Tool Length: 72.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

H&C Oil, Operating, Inc.

25-15s-28w Gove,KS

PO Box 86
Plainville KS 67663

Seymour #25-1

Job Ticket: 54582

DST#: 5

ATTN: Marc Downing

Test Start: 2013.12.01 @ 04:15:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 52.00 sec/qt

Water Loss: 8.79 in³

Resistivity: ohm.m

Salinity: 2500.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	100% Mud	0.148

Total Length: 30.00 ft

Total Volume: 0.148 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8675

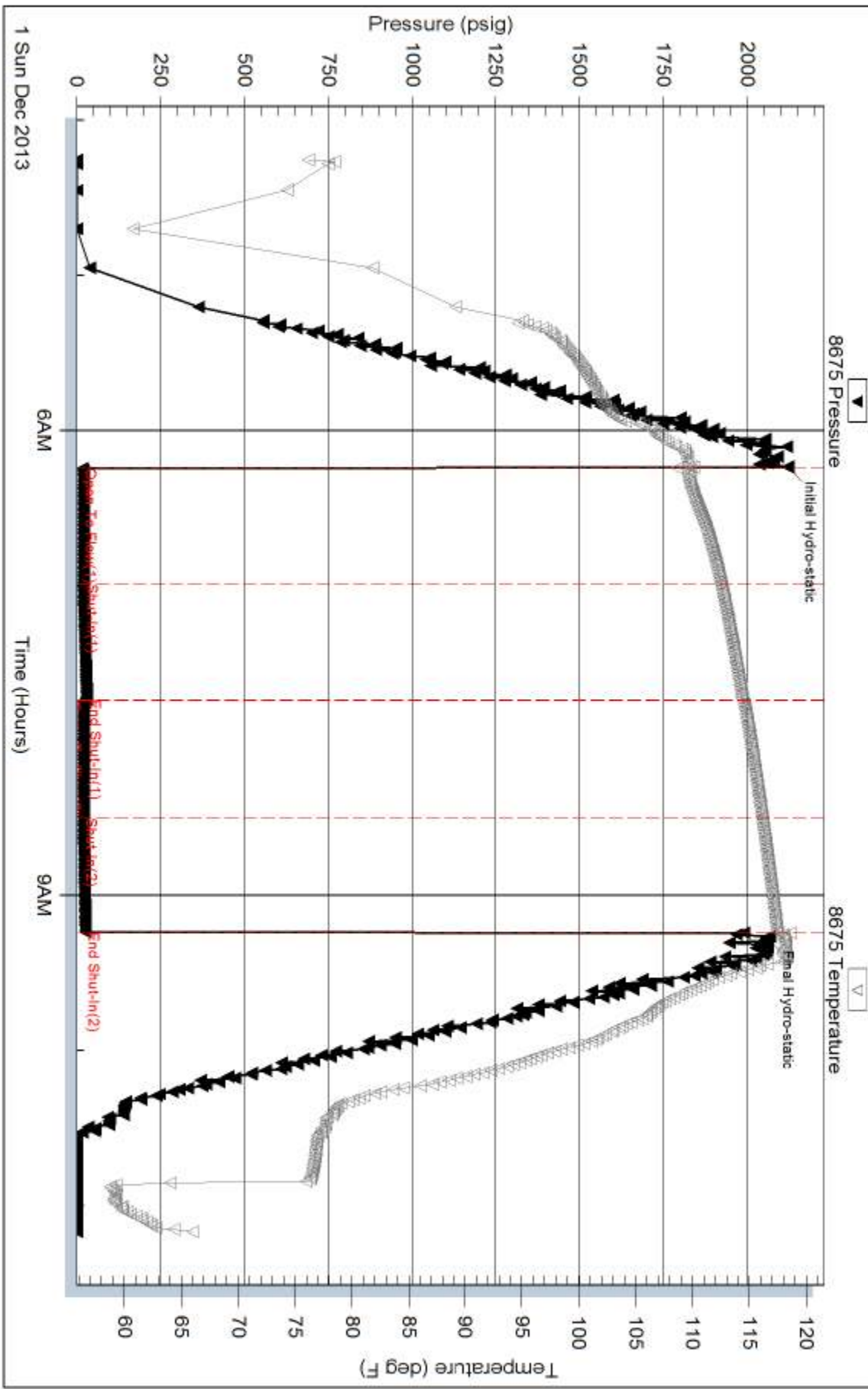
Inside

H&C Oil, Operating, Inc.

