

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

AGGREGATE STATE 36N-16HZ

**Majors 42**

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

Prepared for:  
Date Prepared: 2/16/2014  
Version: 1

Service Supervisor: WHIPPLE, WESLEY

Submitted by: FINNEY, SEAN

**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	1,025.00	44.00
Open Hole Section	13 1/2" Open Hole Section		13.500		0.00	1,035.00	0.00

# HALLIBURTON

## ***Pumping Schedule***

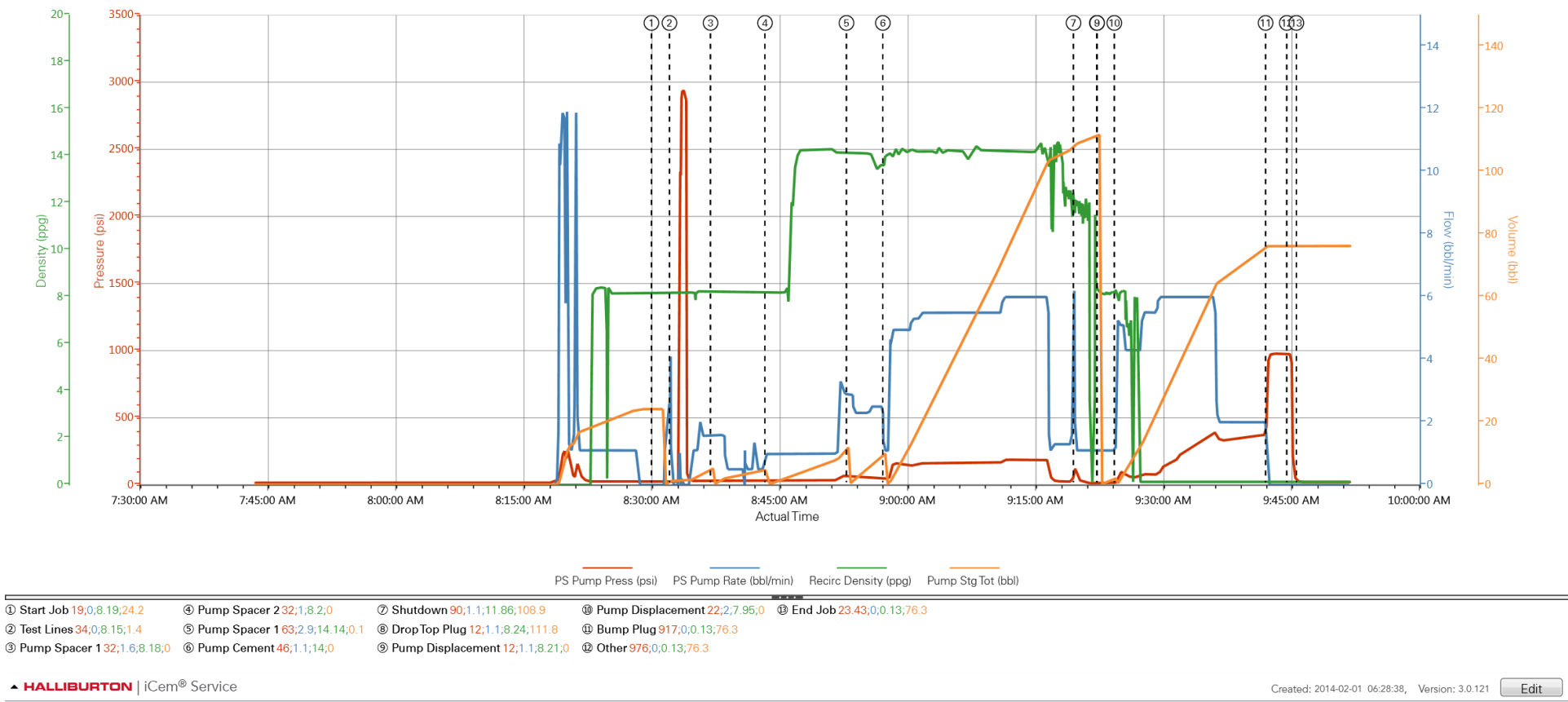
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Stage /Plug #	Fluid #	Fluid Type	Fluid Name	Surface Density lbm/gal	Avg Rate bbl/min	Surface Volume	Downhole Volume
1	1	Spacer	Fresh Water Spacer	8.33	0.50	10.0 bbl	10.0 bbl
1	2	Spacer	Mud Flush	8.40	3.00	12.0 bbl	12.0 bbl
1	1	Spacer	Fresh Water Spacer	8.33	3.00	10.0 bbl	10.0 bbl
1	3	Cement Slurry	SwiftCem B2	14.20	6.00	386.0 sacks	386.0 sacks

