KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1100280

Form ACO-1
June 2009
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: NA

Designate Type of Completion:

- [x] New Well
- [ ] Re-Entry
- [ ] Workover

- [ ] Oil
- [ ] WSW
- [ ] SWD
- [ ] SIOW
- [ ] Gas
- [x] 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
- [ ] Conv. to GSW
- [ ] Plug Back: Plug Back Total Depth
- [ ] Commingled Permit #:
- [ ] Dual Completion Permit #:
- [ ] SWD Permit #:
- [ ] ENHR Permit #:
- [ ] GSW Permit #:

6/13/2012	6/21/2012	6/22/2012
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-195-22786-00-00
Spot Description:
S2 - NW - NW - NW Sec. 10 Twp. 11 S. R. 23 [ ] East [x] West
570 Feet from [x] North / [ ] South Line of Section
330 Feet from [ ] East / [x] West Line of Section
Footages Calculated from Nearest Outside Section Corner:
[ ] NE [x] NW [ ] SE [ ] SW
County: Trego
Lease Name: Bollig N Well #: 1-10
Field Name: WAKEENEY
Producing Formation: NA
Elevation: Ground: 2269 Kelly Bushing: 2274
Total Depth: 4020 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 263 Feet
Multiple Stage Cementing Collar Used? [ ] Yes [x] 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: 37000 ppm Fluid volume: 800 bbls
Dewatering method used: Hauled to Disposal

Location of fluid disposal if hauled offsite:

Operator Name: RUSSELL OIL INC
Lease Name: BOLLIG D License #: 3293
Quarter SE Sec. 25 Twp. 10 S. R. 23 [ ] East [x] West
County: GRAHAM Permit #: 15-065-23548-00-00

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

- [ ] **Letter of Confidentiality Received**
  Date:
- [ ] **Confidential Release Date:**
- [x] **Wireline Log Received**
- [x] **Geologist Report Received**
- [ ] **UIC Distribution**

ALT [x] **I** [ ] **II** [ ] **III** **Approved by:** Deanna Garrison **Date:** 11/13/2012

Side Two

1100280

Operator Name: Russell Oil, Inc. Lease Name: Bollig N Well #: 1-10

Sec. 10 Twp. 11 S. R. 23 ☐ East ☑ West County: Trego

INSTRUCTIONS: Show important tops and base 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. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

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

Electric Log Submitted Electronically ☑ Yes ☐ No
(If no, Submit Copy)

List All E. Logs Run:
Attached

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

Name	Top	Datum
Attached	Attached	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	8.58	23	263	COMMON	160	3%CC:2%GEL

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:
☐ Perforate
☐ Protect Casing
☐ Plug Back TD
☐ Plug Off Zone

Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
-			
-			

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. *(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	Bollig N 1-10
Doc ID	1100280

All Electric Logs Run

COMPUTER PROCESS INTERPRETATION
DUAL INDUCTION
DUAL COMPENSATED POROSITY
MICRORESISTIVITY

Form	ACO1 - Well Completion
Operator	Russell Oil, Inc.
Well Name	Bollig N 1-10
Doc ID	1100280

Tops

Name	Top	Datum
ANHYDRITE	1753	+524
BASE ANHYDRITE	1795	+482
TOPEKA	3268	-991
HEEBNER	3490	-1213
TORONTO	3520	-1243
LANSING	3530	-1253
MUNCIE CREEK	3654	-1377
J ZONE	3708	-1431
BASE KC	3759	-1482
ARBUCKLE	3691	-1684
RTD	4020	-1743
LTD	4022	-1745

Federal Tax I.D.# 20-2886107

one 785-483-2025
l 785-324-1041

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

No. 683

	Sec.	Twp.	Range	County	State	On Location	Finish
6-13-12	10	11	23	Trego	KS		11:45pm

se Bolling A2 Well No. 1-10 Location Wakeeney 4W Into

ractor Southwind #6 Owner

e Job Surface 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.

Size 12¼ T.D. 265
8⅝ Depth 263

Size Depth Charge To Russell Oil

Depth Street

City State

ent Left in Csg. 15' Shoe Joint The above was done to satisfaction and supervision of owner agent or contractor.

s Line Displace 1.53 3/4 BBL Cement Amount Ordered 160sx 3%cc 2%gel

EQUIPMENT

ptrk 9 No. Cementer Chris
Helper

rk No. Driver Matt
Driver

rk 14 No. Driver Lew
Driver

JOB SERVICES & REMARKS

arks:

Hole

se Hole

ralizers

ets

or Port Collar

25/8 on bottom. Est Circulation
x 160sk Displace
Cement Circulated

Common	
Poz. Mix	
Gel.	
Calcium	
Hulls	
Salt	
Flowseal	
Kol-Seal	
Mud CLR 48	
CFL-117 or CD110 CAF 38	
Sand	
Handling	
Mileage	
FLOAT EQUIPMENT	
Guide Shoe	
Centralizer	
Baskets 8⅝ Swage	
AFU Inserts	
Float Shoe	
Latch Down	
Pumptrk Charge	
Mileage	
Tax	
Discount	
Total Charge	

ature

Federal Tax I.D.# 20-2886107

one 785-483-2025 Home Office P.O. Box 32 Russell, KS 67665 No. 879

ll 785-324-1041

Date	Sec.	Twp.	Range	County	State	On Location	Finish
6-22-12	10	11	23	TREGO	KANSAS		8:30 AM

Lease	Well No.	Location
BOLLIG N	1-10	WAKEENEY - 6 N - E - INTO

Contractor SOUTHWIND #6		Owner RUSSELL OIL.
Type Job R. PLUG		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.
Hole Size 7 7/8	T.D. 4020'	
Csg. 4 1/2"	Depth	Charge To RUSSELL OIL.
Csg. Size	Depth	Street P.O. Box 8050
Tool	Depth	City EDMOND State OK, 73083
Cement Left in Csg.	Shoe Joint	The above was done to satisfaction and supervision of owner agent or contractor.
Press Max	Displace	Cement Amount Ordered 230 60/40 - 4% GEL 1/4 FLO

EQUIPMENT

Pumptrk #15	No.	Cementer Helper	NICK
Bulktrk #10	No.	Driver Driver	LEVY
Bulktrk P/U	No.	Driver Driver	CISCO

JOB SERVICES & REMARKS

Remarks:	
Rat Hole	30 SKS
Mouse Hole	N/A
Centralizers	
Baskets	
D.V. or Port Collar	
ST @ 3936	25 SKS
ND @ 1767	25 SKS
RD @ 961	100 SKS
TH @ 310	40 SKS
TH @ 40	10 SKS
AT HOLE	30 SKS
MOUSE HOLE - NO HOLE	

THANK YOU!

