

The Road to Excellence Starts with Safety

Sold To #: 300466		Ship To #: 3847934		Quote #: 0022425671		Sales Order #: 0904760223				
Customer: ANADARKO PETROLEUM CORP-EBUS				Customer Rep: Carlton Cooley						
Well Name: AZUL			Well #: 13-29HZ		API/UWI #: 05-123-46116-00					
Field: WATTENBERG		City (SAP): HUDSON		County/Parish: WELD		State: COLORADO				
Legal Description: SE SW-13-1N-66W-790FSL-2446FWL										
Contractor: PRECISION DRLG				Rig/Platform Name/Num: PRECISION 464						
Job BOM: 7523 7523										
Well Type: HORIZONTAL GAS										
Sales Person: HALAMERICA\HX41066				Srv Supervisor: Bryan Kraft						
Job										
Formation Name										
Formation Depth (MD)		Top		Bottom						
Form Type				BHST						
Job depth MD		12704ft		Job Depth TVD		7389ft				
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	1880	0	1880
Casing		5.5	4.892	17	LTC	HCP110	0	12683	0	7389
Open Hole Section			7.875				1880	12714	1880	7389
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	12683		Bottom Plug	5.5	1	WF	
Float Collar	5.5	1	WF	12678		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)								
0.25 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	Lead Cement	GASSTOP (TM) SYSTEM	395	sack	13.2	1.6	7.7	6	3042	
0.10 %		FE-2 (100001615)								
0.40 %		SCR-100 (100003749)								
5.08 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	720	sack	13.5	1.68	7.99	8	5753	
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	295	bbl	8.33			10	12390	
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:		65 °F
Cement Temperature:		N/A	Plug Displaced by:			8.33lb/gal Fresh Water		Disp. Temperature:		65 °F
Plug Bumped?		Yes	Bump Pressure:			2800 psi		Floats Held?		Yes
Cement Returns:		N/A	Returns Density:			N/A		Returns Temperature:		N/A
Comment: The plug bumped @ calculated displacement @ 2800 PSI, shutdown for 15 minutes @ 3000 PSI for a casing pressure test. The sleeve opened @ 4851 PSI and pumped a 5 BBL wet shoe. The floats held and receieved 2.5 BBLS back to the truck. Nothing returned to surface. Predicted TOC 1406'										

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	4/3/2018	16:00:00	USER	CREW CALLED OUT AT 16:00 4/3/2018, REQUESTED ON LOCATION 20:00 4/3/2018. 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: 12113644/11023106, BULK BACKUP AIR 660: 11005806/10867521, CHEMICAL TRUCK: 10856976/12051660, PUMP ELITE 11897034/11645460.
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	4/3/2018	19:20:00	USER	DISCUSSED ROUTES, HAZARDS, AND COMMUNICATION WITH CREW.
Event	3	Crew Leave Yard	Crew Leave Yard	4/3/2018	19:30:00	USER	STARTED JOURNEY MANAGEMENT.
Event	4	Arrive At Loc	Arrive At Loc	4/3/2018	20:00:00	USER	END JOURNEY MANAGEMENT. MEET WITH CO. MAN TO DISCUSS JOB; SURFACE CASING: 9.625" 36# J-55 @ 1880', 5.5" CASING: 17# P-110 @ 12704', 5' SHOE JOINT, 7.875" OPEN HOLE, TVD @ 7389', 9.1 PPG WELL FLUID, FRESH WATER DISPLACEMENT.
Event	5	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	4/3/2018	20:10:00	USER	HAZARD HUNT. DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH LOCATION, RIG UP AND WEATHER.
Event	6	Rig-Up Equipment	Rig-Up Equipment	4/3/2018	20:15:00	USER	CREW STAGED EQUIPMENT AND RIGGED UP BULK, IRON, AND WATER HOSES TO PERFORM JOB.
Event	7	Event	Pre-Job Safety Meeting	4/3/2018	23:30:00	USER	MEETING WITH HALLIBURTON AND RIG PERSONNEL. COMMUNICATED POTENTIAL SAFETY HAZARDS AND JOB DETAILS.
Event	8	Start Job	Start Job	4/4/2018	00:09:07	COM6	BEGIN REOCRDRING JOB DATA.

