

HALLIBURTON

iCem[®] Service

SANDRIDGE ENERGY INC

For: Tyler McCullar

Date: Wednesday, May 04, 2016

Mutual 780 4-8H

Surface

Job Date: Tuesday, April 26, 2016

Sincerely,
Derek Trier

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1.0 Cementing Job Summary

1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **Mutual 780-4-8H** 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 [Ft. Lupton]

Job Times

	Date	Time	Time Zone
Called Out Time:	4/25/2016	2300	MTN
Arrived On Location At:	4/26/2016	0715	
Job Started At:		1344	
Job Completed At:		1531	
Departed Location At:		1700	



Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 305021	Ship To #: 3722533	Quote #:	Sales Order #: 0903260254
Customer: SANDRIDGE ENERGY INC - E-BUS		Customer Rep: CHUCK	
Well Name: MUTUAL	Well #: 780 4-8H	API/UWI #: 05-057-06541-00	
Field:	City (SAP): COALMONT	County/Parish: JACKSON	State: COLORADO
Legal Description: NW NW-17-7N-80W-37FNL-744FWL			
Contractor: XTREME DRLG		Rig/Platform Name/Num: XTREME 20	
Job BOM: 7521			
Well Type: HORIZONTAL OIL			
Sales Person: HALAMERICA/HX41066		Srvc Supervisor: Joseph Scileppi	

Job

Formation Name			
Formation Depth (MD)	Top	0	Bottom 2383
Form Type	BHST		
Job depth MD	2380ft	Job Depth TVD	2380
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	LTC	J-55	0	2380	0	2380
Open Hole Section			12.25				0	2383	0	2383

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	9.625			2380	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	10	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	495	sack	12.5	2.18		6	12.13	
12.13 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	SwiftCem	SWIFTCEM (TM) SYSTEM	175	sack	13.5	1.76		6	8.98
8.98 Gal		FRESH WATER							
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
4	Displacement Fluid	Displacement Fluid	180.3	bbl	8.4				
Cement Left in Pipe		Amount	Reason		Shoe Joint				
Mix Water: pH ##		Mix Water: ## ppm Chloride:			Mix Water Temperature: ## °F °C				
Cement Temperature: ## °F °C		Plug Displaced by: ## lb/gal kg/m ³ XXXX			Disp. Temperature: ## °F °C				
Plug Bumped? Yes/No		Bump Pressure: ### psi MPa			Floats Held? Yes/No				
Cement Returns: ## bbl m ³		Returns Density: ## lb/gal kg/m ³			Returns Temperature: ## °F °C				
Comment GOT 100 BBLs OF CMT TO SURFACE									

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Cementing Job Summary

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	SwiftCem	SWIFTCEM (TM) SYSTEM	175	sack	13.5	1.76		6	8.98	
8.98 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	
4	Displacement Fluid	Displacement Fluid	180.3	bbl	8.4					
Cement Left In Pipe		Amount	46 ft		Reason			Shoe Joint		
Comment GOT 100 BBLs OF CMT TO SURFACE										

