

HALLIBURTON

iCem® Service

EXTRACTION OIL & GAS-EBUS

United States of America, COLORADO

For:

Date: Wednesday, August 08, 2018

WELD

Extraction Rinn Valley East N17-20-2N

Job Date: Wednesday, August 08, 2018

Sincerely,

Prince Perez

Legal Notice

Disclaimer:

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Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 369404	Ship To #: 3892543	Quote #:	Sales Order #: 0905049724							
Customer: EXTRACTION OIL & GAS -		Customer Rep: Sean Macentire								
Well Name: RINN VALLEY EAST	Well #: N17-20-2N	API/UWI #: 05-123-47316-00								
Field: WATTENBERG	City (SAP): FIRESTONE	County/Parish: WELD	State: COLORADO							
Legal Description: SW SE-17-2N-68W-926FSL-1770FEL										
Contractor:		Rig/Platform Name/Num: Cartell 11								
Job BOM: 7521 7521										
Well Type: HORIZONTAL OIL										
Sales Person: HALAMERICA\HX38199		Srcv Supervisor: Prince Perez								
Job										
Formation Depth	Top 0	Bottom	1,653.21							
Job depth MD	1,653.21	Job Depth TVD	1,653.21							
		Wk Ht Above Floor	10'							
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	0	9.625	8.921	36	8 RD	J-55	0	1653	0	1653
Open Hole Section			13.5				0	1653	0	1653
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make		
Guide Shoe	9.625	1		1,653	Top Plug	9.625	1	HES		
Float Shoe	9.625	1			Bottom Plug	9.625	0	HES		
Float Collar	9.625	1		1,606.21	Plug Container	9.625	1	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/mi n	Total Mix Fluid Gal	
1	Red Dye Spacer	Red Dye Spacer	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/mi n	Total Mix Fluid Gal	
2	Cement	SWIFTCEM (TM) SYSTEM	550	sack	13.5	1.74	9.2	6	5,060	

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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/min	Total Mix Fluid Gal
3	Displacement	Fresh Water	124	bbl	8.33				
Cement Left In Pipe		Amount	45 ft		Reason			Shoe Joint	
Mix Water:		pH 7	Mix Water Chloride:		<300 ppm		Mix Water Temperature:		64 °F
Cement Temperature:		## °F	Plug Displaced by:		8.34 lb/gal		Disp. Temperature:		## °F
Plug Bumped?		Yes	Bump Pressure:		750 psi		Floats Held?		Yes
Cement Returns:		23 bbl	Returns Density:		## lb/gal		Returns Temperature:		## °F
Comment									
Pumped 40 bbls of fresh water. Pumped 10 of Red Dye. Pumped 170.44 bbls of SwiftCem. ¾ of a bbl on the floats.									

1.0 Real-Time Job Summary

1.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density <i>(ppg)</i>	Comb Pump Rate <i>(bbl/min)</i>	PS Pump Press <i>(psi)</i>	Pump Stg Tot <i>(bbl)</i>	Comments
Event	1	Call Out	Call Out	8/7/2018	23:00:00	USER					CREW CALLED OUT AT 23:00, REQUESTED ON LOCATION 3:00. CREW PICKED UP CEMENT, 100 LBS OF SUGAR, AND 2 LBS RED DYE FROM FT. LUPTON, CO. BULK 660, 10867531, 10867098, AND RED TIGER 11542778.
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	8/8/2018	01:50:00	USER					DISCUSSED ROUTES, HAZARDS, AND COMMUNICATION WITH CREW.
Event	3	Crew Leave Shop	Crew Leave Shop	8/8/2018	02:00:00	USER					STARTED JOURNEY MANAGEMENT.
Event	4	Arrive at Location from Service Center	Arrive at Location from Service Center	8/8/2018	02:50:00	USER					END JOURNEY MANAGEMENT. MEET WITH CO. MAN TO DISCUSS JOB; CASING- 9.625 36# @ 1,653.21', 13.5" HOLE 1,653.21' SHOE 45', FRESHWATER DISPLACEMENT, HALLIBURTON TOP PLUG. CASING LANDED @ 04:00 08/08/2018.
Event	5	Safety Meeting - Assessment of Location	Safety Meeting - Assessment of Location	8/8/2018	03:00:00	USER					HAZARD HUNT. DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH LOCATION, RIG UP AND

