

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

Aggregate State 13C-16HZ

**Majors 42**

## **Post Job Summary**

# **Cement Surface Casing**

Date Prepared: 4/1/2014  
Version: 1

Service Supervisor: FANTASIA, JOSEPH

Submitted by: TRIER, DEREK

**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	1,037.00	43.00
Open Hole Section	13 1/2" Open Hole Section		13.500		0.00	1,037.00	0.00

# HALLIBURTON

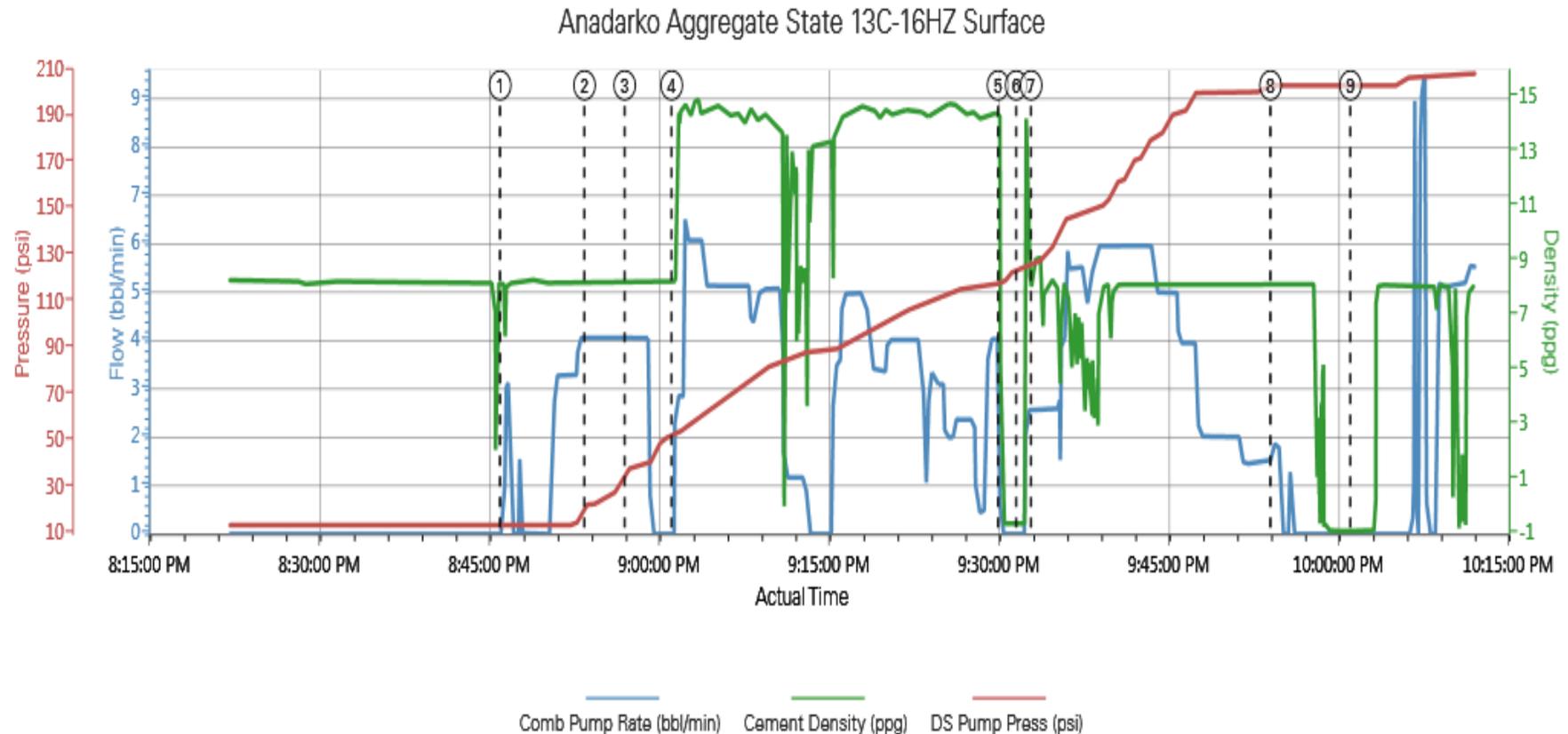
## ***Pumping Schedule***

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<b>Stage /Plug #</b>	<b>Fluid #</b>	<b>Fluid Type</b>	<b>Fluid Name</b>	<b>Surface Density lbm/gal</b>	<b>Avg Rate bbl/min</b>	<b>Surface Volume</b>	<b>Downhole Volume</b>
1	1	Spacer	Fresh Water Spacer	8.33	0.00	10.0 bbl	10.0 bbl
1	2	Spacer	Mud Flush	8.40	0.00	12.0 bbl	12.0 bbl
1	1	Spacer	Fresh Water Spacer	8.33	0.00	10.0 bbl	10.0 bbl
1	3	Cement Slurry	SwiftCem B2	14.20			.0

