

HALLIBURTON

iCem[®] Service

FIFTH CREEK ENERGY

For: Duaine Bell / Don Shambles

Date: Monday, January 16, 2017

Fox Creek 522-3422H

Job Date: Monday, January 16, 2017

**Sincerely,
Vaughn Oteri and Crew**

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Customer: FIFTH CREEK ENERGY
Job: Fifth Creek Fox Creek 552-3422H Interim
Case: Case 1

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DS Pump Press	DH Density	Comb Pump Rate	Pump Stg Tot	Comments
Event	1	Call Out	Call Out	1/15/2017	12:00:00	USER					Call out from ARC hub
Event	2	Arrive At Loc	Arrive At Loc	1/15/2017	19:00:00	USER					Requested on location 2100 Arrived on location 2000 met with company rep to discuss job process and concerns. Rig running casing with approx. 2300' left. 1-Elite, 1-660, 1-BL, 3- Silos on location.
Event	3	Other	Other	1/15/2017	19:10:10	USER					TD-8080 TP-8074 FC-8032 7" - 26# Casing, OH-8.75 9 5/8" 36# Surface Casing set at 1535'
Event	4	Other	Other	1/16/2017	01:50:00	USER	-4.00	8.39	1.70	43.7	Bottom Plug Pre-Loaded in Plug Container (Witnessed by Customer Rep.)
Event	5	Start Job	Start Job	1/16/2017	01:53:55	COM4	-15.00	8.49	0.00	0.0	Water Provided by Rig, Tested as Follows, Chlorides -0, Sulfates <200, PH 8.5, Temp. 86 Deg.
Event	6	Test Lines	Test Lines	1/16/2017	02:04:49	COM4	4178.00	8.52	0.00	2.7	Pressure Test Lines to 4178 PSI. Original Test opened PRV. Re-adjusted PRV, and performed successful test.
Event	7	Pump Spacer 1	Pump Tuned Spacer III	1/16/2017	02:13:04	COM4	-12.00	8.38	0.00	0.0	Mix 40 bbls Tuned Spacer III for OBM @ 11.5 lb/gal (Density Verified by Pressurized Scales) (Surfactants added on Pump truck)

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Case: Case 1

Drop Bottom Plug on the fly. (Witnessed by Customer Rep.)										
Event	8	Drop Bottom Plug	Drop Bottom Plug	1/16/2017	02:24:56	COM4	23.00	10.50	3.00	39.5
Mix and Pump 706 sks (236.4 bbls) Elasticem Cement @ 13.6 lb/gal (Density Verified by Pressurized Scales)										
Event	9	Pump Cement	Pump Cement	1/16/2017	02:25:08	COM4	42.00	13.05	3.00	40.1
Density Verified by Pressurized Scales										
Event	10	Check Weight	Check weight	1/16/2017	02:27:48	COM4	199.00	13.65	5.50	14.6
Shut-Down, Wash Pumps and Lines to 4-Sided Tank Provided by Rig.										
Event	11	Shutdown	Shutdown	1/16/2017	02:58:13	COM4	-61.00	0.79	0.00	5.6
Drop Top Plug by Hand (Witnessed by Driller, and Customer Rep.)										
Event	12	Drop Top Plug	Drop Top Plug	1/16/2017	02:58:53	COM4	-96.00	0.94	0.00	5.6
Start Displacement with OBM (Provided by 2 Tankers)										
Event	13	Pump Displacement	Pump Displacement	1/16/2017	03:12:46	USER	337.00	9.91	8.00	23.9
Flow Rate of Mud from Tankers was erratic, and was moving too slow to keep up with Pump Rate on Pump Truck. Made several attempts to gain flow faster, by blowing lines back to tankers, pressuring-up tankers, and these methods worked temporarily. Broke suction line from tanker to find suction screen on pump truck plugged with handfulls of material pulled from the tankers. Upon Cleaning the suction screen, we were able to keep flow at an acceptable rate for pumping.										
Event	14	Other	Other	1/16/2017	03:26:43	USER	55.00	10.05	0.80	90.1

