

HALLIBURTON

iCem® Service

Post Job Report

ANADARKO PETROLEUM CORP - EBUS

For:

Date: Sunday, May 25, 2014

Melba 26N-14HZ 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 **Melba 26N-14HZ** 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	04/28	1200	MT
Called Out	04/28	0800	MT
On Location	04/28	1250	MT
Job Started	04/28	2204	MT
Job Completed	04/28	2314	MT
Departed Location	04/29	0000	MT

1.2 Cementing Job Summary

Sold To #: 300466		Ship To #: 3358475		Quote #:		Sales Order #: 0901302510				
Customer: ANADARKO PETROLEUM CORP - EBUS						Customer Rep:				
Well Name: MELBA			Well #: 26N-14 HZ			API/UWI #: 05-123-38999-00				
Field: WATTENBERG		City (SAP): PLA		County/Parish: WELD		State: COLORADO				
Legal Description: NW NE-23-3N-66W-618FNL-1676FEL										
Contractor: ENSIGN DRLG				Rig/Platform Name/Num: ENSIGN 123						
Job BOM: 7521										
Well Type: HORIZONTAL GAS										
Sales Person: HALAMERICA\HX46524				Srvc Supervisor: Nicholas Vigil						
Job										
Formation Name										
Formation Depth (MD)		Top		Bottom						
Form Type				BHST						
Job depth MD		1230'		Job Depth TVD						
Water Depth				Wk Ht Above Floor						
Perforation Depth (MD)				To						
Well Data										
	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	850		
Open Hole Section			13.5				0	850		
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		1224'		Bottom Plug	9.625		HES	
Float Collar	9.625	1		1185'		SSR plug set	9.625		HES	
Insert Float	9.625					Plug Container	9.625	1	HES	
	9.625					Centralizers	9.625		HES	
Miscellaneous Materials										
Gelling Agt		Conc		Surfactant		Conc		Acid Type		Qty
Treatment Fld		Conc				Conc		Sand Type		
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	Fresh Water Spacer	30	bbl	8.33				
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	SWIFTCEM (TM) SYSTEM	523	sack	14.2	1.54		6	7.63
7.63 Gal									
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	Displacement	Displacement	91.5	bbl	8.33				
		Amount	42 ft						
Comment 14 bbl of cement to surface									

1.4 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	6.00	10.0 bbl	10.0 bbl
1	2	Spacer	Mud Flush III	8.4	6.00	12.0 bbl	12.0 bbl
1	3	Spacer	Fresh Water	8.33	6.00	10.0 bbl	10.0 bbl
1	4	Cement	SwiftCem	14.20	6.00	523 sacks	523 sacks

1.5 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	9.0
4	Actual mud Plastic Viscosity (PV)	cP	
5	Actual mud Yield Point (YP)	lb _r /100ft ²	
6	Actual mud 30 min Gel Strength	lb _r /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	91.5
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

