

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

Ziemer 34N-5HZ

Ensign 145

Post Job Summary

Cement Surface Casing

Date Prepared: 10/31/2013
Version: 1

Service Supervisor: PICKELL, CHRISTOPHER

Submitted by: TRIER, DEREK

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	1,107.00	45.00
Open Hole Section	13 1/2" Open Hole Section		13.500		0.00	1,120.00	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	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	5.20	460.0 sacks	460.0 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: 2.00 bbl/min

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

Fluid Weight: 14.20 lbm/gal
Slurry Yield: 1.54 ft³/sack
Total Mixing Fluid: 7.66 Gal
Surface Volume: 460.0 sacks
Sacks: 460.0 sacks

HALLIBURTON

Service Supervisor Reports

Job Log

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pump	Pressure (psig)	Comments
10/24/2013 21:00		Call Out					CREW CALLED OUT AT 2100 TO BE ON LOCATION AT 0200
10/25/2013 01:00		Depart from Service Center or Other Site					SAFETY MEETING HELD FOR JOURNEY THEN LEFT THE YARD FOR ENSIGN 145
10/25/2013 01:15		Arrive At Loc					
10/25/2013 02:00		Rig-Up Equipment					HAZARD HUNT PERFORMED. WATER TEST DONE. EQUIPMENT SPOTTED IN AND RIGGED UP
10/25/2013 06:15		Pre-Job Safety Meeting					SAFETY MEETING WITH ALL PERSONEL ON LOCATION TO DISCUSS JOB SAFETY AND PROCEDURE
10/25/2013 06:37		Start Job					RIG CREW CIRCULATED THREW CEMENT HEAD FOR 1 HOURS
10/25/2013 06:42		Test Lines	1	3		2500.0	PRESSURE TEST LINES TO 2500 PSI. CHECK FOR VISIBLE LEAKS AND PRESSURE LOSS
10/25/2013 06:48		Pump Spacer 1	2	10		25.0	PUMP WATER. RETURNS BEGAN WITH 1 BBL AWAY
10/25/2013 06:53		Pump Spacer 2	2	12		30.0	PUMP MUDFLUSH
10/25/2013 07:00		Pump Spacer 1	2	10		35.0	PUMP WATER
10/25/2013 07:05		Pump Cement	5.2	126		75.0	PUMP SWIFTCEM CEMENT 460 SKS 14.2 PPG 1.54 CUFT/SK 7.68 GAL/SK
10/25/2013 07:37		Shutdown					WASH PUMPS AND LINES ON TOP OF THE PLUG
10/25/2013 07:39		Drop Top Plug					PLUG PRELOADED IN PLUG CONTAINER
10/25/2013 07:40		Pump Displacement	5.7	82.2		450.0	PUMP DISPLACEMENT USING WATER
10/25/2013 08:07		Bump Plug	2.5			411.0	CALCULATED PRESSURE TO LAND WAS 324 PSI PLUG LANDED WITH 411 PSI TAKING IT 500 PSI OVER FINAL LIFT PRESSURE
10/25/2013 08:11		Check Floats				1187.0	PRESSURE WAS HELD FOR 5 MINUTES THEN RELEASED. FLOATS HELD. 1 BBL BACK TANKS
10/25/2013 08:18		End Job					24 BBL OF CEMENT TO SURFACE. CEMENT DID NOT FALL ONCE PRESSURE WAS RELEASED. WATCHED FOR 10 MINUTES
10/25/2013 08:30		Pre-Rig Down Safety Meeting					SAFETY MEETING TO DISCUSS RIG DOWN
10/25/2013 08:35		Rig-Down Equipment					RIG DOWN ALL EQUIPMENT. BLOWN DOWN ALL LINES TO PREVENT SPILLS
10/25/2013 09:15		Depart Location for Service Center or Other Site					LEAVE LOCATION FOR THE YARD

The Road to Excellence Starts with Safety

Sold To #: 300466		Ship To #: 3117325		Quote #:		Sales Order #: 900844232	
Customer: ANADARKO PETROLEUM CORP - EBUS				Customer Rep: Joulbert, Tim			
Well Name: Ziemer			Well #: 34N-5HZ		API/UWI #: 05-123-37829		
Field: WATTENBERG		City (SAP): FORT LUPTON		County/Parish: Weld		State: Colorado	
Lat: N 40.087 deg. OR N 40 deg. 5 min. 12.498 secs.				Long: W 104.696 deg. OR W -105 deg. 18 min. 14.134 secs.			
Contractor: Ensign			Rig/Platform Name/Num: Ensign 145				
Job Purpose: Cement Surface Casing							
Well Type: Development Well				Job Type: Cement Surface Casing			
Sales Person: PLIENESS, RYAN			Srvc Supervisor: PICKELL, CHRISTOPHER			MBU ID Emp #: 396838	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
JEWELL, WILLIAM Uris	0.0	503358	PICKELL, CHRISTOPHER Lee	0.0	396838	ROBINSON, TROY	0.0	123456
TAUILIILI, SAI AIGA	0.0	545471						

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10248062C	9 mile	10982754C	9 mile	11527037	9 mile	11605597	9 mile
11667703C	9 mile						

Job

Job Times

Formation Name	Formation Depth (MD)	Top	Bottom	Called Out	Date	Time	Time Zone
					24 - Oct - 2013	21:00	MST
Form Type			BHST	On Location	25 - Oct - 2013	01:15	MST
Job depth MD	1120. ft		Job Depth TVD	1120. ft	Job Started	25 - Oct - 2013	06:37
Water Depth			Wk Ht Above Floor	5. ft	Job Completed	25 - Oct - 2013	08:18
Perforation Depth (MD)	<i>From</i>		<i>To</i>		Departed Loc	25 - Oct - 2013	09:15

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				.	1120.		
9 5/8" Surface Casing	Unknown		9.625	8.921	36.		J-55	.	1107.		

Sales/Rental/3rd Party (HES)

Description	Qty	Qty uom	Depth	Supplier
CMT CASING EQUIPMENT BOM	1	JOB		
MILEAGE FOR CEMENTING CREW,ZI	20	MI		
Description	Qty	Qty uom	Depth	Supplier
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	9	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 ³ /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	
42 gal/bbl		MUD FLUSH III - SBM (528788)							
3.5 lbm/bbl		MUD FLUSH III, 40 LB SACK (101633304)							
1	Fresh Water Spacer		10.00	bbl	8.33			2.0	
3	SwiftCem B2	SWIFTCEM (TM) SYSTEM (452990)	460.0	sacks	14.2	1.54	7.66	5.2	7.66
7.66 Gal		FRESH WATER							
Calculated Values			Pressures			Volumes			
Displacement		Shut In: Instant		Lost Returns		Cement Slurry		Pad	
Top Of Cement		5 Min		Cement Returns 24.0		Actual Displacement 82.2		Treatment	
Frac Gradient		15 Min		Spacers 32.0		Load and Breakdown		Total Job	
Rates									
Circulating			Mixing			Displacement			Avg. Job
Cement Left In Pipe		Amount	45 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					

