

Sold To #: 300466		Ship To #: 3747401		Quote #: 0022303373		Sales Order #: 0904026609				
Customer: ANADARKO PETROLEUM CORP-EBUS				Customer Rep: Reuben Hernandez						
Well Name: CAMENISCH			Well #: 3N-35HZ		API/UWI #: 05-123-43341-00					
Field: WATTENBERG		City (SAP): IONE		County/Parish: WELD		State: COLORADO				
Legal Description: SW SW-2-1N-67W-424FSL-869FWL										
Contractor: NABORS DRLG				Rig/Platform Name/Num: NABORS X22						
Job BOM: 7523 7523										
Well Type: HORIZONTAL GAS										
Sales Person: HALAMERICA\HX41066				Srcv Supervisor: Vaughn Oteri						
Job										
Formation Name										
Formation Depth (MD)		Top		Bottom						
Form Type				BHST						
Job depth MD		14017ft		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	1893	0	1893
Casing		5.5	4.892	17	LTC	HCP110	0	14008	0	7538
Open Hole Section			8.5				1893	14017	1893	7538
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Guide Shoe	5.5					Top Plug	5.5		Weatherford	
Float Shoe	5.5			14008		Bottom Plug	5.5			
Float Collar	5.5			13917		SSR plug set	5.5			
Insert Float	5.5					Plug Container	5.5	1	HES	
Stage Tool	5.5					Centralizers	5.5			
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	80	bbl	10.5	6.25		6		
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	ElastiCem - Cap Cement	ELASTICEM (TM) SYSTEM	150	sack	13.2	1.57		7	7.51	

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	ElastiCem	ELASTICEM (TM) SYSTEM	545	sack	13.2	1.57		7	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
4	EconoCem	ECONOCEM (TM) SYSTEM	1150	sack	13.5	1.68		7	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	Sugar Water	Sugar Water	20	bbl	8.34			7	
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	Biocide Water	Biocide Water	302	bbl	8.34			7	
Cement Left In Pipe		Amount	ft		Reason			Shoe Joint	
Comment 25bbls of Spacer at surface, HOTC-8381.61 TOTC-5626.39 HOLC-3735.04 TOLC-1891.35 HOCC-875.62 TOCC-1015.73									

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DS Pump Press (psi)	DH Density (ppg)	Comb Pump Rate (bbl/min)	Comments
Event	1	Call Out	Call Out	5/13/2017	02:00:00	USER				Call out from ARC hub
Event	2	Arrive At Loc	Arrive At Loc	5/13/2017	05:00:00	USER				Arrived on location met with company rep to discuss job process and concerns
Event	3	Other	Other	5/13/2017	05:10:10	USER				TD-14017 TP-17008 FC-13917 Surf-1893 Mud-9.0ppg Casing-5.5 17#
Event	4	Start Job	Start Job	5/13/2017	08:51:02	COM4	-9.00	8.42	0.00	Hedl pre-job safety meeting with all hands on location to discuss job process and hazards
Event	5	Test Lines	Test Lines	5/13/2017	09:14:39	COM4	180.00	8.42	0.00	Pressure tested pumps and lines with fresh water, found no leaks and pressure held good 4715psi
Event	6	Pump Spacer 1	Pump Spacer 1	5/13/2017	09:19:01	COM4	102.00	8.42	0.00	Mixed 80bbl of 10.5ppg Tuned Spacer III with Tuf fiber at 6.0bpm 226psi
Event	7	Pump Lead Cement	Pump Lead Cement	5/13/2017	09:38:31	COM4	209.00	11.12	5.10	Mixed 695sks or 194bbl of 13.2ppg Y-1.57 G/sk-7.53 Elasticem with Tuf fiber at 7.0bpm 360psi
Event	8	Pump Tail Cement	Pump Tail Cement	5/13/2017	10:14:54	COM4	156.00	13.32	7.00	Mixed 1150sks or 344bbl of 13.5ppg Y-1.68 g/sk7.98 Econocem at 7.0bpm 225psi
Event	9	Shutdown	Shutdown	5/13/2017	11:05:43	COM4	74.00	10.81	0.90	
Event	10	Clean Lines	Clean Lines	5/13/2017	11:05:47	COM4	50.00	3.40	0.90	Washed pumps and lines with fresh water

Event	11	Drop Top Plug	Drop Top Plug	5/13/2017	11:05:52	COM4	31.00	1.19	0.90	Released plug witnessed by company rep
Event	12	Pump Displacement	Pump Displacement	5/13/2017	11:14:20	COM4	56.00	8.33	0.00	Pumped 322bbl of fresh water to displace cement
Event	13	Bump Plug	Bump Plug	5/13/2017	12:07:25	COM4	2726.00	8.42	0.00	Bumped plug 50psi over final pump pressure
Event	14	Pressure Up Well	Pressure Up Well	5/13/2017	12:09:14	COM4	2828.00	8.44	0.00	Held 3000 psi for 15min
Event	15	Other	Other	5/13/2017	12:22:06	COM4	3074.00	8.45	0.00	Released pressure back to pump truck to check floats 3.5bbl back
Event	16	End Job	End Job	5/13/2017	12:25:08	COM4	-24.00	8.34	0.00	25bbl of spacer back to surface, HOTC-8381.61 TOTC-5626.39 HOLC-3735.04 TOLC-1891.35 HOCC-875.62 TOCC-1015.73

3.0 Attachments

3.1 Anadarko Camenisch 3N-35HZ Production Job Chart

