

The Road to Excellence Starts with Safety

Sold To #: 300466	Ship To #: 0003841746	Quote #: 0022425933	Sales Order #: 0904761841
Customer: ANADARKO PETROLEUM CORP-EBUS		Customer Rep: Jermy	
Well Name: AZUL		Well #: 13-4HZ	API/UWI #: 05-123-45913-00
Field: WATTENBERG	City (SAP): HUDSON	County/Parish: WELD	State: COLORADO
Legal Description: SW SW-13-1N-66W-920FSL-1219FWL			
Contractor: XTREME DRLG		Rig/Platform Name/Num: XTREME 22	
Job BOM: 7523 7523			
Well Type: HORIZONTAL GAS			
Sales Person: HALAMERICA\HX41066		Srvc Supervisor: Ryan Stevens	

Job

Formation Name			
Formation Depth (MD)	Top		Bottom
Form Type	BHST		
Job depth MD	12559ft	Job Depth TVD	7412
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	1863	0	0
Casing	New	5.5	4.892	17	LTC	HCP110	0	12559	0	7412
Open Hole Section			7.875				1863	12576	0	0

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	5.5				Top Plug	5.5	1	Weath
Float Shoe	5.5	1	Weath	12559	Bottom Plug	5.5	1	Weath
Float Collar	5.5	1	Weath	12558	SSR plug set	5.5		
Insert Float	5.5				Plug Container	5.5	1	HES
Stage Tool	5.5				Centralizers	5.5		

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				
37.58 gal/bbl		FRESH WATER								
0.70 gal/bbl		DUAL SPACER SURFACTANT B, 5 GAL PAIL (100003665)								
0.50 gal/bbl		D-AIR 3000L, 5 GAL PAIL (101007444)								

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	710	sack	13.5	1.68	7.99	6	5672	
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	Displacement	Biocide Water and MMCR	20	bbl	8.34			10		
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	271	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:			61 °F	
Cement Temperature:		65 °F	Plug Displaced by: 8.34 Lb/Gal			Disp. Temperature:			61 °F	
Plug Bumped?		Yes	Bump Pressure: 2,861 psi			Floats Held?			Yes	
Cement Returns:		0 bbl	Returns Density:			Returns Temperature:				
Comment Calculated top of tail with perfect hole 5,680										
Calculated top of Lead with perfect hole @ 2,028'										
Calculated top of spacer with perfect hole @ 716.										

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	4/6/2018	22:00:00	USER	CREW CALLED OUT @ 22:00, REQUESTED ON LOCATION TIME 05:00 4/7/18. CREW PICKED UP CHEMICALS, PLUG CONTAINER, PUMP AND BULK TRUCKS FROM FORT LUPTON YARD.
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	4/7/2018	04:00:00	USER	DISCUSS HAZARDS ALONG ROUTTE.
Event	3	Crew Leave Yard	Crew Leave Yard	4/7/2018	04:10:00	USER	START JOURNEY MANAGEMENT
Event	4	Arrive At Loc	Arrive At Loc	4/7/2018	04:30:00	USER	END JOURNEY MANAGEMENT, MEET WITH COMPANY REP AND DISCUSS JOB PROCEDURES. 77/8 OH @ 12,578, 5.5 17# CSG @ 12,559, SURFACE 9 5/8 36# SET @ 1861'
Event	5	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	4/7/2018	04:36:00	USER	DISCUSS HAZARDS ASSOCIATED WITH RIG UP
Event	6	Rig-Up Equipment	Rig-Up Equipment	4/7/2018	05:00:00	USER	CREW RIGGED UP BULK TRUCKS, WATER HOSES AND IRON TO PERFORM JOB.
Event	7	Pre-Job Safety Meeting	Pre-Job Safety Meeting	4/7/2018	06:00:00	USER	MEETING WITH RIG CREW AND HES PERSONNEL. DISSCUSSED JOB PROCEDURES AND SAFETY CONCERNS
Event	8	Start Job	Start Job	4/7/2018	06:54:56	COM4	START RECORDING JOB DATA
Event	9	Test Lines	Test Lines	4/7/2018	06:57:33	COM4	TEST LINES TO 6,307 PSI EKO SET @ 500 KICKED OUT @ 2100.
Event	10	Pump Spacer 1	Pump Spacer 1	4/7/2018	07:09:18	COM4	PUMP 60 BBLS OF TUNED SPACER @ 10.5 PPG DENSITY VERIFIED BY PRESSUREIZED UD SCALES
Event	11	Drop Bottom Plug	Drop Bottom Plug	4/7/2018	07:25:02	USER	VERIFIED BY COMPANY REP

Event	12	Pump Lead Cement	Pump Lead Cement	4/7/2018	07:29:09	COM4	PUMP 400 SXS OF GASSTOP CEMENT @ 13.2 PPG YIELD 1.59 MIX WATER 7.69. TOP OF LEAD CALCATED AFTER 15 BBLS OF SPACER BACK 938' DENSITY VERIFIED BY PRESSUREIZED MUD SCALES
Event	13	Pump Tail Cement	Pump Tail Cement	4/7/2018	07:50:44	COM4	PUMP 710 SXS OF ECONOCEM @ 13.5 YIELD 1.68 MIX WATER 7.99. TOP OF TAIL CALCULATED @ 3,288 WITH 15 BBLS OF SPACER BACK
Event	14	Shutdown	Shutdown	4/7/2018	08:26:36	COM4	SHUT DOWN
Event	15	Clean Lines	Clean Lines	4/7/2018	08:28:11	COM4	WASH PUMPS AND LINES
Event	16	Drop Top Plug	Drop Top Plug	4/7/2018	08:35:33	COM4	VERIFIED BY COMPANY REP
Event	17	Pump Displacement	Pump Displacement	4/7/2018	08:36:20	COM4	PUMP CALCULATED DISPLACEMENT OF 292 BBLS. FIRST 20 WITH MMCR AND RIG BIOCIDES THROUGH OUT THE REST.
Event	18	Bump Plug	Bump Plug	4/7/2018	09:21:44	COM4	BUMPPLUG @ 2.8 BPM FINAL CIRCULATING PRESSURE @ 2,481. BUMP PRESSURE @ 2.861
Event	19	Other	Casing test	4/7/2018	09:23:50	COM4	15 MINUTE CASING TEST @ 3,000 PSI
Event	20	Check Floats	Check Floats	4/7/2018	09:34:25	USER	2.5 BBLS BACK
Event	21	Other	Other	4/7/2018	09:38:14	COM4	OPEN WET SHOE SUB PUMP 3 BBLS TOOL OPENED @ 4,775 PSI
Event	22	End Job	End Job	4/7/2018	09:40:00	COM4	STOP RECORDING JOB DATA

Event	23	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	4/7/2018	09:48:12	USER	CREW DISCUUSED HAZARDS ASSPCIATED WITH RIG DOWN
Event	24	Rig-Down Completed	Rig-Down Completed	4/7/2018	11:00:00	USER	ALL EQUIPMENT WAS STOED AND READY FOR TRAVEL.LOCATION WAS LEFT CLEAN
Event	25	Crew Leave Location	Crew Leave Location	4/7/2018	11:45:00	USER	THANKS RYAN STEVENS AND CREW

3.0 Attachments

3.1 Job Chart