Signature

Common	138
Poz. Mix	92
Gel.	8
Calcium	
Hulls	
Salt	
Flowseal	50#
Kol-Seal	
Mud CLR 48	
CFL-117 or CD110 CAF 38	
Sand	
Handling	
Mileage	

FLOAT EQUIPMENT

Guide Shoe	
Centralizer	
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	
	1 - 8 5/8 WOODEN PLUG
Pumptrk Charge	
Mileage	46
Tax	
Discount	
Total Charge	

KITT NOAH
PETROLEUM GEOLOGIST

RUSSELL OIL, INCORPORATED Exploration & Production

GEOLOGIST'S REPORT
DRILLING TIME AND SAMPLE LOG

OPERATOR: Russell Oil, Inc.
LEASE: Bollig N   WELL NO: #1-10
API: #15-195-22,786 FIELD: WaKeeney
LOCATION: 570'FN & 330'FW
SEC: 10 TWP: 11S RNG: 23W
COUNTY: Trego STATE: Kansas

CONTRACTOR: Southwind Rig #6
COMM: 6-13-2012 COMPL: 6-22-2012
RTD: 4020 LOG TD: 4022
SAMPLES SAVED FROM: 3200 TO: TD
DRILLING TIME SAVED FROM: 3200 TO: TD
SAMPLES EXAMINED FROM: 3200 TO: TD
GEOLOGICAL SUPERVISION FROM: 3200 TO: TD
MUD UP: 3200 MUD TYPE: chemical

ELEVATIONS
KB: 2277
DF:
GL: 2269
Measurements Are All From: KB

CASING RECORD
Surface Casing: 8 5/8" set at 263' w/160 sx.
Production Casing: D&A

Formation	Log Top	Log Datum	Sample Top	Sample Datum	Structural Comp A	Structural Comp B
Anhydrite	1756	(+521)	1753	(+524)	-9	flat
B/Anhydrite	1798	(+479)	1795	(+482)	-8	+1
Topeka	3268	(-991)	3263	(-986)	-9	+1
Heebner	3490	(-1213)	3483	(-1206)	-10	+2
Toronto	3520	(-1243)	3513	(-1236)	-9	+4
Lansing	3530	(-1253)	3522	(-1245)	-4	+10
Muncie Creek	3654	(-1377)	3647	(-1370)	-1	+10
B/KC	3754	(-1477)	3753	(-1476)	-9	+6
Marmaton	3856	(-1579)	3853	(-1576)	-5	NA
Arbuckle	3961	(-1684)	3959	(-1682)	-6	NA
RTD			4020	(-1743)		
LTD	4022	(-1745)				

SURVEYS
Dual Induction
Dual Comp Porosity
Microlog

#1-10
10

REFERENCE WELLS FOR STRUCTURAL COMPARISON:
A: Shields Denison #2 NW SW NE Sec 10-11S-23W Trego Co., Ks
B: Shields McCall #1 SW NE NW Sec 10-11S-23W Trego Co., Ks

LEGEND: Limestone, Ool Lime, Dolomite, Sandstone, Shale, Carb Shale, Chert, Anhydrite

