

HALLIBURTON

iCem[®] Service

EXTRACTION OIL & GAS

Date: Tuesday, December 20, 2016

Mickey #10 Surface

Job Date: Sunday, December 04, 2016

Sincerely,

Julia Nichols

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1.0 Cementing Job Summary

1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **Mickey #10** 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 40 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]

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Cementing Job Summary

L,The Road to Excellence Starts with Safety

Sold To #: 369404		Ship To #: 3766634		Quote #:		Sales Order #: 0903690140				
Customer: EXTRACTION OIL & GAS -				Customer Rep: Shawn McIntyre						
Well Name: MICKEY			Well #: 10		API/UWI #: 05-123-43847-00					
Field: WATTENBERG		City (SAP): WINDSOR		County/Parish: WELD		State: COLORADO				
Legal Description: SW NE-5-8N-67W-2422FNL-1903FEL										
Contractor:				Rig/Platform Name/Num: Spud Rig						
Job BOM: 7521										
Well Type: HORIZONTAL OIL										
Sales Person: HALAMERICA\HX38199				Srcv Supervisor: Mamdouh Abdalla						
Job										
Formation Name										
Formation Depth (MD)		Top			Bottom					
Form Type										
BHST										
Job depth MD		1554ft			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	1588	0	1588
Open Hole Section			13.5				0	1588	0	1588
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Guide Shoe	9.625			1554		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	
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	Red Dye Spacer	Red Dye Spacer	20	bbl	8.33					
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	550	sack	13.5	1.74		5	9.2	
		9.20 Gal		FRESH WATER						

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Cementing Job Summary

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal
3	Fresh Water	Fresh Water	116.7	bbl	8.33				
Cement Left In Pipe		Amount	Reason						
		3.3	42 ft		Shoe Joint				
Mix Water:		pH ##	Mix Water Chloride:		Mix Water Temperature: ## °F °C				
			800 ppm						
Cement Temperature: ## °F °C		Plug Displaced by: 8.33 lb/gal			Disp. Temperature: ## °F °C				
Plug Bumped? Yes		Bump Pressure: 450 psi MPa			Floats Held? Yes				
Cement Returns: 40 bbl		Returns Density: 13.5 lb/gal kg/m³			Returns Temperature: ## °F °C				
Comment									

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Downhole Density <i>(ppg)</i>	Combined Pump Rate <i>(bbl/min)</i>	Combined Pump Total <i>(bbl)</i>	Pass-Side Pump Pressure <i>(psi)</i>	Comments
Event	1	Call Out	Call Out	12/3/2016	23:40:00	USER					Call Out (Requested Crew On Location At 05:00 AM)
Event	2	Depart Yard Safety Meeting	Depart Yard Safety Meeting	12/4/2016	02:45:00	USER					
Event	3	Other	Departure Yard	12/4/2016	03:00:00	USER					Pump Truck 126693, Bulk Trucks 11764054 10866489, Pick Up Truck12251195
Event	4	Arrive at Location from Service Center	Arrive at Location from Service Center	12/4/2016	04:00:00	USER					Rig R1H With 9.625 CSG
Event	5	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	12/4/2016	04:30:00	USER					
Event	6	Rig-Up Equipment	Rig-Up Equipment	12/4/2016	04:40:00	USER					
Event	7	Other	CSG On Bottom	12/4/2016	05:05:00	USER					
Event	8	Rig-Up Completed	Rig-Up Completed	12/4/2016	05:35:00	USER					
Event	9	Other	Rig Up 9.625 CMT Head & Load Top Plug	12/4/2016	05:36:00	USER					
Event	10	Pre-Job Safety Meeting	Pre-Job Safety Meeting	12/4/2016	06:10:00	USER	0.00	0.00	0.0	-16.70	
Event	11	Start Job	Start Job	12/4/2016	06:16:11	COM6	0.00	0.00	0.0	-16.70	
Event	12	Pump Water	Pump Water	12/4/2016	06:25:00	USER	7.92	0.00	9.3	-2.70	Pump 3 BBL H2O 2 BPM 50 PSI
Event	13	Pressure Test	Pressure Test	12/4/2016	06:27:00	USER	7.90	0.00	9.3	-9.70	Test Lines 3000 PSI
Event	14	Pump Water	Pump Water	12/4/2016	06:37:00	USER	8.38	0.00	2.4	28.30	Pump 20 BBL H2O with 1 LBS RED DYE (4.5 BPM, 135 PSI)

Event	15	Pump Cement	Pump Cement 550 Sack, Y 1.75, 9.2 GPS (170 BBL Slurry) (120 BBL Mix Water)	12/4/2016	07:05:21	USER	13.55	6.40	139.4	93.30	6.5 BPM 140 PSI
Event	16	Drop Top Plug	Drop Top Plug	12/4/2016	07:14:00	USER	19.48	0.00	0.0	-68.70	
Event	17	Pump Displacement	Pump Displacement	12/4/2016	07:15:00	USER	16.04	1.10	0.0	-65.70	116.7 BBL H2O (40 BBL Cement Back To Surface)
Event	18	Bump Plug	Bump Plug	12/4/2016	07:50:00	USER	8.25	0.00	122.3	863.30	Bump Plug @ 450 PSI Took it 500 Over To 950 PSI
Event	19	Check Floats	Check Floats	12/4/2016	07:55:00	USER	-0.07	0.00	0.0	-78.70	Float Held (0.5 BBL Back)
Event	20	Job Complete	Job Complete	12/4/2016	08:00:00	USER	8.27	2.60	2.0	-65.70	9.625 Job Complete
Event	21	End Job	End Job	12/4/2016	08:47:59	COM6					
Event	22	Safety Meeting	Safety Meeting	12/4/2016	09:00:00	COM6					Top Out
Event	23	Start Job	Start Job	12/4/2016	09:05:59	COM6	8.16	0.00	92.2	-123.70	
Event	24	Pump Cement	Pump 6 BBL Cement (30 Sacks Of G Cement, Y 1.15, 4.99 GPS) Bulk Truck 126693	12/4/2016	09:10:00	USER	8.19	0.00	0.3	-116.70	Pump 3 BBL G Cement (Top Out) Waited For 10 Min & Pump 3 BBL G Cement (Top Out)
Event	25	End Job	End Job	12/4/2016	09:42:58	COM6					
Event	26	Other	Wash Up Cement Equipment	12/4/2016	09:50:00	USER	7.79	0.00	49.5	-139.70	
Event	27	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	12/4/2016	10:05:00	USER	2.19	1.10	61.5	-138.70	
Event	28	Rig-Down Equipment	Rig-Down Equipment	12/4/2016	10:20:00	USER					
Event	29	Rig-Down Completed	Rig-Down Completed	12/4/2016	11:30:00	USER					
Event	30	Depart Location for Service Center or Other Site	Depart Location for Service Center or Other Site	12/4/2016	12:00:00	USER					

3.0 Attachments

3.1 Custom Results – Job Chart with Events

