

HALLIBURTON

iCem[®] Service

PETROSTAR SERVICES

Ft. Lupton District, Colorado

For: Craig Jones

Date: Wednesday, October 16, 2019

Oster

Weld, Wattenberg

Case 1

Job Date: Wednesday, October 16, 2019

Sincerely,

Jamar Horton

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 cement 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 XX 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

1.2 Squeeze Job Information

		Units	Description
1	Was the well full prior to cementing?	Y/N	
2	Injection Rate #1 & Pressure	psi/bpm	
3	Injection Rate #2 & Pressure	psi/bpm	
4	Injection Rate #3 & Pressure	psi/bpm	
5	Initial ISIP	psi	
6	Density of fluid used for Initial ISIP	lb/gal	
7	Final ISIP	psi	
8	Density of displacement fluid	lb/gal	

1.3 Plug Job Information

		Units	Description
1	Density of well fluid exiting well prior to job	lb/gal	
2	Density of well fluid entering well prior to job	lb/gal	
3	Was the well full prior to cementing?	Y/N	
4	How many joints of workstring pulled wet?	# Joints	
5	Depth of workstring for circulation after the plug?	ft	
6	Calculated Plug Height (workstring out)	ft	

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	Depart from Service Center or Other Site	Depart from Service Center or Other Site	10/16/2019	05:00:00	USER					Journey Management meeting held prior to departure. journey called into dispatch and approved.
Event	2	Arrive at Location from Service Center	Arrive at Location from Service Center	10/16/2019	14:00:00	USER					With all Equipment and materials. Hazard hunt performed before spotting in equipment. discussed numbers and job procedures with customer.
Event	3	Comment	Comment	10/16/2019	14:05:00	USER					200' 9" OH, Surf Csg 8 5/8", 24# @ 812'. TOC to surface Water test: PH 7, Chloride less than 303.
Event	4	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	10/16/2019	14:10:00	USER					JSA with all essential personnel to discuss the hazards of rigging up .
Event	5	Pre-Job Safety Meeting	Pre-Job Safety Meeting	10/16/2019	14:45:00	USER					JSA with all essential personnel to discuss the job procedures and the hazards of the job.
Event	6	Rig-Up Completed	Rig-Up Completed	10/16/2019	14:45:00	USER					Safely with no injuries.
Event	7	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	10/16/2019	15:39:36	USER	0.00	8.28	0.00	5.50	JSA with all essential personnel to discuss the hazards of rigging down.

Event	8	Start Job	Start Job	10/16/2019	15:44:51	COM4	6.00	8.21	0.00	5.50	Start recording data.
Event	9	Test Lines	Test Lines	10/16/2019	15:48:28	COM4	-2.00	8.06	0.00	9.30	
Event	10	Pump Spacer 1	Pump Spacer 1	10/16/2019	15:57:49	COM4	1.00	8.16	0.00	9.30	
Event	11	Pump Spacer 2	Pump Spacer 2	10/16/2019	16:02:37	COM4	2206.00	8.00	2.40	0.00	5bbls of fresh water.
Event	12	Pump Cement	Pump Cement	10/16/2019	16:04:48	COM4	1918.00	8.02	2.20	0.00	327sk 81bbls 14.5ppg 1.39yd 6.78gal/sk verified with pressurized scales.
Event	13	Pump Displacement	Pump Displacement	10/16/2019	16:58:04	COM4	2401.00	14.11	1.50	80.00	4.5bbls of fresh water.
Event	14	End Job	End Job	10/16/2019	17:03:25	COM4	0.00	8.28	0.00	4.80	Stop recording data.
Event	15	Rig-Down Completed	Rig-Down Completed	10/16/2019	17:50:00	USER					Safely with no injuries.
Event	16	Depart Location for Service Center or Other Site	Depart Location for Service Center or Other Site	10/16/2019	18:00:00	USER					Journey Management meeting held prior to departure. journey called into dispatch and approved.
Event	17	Comment	Comment	10/16/2019	18:05:00	USER					"".....Thank You for choosing Halliburton.....""

3.0 Attachments

3.1 Case 1-Custom Results.png



