



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1207402
OIL & GAS CONSERVATION DIVISION

Form ACO-1
August 2013

Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD SIOW
- Gas D&A ENHR SIGW
- OG GSW Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

- Deepening Re-perf. Conv. to ENHR Conv. to SWD
- Plug Back Conv. to GSW Conv. to Producer
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
-----------------------------------	-----------------	---

API No. 15 - _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite: _____

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

- Confidentiality Requested
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____

1207402

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
----------------	-------	---------	------------	---

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: _____ _____
--	--	---



DRILL STEM TEST REPORT

Prepared For: **Hamby Oil LLC**

PO Box 205
Ellinwood KS 67528

ATTN: Chuck Hamby/Kurt Tal

Miller #2

16-20s-11w Barton,KS

Start Date: 2013.11.11 @ 17:37:06

End Date: 2013.11.11 @ 23:29:21

Job Ticket #: 52449 DST #: 1

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

Printed: 2013.11.15 @ 16:40:08



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Hamby Oil LLC

16-20s-11w Barton,KS

PO Box 205
Ellinwood KS 67528

Miller #2

Job Ticket: 52449

DST#: 1

ATTN: Chuck Hamby/Kurt Tal

Test Start: 2013.11.11 @ 17:37:06

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:02:51

Time Test Ended: 23:29:21

Test Type: Conventional Bottom Hole (Initial)

Tester: Chris Staats

Unit No: #47

Interval: 3252.00 ft (KB) To 3292.00 ft (KB) (TVD)

Reference Elevations: 1773.00 ft (KB)

Total Depth: 3292.00 ft (KB) (TVD)

1765.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8676 Outside

Press@RunDepth: 18.91 psig @ 3253.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.11.11 End Date: 2013.11.11

Last Calib.: 2013.11.11

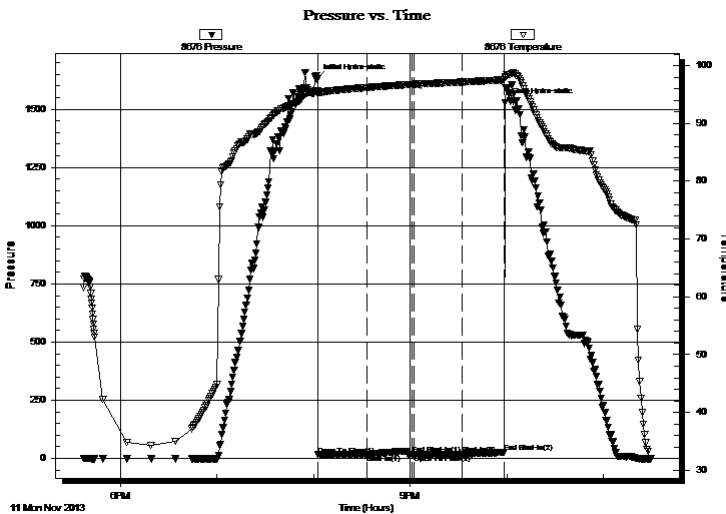
Start Time: 17:37:11 End Time: 23:29:20

Time On Btm: 2013.11.11 @ 20:01:51

Time Off Btm: 2013.11.11 @ 21:59:06

TEST COMMENT: IF: Weak blow 1"
IS: No blow back
FF: No blow back Flushed tool
FS: No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1630.06	95.60	Initial Hydro-static
1	15.92	95.22	Open To Flow (1)
31	17.85	96.20	Shut-In(1)
59	17.05	96.75	End Shut-In(1)
61	17.11	96.77	Open To Flow (2)
91	18.91	97.16	Shut-In(2)
117	26.82	97.55	End Shut-In(2)
118	1530.08	97.90	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud	0.07

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Hamby Oil LLC

16-20s-11w Barton,KS

PO Box 205
Ellinwood KS 67528

Miller #2

Job Ticket: 52449

DST#: 1

ATTN: Chuck Hamby/Kurt Tal

Test Start: 2013.11.11 @ 17:37:06

Tool Information

Drill Pipe:	Length: 3234.00 ft	Diameter: 3.80 inches	Volume: 45.36 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 45.36 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	3.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3252.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	40.00 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			3232.00	
Shut In Tool	5.00			3237.00	
Hydraulic tool	5.00			3242.00	
Packer	5.00			3247.00	21.00 Bottom Of Top Packer
Packer	5.00			3252.00	
Stubb	1.00			3253.00	
Recorder	0.00	8676	Outside	3253.00	
Recorder	0.00	6773	Outside	3253.00	
Perforations	3.00			3256.00	
Change Over Sub	1.00			3257.00	
Drill Pipe	31.00			3288.00	
Change Over Sub	1.00			3289.00	
Bullnose	3.00			3292.00	40.00 Bottom Packers & Anchor

Total Tool Length: 61.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Hamby Oil LLC

16-20s-11w Barton,KS

PO Box 205
Ellinwood KS 67528

Miller #2

Job Ticket: 52449

DST#: 1

ATTN: Chuck Hamby/Kurt Tal

Test Start: 2013.11.11 @ 17:37:06

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.78 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Mud	0.070

