

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

Henrickson 13C-18HZ

Major 29

Post Job Summary **Cement Surface Casing**

Prepared for:
Date Prepared: 9/27/2013
Version: 1

Service Supervisor: MCBRIDE, NATHAN

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	1,020.00	42.00
Open Hole Section	13 1/2" Open Hole Section		13.500		0.00	1,023.00	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	Mud Flush	8.40	5.00	12.0 bbl	12.0 bbl
1	3	Cement Slurry	SwiftCem B2	14.20	5.00	418.0 sacks	418.0 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: Mud Flush
DUMMY MUD / FLUSH / SPACER SBC MATERIAL
3.33 lbm/bbl Mud Flush III
42 gal/bbl Mud Flush III

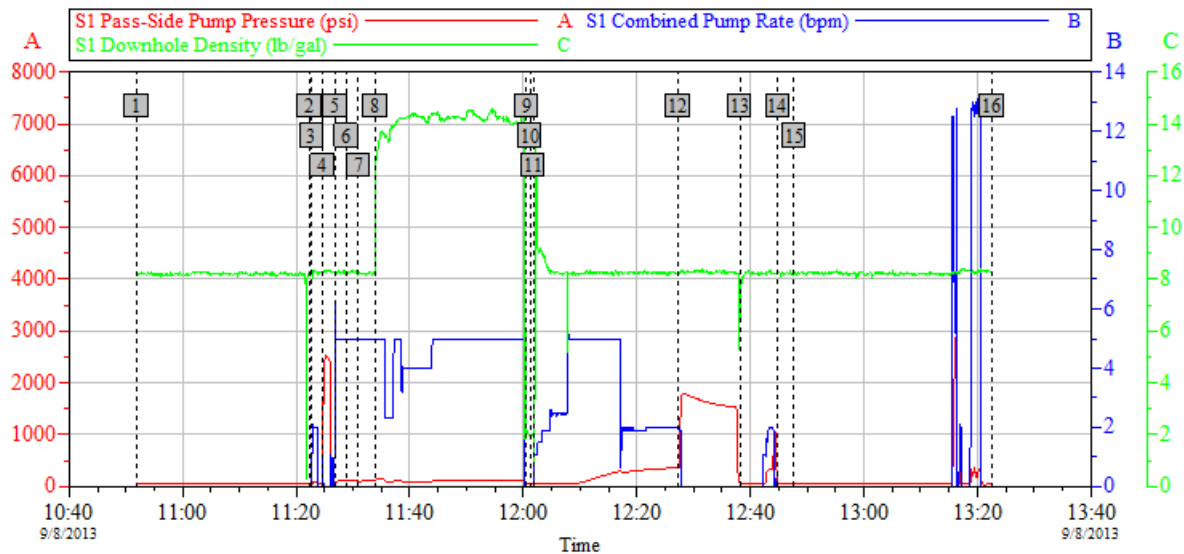
Fluid Density: 8.40 lbm/gal
Fluid Volume: 12.00 bbl
Pump Rate: 5.00 bbl/min

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

Fluid Weight: 14.20 lbm/gal
Slurry Yield: 1.53 ft³/sack
Total Mixing Fluid: 7.63 Gal
Surface Volume: 418.0 sacks
Sacks: 418.0 sacks
Calculated Fill: 900.00 ft
Calculated Top of Fluid: 0.00 ft

HALLIBURTON

Data Acquisition



Global Event Log

1 Starting Job	10:51:59	2 Start Job	11:22:20	3 Fill Lines	11:22:44
4 Test Lines	11:24:41	5 Pump Spacer 1	11:26:53	6 Pump Space Mud Flush	11:28:54
7 Pump Spacer 2	11:30:57	8 Pump Cement	11:33:59	9 Shutdown	12:00:35
10 Drop Top Plug	12:01:14	11 Pump Displacement	12:01:46	12 Bump Plug	12:27:13
13 Check Floats	12:38:07	14 Surge Float	12:44:51	15 End Job	12:47:41
16 Ending Job	13:22:34				

Customer:

