

# HALLIBURTON

iCem<sup>®</sup> Service

**NICKEL ROAD OPERATING LLC**

Ft. Lupton District, CO

**Reeman 6X-HNB-04-06-65 Surface**

Job Date: Thursday, March 24, 2022

Sincerely,

**Meghan Van Zyl**

## Legal Notice

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### Disclaimer:

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## 1.0 Cementing Job Summary

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### 1.1 Executive Summary

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Halliburton appreciates the opportunity to perform the cementing services on the **Reeman 6X-HNB-04-06-65** 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 31 bbls 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**

<b>Sold To #:</b> 382767		<b>Ship To #:</b> 9107767		<b>Quote #:</b>		<b>Sales Order #:</b> 0907754356				
<b>Customer:</b> NICKEL ROAD OPERATING LLC					<b>Customer Rep:</b> Todd Stephens					
<b>Well Name:</b> REEMAN			<b>Well #:</b> 6X-HNB-04-06-65			<b>API/UWI #:</b>				
<b>Field:</b>		<b>City (SAP):</b> EATON		<b>County/Parish:</b> Weld			<b>State:</b> COLORADO			
<b>Legal Description:</b>										
<b>Contractor:</b> IKON DRLG					<b>Rig/Platform Name/Num:</b> IKON 12					
<b>Job BOM:</b> 7521 7521										
<b>Well Type:</b> OIL										
<b>Sales Person:</b> HALAMERICA\HX41066					<b>Srvc Supervisor:</b> Michael Loughran					
<b>Job</b>										
<b>Formation Name</b>										
<b>Formation Depth (MD)</b>		<b>Top</b>				<b>Bottom</b>				
<b>Form Type</b>				<b>BHST</b>						
<b>Job depth MD</b>		1734ft		<b>Job Depth TVD</b>						
<b>Water Depth</b>				<b>Wk Ht Above Floor</b>						
<b>Perforation Depth (MD)</b>		<b>From</b>		<b>To</b>						
<b>Well Data</b>										
<b>Description</b>	<b>New / Used</b>	<b>Size in</b>	<b>ID in</b>	<b>Weight lbm/ft</b>	<b>Thread</b>	<b>Grade</b>	<b>Top MD ft</b>	<b>Bottom MD ft</b>	<b>Top TVD ft</b>	<b>Bottom TVD ft</b>
Casing		16	15.376	55			0	80		
Casing		9.625	8.921	36	LTC	J-55	0	1734		
Open Hole Section			13.5				80	1734		
<b>Tools and Accessories</b>										
<b>Type</b>	<b>Size in</b>	<b>Qty</b>	<b>Make</b>	<b>Depth ft</b>		<b>Type</b>	<b>Size in</b>	<b>Qty</b>	<b>Make</b>	
Guide Shoe	9.625					Top Plug	9.625	1	Sceptre	
Float Shoe	9.625			1734		Bottom Plug	9.625			
Float Collar	9.625			1691.19		SSR plug set	9.625		HES	
Insert Float	9.625					Plug Container	9.625	1	HES	
Stage Tool	9.625					Centralizers	9.625		HES	
<b>Fluid Data</b>										
<b>Stage/Plug #: 1</b>										
<b>Fluid #</b>	<b>Stage Type</b>	<b>Fluid Name</b>	<b>Qty</b>	<b>Qty UoM</b>	<b>Mixing Density lbm/gal</b>	<b>Yield ft<sup>3</sup>/sack</b>	<b>Mix Fluid Gal</b>	<b>Rate bbl/min</b>	<b>Total Mix Fluid Gal</b>	
1	Fresh Water	Fresh Water	10	bbl	8.33			4		
<b>Fluid Data</b>										
<b>Fluid #</b>	<b>Stage Type</b>	<b>Fluid Name</b>	<b>Qty</b>	<b>Qty UoM</b>	<b>Mixing Density lbm/gal</b>	<b>Yield ft<sup>3</sup>/sack</b>	<b>Mix Fluid Gal</b>	<b>Rate bbl/min</b>	<b>Total Mix Fluid Gal</b>	
2	SwiftCem	SBM SWIFTCM CEMENT SYSTEM CEM	600	sack	13.5	1.75		8	9.25	

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	Displacement Fluid	Displacement Fluid	130.7	bbl	8.34			9	
Cement Left In Pipe		Amount	42.81 ft		Reason			Shoe Joint	
Mix Water:		pH 7	Mix Water Chloride:	Less 200 ppm		Mix Water Temperature:		66 °F	
Cement Temperature:			Plug Displaced by:	8.33 lb/gal		Disp. Temperature:		66 °F	
Plug Bumped?		Yes	Bump Pressure:	1100 psi		Floats Held?		Yes	
Cement Returns:		31 BBLS	Returns Density:	13.5 lb/gal		Returns Temperature:			
Comment TOC=0'									

