

# HALLIBURTON

iCem<sup>®</sup> Service

## **EXTRACTION OIL & GAS**

Date: Saturday, December 10, 2016

### **Matrix D-29HC Surface**

Job Date: Tuesday, November 22, 2016

Sincerely,

**Julia Nichols**

## Legal Notice

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## 1.0 Cementing Job Summary

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### 1.1 Executive Summary

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Halliburton appreciates the opportunity to perform the cementing services on the **Matrix D-29HC 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 36 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 #: 369404		Ship To #: 3633959		Quote #:		Sales Order #: 0903663954				
Customer: EXTRACTION OIL & GAS -				Customer Rep: Sean McIntyre						
Well Name: MATRIX			Well #: D-29HC			API/UWI #: 05-123-40895-00				
Field: GREELEY		City (SAP): GREELEY		County/Parish: WELD		State: COLORADO				
Legal Description: SE SW-29-6N-65W-453FSL-2335FWL										
Contractor:				Rig/Platform Name/Num: Spud Rig						
Job BOM: 7521										
Well Type: HORIZONTAL OIL										
Sales Person: HALAMERICA\HX38199				Srvc Supervisor: Nathaniel Moore						
Job										
Job depth MD		1633ft		Job Depth TVD		1633				
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			0	1633	0	1633
Open Hole Section			13.5				0	1652	0	1652
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make		
Guide Shoe	9.625				Top Plug	9.625	1	HES		
Float Shoe	9.625			1633	Bottom Plug	9.625		HES		
Fluid Data										
Stage/Plug #: 1										
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
1	Red Dye Spacer	Red Dye Spacer	50	bbl	8.33					
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
2	SwiftCem	SWIFTCEM (TM) SYSTEM	575	sack	13.5	1.74		5	9.2	
9.20 Gal		FRESH WATER								
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
3	Fresh Water	Fresh Water	123	bbl	8.33					
Cement Left In Pipe		Amount	42 ft			Reason		Shoe Joint		

36 bbl cement to surface

## 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>	Comments
Event	1	Call Out	Call Out	11/22/2016	13:00:00	USER				OL time 1900. Verify equipment and materials
Event	2	Depart Yard Safety Meeting	Depart Yard Safety Meeting	11/22/2016	15:00:00	USER				Journey management with crew
Event	3	Assessment Of Location Safety Meeting	Assessment safety meeting	11/22/2016	16:30:00	USER				Rig still pulling drillpipe. Spot in and rig up equipment
Event	4	Other	Meet with customer rep	11/23/2016	17:00:00	USER				TD 1652' 13.5" open hole. TP 1632.66' 9.625" 36\$ J-55 casing. SJ 43'.
Event	5	Start Job	Start Job	11/23/2016	21:46:07	COM1	40.00	2.84	0.00	Establish circulation with 5 bbl water. 118 psi at 3 bpm.
Event	6	Pump Spacer	Pump Spacer	11/23/2016	21:55:41	USER	41.00	8.58	2.20	30 bbl water and 10 bbl dye.
Event	7	Pump Cement	Pump Cement	11/23/2016	22:11:39	COM1	51.00	13.57	2.00	575 sks/178 bbl 13.5 ppg 1.74 ft3/sk 9.2 gal/sk
Event	8	Check Weight	Check weight	11/23/2016	22:14:57	COM1	215.00	13.64	7.50	13.5 ppg verified with pressurized scales
Event	9	Drop Top Plug	Drop Top Plug	11/23/2016	22:44:39	COM1	-27.00	17.41	0.00	Witnessed by company rep. Washup on top of plug.
Event	10	Pump Displacement	Pump Displacement	11/23/2016	22:44:45	COM1	-27.00	17.38	0.00	122 bbl water displacement
Event	11	Other	Red dye to surface	11/23/2016	22:52:15	COM1	332.00	8.11	9.50	40 bbl into displacement
Event	12	Other	Cement to surface	11/23/2016	22:54:14	COM1				50 bbl into displacement. 36 bbl cement to surface total
Event	13	Bump Plug	Bump Plug	11/23/2016	23:07:00	COM1				480 psi final circulating pressure. Pressured up to 1500 psi for 5 minute casing pressure test
Event	14	Other	Check floats	11/23/2016	23:11:26	COM1				0.5 bbl back. FLoats held.
Event	15	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	11/23/2016	23:13:00	USER				
Event	16	End Job	End Job	11/23/2016	23:15:13	COM1				
Event	17	Depart Location Safety	Depart Location Safety	11/23/2016	23:55:00	USER				