Seymour #25-1

DST Test Number: 5

Pressure vs. Time

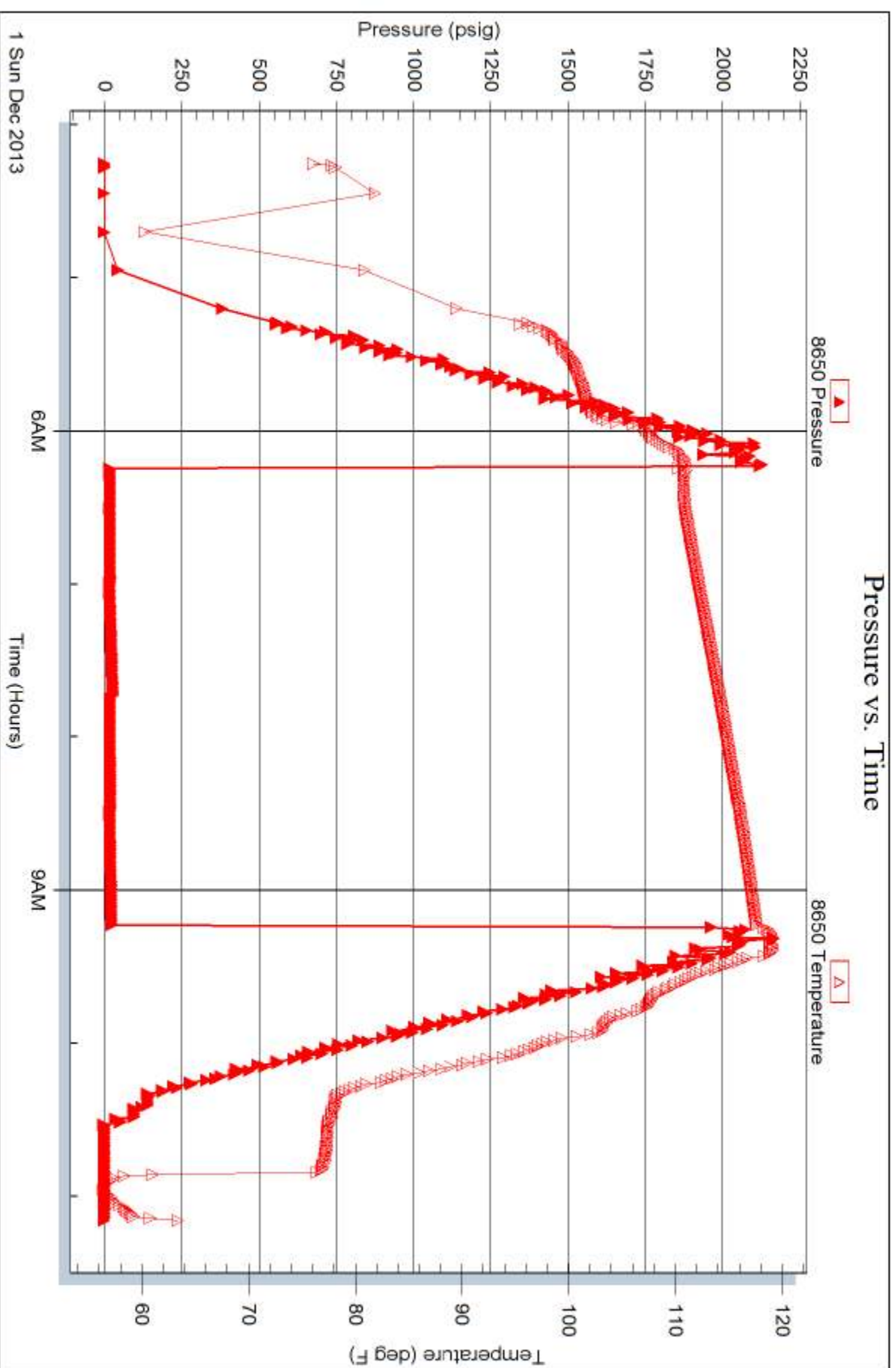


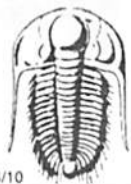
Serial #: 8650

Outside H&C Oil, Operating, Inc.

