

The Road to Excellence Starts with Safety

Sold To #: 300466		Ship To #: 3841630		Quote #: 0022421505		Sales Order #: 0904730147					
Customer: ANADARKO PETROLEUM CORP-EBUS				Customer Rep: Dave Cornett							
Well Name: AZUL			Well #: 13-8HZ		API/UWI #: 05-123-45910-00						
Field: WATTENBERG		City (SAP): HUDSON		County/Parish: WELD		State: COLORADO					
Legal Description: SW SW-13-1N-66W-919FSL-1309FWL											
Contractor: XTREME DRLG				Rig/Platform Name/Num: XTREME 22							
Job BOM: 7523 7523											
Well Type: HORIZONTAL GAS											
Sales Person: HALAMERICA\HX41066				Srv Supervisor: Nicholas Peterson							
Job											
Formation Name											
Formation Depth (MD)		Top		Bottom							
Form Type				BHST							
Job depth MD		12,726'		Job Depth TVD		7,325					
Water Depth				Wk Ht Above Floor		5'					
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	1866	0	0	
Casing	0	5.5	4.892	17	LTC	HCP110	0	12726	0	0	
Open Hole Section			7.875				1866	12737	6092	7325	
Tools and Accessories											
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make		
Guide Shoe	5.5	1	WEATH	12,726		Top Plug	5.5	1	WEATH		
						Bottom Plug	5.5	1	WEATH		
Float Collar	5.5	1	WEATH	12,724		SSR plug set					
Wet Shoe Sub	5.5	1	WEATH	12,717		Plug Container	5.5	1	HES		
						Centralizers	5.5	206	WEATH		
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	41.3	6	2,478

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	1.6	7.7	6	3,080	
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	ECONOCER (TM) SYSTEM	730	sack	13.5	1.68	7.99	8	5,833	
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	Water MMCR	MMCR	20	bbl	8.34			8		
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	275	bbl	8.34			8		
Cement Left In Pipe		Amount	5 ft		Reason			Shoe Joint		
Mix Water:		pH 7.0	Mix Water Chloride:			0 ppm		Mix Water Temperature:		60 °F
Cement Temperature:		## °F	Plug Displaced by:			8.33 lb/gal		Disp. Temperature:		60 °F
Plug Bumped?		Yes	Bump Pressure:			2,600 psi		Floats Held?		Yes
Cement Returns:		0 bbl	Returns Density:			## lb/gal		Returns Temperature:		## °F
Comment: Pumped 60 bbls Tuned Spacer, 113 bbls Lead, 218 bbls Tail, cleaned lines pumped 295 bbls Displacement. No Spacer or cement to surface.										

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	3/23/2018	22:30:00	USER	CREW CALLED OUT AT 22:30, REQUESTED ON LOCATION 05:00. CREW PICKED UP CEMENT, CHEMICALS, AND PLUG CONTAINER FROM FT. LUPTON, CO. BULK 660 10866493, Bulk 660 10784082, 12051660 AND PUMP 11189145.
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	3/24/2018	02:45:00	USER	DISCUSSED ROUTES HAZARDS AND COMMUNICATION WITH CREW.
Event	3	Crew Leave Yard	Crew Leave Yard	3/24/2018	03:00:00	USER	STARTED JOURNEY MANAGEMENT.
Event	4	Arrive at Location from Service Center	Arrive at Location	3/24/2018	03:30:00	USER	END JOURNEY MANAGEMENT. MEET WITH CO. MAN TO DISCUSS JOB; SURFACE CASING- 9.625" 36 LB/FT @ 1,866', 5.5" CASING: 17 LB/FT TOTAL 12,726.40, OH- 7.875", TD 12,737', SHOE TRAC- 11.71', TVD- 7,325'. PUMP FRESH WATER DISPLACEMENT WITH MMCR FIRST 20 BBLs. CASING LANDED @ 05:45 03/24/2018. RIG CIRCULATED 2 BOTTOMS UP.
Event	5	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	3/24/2018	03:45:00	USER	HAZARD HUNT. DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH LOCATION, RIG UP AND WEATHER.
Event	6	Rig-Up Equipment	Rig-Up Equipment	3/24/2018	04:00:00	USER	CREW STAGED EQUIPMENT AND RIGGED UP BULK, IRON, AND WATER HOSES TO PERFORM JOB.
Event	7	Rig-Up Completed	Rig-Down Completed	3/24/2018	06:00:00	USER	FINISHED MIXING UP LATEX WITH MIX WATER.
Event	8	Safety Meeting - Pre Job	Safety Meeting - Pre Job	3/24/2018	07:15:00	USER	MEETING WITH HALLIBURTON AND RIG PERSONNEL. COMMUNICATED POTENTIAL SAFETY HAZARDS AND JOB DETAILS.
Event	9	Start Job	Start Job	3/24/2018	07:30:52	COM5	BEGIN RECORDING JOB DATA.

