

# HALLIBURTON

iCem<sup>®</sup> Service

## Post Job Report

**ANADARKO PETROLEUM CORP - EBUS**

Date: Wednesday, June 18, 2014

**Berry Farms 32C-8HZ Surface**

Sincerely,  
**Derek Trier**

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2.0 Custom Graphs **Error! Bookmark not defined.**

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2.1	Custom Graph	<b>Error! Bookmark not defined.</b>
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3.0 Appendix **Error! Bookmark not defined.**

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**1.1 Executive Summary**

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Halliburton appreciates the opportunity to perform the cementing services on the **Berry Farms 32C-8HZ** 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**

	<b>Date</b>	<b>Time</b>	<b>Time Zone</b>
<b>Requested Time On Location</b>	4/4		MST
<b>Called Out</b>	4/4		
<b>On Location</b>	4/4		
<b>Job Started</b>	4/4	1412	
<b>Job Completed</b>	4/4	1520	
<b>Departed Location</b>	4/4	1630	

1.2 Cementing Job Summary

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Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 300466	Ship To #: 3286288	Quote #:	Sales Order #: 0901248479							
Customer: ANADARKO PETROLEUM CORP - EBUS		Customer Rep: RANDY CASE								
Well Name: BERRY FARMS	Well #: 32C-8 HZ	API/UWI #: 05-123-38897-00								
Field: WATTENBERG	City (SAP): PLA	County/Parish: WELD	State: COLORADO							
Legal Description: SE NE-8-3N-67W-1397FNL-300FEL										
Contractor: Randy Case		Rig/Platform Name/Num: Majors 29								
Job BOM: 7521										
Well Type: HORIZONTAL GAS										
Sales Person: HALAMERICA\HX46524		Srcv Supervisor: WESLEY WHIPPLE								
<b>Job</b>										
Formation Name										
Formation Depth (MD)	Top	Bottom								
Form Type	BHST									
Job depth MD	817ft	Job Depth TVD								
Water Depth	Wk Ht Above Floor									
Perforation Depth (MD)	From	To								
<b>Well Data</b>										
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	1818		
Open Hole Section			13.5				0	1818		
<b>Tools and Accessories</b>										
Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make		
Guide Shoe	9.625	1		1818	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		
<b>Miscellaneous Materials</b>										
Gelling Agt	Conc	Surfactant	Conc	Acid Type	Qty	Conc				
Treatment Fld	Conc	Inhibitor	Conc	Sand Type	Size	Qty				
<b>Fluid Data</b>										
Stage/Plug #: 1										
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
1	Mud Flush III (Powder)	Mud Flush III	12	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 <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal	
2	Lead Cement	SWIFTCEM (TM) SYSTEM	323	Sack/Ton	14.2	1.54		5	7.64	
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal	
3	Displacement	Displacement	59	bbl	8.33					
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	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	323.0 sacks	310.0 sacks

**1.4 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 <sub>f</sub> /100ft <sup>2</sup>	
6	Actual mud 30 min Gel Strength	lb <sub>f</sub> /100ft <sup>2</sup>	
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	59
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