Total Length: 5.00 ft Total Volume: 0.070 bbl

Num Fluid Samples: 0

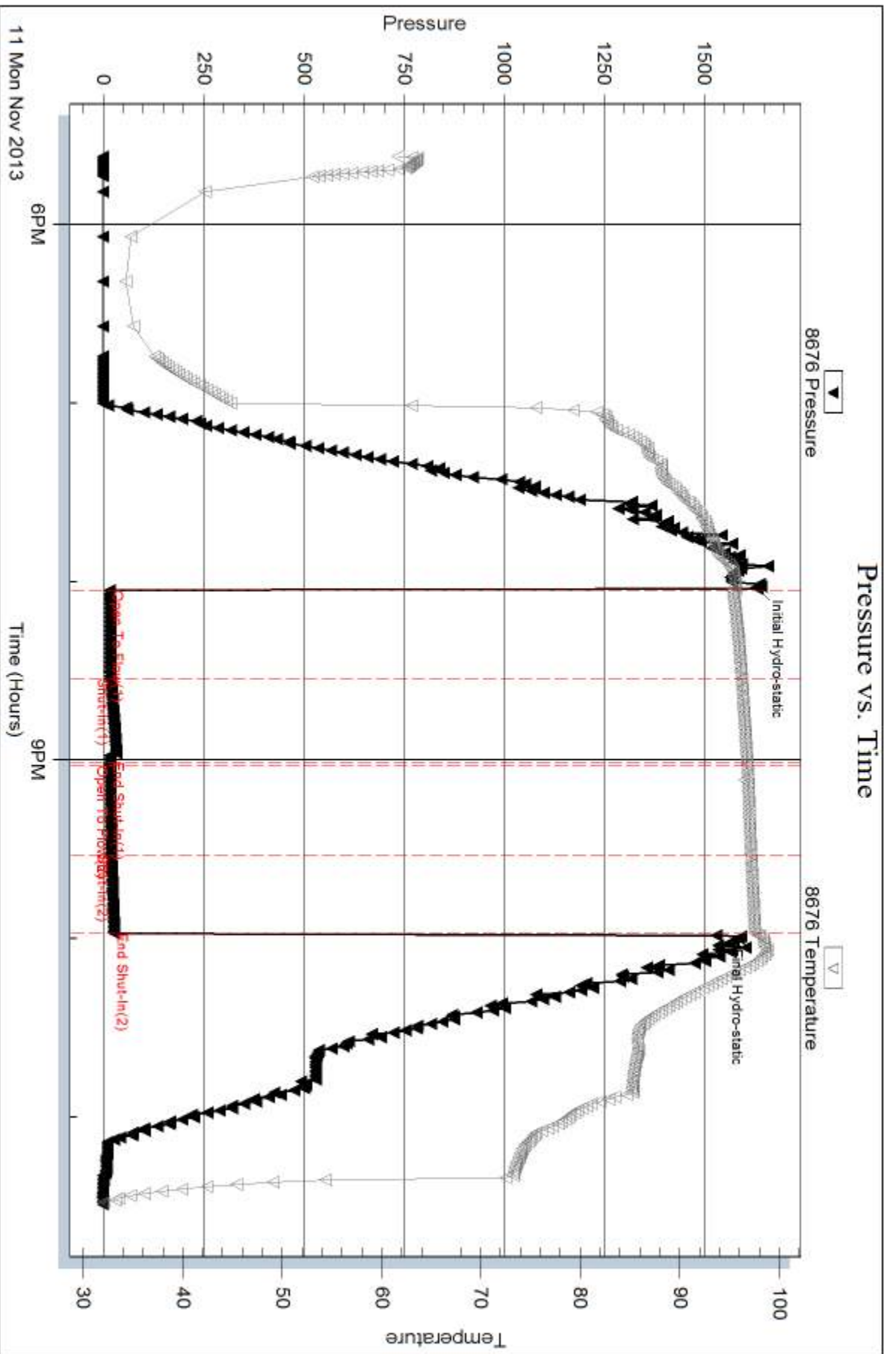
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

