

The Road to Excellence Starts with Safety

Sold To #: 300466		Ship To #: 3932314		Quote #: 0022558227		Sales Order #: 0905556362					
Customer: ANADARKO PETROLEUM CORP-EBUS				Customer Rep: TERRY HACKFORD							
Well Name: MAB			Well #: 15-2HZ			API/UWI #: 05-123-49239-00					
Field: WATTENBERG		City (SAP): IONE		County/Parish: WELD		State: COLORADO					
Legal Description: SW SE-15-1N-66W-503FSL-2171FEL											
Contractor:				Rig/Platform Name/Num: Akita 522							
Job BOM: 7523 7523											
Well Type: HORIZONTAL GAS											
Sales Person: HALAMERICA\HX41066				Srv Supervisor: Lance Carpenter							
Job											
Formation Name											
Formation Depth (MD)		Top		Bottom							
Form Type				BHST							
Job depth MD		18268ft		Job Depth TVD		7619					
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	1894	0	1894	
Casing		5.5	4.892	17	LTC	HCP110	0	18271	0	7628	
Open Hole Section			7.875				1894	18281	1894	7628	
Tools and Accessories											
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make		
Guide Shoe	5.5			18268		Top Plug	5.5	1			
Float Shoe	5.5					Bottom Plug	5.5	1			
Float Collar	5.5			18258		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	FDP-C1337-18	SBM FDP-C1337-18 CEMENT SPACER SYS			80	bbl	10.5	6.14	39.4		
0.75 gal/bbl		MUSOL(R) A, 5 GAL PAIL (100064220)									

91.40 lbm/bbl	BARITE, BULK (100003681)								
0.75 gal/bbl	DUAL SPACER SURFACTANT B, 5 GAL PAIL (100003665)								
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	640	sack	13.2	1.56	7.61	6	7.61
0.90 %		SCR-100 (100003749)							
5.01 Gal		FRESH WATER							
0.10 Gal		D-AIR 3000L, TOTETANK (101396181)							
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	1110	sack	13.5	1.68	7.99	6	7.99
0.10 %		SA-1015, 50 LB SACK (102077046)							
7.99 Gal		FRESH WATER							
0.28 %		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				
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	404	bbl	8.34				
Cement Left In Pipe	Amount	10 ft			Reason			Shoe Joint	
Mix Water:	pH 7	Mix Water Chloride: 0 ppm			Mix Water Temperature: 68 °F				
Cement Temperature:	## °F °C	Plug Displaced by: 8.33 lb/gal			Disp. Temperature: ## °F °C				
Plug Bumped?	Yes	Bump Pressure: 1700 psi			Floats Held? Yes				
Cement Returns:	0	Returns Density: ## lb/gal kg/m3			Returns Temperature: ## °F °C				
Comment									
<p>JOB WENT VERY WELL, HAD GOOD RETURNS THROUGHOUT JOB VOLUMES AND DENSITYS COMFIRMED CAUGHT CEMENT AT 61 BBLs INTO DISPLACEMENT BUMPED PLUG AT 1730 PSI AT 3BPM TOOK TO 2300 PSI AND PRESSURED UP TO 3000PSI FOR 15 MINS CASING TEST. PRESSURED UP TO 4280 PSI TO OPEN WET SHOE SUB AND PUMPED 3BBL WET SHOE AND CHECKED FLOATS 2 BBLs BACK FLOATS HELD.</p>									

