

HALLIBURTON

iCem[®] Service

EXTRACTION OIL & GAS

Date: Wednesday, March 07, 2018

COYOTE TRAILS 34S-20-10N PRODUCTION

Job Date: Friday, February 16, 2018

Sincerely,
Julia Nichols

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1.0 Cementing Job Summary

1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **COYOTE TRAILS 34S-20-10N** cement **Production** casing job. A pre-job safety meeting was held before the job where details of the job were discussed, potential safety hazards were reviewed, and environmental compliance procedures were outlined.

Approximately 97 barrels of cement were returned to surface.

Halliburton maintains a continuous quality improvement process and appreciates any comments or suggestions that you may have. Halliburton again thanks you for the opportunity to perform service work on this well. We hope to be your solutions provider for future projects.

Respectfully,

Halliburton [Fort Lupton]

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Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 369404	Ship To #: 3843032	Quote #:	Sales Order #: 0904630591							
Customer: EXTRACTION OIL & GAS		Customer Rep: .								
Well Name: COYOTE TRAILS	Well #: 34S-20-10N	API/UWI #: 05-123-45994-00								
Field: WATTENBERG	City (SAP): ERIE	County/Parish: WELD	State: COLORADO							
Legal Description: SW SE-28-1N-88W-1146FSL-2139FEL										
Contractor:		Rig/Platform Name/Num: Patterson 901								
Job BOM: 7523 7523										
Well Type: HORIZONTAL OIL										
Sales Person: HALAMERICA\HX38199		Srvc Supervisor: Jordan Larue								
Job										
Formation Name										
Formation Depth (MD)	Top	Bottom								
Form Type		BHST	230 degF							
Job depth MD	18350ft	Job Depth TVD	7950							
Water Depth		Wk Ht Above Floor	4							
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	0	9.625	8.921	36		J-55	0	1623	0	1623
Casing	0	5.5	4.778	20		P-110	0	18333	0	8100
Open Hole Section		8.5	8.5				1623	18350	1623	8100
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Guide Shoe	5.5	1	WF	18350		Top Plug	5.5	1	TLX	
Float Shoe	5.5					Bottom Plug	5.5		HES	
Float Collar	5.5	1	WF	18327		SSR plug set	5.5		HES	
Insert Float	5.5	1	WF	18328		Plug Container	5.5	1	HES	
Stage Tool	5.5					Centralizers	5.5		HES	
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	11.5 lb/gal Tuned Spacer III	Tuned Spacer III	50	bbl	11.5	3.73	23.4	8		
149.34 lbm/bbl		BARITE, BULK (100003681)								
35 gal/bbl		FRESH WATER								
0.50 gal/bbl		MUSOL A, 330 GAL TOTE - (790828)								
0.50 gal/bbl		DUAL SPACER SURFACTANT B, 5 GAL PAIL (100003665)								

last updated on 3/7/2018 9:51:00 AM

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Cementing Job Summary

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	3020	sack	13.2	1.57	7.53	7	7.53
0.45 %		SCR-100 (100003749)							
7.53 Gal		FRESH WATER							
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	Displacement	Displacement	407	bbl	8.34			7	
Cement Left In Pipe	Amount	0 ft			Reason			WET Shoe Joint	
Mix Water:	pH 7	Mix Water Chloride:	200 ppm		Mix Water Temperature:		80 °F °C		
Cement Temperature:	NA	Plug Displaced by:	8.33 lb/gal H2O		Disp. Temperature:		NA		
Plug Bumped?	Yes	Bump Pressure:	3241 psi		Floats Held?		Yes 6BBL BACK		
Cement Returns:	27 bbl	Returns Density:	13.2 lb/gal		Returns Temperature:		NA		
Comment : SEE JOB LOG FOR JOB DETAILS									