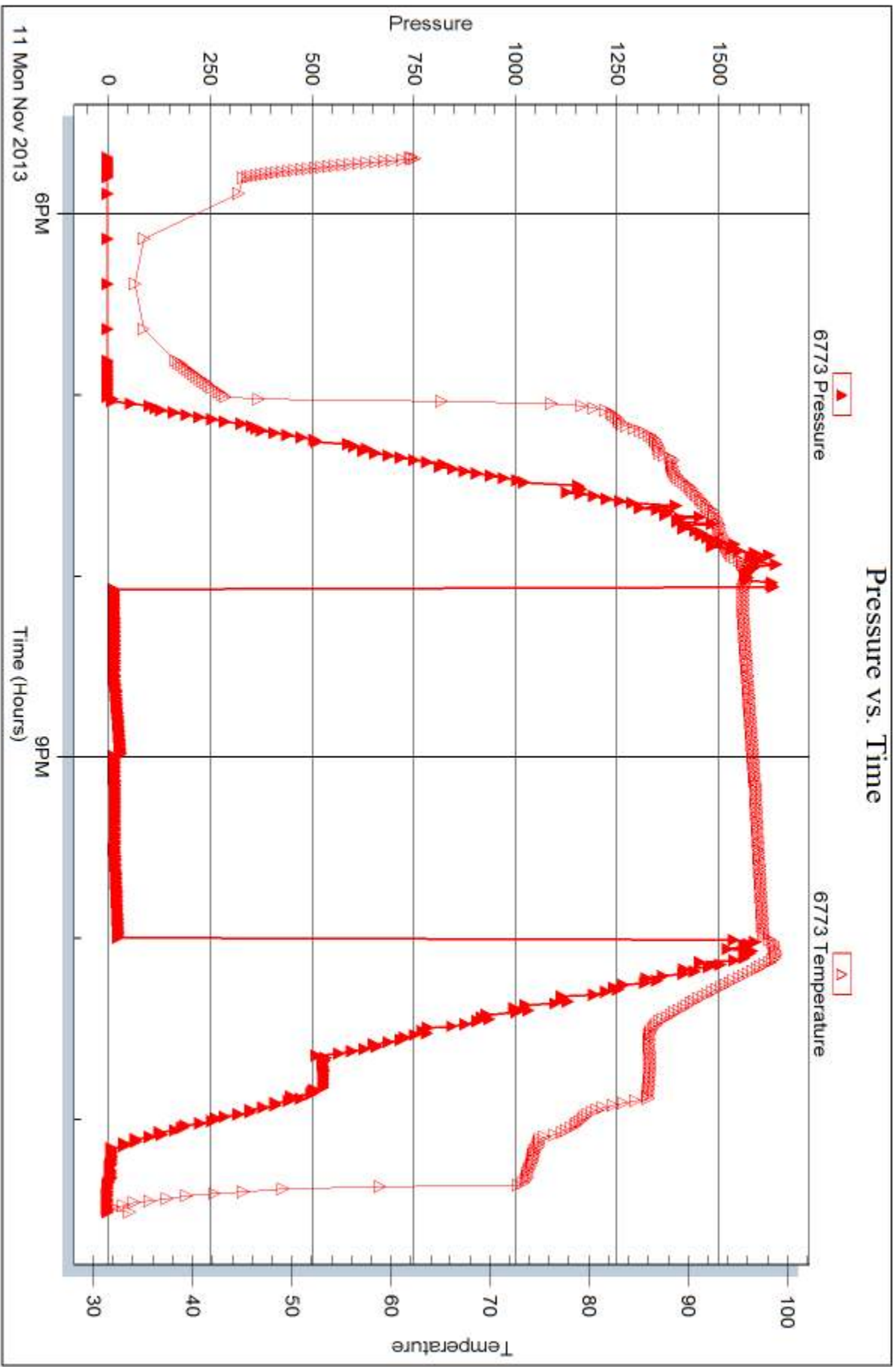


Serial #: 6773

Outside Handy Oil LLC

Miller #2

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 52449

Printed: 2013.11.15 @ 16:40:11



DRILL STEM TEST REPORT

Prepared For: **Hamby Oil LLC**

PO Box 205
Ellinwood KS 67528

ATTN: Chuck Hamby/Kurt Tal

Miller #2

16-20s-11w Barton,KS

Start Date: 2013.11.12 @ 06:20:52

End Date: 2013.11.12 @ 11:35:37

Job Ticket #: 52450 DST #: 2

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

Printed: 2013.11.15 @ 16:39:26



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Hamby Oil LLC

16-20s-11w Barton,KS

PO Box 205
Ellinwood KS 67528

Miller #2

Job Ticket: 52450

DST#: 2

ATTN: Chuck Hamby/Kurt Tal

Test Start: 2013.11.12 @ 06:20:52

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:13:37

Time Test Ended: 11:35:37

Test Type: Conventional Bottom Hole (Reset)

Tester: Chris Staats

Unit No: #47

Interval: 3252.00 ft (KB) To 3300.00 ft (KB) (TVD)

Reference Elevations: 1773.00 ft (KB)

Total Depth: 3300.00 ft (KB) (TVD)

1765.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8676 Outside

Press@RunDepth: 18.90 psig @ 3253.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.11.12 End Date: 2013.11.12

Last Calib.: 2013.11.12

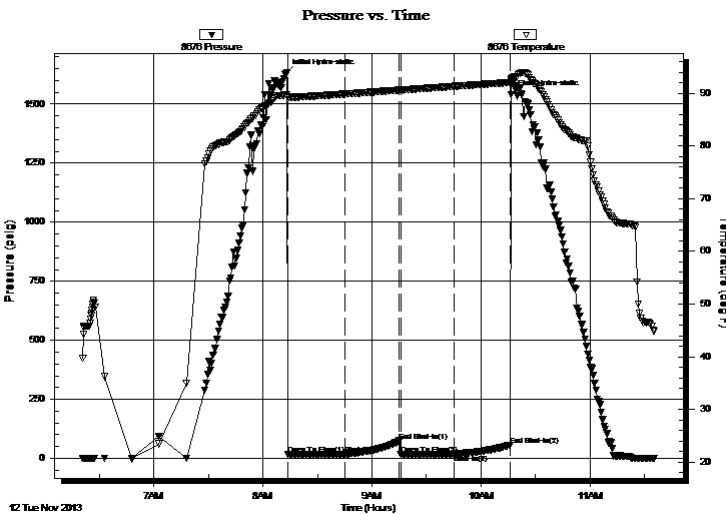
Start Time: 06:20:57 End Time: 11:35:36

Time On Btm: 2013.11.12 @ 08:12:52

Time Off Btm: 2013.11.12 @ 10:16:37

TEST COMMENT: IF: Weak blow 1 1/2"
IS: No blow back
FF: Weak surface blow
FS: No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1629.95	89.72	Initial Hydro-static
1	16.49	89.35	Open To Flow (1)
33	18.12	89.86	Shut-In(1)
63	74.34	90.61	End Shut-In(1)
63	18.27	90.62	Open To Flow (2)
93	18.90	91.32	Shut-In(2)
123	55.82	92.07	End Shut-In(2)
124	1540.35	92.52	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	MUD	0.07

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Hamby Oil LLC

16-20s-11w Barton,KS

PO Box 205
Ellinwood KS 67528

Miller #2

Job Ticket: 52450

DST#: 2

ATTN: Chuck Hamby/Kurt Tal

Test Start: 2013.11.12 @ 06:20:52

Tool Information

Drill Pipe:	Length: 3234.00 ft	Diameter: 3.80 inches	Volume: 45.36 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 48000.00 lb
			<u>Total Volume: 45.36 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	3.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3252.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	48.00 ft			
Tool Length:	69.00 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			3232.00	
Shut In Tool	5.00			3237.00	
Hydraulic tool	5.00			3242.00	
Packer	5.00			3247.00	21.00 Bottom Of Top Packer
Packer	5.00			3252.00	
Stubb	1.00			3253.00	
Recorder	0.00	8676	Outside	3253.00	
Recorder	0.00	6773	Outside	3253.00	
Perforations	4.00			3257.00	
Change Over Sub	1.00			3258.00	
Drill Pipe	31.00			3289.00	
Change Over Sub	1.00			3290.00	
Perforations	7.00			3297.00	
Bullnose	3.00			3300.00	48.00 Bottom Packers & Anchor

Total Tool Length: 69.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Hamby Oil LLC

16-20s-11w Barton,KS

PO Box 205
Ellinwood KS 67528

Miller #2

Job Ticket: 52450

DST#: 2

ATTN: Chuck Hamby/Kurt Tal

Test Start: 2013.11.12 @ 06:20:52

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: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.77 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	MUD	0.070

Total Length: 5.00 ft Total Volume: 0.070 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