1.0 Real-Time Job Summary

1.1 Job Event Log

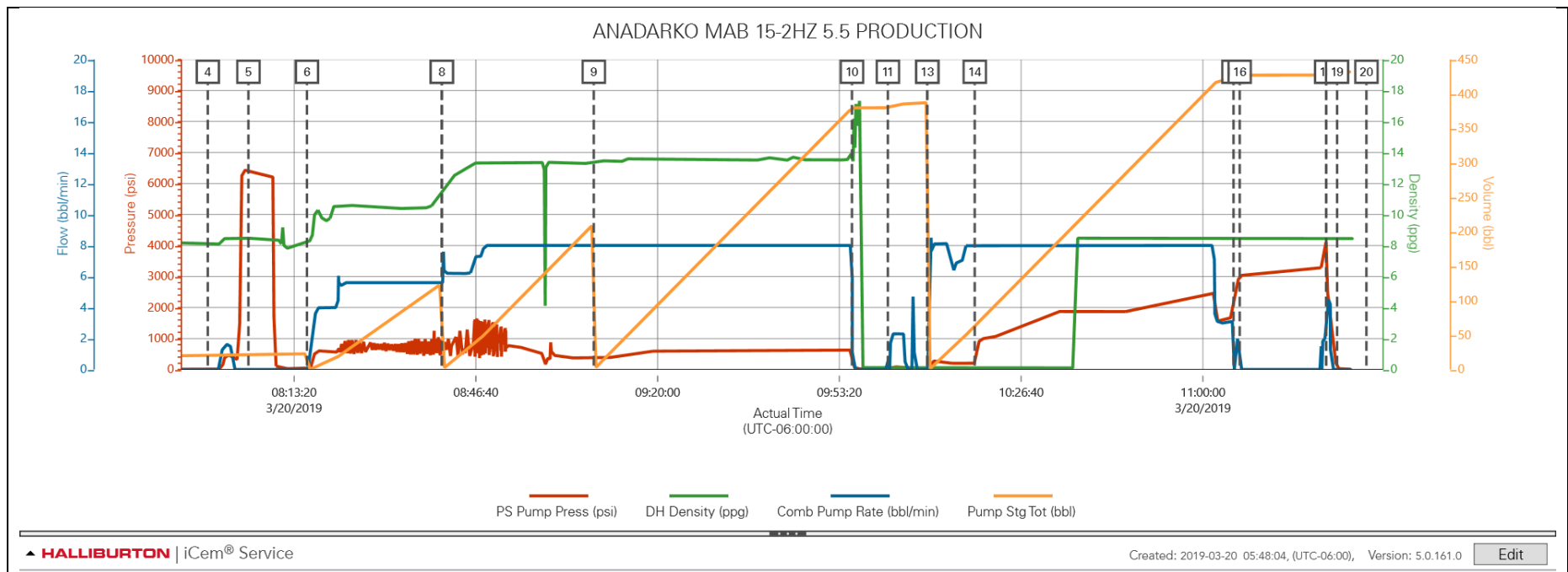
Type	Seq. No.	Activity	Graph Label	Date	Time	Source	PS Pump Press (psi)	DH Density (ppg)	Comb Pump Rate (bbl/min)	Pump Stg Tot (bbl)	Comments
Event	1	Other	Call Out	3/19/2019	22:00:00	USER					CALLED OUT FOR CREW ON LOCATION AT 0400
Event	2	Depart Yard Safety Meeting	Depart from Service Center or Other Site	3/20/2019	03:30:00	USER					HAD SAFETY MEETING WITH CREW AND DISCUSSED ROUTE TO LOCATION AND DRIVING HAZARDS. VERIFIED ALL EQUIPMENT WAS RUNNING AND CEMENT WAS LOADED.
Event	3	Arrive at Rig	Arrive at Rig	3/20/2019	04:00:00	USER					ARRIVED ON LOCATION AND SIGNED IN AT COMPANY MANS SHACK. RIG WAS STILL RUNNING CASING AT 18000 FT. COMPANY MAN TOLD US TO GO AHEAD AND MIX UP LATEX AND TO RIG UP IRON AND SPOT IN EQUIPMENT.
Event	4	Safety Meeting	Safety Meeting	3/20/2019	07:30:00	USER	3.00	8.25	0.00	19.70	HAD SAFETY MEETING WITH HALLIBURTON EMPLOYEES AND RIG HANDS AND DISCUSSED SWA AND HOW TO HAVE GOOD COMMUNICATION THROGH OUT THE JOB.
Event	5	Start Job	Start Job	3/20/2019	07:57:31	COM6	3.00	8.16	0.00	19.70	START JOB.
Event	6	Test Lines	Test Lines	3/20/2019	08:04:58	COM6	6402.00	8.47	0.00	22.80	FILLED LINES WITH 3 BBLS OF FRESH WATER AND

