

HALLIBURTON

iCem[®] Service

ANADARKO PETROLEUM CORP - EBUS

SPOTTED 30N-23HZ

Sincerely,
Jason Gibbs

Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **Spotted 30N-23HZ** cement **Surface** casing job. A pre-job safety meeting was held before the job where details of the job were discussed, potential safety hazards were reviewed, and environmental compliance procedures were outlined.

Halliburton maintains a continuous quality improvement process and appreciates any comments or suggestions that you may have. Halliburton again thanks you for the opportunity to perform service work on this well. We hope to be your solutions provider for future projects.

Respectfully,

Halliburton [Brighton]

Job Times

	Date	Time	Time Zone
Called Out	5/27	0400	MST
On Location	5/27	0700	MST
Job Started	5/27	0816	MST
Job Completed	5/27	0935	MST
Departed Location	5/27	1000	MST

1.1 Cementing Job Summary

HALLIBURTON***Cementing Job Summary****The Road to Excellence Starts with Safety*

Sold To #: 300466		Ship To #: 3508003		Quote #:		Sales Order #: 0901378866				
Customer: ANADARKO PETROLEUM CORP - EBUS				Customer Rep:						
Well Name: SPOTTED		Well #: 30N-23HZ		API/UWI #: 05-123-39428-00						
Field: WATTENBERG		City (SAP): IONE		County/Parish: WELD		State: COLORADO				
Legal Description: SW SW-23-2N-67W-275FSL-820FWL										
Contractor:				Rig/Platform Name/Num: MAJOR 29						
Job BOM: 7521										
Well Type: HORIZONTAL GAS										
Sales Person: HALAMERICA\HX46524				Srv Supervisor: Jason Gibbs						
Job										
Formation Name										
Formation Depth (MD)		Top		Bottom						
Form Type				BHST						
Job depth MD		1296ft		Job Depth TVD						
Water Depth				Wk Ht Above Floor						
Perforation Depth (MD)		From		To						
Well Data										
Description	New / Used	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
Casing		9.625	8.921	36		J-55	0	1296		0
Open Hole Section			13.5				0	1306		0
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Guide Shoe	9.625			1296		Top Plug	9.625		HES	
Float Shoe	9.625					Bottom Plug	9.625		HES	
Float Collar	9.625					SSR plug set	9.625		HES	
Insert Float	9.625					Plug Container	9.625		HES	
Stage Tool	9.625					Centralizers	9.625		HES	
Miscellaneous Materials										
Gelling Agt		Conc		Surfactant		Conc		Acid Type		Qty
Treatment Fld		Conc		Inhibitor		Conc		Sand Type		Size
Fluid Data										
Stage/Plug #: 1										
Fluid #	Stage Type	Fluid Name		Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
1	Mud Flush III (Powder)	Mud Flush III		12	bbl	8.4				
42 gal/bbl		FRESH WATER								

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Cementing Job Summary

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
2	Lead Cement	SWIFTCM (TM) SYSTEM	487	sack	14.2	1.54		6	7.64
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
3	Displacement	Displacement	97	bbl	8.33				
Cement Left In Pipe		Amount	42 ft		Reason		Shoe Joint		
Comment 12bbl back to surface									



Planned Pumping Schedule

- 1. Fill Lines with Water**
- 2. Pressure Test Lines to 3000psi**
- 3. Pump 10 Fresh Water Spacer**
 - a. Density = 8.33 lb/gal
 - b. Volume = 10 bbl
- 4. Pump Mud Flush III Spacer**
 - a. Density = 8.4 lb/gal
 - b. Volume = 12 bbl
- 5. Pump Fresh Water Spacer**
 - a. Density = 8.33 lb/gal
 - b. Volume = 10 bbl
- 6. Pump SwiftCem**
 - a. Density = 14.2 ppg
 - b. Yield = 1.54 ft³/sk
 - c. Water Requirement = 7.63 gal/sk
 - d. Volume = 487 sks (134 bbls)
- 7. Drop Top Plug**
- 8. Start Displacement**
- 9. Pump Displacement Water**
 - a. Density = 8.33 lb/gal
 - b. Volume = 97 bbls
 - c. Rate = 4 bpm
- 10. Land Plug – Anticipated Final Circulation Pressure 400 psi**

Calculated Total Displacement = 97 bbls

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*Cementing Job Log**The Road to Excellence Starts with Safety*

Sold To #: 300466	3280146	Quote #:	Sales Order #: 0901350687
Customer: Anadarko		Customer Rep:	
Well Name: Morning Fresh	Well #: 29C-15HZ	API/UWI #: 05-123-36910-00	
Field: Wattenburg	City (SAP): Platville	County/Parish: Weld	State: Colorado
Lat:		Long:	
Contractor: Majors 29	Rig/Platform Name/Num: Majors 29		
Job Purpose: Cement Surface Casing		Ticket Amount:	
Well Type: Development Well	Job Type: Cement Surface Casing		
Sales Person: GREGORY, JON	Srvc Supervisor: Jason E Gibbs	MBU ID Emp #: 300487	

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Arrive at Location from Service Center	0700							
Assessment Of Location Safety Meeting	0715							Hazard Hunt of the location and rig
Pre-Job Safety Meeting	0730							
Test Lines	0816						3303	3000psi
Pump Spacer 1	0821			10			23	10bbl of H2O
Pump Spacer 2	0829			12			66	12bbl Mudflush III @ 8.4 #/gal
Pump Spacer 3	0831			10			49	10bbl of H2O
Pump Cement	0834			134			72	487sks of SwiftCem @14.2#/gal 1.54 yeild 7.64 gal/sk
Shutdown	0835							
Clean Lines	0901							On top of Plug
Drop Top Plug	0901							
Pump Displacement	0901			97			523	Displace with H2O supplied by rig
Bump Plug	0927						1015	
Casing Test	0932						1358	12bbl cmt back to surface
Check Floats	0935						0	
End Job	0936						0	

Sold To #: 340078

Ship To #: 3456554

Prpsl #:

Sales Order #: 901232816

SUMMIT Version: 7.3.0127

Tuesday, May 27, 2014 06:11:00