

The Road to Excellence Starts with Safety

Sold To #: 300466	Ship To #: 3959443	Quote #: 0022618155	Sales Order #: 0905932816
Customer: ANADARKO PETROLEUM CORP-EBUS		Customer Rep: Carlton Coolet	
Well Name: SARCHET		Well #: 21-5HZ	API/UWI #: 05-123-50073-00
Field: WATTENBERG	City (SAP): PLATTEVILLE	County/Parish: WELD	State: COLORADO
Legal Description: SW SW-21-3N-66W-580FSL-340FWL			
Contractor: PRECISION DRLG		Rig/Platform Name/Num: PRECISION 464	
Job BOM: 7523 7523			
Well Type: HORIZONTAL GAS			
Sales Person: HALAMERICA\HX41066		Srcv Supervisor: Nikolaus Kornafel	

Job

Formation Name		
Formation Depth (MD)	Top	Bottom
Form Type		BHST
Job depth MD	18451ft	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	1890	0	0
Casing		5.5	4.892	17	LTC	HCP110	0	18451	0	0
Open Hole Section			7.875				1890	18465	0	7378

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	5.5	1		18451	Top Plug	5.5	1	
Float Shoe	5.5				Bottom Plug	5.5	1	
Float Collar	5.5	1		18448				
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 ft/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal

1	SPACER	SBM FDP-C1337-18 CEMENT SPACER SYS	115	bbl	10.5	6.17	39.6	6	4,144
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	LATEX LEAD	GASSTOP (TM) SYSTEM	640	sack	13.2	1.56	7.61	8	4,870
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	1130	sack	13.5	1.69	8.08	8	9,130
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	
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	408	bbl	8.34			8	
Cement Left In Pipe	Amount	5 ft			Reason			Shoe Joint	
Mix Water:	pH 7	Mix Water Chloride:	0 ppm		Mix Water Temperature:			72 °F	
Cement Temperature:	N/A	Plug Displaced by:	8.33 lb/gal		Disp. Temperature:			72 °F	
Plug Bumped?	Yes	Bump Pressure:	2,225 psi		Floats Held?			Yes	
Cement Returns:	0 bbl	Returns Density:	N/A		Returns Temperature:			N/A	
Comment PUMPED 115 BBLs OF SPACER THEN DROPPED THE BOTTOM PLUG THEN PUMPED 178 BBLs OF LATEX LEAD CEMENT FOLLOWED BY 3340 BBLs OF TAIL CEMENT. DROPPED THE TOP PLUG THEN PUMPED 428 BBLs OF FRESH WATER DISPLACEMENT. BUMPED THE PLUG AT 1,850 PSI. BROUGHT PRESSURE TO 3,000 PSI AND THEN PRESSURED UP TO 4,103 PSI TO SHIFT THE WET SHOE SUB AND PUMP A 3 BBL WET SHOE, CHECKED FLOATS 2.5 BBLs BACK TO THE TRUCK, FLOATS HELD									

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density <i>(ppg)</i>	Comb Pump Rate <i>(bbl/min)</i>	DS Pump Press <i>(psi)</i>	Pump Stg Tot <i>(bbl)</i>	Comments
Event	1	Pump Spacer	Call Out	8/31/2019	05:00:00	USER					CREW CALLED OUT AT 05:00, REQUESTED ON LOCATION 10:00. CREW PICKED UP CEMENT, CHEMICALS, AND PLUG CONTAINER FROM FT. LUPTON, CO. BULK 660 10867439, BULK 660 10867096, SOFTSIDE 12051659 AND PUMP 11826999.
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	8/31/2019	08:00:00	USER					CREW DISCUSSED ROUTES, HAZARDS, AND COMMUNICATION WITH CREW.
Event	3	Crew Leave Yard	Crew Leave Yard	8/31/2019	08:30:00	USER					STARTED JOURNEY MANAGEMENT.

