

HALLIBURTON

iCem[®] Service

Post Job Report

ANADARKO PETROLEUM CORP - EBUS

For:

Date: Sunday, May 25, 2014

Small Eye 14N-35HZ 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 **Small Eye 14N-35HZ** 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	05/23/14	1900	MT
Called Out	05/24/14	0030	MT
On Location	05/24/14	1900	MT
Job Started	05/24/14	0519	MT
Job Completed	05/24/14	0735	MT
Departed Location	05/24/14	0930	MT

1.2 Cementing Job Summary

HALLIBURTON				Cementing Job Summary						
The Road to Excellence Starts with Safety										
Sold To #: 300466		Ship To #: 3473172		Quote #:		Sales Order #: 0901362445				
Customer: ANADARKO PETROLEUM CORP - EBUS				Customer Rep: BOB BULKENBUSH						
Well Name: SMALL EYED		Well #: 14N-35HZ		API/UWI #: 05-123-39351-00						
Field: WATTENBERG		City (SAP): IONE		County/Parish: WELD		State: COLORADO				
Legal Description: SE SW-23-2N-67W-1020FSL-1925FWL										
Contractor:				Rig/Platform Name/Num: Majors 29						
Job BOM: 7521										
Well Type: HORIZONTAL GAS										
Sales Person: HALAMERICA\HB47901				Srcv Supervisor: Christopher Pickell						
Job										
Formation Name										
Formation Depth (MD)		Top		Bottom						
Form Type				BHST						
Job depth MD		1301ft		Job Depth TVD						
Water Depth				Wk Ht Above Floor		4 FT				
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	1301		0
Open Hole Section			13.5				0	1311		0
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Guide Shoe	9.625	1	HES	1311		Top Plug	9.625	1	HES	
Float Shoe	9.625					Bottom Plug	9.625		HES	
Float Collar	9.625	1	HES			SSR plug set	9.625		HES	
Insert Float	9.625					Plug Container	9.625	1	HES	
Stage Tool	9.625					Centralizers	9.625	9	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	Fresh Water Spacer	Fresh Water Spacer	10	bbl	8.33					
Fluid Data										
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	Mud Flush III (Powder)	Mud Flush III	12	bbl	8.4					

last updated on 5/24/2014 9:24:29 AM
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HALLIBURTON

Cementing Job Summary

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
3	Lead Cement	SWIFTCEN (TM) SYSTEM	490	sack	14.2	1.537		6	7.63
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
4	Displacement	Displacement	98.2	bbl	8.33				
Cement Left in Pipe		Amount 39.58 ft		Reason			Shoe Joint		
Comment									

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	490 sacks	490 sacks

1.5 Job Overview

		Units	Description
1	Surface temperature at time of job	°F	65
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	00:20
13	Pipe movement during cementing	Y/N	N
14	Calculated displacement	Bbls	98.2
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	9
19	Units of gas detected while circulating	Units	
20	Was lost circulation experienced at any time?	Y/N	N

1.6 Job Event Log

1.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density (ppg)	PS Pump Press (psi)	Comb Pump Rate (bbl/min)	COMB PUMP TOTAL	Comment
Event	1	Call Out	Call Out	5/23/2014	19:00:00	USER					Called out for job Chris Pickell, Kendall Broom, Keaton Simmons, Chuck Mills, Thaddeus Harrah
Event	2	Depart Shop for Location	Depart Shop for Location	5/24/2014	00:00:00	USER					Held safety huddle for journey to location, left yard.
Event	3	Arrive At Loc	Arrive At Loc	5/24/2014	00:30:00	USER					Arrived on location and had bulk trucks chain up to enter location after performing a hazard hunt. Rig was getting ready to run casing
Event	4	Rig-up Lines	Rig-up Lines	5/24/2014	01:00:00	USER					Held a safety meeting and rigged up all lines
Event	5	Safety Meeting	Safety Meeting	5/24/2014	05:00:00	USER					Held a pre job safety meeting with crew to discuss job and safety procedures
Event	6	Start Job	Start Job	5/24/2014	05:19:32	COM5					Quick latch plug container used
Event	7	Test Lines	Test Lines	5/24/2014	06:01:47	COM5	8.33	2500	1	2	Pressure test lines to 2500
Event	8	Pump Spacer 1	Pump Spacer 1	5/24/2014	06:03:46	COM5	8.33	50	3	12	Pumped 10 bbl water spacer
Event	9	Pump Spacer 2	Pump Spacer 2	5/24/2014	06:07:58	COM5	8.33	50	3	24	Pumped 12 bbl mud flush spacer
Event	10	Pump Spacer 1	Pump Spacer 1	5/24/2014	06:14:10	COM5	8.33	50	3	34	Pumped 10 bbl water spacer
Event	11	Shutdown	Shutdown	5/24/2014	06:19:51	COM5					Weighed up cement to 14.2. Returns very slow pumping cement, good pressure
Event	12	Pump Cement	Pump Cement	5/24/2014	06:21:30	COM5	14.2	150	5	167	Pumped 133 bbls swiftcem

											490 sks @ 14.2, 1.53 yield, 7.63 gal/sk
Event	13	Shutdown	Shutdown	5/24/2014	06:52:58	COM5					Washed pump and lines on top of plug
Event	14	Drop Top Plug	Drop Top Plug	5/24/2014	06:53:04	COM5					Dropped plug preloaded in head witnessed by company man
Event	15	Pump Displacement	Pump Displacement	5/24/2014	06:54:30	COM5	8.33	500	5	257	Pumped 90 bbl water displacement
Event	16	Shutdown	Shutdown	5/24/2014	07:25:01	COM5	420				Shut down per company man to check return levels
Event	17	Bump Plug	Bump Plug	5/24/2014	07:27:36	COM5	8.33	488.00	2.50	265	Pumped 8bbl and bumped plug
Event	18	Other	Other	5/24/2014	07:33:32	COM5	1474.00				Released pressure and checked floats
Event	19	End Job	End Job	5/24/2014	07:35:06	COM5					End job and got all mud flush and 17bbl cement back
Event	20	Rig Down Lines	Rig Down Lines	5/24/2014	08:27:17	USER					Held rig down safety meeting
Event	21	Depart Location for Shop	Depart Location for Shop	5/24/2014	09:30:00	USER					Held safety huddle for return journey

2.0 Appendix
