

*The Road to Excellence Starts with Safety*

<b>Sold To #:</b> 300466		<b>Ship To #:</b> 3837840		<b>Quote #:</b> 0022407937		<b>Sales Order #:</b> 0904651720				
<b>Customer:</b> ANADARKO PETROLEUM CORP-EBUS				<b>Customer Rep:</b> Keith C.						
<b>Well Name:</b> HERGENREDER			<b>Well #:</b> 22N2-4HZ		<b>API/UWI #:</b> 05-123-45862-00					
<b>Field:</b> WATTENBERG		<b>City (SAP):</b> LONGMONT		<b>County/Parish:</b> WELD		<b>State:</b> COLORADO				
<b>Legal Description:</b> NW NW-33-3N-68W-276FNL-998FWL										
<b>Contractor:</b> Xtreme				<b>Rig/Platform Name/Num:</b> Xtreme 24						
<b>Job BOM:</b> 7523 7523										
<b>Well Type:</b> HORIZONTAL GAS										
<b>Sales Person:</b> HALAMERICA\HX41066				<b>Srv Supervisor:</b> Adam Covington						
<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>		13891ft			<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	2289	0	0
Casing		5.5	4.892	17	LTC	HCP110	0	13891	0	0
Open Hole Section			8.5				2289	13941	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>	
Guide Shoe	5.5					Top Plug	5.5		HES	
Float Shoe	5.5			13891		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	
<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	6.32		4		
35.70 gal/bbl		<b>FRESH WATER</b>								
0.70 gal/bbl		<b>DUAL SPACER SURFACTANT B, 5 GAL PAIL (100003665)</b>								
0.70 gal/bbl		<b>MUSOL A, 330 GAL TOTE - (790828)</b>								

87.97 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	ElastiCem Lead	ELASTICEM (TM) SYSTEM	700	sack	13.2	1.57		6	7.53
0.10 %		SUPER CBL, 50 LB PAIL (100003668)							
0.45 %		SCR-100 (100003749)							
7.53 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 Tail	ECONOCEM (TM) SYSTEM	1150	sack	13.5	1.68		8	7.99
7.99 Gal		FRESH WATER							
0.32 %		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	Biocide Water	Biocide Water	304	bbl	8.34			8	
Cement Left In Pipe		Amount	5 ft			Reason		Shoe Joint	
Comment 20 bbls of spacer back to surface. ToT 5,460 ToL 1377									

## 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	2/19/2018	14:00:00	USER	CALLED OUT BY SERVICE COORDINATOR FOR O/L AT 2000
Event	2	Depart Yard Safety Meeting	Depart Yard Safety Meeting	2/19/2018	17:00:00	USER	HELD MEETING WITH ALL PERSONNEL IN CONVOY TO DISCUSS DIRECTIONS AND HAZARDS ASSOCIATED WITH DRIVING, ALL FIT TO DRIVE.
Event	3	Depart Shop for Location	Depart Shop for Location	2/19/2018	17:10:00	USER	JOURNEY MANAGEMENT PRIOR TO DEPARTURE
Event	4	Arrive at Rig	Arrive at Rig	2/19/2018	19:00:00	USER	UPON ARRIVAL MET WITH COMPANY MAN TO DISCUSS JOB DETAILS AND CALCULATIONS, PERFORMED HAZARD HUNT AND SITE ASSESSMENT.
Event	5	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	2/19/2018	19:30:00	USER	DISCUSSED RIGGING UP HAZARDS AND PROCEDURE ACCORDING TO HMS.
Event	6	Pre-Job Safety Meeting	Pre-Job Safety Meeting	2/19/2018	22:40:00	USER	HELD SAFETY MEETING WITH ALL JOB ASSOCIATED PERSONNEL TO DISCUSS JOB PROCEDURE, HAZARDS AND STOP WORK AUTHORITY.
Event	7	Start Job	Start Job	2/19/2018	23:18:29	COM4	FILLED LINES WITH 3 BBLS OF FRESH WATER TO START. 3 BPM 110 PSI.
Event	8	Test Lines	Test Lines	2/19/2018	23:22:51	COM4	TESTED LINES TO 5500 PSI, AFTER PERFORMING A 500 PSI KICK OUT TEST AND A 5TH GEAR STALL. HELD FOR A LITTLE BIT THEN BLEED OFF SO WE WOULDN'T FREEZE OUR LINES. BLEED OFF, NO LEAKS.
Event	9	Pump Spacer 1	Pump Spacer 1	2/19/2018	23:38:37	COM4	PUMPED 60 BBLS OF 10.5#, 6.32 y, 40.6 wr TUNED SPACER AT 5 BPM, 150 PSI. FULL RETURNS.
Event	10	Drop Bottom Plug	Drop Bottom Plug	2/19/2018	23:56:45	USER	DROPPED NON HALLIBURTON 5.5" TOP