# HALLIBURTON

## Data Acquisition

### ANADARKO GREGGATE STATE 36N-16HZ



# HALLIBURTON

## Service Supervisor Reports

### Job Log

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pump		Pressure (psig)		Comments
02/01/2014 01:30		Call Out							CREW CALLED OUT BY ARS OFFICE. REQUESTED ON LOCATION @ 0530
02/01/2014 05:00		Crew Leave Yard							CREW PRETRIPPED ALL EQUIPMENT PRIOR TO DEPARTURE, HELD PRE JOURNEY SAFETY MEETING WITH CREW TO DISCUSS ROUTE BEING TRAVELED, POTENTIAL DRIVING HAZARDS, AND WEATHER CONDITIONS. ALL DRIVERS FIT FOR DUTY
02/01/2014 05:30		Arrive At Loc							ARRIVED ON LOCATION, MET WITH COMPANY REP TO DISCUSS JOB DETAILS
02/01/2014 05:50		Rig-Up Equipment							CREW HELD PRE RIG UP SAFETY MEETING TO DISCUSS RIG UP PROCESS AND POTENTIAL RIG UP HAZARDS. RIG UP COMPLETED. RIG LANDED CASING @ 0700
02/01/2014 08:00		Safety Meeting							HELD A PRE JOB SAFETY MEETING WITH ALL HANDS ON LOCATION TO DISCUSS JOB PROCESS, PROCEDURES AND POTENTIAL RISKS THAT COULD OCCUR WHILE CEMENTING.
02/01/2014 08:25		Start Job							
02/01/2014 08:27		Test Lines						3000.0	PRESSURE TEST PUMPS AND LINES TO 3000PSI, FOUND NO LEAKS IN IRON AND PRESSURE HELD.
02/01/2014 08:32		Pump Spacer 1	0.5	10				62.0	PUMP FRESH WATER SPACER
02/01/2014 08:39		Pump Spacer 2	3	12				62.0	MIX AND PUMP MUD FLUSH WITH FRESH WATER
02/01/2014 08:48		Pump Spacer 1	3	10				72.0	PUMP FRESH WATER SPACER
02/01/2014 08:52		Pump Cement	6	105.8				190.0	MIX AND PUMP 386 SKS OF SWIFCEM @ 14.2 PPG. DENSITY VERIFIED BY PRESSURIZED MUD SCALES
02/01/2014 09:19		Shutdown							SHUTDOWN TO WASH UP CEMENT MIXING SYSTEM.
02/01/2014 09:22		Drop Top Plug							DROP TOP PLUG FROM HES PLUG CONTAINER, WITNESSED BY COMPANY REP
02/01/2014 09:24		Pump Displacement	6	79.8				320.0	PUMP FRESH WATER DISPLACEMENT, RECEIVED CEMENT TO SURFACE @62 BBLS AWAY
02/01/2014 09:37		Bump Plug						950.0	BUMP PLUG 500 PSI OVER FINAL PUMPING PRESSURE. HELD PRESSURE @ 950PSI
02/01/2014 09:40		Check Floats						950.0	RELEASE PRESSURE BACK TO PUMP TRUCK, RECEIVED .5BBLS BACK AND FLOATS HELD
02/01/2014 09:41		End Job							COMMENCE RIG DOWN OF ALL EQUIPMENT, WET AND DRY CEMENT SAMPLES WERE LEFT ON LOCATION WITH COMPANY REP

### The Road to Excellence Starts with Safety

<b>Sold To #:</b> 300466	<b>Ship To #:</b> 3275794	<b>Quote #:</b>	<b>Sales Order #:</b> 901087635
<b>Customer:</b> ANADARKO PETROLEUM CORP - EBUS		<b>Customer Rep:</b> Porter, Bob	
<b>Well Name:</b> AGGREGATE STATE		<b>Well #:</b> 36N-16HZ	<b>API/UWI #:</b> 05-123-38678
<b>Field:</b> WATTENBERG	<b>City (SAP):</b> IONE	<b>County/Parish:</b> Weld	<b>State:</b> Colorado
<b>Lat:</b> N 40.152 deg. OR N 40 deg. 9 min. 6.923 secs.		<b>Long:</b> W 104.784 deg. OR W -105 deg. 12 min. 57.467 secs.	
<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 #
Rodriguez, Israel	5.0	77775	TAULIILI, SAIAIGA	5.0	545471	WHIPPLE, WESLEY Morgan	5.0	518611

### Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10866497C	10 mile	11542778	10 mile	11562570C	10 mile	11605599	10 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							
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### Job

Formation Name	Formation Depth (MD)	Top	Bottom	Form Type	Job depth MD	Job Depth TVD	Water Depth	Perforation Depth (MD)	From	To
				BHST	1025. ft	1025. ft				

### Job Times

Date	Time	Time Zone
01 - Feb - 2014	01:30	MST
01 - Feb - 2014	05:30	MST
01 - Feb - 2014	08:25	MST
01 - Feb - 2014	09:41	MST
01 - Feb - 2014	10:30	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				.	1035.		
9 5/8" Surface Casing	Unknown		9.625	8.921	36.		J-55	.	1025.		

### 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		
CNTRLZR, 9 5/8"x13 3/4',#500-0963-1375	9	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 <sup>3</sup> /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	Fresh Water Spacer		10.00	bbl	8.33			0.5	
2	Mud Flush		12.00	bbl	8.4			3.0	
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			3.0	
3	SwiftCem B2	SWIFTCEN (TM) SYSTEM (452990)	386.0	sacks	14.2	1.54	7.66	6.0	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		17.8	Actual Displacement	79.8	Treatment
Frac Gradient		15 Min		Spacers		32	Load and Breakdown	Total Job	
Rates									
Circulating		Mixing		Displacement		Avg. Job			
Cement Left In Pipe		Amount	44 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					

