

# HALLIBURTON

iCem<sup>®</sup> Service

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

Date: Sunday, January 19, 2020

### **GP CODY FED 20E-15-3 Surface**

Job Date: Saturday, January 04, 2020

Sincerely,

**SAM CARPENTER**

## 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 **GP Cody Fed 20E-15-3** 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 40 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> 3987053		<b>Quote #:</b>		<b>Sales Order #:</b> 0906193597				
<b>Customer:</b> EXTRACTION OIL & GAS -				<b>Customer Rep:</b> COLBY						
<b>Well Name:</b> GP CODY FED			<b>Well #:</b> 20E-15-3			<b>API/UWI #:</b> 05-123-50282-00				
<b>Field:</b> WATTENBERG		<b>City (SAP):</b> GREELEY		<b>County/Parish:</b> WELD		<b>State:</b> COLORADO				
<b>Legal Description:</b> NE NE-20-5N-65W-694FNL-1305FEL										
<b>Contractor:</b>				<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\H171328				<b>Srvc Supervisor:</b> Lance Carpenter						
<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>		1596		<b>Job Depth TVD</b>		1596				
<b>Water Depth</b>				<b>Wk Ht Above Floor</b>		4				
<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		13.5					0	1596	0	1596
Casing		9.625		36			0	1596	0	1596
<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			1596		Top Plug	9.625	1	HES	
Float Shoe	9.625					Bottom Plug	9.625		HES	
Float Collar	9.625			1553		SSR plug set	9.625		HES	
Insert Float	9.625					Plug Container	9.625		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 ft/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				

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
2	SwiftCem	SWIFTCEM (TM) SYSTEM	590	sack	13.5	1.74		5	9.17
9.17 Gal		<b>FRESH WATER</b>							

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft <sup>3</sup> /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	Reason	Shoe Joint
	41 ft		
Mix Water:	pH 7	Mix Water Chloride: 500 ppm	Mix Water Temperature: 57 °F
Cement Temperature:	## °F °C	Plug Displaced by: 8.4 lb/gal Water	Disp. Temperature: ## °F °C
Plug Bumped?	Yes	Bump Pressure: 526 psi	Floats Held? Yes
Cement Returns:	40 bbl	Returns Density: ## lb/gal kg/m <sup>3</sup>	Returns Temperature: ## °F °C

**Comment**

JOB WENT WELL. NO ACCIDENT, INJURY OR SPILL. SLURRY WEIGHT VERIFIED BY PRESSURIZED MUD BALANCE AND VOLUME VERIFIED BY MIX WATER GALLONS. DROPPED TOP PLUG AFTER CEMENT. WASHED UP ON TOP OF THE PLUG. BUMPED AT 3.5 BPM AT 526 PSI. TOOK TO 1030 PSI AND HELD FOR A FEW MINUTES. FLOATS HELD WITH 1 BBL BACK.

