

# HALLIBURTON

iCem<sup>®</sup> Service

## EXTRACTION OIL & GAS

Date: Tuesday, August 02, 2016

### **Winder #12**

Surface

Job Date: Saturday, July 02, 2016

Sincerely,

**Lauren Roberts**

## 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 **Winder #12** 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.

**22 bbl. 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]**

*The Road to Excellence Starts with Safety*

Sold To #: 369404	Ship To #: 3535888	Quote #:	Sales Order #: 0903402877
Customer: EXTRACTION OIL & GAS -		Customer Rep:	
Well Name: WINDER		Well #: 12	API/UWI #: 05-123-39583-00
Field: SEVERANCE	City (SAP): WINDSOR	County/Parish: WELD	State: COLORADO
Legal Description: NE NE-9-6N-67W-962FNL-684FEL			
Contractor: UNKNOWN		Rig/Platform Name/Num: WORKOVER RIG	
Job BOM: 7521			
Well Type: HORIZONTAL OIL			
Sales Person: HALAMERICA\HB71271		Srvc Supervisor: Aaron Smith	

**Job**

Formation Name			
Formation Depth (MD)	Top		Bottom
Form Type	BHST		
Job depth MD	1539ft	Job Depth TVD	1539
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	1539	0	1539
Open Hole Section			13.5				50	1539	50	1539

**Tools and Accessories**

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	9.625				Top Plug	9.625	1	Hwe
Float Shoe	9.625	1		1539	Bottom Plug	9.625		HES
Float Collar	9.625	1		1494	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 ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
1	Fresh Water	Fresh Water	20	bbl	8.33					

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/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		<b>FRESH WATER</b>								
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
3	Fresh water Displacement	Fresh Water	113	bbl	8.33					
Cement Left In Pipe		<b>Amount</b>	45 ft		<b>Reason</b>			<b>Shoe Joint</b>		
<b>Comment</b>										

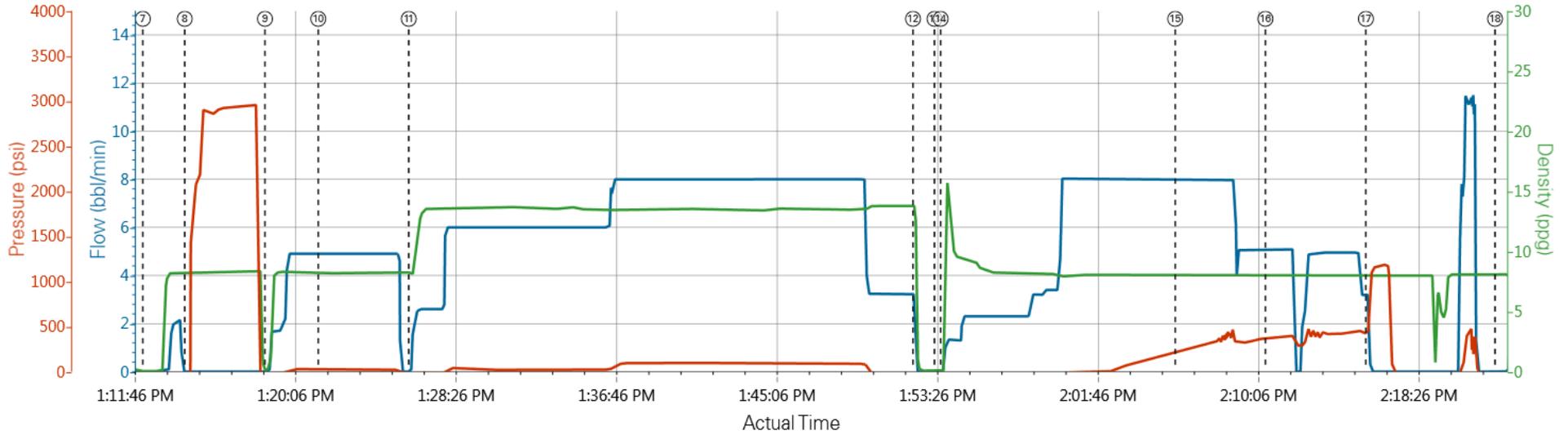
## 2.0 Real-Time Job Summary

### 2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Combined Pump Rate (bbl/min)	Downhole Density (ppg)	Pass-Side Pump Pressure (psi)	Comments
Event	1	Call Out	Call Out	7/2/2016	03:00:00	USER				For O/L @ 0900.
Event	2	Depart from Service Center or Other Site	Depart from Service Center or Other Site	7/2/2016	06:30:00	USER				Journey management meeting held prior to departure.
Event	3	Arrive at Location from Service Center	Arrive at Location from Service Center	7/2/2016	07:30:00	USER				With all equipment and materials. Rig still pulling drill pipe,
Event	4	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	7/2/2016	07:40:00	USER				JSA to discuss the hazards of rig-up
Event	5	Casing on Bottom	Casing on Bottom	7/2/2016	12:45:00	USER	0.00	8.44	-59.00	
Event	6	Pre-Job Safety Meeting	Pre-Job Safety Meeting	7/2/2016	13:00:00	USER	0.00	8.43	-62.00	with all essential personnel
Event	7	Start Job	Start Job	7/2/2016	13:12:17	COM4	0.00	0.05	-60.00	With water supplied from frac tank, water tested good to mix cement, Temp 64, Cl 0, Ph 7.
Event	8	Test Lines	Test Lines	7/2/2016	13:14:28	COM4	0.00	8.25	-24.00	@3000 PSI
Event	9	Pump Spacer 1	Pump Spacer 1	7/2/2016	13:18:38	COM4	0.00	0.11	-32.00	10 Bbls Fresh Water with red dye
Event	10	Pump Spacer 2	Pump Spacer 2	7/2/2016	13:21:24	COM4	4.90	8.23	25.00	10 Bbls Fresh Water
Event	11	Pump Cement	Pump Cement	7/2/2016	13:26:06	COM4	0.10	8.25	-33.00	550 Sks (170.44 Bbls) SwiftCem @ 13.5 ppg, verified with scales.
Event	12	Shutdown	Shutdown	7/2/2016	13:52:17	COM4	0.00	13.79	-56.00	
Event	13	Drop Top Plug	Drop Top Plug	7/2/2016	13:53:24	COM4	0.00	0.07	-76.00	Pre-loaded HWE top plug in plug container, verified by customer rep.
Event	14	Pump Displacement	Pump Displacement	7/2/2016	13:53:43	COM4	0.10	0.07	-76.00	113 bbls fresh water
Event	15	Other	Spacer Returns to Surface	7/2/2016	14:05:54	COM4	8.00	8.02	216.00	@71 bbls Displacement 20 bbls to surface.
Event	16	Other	Cement Returns to Surface	7/2/2016	14:10:35	COM4	5.10	8.03	382.00	@91 Bbls displacement, 22 Bbls To Surface

