

HALLIBURTON

## Cementing Job Summary

## The Road to Excellence Starts with Safety

Sold To #: 300466	Ship To #: 3743927	Quote #: 0022415622	Sales Order #: 0904699804							
Customer: ANADARKO PETROLEUM CORP-EBUS		Customer Rep: Keith K.								
Well Name: MARRS	Well #: 29N-10HZ	API/UWI #: 05-123-43271-00								
Field: WATTENBERG	City (SAP): IONE	County/Parish: WELD	State: COLORADO							
Legal Description: SE NW-22-1N-67W-2120FNL-2011FWL										
Contractor:		Rig/Platform Name/Num: Xtreme 24								
Job BOM: 7523 7523										
Well Type: HORIZONTAL GAS										
Sales Person: HALAMERICA\HX41066		Srvc Supervisor: Ryan Stevens								
Job										
Formation Name										
Formation Depth (MD)	Top	Bottom								
Form Type		BHST								
Job depth MD	15681ft	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	1886	0	1886
Casing		5.5	4.892	17	LTC	HCP110	0	15681	0	7434
Open Hole Section			8.5				1886	15699	0	7534
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Guide Shoe	5.5					Top Plug	5.5	1	Weath	
Float Shoe	5.5	1	Weath	15681		Bottom Plug	5.5	1	Weath	
Float Collar	5.5	1	Weath	15678		SSR plug set	5.5			
Insert Float	5.5					Plug Container	5.5	5.5	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	80	bbl	10.5	6.43	41.3	4	2,856	
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)										

last updated on 3/12/2018 8:36:17 AM

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Created: Thursday, April 12, 2018

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Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal
2	ElastiCem	ELASTICEM (TM) SYSTEM	700	sack	13.2	1.57	7.53	8	5,271
7.53 Gal		FRESH WATER							
0.10 %		SUPER CBL, 50 LB PAIL (100003668)							
0.45 %		SCR-100 (100003749)							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal
3	EconoCem	ECONOCEM (TM) SYSTEM	1390	sack	13.5	1.68	7.99	8	11,088
8 Gal		FRESH WATER							
0.38 %		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/mi n	Total Mix Fluid Gal
4	Biocide Water and MMCR	Biocide Water and MMCR	20	bbl	8.34				840
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/mi n	Total Mix Fluid Gal
5	Biocide Water	Biocide Water	343	bbl	8.34				14,406
Cement Left In Pipe		Amount	3 ft		Reason			Wet Shoe Joint	
Mix Water: pH 7		Mix Water Chloride: 0 ppm		Mix Water Temperature: 62 °F					
Cement Temperature:		Plug Displaced by: 8.34 lb/gal		Disp. Temperature: 62 °F					
Plug Bumped? Yes		Bump Pressure: 3181 psi		Floats Held? Yes					
Cement Returns: 0 bbls		Returns Density: 10.5 lb/gal		Returns Temperature:					
Comment 45 BBLS OF SPACER BACK. NO CEMENT BACK TO SURFACE									

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## 2.0 Real-Time Job Summary

