



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1191969  
OIL & GAS CONSERVATION DIVISION

Form ACO-1  
August 2013

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

WELL COMPLETION FORM  
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Address 1: \_\_\_\_\_

Address 2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

CONTRACTOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Wellsite Geologist: \_\_\_\_\_

Purchaser: \_\_\_\_\_

Designate Type of Completion:

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

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

Operator: \_\_\_\_\_

Well Name: \_\_\_\_\_

Original Comp. Date: \_\_\_\_\_ Original Total Depth: \_\_\_\_\_

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

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - \_\_\_\_\_

Spot Description: \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

\_\_\_\_\_ Feet from  North /  South Line of Section

\_\_\_\_\_ Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE       NW       SE       SW

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

Datum:  NAD27       NAD83       WGS84

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Field Name: \_\_\_\_\_

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total Vertical Depth: \_\_\_\_\_ Plug Back Total Depth: \_\_\_\_\_

Amount of Surface Pipe Set and Cemented at: \_\_\_\_\_ Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set: \_\_\_\_\_ Feet

If Alternate II completion, cement circulated from: \_\_\_\_\_

feet depth to: \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: \_\_\_\_\_ ppm Fluid volume: \_\_\_\_\_ bbls

Dewatering method used: \_\_\_\_\_

Location of fluid disposal if hauled offsite: \_\_\_\_\_

Operator Name: \_\_\_\_\_

Lease Name: \_\_\_\_\_ License #: \_\_\_\_\_

Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

County: \_\_\_\_\_ Permit #: \_\_\_\_\_

AFFIDAVIT

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

Submitted Electronically

KCC Office Use ONLY

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

1191969

Operator Name: \_\_\_\_\_ Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

**INSTRUCTIONS:** Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Electric Log Run	<input type="checkbox"/> Yes <input type="checkbox"/> No			
List All E. Logs Run:				

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?  Yes  No *(If No, fill out Page Three of the ACO-1)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD:      Size: \_\_\_\_\_ Set At: \_\_\_\_\_ Packer At: \_\_\_\_\_ Liner Run:  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
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<b>DISPOSITION OF GAS:</b> <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<b>METHOD OF COMPLETION:</b> <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
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Form	ACO1 - Well Completion
Operator	LB Exploration, Inc.
Well Name	Spencer's Bluffs 6
Doc ID	1191969

All Electric Logs Run

Dual Compensated Porosity
Dual Induction
Microresistivity
Borehole Compensated Sonic



# QUALITY WELL SERVICE, INC.

5969

Federal Tax I.D. # 481187368

Home Office 324 Simpson St., Pratt, KS 67124

Heath's Cell 620-727-3410  
Office / Fax 620-672-3663

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

Date	10-29-13	Sec.	16	Twp.	32	Range	13	County	Barber	State	K	On Location	3:15 A.M	Finish	5:00 A.M
Lease	SPENCERS Bluff			Well No.	#6			Location	MEOLdgc K, SW 25 S.W. 1/4						
Contractor	NINNESCAH Drigs 101							Owner	To Quality Well Service, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.						
Type Job	8 5/8 Surface							Charge To	L B Exploration						
Hole Size	12 1/4			T.D.	350			Street							
Csg.	8 5/8 24'			Depth	350			City	State						
Tbg. Size				Depth				The above was done to satisfaction and supervision of owner agent or contractor.							
Tool				Depth				Cement Amount Ordered 320 x 60/40 Poz							
Cement Left in Csg.				Shoe Joint	20'			2-1/2 GEL 3-1/2 LL 1/4" CF. USED 230 x							
Meas Line				Displace	21.4 Bbls			EQUIPMENT							
Pumptrk	No.	3		Make	MIKE			Common	168						
Bulktrk	No.	5		CHAD				Poz. Mix	112						
Bulktrk	No.							Gel.	6						
Pickup	No.			TOOD				Calcium	10						
JOB SERVICES & REMARKS								Hulls							
Rat Hole								Salt							
Mouse Hole								Flowseal 30							
Centralizers								Kol-Seal							
Baskets								Mud CLR 48							
D/V or Port Collar								CFL-117 or CD110 CAF 38							
Run 8 H's 8 5/8 24" csg								Sand							
SET @ 356'								Handling 336							
Hook up to csg & Break circ w/lig								Mileage 10							
								8 5/8 FLOAT EQUIPMENT							
								Guide Shoe							
Mix Pump 230 x 60/40 2-1/2 GEL 3-1/2 LL								Centralizer							
1/4" CF @ 19.8#/gal								Baskets							
								AFU Inserts							
SHUT DOWN RELEASE WOODEN PLUG								Float Shoe							
								LATCH DOWN 1 EA WOODEN PLUG							
Plug down @ 4:15 A.M 300'															
Close VALVE on csg								LMJ 10							
Disp 21.4 Bbls total								Pumptrk Charge SURFACE							
600' circ thru JOB								Mileage 10							
Circ CMT to PIT															
Thank TOOD MIKE & CHAD															
Signature <i>Richard A. Barry</i>								Tax							
								Discount							
								Total Charge							

PLEASE  
CALL  
AGAIN

# QUALITY WELL SERVICE, INC.

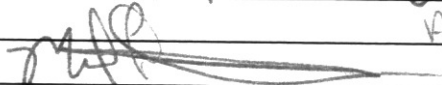
6047

Federal Tax I.D. # 481187368

Home Office 324 Simpson St., Pratt, KS 67124

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

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

Date	11-10-13	Sec.	16	Twp.	32	Range	13	County	BARBER	State	Ks	On Location	10:30 AM	Finish	5:15 AM	
Lease	SPENCE BLUFF			Well No.				Location	Med Lodge Ks W to Twin Peaks Ks							
Contractor	MINNESCAN Delg 101							Owner	2 S 2 1/2 W 1 N 1-10							
Type Job	LONGSTRING							To Quality Well Service, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.								
Hole Size	7 7/8			T.D.												
Csg.	5 1/2			Depth	4939			Charge To	LB Exploration							
Tbg. Size				Depth												
Tool				Depth												
Cement Left in Csg.				Shoe Joint	42.10			The above was done to satisfaction and supervision of owner agent or contractor.								
Meas Line				Displace	119.5 Bbls			Cement Amount Ordered	150 sck Pro C 10% Salt							
<b>EQUIPMENT</b>								5 1/2 Gelsolite 50 sck 60/40 Poz								
Pumptrk No.	3			MIKE				Common	30							
Bulktrk No.	9			SEAN				Poz. Mix	20							
Bulktrk No.												Gel.	3			
Pickup No.												Calcium	150			
<b>JOB SERVICES &amp; REMARKS</b>								Hulls								
Rat Hole	30 sck							Salt	16							
Mouse Hole	20 sck							Flowseal								
Centralizers	1-2-4-6-7-9-11-13-15							Kol-Seal	750'							
Baskets	1							Mud CLR 48	500 gal							
D/V or Port Collar								CFL-117 or CD110 CAF 38								
Ron 117 #1's	5 1/2			" csg				Sand	CC-1 10 gal							
Set d 4939'	1st 42.0			Float shoe - LO Baffle				Handling	219							
Csg on Bottom	Drop Ball							Mileage	10							
Hook up to csg	Break circ w/ rig							<b>5 1/2 FLOAT EQUIPMENT</b>								
Pump 3 Bbls H <sub>2</sub> O	12 Bbls MFBH			3 Bbls H <sub>2</sub> O				Guide Shoe								
Plug R-M Holes	50 sck							Centralizer	10 EA							
Mix Pump	150 sck Pro C			15 1/2 gal				Baskets	1 EA							
SHUT DOWN	wash up tek			RELEASE PLUG				AFU Inserts								
Disp 119.5 Bbls	TOTAL 2% KCL							Float Shoe	1 EA							
LINE PSI	750#							Latch Down	1 EA							
Plug down d 5:00 A.M	1500#															
Release & HELD								LMI	10							
0000 circ thru JOB								Pumptrk Charge	Longstring							
thanks TOOD MIKE SEAN								Mileage	10							
PLEASE CALL AGAIN																
Signature 																
								Tax								
								Discount								
								Total Charge								



## DRILL STEM TEST REPORT

Prepared For: **LB Exploration Inc.**

2135 2nd RD.  
Holyrod Ks, 67450-9021

ATTN: Steve Petermann

### **Spencer's Bluffs #6**

#### **16/32s/13w/Barber**

Start Date: 2013.11.01 @ 23:35:00

End Date: 2013.11.02 @ 08:14:30

Job Ticket #: 18512                      DST #: 1

Superior Testers Enterprises LLC  
PO Box 138 Great Bend KS 67530  
1-800-792-6902

Printed: 2013.11.02 @ 08:40:16









# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

LB Exploration Inc.  
 2135 2nd RD.  
 Holyrood Ks, 67450-9021  
 ATTN: Steve Petermann

**16/32s/13w/Barber**  
**Spencer's Bluffs #6**  
 Job Ticket: 18512      **DST#: 1**  
 Test Start: 2013.11.01 @ 23:35:00

**Tool Information**

Drill Pipe:	Length: 3848.00 ft	Diameter: 3.80 inches	Volume: 53.98 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 72000.00 lb
			<u>Total Volume: 53.98 bbl</u>	Tool Chased 1.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3838.00 ft			Final 51000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	63.38 ft			
Tool Length:	84.38 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3818.00	
Shut-In Tool	5.00			3823.00	
Hydroic Tool	5.00			3828.00	
Packer	5.00			3833.00	21.00      Bottom Of Top Packer
Packer	5.00			3838.00	
Perforations	5.00			3843.00	
Change Over Sub	0.75			3843.75	
Drill Pipe	31.88			3875.63	
Change Over Sub	0.75			3876.38	
Perforations	18.00			3894.38	
Recorder	1.00	6663	Inside	3895.38	
Recorder	1.00	6748	Outside	3896.38	
Bullnose	5.00			3901.38	63.38      Bottom Packers & Anchor

**Total Tool Length: 84.38**



# DRILL STEM TEST REPORT

## FLUID SUMMARY

LB Exploration Inc.  
2135 2nd RD.  
Holyrood Ks, 67450-9021  
ATTN: Steve Petermann

**16/32s/13w/Barber**  
**Spencer's Bluffs #6**  
Job Ticket: 18512      **DST#: 1**  
Test Start: 2013.11.01 @ 23:35:00

### Mud and Cushion Information

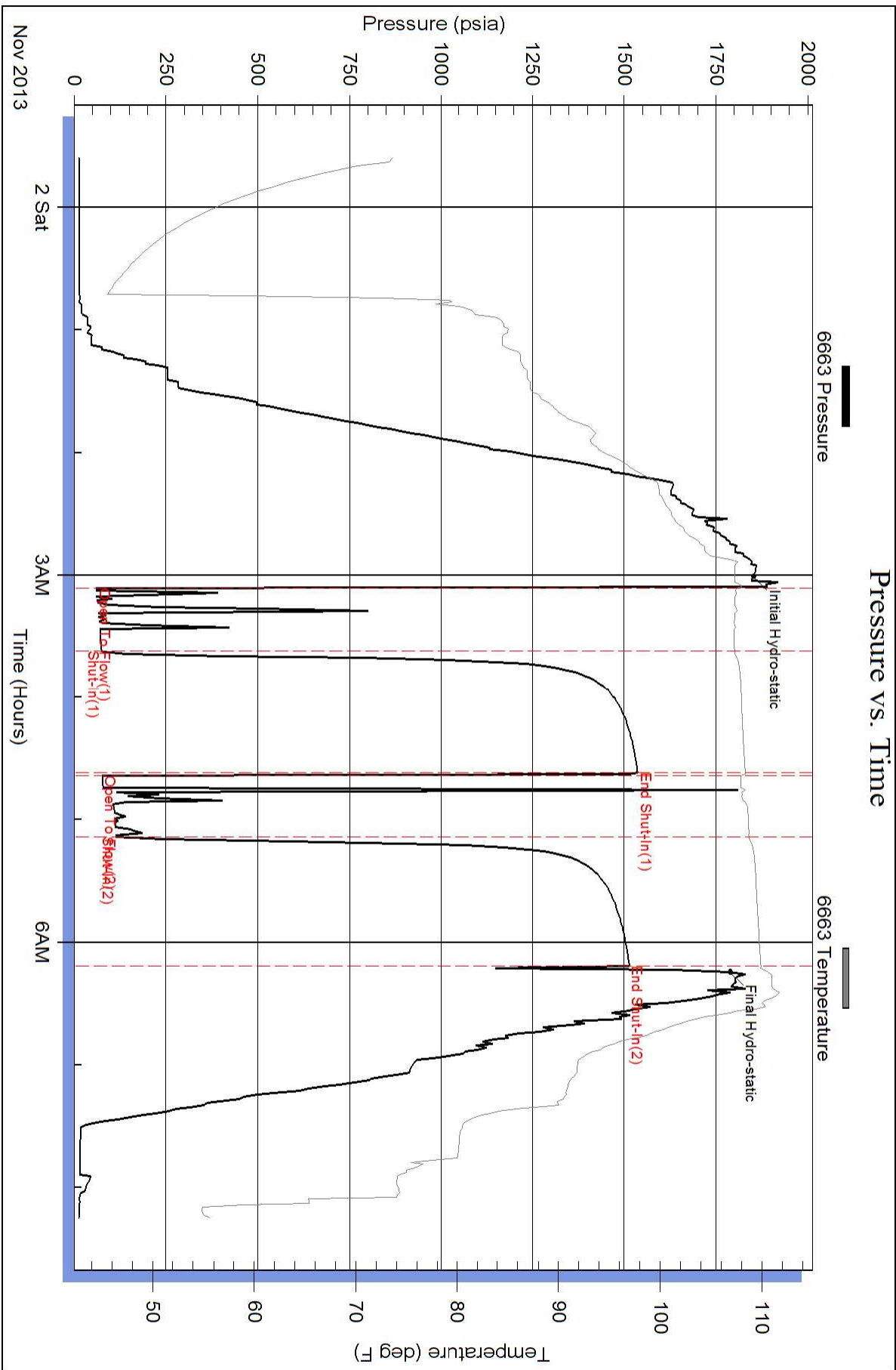
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 51.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.00 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 2600.00 ppm			
Filter Cake: inches			

