

*The Road to Excellence Starts with Safety*

<b>Sold To #:</b> 300466		<b>Ship To #:</b> 0003747413		<b>Quote #:</b> 0022295040		<b>Sales Order #:</b> 0903972203					
<b>Customer:</b> ANADARKO PETROLEUM CORP - EBUS				<b>Customer Rep:</b> Carlton Cooley							
<b>Well Name:</b> CAMENISCH			<b>Well #:</b> 30N-35HZ		<b>API/UWI #:</b> 05-123-43343-00						
<b>Field:</b> WATTENBERG		<b>City (SAP):</b> IONE		<b>County/Parish:</b> WELD		<b>State:</b> COLORADO					
<b>Legal Description:</b> SW SW-2-1N-67W-425FSL-764FWL											
<b>Contractor:</b> NABORS DRLG				<b>Rig/Platform Name/Num:</b> NABORS X22							
<b>Job BOM:</b> 7523											
<b>Well Type:</b> HORIZONTAL GAS											
<b>Sales Person:</b> HALAMERICA\HX41066				<b>Srv Supervisor:</b> Bradley Hinkle							
<b>Job</b>											
<b>Formation Name</b>											
<b>Formation Depth (MD)</b>		<b>Top</b>		<b>Bottom</b>							
<b>Form Type</b>				<b>BHST</b>							
<b>Job depth MD</b>		14062ft		<b>Job Depth TVD</b>		7563ft					
<b>Water Depth</b>				<b>Wk Ht Above Floor</b>							
<b>Perforation Depth (MD)</b>		<b>From</b>		<b>To</b>							
<b>Well Data</b>											
<b>Description</b>	<b>New / Used</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>	
Casing		9.625	8.921	36		J-55	0	1840	0	1840	
Casing		5.5	4.892	17	LTC	HCP110	0	14062	0	7563	
Open Hole Section			7.875				1840	14070	1840	7563	
<b>Tools and Accessories</b>											
<b>Type</b>	<b>Size in</b>	<b>Qty</b>	<b>Make</b>	<b>Depth ft</b>		<b>Type</b>	<b>Size in</b>	<b>Qty</b>	<b>Make</b>		
Guide Shoe	5.5					Top Plug	5.5	1	Weatherford		
Float Shoe	5.5	1		14062		Bottom Plug	5.5	1	Weatherford		
Float Collar	5.5	1		13970		SSR plug set	5.5		HES		
Insert Float	5.5					Plug Container	5.5	1	HES		
Stage Tool	5.5					Centralizers	5.5		HES		
<b>Fluid Data</b>											
<b>Stage/Plug #: 1</b>											
<b>Fluid #</b>	<b>Stage Type</b>	<b>Fluid Name</b>			<b>Qty</b>	<b>Qty UoM</b>	<b>Mixing Density lbm/gal</b>	<b>Yield ft3/sack</b>	<b>Mix Fluid Gal</b>	<b>Rate bbl/min</b>	<b>Total Mix Fluid Gal</b>
1	Tuned Spacer III	Tuned Spacer III			60	bbl	10.5	6.26	40.7	4	

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	Cap Cement	ELASTICEM W/OUT CBL	150	sack	13.2	1.57		6	7.53		
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	Lead Cemnt	ELASTICEM W/ CBL	390	sack	13.2	1.57		8	7.54		
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		
4	Tail Cement	ECONOCEM	880	sack	13.5	1.68		8	7.98		
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		
5	Displacement	FRESH WATER WITH MMCR	20	bbl	8.34			8			
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		
6	Displacement	Biocide Water	304	bbl	8.34			8			
Cement Left In Pipe		Amount	92 ft		Reason			Shoe Joint			
Mix Water:		pH 6	Mix Water Chloride:			0 ppm		Mix Water Temperature:		65 °F	
Cement Temperature:		## °F °C		Plug Displaced by:			## lb/gal kg/m3 XXXX		Disp. Temperature:		## °F °C
Plug Bumped?		Yes/No		Bump Pressure:			2655 psi		Floats Held?		Yes/No
Spacer Returns:		24 bbl		Returns Density:			## lb/gal kg/m3		Returns Temperature:		## °F °C
Comment 24 bbls Tuned Spacer to surface. Estimated top of lead cement at 751 feet. Estimated top of tail cement at 4292 feet.											

