

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

AGGREGATE STATE 13N-16HZ

**Majors 42**

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

Date Prepared: 3/4/2014  
Version: 1

Service Supervisor: SMITH, AARON

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	1,028.00	45.00
Open Hole Section	13 1/2" Open Hole Section		13.500		0.00	1,028.00	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	3.00	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	5.0	384.0 sacks	384.0 sacks

## ***Data Acquisition***

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Service Supervisor could not record data from ZS4.

# HALLIBURTON

## Service Supervisor Reports

Sold To #: 300466		Ship To #: 3280221		Quote #:		Sales Order #: 901077270	
Customer: ANADARKO PETROLEUM CORP - EBUS				Customer Rep: Heresh, Larry			
Well Name: AGGREGATE STATE			Well #: 13N-16HZ			API/UWI #: 05-123-38785	
Field: WATTENBERG		City (SAP): IONE		County/Parish: Weld			State: Colorado
Legal Description:							
Lat: N 40.152 deg. OR N 40 deg. 9 min. 6.919 secs.				Long: W 104.786 deg. OR W -105 deg. 12 min. 51.016 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: SMITH, AARON			MBU ID Emp #: 518187	

Activity Description	Date/Time	Cht #	Rate bbl/m in	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubin g	Casing	
Casing on Bottom	01/30/2014 20:00							
Circulate Well	01/30/2014 20:00							
Arrive at Location from Service Center	01/30/2014 22:00							WITH ALL EQUIPMENT AND MATERIALS,
Assessment Of Location Safety Meeting	01/30/2014 22:05							
Pre-Rig Up Safety Meeting	01/30/2014 22:10							RIG-UP JSA
Rig-Up Equipment	01/30/2014 22:15							
Rig-Up Completed	01/30/2014 22:30							
Pre-Job Safety Meeting	01/30/2014 22:45							WITH CUSTOMER REP AND RIG CREW
Start Job	01/30/2014 23:00							
Test Lines	01/30/2014 23:05							FRESH WATER WITH NO ADDITIVES
Pump Spacer 2	01/30/2014 23:14		3	12	22		125.0	FRESH WATER WITH MUD FLUSH
Pump Spacer 1	01/30/2014 23:18		3	10	32		125.0	FRESH WATER WITH NO ADDITIVES
Pump Cement	01/30/2014 23:21		5	105	137		95.0	384SKS SWIFTCM B1 @ 14.2 PPG 1.55 YIELD, 7.68 GAL/SK
Shutdown	01/30/2014 23:44							
Pump Displacement	01/30/2014 23:46		5	75			389.0	FRESH WATER WITH NO ADDITIVES, SLOWED DOWN LAST 20 BBLS TO 2 BBLS A MINUTE

# HALLIBURTON

Activity Description	Date/Time	Cht #	Rate bbl/m in	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubin g	Casing	
Spacer Returns to Surface	01/30/2014 23:48							@38 BBLS DISPLACEMENT, 32 BBLS TO THE PIT
Cement Returns to Surface	01/31/2014 00:00							@70 BBLS DISPLACEMENT, 5BBLS TO THE PIT
Bump Plug	01/31/2014 00:05						1124.0	FINAL CIRCULATING PRESSURE426, PSI TO LAND392, PSI TO LIFT462,
Check Floats	01/31/2014 00:07							FLOATS HELD, BBLS BACK
End Job	01/31/2014 00:09							RIG DOWN JSA, JOURNEY MANAGMENT MEETING, THANKS AARON SMITH AND CREW

## The Road to Excellence Starts with Safety

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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: SMITH, AARON	MBU ID Emp #: 518187

## Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
DODSON, RICHARD Bryan	0.0	518192	ROOD, TRAVIS James	0.0	561971	SMITH, AARON David	0.0	518187
TOWNSON, JUSTIN T	0.0	555407						

## Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10824253C	10 mile	10972458	10 mile	11526488	10 mile	12010173	10 mile

## Job

## Job Times

Formation Name				Date	Time	Time Zone
Formation Depth (MD)	Top	Bottom		Called Out	30 - Jan - 2014	16:00 MST
Form Type	BHST			On Location	30 - Jan - 2014	00:00 MST
Job depth MD	1243. ft	Job Depth TVD	1028. ft	Job Started	30 - Jan - 2014	00:00 MST
Water Depth	Wk Ht Above Floor			Job Completed	30 - Jan - 2014	00:00 MST
Perforation Depth (MD)	From	To		Departed Loc	30 - Jan - 2014	00:00 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				.	1028.		
9 5/8" Surface Casing	Unknown		9.625	8.921	36.		J-55	.	1028.		

## 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
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1	Fresh Water Spacer		10.0	bbl	8.33			3.0	
2	Mud Flush		12.0	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		10.0	bbl	8.33			3.0	
3	SwiftCem B2	SWIFTCM (TM) SYSTEM (452990)	384.0	sacks	14.2	1.54	7.66	5.0	7.66
7.66 Gal		FRESH WATER							
<b>Calculated Values</b>		<b>Pressures</b>		<b>Volumes</b>					
Displacement		Shut In: Instant		Lost Returns		Cement Slurry		Pad	
Top Of Cement		5 Min		Cement Returns	5.0	Actual Displacement	75	Treatment	
Frac Gradient		15 Min		Spacers	32.0	Load and Breakdown		Total Job	
<b>Rates</b>									
Circulating		Mixing		Displacement	5.0	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 @
The Information Stated Herein Is Correct				Customer Representative Signature					