Depth	Sample Descriptions	Remarks
1756	Anhydrite	EL 1756 (+521)
1798	B/Anhydrite	EL 1798 (+479)
3200	LS,crm fn xln sli fossil pr interpart poro NSNO	
	Sh, gry, green, maroon	
	LS,crm-gry fn xln fossil pr interpart poro dense NSNO	
	LS,crm fn xln sli fossil pr visible poro NSNO	
	Sh, dk gry, green, red	
	LS,crm-gry fn xln sli fossil pr interpart poro dense NSNO	
	Sh, dk gry	
3268	Topeka	EL 3268 (-991)
	LS,crm-gry fn xln pr interpart poro blocky NSNO	
	LS,crm-tan fn xln fossil pr interpart poro NSNO	
	LS,AA	
	Sh, dk gry & red	
	LS,crm-gry fn xln fossil pr interpart poro blocky NSNO	
3300	Sh, lt. gry	
	LS,crm-gry fn xln fossil pr interpart poro subchalky NSNO	
	LS,crm-tan fn xln sli fossil pr interpart poro blocky NSNO	
	LS,crm-wht fn xln fossil pr interpart poro NSNO	
	LS,AA	
	LS,crm-tan fn xln fossil pr interpart poro dense NSNO	
	Sh, blk carbonaceous	
	LS,crm-tan-brwn fn xln fossil subchalky pr interpart poro 1-2 pieces v. lt brwn spty stn NSFO; no odor	
	LS,crm fn xln fossil sli oolitic dolomitic pr-fr interpart poro barren NSFO; no odor	
3400	LS,crm fn xln fossil oolitic pr-fr interpart poro dense NSNO	
	Sh, gry, green, maroon	
	LS,AA	
	Sh, blk carbonaceous	
	Sh, lt gry, green, maroon	
	LS,crm fn xln sli ool pr interpart poro subchalky dk heavy tarry spty stn; iso heavy tar globs on break; no odor	
	LS,tan fn xln v. blocky dense sli fossil pr visible poro predom barren; 1-2 pieces heavy tarry spty stn NSFO; no odor sc pieces wht & tan chert	
	LS,wht fn xln subool sli fossil pr interpart poro 1-2 pieces dk heavy pp bds FO on break; no odor sc pieces wht chert	
	LS, crm fn xln pr interpart poro NSNO sm wht chalk; sc pieces white chert	
3490	Heebner; Sh, blk carbonaceous	EL 3490 (-1213)
	Sh, gry, green, maroon	
3500	Sh, AA	
3520	Toronto; LS,crm fn xln sli fossil pr interpart poro blocky NSNO	EL 3520 (-1243)
3530	Lansing	EL 3530 (-1253)
	LS,crm fn xln fossil & ool pr interpart poro appears chalky sm pyritic lt. brwn subsat stn-chalky & mealy in dry sample; VSSFO; sli odor	
	LS,crm-wht fn xln sli fossil pr visible poro blocky NSNO	
	Sh, lt gry & green	
	LS,crm-wht fn xln ool pr interpart poro overall tight; few pieces lt. brwn spty stn; VSSFO; sli odor	
	Sh, lt gry & maroon	
	LS,crm fn xln sli fossil predom dense 1-2 pieces v. lt. brwn spty edge stn; NSFO; no odor	DST #1: 1st Op: BOB 13" Weak Blowback; Died 21 minutes; 2nd Op: BOB 19" No Blowback. Rec: 248' MW (80%W, 20%M); 124' WM w/oil spots (25%W, 75%M); 18' VSOCWM (2%O, 8%W, 90%M); 390' Total Fluid. IFP: 34-97#/30"; ISIP: 760#/30"; FFP: 111-195#/45"; FSIP: 750#/45"; Chlor: 44,000 ppm
	LS,AA	
	Sh, blk carbonaceous; gry	
3600	LS,crm fn xln fossil dense pr visible poro 1-2 pieces frac vug poro; lt. brwn spty stn around vugs; NSFO; no odor	
	Sh, gry & green	
	LS,crm fn xln dolomitic pr-fr interpart poro friable; med brwn sat stn; S-FSFO; gas on brk; inc in 40" & 60" circ samples; fr odor	
	LS,crm fn xln dolomitic pr-fr interpart poro lt-med brwn sat stn; FSFO; abun active gas bubbles on brk; sli-fr odor	Pipe Strap at 3618' 2.54 Board Short
	LS,crm fn xln pr visible poro dense NSNO sc pieces wht chert	
3654	Muncie Crk; Sh, blk carbonaceous	EL 3654 (-1377)
	Sh, gry, green, maroon	
	LS,crm fn xln fossil & ool pr fossilcast poro appears chalky 2-3 pieces v. lt. brwn spty stn NSFO; no odor	DST #2: 1st Op: BOB 24" Weak Blowback; 2nd Op: BOB 21" Weak Blowback. Rec: 201' GIP; 5' Gassy Oil - Grav 36; 124' MW w/scum oil (90%W, 10%M); 107' WM w/scum oil (10%W, 90%M); 236' Total Fluid. IFP: 26-85#/30"; ISIP: 827#/30"; FFP: 76-130#/45"; FSIP: 819#/45"; Chlor: 50,000 ppm
	Sh, gry & green	
	LS,crm fn xln dolomitic pr-fr pinpoint poro lt. brwn sat stn; S-FSFO; fr odor	
3700	Sh, gry, green, maroon	
	LS,crm fn xln sli fossil dense angular pr interpart poro few pieces dk brwn edge stn in angular pieces; NSFO; no odor	
	Sh, v. dk gry	
	LS,crm-wht fn xln sli fossil mstly dense and chalky; pr interpart poro few pieces dk blk gilsonitic dead edge stn; NSFO; no odor	
	Sh, blk carbonaceous; dk gry, maroon	
	LS,crm fn xln fossil & ool pr interpart poro sm pieces dk brwn spty stn; sm heavy oil on brk; sli gassy odor	
3754	B/KC	EL 3754 (-1477)
	Sh, gry, green, maroon, purple	
	LS,crm-gry fn xln sli fossil pr interpart poro NSNO	DST #3: 1st Op: Weak Sfc; Died 28" No Blowback; 2nd Op: No Blow; Flush; No Help No Blowback. Rec: 1' Mud. IFP: 29-27#/30"; ISIP: 29#/30"; FFP: 25-22#/30"; FSIP: 23#/30"
	LS,crm-wht fn xln sli fossil pr visible poro NSNO	
	Sh, gry, green, maroon	
3800	LS,wht-gry fn xln pr visible poro few pieces poss sdy NSNO	
	Sh, gry & maroon	DST #4: 1st Op: Weak Sfc; Died 3" No Blowback; 2nd Op: No Blow; Flush; No Help No Blowback. Rec: 1' Mud. IFP: 26-24#/30"; ISIP: 24#/30"; FFP: 27-27#/30"; FSIP: 28#/30"
	LS,wht fn xln pr visible poro dense NSNO	
	Sh, dk gry, red	
	LS,wht-pink fn xln angular few pieces fossil pr-fr interpart poro 1-2 pieces med brwn sat stn SSFO; no odor	
	Sh, dk gry, red	
3856	Marmaton	EL 3856 (-1579)
	LS,wht fn xln dense angular sm sli sdy rare pieces poss lt brwn edge stn NSFO; no odor abun pieces orange chert	
	LS,wht fn xln pr interpart poro sm pieces med brwn spty stn VSSFO; no odor abun pieces wht,orange, and tan chert	
	LS,crm-wht fn xln pr interpart poro NSNO abun pieces white and clear chert	
	LS,tan-crm fn xln pr interpart poro NSNO rare pieces orange and tan chert	
3900	Sh, maroon & gry; silty; sdy	
	Sh, AA	
	LS,tan-crm-pink fn xln pr visible poro NSNO sc pieces wht chert	
	Sh, maroon & gry; silty; w/abun orange and mustard yellow chert	
	Sh, AA	
	Sh, dk gry; sm weathered kelly green; 1-2 pieces poss yellow dolomitic LS	
	Sh, gry & weathered kelly green few SS clusters med grained barren; friable clusters well sorted	
3961	Arbuckle	EL 3961 (-1684)
	Dolo, wht-gry fn xln pr intxln poro NSNO	
	Dolo, crm-tan med xln fr intxln poro subrhombic barren NSNO	
	Dolo, crm-tan fn-med xln pr intxln poro barren NSNO sc wht chert	
	Dolo, wht-pink fn-med xln pr-fr intxln poro barren sm rx w/sdy matrix NSNO	
	Dolo, wht fn-med xln pr-fr intxln poro subrhombic barren NSNO	
4000	Dolo, wht-gry fn-med xln pr-fr intxln poro dense v. tight barren NSNO sc tan chert	
	Dolo, crm-tan fn-med xln pr intxln poro barren NSNO sc pieces tan chert	

KITT E. NOAH LICENSED 229 KANSAS GEOLOGIST

DRILLING TIME IN MINUTES PER FOOT — SAMPLE DESCRIPTIONS — REMARKS

DRILL STEM TEST REPORT

Russell OilnInc

Po Box 8050
Edmond Ok 73083

ATTN: Leroy Holt

10-11s-23w-Trego

Bollig N 1-10

Job Ticket: 47784 **DST#: 1**

Test Start: 2012.06.18 @ 11:21:23

GENERAL INFORMATION:

Formation: **LKC-E-F**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 13:25:53
Time Test Ended: 18:00:23

Test Type: Conventional Bottom Hole (Initial)
Tester: Jeff Brown
Unit No: 44

Interval: 3588.00 ft (KB) To 3618.00 ft (KB) (TVD)
Total Depth: 3618.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

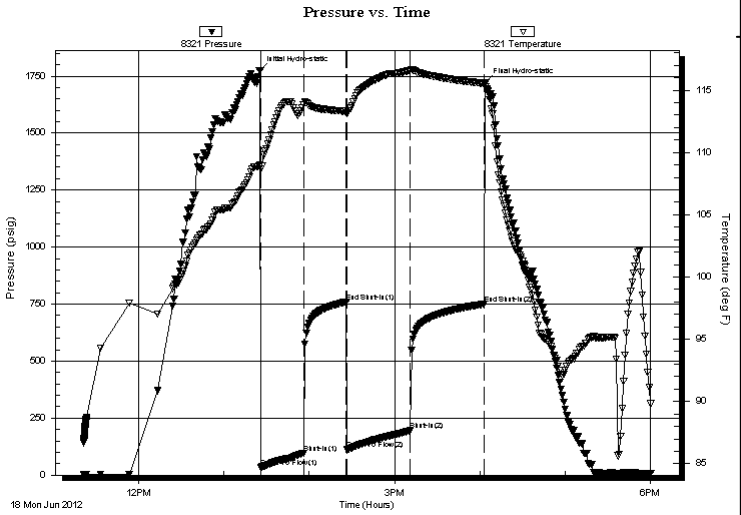
Reference Elevations: 2277.00 ft (KB)
2269.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8321 **Inside**

Press@RunDepth: 194.95 psig @ 3591.00 ft (KB)
Start Date: 2012.06.18 End Date: 2012.06.18
Start Time: 11:21:24 End Time: 18:00:23

Capacity: 8000.00 psig
Last Calib.: 2012.06.18
Time On Btm: 2012.06.18 @ 13:25:23
Time Off Btm: 2012.06.18 @ 16:03:53

