Confidentiality Requested:
☐ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1092735

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 # 3293
Name: Russell Oil, Inc.
Address 1: PO BOX 8050
Address 2:
City: EDMOND State: OK Zip: 73083 + ____
Contact Person: LEROY HOLT
Phone: (405) 752-7600
CONTRACTOR: License # 33350
Name: Southwind Drilling, Inc.
Wellsite Geologist: KITT NOAH
Purchaser: COFFEYVILLE CRUDE

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 #:

5/22/2012	5/30/2012	6/20/2012
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-167-23806-00-00
Spot Description:
SW NE SW SW Sec. 31 Twp. 15 S. R. 14 ☐ East ☑ West
930 Feet from ☐ North / ☑ South Line of Section
800 Feet from ☐ East / ☑ West Line of Section

Footages Calculated from Nearest Outside Section Corner:
☐ NE ☐ NW ☐ SE ☑ SW

GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Russell
Lease Name: Betty Radke A Well #: 1R
Field Name: BOXERGER NORTHEAST
Producing Formation: ARBUCKLE
Elevation: Ground: 1907 Kelly Bushing: 1916
Total Vertical Depth: 3430 Plug Back Total Depth: 3404
Amount of Surface Pipe Set and Cemented at: 918 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: 98000 ppm Fluid volume: 1000 bbls
Dewatering method used: Hauled to Disposal

Location of fluid disposal if hauled offsite:

Operator Name: RUSSELL OIL INC
Lease Name: STEINERT B #1 License #: 3293
Quarter NW Sec. 36 Twp. 17 S. R. 14 ☐ East ☑ West
County: BARTON Permit #: 26052

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: 09/06/2012
☑ **Confidential Release Date:** 09/06/2014
☑ **Wireline Log Received**
☑ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** NAOMI JAMES **Date:** 09/07/2012

[redacted] 1092735

Operator Name: Russell Oil, Inc. Lease Name: Betty Radke A Well #: 1R

Sec. 31 Twp. 15 S. R. 14 ☐ East ☑ West County: Russell

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 ☑ Yes ☐ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☑ Yes ☐ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ Yes ☐ No

List All E. Logs Run:
Attached

☑ Log Formation (Top), Depth and Datum ☐ Sample

Name: Attached Top: Attached Datum: Attached

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
SURFACE	12.25	8.625	23	918	COMMON	370	3%CC;2%GEL
PRODUCTION	7.625	5.5	15.5	3428	60/40 POZ	20	
PRODUCTION	7.625	5.5	15.5	3428	AA-2	125	

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
2	ARBUCKLE(3370-3373)	150 GAL 10% MCA/DMO	
4	ARBUCKLE(3376-3377)	150 GAL 10% MCA/DMO	
4	ARBUCKLE(3377-3381)	250 GAL 15% NE/FE	

TUBING RECORD: Size: 2.875 EUE 8 RD Set At: 3333' Packer At: Liner Run: ☐ Yes ☑ No

Date of First, Resumed Production, SWD or ENHR.: 6/27/2012

Producing Method: ☐ Flowing ☑ Pumping ☐ Gas Lift ☐ Other *(Explain)*

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	60	0	0		

DISPOSITION OF GAS:
☐ Vented ☐ Sold ☐ Used on Lease
(If vented, Submit ACO-18.)

METHOD OF COMPLETION:
☐ Open Hole ☑ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*
☐ Other *(Specify)*

PRODUCTION INTERVAL:

Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Russell Oil, Inc.
Well Name	Betty Radke A 1R
Doc ID	1092735

All Electric Logs Run

COMPUTER PROCESSED INTERP
DUAL INDUCTION
DUAL COMPENSATED POROSITY
MICRORESISTIVITY
BOREHOLE COMPENSATED SONIC
SECTOR BOND

Form	ACO1 - Well Completion
Operator	Russell Oil, Inc.
Well Name	Betty Radke A 1R
Doc ID	1092735

Tops

Name	Top	Datum
ANHYDRITE	924	+991
BASE ANHYDRITE	954	+962
TOPEKA	2840	-924
HEEBNER	3070	-1154
TORONTO	3086	-1170
LANSING	3132	-1216
BASE KC	3365	-1449
ARBUCKLE	3369	-1453

DRILL STEM TEST REPORT

Russell Oil

PO Box 8050
Edmond, Ok 73083

ATTN: Kitt Noah

31-15-14 Russell, Ks

Betty Radke "A" 1R

Job Ticket: 47130 **DST#: 1**

Test Start: 2012.05.26 @ 17:20:50

GENERAL INFORMATION:

Formation: **Toronto**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 19:34:20
Time Test Ended: 23:07:20

Test Type: Conventional Bottom Hole (Initial)
Tester: Brian Fairbank
Unit No: 41

Interval: 3062.00 ft (KB) To 3096.00 ft (KB) (TVD)
Total Depth: 3096.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

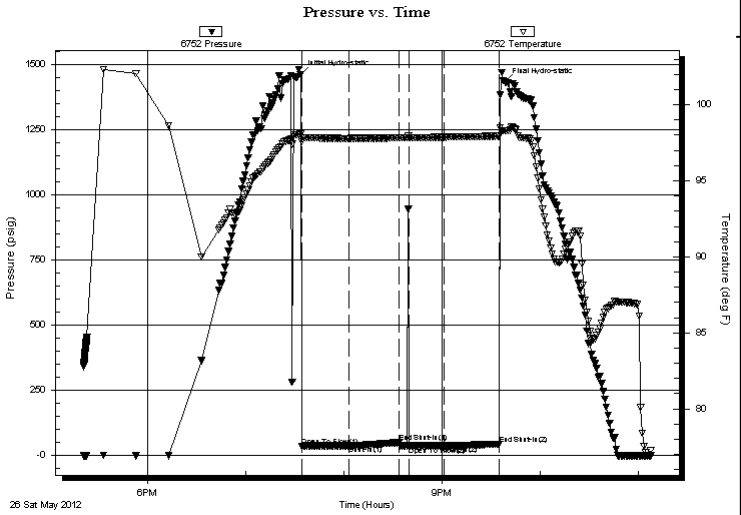
Reference Elevations: 1916.00 ft (KB)
1907.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 6752 **Inside**

Press@RunDepth: 36.85 psig @ 3066.00 ft (KB)
Start Date: 2012.05.26 End Date: 2012.05.26
Start Time: 17:20:51 End Time: 23:07:20

Capacity: 8000.00 psig
Last Calib.: 2012.05.26
Time On Btm: 2012.05.26 @ 19:33:20
Time Off Btm: 2012.05.26 @ 21:38:20

TEST COMMENT: IFP - no blow
ISI - no blow back
FFP - no blow - flush - no blow
FSI - no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1460.55	98.05	Initial Hydro-static
1	35.69	97.59	Open To Flow (1)
30	36.80	97.79	Shut-In(1)
60	48.59	97.82	End Shut-In(1)
67	36.05	97.85	Open To Flow (2)
88	36.85	97.87	Shut-In(2)
122	43.03	97.94	End Shut-In(2)
125	1432.30	98.32	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
50.00	drl mud 100%	0.70

Gas Rates

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

DRILL STEM TEST REPORT

Russell Oil

PO Box 8050
Edmond, Ok 73083

ATTN: Kitt Noah

31-15-14 Russell, Ks

Betty Radke "A" 1R

Job Ticket: 47130 **DST#: 1**

Test Start: 2012.05.26 @ 17:20:50

GENERAL INFORMATION:

Formation: **Toronto**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 19:34:20
Time Test Ended: 23:07:20

Test Type: Conventional Bottom Hole (Initial)
Tester: Brian Fairbank
Unit No: 41

Interval: 3062.00 ft (KB) To 3096.00 ft (KB) (TVD)
Total Depth: 3096.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

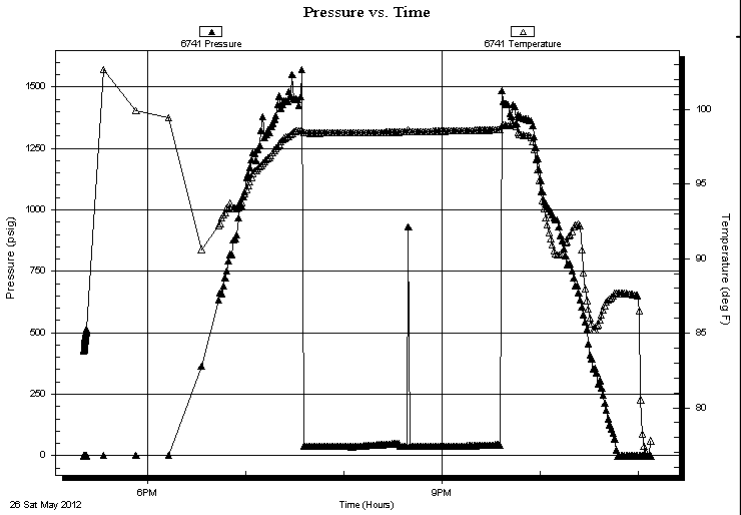
Reference Elevations: 1916.00 ft (KB)
1907.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 6741 **Outside**

Press@RunDepth: psig @ 3066.00 ft (KB)
Start Date: 2012.05.26 End Date: 2012.05.26
Start Time: 17:20:58 End Time: 23:07:57

Capacity: 8000.00 psig
Last Calib.: 2012.05.26
Time On Btm:
Time Off Btm:

TEST COMMENT: IFP - no blow
ISI - no blow back
FFP - no blow - flush - no blow
FSI - no blow back



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
50.00	drl mud 100%	0.70

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Russell Oil

PO Box 8050
Edmond, Ok 73083

ATTN: Kitt Noah

31-15-14 Russell, Ks

Betty Radke "A" 1R

Job Ticket: 47130 **DST#: 1**

Test Start: 2012.05.26 @ 17:20:50

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:	52.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	9.19 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	6500.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
50.00	drl mud 100%	0.701

