

*The Road to Excellence Starts with Safety*

<b>Sold To #:</b> 300466		<b>Ship To #:</b> 3904822		<b>Quote #:</b> 0022547871		<b>Sales Order #:</b> 0905498211				
<b>Customer:</b> ANADARKO PETROLEUM CORP-EBUS				<b>Customer Rep:</b> Luke Rains						
<b>Well Name:</b> REESE			<b>Well #:</b> 21-4HZ			<b>API/UWI #:</b> 05-123-47869-00				
<b>Field:</b> WATTENBERG		<b>City (SAP):</b> FIRESTONE		<b>County/Parish:</b> WELD		<b>State:</b> COLORADO				
<b>Legal Description:</b> SW NW-21-2N-67W-2065FNL-337FWL										
<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> Nathaniel Moore						
<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>		15762ft		<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>						
<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	1890	0	1890
Casing		5.5	4.892	17	LTC	HCP110	0	15762	0	7552
Open Hole Section			7.875				1890	15771	1890	7552
<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		
Float Shoe	5.5			15762		Bottom Plug	5.5	1		
Float Collar	5.5					SSR plug set	5.5			
Insert Float	5.5					Plug Container	5.5	1		
Stage Tool	5.5					Centralizers	5.5			
<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	80	bbl	10.5	6.18				
0.75 gal/bbl		<b>DUAL SPACER SURFACTANT B, 5 GAL PAIL (100003665)</b>								
89.91 lbm/bbl		<b>BARITE, BULK (100003681)</b>								
0.75 gal/bbl		<b>MUSOL(R) A, 5 GAL PAIL (100064220)</b>								

37.58 gal/bbl		<b>FRESH WATER</b>							
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	640	sack	13.2	1.56		6	7.61
0.90 %		<b>SCR-100 (100003749)</b>							
5.01 Gal		<b>FRESH WATER</b>							
0.10 Gal		<b>D-AIR 3000L, TOTETANK (101396181)</b>							
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	840	sack	13.5	1.68		6	7.99
0.10 %		<b>SA-1015, 50 LB SACK (102077046)</b>							
7.99 Gal		<b>FRESH WATER</b>							
0.31 %		<b>HR-5, 50 LB SK (100005050)</b>							
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		<b>MICRO MATRIX CEMENT RETARDER, 5 GAL PAIL (100003781)</b>							
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	Biocide Water	Biocide Water	347.2	bbl	8.34				
Cement Left In Pipe		Amount	0 ft		Reason			Wet Shoe	
Mix Water:		pH 7	Mix Water Chloride:			<300 ppm		Mix Water Temperature:	
								70 °F	
Cement Temperature:		30 °F	Plug Displaced by:			water		Disp. Temperature:	
								70 °F	
Plug Bumped?		Yes	Bump Pressure:			1900-3000 psi		Floats Held?	
								Yes	
Cement Returns:			Returns Density:			## lb/gal kg/m3		Returns Temperature:	
								## °F °C	
Comment									

## 2.0 Real-Time Job Summary

### 2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Comments
Event	1	Other	Callout	2/21/2019	17:00:00	USER	OL time 2200. Verify equipment and materials.
Event	2	Depart Yard Safety Meeting	Depart Yard Safety Meeting	2/21/2019	21:00:00	USER	Journey management conducted with crew.
Event	3	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	2/21/2019	21:30:00	USER	Sign in with customer. Spot in and rig up equipment.
Event	4	Other	Meet with Customer rep	2/21/2019	22:00:00	USER	TD 15771 7.875" hole. TP 15762' WSS 15752' 5.5" 17# casing. TVD 7552'. . Surface 1890' 9.625" 36#. MW 9.3 ppg OBM. Water test: PH 7 Chlorides <500 ppm Temp 70 degrees.
Event	5	Event	Mix latex	2/22/2019	00:30:00	USER	Rig on bottom. Rig up cement head to circulate. Start mixing latex water for lead cement.
Event	6	Safety Meeting - Pre Job	Safety Meeting - Pre Job	2/22/2019	01:30:00	USER	Discuss job procedure with HES and rig crew
Event	7	Test Lines	Test Lines	2/22/2019	02:14:49	COM4	500 psi kickout test and 7000 psi pressure test
Event	8	Drop Bottom Plug	Drop Bottom Plug	2/22/2019	02:19:24	COM4	Witnessed by company rep
Event	9	Pump Spacer 1	Pump Spacer 1	2/22/2019	02:19:35	COM4	80 bbl tuned spacer with surfactants. 10.5 ppg 6.18 ft3/sk 39.7 gal/sk
Event	10	Pump Lead Cement	Pump Lead Cement	2/22/2019	02:38:47	COM4	640 sks/178 bbl GasStop lead. 13.2 ppg 1.55 ft3/sk 7.61 gal/sk
Event	11	Pump Tail Cement	Pump Tail Cement	2/22/2019	03:09:15	COM4	840 sks/ 251 bbl EconoCem Tail 13.5 ppg 1.68 ft3/sk 7.99 gal/sk
Event	12	Drop Top Plug	Drop Top Plug	2/22/2019	03:54:19	COM4	Witnessed by company rep

Event	13	Pump Displacement	Pump Displacement	2/22/2019	03:56:24	COM4	365 bbl water displacement with MMCR in the first 20 bbl.
Event	14	Bump Plug	Bump Plug	2/22/2019	04:40:52	COM4	1920 psi final pump pressure. Pressured up to 3000 psi for 15 minute casing test.
Event	15	Pressure Up	Pressure Up	2/22/2019	04:52:08	USER	Shift wet shoe sub at 4650 psi and pump 3 bbl wet shoe.
Event	16	Check Floats	Check Floats	2/22/2019	04:54:02	USER	2 bbl back. Floats held
Event	17	Post-Job Safety Meeting (Pre Rig-Down)	Post-Job Safety Meeting (Pre Rig-Down)	2/22/2019	05:15:00	USER	Discuss rig down with HES and rig crew.
Event	18	End Job	End Job	2/22/2019	05:16:58	COM4	
Event	19	Safety Meeting - Departing Location	Safety Meeting - Departing Location	2/22/2019	06:30:00	USER	Journey management with crew.

## 3.0 Attachments

### 3.1 Job Chart

Custom Results