## 2.0 Real-Time Job Summary

## 2.1 Job Event Log

Seq No.	Activity	Graph Label	Date	Time	Dwnhole Density (ppg)	Cmb Pump Rate (bbl/min)	Pump A Pressure (psi)	Cmb Stg Total (bbl)	Comments
1	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	3/23/2022	14:30:00					JSA SAFE DRIVING
2	Crew Leave Yard	Crew Leave Yard	3/23/2022	15:00:00					CREW LEAVES YARD
3	Arrive At Loc	Arrive At Loc	3/23/2022	16:00:00					MEET WITH CUSTOMER. 1734' J-55 36# 9.625" CASING. TD 1734' F/C 1691.19', 13.5"HOLE, WATER 66 DEGREES, CHLORIDES LESS THAN 200 PPM, PH 7
4	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	3/23/2022	18:00:00					HAZARD HUNT, JSA SAFE RIG UP
5	Rig-Up Equipment	Rig-Up Equipment	3/23/2022	18:05:00					RIG UP ALL HES EQUIPMENT AND IRON TO BUFFER ZONE
6	Call Out	Call Out	3/23/2022	21:00:00					CREW CALLED OUT AT 2100 HRS. 3/23/2022 REQUESTED ON LOCATION 2130 HRS. 3/23/2022
7	Pre-Job Safety Meeting	Pre-Job Safety Meeting	3/23/2022	22:14:21	0.52	0.00	-54.32	5.81	DISCUSS HAZARDS OF HES EQUIPMENT AND PRESSURE
8	Start Job	Start Job	3/23/2022	22:49:52	8.44	0.00	-6.67	0.00	BEGIN RECORDING DATA. RIG CIRCULATES BOTTOMS UP. 10 BPM/250 PSI
9	Test Lines	Test Lines	3/23/2022	22:51:18	8.52	0.00	27.99	3.08	TEST HES LINES TO 3000 PSI

10	Pump Spacer 1	Pump Spacer 1	3/23/2022	22:54:08	8.48	0.00	9.07	0.00	10 BBLS. FRESH WATER SPACER W/.5 LBS. GREEN DYE
11	Pump Cement	Pump Cement	3/23/2022	22:58:05	8.37	3.04	57.25	0.03	600 SACKS SBM SWIFTCCEM CEMENT. 187 BBLS. 13.5 PPG, 1.75 YIELD, 9.25 GAL/SACK. 31 BBLS. CEMENT TO SURFACE. TOC=0'
12	Shutdown	Shutdown	3/23/2022	23:27:57	10.91	0.00	100.49	222.45	SHUTDOWN
13	Drop Top Plug	Drop Top Plug	3/23/2022	23:34:32	0.00	0.00	-18.84	0.00	SCEPTRE TOP PLUG VERIFIED BY TODD.
14	Pump Displacement	Pump Displacement	3/23/2022	23:34:35	0.00	0.00	-18.63	0.00	130.7 BBLS, FRESH WATER DISPLACEMENT
15	Shutdown	Shutdown	3/23/2022	23:51:20	8.38	3.16	544.37	123.49	SHUTDOWN AT 115 BBLS TO STAGE 4 MIN
16	Resume	Resume	3/23/2022	23:55:54	8.34	0.00	332.40	123.52	RESUME PUMPING
17	Shutdown	Shutdown	3/23/2022	23:58:42	8.38	0.07	456.30	128.77	SHUTDOWN AT 119 INTO DISPLACEMENT TO STAGE 10 MIN
18	Resume	Resume	3/24/2022	00:08:23	8.32	0.00	143.96	128.77	RESUME PUMPING
19	Bump Plug	Bump Plug	3/24/2022	00:13:40	8.42	0.00	1069.12	137.43	FCP 540 PSI/2 BPM. BUMP 1100 PSI
20	Check Floats	Check Floats	3/24/2022	00:14:13	8.33	0.00	83.21	137.43	FLOATS HOLD .5 BBLS BACK TO PUMP TRUCK
21	End Job	End Job	3/24/2022	00:14:33	8.33	0.00	-3.95	0.00	STOP RECORDING DATA. PUMP 15 BBLS. WATER TO FLUSH RIGS CELLAR PUMP
22	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	3/24/2022	00:20:00					JSA SAFE RIG-DOWN
23	Rig-Down Equipment	Rig-Down Equipment	3/24/2022	00:35:00					RIG DOWN HES EQUIPMENT
24	Rig-Down Completed	Rig-Down Completed	3/24/2022	00:40:00					RIG-DOWN COMPLETED



25	Crew Leave Location	Crew Leave Location	3/24/2022	01:30:00	CREW LEAVE LOCATION.
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3.0 Attachments

3.1 Real Time iCem Job Chart

