

The Road to Excellence Starts with Safety

Sold To #: 300466	Ship To #: 3841837	Quote #: 0022428085	Sales Order #: 0904770677
Customer: ANADARKO PETROLEUM CORP-EBUS		Customer Rep: Jeremy Wilde	
Well Name: AZUL	Well #: 13-3HZ	API/UWI #: 05-123-45917-00	
Field: WATTENBERG	City (SAP): HUDSON	County/Parish: WELD	State: COLORADO
Legal Description: SW SW-13-1N-66W-921FSL-1204FWL			
Contractor: XTREME DRLG		Rig/Platform Name/Num: XTREME 22	
Job BOM: 7523 7523			
Well Type: HORIZONTAL GAS			
Sales Person: HALAMERICA\HX41066		Srvc Supervisor: Nicholas Peterson	

Job

Formation Name			
Formation Depth (MD)	Top		Bottom
Form Type	BHST		
Job depth MD	12,333'	Job Depth TVD	7,349'
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	1858	0	1858
Casing	0	5.5	4.892	17	LTC	HCP110	0	12333	0	0
Open Hole Section			7.875				1868	12344	0	0

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	5.5	1	WEATH	12,333	Top Plug	5.5	1	WEATH
					Bottom Plug	5.5	1	WEATH
Wet Shoe Sub	5.5	1	WEATH	12,324				
Insert Float	5.5				Plug Container	5.5	1	HES
					Centralizers	5.5	221	WEAHT

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	4	

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	7.7	8	3,080	
3	EconoCem	ECONOCEM (TM) SYSTEM	690	sack	13.5	1.68	7.99	8	5,513	
4	Displace MMCR	MMCR	20	bbl	8.34			8		
0.50 gal/bbl		MICRO MATRIX CEMENT RETARDER, 5 GAL PAIL								
5	Displace Biocide Water	Biocide Water	220	bbl	8.34			8		
Cement Left In Pipe		Amount	0'		Reason			Wet Shoe		
Mix Water:		6.8 pH	Mix Water Chloride:		0 ppm		Mix Water Temperature:			62 °F
Cement Temperature:		## °F	Plug Displaced by:		8.33 lb/gal		Disp. Temperature:			62 °F
Plug Bumped?		Yes	Bump Pressure:		2,460 psi		Floats Held?			Yes
Cement Returns:		0 bbl	Returns Density:		## lb/gal		Returns Temperature:			## °F
Comment: Pumped 60 bbls Tuned Spacer, 113 bbls Lead latex cement, 206 bbls Tail, 286 bbls Fresh water displacement with MMCR first 20 bbls and Biocide until 240 away. No spacer 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	4/10/2018	06:00:00	USER	CREW CALLED OUT AT 06:00, REQUESTED ON LOCATION 12:00. CREW PICKED UP CEMENT, CHEMICALS, AND PLUG CONTAINER FROM FT. LUPTON, CO. BULK 660 11566182, Bulk 660 11689672 , SOFTSIDE, 12051659 AND PUMP 11189145.
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	4/10/2018	10:00:00	USER	DISCUSSED ROUTES, HAZARDS, AND COMMUNICATION WITH CREW.
Event	3	Crew Leave Yard	Crew Leave Yard	4/10/2018	10:15:00	USER	STARTED JOURNEY MANAGEMENT.
Event	4	Arrive at Location from Service Center	Arrive at Location	4/10/2018	10:30:00	USER	END JOURNEY MANAGEMENT. MEET WITH CO. MAN TO DISCUSS JOB; SURFACE CASING- 9.625" 36 LB/FT @ 1,858', 5.5" CASING: 17 LB/FT TOTAL 12,333', 7.875" HOLE, TD 12,344', 20' SHOE TRAC, TVD- 7,349', WF- 9.4, 221 CENTRALIZERS. PUMP FRESH WATER DISPLACEMENT WITH MMCR FIRST 20 BBLS. CASING LANDED @ 14:00 04/10/2018. RIG CIRCULATED 2 BOTTOMS UP.
Event	5	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	4/10/2018	10:45:00	USER	HAZARD HUNT. DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH LOCATION, RIG UP AND WEATHER.
Event	6	Rig-Up Equipment	Rig-Up Equipment	4/10/2018	11:00:00	USER	CREW STAGED EQUIPMENT AND RIGGED UP BULK, IRON, AND WATER HOSES TO PERFORM JOB.
Event	7	Rig-Up Completed	Rig-Up Completed	4/10/2018	12:30:00	USER	WAITED ON RIG TO FINISH RUNNING CASING.
Event	8	Safety Meeting - Pre Job	Safety Meeting - Pre Job	4/10/2018	14:30:00	USER	MEETING WITH HALLIBURTON AND RIG PERSONNEL. COMMUNICATED POTENTIAL SAFETY HAZARDS AND JOB DETAILS.
Event	9	Start Job	Start Job	4/10/2018	15:25:32	COM5	BEGIN RECORDING JOB DATA.

