

The Road to Excellence Starts with Safety

Sold To #: 375989		Ship To #: 3971768		Quote #:		Sales Order #: 0905745958				
Customer: CONFLUENCE DJ LLC-EBUS					Customer Rep: Josh Kliesen					
Well Name: 70 RANCH #10-12-3L,WELD			Well #: 3971768			API/UWI #:				
Field:		City (SAP): KERSEY		County/Parish: WELD			State: COLORADO			
Legal Description:										
Contractor: ENSIGN DRLG					Rig/Platform Name/Num: ENSIGN 140					
Job BOM: 7521 7521										
Well Type: HORIZONTAL OIL										
Sales Person: HALAMERICA\HX38199					Srv Supervisor: Nicholas Cummins					
Job										
Formation Name										
Formation Depth (MD)		Top 80ft		Bottom		1562ft				
Form Type				BHST						
Job depth MD		1558ft		Job Depth TVD		1562ft				
Water Depth				Wk Ht Above Floor		3ft				
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			0	1554	0	0
Open Hole Section			13.5				0	1562		0
Tools and Accessories										
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make	
Guide Shoe	9.625	1	HES	1554		Top Plug	9.625	1	HES	
Float Shoe	9.625					Bottom Plug	9.625			
Float Collar	9.625	1	HES	1512		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	Mud Flush III (Powder)	Mud Flush III	40	bbbl	8.4			6		
42 gal/bbl		FRESH WATER								
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	12.5# SwiftCem	SWIFTCEM (TM) SYSTEM	285	sack	12.5	2.16	12.31	8	3508	
12.31 Gal		FRESH WATER								
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	13.5# SwiftCem	SWIFTCEM (TM) SYSTEM	195	sack	13.5	1.74	9.18	8	1790	
9.18 Gal		FRESH WATER								
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	
4	Displacement fluid		117	bbbl	8.3			8		
Cement Left In Pipe		Amount	46 ft		Reason			Shoe Joint		

Mix Water:	pH 7	Mix Water Chloride:	<400 ppm	Mix Water Temperature:	58 °F
Cement Temperature:	58 °F	Plug Displaced by:	8.33 lb/gal	Disp. Temperature:	58 °F
Plug Bumped?	Yes	Bump Pressure:	490 psi	Floats Held?	Yes
Cement Returns:	30 bbl	Returns Density:	12.5 lb/gal	Returns Temperature:	

Comment

10 bbls Red Dye/Mud Flush

30 bbls Mud Flush

109 bbls Lead cement

60 bbls Tail cement

117 Displacement

.5 bbls back

Floats Held

Estimated top of Tail 863'.

Estimated 30 bbls of Lead to surface.

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DS Pump Press <i>(psi)</i>	DH Density <i>(ppg)</i>	Comb Pump Rate <i>(bbl/min)</i>	Pump Stg Tot <i>(bbl)</i>	Comments
Event	1	Call Out	Call Out	6/3/2019	03:00:00	USER					The crew was called out on 6/3/19 at 0300. The customer requested HES on location at 0900 on 6/3/19.
Event	2	Depart from Service Center or Other Site	Depart from Service Center or Other Site	6/3/2019	07:30:00	USER					The crew held a pre journey safety meeting discussing the route and potential hazards while driving. The supervisor called in a journey. The crew departed service center.
Event	3	Arrive at Location from Service Center	Arrive at Location from Service Center	6/3/2019	08:40:00	USER					The crew arrived on location safely. The rig was still running casing. The supervisor met with the Company man and received numbers. TD 1,562', TP 1,557.89' 9 5/8" 36# J-55, FC 1,511.52', PC 80' 16" 15.5 ID, OH 13 1/2", Mud 9 ppg.
Event	4	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	6/3/2019	08:50:00	USER					Crew discussed all potential hazards on location.
Event	5	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	6/3/2019	09:00:00	USER					Crew held a safety meeting discussing the rig up procedure. Also all potential hazards associated with rigging up all HES equipment and lines.