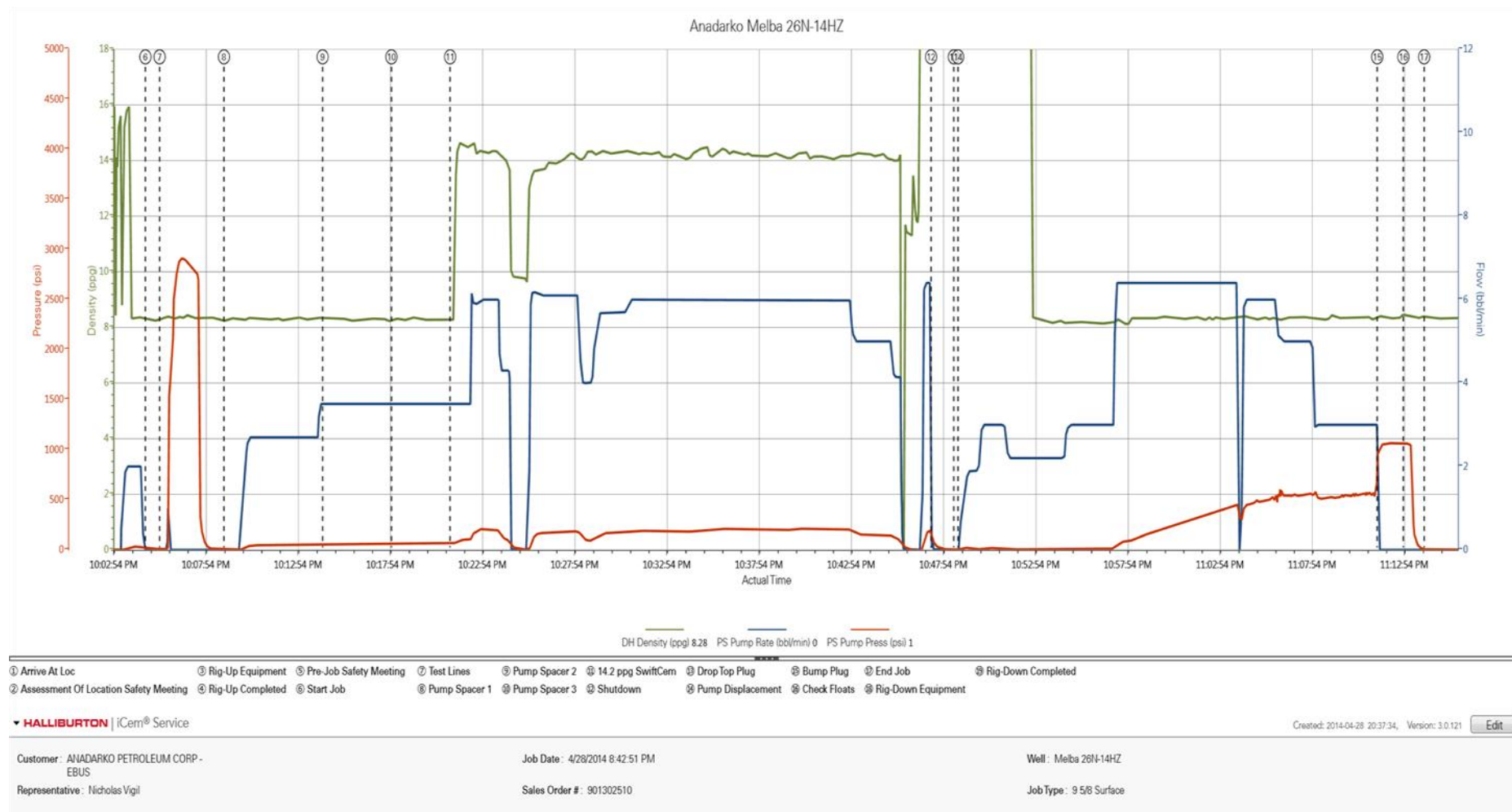
1.6 Job Event Log

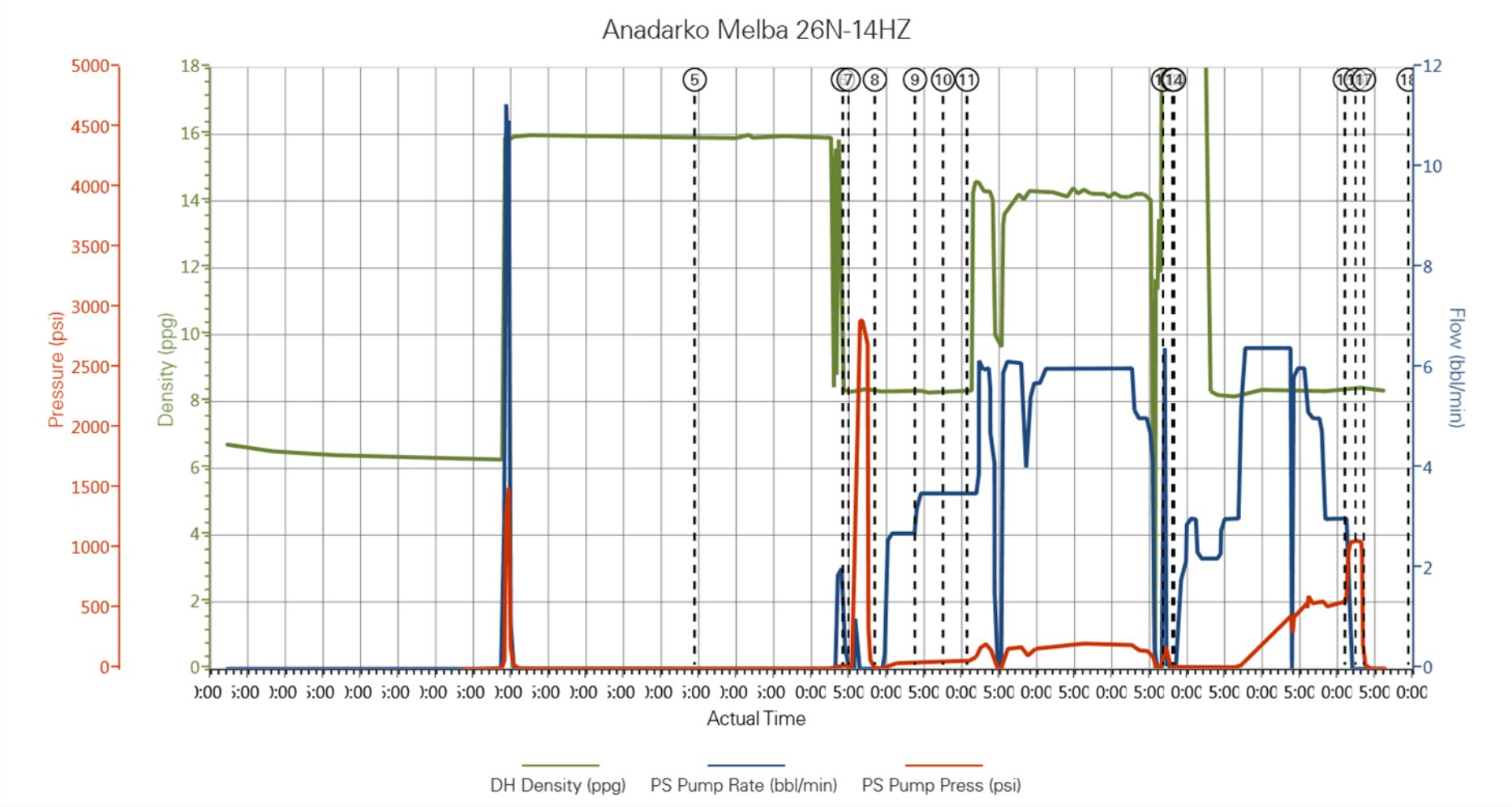
Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density (ppg)	PS Pump Rate (bbl/min)	PS Pump Press (psi)	Comment
Event	1	Arrive At Loc	Arrive At Loc	4/28/2014	12:15:00	USER				On location time was 1200. We were held up for 50 minutes due to road construction, Rig was reaming when we arrived
Event	2	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	4/28/2014	12:30:00	USER				Hazard hunt, Rig uo safety meeting, Water test
Event	3	Rig-Up Equipment	Rig-Up Equipment	4/28/2014	12:45:00	USER				
Event	4	Rig-Up Completed	Rig-Up Completed	4/28/2014	13:15:00	USER				
Event	5	Pre-Job Safety Meeting	Pre-Job Safety Meeting	4/28/2014	21:45:00	USER	15.92	0.00	2.00	Held safety meeting with all personnel involved in job.
Event	6	Start Job	Start Job	4/28/2014	22:04:43	COM1	8.26	0.00	18.00	
Event	7	Test Lines	Test Lines	4/28/2014	22:05:29	COM1	8.31	0.00	9.00	Pressure tested lines to 3000 psi.
Event	8	Pump Spacer 1	Pump Spacer 1	4/28/2014	22:08:58	COM1	8.27	0.00	3.00	Fresh Water
