

HALLIBURTON

iCem[®] Service

VERDAD RESOURCES LLC

KBL 1930-12H

Production Casing

Job Date: Saturday, August 14, 2021

Sincerely,

Nick Roles and Crew

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 KBL 1930-12H 5.5" 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 30 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

Sold To #: 380688		Ship To #: 9032724		Quote #:		Sales Order #: 0907316779				
Customer: VERDAD RESOURCES LLC-EBUS					Customer Rep: Joe Madsen					
Well Name: KBL			Well #: 1930-12H			API/UWI #: 05-123-50886-00				
Field: WATTENBERG		City (SAP): KEENESBURG		County/Parish: WELD			State: COLORADO			
Legal Description: NW SE-19-2N-63W-1806FSL-2021FEL										
Contractor: PRECISION DRLG					Rig/Platform Name/Num: PRECISION 464					
Job BOM: 7523 7523										
Well Type: HORIZONTAL OIL										
Sales Person: HALAMERICA\HX41066					Srvc Supervisor: Nicholas Roles					
Job										
Job depth MD		14419ft			Job Depth TVD					
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
Casing		9.625	8.921	36			0	1776	0	1776
Casing		5.5	4.892	17			0	14404	0	6650
Open Hole Section			8.5				1781	14419	1781	6650
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Float Shoe	5.5		1	14404		Top Plug	5.5	1	HES	
Float Collar	5.5		1	14334		Bottom Plug	5.5	1	HES	
						Plug Container	5.5	1	HES	

Fluid Data									
Stage #: 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 PRIME SPACER	100	bbl	11.5	3.71		8	
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	Lead Cement	ELASTICEM™ SYSTEM	1134	sack	13.2	1.6		9	7.66
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	Tail Cement	NeoCem™	865	sack	13.2	2.02		9	9.71
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
4	Displacement	MMCR Water	40	bbl	8.34			10	
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
5	Displacement	Biocide Water	293	bbl	8.34			10	
Cement Left In Pipe		Amount	70 ft		Reason			Shoe Joint	
Mix Water:		pH 7	Mix Water Chloride:		>3000 ppm		Mix Water Temperature:		65 °F
Cement Temperature:		85 °F	Plug Displaced by:		8.33 lb/gal		Disp. Temperature:		65 °F
Plug Bumped?		Yes	Bump Pressure:		3150 psi		Floats Held?		Yes
Cement Returns:		30 bbl	Returns Density:				Returns Temperature:		
Comment Got 30bbls cement to surface. Estimated TOT-6806’.									

2.0 Real-Time Job Summary

2.1 Job Event Log

Seq. No.	Activity	Date	Time	DH Density (ppg)	Comb Pump Rate (bbl/min)	DS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
1	Call Out	8/13/2021	16:00:00					Called out by service coordinator for OL time of 2200.
2	Pre-Convoy Safety Meeting	8/13/2021	18:15:00					Discuss all hazards associated with journey, directions to destination, complete journey management if needed, and ensure all convoy is fit for duty.
3	Depart from Service Center or Other Site	8/13/2021	18:30:00					Depart from service center or other job site.
4	Arrive at Location from Service Center	8/13/2021	19:30:00					Upon arrival to location, signed in with onsite safety personnel. Met with company man and discussed job specific requirements and specifications.
5	Pre-Rig Up Safety Meeting	8/13/2021	19:45:00					Held pre rig up JSA for hazards, hazard hunt with crew, and discussed plan for spotting equipment and rigging up lines for job. Discussed muster points and closest emergency location as well as coordinates.
6	Rig-Up Equipment	8/13/2021	20:00:00					Begin rig up with crew.
7	Rig-Up Completed	8/13/2021	21:00:00					Complete rig up for job to nearest point before red zone.
8	Other	8/13/2021	21:30:00					Mix water test results- PH-7, Chlo-0, Temp-65F.
9	Safety Meeting - Pre Job	8/14/2021	00:00:00	8.17	0.00	35.00	12.10	Held job specific hazards as well as confirming job procedure with co man and rest of crew associated with job.