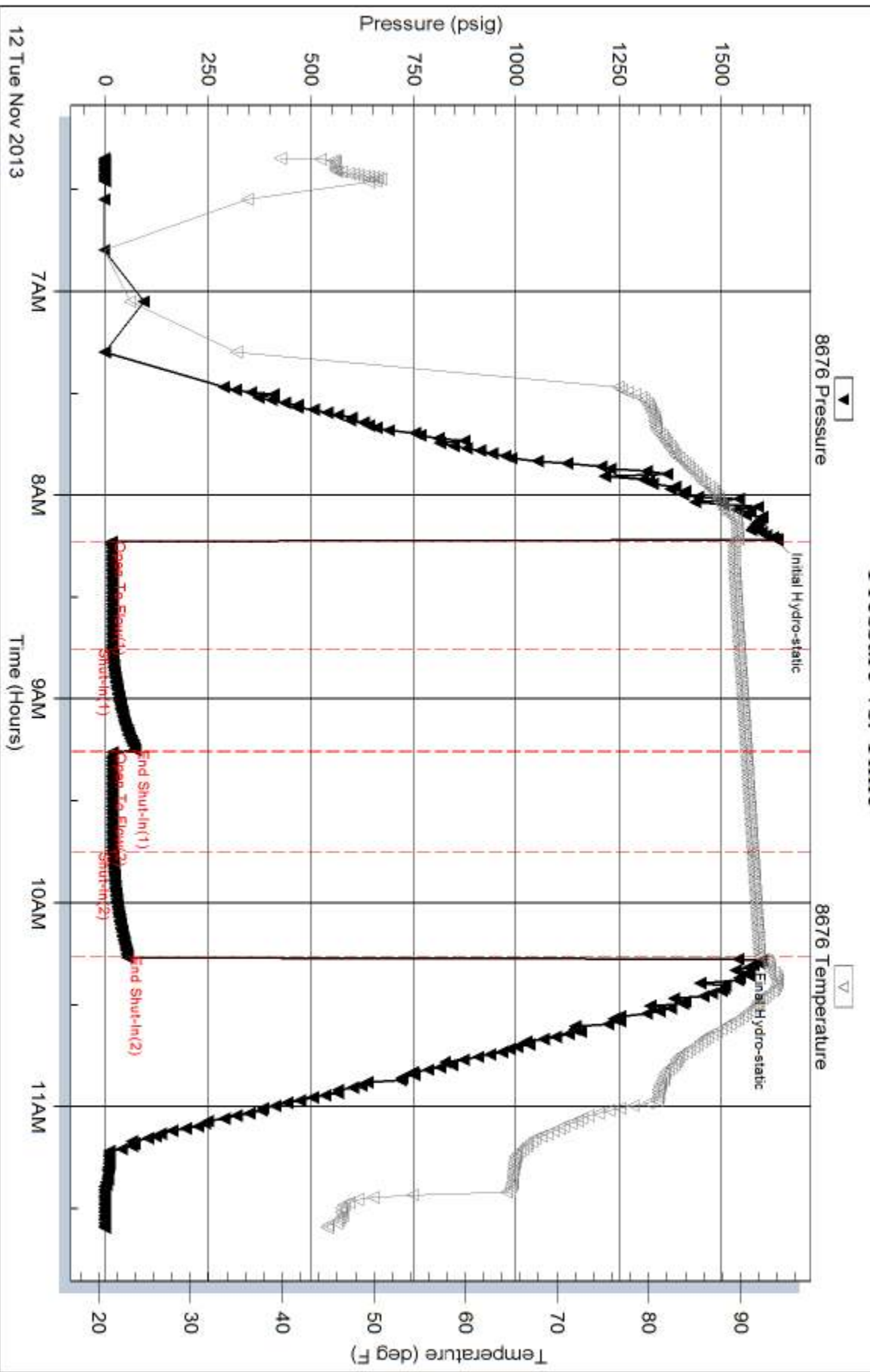
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

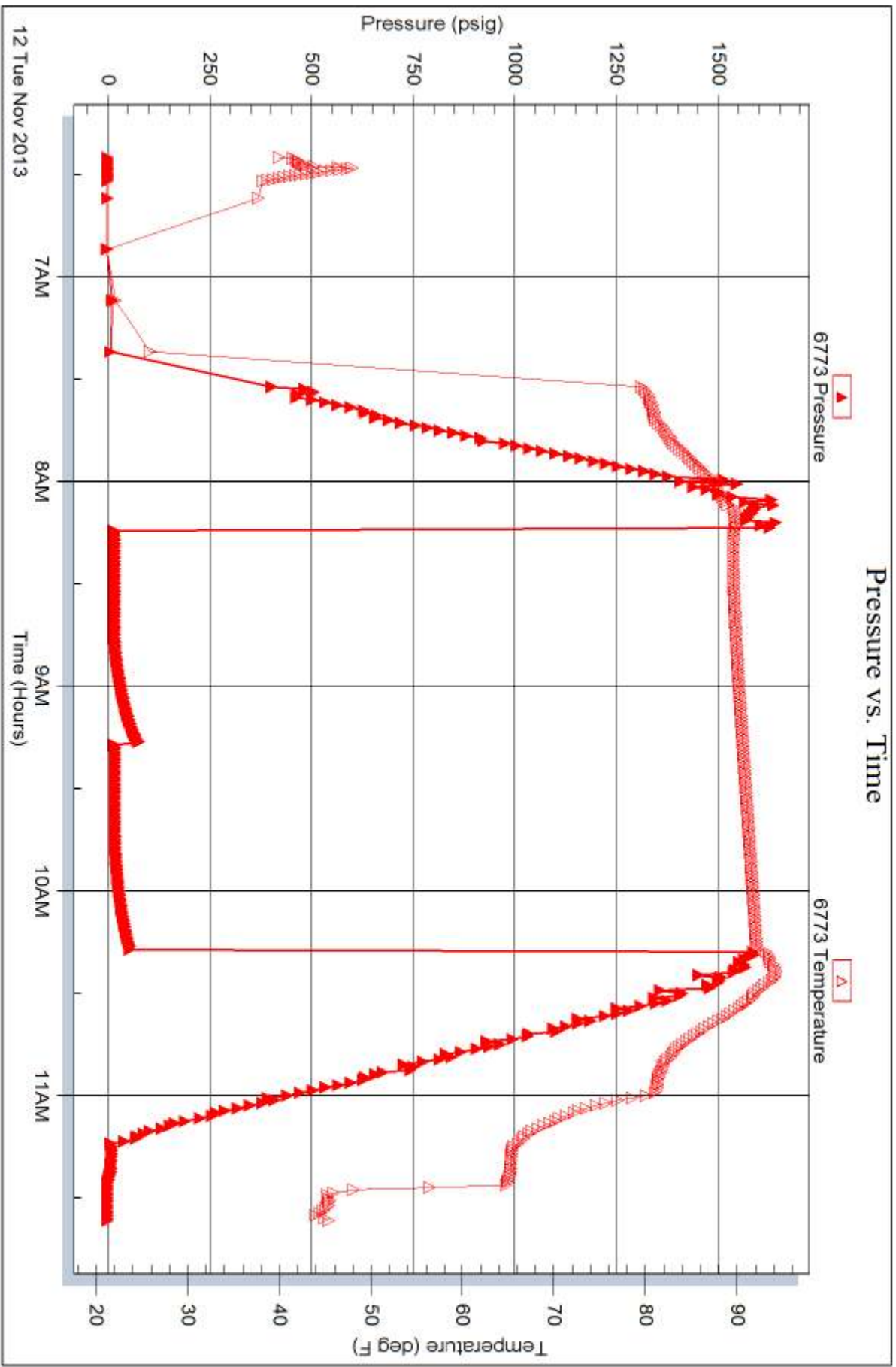


Serial #: 6773

Outside Handy Oil LLC

Miller #2

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 52450

Printed: 2013.11.15 @ 16:39:29



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 52449

Well Name & No. Miller #2 Test No. 1 Date 11-11-13
 Company Hamby Oil LLC Elevation 1773 KB 1765 GL
 Address PO box 205 Ellinwood KS 67528
 Co. Rep / Geo. Chuck Hamby / Kurt Talbot Rig SOUTHWIND #6
 Location: Sec. 16 Twp. 20 Rge. 11 Co. Barton State KS