Event	9	Test Lines	Test Lines	4/4/2018	00:18:04	COM6	PRESSURE TESTED IRON TO 6000 PSI. KICKOUTS SET @ 500 PSI, KICKED OUT @ 900 PSI, 5TH GEAR STALL OUT @ 1620 PSI.
Event	10	Pump Spacer 1	Pump Spacer @ 10.5 ppg	4/4/2018	00:22:36	COM6	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	Shutdown	Shutdown	4/4/2018	00:39:38	USER	SHUTDOWN TO DROP BOTTOM PLUG AND MIX LEAD CEMENT.
Event	12	Drop Bottom Plug	Drop Bottom Plug	4/4/2018	00:42:28	USER	PLUG LEFT CONTAINER, VERIFIED BY CO. MAN.
Event	13	Pump Lead Cement	Pump Lead Cement @ 13.2 ppg	4/4/2018	00:45:45	COM6	PUMP 395 SKS OF ELASTICEM @ 13.2 LB/GAL, 1.6 YIELD, 7.7 GAL/SK, 113 BBLS, CALCULATED TOL @ 2092', MIX WATER MIXED WITH 1000 GAL OF LATEX AND 50 GAL D-AIR, DENSITY VERIFIED BY PRESSURIZED MUD SCALES.
Event	14	Shutdown	Shutdown	4/4/2018	01:05:31	USER	SHUTDOWN TO SWITCH FROM LEAD TO TAIL.
Event	15	Pump Tail Cement	Pump Tail Cement @ 13.5 ppg	4/4/2018	01:13:09	COM6	PUMP 720 SKS OF ECONOCHEM @ 13.5 LB/GAL, 1.68 YIELD, 7.99 GAL/SK, 215 BBLS, CALCULATED TOT @ 5749', DENSITY VERIFIED BY PRESSURIZED MUD SCALES.
Event	16	Shutdown	Shutdown	4/4/2018	01:44:02	COM6	SHUTDOWN TO WASH PUMPS/LINES AND DROP TOP PLUG.
Event	17	Drop Top Plug	Drop Top Plug	4/4/2018	01:51:58	COM6	PLUG LEFT CONTAINER, VERIFIED BY CO. MAN.
Event	18	Pump Displacement	Pump Fresh Water Displacement	4/4/2018	01:52:20	COM6	BEGIN CALCULATED DISPLACEMENT OF 295 BBLS WITH FRESH WATER. MMCR AND BIOCIDES ADDED TO 1ST 20 BBLS. BIOCIDES ADDED THROUGH REST OF DISPLACEMENT.
Event	19	Bump Plug	Bump Plug	4/4/2018	02:30:29	COM6	PLUG BUMPED AT CALCULATED DISPLACEMENT. FINAL CIRCULATING PRESSURE OF 2800 PSI. NOTHING RETURNED TO SURFACE.

Event	20	Shutdown	Shutdown	4/4/2018	02:30:54	USER	SHUTDOWN FOR 15 MINUTES @ 3000 PSI.
Event	21	Pressure Test	Casing Pressure Test	4/4/2018	02:31:00	USER	CASING PRESSURE TEST, 3000 PSI FOR 15 MINUTES.
Event	22	Other	Open Sleeve	4/4/2018	02:44:26	USER	PRESSURE UP TO OPEN SLEEVE. SLEEVE OPENED @ 4851 PSI.
Event	23	Pump Displacement	Pump Wet Shoe	4/4/2018	02:44:39	USER	PUMP 5 BBLS OF FRESH WATER FOR A WET SHOE.
Event	24	Check Floats	Check Floats	4/4/2018	02:46:20	USER	RELEASED PRESSURE, FLOATS HELD, 2.5 BBLS BACK.
Event	25	End Job	End Job	4/4/2018	02:47:42	COM6	STOP RECORDING JOB DATA.
Event	26	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	4/4/2018	02:50:00	USER	DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH WEATHER, LOCATION AND RIGGING DOWN IRON AND HOSES.
Event	27	Rig-Down Completed	Rig-Down Completed	4/4/2018	04:00:00	USER	ALL HALLIBURTON ITEMS WERE STOWED FOR TRAVEL, AND LOCATION WAS CLEAN.
Event	28	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	4/4/2018	04:45:00	USER	DISCUSSED ROUTES HAZARDS AND COMMUNICATION WITH CREW.
Event	29	Crew Leave Location	Crew Leave Location	4/4/2018	05:00:00	USER	THANK YOU FOR USING HALLIBURTON - BRYAN KRAFT AND CREW.

3.0 Attachments

3.1 Job Chart

Custom Results