TEST COMMENT: IFP-Good blow BOB in 13 min
ISI-Weak suface back died out in 21 min
FFP-Good Blow BOB in 18 3/4 in
FSI-Dead no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1775.47	108.96	Initial Hydro-static
1	33.63	108.64	Open To Flow (1)
31	96.59	113.85	Shut-In(1)
61	759.64	113.31	End Shut-In(1)
61	111.21	113.16	Open To Flow (2)
106	194.95	116.58	Shut-In(2)
158	750.21	115.55	End Shut-In(2)
159	1720.47	115.30	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
248.00	MW 20%M 80%W	3.48
124.00	WM with oil spots 25%W 75%M	1.74
18.00	VSOCWM 2%O 8%W 90%M	0.25

Gas Rates

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

DRILL STEM TEST REPORT

Russell OilnInc

Po Box 8050
Edmond Ok 73083

ATTN: Leroy Holt

10-11s-23w-Trego

Bollig N 1-10

Job Ticket: 47784 **DST#: 1**

Test Start: 2012.06.18 @ 11:21:23

GENERAL INFORMATION:

Formation: **LKC-E-F**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 13:25:53
Time Test Ended: 18:00:23

Test Type: Conventional Bottom Hole (Initial)
Tester: Jeff Brown
Unit No: 44

Interval: 3588.00 ft (KB) To 3618.00 ft (KB) (TVD)
Total Depth: 3618.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

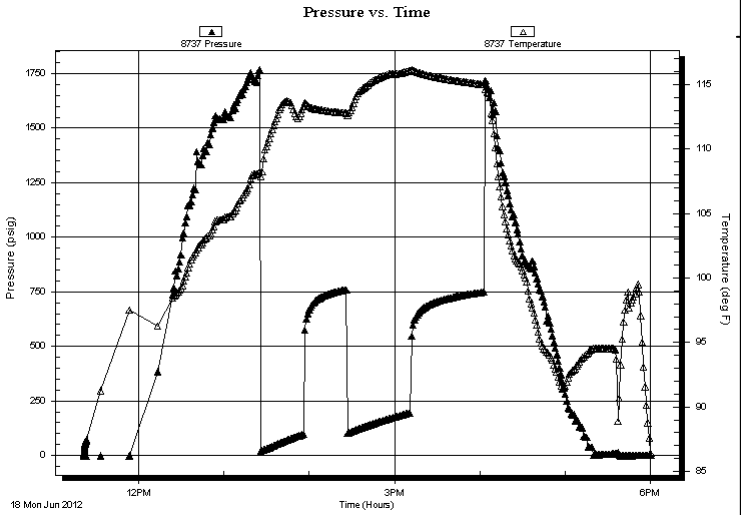
Reference Elevations: 2277.00 ft (KB)
2269.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8737 **Outside**

Press@RunDepth: psig @ 3591.00 ft (KB)
Start Date: 2012.06.18 End Date: 2012.06.18
Start Time: 11:21:30 End Time: 18:00:29

Capacity: 8000.00 psig
Last Calib.: 2012.06.18
Time On Btm:
Time Off Btm:

TEST COMMENT: IFP-Good blow BOB in 13 min
ISI-Weak suface back died out in 21 min
FFP-Good Blow BOB in 18 3/4 in
FSI-Dead no blow back



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
248.00	MW 20%M 80%W	3.48
124.00	WM with oil spots 25%W 75%M	1.74
18.00	VSOCWM 2%O 8%W 90%M	0.25

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Russell OilnInc

Po Box 8050
Edmond Ok 73083

ATTN: Leroy Holt

10-11s-23w-Trego

Bollig N 1-10

Job Ticket: 47784 **DST#: 1**

Test Start: 2012.06.18 @ 11:21:23

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:	53.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.40 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1100.00 ppm				
Filter Cake:	inches				

Recovery Information

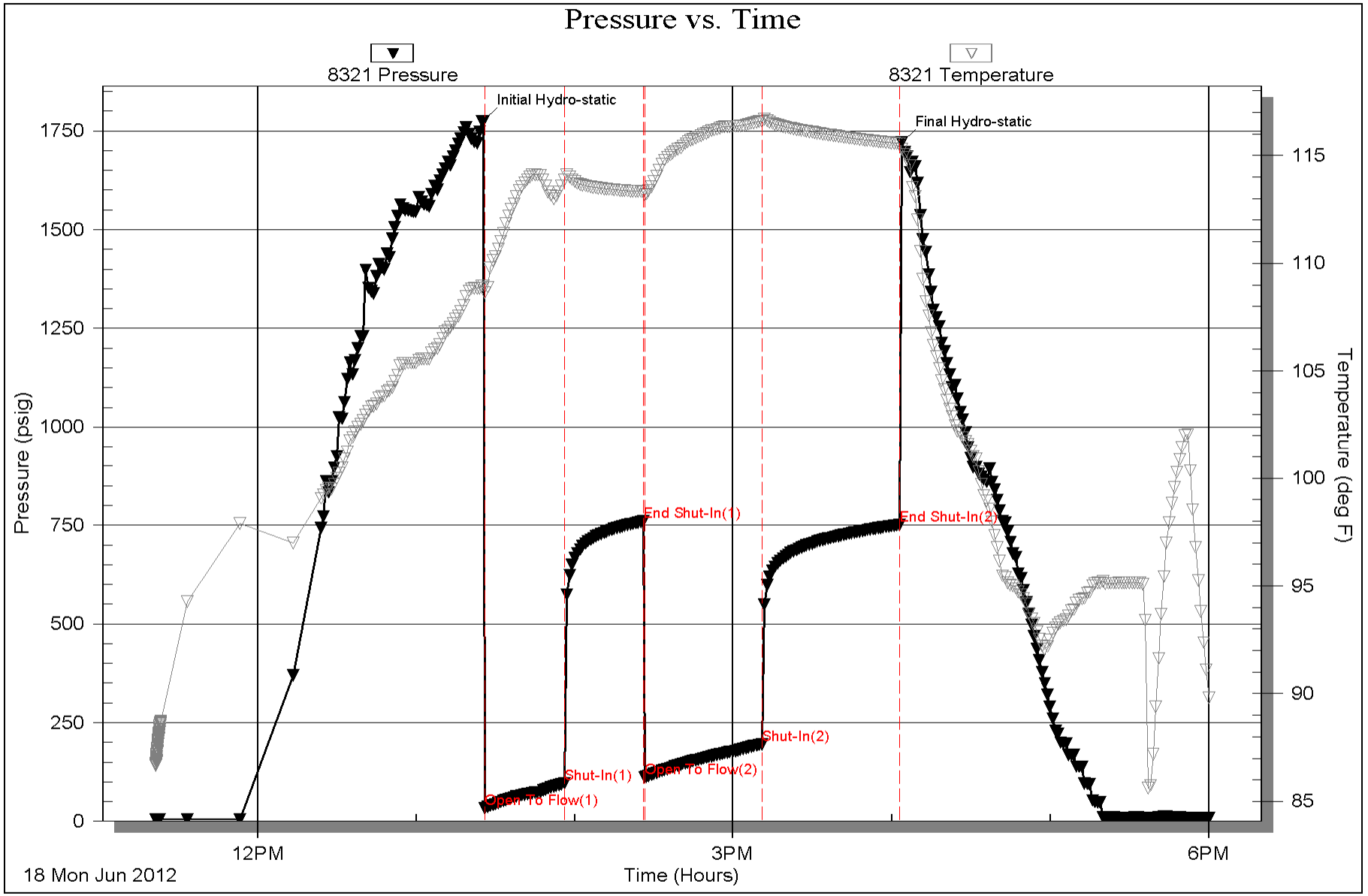
Recovery Table

Length ft	Description	Volume bbl
248.00	MW 20%M 80%W	3.479
124.00	WM w ith oil spots 25%W 75%M	1.739
18.00	VSOCWM 2%O 8%W 90%M	0.252