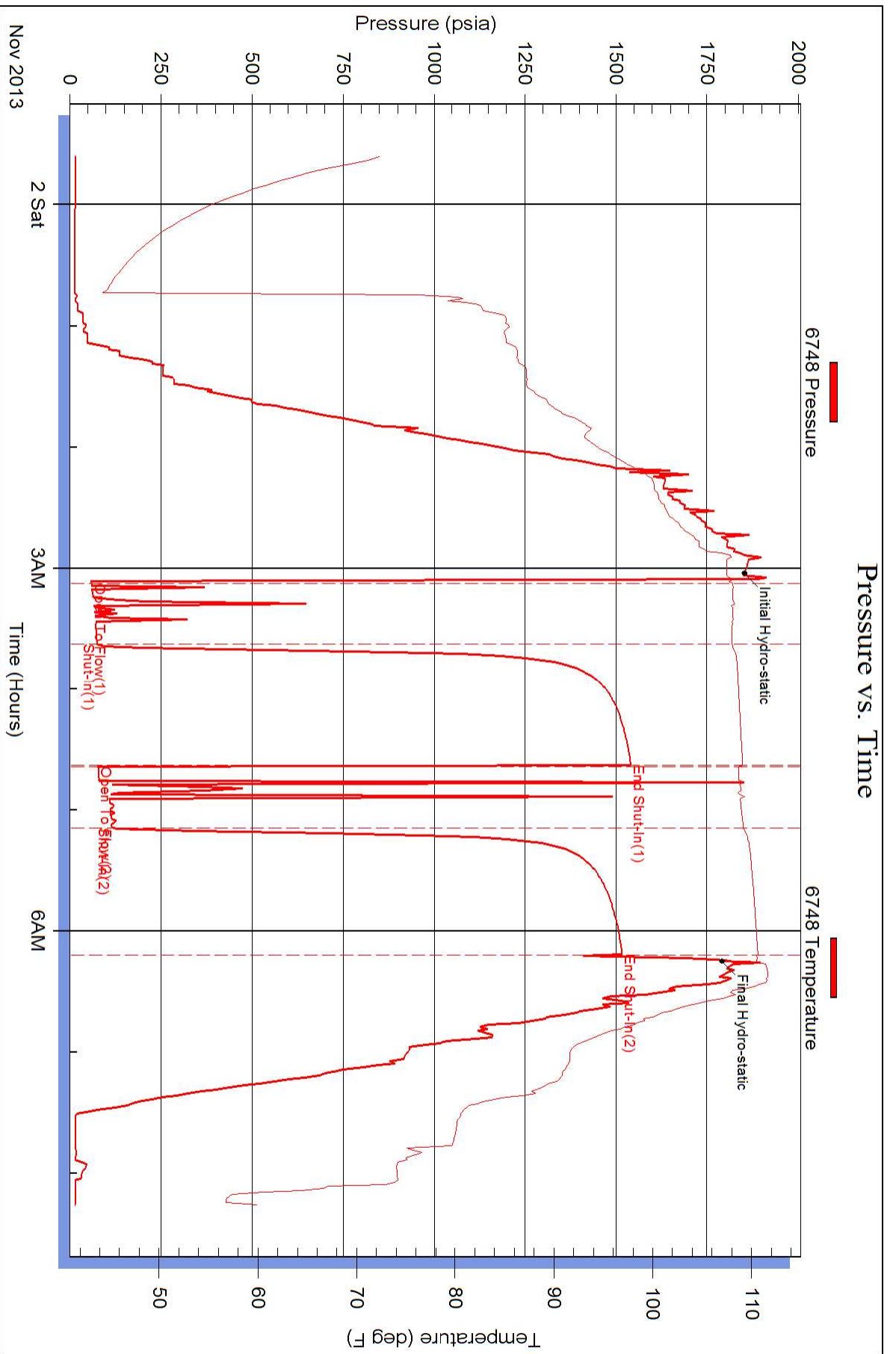
### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
65.00	100% mud	0.912

Total Length: 65.00 ft      Total Volume: 0.912 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments:







## DRILL STEM TEST REPORT

Prepared For: **LB Exploration Inc.**

2135 2nd RD.  
Holyrod Ks, 67450-9021

ATTN: Steve Petermann

### **Spencer's Bluffs #6**

#### **16/32s/13w/Barber**

Start Date: 2013.11.02 @ 18:25:00

End Date: 2013.11.03 @ 03:41:00

Job Ticket #: 18513                      DST #: 2

Superior Testers Enterprises LLC  
PO Box 138 Great Bend KS 67530  
1-800-792-6902

Printed: 2013.11.03 @ 03:16:41





# DRILL STEM TEST REPORT

LB Exploration Inc.  
 2135 2nd RD.  
 Holyrood Ks, 67450-9021  
 ATTN: Steve Petermann

**16/32s/13w/Barber**  
**Spencer's Bluffs #6**  
 Job Ticket: 18513      **DST#: 2**  
 Test Start: 2013.11.02 @ 18:25:00

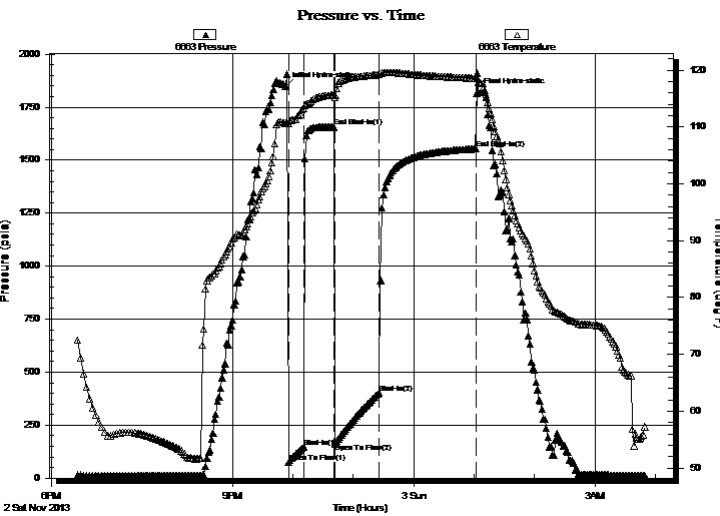
## GENERAL INFORMATION:

Formation: **Douglas Sand**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 00:00:00 Tester: Shane Konzem  
 Time Test Ended: 03:41:00 Unit No: 3330/196/Great Bend  
 Interval: **3924.00 ft (KB) To 3962.00 ft (KB) (TVD)** Reference Elevations: 1828.00 ft (KB)  
 Total Depth: 3995.00 ft (KB) (TVD) 1815.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Poor KB to GR/CF: 13.00 ft

## Serial #: 6663

Press @ RunDepth: 1553.47 psia @ ft (KB) Capacity: 5000.00 psia  
 Start Date: 2013.11.02 End Date: 2013.11.03 Last Calib.: 2013.11.03  
 Start Time: 18:25:00 End Time: 03:49:30 Time On Btm: 2013.11.02 @ 21:52:30  
 Time Off Btm: 2013.11.03 @ 01:02:30

**TEST COMMENT:** 1st Open/ 15 Minutes. Good blow built to bottom of 5 gallon bucket in 7 minutes and 50 seconds.  
 1st Shut In/ 30 Minutes. No blow back.  
 2nd Open/ 45 Minutes. Good blow built to bottom of 5 gallon bucket in 6 minutes and 45 seconds.  
 2nd Shut In/ 90 Minutes. No blow back.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1849.15	110.64	Initial Hydro-static
3	74.67	110.58	Open To Flow (1)
18	147.58	113.22	Shut-In(1)
49	1656.39	115.65	End Shut-In(1)
49	162.55	115.17	Open To Flow (2)
93	400.95	119.19	Shut-In(2)
189	1553.47	118.56	End Shut-In(2)
190	1816.81	118.60	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
189.00	30% w ater cut 70% mud	2.65
189.00	27.5% mud, 72.5% w ater	2.65
315.00	5% gas, 5% mud, 90% w ater	4.42
0.00	Chloride recov. 27000 ppm	0.00
0.00	resist recov .21 ohms at 40 degrees	0.00

## Gas Rates

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





# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

LB Exploration Inc.  
 2135 2nd RD.  
 Holyrood Ks, 67450-9021  
 ATTN: Steve Petermann

**16/32s/13w/Barber**  
**Spencer's Bluffs #6**  
 Job Ticket: 18513      **DST#: 2**  
 Test Start: 2013.11.02 @ 18:25:00

**Tool Information**

Drill Pipe:	Length: 3923.00 ft	Diameter: 3.80 inches	Volume: 55.03 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose:	74000.00 lb
			<u>Total Volume: 55.03 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial	52000.00 lb
Depth to Top Packer:	3924.00 ft			Final	54000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	71.75 ft				
Tool Length:	92.75 ft				
Number of Packers:	3	Diameter: 6.75 inches			

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3904.00	
Shut-In Tool	5.00			3909.00	
Hydroic Tool	5.00			3914.00	
Packer	5.00			3919.00	21.00      Bottom Of Top Packer
Packer	5.00			3924.00	
Perforations	31.00			3955.00	
Recorder	1.00	6663	Inside	3956.00	
Recorder	1.00	6651	Outside	3957.00	
Blank Off Sub	0.75			3957.75	71.75      Tool Interval
Packer	5.00			3962.75	
Perforations	29.00			3991.75	
Recorder	1.00	6748		3992.75	
Bullnose	3.00			3995.75	1000091.75      Bottom Packers & Anchor

**Total Tool Length: 92.75**



# DRILL STEM TEST REPORT

## FLUID SUMMARY

LB Exploration Inc.  
 2135 2nd RD.  
 Holyrood Ks, 67450-9021  
 ATTN: Steve Petermann

**16/32s/13w/Barber**  
**Spencer's Bluffs #6**  
 Job Ticket: 18513      **DST#: 2**  
 Test Start: 2013.11.02 @ 18:25:00

