

**ANADARKO PETROLEUM CORP - EBUS  
DO NOT MAIL - PO BOX 4995  
THE WOODLANDS, Texas**

Howard 27C-33HZ

**Major 29**

## **Post Job Summary**

# **Cement Surface Casing**

Prepared for:  
Date Prepared: 1/20/2014  
Version: 1

Service Supervisor: SMITH, AARON

Submitted by: FINNEY, SEAN

**HALLIBURTON**

# HALLIBURTON

## Wellbore Geometry

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Job Tubulars					MD		Shoe Joint Length ft
Type	Description	Size in	ID in	Wt lbm/ft	Top ft	Bottom ft	
Casing	9 5/8" Surface Casing	9.63	8.921	36.00	0.00	1,012.00	42.00
Open Hole Section	13 1/2" Open Hole Section		13.500		0.00	1,022.00	0.00

# HALLIBURTON

## ***Pumping Schedule***

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<b>Stage /Plug #</b>	<b>Fluid #</b>	<b>Fluid Type</b>	<b>Fluid Name</b>	<b>Surface Density lbm/gal</b>	<b>Avg Rate bbl/min</b>	<b>Surface Volume</b>	<b>Downhole Volume</b>
1	1	Spacer	Fresh Water Spacer	8.33	2.00	10.0 bbl	10.0 bbl
1	2	Spacer	Mud Flush	8.40	2.00	12.0 bbl	12.0 bbl
1	1	Spacer	Fresh Water Spacer	8.33	2.00	10.0 bbl	10.0 bbl
1	3	Cement Slurry	SwiftCem B2	14.20	5.00	386.0 sacks	386.0 sacks

# HALLIBURTON

## Service Supervisor Reports

### Job Log

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pump	Pressure (psig)	Comments
09/12/2013 04:00		Arrive at Location from Service Center					WITH ALL EQUIPMENT AND MATERIALS, CASING ON BOTTOM @ 0615.
09/12/2013 04:30		Assessment Of Location Safety Meeting					
09/12/2013 06:30		Pre-Rig Up Safety Meeting					DISCUSSED RIG UP JSA WITH CREW
09/12/2013 06:35		Rig-Up Equipment					HAD TO PULL OUT TRUCKS THAT WERE STUCK
09/12/2013 07:30		Rig-Up Completed					
09/12/2013 08:00		Pre-Job Safety Meeting					WITH CUSTOMER REP AND RIG CREW
09/12/2013 08:31		Start Job					
09/12/2013 08:34		Test Lines					@ 2500 PSI
09/12/2013 08:40		Pump Spacer 1	2	10		25.0	FRESH WATER WITH NO ADDITIVES
09/12/2013 08:45		Pump Spacer 2	2	12		25.0	FRESH WATER WITH MUD FLUSH
09/12/2013 08:50		Pump Spacer 1	2	10		29.0	FRESH WATER WITH NO ADDITIVES
09/12/2013 08:55		Pump Cement	5	106		80.0	385 SKS SWIFTCEM B1 , @ 14.2 PPG, 1.54 YIELD, 7.66 GAL/SK
09/12/2013 09:19		Shutdown					
09/12/2013 09:20		Drop Top Plug					PRE-LOADED HWE TOP PLUG IN PLUG CONTAINER. VERIFIED BY CUSTOMER REP
09/12/2013 09:22		Clean Lines	2	10		25.0	WASHED PUMPS AND LINES ON TOP OF PLUG
09/12/2013 09:32		Pump Displacement	5	66		380.0	FRESH WATER WITH NO ADDITIVES
09/12/2013 09:37		Spacer Returns to Surface					@ 32 BBLS DISPLACEMENT 32 BBLS TO THE PIT
09/12/2013 09:44		Cement Returns to Surface					@ 64 BBLS DISPLACEMENT, 12 BBLS TO THE PIT
09/12/2013 09:50		Bump Plug	2			1080.0	FINAL CIRCULATING PRESSURE 380
09/12/2013 09:55		Check Floats					FLOATS GOOD .5 BBLS BACK
09/12/2013 09:58		End Job					RIG-DOWN SAFETY MEETING, JOURNEY MANAGEMENT, THANKS AARON SMITH AND CREW