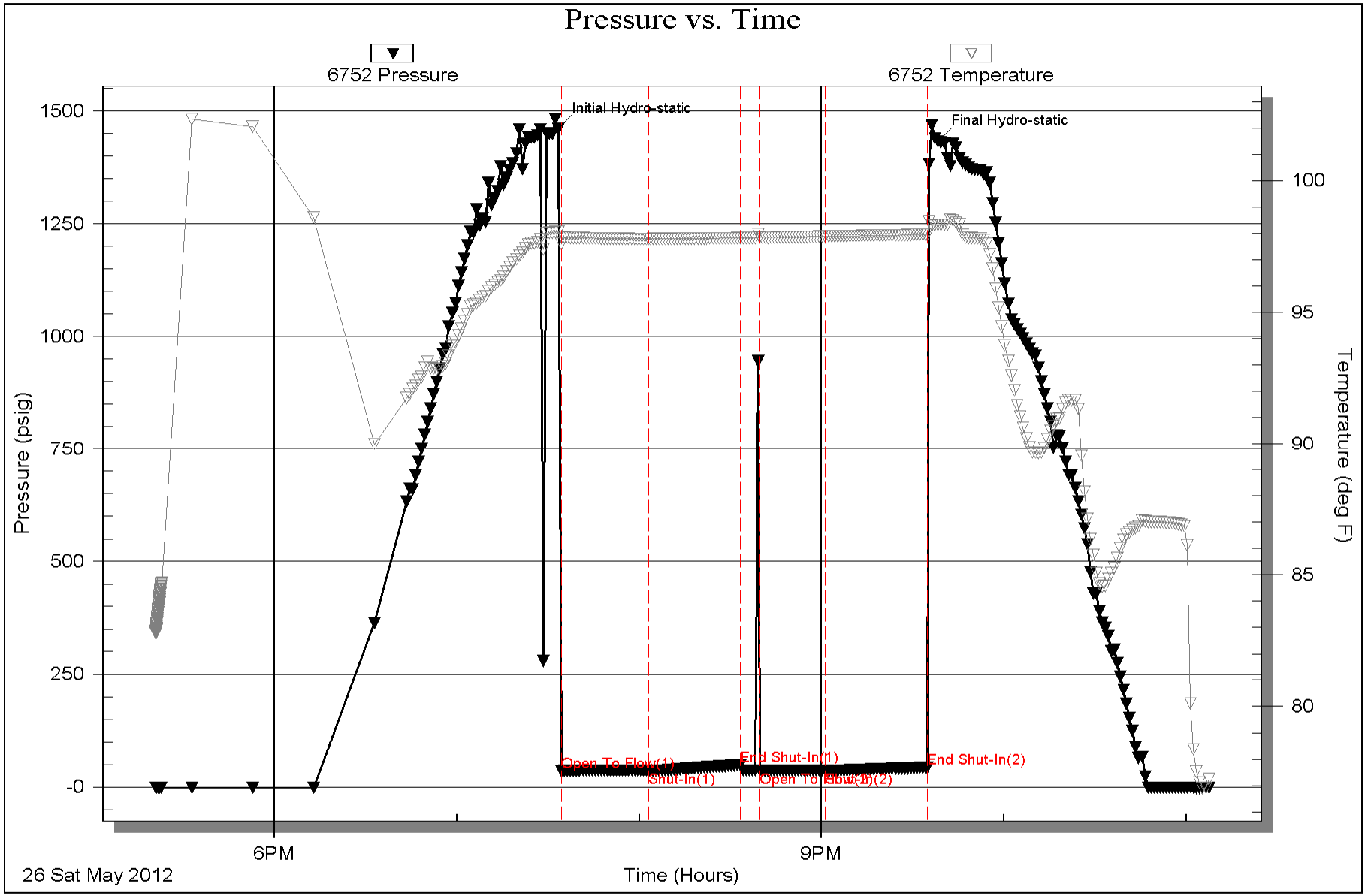
Total Length: 50.00 ft Total Volume: 0.701 bbl

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

Laboratory Name: Laboratory Location:

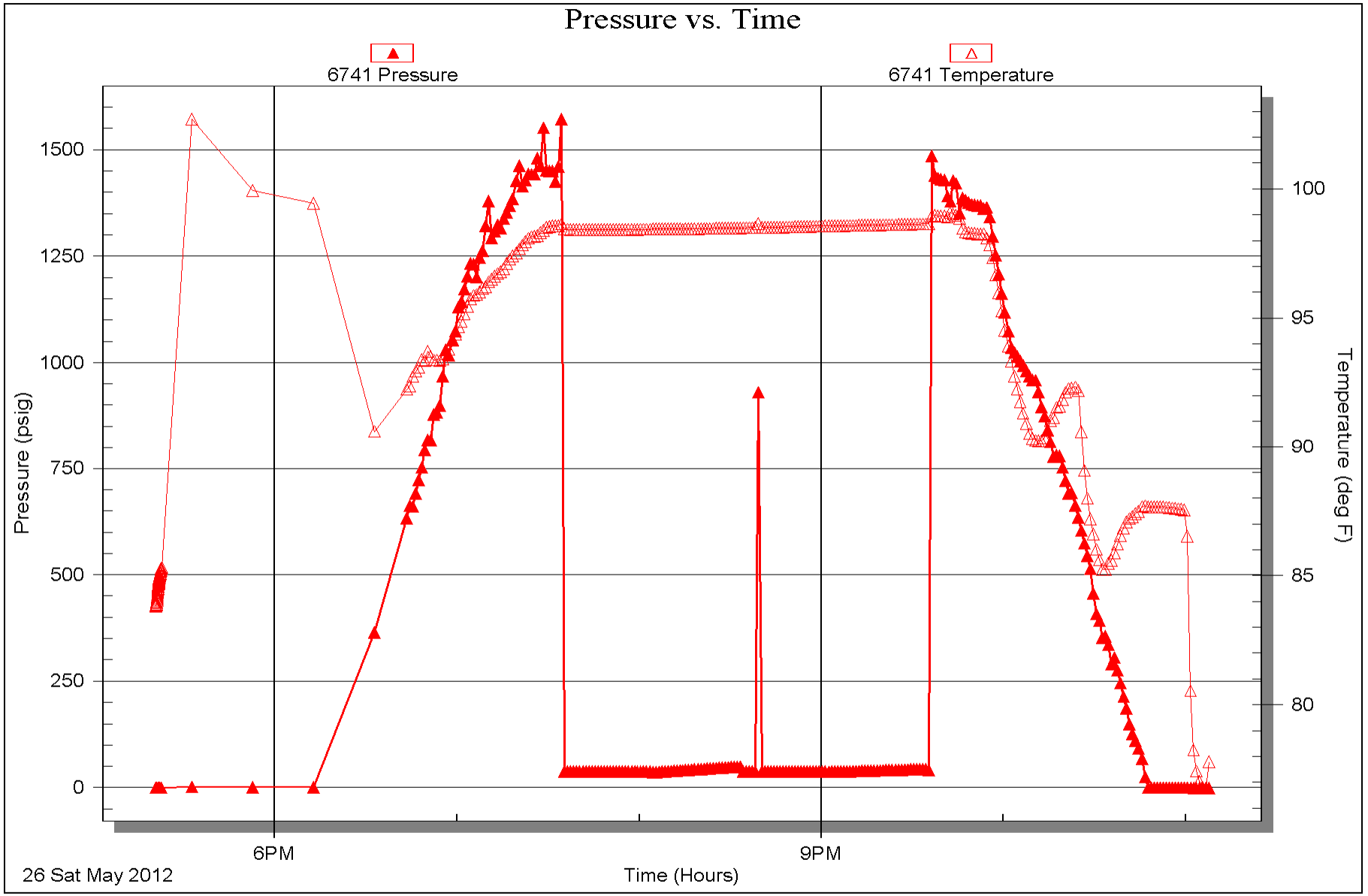
Recovery Comments:

Serial #: 6752 **Inside** Russell Oil Betty Radke "A" 1R DST Test Number: 1



Trilobite Testing, Inc Ref. No: 47130 Printed: 2012.05.27 @ 08:29:21

Serial #: 6741 **Outside** Russell Oil Betty Radke "A" 1R DST Test Number: 1



Trilobite Testing, Inc Ref. No: 47130 Printed: 2012.05.27 @ 08:29:21

DRILL STEM TEST REPORT

Russell Oil

PO Box 8050
Edmond, Ok 73083

ATTN: Kitt Noah

31-15-14 Russell, Ks

Betty Radke "A" 1R

Job Ticket: 47131 **DST#: 2**

Test Start: 2012.05.27 @ 07:40:04

GENERAL INFORMATION:

Formation: **LKC "A-B"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 09:07:04
Time Test Ended: 14:08:34

Test Type: Conventional Bottom Hole (Reset)
Tester: Brian Fairbank
Unit No: 41

Interval: 3094.00 ft (KB) To 3156.00 ft (KB) (TVD)
Total Depth: 3156.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

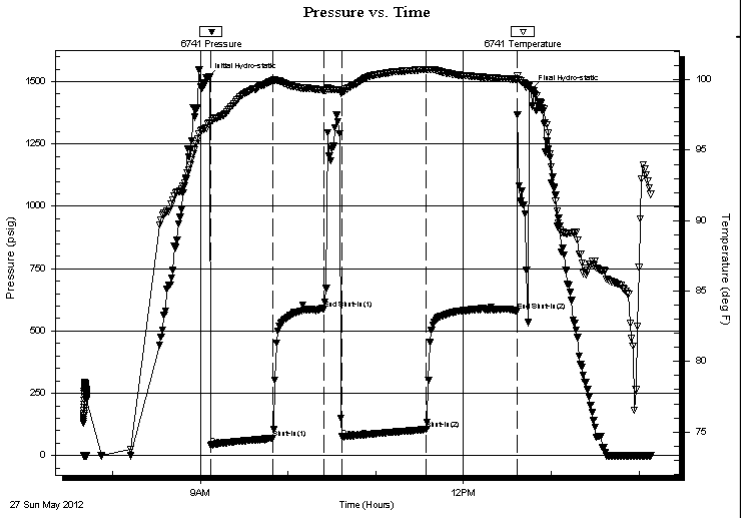
Reference Elevations: 1916.00 ft (KB)
1907.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 6741 **Outside**

Press@RunDepth: 105.41 psig @ 3100.00 ft (KB)
Start Date: 2012.05.27 End Date: 2012.05.27
Start Time: 07:40:05 End Time: 14:08:34

Capacity: 8000.00 psig
Last Calib.: 2012.05.27
Time On Btm: 2012.05.27 @ 09:05:04
Time Off Btm: 2012.05.27 @ 12:46:04

TEST COMMENT: IFP - weak to good blow sur - 6 1/2"
ISI - no blow back
FFP - weak to good blow sur - 6 1/2"
FSI - no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1514.98	96.87	Initial Hydro-static
2	42.07	96.94	Open To Flow (1)
45	70.49	99.95	Shut-In(1)
80	588.86	99.28	End Shut-In(1)
92	75.67	99.09	Open To Flow (2)
150	105.41	100.73	Shut-In(2)
212	578.91	100.04	End Shut-In(2)
221	1469.16	99.32	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	MW 95%W, 5%M	1.68
30.00	WM 45%W, 55%M	0.42

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Russell Oil

PO Box 8050
Edmond, Ok 73083

ATTN: Kitt Noah

31-15-14 Russell, Ks

Betty Radke "A" 1R

Job Ticket: 47131 **DST#: 2**

Test Start: 2012.05.27 @ 07:40:04

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:	32000 ppm
Viscosity:	48.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	10.79 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	8500.00 ppm				
Filter Cake:	inches				