### Mud and Cushion Information

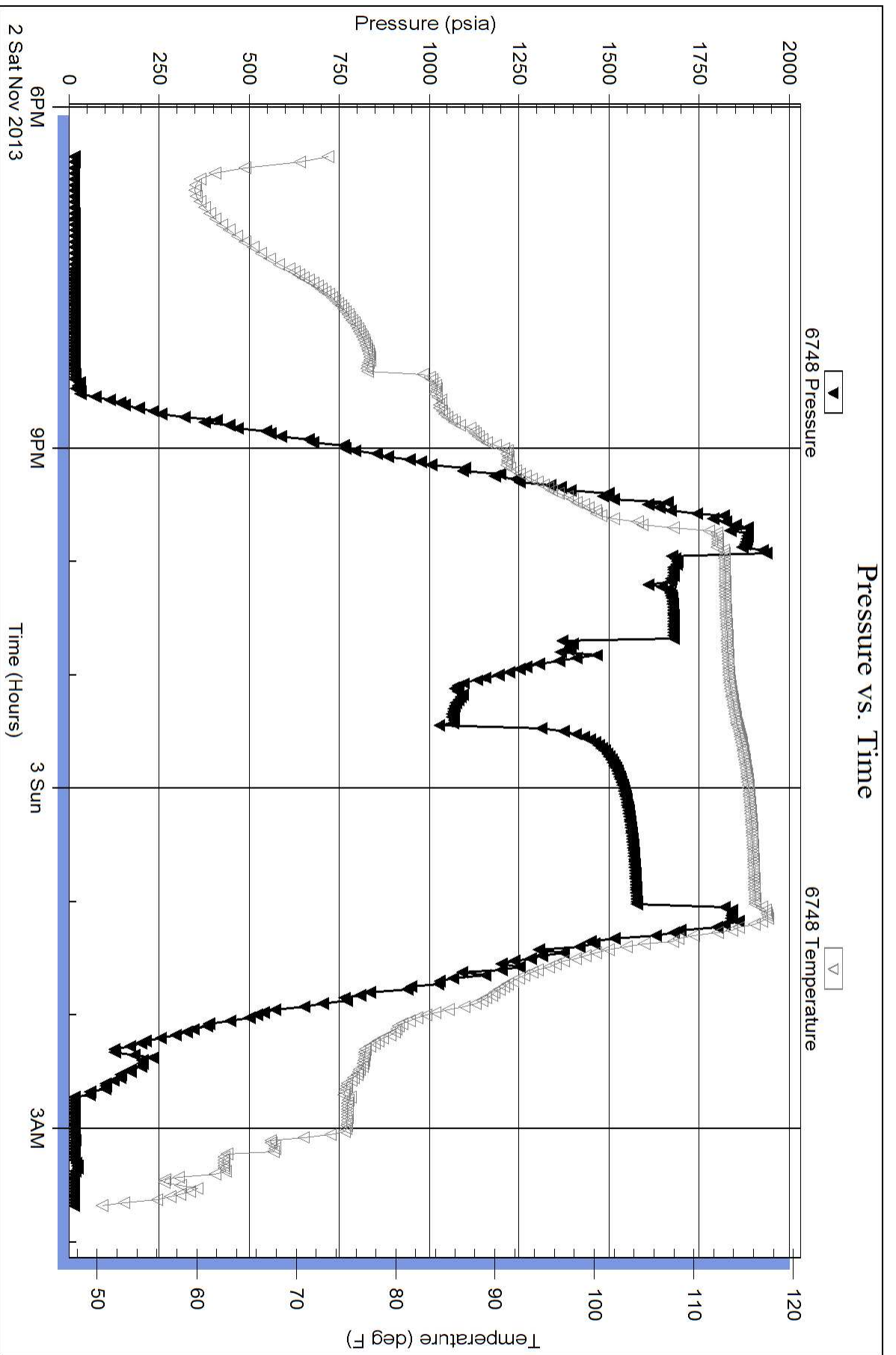
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 51.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.00 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 2600.00 ppm			
Filter Cake: inches			

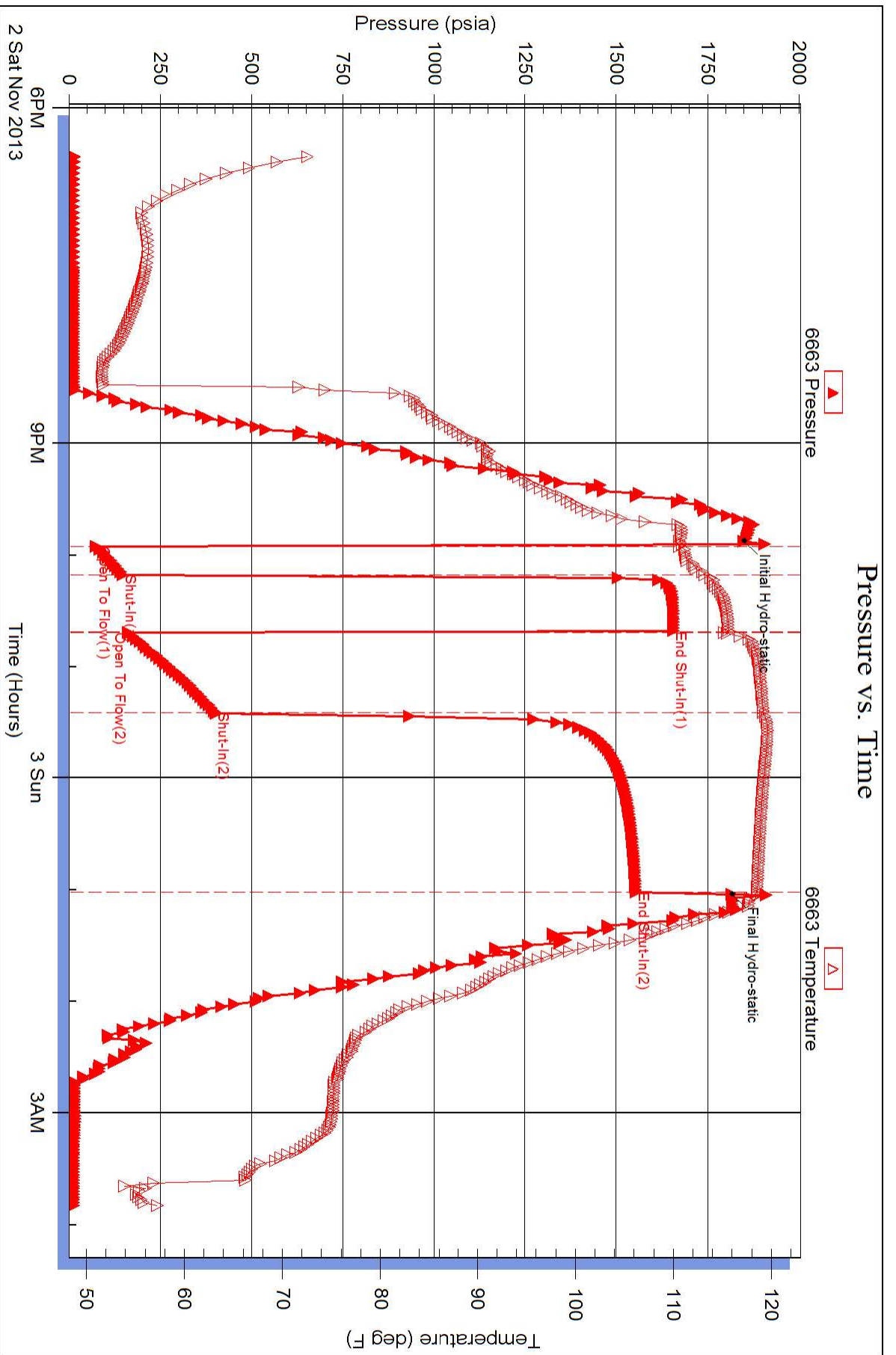
### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
189.00	30% w ater cut 70% mud	2.651
189.00	27.5% mud, 72.5% w ater	2.651
315.00	5% gas, 5% mud, 90% w ater	4.419
0.00	Chloride recov. 27000 ppm	0.000
0.00	resist recov .21 ohms at 40 degrees	0.000

Total Length: 693.00 ft      Total Volume: 9.721 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:







## DRILL STEM TEST REPORT

Prepared For: **LB Exploration Inc.**

2135 2nd RD.  
Holyrod Ks, 67450-9021

ATTN: Steve Petermann

### **Spencer's Bluffs #6**

#### **16/32s/13w/Barber**

Start Date: 2013.11.03 @ 21:55:00

End Date: 2013.11.04 @ 04:59:30

Job Ticket #: 18514                      DST #: 3

Superior Testers Enterprises LLC  
PO Box 138 Great Bend KS 67530  
1-800-792-6902

Printed: 2013.11.04 @ 05:14:58





# DRILL STEM TEST REPORT

LB Exploration Inc.  
 2135 2nd RD.  
 Holyrood Ks, 67450-9021  
 ATTN: Steve Petermann

**16/32s/13w/Barber**  
**Spencer's Bluffs #6**  
 Job Ticket: 18514      **DST#: 3**  
 Test Start: 2013.11.03 @ 21:55:00

## GENERAL INFORMATION:

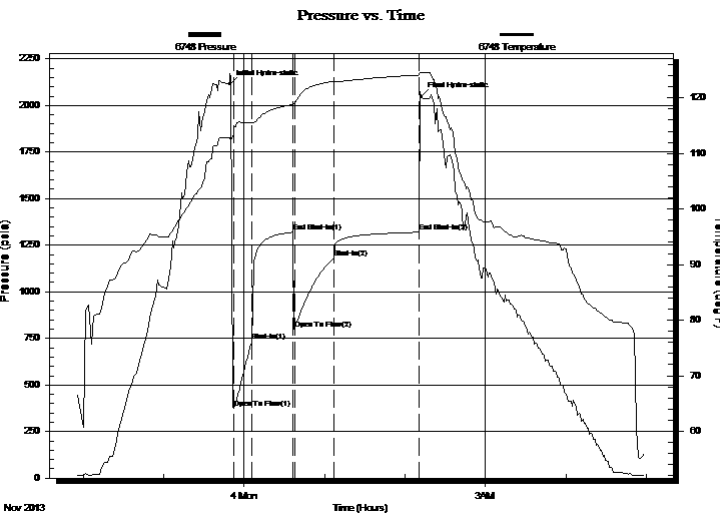
Formation: **Drum**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 23:51:30  
 Time Test Ended: 04:59:30  
 Interval: **4292.00 ft (KB) To 4308.00 ft (KB) (TVD)**  
 Total Depth: 4308.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Poor  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Shane Konzem  
 Unit No: 3330/196/Great Bend  
 Reference Elevations: 1828.00 ft (KB)  
 1815.00 ft (CF)  
 KB to GR/CF: 13.00 ft

## Serial #: 6748

## Outside

Press @ RunDepth: 1320.12 psia @ 4305.00 ft (KB) Capacity: 5000.00 psia  
 Start Date: 2013.11.03 End Date: 2013.11.04 Last Calib.: 2013.11.04  
 Start Time: 21:55:00 End Time: 04:58:30 Time On Btm: 2013.11.03 @ 23:49:00  
 Time Off Btm: 2013.11.04 @ 02:12:00

**TEST COMMENT:** 1st Open/ 15 Minutes. Strong blow built to bottom of 5 gallon bucket in 45 seconds.  
 1st Shut In/ 30 Minutes. BLow back built to bottom of 5 gallon bucket.  
 2nd Open/ 30 Minutes. Strong blow built to bottom of 5 gallon bucket in 1 minute.  
 2nd Shut In/ 60 Minutes. G0od blow back built to 3 inches in bucket. Gas to surface in 55 minutes.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2112.43	112.84	Initial Hydro-static
3	373.71	113.62	Open To Flow (1)
17	735.02	115.47	Shut-In(1)
48	1320.70	118.84	End Shut-In(1)
49	801.14	118.89	Open To Flow (2)
78	1179.35	122.97	Shut-In(2)
142	1320.12	124.11	End Shut-In(2)
143	2047.58	124.53	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
252.00	5% gas, 30% w ater, 65% mud.	3.53
126.00	5% gas, 45% w ater, 50% mud.	1.77
315.00	5% gas, 2.5% mud, 92.5% w ater	4.42
504.00	5% gas, 95% w ater.	7.07
378.00	5% gassy, 95% w ater	5.30
504.00	5% gas, 5% mud, 90% w ater.	7.07

## Gas Rates

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



# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

LB Exploration Inc.  
 2135 2nd RD.  
 Holyrood Ks, 67450-9021  
 ATTN: Steve Petermann

**16/32s/13w/Barber**  
**Spencer's Bluffs #6**  
 Job Ticket: 18514      **DST#: 3**  
 Test Start: 2013.11.03 @ 21:55:00

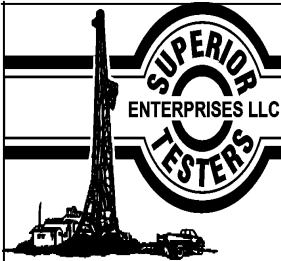
**Tool Information**

Drill Pipe:	Length: 4296.00 ft	Diameter: 3.80 inches	Volume: 60.26 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose:	74000.00 lb
			<u>Total Volume: 60.26 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial	52000.00 lb
Depth to Top Packer:	4292.00 ft			Final	60000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	16.00 ft				
Tool Length:	37.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4272.00	
Shut-In Tool	5.00			4277.00	
Hydroic Tool	5.00			4282.00	
Packer	5.00			4287.00	21.00      Bottom Of Top Packer
Packer	5.00			4292.00	
Perforations	11.00			4303.00	
Recorder	1.00	6663	Inside	4304.00	
Recorder	1.00	6748	Outside	4305.00	
Bullnose	3.00			4308.00	16.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>37.00</b>				





# DRILL STEM TEST REPORT

## FLUID SUMMARY

LB Exploration Inc.  
 2135 2nd RD.  
 Holyrood Ks, 67450-9021  
 ATTN: Steve Petermann

**16/32s/13w/Barber**  
**Spencer's Bluffs #6**  
 Job Ticket: 18514      **DST#: 3**  
 Test Start: 2013.11.03 @ 21:55:00

### 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: 8.20 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 5000.00 ppm			
Filter Cake: inches			

