Confidentiality Requested:
☐ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1092748

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 # 34110
Name: Caerus Kansas LLC
Address 1: 600 17TH ST, STE 1600 N
Address 2:
City: DENVER State: CO Zip: 80202 + ____
Contact Person: Amy Lay
Phone: (303) 565-4600
CONTRACTOR: License # 34541
Name: Ninnescah Drilling LLC
Wellsite Geologist: Jeff Lawler
Purchaser: Plains Marketing

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 #:

7/23/2012	7/31/2012	8/31/2012
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-009-25718-00-00
Spot Description:
NE - NE - SW - SE Sec. 18 Twp. 17 S. R. 13 ☐ East ☑ West
1050 Feet from ☐ North / ☑ South Line of Section
1403 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: Barton
Lease Name: Hoffman Well #: 18-34
Field Name:
Producing Formation: Arbuckle
Elevation: Ground: 1911 Kelly Bushing: 1920
Total Vertical Depth: 3520 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 845 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: 5000 ppm Fluid volume: 300 bbls
Dewatering method used: Hauled to Disposal
Location of fluid disposal if hauled offsite:
Operator Name: Caerus Kansas LLC
Lease Name: Brack Family Farms 1-19 License #: 34110
Quarter W2 Sec. 19 Twp. 17 S. R. 13 ☐ East ☑ West
County: Barton Permit #: D-30,597

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: 10/08/2012
☑ **Confidential Release Date:** 10/08/2014
☑ **Wireline Log Received**
☐ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** NAOMI JAMES **Date:** 10/09/2012

1092748

Operator Name: Caerus Kansas LLC Lease Name: Hoffman Well #: 18-34

Sec. 18 Twp. 17 S. R. 13 ☐ East ☑ West County: Barton

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	Top	Datum
Stone Corral	886	
Heebner Sh	3096	
Lansing	3181	
Base Kansas City	3393	
Arbuckle	3420	

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	24	845	Common	325	3% CC 2% Gel
Production	7.875	5.5	15.5	3507	60/40 Poz	150	10% salt, 5#/sx gilsonite

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
6	3378-3384	750 gal 20% mud acid	3378-3384
6	3338-3340	875 gal 20% mud acid	3338-3340
6	3316-3322	625 gal 20% mud acid	3316-3322

TUBING RECORD: Size: 2-3/8" Set At: 3470 Packer At: Liner Run: ☐ Yes ☑ No

Date of First, Resumed Production, SWD or ENHR. 9/5/2012

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

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	4	0	0		34

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:
3316-3384

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

Form	ACO1 - Well Completion
Operator	Caerus Kansas LLC
Well Name	Hoffman 18-34
Doc ID	1092748

All Electric Logs Run

Dual Induction
Mircrolog
Sonic Log
Compensated Density Neutron

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/

September 05, 2012

Amy Lay
Caerus Kansas LLC
600 17TH ST, STE 1600 N
DENVER, CO 80202

Re: ACO1
API 15-009-25718-00-00
Hoffman 18-34
SE/4 Sec.18-17S-13W
Barton 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,
Amy Lay

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025 Home Office P.O. Box 32 Russell, KS 67665 No. 921

Cell 785-324-1041

Date	Sec.	Twp.	Range	County	State	On Location	Finish
7-24-12	18	17	13	Barton	Ks		8:00 PM

Lease Hoffman Well No. 18-34 Location Russell, Ks - 5 to 150th Rd, 3E to 10 Ave, 1S, W+N to Rig

Contractor Ninnescah Drilling #101

Type Job Surface

Hole Size 12¼" T.D. 850'

Csg. 8 5/8" Depth 848'

Tbg. Size Depth

Tool Depth

Cement Left in Csg. 41' Shoe Joint 41'

Meas Line Displace 51 ¼ BLS

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 Caerus Kansas

Street

City State

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

Cement Amount Ordered 325 sx Common 3% CC 2% Gel ~~¼# Flo~~ seal

EQUIPMENT

Pumptrk 16 No. Cementer Helper Travis

Bulktrk 12 No. Driver Lonnie

~~Bulktrk~~ P.U. No. Driver Rick

JOB SERVICES & REMARKS

Remarks: Cement did Circulate.

Common	325
Poz. Mix	
Gel.	6
Calcium	12
Hulls	
Salt	
Flowseal	
Kol-Seal	
Mud CLR 48	
CFL-117 or CD110 CAF 38	
Sand	
Handling	343
Mileage	

Rat Hole

Mouse Hole

Centralizers

Baskets

D/V or Port Collar

FLOAT EQUIPMENT

Guide Shoe

Centralizer

Baskets

AFU Inserts

Float Shoe

Latch Down

1 - Baffle plate

1 - Rubber plug

Pumptrk Charge Long Surface

Mileage 16

Tax

Discount

Total Charge

X Signature Richard A. Carnagey

BASIC energy services, L.P.

TREATMENT REPORT

Customer: CAERUS Oper. LLC	Lease No.		Date: 7-31-12
Lease: HOFFMAN	Well #: 18-34		
Field Order #: 0.59.50A	Station: Pratt KS	Casing: 5 1/2"	Depth: 3507'
County: Barton	State: KS		
Type Job: 5 1/2" L.S. CNW	Formation: LKD 3520'	Legal Description: 18-17-13	

PIPE DATA		PERFORATING DATA		FLUID USED	TREATMENT RESUME		
Casing Size: 5 1/2"	Tubing Size	Shots/Ft		Acid: 12 BBl mud Flush	RATE	PRESS	ISIP
Depth: 3507'	Depth	From	To	Pre Pad: 150 SKs 60/40	Max: Poz @	15.2 #/gal	5 Min.
Volume: 83	Volume	From	To	RH Pad: 30 SKs 60/40	Min:		10 Min.
Max Press: 1500 #	Max Press	From	To	MH Frac: 20 SKs 60/40	Avg:		15 Min.
Well Connection: PC	Annulus Vol.	From	To		HHP Used		Annulus Pressure
Plug Depth: 3483	Packer Depth	From	To	Flush: Disp. W/ 20	Gas Volume		Total Load

Customer Representative: Brian Karlin | Station Manager: Scotty | Treater: Allen

Service Units	28443	27463	70959	19918							
Driver Names	Allen	Steve	Dale	Phye							

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
1230 AM					on Loc. Discuss Safety, Setup, Plan Job
					Rig Laying down Drill Collars.
340					Start 5 1/2" CASING 15.5#
					Shoe Joint 24' w/ Float shoe
					+ Latch down Baffle in collar
					Basket #2, cent. 4-6-8-10-12-14
555					Pipe @ 3507, Cir. + Rotate pipe.
			12	5	Pump 12 BBls mud Flush
			5	5	Pump 5 BBL H20
			31.5	5	mix + pump 150 sks 60/40 Poz 15.2#
715					Finish mix, Wash out Pump + Line
				6	Drop Latch Down Plug Start Disp.
	500			5	caught Lift PSI 458 BBl out
730	1500		83	4 1/2	Plug down
					Release PSI OK"
			7		Plug R.H w/ 30 sks 60/40
					Plug M.H w/ 20 sks 60/40
					Wash up Equip. + Rack up.
815					Job complete.
					thanks Allen, Steve, Dale.

Taylor Printing, Inc. 620-672-3656

BASIC ENERGY SERVICES
PRESSURE PUMPING & WIRELINE

10244 NE Hwy. 61
P.O. Box 8613
Pratt, Kansas 67124
Phone 620-672-1201

FIELD SERVICE TICKET
1718 05950 · A

DATE TICKET NO.

