

*The Road to Excellence Starts with Safety*

<b>Sold To #:</b> 300466		<b>Ship To #:</b> 3712347		<b>Quote #:</b> 0022287558		<b>Sales Order #:</b> 0903923572				
<b>Customer:</b> ANADARKO PETROLEUM CORP - EBUS				<b>Customer Rep:</b> James						
<b>Well Name:</b> PUMA FED			<b>Well #:</b> 34N-35HZ		<b>API/UWI #:</b> 05-123-42567-00					
<b>Field:</b> WATTENBERG		<b>City (SAP):</b> IONE		<b>County/Parish:</b> WELD		<b>State:</b> COLORADO				
<b>Legal Description:</b> SW SW-23-1N-67W-290FSL-616FWL										
<b>Contractor:</b> NABORS DRLG				<b>Rig/Platform Name/Num:</b> NABORS X22						
<b>Job BOM:</b> 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>		17887ft		<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	2291	0	2291
Casing		5.5	4.892	17	LTC	HCP110	0	17879	0	7523
Open Hole Section			8.5				2291	17887	2250	7523
<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		HES	
Float Shoe	5.5			17879		Bottom Plug	5.5		HES	
Float Collar	5.5			17878		SSR plug set	5.5		HES	
Insert Float	5.5					Plug Container	5.5		HES	
Stage Tool	5.5					Centralizers	5.5		HES	
<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	6.11				
0.50 gal/bbl		<b>MUSOL A, 330 GAL TOTE - (790828)</b>								
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>							
<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	1.57		5	7.53
7.53 Gal		<b>FRESH WATER</b>							
0.90 %		<b>SCR-100 (100003749)</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	630	sack	13.2	1.6		5	7.69
0.50 %		<b>SCR-100 (100003749)</b>							
7.69 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	1700	sack	13.5	1.68		5	7.98
7.98 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	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>							
<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	414	bbl	8.34				
Cement Left In Pipe		Amount	ft	Reason				Shoe Joint	

## 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	3/29/2017	01:30:00	USER	OL time 0730. Verify equipment and materials
Event	2	Depart Yard Safety Meeting	Depart Yard Safety Meeting	3/29/2017	06:00:00	USER	Journey management with crew
Event	3	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	3/29/2017	06:30:00	USER	Sign in with customer. Spot in and rig up equipmet. TD 17887' 8.5" OH. TP 17879' 5.5" 17# P-110. FC 17878'. Surface 2291' 9.625" 36# J-55. MW 9.1 ppg. Water tested PH 7 Chlorides <100 Sulfates <200 Temp 75 degrees.
Event	4	Pre-Job Safety Meeting	Pre-Job Safety Meeting	3/29/2017	12:00:00	USER	Discuss job procedure with HES and rig crew
Event	5	Start Job	Start Job	3/29/2017	12:54:24	COM1	Fill lines 3 bbl water
Event	6	Test Lines	Test Lines	3/29/2017	13:04:02	COM1	500 psi kickout test and 4800 psi pressure test
Event	7	Pump Spacer 1	Pump Spacer 1	3/29/2017	13:08:38	COM1	80 bbl tuned spacer 10.5 ppg with surfactants. 6.11 ft3/sk 39.9 gal/sk
Event	8	Drop Bottom Plug	Drop Bottom Plug	3/29/2017	13:30:57	COM1	
Event	9	Pump Lead Cement	Pump Lead Cement	3/29/2017	13:38:49	COM1	780 sks/222 bbl 1.2 ppg 1.6 ft3/sk 7.69 gal/sk
Event	10	Check Weight	Check weight	3/29/2017	13:47:23	COM1	13.2 ppg verified with pressurized scales
Event	11	Pump Tail Cement	Pump Tail Cement	3/29/2017	14:14:23	COM1	1700 sks/509 bbl 13.5 ppg 1.68 ft3/sk 7.98 gal/sk
Event	12	Check Weight	Check weight	3/29/2017	14:14:57	COM1	13.5 ppg
Event	13	Check Weight	Check weight	3/29/2017	14:28:14	COM1	13.5 ppg
Event	14	Drop Top Plug	Drop Top Plug	3/29/2017	15:45:52	COM1	Witnessed by customer rep

Event	15	Pump Displacement	Pump Displacement	3/29/2017	15:46:02	COM1	414 bbl water displacement.
Event	16	Other	Other	3/29/2017	16:30:16	COM1	Spacer to surface. 340 bbl into displacemet. 75 bbl spacer to surface
Event	17	Bump Plug	Bump Plug	3/29/2017	16:47:35	COM1	2600 psi final circulating pressure at 3 bpm. Pressured up to 3150 psi. Held for 15 minute casing test
Event	18	Other	Check floats	3/29/2017	17:03:04	COM1	5 bbl back. Floats held
Event	19	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	3/29/2017	17:10:00	USER	
Event	20	End Job	End Job	3/29/2017	17:18:51	COM1	
Event	21	Depart Location Safety Meeting	Depart Location Safety Meeting	3/30/2017	18:30:00	USER	

## 2.2 Custom Graph