Event	10	Test Lines	Test Lines	3/24/2018	07:40:27	COM5	END JOURNEY MANAGEMENT. MEET WITH CO. MAN TO DISCUSS JOB; SURFACE CASING- 9.625" 36 LB/FT @ 1,866', 5.5" CASING: 17 LB/FT TOTAL 12,726.40, OH- 7.875", TD 12,737', SHOE TRAC- 11.71', TVD- 7,325'. PUMP FRESH WATER DISPLACEMENT WITH MMCR FIRST 20 BBLS. CASING LANDED @ 05:45 03/24/2018. RIG CIRCULATED 2 BOTTOMS UP.
Event	11	Pump Spacer 1	Pump Spacer 1	3/24/2018	07:52:48	COM5	PUMP 60 BBLS OF TUNED SPACER @ 10.5 LB/GAL, 20 GALLONS D-AIR, 40 GALS DUAL SPACER B, 40 GALS MUSOL A. HOS CALCULATED @ 1,293.25', TOS CALCULATED @ 686.46'. DENSITY VERIFIED BY PRESSURIZED MUD SCALES. PUMP RATE 4 BBLS/MIN @ 490 PSI.
Event	12	Pump Lead Cement	Pump Lead Cement	3/24/2018	08:06:47	COM5	PUMPED 400 SKS OF GASSTOP @ 13.2 LB/GAL, 1.6 FT3/SK, 7.7 GAL/SK. 113.98 BBLS, HOL CALCULATED @ 3,688.67', TOL CALCULATED @ 1,979.71'. DENSITY VERIFIED BY PRESSURIZED MUD SCALES. PUMP RATE 6 BBLS/MIN @ 380 PSI.
Event	13	Pump Tail Cement	Pump Tail Cement	3/24/2018	08:27:43	COM5	PUMP 730 SKS OF ECONOCEM @ 13.5 LB/GAL, 1.68 FT3/SK, 7.99 GAL/SK, 218.42 BBLS. HOT CALCULATED @ 7,068.61', TOT CALCULATED @ 5,668.38'. DENSITY VERIFIED BY PRESSURIZED MUD SCALES. PUMP RATE 6 BBLS/MIN @ 397 PSI.
Event	14	Clean Lines	Clean Lines	3/24/2018	09:04:57	USER	CLEAN LINES WITH 6 BBLS FRESH WATER AND RIG BLEW DOWN AIR FROM HEAD TO WASH UP MANIFOLD.
Event	15	Drop Top Plug	Drop Top Plug	3/24/2018	09:10:52	COM5	PLUG LEFT CONTAINER, VERIFIED BY CO. MAN.
Event	16	Pump Displacement	Pump Displacement	3/24/2018	09:12:32	COM5	BEGIN CALCULATED DISPLACEMENT OF 295 BBLS WITH FRESH WATER. PUMPED THE FIRST 10 BBLS WITH MMCR, PUMPED 200 BBLS WITH BIOCIDES.

Event	17	Bump Plug	Bump Plug	3/24/2018	09:55:53	COM5	PLUG BUMPED AT CALCULATED DISPLACEMENT. 2,700 PSI PRESSURED 500 PSI OVER BUMP. HELD PRESSURE FOR 15 MINS FOR CASING PRESSURE TEST.
Event	18	Shift Tool - Lower	Shift Tool - Lower	3/24/2018	10:12:46	USER	SHIFTED WET SHOE SUB @ 4,000 PSI. PUMPED 3 BBLs FOR WET SHOE.
Event	19	Check Floats	Check Floats	3/24/2018	10:14:48	USER	RELEASED PRESSURE, FLOATS HELD, 2 BBLs BACK.
Event	20	End Job	End Job	3/24/2018	10:16:08	COM5	STOP RECORDING JOB DATA.
Event	21	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	3/24/2018	10:30:00	USER	DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH WEATHER, LOCATION AND RIGGING DOWN IRON AND HOSES.
Event	22	Rig-Down Equipment	Rig-Down Equipment	3/24/2018	10:45:00	USER	RIG DOWN BULK AND MIXING EQUIPMENT.
Event	23	Rig-Down Completed	Rig-Down Completed	3/24/2018	12:00:00	USER	ALL HALLIBURTON ITEMS WERE STOWED FOR TRAVEL, AND LOCATION WAS CLEAN.
Event	24	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	3/24/2018	12:15:00	USER	DISCUSSED ROUTES, HAZARDS, AND COMMUNICATION WITH CREW.
Event	25	Depart Location	Depart Location	3/24/2018	12:30:00	USER	THANK YOU FOR USING HALLIBURTON - NICK PETERSON AND CREW.

3.0 Attachments

3.1 Job Chart