DATE OF JOB 7-31-12 DISTRICT KANSAS	NEW WELL ☒ OLD WELL ☐ PROD ☐ INJ ☐ WDW ☐ CUSTOMER ORDER NO.:
CUSTOMER CAERUS Operating LLC	LEASE HOFFMAN #18-34 WELL NO.
ADDRESS	COUNTY Barton 18-17-13 STATE KS
CITY STATE	SERVICE CREW Allen, Steve, Dale
AUTHORIZED BY	JOB TYPE: 5 1/2" L.S. CNW

EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS
28443-P.U.	1				
27463 PT	1				
20959-19919	1				

	DATE	AM/PM	TIME
TRUCK CALLED	7-30-12	AM PM	1030
ARRIVED AT JOB	7-31-12	AM PM	1230
START OPERATION	7-31-12	AM PM	700
FINISH OPERATION	7-31-12	AM PM	800
RELEASED	7-31-12	AM PM	815
MILES FROM STATION TO WELL	65 miles		

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered).
The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP.

SIGNED:
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	$ AMOUNT
CP103	60/40 Poz	SK	150		$1800.00
CP103	60/40 Poz	SK	50		$600.00
CC111	SALT	lb	807		$403.50
CC112	Friction Reducer	lb	97		$582.00
CC201	Gilsonite	lb	750		$502.50
CF607	Latch Down Plug & Baffle 5 1/2	EA	1		$400.00
CF1251	Auto Fill Float Shoe 5 1/2" Blue	EA	1		$360.00
CF1651	Turbolizer 5 1/2" Blue	EA	6		$550.00
CF1901	Basket 5 1/2" Blue	EA	1		$290.00
CC151	MUD Flush	gal	500		$430.00
E100	Unit mileage Chg. P.U.	mi	65		$276.25
E101	Heavy Equip mileage	mi	130		$910.00
E113	Bulk Delivery chg.	TM	559		$894.40
CE204	Depth Chg. 3001'-4000'	4-hr	1		$2160.00
CE240	Blending & mixing Service Chg.	SK	200		$280.00
CE501	5 1/2 Swivel Rental	EA	1		$200.00
CE504	Plug container Utilization	Job	1		$250.00
S003	Service Supervisor First 8 hrs	EA	1		$175.00

CHEMICAL / ACID DATA:			

SUB TOTAL DLS $8380.24

SERVICE & EQUIPMENT	%TAX ON $	
MATERIALS	%TAX ON $	
	TOTAL	

SERVICE REPRESENTATIVE Allen Ward

THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: Brian Karlen
(WELL OWNER OPERATOR CONTRACTOR OR AGENT)

FIELD SERVICE ORDER NO.

CLOUD LITHO - Abilene, TX

DRILL STEM TEST REPORT

Caerus Kansas LLC

Po Dox 1378
Hays Ks 67691 + 3974

ATTN: Brian Karlin

18-17s-13w

Hoffman 18-34

Job Ticket: 49336 **DST#: 1**

Test Start: 2012.07.27 @ 16:28:52

GENERAL INFORMATION:

Formation: **Lansing A-E**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 20:11:52
Time Test Ended: 01:05:22

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

Interval: 3180.00 ft (KB) To 3246.00 ft (KB) (TVD)
Total Depth: 3246.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

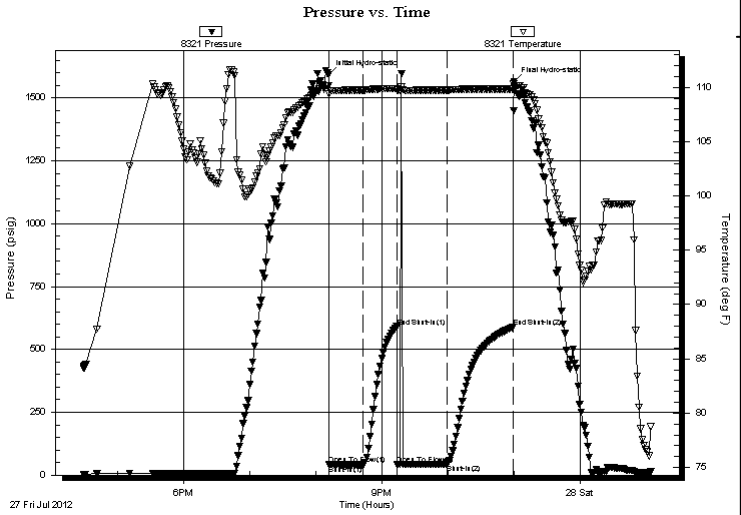
Reference Elevations: 1923.00 ft (KB)
1911.00 ft (CF)
KB to GR/CF: 12.00 ft

Serial #: 8321 **Inside**

Press@RunDepth: 44.73 psig @ 3218.00 ft (KB)
Start Date: 2012.07.27 End Date: 2012.07.28
Start Time: 16:28:53 End Time: 01:05:22

Capacity: 8000.00 psig
Last Calib.: 2012.07.28
Time On Btm: 2012.07.27 @ 20:11:22
Time Off Btm: 2012.07.27 @ 23:00:22

TEST COMMENT: IFP=Weak surface blow died out in 11 min
ISI=Dead no blow back
FFP=Dead no blow flush tool dead
FSI=Dead no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1592.42	110.16	Initial Hydro-static
1	41.45	109.37	Open To Flow (1)
32	40.86	109.76	Shut-In(1)
62	590.52	109.88	End Shut-In(1)
63	41.82	109.74	Open To Flow (2)
108	44.73	109.75	Shut-In(2)
168	589.20	109.85	End Shut-In(2)
169	1563.84	110.09	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
8.00	Mud 100%M	0.11

Gas Rates

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

DRILL STEM TEST REPORT

Caerus Kansas LLC

Po Dox 1378
Hays Ks 67691 + 3974

ATTN: Brian Karlin

18-17s-13w

Hoffman 18-34

Job Ticket: 49336 **DST#: 1**

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Time Test Ended: 01:05:22

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

Interval: 3180.00 ft (KB) To 3246.00 ft (KB) (TVD)
Total Depth: 3246.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

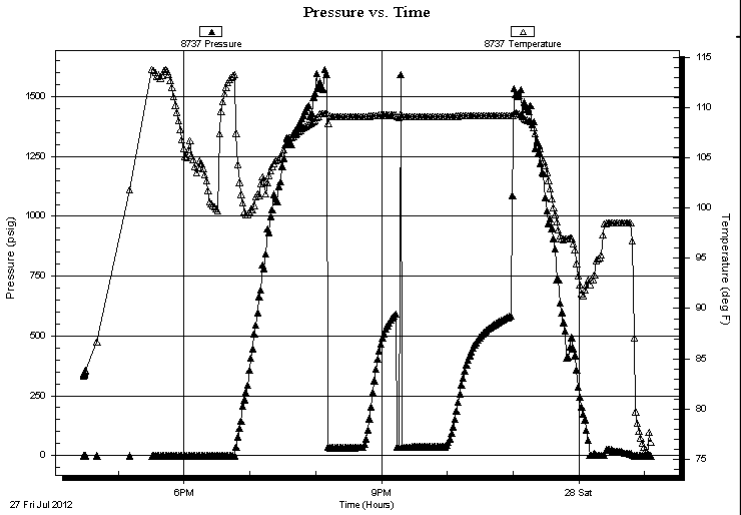
Reference Elevations: 1923.00 ft (KB)
1911.00 ft (CF)
KB to GR/CF: 12.00 ft