Recovery Information

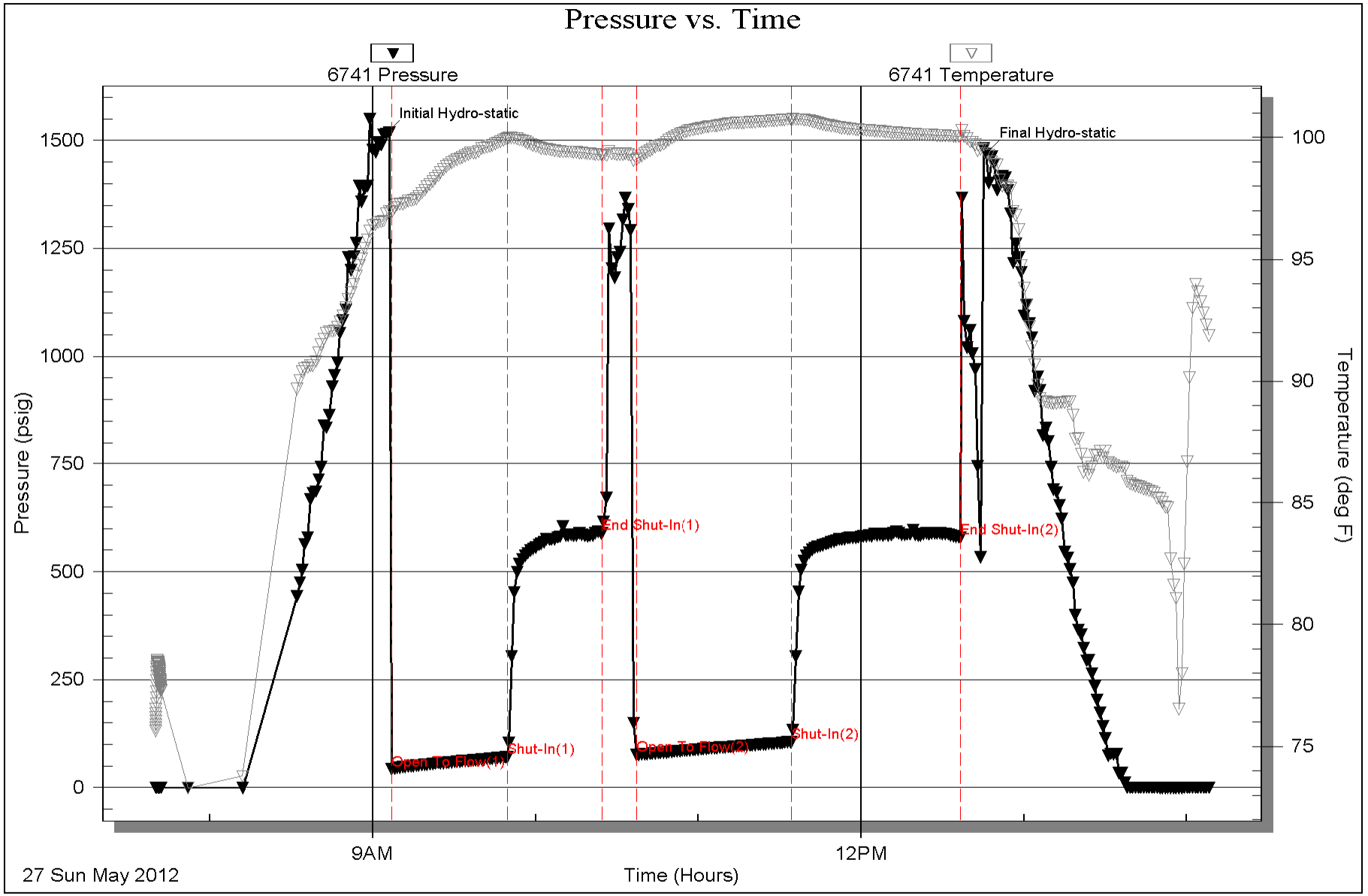
Recovery Table

Length ft	Description	Volume bbl
120.00	MW 95%W, 5%M	1.683
30.00	WM 45%W, 55%M	0.421

Total Length: 150.00 ft Total Volume: 2.104 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 6741 **Outside** Russell Oil Betty Radke "A" 1R DST Test Number: 2



Trilobite Testing, Inc Ref. No: 47131 Printed: 2012.05.27 @ 14:19:29

DRILL STEM TEST REPORT

Russell Oil

PO Box 8050
Edmond, Ok 73083

ATTN: Kitt Noah

31-15-14 Russell, Ks

Betty Radke "A" 1R

Job Ticket: 47132 **DST#: 3**

Test Start: 2012.05.27 @ 21:41:20

GENERAL INFORMATION:

Formation: **LKC "C"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 23:29:50
Time Test Ended: 03:26:20

Test Type: Conventional Bottom Hole (Reset)
Tester: Brian Fairbank
Unit No: 41

Interval: 3156.00 ft (KB) To 3173.00 ft (KB) (TVD)
Total Depth: 3173.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

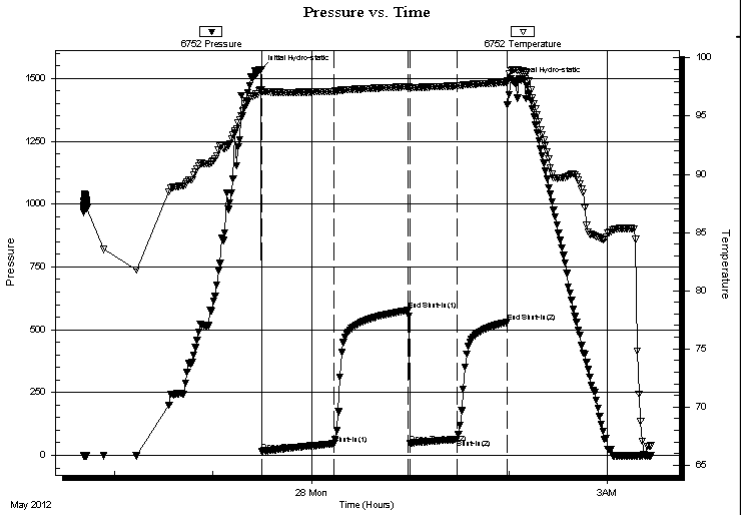
Reference Elevations: 1916.00 ft (KB)
1907.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 6752 **Inside**

Press@RunDepth: 63.24 psig @ 3160.00 ft (KB)
Start Date: 2012.05.27 End Date: 2012.05.28
Start Time: 21:41:21 End Time: 03:26:20

Capacity: 8000.00 psig
Last Calib.: 2012.05.28
Time On Btm: 2012.05.27 @ 23:28:50
Time Off Btm: 2012.05.28 @ 02:02:50

TEST COMMENT: IFP - weak to fair blow 1/4" - 6"
ISI - no blow back
FFP - no blow 6 min - 1"
FSI - no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1536.10	97.27	Initial Hydro-static
1	14.69	97.10	Open To Flow (1)
45	45.47	97.13	Shut-In(1)
90	576.85	97.53	End Shut-In(1)
91	48.53	97.44	Open To Flow (2)
120	63.24	97.60	Shut-In(2)
150	529.82	97.89	End Shut-In(2)
154	1488.05	98.98	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
74.00	MW 95%W, 5%M	1.04
1.00	OIL TSTM	0.01

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

Russell Oil

PO Box 8050
Edmond, Ok 73083

ATTN: Kitt Noah

31-15-14 Russell, Ks

Betty Radke "A" 1R

Job Ticket: 47132 **DST#: 3**

Test Start: 2012.05.27 @ 21:41:20

GENERAL INFORMATION:

Formation: **LKC "C"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 23:29:50
Time Test Ended: 03:26:20

Test Type: Conventional Bottom Hole (Reset)
Tester: Brian Fairbank
Unit No: 41

Interval: 3156.00 ft (KB) To 3173.00 ft (KB) (TVD)
Total Depth: 3173.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

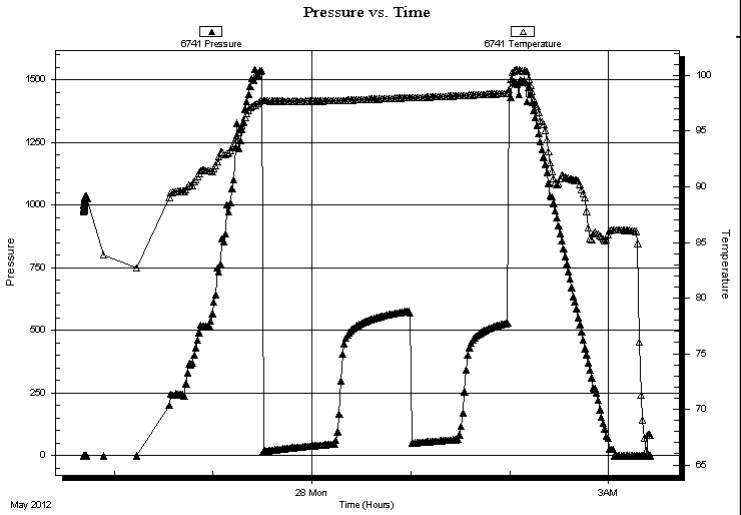
Reference Elevations: 1916.00 ft (KB)
1907.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 6741 **Outside**

Press@RunDepth: psig @ 3160.00 ft (KB)
Start Date: 2012.05.27 End Date: 2012.05.28
Start Time: 21:41:31 End Time: 03:25:21

Capacity: 8000.00 psig
Last Calib.: 2012.05.28
Time On Btm:
Time Off Btm:

TEST COMMENT: IFP - weak to fair blow 1/4" - 6"
ISI - no blow back
FFP - no blow 6 min - 1"
FSI - no blow back



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
74.00	MW 95%W, 5%M	1.04
1.00	OIL TSTM	0.01

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Russell Oil

PO Box 8050
Edmond, Ok 73083

ATTN: Kitt Noah

31-15-14 Russell, Ks

Betty Radke "A" 1R

Job Ticket: 47132 **DST#: 3**

Test Start: 2012.05.27 @ 21:41:20

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:	48000 ppm
Viscosity:	48.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	10.79 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	8500.00 ppm				
Filter Cake:	inches				