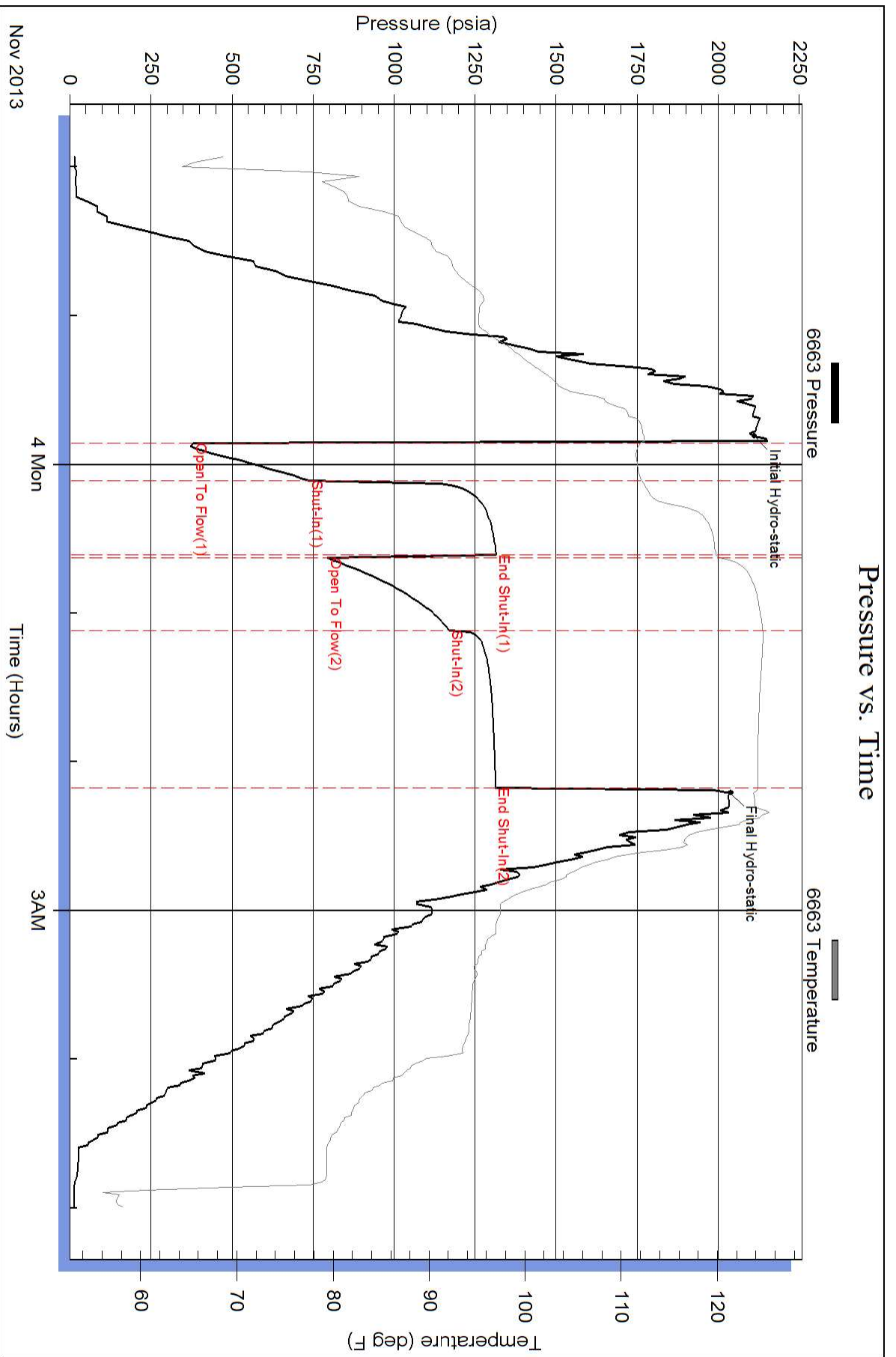
### Recovery Information

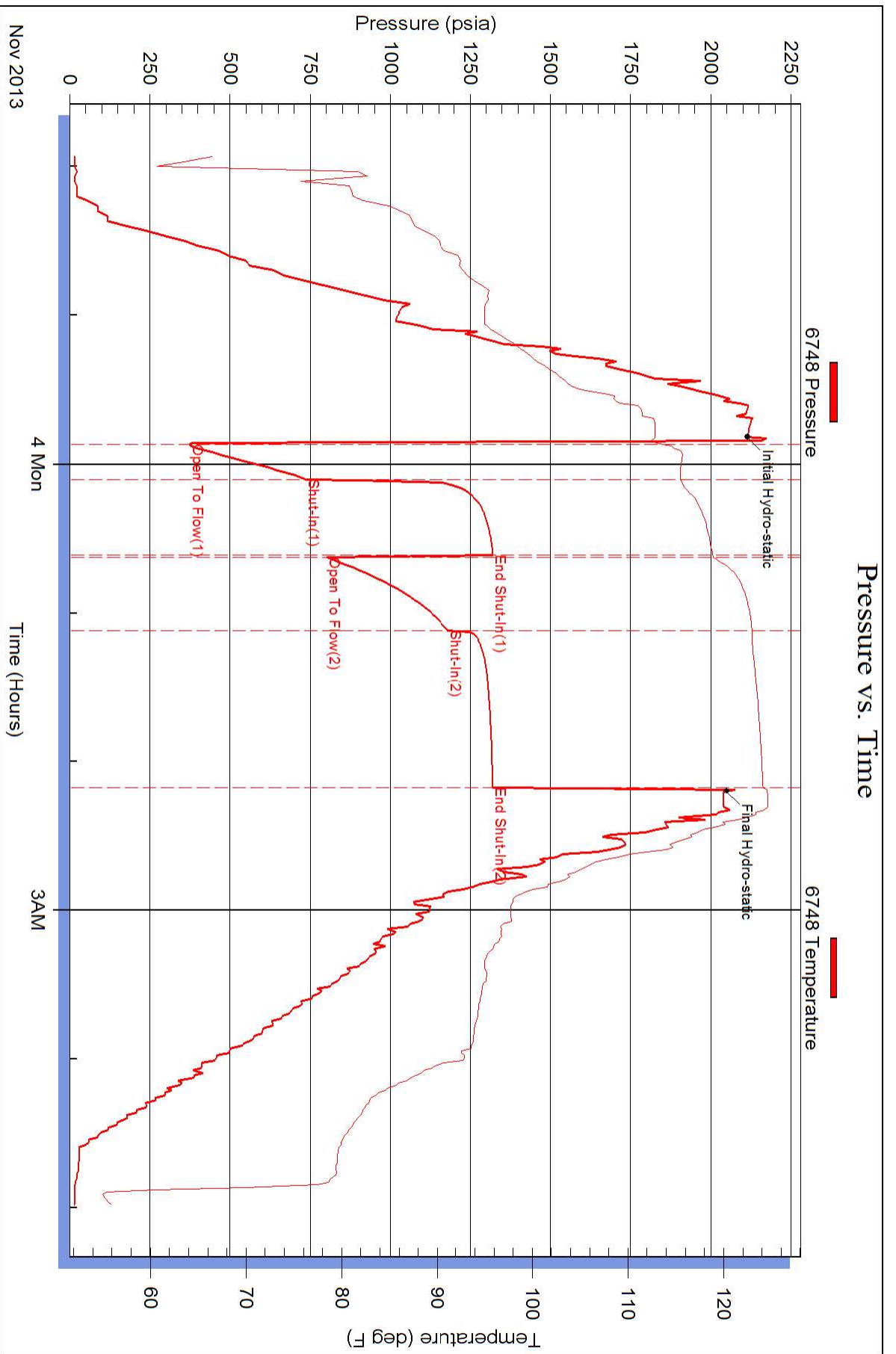
Recovery Table

Length ft	Description	Volume bbl
252.00	5% gas, 30% w ater, 65% mud.	3.535
126.00	5% gas, 45% w ater, 50% mud.	1.767
315.00	5% gas, 2.5% mud, 92.5% w ater	4.419
504.00	5% gas, 95% w ater.	7.070
378.00	5% gassy, 95% w ater	5.302
504.00	5% gas, 5% mud, 90% w ater.	7.070
315.00	5% gas, 95% w ater	4.419
0.00	Chloride recov, 27000 ppm	0.000
0.00	resist recov, .21 at 40 degrees.	0.000

Total Length: 2394.00 ft      Total Volume: 33.582 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:

### Pressure vs. Time







## DRILL STEM TEST REPORT

Prepared For: **LB Exploration Inc.**

2135 2nd RD.  
Holyrood Ks, 67450-9021

ATTN: Steve Petermann

### **Spencer's Bluffs #6**

#### **16/32s/13w/Barber**

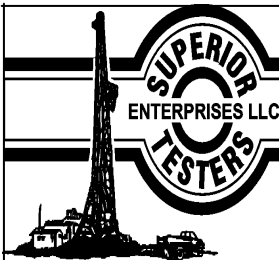
Start Date: 2013.11.04 @ 22:48:00

End Date: 2013.11.05 @ 05:23:30

Job Ticket #: 18515                      DST #: 4

Superior Testers Enterprises LLC  
PO Box 138 Great Bend KS 67530  
1-800-792-6902

Printed: 2013.11.05 @ 05:39:09



# DRILL STEM TEST REPORT

LB Exploration Inc.  
 2135 2nd RD.  
 Holyrood Ks, 67450-9021  
 ATTN: Steve Petermann

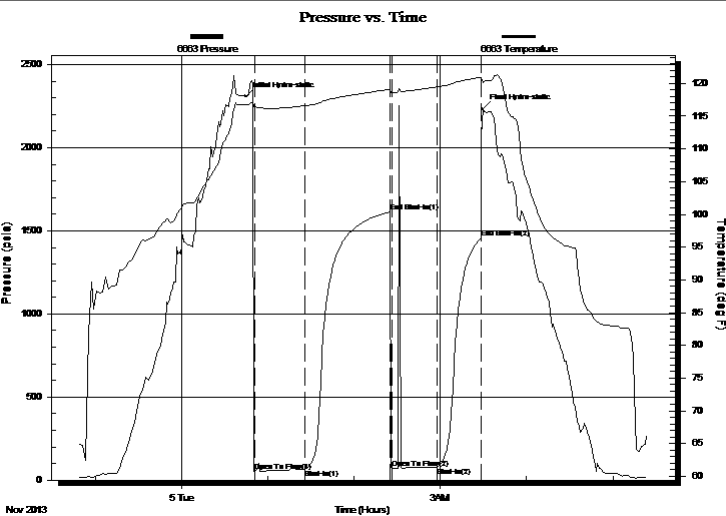
**16/32s/13w/Barber**  
**Spencer's Bluffs #6**  
 Job Ticket: 18515      **DST#: 4**  
 Test Start: 2013.11.04 @ 22:48:00

## GENERAL INFORMATION:

Formation: **Marmaton/Massey**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 00:50:30  
 Time Test Ended: 05:23:30  
 Interval: **4493.00 ft (KB) To 4542.00 ft (KB) (TVD)**  
 Total Depth: 4542.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Poor  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Shane Konzem  
 Unit No: 3330/196/Great Bend  
 Reference Elevations: 1828.00 ft (KB)  
 1815.00 ft (CF)  
 KB to GR/CF: 13.00 ft

**Serial #: 6663      Inside**  
 Press @ RunDepth: 79.52 psia @ 4538.00 ft (KB)      Capacity: 5000.00 psia  
 Start Date: 2013.11.04      End Date: 2013.11.05      Last Calib.: 2013.11.05  
 Start Time: 22:48:00      End Time: 05:23:30      Time On Btm: 2013.11.05 @ 00:44:30  
    Time Off Btm: 2013.11.05 @ 03:29:30

**TEST COMMENT:** 1st Open/ 30 Minutes. Weak blow built to 2 inches in 5 gallon bucket.  
 1st Shut In/ 60 Minutes. No blow back.  
 2nd Open/ 30 Minutes. No blow, flushed tool and gained a weak blow built to 1 inch in 5 gallon bucket.  
 2nd Shut In/ 30 Minutes. No blow back.



