

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

Howard 36N-33HZ

Major 29

Post Job Summary

Cement Surface Casing

Prepared for:
Date Prepared: 10/4/2013
Version: 1

Service Supervisor: BULINSKI, MATTHEW

Submitted by: FINNEY, SEAN

HALLIBURTON

HALLIBURTON

Wellbore Geometry

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	900.00	42.00
Open Hole Section	13 1/2" Open Hole Section		13.500		0.00	900.00	0.00

HALLIBURTON

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 Spacer	8.33	2.00	10.0 bbl	10.0 bbl
1	2	Spacer	Mud Flush	8.40	4.00	12.0 bbl	12.0 bbl
1	3	Cement Slurry	SwiftCem B2	14.20	5.00	386.0 sacks	386.0 sacks

Fluids Pumped

Stage/Plug # 1 Fluid 1: Fresh Water Spacer
DUMMY MUD / FLUSH / SPACER SBC MATERIAL

Fluid Density: 8.33 lbm/gal
Fluid Volume: 10.00 bbl
Pump Rate: 2.00 bbl/min

Stage/Plug # 1 Fluid 2: Mud Flush
DUMMY MUD / FLUSH / SPACER SBC MATERIAL
42 gal/bbl Mud Flush III
3.5 lbm/bbl Mud Flush III

Fluid Density: 8.40 lbm/gal
Fluid Volume: 12.00 bbl
Pump Rate: 4.00 bbl/min

Stage/Plug # 1 Fluid 3: SwiftCem B2
SWIFTCEM (TM) SYSTEM

Fluid Weight: 14.20 lbm/gal
Slurry Yield: 1.55 ft³/sack
Total Mixing Fluid: 7.68 Gal
Surface Volume: 386.0 sacks
Sacks: 386.0 sacks
Calculated Fill: 900.00 ft
Calculated Top of Fluid: 0.00 ft

HALLIBURTON

Service Supervisor Reports

Job Log

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pump	Pressure (psig)	Comments
09/27/2013 12:00		Arrive at Location from Service Center					Arrived 1hr early and rig preparing to start running Csg..
09/27/2013 12:10		Assessment Of Location Safety Meeting					Hazard Hunt on Location before spotting in bulk trucks
09/27/2013 12:20		Safety Meeting - Pre Rig-Up					JSA on rigging bulk trucks and iron to rig
09/27/2013 12:30		Rig-Up Equipment					
09/27/2013 12:55		Rig-Up Completed					
09/27/2013 15:45		Safety Meeting - Pre Job					JSA with company man, rig hands, and HES hands on pump schedule
09/27/2013 16:11		Start Job					
09/27/2013 16:13		Test Lines					3000psi Pressure Test Lines to Rig floor
09/27/2013 16:23		Pump Spacer 1	2	10		50.0	10bbls H2O spacer
09/27/2013 16:28		Pump Spacer 2	4	12		70.0	12bbls Mudflush spacer
09/27/2013 16:32		Pump Spacer 1	5	10		80.0	10bbls H2O spacer
09/27/2013 16:35		Pump Cement	5	106.5		120.0	386sks Swiftcem, 14.2ppg, 1.55yield, 7.68gal/sk, Mixed with rig water and # verify 3x's by pressurized mud scales
09/27/2013 17:00		Shutdown					
09/27/2013 17:05		Drop Top Plug					Broke off quicklatch swedge and dropped plug
09/27/2013 17:07		Pump Displacement	5	75.7		320.0	H2O displacment, Good returns throughout... Cmt to surface Last 10bbls
09/27/2013 17:25		Bump Plug	3			1427.0	Slowed down last 20bbls to 3bbl/min to bump... Plug landed at 350psi and brought up to 1427psi for 5mins
09/27/2013 17:31		Check Floats					Floats held
09/27/2013 17:32		End Job					
09/27/2013 17:35		Safety Meeting - Pre Rig-Down					JSA on rigging down bulk trucks and iron from rig
09/27/2013 17:40		Rig-Down Equipment					
09/27/2013 18:24		Rig-Down Completed					
09/27/2013 18:25		Safety Meeting - Departing Location					JSA on pre-tripping trucks and driving back to Brighton yard

