

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

Ferge 28N-14HZ

Majors 29

Post Job Summary

Cement Surface Casing

Date Prepared: 2/12/2014
Version: 1

Service Supervisor: BIRCHELL, DEVIN

Submitted by: GROVES, COREY

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	1,242.00	45.00
Open Hole Section	13 1/2" Open Hole Section		13.500		0.00	1,242.00	0.00

HALLIBURTON

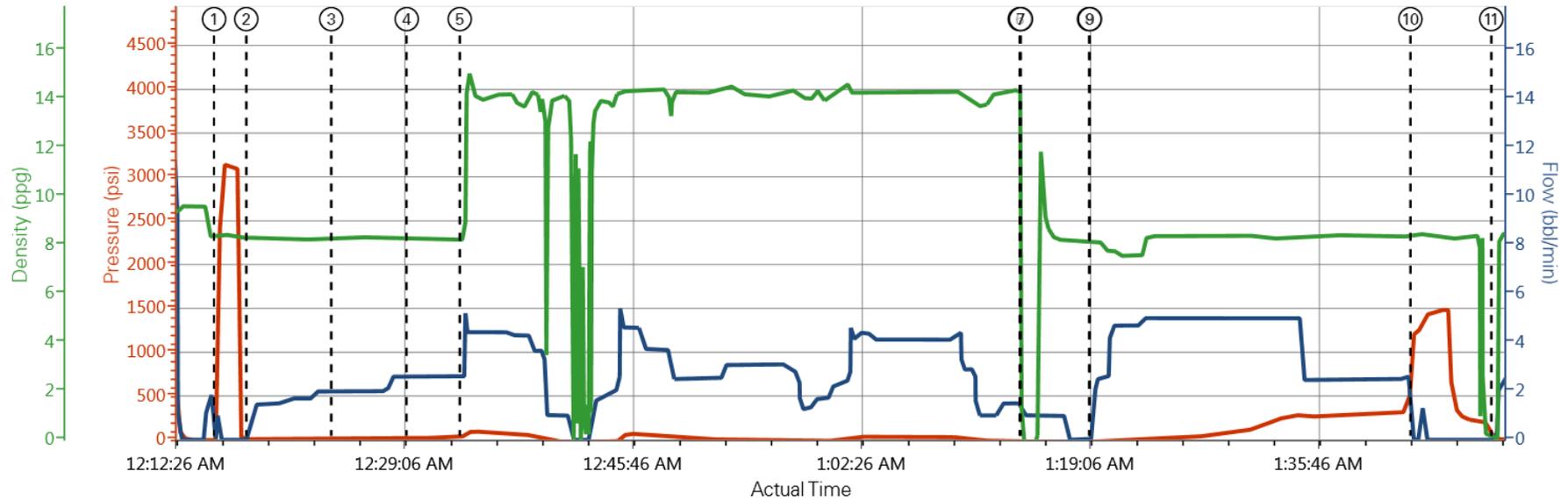
Pumping Schedule

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	2.50	20.0 bbl	20.0 bbl
1	2	Spacer	Mud Flush	8.40	2.50	12.0 bbl	12.0 bbl
1	3	Cement Slurry	SwiftCem B2	14.20	4.50	466 sacks	466 sacks

HALLIBURTON

Data Acquisition

Anadarko Ferge 28N-14HZ



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

- | | | | |
|--------------------------|--------------------------------|-------------------------------|-------------------------|
| ① Test Lines 1529;0;8.36 | ④ Pump Spacer 1 36;2.6;8.22 | ⑦ Clean Lines -14;1;-0.05 | ⑩ Bump Plug 1219;0;8.35 |
| ② Pump Spacer 1 4;0;8.31 | ⑤ Pump Lead Cement 37;2.6;8.22 | ⑧ Drop Top Plug -24;1;8.11 | ⑪ End Job 8;0;0.09 |
| ③ Pump Spacer 2 8;2;8.28 | ⑥ Shutdown -14;1;-0.12 | ⑨ Pump Displacement -24;1;8.1 | |

