

# HALLIBURTON

iCem<sup>®</sup> Service

## **EXTRACTION OIL & GAS**

Date: Friday, July 08, 2016

### **Winder #11 Surface**

Job Date: Sunday, July 03, 2016

Sincerely,

**Julia Nichols**

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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 **Winder #11** 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 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 #: 369404	Ship To #: 3535921	Quote #:	Sales Order #: 0903407060
Customer: EXTRACTION OIL & GAS -		Customer Rep: Jose	
Well Name: WINDER	Well #: 11	API/UWI #: 05-123-39581-00	
Field: SEVERANCE	City (SAP): WINDSOR	County/Parish: WELD	State: COLORADO
Legal Description: NE NE-9-6N-67W-936FNL-684FEL			
Contractor: UNKNOWN		Rig/Platform Name/Num: WORKOVER RIG	
Job BOM: 7521			
Well Type: HORIZONTAL OIL			
Sales Person: HALAMERICA/HB71271		Srcv Supervisor: Nathaniel Moore	
<b>Job</b>			

Formation Name			
Formation Depth (MD)	Top		Bottom
Form Type			BHST
Job depth MD	1537ft		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			0	1537	0	1537
Open Hole Section			13.5				0	1537	0	1537

Tools and Accessories									
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make
Guide Shoe	9.625			1537		Top Plug	9.625	1	HES
Float Shoe	9.625					Bottom Plug	9.625		HES
Float Collar	9.625					SSR plug set	9.625		HES
Insert Float	9.625					Plug Container	9.625		HES
Stage Tool	9.625					Centralizers	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	Fresh Water	Fresh Water – Red dye in first 10	20	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	550	sack	13.5	1.74		6	9.19		
		9.19 Gal	FRESH WATER								

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***Cementing Job Summary***

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		Water displacement	115	bbl	8.33					
<b>Cement Left In Pipe</b>		<b>Amount</b>	42 ft		<b>Reason</b>			Shoe Joint		
20 bbl spacer and 35 bbl cement to surface										

