

HALLIBURTON

iCem[®] Service

EXTRACTION OIL & GAS

For:

Date: Thursday, December 18, 2014

EXTRACTION THORNTON #11

Surface

Job Date: Tuesday, December 16, 2014

Sincerely,

Sebastian Estenssoro

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1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **Thornton #11r** cement **Surface** 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.

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 Brighton

1.2 Job Summary

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Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 389404		Ship To #: 3593038		Quote #:		Sales Order #: 0901933442				
Customer: EXTRACTION OIL & GAS				Customer Rep: Larry Siegel						
Well Name: THORNTON		Well #: 11		API/UWI #: 05-123-40256-00						
Field: WATTENBERG		City (SAP): AULT		County/Parish: WELD		State: COLORADO				
Legal Description: SW SW-8-7N-66W-1185FSL-331FWL										
Contractor: H & P DRLG				Rig/Platform Name/Num: H & P 280						
Job BOM: 7521										
Well Type: HORIZONTAL OIL										
Sales Person: HALAMERICA/HB21661				Srv Supervisor: Bradley Hinkle						
Job										
Formation Name										
Formation Depth (MD)		Top		Bottom						
Form Type				BHST						
Job depth MD		837ft		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	LTC	J-55	0	837		0
Open Hole Section			13.5				0	862		0
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Guide Shoe	9.625			837		Top Plug	9.625		HES	
Float Shoe	9.625					Bottom Plug	9.625		HES	
Float Collar	9.625			795		SSR plug set	9.625		HES	
Insert Float	9.625					Plug Container	9.625		HES	
Stage Tool	9.625					Centralizers	9.625		HES	
Miscellaneous Materials										
Gelling Agt		Conc		Surfactant		Conc	Acid Type		Qty	Conc
Treatment Fld		Conc		Inhibitor		Conc	Sand Type		Size	Qty
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	Fresh Water Spacer	10 BBL Fresh Water Spacer, 12 BBLS Mud Flush, 10 BBLS Fresh Water	32	bbl	8.33			4		
4 lbm/bbl		MUD FLUSH III, 40 LB SACK (101633304)								

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Cementing Job Summary

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
2	Lead Cement	SWIFTCEM (TM) SYSTEM	350	sack	14.2	1.54		5	7.69	
7.69 Gal		FRESH WATER								
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
3	Displacement	Displacement	61	bbl	8.33			5		
Cement Left In Pipe		Amount	42 ft		Reason			Shoe Joint		
Mix Water: pH ##		Mix Water: ## ppm Chloride:			Mix Water Temperature: ## °F °C					
Cement Temperature: ## °F °C		Plug Displaced by: ## lb/gal kg/m ³ XXXX			Disp. Temperature: ## °F °C					
Plug Bumped? Yes/No		Bump Pressure: ### psi MPa			Floats Held? Yes/No					
Cement Returns: ## bbl m ³		Returns Density: ## lb/gal kg/m ³			Returns Temperature: ## °F °C					
Comment 11 BBLS CEMENT TO SURFACE.										