Seymour #25-1

DST Test Number: 5





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 54578

Well Name & No. Seymour # 25-1 Test No. 1 Date 11/27/13
 Company H & C Oil Operating, Inc Elevation 2474 KB 2463 GL
 Address Plainville, Kansas 67663, PO Box 86
 Co. Rep / Geo. Marc Downing Rig H2 Drilling Rig 1
 Location: Sec. 25 Twp. 15S Rge. 28W Co. Cove Co. State K5

Interval Tested 3767-3788 Zone Tested Lansing "E" Zone
 Anchor Length 21 Drill Pipe Run 3499.30 Mud Wt. 8.9
 Top Packer Depth 3763 Drill Collars Run 276.89 Vis 51
 Bottom Packer Depth 3762 Wt. Pipe Run WL 8.0
 Total Depth 3788 Chlorides 1500 ppm System LCM 1.5 #

Blow Description Built to 2 1/2" below
No return below
Built to 1/4" below
No return below

Rec	Feet of	%gas	%oil	%water	%mud
<u>50</u>	<u>Mud with oil scum on top</u>			<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 50 BHT 110 Gravity API RW @ ° F Chlorides ppm
 (A) Initial Hydrostatic 1,847 ☒ Test 1150 T-On Location 14:15
 (B) First Initial Flow 14 ☐ Jars T-Started 16:45
 (C) First Final Flow 29 ☐ Safety Joint T-Open 19:17
 (D) Initial Shut-In 1,045 ☒ Circ Sub N/C T-Pulled 22:17
 (E) Second Initial Flow 32 ☒ Hourly Standby 1 T-Out 23:54
 (F) Second Final Flow 46 ☒ Mileage 100 RT 155 Comments over the 9
 (G) Final Shut-In 1,035 ☐ Sampler hours
 (H) Final Hydrostatic 1,757 ☐ Straddle
☐ Shale Packer
☐ Extra Packer
☐ Extra Recorder
☐ Day Standby
☒ Accessibility 150 Sub Total 1455

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

Approved By Our Representative
 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.

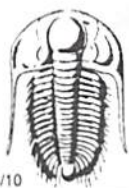


Test Ticket

NO. 54579

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. 54580

Well Name & No. Baymour #25-1 Test No. 3 Date 11/29/13
 Company H+C Oil Operating, Inc. Elevation 2474 KB 2463 GL
 Address PO Box 86, Plainville MS, 67663
 Co. Rep / Geo. Marc Downing Rig 42 Drilling Rig 1
 Location: Sec. 25 Twp. 15S Rge. 28W Co. Cove Co. State MS

Interval Tested 3943-3974 Zone Tested Lansing "K" Zone
 Anchor Length 31 Drill Pipe Run 3656.34 Mud Wt. 9.1
 Top Packer Depth 3939 Drill Collars Run 216.89 Vis 53
 Bottom Packer Depth 3943 Wt. Pipe Run WL 8.8
 Total Depth 3974 Chlorides 3,000 ppm System LCM 1#

Blow Description B.O.B. in 4 min.
Bled off for 5 min. No return below.
B.O.B. in 5 min.
Bled off for 5 min. No return below

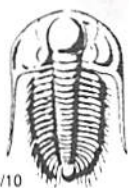
Rec	Feet of	%gas	%oil	%water	%mud
325	mcw			50	50
751	water			100	

Rec Total 1076 BHT 129 Gravity API RW 38 @ 40 °F Chlorides 30,000 ppm
 (A) Initial Hydrostatic 1,959 ☒ Test 1150 T-On Location 12:50
 (B) First Initial Flow 89 ☐ Jars T-Started 13:30
 (C) First Final Flow 326 ☐ Safety Joint T-Open 16:16
 (D) Initial Shut-In 1,897 ☒ Circ Sub N/C T-Pulled 18:46
 (E) Second Initial Flow 331 ☒ Hourly Standby 1 hour last night T-Out 20:47
 (F) Second Final Flow 513 ☒ Mileage 100 RT x 2 310 Comments drove out here
 (G) Final Shut-In 1,755 ☐ Sampler and rig drill 20 feet when
 (H) Final Hydrostatic 1,896 ☐ Straddle not to 50 couldnt test the "F"

☐ Ruined Shale Packer
☐ Ruined Packer
☐ Extra Copies
 Initial Open 30 Sub Total 0
 Initial Shut-In 45 Total 1610
 Final Flow 30 MP/DST Disc't
 Final Shut-In 45 ☒ Accessibility 150
 Sub Total 1610

Approved By Our Representative

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**TRILOBITE
TESTING INC.**

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **54581**

Well Name & No. Seymour #25-1 Test No. 4 Date 11/29/13 11/30/13
 Company H+C Oil Operating, Inc Elevation 2474 KB 2463 GL
 Address PO Box 86, Plainville KS, 67663
 Co. Rep / Geo. Marc Downing Rig H2 Rig 1
 Location: Sec. 25 Twp. 15S Rge. 28W Co. Cove Co State KS

