

*The Road to Excellence Starts with Safety*

Sold To #: 300466	Ship To #: 3841594	Quote #: 0022429485	Sales Order #: 0904777494
Customer: ANADARKO PETROLEUM CORP-EBUS		Customer Rep: Albert Bryan	
Well Name: AZUL		Well #: 13-2HZ	API/UWI #: 05-123-45915-00
Field: WATTENBERG	City (SAP): IONE	County/Parish: WELD	State: COLORADO
Legal Description: SW SW-13-1N-66W-921FSL-1174FWL			
Contractor: XTREME DRLG		Rig/Platform Name/Num: XTREME 22	
Job BOM: 7523 7523			
Well Type: HORIZONTAL GAS			
Sales Person: HALAMERICA\HX41066		Srvc Supervisor: Nicholas Roles	

**Job**

Formation Name			
Formation Depth (MD)	Top		Bottom
Form Type	BHST		
Job depth MD	12437ft	Job Depth TVD	
Water Depth	Wk Ht Above Floor		
Perforation Depth (MD)	From		To

**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	1867	0	1867
Casing		5.5	4.892	17	LTC	HCP110	0	12437	0	7588
Open Hole Section			7.875				1867	12447	1867	7588

**Tools and Accessories**

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	5.5			12437	Top Plug	5.5		HES
Float Shoe	5.5				Bottom Plug	5.5		HES
Float Collar	5.5				SSR plug set	5.5		HES
Insert Float	5.5				Plug Container	5.5		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 ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
1	Tuned Spacer III	Tuned Spacer III	60	bbl	10.5	6.43		5		
37.58 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>								

86.45 lbm/bbl		<b>BARITE, BULK (100003681)</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	Gasstop B1	GASSTOP (TM) SYSTEM	400	sack	13.2	1.59		8	7.69
0.10 %		<b>FE-2 (100001615)</b>							
0.40 %		<b>SCR-100 (100003749)</b>							
5.09 Gal		<b>FRESH WATER</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	EconoCem	ECONOCEM (TM) SYSTEM	700	sack	13.5	1.68		8	7.99
0.36 %		<b>HR-5, 50 LB SK (100005050)</b>							
0.20 %		<b>SA-1015, 50 LB SACK (102077046)</b>							
7.99 Gal		<b>FRESH WATER</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	Biocide Water and MMCR	Biocide Water and MMCR	20	bbl	8.34			10	
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>
5	Biocide Water	Biocide Water	268	bbl	8.34			10	
<b>Cement Left In Pipe</b>	<b>Amount</b>	0 ft			<b>Reason</b>			<b>Wet Shoe</b>	
<b>Comment</b> Got 0bbls spacer back to pits. Estimated TOT-5657', TOL-2000', TOS-698'									

## 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	4/13/2018	09:00:00	USER	Called out by Service Coordinator for O/L at 1300
Event	2	Depart Yard Safety Meeting	Depart Yard Safety Meeting	4/13/2018	12:15:00	USER	Held meeting with all personnel in convoy to discuss directions and hazards associated with drive, all fit to drive.
Event	3	Depart from Service Center or Other Site	Depart from Service Center or Other Site	4/13/2018	12:30:00	USER	Journey Management prior to departure
Event	4	Arrive at Location from Service Center	Arrive at Location from Service Center	4/13/2018	13:00:00	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	4/13/2018	14:00:00	USER	Discussed rigging up hazards and procedure according to HMS.
Event	6	Other	Other	4/13/2018	14:30:00	USER	Water test- PH-6, Chlor-0, Temp-85.
Event	7	Safety Meeting - Pre Job	Safety Meeting - Pre Job	4/13/2018	15:00:00	USER	Held safety meeting with all job associated personnel to discuss job procedure, hazards and stop work authority.
Event	8	Start Job	Start Job	4/13/2018	16:56:41	COM4	TD-12447', TP-12437' 5.5" 17#, WS Baffl-12428', TVD-7588', OH-7.875", SURF-1867' 9.625" 36#, MUD-9.5#
Event	9	Pressure Test	Pressure Test	4/13/2018	16:59:53	USER	
Event	10	Pump Spacer 1	Pump Spacer 1	4/13/2018	17:12:50	COM4	Pumped 5bbls fresh water to fill lines, shutdown, closed manifold, performed 500psi k/o function test, continued with 5th gear stall at 1400psi, proceeded to bring pressure to 6000psi. Pressure stabilized and held with no leaks.
Event	11	Drop Bottom Plug	Drop Bottom Plug	4/13/2018	17:37:06	COM4	Dropped by HES supervisor, witnessed by company man.

Event	12	Pump Lead Cement	Pump Lead Cement	4/13/2018	17:37:25	COM4	Pumped 400sks or 113bbbls of 13.2# 1.59y 7.69g/s Gasstop with 1000g of Latex with 60g D-Air at 8bpm 560psi.
Event	13	Check Weight	Check Weight	4/13/2018	17:40:09	COM4	Weight verified with pressurized mud scales.
Event	14	Pump Tail Cement	Pump Tail Cement	4/13/2018	17:55:06	COM4	Pumped 700sks or 209.5bbbls of 13.5# 1.68Y 7.9G/S Econocem at 8bpm 555psi.
Event	15	Check Weight	Check Weight	4/13/2018	18:01:48	COM4	Weight verified with pressurized mud scales.
Event	16	Check Weight	Check Weight	4/13/2018	18:08:54	COM4	Weight verified with pressurized mud scales.
Event	17	Check Weight	Check Weight	4/13/2018	18:11:18	COM4	Weight verified with pressurized mud scales.
Event	18	Shutdown	Shutdown	4/13/2018	18:27:08	USER	
Event	19	Drop Top Plug	Drop Top Plug	4/13/2018	18:38:05	COM4	Dropped by HES supervisor, witnessed by company man.
Event	20	Pump Displacement	Pump Displacement	4/13/2018	18:38:09	COM4	Pumped 288bbbls fresh water with 10g MMCR in first 20bbbls, followed with 5g biocide throughout at 10bpm.
Event	21	Bump Plug	Bump Plug	4/13/2018	19:20:01	COM4	Slowed down at 270bbbls away to 3bpm, Final Circulating Pressure-2500psi, Bump Pressure-3000psi. Held for 5min casing test
Event	22	Pressure Up Well	Pressure Up Well	4/13/2018	19:23:36	COM4	Proceeded to bring pressure up to sheer at 4600psi, continued to pump 3bbbls at 3bpm 2720psi for wet shoe.
Event	23	Check Floats	Check Floats	4/13/2018	19:26:49	USER	Released pressure and got 2.5bbbls back to truck.
Event	24	End Job	End Job	4/13/2018	19:28:38	USER	Got 0bbbls spacer back to pits. Estimated TOT-5657', TOL-2000', TOS-698'
Event	25	Safety Meeting - Pre Rig-Down	Safety Meeting - Pre Rig-Down	4/13/2018	19:30:00	USER	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	26	End Job	End Job	4/13/2018	19:53:44	COM4	
Event	27	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	4/13/2018	21:15:00	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	4/13/2018	21:30:00	USER	Pre journey management prior to departure.

3.0 Attachments

3.1 Job Chart

