

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

Wirkner Vance 14C-1HZ

MAJORS 42

Post Job Summary **Cement Surface Casing**

Prepared for:
Date Prepared: 10/15/2013
Version: 1

Service Supervisor: NIELSON, BRANDON

Submitted by: FINNEY, SEAN

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	1,011.00	42.00
Open Hole Section	13 1/2" Open Hole Section		13.500		0.00	1,011.00	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	1.50	10.0 bbl	10.0 bbl
1	2	Spacer	Mud Flush	8.40	3.00	12.0 bbl	12.0 bbl
1	3	Spacer	Fresh Water Spacer	8.33	3.00	10.0 bbl	10.0 bbl
1	4	Cement Slurry	SwiftCem B2	14.20	5.50	381.0 sacks	381.0 sacks
1	5	Spacer	Displacemant	8.33	5.00	75.0 bbl	75.0 bbl

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: 1.50 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: 3.00 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: 3.00 bbl/min

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

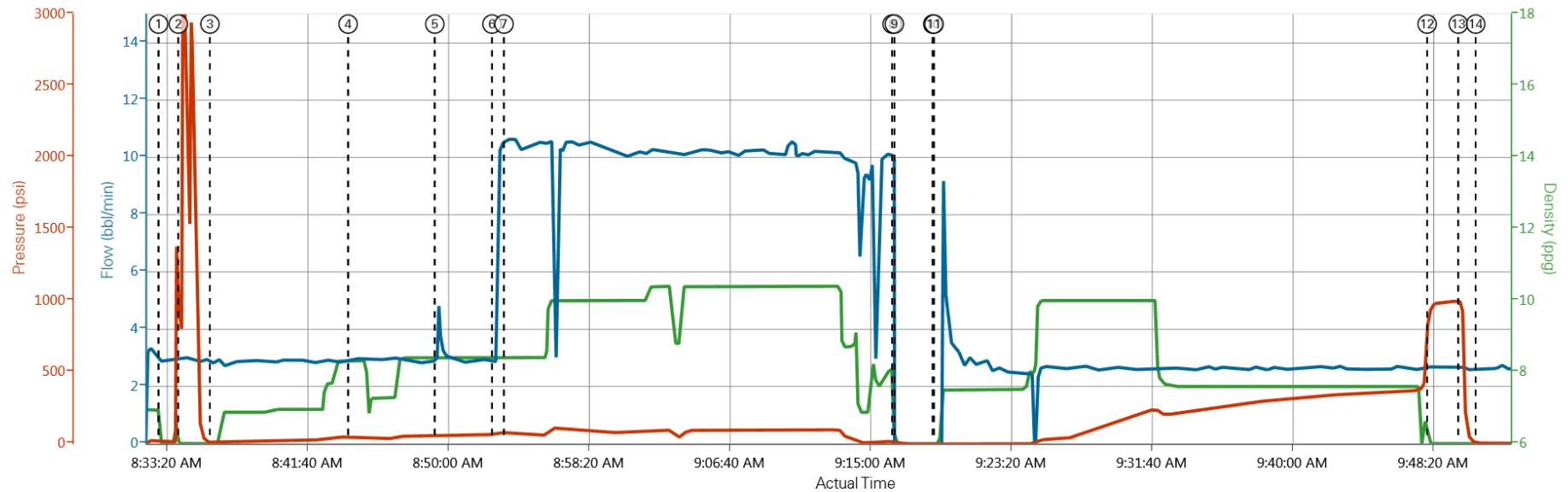
Fluid Weight: 14.20 lbm/gal
Slurry Yield: 1.54 ft³/sack
Total Mixing Fluid: 7.66 Gal
Surface Volume: 381.0 sacks
Sacks: 381.0 sacks
Calculated Fill: 900.00 ft
Calculated Top of Fluid: 0.00 ft

Stage/Plug # 1 Fluid 5: Displacemant
DUMMY MUD / FLUSH / SPACER SBC MATERIAL

Fluid Density: 8.33 lbm/gal
Fluid Volume: 75.00 bbl
Pump Rate: 5.00 bbl/min

Data Acquisition

ANADARKO WIRKNER-VANCE 14C-1HZ



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

① Start Job 0;8.3;18 ④ Pump Spacer 2 2.9;8.29;48 ⑦ Start Job 3;14.5;79 ⑩ Drop Top Plug 0;-0.09;-3 ⑬ Other 0;8.16;991
 ② Test Lines 0;8.38;803 ⑤ Pump Spacer 1 3;9.53;57 ⑧ Start Job 0;0.49;8 ⑪ Pump Displacement 0;-0.13;-3 ⑭ End Job 0;8.08;5
 ③ Pump Spacer 1 0;8.25;8 ⑥ Pump Cement 3;8.29;65 ⑨ Shutdown 0;-0.04;2 ⑫ Bump Plug 0;8.16;932