PRESSURE SUMMARY			
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2309.74	116.70	Initial Hydro-static
6	54.01	116.50	Open To Flow (1)
41	64.85	116.57	Shut-In(1)
101	1614.56	119.08	End Shut-In(1)
102	68.68	118.69	Open To Flow (2)
133	79.52	119.46	Shut-In(2)
164	1456.68	120.90	End Shut-In(2)
165	2233.45	120.19	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
50.00	20% mud, 80% water	0.70
0.00	chloride recov, 28000 ppm	0.00
0.00	resist recov, .21 at 40 degrees.	0.00

Gas Rates			
	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)





# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

LB Exploration Inc.  
 2135 2nd RD.  
 Holyrood Ks, 67450-9021  
 ATTN: Steve Petermann

**16/32s/13w/Barber**  
**Spencer's Bluffs #6**  
 Job Ticket: 18515      **DST#: 4**  
 Test Start: 2013.11.04 @ 22:48:00

**Tool Information**

Drill Pipe:	Length: 4487.00 ft	Diameter: 3.80 inches	Volume: 62.94 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose:	76000.00 lb
			<u>Total Volume: 62.94 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial	54000.00 lb
Depth to Top Packer:	4493.00 ft			Final	56000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	49.00 ft				
Tool Length:	70.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4473.00	
Shut-In Tool	5.00			4478.00	
Hydroic Tool	5.00			4483.00	
Packer	5.00			4488.00	21.00      Bottom Of Top Packer
Packer	5.00			4493.00	
Perforations	44.00			4537.00	
Recorder	1.00	6663	Inside	4538.00	
Recorder	1.00	6748	Outside	4539.00	
Bullnose	3.00			4542.00	49.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>70.00</b>				



# DRILL STEM TEST REPORT

## FLUID SUMMARY

LB Exploration Inc.  
2135 2nd RD.  
Holyrood Ks, 67450-9021  
ATTN: Steve Petermann

**16/32s/13w/Barber**  
**Spencer's Bluffs #6**  
Job Ticket: 18515      **DST#: 4**  
Test Start: 2013.11.04 @ 22:48:00

### 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: 10.20 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 6000.00 ppm			
Filter Cake: inches			

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
50.00	20% mud, 80% water	0.701
0.00	chloride recov, 28000 ppm	0.000
0.00	resist recov, .21 at 40 degrees.	0.000

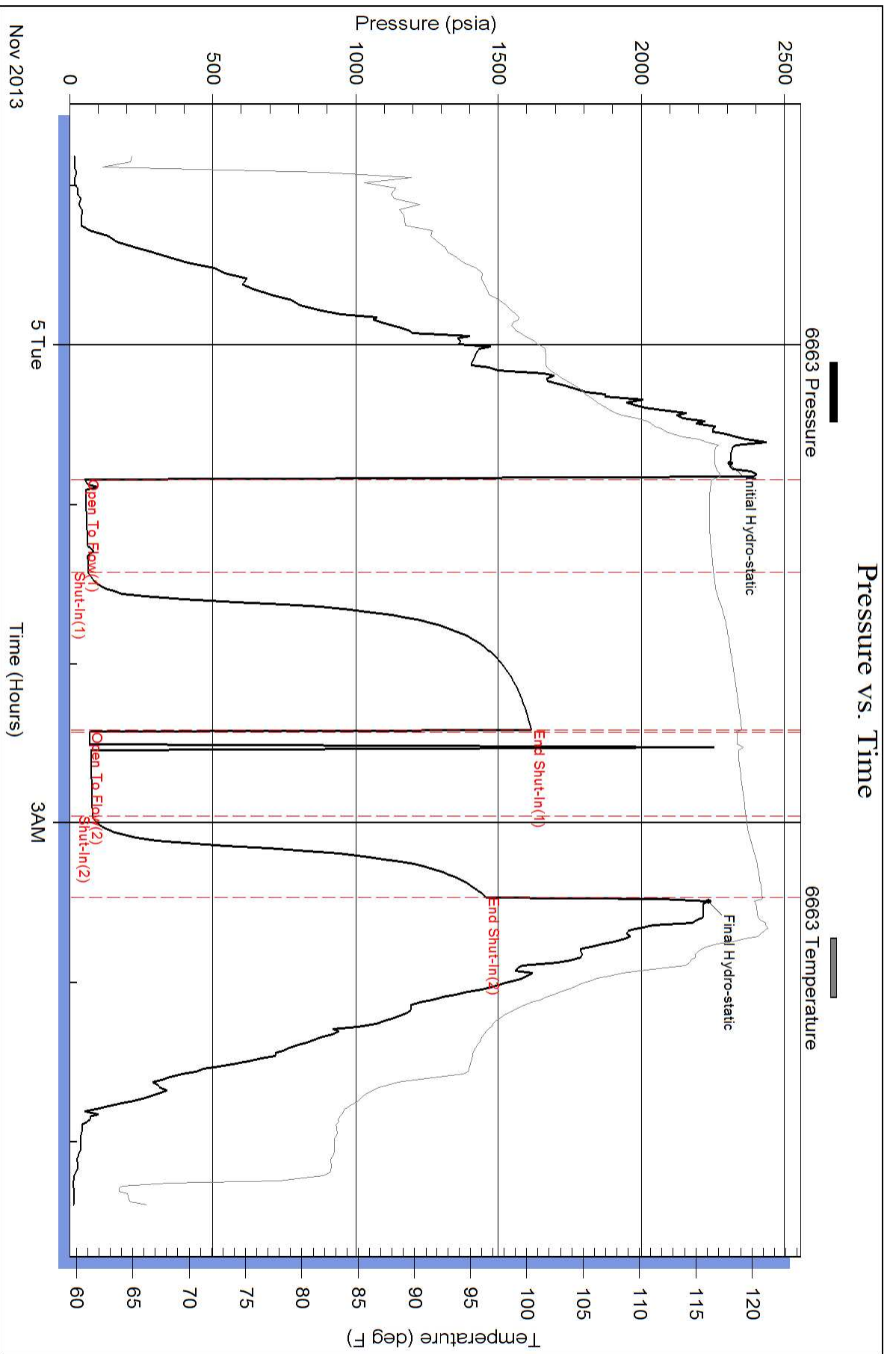
Total Length: 50.00 ft      Total Volume: 0.701 bbl

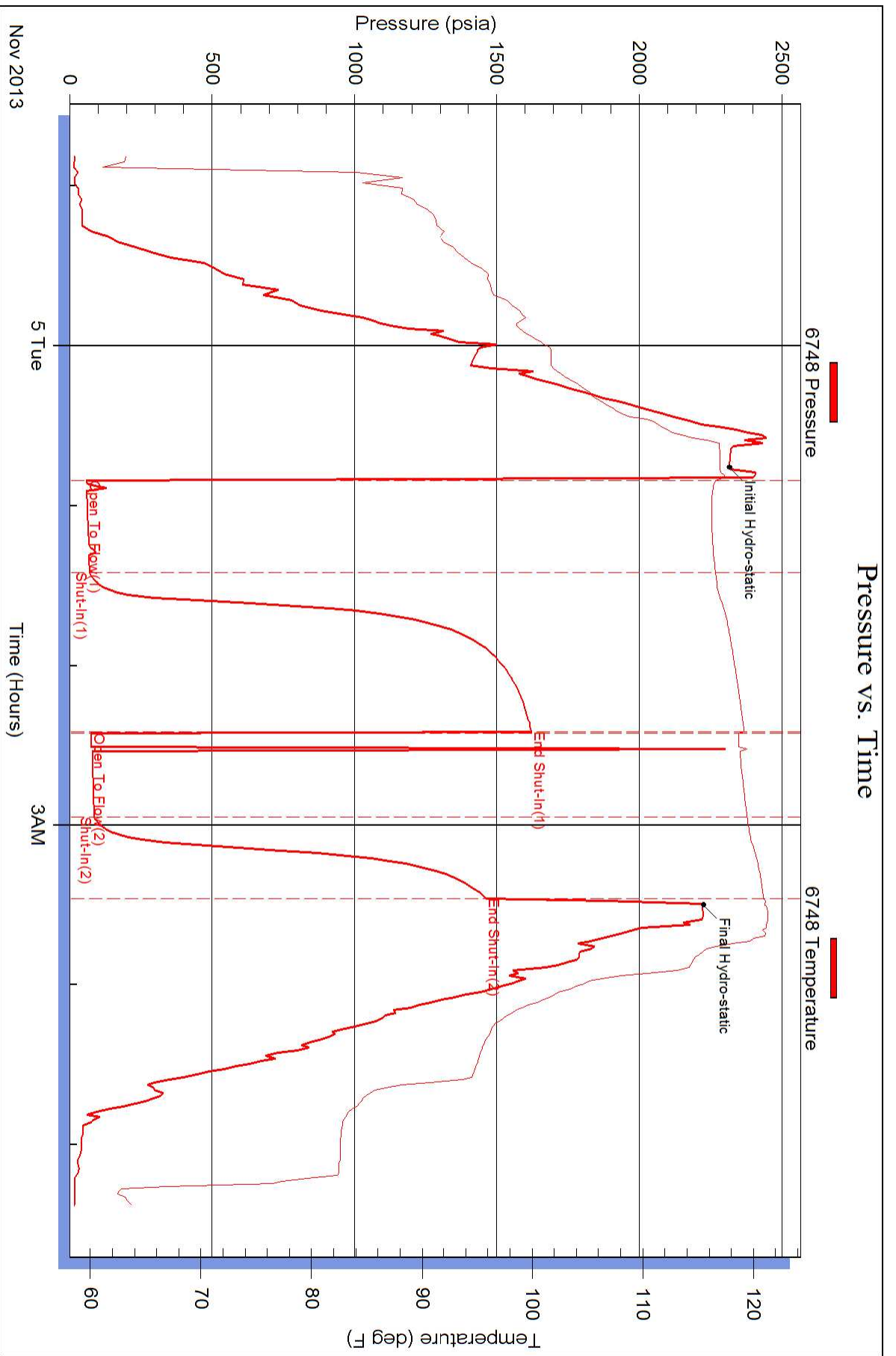
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:

Laboratory Name:      Laboratory Location:

Recovery Comments:









## DRILL STEM TEST REPORT

Prepared For: **LB Exploration Inc.**

2135 2nd RD.  
Holyrod Ks, 67450-9021

ATTN: Steve Petermann

### **Spencer's Bluffs #6**

#### **16/32s/13w/Barber**

Start Date: 2013.11.05 @ 16:25:00

End Date: 2013.11.06 @ 00:46:00

Job Ticket #: 8516                      DST #: 5

Superior Testers Enterprises LLC  
PO Box 138 Great Bend KS 67530  
1-800-792-6902

Printed: 2013.11.06 @ 01:03:07



# DRILL STEM TEST REPORT

LB Exploration Inc.  
 2135 2nd RD.  
 Holyrood Ks, 67450-9021  
 ATTN: Steve Petermann

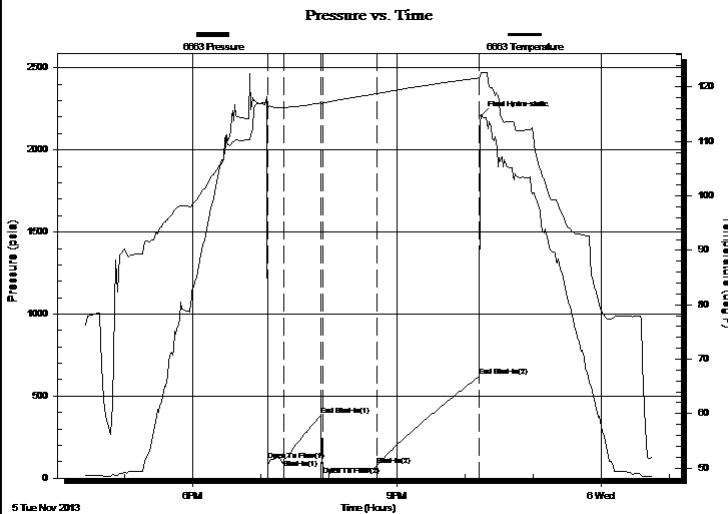
**16/32s/13w/Barber**  
**Spencer's Bluffs #6**  
 Job Ticket: 8516 **DST#: 5**  
 Test Start: 2013.11.05 @ 16:25:00

## GENERAL INFORMATION:

Formation: **Mississippian**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 19:06:30 Tester: Shane Konzem  
 Time Test Ended: 00:46:00 Unit No: 3330/196/Great Bend  
 Interval: **4571.00 ft (KB) To 4616.00 ft (KB) (TVD)** Reference Elevations: 1828.00 ft (KB)  
 Total Depth: 4616.00 ft (KB) (TVD) 1815.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Poor KB to GR/CF: 13.00 ft

**Serial #: 6663 Inside**  
 Press @ RunDepth: 77.09 psia @ 4612.00 ft (KB) Capacity: 5000.00 psia  
 Start Date: 2013.11.05 End Date: 2013.11.06 Last Calib.: 2013.11.06  
 Start Time: 16:25:00 End Time: 00:46:00 Time On Btm:  
 Time Off Btm: 2013.11.05 @ 22:14:30

**TEST COMMENT:** 1st Open/ 15 Minutes. Strong blow built to bottom of 5 gallon bucket in 35 seconds.  
 1st Shut In/ 30 Minutes. No blow back.  
 2nd Open/ 45 Minutes. Sstrong blow built to bottom of 5 gallon bucket in 15 seconds. Gas to surface in 15 minutes.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	108.20	116.52	Open To Flow (1)
15	114.62	116.27	Shut-In(1)
47	385.84	117.11	End Shut-In(1)
49	72.62	117.05	Open To Flow (2)
96	77.09	118.80	Shut-In(2)
187	621.88	121.70	End Shut-In(2)
188	2208.20	122.60	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
31.00	5% gas, 10% oil, 85% mud	0.43

## Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	0.13	4.50	1.68
Last Gas Rate	0.13	5.26	1.97
Max. Gas Rate	0.13	5.26	1.97



# DRILL STEM TEST REPORT

LB Exploration Inc.  
 2135 2nd RD.  
 Holyrood Ks, 67450-9021  
 ATTN: Steve Petermann