Event	4	Arrive at Location from Service Center	Arrive at Location from Service Center	8/31/2019	09:15:00	USER					END JOURNEY MANAGEMENT. MEET WITH CO. MAN TO DISCUSS JOB; SURFACE CASING- 9.625" 36 LB/FT @ 1,890, 5.5" CASING: 17 LB/FT TOTAL 18,451', 7.825" HOLE, TD 18,465', SHOE TRAC- 5', TVD- 7,378'. PUMP FRESH WATER DISPLACEMENT 428 BBLS. CASING LANDED @ 12:00 08/31/2019. RIG CIRCULATED BOTTOMS UP @ 331 GPM @ 871 PSI.
Event	5	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	8/31/2019	09:45:00	USER					HAZARD HUNT. DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH LOCATION, RIG UP, AND WEATHER.
Event	6	Rig-Up Equipment	Rig-Up Equipment	8/31/2019	10:00:00	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	8/31/2019	14:30:00	USER	8.56	0.00	-1.00	3.90	SAFETY MEETING WITH HALLIBURTON, AND RIG PERSONNEL. CREW COMMUNICATED POTENTIAL SAFETY HAZARDS, AND JOB DETAILS.
Event	8	Start Job	Start Job	8/31/2019	14:58:26	COM5	8.57	0.00	1.00	0.00	BEGIN RECORDING JOB DATA.
Event	9	Check Weight	Check Weight	8/31/2019	15:06:41	COM5	8.57	0.00	0.00	0.00	DENSITY VERIFIED BY PRESSURIZED MUD SCALES.
Event	10	Test Lines	Test Lines	8/31/2019	15:23:01	COM5	8.35	0.00	161.00	2.90	PRESSURE TESTED IRON TO 6,500 PSI. KICKOUTS SET @

											500 PSI, KICKED OUT @ 900 PSI, 5TH GEAR STALL OUT @ 2,100 PSI.
Event	11	Pump Spacer	Pump Spacer	8/31/2019	15:29:52	USER	10.70	1.50	174.00	4.30	PUMP 115 BBLS OF SPACER @ 10.5 LB/GAL, 6.17 FT3/SK, 39.6 GAL/SK 10 GALLONS D-AIR. DENSITY VERIFIED BY PRESSURIZED MUD SCALES. PUMP RATE 6 BBLS/MIN @ 480 PSI.
Event	12	Check Weight	Check Weight	8/31/2019	15:39:35	COM5	10.51	8.00	461.00	54.60	DENSITY VERIFIED BY PRESSURIZED MUD SCALES.
Event	13	Pump Lead Cement	Pump Lead Cement	8/31/2019	15:47:26	COM5	10.59	8.20	926.00	0.10	PUMPED 640 SKS OF GASSTOP LEAD CEMENT @ 13.2 LB/GAL, 1.56 FT3/SK, 7.61 GAL/SK. 177.82 BBLS, TOL @ 1,760.46'. DENSITY VERIFIED BY PRESSURIZED MUD SCALES. PUMP RATE 8 BBLS/MIN @ 480 PSI.
Event	14	Drop Bottom Plug	Drop Bottom Plug	8/31/2019	15:48:03	COM5	12.87	8.20	946.00	5.10	BOTTOM PLUG LEFT PLUG CONTAINER, WITNESSED BY COMPANY MAN.
Event	15	Pump Tail Cement	Pump Tail Cement	8/31/2019	16:11:31	COM5	13.36	8.20	448.00	195.30	PUMP 1,130 SKS OF ECONOCEM TAIL CEMENT @ 13.5 LB/GAL, 1.69 FT3/SK, 8.08 GAL/SK, 340.12 BBLS. TOT CALCULATED @ 7,443.88'. DENSITY VERIFIED BY PRESSURIZED MUD SCALES. PUMP RATE 8 BBLS/MIN @ 450 PSI.
Event	16	Check Weight	Check Weight	8/31/2019	16:12:47	COM5	13.52	8.20	500.00	10.40	DENSITY VERIFIED BY PRESSURIZED MUD SCALES.