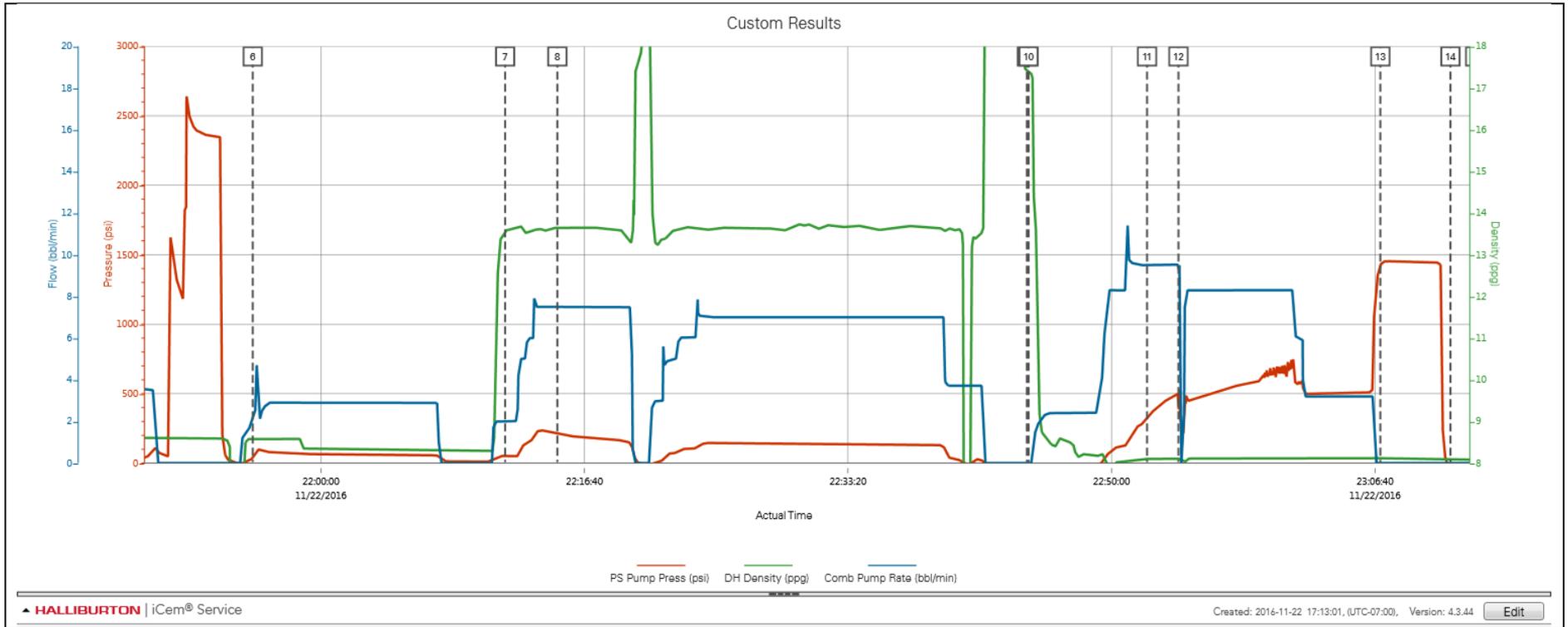
Meeting

Meeting

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3.0 Attachments

3.1 Custom Results – Job Chart with Events



3.2 Custom Results – Job Chart without Events

