

Sold To #: 300466	Ship To #: 3747433	Quote #: 0022304362	Sales Order #: 0904034728
Customer: ANADARKO PETROLEUM CORP-EBUS		Customer Rep: James Atkins	
Well Name: CAMENISCH		Well #: 3C-35HZ	API/UWI #: 05-123-43339-00
Field: WATTENBERG	City (SAP): IONE	County/Parish: WELD	State: COLORADO
Legal Description: SW SW-2-1N-67W-424FSL-899FWL			
Contractor: NABORS DRLG		Rig/Platform Name/Num: NABORS X22	
Job BOM: 7523 7523			
Well Type: HORIZONTAL GAS			
Sales Person: HALAMERICA\HX41066		Srcv Supervisor: Nicholas Roles	
<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>	14324ft	<b>Job Depth TVD</b>
<b>Water Depth</b>		<b>Wk Ht Above Floor</b>
<b>Perforation Depth (MD)</b>	<b>From</b>	<b>To</b>

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	1906	0	1906
Casing		5.5	4.892	17	LTC	HCP110	0	14324	0	7680
Open Hole Section			8.5				1906	14332	1906	7680

Tools and Accessories									
Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make	
Guide Shoe	5.5				Top Plug	5.5		HES	
Float Shoe	5.5			14324	Bottom Plug	5.5		HES	
Float Collar	5.5				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 ft/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
1	Tuned Spacer III	Tuned Spacer III	80	bbl	10.5	6.25		3		
	88.91 lbm/bbl	<b>BARITE, BULK (100003681)</b>								
	37.58 gal/bbl	<b>FRESH WATER</b>								
	0.50 gal/bbl	<b>DUAL SPACER SURFACTANT B, 5 GAL PAIL (100003665)</b>								
	0.3750 lbm/bbl	<b>TUF FIBER 594, 15 LB BOX (101350514)</b>								

0.50 gal/bbl		<b>MUSOL A, 330 GAL TOTE - (790828)</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>
2	ElastiCem - Cap Cement	ELASTICEM (TM) SYSTEM	150	sack	13.2	1.573		4	7.51
7.51 Gal		<b>FRESH WATER</b>							
0.90 %		<b>SCR-100 (100003749)</b>							
0.10 lbm		<b>TUF FIBER 594, 15 LB BOX (101350514)</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>
3	ElastiCem	ELASTICEM (TM) SYSTEM	545	sack	13.2	1.57		7	7.53
0.10 lbm		<b>TUF FIBER 594, 15 LB BOX (101350514)</b>							
0.30 %		<b>SCR-100 (100003749)</b>							
7.53 Gal		<b>FRESH WATER</b>							
0.10 %		<b>SUPER CBL, 50 LB PAIL (100003668)</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>
4	EconoCem	ECONOCEM (TM) SYSTEM	1200	sack	13.5	1.68		8	7.98
13.50 Gal		<b>FRESH WATER</b>							
0.40 %		<b>HR-5, 50 LB SK (100005050)</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>
5	MMCR	MMCR	20	bbl	8.34			8	
0.50 gal/bbl		<b>MICRO MATRIX CEMENT RETARDER, 5 GAL PAIL (100003781)</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>
6	Biocide Water	Biocide Water	310	bbl	8.34			8	
Cement Left In Pipe		<b>Amount</b>	85 ft		<b>Reason</b>			<b>Shoe Joint</b>	
<b>Comment</b> Got 30bbls spacer to surface. Estimated TOT-5574', TOL#2-1848', TOL#1-973'.									

## 2.0 Real-Time Job Summary

### 2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density <i>(ppg)</i>	Comb Pump Rate <i>(bbl/min)</i>	DS Pump Press <i>(psi)</i>	Comments
Event	1	Call Out	Call Out	5/17/2017	20:00:00	USER				Crew call out for o/l at 0200
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	5/18/2017	01:45:00	USER				All crew aware of hazards and directions. All fit to drive.
Event	3	Depart from Service Center or Other Site	Depart from Service Center or Other Site	5/18/2017	02:00:00	USER				Started journey management.
Event	4	Arrive at Location from Service Center	Arrive at Location from Service Center	5/18/2017	02:15:00	USER				Met with company man to discuss job details and procedure. Performed hazard hunt and site assessment. Rig had 1500ft casing left to run.
Event	5	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	5/18/2017	02:30:00	USER				All hse present. Discussed bulk and iron placement and all red zone areas. Caution taped high pressure zones.
Event	6	Other	Other	5/18/2017	02:45:00	USER				Water Test- PH-6 Chlo-0 Temp-60 Cement temp-70
Event	7	Safety Meeting - Pre Job	Safety Meeting - Pre Job	5/18/2017	06:00:00	USER				Discussed job associated hazards, contingencies and job procedure with all job associated personel.
Event	8	Start Job	Start Job	5/18/2017	08:04:13	COM4	8.52	0.00	-3.00	TD-14332', TP-14324' 5.5" 17#, FC-14239', TVD-7680', OH-8.5", SURF-1906' 9.625" 36#, MUD-9.2#
Event	9	Check Weight	Check Weight	5/18/2017	08:09:45	COM4	8.67	0.00	148.00	Weight verified with pressurized mud scales.

