

HALLIBURTON

iCem[®] Service

Post Job Report

ANADARKO PETROLEUM CORP - EBUS

For:

Date: Tuesday, June 10, 2014

Benson Farms 14N-19HZ Surface

Case 1

Sincerely,

Derek Trier

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1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **Benson Farms 14N-19HZ** 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
Requested Time On Location	06/10	0700	MST
Called Out		0230	
On Location		0700	
Job Started		0953	
Job Completed		1009	
Departed Location		1032	

1.2 Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 300466		Ship To #: 3472975		Quote #:		Sales Order #: 0901417156				
Customer: ANADARKO PETROLEUM CORP - EBUS				Customer Rep: Allen Secrest						
Well Name: BENSON FARMS		Well #: 14N-19HZ		API/UWI #: 05-123-39339-00						
Field: WATTENBERG		City (SAP): LONGMONT		County/Parish: WELD		State: COLORADO				
Legal Description: SE SE-23-3N-68W-617FSL-72FEL										
Contractor:				Rig/Platform Name/Num: Majors 42						
Job BOM: 7521										
Well Type: HORIZONTAL GAS										
Sales Person: HALAMERICA\HB47901				Srvc Supervisor: Devin Birchell						
Job										
Formation Name										
Formation Depth (MD)		Top		Bottom						
Form Type				BHST						
Job depth MD		1235ft		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		J-55	0	1225		
Open Hole Section			13.5				0	1235		
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make		
Guide Shoe	9.625	1			Top Plug	9.625	1	HES		
Float Shoe	9.625	1		1225	Bottom Plug	9.625		HES		
Float Collar	9.625	1		1185	SSR plug set	9.625		HES		
Insert Float	9.625	1			Plug Container	9.625	1	HES		
Stage Tool	9.625	1			Centralizers	9.625	1	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	Mud Flush III (Powder)	Mud Flush III	12	bbl	8.4					
42 gal/bbl		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	462	sack	14.2	1.54		6	7.64
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
3	Displacement	Displacement	93	bbl	8.33				
Cement Left in Pipe		Amount	42 ft		Reason		Shoe Joint		
Comment									

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	
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	93
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

