

HALLIBURTON

iCem[®] Service

VERDAD OIL & GAS CORP

Date: Friday, June 23, 2017

Homestead 21 Surface

Job Date: Sunday, May 28, 2017

Sincerely,

Julia Nichols

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 **Homestead #21** cement **Surface** 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 35 barrels 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]

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*Cementing Job Summary**The Road to Excellence Starts with Safety*

Sold To #: 306259	Ship To #: 3796272	Quote #:	Sales Order #: 0904064331
Customer: VERDAD OIL & GAS CORP		Customer Rep: Joe	
Well Name: HOMESTEAD	Well #: 21	API/UWI #: 05-123-44846-00	
Field: WATTENBERG	City (SAP): IONE	County/Parish: WELD	State: COLORADO
Legal Description: NE SE-34-1N-66W-2446FSL-984FEL			
Contractor: ADVANCED ENERGY		Rig/Platform Name/Num: ADVANCED 10	
Job BOM: 7521 7521			
Well Type: HORIZONTAL OIL			
Sales Person: HALAMERICA\HX38199		Srv Supervisor: Nicholas Peterson	
Job			

Formation Name			
Formation Depth (MD)	Top	Bottom	
Form Type	BHST		
Job depth MD	1721ft	Job Depth TVD	
Water Depth	Wk HI 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	1702		0
Open Hole Section			13.5				0	1721		0

Tools and Accessories									
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make
Guide Shoe	9.625	1	WEATH	1702		Top Plug	9.625	1	WEATH
Float Shoe						Bottom Plug	9.625	1	WEATH
Float Collar	9.625	1	WEATH	1656.12		SSR plug set			
Insert Float						Plug Container	9.625	1	HES
Stage Tool						Centralizers			

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	Fresh Water Spacer	Fresh Water Spacer	20	bbl	8.33			4		
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	
2	SwiftCem	SWIFTCM (TM) SYSTEM	245	sack	13.5	1.76		4	8.83	
		0.1250 lbm	POLY-E-FLAKE (101216940)							
		8.83 Gal	FRESH WATER							

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Created: Friday, June 23, 2017

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Cementing Job Summary

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
3	Displacement	Displacement	129	bbl	8.33			4	
Cement Left In Pipe		Amount	40 ft			Reason		Shoe Joint	
Mix Water:		pH 7.0	Mix Water Chloride:		0 ppm		Mix Water Temperature:		60 °F
Cement Temperature:		°F	Plug Displaced by:		8.33 lb/gal		Disp. Temperature:		60 °F
Plug Bumped?		Yes	Bump Pressure:		580 psi		Floats Held?		Yes
Cement Returns:		35 bbl	Returns Density:		13.5 lb/gal		Returns Temperature:		## °F
Comment: 35 BBLS CEMENT TO SURFACE, 2 BBLS BACK AFTER RELEASING FLOATS.									

