

HALLIBURTON

iCem[®] Service

BONANZA CREEK ENERGY

For: MARTIN CABELL

Date: Monday, July 21, 2014

PRONGHORN D-X-9HNB

PRONGHORN

Case 1

Sincerely,

AARON SMITH

Table of Contents

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	Appendix	9

1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **Pronghorn D-X-9HNB** 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

	Date	Time	Time Zone
Called Out	7/20/14	1630	MST
On Location	7/20/14	2000	MST
Job Started	7/21/14	0155	MST
Job Completed	7/21/14	0307	MST
Departed Location	7/21/14	0345	MST

1.2 Cementing Job Summary



Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 324725	Ship To #: 3471379	Quote #:	Sales Order #: 0901521654							
Customer: BONANZA CREEK ENERGY		Customer Rep: MARTIN CABELL								
Well Name: PRONGHORN		Well #: D-X-9HNB	API/UWI #: 05-123-39286-00							
Field: WATTENBERG	City (SAP): MASTERS	County/Parish: WELD	State: COLORADO							
Legal Description: SW SW-9-5N-61W-1273FSL-260FWL										
Contractor:		Rig/Platform Name/Num: Cade 22								
Job BOM: 7521										
Well Type: HORIZONTAL OIL										
Sales Person: HALAMERICA\HX46524		Srv Supervisor: Aaron Smith								
Job										
Formation Name										
Formation Depth (MD)	Top	Bottom								
Form Type		BHST								
Job depth MD	472ft	Job Depth TVD								
Water Depth		Wk Ht Above Floor								
Perforation Depth (MD)	From	To								
Well Data										
Description	New / Used	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
Casing	0	9.625	8.921	36	STC	J-55	0	462		462
Open Hole Section			13.5				0	472		472
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make		
Guide Shoe	9.625				Top Plug	9.625	1	HES		
Float Shoe	9.625	1	SSII	462	Bottom Plug	9.625		HES		
Float Collar	9.625	1	SSII	420	SSR plug set	9.625		HES		
Insert Float	9.625				Plug Container	9.625	1	HES		
Stage Tool	9.625				Centralizers	9.625		HES		
Miscellaneous Materials										
Gelling Agt	Conc	Surfactant	Conc	Acid Type	Qty	Conc				
Treatment Fld	Conc	Inhibitor	Conc	Sand Type	Size	Qty				
Fluid Data										
Stage/Plug #: 1										
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
1	FRESH WATER	SPACER	24	bbl	8.33			6		
FRESH WATER										
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
2	Lead Cement	SWIFTCEM (TM) SYSTEM	195	sack	13.5	1.75		6	9.23	

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Cementing Job Summary

9.23 Gal		FRESH WATER							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft³/sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal
3	Displacement	Displacement	32.5	bbf	8.33			6	
Cement Left In Pipe	Amount	42 ft		Reason	Shoe Joint				
Comment									

1.3 Planned Pumping Schedule

- 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 = 24 bbl
- 4. Pump SwiftCem (Lead)**
 - a. Density = 13.5 lb/gal
 - b. Yield = 1.75 ft³/sk
 - c. Water Requirement = 9.23 gal/sk
 - d. Volume = 195 sks (60 bbls)
- 5. Drop Top Plug**
- 6. Start Displacement**
- 7. Pump Displacement Water**
 - a. Density = 8.33 lb/gal
 - b. Volume = 32.5 bbls
- 8. Land Plug – Anticipated Final Circulation Pressure 140 psi**

Calculated Total Displacement = 32.5 bbls

1.4 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Comment
Event	1	Call Out	Call Out	7/20/2014	16:30:00	USER	CALLED OUT BY ARS FOR ON LOCATION @ 2200
Event	2	Depart Yard Safety Meeting	Depart Yard Safety Meeting	7/20/2014	19:45:00	USER	JOURNEY MANAGEMENT MEETING WITH HES CREW PRIOR TO DEPARTURE
Event	3	Depart from Service Center or Other Site	Depart from Service Center or Other Site	7/20/2014	20:00:00	USER	
Event	4	Arrive at Location from Service Center	Arrive at Location from Service Center	7/20/2014	21:00:00	USER	WITH ALL EQUIPMENT AND MATERIALS
Event	5	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	7/21/2014	00:30:00	USER	RIG-UP JSA WITH HES CREW
Event	6	Rig-Up Equipment	Rig-Up Equipment	7/21/2014	00:35:00	USER	
Event	7	Rig-Up Completed	Rig-Up Completed	7/21/2014	00:45:00	USER	
Event	8	Pre-Job Safety Meeting	Pre-Job Safety Meeting	7/21/2014	01:30:00	USER	WITH CUSTOMER REP AND RIG CREW
Event	9	Start Job	Start Job	7/21/2014	01:55:00	USER	
Event	10	Test Lines	Test Lines	7/21/2014	01:56:00	USER	@2500 PSI
Event	11	Pump Spacer	Pump Spacer	7/21/2014	02:01:00	USER	24 BBLS FRESH WATER
Event	12	Pump Cement	Pump Cement	7/21/2014	02:12:00	USER	60 BBLS, 195 SKS @ 13.5 PPG, 1.75 YIELD, 9.23 GAL/SK
Event	13	Shutdown	Shutdown	7/21/2014	02:32:00	USER	
Event	14	Drop Top Plug	Drop Top Plug	7/21/2014	02:34:00	USER	PRE-LOADED HWE TOP PLUG IN PLUG CONTAINER VERIFIED BY CUSTOMER REP
Event	15	Pump Displacement	Pump Displacement	7/21/2014	02:35:00	USER	32.5 BBLS FRESH WATER
Event	16	Cement Returns to Surface	Cement Returns to Surface	7/21/2014	02:46:00	USER	@ 18 BBLS DISPLACEMENT, 14.5 BBLS TO SURFACE
Event	17	Bump Plug	Bump Plug	7/21/2014	02:57:00	USER	@ 1000 OVER, FINAL CIRCULATING PRESSURE 140 PSI, FINAL BUMP 1170

							PSI
Event	18	Check Floats	Check Floats	7/21/2014	03:00:00	USER	.5 BBL BACK
Event	19	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	7/21/2014	03:05:00	USER	RIG-DOWN JSA WITH HES CREW
Event	20	End Job	End Job	7/21/2014	03:07:00	USER	THANKS AARON SMITH AND CREW
Event	21	Rig-Down Equipment	Rig-Down Equipment	7/21/2014	03:20:55	USER	
Event	22	Rig-Down Completed	Rig-Down Completed	7/21/2014	03:30:00	USER	
Event	23	Depart Location Safety Meeting	Depart Location Safety Meeting	7/21/2014	03:35:00	USER	JOURNEY MANAGEMENT MEETING PRIOR TO DEPARTURE
Event	24	Depart Location	Depart Location	7/21/2014	03:45:00	USER	

2.0 Appendix

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