Interval Tested 3974 3784-3798 Zone Tested Lansing "F" Zone
 Anchor Length 14 Drill Pipe Run 3497.78 Mud Wt. 9.2
 Top Packer Depth 3780 Drill Collars Run 276.89 Vis 54
 Bottom Packer Depth 3784 Wt. Pipe Run WL 8.0
 Total Depth 3974 3798 Chlorides 2,000 ppm System LCM 2#

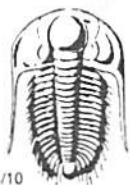
Blow Description Built to 5" below
Bled off for 3 min. No return below
Built to 3/4" below
No return below

Rec	Feet of	%gas	%oil	%water	%mud
<u>120</u>	<u>Mud with 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 120 BHT 117 Gravity API RW @ °F Chlorides ppm
 (A) Initial Hydrostatic 1,882 ☒ Test 1150 T-On Location 21:25
 (B) First Initial Flow 32 ☐ Jars T-Started 21:55
 (C) First Final Flow 57 ☐ Safety Joint T-Open 23:48
 (D) Initial Shut-In 1,002 ☒ Circ Sub N/C T-Pulled 02:48
 (E) Second Initial Flow 58 ☐ Hourly Standby T-Out 04:36
 (F) Second Final Flow 77 ☒ Mileage 100 155 Comments
 (G) Final Shut-In 973 ☐ Sampler
 (H) Final Hydrostatic 1,846 ☒ Straddle 600 ☐ Ruined Shale Packer
☒ Shale Packer Straddlebacker ☐ Ruined Packer

Initial Open 45 ☐ Extra Packer ☐ Extra Copies
 Initial Shut-In 45 ☐ Extra Recorder Sub Total 0
 Final Flow 45 ☐ Day Standby Total 2055
 Final Shut-In 45 ☒ Accessibility 150 MP/DST Disc't ☒
 Sub Total 2055

Approved By Our Representative
 TriLOBITE TESTING Inc. shall not be liable for damaged or 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. 54582

Well Name & No. Seymour 25-1 Test No. 5 Date 12/1/13
 Company H+C Oil Operating Inc Elevation 2474 KB 2463 GL
 Address PO Box 86, Plainville KS, 67663
 Co. Rep / Geo. Marc Downing Rig H2 Drilling Rig 4
 Location: Sec. 25 Twp. 18S Rge. 28W Co. Leone Co State KS

Interval Tested 4133-4185 Zone Tested Myric Station
 Anchor Length 52 Drill Pipe Run 3844.58 Mud Wt. 9.1
 Top Packer Depth 4129 Drill Collars Run 276.89 Vis 52
 Bottom Packer Depth 4133 Wt. Pipe Run WL 8.8
 Total Depth 4185 Chlorides 2,500 ppm System LCM 1.5 #
 Blow Description Built to 1 1/2", died to 3/4" below.
No return below
No below
No return below

Rec	Feet of	%gas	%oil	%water	%mud
30	Mud ran spot of oil in tool			100	
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 30 BHT 117 Gravity API RW @ °F Chlorides ppm
 (A) Initial Hydrostatic 2,124 ☒ Test 1250 T-On Location 00:45
 (B) First Initial Flow 18 ☐ Jars T-Started 04:15
 (C) First Final Flow 21 ☐ Safety Joint T-Open 06:15
 (D) Initial Shut-In 31 ☒ Circ Sub N/C T-Pulled 09:15
 (E) Second Initial Flow 20 ☒ Hourly Standby 3 hours .5h 50 T-Out 11:10
 (F) Second Final Flow 21 ☒ Mileage 100 X 2 310 Comments Had to short trip
 (G) Final Shut-In 27 ☐ Sampler when I got here. That
 (H) Final Hydrostatic 2,057 ☐ ~~Shuttle~~ wait on order to load or shuttle they has the shuttle
☐ Ruined Shale Packer

Initial Open 45 ☐ Ruined Packer
 Initial Shut-In 45 ☐ Extra Copies
 Final Flow 45 Sub Total 0
 Final Shut-In 45 Total 1760
☒ Day Standby loaded tools 12/2/13
☒ Accessibility 150 @ 11:30 MP/DST Disc't
 Sub Total 1760

Approved By Our Representative
 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.