Total Length: 390.00 ft Total Volume: 5.470 bbl

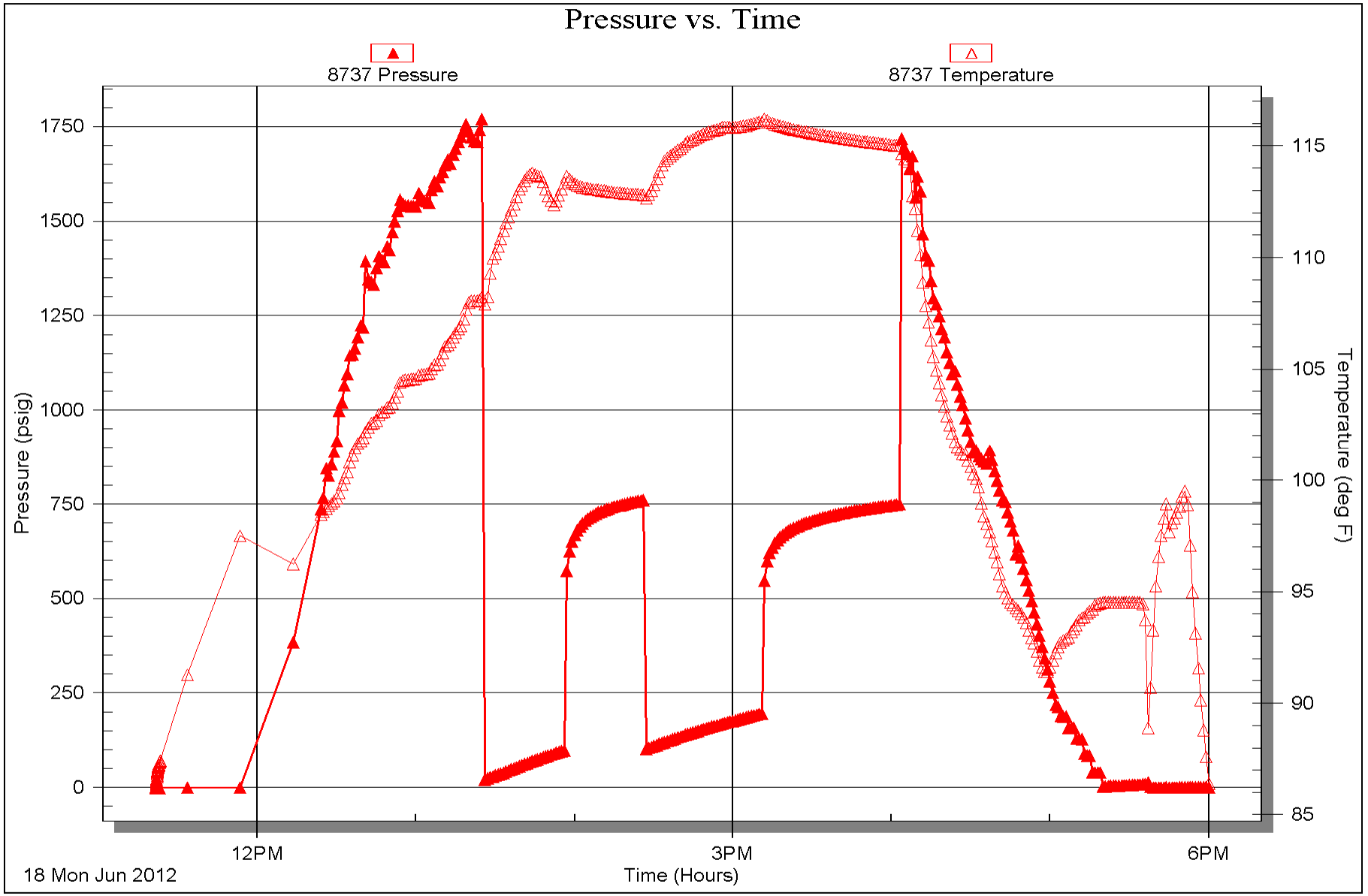
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8321 **Inside** Russell OilnInc Bollig N 1-10 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 47784 Printed: 2012.06.19 @ 05:58:57

Serial #: 8737 **Outside** Russell OilnInc Bollig N 1-10 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 47784 Printed: 2012.06.19 @ 05:58:57

DRILL STEM TEST REPORT

Russell OilnInc

Po Box 8050
Edmond Ok 73083

ATTN: Leroy Holt

10-11s-23w-Trego

Bollig N 1-10

Job Ticket: 47785 **DST#: 2**

Test Start: 2012.06.19 @ 00:38:07

GENERAL INFORMATION:

Formation: **LKC-G**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 02:41:37
Time Test Ended: 07:39:37

Test Type: Conventional Bottom Hole (Reset)
Tester: Jeff Brown
Unit No: 44

Interval: 3618.00 ft (KB) To 3630.00 ft (KB) (TVD)
Total Depth: 3630.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

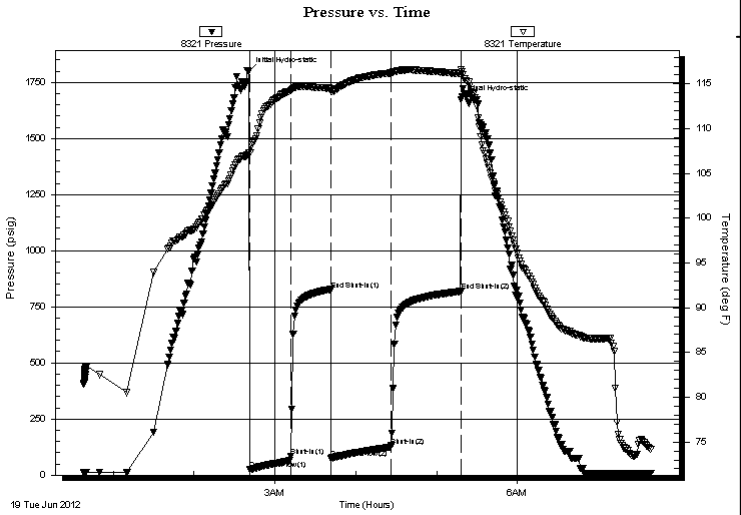
Reference Elevations: 2277.00 ft (KB)
2269.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8321 **Inside**

