

# HALLIBURTON

iCem<sup>®</sup> Service

## **BONANZA CREEK ENERGY**

**For:**

Date: Thursday, October 30, 2014

### **BONANZA CREEK LATHAM T-P-2 HNB SURFACE**

BONANZA CREEK LATHAM T-P-2 HNB SURFACE

Sincerely,  
**Sheldon Cotts**

## Table of Contents

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1.1	Executive Summary	3
1.2	Cementing Job Summary	4
1.3	Planned Pumping Schedule	6
1.4	Job Event Log	7
2.0	Custom Graphs	9
2.1	Custom Graph	10
3.0	Appendix	11

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## 1.1 Executive Summary

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Halliburton appreciates the opportunity to perform the cementing services on the **Latham T-P-2 HNB cement Surface** casing job. A pre-job safety meeting was held before the job where details of the job were discussed, potential safety hazards were reviewed, and environmental compliance procedures were outlined.

Halliburton maintains a continuous quality improvement process and appreciates any comments or suggestions that you may have. Halliburton again thanks you for the opportunity to perform service work on this well. We hope to be your solutions provider for future projects.

Respectfully,

**Halliburton [Brighton]**

**Job Times**

	<b>Date</b>	<b>Time</b>	<b>Time Zone</b>
<b>On Location</b>	6/24/14	2100	MST
<b>Job Started</b>	6/25/14	0958	MST
<b>Job Completed</b>	6/25/14	1148	MST
<b>Departed Location</b>	6/25/14	1230	MST

## 1.2 Cementing Job Summary

**HALLIBURTON**

### Cementing Call for Services

The Road to Excellence Starts with Safety											
Sold To #: 324725	Ship To #: 3281211	Primary Sales Order #: 0901453694									
Customer: BONANZA CREEK ENERGY			Job Purpose: 7521 CMT SURFACE CASING BOM								
Well Name: LATHAM		Well #: T-P-2 HNB	API/UWI #: 05-123-38788-00								
Field: WATTENBERG	City: KERSEY	Country/Parish: WELD	State/Prov: COLORADO								
Legal Description:											
Rig Name & Number / Phone Number: CADE 26 / 832-461-4633					Location: LAND						
myCem id# :	Job Criticality Status: GREEN		iFacts Request id #:								
Contacts											
Type	Name	Email	Phone								
Account Rep	Jon Gregory	Jon.Gregory@Halliburton.com	+19702104722								
Service Coordinator	Ryan Wyckoff	Ryan.Wyckoff@halliburton.com	+17205386044								
Company Man	Tim		832-461-4633								
PPE, Safety Huddles, JSA's, HOC & Near Miss Reporting, BBP Observations											
Distance/Mileage(1 way)	35 mile	Distance/Mileage(1 way) Mtls:	35 mile								
Srvcs:		Rqstd Job Start Date/Time:	06/28/2014								
HSE Information											
H2S Present:	Unknown	CO2 Present:	Unknown								
<i>Drive Safely. Lights On for Safety. Wear Seat Belts. Observe all HES / Customer Safety Policies.</i>											
Directions:											
Hwy 34 East to Cr 69, North on Cr 69 3/4 miles, East into at the Guard Shack											
Instruction											
General Equipment											
3rd Party / Inventory Items											
SAP Number	Description	Quantity	UoM	Pricing Enabled							
Job Info / Well Data											
Job Depth (MD) ft	Job Depth (TVD) ft	Well Fluid Type	Well Fluid Weight lbm/gal	Displacement Fluid	Displ Fluid Weight lbm/gal						
410				Displacement	8.33						
BHST degF	BHCT degF	Log Temp degF		Time Since Circ Stopped HH:MM:SS							
				HH:MM:SS							
Job Tubulars/Tools											
Description	Size in	Weight lbm/ft	ID in	Thread	Grade	Top MD ft	Btm MD ft	Top TVD ft	Btm TVD ft	Shoe Jnt ft	% Excess
Open Hole			13.5			0	410				100
9-5/8" Surface Casing	9.625	36	8.921	STC	J-55	0	410			42	
Mud conditioning plan											
The condition of the drilling fluid is one of the most important variables in achieving a cement barrier. Prior to cementing, circulate the mud at the planned highest displacement rate for the cement job for at least 2 bottoms-up until the well is clean, mud is free of gas and											