Serial #: 8737 **Outside**

Press@RunDepth: psig @ 3218.00 ft (KB)
Start Date: 2012.07.27 End Date: 2012.07.28
Start Time: 16:28:17 End Time: 01:05:16

Capacity: 8000.00 psig
Last Calib.: 2012.07.28
Time On Btm:
Time Off Btm:

TEST COMMENT: IFP=Weak surface blow died out in 11 min
ISI=Dead no blow back
FFP=Dead no blow flush tool dead
FSI=Dead no blow back



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
8.00	Mud 100%M	0.11

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Caerus Kansas LLC

Po Dox 1378
Hays Ks 67691 + 3974

ATTN: Brian Karlin

18-17s-13w

Hoffman 18-34

Job Ticket: 49336 **DST#: 1**

Test Start: 2012.07.27 @ 16:28:52

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:	49.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	8.99 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	2000.00 ppm				
Filter Cake:	inches				

Recovery Information

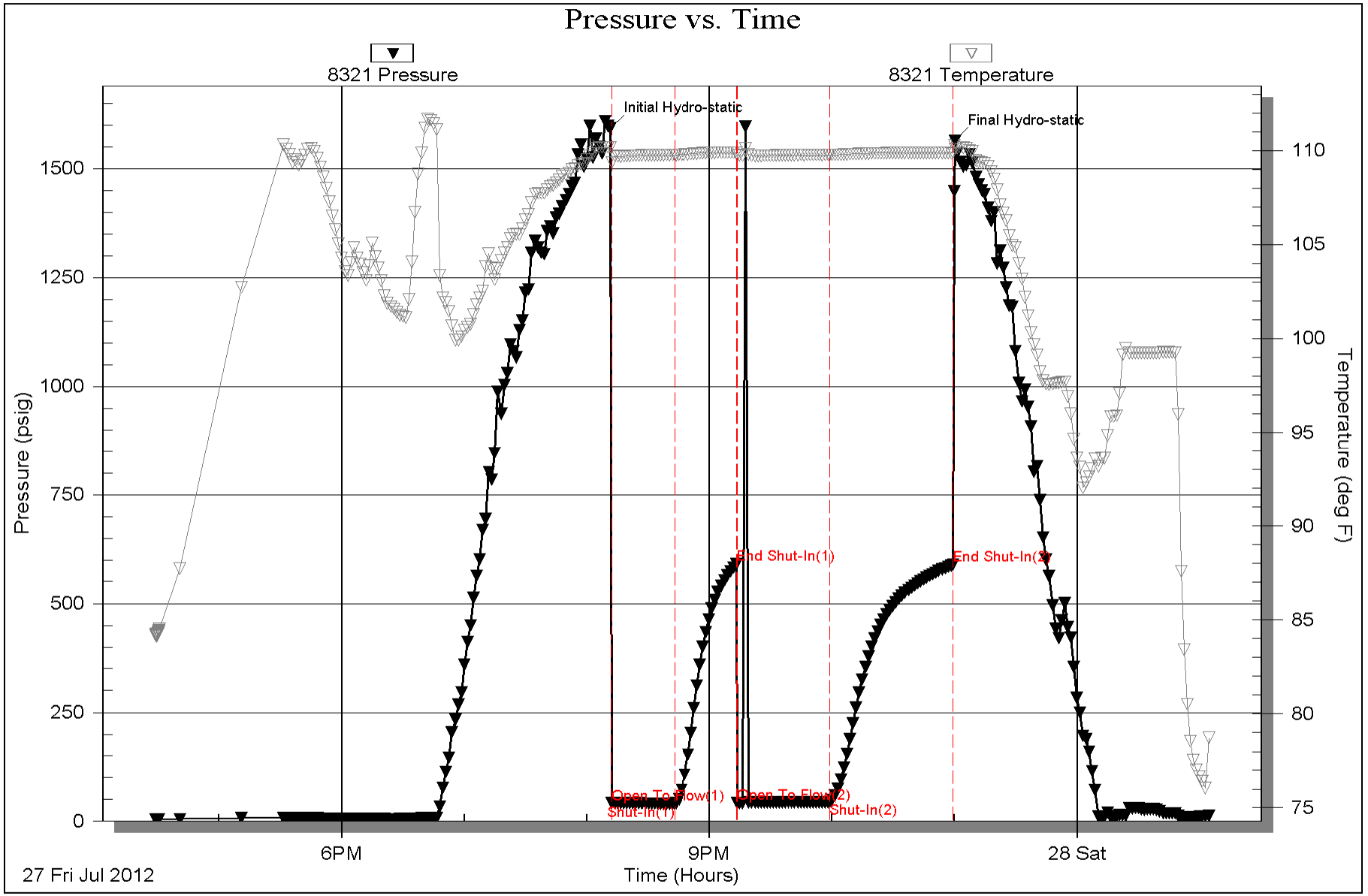
Recovery Table

Length ft	Description	Volume bbl
8.00	Mud 100%M	0.112

Total Length: 8.00 ft Total Volume: 0.112 bbl

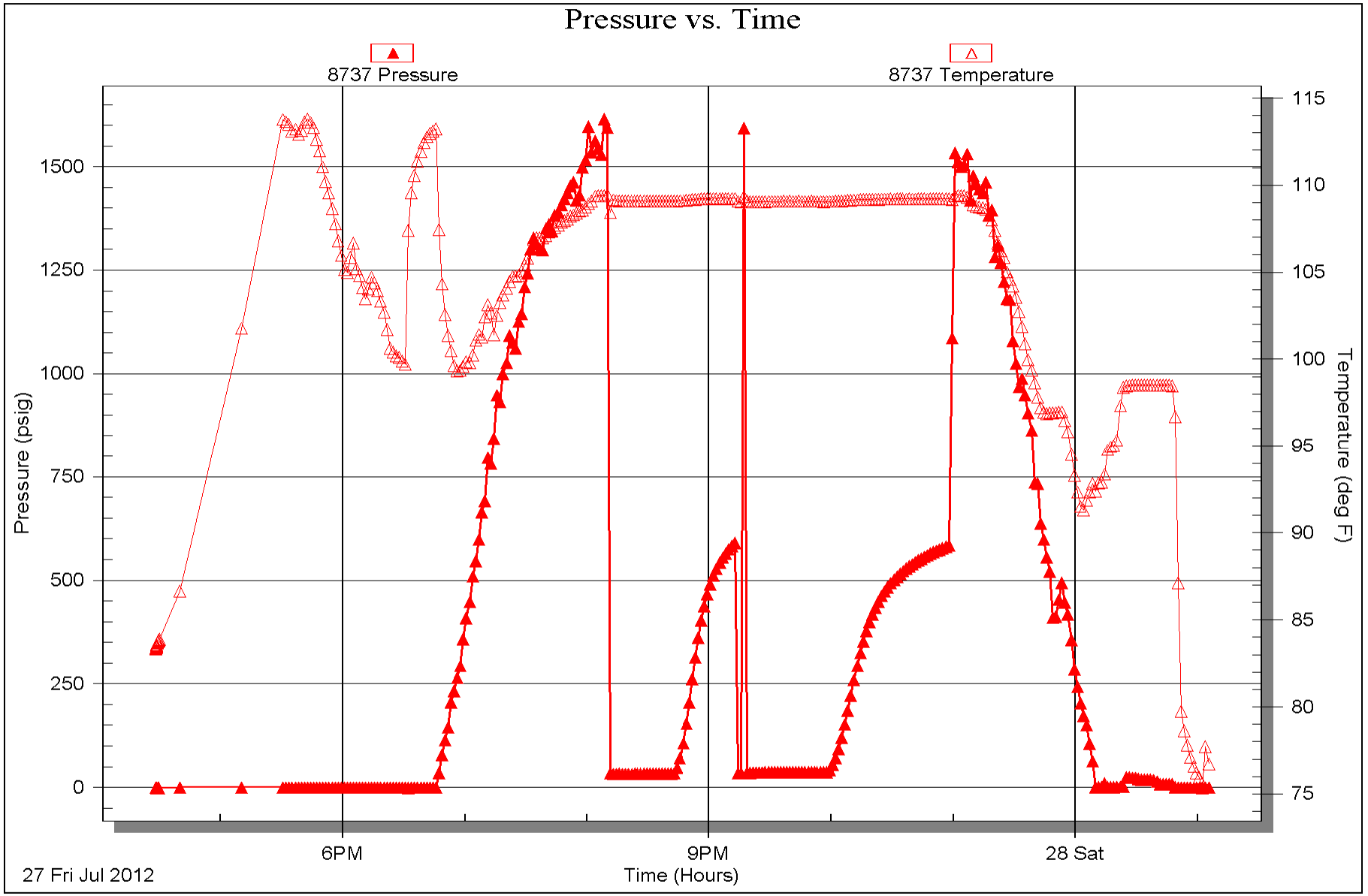
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8321 **Inside** Caerus Kansas LLC Hoffman 18-34 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 49336 Printed: 2012.07.28 @ 05:40:12