10	Start Job	8/14/2021	00:06:49	8.17	0.00	35.00	12.10	TD-14419', TP-14404' 5.5" 17#, FC-14334', TVD-6650', OH-8.5", SURF-1781' 9.625" 36#, MUD-9.6#
11	Test Lines	8/14/2021	00:27:23	8.10	0.00	95.00	3.10	Pumped 3bbls fresh water to fill lines, closed manifold and performed 500psi k/o function test, proceeded to perform 5th gear stall at 1452psi, continued to bring pressure up to 4500psi. Pressure stabilized and held with no leaks
12	Pump Spacer 1	8/14/2021	00:30:16	8.09	0.00	18.00	3.20	Pumped 100bbls 11.5# 3.71y 23.58g/s Tuned Prime 10g D-Air at 8bpm 225psi.
13	Check Weight	8/14/2021	00:33:02	11.23	8.10	628.00	9.70	Weight verified with pressurized mud scales.
14	Check Weight	8/14/2021	00:40:23	11.52	8.10	364.00	60.90	Weight verified with pressurized mud scales.
15	Drop Bottom Plug	8/14/2021	00:45:54	0.48	0.00	3.00	93.60	Dropped by HES supervisor, witnessed by company man.
16	Pump Lead Cement	8/14/2021	00:45:57	0.58	0.00	3.00	93.60	Pumped 1134sks or 323bbls 13.2# 1.6y 7.66g/s ElastiCem w/ CBL at 9bpm 520psi.
17	Check Weight	8/14/2021	00:48:19	13.07	3.60	103.00	8.10	Weight verified with pressurized mud scales.
18	Check Weight	8/14/2021	00:56:09	13.30	9.40	517.00	75.00	Weight verified with pressurized mud scales.
19	Check Weight	8/14/2021	01:12:09	13.19	9.40	520.00	225.20	Weight verified with pressurized mud scales.
20	Pump Tail Cement	8/14/2021	01:23:26	12.99	9.40	453.00	331.10	Pumped 865sks or 311bbls 13.2# 2.03y 9.71g/s NeoCem at 9bpm 575psi.
21	Check Weight	8/14/2021	01:28:04	13.21	5.10	255.00	23.80	Weight verified with pressurized mud scales.
22	Check Weight	8/14/2021	01:32:37	13.16	9.40	653.00	62.50	Weight verified with pressurized mud scales.
23	Check Weight	8/14/2021	01:50:36	13.07	9.40	720.00	231.30	Weight verified with pressurized mud scales.
24	Shutdown	8/14/2021	02:02:50	13.06	0.00	126.00	318.50	Pumped 5bbls fresh water to clean through pumps and lines.

25	Drop Top Plug	8/14/2021	02:11:02	8.27	0.00	7.00	15.50	Dropped by HES supervisor, witnessed by company man.
26	Pump Displacement	8/14/2021	02:11:04	8.25	0.00	6.00	15.50	Pumped 333bbls fresh water with 20g MMCR in first 40bbls, 3lbs BE-3 and 5gal MCMX throughout.
27	Bump Plug	8/14/2021	02:52:36	8.34	0.00	3198.00	335.80	Slowed down to 4bpm at 310bbls away, final circulating pressure-2650psi, bump pressure-3150psi.
28	Other	8/14/2021	02:57:27	8.34	0.00	3285.00	335.80	Released pressure and got 3.5bbls back to pump. Floats held.
29	End Job	8/14/2021	02:58:55	8.34	0.00	2.00	335.80	Got 30bbls cement to surface. Estimated TOT-6806'.
30	Pre-Rig Down Safety Meeting	8/14/2021	03:00:00	8.32	0.00	3.00	0.00	Held safety meeting with crew prior to rig down, discussed possibility of trapped pressure, swing radius, slips trips and falls, pinch points and risks associated with rig down.
31	Rig Down Lines	8/14/2021	03:15:00	0.25	0.00	1.00	32.20	Begin rig down
32	Pre-Convoy Safety Meeting	8/14/2021	04:00:00					Held safety meeting with convoy, discussed trip hazards, directions and all crew fit for duty prior to departure.
33	Rig-Down Completed	8/14/2021	04:00:00					Rig down complete with no injuries, spills or damage to equipment.
34	Depart Location for Service Center or Other Site	8/14/2021	04:15:00					Depart location, if applicable journey will be submitted.

3.0 Attachments

3.1 Job Chart

