HALLIBURTON

iCem® Service

Post Job Report

ANADARKO PETROLEUM CORP - EBUS

For:
Date: Wednesday, July 02, 2014

Anadarko Deepe 36C-27 HZ Surface

ANADARKO DEEPE 36C-27 HZ SURFACE

Sincerely,

Derek Trier

Table of Contents

1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **Deepe 36C-27HZ** 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	06/04	0300	
On Location	06/04	0230	
Job Started	06/04	0317	
Job Completed	06/04	0818	
Departed Location	06/04	845	

1.2 Cementing Job Summary

HALLIBURTON

Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 300466	**Ship To #:** 3207596	**Quote #:**	**Sales Order #:** 0901404194
Customer: ANADARKO PETROLEUM CORP - EBUS		**Customer Rep:**	
Well Name: DEEPE	**Well #:** 36C-27 HZ		**API/UWI #:** 05-123-38497-00
Field: WATTENBERG	**City (SAP):** IONE	**County/Parish:** WELD	**State:** COLORADO
Legal Description: NE NW-22-2N-67W-531FNL-2140FWL			
Contractor:		**Rig/Platform Name/Num:** MAJOR 29	
Job BOM: 7521			
Well Type: HORIZONTAL GAS			
Sales Person: HALAMERICA\HX46524		**Srvc Supervisor:** Joseph Fantasia	

Job

Formation Name				
Formation Depth (MD)	**Top**		**Bottom**	
Form Type			**BHST**	
Job depth MD	690ft		**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	690	0	690
Open Hole Section			13.5				0	700	0	700

Tools and Accessories

Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make
Guide Shoe	9.625	1		690		Top Plug	9.625	1	HES
Float Shoe	9.625	1				Bottom Plug	9.625	1	HES
Float Collar	9.625	1				SSR plug set	9.625	1	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			5	
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

last updated on 6/4/2014 9:08:23 AM Page 1 of 3

ANADARKO DEEPE 36C-27 HZ SURFACE

HALLIBURTON *Cementing Job Summary*

2	Lead Cement	SWIFTCEM (TM) SYSTEM	256	sack	14.2	1.54	7.64	5	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	50	bbl	8.33			5	

Cement Left In Pipe	Amount	42 ft	Reason	Shoe Joint

Comment

1.3 Planned Pumping Schedule

Stage /Plug #	Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Avg Rate bbl/min	Surface Volume	Downhole Volume
1	1	Spacer	Fresh Water	8.33	5.00	10.0 bbl	10.0 bbl
1	2	Spacer	Mud Flush III	8.40	5.00	10.0 bbl	10.0 bbl
1	3	Spacer	Fresh Water	8.33	5.00	10.0 bbl	10.0 bbl
1	4	Cement Slurry	SwiftCem	14.20	5.00	256.0 sacks	256.0 sacks

1.4 Job Overview

		Units	Description
1	Surface temperature at time of job	^{o}F	
2	Mud type (OBM, WBM, SBM, Water, Brine)	-	
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	
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

