

HALLIBURTON

iCem[®] Service

Post Job Report

BONANZA CREEK ENERGY

For: Sam Mares

Date: Wednesday, December 17, 2014

State Seventy Holes K21-024-4 HNB Intermediate

Sincerely,
Derek Trier

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1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **State Seventy Holes K21-024-4HNB** cement **Intermediate** 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
Requested Time On Location	12/17	2100	MTN
Called Out		1500	
On Location		2054	
Job Started		2215	
Job Completed	12/18	0142	
Departed Location		0300	

1.2 Cementing Job Summary

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Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 324725	Ship To #: 3463667	Quote #:	Sales Order #: 0901934373							
Customer: BONANZA CREEK ENERGY		Customer Rep: Lee Perdue								
Well Name: STATE SEVENTY HOLES	Well #: K21-O24-4 HNB	API/UWI #: 05-123-39211-00								
Field: WATTENBERG	City (SAP): KERSEY	County/Parish: WELD	State: COLORADO							
Legal Description: NE NW-4-4N-62W-370FNL-1382FWL										
Contractor:		Rig/Platform Name/Num: Frontier 4								
Job BOM: 7522										
Well Type: HORIZONTAL OIL										
Sales Person: HALAMERICA/H117930		Srv Supervisor: Bradley Hinkle								
Job										
Formation Name										
Formation Depth (MD)	Top	Bottom								
Form Type		BHST								
Job depth MD	6679ft	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		9.625	8.921	36			0	450	0	0
Casing		7	6.276	26		P-110	0	6679	0	0
Open Hole Section			8.75				450	6689	0	0
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Guide Shoe	7			6679		Top Plug	7		HES	
Float Shoe	7					Bottom Plug	7		HES	
Float Collar	7			6637		SSR plug set	7		HES	
Insert Float	7					Plug Container	7		HES	
Stage Tool	7					Centralizers	7		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 ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
1	Fresh Water Spacer	20 bbs Fresh water, 10 bbls Mud Flush III, 20 bbls Fresh Water	50	bbl	8.33			4		
42 gal/bbl		FRESH WATER								

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Cementing Job Summary

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
2	Lead Cement	ECONOCEM (TM) SYSTEM	530	sack	12.5	1.89		6	10.28
10.28 Gal		FRESH WATER							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
3	Tail Cement	EXPANDACEM (TM) SYSTEM	245	sack	14.6	1.46		5	6.08
6.08 Gal		FRESH WATER							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
4	Displacement	Fresh Water	254	bbl	8.33			7	
Cement Left in Pipe Amount 42 ft Reason Shoe Joint									
Mix Water: pH ##		Mix Water: ## ppm		Chloride:		Mix Water Temperature: ## °F °C			
Cement Temperature: ## °F °C		Plug Displaced by: ## lb/gal kg/m ³ XXXX				Disp. Temperature: ## °F °C			
Plug Bumped? Yes/No		Bump Pressure: #### psi MPa				Floats Held? Yes/No			
Cement Returns: ## bbl m ³		Returns Density: ## lb/gal kg/m ³				Returns Temperature: ## °F °C			
Comment 30 BBLS CEMENT TO SURFACE.									