## 2.0 Real-Time Job Summary

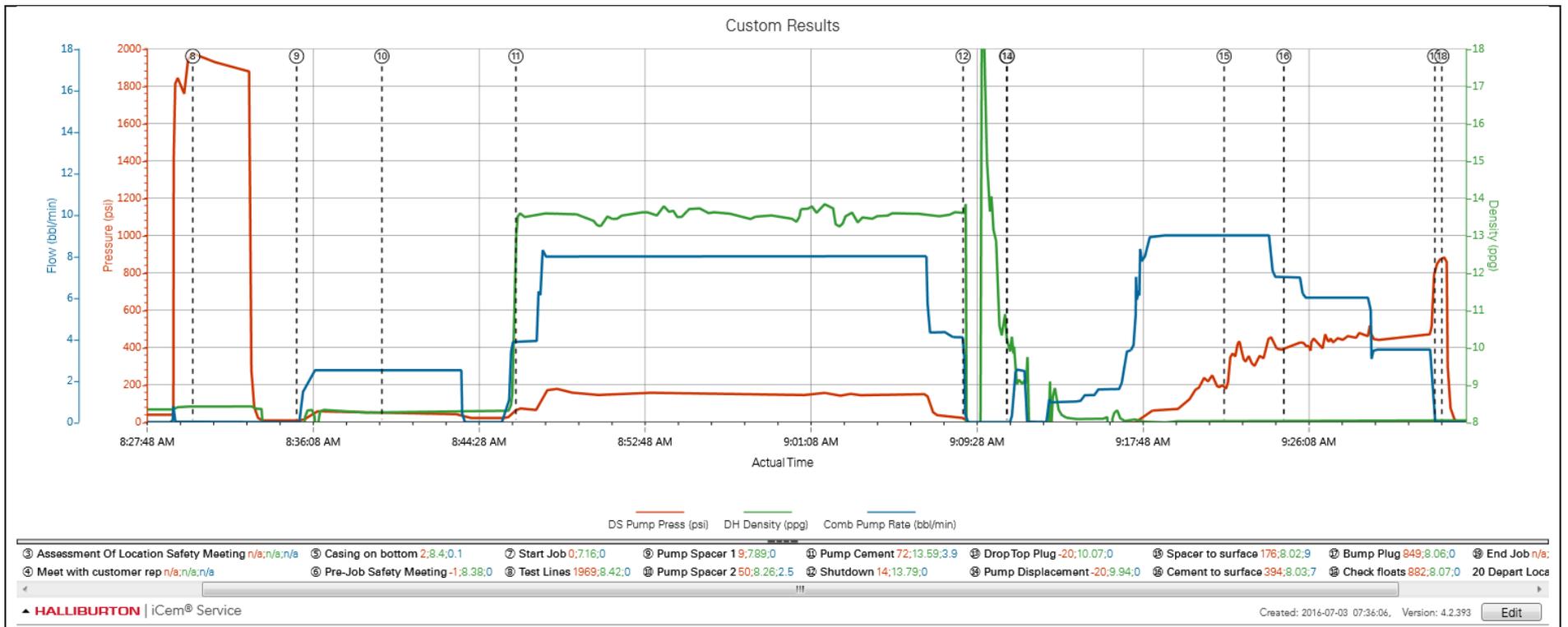
### 2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Driv-Side Pump Pressure (psi)	Downhole Density (ppg)	Combined Pump Rate (bbl/min)	Comments
Event	1	Call Out	Call Out	7/2/2016	23:30:00	USER				OL time 0530. Verify equipment and materials
Event	2	Depart Yard Safety Meeting	Depart Yard Safety Meeting	7/3/2016	04:00:00	USER				Journey management with crew
Event	3	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	7/3/2016	05:00:00	USER				Rig pulling last stands of drill pipe. Ready to run casing.
Event	4	Other	Meet with customer rep	7/3/2016	06:30:00	USER				TD 1537' 13.5" open hole. TP 1537' 9.625" 36# J-55 casing. Shoe joint 45'. MW 8.7 ppg. Water tested PH 7 Chlorides <300 Sulfates <200 Temp 65 degrees.
Event	5	Other	Casing on bottom	7/3/2016	08:00:00	USER				Rig pumped to establish circulation
Event	6	Pre-Job Safety Meeting	Pre-Job Safety Meeting	7/3/2016	08:15:00	USER				
Event	7	Start Job	Start Job	7/3/2016	08:25:52	COM1				Fill lines with 3 bbl water
Event	8	Test Lines	Test Lines	7/3/2016	08:30:12	COM1				Test lines to 2000 psi
Event	9	Pump Spacer 1	Pump Spacer 1	7/3/2016	08:35:25	COM1	9.00	8.19	1.00	10 bbl water with red dye
Event	10	Pump Spacer 2	Pump Spacer 2	7/3/2016	08:39:42	COM1	50.00	8.26	2.50	10 bbl water
Event	11	Pump Cement	Pump Cement	7/3/2016	08:46:41	COM1	72.00	13.59	3.90	550sks/170 bbl 13.5 ppg SwiftCem at 1.74 ft3/sk and 9.19 gal/sk
Event	12	Shutdown	Shutdown	7/3/2016	09:08:53	COM1				Wash-up on top of the plug
Event	13	Drop Top Plug	Drop Top Plug	7/3/2016	09:11:04	COM1				Witnessed by company rep
Event	14	Pump Displacement	Pump Displacement	7/3/2016	09:11:06	COM1	-20.00	9.94	0.00	115 bbl water displacement
Event	15	Other	Spacer to surface	7/3/2016	09:22:00	USER				Saw red dye spacer return to surface approximately 60 bbl into displacement. 20 bbl total.
Event	16	Other	Cement to surface	7/3/2016	09:25:00	USER				Saw cement return to surface approximately 80 bbl into displacement. 35 bbl total.

Event	17	Bump Plug	Bump Plug	7/3/2016	09:32:34	COM1	Final circulating pressure 480 psi. Pressured up to 850 psi.
Event	18	Other	Check floats	7/3/2016	09:32:55	COM1	0.5 bbl back
Event	19	End Job	End Job	7/3/2016	09:50:00	USER	
Event	20	Depart Location Safety Meeting	Depart Location Safety Meeting	7/3/2016	10:30:00	USER	

3.0 Attachments

3.1 Custom Results – Job Chart with Events



3.2 Custom Results – Job Chart without Events