Cementing Job Log

The Road to Excellence Starts with Safety

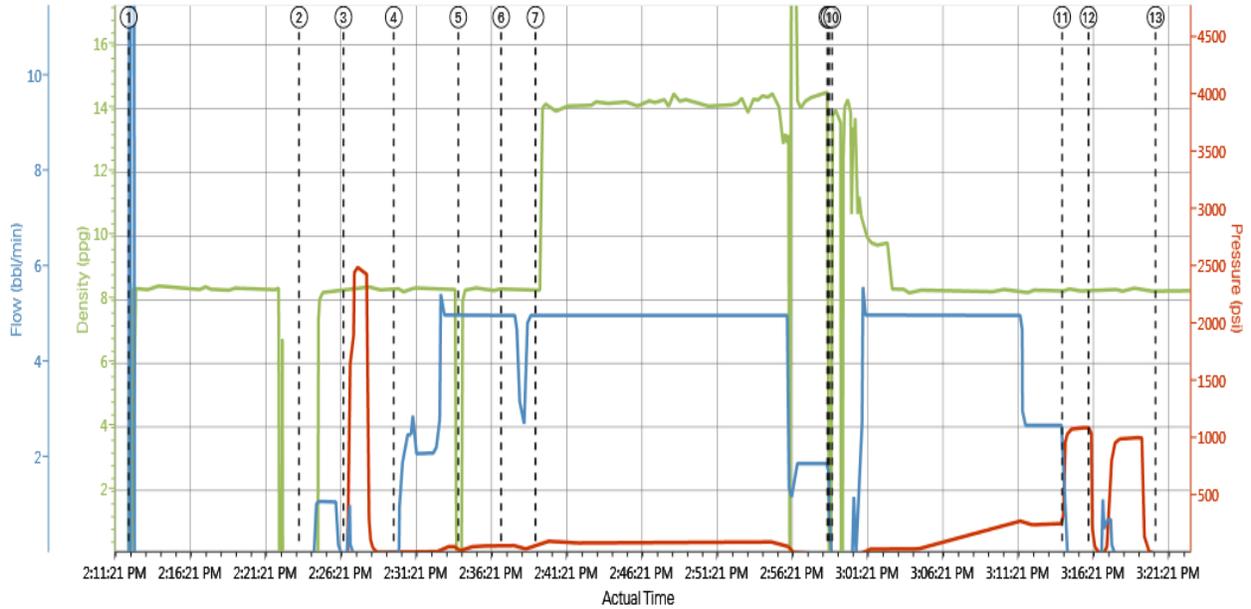
Sold To #: 300466	Ship To #: 3368087	Quote #:	Sales Order #: 0901248479
Customer: ANADARKO PETROLEUM CORP - EBUS		Customer Rep: Case, Randy	
Well Name: Berry Farms	Well #: 32C-8 HZ	API/UWI #: 05-123-38897-00	
Field: Wattenberg	City (SAP): Mead	County/Parish: Weld	State: Colorado
Lat: .	Long:		
Contractor: Majors	Rig/Platform Name/Num: Majors 29		
Job Purpose: Cement Surface Casing	Ticket Amount:		
Well Type: Development Well	Job Type: Cement Surface Casing		
Sales Person: GREGORY, JON	Srvc Supervisor: WHIPPLE, WESLEY	MBU ID Emp #: 300487	

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Arrive at Location from Service Center								Rig still running pipe in hole
Assessment Of Location Safety Meeting								Hazard Hunt and Discuss 3rd party activities
Pre-Rig Up Safety Meeting								Review JSA and Discuss Rig up layout
Rig-Up Equipment								
Rig-Up Completed								
Pre-Job Safety Meeting								With Customer and 3rd Parties involved
Start Job								
Pump Water								Fill Lines
Test Lines						2500		
Pump Water			5	10		61		Fresh Water
Pump Spacer			5	12		95		Mud Flush
Pump Water			5	10		110		Fresh Water
Pump Cement			5	88		97		323 sks @ 14.2ppg, 1.54yield, 7.66gal/sk
Shutdown								
Drop Top Plug								
Pump Displacement			5	59		260		Fresh Water
Cement Returns to Surface								59 bbls Displaced 10 bbls to Pit
Bump Plug						1000		
Check Floats								Floats Good, Bump pressure back up to check floats per Company man
End Job								Thanks Jason and Crew

Sold To #: 300466 Ship To #: 3368087 Prpsl #: Sales Order #: 901242915

SUMMIT Version: 7.3.0127 Friday, April 04, 2014 12:06:00

ANADARKO BERRY FARMS 32C-8 HZ 901248479



DH Density (ppg) PS Pump Press (psi) PS Pump Rate (bbbl/min)

- ① Test Lines 0,0;0    ④ Pump Spacer 18.36;4;0    ⑦ Pump Lead Cement 8.29;76;5    ⑩ Pump Displacement 13.99;-4;0    ⑬ End Job 8.28;2;0
- ② Start Job -12.07;3;0    ⑤ Pump Spacer 2-9.03;21;5    ⑧ Shutdown -6.16;2;0    ⑪ Bump Plug 8.27;972;0
- ③ Test Lines 8.36;6;0    ⑥ Pump Spacer 18.36;76;5    ⑨ Drop Top Plug 13.25;-1;0    ⑫ Other 8.3;1051;0