2.0 Real-Time Job Summary

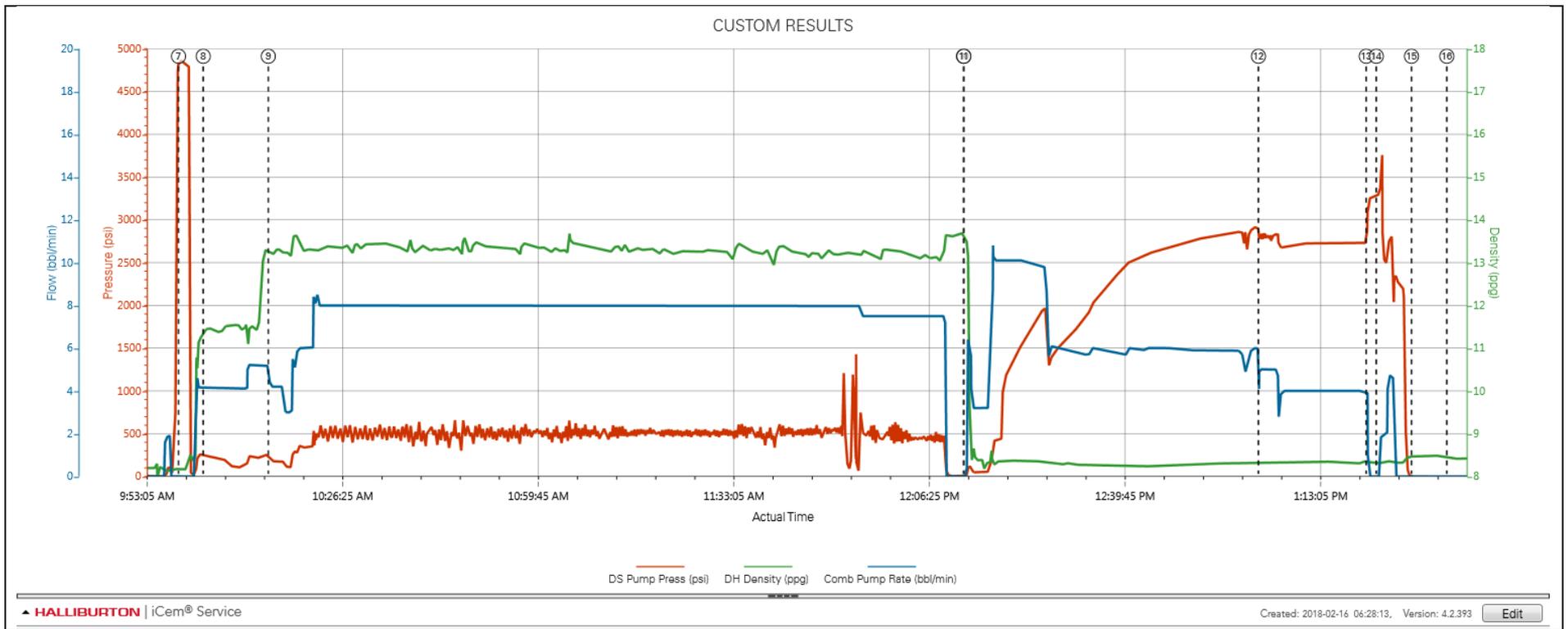
2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Driv-Side Pump Pressure (psi)	Downhole Density (ppg)	Combined Pump Rate (bbl/min)	Comments
Event	1	Call Out	Call Out	2/15/2018	21:00:00	USER				REQUESTED LOC TIME 0400
Event	2	Arrive at Location from Service Center	Arrive at Location from Service Center	2/16/2018	02:00:00	USER				CHECK IN WITH CO MAN AND TOOL HAND... TD 18350, TP 18333, WSS@ 18328, CS 5.5" 20# P110, PC 9.625" 36# J55 1623, 8.5" OH, WF 9*.1# OBM
Event	3	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	2/16/2018	02:15:00	USER				RIG RUNNING CS
Event	4	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	2/16/2018	02:30:00	USER				REVIEW JSA DISCUSS HAZARDS
Event	5	Rig-Up Equipment	Rig-Up Equipment	2/16/2018	02:45:00	USER				NO ACCIDENTS OR INJURIES... H2O TESTED GOOD 60 F, 200 CH- SUL 0-PH7....
Event	6	Pre-Job Safety Meeting	Pre-Job Safety Meeting	2/16/2018	09:45:00	USER	155.00	8.22	5.50	REVIEW JSA, PUMP SCHEDULE AND RETURNS
Event	7	Test Lines	Test Lines	2/16/2018	09:58:50	COM10	4870.00	8.17	0.00	4800 PSI TEST GOOD
Event	8	Pump Spacer 1	Pump Spacer 1	2/16/2018	10:03:03	COM10	252.00	11.44	4.10	50 BBLS TUNED SPACER SCALED @ 11.5#
Event	9	Pump Cement	Pump Cement	2/16/2018	10:14:08	COM10	194.00	13.23	4.20	3020 SKS SCALED @ 13.2#
Event	10	Drop Top Plug	Drop Top Plug	2/16/2018	12:12:38	COM10	6.00	13.53	0.00	PLUG WENT
Event	11	Pump Displacement	Pump Displacement	2/16/2018	12:12:40	COM10	6.00	13.52	0.00	407 BBLS H2O... SPACER BACK @ 260 BBLS CMT BACK @ 310 BBLS GONE 50 BBLS SPACER AND 97 BBLS CMT TO SURFACE... FINAL LIFT PSI @ 2720 PSI
Event	12	Other	Other	2/16/2018	13:02:53	COM10	2811.00	8.31	5.00	SLOWED TO 4BPM CMT TO SURFACE
Event	13	Bump Plug	Bump Plug	2/16/2018	13:21:15	COM10	3214.00	8.34	0.00	BUMP 3241 PSI HELD FOR 1 MIN
Event	14	Other	Other	2/16/2018	13:22:58	COM10	3295.00	8.30	0.00	RUPTURED WETSHOE @ 3760PSI...PUMPED 5 BBLS WET SHOE TRAC
Event	15	End Job	End Job	2/16/2018	13:28:58	COM10	-4.00	8.47	0.00	CHECK FLOATS THEY HELD 6BBLS BACK... END JOB

Event	16	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	2/16/2018	13:35:00	USER	-5.00	8.43	0.00	REVIEW JSA DISCUSS HAZARDS
Event	17	Rig-Down Equipment	Rig-Down Equipment	2/16/2018	13:45:00	USER	-8.00	0.28	0.00	NO ACCIDENTS OR INJURIES
Event	18	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	2/16/2018	15:00:00	USER				DISCUSS JM AND DIRECTIONS CALL FOR ROAD CONDITIONS
Event	19	Crew Leave Location	Crew Leave Location	2/16/2018	15:30:00	USER				SLEEP ON LEASE RD

3.0 Attachments

3.1 CUSTOM RESULTS – JOB CHART WITH EVENTS



3.2 CUSTOM RESULTS – JOB CHART WITHOUT EVENTS

