

HALLIBURTON

iCem® Service

EXTRACTION OIL & GAS-EBUS

United States of America, COLORADO

For: Danny Herrera

Date: Friday, August 10, 2018

Rinn Valley East N17-20-5N

WELD, Rinn Valley East N17-20-5N

Extraction Rinn Valley East N17-20-5N

Job Date: Friday, August 10, 2018

Sincerely,

Nick Peterson

Legal Notice

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The Road to Excellence Starts with Safety

Sold To #: 369404	Ship To #: 3892500	Quote #:	Sales Order #: 0905049923
Customer: EXTRACTION OIL & GAS -		Customer Rep: Danny Herrera	
Well Name: RINN VALLEY EAST		Well #: N17-20-5N	API/UWI #: 05-123-47313-00
Field: WATTENBERG	City (SAP): FIRESTONE	County/Parish: WELD	State: COLORADO
Legal Description: SW SE-17-2N-68W-842FSL-1772FEL			
Contractor: SHAWN MCINTYRE		Rig/Platform Name/Num: Cartell 11	
Job BOM: 7521 7521			
Well Type: HORIZONTAL OIL			
Sales Person: HALAMERICA/HX38199		Srcv Supervisor: Nicholas Peterson	

Job

Formation Name	
Formation Depth (MD)	Top Bottom
Form Type	BHST
Job depth MD	1,654'
Water Depth	Job Depth TVD
Perforation Depth (MD)	Wk Ht Above Floor 6'
	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	0	9.625	8.921	36	8 RD	J-55	0	1654	0	0
Open Hole Section			13.5				0	1654	0	0

Tools and Accessories									
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make
Float Shoe	9.625	1	Weath	1,654		Top Plug	9.625	1	HES
Float Shoe	9.625	1	Weath	1,609					
						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/min	Total Mix Fluid Gal
1	Red Dye Spacer	Red Dye Spacer	40	bbl	8.33			4	

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	Cement	SWIFTCEM (TM) SYSTEM	550	sack	13.5	1.74	9.2	8	5,060

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			7		
Cement Left In Pipe										
	Amount	45 ft	Reason				Shoe Joint			
Mix Water:	pH 7.0	Mix Water Chloride:	0 ppm	Mix Water Temperature:		72 °F				
Cement Temperature:	## °F	Plug Displaced by:	8.33 lb/gal	Disp. Temperature:		72 °F				
Plug Bumped?	Yes	Bump Pressure:	479 psi	Floats Held?		Yes				
Cement Returns:	34 bbl	Returns Density:	13.5 lb/gal	Returns Temperature:		## °F				
Comment: Pumped 40 bbls Red dye spacer, 170.44 bbls cement, 124 bbls Displacement. Cement to surface 90 bbls into displacement 34 bbls back to surface.										

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	8/10/2018	12:00:00	USER					CREW CALLED OUT AT 12:00, REQUESTED ON LOCATION 17:00. CREW PICKED UP CEMENT, TOP PLUG, 100 LBS OF SUGAR, 2 LBS RED DYE, FROM FT. LUPTON, CO. BULK TRUCKS 10867096, 10991603, AND ELITE 11189145.
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	8/10/2018	12:15:00	USER					DISCUSSED ROUTES, HAZARDS, AND COMMUNICATION WITH CREW.
Event	3	Crew Leave Yard	Crew Leave Yard	8/10/2018	12:30:00	USER					STARTED JOURNEY MANAGEMENT.
Event	4	Arrive at Location from Service Center	Arrive at Location	8/10/2018	16:00:00	USER					ON LOCATION FROM PREVIOUS JOB. MEET WITH CO. MAN TO DISCUSS JOB; CASING- 9.625" 36 LB/FT @ 1,653.21', 13.5" HOLE 1,653.21", SHOE 45', FRESH WATER DISPLACEMENT, HALLIBURTON TOP PLUG. CASING LANDED @ 07:30 08/10/2018. RIG CIRCULATED BOTTOMS UP.

