

HALLIBURTON

iCem[®] Service

HIGHPOINT RESOURCES CORP-EBUS

Date: Monday, March 18, 2019

Highpoint Wetco 4-63-5-5649C Production Liner

Job Date: Monday, March 04, 2019

Sincerely,
Tyler Hill

Legal Notice

Disclaimer:

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1.0 Cementing Job Summary

1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **Wetco 4-63-5-5649C** cement **Production** liner 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 Ft. Lupton

The Road to Excellence Starts with Safety

Sold To #: 343492		Ship To #: 3917349		Quote #:		Sales Order #: 0905526766	
Customer: HIGHPOINT RESOURCES CORP-EBUS				Customer Rep: Chris Moore			
Well Name: WETCO			Well #: 4-63-5-5649C		API/UWI #: 05-123-48499-00		
Field: WATTENBERG		City (SAP): KERSEY		County/Parish: WELD		State: COLORADO	
Legal Description: NW SW-4-4N-63W-2215FSL-727FWL							
Contractor: CADE DRLG				Rig/Platform Name/Num: CADE 23			
Job BOM: 7525 7525							
Well Type: HORIZONTAL OIL							
Sales Person: HALAMERICA/H139013				Srvc Supervisor: Prince Perez			

Job

Formation Depth (MD)	Top	0'	Bottom	16,470'
Job depth MD	16,460'		Job Depth TVD	6,585'
			Wk Ht Above Floor	5'

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
Drill Pipe		4.5	3.34	14			0	6755	0	6585
Casing		7	6.366	23			0	7005	0	6585
Casing		4.5	4	11.6			6755	16460	0	0
Open Hole Section			6.125				7005	16470	0	0

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	4.5			16,460	Top Plug	4.5	1	PP
Float Shoe	4.5				Bottom Plug	4.5		
Float Collar	4.5			16404.5'	SSR plug set	4.5		
Insert Float	4.5				Plug Container	4.5		
Stage Tool	4.5				Centralizers	4.5	50	

Fluid Data

Stage/Plug #: 1

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
1	Spacer	Tuned Spacer III	20	bbl	12	3.21	20.1	4	703

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
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2	Cement	NeoCem TM	174.4	bbbl	13.2	2.04	9.74	8	4,675
0.09 %		SCR-100 (100003749)							
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	Fresh Water	234.7	bbbl	8.4				
Cement Left In Pipe									
Amount		0 ft			Reason			Wet Shoe	
Mix Water: pH 7		Mix Water Chloride: <300 ppm			Mix Water Temperature: 60 °F				
Cement Temperature: ## °F		Plug Displaced by: 8.34 lb/gal			Disp. Temperature: 60 °F				
Plug Bumped? Yes		Bump Pressure: 645 psi			Floats Held? Yes				
Cement Returns: 0 bbl		Returns Density: 12 lb/gal			Returns Temperature: 75 °F				
Comment									
Pumped 20 bbls of Tuned Spacer III with 10 gallons of D-Air.									
Pumped 174.4 bbls of Neocem.									
Pumped 234.7 bbls of fresh water Displacement with 5 gallons of MMCR, 10 gallons of Anhib, 5 gallons of Oxygen, and 3 lbs of BE-3.									
Pumped a 2 bbl wet shoe.									
1.5 bbls back on the floats.									
Pumped 160 bbls to circulated out.									
20 bbls of spacer back to surface.									