Event	9	Pump Spacer 2	Pump Spacer 2	4/28/2014	22:14:19	COM1	8.30	3.50	61.00	Dye Water
Event	10	Pump Spacer 1	Pump Spacer 3	4/28/2014	22:18:03	COM1	8.26	3.50	64.00	Fresh Water
Event	11	Pump Cement	14.2 ppg SwiftCem	4/28/2014	22:21:14	COM1	8.28	3.50	67.00	523 sks, weight was verified by scale
Event	12	Shutdown	Shutdown	4/28/2014	22:47:19	COM1	28.16	0.00	98.00	
Event	13	Drop Top Plug	Drop Top Plug	4/28/2014	22:48:33	COM1	28.13	0.00	4.00	Plug was pre loaded.
Event	14	Pump Displacement	Pump Displacement	4/28/2014	22:48:47	COM1	28.22	0.00	3.00	Displaced with fresh water.
Event	15	Bump Plug	Bump Plug	4/28/2014	23:11:31	COM1	8.35	0.00	1006.00	Bumped plug 500 psi over final lift bringing our pressure to 1050 psi.
Event	16	Other	Check Floats	4/28/2014	23:12:56	COM1				Floats held
Event	17	End Job	End Job	4/28/2014	23:14:04	COM1	8.37	0.00	4.00	Rig down safety meeting
Event	18	Rig-Down Equipment	Rig-Down Equipment	4/28/2014	23:20:00	USER				

Event	19	Rig-Down Completed	Rig-Down Completed	4/29/2014	00:00:00	USER
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2.0 Custom Graphs

2.1 Custom Graph





3.0 Appendix
