

# HALLIBURTON

iCem<sup>®</sup> Service

## **EXTRACTION OIL & GAS**

United States of America

Date: Saturday, December 17, 2016

### **Mickey #12**

Surface

Job Date: Tuesday, December 06, 2016

Sincerely,

**Justin Lansdale**

## Legal Notice

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### Disclaimer:

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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 **Mickey #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.

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 [Fort Lupton]**

*The Road to Excellence Starts with Safety*

<b>Sold To #:</b> 369404		<b>Ship To #:</b> 3766594		<b>Quote #:</b>		<b>Sales Order #:</b> 0903687733					
<b>Customer:</b> EXTRACTION OIL & GAS -				<b>Customer Rep:</b> Shawn McIntyre							
<b>Well Name:</b> MICKEY			<b>Well #:</b> 12		<b>API/UWI #:</b> 05-123-43845-00						
<b>Field:</b> WATTENBERG		<b>City (SAP):</b> WINDSOR		<b>County/Parish:</b> WELD		<b>State:</b> COLORADO					
<b>Legal Description:</b> SW NE-5-6N-67W-2422FNL-1933FEL											
<b>Contractor:</b>				<b>Rig/Platform Name/Num:</b> Spud Rig							
<b>Job BOM:</b> 7521											
<b>Well Type:</b> HORIZONTAL OIL											
<b>Sales Person:</b> HALAMERICA\HX38199				<b>Srv Supervisor:</b> Mamdouh Abdalla							
<b>Job</b>											
<b>Formation Name</b>											
<b>Formation Depth (MD)</b>		<b>Top</b>	60	<b>Bottom</b>		1588					
<b>Form Type</b>				<b>BHST</b>							
<b>Job depth MD</b>		1551ft		<b>Job Depth TVD</b>							
<b>Water Depth</b>				<b>Wk Ht Above Floor</b>							
<b>Perforation Depth (MD)</b>		<b>From</b>		<b>To</b>							
<b>Well Data</b>											
<b>Description</b>	<b>New / Used</b>	<b>Size in</b>	<b>ID in</b>	<b>Weight lbm/ft</b>	<b>Thread</b>	<b>Grade</b>	<b>Top MD ft</b>	<b>Bottom MD ft</b>	<b>Top TVD ft</b>	<b>Bottom TVD ft</b>	
Casing		9.625	8.921	36			0	1551	0	1551	
Open Hole Section			13.5				60	1588	0	1588	
<b>Tools and Accessories</b>											
<b>Type</b>	<b>Size in</b>	<b>Qty</b>	<b>Make</b>	<b>Depth ft</b>		<b>Type</b>	<b>Size in</b>	<b>Qty</b>	<b>Make</b>		
Guide Shoe	9.625			1588		Top Plug	9.625		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		
<b>Fluid Data</b>											
<b>Stage/Plug #:</b> 1											
<b>Fluid #</b>	<b>Stage Type</b>	<b>Fluid Name</b>			<b>Qty</b>	<b>Qty UoM</b>	<b>Mixing Density lbm/gal</b>	<b>Yield ft3/sack</b>	<b>Mix Fluid Gal</b>	<b>Rate bbl/min</b>	<b>Total Mix Fluid Gal</b>
1	Red Dye Spacer	Red Dye Spacer			0	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		5	9.2
9.20 Gal		FRESH WATER							
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	Fresh Water	117	bbl	8.33				
Cement Left In Pipe		Amount	42 ft		Reason			Shoe Joint	
Comment 38 bbls of cement to surface									

