

# HALLIBURTON

iCem® Service

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

Date: Tuesday, April 24, 2018

### **Coyote Trails 33S-20-7N Surface**

Job Date: Wednesday, March 28, 2018

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 **Coyote Trails 33S-20-7N** 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 25 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> 3843098		<b>Quote #:</b>		<b>Sales Order #:</b> 0904742311					
<b>Customer:</b> EXTRACTION OIL & GAS -						<b>Customer Rep:</b> Jose Torres					
<b>Well Name:</b> COYOTE TRAILS				<b>Well #:</b> 33S-20-7N			<b>API/UWI #:</b> 05-123-45989-00				
<b>Field:</b> WATTENBERG		<b>City (SAP):</b> ERIE		<b>County/Parish:</b> WELD			<b>State:</b> COLORADO				
<b>Legal Description:</b> SW SE-28-1N-68W-1147FSL-2193FEL											
<b>Contractor:</b> PATTERSON-UTI ENERGY					<b>Rig/Platform Name/Num:</b> PATTERSON 901						
<b>Job BOM:</b> 7521 7521											
<b>Well Type:</b> HORIZONTAL OIL											
<b>Sales Person:</b> HALAMERICA\HX38199					<b>Srvc Supervisor:</b> Kendall Broom - H194727						
<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>		1630ft		<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	0	9.625	8.921	36	8 RD	J-55	0	1600	0	0	
Open Hole Section			13.5				0	1630	0	1630	
<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	HES		
Float Shoe	9.625			1600		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 #:</b> 1											
<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			20	bbl	8.33				

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		5	9.2
9.20 Gal		FRESH WATER							
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	120	bbl	8.33				
Cement Left In Pipe		Amount	44 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	Comb Pump Rate (bbl/min)	DH Density (ppg)	Pump Stg Tot (bbl)	PS Pump Press (psi)	Comments
Event	1	Call Out	Call Out	3/28/2018	02:30:00	USER					Called out crew to be on location at 0530
Event	2	Depart Shop for Location	Depart Shop for Location	3/28/2018	04:30:00	USER					Held a safety meeting before leaving for location
Event	3	Arrive At Loc	Arrive At Loc	3/28/2018	05:15:00	USER					Arrived on location and met with the company man
Event	4	Rig-up Lines	Rig-up Lines	3/28/2018	05:30:00	USER					Held a hazard hunt before spotting in trucks and rigging up
Event	5	Safety Meeting	Safety Meeting	3/28/2018	06:40:00	USER	0.00	0.03	0.00	-47.00	Held a safety meeting with crew to discuss the operation and safety
Event	6	Start Job	Start Job	3/28/2018	06:54:39	COM5	0.00	8.44	0.00	-28.00	Filled lines with 3 bbls water
Event	7	Test Lines	Test Lines	3/28/2018	06:59:09	COM5	0.00	8.45	3.00	0.00	Test lines to 3000 psi with a 500 kickout and 5th gear stall.
Event	8	Pump Spacer 1	Pump Spacer 1	3/28/2018	07:00:07	COM5	3.40	8.46	0.00	63.00	Pumped 10 bbl water spacer
Event	9	Pump Spacer 1	Pump Spacer 1	3/28/2018	07:05:13	COM5	3.40	8.45	0.00	105.00	Pumped 10 bbla water spacer with red dye
Event	10	Pump Cement	Pump Cement	3/28/2018	07:08:10	COM5	3.40	8.44	0.00	107.00	Pumped 170.44 bbls Swiftcem. 550 sks, 13.5 #, 1.74 yield 9.2 gal/sks. Pumped at 5 bpm and 230 psi
Event	11	Check Weight	Check weight	3/28/2018	07:14:03	COM5	5.00	13.54	27.20	232.00	Verified weight with pressurized scales

Event	12	Shutdown	Shutdown	3/28/2018	07:44:36	COM5	0.00	14.23	178.20	64.00	Shut down and washed up the cement head
Event	13	Drop Top Plug	Drop Top Plug	3/28/2018	07:46:08	COM5	0.00	15.94	178.20	35.00	Dropped top plug, Preloaded and witnessed by the company man
Event	14	Pump Displacement	Pump Displacement	3/28/2018	07:46:12	COM5	0.00	15.98	0.00	35.00	Pumped 120 bbls water displacement. Got 25 bbls cement back to surface. Pumped 10 bpm and 560 psi
Event	15	Bump Plug	Bump Plug	3/28/2018	08:08:14	COM5	0.00	8.04	125.80	818.00	Bumped plug at 440 psi final lift pressure
Event	16	End Job	End Job	3/28/2018	08:09:32	COM5	0.00	8.00	0.00	-13.00	
Event	17	Rig Down Lines	Rig Down Lines	3/28/2018	08:15:00	USER	1.20	8.03	17.20	-3.00	Held A safety meeting before rigging down lines
Event	18	Depart Location	Depart Location	3/28/2018	09:00:00	USER					Held a safety huddle before leaving location



## 3.0 Attachments

### 3.1 Extraction Coyote Trails 33S-20-7N Surface Job Chart

