

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

NRC 4N-8HZ

Majors 42

Post Job Summary

Cement Surface Casing

Prepared for:
Date Prepared: 1/30/2014
Version: 1

Service Supervisor: WHIPPLE, WESLEY

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	1,245.00	45.00
Open Hole Section	13 1/2" Open Hole Section		13.500		0.00	1,245.00	0.00

HALLIBURTON

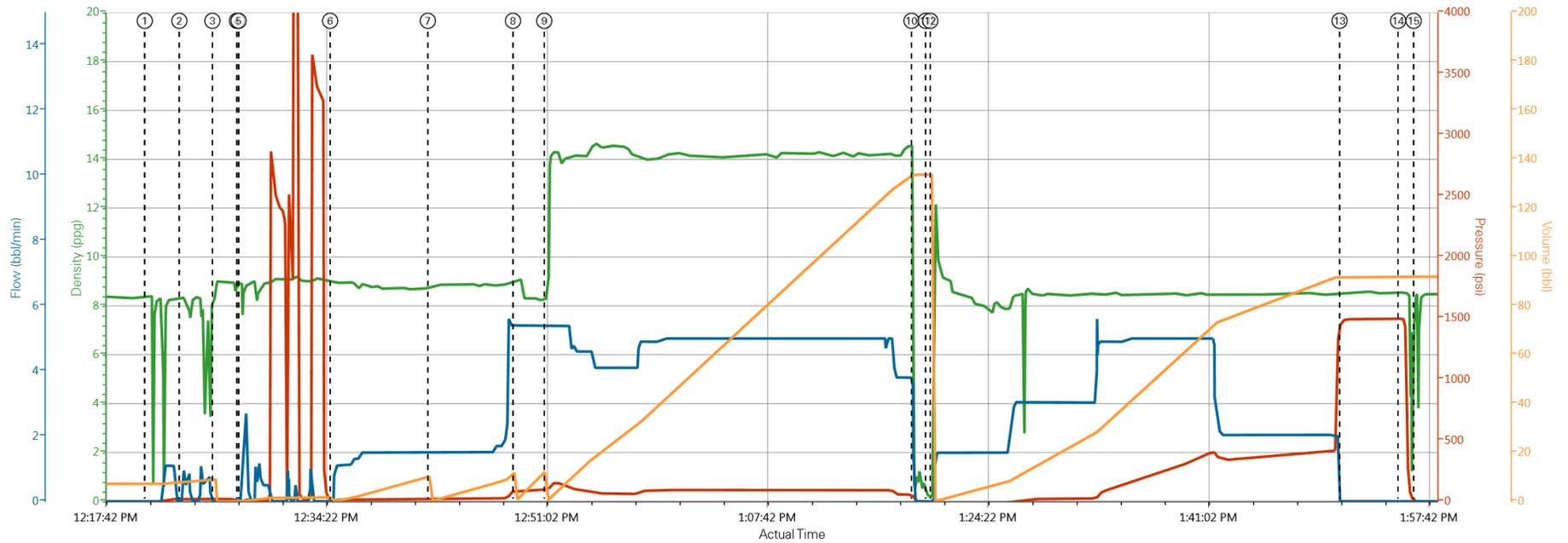
Pumping Schedule

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	1.50	12.0 bbl	12.0 bbl
1	1	Spacer	Fresh Water Spacer	8.33	5.00	10.0 bbl	10.0 bbl
1	3	Cement Slurry	SwiftCem B2	14.20	5.00	446.0 sacks	446.0 sacks

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Data Acquisition

ANADARKO NRC 4N-8HZ



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

- ① Start Job 8.36;0,0;7.2 ④ Start Job 8.97;-2,0;0 ⑦ Pump Spacer 2 8.74;20,1.5,0 ⑩ Shutdown 0.76;28,0;133.7 ⑬ Bump Plug 8.47;1476,0;92
- ② Test Lines 8.37;12,0;8.2 ⑤ Test Lines 8.92;-4,0.1;0 ⑧ Pump Spacer 1 8.98;87,5.4;0.1 ⑪ Drop Top Plug 0.23;-14,0;133.7 ⑭ Other 8.56;1495,0;92
- ③ End Job 8.3;12,0;9 ⑥ Pump Spacer 1 9.04;3,0;0 ⑨ Pump Cement 8.28;98,5.4;0.1 ⑫ Pump Displacement 0.21;-15,0;0 ⑮ End Job 8.46;-1.58;0;92