**The Road to Excellence Starts with Safety**

<b>Sold To #:</b> 300466	<b>Ship To #:</b> 3005208	<b>Quote #:</b>	<b>Sales Order #:</b> 900735644
<b>Customer:</b> ANADARKO PETROLEUM CORP - EBUS		<b>Customer Rep:</b> Balkenbush, Bob	
<b>Well Name:</b> Howard		<b>Well #:</b> 27C-33HZ	<b>API/UWI #:</b>
<b>Field:</b> WATTENBURG	<b>City (SAP):</b> DACONO	<b>County/Parish:</b> Weld	<b>State:</b> Colorado
<b>Job Purpose:</b> Cement Surface Casing			
<b>Well Type:</b> Development Well		<b>Job Type:</b> Cement Surface Casing	
<b>Sales Person:</b> PLIENESS, RYAN		<b>Srvc Supervisor:</b> SMITH, AARON	<b>MBU ID Emp #:</b> 518187

**Job Personnel**

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
DODSON, RICHARD Bryan	6.0	518192	SMITH, AARON David	6.0	518187			

**Equipment**

HES Unit #	Distance-1 way						
11410470C	7 mile	11562546C	7 mile	11566182	7 mile	12010173	7 mile

**Job Hours**

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours

**TOTAL** Total is the sum of each column separately

**Job**

**Job Times**

Formation Name	Top	Bottom	Called Out	Date	Time	Time Zone
<b>Form Type</b>		BHST	<b>On Location</b>	12 - Sep - 2013	04:00	MST
<b>Job depth MD</b>	1022. ft	<b>Job Depth TVD</b>	<b>Job Started</b>	12 - Sep - 2013	08:31	MST
<b>Water Depth</b>		<b>Wk Ht Above Floor</b>	<b>Job Completed</b>	12 - Sep - 2013	09:56	MST
<b>Perforation Depth (MD)</b>	<b>From</b>	<b>To</b>	<b>Departed Loc</b>	12 - Sep - 2013	10:30	MST

**Well Data**

Description	New / Used	Max pressure psig	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
13 1/2" Open Hole Section				13.5				.	1022.		
9 5/8" Surface Casing	Unknown		9.625	8.921	36.		J-55	.	1012.		

**Sales/Rental/3<sup>rd</sup> Party (HES)**

Description	Qty	Qty uom	Depth	Supplier
CMT CASING EQUIPMENT BOM	1	JOB		
MILEAGE FOR CEMENTING CREW,ZI	30	MI		
ZI FUEL SURCHG-CARS/PICKUPS<1 1/2TON	30	MI		
KIT,HALL WELD-A	1	EA		
CNTRLZR, 9 5/8x13 3/4,#500-0963-1375	7	EA		
PLUG,CMTG,TOP,9 5/8,HWE,8.16 MIN/9.06 MA	1	EA		
COLLAR-STOP-9 5/8"-FRICTION-HINGED	2	EA		
BASKET - CEMENT - 9-5/8 CSG X 12-1/4	1	EA		

Fluid Data									
Stage/Plug #: 1									
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	Fresh Water Spacer		10.00	bbl	8.33			2.0	
2	Mud Flush		12.00	bbl	8.4			2.0	
3.33 lbm/bbl		MUD FLUSH III, 40 LB SACK (101633304)							
42 gal/bbl		MUD FLUSH III - SBM (528788)							
1	Fresh Water Spacer		10.00	bbl	8.33			2.0	
3	SwiftCem B2	SWIFTCEM (TM) SYSTEM (452990)	386.0	sacks	14.2	1.53	7.63	5.0	7.63
7.63 Gal		FRESH WATER							
Calculated Values		Pressures		Volumes					
Displacement		Shut In: Instant		Lost Returns		Cement Slurry		Pad	
Top Of Cement		5 Min		Cement Returns		Actual Displacement 66		Treatment	
Frac Gradient		15 Min		Spacers		Load and Breakdown		Total Job	
Rates									
Circulating		Mixing		Displacement		Avg. Job			
Cement Left In Pipe		Amount	42 ft	Reason	Shoe Joint				
Frac Ring # 1 @	ID	Frac ring # 2 @	ID	Frac Ring # 3 @	ID	Frac Ring # 4 @	ID		
The Information Stated Herein Is Correct				Customer Representative Signature					