Recovery Information

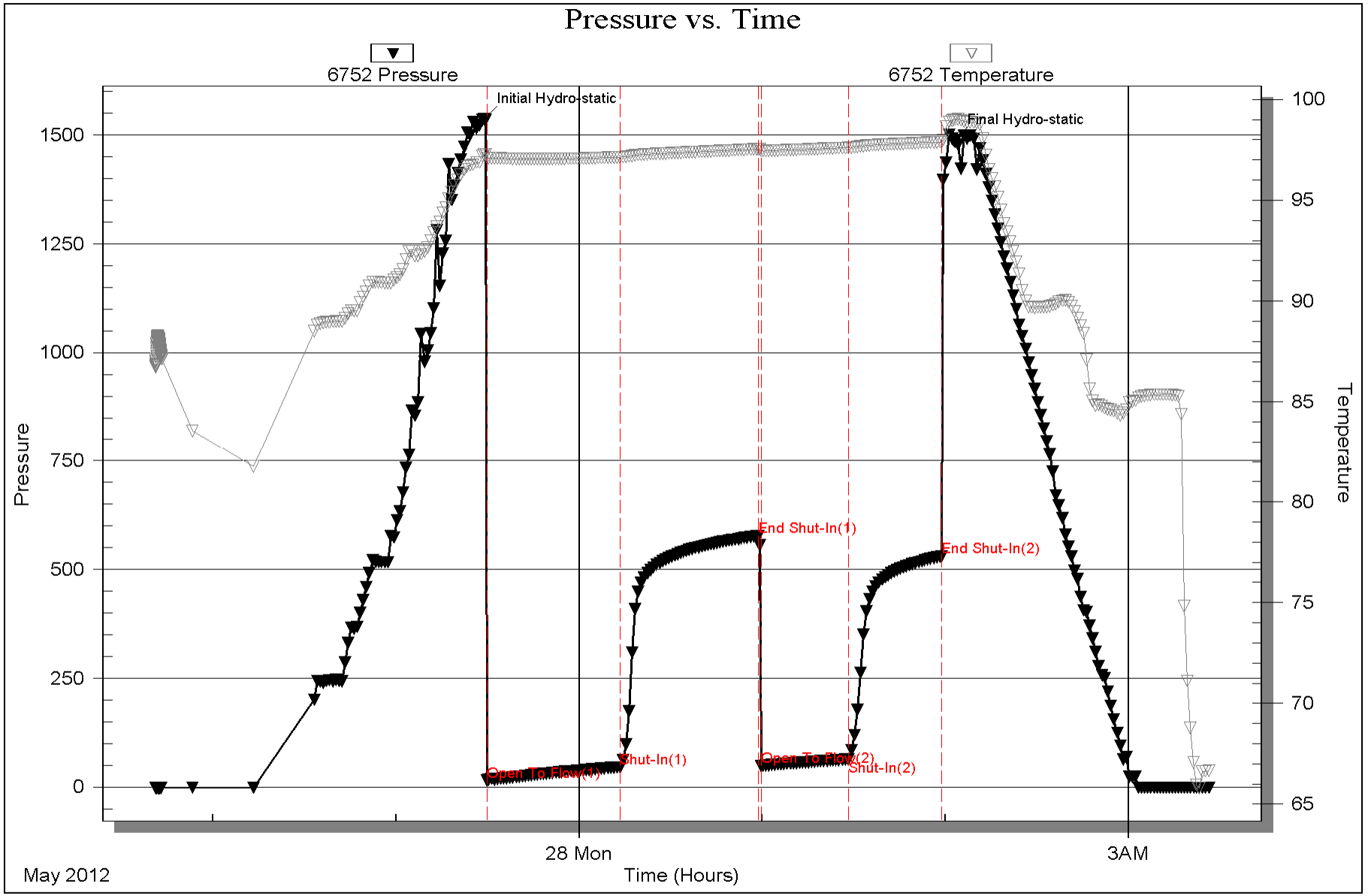
Recovery Table

Length ft	Description	Volume bbl
74.00	MW 95%W, 5%M	1.038
1.00	OIL TSTM	0.014

Total Length: 75.00 ft Total Volume: 1.052 bbl

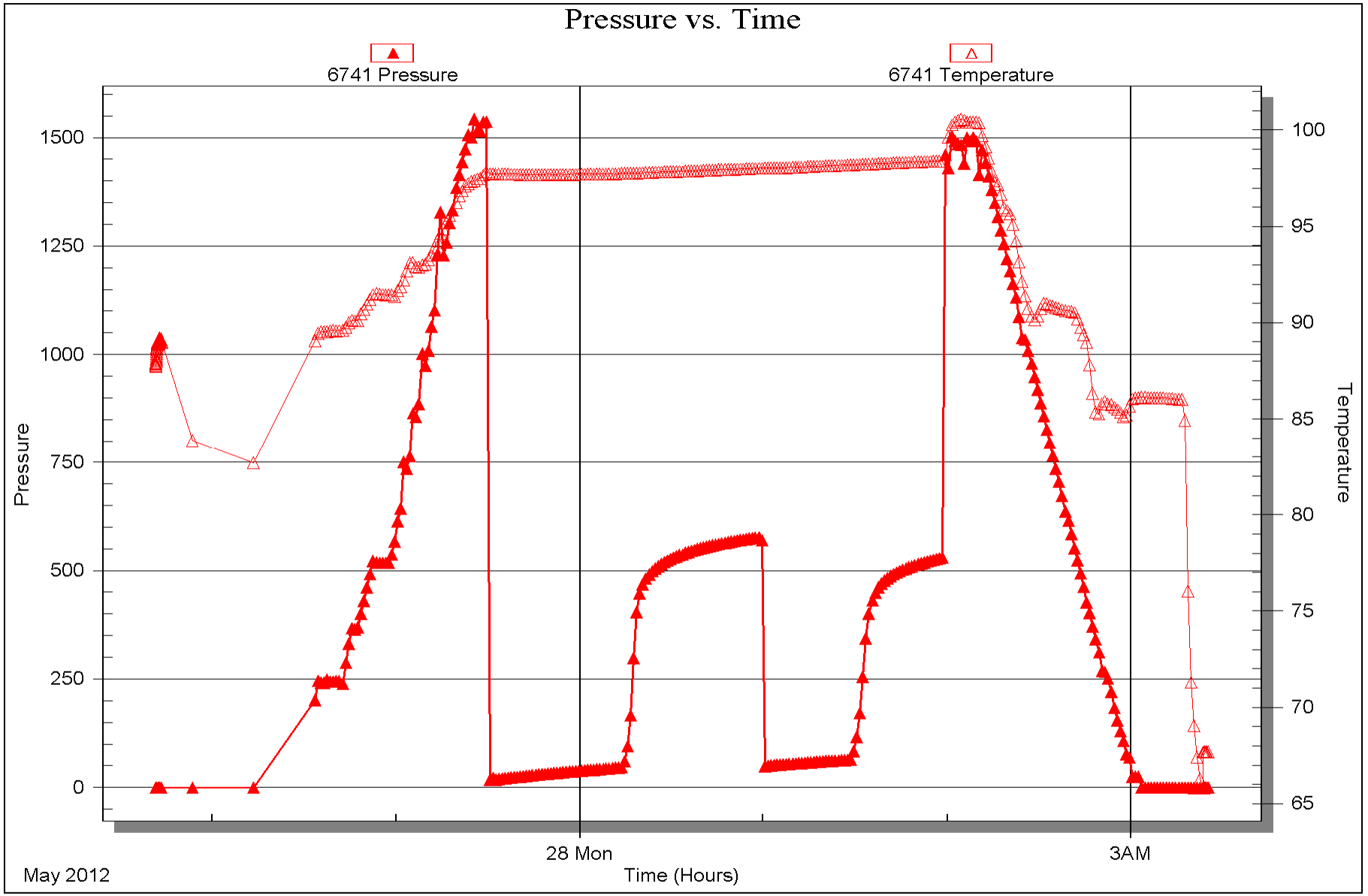
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 6752 **Inside** Russell Oil Betty Radke "A" 1R DST Test Number: 3



Trilobite Testing, Inc Ref. No: 47132 Printed: 2012.05.28 @ 09:18:32

Serial #: 6741 **Outside** Russell Oil Betty Radke "A" 1R DST Test Number: 3



Trilobite Testing, Inc Ref. No: 47132 Printed: 2012.05.28 @ 09:18:33

DRILL STEM TEST REPORT

Russell Oil

PO Box 8050
Edmond, Ok 73083

ATTN: Kitt Noah

31-15-14 Russell, Ks

Betty Radke "A" 1R

Job Ticket: 47133 **DST#: 4**

Test Start: 2012.05.28 @ 13:09:43

GENERAL INFORMATION:

Formation: **LKC "E-F"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 14:40:13
Time Test Ended: 18:00:13

Test Type: Conventional Bottom Hole (Reset)
Tester: Brian Fairbank
Unit No: 41

Interval: 3182.00 ft (KB) To 3212.00 ft (KB) (TVD)
Total Depth: 3212.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

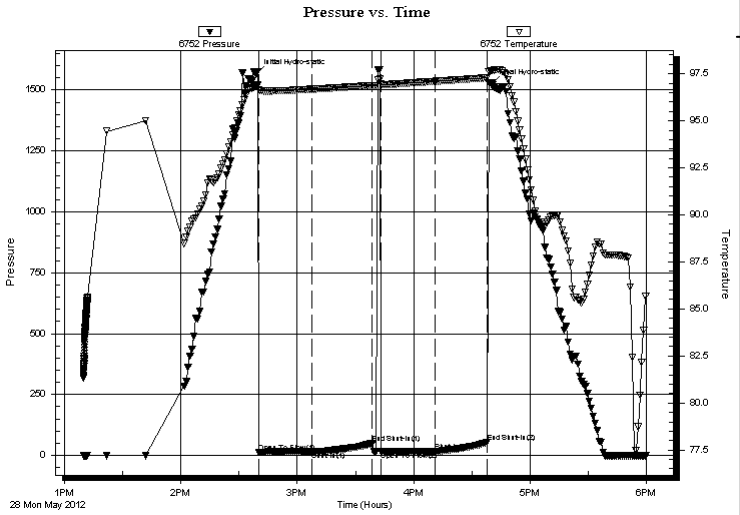
Reference Elevations: 1916.00 ft (KB)
1907.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 6752 **Inside**

Press@RunDepth: 16.67 psig @ 3189.00 ft (KB)
Start Date: 2012.05.28 End Date: 2012.05.28
Start Time: 13:09:44 End Time: 18:00:13

Capacity: 8000.00 psig
Last Calib.: 2012.05.28
Time On Btm: 2012.05.28 @ 14:39:13
Time Off Btm: 2012.05.28 @ 16:40:13

TEST COMMENT: IFP - no blow
ISI - no blow back
FFP - no blow - flush - no blow
FSI - no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1566.88	96.89	Initial Hydro-static
1	13.06	96.66	Open To Flow (1)
29	14.80	96.68	Shut-In(1)
60	49.23	96.88	End Shut-In(1)
64	15.52	96.97	Open To Flow (2)
92	16.67	97.10	Shut-In(2)
119	53.43	97.29	End Shut-In(2)
121	1525.15	97.67	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	drl mud 100%	0.01