## 2.0 Real-Time Job Summary

### 2.1 Job Event Log

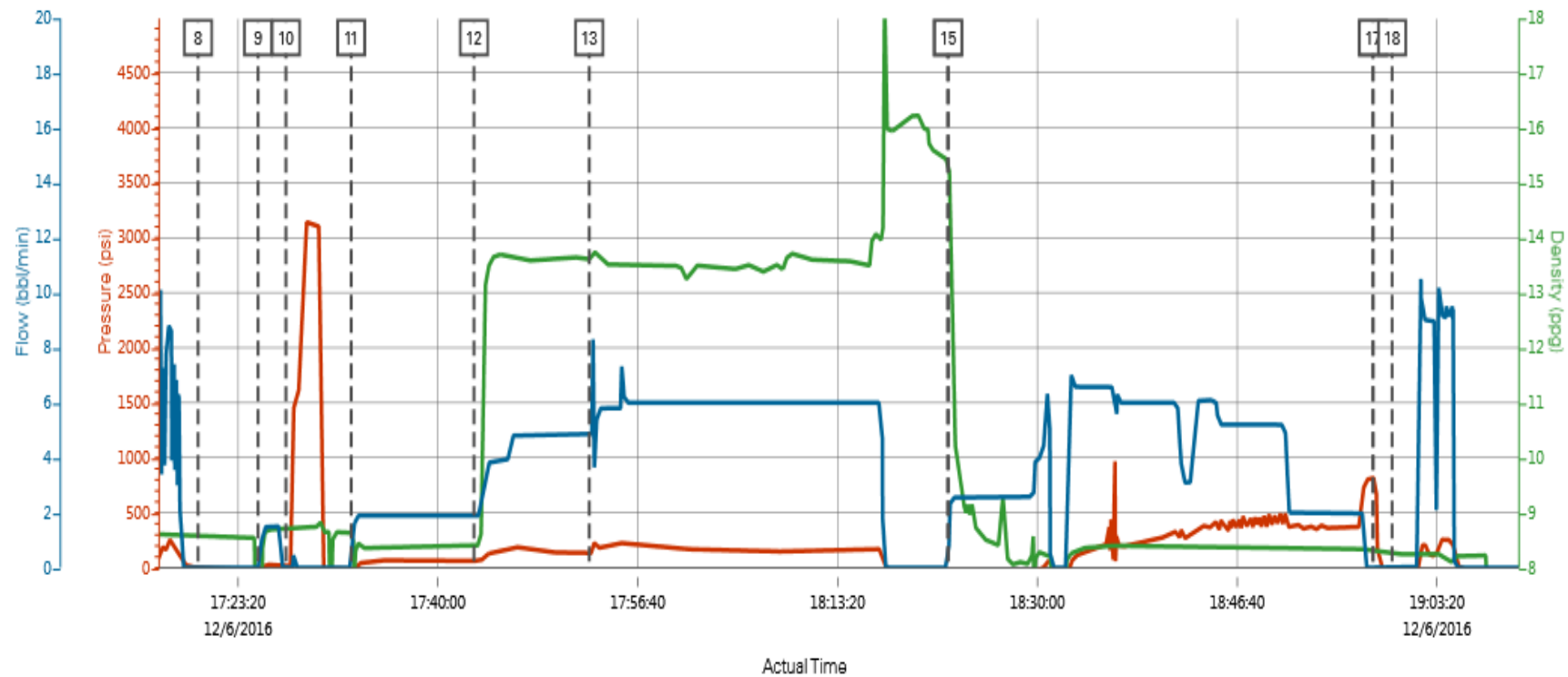
Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Comments
Event	1	Call Out	Call Out	12/6/2016	05:30:00	USER	Call Out Requested Crew On Location @ 08:00
Event	2	Arrive At Loc	Arrive At Loc	12/6/2016	06:30:00	USER	
Event	3	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	12/6/2016	07:00:00	USER	
Event	4	Rig-Up Equipment	Rig-Up Equipment	12/6/2016	07:30:00	USER	
Event	5	Rig-Down Completed	Rig-Down Completed	12/6/2016	09:00:00	USER	
Event	6	Pre-Job Safety Meeting	Pre-Job Safety Meeting	12/7/2016	17:00:00	USER	
Event	7	Start Job	Start Job	12/7/2016	17:12:43	COM6	
Event	8	Other	Other	12/7/2016	17:20:00	USER	Rig Up CMT Head & Load Top Plug
Event	9	Pump Water	Pump Water	12/7/2016	17:25:00	USER	Flush Lines With 3 BBL H2O
Event	10	Test Lines	Test Lines	12/7/2016	17:27:19	COM6	Test Line 3000 PSI.
Event	11	Pump Spacer 1	Pump Spacer 1	12/7/2016	17:32:46	COM6	Flush Line With 20 BBL H2O With 1 Lb Red Dye
Event	12	Pump Cement	Pump Cement	12/7/2016	17:43:00	USER	170 BBL CMT @ 13.5 (550 Sacks, Y 1.74, GPS 9.2) (120 BBL Mix Water) 5 BPM (Pressure 180 : 225 PSI)
Event	13	Check Weight	Check weight	12/7/2016	17:52:37	COM6	13.5 PPG
Event	14	Drop Top Plug	Drop Top Plug	12/7/2016	18:22:31	COM6	
Event	15	Pump Displacement	Pump Displacement	12/7/2016	18:22:34	COM6	116 BBL H2O (6.5 BPM 185 PSI) (5 BPM 430 PSI) (38 BBL Cemet Back To Surface)

Event	16	Bump Plug	Bump Plug	12/7/2016	18:57:59	COM6	Bump Plug @ 500 PSI & Took It Over To 950 PSI
Event	17	Check Floats	Check Floats	12/7/2016	18:58:00	USER	Hold (0.5 BBL Return)
Event	18	End Job	End Job	12/7/2016	18:59:35	COM6	
Event	19	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	12/7/2016	19:30:00	USER	
Event	20	Rig-Down Equipment	Rig-Down Equipment	12/7/2016	19:40:00	USER	
Event	21	Rig-Down Completed	Rig-Down Completed	12/7/2016	21:00:00	USER	
Event	22	Depart Location Safety Meeting	Depart Location Safety Meeting	12/7/2016	21:15:42	USER	
Event	23	Depart Location	Depart Location	12/7/2016	21:30:00	USER	



## 2.2 Custom Graph

Custom Results



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