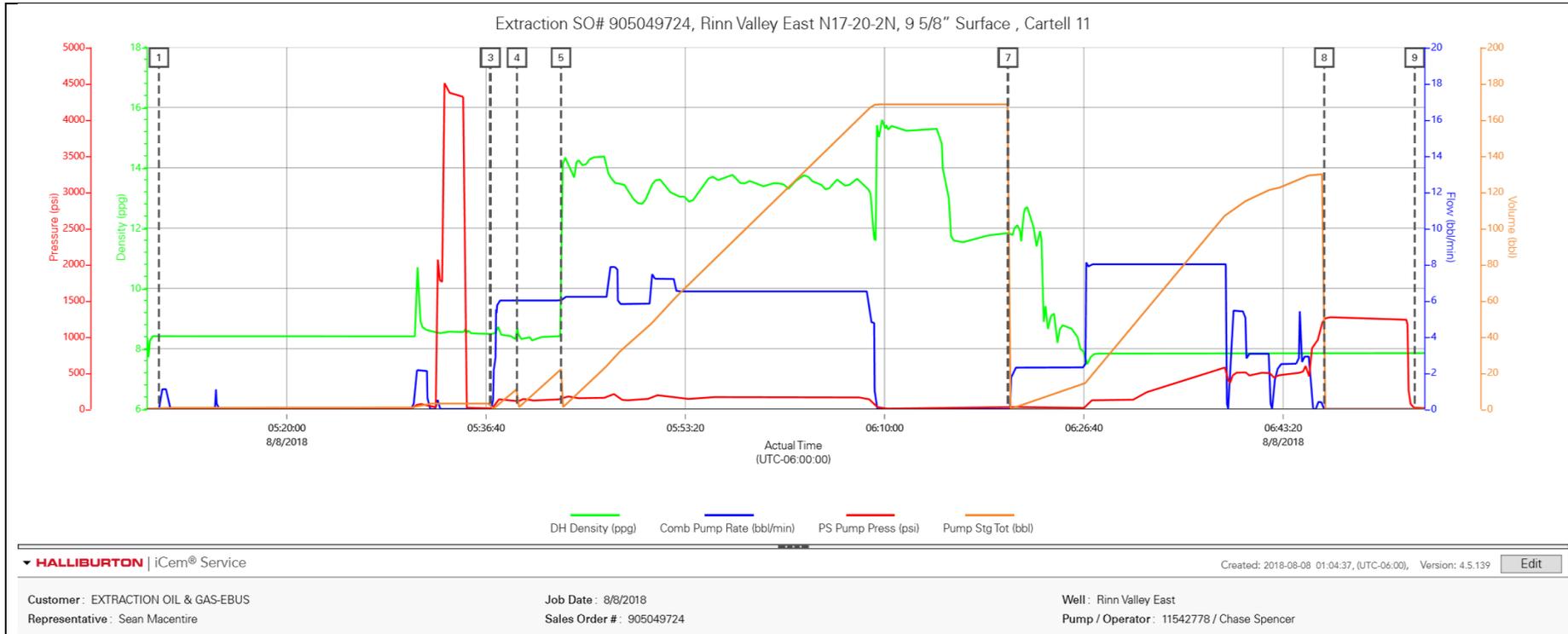
WEATHER.

Event	6	Rig-Up Equipment	Rig-Up Equipment	8/8/2018	03:10:00	USER					RIG UP BULK AND MIXING EQUIPMENT.
Event	7	Rig-Up Completed	Rig-Up Completed	8/8/2018	04:50:00	USER					
Event	8	Pre-Job Safety Meeting	Pre-Job Safety Meeting	8/8/2018	05:00:00	USER					MEETING WITH HALLIBURTON AND RIG PERSONNEL. COMMUNICATED POTENTIAL SAFETY HAZARDS AND JOB DETAILS.
Event	9	Start Job	Start Job	8/8/2018	05:09:18	COM4					BEGIN RECORDING JOB DATA.
Event	10	Test Lines	Test Lines	8/8/2018	05:36:59	COM4					PRESSURE TESTED IRON TO 4500 PSI. KICKOUTS SET @ 500 PSI, KICKED OUT @ 720 PSI, 5TH GEAR STALL OUT @ 1810 PSI, 4,500 KICKOUT @ 4,510 PSI.
Event	11	Pump Spacer 1	Pump Spacer 1	8/8/2018	05:37:03	COM4	8.48	4		40	PUMPED 40 BBLS OF FRESH WATER.
Event	12	Pump Spacer 2	Pump Spacer 2	8/8/2018	05:39:15	COM4	8.73	6.00	86.00	10	PUMP 10 BBLS OF FRESH WATER WITH RED DYE.
Event	13	Pump Cement	Pump Cement	8/8/2018	05:42:56	COM4	13.5	6.00	134.00	170	PUMP 550 SKS OF SWIFCEM @ 13.5 LB/GAL, 1.74 FT3/SK, 9.2 GAL/SK, 170.44 BBLS, 23 BBLS CALCULATED TO RETURN. DENSITY VERIFIED BY PRESSURIZED MUD SCALES.
Event	14	Drop Top Plug	Drop Top Plug	8/8/2018	06:20:17	COM4					PLUG LEFT CONTAINER, VERIFIED BY COMPANY REP.

Event	15	Pump Displacement	Pump Displacement	8/8/2018	06:20:20	COM4	8.33	8	470	0.00	BEGIN CALCULATED DISPLACEMENT OF 124 BBLS WITH FRESH WATER.
Event	16	Bump Plug	Bump Plug	8/8/2018	06:46:46	COM4					PLUG BUMPED AT CALCULATED DISPLACEMENT. PRESSURED 500 PSI OVER BUMP TO 1,200 PSI.
Event	17	End Job	End Job	8/8/2018	06:54:20	COM4					STOP RECORDING JOB DATA.
Event	18	Post-Job Safety Meeting (Pre Rig-Down)	Post-Job Safety Meeting (Pre Rig-Down)	8/8/2018	07:00:00	USER					DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH WEATHER, LOCATION AND RIGGING DOWN IRON AND HOSES.
Event	19	Rig-Down Equipment	Rig-Down Equipment	8/8/2018	07:10:00	USER					RIG DOWN BULK AND MIXING EQUIPMENT.
Event	20	Rig-Down Completed	Rig-Down Completed	8/8/2018	08:10:00	USER					
Event	21	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	8/8/2018	08:15:00	USER					ALL HALLIBURTON ITEMS WERE STOWED FOR TRAVEL, AND LOCATION WAS CLEAN.
Event	22	Crew Leave Location	Crew Leave Location	8/8/2018	08:30:00	USER					THANK YOU FOR USING HALLIBURTON – PRINCE PEREZ AND CREW.

2.0 Attachments

2.1 Extraction Rinn Valley East N17-20-2N-Custom Results.png



3.0