

HALLIBURTON

iCem[®] Service

EXTRACTION OIL & GAS

Date: Wednesday, January 25, 2017

Matrix A-29HN Production

Job Date: Monday, January 16, 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 A-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 30 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 #: 389404	Ship To #: 3827159	Quote #:	Sales Order #: 0903781833							
Customer: EXTRACTION OIL & GAS		Customer Rep: SHAYNE HACKFORD								
Well Name: MATRIX	Well #: A-29HN	API/UWI #: 05-123-40692-00								
Field: GREELEY	City (SAP): GREELEY	County/Parish: WELD	State: COLORADO							
Legal Description: SE SW-29-6N-65W-427FSL-2297FWL										
Contractor: H & P DRLG		Rig/Platform Name/Num: H & P 321								
Job BOM: 7523										
Well Type: HORIZONTAL OIL										
Sales Person: HALAMERICA\HX38199		Srvc Supervisor: Jesse Slaughter								
Job										
Formation Name										
Formation Depth (MD)	Top	Bottom								
Form Type	BHST									
Job depth MD	11938ft	Job Depth TVD								
Water Depth		Wk Ht Above Floor	4ft							
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	1654	0	0
Casing		5.5	4.778	20			0	11938	0	0
Open Hole Section			8.5				1654	11945	0	7000
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Guide Shoe	5.5			11938		Top Plug	5.5	1	KLX	
Float Shoe	5.5					Bottom Plug	5.5		HES	
Float Collar	5.5					SSR plug set	5.5		HES	
Insert Float	5.5					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 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		5		
	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 (100003665)								
	0.25 gal/bbl	D-AIR 3000L, 5 GAL PAIL (101007444)								

last updated on 1/25/2017 4:16:15 PM

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(v. 4.3.44)

Created: Wednesday, January 25, 2017

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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/min	Total Mix Fluid Gal
2	ElastiCem W/O CBL	ELASTICEM (TM) SYSTEM	150	sack	13.2	1.57		5	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/min	Total Mix Fluid Gal
3	ElastiCem Tail	ELASTICEM (TM) SYSTEM	1400	sack	13.2	1.57		8	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/min	Total Mix Fluid Gal
4	Displacement	Displacement	263.8	bbl	8.33			9	
Cement Left In Pipe		Amount	5 ft		Reason			Shoe Joint	
Comment									

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DS Pump Press (psi)	DH Density (ppg)	Comb Pump Rate (bbl/min)	Comments
Event	1	Safety Meeting	Call Out	1/15/2017	16:00:00	USER				
Event	2	Safety Meeting	Crew Leave Yard	1/16/2017	18:30:00	USER				
Event	3	Safety Meeting	Arrive At Loc	1/16/2017	19:30:00	USER				RIG WAS RUNNING CASING UPON HES ARRIVAL
Event	4	Safety Meeting	Rig-Up Equipment	1/16/2017	20:30:00	USER				1 ELITE, 1 660 BULK TRUCK, 2 FIELD BINS
Event	5	Safety Meeting	Pre-job Safety Meeting	1/16/2017	21:00:00	USER				WITH ALL PERSONNEL
Event	6	Start Job	Start Job	1/16/2017	00:14:49	COM5				
Event	7	Prime Pumps	Prime Pumps	1/16/2017	00:16:39	COM5				
Event	8	Test Lines	Test Lines	1/16/2017	00:22:51	COM5	4877.00	8.87	0.00	
Event	9	Check Weight	Check Weight	1/16/2017	00:32:39	COM5	-21.00	8.65	0.00	SCALES SHOWING 11.5 PPG
Event	10	Pump Spacer 1	Pump Tuned Spacer	1/16/2017	00:34:18	COM5	71.00	11.57	2.50	WITH 15 GAL MUSOL A, 15 GAL DUAL SPACER B, 5 GAL D-AIR
Event	11	Pump Lead Cement	Pump Lead Cement	1/16/2017	00:45:01	COM5	308.00	13.16	5.00	150 SKS AT 13.2 PPG, 1.57 FT3/SK, 7.48 GAL/SK
Event	12	Check Weight	Check Weight	1/16/2017	00:46:04	COM5	333.00	13.31	5.00	SCALES SHOWING 13.2 PPG
Event	13	Pump Tail Cement	Pump Tail Cement	1/16/2017	00:52:47	COM5	283.00	13.28	4.60	1400 SKS AT 13.2 PPG, 1.57 FT3/SK, 7.49 GAL/SK
Event	14	Check Weight	Check Weight	1/16/2017	00:56:43	COM5	728.00	13.18	8.00	
Event	15	Check Weight	Check Weight	1/16/2017	01:21:54	COM5	759.00	13.25	8.10	
Event	16	Shutdown	Shutdown	1/16/2017	01:46:37	COM5	118.00	13.54	0.00	
Event	17	Clean Lines	Clean Lines	1/16/2017	01:54:15	COM5	-17.00	-0.05	0.70	CLEAN PUMPS AND LINES TO RIG TANK
Event	18	Drop Top Plug	Drop Top Plug	1/16/2017	01:57:24	COM5				PLUG LAUNCHED. SUPPLIED BY KLX
Event	19	Pump Displacement	Pump Displacement	1/16/2017	01:57:50	COM5	12.00	8.17	0.90	FRESH WATER

Event	20	Other	Slow Rate	1/16/2017	02:25:05	COM5	2853.00	8.35	4.20	SLOWED RATE 20 BBLS PRIOR TO CALCULATED DISPLACEMENT
Event	21	Bump Plug	Bump Plug	1/16/2017	02:27:33	COM5	3050.00	8.33	0.00	
Event	22	Pump Spacer	Pump Wet Shoe	1/16/2017	02:28:09	USER	3233.00	8.32	0.00	PUMP WET SHOE AS PER COMPANY REP
Event	23	Other	Check Floats	1/16/2017	02:29:54	COM5	2591.00	8.32	4.20	FLOATS HOLDIND. HES RETURNED 2 BBLS H2O TO PUMP
Event	24	End Job	End Job	1/16/2017	02:31:00	COM5				PIPE WAS STATIC DURING JOB, GOOD CIRCULATION THROUGHOUT JOB. HES RETURNED 30 BBLS CEMENT TO SURFACE.
Event	25	End Job	Rig Down Equipment	1/16/2017	03:00:00	USER				
Event	26	End Job	Crew Leave Location	1/16/2017	04:30:00	USER				
Event	27	End Job	Comment	1/16/2017	04:31:00	USER				THANK YOU FOR USING HALLIBURTON CEMENT DEPARTMENT JESSE SLAUGHTER AND CREW

3.0 Attachments

3.1 Custom Results – Job Chart with Events



3.2 Custom Results – Job Chart without Events