Call For Service  
 Sales Order #:0901453694

Page 1 of 5  
 Monday, June 23, 2014 11:45:49 PM

pump pressures have stabilized.										
Materials										
Stage/Plug #: 1										
Fluid #	Fluid Name	Package/SBM/Material Name	Rqstd Del Qty	UOM	Density lbm/gal	Yield ft <sup>3</sup> /sack	Water Req Gal/sack	Rate bbl/min	Total Mix Fluid Gal/sack	Surface Batch Mixing Time
1	Mud Flush III (Powder)		20	bbl	8.4			6		
iFacts Test id #										
Fluid #	Fluid Name	Package/SBM/Material Name	Rqstd Del Qty	UOM	Density lbm/gal	Yield ft <sup>3</sup> /sack	Water Req Gal/sack	Rate bbl/min	Total Mix Fluid Gal/sack	Surface Batch Mixing Time hr
2	Lead Cement	SWIFTCEM (TM) SYSTEM	340	sack	13.5	1.75	9.23	6	9.23	
iFacts Test id #										
Fluid #	Fluid Name	Package/SBM/Material Name	Rqstd Del Qty	UOM	Density lbm/gal	Yield ft <sup>3</sup> /sack	Water Req Gal/sack	Rate bbl/min	Total Mix Fluid Gal/sack	Surface Batch Mixing Time
3	Displacement		60	bbl	8.33			6		
iFacts Test id #										

## **1.3 Planned Pumping Schedule**

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- 1. Fill Lines with Water**
  - a. Density = 8.33 lb/gal
  - b. Volume = 2 bbls
- 2. Pressure Test Lines to 2500 psi**
- 3. Pump Water Spacer**
  - a. Density = 8.33 lb/gal
  - b. Volume = 10 bbl
  - c. Rate = 3 bpm
- 4. Pump Mud Flush**
  - a. Density = 8.33 lb/gal
  - b. Volume = 20 bbl
  - c. Rate = 3 bpm
- 5. Pump Water Spacer**
  - a. Density = 8.33 lb/gal
  - b. Volume = 40 bbl
  - c. Rate = 4 bpm
- 6. Pump SwiftCem (Lead)**
  - a. Density = 13.5 lb/gal
  - b. Yield = 1.75 ft<sup>3</sup>/sk
  - c. Water Requirement = 9.23 gal/sk
  - d. Volume = 340 sks (105 bbls)
  - e. Rate = 4 bpm
- 7. Drop Top Plug**
- 8. Start Displacement**
- 9. Pump Displacement Water**
  - a. Density = 8.33 lb/gal
  - b. Volume = 60 bbls
  - c. Rate = 2.5 bpm
10. Land Plug – Anticipated Final Circulation Pressure 248 psi