2.0 Real-Time Job Summary

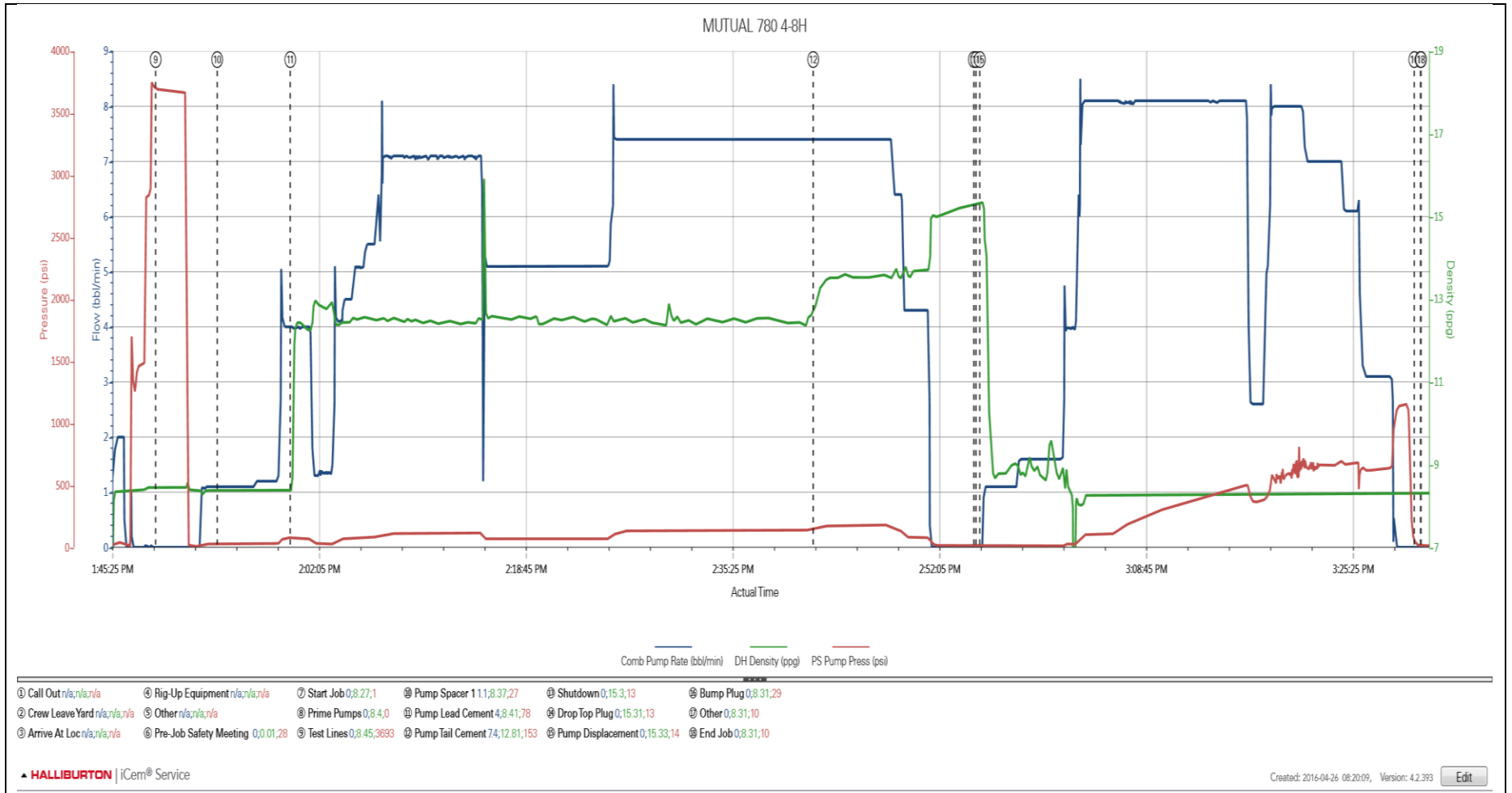
2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Comb Pump Rate <i>(bbl/min)</i>	DH Density <i>(ppg)</i>	PS Pump Press <i>(psi)</i>	Comments
Event	1	Call Out	Call Out	4/25/2016	23:00:00	USER				CALLOUT FOR ON LOCATION AT 0800
Event	2	Crew Leave Yard	Crew Leave Yard	4/26/2016	02:30:00	USER				PRE JOURNEY JSA W/ CREW
Event	3	Arrive At Loc	Arrive At Loc	4/26/2016	07:15:00	USER				UPON ARRIVAL RIG JUST STARTED RUNNING CASING, MET W/ COMPANY REP TO DISCUSS JOB PROCEDURE
Event	4	Rig-Up Equipment	Rig-Up Equipment	4/26/2016	12:00:00	USER				PRE RIG UP HAZARD HUNT JSA W/ CREW
Event	5	Other	Other	4/26/2016	12:30:00	USER				FIELD MIX WATER ANALYSIS: TEMP 46, PH-7, CHLORIDES-0, IRON-0, SULFATES- <200, HARDNESS- 140
Event	6	Pre-Job Safety Meeting	Pre-Job Safety Meeting	4/26/2016	13:00:26	USER				JSA W/ ALL INVOLVED PERSONNEL
Event	7	Start Job	Start Job	4/26/2016	13:44:23	COM5				
Event	8	Prime Pumps	Prime Pumps	4/26/2016	13:44:59	COM5				FILLED LINES W/ 2 BBLS OF H2O AT 40 PSI
Event	9	Test Lines	Test Lines	4/26/2016	13:49:02	COM5	0.00	8.45	3693.00	TESTED LINES TO 3000 PSI FOR 3 MIN, NO VISIBLE LEAKS
Event	10	Pump Spacer 1	Pump Spacer 1	4/26/2016	13:54:00	USER	1.10	8.37	27.00	PUMPED 10 BBLS OF DYE WATER AT 1.5 BPM AND 10 PSI
Event	11	Pump Lead Cement	Pump Lead Cement	4/26/2016	14:00:53	COM5	4.00	12.31	73.00	PUMPED 495 SKS OR 191 BBLS OF 12.5 LEAD CMT AT 7.5 BPM AND 114 PSI
Event	12	Pump Tail Cement	Pump Tail Cement	4/26/2016	14:42:58	COM5	7.40	13.50	172.00	PUMPED 175 SKS OR 54.8 BBLS OF 13.5 TAIL CMT AT 7.5 BPM AND 121 PSI
Event	13	Shutdown	Shutdown	4/26/2016	14:54:59	COM5				
Event	14	Drop Top Plug	Drop Top Plug	4/26/2016	14:55:10	COM5				PLUG PRE LOADED AND WITNESSED BY COMPANY REP
Event	15	Pump Displacement	Pump Displacement	4/26/2016	14:55:28	COM5	0.00	15.33	14.00	PUMPED 180.3 BBLS OF H2O AT 8 BPM AND 420 PSI, GOT 100 BBLS OF CMT BACK TO SURFACE
Event	16	Bump Plug	Bump Plug	4/26/2016	15:29:30	COM5	0.00	8.32	1155.00	FINAL IRCULATING PRESSURE WAS AT 623 PSI AND PLUG BUMPED AT 1129 PSI

Event	17	Other	Other	4/26/2016	15:31:00	USER	0.00	8.31	10.00	CHECKED FLOATS, THEY HELD AND GOT 1 BBL BACK TO TRUCK
Event	18	End Job	End Job	4/26/2016	15:31:01	COM5				

3.0 Attachments

3.1 Case 1-Custom Results.png



3.2 Case 1-Custom Results (1).png