Interval Tested 3252-3292 Zone Tested Arbuckle
 Anchor Length 40 Drill Pipe Run 3234 Mud Wt. 9.3
 Top Packer Depth 3280 47 Drill Collars Run 0 Vis 54
 Bottom Packer Depth 3280 3252 Wt. Pipe Run 0 WL 8.8
 Total Depth 3292 Chlorides 4000 ppm System LCM 1#

Blow Description IF: weak blow 1"
ISF: NO blow back
FF: NO blow flushed too 1
FST: NO blow back

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

Rec Total 5' BHT 95° Gravity — API RW @ ° F Chlorides — ppm

(A) Initial Hydrostatic 1630 Test 1150 T-On Location 17:20
 (B) First Initial Flow 15 Jars — T-Started 20:02
 (C) First Final Flow 17 Safety Joint — T-Open 23:29
 (D) Initial Shut-In 17 Circ Sub — T-Pulled 22:00
 (E) Second Initial Flow 17 Hourly Standby — T-Out 23:28
 (F) Second Final Flow 18 Mileage 110 miles 170.50 Comments —
 (G) Final Shut-In 26 Sampler —
 (H) Final Hydrostatic 1530 Straddle — Ruined Shale Packer —
 Shale Packer — Ruined Packer —
 Extra Packer — Extra Copies —
 Extra Recorder — Sub Total 0
 Day Standby — Total 1320.50
 Accessibility — MP/DST Disc't —

Initial Open 30
 Initial Shut-In 30
 Final Flow 30
 Final Shut-In 30
 Approved By Kurt Talbot Our Representative Chi-Ste

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. 52450

Well Name & No. Miller #2 Test No. 2 Date 11-12-13
 Company Hamby oil LLC Elevation 1773 KB 1765 GL
 Address PO box 205 Ellinwood KS 67528
 Co. Rep / Geo. Chuck Hamby / Kurt talbot Rig South wind #6
 Location: Sec. 16 Twp. 20 Rge. 11 Co. Barton State KS

Interval Tested 3252 - 3300 Zone Tested AR buckle
 Anchor Length 48' Drill Pipe Run _____ Mud Wt. 9.3
 Top Packer Depth 3247 Drill Collars Run 0 Vis 54
 Bottom Packer Depth 3252 Wt. Pipe Run 0 WL 88
 Total Depth 3300 Chlorides 4000 ppm System LCM 1#

Blow Description IF: Weak blow 1 1/2"
ISI: NO blow back
FF: Weak surface blow
FSI: NO blow back

Rec	Feet of	%gas	%oil	%water	%mud
Rec <u>5'</u>	Feet of <u>MUD with oil spots in tool</u>	%gas	%oil	%water	%mud
Rec _____	Feet of _____	%gas	%oil	%water	%mud
Rec _____	Feet of _____	%gas	%oil	%water	%mud
Rec _____	Feet of _____	%gas	%oil	%water	%mud

Rec Total 5 BHT 90° Gravity _____ API RW _____ @ _____ ° F Chlorides _____ ppm

(A) Initial Hydrostatic <u>1629</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>6:10</u>
(B) First Initial Flow <u>16</u>	<input type="checkbox"/> Jars _____	T-Started <u>6:20</u>
(C) First Final Flow <u>18</u>	<input type="checkbox"/> Safety Joint _____	T-Open <u>8:13</u>
(D) Initial Shut-In <u>74</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>10:15</u>
(E) Second Initial Flow <u>18</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>11:30</u>
(F) Second Final Flow <u>18</u>	<input checked="" type="checkbox"/> Mileage <u>341</u>	Comments <u>loaded tools</u>
(G) Final Shut-In <u>55</u>	<input type="checkbox"/> Sampler _____	<u>11-13 15:00 hrs</u>
(H) Final Hydrostatic <u>1540</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Shale Packer _____

Initial Open 30 Shale Packer _____
 Initial Shut-In 30 Ruined Packer _____
 Final Flow 30 Extra Packer _____
 Final Shut-In 30 Extra Recorder _____
 Sub Total 1491 Day Standby 1d 3.5h Sub Total 800
 Total 2291 Accessibility _____ MP/DST Disc't _____

Approved By Kurt talbot Our Representative Chris

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.



Geologist's Report

Company: **Hambly Oil, LLC**
 Lease: **Miller #2**
 Field: **Chase-Silica**
 Location: **W2-NW-NW-NE**
 Sec: **16** Twsp: **20S** Rge: **11W**
 County: **Barton** State: **Kansas**
 GL: ~~1765~~ KB: ~~1775~~
 1765 1775

Contractor: **Southwind Drilling Co., Rig #6**
 Spud: **11/7/13** Comp: **11/13/13**
 RTD: **3650'** LTD: **3647'**
 Mud Up: **3000'** Type Mud: **Chemical/Displaced**

Samples Saved From: **3100' to RTD**
 Drilling Time Kept From: **3000' to RTD**
 Samples Examined From: **3100' to RTD**
 Geological Supervision From: **3300' to RTD**
 Geologist on Well: **Kurt Talbott**