											PRESSURE TESTED LINES TO 6500 PSI
Event	7	Pump Spacer 1	Pump Spacer 1	3/20/2019	08:15:42	COM6	14.00	8.28	0.00	22.80	PUMPED 80BBLs OF 10.5# 6.14 YIELD 39.4 GALS FDP SPACER.
Event	8	Drop Bottom Plug	Drop Bottom Plug	3/20/2019	08:40:24	COM6	1088.00	11.34	5.60	124.90	DROPPED BOTTTOM PLUG ON THE FLY WITH COMPANY MAN ON RIG FLOOR.
Event	9	Pump Lead Cement	Pump Lead Cement	3/20/2019	08:40:27	COM6	830.00	11.33	5.60	125.20	PUMPED 177 BBLs OF GASSTOP 13.2# 1.56 YIELD 7.61 GALS 640 SKS
Event	10	Pump Tail Cement	Pump Tail Cement	3/20/2019	09:08:18	COM6	374.00	13.36	8.00	0.10	PUMPED 332 BBLs OF 13.5# 1.68 YIELD 7.99 GAL TAIL CEMENT (ECONCEM) 1110SKS
Event	11	Shutdown	Shutdown	3/20/2019	09:55:39	USER	659.00	13.91	8.00	379.70	SHUTDOWN
Event	12	Clean Lines	Clean Lines	3/20/2019	10:02:14	COM6	12.00	0.12	0.00	379.90	CLEANED PUMPS AND LINES WITH FRESH WATER.
Event	13	Drop Top Plug	Drop Top Plug	3/20/2019	10:09:26	COM6	10.00	0.12	0.00	387.30	DROPPED TOP PLUG WITH COMPANY MAN ON RIG FLOOR.
Event	14	Pump Displacement	Pump Displacement	3/20/2019	10:09:28	COM6	10.00	0.12	0.00	387.30	PUMPED 424 BBLs OF DISPLACEMENT WATER WITH 20BBLs OF MMCR IN THE FIRST 20BBLs AND BIOCIDES THROUGHOUT THE NEXT 350 BBLs AT 8 BPM. SLOWED RATE AT 390BBLs AWAY TO 3BPM.
Event	15	Other	Other	3/20/2019	10:18:10	USER	183.00	0.12	8.00	63.20	CAUGHT CEMENT AT 61 BBLs INTO DISPLACEMENT
Event	16	Bump Plug	Bump Plug	3/20/2019	11:05:37	USER	2342.00	8.47	0.00	426.50	BUMPED PLUG AT 1700PSI TOOK 500PSI OVER

Event	17	15 Min Shut-in Pres	15 Min Shut-in Pres	3/20/2019	11:06:45	COM6	3027.00	8.50	0.00	427.40	15 MIN CASING TEST AT 3000PSI
Event	18	Other	Other	3/20/2019	11:22:36	USER	4170.00	8.51	2.00	428.80	PRESSURE UP TO OPEN WET SHOE SUB AT 4200PSI AND PUMPED A 3 BBL WET SHOE
Event	19	Check Floats	Check Floats	3/20/2019	11:22:37	USER	4177.00	8.51	2.00	428.90	FLOATS HELD AND GOT 2 BBL BACK.
Event	20	End Job	End Job	3/20/2019	11:24:37	USER	52.00	8.44	0.00	432.00	END JOB
Event	21	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	3/20/2019	11:30:00	USER					HAD SAFETY MEETING WITH CREW AND DISCUSSED CARRYING IRON AND RIGGING DOWN FLOOR SAFELY.
Event	22	Crew Leave Location	Crew Leave Location	3/20/2019	13:00:00	USER					CREW LEFT LOCATION

2.0 Attachments

2.1 ANADARKO PETROLEUM 5.5 PRODUCTION SO 905556362 MAB 15-2HZ-Custom Results.png



3.0 Custom Graphs

3.1 Custom Graph