HALLIBURTON

Service Supervisor Reports

Job Log

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pressure (psig)	Comments
01/27/2014 17:00		Call Out				Called out for Anadarko Ferge 28N-14HZ Surface
01/27/2014 20:00		Pre-Convoy Safety Meeting				Discuss road and weather conditions, fatigue and following distance
01/27/2014 20:30		Depart from Service Center or Other Site				Call journey management, Depart for location
01/27/2014 21:30		Arrive At Loc				Close journey, talk with compan rep on valumes, rates, and depth, rig still running casing
01/27/2014 21:40		Pre-Rig Up Safety Meeting				Discussed rig up, line of fire, slips, and pinch points
01/27/2014 21:45		Rig-Up Equipment				Rig up ground line, and suction hoses
01/27/2014 22:00		Wait on Customer or Customer Sub-Contractor Equip				Wait for rig crew to finish running casing
01/27/2014 22:30		Casing on Bottom				Casing on bottom rig will circulate until HES is rigged up
01/27/2014 23:40		Pre-Job Safety Meeting				Discuss pump schedule, procedure, high pressure iron, and emergency plan
01/28/2014 00:00		Other				Stop circulating rig crew drained top drive, rigged up cement head and tied into stand pipe
01/28/2014 00:15		Other				filled lines to pressure test pump and lines
01/28/2014 00:15		Pressure Test			3160.0	Pressure test pump and lines to 3160 psi held for 2 minutes
01/28/2014 00:17		Pump Spacer	2	10	34.0	Pump 10 bbls Fresh Water Spacer
01/28/2014 00:24		Pump Spacer 1	2.5	12	36.0	Pump 12 bbls Mud Flush III Spacer
01/28/2014 00:29		Pump Spacer 2	2.5	10	30.0	Pump 10 bbls Fresh Water Spacer
01/28/2014 00:33		Pump Lead Cement	4.5	127	76.0	Pump cement at 14.2 ppg Y: 1.54ft ³ /sk W: 7.66gal/sk (466sks)
01/28/2014 01:12		Shutdown				Shutdown to drop top plug
01/28/2014 01:14		Drop Top Plug				Dropped top plug, washed pump and lines on plug
01/28/2014 01:14		Pump Displacement - Start	3			Pump displacement 92 bbls water
01/28/2014 01:20		Returns To Surface	3	3	9.0	Returns seen at surface with 3 bbls displacement away
01/28/2014 01:28		Displ Reached Cmnt	5	40	62.0	displacement reached cement with 40 bbls away
01/28/2014 01:30		Spacer Returns to Surface	5	50	100.0	With 50 bbls displacement away spacer returns to surface (32 bbls)
01/28/2014 01:38		Cement Returns to Surface	2.5	82	286.0	With 82 bbls displacement away cement returns to surface (10 bbls)
01/28/2014 01:42		Bump Plug	2.5	92	307.0	Bumped plug with 92 bbls with 307 psi took pressure to 1476 psi
01/28/2014 01:45		Check Floats			1503.0	Checked floats, floats held with .5 bbls back to truck
01/28/2014 01:46		Job Complete				Job Complete
01/28/2014 01:50		Pre-Rig Down Safety Meeting				Discussed trapped pressure, slips, trips, falls, and overhead loads
01/28/2014 01:55		Rig-Down Equipment				Begin rigging down all iron and suction hoses
01/28/2014 02:30		Pre-Convoy Safety Meeting				Discussed fatigue, wildlife, weather, and journey management
01/28/2014 02:35		Depart Location for Service Center or Other Site				Depart for Halliburton Service Center

The Road to Excellence Starts with Safety

Sold To #: 300466		Ship To #: 3117116		Quote #:		Sales Order #: 901052382	
Customer: ANADARKO PETROLEUM CORP - EBUS				Customer Rep: Balkenbush, Bob			
Well Name: Ferge			Well #: 28N-14HZ		API/UWI #:		
Field: WATTENBERG		City (SAP): PLATTEVILLE		County/Parish: Weld		State: Colorado	
Contractor: Majors			Rig/Platform Name/Num: Majors 29				
Job Purpose: Cement Surface Casing							
Well Type: Development Well				Job Type: Cement Surface Casing			
Sales Person: GREGORY, JON			Srvc Supervisor: BIRCHELL, DEVIN		MBU ID Emp #: 466993		

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BIRCHELL, DEVIN Ray	0.0	466993	MILLER, GEOFFREY Alan	0.0	460232	SIMMONS, KEATON J	0.0	524850

Equipment

HES Unit #	Distance-1 way						
11341988C	15 mile	12010171	15 mile				

Job Hours

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

Job

Job Times

Formation Name	Top	Bottom	Called Out	Date	Time	Time Zone
Formation Depth (MD)			On Location	27 - Jan - 2014	17:00	MST
Form Type		BHST	Job Started	27 - Jan - 2014	21:30	MST
Job depth MD	1242. ft	Job Depth TVD	1242. ft	Job Started	28 - Jan - 2014	00:15
Water Depth		Wk Ht Above Floor	4. ft	Job Completed	28 - Jan - 2014	01:45
Perforation Depth (MD)	<i>From</i>	<i>To</i>	Departed Loc	28 - Jan - 2014	02:30	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				.	1242.		
9 5/8" Surface Casing	Unknown		9.625	8.921	36.		J-55	.	1242.		

Sales/Rental/3rd Party (HES)

Description	Qty	Qty uom	Depth	Supplier
CMT CASING EQUIPMENT BOM	1	JOB		
MILEAGE FOR CEMENTING CREW,ZI	15	MI		
ZI FUEL SURCHG-CARS/PICKUPS<1 1/2TON	15	MI		
KIT,HALL WELD-A	1	EA		
CNTRLZR, 9 5/8"x13 3/4',#500-0963-1375	8	EA		
BASKET - CEMENT - 9-5/8 CSG X 12-1/4	1	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		
Tools and Accessories													
Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug			
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar					Retainer					SSR plug set			
Insert Float										Plug Container			
Stage Tool										Centralizers			
Miscellaneous Materials													
Gelling Agt			Conc		Surfactant			Conc		Acid Type		Qty	Conc %
Treatment Fld			Conc		Inhibitor			Conc		Sand Type		Size	Qty
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					20.0	bbl	8.33			2.50		
2	Mud Flush					12.0	bbl	8.4			2.50		
		3.5 lbm/bbl MUD FLUSH III, 40 LB SACK (101633304)											
		42 gal/bbl MUD FLUSH III - SBM (528788)											
3	SwiftCem B2	SWIFTCEM (TM) SYSTEM (452990)				466	sacks	14.2	1.54	7.66	4.50	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			Actual Displacement			Treatment	
Frac Gradient			15 Min			Spacers			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								