Serial #: 8737 **Outside** Caerus Kansas LLC Hoffman 18-34 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 49336 Printed: 2012.07.28 @ 05:40:13

DRILL STEM TEST REPORT

Caerus Kansas LLC

Po Dox 1378
Hays Ks 67691 + 3974

ATTN: Brian Karlin

18-17s-13w

Hoffman 18-34

Job Ticket: 49337 **DST#: 2**

Test Start: 2012.07.28 @ 07:27:57

GENERAL INFORMATION:

Formation: **Lasing -G**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 09:11:27
Time Test Ended: 13:45:27

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

Interval: 3240.00 ft (KB) To 3265.00 ft (KB) (TVD)
Total Depth: 3265.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

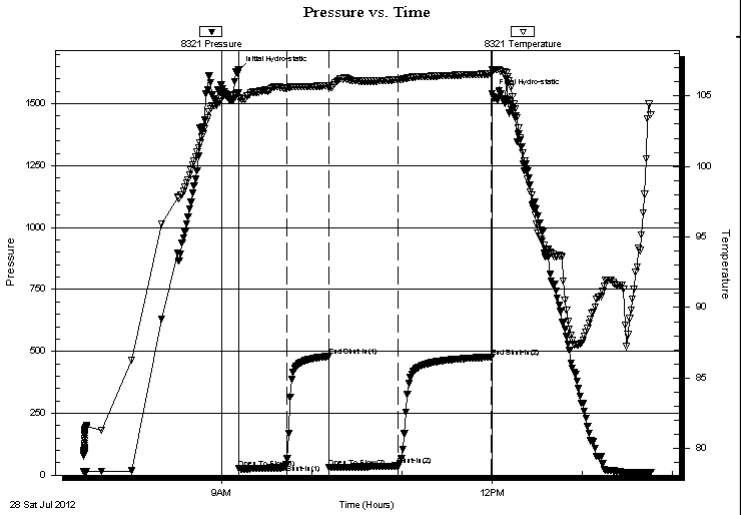
Reference Elevations: 1923.00 ft (KB)
1911.00 ft (CF)
KB to GR/CF: 12.00 ft

Serial #: 8321 **Inside**

Press@RunDepth: 37.82 psig @ 3243.00 ft (KB)
Start Date: 2012.07.28 End Date: 2012.07.28
Start Time: 07:27:58 End Time: 13:45:27

Capacity: 8000.00 psig
Last Calib.: 2012.07.28
Time On Btm: 2012.07.28 @ 09:10:57
Time Off Btm: 2012.07.28 @ 11:59:57

TEST COMMENT: IFP=Weak blow built to 1 1/2 in
ISI=Dead no blow back
FFP=Weak blow built to 1/4 in
FSI=Dead no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1635.52	105.23	Initial Hydro-static
1	26.74	104.89	Open To Flow (1)
32	44.56	105.55	Shut-In(1)
60	479.71	105.72	End Shut-In(1)
61	32.08	105.60	Open To Flow (2)
107	37.82	106.15	Shut-In(2)
169	477.03	106.56	End Shut-In(2)
169	1542.18	106.86	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
36.00	Mud with oil spots	0.50

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

Caerus Kansas LLC

Po Dox 1378
Hays Ks 67691 + 3974

ATTN: Brian Karlin

18-17s-13w

Hoffman 18-34

Job Ticket: 49337 **DST#: 2**

Test Start: 2012.07.28 @ 07:27:57

GENERAL INFORMATION:

Formation: **Lasing -G**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 09:11:27
Time Test Ended: 13:45:27

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

Interval: 3240.00 ft (KB) To 3265.00 ft (KB) (TVD)
Total Depth: 3265.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

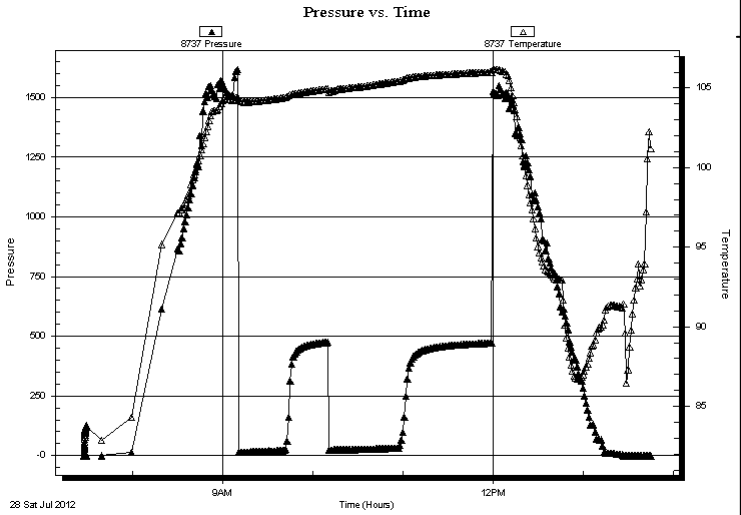
Reference Elevations: 1923.00 ft (KB)
1911.00 ft (CF)
KB to GR/CF: 12.00 ft

Serial #: 8737 **Outside**

Press@RunDepth: psig @ 3243.00 ft (KB)
Start Date: 2012.07.28 End Date: 2012.07.28
Start Time: 07:27:15 End Time: 13:44:44

Capacity: 8000.00 psig
Last Calib.: 2012.07.28
Time On Btm:
Time Off Btm:

TEST COMMENT: IFP=Weak blow built to 1 1/2 in
ISI=Dead no blow back
FFP=Weak blow built to 1/4 in
FSI=Dead no blow back