							PLUG. DROPPED BY ADAM COVINGTON AND WITNESSED BY THE CO. MAN.
Event	11	Pump Lead Cement	Pump Lead Cement	2/20/2018	00:02:07	COM4	PUMPED 196 BBLS (700 sks) OF 13.2#, 1.57y, 7.53 wr. CEMENT. AT 5.5 BPM, 192 PSI.
Event	12	Check Weight	Check Weight	2/20/2018	00:28:50	COM4	CHECKED WEIGHT BY USING A PRESSURIZED MUD SCALE. WEIGHED UP AT 13.2#
Event	13	Pump Tail Cement	Pump Tail Cement	2/20/2018	00:40:25	COM4	PUMPED 344 BBLS (1150 SKS) OF 13.5#, 1.68 y, 7.99 wr TAIL CEMENT AT 8 BPM 402 PSI
Event	14	Check Weight	Check Weight	2/20/2018	01:04:57	COM4	CHEKED WEIGHT USING A PRESSURIZED MUD SCALES. WEIGHT UP AT 13.5 #
Event	15	Shutdown	Shutdown	2/20/2018	01:27:24	COM4	SHUTDOWN TO DROP TOP PLUG. WASH PUMPS AND LINES.
Event	16	Drop Top Plug	Drop Top Plug	2/20/2018	01:27:35	COM4	DROPPED 5.5" NON HALLIBURTON TOP PLUG. I DROPPED IT AND CO. MAN WITNESSED
Event	17	Pump Displacement	Pump Displacement	2/20/2018	01:45:26	COM4	PUMPED 322 BBLS OF FRESH WATER DISPLACEMENT. FIRST 20 BEING MIXED WITH MMCR. THE REST WITH ALGECIDE. AT 8 BPM 230 PSI. FULL RETURNS.
Event	18	Bump Plug	Bump Plug	2/20/2018	02:33:00	COM4	BUMPED PLUG AT 3 BPM FCP 2460 AND THE BUMP PRESSURE WAS 2886. FULL RETURNS. GOT TRACES OF SPACER BACK TO SURFACE.
Event	19	Other	Other	2/20/2018	02:44:27	COM4	HELD FOR 10 MINUTE CASING TEST. THEN STARTED PUMPING AT 2 BBLS A MINUTE TO SHEER. SHEER PRESSURE WAS 4421 PSI. THEN STARTED ON PUMPING THE 3 BBLS WET SHOES. CHECKED FLOATS, GOT 2 1/4 BBLS BACK TO THE TRUCK.
Event	20	End Job	End Job	2/20/2018	02:46:04	COM4	
Event	21	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	2/20/2018	03:30:00	USER	DISCUSSED RIGGING DOWN HAZARDS AND

PROCEDURE ACCORDING TO HMS.							
Event	22	Depart Location Safety Meeting	Depart Location Safety Meeting	2/20/2018	05:45:00	USER	HELD MEETING WITH ALL HES EMPLOYEES IN CONVOY TO DISCUSS DIRECTIONS AND HAZARDS ASSOCIATED WITH DRIVING, ALL FIT TO DRIVE.
Event	23	Depart Location for Shop	Depart Location for Shop	2/20/2018	06:00:00	USER	PRE JOURNEY MANAGEMENT PRIOR TO DEPARTURE.

## 3.0 Attachments

### 3.1 Job Chart

Custom Results

