

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		Srv 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
Casing	0	9.625	8.921
Open Hole Section			13.5
Weight lbm/ft	36	Thread	8 RD
Grade	J-55	Top MD ft	0
Bottom MD ft	1653	Top TVD ft	0
Bottom TVD ft	1653		
Tools and Accessories			
Type	Size in	Qty	Make
Guide Shoe	9.625	1	1,653
Float Shoe	9.625	1	
Float Collar	9.625	1	1,606.21
Top Plug	9.625	1	HES
Bottom Plug	9.625	0	HES
Plug Container	9.625	1	HES
Fluid Data			
Stage/Plug #: 1			
Fluid #	Stage Type	Fluid Name	Qty
1	Red Dye Spacer	Red Dye Spacer	10
Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal
bbl	8.33		
Rate bbl/min	Total Mix Fluid Gal		
Fluid #	Stage Type	Fluid Name	Qty
2	Cement	SWIFTCM (TM) SYSTEM	550
Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal
sack	13.5	1.74	9.2
Rate bbl/min	Total Mix Fluid Gal		
			5,060

last updated on 8/8/2018 7:47:22 AM

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iCem® Service

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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. ¼ 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 (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	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

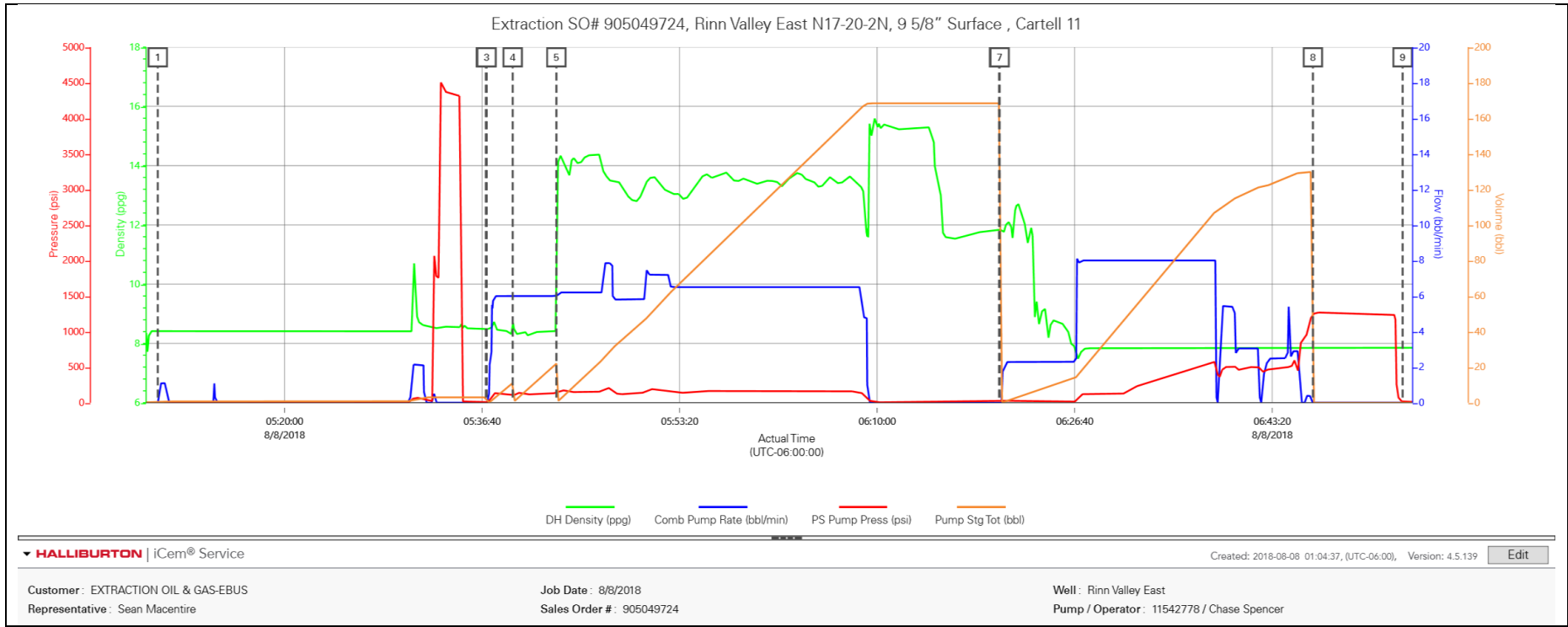
WEATHER.

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 SWIFTCEM @ 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