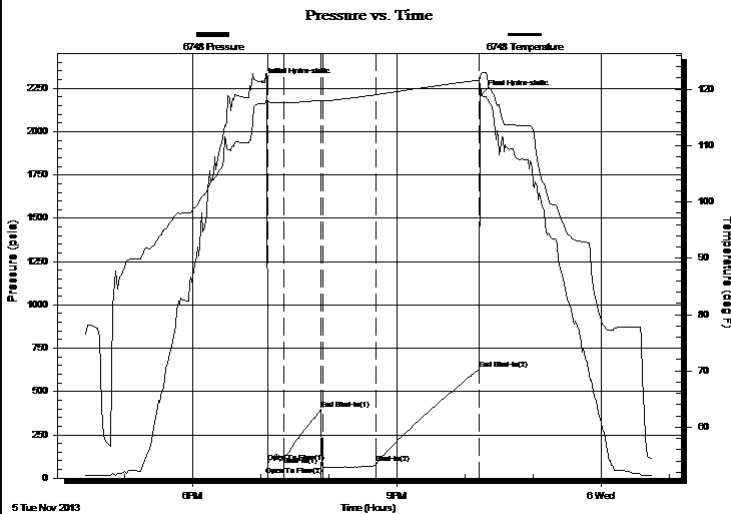
**16/32s/13w/Barber**  
**Spencer's Bluffs #6**  
 Job Ticket: 8516 **DST#: 5**  
 Test Start: 2013.11.05 @ 16:25:00

## GENERAL INFORMATION:

Formation: **Mississippian**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 19:06:30  
 Time Test Ended: 00:46:00  
 Interval: **4571.00 ft (KB) To 4616.00 ft (KB) (TVD)**  
 Total Depth: 4616.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Poor  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Shane Konzem  
 Unit No: 3330/196/Great Bend  
 Reference Elevations: 1828.00 ft (KB)  
 1815.00 ft (CF)  
 KB to GR/CF: 13.00 ft

**Serial #: 6748 Outside**  
 Press @ RunDepth: 629.16 psia @ 4613.00 ft (KB) Capacity: 5000.00 psia  
 Start Date: 2013.11.05 End Date: 2013.11.06 Last Calib.: 2013.11.06  
 Start Time: 16:25:00 End Time: 00:46:00 Time On Btm: 2013.11.05 @ 19:01:30  
 Time Off Btm: 2013.11.05 @ 22:14:30

**TEST COMMENT:** 1st Open/ 15 Minutes. Strong blow built to bottom of 5 gallon bucket in 35 seconds.  
 1st Shut In/ 30 Minutes. No blow back.  
 2nd Open/ 45 Minutes. Sstrong blow built to bottom of 5 gallon bucket in 15 seconds. Gas to surface in 15 minutes.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2284.95	117.49	Initial Hydro-static
5	90.87	117.75	Open To Flow (1)
20	126.50	117.63	Shut-In(1)
53	395.37	118.08	End Shut-In(1)
54	68.37	117.96	Open To Flow (2)
101	82.93	119.04	Shut-In(2)
191	629.16	121.63	End Shut-In(2)
193	2212.77	122.82	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
31.00	5% gas, 10% oil, 85% mud	0.43

## Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	0.13	4.50	1.68
Last Gas Rate	0.13	5.26	1.97
Max. Gas Rate	0.13	5.26	1.97



# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

LB Exploration Inc.  
 2135 2nd RD.  
 Holyrood Ks, 67450-9021  
 ATTN: Steve Petermann

**16/32s/13w/Barber**  
**Spencer's Bluffs #6**  
 Job Ticket: 8516      **DST#: 5**  
 Test Start: 2013.11.05 @ 16:25:00

## Tool Information

Drill Pipe:	Length: 4579.00 ft	Diameter: 3.80 inches	Volume: 64.23 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose:	72000.00 lb
			<u>Total Volume: 64.23 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	29.00 ft			String Weight: Initial	54000.00 lb
Depth to Top Packer:	4571.00 ft			Final	57000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	45.00 ft				
Tool Length:	66.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4551.00	
Shut-In Tool	5.00			4556.00	
Hydroic Tool	5.00			4561.00	
Packer	5.00			4566.00	21.00      Bottom Of Top Packer
Packer	5.00			4571.00	
Perforations	40.00			4611.00	
Recorder	1.00	6663	Inside	4612.00	
Recorder	1.00	6748	Outside	4613.00	
Bullnose	3.00			4616.00	45.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>66.00</b>				



# DRILL STEM TEST REPORT

## FLUID SUMMARY

LB Exploration Inc.  
 2135 2nd RD.  
 Holyrood Ks, 67450-9021  
 ATTN: Steve Petermann

**16/32s/13w/Barber**  
**Spencer's Bluffs #6**  
 Job Ticket: 8516      **DST#: 5**  
 Test Start: 2013.11.05 @ 16:25:00

### 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: 11.20 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 6000.00 ppm			
Filter Cake: inches			

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
31.00	5% gas, 10% oil, 85% mud	0.435

Total Length: 31.00 ft      Total Volume: 0.435 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:



# DRILL STEM TEST REPORT

**GAS RATES**

LB Exploration Inc.  
2135 2nd RD.  
Holyrood Ks, 67450-9021  
ATTN: Steve Petermann

**16/32s/13w/Barber**  
**Spencer's Bluffs #6**  
Job Ticket: 8516      **DST#: 5**  
Test Start: 2013.11.05 @ 16:25:00

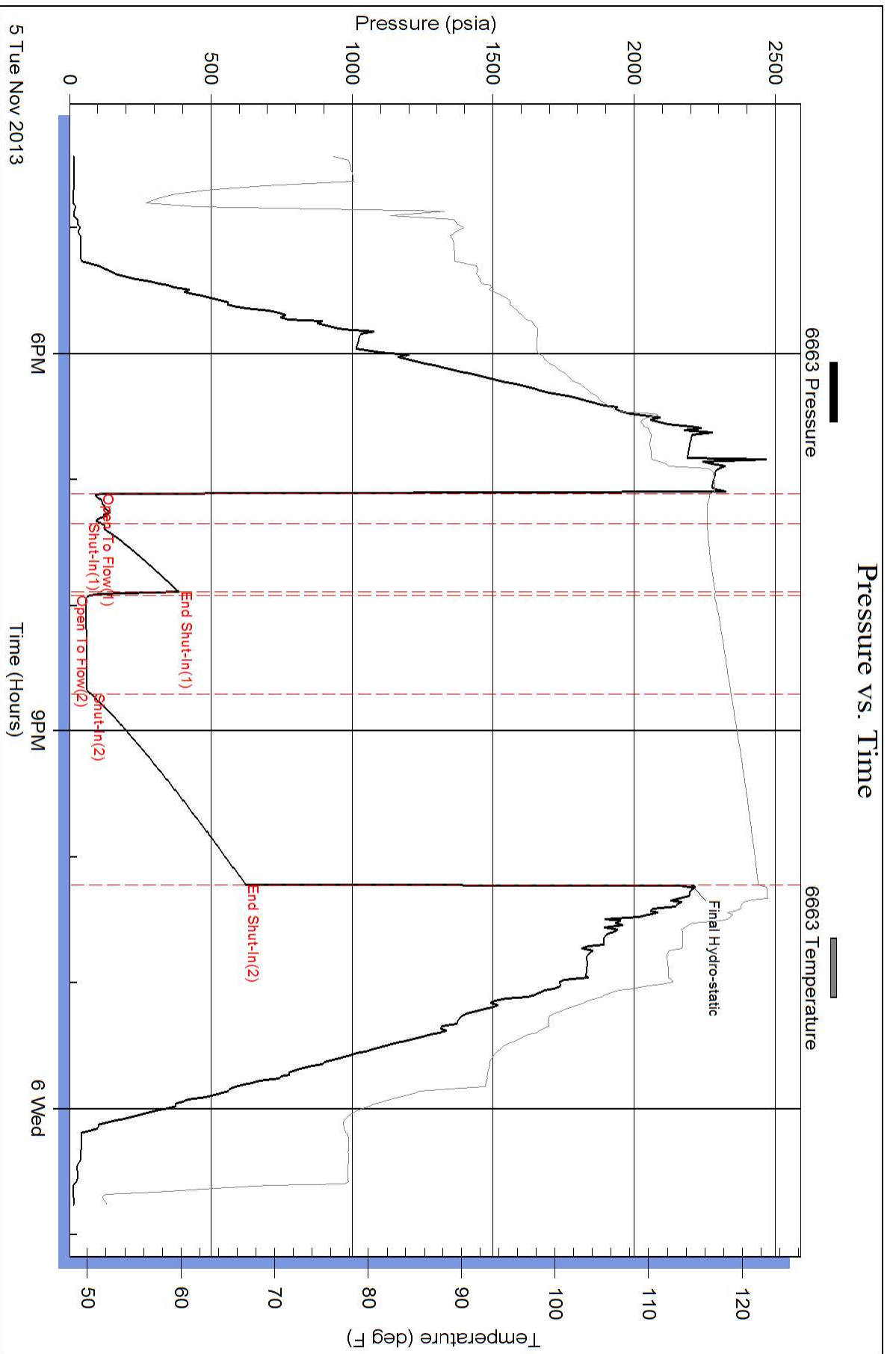
## Gas Rates Information

Temperature: 59 (deg F)  
Relative Density: 0.65  
Z Factor: 0.8

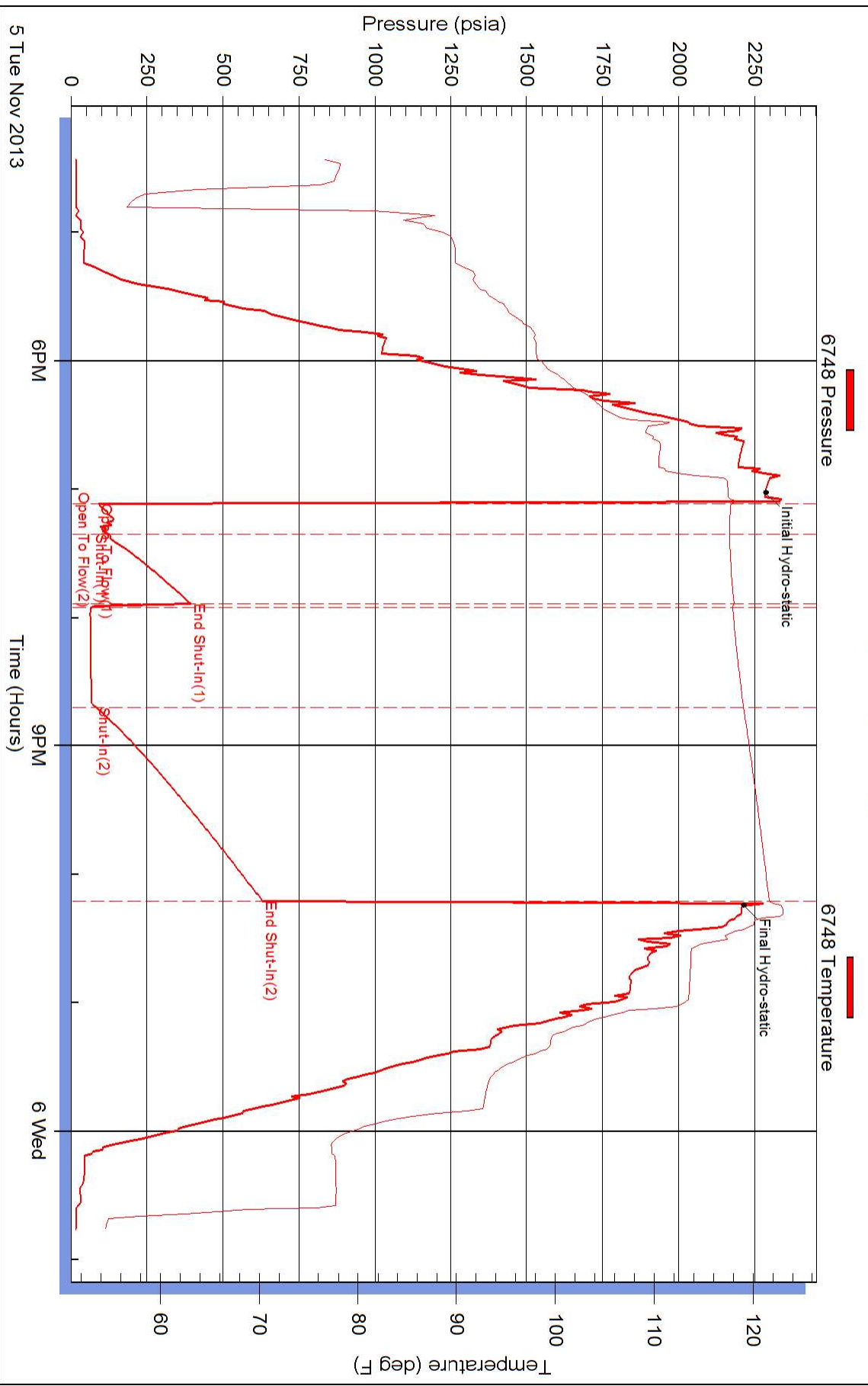
Gas Rates Table

Flow Period	Elapsed Time	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
2	20	0.13	4.50	1.68
2	30	0.13	5.25	1.97
2	40	0.13	5.25	1.97
2	45	0.13	5.26	1.97