PRESSURE SUMMARY

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

Recovery

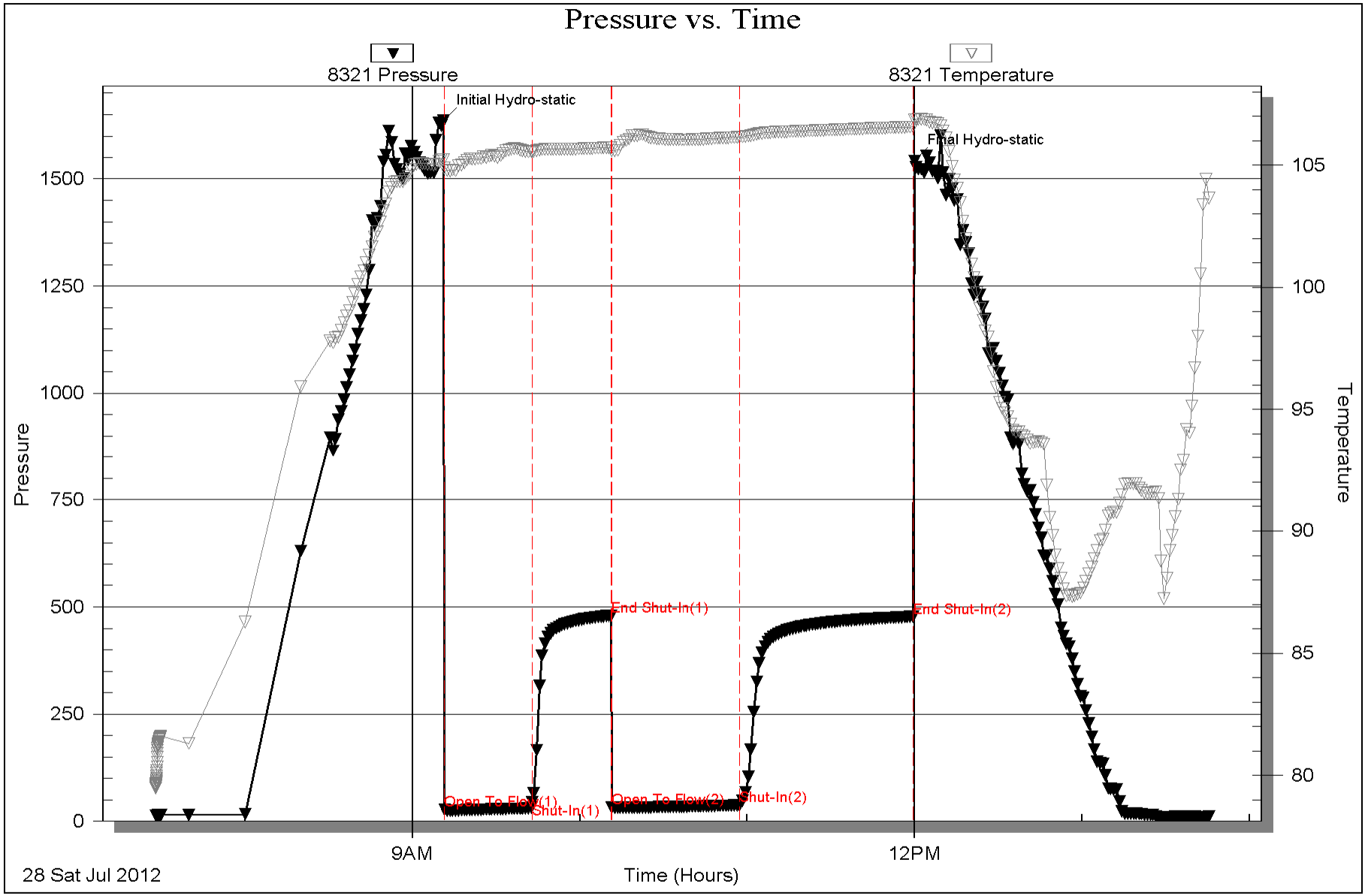
Length (ft)	Description	Volume (bbl)
36.00	Mud with oil spots	0.50

* Recovery from multiple tests

Gas Rates

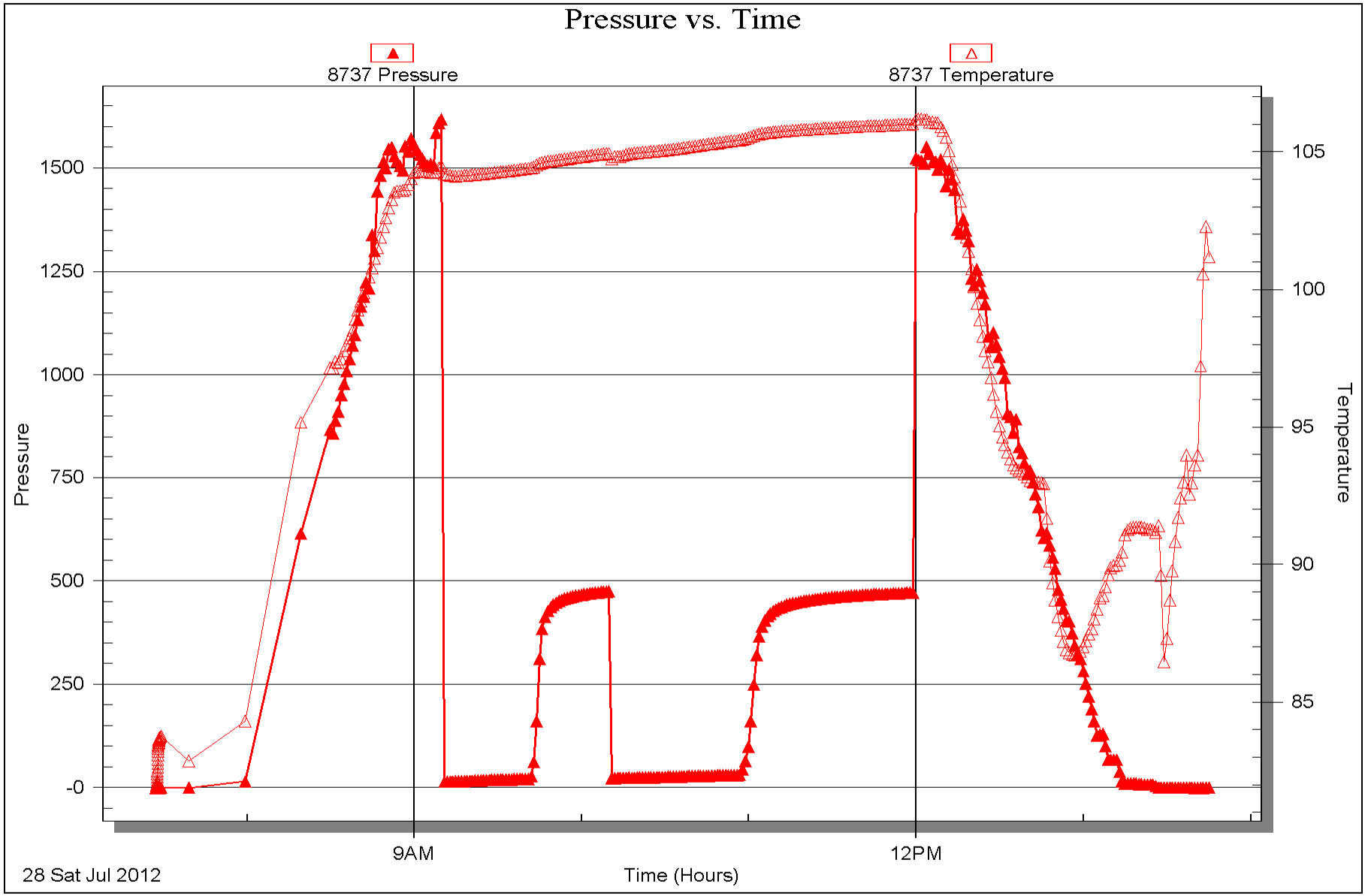
	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

Serial #: 8321 **Inside** Caerus Kansas LLC Hoffman 18-34 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 49337 Printed: 2012.07.28 @ 19:08:35

