

HALLIBURTON

iCem[®] Service

EXTRACTION OIL & GAS

Date: Friday, June 22, 2018

EXTRACTION VT-LDS 1-16-18 PRODUCTION

Job Date: Thursday, June 21, 2018

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 **VT-LDS 1-16-18** 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.

Approximately 50 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 Ft. Lupton

The Road to Excellence Starts with Safety

Sold To #: 369404		Ship To #: 3787026		Quote #:		Sales Order #: 0904934216				
Customer: EXTRACTION OIL & GAS				Customer Rep: JOSE TORRES						
Well Name: VT-LDS			Well #: 1-16-18		API/UWI #: 05-123-44421-00					
Field: WATTENBERG		City (SAP): GREELEY		County/Parish: WELD		State: COLORADO				
Legal Description: SW NW-15-5N-65W-1882FNL-650FWL										
Contractor:				Rig/Platform Name/Num: Patterson 901						
Job BOM: 7523 7523										
Well Type: HORIZONTAL OIL										
Sales Person: HALAMERICA\HX38199				Srv Supervisor: Jarnail Singh						
Job										
Formation Name										
Formation Depth (MD)		Top		Bottom						
Form Type				BHST						
Job depth MD		20445ft		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	0	9.625	8.921	36		J-55	0	1550	0	1550
Casing	0	5.5	4.778	20	BTC	P-110	0	20442	0	6800
Open Hole Section			8.375				1550	8600		
Open Hole Section			8.5				8600	20445	1550	6800
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Guide Shoe	5.5					Top Plug	5.5		HES	
Float Shoe	5.5			20442		Bottom Plug	5.5		HES	
Float Collar	5.5					SSR plug set	5.5		HES	
Insert Float	5.5					Plug Container	5.5	1	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 ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
1	11.5 lb/gal Tuned Spacer III	Tuned Spacer III		50	bbl	11.5	3.73		6	

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	3275	sack	13.2	1.57		8	7.53
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	Displacement	450	bbl	8.33				
Cement Left In Pipe		Amount	0 ft		Reason			Shoe Joint	
Mix Water:	pH ##	Mix Water Chloride:## ppm			Mix Water Temperature:## °F °C				
Cement Temperature:	## °F °C	Plug Displaced by:## lb/gal kg/m3 XXXX			Disp. Temperature:## °F °C				
Plug Bumped?	Yes/No	Bump Pressure:#### psi MPa			Floats Held?			Yes/No	
Cement Returns:	50 bbl m3	Returns Density:## lb/gal kg/m3			Returns Temperature:## °F °C				
Comment GOOD RETUNRS THOUGH THE JOB, 50 BBLS SPACER AND 50 BBLS CMT BACK TO SURFACE									

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DS Pump Press (psi)	Comb Pump Rate (bbl/min)	DH Density (ppg)	Comments
Event	1	Depart Yard Safety Meeting	Depart yard safety meeting	6/20/2018	20:00:00	USER				HES CREW DISCUSSED THE HAZARDS OF DRIVING TO LOCATION
Event	2	Call Out	Call Out	6/20/2018	20:00:00	USER				HES CREW GOT CALLED OUT @ 2000 REQUESTED ON LOC 0300 ON 6-21-2018
Event	3	Arrive At Loc	Arrive At Loc	6/21/2018	02:00:00	USER				HES CREW ARRIVED AT LOC 0200, ONE HOUR EARLY
Event	4	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	6/21/2018	02:05:00	USER				HES CREW DISCUSSED HOW TO SAFELY SPOT EQUIPMENT SIDE OF LOC. RIG HAD 4000 FT LEFT TO RUN, WAITED TO SOPT TRUCKS TELL CASING WAS ON BOTTOM
Event	5	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	6/21/2018	05:00:00	USER				HES CREW DISCUSSED THE HAZARDS OF RIGGING UP EQUIPMENT
Event	6	Pre-Job Safety Meeting	Pre-Job Safety Meeting	6/21/2018	07:00:00	USER	-2.00	0.00	8.32	HES AND RIG CREW DISCUSSED THE HAZARDS OF RIGGING UP THE FLOOR AND PUMPING THE JOB
Event	7	Start Job	Start Job	6/21/2018	07:30:10	COM7	-2.00	0.00	8.30	START JOB
Event	8	Prime Pumps	Prime Pumps	6/21/2018	07:36:24	USER	-3.00	0.00	6.52	PRIME LINES WITH 2 BBLs H2O
Event	9	Test Lines	Test Lines	6/21/2018	07:38:28	USER	175.00	0.00	8.31	TEST LINES TO 500-6000 PSI FOR 5 MINS
Event	10	Pump Spacer	Pump Spacer	6/21/2018	07:58:31	USER	184.00	0.00	8.27	PUMP 50 BBLs TUNED

SAPCER @ 11.5# YIELD 3.73,
GAL/SK 23.4

Event	11	Pump Cement	Pump Cement	6/21/2018	08:10:20	USER	316.00	5.00	13.53	PUMP 915.75 BBLS CEMENT @ 13.2# 3275 SKS, YIELD 1.57, GAL/SK 7.53
Event	12	Shutdown	shutdown	6/21/2018	10:29:47	USER	43.00	0.00	8.25	SHUTDOWN
Event	13	Drop Top Plug	Drop Top Plug	6/21/2018	10:31:06	USER	7.00	0.00	8.30	DROP KLS TOP PLUG
Event	14	Pump Displacement	Pump Displacement	6/21/2018	10:32:06	USER	6.00	0.00	8.41	PUMP 450 BBLS WATER DISPLACEMENT
Event	15	Bump Plug	Bump Plug	6/21/2018	11:27:39	USER	2658.00	0.00	8.41	BUMPED PLUG RIGHT AT CALCULATED AND PSI WAS 2400 PSI TOOK 500 PSI
Event	16	Pressure Up	Pressure Up	6/21/2018	11:29:57	USER	2871.00	0.90	8.42	PRESSURE UP TO BURST THE DESK 3950 PSI
Event	17	Check Floats	Check Floats	6/21/2018	11:35:32	USER	29.00	0.00	8.33	FLOATS HELD 3 BBLS BACK, 5 BBLS WET SHOE
Event	18	End Job	End Job	6/21/2018	11:41:34	COM7	6.00	0.00	8.35	END JOB
Event	19	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	6/21/2018	11:45:00	USER				HES CREW DISCUSSED HAZARDS OF RIGGING DOWN EQUIPMENT
Event	20	Depart Location Safety Meeting	Depart Location Safety Meeting	6/21/2018	12:50:00	USER				HES CREW DISCUSSED THE HAZARDS OF DRIVING
Event	21	Job Complete	Job Complete	6/21/2018	13:00:00	USER				JOB COMPLETE, 50 BBLS SPACER AND 50BBLS OF CEMENT BACK TO SURFACE

3.0 Attachments

3.1 VT-LDS 1-16-18 Production.png