Event	17	Bump Plug	Bump Plug	7/2/2016	14:15:48	USER	3.20	8.03	513.00	@500 psi over, final circulating pressure 467 psi
Event	18	End Job	End Job	7/2/2016	14:22:31	COM4	0.00	8.09	-72.00	Thanks Aaron Smith and Crew
Event	19	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	7/2/2016	14:40:00	USER				JSA to discuss the hazards of rig-down
Event	20	Depart Location for Service Center or Other Site	Depart Location for Service Center or Other Site	7/2/2016	15:00:00	USER				Depart location for next location

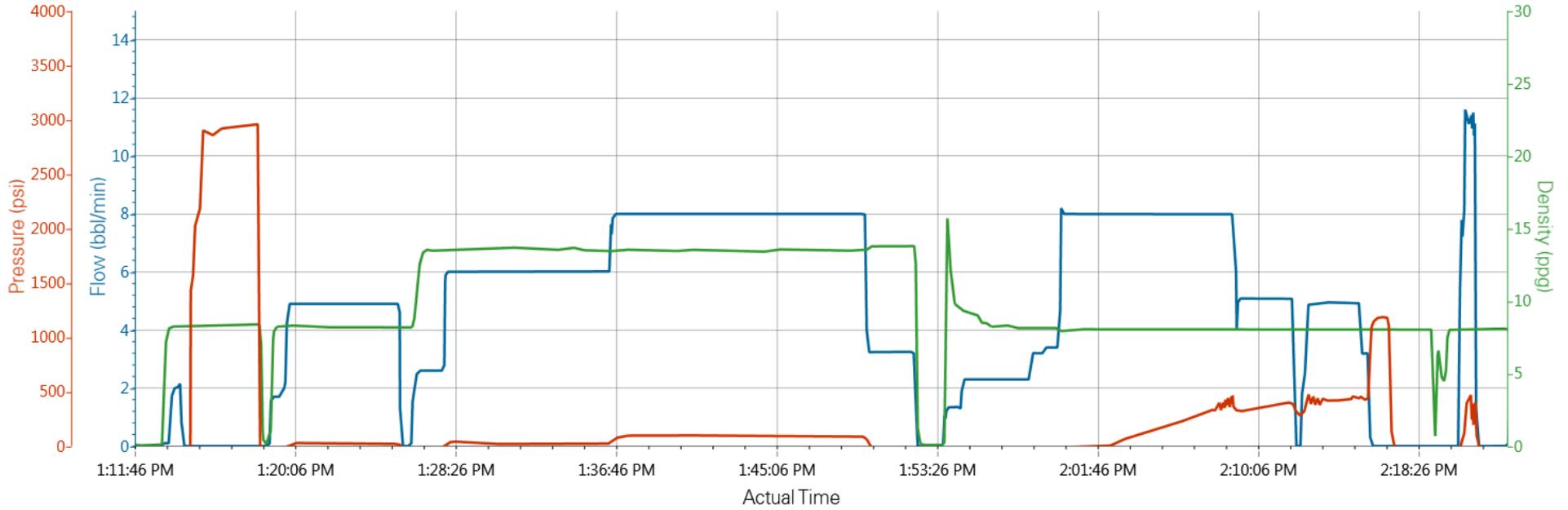
Extraction Oil & Gas Winder 12 Surface



Comb Pump Rate (bbl/min) DH Density (ppg) PS Pump Press (psi)

[Pumping on Bottom 0:8.44:-59](#)  
 [7 Start Job 0:0.05:-60](#)  
 [9 Pump Spacer 1 0:0.11:-32](#)  
 [11 Pump Cement 0:1.8.25:-33](#)  
 [13 Drop Top Plug 0:0.07:-76](#)  
 [15 Spacer Returns to Surface 8:8.02:216](#)  
 [17 Bump Plug 3:2.8.03:513](#)  
 [19 Pre-Rig Down Safety Meeting n/n/n/n/a](#)  
[21 End Job Safety Meeting 0:8.43:-62](#)  
 [23 Test Lines 0:8.25:-24](#)  
 [25 Pump Spacer 2 4.9:8.23:25](#)  
 [27 Shutdown 0:13.79:-56](#)  
 [29 Pump Displacement 0.1:0.07:-76](#)  
 [31 Cement Returns to Surface 5.1:8.03:382](#)  
 [33 End Job 0:8.09:-72](#)  
 [35 20 Depart Location for Service Center or Other Site n/n/n/n/a](#)

Extraction Oil & Gas Winder 12 Surface



Comb Pump Rate (bbl/min) DH Density (ppg) PS Pump Press (psi)