## 2.1 Job Event Log

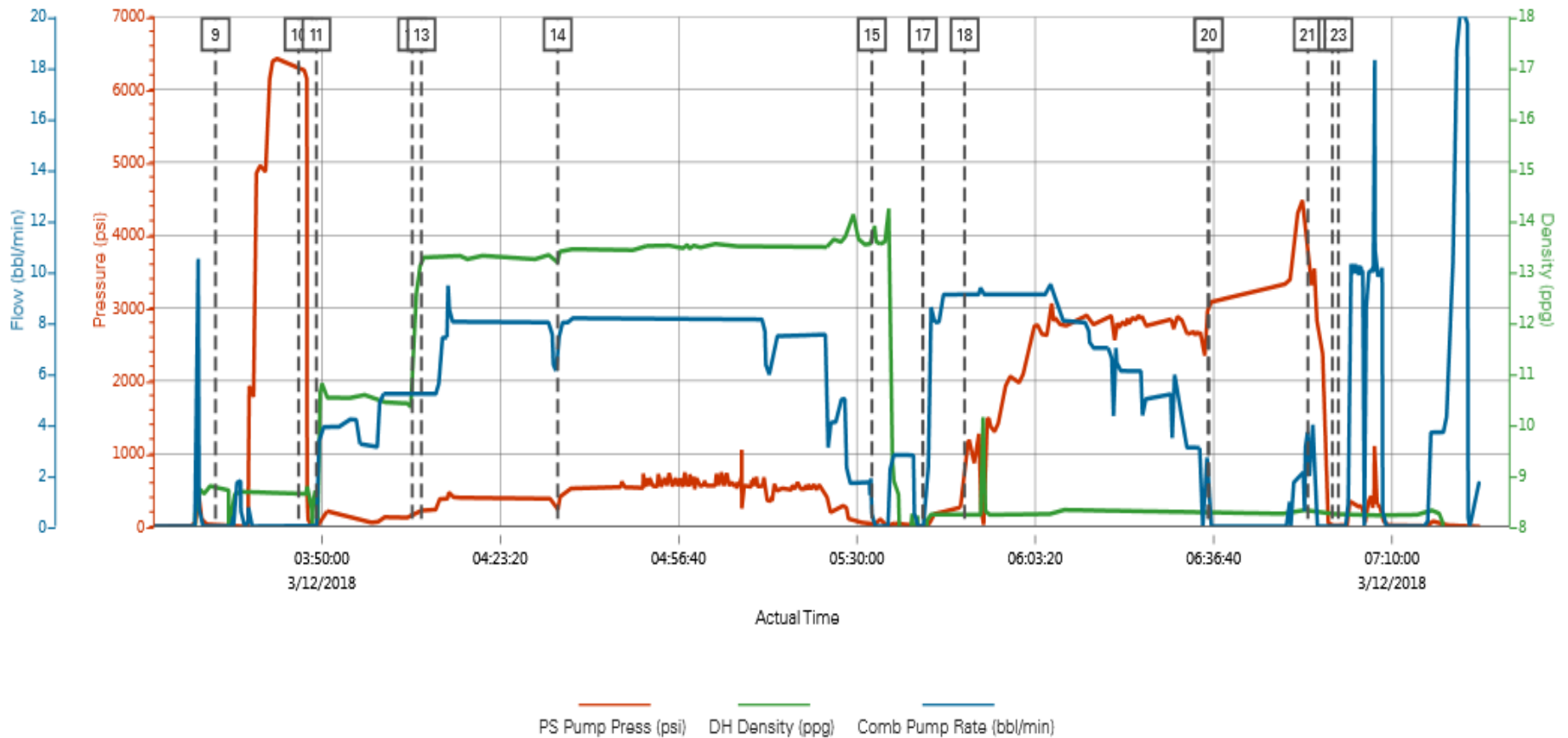
Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Comments
Event	1	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	3/11/2018	07:45:00	USER	DISSCUS HAZARDS ALONG ROUTE
Event	2	Call Out	Call Out	3/11/2018	17:30:00	USER	CREW CALLED OUT FOR JOB. CREW PICKED UP PIMP11645460, BUK TRUCKS, PLUG CONTAINER AND CHEMICALS FROM THE FORT LUPTON YARD.
Event	3	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	3/11/2018	22:00:00	USER	DISCUSSED HAZARDS ALONG ROUTE OF TRAVEL TO LOCATION
Event	4	Crew Leave Yard	Crew Leave Yard	3/11/2018	22:25:00	USER	START JOURNEY MANAGEMENT
Event	5	Arrive At Loc	Arrive At Loc	3/11/2018	22:45:00	USER	CREW ARRIVED ON LOCATION. MEET WIT COMPANY REP AND DISCUSS JOB PROCEDURES
Event	6	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	3/11/2018	23:00:00	USER	DISCUSS HAZARDS ASSOCIATED WITH RIG UP.
Event	7	Rig-Up Equipment	Rig-Up Equipment	3/11/2018	23:30:00	USER	CREW RIGGED UP PUMP, AND BULK TRUCKS TO PERFORM JOBS.
Event	8	Pre-Job Safety Meeting	Pre-Job Safety Meeting	3/12/2018	02:35:00	USER	MEET WITH COMPANY MAN, RIG CREW AND HALLIBURTON PERSONEL TO DISCUSS JOB PROCEDURES AND JOB HAZARDS. TD 15,699' TP 15,681 FC 15,678 PC 1,886. CSG 5.5 17# OH 8.5
Event	9	Start Job	Start Job	3/12/2018	03:30:07	COM4	START RECORDING JOB DATA
Event	10	Test Lines	Test Lines	3/12/2018	03:45:39	COM4	PRESSURE TEST PUMPS AND LINES. SET KO @ 500 KICKED OUT @ 1900 PSI, 5TH GEAR STALL @ 2975, FINAL PRESSURE TEST @ 6,181 PSI
Event	11	Pump Spacer 1	Pump Spacer 1	3/12/2018	03:48:59	COM4	PUMP 80 BBLS OF TUNED SPACER @ 10.5