Surface Casing: **8 5/8" @ 310'**
 Production: **5 1/2"@**

Logs: **By Pioneer: CNL/CDL, DIL, MEL, SONIC**

ROCK TYPES

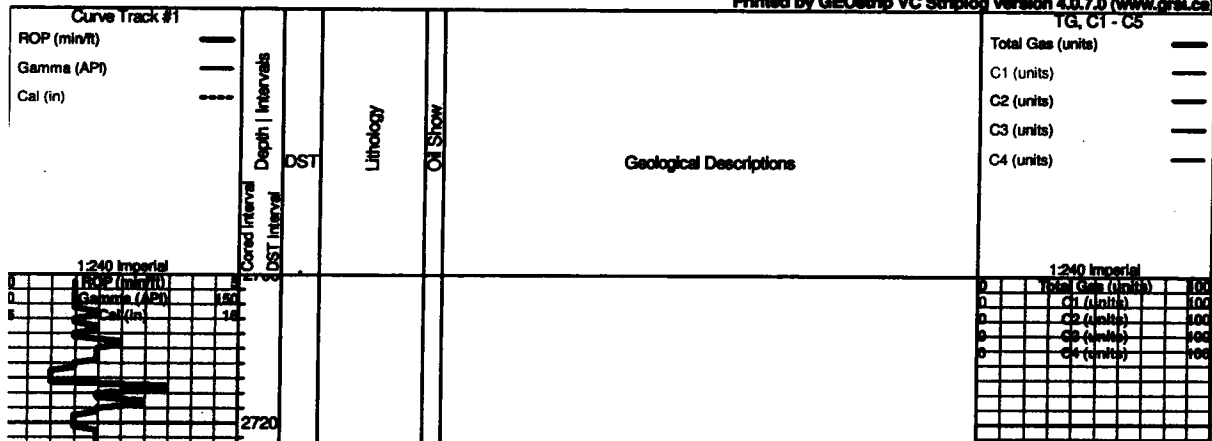
Doprism shale, gm Carbon Sh
 Lmet fw<7 shale, gry Shool

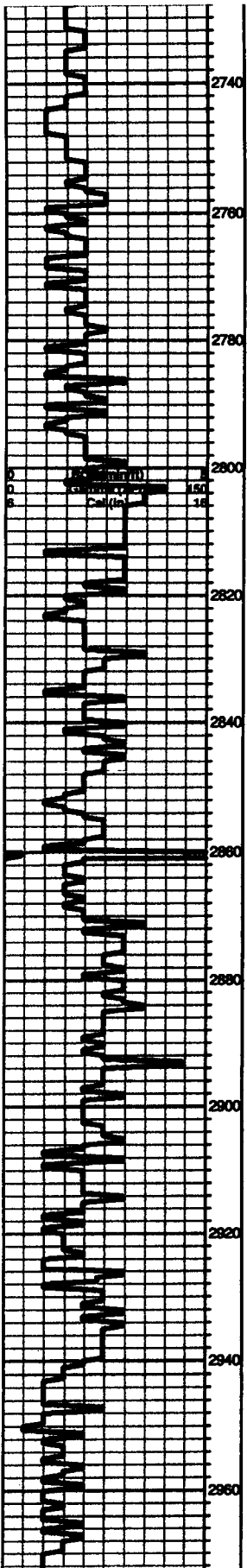
OTHER SYMBOLS

DST

 DST Int
 DST alt

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





A/A

Ls-crm/tan/gry, f-med xln, slightly dolomitic, sucrosic, few fossils, scattered ppt to iner xln por, cherty

Ls-crm/tan, fxdn, fossils, dense, poor vis por, slightly chalky

Ls-crm/tan, fxdn, slightly dolomitic, few fossils, poor vis por, slightly cherty

Heebner 2905.0 (-1132.0) -1131.0

Black carbon shale

Shale-gry/grn

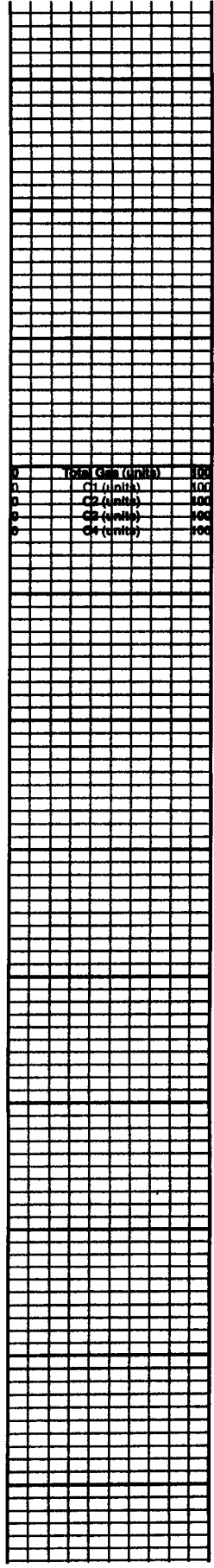
Toronto 2924.0 (-1151.0) -1147.0

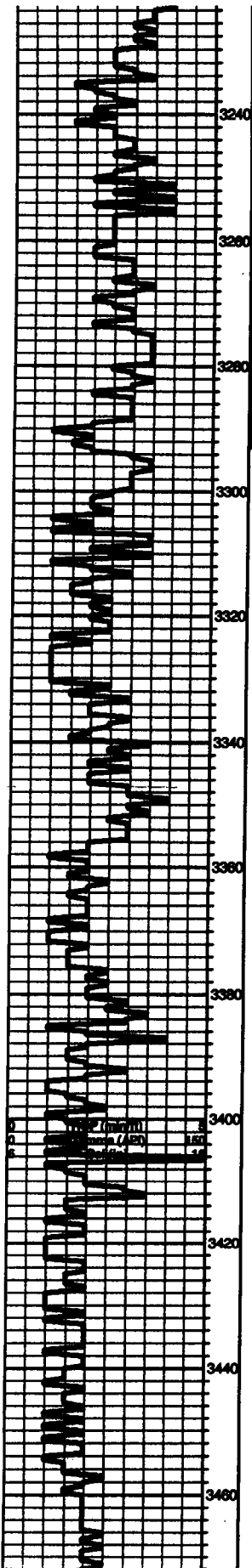
Ls-crm/tan, fxdn, few fossils, poor vis por, slightly chalky

Douglas 2940.0 (-1167.0) -1167.0

Shale-gry/grm soft

Shale-gry/grm/brown soft





ls-crm/tan, fine, fossils, poor vis por, chalky, cherty

Ls-tan/gry, fxdn, ool/fossils, poor vis por, shale-gry/grn/bik carbon chert-tan/crm

ls-crm/tan, fxdn fossils, poor vis por, chert-A/A

Ls-A/A

Ls-crm/tan, fxdn, few fossils, slightly ool, poor vis por, chalky

Arbuckle 3279.0 (-1506.0) -1510.0

Dol-wht/crm, f-med xdn, few rhomb xdn, poor iner xdn por, dark brown to black stains, odor, Trace show of oil