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Russell Oil

PO Box 8050
Edmond, Ok 73083

ATTN: Kitt Noah

31-15-14 Russell, Ks

Betty Radke "A" 1R

Job Ticket: 47133 **DST#: 4**

Test Start: 2012.05.28 @ 13:09:43

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:	48.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	12.19 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	10000.00 ppm				
Filter Cake:	inches				

Recovery Information

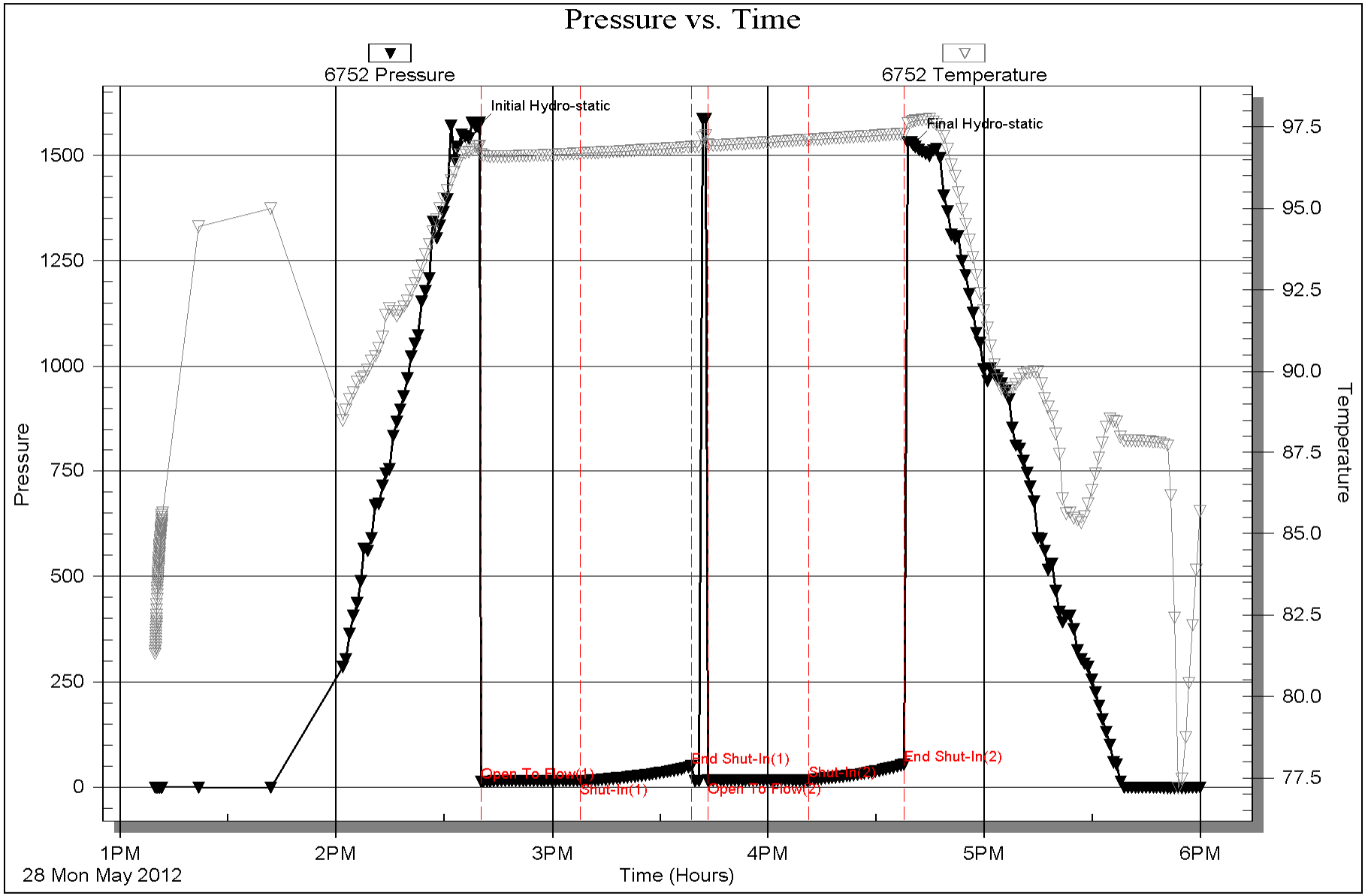
Recovery Table

Length ft	Description	Volume bbl
1.00	drl mud 100%	0.014

Total Length: 1.00 ft Total Volume: 0.014 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 6752 **Inside** Russell Oil Betty Radke "A" 1R DST Test Number: 4



Trilobite Testing, Inc Ref. No: 47133 Printed: 2012.05.29 @ 08:10:59

DRILL STEM TEST REPORT

Russell Oil

PO Box 8050
Edmond, Ok 73083

ATTN: Kitt Noah

31-15-14 Russell, Ks

Betty Radke "A" 1R

Job Ticket: 47134 **DST#: 5**

Test Start: 2012.05.29 @ 08:01:27

GENERAL INFORMATION:

Formation: **Lansing H-J**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 09:17:57
Time Test Ended: 12:03:57

Test Type: Conventional Bottom Hole (Reset)
Tester: Paul Simpson
Unit No: 41

Interval: 3264.00 ft (KB) To 3322.00 ft (KB) (TVD)
Total Depth: 3322.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

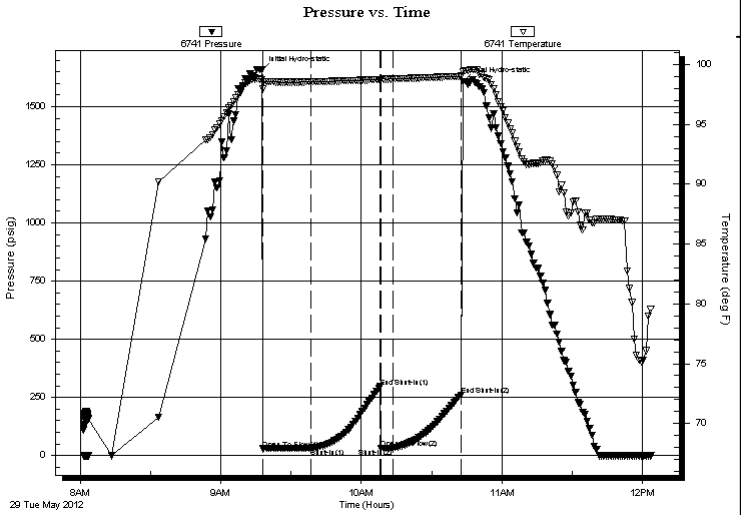
Reference Elevations: 1916.00 ft (KB)
1907.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 6741 **Outside**

Press@RunDepth: 32.05 psig @ 3268.00 ft (KB)
Start Date: 2012.05.29 End Date: 2012.05.29
Start Time: 08:01:28 End Time: 12:03:57

Capacity: 8000.00 psig
Last Calib.: 2012.05.29
Time On Btm: 2012.05.29 @ 09:17:27
Time Off Btm: 2012.05.29 @ 10:43:27

TEST COMMENT: 20-- weak blow died in 15 minutes
30-
5- no blow
30-



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1656.87	98.77	Initial Hydro-static
1	29.33	97.95	Open To Flow (1)
21	31.52	98.56	Shut-In(1)
51	296.48	98.76	End Shut-In(1)
51	31.76	98.75	Open To Flow (2)
56	32.05	98.80	Shut-In(2)
85	259.40	99.03	End Shut-In(2)
86	1608.99	99.43	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud with oil speck in tool	0.07

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Russell Oil

PO Box 8050
Edmond, Ok 73083

ATTN: Kitt Noah

31-15-14 Russell, Ks

Betty Radke "A" 1R

Job Ticket: 47134 **DST#: 5**

Test Start: 2012.05.29 @ 08:01:27

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:	52.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	9.17 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	6500.00 ppm				
Filter Cake:	inches				

Recovery Information

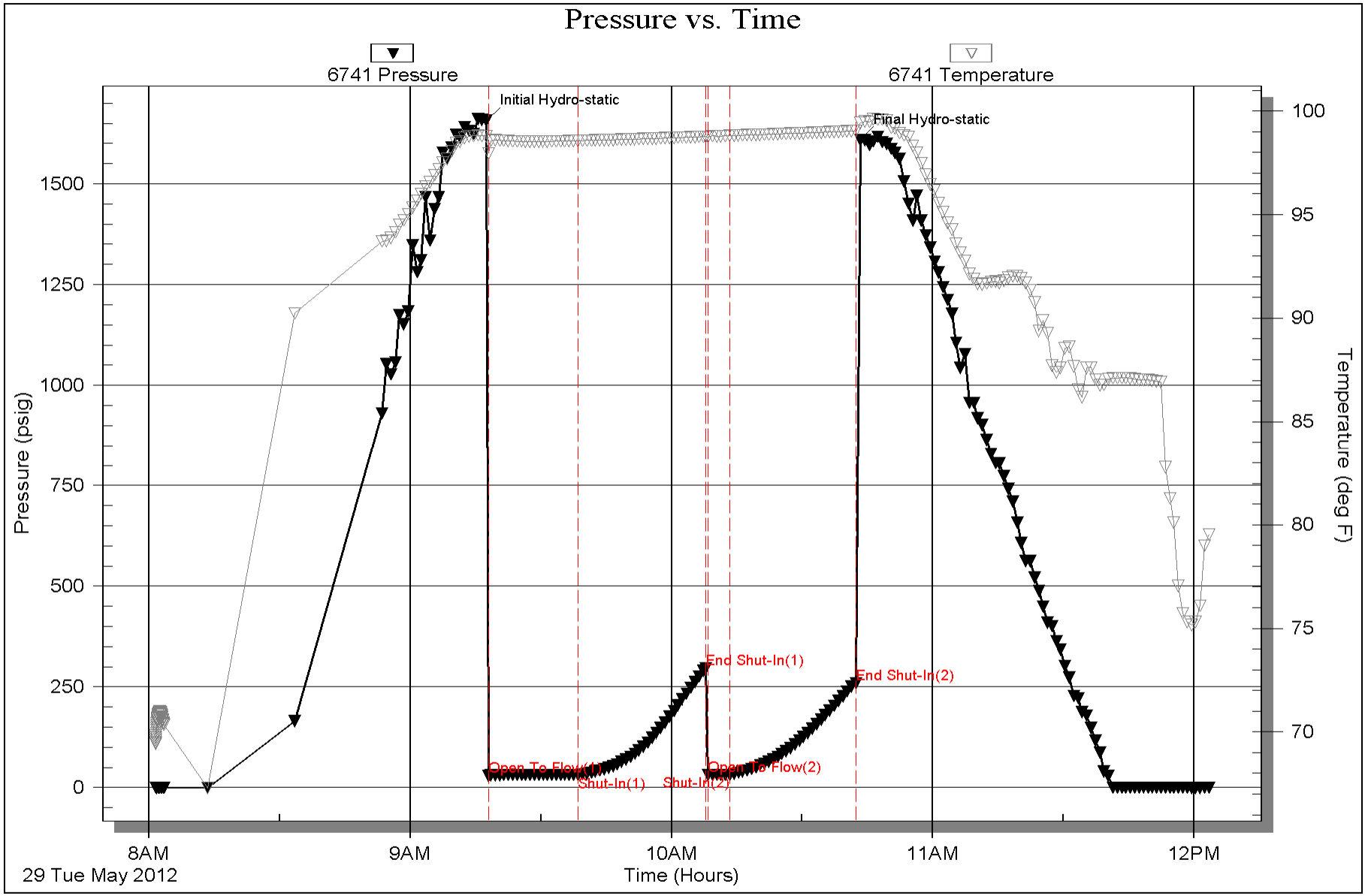
Recovery Table

Length ft	Description	Volume bbl
5.00	mud w ith oil speck in tool	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 #: 6741 **Outside** Russell Oil Betty Radke "A" 1R DST Test Number: 5