Serial #: 8737 **Outside** Caerus Kansas LLC Hoffman 18-34 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 49337 Printed: 2012.07.28 @ 19:08:36

DRILL STEM TEST REPORT

Caerus Kansas LLC

Po Dox 1378
Hays Ks 67691 + 3974

ATTN: Brian Karlin

18-17s-13w

Hoffman 18-34

Job Ticket: 49338 **DST#: 3**

Test Start: 2012.07.29 @ 02:26:18

GENERAL INFORMATION:

Formation: **LKC-H-K**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 04:34:18
Time Test Ended: 12:09:18

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

Interval: 3308.00 ft (KB) To 2292.00 ft (KB) (TVD)
Total Depth: 3392.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

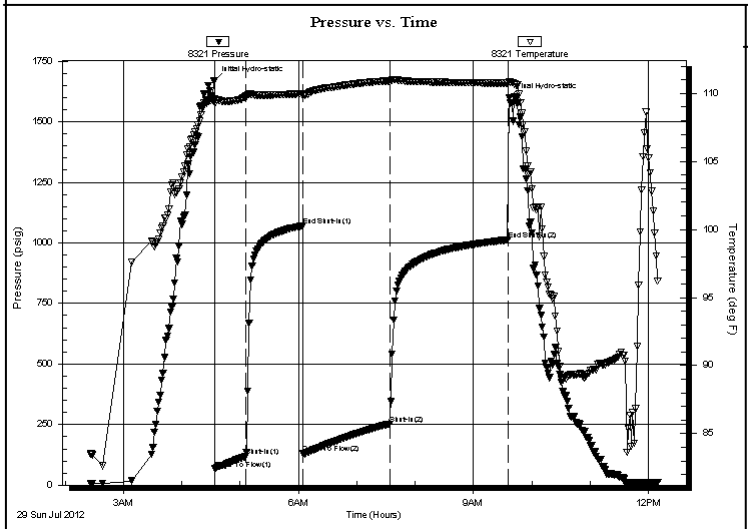
Reference Elevations: 1924.00 ft (KB)
1911.00 ft (CF)
KB to GR/CF: 13.00 ft

Serial #: 8321 **Inside**

Press@RunDepth: 253.32 psig @ 3374.00 ft (KB)
Start Date: 2012.07.29 End Date: 2012.07.29
Start Time: 02:26:19 End Time: 12:09:18

Capacity: 8000.00 psig
Last Calib.: 2012.07.29
Time On Btm: 2012.07.29 @ 04:33:48
Time Off Btm: 2012.07.29 @ 09:36:18

TEST COMMENT: IFP=Good blow BOB in 6 min
ISI=Fair blow back built to 7 in
FFP=Strong blow BOB in 4 min
FSI=Good blow back BOB in 13 min



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1668.85	109.59	Initial Hydro-static
1	66.85	109.28	Open To Flow (1)
32	117.96	109.78	Shut-In(1)
91	1070.46	109.98	End Shut-In(1)
91	132.27	109.82	Open To Flow (2)
180	253.32	110.90	Shut-In(2)
302	1012.61	110.76	End Shut-In(2)
303	1598.09	110.86	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
126.00	MW with oil spots 20%M 80%W	1.77
63.00	OCGWM 20%G 10%O 30%W 40%M	0.88
63.00	OCGM 35%G 15%O 50%M	0.88
254.00	Gassy Oil 40%O 60%G	3.56
0.00	1764-GIP	0.00

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

Caerus Kansas LLC

Po Dox 1378
Hays Ks 67691 + 3974

ATTN: Brian Karlin

18-17s-13w

Hoffman 18-34

Job Ticket: 49338 **DST#: 3**

Test Start: 2012.07.29 @ 02:26:18

GENERAL INFORMATION:

Formation: **LKC-H-K**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 04:34:18
Time Test Ended: 12:09:18

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

Interval: 3308.00 ft (KB) To 2292.00 ft (KB) (TVD)
Total Depth: 3392.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

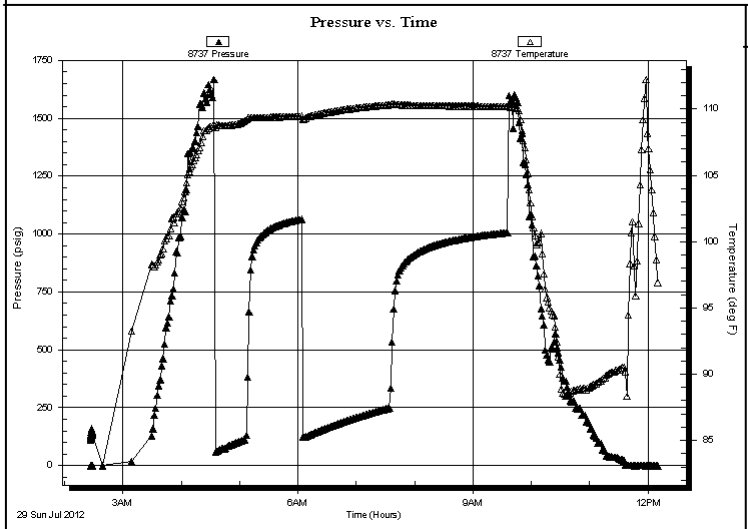
Reference Elevations: 1924.00 ft (KB)
1911.00 ft (CF)
KB to GR/CF: 13.00 ft

Serial #: 8737 **Outside**

Press@RunDepth: psig @ 3374.00 ft (KB)
Start Date: 2012.07.29 End Date: 2012.07.29
Start Time: 02:26:52 End Time: 12:10:21

Capacity: 8000.00 psig
Last Calib.: 2012.07.29
Time On Btm:
Time Off Btm:

TEST COMMENT: IFP=Good blow BOB in 6 min
ISI=Fair blow back built to 7 in
FFP=Strong blow BOB in 4 min
FSI=Good blow back BOB in 13 min



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
126.00	MW with oil spots 20%M 80%W	1.77
63.00	OCGWM 20%G 10%O 30%W 40%M	0.88
63.00	OCGM 35%G 15%O 50%M	0.88
254.00	Gassy Oil 40%O 60%G	3.56
0.00	1764-GIP	0.00

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Caerus Kansas LLC

Po Dox 1378
Hays Ks 67691 + 3974

ATTN: Brian Karlin

18-17s-13w

Hoffman 18-34

Job Ticket: 49338 **DST#: 3**

Test Start: 2012.07.29 @ 02:26:18

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	33 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	50.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	9.18 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	4000.00 ppm				
Filter Cake:	inches				