# HALLIBURTON

## Data Acquisition



- |                                 |                               |                                     |
|---------------------------------|-------------------------------|-------------------------------------|
| ① Pump Spacer 1 0;8.18;13.91    | ④ Pump Cement 2.85;8.17;52.86 | ⑦ Pump Displacement 2.6;9.07;127.14 |
| ② Pump Spacer 2 4.05;8.26;23.01 | ⑤ Shutdown 0;-0.63;118.21     | ⑧ Bump Plug 1.9;8.08;203.2          |
| ③ Pump Spacer 1 4.05;8.2;38     | ⑥ Drop Top Plug 0;-0.6;123.88 | ⑨ Check Floats 0;-0.86;203.2        |

# HALLIBURTON

## Service Supervisor Reports

HALLIBURTON

### Cementing Job Log

The Road to Excellence Starts with Safety

Sold To #: 300466	Ship To #: 3280245	Quote #:	Sales Order #: 901080311
Customer: ANADARKO PETROLEUM CORP - EBUS		Customer Rep: Porter, Bob	
Well Name: Aggregate State	Well #: 13C-16HZ	API/UWI #: 05-123-38786	
Field: WATTENBERG	City (SAP): IONE	County/Parish: Weld	State: Colorado
<b>Legal Description:</b>			
Lat: N 40.152 deg. OR N 40 deg. 9 min. 7.2 secs.		Long: W 104.786 deg. OR W -105 deg. 12 min. 50.4 secs.	
Contractor: Majors		Rig/Platform Name/Num: Majors 42	
Job Purpose: Cement Surface Casing			Ticket Amount:
Well Type: Development Well		Job Type: Cement Surface Casing	
Sales Person: GREGORY, JON		Srvc Supervisor: FANTASIA, JOSEPH	MBU ID Emp #: 485445

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Arrive at Location from Service Center	01/29/2014 15:00							ARRIVE AT LOCATION. RIG ON BOTTOM WAITING ON HES. AFTER SPOTTING PUMP TRUCK IT WAS DISCOVERED DECK ENGINE STARTER WAS LOCKED UP. CALLED FOR NEW TRUCK. DOWN FROM 1830 TO 2030. 2 HOURS.
Assessment Of Location Safety Meeting	01/29/2014 15:15							PERFORM SITE ASSESSMENT AND HAZARD HUNT WITH CREW PRIOR TO SPOTTING EQUIPMENT AND RIGGING UP.
Start Job	01/29/2014 20:30							PERFORM PRE-JOB SAFETY MEETING WITH ALL PRESENT PERSONELL PRIOR TO JOB
Test Lines	01/29/2014 20:45						2200.0	PRESSURE TEST LINES TO 2000 PSI
Pump Spacer 1	01/29/2014 20:46		5	10			100.0	PUMP 10 BBLS WATER
Pump Spacer 2	01/29/2014 20:53		4	12			140.0	PUMP 12 BBLS MUDFLUSH
Pump Spacer 1	01/29/2014 20:57		5	10			100.0	PUMP 10 BBLS WATER
Pump Cement	01/29/2014 21:01		7	107			90.0	390 SKS SWIFCEM MIXED AT 14.2 PPG USING RIG WATER

Sold To #: 300466

Ship To #: 3280245

Quote #:

Sales Order #: 901080311

SUMMIT Version: 7.3.0109

Wednesday, January 29, 2014 10:33:00

### *Cementing Job Log*

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Shutdown	01/29/2014 21:30							
Drop Top Plug	01/29/2014 21:31							PLUG PRELOADED
Pump Displacement	01/29/2014 21:33		6	76.5			300.0	GOOD RETURNS THROUGHOUT. CEMENT TO SURFACE AT 70 BBLs OUT OF 77 BBLs TOTAL DISPLACEMENT. APPROX 7 BBLs CEMENT TO SURFACE.
Bump Plug	01/29/2014 21:54		3				400.0	PLUG LANDED AT 400 PSI. PRESSURE BROUGHT TO 900 PSI AND HELD 3 MIN.
Check Floats	01/29/2014 22:01							FLOATS HELD
End Job	01/29/2014 22:15							PERFORM PRE RIG DOWN SAFETY MEETING