HALLIBURTON

Service Supervisor Reports

Job Log

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pump	Pressure (psig)	Comments
10/11/2013 02:30		Call Out					
10/11/2013 05:00		Crew Leave Yard					
10/11/2013 05:30		Arrive At Loc					APON ARRIVAL RIG JUST STARTED RUNNING CASING. RUNNING TO 1011 FT
10/11/2013 05:40		Assessment Of Location Safety Meeting					CREW DID HAZARD HUNT OF LOCATION
10/11/2013 05:45		Rig-Up Equipment					BACKED PUMP TRUCK ON CONTAINMENT AND STARTED RIGGING UP
10/11/2013 06:15		Rig-Up Completed					
10/11/2013 07:50		Casing on Bottom					
10/11/2013 08:00		Safety Meeting					JSA WITH RIG CREW
10/11/2013 08:30		Start Job					
10/11/2013 08:33		Test Lines					TESTED LINES TO 3000 PSI NO VISIBLE LEAKS
10/11/2013 08:35		Pump Spacer 1	1.5	10		26.0	FRESH WATER
10/11/2013 08:43		Pump Spacer 2	3	12		50.0	MUD FLUSH
10/11/2013 08:48		Pump Spacer 1	3	10		54.0	FRESH WATER
10/11/2013 08:51		Pump Cement	5.5	104.5		95.0	381 SKS SWIFTCEM MIXED @ 14.2 PPG WITH FRESH WATER
10/11/2013 09:15		Shutdown					
10/11/2013 09:17		Drop Top Plug					PLUG PRE LOADED WITNESSED BY COMPANY REP
10/11/2013 09:17		Pump Displacement	5	77.25		211.0	FRESH WATER, GOOD RETURNS THROUGHOUT. CEMENT RETURNED TO SURFACE 64 BBL INTO LEAVING US WITH 13.25 BBL BACK
10/11/2013 09:47		Bump Plug	2			400.0	CALCULATED PRESSURE TO LAND WAS 327
10/11/2013 09:49		Check Floats				995.0	FLOATS HELD WITH .5 BBL BACK TO THE TRUCK
10/11/2013 09:50		End Job					

The Road to Excellence Starts with Safety

Sold To #: 300466	Ship To #: 3110498	Quote #:	Sales Order #: 900812528
Customer: ANADARKO PETROLEUM CORP - EBUS		Customer Rep: Porter, Bob	
Well Name: Wirkner Vance		Well #: 14C-1HZ	API/UWI #:
Field: WATTENBERG	City (SAP): FORT LUPTON	County/Parish: Weld	State: Colorado
Contractor: MAJORS		Rig/Platform Name/Num: MAJORS 42	
Job Purpose: Cement Surface Casing			
Well Type: Development Well		Job Type: Cement Surface Casing	
Sales Person: FLING, MATTHEW	Srvc Supervisor: NIELSON, BRANDON		MBU ID Emp #: 479703

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BARNES, BRIAN L	5.5	485204	MYRE, JAMES	5.5	549859	NIELSON, BRANDON K	5.5	479703
STIELER, KENT	5.5	554541						

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
11362287C	14 mile	11764054C	14 mile	11764737	14 mile	12010172	14 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	1011. ft	1011. ft	3. ft					11 - Oct - 2013	02:30	MST
											On Location	11 - Oct - 2013	05:30	MST
											Job Started	11 - Oct - 2013	08:30	MST
											Job Completed	11 - Oct - 2013	09:50	MST
											Departed Loc	11 - Oct - 2013	11:00	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				.	1011.		
9 5/8" Surface Casing	Unknown		9.625	8.921	36.		J-55	.	1011.		

Sales/Rental/3rd 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 5/8"x13 3/4',#500-0963-1375	7	EA		
BASKET - CEMENT - 9-5/8 CSG X 12-1/4	1	EA		
Description	Qty	Qty uom	Depth	Supplier

PLUG,CMTG, TOP, 9 5/8, HWE, 8.16 MIN/9.06 MA						1	EA		
COLLAR-STOP-9 5/8"-FRICTION-HINGED						2	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			1.5	
2	Mud Flush		12.00	bbl	8.4			3.0	
3.33 lbm/bbl		MUD FLUSH III, 40 LB SACK (101633304)							
42 gal/bbl		MUD FLUSH III - SBM (528788)							
3	Fresh Water Spacer		10.00	bbl	8.33			3.0	
4	SwiftCem B2	SWIFTCEM (TM) SYSTEM (452990)	381.0	sacks	14.2	1.54	7.66	5.5	7.66
7.66 Gal		FRESH WATER							
5	Displacement		75.00	bbl	8.33	.0	.0	5.0	
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					