Press@RunDepth: 130.34 psig @ 3619.00 ft (KB)
Start Date: 2012.06.19 End Date: 2012.06.19
Start Time: 00:38:08 End Time: 07:38:37

Capacity: 8000.00 psig
Last Calib.: 2012.06.19
Time On Btm: 2012.06.19 @ 02:40:37
Time Off Btm: 2012.06.19 @ 05:18:07

TEST COMMENT: IFP-Good Blow BOB in 24 mins
ISI-Weak Surface Blow Back Built to 1/8 in
FFP-Good Blow BOB 21 mins
FSI-Weak Surface Blow Back Built to 1/2 in



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1796.71	107.34	Initial Hydro-static
1	25.54	107.29	Open To Flow (1)
31	85.15	114.24	Shut-In(1)
61	827.03	114.50	End Shut-In(1)
61	75.88	114.21	Open To Flow (2)
106	130.34	116.22	Shut-In(2)
157	818.77	116.16	End Shut-In(2)
158	1672.28	116.63	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
124.00	MW With Oil Spots 10% M 90% W	1.74
107.00	WM With Oil Spots 10% W 90 % M	1.50
5.00	Gassy Oil 5% G 95% Oil	0.07
0.00	201-GIP	0.00

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Russell OilnInc

Po Box 8050
Edmond Ok 73083

ATTN: Leroy Holt

10-11s-23w-Trego

Bollig N 1-10

Job Ticket: 47785 **DST#: 2**

Test Start: 2012.06.19 @ 00:38:07

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:	50000 ppm
Viscosity:	53.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.39 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1100.00 ppm				
Filter Cake:	inches				

Recovery Information

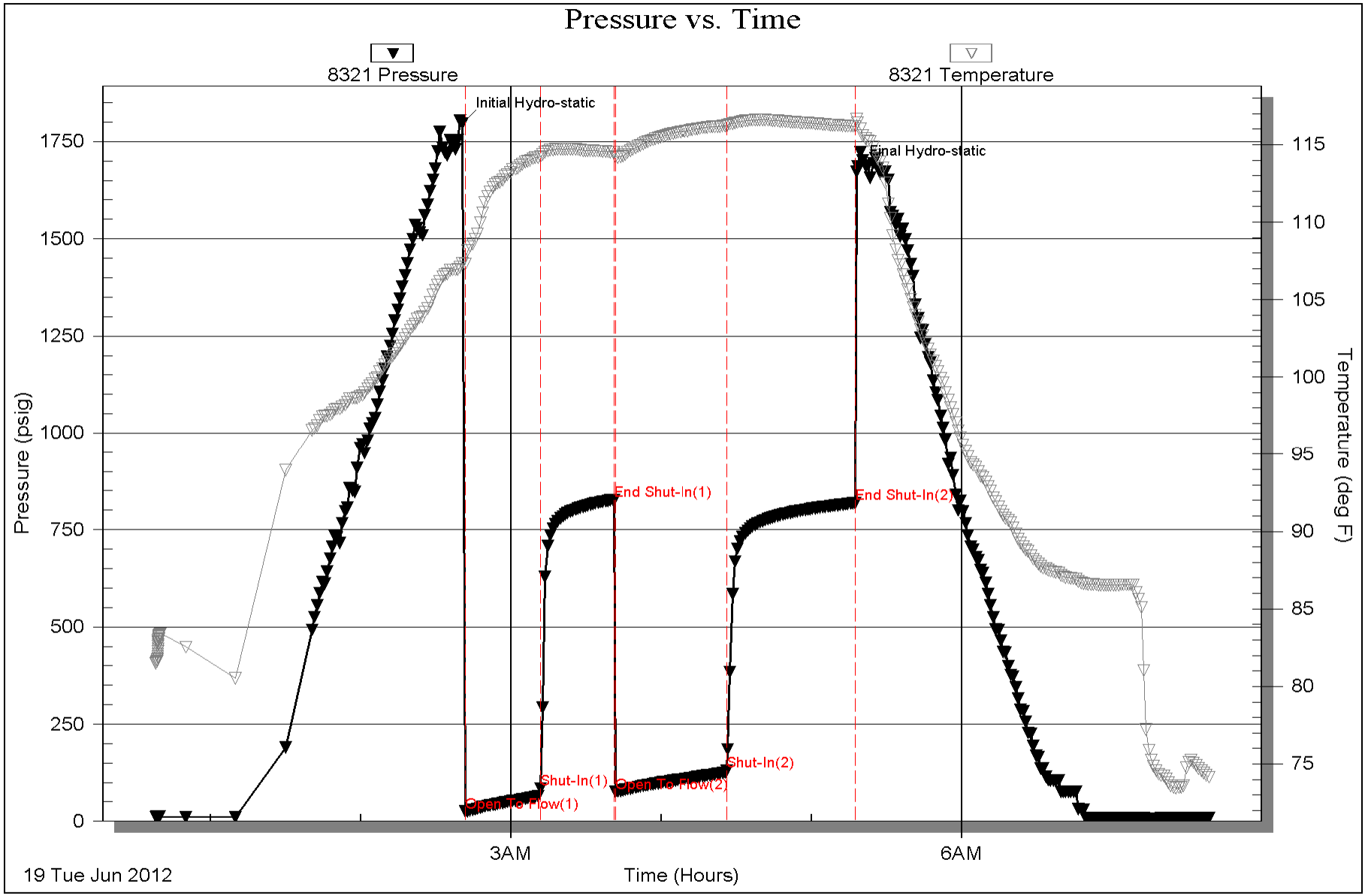
Recovery Table

Length ft	Description	Volume bbl
124.00	MW With Oil Spots 10% M 90% W	1.739
107.00	WM With Oil Spots 10% W 90 % M	1.501
5.00	Gassy Oil 5% G 95% Oil	0.070
0.00	201-GIP	0.000

Total Length: 236.00 ft Total Volume: 3.310 bbl

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

Serial #: 8321 **Inside** Russell OilnInc Bollig N 1-10 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 47785 Printed: 2012.06.19 @ 08:22:05

DRILL STEM TEST REPORT

Russell OilnInc

Po Box 8050
Edmond Ok 73083

ATTN: Leroy Holt

10-11s-23w-Trego

Bollig N 1-10

Job Ticket: 47786 **DST#: 3**

Test Start: 2012.06.19 @ 21:49:34

GENERAL INFORMATION:

Formation: **LCK-I-J**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 23:22:04
Time Test Ended: 03:16:04

Test Type: Conventional Bottom Hole (Reset)
Tester: Jeff Brown
Unit No: 44

Interval: 3675.00 ft (KB) To 3718.00 ft (KB) (TVD)
Total Depth: 3718.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