1.3 Job Overview

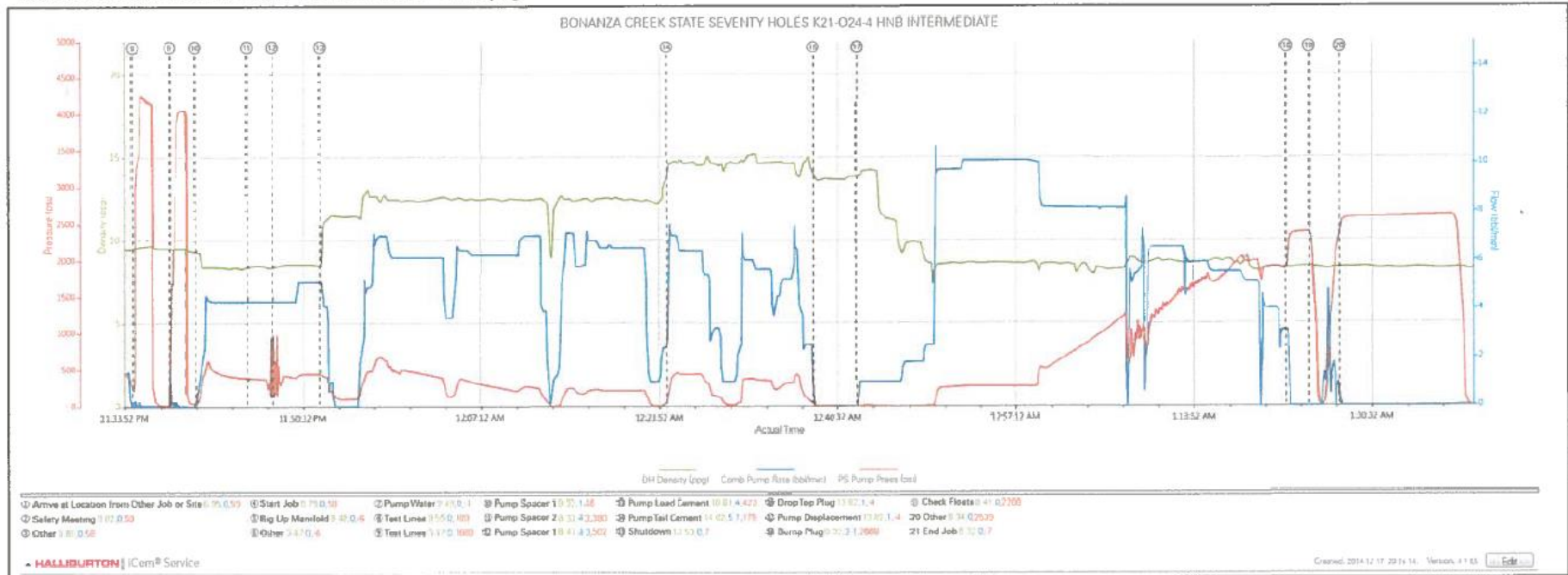
		Units	Description
1	Surface temperature at time of job	°F	
2	Mud type (OBM, WBM, SBM, Water, Brine)	-	WBM
3	Actual mud density	lb/gal	9.3
4	Actual mud Plastic Viscosity (PV)	cP	
5	Actual mud Yield Point (YP)	lb _f /100ft ²	
6	Actual mud 30 min Gel Strength	lb _f /100ft ²	
7	Time circulated before job	HH:MM	
8	Mud volume circulated	Bbls	
9	Rate at which well was circulated	Bpm	
10	Pipe movement during hole circulation	Y/N	N
11	Rig pressure while circulating	Psi	
12	Time from end mud circulation to start of job	HH:MM	
13	Pipe movement during cementing	Y/N	N
14	Calculated displacement	Bbls	254
15	Job displaced by	Rig/HES	HES
16	Annular flow before job	Y/N	N
17	Annular flow after job	Y/N	N
18	Length of rat hole	Ft	
19	Units of gas detected while circulating	Units	
20	Was lost circulation experienced at any time?	Y/N	N

1.4 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density (ppg)	PS Pump Press (psi)	PS Pump Rate (bbl/min)	Pump Stg Tot (bbl)	Comment
Event	1	Arrive at Location from Service Center	Arrive at Location from Service Center	12/2/2014	21:00:00	USER					Arrived on location rig down
Event	2	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	12/2/2014	21:10:00	USER					JSA and hazard hunt with HES crew
Event	3	Rig-Up Equipment	Rig-Up Equipment	12/3/2014	11:00:00	USER	2.16	5.00	0.00	0.0	Rigged up HES lines and equipment
Event	4	Pre-Job Safety Meeting	Pre-Job Safety Meeting	12/3/2014	11:30:00	USER	2.10	6.00	0.00	0.0	JSA with HES and rig crew on job procedure
Event	5	Start Job	Start Job	12/3/2014	11:45:52	COM6	8.28	10.00	0.00	30.8	
Event	6	Test Lines	Test Lines	12/3/2014	11:51:53	COM6	8.34	902.00	0.00	2.3	Test lines to 4000psi
Event	7	Pump Spacer 1	Pump Spacer 1	12/3/2014	11:57:20	COM6	8.34	20.00	0.00	2.3	Pump 20bbls of Mud Flush
Event	8	Pump Spacer 2	Pump Spacer 2	12/3/2014	12:04:54	COM6	8.26	204.00	3.10	0.0	Pump 20bbls of Water
Event	9	Pump Lead Cement	Pump Lead Cement	12/3/2014	12:16:09	COM6	8.31	77.00	0.80	20.1	Pump 188bbls of 12.5ppg Lead Cement
Event	10	Pump Tail Cement	Pump Tail Cement	12/3/2014	12:54:24	COM6	14.47	53.00	2.30	181.7	Pump 55bbls of 14.6ppg Tail Cement
Event	11	Shutdown	Shutdown	12/3/2014	13:11:34	COM6	14.54	21.00	0.00	17.5	
Event	12	Drop Top Plug	Drop Top Plug	12/3/2014	13:15:34	COM6	14.49	15.00	0.00	17.5	Plug pre loaded in HES head
Event	13	Pump Displacement	Pump Displacement	12/3/2014	13:17:58	COM6	14.49	23.00	0.90	17.6	Pump 268bbls of Mud. Mudflush to surface at 235away giving us 38bbls of spacer to surface
Event	14	Bump Plug	Bump Plug	12/3/2014	14:03:52	COM6	8.13	2269.00	4.00	257.2	Bumped plug at 1897 took 500 over and held for 3 mins
Event	15	Check Floats	Check Floats	12/3/2014	14:08:26	USER	8.09	210.00	0.00	257.6	Checked floats, floats good
Event	16	Test Lines	Test Lines	12/3/2014	14:11:26	COM6	8.16	23.00	0.90	257.6	Casing test 2500psi for 30 mins.
Event	17	End Job	End Job	12/3/2014	14:45:32	COM6	8.22	10.00	0.00	259.7	Thank you Markovich and crew

2.0 Attachments

2.1 BONANZA CREEK STATE SEVENTY HOLES K21-O24-4 HNB.png



3.0 Appendix