## 2.0 Real-Time Job Summary

### 2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Comments
Event	1	Call Out	Call Out	4/16/2017	20:00:00	USER	Crew called for an on location of 0130 on 4/17/2017. Crew was Bradley Hinkle, Todd Porter, Knoell Coombs, Nick Cummins and Spencer Torrey.
Event	2	Depart Yard Safety Meeting	Depart Yard Safety Meeting	4/16/2017	23:30:00	USER	Pre-journey safety meeting.
Event	3	Arrive at Location from Service Center	Arrive at Location from Service Center	4/17/2017	00:15:00	USER	Sign in, perform a site assessment and pre rig-up safety meeting. Rig had approximately 1,000 feet of casing to run.
Event	4	Rig-Up Equipment	Rig-Up Equipment	4/17/2017	02:15:00	USER	Load plugs with customer present. Rig up plug container and manifold to casing so rig can circulate through.
Event	5	Safety Meeting - Pre Job	Safety Meeting - Pre Job	4/17/2017	04:15:00	USER	Pre-job safety meeting with all personnel on location.
Event	6	Test Lines	Test Lines	4/17/2017	04:45:00	USER	Data recorder disconnected while crew was up on the floor giving JSA. Pressure test didn't record. Tested lines to 4500 PSI with a 500 PSI electronic kick-out test. Pressure held solid for 2 minute test.
Event	7	Pump Spacer 1	Pump Spacer 1	4/17/2017	05:02:23	COM4	Pump 60 bbls Tuned Spacer mixed at 10.5 ppg with surfactants added. Density verified by pressurized scales.
Event	8	Check Weight	Check Weight	4/17/2017	05:12:25	COM4	Spacer weighed to 10.6 ppg.
Event	9	Drop Bottom Plug	Drop Bottom Plug	4/17/2017	05:25:45	COM4	Top plug preloaded. Witnessed by customer.
Event	10	Pump Lead Cement	Pump Lead Cement	4/17/2017	05:26:36	COM4	Pump 42 bbls (150 sacks) ElastiCem without Super-CBL mixed at 13.2 ppg. Density verified by pressurized scales.
Event	11	Check Weight	Check Weight	4/17/2017	05:30:41	COM4	Cement weighed at 13.2 ppg.

Event	12	Pump Lead Cement	Pump Lead Cement	4/17/2017	05:35:06	COM4	Pump 109 bbls (390 sacks) ElastiCem with Super-CBL mixed at 13.2 ppg. Density verified by pressurized scales.
Event	13	Check Weight	Check Weight	4/17/2017	05:38:01	COM4	Cement weighed at 13.3 ppg.
Event	14	Pump Tail Cement	Pump Tail Cement	4/17/2017	05:49:49	COM4	Pump 263 bbls (880 sacks) EconoCem mixed at 13.5 ppg. Density verified by pressurized scales.
Event	15	Check Weight	Check Weight	4/17/2017	05:54:04	COM4	Cement weighed at 13.45 ppg.
Event	16	Check Weight	Check Weight	4/17/2017	06:19:53	COM4	Cement weighed at 13.55 ppg.
Event	17	Shutdown	Shutdown	4/17/2017	06:22:42	COM4	
Event	18	Clean Lines	Clean Lines	4/17/2017	06:22:55	COM4	Rig blew down lines to wash-up tank and HES washed pumps and lines to wash-up tank until clean.
Event	19	Drop Top Plug	Drop Top Plug	4/17/2017	06:36:27	COM4	Top plug preloaded.
Event	20	Pump Displacement	Pump Displacement	4/17/2017	06:36:31	COM4	Pump 324 bbls, first 20 bbls with cement retarder (MMCR) and the last 304 bbls with Biocide. Good returns throughout. 24 bbls Tuned Spacer to surface. Estimated top of lead cement at 751 feet. Estimated top of tail cement at 4292 feet.
Event	21	Other	Other	4/17/2017	06:37:11	USER	Plug indicator wasn't working. Pumped until fluid felt in lines and shutdown to pop off ligting eye to verify plug went.
Event	22	Displ Reached Cement	Displ Reached Cement	4/17/2017	06:49:00	COM4	Reach cement at 77 bbls away.

Event	23	Bump Plug	Bump Plug	4/17/2017	07:24:10	COM4	Bump plug at 2655 PSI and increased pressure to 3000 PSI. Held for 15 minutes for a casing test.
Event	24	Check Floats	Check Floats	4/17/2017	07:39:31	USER	Floats held. 4 bbls back.
Event	25	End Job	End Job	4/17/2017	07:40:44	COM4	
Event	26	Safety Meeting - Pre Rig-Down	Safety Meeting - Pre Rig-Down	4/17/2017	07:45:00	USER	Pre rig-down safety meeting.
Event	27	Depart Location for Shop	Depart Location for Shop	4/17/2017	10:00:00	USER	Pre-journey safety meeting.

## 3.0 Attachments

### 3.1 Graph