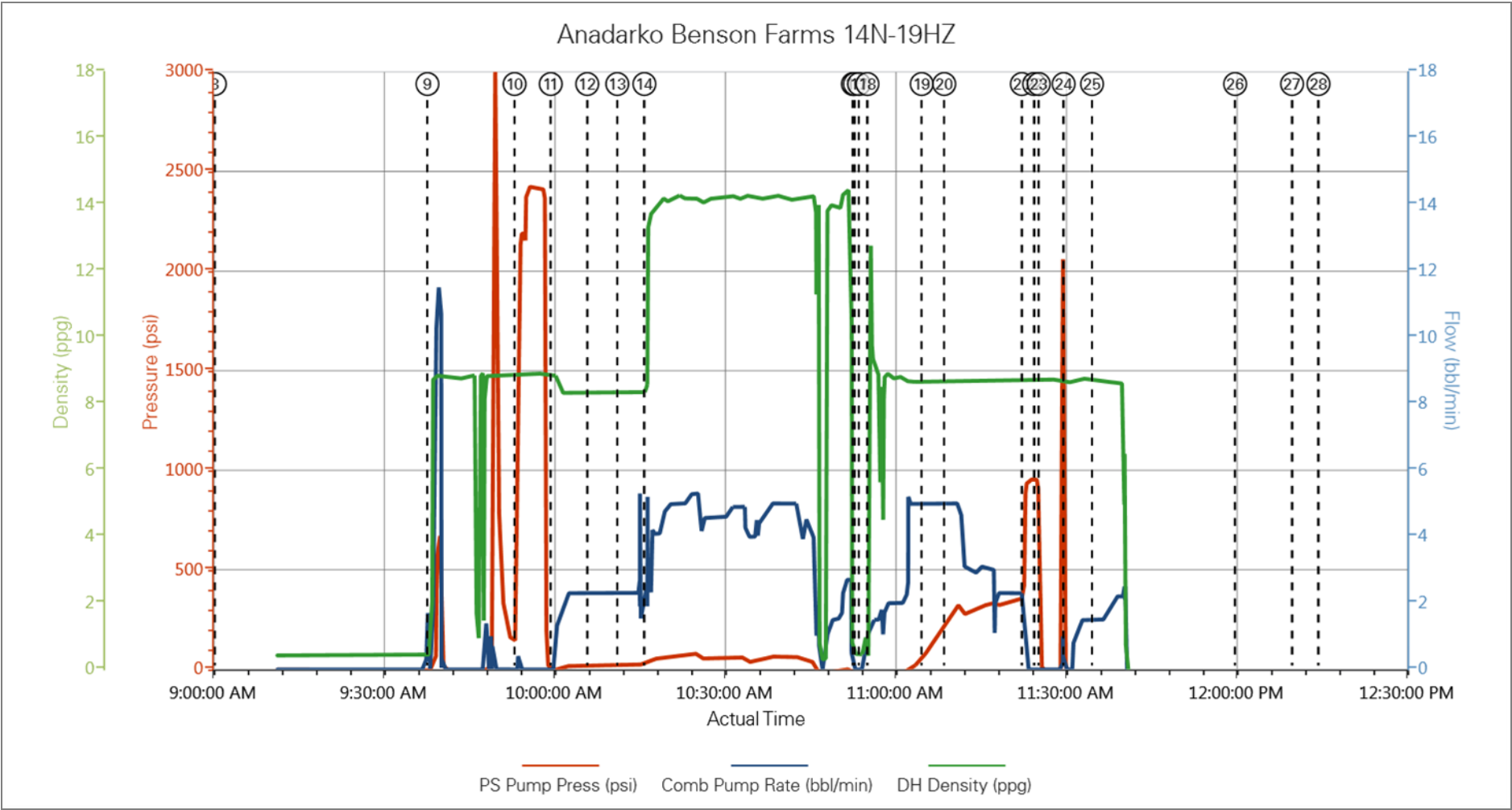
1.4 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	PS Pump Press (psi)	Comb Pump Rate (bbl/min)	DH Density (ppg)	Comment
Event	1	Call Out	Call Out	6/10/2014	02:30:12	USER				called out cement crew for anadarko benson farms 14n-19hz surface
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	6/10/2014	06:15:12	USER				discussed route, weather, other traffic, following distance
Event	3	Depart from Service Center or Other Site	Depart from Service Center or Other Site	6/10/2014	06:30:14	USER				called journey gate checked and departed for location
Event	4	Arrive At Loc	Arrive At Loc	6/10/2014	07:00:24	USER				ended journey and talked with company rep on volumes rates depths and pressures
Event	5	Wait on Customer or Customer Sub-Contractor Equip - Start Time	Wait on Customer or Customer Sub-Contractor Equip - Start Time	6/10/2014	07:05:23	USER				wait for rig crew to finish running casing
Event	6	Pre-Job Safety Meeting	Pre-Job Safety Meeting	6/10/2014	08:40:25	USER				discussed job procedures with cement and rig crew
Event	7	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	6/10/2014	08:55:14	USER				discussed spotting equipment, hand placement, swing path, pinch points
Event	8	Rig-Up Equipment	Rig-Up Equipment	6/10/2014	09:00:54	USER				spotted and rigged up equipment, iron, and water hoses
Event	9	Prime Pumps	Prime Pumps	6/10/2014	09:38:17	USER	-5.00	0.00	0.44	primed pump and lines for pressure test
Event	10	Test Lines	Test Lines	6/10/2014	09:53:37	COM1	1719.00	0.00	8.82	tested pump and lines to 2490 psi
Event	11	Pump Spacer 1	Pump Spacer 1	6/10/2014	09:59:59	COM1	-6.00	0.00	8.89	pumped 10 bbls water spacer
Event	12	Pump Spacer 2	Pump Spacer 2	6/10/2014	10:06:24	COM1	20.00	2.30	8.36	pumped 12 bbls mud flush III spacer
Event	13	Pump Spacer 1	Pump Spacer 1	6/10/2014	10:11:41	COM1	22.00	2.30	8.31	pumped 10 bbls water spacer
Event	14	Pump Lead Cement	Pump Lead Cement	6/10/2014	10:16:27	COM1	39.00	2.80	13.37	pump 132 bbls (462 sks) 14.2 slurry, y: 1.54 ft3/sk w: 7.64 gal/sk
Event	15	Shutdown	Shutdown	6/10/2014	10:53:07	COM1	-18.00	0.00	0.43	shutdown to clean pump and lines and to drop plug
Event	16	Drop Top Plug	Drop Top Plug	6/10/2014	10:53:28	COM1	-18.00	0.00	0.50	dropped plug with driller and company rep witnessing
Event	17	Clean Lines	Clean Lines	6/10/2014	10:54:12	COM1	-18.00	0.00	0.45	cleaned pump and lines on plug

Event	18	Pump Displacement	Pump Displacement	6/10/2014	10:55:41	COM1	-17.00	1.10	11.79	pump 93 bbls fresh water displacement
Event	19	Spacer Returns to Surface	Spacer Returns to Surface	6/10/2014	11:05:14	USER	78.00	5.00	8.62	with 23 bbls displacement away spacer returns to surface 10 bbls water 12 mud flush 10 bbls water
Event	20	Cement Returns to Surface	Cement Returns to Surface	6/10/2014	11:09:12	USER	236.00	5.00	8.66	with 55 bbls displacement away cement returns to surface (38 bbls)
Event	21	Bump Plug	Bump Plug	6/10/2014	11:22:50	COM1	908.00	0.00	8.72	bumped plug with 354 psi and took pressure to 954 psi and held for 3 minutes
Event	22	Check Floats	Check Floats	6/10/2014	11:25:00	USER	914.00	0.00	8.70	checked floats, floats held with .5 bbls back
Event	23	End Job	End Job	6/10/2014	11:25:50	COM1	-7.00	0.00	8.62	job completed
Event	24	Post-Job Safety Meeting (Pre Rig-Down)	Post-Job Safety Meeting (Pre Rig-Down)	6/10/2014	11:30:12	USER	-15.00	0.00	8.64	discussed rigging down hand placement pinch points team lifting
Event	25	Rig-Down Equipment	Rig-Down Equipment	6/10/2014	11:35:12	USER	-20.00	1.50	8.71	rig down cement head ground iron and water hoses
Event	26	Rig-Down Completed	Rig-Down Completed	6/10/2014	12:00:22	USER				rig up complete, walk around to make sure everything is picked up ready for transport
Event	27	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	6/10/2014	12:10:23	USER				discussed route, weather, other traffic, following distance
Event	28	Depart Location for Service Center or Other Site	Depart Location for Service Center or Other Site	6/10/2014	12:15:02	USER				thank you for using halliburton energy services

2.0 Custom Graphs

2.1 Custom Graph



3.0 Appendix