Job Date: 08-Sep-2013

Sales Order #: 900729840

WellDescription:

UWI:

OptiCem v6.4.10
05-Oct-13 14:44

HALLIBURTON

Service Supervisor Reports

Job Log

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pump		Pressure (psig)	Comments
09/08/2013 02:45		Arrive at Location from Service Center						All equipment and materials on location Rig Running Casing
09/08/2013 02:55		Assessment Of Location Safety Meeting						Hazard Hunt and review fluid location, wash up and truck layout
09/08/2013 03:00		Pre-Rig Up Safety Meeting						
09/08/2013 03:05		Rig-Up Equipment						
09/08/2013 03:50		Rig-Up Completed						
09/08/2013 10:30		Casing on Bottom						
09/08/2013 10:35		Circulate Well						
09/08/2013 11:00		Pre-Job Safety Meeting						
09/08/2013 11:22		Start Job						
09/08/2013 11:22		Pump Water	2	2				Fill Lines
09/08/2013 11:24		Test Lines					2500.0	
09/08/2013 11:26		Pump Spacer	5	10				Fresh Water
09/08/2013 11:28		Pump Spacer	5	12				Mud Flush
09/08/2013 11:30		Pump Spacer	5	10			75.0	Fresh Water
09/08/2013 11:33		Pump Lead Cement	5	113.9			100.0	380sks @ 14.2ppg, 1.54yield, 7.66gal/sk
09/08/2013 12:01		Drop Top Plug						
09/08/2013 12:01		Pump Displacement	5	75.7			345.0	Fresh Water
09/08/2013 12:15		Spacer Returns to Surface						Mud Flush to Surface 8bbls into Displacement
09/08/2013 12:23		Cement Returns to Surface						74bbls Displaced 3bbls to Surface
09/08/2013 12:27		Bump Plug						1000psi Over 1525 Final bump Pressure
09/08/2013 12:38		Check Floats						Float didnt hold. Pressured up and Surged Float. Float Held.
09/08/2013 12:47		End Job						Thanks McBride and Crew

The Road to Excellence Starts with Safety

Sold To #: 300466		Ship To #: 3099486		Quote #:		Sales Order #: 900729840	
Customer: ANADARKO PETROLEUM CORP - EBUS				Customer Rep: Balkenbush, Bob			
Well Name: Henrickson			Well #: 13C-18HZ		API/UWI #: 05-123-37673		
Field: WATTENBERG		City (SAP): PLATTEVILLE		County/Parish: Weld		State: Colorado	
Lat: N 40.237 deg. OR N 40 deg. 14 min. 11.414 secs.				Long: W 104.827 deg. OR W -105 deg. 10 min. 22.897 secs.			
Job Purpose: Cement Surface Casing							
Well Type: Development Well				Job Type: Cement Surface Casing			
Sales Person: PLIENESS, RYAN				Srvc Supervisor: MCBRIDE, NATHAN		MBU ID Emp #: 313810	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
CHISLUM, DENNIS	11.5	512130	MARKOVICH, STEVEN Michael	11.5	502964	MCBRIDE, NATHAN Charles	11.5	313810

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10248053C	15 mile	11338223	15 mile	11362287C	15 mile	11764052	15 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	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	900. ft	900. ft						07 - Sep - 2013	23:00	MST
											On Location	08 - Sep - 2013	02:45	MST
											Job Started	08 - Sep - 2013	11:20	MST
											Job Completed	08 - Sep - 2013	12:47	MST
											Departed Loc	08 - Sep - 2013	14:15	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				.	1023.		
9 5/8" Surface Casing	Unknown		9.625	8.921	36.		J-55	.	1020.		

Fluid Data

Stage/Plug #: 1

Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft ³ /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	Mud Flush		12.00	bbl	8.4	.0	.0	5.0	
3.33 lbm/bbl		MUD FLUSH III, 40 LB SACK (101633304)							
42 gal/bbl		MUD FLUSH III - SBM (528788)							
3	SwiftCem B2	SWIFTCM (TM) SYSTEM (452990)	418.0	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		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					

