

HALLIBURTON

iCem[®] Service

EXTRACTION OIL & GAS

Date: Tuesday, January 17, 2017

Matrix C-29HN Production

Job Date: Monday, January 09, 2017

Sincerely,

Julia Nichols

Legal Notice

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1.0 Cementing Job Summary

1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **Matrix C-29HN** 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 40 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 [Ft. Lupton]

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Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 369404		Ship To #: 3633958		Quote #:		Sales Order #: 0903768651					
Customer: EXTRACTION OIL & GAS				Customer Rep: SHANE HATFORD							
Well Name: MATRIX			Well #: C-29HN			API/UWI #: 05-123-40894-00					
Field: GREELEY		City (SAP): GREELEY		County/Parish: WELD		State: COLORADO					
Legal Description: SE SW-29-6N-65W-444FSL-2322FWL											
Contractor: H & P DRLG				Rig/Platform Name/Num: H & P 321							
Job BOM: 7523											
Well Type: HORIZONTAL OIL											
Sales Person: HALAMERICA\HX38199					Srv Supervisor: Andrew Brennecke						
Job											
Formation Name											
Formation Depth (MD)		Top			Bottom						
Form Type					BHST						
Job depth MD		11704ft			Job Depth TVD		7000				
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			0	1655	0	1655	
Casing		5.5	4.778	20			0	11704	0	7000	
Open Hole Section			8.5				1653	11720	1653	7000	
Tools and Accessories											
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make		
Guide Shoe						Top Plug	5.5	1	KLX		
Float Shoe	5.5	1		11704		Bottom Plug					
Float Collar	5.5	1		11650		SSR plug set					
Insert Float						Plug Container	5.5	1	HES		
Stage Tool						Centralizers	5.5				
Fluid Data											
Stage/Plug #: 1											
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
1	11.5 lb/gal Tuned Spacer III	Tuned Spacer III			50	bbl	11.5	3.74		4	
0.30 gal/bbl		MUSOL A, 330 GAL TOTE - (790828)									
149.34 lbm/bbl		BARITE, BULK (100003681)									
35.40 gal/bbl		FRESH WATER									
0.30 gal/bbl		DUAL SPACER SURFACTANT B, 5 GAL PAIL (100003685)									
0.25 gal/bbl		D-AIR 3000L, 5 GAL PAIL (101007444)									

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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 W/O CBL	ELASTICEM (TM) SYSTEM	150	sack	13.2	1.57		4	7.48	
7.48 Gal		FRESH WATER								
0.90 %		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	
3	ElastiCem Tail	ELASTICEM (TM) SYSTEM	1400	sack	13.2	1.57		7.5	7.49	
7.49 Gal		FRESH WATER								
0.80 %		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	Displacement	Displacement	257.5	bbl	8.33			11		
Cement Left In Pipe		Amount	5 ft			Reason			Shoe Joint	
Mix Water:		pH 7	Mix Water Chloride:		0 ppm		Mix Water Temperature:		85 °F	
Cement Temperature:			Plug Displaced by:		8.4 lb/gal		Disp. Temperature:			
Plug Bumped?		Yes		Bump Pressure:		2800 psi		Floats Held?		Yes
Cement Returns:		40 bbl		Returns Density:				Returns Temperature:		
Comment										

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DS Pump Press <i>(psi)</i>	DH Density <i>(ppg)</i>	Comb Pump Rate <i>(bbl/min)</i>	Comments
Event	1	Call Out	Call Out	1/9/2017	10:00:00	USER				
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	1/9/2017	14:00:00	USER				ALL HES PRESENT
Event	3	Crew Leave Yard	Crew Leave Yard	1/9/2017	14:15:00	USER				
Event	4	Arrive at Location from Service Center	Arrive at Location from Service Center	1/9/2017	15:15:00	USER				RIG RUNNING CASING
Event	5	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	1/9/2017	15:30:00	USER				
Event	6	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	1/9/2017	15:45:00	USER				ALL HES PRESENT
Event	7	Rig-Up Completed	Rig-Up Completed	1/10/2017	17:15:00	USER				1-ELITE, 1-660 BULK TRAILER, 1-1600 FIELD BIN, 1-1420 FIELD BIN, 5.5" QUICK LATCH PLUG CONTAINER, 4" SUCTION HOSE
Event	8	Pre-Job Safety Meeting	Pre-Job Safety Meeting	1/10/2017	19:00:00	USER				ALL HES AND RIG CREW PRESENT
Event	9	Start Job	Start Job	1/10/2017	19:32:39	COM5				TD-11720', TVD-7000', TP-11704', FC-11650.72', OH-8.5", CSG-5.5" 20# P110, SCSG- 9.625" 36# 0-1653', MUD- 8.5PPG
Event	10	Prime Pumps	Prime Pumps	1/10/2017	19:35:00	USER				FRESH WATER
Event	11	Test Lines	Test Lines	1/10/2017	19:50:07	COM5	4825.00	8.37	0.00	FIRST PRESSURE TEST WE SWAPPED OUT 2" LO TORQ AFTER THAT PRESSURE HELD
Event	12	Pump Spacer 1	Pump Spacer 1	1/10/2017	20:00:58	COM5	102.00	11.10	2.30	TUNED SPACER III, 50BBLS, 11.5PPG, 3.74CF/SK, 23.7GAL/SK. 15GAL MUSAL, 15 GAL DUAL SPACER, 5 GAL D-AIR
Event	13	Pump Lead Cement	Pump Lead Cement	1/10/2017	20:15:39	COM5	144.00	13.17	3.80	ELASTICEM W/O CBL 150SKS, 13.2PPG, 1.57CF/SK, 7.48GAL/SK

Event	14	Pump Tail Cement	Pump Tail Cement	1/10/2017	20:27:26	COM5	146.00	13.04	4.20	ELASTICEM W/CBL 1400SKS, 13.2PPG, 1.57CF/SK, 7.49GAL/SK
Event	15	Shutdown	Shutdown	1/10/2017	21:53:53	USER	67.00	13.11	0.00	
Event	16	Clean Lines	Clean Lines	1/10/2017	22:01:09	COM5	0.00	29.92	0.70	CLEANED LINES TO FOUR SIDED TANK
Event	17	Drop Plug	Drop Plug	1/10/2017	22:06:40	USER	13.00	7.94	1.40	PLUG DROP BY KLX REP
Event	18	Pump Displacement	Pump Displacement	1/10/2017	22:07:19	COM5	25.00	8.20	1.50	FRESH WATER
Event	19	Slow Rate	Slow Rate	1/10/2017	22:34:38	USER	2548.00	8.29	5.20	SLOW RATE LAST 10 BBLS
Event	20	Other	RUPTURE PLUG	1/10/2017	22:37:44	USER	2423.00	8.31	5.10	RUPTER PLUG
Event	21	Check Floats	Check Floats	1/10/2017	22:38:48	USER	2079.00	8.28	0.00	FLOATS HELD 2 BBLS BACK
Event	22	End Job	End Job	1/10/2017	22:42:49	COM5				GOOD RETURNS THROUGH OUT JOB, 40BBLS CEMENT TO SURFACE
Event	23	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	1/10/2017	22:50:00	USER				ALL HES AND RIG CREW PRESENT
Event	24	Crew Leave Location	Crew Leave Location	1/10/2017	00:01:00	USER				THANK YOU FOR CHOOSING HALLIBURTON, ANDREW BRENNECKE AND CREW

3.0 Attachments

3.1 Custom Results – Job Chart with Events



3.2 Custom Results – Job Chart with Events

