

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

NRC 28N-4HZ

**Majors 42**

## **Post Job Summary** **Cement Surface Casing**

Date Prepared: 2/12/2014  
Version: 1

Service Supervisor: WHIPPLE, WESLEY

Submitted by: GROVES, COREY

**HALLIBURTON**

# HALLIBURTON

## Wellbore Geometry

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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	1,071.00	45.00
Open Hole Section	13 1/2" Open Hole Section		13.500		0.00	1,071.00	0.00

# HALLIBURTON

## ***Pumping Schedule***

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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 bbls	10 bbls
1	2	Spacer	Mud Flush	8.40	2.00	12 bbls	12 bbls
1	1	Spacer	Fresh Water Spacer	8.33	5.00	10 bbls	10 bbls
1	3	Cement Slurry	SwiftCem B2	14.20	5.00	386 sacks	386 sacks



# HALLIBURTON

## Service Supervisor Reports

### Job Log

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pressure (psig)	Comments
01/27/2014 17:30		Call Out				CREW CALLED OUT BY COORDINATING OFFICE @1730 REQUESTED ON LOCATION @2230
01/27/2014 21:15		Crew Leave Yard				CREW PRE TRIPPED ALL EQUIPMENT IN YARD, HELD PRE JOURNEY SAFETY MEETING TO DISCUSS ROUTE TRAVELED, POTENTIAL DRIVING RISKS, AND WEATHER CONDITIONS. ALL DRIVERS FIT FOR DUTY
01/27/2014 21:30		Arrive At Loc				ARRIVED ON LOCATION AND MET WITH COMPANY REP TO DISCUSS JOB DETAILS. RIG WAS STILL RUNNING CASING UPON ARRIVAL
01/27/2014 21:40		Rig-Up Equipment				HELD PRE RIG UP SAFETY MEETING TO DISCUSS RIG UP PROCESS, COMMENCED RIG UP OF ALL EQUIPMENT
01/27/2014 23:10		Casing on Bottom				RIG LANDED CASING ON BOTTOM
01/28/2014 00:00		Safety Meeting				HELD PRE JOB SAFETY MEETING WITH ALL HANDS ON LOCATION TO DISCUSS JOB PROCESS, PROCEDURES AND POTENTIAL HAZARDS THAT COULD OCCUR WHILE CEMENTING
01/28/2014 00:48		Start Job				
01/28/2014 00:50		Test Lines			3000.0	PRESSURE TESTED PUMPS AND LINES TO 3000PSI, FOUND NO LEAKS IN IRON AND PRESSURE HELD
01/28/2014 00:52		Pump Spacer 1	2	10	32.0	PUMP FRESH WATER SPACER
01/28/2014 00:59		Pump Spacer 2	2	12	40.0	PUMP MUD FLUSH SPACER
01/28/2014 01:07		Pump Spacer 1	5	10	149.0	PUMP FRESH WATER SPACER
01/28/2014 01:09		Pump Cement	5	105	130.0	MIX AND PUMP 386 SKS OF SWIFTCM @14.2 PPG. DENSITY VERIFIED BY MUD SCALES.
01/28/2014 01:33		Shutdown				
01/28/2014 01:35		Drop Top Plug				DROP TOP PLUG FROM HES PLUG CONTAINER, WITNESSED BY COMPANY REP
01/28/2014 01:36		Pump Displacement	5	79	250.0	PUMP FRESH WATER DISPLACEMENT. RECIEVED CEMENT TO SURFACE AT 67BBLS AWAY
01/28/2014 02:05		Bump Plug				BUMP PLUG 1000PSI OVER FINAL PUMPING PRESSURE.
01/28/2014 02:07		Check Floats			1535.0	RELEASE PRESSURE BACK TO PUMP TRUCK and RECIEVED A CONSTANT HEAVY FLOW, ATTEMPTED TO PRESSURE UP AGAIN AND RE CHECK FLOATS AND WASNT SUCESSFUL.
01/28/2014 02:19		Other			200.0	PRESSURED UP WELL TO 200PSI AND SHUT IN. COMPANY REP REQUESTED WE HOLD IT ON FOR AN ADDITIONAL 2 HRS.
01/28/2014 03:31		End Job				COMMENCED RIG DOWN OF ALL EQUIPMENT. WET AND DRY CEMENT SAMPLES WERE LEFT ON LOCATION

## The Road to Excellence Starts with Safety

<b>Sold To #:</b> 300466		<b>Ship To #:</b> 3271799		<b>Quote #:</b>		<b>Sales Order #:</b> 901060914	
<b>Customer:</b> ANADARKO PETROLEUM CORP - EBUS				<b>Customer Rep:</b> Hersh, Larry			
<b>Well Name:</b> NRC			<b>Well #:</b> 28N-4HZ			<b>API/UWI #:</b>	
<b>Field:</b> WATTENBERG		<b>City (SAP):</b> IONE		<b>County/Parish:</b> Weld		<b>State:</b> Colorado	
<b>Contractor:</b> Majors			<b>Rig/Platform Name/Num:</b> Majors 42				
<b>Job Purpose:</b> Cement Surface Casing							
<b>Well Type:</b> Development Well				<b>Job Type:</b> Cement Surface Casing			
<b>Sales Person:</b> GREGORY, JON			<b>Srvc Supervisor:</b> WHIPPLE, WESLEY			<b>MBU ID Emp #:</b> 518611	

## Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BARNES, BRIAN L	6.0	485204	MASTEL, RYAN Eugene	6.0	561732	MAYFIELD, BYRON L	6.0	528751
WHIPPLE, WESLEY Morgan	6.0	518611						

## Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10982754	9 mile	11362287C	9 mile	11527037	9 mile	11605599	9 mile

## Job Hours

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

## Job

Formation Name	Formation Depth (MD)	Top	Bottom	Form Type	Job depth MD	Job Depth TVD	Water Depth	Perforation Depth (MD)	From	To
				BHST	1071. ft	1071. ft				
							Wk Ht Above Floor			
						3. ft				

## Job Times

Date	Time	Time Zone
27 - Jan - 2014	19:30	MST
27 - Jan - 2014	21:30	MST
28 - Jan - 2014	00:48	MST
28 - Jan - 2014	02:19	MST
28 - Jan - 2014	03:30	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				.	1071.		
9 5/8" Surface Casing	Unknown		9.625	8.921	36.		J-55	.	1071.		

Sales/Rental/3<sup>rd</sup> 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		
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		
CNTRLZR, 9 5/8"x13 3/4',#500-0963-1375	9	EA		
BASKET - CEMENT - 9-5/8 CSG X 12-1/4	1	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 ft3/sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	Fresh Water Spacer		10.0	bbl	8.33			2.0	
2	Mud Flush		12.0	bbl	8.4			2.0	
	3.5 lbm/bbl	MUD FLUSH III, 40 LB SACK (101633304)							
	42 gal/bbl	MUD FLUSH III - SBM (528788)							
2	Fresh Water Spacer		10.0	bbl	8.4			5.0	
3	SwiftCem B2	SWIFTCem (TM) SYSTEM (452990)	386	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		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
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