

HALLIBURTON

iCem® Service

Post Job Report

ANADARKO PETROLEUM CORP - EBUS

Date: Wednesday, June 18, 2014

Spurling 35C-34HZ Surface

Sincerely,
Derek Trier

Table of Contents

1.1	Executive Summary	3
1.2	Cementing Job Summary	4
1.3	Planned Pumping Schedule	6
1.4	Job Overview	6
1.5	Job Event Log	7
2.0	Custom Graphs	Error! Bookmark not defined.
2.1	Custom Graph	Error! Bookmark not defined.
3.0	Appendix	Error! Bookmark not defined.

1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **Spurling 35C-34HZ** 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	4/10	0730	MST
Called Out	4/10	0330	
On Location	4/10	0730	
Job Started	4/10	0828	
Job Completed	4/10	0951	
Departed Location	4/10	1100	

1.2 Cementing Job Summary

Sold To #: 300466		Ship To #: 3367888		Quote #:		Sales Order #: 0901248678					
Customer: ANADARKO PETROLEUM CORP - EBUS						Customer Rep: LARRY HERSH					
Well Name: SPURLING				Well #: 35C-34 HZ			API/UWI #: 05-123-39126-00				
Field: WATTENBERG		City (SAP): ION		County/Parish: WELD			State: COLORADO				
Legal Description: NW NW-34-2N-67W-377FNL-1118FWL											
Contractor: Bob Porter				Rig/Platform Name/Num: Majors 42							
Job BOM: 7521											
Well Type: HORIZONTAL GAS											
Sales Person: HALAMERICA\HX46524				Srv Supervisor: Aaron Smith							
Job											
Formation Name											
Formation Depth (MD)		Top		Bottom							
Form Type					BHST						
Job depth MD		1082ft			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	1082			
Open Hole Section			13.5				0	1082			
Tools and Accessories											
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make		
Guide Shoe	9.625	1		1082		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		
	9.625	1				Centralizers	9.625	1	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 ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
1	Mud Flush III (Powder)	Mud Flush III		10	bbl	8.4				
42 gal/bbl										
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		389	Sack	14.2	1.54		6	7.64
7.64 Gal										
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		62.5	bbl	8.33				
		Amount	42 ft							
Comment										

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	5.00	10.0 bbl	10.0 bbl
1	2	Spacer	Mud Flush III	8.40	5.00	12.0 bbl	12.0 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	389.0 sacks	389.0 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	
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	62.5
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

HALLIBURTON

ANADARKO PETROLEUM CORP - EBUS
ANADARKO PETROLEUM SPURLING 35C-34HZ SURFACE
Case 2

1.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Combined Pump Rate (bbl/min)	Pass-Side Pump Pressure (psi)	Downhole Density (spg)	Comment
Event	1	Arrive at Location from Service Center	Arrive at Location from Service Center	4/10/2014	07:30:00	USER	0.00	7.72	8.42	WITH ALL EQUIPMENT AND MATERIALS
Event	2	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	4/10/2014	07:35:00	USER	0.00	-0.72	8.37	
Event	3	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	4/10/2014	07:40:00	USER	1.99	25.53	8.33	
Event	4	Rig-Down Equipment	Rig-Down Equipment	4/10/2014	07:45:00	USER	1.99	26.47	8.28	
Event	5	Rig-Up Completed	Rig-Up Completed	4/10/2014	08:00:00	USER	6.02	71.47	14.06	
Event	6	Pre-Job Safety Meeting	Pre-Job Safety Meeting	4/10/2014	08:15:00	USER	0.00	-24.16	0.37	WITH CUSTOMER REP AND RIG CREW
Event	7	Start Job	Start Job	4/10/2014	08:28:48	USER	5.03	216.78	8.63	
Event	8	Test Lines	Test Lines	4/10/2014	08:30:03	USER	5.03	246.78	8.67	@ 2500 PSI
Event	9	Pump Spacer 1	Pump Spacer 1	4/10/2014	08:35:55	USER	2.01	283.35	8.75	10 BBLS FRESH WATER WITH NO ADDITIVES
Event	10	Pump Spacer 2	Pump Spacer 2	4/10/2014	08:40:54	USER	2.01	371.47	8.76	12 BBLS MUD FLUSH
Event	11	Pump Spacer 1	Pump Spacer 1	4/10/2014	08:47:02	USER	0.00	1467.43	8.71	10 BBLS FRESH WATER
Event	12	Pump Cement	Pump Cement	4/10/2014	08:53:20	USER				106 BBLS/ 389 SKS @ 14.2PPG, 1.54 YIELD, 7.62 GAL/SK
Event	13	Shutdown	Shutdown	4/10/2014	09:13:39	USER				
Event	14	Drop Top Plug	Drop Top Plug	4/10/2014	09:14:53	USER				PRE-LOADED HWF TOP PLUG, VERIFIED BY CUSTOMER REP
Event	15	Pump Displacement	Pump Displacement	4/10/2014	09:16:06	USER				80 BBLS FRESH WATER
Event	16	Bump Plug	Bump Plug	4/10/2014	09:40:00	USER				FINAL CIRCULATING PRESSURE 346 PSI, 1504 FINAL PRESSURE
Event	17	Check Floats	Check Floats	4/10/2014	09:44:46	USER				FLOATS HELD, .5 BBLS BACK
Event	18	End Job	End Job	4/10/2014	09:51:18	USER				

iCem® Service
Created: Thursday, April 10, 2014