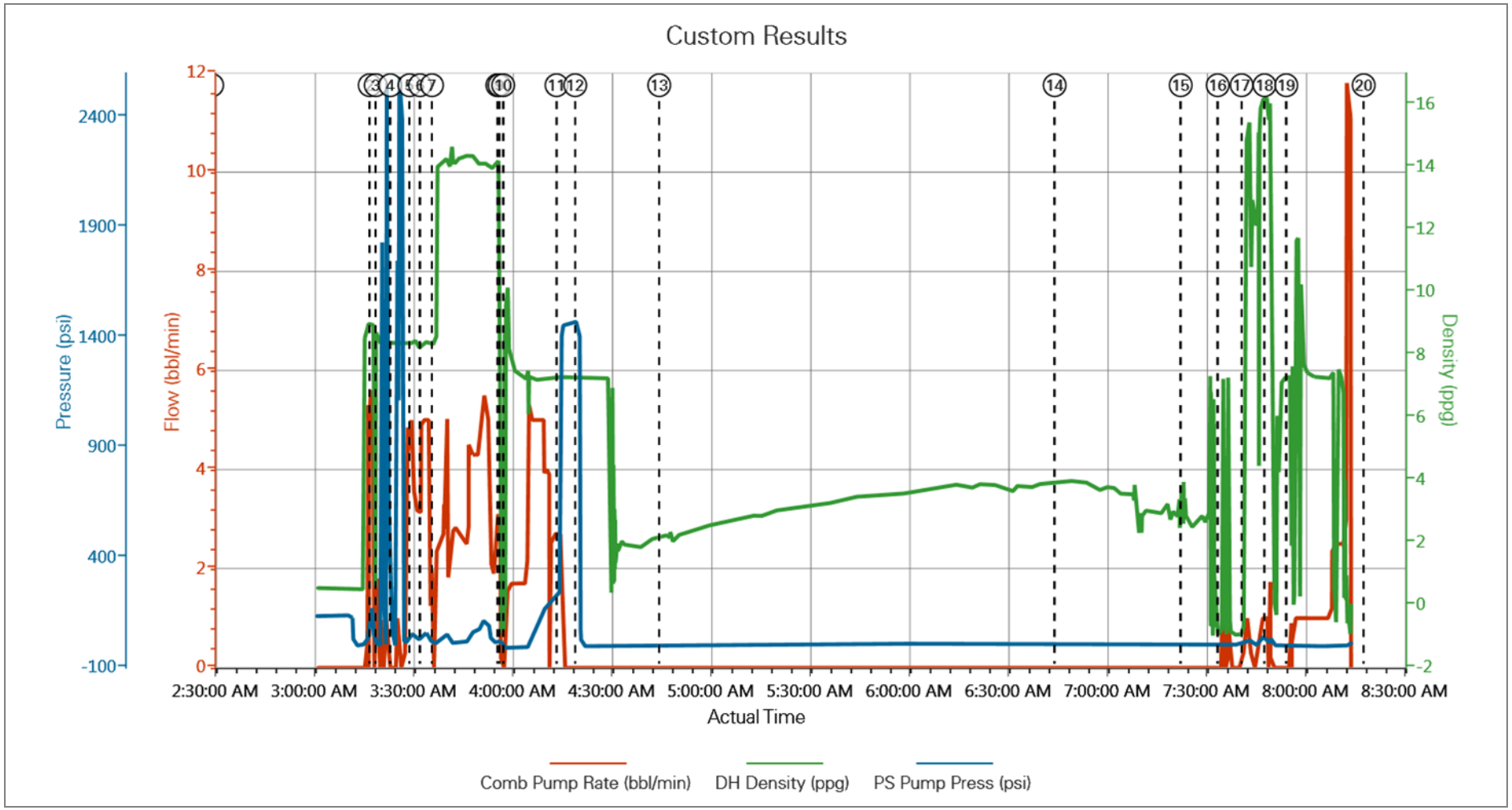
1.5 Job Event Log

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	6/4/2014	02:30:00	USER				REQUESTED ON LOCATION @ 0300. ARRIVE AT LOCATION AT 0230. RIG ON BOTTOM CIRCULATING. PERFORM SITE ASSESSMENT WITH CREW.
Event	2	Start Job	Start Job	6/4/2014	03:17:40	COM4	0.00	8.89	80.00	PERFORM PRE JOB SAFETY MEETING WITH ALL PRESENT PERSONELL.
Event	3	Test Lines	Test Lines	6/4/2014	03:19:30	COM4	0.00	8.37	4.00	PRESSURE TEST LINES TO 2000 PSI
Event	4	Pump Spacer 1	Pump Spacer 1	6/4/2014	03:23:55	COM4	0.00	8.38	2.00	PUMP 10 BBLS WATER
Event	5	Pump Spacer 2	Pump Spacer 2	6/4/2014	03:29:43	COM4	5.00	8.31	62.00	PUMP 12 BBLS MUDFLUSH
Event	6	Pump Spacer 1	Pump Spacer 1	6/4/2014	03:32:55	COM4	5.00	8.40	60.00	PUMP 10 BBLS WATER
Event	7	Pump Cement	Pump Cement	6/4/2014	03:36:32	COM4	0.00	8.30	2.00	PUMP 70 BBLS (256 SKS) SWIFTCEM MIXED AT 14.2 PPG USING SUPPLIED WATER.
Event	8	Shutdown	Shutdown	6/4/2014	03:56:18	COM4	0.00	-0.80	7.00	
Event	9	Drop Top Plug	Drop Top Plug	6/4/2014	03:56:58	COM4	0.00	-0.64	-10.00	TOP PLUG PRELOADED.
Event	10	Pump Displacement	Pump Displacement	6/4/2014	03:58:05	COM4	0.00	9.99	-12.00	GOOD RETURNS THROUGHOUT. MUDFLUSH BACK AT 20 BBLS INTO 50 BBLS TOTAL DISPLACEMENT. NO CEMENT TO SURFACE AT PLUG DOWN.
Event	11	Bump Plug	Bump Plug	6/4/2014	04:14:13	COM4	2.70	7.24	257.00	PLUG LANDED AT 257 PSI. PRESSURE BROUGHT TO 1300 PSI AND HELD FOR 5 MIN.
Event	12	Check Floats	Check Floats	6/4/2014	04:19:52	USER	0.00	7.31	1474.00	FLOATS HELD
Event	13	Other	Other	6/4/2014	04:45:18	USER	0.00	2.23	-1.00	RIG TAGGED CEMENT AT APPROX 25' FROM SURFACE. CALLED FOR 100 SKS TOP OUT CEMENT PER CUSTOMER REQUEST.
Event	14	Other	Other	6/4/2014	06:45:00	USER	0.00	3.95	9.00	CEMENT ARRIVES AT LOCATION.
Event	15	Other	Other	6/4/2014	07:23:08	USER	0.00	3.57	7.00	RIG TAGS CEMENT WITH 1" PIPE AND HES RIGS UP IRON TO 1"

Event	16	Pump Spacer 1	Pump Spacer 1	6/4/2014	07:34:19	USER	0.00	-0.93	6.00	.5 BBLS WATER TO CLEAR TUBING AND ESTABLISH CIRCULATION.
Event	17	Pump Cement	Pump Cement	6/4/2014	07:41:34	USER	1.00	13.22	18.00	PUMP 5 BBLS (25 SKS) PREMIUM G CEMENT MIXED AT 15.8 PPG.
Event	18	Pump Displacement	Pump Displacement	6/4/2014	07:48:30	USER	0.00	15.52	12.00	PUMP .25 BBLS WATER TO CLEAR LINES.
Event	19	Clean Lines	Clean Lines	6/4/2014	07:55:05	USER	0.00	7.31	1.00	WASH PUMPS AND LINES
Event	20	End Job	End Job	6/4/2014	08:18:32	USER				PERFORM PRE RIG DOWN SAFETY MEETING WITH CREW.
Event	21	Depart Location	Depart Location	6/4/2014	08:45:00	USER				PERFORM JOURNEY AND LEAVE LOCATION.

2.0 Custom Graphs

2.1 Custom Graph



ANADARKO DEEPE 36C-27 HZ SURFACE

3.0 Appendix