

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

Disclaimer:

All information in this report is provided subject to the terms and conditions which govern the services provided by Halliburton. Halliburton personnel use their best efforts in gathering information and their best judgment in interpreting it, but any interpretation, research, analysis or recommendation furnished by Halliburton are opinions based upon inferences from measurements and empirical relationships and assumptions, which inferences and empirical relationships and assumptions are not infallible, and with respect to which professionals in the industry may differ. Accordingly, HALLIBURTON IS UNABLE TO GUARANTEE THE ACCURACY OF ANY CHART INTERPRETATION, RESEARCH ANALYSIS, OR JOB RECOMMENDATION and any interpretation or recommendation is not for use of or reliance upon by any third party. The customer has full responsibility for any of its decisions which are based on the information provided in this report.

Table of Contents

1.0	Cementing Job Summary	4
1.1	Executive Summary	4
2.0	Real-Time Job Summary	7
2.1	Job Event Log	7
3.0	Attachments.....	9
3.1	Custom Results – Job Chart with Events	9
3.2	Custom Results – Job Chart with Events	10

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]

HALLIBURTON

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		Srcv Supervisor: Nicholas Peterson								
Job										
Formation Name										
Formation Depth (MD)	Top	Bottom								
Form Type		BHST								
Job depth MD	1721ft	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	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	SWIFTCEM (TM) SYSTEM	245	sack	13.5	1.76		4	8.83	
0.1250 lbm		POLY-E-FLAKE (101216940)								
8.83 Gal		FRESH WATER								

last updated on 5/28/2017 10:36:04 AM

Page 1 of 3

HALLIBURTON

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

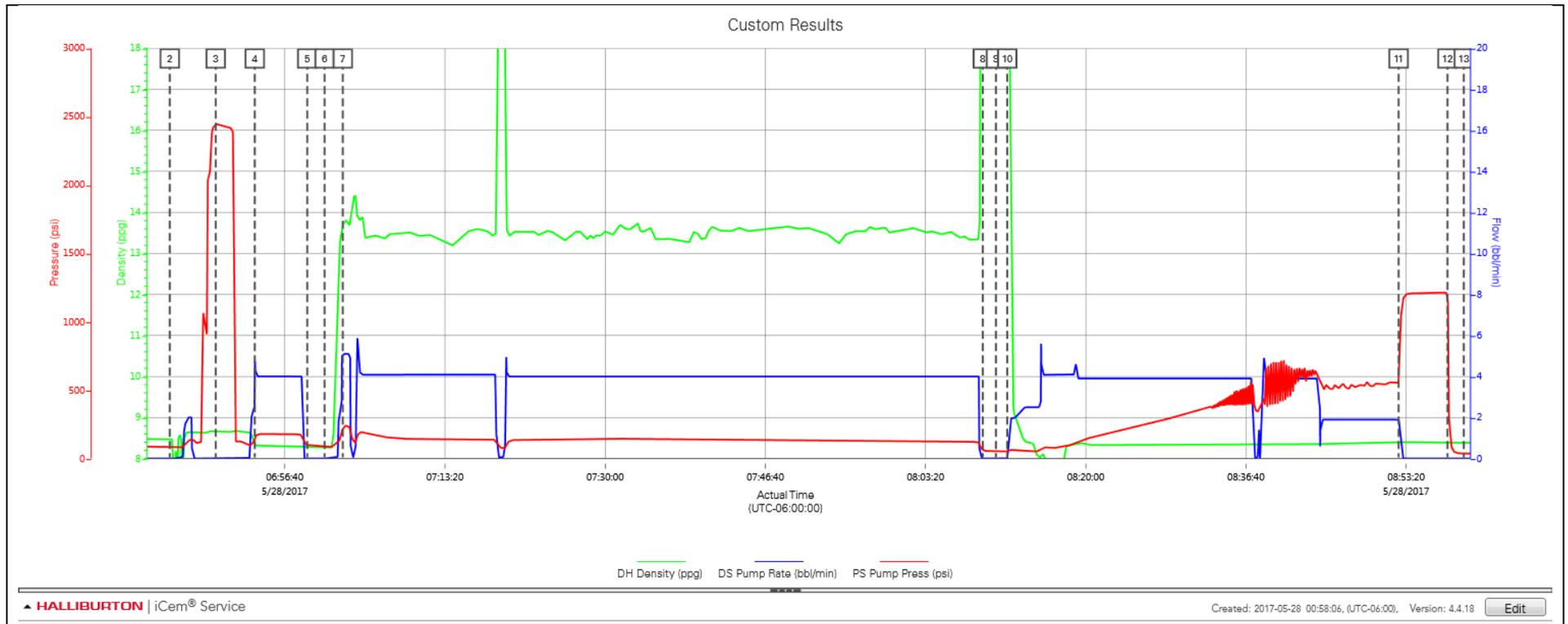
2.1 Job Event Log

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

