

The Road to Excellence Starts with Safety

Sold To #: 300466	Ship To #: 0003747413	Quote #: 0022295040	Sales Order #: 0903972203
Customer: ANADARKO PETROLEUM CORP - EBUS		Customer Rep: Carlton Cooley	
Well Name: CAMENISCH		Well #: 30N-35HZ	API/UWI #: 05-123-43343-00
Field: WATTENBERG	City (SAP): IONE	County/Parish: WELD	State: COLORADO
Legal Description: SW SW-2-1N-67W-425FSL-764FWL			
Contractor: NABORS DRLG		Rig/Platform Name/Num: NABORS X22	
Job BOM: 7523			
Well Type: HORIZONTAL GAS			
Sales Person: HALAMERICA\HX41066		Srvc Supervisor: Bradley Hinkle	

Job

Formation Name			
Formation Depth (MD)	Top		Bottom
Form Type	BHST		
Job depth MD	14062ft	Job Depth TVD	7563ft
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	1840	0	1840
Casing		5.5	4.892	17	LTC	HCP110	0	14062	0	7563
Open Hole Section			7.875				1840	14070	1840	7563

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
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

Fluid Data

Stage/Plug #: 1										
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	
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 ft ³ /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	
3	Lead Cemnt	ELASTICEM W/ CBL	390	sack	13.2	1.57		8	7.54	
4	Tail Cement	ECONOCEM	880	sack	13.5	1.68		8	7.98	
5	Displacement	FRESH WATER WITH MMCR	20	bbl	8.34			8		
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/m ³ 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/m ³			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 lighting 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



