

HALLIBURTON

iCem[®] Service

Post Job Report

ANADARKO PETROLEUM CORP - EBUS

For:

Date: Thursday, June 19, 2014

NRC 29N-32HZ Surface

Case 1

Sincerely,

Derek Trier

Table of Contents

1.1	Executive Summary	3
1.2	Cementing Job Summary	4
1.3	Job Overview	7
1.4	Job Event Log	8
2.0	Custom Graphs	9

1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **NRC 29N-32HZ** 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	5/4		MST
Called Out	5/4		
On Location	5/4		
Job Started	5/4	0630	
Job Completed	5/4	0738	
Departed Location	5/4	0830	

1.2 Cementing Job Summary

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Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 300466	Ship To #: 3471373	Quote #:	Sales Order #: 0901317333							
Customer: ANADARKO PETROLEUM CORP - EBUS		Customer Rep:								
Well Name: NRC	Well #: 29N-32HZ	API/UWI #: 05-123-39293-00								
Field: WATTENBERG	City (SAP): ION	County/Parish: WELD	State: COLORADO							
Legal Description: NE NW-8-1N-67W-612FNL-2035FWL										
Contractor:		Rig/Platform Name/Num: Majors 42								
Job BOM: 7521										
Well Type: HORIZONTAL GAS										
Sales Person: HALAMERICA/HB47901		Srcv Supervisor: Wesley Whipple								
Job										
Formation Name										
Formation Depth (MD)	Top	Bottom								
Form Type		BHST								
Job depth MD	820ft	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
Open Hole Section			13.5				0	1224		0
Casing		9.625	8.921	36		J-55	0	1234		0
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make		
Guide Shoe	9.625			1234	Top Plug	9.625		HES		
Float Shoe	9.625				Bottom Plug	9.625		HES		
Float Collar	9.625				SSR plug set	9.625		HES		
Insert Float	9.625				Plug Container	9.625		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 ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
1	Mud Flush III (Powder)	Mud Flush III	0	bbl	8.4					
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	SWIFCEM (TM) SYSTEM		sack	14.2	1.54		6	7.64	
	7.64 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	Displacement	Displacement	0	bbl	8.33					
Cement Left In Pipe		Amount 42 ft	Reason				Shoe Joint			
Comment 20bbls of Cement Returns to surface										

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Cementing Job Summary

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3	Displacement	Displacement	0	bbl	8.33				
Cement Left In Pipe		Amount 42 ft	Reason			Shoe Joint			
Comment 20bbls of Cement Returns to surface									

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	8.40	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 Slurry	Lead Cement	12.70	6.00	440.0 sacks	440.0 sacks

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	
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)	Comb Pump Rate (bbl/min)	Pump Stg Tot (bbl)	PS Pump Press (psi)	Comment
Event	1	Start Job	Start Job	5/4/2014	06:30:40	COM5	8.15	0.00	13.1	115.00	
Event	2	Test Lines	Test Lines	5/4/2014	06:31:36	COM5	8.35	0.00	13.5	135.00	
Event	3	Pump Spacer 1	Pump Spacer 1	5/4/2014	06:34:37	COM5	8.28	0.00	0.0	119.00	
Event	4	Pump Spacer 2	Pump Spacer 2	5/4/2014	06:39:59	COM5	8.30	2.50	9.9	168.00	
Event	5	Pump Spacer 1	Pump Spacer 1	5/4/2014	06:43:27	COM5	8.37	5.00	12.0	225.00	
Event	6	Pump Cement	Pump Cement	5/4/2014	06:45:28	COM5	8.29	5.00	10.1	248.00	
Event	7	Drop Top Plug	Drop Top Plug	5/4/2014	07:12:49	COM5	13.74	0.00	128.0	114.00	
Event	8	Pump Displacement	Pump Displacement	5/4/2014	07:12:52	COM5	13.76	0.00	128.0	114.00	
Event	9	Bump Plug	Bump Plug	5/4/2014	07:35:20	COM5	8.34	0.00	90.2	1048.00	
Event	10	Other	Other	5/4/2014	07:37:12	COM5	8.41	0.00	90.2	1080.00	
Event	11	End Job	End Job	5/4/2014	07:38:20	COM5	8.37	0.00	90.2	120.00	

2.0 Custom Graphs



