

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

Herman 37N-5HZ

**MAJORS 42**

## **Post Job Summary**

# **Cement Surface Casing**

Prepared for:  
Date Prepared: 8/21/2013  
Version: 1

Service Supervisor: BULINSKI, MATTHEW

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	1,022.00	42.00
Open Hole Section	13 1/2" Open Hole Section		13.500		0.00	1,033.00	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	5.00	10.0 bbl	10.0 bbl
1	2	Spacer	MudFlush	8.40	5.00	12.0 bbl	12.0 bbl
1	3	Spacer	Fresh Water Spacer	8.33	5.00	10.0 bbl	10.0 bbl
1	4	Cement Slurry	SwiftCem B2	14.20	5.00	397.0 sacks	397.0 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: 5.00 bbl/min

**Stage/Plug # 1 Fluid 2:** MudFlush  
DUMMY MUD / FLUSH / SPACER SBC MATERIAL  
10 lbm/Mgal Mud Flush III  
10 lbm/bbl Mud Flush III

Fluid Density: 8.40 lbm/gal  
Fluid Volume: 12.00 bbl  
Pump Rate: 5.00 bbl/min

**Stage/Plug # 1 Fluid 3:** Fresh Water Spacer  
DUMMY MUD / FLUSH / SPACER SBC MATERIAL

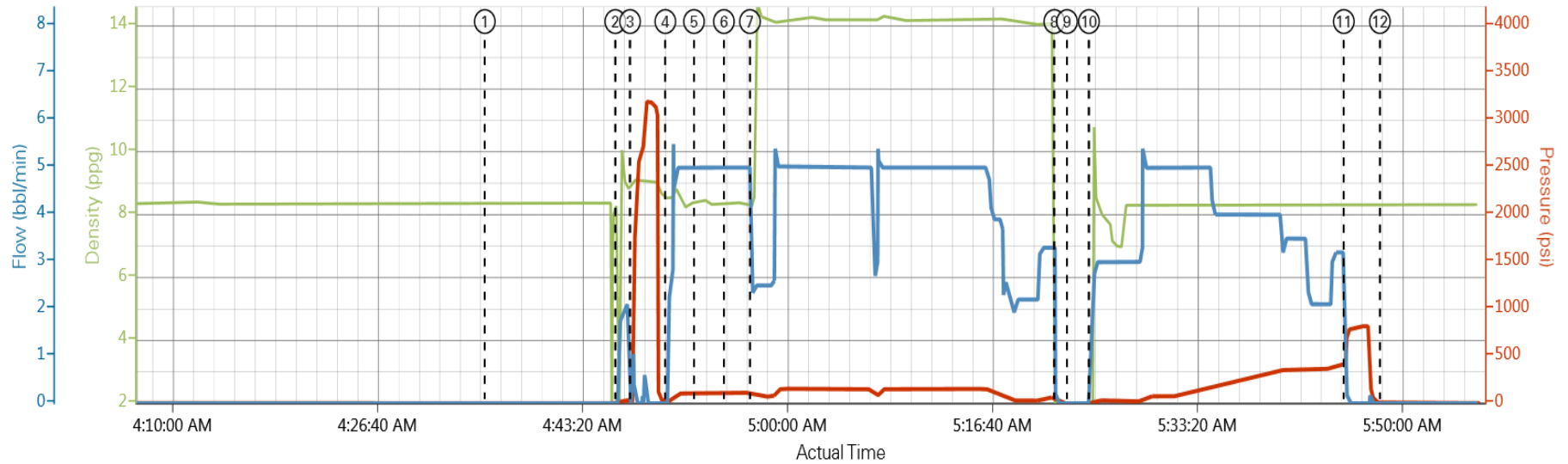
Fluid Density: 8.33 lbm/gal  
Fluid Volume: 10.00 bbl  
Pump Rate: 5.00 bbl/min

**Stage/Plug # 1 Fluid 4:** SwiftCem B2  
SWIFTCEM (TM) SYSTEM

Fluid Weight: 14.20 lbm/gal  
Slurry Yield: 1.54 ft<sup>3</sup>/sack  
Total Mixing Fluid: 7.67 Gal  
Surface Volume: 397.0 sacks  
Sacks: 397.0 sacks  
Calculated Fill: 900.00 ft  
Calculated Top of Fluid: 0.00 ft

## Data Acquisition

Anadarko Herman 37N-5HZ Surface 8-18-13



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

- ① Start Job      ⑥ Pump Spacer 1      ⑪ Bump Plug
- ② Start Job      ⑦ Pump Cement      ⑫ End Job
- ③ Test Lines      ⑧ Shutdown
- ④ Pump Spacer 1      ⑨ Drop Top Plug
- ⑤ Pump Spacer 2      ⑩ Pump Displacement