Dol-wht/crm/tan, f-med rhomb xdn, poor to fair iner xdn to finely vug por, black stains, TrSFO, fair odor

Dol-crm/wht, f-med rhomb xdn, poor iner xdn to finely vug por, trace black stains, NSFO, faint odor, pyritic in part, chert-boney wht/crm

A/A Chert-wht/crm

Dol-wht/crm, f-med rhmb xdn, dense, poor iner xdn por, chert- A/A pyrite

A/A

Dol-wht/tan, fine to med xdn, dense, poor to fair iner xdn por, trace black stains, NSFO, chert-boney wht/tan/gry

A/A Dense, Chert-boney wht/crm

Dol-tan/crm, f-med xdn, dense, poor iner xdn por, trace black stains, NSFO, chert- A/A

Dol- A/A

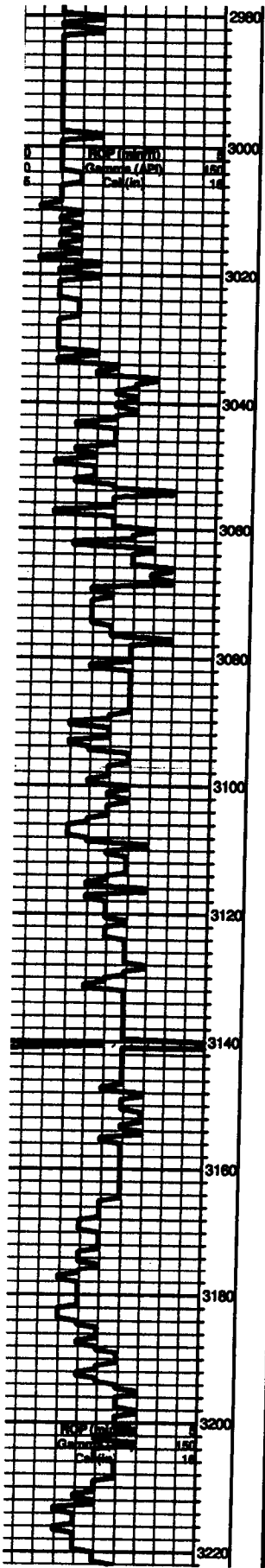
Dol-tan/crm, f-med xdn, few rhomb, poor iner xdn to finely vug por, slightly chalky, chert-boney wht/crm

A/A

DST #1 3252-3292
30-30-30-30
IF: Weak 1" blow
Recovery:
5' mud
Pressures:
ISIP 17 PSI
FSIP 26 PSI
IFP 15-17 PSI
FFP 17-18 PSI
HSH 1630-1530 PSI

DST #2 3252-3300
30-30-30-30
IF: Built to 1 1/2"
Recovery:
5' mud
Pressures:
ISIP 73 pai
FSIP 56 pai
IFP 16-18 pai
FFP 18-19 pai
HSH 1630-1540 pai

	Total Gas (units)	DB
0	0	100
0	0	100
0	0	100
0	0	100
0	0	100



A/A

Shale-gry/grn/maroon/brown

A/A

Shale- A/A

Brown Lime 3034.0 (-1261.0) -1269.0

Ls-tan/buff, fxdn, dense, fossils, poor vis por
Shale-gry/grn

Lansing 3053.0 (-1280.0) -1277.0

Ls-crm/wht/lt grym fxdn, ool/fossils, dense,
poor vis por, chalky

Ls-crm/tan/lt gry, fxdn, ool/fossils, poor
scattered iner xin por, black stains? NSFO, no
odor, slightly chalky

Ls-crm/tan, fxdn, ool, poor ppr to iner xin por,
dark brwon to black stains, NSFO, faint odor,
chalky

Ls-crm/tan, fxdn, poor vispor, slightly chalky,
questionable black stains?

Ls-crm/tan/lt gry, fossils/ool, poor scattered
sub oom por, black stains, chalky, NSFO,

Ls-crm/tan, fxdn, fossils, poor ppt to iner xin
por, chalky, scattered black stains, NSFO, no odor

Ls-crm/tan, fxdn, ool/fossils, scattered poor ppt
por, chalky

Ls-crm/tan, fxdn, ool/fossils, poor scattered por,
chalky

Ls-crm/tan, fxdn, ool, sub oom por, black stains,
chalky, NSFO Trace black carbon shale

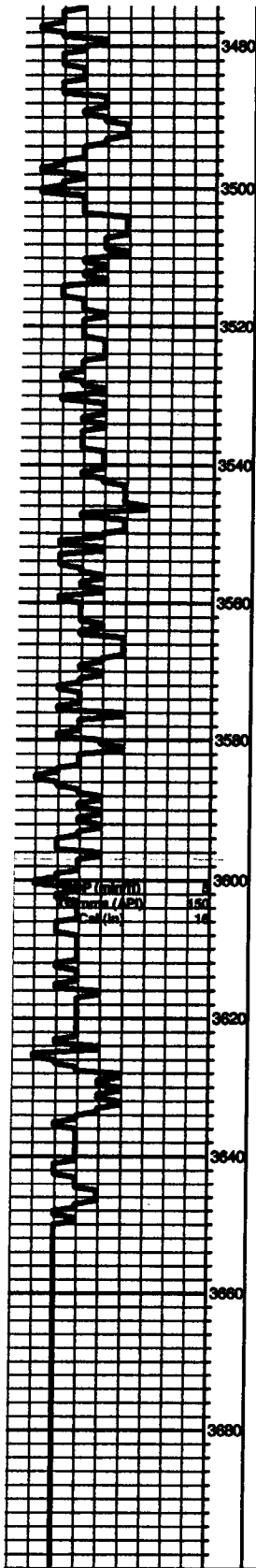
A/A Scattered sub oom por Shale-gry

Ls-crm/tan, fxdn, dense, poor vis por, few
ool/fossils,

Ls-lt gry/tan, fxdn, ool/fossils, poor scattered
iner xin por, cherty,

0	Total Gas (ml/g)	100
0	C1 (ml/g)	100
0	C2 (ml/g)	100
0	C3 (ml/g)	100
0	C4 (ml/g)	100

0	Total Gas (ml/g)	100
0	C1 (ml/g)	100
0	C2 (ml/g)	100
0	C3 (ml/g)	100
0	C4 (ml/g)	100



Dol-tan/crm/buff, f-med xln, dense, poor to fair inner xln por, chert-boney wht/crm/tan, chalky

A/A

Dol-wht/crm, f-med xln, dense, poor to fair inner xln por, chert-A/A

Dol-tan/buff, f-med xln, dense, poor vis por, chert A/A

Dol-tan/buff, f-xln, poor to fair inner xln por, chert- dense, ool? 1 piece w/golden brown stain?