2.0 Real-Time Job Summary

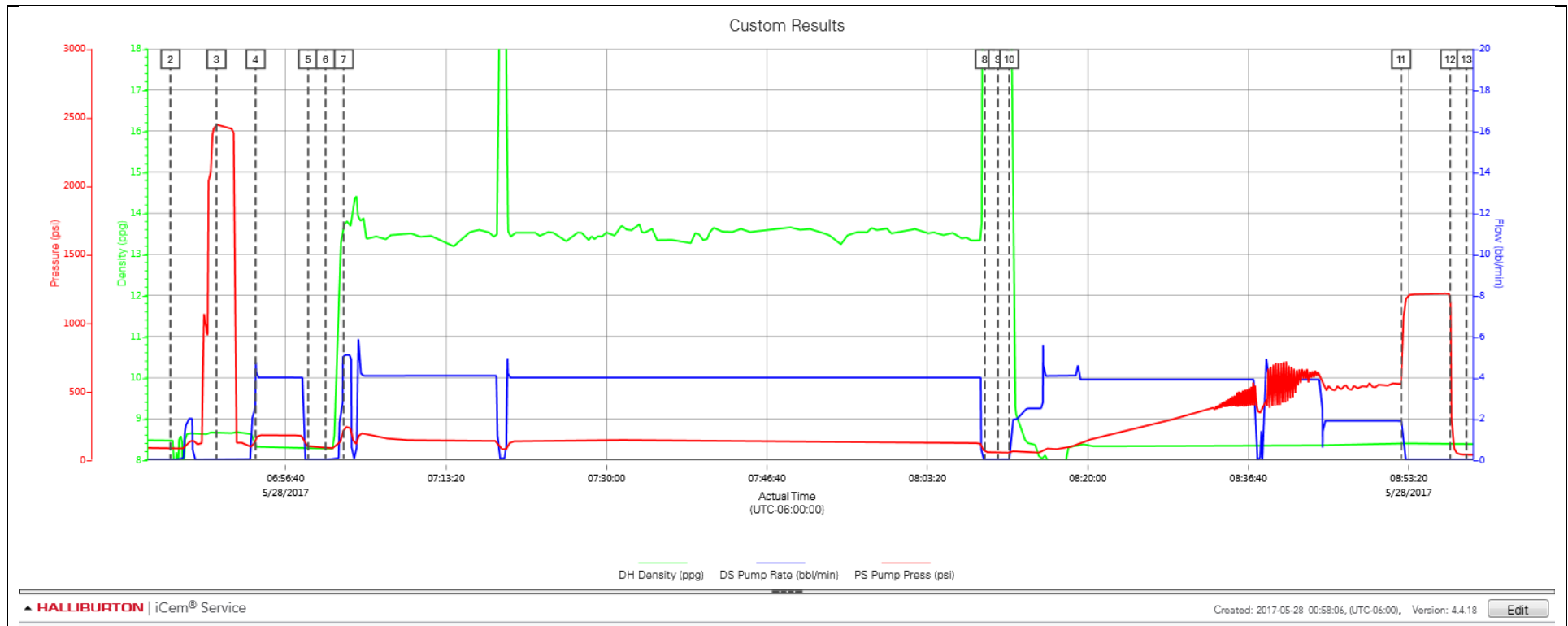
2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density (ppg)	PS Pump Press (psi)	DS Pump Rate (bbl/min)	Comments
Event	1	Call Out	Call Out	5/27/2017	23:30:00	USER				CREW CALLED OUT AT 23:30, REQUESTED ON LOCATION 04:30. CREW PICKED UP CEMENT, 100 LBS SUGAR, 100 LBS CALCIUM CHLORIDE, AND DOUBLE STACK PLUG COTAINER FROM FT. LUPTON, CO. BULK 660 E-15,BL-4, PUMP RT-1.
Event	2	Crew Leave Shop	Crew Leave Shop	5/28/2017	03:00:00	USER				STARTED JOURNEY MANAGEMENT.
Event	3	Arrive at Location from Service Center	Arrive at Location from Service Center	5/28/2017	03:30:00	USER				END JOURNEY MANAGEMENT. MEET WITH CO. MAN TO DISCUSS JOB; CASING- 9.625 36# @ 1,701.59', 13.5" HOLE 1,721' SHOE 45.47', FRESH WATER DISPLACEMENT.
Event	4	Safety Meeting - Assessment of Location	Safety Meeting - Assessment of Location	5/28/2017	03:45:00	USER				HAZARD HUNT. DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH LOCATION, RIG UP AND WEATHER.
Event	5	Rig-Up Equipment	Rig-Up Equipment	5/28/2017	04:00:00	USER				RIG UP BULK AND MIXING EQUIPMENT.
Event	6	Pre-Job Safety Meeting	Pre-Job Safety Meeting	5/28/2017	06:00:00	USER	0.06	100.00	0.00	MEETING WITH HALLIBURTON AND RIG PERSONNEL. COMMUNICATED POTENTIAL SAFETY HAZARDS AND JOB DETAILS.
Event	7	Start Job	Start Job	5/28/2017	06:44:42	COM5	8.47	86.00	0.00	BEGIN RECORDING JOB DATA.
Event	8	Test Lines	Test Lines	5/28/2017	06:49:29	COM5	8.67	2447.00	0.00	PRESSURE TESTED IRON TO 3500 PSI. KICKOUTS SET @ 500 PSI, KICKED OUT @ 1000 PSI, 5TH GEAR STALL OUT @ 2090 PSI.
Event	9	Pump Spacer 1	Pump Spacer 1	5/28/2017	06:53:33	COM5	8.33	142.00	3.60	PUMP 20 BBLS OF FRESH WATER.
Event	10	Drop Bottom Plug	Drop Bottom Plug	5/28/2017	06:59:00	USER	8.28	96.00	0.00	PLUG LEFT CONTAINER, VERIFIED BY CO. MAN.
Event	11	Check Weight	Check Weight	5/28/2017	07:00:48	USER	8.26	84.00	0.00	WEIGHT CONFIRMED USING PRESSURIZED MUD SCALES.
Event	12	Pump Cement	Pump Cement	5/28/2017	07:02:42	COM5	13.63	222.00	5.10	PUMP 780 SKS OF SWIFTCEM @ 13.5 LB/GAL, 1.76 YIELD, 8.83 GAL/SK 245 BBLS, DENSITY VERIFIED BY PRESSURIZED MUD SCALES.
Event	13	Shutdown	Shutdown	5/28/2017	08:09:17	USER	19.14	60.00	0.00	SHUTDOWN TO DROP PLUG.

Event	14	Drop Top Plug	Drop Top Plug	5/28/2017	08:10:39	USER	21.06	53.00	0.00	PLUG LEFT CONTAINER, VERIFIED BY CO. MAN.
Event	15	Pump Displacement	Pump Displacement	5/28/2017	08:11:50	COM5	22.33	52.00	0.00	BEGIN CALCULATED DISPLACEMENT OF 129 BBLS WITH FRESH WATER. CEMENT TO SURFACE @ 94 BBLS INTO DISPLACEMENT, 35 BBLS OF CEMENT TO SURFACE. SLOW RATE TO 2 BPM @ 110 BBLS INTO DISPLACEMENT.
Event	16	Bump Plug	Bump Plug	5/28/2017	08:52:33	USER	8.38	557.00	1.90	PLUG BUMPED AT CALCULATED DISPLACEMENT. PRESSURED 500 PSI OVER BUMP.
Event	17	Check Floats	Check Floats	5/28/2017	08:57:38	USER	8.40	1205.00	0.00	RELEASED PRESSURE, FLOATS HELD, 2 BBLS BACK.
Event	18	End Job	End Job	5/28/2017	08:59:20	COM5	8.37	37.00	0.00	STOP RECORDING JOB DATA.
Event	19	Post-Job Safety Meeting (Pre Rig-Down)	Post-Job Safety Meeting (Pre Rig-Down)	5/28/2017	09:10:00	USER				DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH WEATHER, LOCATION AND RIGGING DOWN IRON AND HOSES.
Event	20	Rig-Down Equipment	Rig-Down Equipment	5/28/2017	09:15:00	USER				RIG DOWN BULK AND MIXING EQUIPMENT.
Event	21	Crew Leave Location	Crew Leave Location	5/28/2017	11:00:00	USER				THANK YOU FOR USING HALLIBURTON – NICK PETERSON AND CREW.

3.0 Attachments

3.1 Custom Results – Job Chart with Events



3.2 Custom Results – Job Chart with Events