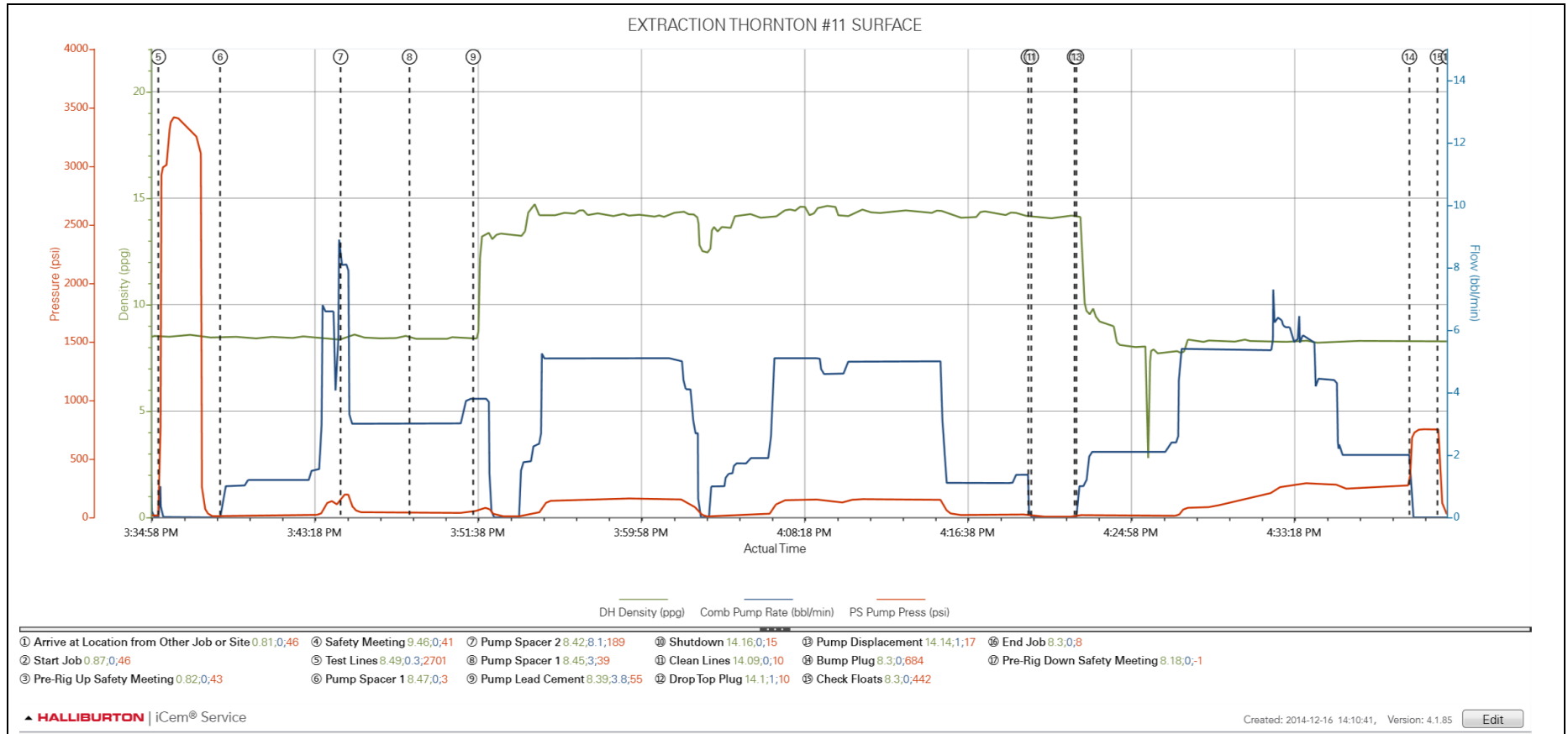
1.3 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Comments
Event	1	Arrive at Location from Other Job or Site	Arrive at Location from Other Job or Site	12/16/2014	14:11:11	USER	0.81	0.00	46.00	PERFORM A SITE ASSESSMENT AND PRE-RIG UP SAFETY MEETING.
Event	2	Start Job	Start Job	12/16/2014	14:13:18	COM5	0.87	0.00	46.00	
Event	3	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	12/16/2014	14:30:00	USER	0.82	0.00	43.00	PRE-RIG UP SAFETY MEETING WITH ALL PERSONNEL ON LOCATION.
Event	4	Safety Meeting	Safety Meeting	12/16/2014	15:25:00	USER	9.46	0.00	41.00	PRE-JOB SAFETY MEETING WITH ALL PERSONNEL ON LOCATION.
Event	5	Test Lines	Test Lines	12/16/2014	15:35:26	USER	8.49	0.30	2701.00	PRESSURE TEST LINES.
Event	6	Pump Spacer 1	Pump Spacer 1	12/16/2014	15:38:35	COM5	8.47	0.00	3.00	PUMP 10 BBLS FRESH WATER
Event	7	Pump Spacer 2	Pump Spacer 2	12/16/2014	15:44:44	COM5	8.42	8.00	186.00	PUMP 12 BBLS MUD FLUSH WATER.
Event	8	Pump Spacer 1	Pump Spacer 1	12/16/2014	15:48:15	COM5	8.45	3.00	39.00	PUMP 10 BBLS FRESH WATER.
Event	9	Pump Lead Cement	Pump Lead Cement	12/16/2014	15:51:30	COM5	8.38	3.80	54.00	PUMP 96 BBLS (350 SACKS) SWIFTCEM USING SUPPLIED WATER. DENSITY VERIFIED BY SCALES.
Event	10	Shutdown	Shutdown	12/16/2014	16:19:50	COM5	14.15	0.00	16.00	
Event	11	Clean Lines	Clean Lines	12/16/2014	16:19:59	COM5	14.10	0.00	11.00	
Event	12	Drop Top Plug	Drop Top Plug	12/16/2014	16:22:12	COM5	14.10	1.00	10.00	TOP PLUG PRELOADED.
Event	13	Pump Displacement	Pump Displacement	12/16/2014	16:22:18	COM5	14.14	1.00	17.00	PUMP 61 BBLS FRESH WATER SUPPLIED BY RIG. GOOD RETURNS THROUGHOUT. 11 BBLS CEMENT TO SURFACE.
Event	14	Bump Plug	Bump Plug	12/16/2014	16:39:17	COM5	8.31	0.00	675.00	BUMP PLUG AT 255 PSI AND PRESSURE INCREASED TO 755 PSI. HELD FOR 2 MINUTES.
Event	15	Check Floats	Check Floats	12/16/2014	16:40:43	USER	8.30	0.00	442.00	1 BBL BACK. FLOATS HELD.
Event	16	End Job	End Job	12/16/2014	16:41:16	COM5	8.31	0.00	9.00	

Event	17	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	12/16/2014	16:45:00	USER	8.16	0.00	-1.00	PRE-RIG DOWN SAFETY MEETING WITH HES AND RIG PERSONNEL.
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2 Attachments

2.1 EXTRACTION THORNTON #11.png



2.2 Custom Graph