**Calculated Total Displacement = 60 bbls**

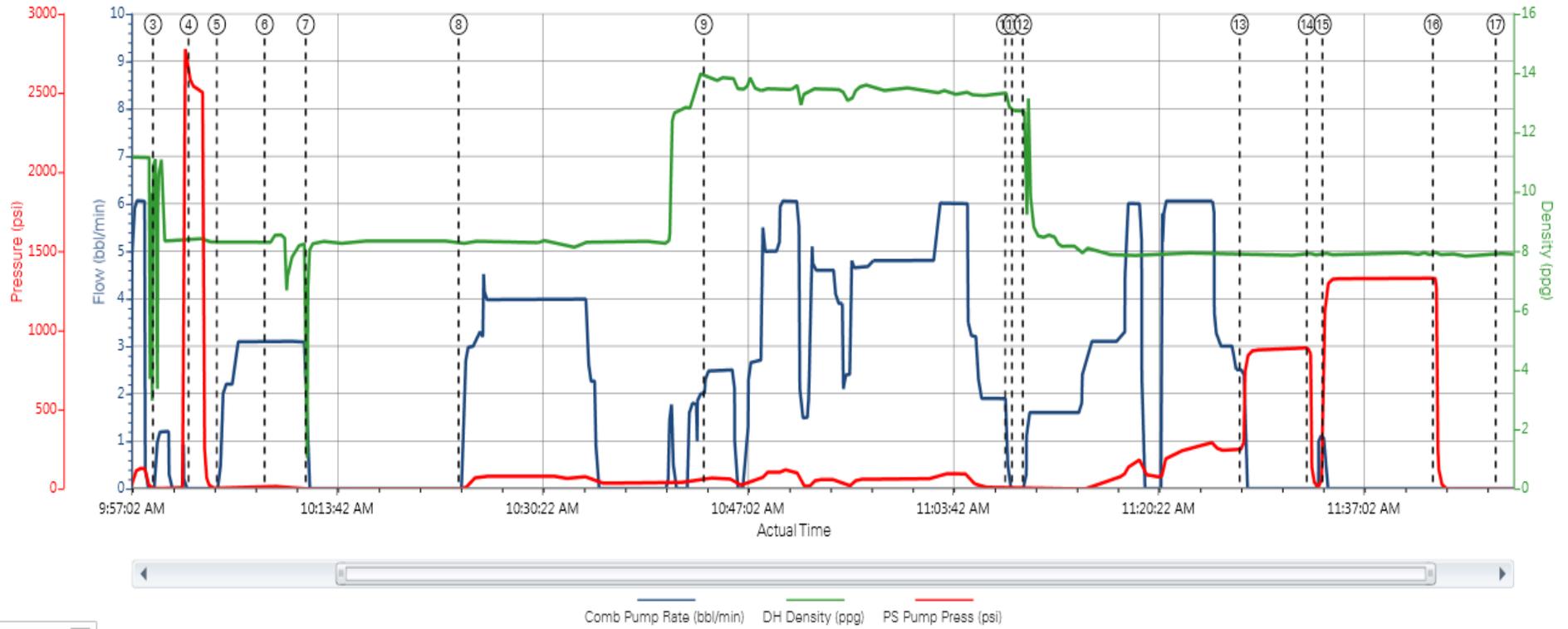
## 1.4 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Combined Pump Rate (bbl/min)	Downhole Density (ppg)	Pass-Side Pump Pressure (psi)	Comment
Event	1	Arrive at Location from Service Center	Arrive at Location from Service Center	6/24/2014	21:00:00	USER				ARRIVE AT LOCATION. PERFORM SITE ASSESSMENT. RIG DRILLING @ 500 FT.
Event	2	Rig-up Lines	Rig-up Lines	6/25/2014	08:00:00	USER				SAFETY MEETING PRIOR TO RIGGING UP LINES.
Event	3	Start Job	Start Job	6/25/2014	09:58:57	COM4	0.00	11.12	-1.00	PERFORM SAFETY METTING WITH ALL PRESENT PERSONELL.
Event	4	Test Lines	Test Lines	6/25/2014	10:01:51	COM4	0.00	8.41	2559.00	PRESSURE TEST LINES TO 2500 PSI.
Event	5	Pump Spacer 1	Pump Spacer 1	6/25/2014	10:04:08	COM4	0.00	8.30	0.00	PUMP 10 BBLS WATER
Event	6	Pump Spacer 2	Pump Spacer 2	6/25/2014	10:08:01	COM4	3.10	8.29	13.00	PUMP 20 BBLS MUDFLUSH
Event	7	Shutdown	Shutdown	6/25/2014	10:11:21	USER	0.00	7.45	-3.00	RIG HAVING PROBLEMS
Event	8	Pump Spacer 1	Pump Spacer 1	6/25/2014	10:23:46	COM4	0.00	8.30	-3.00	PUMP 40 BBLS WATER WITH RED DYE ADDED TO LAST 5 BBLS.
Event	9	Pump Cement	Pump Cement	6/25/2014	10:43:40	COM4	2.40	13.92	66.00	PUMP 105 BBLS (340 SKS) SWIFTCEM MIXED AT 13.5 PPG USING SUPPLIED WATER. DENSITY VERIFIED BY SCALE.
Event	10	Shutdown	Shutdown	6/25/2014	11:08:08	COM4	0.00	12.99	5.00	
Event	11	Drop Top Plug	Drop Top Plug	6/25/2014	11:08:41	COM4	0.00	12.71	-4.00	TOP PLUG PRELOADED.
Event	12	Pump Displacement	Pump Displacement	6/25/2014	11:09:34	COM4	0.00	12.72	-4.00	GOOD RETURNS THROUGHOUT. CEMENT TO SURFACE AT 35 BBLS INTO 60 BBLS TOTAL DISPLACEMENT. APPROX 25 BBLS CEMENT TO SURFACE.

