

The Road to Excellence Starts with Safety

Sold To #: 300466	Ship To #: 3847933	Quote #: 0022445215	Sales Order #: 0904871477
Customer: ANADARKO PETROLEUM CORP-EBUS		Customer Rep: LEVI ROGERS	
Well Name: AZUL		Well #: 13-20HZ	API/UWI #: 05-123-46104-00
Field: WATTENBERG	City (SAP): HUDSON	County/Parish: WELD	State: COLORADO
Legal Description: SE SW-13-1N-66W-747FSL-2326FWL			
Contractor: PRECISION DRLG		Rig/Platform Name/Num: PRECISION 464	
Job BOM: 7523 7523			
Well Type: HORIZONTAL GAS			
Sales Person: HALAMERICA\HX41066		Srvc Supervisor: Vitali Neverdasov	

Job

Formation Name			
Formation Depth (MD)	Top		Bottom
Form Type	BHST		
Job depth MD	12717ft	Job Depth TVD	
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	1873	0	0
Casing		5.5	4.892	17	LTC	HCP110	0	12717	0	0
Open Hole Section			7.875				1873	12727	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	HES
Float Shoe	5.5	1	NES	12717	Bottom Plug	5.5	1	HES
Float Collar	5.5	1	HES	12705	SSR plug set	5.5		HES
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	6.96				
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)							
79.92 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	1.58		8	7.59
0.10 %		FE-2 (100001615)							
0.55 %		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	EconoCem	ECONOCEM (TM) SYSTEM	730	sack	13.5	1.68		8	7.99
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	Biocide Water and MMCR	Biocide Water and 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	ft		Reason WET SHOE			Shoe Joint	
Comment : ESTIMATED TOP OF SPACER @ 684'. TOL @ 1979'. TOT @ 5628'									

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	5/23/2018	00:30:00	USER	ON LOCATION @ 06:00
Event	2	Depart from Service Center or Other Site	Depart from Service Center or Other Site	5/23/2018	05:40:00	USER	
Event	3	Arrive at Location from Service Center	Arrive at Location from Service Center	5/23/2018	05:50:00	USER	5 MILES. DISCUSS NUMBERS AND PROCEDURE WITH CUSTOMER. RIG IS RUNNING CASING
Event	4	Other	Other	5/23/2018	06:00:00	USER	SPOT TRUCKS
Event	5	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	5/23/2018	06:10:00	USER	HELD PRE RIG UP JSA
Event	6	Casing on Bottom	Casing on Bottom	5/23/2018	08:10:00	USER	CASING LANDED
Event	7	Pre-Job Safety Meeting	Pre-Job Safety Meeting	5/23/2018	09:04:00	USER	PRE JOB SAFETY MEETING WITH ALL PERSONAL INVOLVED.
Event	8	Start Job	Start Job	5/23/2018	09:20:13	COM4	
Event	9	Test Lines	Test Lines	5/23/2018	09:44:05	COM4	LOAD LINE AND TEST TO 7220 PSI
Event	10	Pump Spacer 1	Pump Spacer 1	5/23/2018	09:46:37	COM4	BATCH/ WEIGHT/ PUMP 60 BBLS OF SPACER WITH SURFACTANS @ 10.5 PPG
Event	11	Drop Bottom Plug	Drop Bottom Plug	5/23/2018	09:58:31	COM4	
Event	12	Pump Lead Cement	Pump Lead Cement	5/23/2018	10:07:57	COM4	BATCH/ WEIGHT/ PUMP 400 SKS (112.6 BBLS) OF GASSTOP CEMENT @ 13.2 PPG.
Event	13	Pump Tail Cement	Pump Tail Cement	5/23/2018	10:27:35	COM4	WEIGHT/ PUMP 730 SKS (218.4 BBLS) OF ECONOCEM @ 13.5 PPG
Event	14	Shutdown	Shutdown	5/23/2018	11:01:00	USER	WASH PUMPS AND LINES/ DROP TOP PLUG
Event	15	Pump Displacement	Pump Displacement	5/23/2018	11:09:10	COM4	FIRST 20 BBLS WITH MMCR. REMAINING OF DICPLACEMENT WITH BIOCID. LAST 40 BBLS FRESH WATER TO CLEAN THE LINE.
Event	16	Check Floats	Check Floats	5/23/2018	11:12:00	USER	FLOATS HELD

Event	17	Bump Plug	Bump Plug	5/23/2018	11:57:41	COM4	BUMP PLUG WITH 500 PSI OVER FINAL CIRCULATING PRESSURE OF 3027 PSI. HOLD PRESSURE FOR 15 MIN FOR CASING TEST.
Event	18	Other	Other	5/23/2018	12:16:00	USER	PRESSURE UP , BURST DISC @ 5703 AND PUMP 3 BBLs WET SHOE.
Event	19	Shutdown	Shutdown	5/23/2018	12:18:56	USER	JOB IS COMPLETE
Event	20	End Job	End Job	5/23/2018	12:27:18	COM4	

3.0 Attachments

3.1 Job Chart