Trilobite Testing, Inc Ref. No: 47134 Printed: 2012.05.29 @ 14:06:42

DRILL STEM TEST REPORT

Russell Oil

PO Box 8050
Edmond, Ok 73083

ATTN: Kitt Noah

31-15-14 Russell, Ks

Betty Radke "A" 1R

Job Ticket: 47153 **DST#: 6**

Test Start: 2012.05.29 @ 22:15:44

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 23:44:14
Time Test Ended: 03:14:14

Test Type: Conventional Bottom Hole (Reset)
Tester: Brian Fairbank
Unit No: 41

Interval: 3365.00 ft (KB) To 3377.00 ft (KB) (TVD)
Total Depth: 3377.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

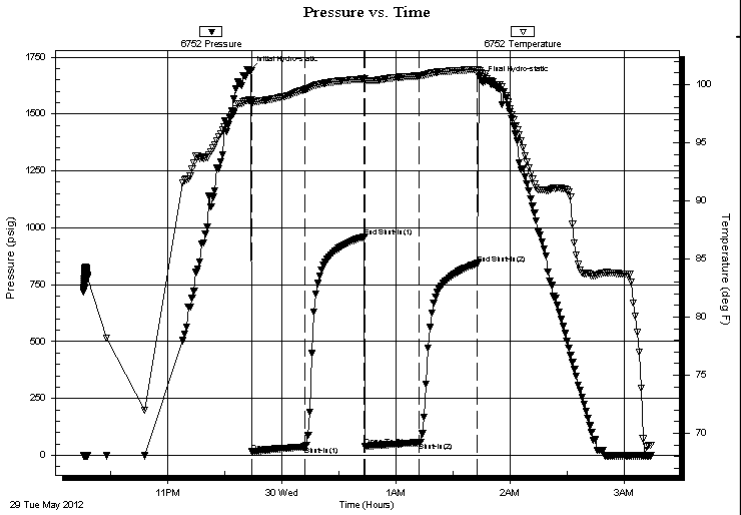
Reference Elevations: 1916.00 ft (KB)
1907.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 6752 **Inside**

Press@RunDepth: 56.46 psig @ 3369.00 ft (KB)
Start Date: 2012.05.29 End Date: 2012.05.30
Start Time: 22:15:45 End Time: 03:14:14

Capacity: 8000.00 psig
Last Calib.: 2012.05.30
Time On Btm: 2012.05.29 @ 23:43:14
Time Off Btm: 2012.05.30 @ 01:44:44

TEST COMMENT: IFP - BOB 30 min
ISI - no blow back
FFP - w eak to good blow sur - 7 1/5"
FSI - no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1690.19	98.66	Initial Hydro-static
1	16.01	98.48	Open To Flow (1)
29	37.90	99.59	Shut-In(1)
60	961.41	100.50	End Shut-In(1)
61	40.20	100.32	Open To Flow (2)
89	56.46	100.76	Shut-In(2)
120	843.66	101.31	End Shut-In(2)
122	1646.23	101.03	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	HOCM 40%O, 60%M	0.42
85.00	FREE OIL 95%O, 5%M	1.19
0.00	60' GIP	0.00

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Russell Oil

PO Box 8050
Edmond, Ok 73083

ATTN: Kitt Noah

31-15-14 Russell, Ks

Betty Radke "A" 1R

Job Ticket: 47153 **DST#: 6**

Test Start: 2012.05.29 @ 22:15:44

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	36 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	54.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	13.19 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	11000.00 ppm				
Filter Cake:	inches				

Recovery Information

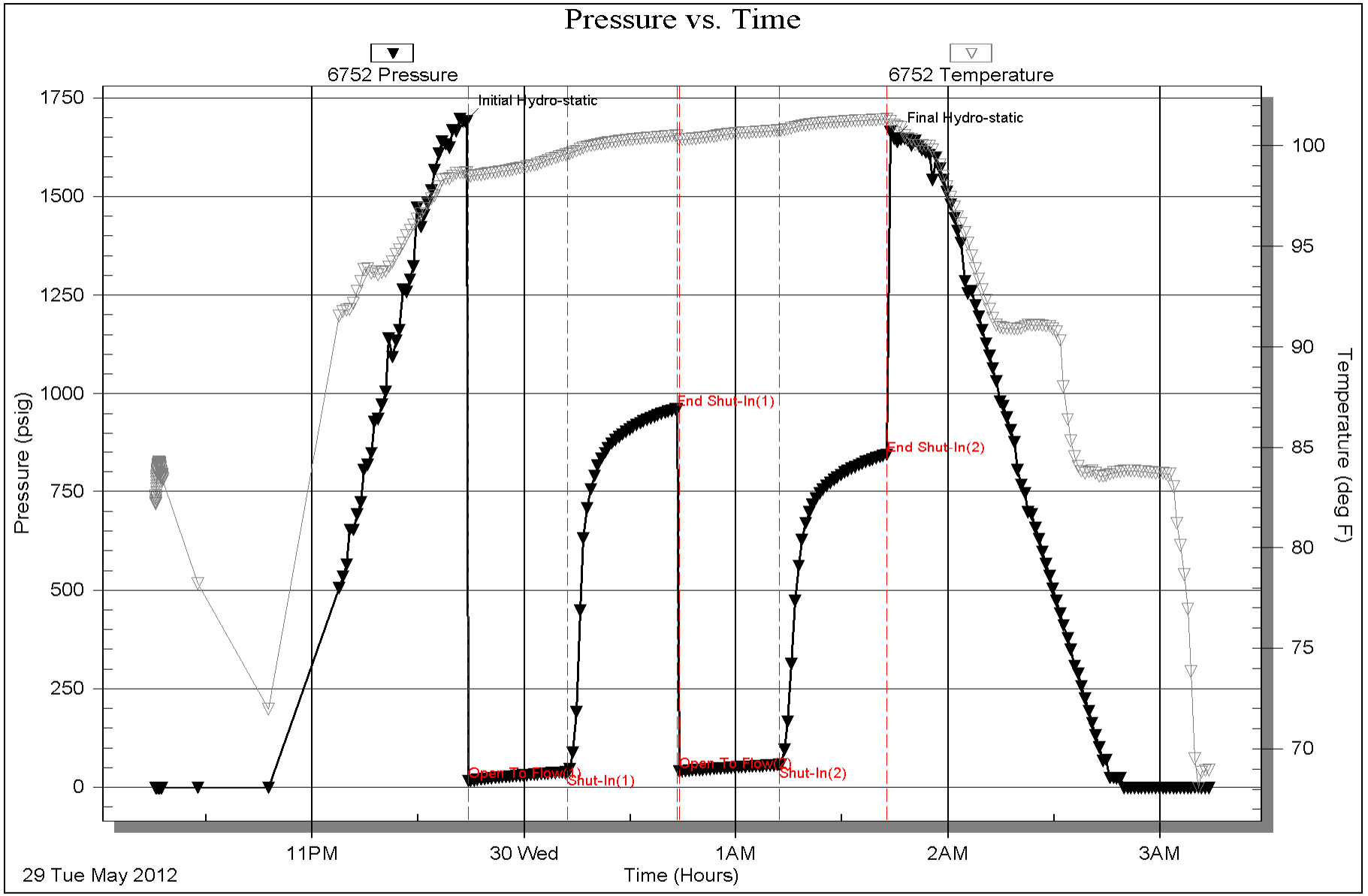
Recovery Table

Length ft	Description	Volume bbl
30.00	HOCM 40%O, 60%M	0.421
85.00	FREE OIL 95%O, 5%M	1.192
0.00	60' GIP	0.000

Total Length: 115.00 ft Total Volume: 1.613 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 6752 **Inside** Russell Oil Betty Radke "A" 1R DST Test Number: 6



Trilobite Testing, Inc Ref. No: 47153 Printed: 2012.05.30 @ 08:21:17

DRILL STEM TEST REPORT

Russell Oil

PO Box 8050
Edmond, Ok 73083

ATTN: Kitt Noah

31-15-14 Russell, Ks

Betty Radke "A" 1R

Job Ticket: 47136 **DST#: 7**

Test Start: 2012.05.30 @ 08:25:23

GENERAL INFORMATION:

Formation: **Arbuckle (2)**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 09:49:23
Time Test Ended: 13:41:53

Test Type: Conventional Bottom Hole (Reset)
Tester: Brian Fairbank
Unit No: 41

Interval: 3377.00 ft (KB) To 3385.00 ft (KB) (TVD)
Total Depth: 3385.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

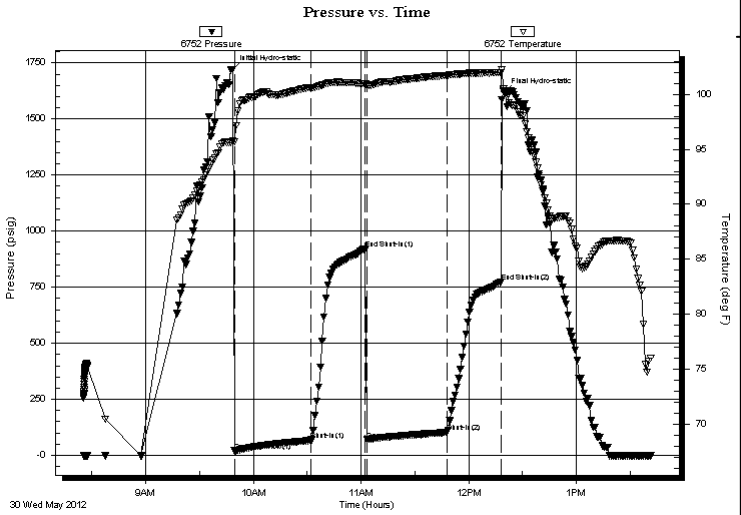
Reference Elevations: 1916.00 ft (KB)
1907.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 6752 **Inside**