							PPG 36 BBLS CALCUALTED BACK TO SURFACE
Event	12	Drop Bottom Plug	Drop Bottom Plug	3/12/2018	04:06:53	COM4	DROP BOTTOM PLUG VERIFIED BY COMPANY MAN
Event	13	Pump Lead Cement	Pump Lead Cement	3/12/2018	04:08:36	COM4	PUMP 700 SXS OF ELASTICEM @ 13.2 PPG. YIELD 1.57 MIX WATER 7.53 TOP OF LEAD CALCULATED @ 980'
Event	14	Pump Tail Cement	Pump Tail Cement	3/12/2018	04:34:05	COM4	PUMP 1,390 SXS OF ECONCEM @ 13.5 PPG YIELD 1.57MIX WATER 7.99 TOP OF TAIL CALCULATED @ 5,510'
Event	15	Shutdown	Shutdown	3/12/2018	05:32:48	COM4	SHUT DOWN AND WASH PUMPS AND LINES
Event	16	Drop Top Plug	Drop Top Plug	3/12/2018	05:42:17	COM4	VERIFIED BY COMPANY REP.
Event	17	Pump Displacement	Pump Displacement	3/12/2018	05:42:20	COM4	PUMP CALCULATED DISPALCEMENT OF 364 BBLS FIRST 20 WITH MMCR AND BIOCIDIE WITH REST
Event	18	Displ Reached Cement	Displ Reached Cmnt	3/12/2018	05:50:06	COM4	CAUGHT CEMENT.
Event	19	Bump Plug	Bump Plug	3/12/2018	06:35:40	COM4	BUMP PLUG @364 BBLS. FINAL CIRCULATING PRESSURE @ 2,842 PSI
Event	20	Other	Other	3/12/2018	06:35:45	COM4	HOLD PRESSURE ON WELL FOR 1 MINS FOR A CSGTEST
Event	21	Other	BRURST PLUG	3/12/2018	06:54:16	USER	BURST PLUG @ 4451 PSI, PUMP 3 BBLS WET SHOE
Event	22	End Job	End Job	3/12/2018	06:58:52	COM4	STOP RECORDING JOB DATA
Event	23	Check Floats	Check Floats	3/12/2018	07:00:00	USER	CHECK FLOATS 2 BBLS BACK. FLOATS HELD
Event	24	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	3/12/2018	07:45:00	USER	DISSCUSS HAZARDS ASSOCIATED WITH RIGGING DOWN EQUIPMENT
Event	25	Crew Leave Location	Crew Leave Location	3/12/2018	08:30:00	USER	THANKS RYAN STEVENS AND CREW

## 3.0 Attachments

### 3.1 Job Chart

Custom Results



## 3.2 Plug Landing/Shifting Wet Shoe Sub

### Custom Results

