

The Road to Excellence Starts with Safety

Sold To #: 300466	Ship To #: 3841747	Quote #:	Sales Order #: 0904737325
Customer: ANADARKO PETROLEUM CORP-EBUS		Customer Rep: Anadarko	
Well Name: AZUL	Well #: 13-7HZ	API/UWI #: 05-123-45911-00	
Field: WATTENBERG	City (SAP): HUDSON	County/Parish: WELD	State: COLORADO
Legal Description: SW SW-13-1N-66W-919FSL-1294FWL			
Contractor: XTREME DRLG		Rig/Platform Name/Num: XTREME 22	
Job BOM: 7523 7523			
Well Type: HORIZONTAL GAS			
Sales Person: HALAMERICA\HX41066		Srvc Supervisor: Bryan Kraft	

Job

Formation Name			
Formation Depth (MD)	Top		Bottom
Form Type	BHST		
Job depth MD	12857ft	Job Depth TVD	7374ft
Water Depth		Wk Ht Above Floor	4ft
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	1870	0	1870
Casing	0	5.5	4.892	17	LTC	HCP110	0	12857	0	7374
Open Hole Section			7.875				1870	12884	1870	7374

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe					Top Plug	5.5	1	WF
Float Shoe	5.5	1	WF	12857	Bottom Plug	5.5	1	WF
Wet Shoe Sub	5.5	1	WF	12845	SSR plug set			
Insert Float					Plug Container	5.5	1	HES
Stage Tool					Centralizers			

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	Spacer	TUNED SPACER III	60	bbl	10.5	6.43	41.3	4	2164	
	37.58 gal/bbl	FRESH WATER								
	0.70 gal/bbl	DUAL SPACER SURFACTANT B, 5 GAL PAIL (100003665)								
	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	Lead Cement	GASSTOP (TM) SYSTEM	400	sack	13.2	1.6	7.7	8	3080	
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	Tail Cement	ECONOCEM (TM) SYSTEM	730	sack	13.5	1.68	7.99	8	5833	
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	FRESH WATER	298	bbl	8.33			8	12516	
0.50 gal/bbl		MICRO MATRIX CEMENT RETARDER, 5 GAL PAIL (100003781)								
Cement Left In Pipe	Amount	0 ft			Reason			Wet Shoe Joint		
Mix Water:	pH 7	Mix Water Chloride:	<300 ppm			Mix Water Temperature:	60 °F			
Cement Temperature:	N/A	Plug Displaced by:	8.33lb/gal Fresh Water			Disp. Temperature:	60 °F			
Plug Bumped?	Yes	Bump Pressure:	2450 psi			Floats Held?	Yes			
Cement Returns:	N/A	Returns Density:	N/A			Returns Temperature:	N/A			
Comment: The plug bumped @ calculated displacement @ 2450 PSI, shutdown for 15 minutes @ 3000 PSI. Held a 3000 PSI casing pressure test for 15 minutes. The sleeve opened @ 4947 PSI and pumped a 3 BBL wet shoe. The floats held and received 2.5 BBLS back to the truck. Nothing returned to surface.										

1.0 Real-Time Job Summary

1.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Comments
Event	1	Call Out	Call Out	3/27/2018	13:00:00	USER	CREW CALLED OUT AT 13:00 3/27/2018, REQUESTED ON LOCATION 19:00 3/27/2018. CREW PICKED UP CEMENT, CHEMICALS (40 GAL MUSOL A, 40 GAL DUAL SPACER B, 70 GAL D-AIR, 10 GAL MMCR), 200 LBS SUGAR, PLUG CONTAINER AND MANIFOLD FROM FORT LUPTON,CO. BULK 660: 11062238/10866489, BULK 660: 11526488/10866493,CHEMICAL TRUCK: 10856976/10251660, PUMP ELITE 11897034/11645460.
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	3/27/2018	16:45:00	USER	DISCUSSED ROUTES, HAZARDS, AND COMMUNICATION WITH CREW.
Event	3	Crew Leave Location	Crew Leave Location	3/27/2018	17:00:00	USER	STARTED JOURNEY MANAGEMENT.
Event	4	Arrive At Loc	Arrive At Loc	3/27/2018	17:30:00	USER	END JOURNEY MANAGEMENT. MEET WITH CO. MAN TO DISCUSS JOB; SURFACE CASING: 9.625" 36# J-55 @ 1870', 5.5" CASING: 17# P-110 @ 12857.07', 11.71' SHOE JOINT, 7.875" OPEN HOLE, TVD @ 7374', 9.4 PPG WELL FLUID, FRESH WATER DISPLACEMENT.

