

HALLIBURTON

iCem[®] Service

EXTRACTION OIL & GAS

Date: Saturday, June 18, 2016

Breniman #8

Surface

Job Date: Monday, May 30, 2016

Sincerely,
Lauren Roberts

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1.0 Cementing Job Summary

1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **Breniman #8** 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.

27 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]

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Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 369404	Ship To #: 3615637	Quote #:	Sales Order #: 0903339851							
Customer: EXTRACTION OIL & GAS -		Customer Rep: SHANE								
Well Name: BRENIMAN	Well #: 8	API/UWI #: 05-123-40421-00								
Field: WATTENBERG	City (SAP): WINDSOR	County/Parish: WELD	State: COLORADO							
Legal Description: NE NW-16-6N-67W-632FNL-2042FWL										
Contractor: PATTERSON-UTI ENERGY		Rig/Platform Name/Num: PATTERSON 346								
Job BOM: 7521										
Well Type: HORIZONTAL OIL										
Sales Person: HALAMERICA/HB71271		Srvc Supervisor: Joseph Scileppi								
Job										
Formation Name										
Formation Depth (MD)	Top 0	Bottom	1553							
Form Type	BHST									
Job depth MD	1553ft	Job Depth TVD	1553							
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	1553	0	1553
Open Hole Section			13.5				0	1553	0	1553
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make		
Guide Shoe	9.625			1553	Top Plug	9.625	1	HES		
Float Shoe	9.625				Bottom Plug	9.625				
Float Collar	9.625				SSR plug set	9.625				
Insert Float	9.625				Plug Container	9.625	1	HES		
Stage Tool	9.625				Centralizers	9.625				
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	Fresh Water	Fresh Water	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		6	9.17	
9.17 Gal		FRESH WATER								

last updated on 5/30/2016 8:19:38 PM

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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 Displacement	FRESH WATER Displacement	116.8	bbl	9				
Cement Left In Pipe									
Amount		42 ft			Reason			Shoe Joint	
Mix Water: pH ##		Mix Water Chloride: ## ppm			Mix Water Temperature: ## °F °C				
Cement Temperature: ## °F °C		Plug Displaced by: ## lb/gal kg/m³ XXXX			Disp. Temperature: ## °F °C				
Plug Bumped? Yes/No		Bump Pressure: ### psi MPa			Floats Held? Yes/No				
Cement Returns: ## bbl m³		Returns Density: ## lb/gal kg/m³			Returns Temperature: ## °F °C				
Comment 27 BBLs OF CMT TO SURFACE									

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Comb Pump Rate (bbl/min)	DH Density (ppg)	PS Pump Press (psi)	Comments
Event	1	Call Out	Call Out	5/30/2016	12:00:00	USER				CALLOUT FOR ON LOCATION AT 1800
Event	2	Crew Leave Yard	Crew Leave Yard	5/30/2016	16:00:00	USER				PRE JOURNEY JSA W/ CREW
Event	3	Arrive At Loc	Arrive At Loc	5/30/2016	17:15:00	USER				UPON ARRIVAL RIG HAD 15 JOINTS LEFT TO RUN, MET W/ COMPANY REP TO DISCUSS JOB PROCEDURE
Event	4	Rig-Up Equipment	Rig-Up Equipment	5/30/2016	17:30:00	USER				PRE RIG UP HAZARD HUNT JSA W/ CREW
Event	5	Other	Other	5/30/2016	17:35:00	USER				FIELD MIX WATER ANALYSIS: PH-7, TEMP-62, CHLORIDE-0
Event	6	Pre-Job Safety Meeting	Pre-Job Safety Meeting	5/30/2016	18:30:00	USER	0.00	8.44	5.00	JSA W/ ALL INVOLVED PERSONNEL
Event	7	Start Job	Start Job	5/30/2016	18:39:34	COM5	0.00	8.38	0.00	
Event	8	Prime Pumps	Prime Pumps	5/30/2016	18:40:01	COM5	1.20	8.39	1.00	
Event	9	Test Lines	Test Lines	5/30/2016	18:44:42	COM5	0.00	8.44	2369.00	TESTED LINES TO 2500 PSI FOR 3 MIN, NO VISIBLE LEAKS
Event	10	Pump Spacer 1	Pump Spacer 1	5/30/2016	18:48:31	COM5	1.30	8.35	21.00	PUMPED 20 BBLS OF H2O W/ DYE IN FIRST 10 BBLS AT 5 BPM AND 96 PSI
Event	11	Pump Cement	Pump Cement	5/30/2016	18:55:02	COM5	5.00	13.95	118.00	PUMPED 550 SKS OR 170.4 BBLS OF 13.5 CMT AT 7.5 BPM AND 140 PSI
Event	12	Shutdown	Shutdown	5/30/2016	19:20:40	COM5	0.00	0.24	-6.00	
Event	13	Drop Plug	Drop Plug	5/30/2016	19:23:46	COM5	0.00	0.33	-4.00	PLUG PRE LOADED AND WITNESSED BY COMPANY REP
Event	14	Pump Displacement	Pump Displacement	5/30/2016	19:23:55	COM5	0.00	0.36	-4.00	PUMPED 116.8 BBLS OF H2O AT 10 BPM AND 500 PSI, GOT 27 BBLS OF CMT TO SURFACE
Event	15	Bump Plug	Bump Plug	5/30/2016	19:40:45	COM5	5.00	8.27	479.00	FINAL CIRCULATING PRESSURE WAS 536 PSI AND PLUG BUMPED AT 820 PSI
Event	16	Pressure Up Well	Pressure Up Well	5/30/2016	19:43:59	COM5	1.20	8.29	1324.00	1500 PSI CASING TEST FOR 5 MIN
Event	17	Other	Other	5/30/2016	19:49:43	USER	0.00	8.27	23.00	CHECKED FLOATS THEY HELD AND GOT ONE BBL BACK TO

TRUCK

Event	18	End Job	End Job	5/30/2016	19:54:16	COM5	0.00	0.03	0.00
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Comb Pump Rate (bbl/min) DH Density (ppg) PS Pump Press (psi)

- ① Call Out n/a;n/a;n/a ④ Rig-Up Equipment n/a;n/a;n/a ⑦ Start Job 0;8.38;0 ⑩ Pump Spacer 1 1.3;8.35;21 ⑬ Drop Plug 0;0.33;-4 ⑯ Pressure Up Well 1.2;8.29;1324
- ② Crew Leave Yard n/a;n/a;n/a ⑤ Other n/a;n/a;n/a ⑧ Prime Pumps 1.2;8.39;1 ⑪ Pump Cement 5;13.95;118 ⑭ Pump Displacement 0;0.36;-4 ⑰ Other 0;8.27;23
- ③ Arrive At Loc n/a;n/a;n/a ⑥ Pre-Job Safety Meeting 0;8.44;5 ⑨ Test Lines 0;8.44;2369 ⑫ Shutdown 0;0.24;-6 ⑮ Bump Plug 5;8.27;479 ⑱ End Job 0;0.03;0