The Road to Excellence Starts with Safety

Sold To #: 300466		Ship To #: 3107571		Quote #:		Sales Order #: 900768500					
Customer: ANADARKO PETROLEUM CORP - EBUS				Customer Rep: Strong, Brett							
Well Name: Howard			Well #: 36N-33HZ		API/UWI #: 05-123-38031						
Field: WATTENBERG		City (SAP): DACONO		County/Parish: Weld		State: Colorado					
Lat: N 40.019 deg. OR N 40 deg. 1 min. 9.876 secs.				Long: W 104.891 deg. OR W -105 deg. 6 min. 31.324 secs.							
Job Purpose: Cement Surface Casing											
Well Type: Development Well				Job Type: Cement Surface Casing							
Sales Person: GREGORY, JON			Srvc Supervisor: BULINSKI, MATTHEW		MBU ID Emp #: 483865						
Job Personnel											
HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #			
BULINSKI, MATTHEW J	0.0	483865	CARPENTER, JACOB P	0.0	499500	VIATOR, JASON R.	0.0	550394			
Equipment											
HES Unit #	<i>Distance-1 way</i>	HES Unit #	<i>Distance-1 way</i>	HES Unit #	<i>Distance-1 way</i>	HES Unit #	<i>Distance-1 way</i>				
10824253C	10 mile	11338223	10 mile	11605598	10 mile	11764052	10 mile				
Job Hours											
Date	<i>On Location Hours</i>	Operating Hours	Date	<i>On Location Hours</i>	Operating Hours	Date	<i>On Location Hours</i>	Operating Hours			
TOTAL											
<i>Total is the sum of each column separately</i>											
Job				Job Times							
Formation Name						Date	Time	Time Zone			
Formation Depth (MD)	Top	Bottom		Called Out		27 - Sep - 2013	09:00	MST			
Form Type	BHST			On Location		27 - Sep - 2013	12:00	MST			
Job depth MD	900. ft	Job Depth TVD		Job Started		27 - Sep - 2013	16:11	MST			
Water Depth	Wk Ht Above Floor			Job Completed		27 - Sep - 2013	17:32	MST			
Perforation Depth (MD)	<i>From</i>	<i>To</i>		Departed Loc		27 - Sep - 2013	18:30	MST			
Well Data											
<i>Description</i>	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				.	900.		
9 5/8" Surface Casing	Unknown		9.625	8.921	36.		J-55	.	900.		
Sales/Rental/3rd Party (HES)											
Description						Qty	Qty uom	Depth	Supplier		
CMT CASING EQUIPMENT BOM						1	JOB				
MILEAGE FOR CEMENTING CREW,ZI						20	MI				
ZI FUEL SURCHG-CARS/PICKUPS<1 1/2TON						20	MI				
KIT,HALL WELD-A						1	EA				
CNTRLZR, 9 5/8"x13 3/4',#500-0963-1375						7	EA				
PLUG,CMTG, TOP,9 5/8,HWE,8.16 MIN/9.06 MA						1	EA				
Description						Qty	Qty uom	Depth	Supplier		

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 ft3/sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	Fresh Water Spacer		10.00	bbl	8.33	.0	.0	2.0	
2	Mud Flush		12.00	bbl	8.4	.0	.0	4.0	
42 gal/bbl		MUD FLUSH III - SBM (528788)							
3.5 lbm/bbl		MUD FLUSH III, 40 LB SACK (101633304)							
3	SwiftCem B2	SWIFTCEM (TM) SYSTEM (452990)	386.0	sacks	14.2	1.55	7.68	5.0	7.68
7.68 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		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					