Press@RunDepth: 102.94 psig @ 3378.00 ft (KB)
Start Date: 2012.05.30 End Date: 2012.05.30
Start Time: 08:25:24 End Time: 13:41:53

Capacity: 8000.00 psig
Last Calib.: 2012.05.30
Time On Btm: 2012.05.30 @ 09:48:23
Time Off Btm: 2012.05.30 @ 12:19:53

TEST COMMENT: IFP - BOB 11 min
ISI - sur blow back - died 7 min
FFP - w eak to fair blow 1/4" - 5"
FSI - no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1720.98	95.77	Initial Hydro-static
1	20.17	95.68	Open To Flow (1)
44	66.73	100.59	Shut-In(1)
74	920.33	100.98	End Shut-In(1)
75	69.65	100.82	Open To Flow (2)
120	102.94	101.73	Shut-In(2)
150	774.17	101.97	End Shut-In(2)
152	1618.05	100.29	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	WOCM 37%O, 3%W, 60%M	0.21
235.00	FREE OIL 95%O, 5%M	3.30
0.00	60' GIP	0.00

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Russell Oil

PO Box 8050
Edmond, Ok 73083

ATTN: Kitt Noah

31-15-14 Russell, Ks

Betty Radke "A" 1R

Job Ticket: 47136 **DST#: 7**

Test Start: 2012.05.30 @ 08:25:23

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	37 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	46.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	12.39 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	10500.00 ppm				
Filter Cake:	inches				

Recovery Information

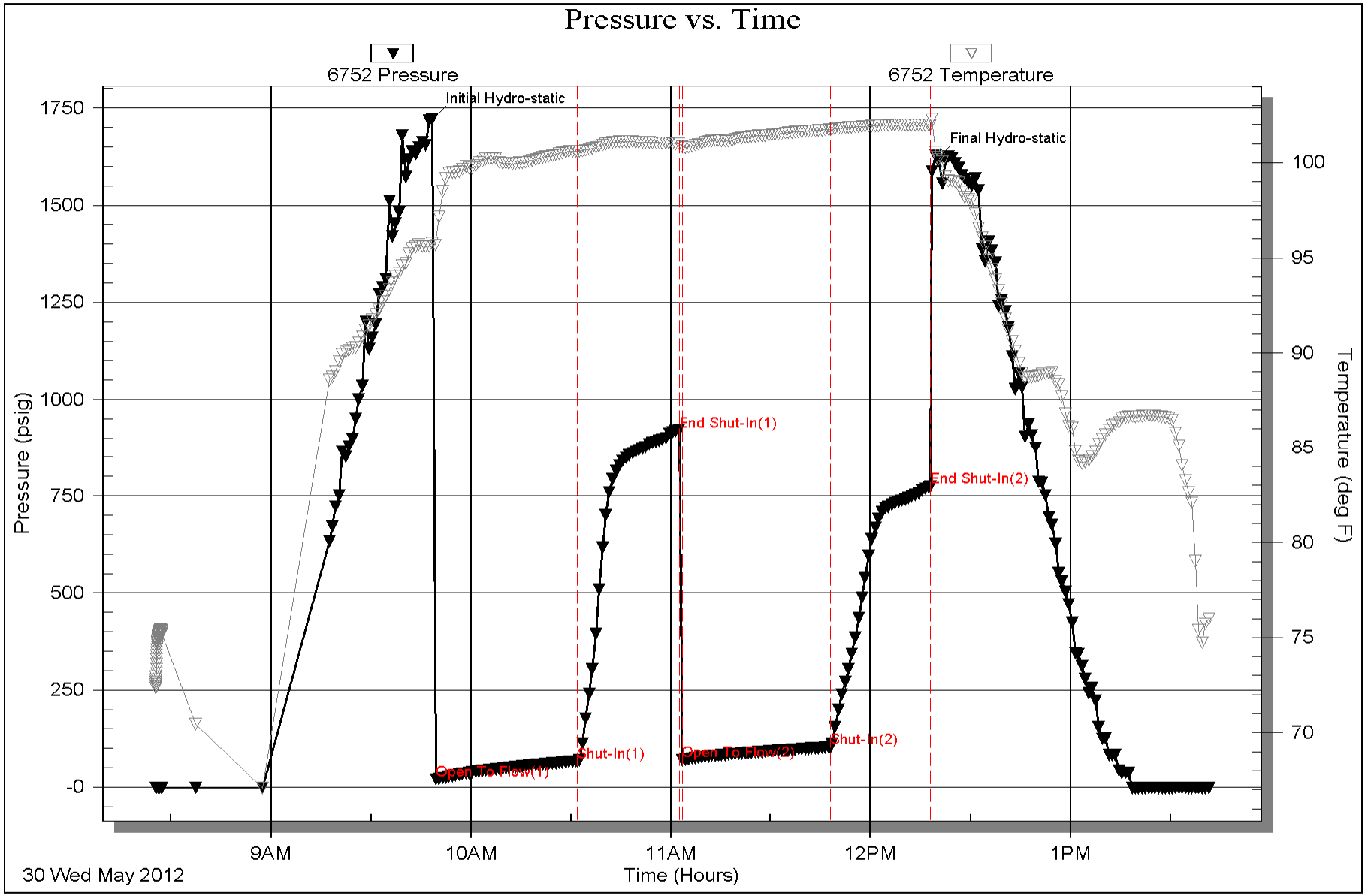
Recovery Table

Length ft	Description	Volume bbl
15.00	WOCM 37%O, 3%W, 60%M	0.210
235.00	FREE OIL 95%O, 5%M	3.296
0.00	60' GIP	0.000

Total Length: 250.00 ft Total Volume: 3.506 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 6752 **Inside** Russell Oil Betty Radke "A" 1R DST Test Number: 7



Trilobite Testing, Inc Ref. No: 47136 Printed: 2012.05.30 @ 15:45:43

Betty Radke "A" #1R Drilling Report

Russell Oil, Inc. KB: 1916
Betty Radke "A" #1R GL: 1907
930'FS & 800'FW
Section 31-15S-14W
Russell County, Kansas
#15-167-23,806

Reference Well A: *Russell Oil Neal Nuss #1 2540'FS & 2060'FE Sec 31-15S-14W (oil)*
Reference Well B: *H&P Elsasser "A" #1 NW NW SW Sec 31-15S-14W (dry)*
Reference Well C: *Farmer Boxberger #1 NW NE Sec 31-15S-14W (oil)*

		A:	B:	C:
SAMPLE TOPS				
Anhydrite	924 (+992)	flat	+6	+8
B/Anhydrite	950 (+966)	+4	+10	+13
Howard	2770 (-854)	-4	+12	NA
Topeka	2835 (-919)	-1	+17	+10
Heebner	3064 (-1148)	+1	+15	+9
Toronto	3080 (-1164)	+1	+17	+10
Lansing	3125 (-1209)	+1	+17	+10
Mun Creek	3267 (-1351)	+1	+13	+8
B/KC	3367 (-1451)	+1	+11	+11
Arbuckle	3372 (-1456)	+15	+36	+19
RTD	3430 (-1514)			

		A:	B:	C:
ELECTRIC LOG TOPS				
Anhydrite	924 (+992)	flat	+6	+8
B/Anhydrite	954 (+962)	flat	+6	+9
Howard	2771 (-855)	-5	+11	NA
Topeka	2840 (-924)	-6	+11	+4
Heebner	3070 (-1154)	-5	+9	+3
Toronto	3086 (-1170)	-5	+11	+4
Lansing	3132 (-1216)	-6	+10	+3
Mun Creek	3268 (-1352)	flat	+12	+7
B/KC	3365 (-1449)	+3	+13	+14
Arbuckle	3369 (-1453)	+18	+39	+22
RTD	3432 (-1516)			

Sample Shows and Drill Stem Tests:

7am 5-26-12: Drilling at 3005'

Topeka Plattsmouth 50' zone: *Circulate 3026'*
Limestone, cream; fossiliferous; oolitic, poor to fair interparticle and pinpoint porosity; medium golden brown subsaturated to mostly saturated stain; slight to fair show of free oil on break; good pungent odor. *6' drilling break*

Topeka Plattsmouth 30' zone:
Limestone, cream; oolitic, subchalky; poor to fair pinpoint porosity; few pieces dark brown subsaturated stain; no show of free oil on break; fair odor. *3' drilling break*

Toronto: *Circulate 3096'* ***DST #1***
Limestone, cream; fossiliferous; sm pieces very oolitic, poor to fair interparticle; some vugular porosity; medium brown subsaturated stain – some pieces with possible crystalline porosity; slight show of free oil on break; fair odor in 20" circulation sample.*4' drilling break*

DST #1: *Trilobite Testing Co., Inc. - Hays*
Toronto *Brian Fairbank; Tester*
3062-3196
1st Op: Tool Slid 15'; No Blow
No Blowback
2nd Op: No Blow; Flush Tool: No Help
No Blowback
Tester picked up one joint after tool slid to tag bottom….will look at test charts for any possible plugging…

Rec:
50' Mud

IFP: 36-37#/30"
ISIP: 49#/30"
FFP: 36-37#/30"
FSIP: 43#/30"
Do not see any plugging on flows…

No pipe strap taken…too windy

Lansing "A": *Circulate 3140'* **DST #2**
Limestone, cream-white; slightly dolomitic; oolitic; isolated vugular porosity; overall poor interparticle porosity; 2-3 pieces light brown spotty to subsaturated stain; slight to fair show of free oil; one piece with gas on break; no odor. *No drilling break*

Lansing "B": *Circulate 3156'* **DST #2**
Limestone, cream; fossiliferous; very rare vugular porosity; few pieces light brown spotty stain; slight to fair show of free oil; some gas on break; fair odor on break. *3' drilling break*

7am 5-27-12: Tripping out for DST #2 at 3156'

DST #2: *Trilobite Testing Co., Inc. - Hays*
Lansing "A-B": *Brian Fairbank; Tester*
3094-3156
1st Op: Tool Slid 10'; Weak Bldg 6 ½"
No Blowback
2nd Op: Weak Bldg 6 ½"
No Blowback

Rec:
30' Watery Mud (45%W, 55%M)
120' MW (95%W, 5%M)
150' Total Fluid

IFP: 42-71#/45"
ISIP: 589#/45"
FFP: 76-105#/60"
FSIP: 579#/60"
Chlor: 32,000 ppm

Tool continued to slide during test…1' on 1st open; 1' on initial shut-in; 8" on 2nd open; 6" on final shut-in…both opens show hydrostatic and mud pushed ahead of tool; Paul Simpson feels valid test…tore two packers…will add tank mud after DST #2 and circulate longer at test points.

