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**ANADARKO PETROLEUM CORP - EBUS**

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**Gittlein 3N-28HZ  
WATTENBERG  
Weld County , Colorado**

**Cement Surface Casing**  
**06-Sep-2013**

**Job Site Documents**

*The Road to Excellence Starts with Safety*

<b>Sold To #:</b> 300466	<b>Ship To #:</b> 3098511	<b>Quote #:</b>	<b>Sales Order #:</b> 900724476
<b>Customer:</b> ANADARKO PETROLEUM CORP - EBUS		<b>Customer Rep:</b> Hersh, Larry	
<b>Well Name:</b> Gittlein		<b>Well #:</b> 3N-28HZ	<b>API/UWI #:</b> 05-123-36225
<b>Field:</b> WATTENBERG	<b>City (SAP):</b> HUDSON	<b>County/Parish:</b> Weld	<b>State:</b> Colorado
<b>Lat:</b> N 40.088 deg. OR N 40 deg. 5 min. 18.38 secs.		<b>Long:</b> W 104.674 deg. OR W -105 deg. 19 min. 32.844 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> PLIENESS, RYAN		<b>Srvc Supervisor:</b> BIRCHELL, DEVIN	<b>MBU ID Emp #:</b> 466993

**Job Personnel**

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BIRCHELL, DEVIN Ray	6	466993	MILLER, GEOFFREY Alan	6	460232	SIMMONS, KEATON J	6	524850
TRANCOSO, JEFFREY Donald	6	550472						

**Equipment**

HES Unit #	Distance-1 way						
11064046C	15 mile	11360865C	15 mile	11362287C	15 mile	11764054C	15 mile
12010171	15 mile						

**Job Hours**

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
09-05-13	3	1	09-06-13	3	2.5			

**TOTAL** Total is the sum of each column separately

**Job**

**Job Times**

Formation Name	Top	Bottom	Called Out	Date	Time	Time Zone	
<b>Formation Depth (MD)</b>			<b>On Location</b>	05 - Sep - 2013	17:00	MST	
<b>Form Type</b>		BHST	<b>Job Started</b>	05 - Sep - 2013	21:00	MST	
<b>Job depth MD</b>	1322. ft	<b>Job Depth TVD</b>	1322. ft	<b>Job Completed</b>	06 - Sep - 2013	01:07	MST
<b>Water Depth</b>		<b>Wk Ht Above Floor</b>	4. ft	<b>Job Completed</b>	06 - Sep - 2013	02:30	MST
<b>Perforation Depth (MD)</b>	<i>From</i>	<i>To</i>	<b>Departed Loc</b>	06 - Sep - 2013	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				.	1322.		
9 5/8" Surface Casing	Unknown		9.625	8.921	36.		J-55	.	1322.		

**Tools and Accessories**

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
<b>Guide Shoe</b>					<b>Packer</b>					<b>Top Plug</b>	9.625	1	HES
<b>Float Shoe</b>	9.625	1	HES	1319	<b>Bridge Plug</b>					<b>Bottom Plug</b>			
<b>Float Collar</b>	9.625	1	HES	1277	<b>Retainer</b>					<b>SSR plug set</b>			
<b>Insert Float</b>										<b>Plug Container</b>	9.625	1	HES
<b>Stage Tool</b>										<b>Centralizers</b>			

**Miscellaneous Materials**

Gelling Agt	Conc	Surfactant	Conc	Acid Type	Qty	Conc %
<b>Treatment Fld</b>	<b>Conc</b>	<b>Inhibitor</b>	<b>Conc</b>	<b>Sand Type</b>	<b>Size</b>	<b>Qty</b>