Event	6	Rig-Up Equipment	Rig-Up Equipment	6/3/2019	09:10:00	USER					The crew rigged up all HES equipment and lines.
Event	7	Rig-Up Completed	Rig-Up Completed	6/3/2019	10:30:00	USER	70.00	0.21	0.00	0.00	Rig up completed, no one got hurt.
Event	8	Safety Meeting - Pre Job	Safety Meeting - Pre Job	6/3/2019	11:11:00	USER	7.00	8.26	0.00	0.00	The crew and all personal involved with cement job discussed all potential hazards associated with job. Followed by the job procedure to ensure everyone understood the plan of action
Event	9	Start Job	Start Job	6/3/2019	11:41:07	COM1	11.00	7.86	0.00	0.00	Strated recording data from Elite 11512092. Filled lines with 3 bbls of water at 3 bpm, pressure was at 47 psi.
Event	10	Test Lines	Test Lines	6/3/2019	11:43:28	COM1	1943.00	8.20	0.00	3.30	Pressure tested all HES lines to 3,000 psi. The pressure test failed.
Event	11	Test Lines	Test Lines	6/3/2019	11:52:07	COM1	22.00	8.20	0.00	4.40	Troubleshoot the issue re pressure tested all HES lines to 3,000 psi. The pressure test passed.
Event	12	Pump Spacer 1	Pump Spacer 1	6/3/2019	12:00:37	COM1	12.00	8.24	0.00	0.00	Pumped 40 bbls of Mud Flush with Red Dye in the first 10 bbls, at 6 bpm pressure was at 100 psi.
Event	13	Pump Lead Cement	Pump Lead Cement	6/3/2019	12:11:40	COM1	35.00	8.36	0.00	0.00	Pumped 109 bbls (285 sks) of Lead cement at 8 bpm, pressure was at 240 psi. 12.5 ppg 2.16 yield 12.31 gal/sk. Used pressurized scales to verify density.
Event	14	Pump Tail Cement	Pump Tail Cement	6/3/2019	12:29:28	COM1	272.00	12.64	8.20	0.10	Pumped 60 bbls (195 sks) of Lead cement at 8 bpm, pressure was at 350 psi. 13.5 ppg 1.74 yield 9.18

											gal/sk. Used pressurized scales to verify density.
Event	15	Shutdown	Shutdown	6/3/2019	12:40:15	COM1	12.00	24.15	0.00	64.30	Shutdown to drop top plug.
Event	16	Drop Top Plug	Drop Top Plug	6/3/2019	12:43:17	COM1	12.00	24.21	0.00	64.30	Driller and cementer verified plug left container.
Event	17	Pump Displacement	Pump Displacement	6/3/2019	12:43:25	COM1	12.00	24.19	0.00	0.00	Pumped the calculated displacement of 117 bbls.
Event	18	Bump Plug	Bump Plug	6/3/2019	13:05:56	COM1	831.00	8.23	0.00	116.80	Bumped the plug, final circulating pressure was 490 psi. Pressure up 500 over before shutting down for a 5 min casing test.
Event	19	Other	Check Floats	6/3/2019	13:09:17	COM1	861.00	8.25	0.00	116.80	Bled pressure back to truck. Got .5 bbls back to truck. Floats held
Event	20	End Job	End Job	6/3/2019	13:10:45	COM1	-1.00	8.25	0.00	0.00	Cement job complete. stopped recording data from Elite 11512092. Estimated top of Tail cement 863'. Estimated 30 bbls of cement back to surface.
Event	21	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	6/3/2019	13:11:00	USER	1.00	8.24	0.00	0.00	Crew held a safety meeting discussing the rig down procedure. Also all potential hazards associated with rigging down all HES equipment and lines.
Event	22	Rig-Down Equipment	Rig-Down Equipment	6/3/2019	14:00:00	USER					The crew rigged down all HES equipment and lines.
Event	23	Rig-Down Completed	Rig-Down Completed	6/3/2019	14:45:00	USER					Rig down completed no one got hurt.
Event	24	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	6/3/2019	14:50:00	USER					The crew held a pre journey safety meeting discussing the route and potential hazards while driving The

supervisor called in a journey.

Event	25	Depart Location for Service Center or Other Site	Depart Location for Service Center or Other Site	6/3/2019	15:00:00	USER
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Nick Cummins and crew would like to thank you for your business, and choosing Halliburton Cement! Please feel free to call if you have any questions.

3.0 Attachments

3.1 Confluence 70 Ranch 10-12-3L Surface Chart