Recovery Information

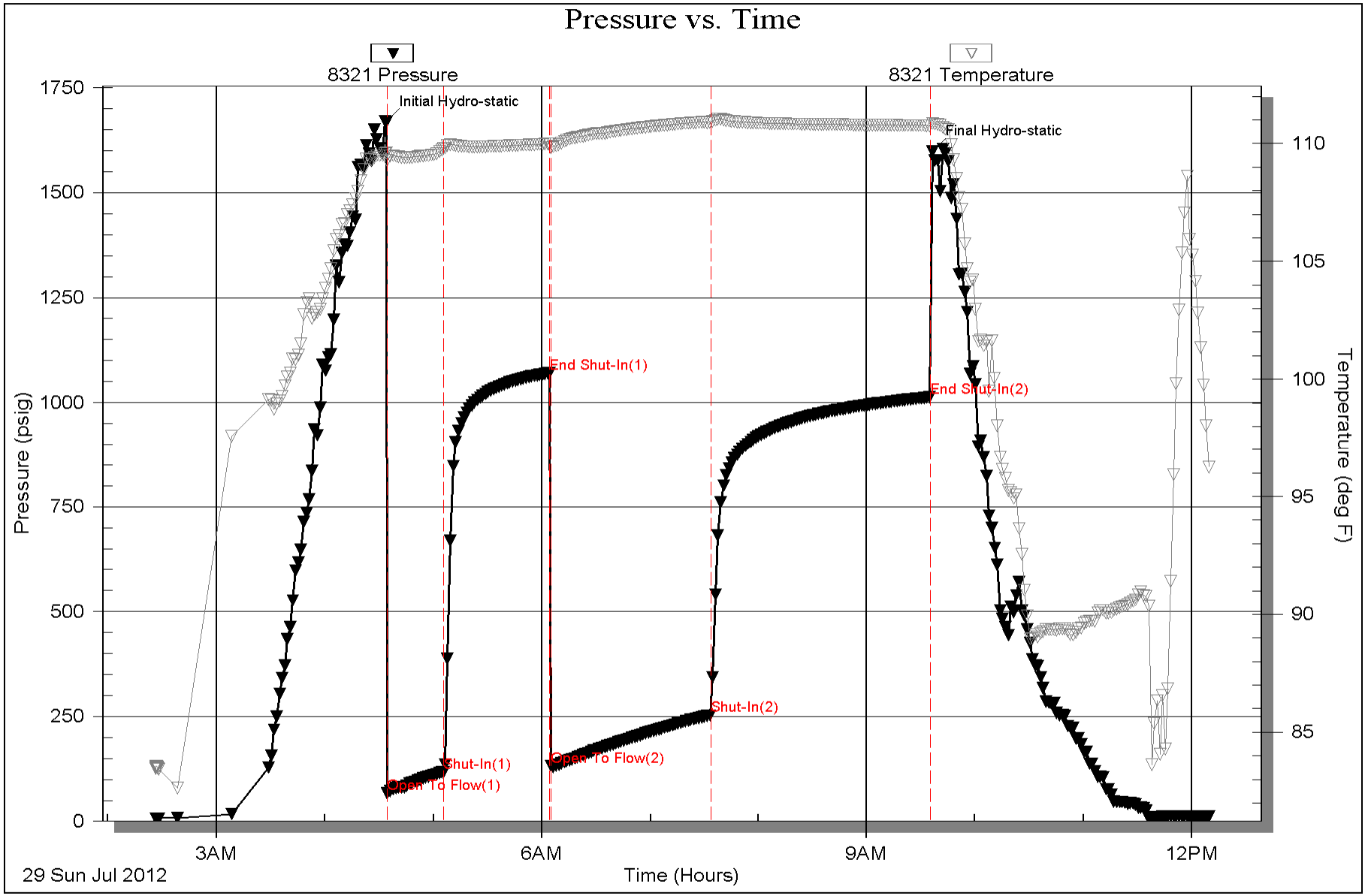
Recovery Table

Length ft	Description	Volume bbl
126.00	MW w ith oil spots 20%M 80%W	1.767
63.00	OCGWM 20%G 10%O 30%W 40%M	0.884
63.00	OCGM 35%G 15%O 50%M	0.884
254.00	Gassy Oil 40%O 60%G	3.563
0.00	1764-GIP	0.000

Total Length: 506.00 ft Total Volume: 7.098 bbl

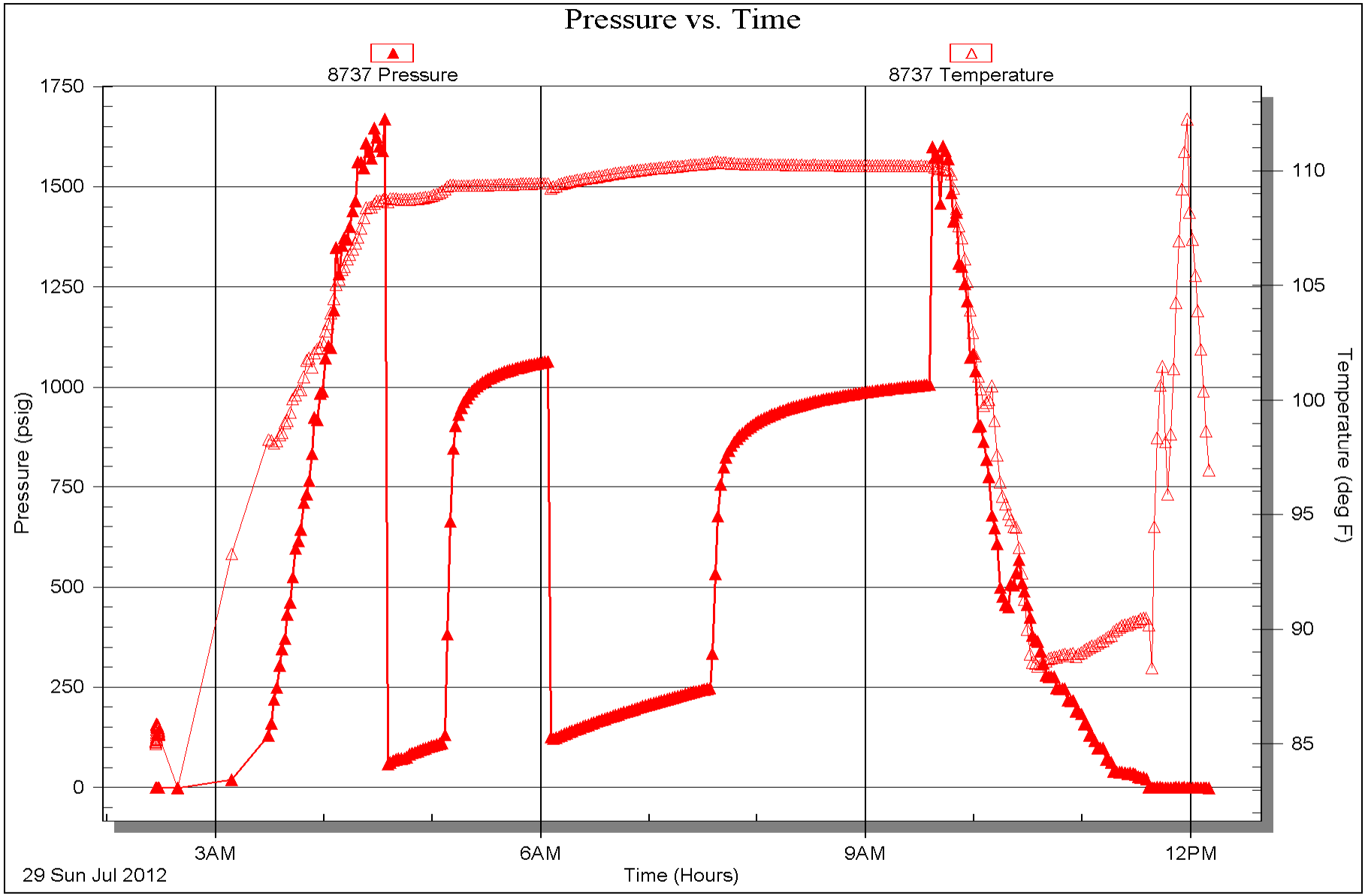
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8321 **Inside** Caerus Kansas LLC Hoffman 18-34 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 49338 Printed: 2012.07.29 @ 23:29:28

Serial #: 8737 **Outside** Caerus Kansas LLC Hoffman 18-34 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 49338 Printed: 2012.07.29 @ 23:29:28