Dol-wht/tan, f-med rhomb xln, poor to fair inner xln to finely vug por, dense, pyrite, chalky, chert- A/A

A/A

0	Total Gas (cm ³ /g)	100
0	C1 (cm ³ /g)	100
0	C2 (cm ³ /g)	100
0	C3 (cm ³ /g)	100
0	C4 (cm ³ /g)	100

Dol-buff/tan, f-med rhomb xln, poor vis por, dense, cherty, pyrite

A/A Few sandy

Dol-crm/tan/buff, fine xln, sandy, poor vis por, cherty, chalky pyrite

QUALITY WELL SERVICE, INC.

6040

Federal Tax I.D. # 481187368

Home Office 324 Simpson St., Pratt, KS 67124

Office 620-727-3410
Fax 620-672-3663

Rich's Cell 620-727-3409
Brady's Cell 620-727-6964

Date	11-7-13	Sec.	16	Twp.	20	Range	11	County	Barton	State	Ks	On Location	2:45 PM	Finish	5:45 PM
Lease	M. Lee	Well No.		Location Ellinwood K1 S on 100 th to 35 th Rd											
Contractor	Southwind Delg				Owner 2 1/2 E Sinto										
Type Job	85/8				To Quality Well Service, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.										
Hole Size	12 1/4				T.D.	310									
Csg.	35/8				Depth	310.93									
Tbg. Size					Depth										
Tool					Depth										
Cement Left in Csg.					Shoe Joint	75									
Meas Line					Displace	139 Bbls									
EQUIPMENT											2% GEL 3% CL 1/4" CF				
Pumptrk	No.					Common 165									
Bulktrk	No.					Poz. Mix 110									
Bulktrk	No.					Gel. 5									
Pickup	No.					Calcium 9									
JOB SERVICES & REMARKS											Hulls				
Rat Hole											Salt				
Mouse Hole											Flowseal 68.75"				
Centralizers											Kol-Seal				
Baskets											Mud CLR 48				
D/V or Port Collar											CFL-117 or CD110 CAF 38				
Run 10 #s 85/8 23" csg											Sand				
set 308'											Handling 239				
											Mileage 15				
Hook up to csg & Break circ w/ rig											85/8 FLOAT EQUIPMENT				
											Guide Shoe				
Mix & Pump 275cc 6240 Poz											Centralizer				
2% GEL 3% CL 1/4" CF @ 14.7"/gal											Baskets				
											AFU Inserts				
SHUT DOWN RELEASE WOODEN PLUG											Float Shoe				
											Laid down 1EA Wooden Plug				
D. so 139 Bbls total															
Plug down @ 5:30 PM											LMV 15				
Close Valve on csg 300'											Pumptrk Charge Surface				
Good Circ thru Job											Mileage 15				
Circ RT to RT															
Thanks Todd Mike Chad															
Signature <i>[Signature]</i>															
											Tax				
											Discount				
											Total Charge				

PLEASE
CALL
AGAIN

QUALITY WELL SERVICE, INC.

6044

Federal Tax I.D. # 481187368

Home Office 324 Simpson St., Pratt, KS 67124

Office 620-727-3410
Fax 620-672-3663

TODD'S 620-338-5422

Rich's Cell 620-727-3409
Brady's Cell 620-727-6964

Date	01-13-13	Sec.	16	Twp.	20	Range	11	County	Barton	State	Ks	On Location	8:45 P.M	Finish	2:00 AM
Lease	Miller	Well No.	Z		Location Ellinwood K1 S to 30 th Rd										
Contractor	Southwind Drlg				Owner 3 1/2 E S into										
Type Job	5 1/2 longstring				To Quality Well Service, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.										
Hole Size	7 7/8		T.D.		3650		Charge To Hamby Oil LLC								
Csg.	5 1/2 155"		Depth		3393.37		Street								
Tbg. Size			Depth		City State										
Tool			Depth		City State										
Cement Left in Csg.			Shoe Joint		14.93		The above was done to satisfaction and supervision of owner agent or contractor.								
Meas Line			Displace		30 S 531		Cement Amount Ordered 155x Pro C								
EQUIPMENT															
Pumptrk	No.	3		MIKE		12 1/2 Salt 5 1/2 x 9.5m									
Bulktrk	No.	9		CHAD		Common 155									
Bulktrk	No.					Poz. Mix									
Pickup	No.			TODD		Gel.									
JOB SERVICES & REMARKS															
Rat Hole	30 x				Hulls										
Mouse Hole					Salt 17										
Centralizers					Flowseal										
Baskets					Kol-Seal 775"										
D/V or Poit Collar					Mud CLR 48										
Run 79 J's 5 1/2 155" csg					CFL-117 or CD110 CAF 38										
SET 1st 14.93 PKR SAVE & LD					Sand										
Hook up to csg BREAK CIRC W/PIG					Handling 172										
Drop Ball SET PKR SAVE					Mileage 15										
Pump 3 Bbls H2O 12 Bbls MFLush 3 Bbls H2O					5 1/2 FLOAT EQUIPMENT										
Plug R-hole 30x					Guide Shoe										
Mix Pump 125 x Pro C 15 1/4 GAL					2 EA										
START DOWN WASH UP tek FLINES					Baskets 1 EA										
Diso 30.5 Bbls total					1 EA Threadlock Kit										
Lift PSI 750"					Float Shoe										
Plug down @ 1500" 1:30 AM					LATCH DOWN 1 EA										
RELEASE & HELD					1 EA WEATHERFOO PACKER SHOE										
Good Circ thru JOB					LMV 15										
Thanks TODD MIKE CHAD					Pumptrk Charge Longstring										
					Mileage 15										
X Signature													Tax		
													Discount		
													Total Charge		

PLEASE
CALL
AGAIN