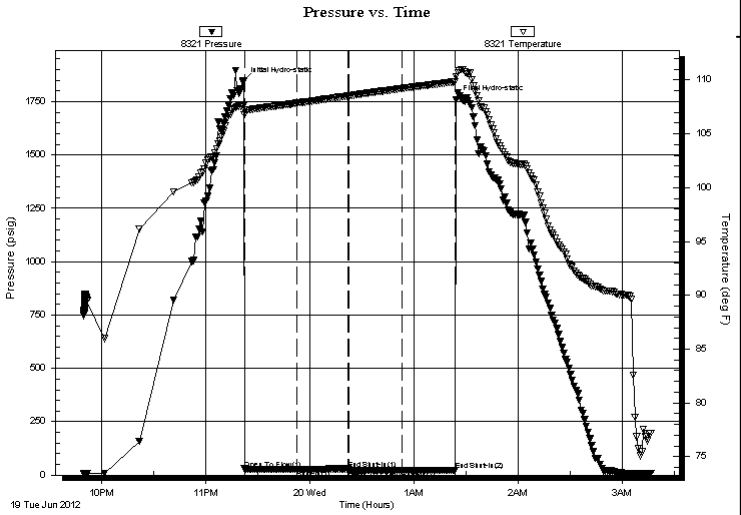
Reference Elevations: 2277.00 ft (KB)
2269.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8321 **Inside**

Press@RunDepth: 22.12 psig @ 3679.00 ft (KB)
Start Date: 2012.06.19 End Date: 2012.06.20
Start Time: 21:49:35 End Time: 03:16:04

Capacity: 8000.00 psig
Last Calib.: 2012.06.20
Time On Btm: 2012.06.19 @ 23:21:34
Time Off Btm: 2012.06.20 @ 01:24:04

TEST COMMENT: IFP-Weak Surface Blow Died Out 28 mins
ISI-Dead No Blow Back
FFP-Dead Flushed Tool -Dead
FSI-Dead no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1846.23	107.60	Initial Hydro-static
1	28.91	106.77	Open To Flow (1)
31	26.67	107.86	Shut-In(1)
60	29.36	108.53	End Shut-In(1)
61	24.99	108.54	Open To Flow (2)
91	22.12	109.22	Shut-In(2)
122	23.20	109.85	End Shut-In(2)
123	1757.56	110.31	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	Mud	0.01

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Russell OilnInc

Po Box 8050
Edmond Ok 73083

ATTN: Leroy Holt

10-11s-23w-Trego

Bollig N 1-10

Job Ticket: 47786 **DST#: 3**

Test Start: 2012.06.19 @ 21:49:34

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:	50.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.80 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1700.00 ppm				
Filter Cake:	inches				

Recovery Information

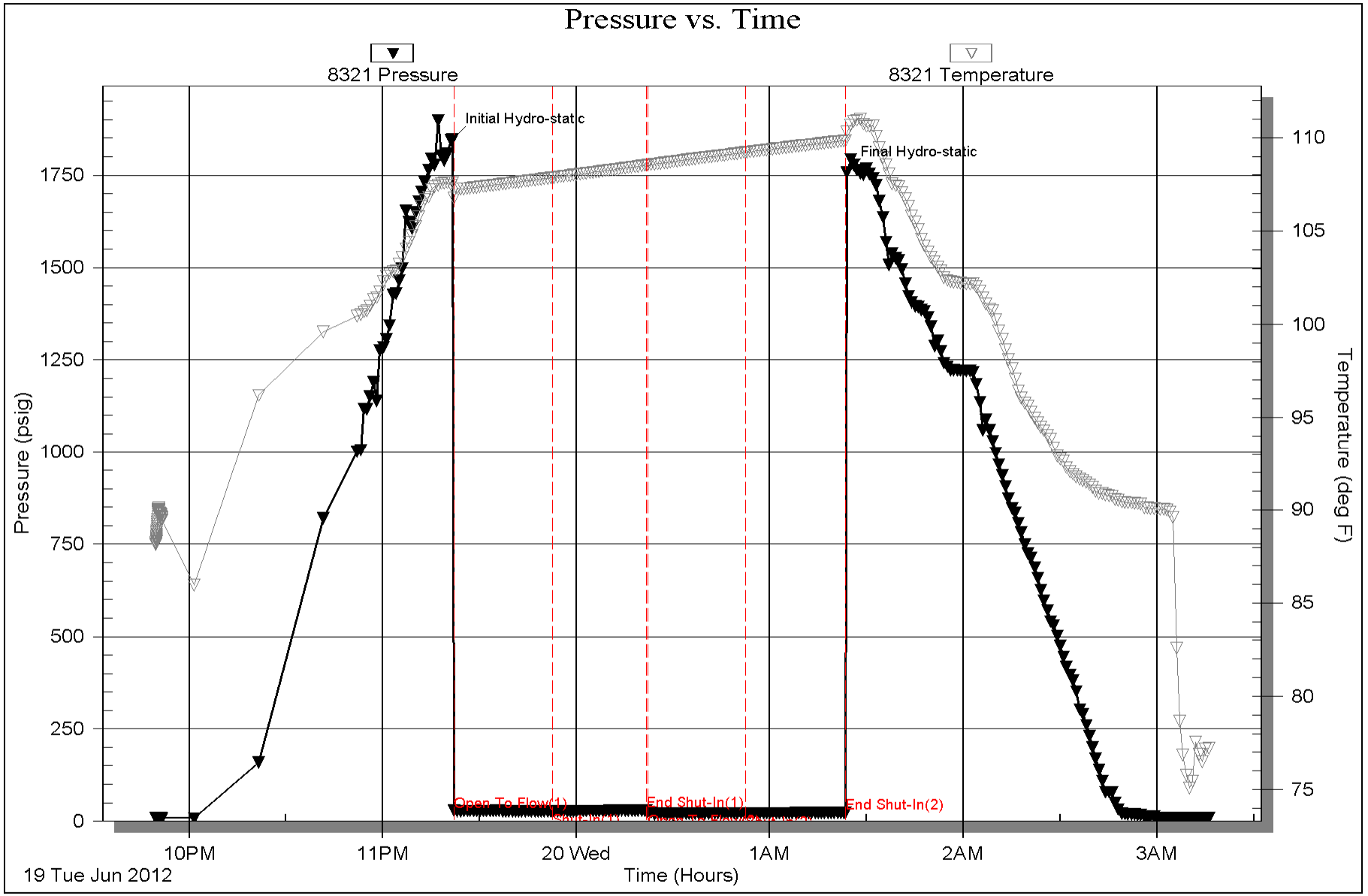
Recovery Table

Length ft	Description	Volume bbl
1.00	Mud	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 #: 8321 **Inside** Russell OilnInc Bollig N 1-10 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 47786 Printed: 2012.06.20 @ 07:50:09

DRILL STEM TEST REPORT

Russell Oil Inc

Po Box 8050
Edmond Ok 73083

ATTN: Leroy Holt

10-11s-23w-Trego

Bollig N 1-10

Job Ticket: 47787 **DST#: 4**

Test Start: 2012.06.20 @ 12:20:41

GENERAL INFORMATION:

Formation: **LKC-K-L**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 14:08:41
Time Test Ended: 17:43:41