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density <i>(ppg)</i>	Comb Pump Rate <i>(bbl/min)</i>	PS Pump Press <i>(psi)</i>	Comments
Event	1	Call Out	Call Out	3/3/2019	13:45:00	USER				CREW CALLED OUT AT 13:45, REQUESTED ON LOCATION 21:30. CREW PICKED UP CEMENT, CHEMICALS, FROM FT. LUPTON, CO. BULK 660 11023106, 10867096, 10248062, PUMP 0070.
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	3/3/2019	20:50:00	USER				DISCUSSED ROUTES, HAZARDS, AND COMMUNICATION WITH CREW.
Event	3	Crew Leave Shop	Crew Leave Shop	3/3/2019	21:00:00	USER				STARTED JOURNEY MANAGEMENT.
Event	4	Arrive at Location from Service Center	Arrive at Location from Service Center	3/3/2019	22:00:00	USER				END JOURNEY MANAGEMENT. MET WITH COMPANY MAN AND TOOL HAND TO DISCUSS JOB DETAILS. TD-16,470', TP-16,460', LINER CASING- SET @ 16,460', LINER TOP @ 6,755.4', 11.6 LB/FT 4.5" P-110, 4.5" 37.37# HWDP-6,755.4', 4.5" 18.1# DP-5185.95', PC- 7,005' 7" 23 LB/FT, WF- 8.8 LB/GAL. LANDED ON BOTTOM @ 21:30
Event	5	Safety Meeting - Assessment of Location	Safety Meeting - Assessment of Location	3/3/2019	22:10:00	USER				HAZARD HUNT. DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH LOCATION, RIG UP AND

										WEATHER.
Event	6	Rig-Up Equipment	Rig-Up Equipment	3/3/2019	22:20:00	USER				RIG UP BULK AND MIXING EQUIPMENT.
Event	7	Rig-Up Completed	Rig-Up Completed	3/4/2019	03:00:00	USER	0.00	0.00	-31.00	
Event	8	Pre-Job Safety Meeting	Pre-Job Safety Meeting	3/4/2019	03:10:00	USER	0.00	0.00	-29.00	MEETING WITH HALLIBURTON AND RIG PERSONNEL. COMMUNICATED POTENTIAL SAFETY HAZARDS AND JOB DETAILS AFTER WAITING FOR RIG TO WARM UP MIXING WATER TO 60 DEGREES F.
Event	9	Pre-Job Safety Meeting	Pre-Job Safety Meeting	3/4/2019	07:30:00	USER	7.24	3.30	2.00	HAD A SECOND MEETING AFTER WE GOT THE PUMP THAWED FROM IT BEING FROZEN AT CERTAIN VALVES AND AIR LINES. DISCUSSED WITH THE COMPANY MAN THAT WE WERE CONFIDENT TO PUMP THE JOB WITH PUMP ON LOCATION AFTER WE WERE ABLE TO MOVE WATER ON IT FREELY.
Event	10	Start Job	Start Job	3/4/2019	08:08:36	COM4	6.93	0.00	6.00	BEGIN RECORDING JOB DATA.
Event	11	Test Lines	Test Lines	3/4/2019	08:21:18	COM4	10.53	0.00	6610.00	PRESSURE TESTED IRON TO 6,500 PSI. KICKOUTS SET @ 500 PSI, KICKED OUT @ 600 PSI, 5TH GEAR STALL OUT @ 1,800 PSI. KICKOUTS SET @ 6,500 PSI, KICKED OUT @ 6,500 PSI.
Event	12	Pump Spacer 1	Pump Spacer 1	3/4/2019	08:21:53	COM4	11.46	0.00	-23.00	PUMP 20 BBLS OF TUNED SPACER @ 12 LB/GAL, 3.21 FT3/SK, 20.1 GAL/SK. HOS