### Pressure vs. Time





## DRILL STEM TEST REPORT

Prepared For: **LB Exploration Inc.**

2135 2nd RD.  
Holyrod Ks, 67450-9021

ATTN: Steve Petermann

### **Spencer's Bluffs #6**

#### **16/32s/13w/Barber**

Start Date: 2013.11.06 @ 12:30:00

End Date: 2013.11.06 @ 19:24:00

Job Ticket #: 18517                      DST #: 6

Superior Testers Enterprises LLC  
PO Box 138 Great Bend KS 67530  
1-800-792-6902

Printed: 2013.11.06 @ 19:42:38



# DRILL STEM TEST REPORT

LB Exploration Inc.  
 2135 2nd RD.  
 Holyrood Ks, 67450-9021  
 ATTN: Steve Petermann

**16/32s/13w/Barber**  
**Spencer's Bluffs #6**  
 Job Ticket: 18517      **DST#: 6**  
 Test Start: 2013.11.06 @ 12:30:00

## GENERAL INFORMATION:

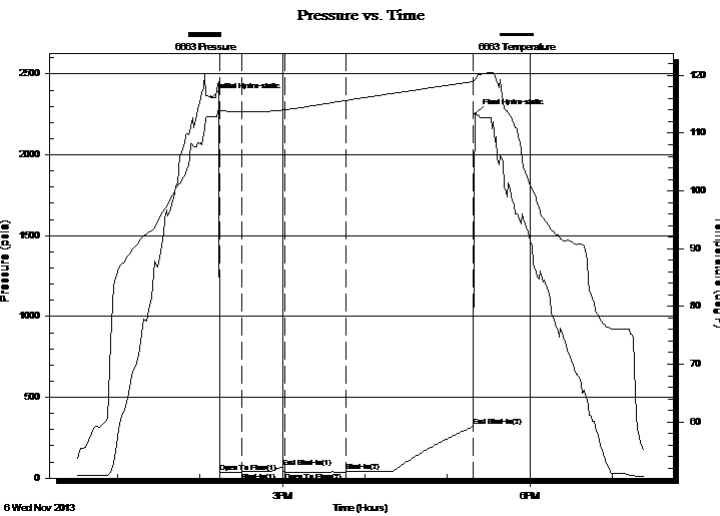
Formation: **Mississippian**  
 Deviated: No      Whipstock:      ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 14:14:30      Tester: Shane Konzem  
 Time Test Ended: 19:24:00      Unit No: 3330/196/Great Bend  
 Interval: **4617.00 ft (KB) To 4640.00 ft (KB) (TVD)**      Reference Elevations: 1828.00 ft (KB)  
 Total Depth: 4640.00 ft (KB) (TVD)      1815.00 ft (CF)  
 Hole Diameter: 7.88 inches      Hole Condition: Poor      KB to GR/CF: 13.00 ft

## Serial #: 6663

Inside

Press @ Run Depth: 39.94 psia @ 4636.00 ft (KB)      Capacity: 5000.00 psia  
 Start Date: 2013.11.06      End Date: 2013.11.06      Last Calib.: 2013.11.06  
 Start Time: 12:30:00      End Time: 19:24:00      Time On Btm: 2013.11.06 @ 14:08:30  
 Time Off Btm: 2013.11.06 @ 17:20:30

**TEST COMMENT:** 1st Open/ 15 Minutes. Good blow built to bottom of 5 gallon bucket in 5 min utes.  
 1st Shut In/ 30 Minutes. Blow back built to 1.5 inches in 5 gallon bucket.  
 2nd Open/ 45 Minutes. Fair blow built to bottom of 5 gallon bucket in 40 minutes.  
 2nd Shut In/ 90 Minutes. BLOW back built to 5 inches in 5 gallon bucket.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2355.97	112.88	Initial Hydro-static
6	36.76	113.92	Open To Flow (1)
22	37.96	113.68	Shut-In(1)
52	66.14	113.99	End Shut-In(1)
53	35.58	114.03	Open To Flow (2)
98	39.94	115.67	Shut-In(2)
191	320.33	118.91	End Shut-In(2)
192	2253.85	119.25	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	550 feet 100% gas.	0.00
20.00	5% Oil, 95% mud	0.28

## Gas Rates

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



# DRILL STEM TEST REPORT

LB Exploration Inc.  
 2135 2nd RD.  
 Holyrood Ks, 67450-9021  
 ATTN: Steve Petermann

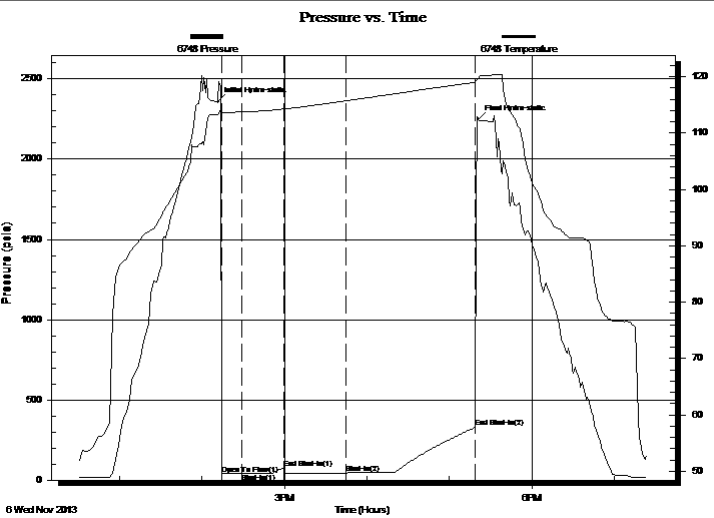
**16/32s/13w/Barber**  
**Spencer's Bluffs #6**  
 Job Ticket: 18517 **DST#: 6**  
 Test Start: 2013.11.06 @ 12:30:00

## GENERAL INFORMATION:

Formation: **Mississippian**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 14:14:30  
 Time Test Ended: 19:24:00  
 Interval: **4617.00 ft (KB) To 4640.00 ft (KB) (TVD)**  
 Total Depth: 4640.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Poor  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Shane Konzem  
 Unit No: 3330/196/Great Bend  
 Reference Elevations: 1828.00 ft (KB)  
 1815.00 ft (CF)  
 KB to GR/CF: 13.00 ft

**Serial #: 6748 Outside**  
 Press @ RunDepth: 327.25 psia @ 4637.00 ft (KB) Capacity: 5000.00 psia  
 Start Date: 2013.11.06 End Date: 2013.11.06 Last Calib.: 2013.11.06  
 Start Time: 12:30:00 End Time: 19:23:30 Time On Btm: 2013.11.06 @ 14:11:30  
 Time Off Btm: 2013.11.06 @ 17:21:00

**TEST COMMENT:** 1st Open/ 15 Minutes. Good blow built to bottom of 5 gallon bucket in 5 min utes.  
 1st Shut In/ 30 Minutes. Blow back built to 1.5 inches in 5 gallon bucket.  
 2nd Open/ 45 Minutes. Fair blow built to bottom of 5 gallon bucket in 40 minutes.  
 2nd Shut In/ 90 Minutes. BLOW back built to 5 inches in 5 gallon bucket.



PRESSURE SUMMARY			
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2357.47	113.29	Initial Hydro-static
3	38.95	113.67	Open To Flow (1)
18	42.21	113.73	Shut-In(1)
48	71.30	114.26	End Shut-In(1)
93	43.25	115.69	Shut-In(2)
188	327.25	118.96	End Shut-In(2)
190	2248.77	119.73	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
0.00	550 feet 100% gas.	0.00
20.00	5% Oil, 95% mud	0.28

Gas Rates			
	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)



# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

LB Exploration Inc.  
 2135 2nd RD.  
 Holyrood Ks, 67450-9021  
 ATTN: Steve Petermann

**16/32s/13w/Barber**  
**Spencer's Bluffs #6**  
 Job Ticket: 18517      **DST#: 6**  
 Test Start: 2013.11.06 @ 12:30:00

**Tool Information**

Drill Pipe:	Length: 4612.00 ft	Diameter: 3.80 inches	Volume: 64.69 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 76000.00 lb
			<u>Total Volume: 64.69 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	4617.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	23.00 ft			
Tool Length:	44.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4597.00	
Shut-In Tool	5.00			4602.00	
Hydroic Tool	5.00			4607.00	
Packer	5.00			4612.00	21.00      Bottom Of Top Packer
Packer	5.00			4617.00	
Perforations	18.00			4635.00	
Recorder	1.00	6663	Inside	4636.00	
Recorder	1.00	6748	Outside	4637.00	
Bullnose	3.00			4640.00	23.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>44.00</b>				



# DRILL STEM TEST REPORT

## FLUID SUMMARY

LB Exploration Inc.  
 2135 2nd RD.  
 Holyrood Ks, 67450-9021  
 ATTN: Steve Petermann

**16/32s/13w/Barber**  
**Spencer's Bluffs #6**  
 Job Ticket: 18517      **DST#: 6**  
 Test Start: 2013.11.06 @ 12:30:00

### 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: 66.00 sec/qt	Cushion Volume: bbl		
Water Loss: 10.79 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 7000.00 ppm			
Filter Cake: inches			