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Wednesday, January 29, 2014 10:33:00

*The Road to Excellence Starts with Safety*

<b>Sold To #:</b> 300466		<b>Ship To #:</b> 3280245		<b>Quote #:</b>		<b>Sales Order #:</b> 901080311					
<b>Customer:</b> ANADARKO PETROLEUM CORP - EBUS				<b>Customer Rep:</b> Porter, Bob							
<b>Well Name:</b> Aggregate State			<b>Well #:</b> 13C-16HZ		<b>API/UWI #:</b> 05-123-38786						
<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. 7.2 secs.				<b>Long:</b> W 104.786 deg. OR W -105 deg. 12 min. 50.4 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>			<b>MBU ID Emp #:</b>					
<b>Job Personnel</b>											
<b>HES Emp Name</b>		<b>Exp Hrs</b>	<b>Emp #</b>	<b>HES Emp Name</b>		<b>Exp Hrs</b>	<b>Emp #</b>				
<b>Equipment</b>											
<b>HES Unit #</b>	<i>Distance-1 way</i>	<b>HES Unit #</b>	<i>Distance-1 way</i>	<b>HES Unit #</b>	<i>Distance-1 way</i>	<b>HES Unit #</b>	<i>Distance-1 way</i>				
<b>Job</b>				<b>Job Times</b>							
<b>Formation Name</b>						<b>Date</b>	<b>Time</b>	<b>Time Zone</b>			
<b>Formation Depth (MD)</b>		<b>Top</b>	<b>Bottom</b>			<b>Called Out</b>					
<b>Form Type</b>		<b>BHST</b>				<b>On Location</b>					
<b>Job depth MD</b>		1240. ft	<b>Job Depth TVD</b>	1037. ft			<b>Job Started</b>				
<b>Water Depth</b>		<b>Wk Ht Above Floor</b>				<b>Job Completed</b>					
<b>Perforation Depth (MD)</b>		<i>From</i>	<i>To</i>			<b>Departed Loc</b>					
<b>Well Data</b>											
<i>Description</i>	<b>New / Used</b>	<b>Max pressure psig</b>	<b>Size in</b>	<b>ID in</b>	<b>Weight lbm/ft</b>	<b>Thread</b>	<b>Grade</b>	<b>Top MD ft</b>	<b>Bottom MD ft</b>	<b>Top TVD ft</b>	<b>Bottom TVD ft</b>
13 1/2" Open Hole Section				13.5				.	1037.		
9 5/8" Surface Casing	Unknown		9.625	8.921	36.		J-55	.	1037.		
<b>Sales/Rental/3<sup>rd</sup> Party (HES)</b>											
<b>Description</b>						<b>Qty</b>	<b>Qty uom</b>	<b>Depth</b>	<b>Supplier</b>		
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						6	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				
<b>Description</b>						<b>Qty</b>	<b>Qty uom</b>	<b>Depth</b>	<b>Supplier</b>		
COLLAR-STOP-9 5/8"-FRICTION-HINGED						2	EA				
<b>Fluid Data</b>											
<b>Stage/Plug #: 1</b>											

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		10.0	bbl	8.33			5.0	
2	Mud Flush		12.0	bbl	8.4			4.0	
3.5 lbm/bbl		MUD FLUSH III, 40 LB SACK (101633304)							
42 gal/bbl		MUD FLUSH III - SBM (528788)							
1	Fresh Water Spacer		10.0	bbl	8.33			5.0	
3	SwiftCem B2	SWIFTCEM (TM) SYSTEM (452990)		sacks	14.2	1.53	7.63	7.0	7.63
7.63 Gal		FRESH WATER							
Calculated Values		Pressures		Volumes					
Displacement		Shut In: Instant		Lost Returns		Cement Slurry		Pad	
Top Of Cement		5 Min		Cement Returns 7		Actual Displacement 76.5		Treatment	
Frac Gradient		15 Min		Spacers 32		Load and Breakdown		Total Job	
Rates									
Circulating		Mixing		Displacement 6.0		Avg. Job			
Cement Left In Pipe		Amount 43 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					