										DPIN CALCULATED @ 1,015.23'. TOS DPIN CALCULATED @ 5,199.9'. DENSITY VERIFIED BY PRESSURIZED MUD SCALES. PUMP RATE 4 BBLS/MIN @ 350 PSI.
Event	13	Pump Lead Cement	Pump Lead Cement	3/4/2019	08:28:53	COM4	12.80	2.80	58.00	PUMP 480 SKS OF NEOCEM @ 13.2 LB/GAL, 2.04 FT3/SK, 9.74 GAL/SK, 174.4 BBLS, DENSITY VERIFIED BY PRESSURIZED MUD SCALES. TOC CALCULATED @ 6,215.1'. PUMP RATE 6 BBLS/MIN @ 395 PSI.
Event	14	Shutdown	Shutdown	3/4/2019	08:59:45	COM4	12.35	2.30	-3.00	SHUTDOWN TO FREE A STUCK VALVE ON THE 660 TO DELIVER PRODUCT.
Event	15	Shutdown	Shutdown	3/4/2019	09:10:36	COM4	0.95	0.00	-49.00	SHUTDOWN TO DROP DART/CLEAN LINES.
Event	16	Drop Top Plug	Drop Top Plug	3/4/2019	09:17:55	COM4	-0.34	0.00	-65.00	DART LOADED BY TOOL HAND.
Event	17	Pump Displacement	Pump Displacement	3/4/2019	09:18:00	COM4	-0.34	0.00	-66.00	BEGIN DISPLACEMENT WITH 234.7 BBLS OF FRESH WATER. MMCR IN THE FIRST 10 BBLS OF DISPLACEMENT. 10 GALLONS OF ANHIB, 5 GALLONS OF OXYGON, AND 3 LBS OF BE-3 BIOCIDES ALSO ADDED TO DISPLACEMENT. SLOW RATE TO 3.0 BBLS/MIN @ 70 BBLS TO LAND DART. PICKED UP PLUG @ 75 BBLS AWAY PRESSURE WAS 1,640 PSI. SLOW RATE TO 3 BBLS/MIN @ 210 BBLS TO BUMP PLUG. DART LANDED AT 234

										BBLS INTO DISPLACEMENT, SHEARD AT 3,806 PSI.
Event	18	Bump Plug	Bump Plug	3/4/2019	10:08:52	COM4	8.19	0.00	1145.00	PLUG BUMPED AT CALCULATED DISPLACEMENT. PRESSURED 500 PSI OVER FINAL CIRCULATING PRESSURE.
Event	19	Check Floats	Check Floats	3/4/2019	10:10:40	COM4	8.17	0.00	1223.00	1.5 BBLS BACK ON THE FLOATS.
Event	20	Pressure Up Well	Pressure Up Well	3/4/2019	10:13:46	COM4	8.30	1.90	3806.00	SHEARED @ 3,806 PSI FOLLOWED BY A 2 BBL WET SHOE.
Event	21	Test Lines	Test Lines	3/4/2019	10:33:13	COM4	8.15	0.00	-1.00	TESTED TO 500 PSI ON THE BACKSIDE. HELD FOR 20 MINUTES.
Event	22	Circulate Well	Circulate Well	3/4/2019	10:51:35	USER	8.13	0.00	513.00	CIRCULATED WELL WITH FRESH WATER AND 5 GALLONS OF MMCR TO CLEAN CEMENT AND SPACER FROM TOP OF HANGER. CIRCULATED 20 BBLS OF TUNED SPACER III & CALCULATED 10 BBLS OF CEMENT OFF THE TOP OF LINER.
Event	23	End Job	End Job	3/4/2019	11:14:29	COM4	8.19	0.00	7.00	STOP RECORDING JOB DATA.
Event	24	Post-Job Safety Meeting (Pre Rig-Down)	Post-Job Safety Meeting (Pre Rig-Down)	3/4/2019	11:20:00	USER	8.22	0.00	-9.00	DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH WEATHER, LOCATION AND RIGGING DOWN IRON AND HOSES.
Event	25	Rig-Down Equipment	Rig-Down Equipment	3/4/2019	11:30:00	USER	8.22	1.70	-15.00	RIG DOWN BULK AND MIXING EQUIPMENT.
Event	26	Rig-Down Completed	Rig-Down Completed	3/4/2019	12:40:00	USER				

Event	27	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	3/4/2019	16:20:00	USER	DISCUSSED ROUTES, HAZARDS, AND COMMUNICATION WITH CREW.
Event	28	Crew Leave Location	Crew Leave Location	3/4/2019	16:30:00	USER	THANK YOU FOR USING HALLIBURTON – PRINCE A PEREZ AND CREW.

3.0 Attachments

3.1 Highpoint Wetco 4-63-5-5649C Production Liner.png