Event	10	Test Lines	Test Lines	4/10/2018	15:28:59	COM5	PRESSURE TESTED IRON TO 6,000 PSI. KICKOUTS SET @ 500 PSI, KICKED OUT @ 800 PSI, 5TH GEAR STALL OUT @ 2,180 PSI.
Event	11	Pump Spacer 1	Pump Spacer 1	4/10/2018	15:36:21	COM5	PUMP 60 BBLS OF TUNED SPACER III @ 10.5 LB/GAL. 30 GALS D-AIR, 40 GALS MUSOL, 40 GALS DUAL SPACER B. DENSITY VERIFIED BY PRESSURIZED MUD SCALES. CALCULATED HOS @ 1,301.91', CALCULATED TOS @ 695.16'. PUMP RATE 4 BBLS/MIN @ 380 PSI.
Event	12	Shutdown	Shutdown	4/10/2018	15:50:46	USER	BUILD UP TUB OF LATEX CEMENT.
Event	13	Drop Bottom Plug	Drop Bottom Plug	4/10/2018	15:53:55	USER	PLUG LEFT CONTAINER, VERIFIED BY CO. MAN.
Event	14	Pump Lead Cement	Pump Lead Cement	4/10/2018	15:55:05	COM5	PUMPED 400 SKS OF GAS STOP @ 13.2 LB/GAL, 1.59 FT3/SK, 7.69 GAL/SK. 113.27 BBLS, HOL CALCULATED @ 3,665.70', TOL CALCULATED @ 1,997.07'. DENSITY VERIFIED BY PRESSURIZED MUD SCALES. PUMP RATE 8 BBLS/MIN @ 1,040 PSI.
Event	15	Pump Tail Cement	Pump Tail Cement	4/10/2018	16:12:37	COM5	PUMP 690 SKS OF ECONOCEM @ 13.5 LB/GAL, 1.68 FT3/SK, 7.99 GAL/SK, 206.45 BBLS. HOT CALCULATED @ 6,681.33', TOT CALCULATED @ 5,662.77'. DENSITY VERIFIED BY PRESSURIZED MUD SCALES. PUMP RATE 8 BBLS/MIN @ 675 PSI.
Event	16	Clean Lines	Clean Lines	4/10/2018	16:41:51	USER	SHUTDOWN TO WASH LINES.
Event	17	Drop Top Plug	Drop Top Plug	4/10/2018	16:51:34	COM5	PLUG LEFT CONTAINER, VERIFIED BY CO. MAN.
Event	18	Pump Displacement	Pump Displacement	4/10/2018	16:53:14	COM5	BEGIN CALCULATED DISPLACEMENT OF 286 BBLS WITH FRESH WATER. PUMPED THE FIRST 20 BBLS WITH MMCR, PUMPED 220 BBLS WITH BIOCID. PUMP RATE 8 BBLS/MIN @ 2,650 PSI.
Event	19	Bump Plug	Bump Plug	4/10/2018	17:33:14	COM5	PLUG BUMPED AT CALCULATED DISPLACEMENT. 2,640 PSI PRESSURED 500 PSI OVER BUMP.

Event	20	Check Floats	Check Floats	4/10/2018	17:46:59	USER	RELEASED PRESSURE, FLOATS HELD, 3 BBLS BACK.
Event	21	Other	Other	4/10/2018	17:57:41	USER	TRIED TO SHIFT TOOL. PRESSURE WOULDNT INCREASE PAST 3,500 PSI.
Event	22	End Job	End Job	4/10/2018	18:01:17	COM5	STOP RECORDING JOB DATA.
Event	23	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	4/10/2018	18:15:00	USER	DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH WEATHER, LOCATION AND RIGGING DOWN IRON AND HOSES.
Event	24	Rig-Down Equipment	Rig-Down Equipment	4/10/2018	18:30:00	USER	RIG DOWN BULK AND MIXING EQUIPMENT.
Event	25	Rig-Down Completed	Rig-Down Completed	4/10/2018	19:30:00	USER	ALL HALLIBURTON ITEMS WERE STOWED FOR TRAVEL, AND LOCATION WAS CLEAN.
Event	26	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	4/10/2018	19:45:00	USER	DISCUSSED ROUTES HAZARDS AND COMMUNICATION WITH CREW.
Event	27	Depart Location	Depart Location	4/10/2018	20:00:00	USER	THANK YOU FOR USING HALLIBURTON - NICK PETERSON AND CREW.

3.0 Attachments

3.1 Job Chart