TOP OF CEMENT – SURFACE WITH 40 BBL BACK

ALL SPACER TO SURFACE

## 2.0 Real-Time Job Summary

### 2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	PS Pump Press <i>(psi)</i>	DH Density <i>(ppg)</i>	Comb Pump Rate <i>(bbl/min)</i>	Pump Stg Tot <i>(bbl)</i>	Comments
Event	1	Other	Other	1/4/2020	11:30:00	USER					RIG TD'S WELL. CREW WENT AND RELOADED CEMENT BINS WITH NEXT WELL'S CEMENT.
Event	2	Safety Meeting	Safety Meeting	1/4/2020	16:30:00	USER	-7.00	0.00	0.00	0.00	CREW HAS PRE JOB SAFETY MEETING DISCUSSING RED ZONES, MUSTER AREAS, TEAM LIFTING, PINCH POINTS, LINE OF FIRE, TUGGER OPERATIONS, ROLES, PROCEEDURES AND THE JOB
Event	3	Casing on Bottom	Casing on Bottom	1/4/2020	16:50:00	USER	-8.00	8.44	1.40	16.50	CASING ON BOTTOM. RIG CIRCULATES BOTTOMS UP WHILE RIGGING DOWN CASING EQUIPMENT AND RIGGING UP HES LINES
Event	4	Start Job	Start Job	1/4/2020	16:58:30	COM4	-7.00	8.43	1.50	3.00	START JOB
Event	5	Test Lines	Test Lines	1/4/2020	17:10:45	COM4	1693.00	8.35	0.00	2.90	FILL LINES WITH 3 BBL WATER. PRESSURE TEST HES LINES TO 3000 PSI. HELD FOR A FEW MINUTES, TEST GOOD
Event	6	Pump Spacer 1	Pump Spacer 1	1/4/2020	17:13:41	COM4	24.00	8.31	0.00	0.00	PUMP 10 BBL RED DYE WATER SPACER
Event	7	Pump Lead Cement	Pump Lead Cement	1/4/2020	17:18:37	COM4	105.00	13.12	2.90	0.00	PUMP 183 BBL SWIFTCEM 13.5# 1.74 YIELD 9.17 GAL 590 SACKS

Event	8	Check Weight	Check Weight	1/4/2020	17:21:41	COM4	360.00	13.61	8.00	16.50	VERIFIED WEIGHT WITH PRESSURIZED MUD BALANCE
Event	9	Check Weight	Check Weight	1/4/2020	17:23:49	COM4	284.00	13.57	8.00	33.60	VERIFIED WEIGHT WITH PRESSURIZED MUD BALANCE
Event	10	Check Weight	Check Weight	1/4/2020	17:31:01	COM4	175.00	13.59	6.20	85.00	VERIFIED WEIGHT WITH PRESSURIZED MUD BALANCE
Event	11	Shutdown	Shutdown	1/4/2020	17:48:43	COM4	68.00	15.82	0.00	212.30	SHUTDOWN
Event	12	Drop Top Plug	Drop Top Plug	1/4/2020	17:57:13	COM4	7.00	20.37	0.00	0.00	DROP TOP PLUG. QUICK LATCH ASSEMBLY CAME APART AND USED SWEDGE TO FINISH JOB
Event	13	Pump Displacement	Pump Displacement	1/4/2020	18:00:41	COM4	7.00	20.36	0.00	0.00	PUMP 120 BBL WATER DISPLACEMENT WASHING UP FIRST 10 BBL ON TOP OF THE PLUG
Event	14	Bump Plug	Bump Plug	1/4/2020	18:18:41	USER	597.00	7.74	3.50	121.80	BUMP PLUG AT 3.5 BPM AT 526 PSI. TOOK TO 1030 PSI AND HELD FOR A FEW MINUTES
Event	15	Check Floats	Check Floats	1/4/2020	18:19:52	USER	643.00	7.74	0.00	121.90	CHECK FLOATS. FLOATS HELD WITH 1 BBL BACK
Event	16	End Job	End Job	1/4/2020	18:32:08	COM4	27.00	7.79	2.10	144.80	END JOB
Event	17	Safety Meeting	Safety Meeting	1/4/2020	18:35:00	USER					CREW HAS PRE RIG DOWN SAFETY MEETING DISCUSSING MUDDY CONDITIONS, SLIPS TRIPS FALLS, TUGGER OPERATIONS, TEAM LIFTING, PINCH POINTS, COMMUNICATIONS AND BEGIN RIGGING DOWN EQUIPMENT AND LINES

Event	18	Depart Location	Depart Location	1/4/2020	20:30:00	USER	SWAPPING OUT PUMP TRUCKS FOR ANOTHER JOB. PUMP DEPARTS FOR NEXT LOCATION.
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## 3.0 Attachments

### 3.1 EXTRACTION GP CODY FED 20E-15-3 SURFACE.png