HALLIBURTON

Service Supervisor Reports

Job Log

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pump	Pressure (psig)	Comments
01/20/2014 06:30		Call Out					CREW CALLED OUT BY ARS OFFICE @0630 REQUESTED ON LOCATION @1030
01/20/2014 09:20		Crew Leave Yard					CREW PRE TRIPPED ALL EQUIPMENT, HELD PRE JOURNEY SAFETY MEETING TO DISCUSS ROUTE TRAVELED AND POTENTIAL DRIVING HAZARDS
01/20/2014 09:40		Arrive At Loc					ARRIVED ON LOCATION AND MET WITH COMPANY REP TO DISCUSS JOB DETAILS
01/20/2014 09:50		Rig-Up Equipment					HELD PRE RIG UP SAFETY MEETING AND COMMENCED RIG UP OF EQUIPMENT. DONE RIGGING UP @ 1020
01/20/2014 11:00		Casing on Bottom					RIG LANDED CASING ON BOTTOM AND CIRCULATED AN HR
01/20/2014 12:00		Safety Meeting					HELD PRE JOB SAFETY MEETING WITH ALL HANDS ON LOCATION TO DISCUSS JOB PROCESS PROCEDURES AND POTENTIAL HAZARDS THAT COULD OCCUR DURING CEMENTING
01/20/2014 12:20		Start Job					
01/20/2014 12:23		Test Lines				3000.0	PRESSURE TESTED PUMPS AND LINES TO 3000PSI, FOUND NO VISABLES LEAKS IN RIG UP AND PRESSURE HELD
01/20/2014 12:34		Pump Spacer 1	1.5	10		8.0	PUMP FRESH WATER SPACER
01/20/2014 12:42		Pump Spacer 2	1.5	12		25.0	MIX AND PUMP MUD FLUSH SPACER
01/20/2014 12:48		Pump Spacer 1	5.5	10		40.0	PUMP FRESH WATER SPACER
01/20/2014 12:51		Pump Cement	5	122		95.0	MIX AND PUMP 446SKS OF SWIFTCEM @ 14.2 PPG. DENSITY VERIFIED BY PRESSURIZED MUD SCALES
01/20/2014 13:18		Shutdown					
01/20/2014 13:19		Drop Top Plug					DROP TOP PLUG FROM HES PLUG CONTAINER. WITNESSED BY COMPANY REP
01/20/2014 13:20		Pump Displacement	5	93		290.0	PUMP FRESH WATER DISPLACEMENT, RECIEVED CEMENT BACK TO SURFACE AT 75 BBLs AWAY
01/20/2014 13:50		Bump Plug				1480.0	BUMP PLUG 1000 PSI OVER FINAL PUMPING PRESSURE.
01/20/2014 13:55		Check Floats				1490.0	RELEASE PRESSURE BACK TO PUMP TRUCK, RECIEVED 1 BBL BACK AND FLOATS HELD
01/20/2014 13:56		End Job					HELD POST JOB SAFETY MEETING AND COMMENCED RIG DOWN OF ALL EQUIPMENT. WET AND DRY CEMENT SAMPLES WERE LEFT ON LOCATION

The Road to Excellence Starts with Safety

Sold To #: 300466		Ship To #: 3205593		Quote #:		Sales Order #: 901048787	
Customer: ANADARKO PETROLEUM CORP - EBUS				Customer Rep: Hersh, Larry			
Well Name: NRC			Well #: 4N-8HZ		API/UWI #:		
Field: WATTENBERG		City (SAP): IONE		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: GREGORY, JON			Srvc Supervisor: WHIPPLE, WESLEY			MBU ID Emp #: 518611	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BARNES, BRIAN L	4.8	485204	MAYFIELD, BYRON L	4.8	528751	ROBINSON, TROY	4.8	7771
WHIPPLE, WESLEY Morgan	4.8	518611						

Equipment

HES Unit #	Distance-1 way						
11019824	12 mile	11542778	12 mile	11764054C	12 mile	11764737	12 mile
12010172	12 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	Called Out	Date	Time	Time Zone
			On Location	20 - Jan - 2014	09:40	MST
Form Type		BHST	Job Started	20 - Jan - 2014	12:20	MST
Job depth MD	1245. ft	Job Depth TVD	1245. ft	Job Completed	20 - Jan - 2014	13:56
Water Depth		Wk Ht Above Floor	2. ft	Departed Loc	20 - Jan - 2014	14:30
Perforation Depth (MD) From		To				

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				.	1245.		
9 5/8" Surface Casing	Unknown		9.625	8.921	36.		J-55	.	1245.		

Sales/Rental/3rd Party (HES)

Description	Qty	Qty uom	Depth	Supplier
CMT CASING EQUIPMENT BOM	1	JOB		
MILEAGE FOR CEMENTING CREW,ZI	20	MI		
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	7	EA		
Description	Qty	Qty uom	Depth	Supplier

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		
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			1.5	
	3.5 lbm/bbl	MUD FLUSH III, 40 LB SACK (101633304)							
	42 gal/bbl	MUD FLUSH III - SBM (528788)							
1	Fresh Water Spacer		10.00	bbl	8.33			5.0	
3	SwiftCem B2	SWIFTCEM (TM) SYSTEM (452990)	446.0	sacks	14.2	1.54	7.66	5.0	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	18	Actual Displacement	93	Treatment	
Frac Gradient		15 Min		Spacers	32	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
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