DRILL STEM TEST REPORT

Caerus Kansas LLC

Po Box 1378
Hays Ks 67691 + 3974

ATTN: Brian Karlin

18-17s-13w

Hoffman 18-34

Job Ticket: 49339 **DST#: 4**

Test Start: 2012.07.29 @ 22:26:17

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 00:27:17
Time Test Ended: 05:24:47

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

Interval: 3391.00 ft (KB) To 3441.00 ft (KB) (TVD)
Total Depth: 3441.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

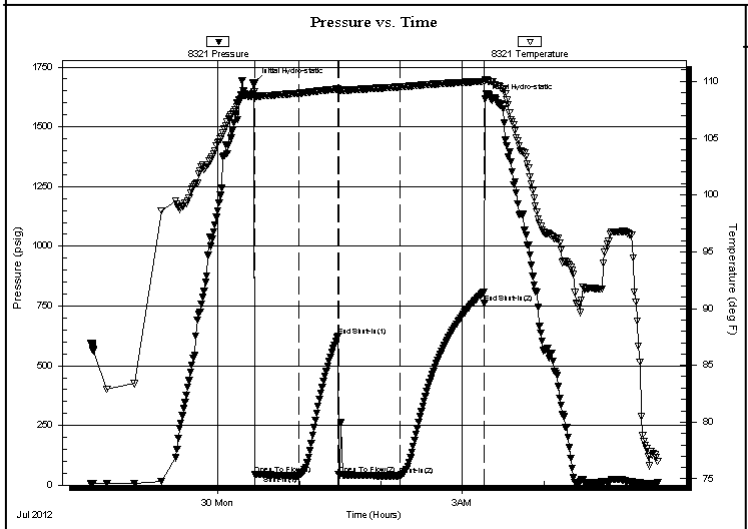
Reference Elevations: 1924.00 ft (KB)
1911.00 ft (CF)
KB to GR/CF: 13.00 ft

Serial #: 8321 **Inside**

Press@RunDepth: 39.14 psig @ 3428.00 ft (KB)
Start Date: 2012.07.29 End Date: 2012.07.30
Start Time: 22:26:18 End Time: 05:23:47

Capacity: 8000.00 psig
Last Calib.: 2012.07.30
Time On Btm: 2012.07.30 @ 00:26:47
Time Off Btm: 2012.07.30 @ 03:16:47

TEST COMMENT: IFP=Weak surface blow back died out in 18 min
ISI=Dead no blow back
FFP=Dead no blow Flushed tool dead
FSI=Dead no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1683.23	109.05	Initial Hydro-static
1	44.58	108.63	Open To Flow (1)
33	39.98	108.94	Shut-In(1)
62	625.08	109.33	End Shut-In(1)
62	43.81	109.08	Open To Flow (2)
107	39.14	109.51	Shut-In(2)
170	761.93	109.98	End Shut-In(2)
170	1616.74	110.18	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	VSOCM 2%O 98%M	0.07

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Caerus Kansas LLC

Po Dox 1378
Hays Ks 67691 + 3974

ATTN: Brian Karlin

18-17s-13w

Hoffman 18-34

Job Ticket: 49339 **DST#: 4**

Test Start: 2012.07.29 @ 22:26:17

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:	58.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	9.58 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	4000.00 ppm				
Filter Cake:	inches				

Recovery Information

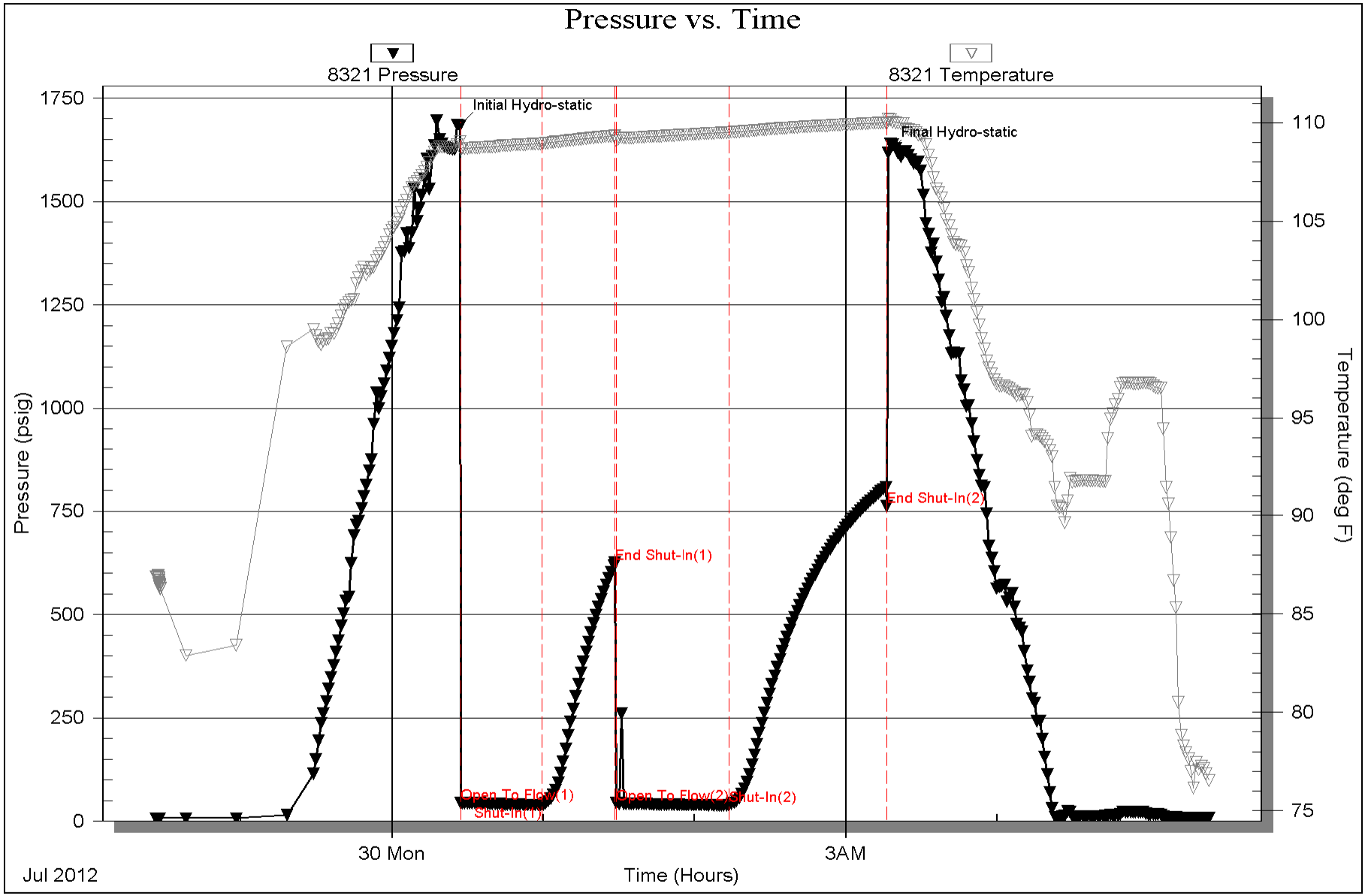
Recovery Table

Length ft	Description	Volume bbl
5.00	VSOCM 2%O 98%M	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 #: 8321 **Inside** Caerus Kansas LLC Hoffman 18-34 DST Test Number: 4



Trilobite Testing, Inc Ref. No: 49339 Printed: 2012.07.30 @ 07:52:00