# HALLIBURTON

## Service Supervisor Reports

### Job Log

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pump	Pressure (psig)	Comments
08/18/2013 02:00		Arrive at Location from Service Center					Arrived on Location 2hrs early and rig is running Csg on Scheduling
08/18/2013 02:05		Assessment Of Location Safety Meeting					Hazard Hunt on Location before spotting in trucks
08/18/2013 02:10		Safety Meeting - Pre Rig-Up					JSA on rigging up bulk trucks and iron to rig
08/18/2013 02:15		Rig-Up Equipment					
08/18/2013 02:45		Rig-Up Completed					
08/18/2013 04:15		Safety Meeting - Pre Job					JSA with Company man, Rig hands, and HES hands on job scheduling
08/18/2013 04:46		Start Job					
08/18/2013 04:47		Test Lines					3000psi Pressure test lines to rig floor
08/18/2013 04:50		Pump Spacer 1	5	10		104.0	H2O spacer
08/18/2013 04:52		Pump Spacer 2	5	12		105.0	Mudflush spacer
08/18/2013 04:54		Pump Spacer 1	5	10		107.0	H2O spacer
08/18/2013 04:57		Pump Cement	5	108.8		155.0	397sks Swiftcem, 14.2, 1.54yield, 7.67gal/sk, Mixed with rig water, and # verify by pressurized mud scales--- 3 samples weighed
08/18/2013 05:21		Shutdown					
08/18/2013 05:22		Drop Top Plug					Pre-Loaded
08/18/2013 05:24		Pump Displacement	5	75		230.0	H2O displacement, Good returns throughout... 7bbls Cmt to Surface
08/18/2013 05:45		Bump Plug	3			823.0	Slowed down last 20bbls to 3bbl/min to land... Plug landed at 420psi and brought to 823psi for 2mins
08/18/2013 05:47		Check Floats					Floats held
08/18/2013 05:48		End Job					
08/18/2013 05:55		Safety Meeting - Pre Rig-Down					Safety huddle by supervisor truck on rigging down bulk trucks and iron
08/18/2013 06:00		Rig-Down Equipment					
08/18/2013 06:35		Rig-Down Completed					
08/18/2013 06:45		Safety Meeting - Departing Location					Safety JSA on pre-tripping trucks and driving back to Brighton Location

*The Road to Excellence Starts with Safety*

<b>Sold To #:</b> 300466		<b>Ship To #:</b> 3092953		<b>Quote #:</b>		<b>Sales Order #:</b> 900674284	
<b>Customer:</b> ANADARKO PETROLEUM CORP - EBUS				<b>Customer Rep:</b> PORTER, BOB			
<b>Well Name:</b> Herman			<b>Well #:</b> 37N-5HZ		<b>API/UWI #:</b> 05-123-37505		
<b>Field:</b> WATTENBERG		<b>City (SAP):</b> PLATTEVILLE		<b>County/Parish:</b> Weld		<b>State:</b> Colorado	
<b>Lat:</b> N 40.175 deg. OR N 40 deg. 10 min. 29.075 secs.				<b>Long:</b> W 104.796 deg. OR W -105 deg. 12 min. 13.561 secs.			
<b>Contractor:</b> MAJORS			<b>Rig/Platform Name/Num:</b> Majors 42				
<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> BULINSKI, MATTHEW			<b>MBU ID Emp #:</b> 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	mills, Chuck	0.0	1234567	WILEY, JAMES A	0.0	440080

**Equipment**

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10972458	30 mile	11019275C	30 mile	11542778	30 mile	11605598	30 mile

**Job Hours**

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
<b>TOTAL</b>								
<i>Total is the sum of each column separately</i>								

**Job**

**Job Times**

Formation Name	Formation Depth (MD) Top	Bottom	Form Type	Job depth MD	Job Depth TVD	Water Depth	Perforation Depth (MD) From	To	Called Out	Date	Time	Time Zone
			BHST	1022. ft	1022. ft				17 - Aug - 2013	22:00	MST	
									18 - Aug - 2013	02:00	MST	
									18 - Aug - 2013	04:35	MST	
									18 - Aug - 2013	05:48	MST	
									18 - Aug - 2013	07:00	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				.	1033.		
9 5/8" Surface Casing	Unknown		9.625	8.921	36.		J-55	.	1022.		

**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
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1	Fresh Water Spacer		10.00	bbl	8.33	.0	.0	5.0	
2	MudFlush		12.00	bbl	8.4	.0	.0	5.0	
	10 lbm/Mgal	MUD FLUSH III - SBM (528788)							
	10 lbm/bbl	MUD FLUSH III, 40 LB SACK (101633304)							
3	Fresh Water Spacer		10.00	bbl	8.33	.0	.0	5.0	
4	SwiftCem B2	SWIFTCEM (TM) SYSTEM (452990)	397.0	sacks	14.2	1.54	7.67	5.0	7.67
	7.67 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					

