

*The Road to Excellence Starts with Safety*

<b>Sold To #:</b> 300466		<b>Ship To #:</b> 3847982		<b>Quote #:</b> 0022426306		<b>Sales Order #:</b> 0904762911				
<b>Customer:</b> ANADARKO PETROLEUM CORP-EBUS				<b>Customer Rep:</b> Luke Rains						
<b>Well Name:</b> AZUL			<b>Well #:</b> 13-30HZ		<b>API/UWI #:</b> 05-123-46114-00					
<b>Field:</b> WATTENBERG		<b>City (SAP):</b> HUDSON		<b>County/Parish:</b> WELD		<b>State:</b> COLORADO				
<b>Legal Description:</b> SE SW-13-1N-66W-775FSL-2446FWL										
<b>Contractor:</b> PRECISION DRLG				<b>Rig/Platform Name/Num:</b> PRECISION 464						
<b>Job BOM:</b> 7523 7523										
<b>Well Type:</b> HORIZONTAL GAS										
<b>Sales Person:</b> HALAMERICA\HX41066				<b>Srv Supervisor:</b> Ryan Stevens						
<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>		13396ft		<b>Job Depth TVD</b>		7,460				
<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	1920	0	1920
Casing		5.5	4.892	17	LTC	HCP110	0	13496	0	7460
Open Hole Section			7.875				1920	13406	0	0
<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>	
<b>Guide Shoe</b>						<b>Top Plug</b>	5.5	1	weath	
<b>Float Shoe</b>	5.5	1	weath	13496		<b>Bottom Plug</b>	5.5	1	weath	
<b>Float Collar</b>	5.5	1	weath	13494		<b>SSR plug set</b>	5.5			
<b>Insert Float</b>						<b>Plug Container</b>	5.5	1	HES	
<b>Stage Tool</b>						<b>Centralizers</b>				
<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	6.43			2,142	
37.58 gal/bbl		<b>FRESH WATER</b>								
0.70 gal/bbl		<b>DUAL SPACER SURFACTANT B, 5 GAL PAIL (100003665)</b>								
0.50 gal/bbl		<b>D-AIR 3000L, 5 GAL PAIL (101007444)</b>								

0.70 gal/bbl		MUSOL A, 330 GAL TOTE - (790828)							
86.45 lbm/bbl		BARITE, BULK (100003681)							
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	Gasstop B1	GASSTOP (TM) SYSTEM	400	sack	13.2	1.59	7.69	6	3,076
0.10 %		FE-2 (100001615)							
0.40 %		SCR-100 (100003749)							
5.09 Gal		FRESH WATER							
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	EconoCem	ECONOCEM (TM) SYSTEM	810	sack	13.5	1.68	7.99	8	6,471
0.20 %		SA-1015, 50 LB SACK (102077046)							
7.99 Gal		FRESH WATER							
0.35 %		HR-5, 50 LB SK (100005050)							
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	Biocide Water and MMCR	Biocide Water and MMCR	20	bbl	8.34				
0.50 gal/bbl		MICRO MATRIX CEMENT RETARDER, 5 GAL PAIL (100003781)							
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	Biocide Water	291	bbl	8.34			10	
Cement Left In Pipe		Amount	0 ft		Reason			Wet shoe	
Mix Water:		pH 7	Mix Water Chloride:		0 ppm		Mix Water Temperature:		65 °F
Cement Temperature:			Plug Displaced by:		8.34 LB/BBL		Disp. Temperature:		
Plug Bumped?		No	Bump Pressure:				Floats Held?		Yes
Cement Returns:		0 bbl	Returns Density:				Returns Temperature:		°F
Comment DID NOT BUMP PLUG AT CALCULATED DISPLACEMENT. PUMPED 4 BBLs OVER CALCULATED DISPLACEMENT PER CUSTOMER REQUEST.									