Event	5	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	3/27/2018	17:45:00	USER	HAZARD HUNT. DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH LOCATION, RIG UP AND WEATHER.
Event	6	Rig-Up Equipment	Rig-Up Equipment	3/27/2018	17:50:00	USER	CREW STAGED EQUIPMENT AND RIGGED UP BULK, IRON, AND WATER HOSES TO PERFORM JOB.
Event	7	Pre-Job Safety Meeting	Pre-Job Safety Meeting	3/27/2018	23:00:00	USER	MEETING WITH HALLIBURTON AND RIG PERSONNEL. COMMUNICATED POTENTIAL SAFETY HAZARDS AND JOB DETAILS.
Event	8	Start Job	Start Job	3/27/2018	23:10:03	USER	BEGIN REOCRDRING JOB DATA.
Event	9	Test Lines	Test Lines	3/27/2018	23:15:06	RTD Import	PRESSURE TESTED IRON TO 6000 PSI. KICKOUTS SET @ 500 PSI, KICKED OUT @ 650 PSI, 5TH GEAR STALL OUT @ 1950 PSI.
Event	10	Pump Spacer 1	Pump Tuned Spacer @ 10.5 ppg	3/27/2018	23:22:50	RTD Import	PUMP 60 BBLS OF TUNED SPACER @ 10.5 LB/GAL, ADDED 40 GAL MUSOL A, 40 GAL DUAL SPACER B, 20 GAL D-AIR, DENSITY VERIFIED BY PRESSURIZED MUD SCALES.
Event	11	Drop Plug	Drop Bottom Plug	3/27/2018	23:41:37	RTD Import	PLUG LEFT CONTAINER, VERIFIED BY DRILLER.
Event	12	Pump Lead Cement	Pump Lead Cement @ 13.2 ppg	3/27/2018	23:44:31	RTD Import	PUMP 400 SKS OF ELASTICEM @ 13.2 LB/GAL, 1.6 YIELD, 7.7 GAL/SK, 114 BBLS, CALCULATED TOL @ 2122', DENSITY VERIFIED BY PRESSURIZED MUD SCALES.
Event	13	Shutdown	Shutdown	3/28/2018	00:13:13	RTD Import	SHUTDOWN TO SWITCH FROM LEAD TO TAIL.
Event	14	Pump Tail Cement	Pump Tail Cement @ 13.5 ppg	3/28/2018	00:20:06	RTD Import	PUMP 730 SKS OF ECONOCEM @ 13.5 LB/GAL, 1.68 YIELD, 7.99 GAL/SK, 218

							BBLs, CALCULATED TOT @ 5811', DENSITY VERIFIED BY PRESSURIZED MUD SCALES.
Event	15	Shutdown	Shutdown	3/28/2018	00:51:21	RTD Import	SHUTDOWN TO WASH PUMPS/LINES AND DROP TOP PLUG.
Event	16	Drop Top Plug	Drop Top Plug	3/28/2018	01:01:43	RTD Import	PLUG LEFT CONTAINER, VERIFIED BY CO. MAN.
Event	17	Pump Displacement	Pump Fresh Water Displacement	3/28/2018	01:03:20	RTD Import	BEGIN CALCULATED DISPLACEMENT OF 298 BBLs WITH FRESH WATER. MMCR AND BIOCIDES ADDED TO 1ST 20 BBLs. BIOCIDES ADDED THROUGH REST OF DISPLACEMENT.
Event	18	Bump Plug	Bump Plug	3/28/2018	01:46:35	RTD Import	PLUG BUMPED AT CALCULATED DISPLACEMENT. FINAL CIRCULATING PRESSURE OF 2450 PSI.
Event	19	Shutdown	Shutdown	3/28/2018	01:46:58	USER	SHUTDOWN FOR 15 MINUTES @ 3000 PSI.
Event	20	Pressure Test	Casing Pressure Test	3/28/2018	01:47:10	USER	CASING PRESSURE TEST, 3000 PSI FOR 15 MINUTES.
Event	21	Other	Open Sleeve	3/28/2018	02:03:17	USER	PRESSURE UP TO OPEN SLEEVE. SLEEVE OPENED @ 4947 PSI.
Event	22	Pump Displacement	Pump Wet Shoe	3/28/2018	02:03:24	USER	PUMP 3 BBLs OF FRESH WATER FOR A WET SHOE.
Event	23	Check Floats	Check Floats	3/28/2018	02:04:28	USER	RELEASED PRESSURE, FLOATS HELD, 2.5 BBLs BACK.
Event	24	End Job	End Job	3/28/2018	02:05:07	USER	STOP RECORDING JOB DATA.

Event	25	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	3/28/2018	03:10:00	USER	DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH WEATHER, LOCATION AND RIGGING DOWN IRON AND HOSES.
Event	26	Rig-Down Completed	Rig-Down Completed	3/28/2018	05:00:00	USER	ALL HALLIBURTON ITEMS WERE STOWED FOR TRAVEL,AND LOCATION WAS CLEAN.
Event	27	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	3/28/2018	05:15:00	USER	DISCUSSED ROUTES HAZARDS AND COMMUNICATION WITH CREW.
Event	28	Crew Leave Location	Crew Leave Location	3/28/2018	05:30:00	USER	THANK YOU FOR USING HALLIBURTON - BRYAN KRAFT AND CREW.

2.0 Attachments

2.1 Job Chart