Lansing "C": *Circulate 3173'* **DST #3**
Limestone, white; dolomitic; oolitic; pelletoid; pieces oolicastic porosity; good amount golden brown spotty to subsaturated stain; slight show of free oil – pinpoint beads on break; slight odor. *4' drilling break*

DST #3: *Trilobite Testing Co., Inc. - Hays*
Lansing "C": *Brian Fairbank; Tester*
3156-3173
1st Op: Weak Bldg 6"
No Blowback
2nd Op: No Blow first 6 minutes, then built 1"
No Blowback

Rec:
1' Free Oil
74' MW (95%W, 5%M)
75' Total Fluid

IFP: 15-46#/45"
ISIP: 577#/45"
FFP: 49-63#/30"
FSIP: 530#/30"
Chlor: 48,000 ppm

7am 5-28-12: Drilling at 3190'

Lansing "F": *Circulate 3212'* **DST #4**
Limestone, cream; suboolitic; some pelletoid; poor interparticle porosity; several pieces golden brown spotty to subsaturated stain in dry sample; no show of free oil, no odor. *2' drilling break*

DST #4: *Trilobite Testing Co., Inc. - Hays*
Lansing "E-F": *Brian Fairbank; Tester*
3182-3212
1st Op: No Blow
No Blowback
2nd Op: No Blow; Flush Tool: No Help
No Blowback
Rec:
1' Mud

IFP: 13-15#/30"
ISIP: 49#/30"
FFP: 16-17#/30"
FSIP: 53#/30"

Pipe Strap at 3212': 5.53 Board Short

No show in "G" zone… barren oolicastic porosity…

Lansing "H": **DST #5**
Limestone, cream-white; slightly fossiliferous; subchalky; poor interparticle porosity;2-3 pieces light brown saturated stain; slight show of free oil; slight odor.

Lansing "I": *Circulate 3300'* **DST #5**
Limestone, cream; oolitic; some pelletoid; poor interparticle porosity; light brown subsaturated stain; very slight show of free oil – one piece with slight show of gas; slight odor.

Lansing "J": *Circulate 3322'* **DST #5**
Limestone, cream; few pieces slightly oolicastic; overall dense; poor visible porosity; no show of free oil; no odor.

7am 5-29-12: Tripping out for DST #5 at 3322'

DST #5: *Trilobite Testing Co., Inc. - Hays*
Lansing "H-J": *Paul Simpson; Tester*
3264-3322
1st Op: Weak Blow; Died 15 minutes
No Blowback
2nd Op: Dead Blow
No Blowback

Rec:
5’ Mud w/oil spots

IFP: 29-31#/20”
ISIP: 296#/30”
FFP: 32-32#/5”
FSIP: 259#/30”

Lansing “K”:
Limestone, cream-white; slightly fossiliferous; subchalky; poor interparticle porosity;2-3 pieces light brown saturated stain; slight show of free oil; slight odor.

Lansing “L”: *Circulate 3372’*
Limestone, cream; oolitic; some pelletoid; poor interparticle porosity; light brown subsaturated stain; very slight show of free oil – one piece with slight show of gas; slight odor.

Arbuckle Dolomite 0’-5’in: (-1461) *Circulate 3377’* **DST #6**
20 minute circulation sample: Dolomite; fine crystalline; poor to scattered fair intercrystalline porosity; scattered pieces light brown saturated stain; slight show of free oil – some gas on break; fair pungent odor.
40 minute circulation sample: Dolomite; fine to medium crystalline; poor to fair intercrystalline porosity; scattered vugular porosity; abundant pieces golden brown saturated stain; slight to fair show of free oil – some gas on break; good gassy pungent odor.
60 minute circulation sample: Dolomite; fine to medium crystalline; poor to fair intercrystalline porosity; scattered vugular porosity; abundant pieces golden brown very rich saturated stain; slight to fair show of free oil – some gas on break; good gassy pungent odor.

DST #6: *Trilobite Testing Co., Inc. - Hays*
Arbuckle 0-5’ in (-1461) *Brian Fairbank; Tester*
3365-3377
1st Op: BOB 30”
No Blowback
2nd Op: Weak Bldg 7 ½”
No Blowback

Rec:
60’ GIP
85’ Free Oil (95%O, 5%M) – Gravity 36
30’ HOCM (40%O, 60%M)
115’ Total Fluid

IFP: 16-38#/30”
ISIP: 961#/30”
FFP: 40-56#/30”

FSIP: 844#/30”

Arbuckle Dolomite 5’-13’in: (-1469) *Circulate 3385’* **DST #7**
40 minute circulation sample: Dolomite; medium crystalline; some vugular porosity; poor to fair intercrystalline porosity; very friable; abundant pieces light golden brown subsaturated to saturated stain; fair show of free oil – some gas on break; fair to good gassy pungent odor. *Drilled 1-1-1-2-2-2-1-2.*
60 minute circulation sample: Dolomite; fine to medium crystalline; some pieces appear very dense; poor to fair intercrystalline porosity; many pieces friable; fair amount pieces light golden brown subsaturated to saturated stain; a few pieces subrhombic dolomite with barren or weakened stain; slight to fair show of free oil – some gas on break; fair gassy pungent odor. *The last two feet drilled may be water bearing…will run drill stem test to verify this…*

7am 5-30-12: Tripping out for DST #7 at 3385’

DST #7: *Trilobite Testing Co., Inc. - Hays*
Arbuckle 5-13’ in (-1469) *Brian Fairbank; Tester*
3377-3385
1st Op: BOB 11”
Surface Blowback; Died 7 minutes
2nd Op: Weak Bldg 5”
No Blowback

Rec:
60’ GIP
235’ Free Oil – Gravity 37
15’ WOCM (37%O, 3%W, 60%M)
250’ Total Fluid

IFP: 20-67#/45”
ISIP: 920#/30”
FFP: 70-103#/45”
FSIP: 774#/30”
Chlor: Too Small to Measure

Zones per Microlog:
Plattsmouth 50’ zn
Lansing “B”
Lansing “F”
Lansing “I”
Arbuckle

5 ½” production casing will be set Thursday morning…

FINAL REPORT

Conservation Division
Finney State Office Building
130 S. Market, Rm. 2078
Wichita, KS 67202-3802

Kansas
Corporation Commission

Phone: 316-337-6200
Fax: 316-337-6211
http://kcc.ks.gov/

Mark Sievers, Chairman
Thomas E. Wright, Commissioner

Sam Brownback, Governor

September 05, 2012

LEROY HOLT
Russell Oil, Inc.
PO BOX 8050
EDMOND, OK 73083

Re: ACO1
API 15-167-23806-00-00
Betty Radke A 1R
SW/4 Sec.31-15S-14W
Russell 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,
LEROY HOLT

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025 Home Office P.O. Box 32 Russell, KS 67665 No. 967

Cell 785-324-1041

Sec.	Twp.	Range	County	State	On Location	Finish
			Russell	Kansas		11:30am

Date 5-23-12

Lease Betty Radke Well No. A-1R Location Batta Rd S to Co. Line

Contractor Southwind Drilling Rig 2

Type Job Surface

Hole Size 12¼ T.D.

Csg. 8⅝ Depth

Tbg. Size Depth

Tool Depth

Cement Left in Csg. Shoe Joint

Meas Line Displace

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 Russell Oil

Street

City State

The above was done to satisfaction and supervision of owner agent or contractor.

Cement Amount Ordered 370 Common 3%CC 2%Gel

EQUIPMENT

Pumptrk 5 No. Cementer Helper Steve

Bulktrk 13 No. Driver Driver Brad

Bulktrk No. Driver Driver Levy

JOB SERVICES & REMARKS

Remarks: Cement did Circulate

Rat Hole

Mouse Hole

Centralizers

Baskets

D/V or Port Collar

Common	370
Poz. Mix	
Gel.	7
Calcium	14
Hulls	
Salt	
Flowseal	
Kol-Seal	
Mud CLR 48	
CFL-117 or CD110 CAF 38	
Sand	
Handling	391
Mileage	

FLOAT EQUIPMENT

Guide Shoe	
Centralizer	
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	
Pumptrk Charge	Baffle Plate 8⅝ Rubber Plug Long Surface
Mileage	16
Tax	
Discount	
Total Charge	

X Signature William Sanders

BASIC energy services, L.P.

TREATMENT REPORT

Customer Russell Oil	Lease No.	Date 5-31-12
Lease Betty Radke A	Well # 1-R	

Field Order # 10337	Station Pratt	Casing 5½ 15.5	Depth 3428	County Russell	State KS
Type Job CNW-5½ L.S.			Formation	Legal Description 31-15-14	

PIPE DATA		PERFORATING DATA		FLUID USED	TREATMENT RESUME		
Casing Size 5½ 15.5#	Tubing Size	Shots/Ft	145 sks	Acid AA2 (com)	RATE	PRESS	ISIP
Depth 3428	Depth	From	To 30 sks	Pre Pad [illegible]	Max		5 Min.
Volume 81.58	Volume	From	To	Pad	Min		10 Min.
Max Press 1500	Max Press	From	To	Frac	Avg		15 Min.
Well Connection [illegible]	Annulus Vol.	From	To		HHP Used		Annulus Pressure
Plug Depth 3407	Packer Depth	From	To	Flush 81	Gas Volume		Total Load

Customer Representative	Station Manager Dave Scott	Treater Steve [illegible]

Service Units	27283	27463	70959	19918						
Driver Names	[illegible]	Mitchell	Phil							

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
7:00 AM					On location Safety Meeting
					Run 81 jts 5½ 15.5# Csg
					Centralizers 1-3-6-8-10-12-14-16-18-62-68-74-80
					Casing on Bottom Break Circ w/Rig
10:50	300		24	5	24 bbl Super Flush II
10:5?	300		5	5	5 bbl H2O
10:55	250		35	5	Mix 145 sks @ 15.3#/Gal
					Shut Down
					Clean Pump & Lines
					Release Plug
11:15	0		0	6	Start H2O Displacement
11:25	350		60 ~~350~~	5	Lift Pressure
11:28	500		71 ~~500~~	4	Slow Rate
11:30 AM	1500		81 ~~1500~~	4	Plug Down - Held
					Mix 30 sks 60/40 poz RH