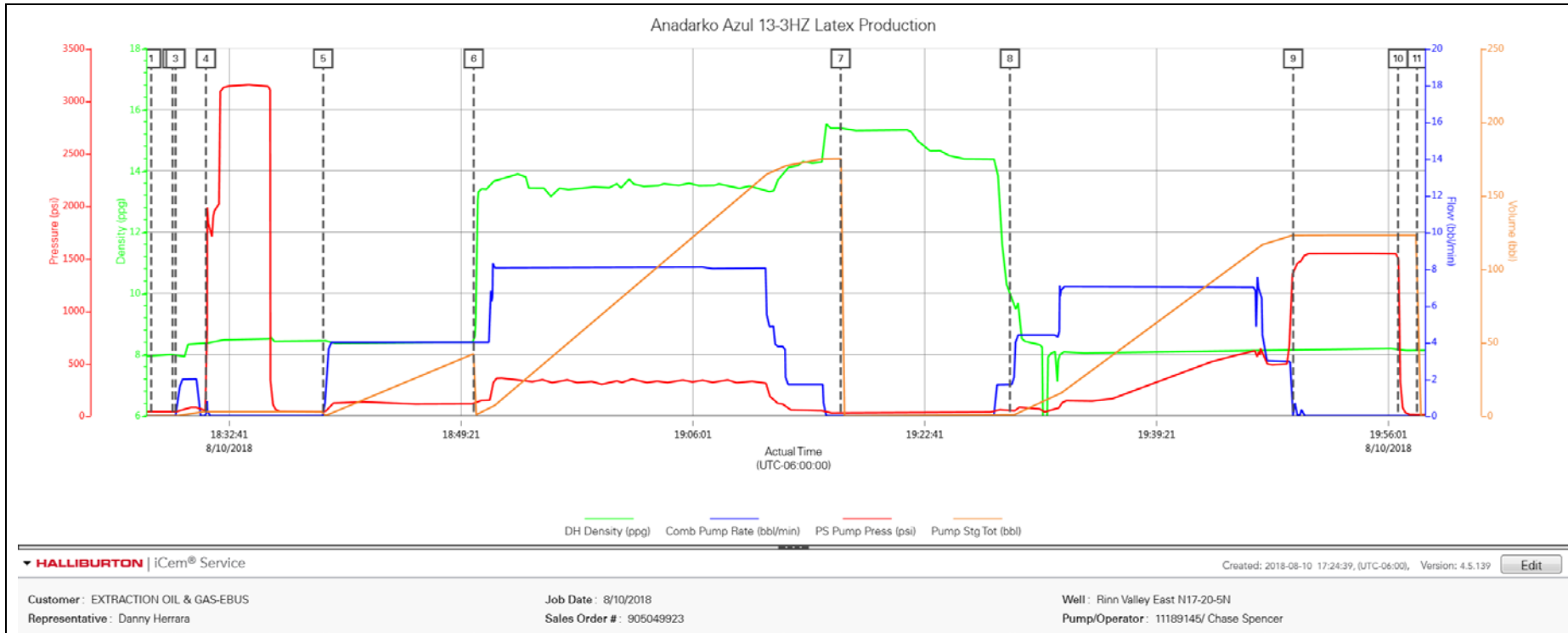
Event	5	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	8/10/2018	16:30:00	USER					HAZARD HUNT. DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH LOCATION, RIG UP AND WEATHER.
Event	6	Rig-Up Equipment	Rig-Up Equipment	8/10/2018	16:45:00	USER					CREW STAGED EQUIPMENT AND RIGGED UP BULK, IRON, AND WATER HOSES TO PERFORM JOB.
Event	7	Rig-Up Completed	Rig-Up Completed	8/10/2018	17:30:00	USER					
Event	8	Rig-Up Completed	Rig-Up Completed	8/10/2018	18:00:00	USER					ALL HALLIBURTON ITEMS WERE STOWED FOR TRAVEL, AND LOCATION WAS CLEAN.
Event	9	Safety Meeting - Pre Job	Safety Meeting - Pre Job	8/10/2018	18:10:00	USER					MEETING WITH HALLIBURTON RIG PERSONNEL DID NOT ATTEND SAFETY MEETING. COMMUNICATED POTENTIAL SAFETY HAZARDS AND JOB DETAILS.
Event	10	Start Job	Start Job	8/10/2018	18:27:04	COM5					BEGIN RECORDING JOB DATA.
Event	11	Test Lines	Test Lines	8/10/2018	18:31:00	COM5					PRESSURE TESTED IRON TO 3,000 PSI. KICKOUTS SET @ 500 PSI, KICKED OUT @ 1,350 PSI, 5TH GEAR STALL OUT @ 1,840 PSI.
Event	12	Pump Spacer 1	Pump Spacer 1	8/10/2018	18:39:26	COM5	8.34	4.00	104.00	40.00	PUMP 40 BBLS OF FRESH WATER WITH RED DYE. PUMP RATE 4 BBLS/MIN @ 104 PSI.

Event	13	Pump Cement	Pump Cement	8/10/2018	18:50:15	COM5	13.49	8.00	285.00	170.44	PUMP 550 SKS OF SWIFTCEM @ 13.5 LB/GAL, 1.74 FT3/SK, 9.2 GAL/SK 170.44 BBLS. HOT CALCULATED @ 1,653.21' TOT @ SURFACE. DENSITY VERIFIED BY PRESSURIZED MUD SCALES. PUMP RATE 8 BBLS/MIN @ 289 PSI.
Event	14	Shutdown	Shutdown	8/10/2018	19:15:34	USER					SHUTDOWN TO DROP TOP PLUG.
Event	15	Drop Top Plug	Drop Top Plug	8/10/2018	19:23:01	COM5					REMOVED SWAGE TO DROP TOP PLUG, VERIFIED BY COMPANY REP.
Event	16	Pump Displacement	Pump Displacement	8/10/2018	19:27:18	COM5	8.34	7.00	389.00	124.00	BEGIN CALCULATED DISPLACEMENT OF 124 BBLS WITH FRESH WATER. CEMENT TO SURFACE @ 90 BBLS INTO DISPLACEMENT 34 BBLS CEMENT TO SURFACE.
Event	17	Bump Plug	Bump Plug	8/10/2018	19:49:10	COM5					PLUG BUMPED AT CALCULATED DISPLACEMENT. PRESSURED UP TO 1,500 PSI FOR 10MIN CASING PRESSURE TEST.
Event	18	Check Floats	Check Floats	8/10/2018	19:56:42	USER					RELEASED PRESSURE, FLOATS HELD, .75 BBLS BACK.
Event	19	End Job	End Job	8/10/2018	19:58:04	COM5					STOP RECORDING JOB DATA.

Event	20	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	8/10/2018	20:00:00	USER	DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH WEATHER, LOCATION AND RIGGING DOWN IRON AND HOSES.
Event	21	Rig-Down Equipment	Rig-Down Equipment	8/10/2018	20:15:00	USER	RIG DOWN BULK AND MIXING EQUIPMENT.
Event	22	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	8/10/2018	20:45:00	USER	DISCUSSED ROUTES HAZARDS AND COMMUNICATION WITH CREW.
Event	23	Depart Location	Depart Location	8/10/2018	21:00:00	USER	THANK YOU FOR USING HALLIBURTON - NICK PETERSON AND CREW.

2.0 Attachments

2.1 Extraction Rinn Valley East N17-20-5N -Custom Results.png



3.0