

# HALLIBURTON

iCem<sup>®</sup> Service

## **EXTRACTION OIL & GAS-EBUS**

Date: Wednesday, May 22, 2019

## **INTERCHANGE B N35-20-6N Surface**

Job Date: Monday, April 01, 2019

Sincerely,

**Bryce Hinsch**

## 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 **Interchange B N35-20-6N** 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.

**Approximately 20 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**

*The Road to Excellence Starts with Safety*

<b>Sold To #:</b> 369404		<b>Ship To #:</b> 3901402		<b>Quote #:</b>		<b>Sales Order #:</b> 0905577851					
<b>Customer:</b> EXTRACTION OIL & GAS -				<b>Customer Rep:</b> justin							
<b>Well Name:</b> INTERCHANGE B			<b>Well #:</b> N35-20-6N		<b>API/UWI #:</b> 05-014-20777-00						
<b>Field:</b> WATTENBERG		<b>City (SAP):</b> BROOMFIELD		<b>County/Parish:</b> BROOMFIELD		<b>State:</b> COLORADO					
<b>Legal Description:</b> NE SW-10-1S-68W-2496FSL-1637FWL											
<b>Contractor:</b> Shawn McIntyre				<b>Rig/Platform Name/Num:</b> Cartel 15							
<b>Job BOM:</b> 7521 7521											
<b>Well Type:</b> HORIZONTAL OIL											
<b>Sales Person:</b> HALAMERICA\HX38199				<b>Srv Supervisor:</b> Nicholas Ralston							
<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>		1643ft			<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>	
Open Hole Section			13.5					1643			
Casing		9.625	8.921	36				1643			
<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			1643		Top Plug	9.625	1	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	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 ft3/sack</b>	<b>Mix Fluid Gal</b>	<b>Rate bbl/min</b>	<b>Total Mix Fluid Gal</b>
1	Red Dye Spacer	Red Dye Spacer			10	bbl	8.33			4	

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	SwiftCem	SWIFTCEM (TM) SYSTEM	550	sack	13.5	1.74		8	9.2
9.20 Gal		<b>FRESH WATER</b>							
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	Fresh Water	Fresh Water	121	bbl	8.33			8	
Cement Left In Pipe		Amount	44 ft		Reason			Shoe Joint	
Mix Water:			Mix Water Chloride:		Mix Water Temperature:				
Cement Temperature:			Plug Displaced by:		FRESH WATER		Disp. Temperature:		
Plug Bumped?		YES	Bump Pressure:		560 – 1196 PSI		Floats Held?		YES
Cement Returns:		20 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	Recirc Density (ppg)	Comb Pump Rate (bbl/min)	DS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	Call Out	3/31/2019	10:00:00	USER					CALLED OUT FOR EXTRACTION INTERSECTION B 9 5/8 SURFACE JOB ON LOCATION 2200
Event	2	Arrive At Loc	Arrive At Loc	3/31/2019	10:30:00	USER					ALREADY ON LOCATION FROM PREVIOUS JOB GOT WITH JUSTIN COMPANY MAN GOT NEW NUMBERS TD 1642 TP 1645 OH 13.5 SJ 44 W 36# G J-55 MW 8.6 WATER TESTED GOOD
Event	3	Other	Other	3/31/2019	17:17:52	USER					RIG STILL RUNNING CASING
Event	4	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	3/31/2019	18:00:00	USER					DISCUSS RIG UP JSA WITH CREW
Event	5	Rig-Up Equipment	Rig-Up Equipment	3/31/2019	18:10:00	USER					RIG UP FOR NEXT WELL
Event	6	Start Job	Start Job	3/31/2019	23:03:36	COM5	0.16	0.00	7.00	0.00	DISCUSS JOB PROCEDURE WITH RIG CREW AND HALLIBURTON
Event	7	Test Lines	Test Lines	3/31/2019	23:03:41	COM5	0.16	0.00	7.00	0.00	TEST K/O 500 HIGH 2000 BOTH TEST GOOD
Event	8	Pump Spacer 1	Pump Spacer 1	3/31/2019	23:29:22	COM5	8.67	4.00	117.00	0.70	PUMP 10 BBL FRESH WATER WITH RED DYE @ 4 BPM @127 PSI
Event	9	Pump Cement	Pump Cement	3/31/2019	23:33:20	COM5	13.44	8.00	357.00	2.10	PUMP 550 SKS 170 BBL CMT @ 13.5 PPG @8 BPM 328 PSI
Event	10	Drop Top Plug	Drop Top Plug	4/1/2019	00:02:14	COM5	8.84	0.00	45.00	197.10	DROP TOP PLUG

Event	11	Pump Displacement	Pump Displacement	4/1/2019	00:03:44	COM5	8.84	1.50	32.00	0.00	PUMP 121 BBL FRESH WATER DISPLACEMENT @ 8 BPM 196 PSI
Event	12	Bump Plug	Bump Plug	4/1/2019	00:25:03	COM5	8.83	0.30	941.00	141.90	BUMP PLUG @ 560 PSI TOOK TO 1196 PSI HELD 1 MIN CHECK FLOATS 1/2 BBL BACK TO TRUCK GOT 20BBL CMT TO SURFACE
Event	13	End Job	End Job	4/1/2019	00:29:46	COM5	8.83	0.00	9.00	142.00	
Event	14	Crew Leave Location	Crew Leave Location	4/1/2019	00:58:13	USER					CREW STAYING ON LOCATION FOR NEXT WELL



## 3.0 Attachments

### 3.1 Extraction Interchange B N35-20-6N Surface Chart