ALLIED OIL & GAS SERVICES, LLC 061065

Federal Tax ID. # 20-8651475

 REMIT TO P.O. BOX 95999
 SOUTHLAKE, TEXAS 76092

SERVICE POINT:

61000 Bzndy ket

DATE <u>1-24-17</u>	SEC. <u>25</u>	TWP. <u>15S</u>	RANGE <u>28W</u>	CALLED OUT	ON LOCATION	JOB START <u>6:00 PM</u>	JOB FINISH <u>5:00 PM</u>
LEASE <u>Seymour</u> WELL # <u>25-1</u>				LOCATION <u>11W 46N 12E</u>		COUNTY <u>Greene</u>	STATE <u>KY</u>
OLD OR NEW (Circle one)				OWNER <u>101</u>			

 CONTRACTOR H2 Drilling & Co OWNER 101

 TYPE OF JOB Surface T.D. 1605KS
 CEMENT AMOUNT ORDERED 1605KS C-655A
 CASING SIZE 4 5/8" DEPTH 265'
 TUBING SIZE 4 1/2" DEPTH 265'
 DRILL PIPE 4 1/2" DEPTH 265'

 TOOL DEPTH 265'
 PRES. MAX DEPTH 265'
 MEAS. LINE SHOE JOINT 265'
 CEMENT LEFT IN CSG. 15 FT
 PERFS. 15 FT
 DISPLACEMENT 15,926 bbls Greene

EQUIPMENT

 PUMP TRUCK CEMENTER Superior Chamberlain
 # (366) HELPER Mike Seethorn
 BULK TRUCK Big
 # 609-112 DRIVER Demetrius T. Jurnia
 BULK TRUCK Big
 # 609-112 DRIVER Demetrius T. Jurnia

REMARKS:

Break contract on 1/24/17. Pump truck and helper are being used for 15,926 bbls of cement. Shovel and shovel are being used for 15,926 bbls of cement. Shovel and shovel are being used for 15,926 bbls of cement. Shovel and shovel are being used for 15,926 bbls of cement.

 CHARGE TO: H & C Oil Co.
 STREET _____
 CITY _____ STATE _____ ZIP _____

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

PRINTED NAME Jose C. FabeloSIGNATURE Jose C. Fabelo
 SIGNATURE Jose C. Fabelo
Jose C. Fabelo

for 785-688-4200

 COMMON 160 @ 17.90 2.864.00
 POZMIX 3 @ 23.40 70.20
 GEL 0.45 @ 0.80 360.00
 CHLORIDE 0.45 @ 0.80 360.00
 ASC 0.45 @ 0.80 360.00
 HANDLING 172.99 @ 2.48 429.98
 MILEAGE 7.89 @ 260 2053.60
 TOTAL 4.544.88

SERVICE

 DEPTH OF JOB 1512.35
 PUMP TRUCK CHARGE 1512.35
 EXTRA FOOTAGE 0
 MILEAGE 40 @ 7.70 308.00
 MANIFOLD 40 @ 4.50 180.00
 TOTAL 1.996.35

PLUG & FLOAT EQUIPMENT

 Wood plug 107.00
 TOTAL 107.00

 SALES TAX (If Any) 268.75
 TOTAL CHARGES 6.647.83
 DISCOUNT 1.861.00 IF PAID IN 30 DAYS
4.786.83

 800.00 Bndy
 3.986.83

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

7572

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

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

No.

Date	12-2-13	Sec.	25	Twp.	15	Range	28	County	Grove	State	Ks	On Location	6.43 PM
Lease	Seymour												
Contractor	H2 Drilling												
Type Job	Plug												
Hole Size	7 7/8"												
Csg.	T.D. 4372'												
Tbg. Size	4 1/2" D.P.												
Tool	Depth 1930'												
Cement Left in Csg.	Shoe Joint												
Meas Line	Displace H2O 1 mud												
EQUIPMENT													
Pumptrk	16	No.	Cement	Helper	B. H. H.								
Bulktrk	13	No.	Driver	Driver	DAVID								
Bulktrk	P.W.	No.	Driver	Driver	RICK								
JOB SERVICES & REMARKS													
Remarks:	1930' - 25 SX												
Rat Hole	940' - 100 SX												
Mouse Hole	315' - 40 SX												
Centralizers	45' - 10 SX w/ plug												
Baskets	Rathole 30 SX												
DV or Port Collar	Mousseche 15 SX												
Cement did Circulate.													
FLOAT EQUIPMENT													
Guide Shoe													
Centralizer													
Baskets													
AFU Inserts													
Float Shoe													
Latch Down													
1 - Dry hole plug													
Pumptrk Charge													
Mileage 47													
Tax													
Discount													
Total Charge													

X Signature 