

HALLIBURTON

iCem[®] Service

VERDAD OIL & GAS

Lost Creek 3-62-08-2H Production

Job Date: Sunday, June 18, 2017

Sincerely,

Fort Lupton District Cement

Legal Notice

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1.0 Cementing Job Summary

1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **Lost Creek 3-62-08-2H** cement 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.

55bbls of cement to surface

5bbls wet shoe was pumped

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 #: 306259		Ship To #: 3796393		Quote #: 0022290119		Sales Order #: 0904090245					
Customer: VERDAD OIL & GAS CORP -				Customer Rep: .							
Well Name: LOST CREEK			Well #: 3-62-08-2H		API/UWI #: 05-123-44648-00						
Field: WATTENBERG		City (SAP): ROGGEN		County/Parish: WELD		State: COLORADO					
Legal Description: NW NW-8-3N-62W-320FNL-1314FWL											
Contractor: XTREME DRLG				Rig/Platform Name/Num: XTREME 20							
Job BOM: 7523 7523											
Well Type: HORIZONTAL OIL											
Sales Person: HALAMERICA\HX38199				Srv Supervisor: Nathaniel Moore							
Job											
Formation Name											
Formation Depth (MD)		Top		Bottom							
Form Type				BHST							
Job depth MD		13989ft		Job Depth TVD							
Water Depth				Wk Ht Above Floor							
Perforation Depth (MD)		From		To							
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	LTC	J-55	0	1700			
Casing		5.5	4.778	20	LTC	P-110	0	16000			
Open Hole Section			8.5				1700	16000			
Tools and Accessories											
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make		
Guide Shoe	5.5					Top Plug	5.5	1	HES		
Float Shoe	5.5			13979		Bottom Plug	5.5		HES		
Float Collar	5.5					SSR plug set	5.5		HES		
Insert Float	5.5					Plug Container	5.5		HES		
Stage Tool	5.5					Centralizers	5.5		HES		
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	11.5 lb/gal Tuned Spacer III	Tuned Spacer III			40	bbl	11.5	3.79			
34.30 gal/bbl		FRESH WATER									
147.42 lbm/bbl		BARITE, BULK (100003681)									

0.70 gal/bbl		MUSOL A, 330 GAL TOTE - (790828)							
0.70 gal/bbl		DUAL SPACER SURFACTANT B, 5 GAL PAIL (100003665)							
0.25 gal/bbl		D-AIR 3000L, 5 GAL PAIL (101007444)							
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	ElastiCem	ELASTICEM (TM) SYSTEM	940	sack	13.2	1.57		4	7.54
0.30 %		HR-5, 50 LB SK (100005050)							
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	NeoCem	NeoCem TM	1020	sack	13.2	2.04		4	9.75
9.75 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
4	Displacement Fluid	Displacement Fluid	301	bbl	8.4				
Cement Left In Pipe		Amount	45 ft		Reason			Shoe Joint	

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DS Pump Press (psi)	DH Density (ppg)	Comb Pump Rate (bbl/min)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	Call Out	6/18/2017	12:00:00	USER					OL time 1800. Verify equipment and materials
Event	2	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	6/18/2017	17:00:00	USER					Sign in with customer. Spot in and rig up equipment. TD 13989' 8.5" hole. TP 13979' 5.5" 20# P-110. Wet shoe sub 13821'. Surface 1705' 9.625" 36# J-55. MW 10 PPG.
Event	3	Pre-Job Safety Meeting	Pre-Job Safety Meeting	6/18/2017	23:15:00	USER	0.00	8.52	0.00	0.00	Discuss job procedure with HES and rig crew
Event	4	Start Job	Start Job	6/18/2017	23:50:00	COM1	1417.00	8.58	0.00	2.90	Fill lines 3 bbl water
Event	5	Test Lines	Test Lines	6/18/2017	23:53:54	COM1	5452.00	8.65	0.00	2.90	500 psi kick out test and 5000 psi pressure test
Event	6	Pump Spacer 1	Pump Spacer 1	6/18/2017	23:55:49	COM1	47.00	8.55	0.00	2.90	40 bbl tuned spacer 11.5 ppg 3.79 ft3/sk 7.54 gal/sk
Event	7	Pump Lead Cement	Pump Lead Cement	6/19/2017	00:09:19	COM1	235.00	13.09	4.40	37.00	940 sks/263 bbl 13.2 pg 1.57 ft3/sk 7.54 gal/s Elasticem
Event	8	Check Weight	Check weight	6/19/2017	00:13:57	COM1	359.00	13.30	7.00	30.60	13.2 ppg
Event	9	Pump Tail Cement	Pump Tail Cement	6/19/2017	00:49:20	COM1	298.00	13.31	7.00	272.30	1020 sks/371 bbl 13.2 pg 2.04 ft3/sk 9.75 galsk NeoCem
Event	10	Shutdown	Shutdown	6/19/2017	01:45:13	COM1	18.00	13.44	0.00	369.90	Wash pumps and lines/Blow down with rig air
Event	11	Drop Top Plug	Drop Top Plug	6/19/2017	01:54:59	COM1	-3.00	-0.42	0.00	384.70	Witnessed by company rep

Event	12	Pump Displacement	Pump Displacement	6/19/2017	01:55:02	COM1	-3.00	-0.42	0.00	384.70	301 bbl water displacement with cement retarder in first 10 bbl and biocide throughout.
Event	13	Other	Spacer to surface	6/19/2017	02:26:25	COM1	2792.00	8.08	6.00	222.40	210 bbl into displacement
Event	14	Slow Rate	Slow Rate	6/19/2017	02:28:27	USER	2820.00	8.08	6.00	234.70	Slowed to 2.5 bpm because rig bypass was plugged up. Had to take cement returns over shakers. Stayed at 2.5 bpm for remainder of job.
Event	15	Other	Cement to surface	6/19/2017	02:41:36	COM1	2437.00	8.08	2.50	269.30	250 bbl into displacement.55 bbl cement to surface
Event	16	Bump Plug	Bump Plug	6/19/2017	03:01:21	COM1	2987.00	8.08	0.00	315.80	2450 psi final circulating pressure. Pressured up to 2900 psi
Event	17	Other	Pressure up well	6/19/2017	03:04:00	USER	3882.00	8.11	1.00	316.70	Shift wet shoe sub. 4810 psi. Pump 5 bbl wet shoe
Event	18	Other	Check floats	6/19/2017	03:08:44	USER	2179.00	8.07	0.00	323.10	2 bbl back. Floats held
Event	19	Depart Location Safety Meeting	Depart Location Safety Meeting	6/19/2017	05:00:00	USER					

3.0 Job Chart

3.1 Job Chart

