

HALLIBURTON

iCem[®] Service

EXTRACTION OIL & GAS

United States of America

Date: Wednesday, December 28, 2016

Matrix A-29HN Production

Job Date: Friday, November 25, 2016

Sincerely,

Justin Lansdale

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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.

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]

The Road to Excellence Starts with Safety

Sold To #: 369404	Ship To #: 3627159	Quote #:	Sales Order #: 0903654370
Customer: EXTRACTION OIL & GAS -		Customer Rep: Sean McIntyre	
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:		Rig/Platform Name/Num: Spud Rig	
Job BOM: 7521			
Well Type: HORIZONTAL OIL			
Sales Person: HALAMERICA\HX38199		Srvc Supervisor: Jacob Ayers	

Job

Formation Name			
Formation Depth (MD)	Top	Bottom	
Form Type	BHST		
Job depth MD	1634 ft	Job Depth TVD	

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	1634	0	1634
Open Hole Section			13.5				0	1634	0	1634

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	9.625			1634	Top Plug	9.625		HES
Float Shoe	9.625				Bottom Plug	9.625		HES
Float Collar	9.625				SSR plug set	9.625		HES
Insert Float	9.625				Plug Container	9.625		HES
Stage Tool	9.625				Centralizers	9.625		HES

Fluid Data

Stage/Plug #: 1										
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density	Yield ft3/sack	Mix Fluid	Rate bbl/min	Total Mix Fluid	
1	Fresh Water	Fresh Water	20	dbl	8.33					

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density	Yield ft3/sack	Mix Fluid	Rate bbl/min	Total Mix Fluid	
2	SwiftCem	SWIFTCEM (TM) SYSTEM	575	sack	13.5	1.74		5	9.2	

9.20 Gal		FRESH WATER								
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density	Yield ft3/sack	Mix Fluid	Rate bbl/min	Total Mix Fluid	
3	Fresh Water	Fresh Water	122	bbbl	8.33					
Cement Left In Pipe		Amount	43.5 ft		Reason			Shoe Joint		
Mix Water pH:	7.5	Mix Water Chloride:	<52ppm		Mix Water Temperature:	55 °F				
Sulfates:	<400	Cement Returns:	30 bbl		Returns Density:	13.5lb/gal				
Plug Bumped?:	Yes	Bump Pressure:	621 psi		Floats Held?:	Yes				
Comment 32 bbls cement back to surface										

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Comments
Event	1	Arrive at Location from Other Job or Site	Arrive at Location from Other Job or Site	11/25/2016	10:00:02	USER	requested on location time was 1000
Event	2	Start Job	Start Job	11/25/2016	11:36:11	COM5	
Event	3	Pump Spacer 2	Pump Spacer 1	11/25/2016	11:37:52	USER	pump 10 bbl fresh water ahead
Event	4	Pressure Test	Pressure Test	11/25/2016	11:44:15	USER	test pumps and lines to 2600
Event	5	Pump Spacer	Pump Spacer	11/25/2016	11:48:42	USER	20 bbl red dye water spacer
Event	6	Pump Cement	Pump Cement	11/25/2016	11:56:32	USER	575 sks 1.74 yield 9.2 wrq = 178bbl cmt @13.5#
Event	7	Check Weight	Check Weight	11/25/2016	11:59:16	USER	checked weight and auto called down hole
Event	8	Slow Rate	Slow Rate	11/25/2016	12:10:20	USER	slowed rate to fix packed off tub
Event	9	Drop Plug	Drop Plug	11/25/2016	12:26:31	USER	shut down dropped plug
Event	10	Pump Displacement	Pump Displacement	11/25/2016	12:28:47	USER	calculated 122bbl to land plug
Event	11	Cement Returns to Surface	Cement Returns to Surface	11/25/2016	12:46:02	USER	calculated 32 bbl cmt back 30 bbl actually returned to surface
Event	12	Bump Plug	Bump Plug	11/25/2016	12:54:51	USER	calculated 440psi to land plug actually landed @ 710psi

Event	13	Standby Other	Standby Other	11/25/2016	12:59:35	USER	check floats floats held 3/4bbl back
Event	14	End Job	End Job	11/25/2016	13:00:40	COM5	

2.2 Custom Graph