Event	10	Test Lines	Test Lines	5/18/2017	08:10:24	COM4	8.66	0.00	141.00	Pumped 5bbls fresh water to fill lines, shutdown, closed manifold, performed 500psi k/o function test, proceeded to bring pressure to 4800psi. Held well, no leaks.
Event	11	Pump Spacer 1	Pump Spacer 1	5/18/2017	08:14:59	COM4	8.62	0.00	5.00	Pumped 80bbbls of 10.5# 6.25Y 40.6g/s Tuned Spacer III with 40g Musol A, 40g Dual Spacer B, 10g D-Air and 2 boxes of TUFF fiber at 3bpm 198psi.
Event	12	Pump Lead Cement	Pump Lead Cement	5/18/2017	08:36:43	COM4	12.07	3.90	189.00	Pumped 150sks or 41.9bbbls of 13.2# 1.57y 7.51g/s Elasticem w/o CBL with 1 box TUFF fiber at 4bpm 208psi.
Event	13	Check Weight	Check Weight	5/18/2017	08:43:35	COM4	13.29	3.90	124.00	Weight verified with pressurized mud scales.
Event	14	Pump Lead Cement	Pump Lead Cement	5/18/2017	08:48:26	COM4	13.27	7.00	388.00	Pumped 545sks or 152.4bbbls of 13.2# 1.57y 7.53g/s Elasticem w/ CBL with 3.33 Box TUFF fiber at 7bpm 368psi.
Event	15	Check Weight	Check Weight	5/18/2017	09:00:31	COM4	13.27	7.00	319.00	Weight verified with pressurized mud scales.
Event	16	Pump Tail Cement	Pump Tail Cement	5/18/2017	09:12:34	COM4	13.39	6.50	326.00	Pumped 1200sks or 359bbbls of 13.5# 1.68Y 7.98G/S Econocem at 8bpm 565psi.
Event	17	Check Weight	Check Weight	5/18/2017	09:22:53	COM4	13.56	8.10	596.00	Weight verified with pressurized mud scales.
Event	18	Check Weight	Check Weight	5/18/2017	09:48:20	COM4	13.56	8.10	586.00	Weight verified with pressurized mud scales.
Event	19	Other	Other	5/18/2017	10:05:30	COM4	17.93	0.00	-3.00	Shutdown, rig blew down iron with air, followed with

										5bbls fresh water through pumps and lines.
Event	20	Drop Top Plug	Drop Top Plug	5/18/2017	10:10:41	COM4	8.42	0.00	-1.00	Dropped by HES supervisor, witnessed by company man.
Event	21	Pump Displacement	Pump Displacement	5/18/2017	10:11:00	COM4	8.42	0.00	-1.00	Pumped 330bbls fresh water with 10g MMCR in first 20bbls, followed with 5g biocide throughout at 8bpm 2110psi.
Event	22	Bump Plug	Bump Plug	5/18/2017	10:58:12	COM4	8.37	0.00	2546.00	Slowed down to 6bpm at 300bbls away, slowed to 2bpm at 310bbls away, final circulating pressure-2036psi. Bump Pressure-2601psi.
Event	23	Other	Other	5/18/2017	10:58:42	COM4	8.36	0.00	2608.00	Casing test at 2600psi for 15min, pressure came up to 2800psi by time to release.
Event	24	Check Floats	Check Floats	5/18/2017	11:13:36	USER	8.33	0.00	2890.00	Released pressure, surged line and got 3bbls back to truck. Floats held.
Event	25	End Job	End Job	5/18/2017	11:19:33	COM4				Got 30bbls spacer to surface. Estimated TOT-5574', TOL#2-1848',TOL#1-973'.
Event	26	Safety Meeting - Pre Rig-Down	Safety Meeting - Pre Rig-Down	5/18/2017	11:25:00	USER	8.30	0.00	3.00	All HSE present. Discussed red zone areas and trapped pressure hazards. Watch for suspended loads and rig down procedures, including hand placement, lifting techniques, and swing radius.
Event	27	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	5/18/2017	12:45:00	USER				All HSE present and fit to drive. Aware of directions and hazards.

Event	28	Depart Location for Service Center or Other Site	Depart Location for Service Center or Other Site	5/18/2017	13:00:00	USER	Pre journey managment prior to departure.
-------	----	--	--	-----------	----------	------	---

---

3.0 Attachments

3.1 Anadarko Camenisch 3C-35HZ Production Job Chart.png