**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	.0	.0	
2	Mud Flush		12.00	bbl	8.4	.0	.0	.0	
	3.33 lbm/bbl	MUD FLUSH III, 40 LB SACK (101633304)							
	42 gal/bbl	MUD FLUSH III - SBM (528788)							
3	SwiftCem B2	SWIFTCEM (TM) SYSTEM (452990)	473.0	sacks	14.2	1.53	7.63		7.63
	7.63 Gal	FRESH WATER							
Calculated Values		Pressures			Volumes				
Displacement		Shut In: Instant		Lost Returns		Cement Slurry		Pad	
Top Of Cement	Surface	5 Min		Cement Returns	24	Actual Displacement		Treatment	
Frac Gradient		15 Min		Spacers	32	Load and Breakdown		Total Job	
Rates									
Circulating		Mixing		Displacement		Avg. Job			
Cement Left In Pipe	Amount	42 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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Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	09/05/2013 17:00							Called Out Cement Crew For Anadarko Petroleum Gittlein 3N-28HZ Surface
Pre-Convoy Safety Meeting	09/05/2013 20:20							Discussed Hazards On Route To Location, Weather, Other Traffic, Route
Depart from Service Center or Other Site	09/05/2013 20:30							
Arrive At Loc	09/05/2013 21:00							Arrived To Location Talked With Company Rep On Volumes, Rates, Depths
Wait on Customer or Customer Sub-Contractor Equip	09/05/2013 21:10							Wait For Rig Crew to Finish Running Casing
Casing on Bottom	09/05/2013 23:45							Casing on bottom rig circulating conditioning hole, Halliburton rigging up
Pre-Rig Up Safety Meeting	09/05/2013 23:45							Discussed Hazards With Cement Crew For Rigging Up Iron and Water Hoses
Rig-Up Equipment	09/05/2013 23:50							
Pre-Job Safety Meeting	09/06/2013 00:45							Discussed Job Procedures With Cement and Rig Crews
Rig-Up Completed	09/06/2013 01:04							Finished Rigging Up To The Floor And Well Head
Prime Pumps	09/06/2013 01:06							Primed Pumps and Lines For Pressure Test

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Pressure Test	09/06/2013 01:07							Test Pump and Lines to 2740 psi
Pump Spacer	09/06/2013 01:10		3	10	10		35.0	Pumped 10 bbls Fresh Water Spacer
Pump Spacer 1	09/06/2013 01:21		3	12	22		56.0	Pumped 12 bbls Mud Flush III Spacer
Pump Spacer 2	09/06/2013 01:25		4	10	32		67.0	Pumped 10 bbls Fresh Water Spacer
Pump Lead Cement	09/06/2013 01:28		5.5	128	160		85.0	Pumped 128 bbls ( 473sks) 14.2 ppg Lead, Yield 1.53 ft <sup>3</sup> /sk Water 7.63 gal/sk
Drop Plug	09/06/2013 01:55							Dropped Plug With Driller Witnessing
Pump Displacement	09/06/2013 01:56		3					Pumped Fresh Water Displacement
Spacer Returns to Surface	09/06/2013 02:10		3	43	203		108.0	10 bbls Fresh Water, Followed By 12 bbls Mud Flush III, The 10 bbls Fresh Water
Cement Returns to Surface	09/06/2013 02:20		3	72	232		355.0	With 72 bbls displacement away cement returns to surface (24bbls Back)
Bump Plug	09/06/2013 02:30		3	99	259		458.0	Bumped Plug With 458 psi Took Pressure To 1528 psi
Check Floats	09/06/2013 02:34						1528.0	Checked Floats, Floats Held With 1 bbls Back To Truck
Job Complete	09/06/2013 02:36							
Clean Lines	09/06/2013 02:48							Wash Pump and Lines to Haul Off Pit
Post-Job Safety Meeting (Pre Rig-Down)	09/06/2013 02:55							Discussed Hazards With Crew For Rigging Down Iron and Water Hoses
Rig-Down Equipment	09/06/2013 03:00							
Rig-Down Completed	09/06/2013 03:30							
Pre-Convoy Safety Meeting	09/06/2013 03:35							Discussed Hazards On Route To Service Center, Weather, Other Traffic, Route
Depart Location for Service Center or Other Site	09/06/2013 03:40							Thank You For Using Halliburton Energy Services

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Slow Rate	09/06/2013 22:14							Slowed Rate To Bump Plug