Test Type: Conventional Bottom Hole (Reset)
Tester: Jeff Brown/Tate Lang
Unit No: 44

Interval: 3713.00 ft (KB) To 3750.00 ft (KB) (TVD)
Total Depth: 3750.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

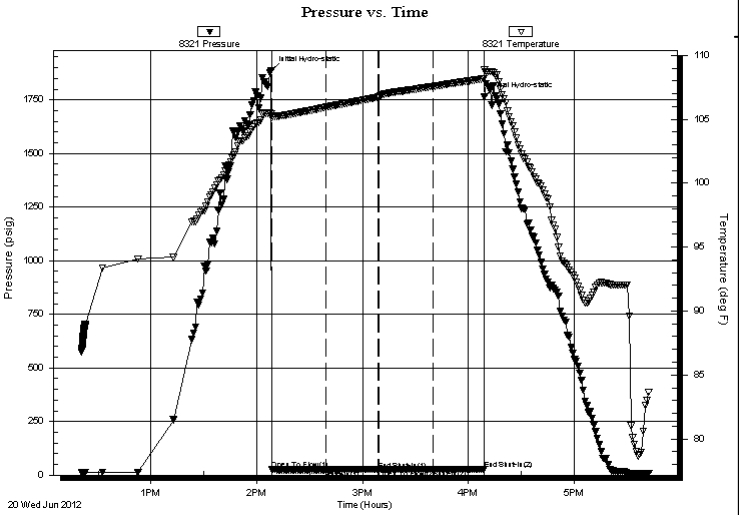
Reference Elevations: 2277.00 ft (KB)
2269.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8321 **Inside**

Press@RunDepth: 26.50 psig @ 3718.00 ft (KB)
Start Date: 2012.06.20 End Date: 2012.06.20
Start Time: 12:20:42 End Time: 17:42:41

Capacity: 8000.00 psig
Last Calib.: 2012.06.20
Time On Btm: 2012.06.20 @ 14:08:11
Time Off Btm: 2012.06.20 @ 16:09:11

TEST COMMENT: IFP-Weak Surface Died Out 3 min
ISI-Dead No Blow Back
FFP-Dead Flush Tool Dead
FSI-Dead No Blow Back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1888.15	105.42	Initial Hydro-static
1	26.06	105.10	Open To Flow (1)
31	24.24	105.93	Shut-In(1)
61	24.22	106.72	End Shut-In(1)
61	27.36	106.73	Open To Flow (2)
92	26.50	107.56	Shut-In(2)
121	28.46	108.17	End Shut-In(2)
121	1764.26	108.90	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	Mud	0.01

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Russell Oil Inc

Po Box 8050
Edmond Ok 73083

ATTN: Leroy Holt

10-11s-23w-Trego

Bollig N 1-10

Job Ticket: 47787 **DST#: 4**

Test Start: 2012.06.20 @ 12:20:41

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	56.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.79 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1700.00 ppm				
Filter Cake:	inches				

Recovery Information

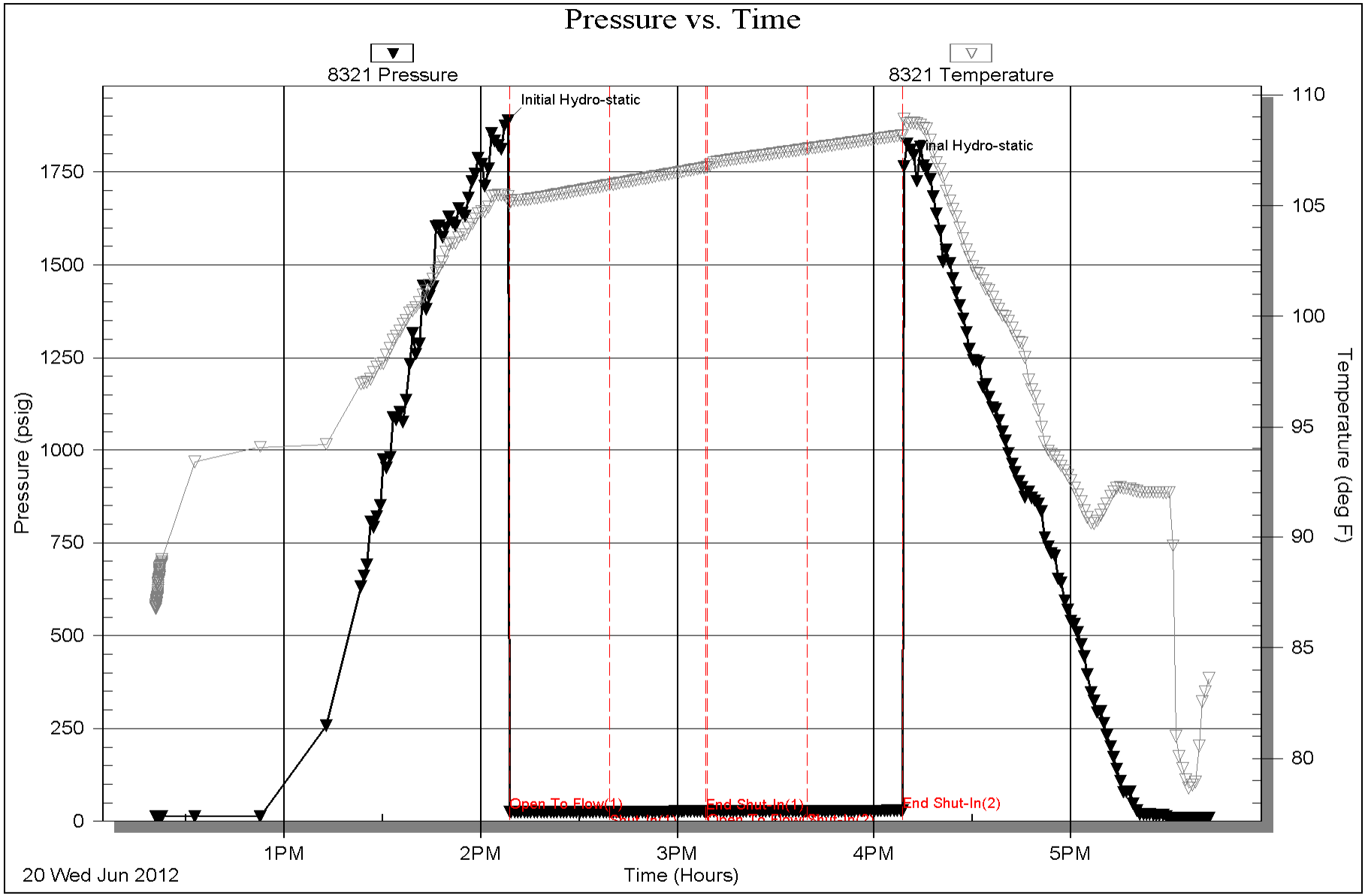
Recovery Table

Length ft	Description	Volume bbl
1.00	Mud	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 #: 8321 **Inside** Russell Oil Inc Bollig N 1-10 DST Test Number: 4



Trilobite Testing, Inc Ref. No: 47787 Printed: 2012.06.21 @ 08:08:56