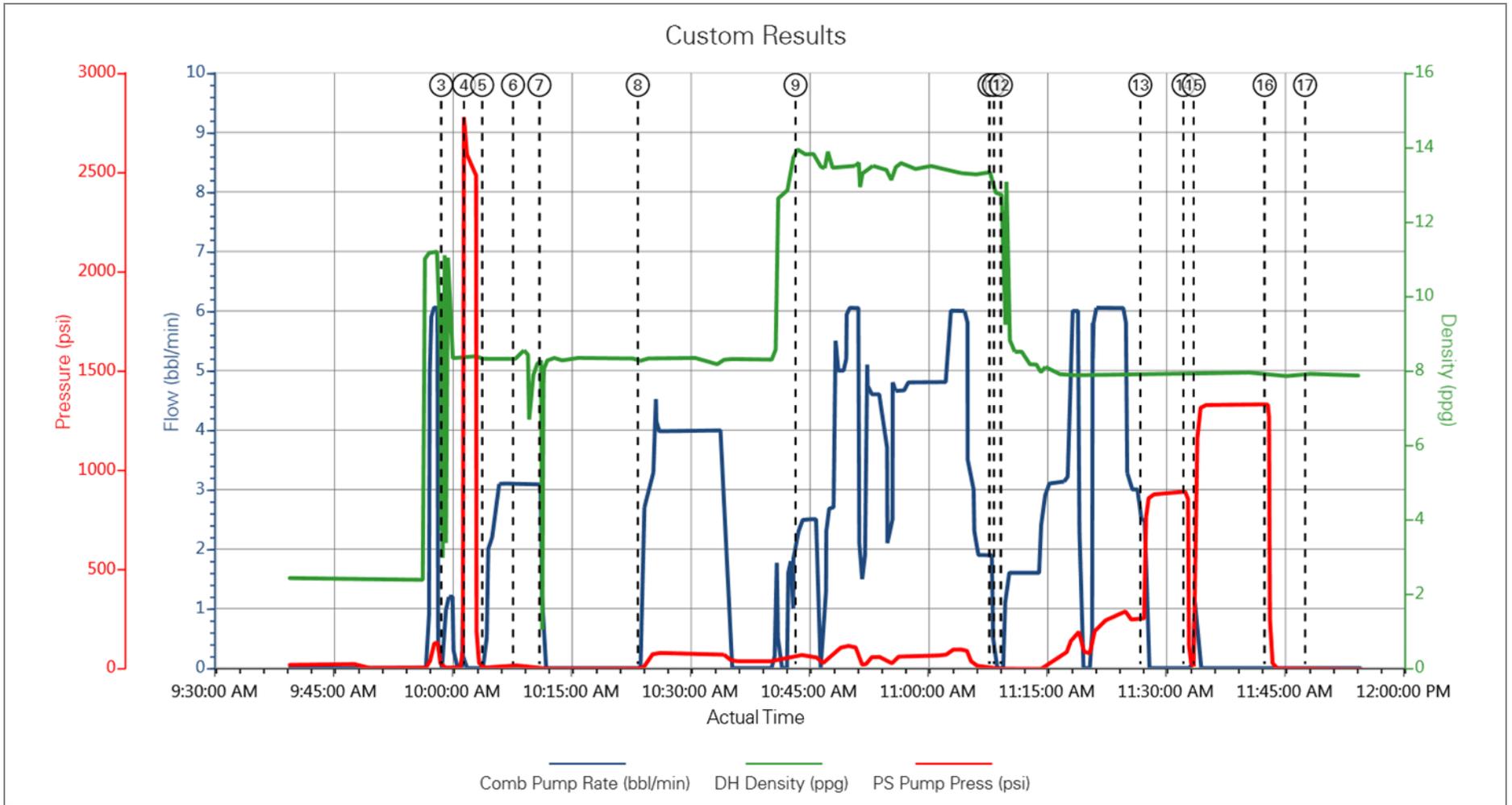
Event	13	Bump Plug	Bump Plug	6/25/2014	11:27:10	USER	2.50	7.97	248.00	PLUG LANDED AT 248 PSI. PRESSURE BROUGHT TO 800 PSI AND HELD 10 MIN PER CUSTOMER REQUEST.
Event	14	Check Floats	Check Floats	6/25/2014	11:32:37	USER	0.00	7.94	890.00	FLOATS HELD 1.5 BBLS BACK.
Event	15	Pressure Test	Pressure Test	6/25/2014	11:33:53	USER	0.00	7.91	1214.00	PRESSURE UP TO 1000 PSI AND HOLD 10 MIN PER CUSTOMER REQUEST.
Event	16	Check Floats	Check Floats	6/25/2014	11:42:51	USER	0.00	7.96	1329.00	FLOATS HELD 1.5 BBLS BACK.
Event	17	Rig Down Lines	Rig Down Lines	6/25/2014	11:47:57	USER	0.00	7.88	-5.00	SAFETY MEETING PRIOR TO RIGGING DOWN LINES.
Event	18	Depart Location	Depart Location	6/25/2014	12:30:00	USER				DEPART LOCATION JOURNEY MGNT.

2.0 Custom Graphs

Custom Results



2.1 Custom Graph



**3.0 Appendix**

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Insert Planned Pump Schedule from Proposal or actual Job Procedure built for job