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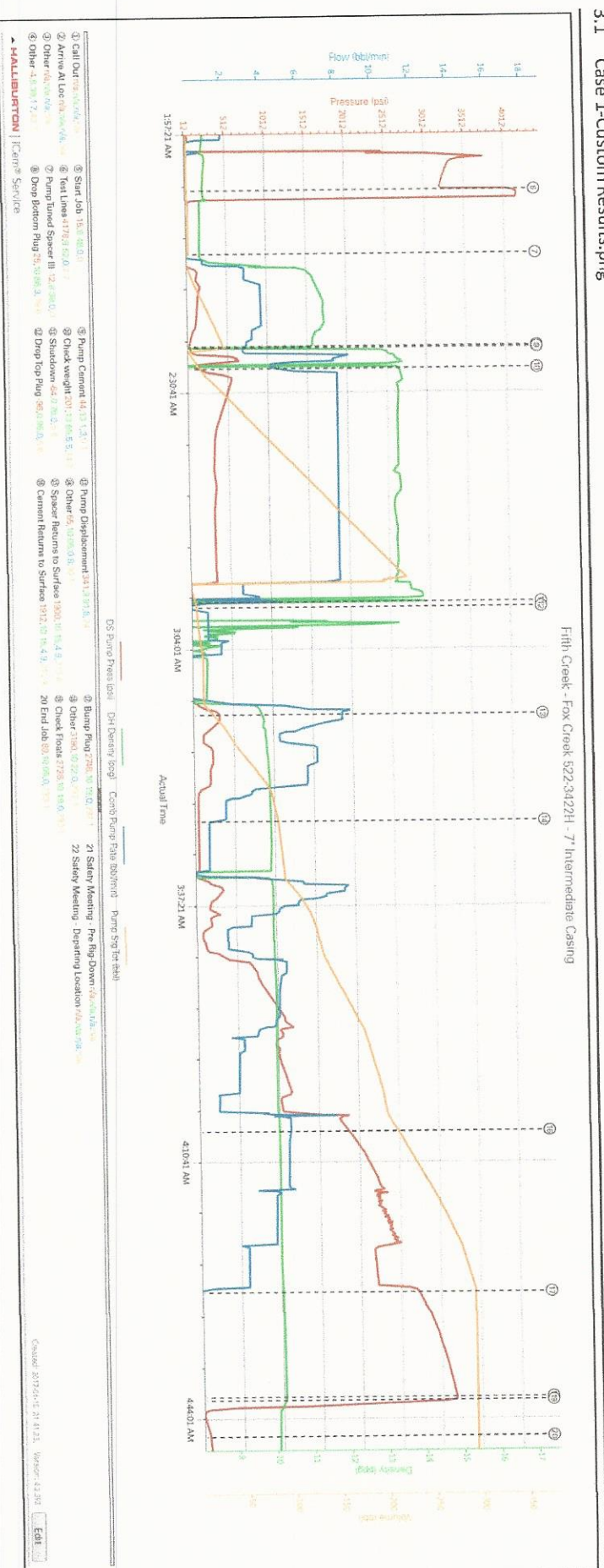
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Event	15	Spacer Returns to Surface	Spacer Returns to Surface	1/16/2017	04:07:00	USER	1900.00	10.15	4.90	213.8	Spacer Returns to Surface @ 260 bbls Away
Event	16	Cement Returns to Surface	Cement Returns to Surface	1/16/2017	04:07:01	USER	1912.00	10.15	4.90	213.9	+/- 5 bbls Cement to Surface
Event	17	Bump Plug	Bump Plug	1/16/2017	04:27:55	COM/4	2748.00	10.19	0.00	293.1	Bump Plug at 2748 PSI, Final Pump Pressure 2250
Event	18	Other	Other	1/16/2017	04:41:29	USER	3189.00	10.22	0.00	293.1	3190 PSI on Casing after 14 mins.
Event	19	Other	Check Floats	1/16/2017	04:41:55	COM/4	2728.00	10.19	0.00	293.1	Check Floats, Floats Holding, Returned 3.5 bbls back to truck.
Event	20	End Job	End Job	1/16/2017	04:46:35	COM/4	89.00	10.05	0.00	293.1	
Event	21	Safety Meeting - Pre Rig-Down	Safety Meeting - Pre Rig-Down	1/16/2017	05:30:00	USER					Safety Meeting with HES Crew prior to rigging-down equipment.
Event	22	Safety Meeting - Departing Location	Safety Meeting - Departing Location	1/16/2017	06:30:00	USER					Journey Management Meeting with Crew Prior to Departing Location

3.0 Attachments

3.1 Case 1-Custom Results.png



The Road to Excellence Starts with Safety

Sold To #: 375970	Ship To #: 3712331	Quote #: 0022259285	Sales Order #: 0903775655
Customer: FIFTH CREEK ENERGY -		Customer Rep: Duaine Bell / Don Shambles	
Well Name: FOX CREEK	Well #: 522-3422H	API/UWI #: 05-123-42582-00	
Field: HEREFORD	City (SAP): KEOTA	County/Parish: WELD	State: COLORADO
Legal Description: NE NE-34-12N-63W-310FNL-922FEL			
Contractor: ENSIGN DRLG		Rig/Platform Name/Num: ENSIGN 145	
Job BOM: 7522			
Well Type: HORIZONTAL OIL			
Sales Person: HALAMERICA\HX38199		Srv Supervisor: Vaughn Oteri	
Job			

Formation Name		Bottom	
Formation Depth (MD)	Top	BHST	
Form Type		Job Depth TVD	
Job depth MD	8074ft	Wk Ht Above Floor	3'
Water Depth		To	
Perforation Depth (MD)	From		

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	1535		1534
Casing		7	6.276	26			0	8074		7400
Open Hole Section			8.75				1535	8074	1535	7400

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe					Top Plug	7		3 rd Party
Float Shoe	7	1		8074'	Bottom Plug	7		3rd Party
Float Collar	7	1		8032'	SSR plug set			
Insert Float					Plug Container	7		QLPC
Stage Tool					Centralizers	7		3rd Party

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	11.5 lb/gal Tuned Spacer III	Tuned Spacer III	40	bbl	11.5				
	146.50 lbm/bbl								
	36.09 gal/bbl								
	0.30 gal/bbl								
	0.30 gal/bbl								
		BARITE, BULK (100003681)							
		FRESH WATER							
		MUSOL(R) A, BULK (100003696)							
		DUAL SPACER SURFACTANT B, 5 GAL PAIL (100003665)							

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal
2	ElastiCem	ELASTICEM (TM) SYSTEM	706	sack	13.60	1.88		4	8.57
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal
3	Displacement Mud		306	bbl	10				
Cement Left In Pipe			Amount	42 ft	Reason			Shoe Joint	
Comment +/- 5 bbls Cement to Surface									