Event	17	Check Weight	Check Weight	8/31/2019	16:39:58	COM5	13.50	8.00	449.00	228.00	DENSITY VERIFIED BY PRESSURIZED MUD SCALES.
Event	18	Check Weight	Check Weight	8/31/2019	16:46:20	COM5	13.48	7.90	447.00	278.70	DENSITY VERIFIED BY PRESSURIZED MUD SCALES.
Event	19	Check Weight	Check Weight	8/31/2019	16:51:57	COM5	13.56	8.00	446.00	323.40	DENSITY VERIFIED BY PRESSURIZED MUD SCALES.
Event	20	Shutdown	Shutdown	8/31/2019	16:55:34	COM5	13.74	0.00	76.00	342.50	SHUTDOWN TO WASH LINES.
Event	21	Drop Top Plug	Drop Top Plug	8/31/2019	17:04:55	COM5	-0.24	0.00	-5.00	359.40	PLUG LEFT CONTAINER, VERIFIED BY CO. MAN.
Event	22	Pump Displacement	Pump Displacement	8/31/2019	17:05:00	COM5	-0.24	0.00	-6.00	0.00	BEGIN CALCULATED DISPLACEMENT OF 428 BBLS WITH FRESH WATER. 10 GAL OF MMCR IN THE FIRST 20 BBLS AND 5 GAL OF BIOCIDES THROUGHOUT THE REST.
Event	23	Displ Reached Cement	Displ Reached Cement	8/31/2019	17:10:17	COM5	8.06	10.10	677.00	48.00	CAUGHT CEMENT @ 44 BBLS INTO DISPLACEMENT.
Event	24	Bump Plug	Bump Plug	8/31/2019	17:59:20	COM5	8.12	0.00	2883.00	430.00	SPACER TO SURFACE @ 297 BBLS INTO DISPLACEMENT. 31 BBLS OF TUNED SPACER TO SURFACE. PLUG BUMPED AT CALCULATED DISPLACEMENT. 2,200 PSI PRESSURED UP 800 PSI OVER FINAL CIRCULATING PRESSURE TO 3,000 PSI AND HELD FOR A 15 MINUTE TEST
Event	25	Pressure Up Well	Pressure Up Well	8/31/2019	18:09:02	COM5	8.12	0.00	3083.00	430.00	PRESSURED UP TO 4,103 PSI TO SHIFT THE WET SHOE

											SUB AND PUMPED A 3 BBL WET SHOE.
Event	26	Other	Other	8/31/2019	18:12:16	COM5	8.10	0.00	1846.00	435.30	RELEASED PRESSURE, FLOATS HELD, 2.5 BBLs BACK.
Event	27	End Job	End Job	8/31/2019	18:13:16	COM5	7.80	0.00	4.00	0.00	STOP RECORDING JOB DATA.
Event	28	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	8/31/2019	18:15:00	USER					DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH WEATHER, LOCATION AND RIGGING DOWN IRON AND HOSES.
Event	29	Rig-Down Completed	Rig-Down Completed	8/31/2019	19:00:00	USER					ALL HALLIBURTON ITEMS WERE STOWED FOR TRAVEL, AND LOCATION WAS CLEAN.
Event	30	Safety Meeting - Departing Location	Safety Meeting - Departing Location	8/31/2019	20:00:00	USER					CREW DISCUSSED ROUTES HAZARDS AND COMMUNICATION WITH CREW.
Event	31	Crew Leave Location	Crew Leave Location	8/31/2019	20:05:00	USER					THANK YOU FOR USING HALLIBURTON – NICK KORNAFEL AND CREW.

3.0 Attachments

3.1 ANADARKO SARCHET 21-5HZ PRODUCTION-Custom Results.png