## 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	4/7/2018	11:00:00	USER	CREW CALLED OUT AT 11:00, REQUESTED ON LOCATION 16:30. CREW PICKED UP CEMENT, CHEMICALS, AND PLUG CONTAINER FROM FT. LUPTON, CO. BULK 660, AND PUMP 11360070.
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	4/7/2018	13:30:00	USER	CREW DISCUSSED ROUTES, HAZARDS, AND COMMUNICATION WITH CREW.
Event	3	Crew Leave Yard	Crew Leave Yard	4/7/2018	15:30:00	USER	STARTED JOURNEY MANAGEMENT.
Event	4	Arrive At Loc	Arrive At Loc	4/7/2018	15:45:00	USER	MEET WITH COMPANY REP AND DISCUSS JOB PROCEDURES
Event	5	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	4/7/2018	16:00:00	USER	HAZARD HUNT. DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH LOCATION, RIG UP, AND WEATHER.
Event	6	Rig-Up Equipment	Rig-Up Equipment	4/7/2018	16:10:00	USER	CREW STAGED EQUIPMENT AND RIGGED UP BULK, IRON AND WATER HOSES TO PERFORM JOB
Event	7	Pre-Job Safety Meeting	Pre-Job Safety Meeting	4/7/2018	18:00:00	USER	SAFETY MEETING WITH HALLIBURTON, AND RIG PERSONNEL. CREW COMMUNICATED POTENTIAL SAFETY HAZARDS, AND JOB DETAILS.
Event	8	Start Job	Start Job	4/7/2018	18:57:13	COM4	START RECORDING JOB DATA
Event	9	Test Lines	Test Lines	4/7/2018	18:59:54	COM4	PRESSURE TEST LINES TO 6,969 EKO SET TO 500 KICKED OUT @ 2200.
Event	10	Pump Spacer 1	Pump Spacer 1	4/7/2018	19:05:51	COM4	PUMP 60 BBLS OF TUNED SPACER @ 10.5 PPG DENSITY VERIFIED BY PRESSUREIZED MUD SCALES
Event	11	Drop Bottom Plug	Drop Bottom Plug	4/7/2018	19:23:08	USER	DROP BOTTOM PLUG VERIFIED BY COMPNY REP.

Event	12	Pump Cement	Pump Cement	4/7/2018	19:34:07	COM4	PUMP 400 SXS OF GASSTOP CEMENT @13.2 PPG YIELD 1.59 MIX WATER 7.69CALCULATED TOP OF LEAD @ 1100.
Event	13	Pump Tail Cement	Pump Tail Cement	4/7/2018	19:52:30	COM4	PUMP 810 SXS OF ECONOCEM @ 13.5 PPG. YIELD 1.68 MIX WATER 7.99. CALCULATED TOP OF TAIL @ 5554.
Event	14	Shutdown	Shutdown	4/7/2018	20:36:04	USER	SHUTDOWN TO WASH UP
Event	15	Drop Top Plug	Drop Top Plug	4/7/2018	20:42:27	COM4	VERIFIED BY COMPANY REP
Event	16	Pump Displacement	Pump Displacement	4/7/2018	20:48:41	COM4	START CALCULATED DISPLACEMNT OF 311 BBLS. FIRST 20 BBLS OF MMCR AND BIOCID E THROUGH OUT THE REST
Event	17	Shutdown	Shutdown	4/7/2018	21:48:04	USER	SHUTDOWN DID NOT BUMP PLUG, PUMP 4 BBLS OVER CALCULATED DISPLACEMENT OF 311 BBLS FOR A TOTAL OF 314 BBLS.
Event	18	Check Floats	Check Floats	4/7/2018	21:49:07	USER	CHECK FLAOTS 2 BBLS BACK
Event	19	End Job	End Job	4/7/2018	21:53:09	COM4	STOP RECORDING JOB DATA
Event	20	Pre-Rig Down Safety Meeting	Pre Rig Down Safet Meeting	4/7/2018	23:00:00	USER	CREW DISCUSSED HAZARDS ASSOCIATED WITH RIG DOWN.
Event	21	Rig-Down Completed	Rig-Down Completed	4/7/2018	23:18:06	USER	ALL HALLIBURTON EQUIPMENT WAS STOED AND READY FOR TRAVEL
Event	22	Crew Leave Location	Crew Leave Location	4/7/2018	23:19:35	USER	THANKS RYAN STEVENS AND CREW

## 3.0 Attachments

### 3.1 Job Chart