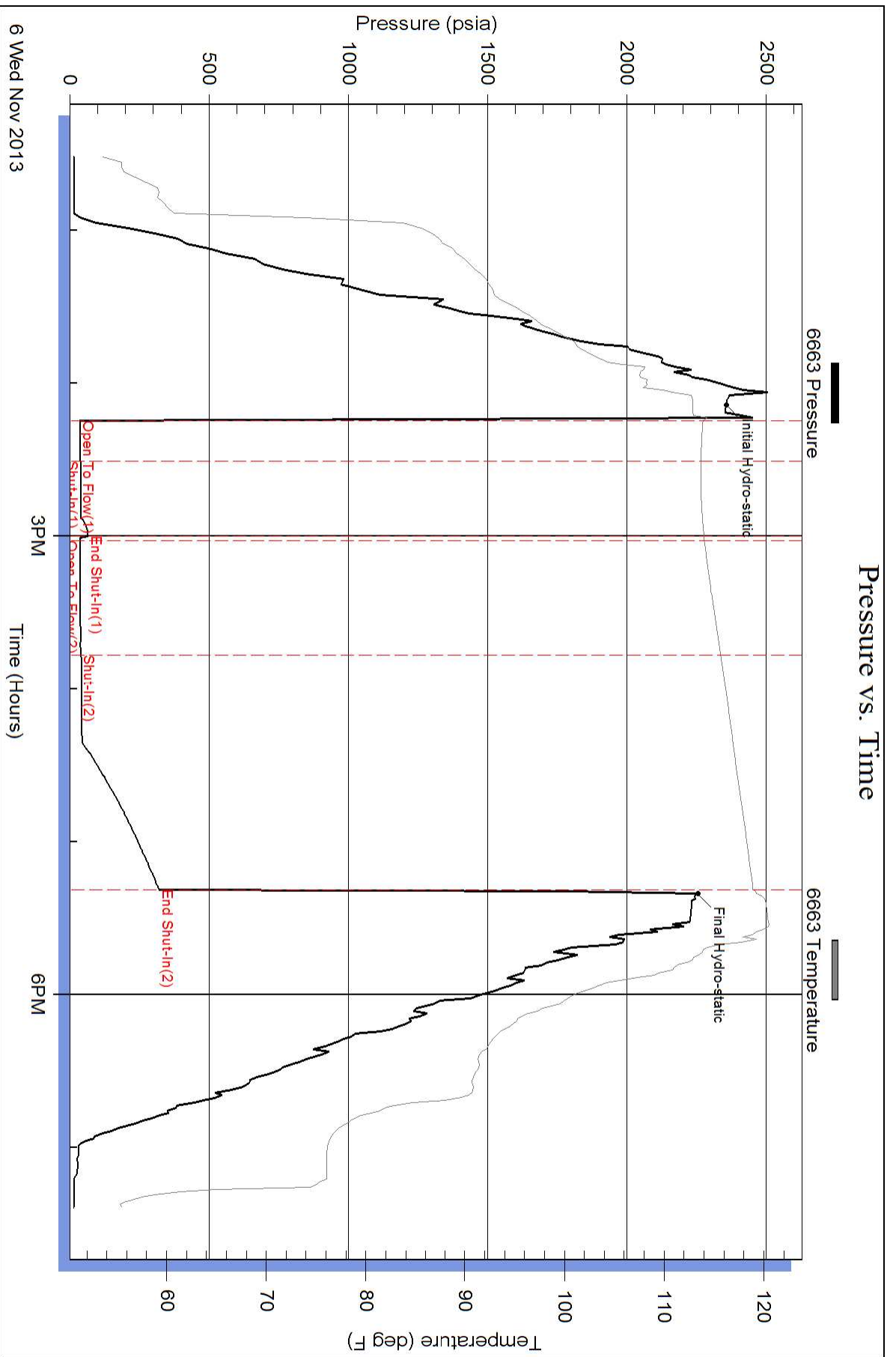
### Recovery Information

Recovery Table

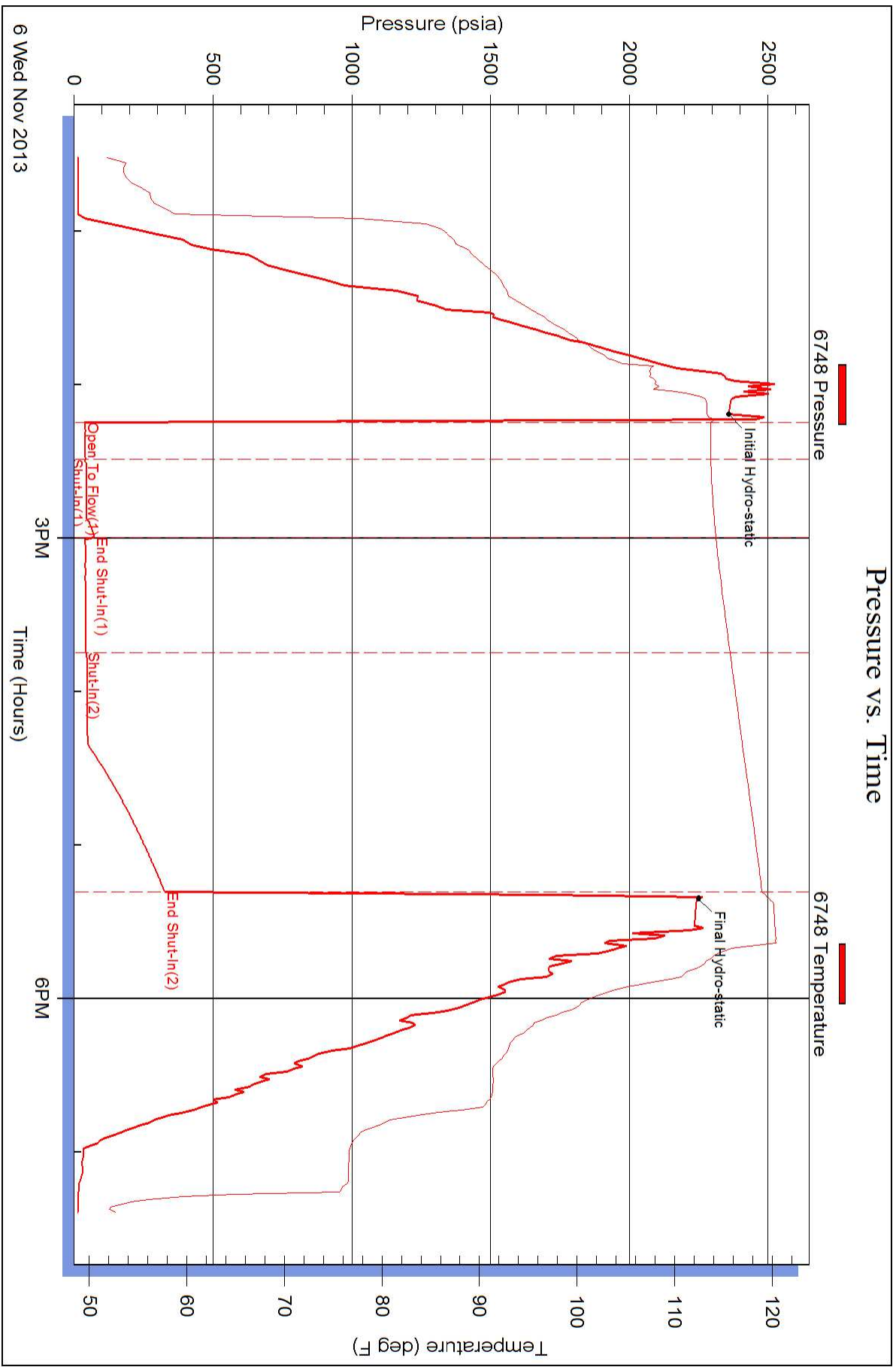
Length ft	Description	Volume bbl
0.00	550 feet 100% gas.	0.000
20.00	5% Oil, 95% mud	0.281

Total Length: 20.00 ft      Total Volume: 0.281 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:

# Pressure vs. Time









## DRILL STEM TEST REPORT

Prepared For: **LB Exploration Inc.**

2135 2nd RD.  
Holyrod Ks, 67450-9021

ATTN: Steve Petermann

### **Spencer's Bluffs #6**

#### **16/32s/13w/Barber**

Start Date: 2013.11.07 @ 18:55:00

End Date: 2013.11.08 @ 01:19:00

Job Ticket #: 18518                      DST #: 7

Superior Testers Enterprises LLC  
PO Box 138 Great Bend KS 67530  
1-800-792-6902

Printed: 2013.11.08 @ 01:32:49



# DRILL STEM TEST REPORT

LB Exploration Inc.  
 2135 2nd RD.  
 Holyrood Ks, 67450-9021  
 ATTN: Steve Petermann

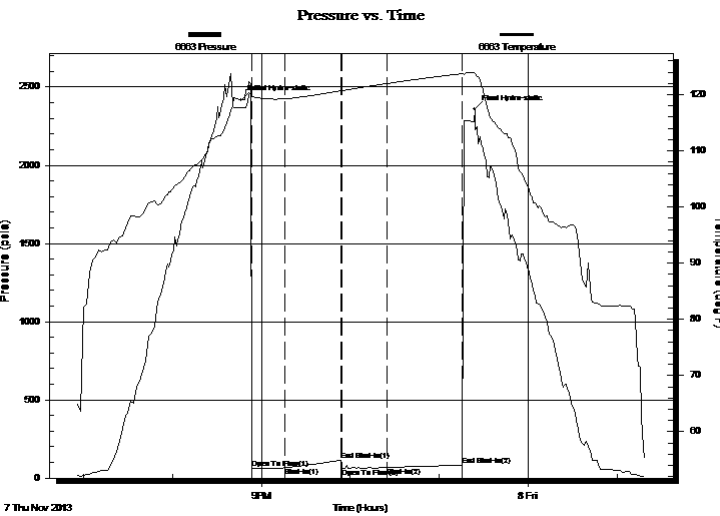
**16/32s/13w/Barber**  
**Spencer's Bluffs #6**  
 Job Ticket: 18518 **DST#: 7**  
 Test Start: 2013.11.07 @ 18:55:00

## GENERAL INFORMATION:

Formation: **Lower Mississippian**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 20:53:30  
 Time Test Ended: 01:19:00  
 Interval: **4749.00 ft (KB) To 4824.00 ft (KB) (TVD)**  
 Total Depth: 4824.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Poor  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Shane Konzem  
 Unit No: 3330/196/Great Bend  
 Reference Elevations: 1828.00 ft (KB)  
 1815.00 ft (CF)  
 KB to GR/CF: 13.00 ft

**Serial #: 6663 Inside**  
 Press @ RunDepth: 68.00 psia @ 4817.38 ft (KB) Capacity: 5000.00 psia  
 Start Date: 2013.11.07 End Date: 2013.11.08 Last Calib.: 2013.11.08  
 Start Time: 18:55:00 End Time: 01:19:00 Time On Btm: 2013.11.07 @ 20:46:30  
 Time Off Btm: 2013.11.07 @ 23:24:00

**TEST COMMENT:** 1st Open/ 20 Minutes. Weak surface blow.  
 1st Shut In/ 40 Minutes. No blow back.  
 2nd Open/ 20 Minutes. No blow flushed tool and gained flush bubbles and blow died.  
 2nd Shut In/ 60 Minutes. No blow back.



## PRESSURE SUMMARY

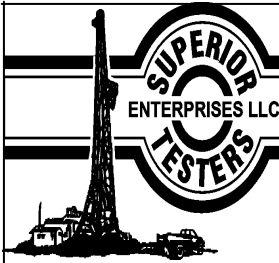
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2420.17	117.65	Initial Hydro-static
7	65.19	119.70	Open To Flow (1)
29	66.38	119.25	Shut-In(1)
67	114.30	120.70	End Shut-In(1)
68	65.84	120.70	Open To Flow (2)
99	68.00	121.99	Shut-In(2)
149	82.58	123.74	End Shut-In(2)
158	2359.03	123.75	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
20.00	100% mud	0.28

## Gas Rates

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



# DRILL STEM TEST REPORT

LB Exploration Inc.  
 2135 2nd RD.  
 Holyrood Ks, 67450-9021  
 ATTN: Steve Petermann

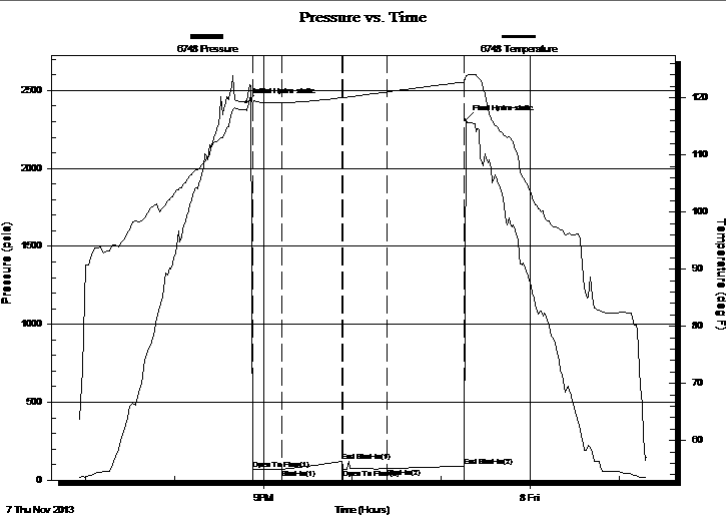
**16/32s/13w/Barber**  
**Spencer's Bluffs #6**  
 Job Ticket: 18518 **DST#: 7**  
 Test Start: 2013.11.07 @ 18:55:00

## GENERAL INFORMATION:

Formation: **Lower Mississippian**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 20:53:30  
 Time Test Ended: 01:19:00  
 Interval: **4749.00 ft (KB) To 4824.00 ft (KB) (TVD)**  
 Total Depth: 4824.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Poor  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Shane Konzem  
 Unit No: 3330/196/Great Bend  
 Reference Elevations: 1828.00 ft (KB)  
 1815.00 ft (CF)  
 KB to GR/CF: 13.00 ft

**Serial #: 6748 Outside**  
 Press @ Run Depth: 90.25 psia @ 4818.38 ft (KB) Capacity: 5000.00 psia  
 Start Date: 2013.11.07 End Date: 2013.11.08 Last Calib.: 2013.11.08  
 Start Time: 18:55:00 End Time: 01:18:30 Time On Btm: 2013.11.07 @ 20:48:30  
 Time Off Btm: 2013.11.07 @ 23:16:30

**TEST COMMENT:** 1st Open/ 20 Minutes. Weak surface blow.  
 1st Shut In/ 40 Minutes. No blow back.  
 2nd Open/ 20 Minutes. No blow flushed tool and gained flush bubbles and blow died.  
 2nd Shut In/ 60 Minutes. No blow back.



PRESSURE SUMMARY			
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2423.95	117.83	Initial Hydro-static
4	69.96	118.99	Open To Flow (1)
24	71.47	119.17	Shut-In(1)
65	121.11	120.03	End Shut-In(1)
65	71.64	120.00	Open To Flow (2)
95	74.13	121.04	Shut-In(2)
147	90.25	122.76	End Shut-In(2)
148	2313.04	123.93	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
20.00	100% mud	0.28

Gas Rates			
	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)



# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

LB Exploration Inc.  
 2135 2nd RD.  
 Holyrood Ks, 67450-9021  
 ATTN: Steve Petermann

**16/32s/13w/Barber**  
**Spencer's Bluffs #6**  
 Job Ticket: 18518      **DST#: 7**  
 Test Start: 2013.11.07 @ 18:55:00

**Tool Information**

Drill Pipe:	Length: 4736.00 ft	Diameter: 3.80 inches	Volume: 66.43 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 66.43 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	4749.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	74.38 ft			
Tool Length:	95.38 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4729.00	
Shut-In Tool	5.00			4734.00	
Hydroic Tool	5.00			4739.00	
Packer	5.00			4744.00	21.00      Bottom Of Top Packer
Packer	5.00			4749.00	
Perforations	5.00			4754.00	
Change Over Sub	0.75			4754.75	
Drill Pipe	31.88			4786.63	
Change Over Sub	0.75			4787.38	
Perforations	29.00			4816.38	
Recorder	1.00	6663	Inside	4817.38	
Recorder	1.00	6748	Outside	4818.38	
Bullnose	5.00			4823.38	74.38      Bottom Packers & Anchor

**Total Tool Length: 95.38**



# DRILL STEM TEST REPORT

## FLUID SUMMARY

LB Exploration Inc.  
 2135 2nd RD.  
 Holyrood Ks, 67450-9021  
 ATTN: Steve Petermann

**16/32s/13w/Barber**  
**Spencer's Bluffs #6**  
 Job Ticket: 18518      **DST#: 7**  
 Test Start: 2013.11.07 @ 18:55:00

### 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: 86.00 sec/qt	Cushion Volume: bbl		
Water Loss: 12.00 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 6000.00 ppm			
Filter Cake: inches			

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	100% mud	0.281

Total Length: 20.00 ft      Total Volume: 0.281 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:

