

*The Road to Excellence Starts with Safety*

Sold To #: 375989	Ship To #: 3971768	Quote #: 0022574327	Sales Order #: 0905743765
Customer: CONFLUENCE DJ LLC-EBUS		Customer Rep: Arvid Mosnes	
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: 7523 7523			
Well Type: HORIZONTAL OIL			
Sales Person: HALAMERICA/HX38199		Srvc Supervisor: Thomas Haas	

**Job**

<b>Formation Name</b>			
<b>Formation Depth (MD)</b>	<b>Top</b>		<b>Bottom</b>
<b>Form Type</b>			<b>BHST</b>
<b>Job depth MD</b>	16651ft		<b>Job Depth TVD</b> 6444
<b>Water Depth</b>			<b>Wk Ht Above Floor</b> 4 ft
<b>Perforation Depth (MD)</b>	<b>From</b>		<b>To</b>

**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
Open Hole Section			13.5				0	0	0	0
Casing	0	9.625	8.921	36			0	1554	0	1562
Casing	0	5.5	4.778	20			0	16651	0	6444
Open Hole Section			8.5				1562	16659	1562	6444

**Tools and Accessories**

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
					<b>Top Plug</b>	5.5	1	HES
<b>Float Shoe</b>	5.5	1	hes	16651	<b>Bottom Plug</b>	5.5	2	HES
<b>Float Collar</b>	5.5	1	hes	16605				
<b>RSI</b>	5.5	1	HES	16560	<b>Plug Container</b>	5.5	1	HES
<b>Stage Tool</b>	5.5							

**Fluid Data**

<b>Stage/Plug #: 1</b>									
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
1	FDP-C1337-18	SBM FDP-C1337-18 CEMENT SPACER SYS	100	bbl	12	3.25	20	8	3455
10 gal/bbl		<b>D-AIR 3000L, 5 GAL PAIL (101007444)</b>							

1 lbm/bbl	<b>FE-2 (100001615)</b>
5 lbm/bbl	<b>SEM-93P, 35 LB SACK - (1023977)</b>
172.91 lbm/bbl	<b>BARITE, BULK (100003681)</b>
5 lbm/bbl	<b>SEM-94P, 35 LB SACK - (1023987)</b>

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
2	ElastiCem	ELASTICEM (TM) SYSTEM	1990	sack	14.4	1.7	7.32	8	14566
7.32 Gal		<b>FRESH WATER</b>							
0.40 %		<b>HR-5, 50 LB SK (100005050)</b>							

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
3	MMCR Displacement	MMCR Displacement	30	bbl	8.34				
0.50 gal/bbl		<b>MICRO MATRIX CEMENT RETARDER, 5 GAL PAIL (100003781)</b>							

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
4	Displacement	Displacement	336	bbl	8.34				
0.30 lbm/bbl		<b>BE-3S, 50 LB BOX (101382962)</b>							
0.02 gal/bbl		<b>CLA-WEB - TOTE (101985045)</b>							

<b>Cement Left In Pipe</b>	<b>Amount</b>	54 ft	<b>Reason</b>	<b>Shoe Joint</b>	
Mix Water:	pH 7	Mix Water Chloride:	<300 ppm	Mix Water Temperature:	<b>63</b>
Cement Temperature:	N/A	Plug Displaced by:	8.33 lb/gal F.W.	Disp. Temperature:	<b>61</b>
Plug Bumped?	YES	Bump Pressure:	2680 psi	Floats Held?	<b>Yes</b>
Cement Returns:	N/A	Returns Density:	N/A	Returns Temperature:	<b>N/A</b>
<b>Comment</b> PLUG BUMP AT 350 BBLS, FINAL CIRCULATING PSI OF 2680,FLOATS HELD, 4 BBLS BACK. 40 BBLS OF INTERFACE TO SURFACE.					

## 2.0 Real-Time Job Summary

### 2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density <i>(ppg)</i>	Comb Pump Rate <i>(bbl/min)</i>	DS Pump Press <i>(psi)</i>	Pump Stg Tot <i>(bbl)</i>	Comments
Event	1	Call Out	Call Out	6/10/2019	13:00:00	USER					CREW CALLED OUT AT 13:00 6/10/2019, REQUESTED ON LOCATION 19:00 6/10/2019. CREW PICKED UP CEMENT, CHEMICALS 20 GAL D-AIR, 3 LBS BE3, 15 GAL MMCR, 10 GAL CLA-WEB, 100 LBS SUGAR, AND PLUG CONTAINER FROM FORT LUPTON, CO. BULK 660: 12113644/10867439 BULK 660: 11027125/11764052 IRON TRUCK: 12100990 PUMP ELITE: 11897034/11645460
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	6/10/2019	16:45:00	USER					DISCUSSED ROUTES, HAZARDS, AND COMMUNICATION WITH CREW
Event	3	Crew Leave Yard	Crew Leave Yard	6/10/2019	17:00:00	USER					STARTED JOURNEY MANAGEMENT.
Event	4	Arrive At Loc	Arrive At Loc	6/10/2019	18:00:00	USER					END JOURNEY MANAGEMENT. MEET WITH CO. MAN TO DISCUSS JOB; SURFACE CASING: 9.625" 36# @ 1562', CASING: 5.5" 20# @ 16651', 54' SHOE JOINT, 8.5" OPEN HOLE, TVD @ 6444', 10 PPG WELL FLUID, FRESH WATER DISPLACEMENT.

Event	5	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	6/10/2019	18:10:00	USER					HAZARD HUNT. DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH LOCATION, RIG UP AND WEATHER.
Event	6	Rig-Up Equipment	Rig-Up Equipment	6/10/2019	18:20:00	USER					CREW STAGED EQUIPMENT AND RIGGED UP BULK, IRON, AND WATER HOSES TO PERFORM JOB.
Event	7	Pre-Job Safety Meeting	Pre-Job Safety Meeting	6/10/2019	20:00:00	USER					MEETING WITH HALLIBURTON AND RIG PERSONNEL. COMMUNICATED POTENTIAL SAFETY HAZARDS AND JOB DETAILS.
Event	8	Start Job	Start Job	6/10/2019	21:54:10	COM4	3.79	0.00	0.00	0.00	START DATA RECORDING
Event	9	Test Lines	Test Lines	6/10/2019	21:55:54	COM4	8.54	0.00	133.00	1.30	PRESSURE TESTED IRON TO 8000 PSI KO SET TO 500 KICKED OUT AT 850 PSI, 5TH GEAR STALL AT 1850 PSI.
Event	10	Pump Spacer 1	Pump Spacer 1	6/10/2019	21:59:02	COM4	11.29	1.40	64.00	2.70	PUMP 100 BBLS SPACER @ 12 LBS/GAL ADDED 20 GAL OF D-AIR, DENSITY VERIFIED BY PRESSURIZED MUD SCALES.
Event	11	Pump Lead Cement	Pump Lead Cement	6/10/2019	22:14:21	COM4	14.06	5.60	620.00	107.30	PUMP 1990 SACKS OF ELASTICEM @ 14.4 LBS /GAL 1.7 YIELD, 7.3 GAL/SK TOC 1884 FT, DENSITY MEASURED BY PRESSURIZED MUD SCALES.
Event	12	Shutdown	Shutdown	6/10/2019	23:32:46	COM4	15.20	0.00	128.00	651.70	SHUTDOWN TO DROP TOP PLUG, WASH PUMPS AND LINES.
Event	13	Drop Top Plug	Drop Top Plug	6/10/2019	23:44:17	COM4	0.07	0.00	4.00	668.00	PLUG LEFT CONTAINER VERIFIED BY CO. MAN AND TOOL HAND

Event	14	Pump Displacement	Pump Displacement	6/10/2019	23:44:19	COM4	0.87	0.00	4.00	668.00	BEGIN CALCULATED DISPLACEMENT OF 368 BBLs WITH FRESH WATER, 15 GAL OF MMCR IN FIRST 30 BBL, 10 GAL OF CLA-WEB AND 3 LBS OF BE3 ADDED THROUGH OUT.
Event	15	Bump Plug	Bump Plug	6/11/2019	00:29:16	COM4	8.05	0.00	3251.00	376.70	BUMP PLUG AT 350 BBLs OF DISPLACEMENT, FINAL CIRCULATING PRESSURE OF 2680 PSI. 40 BBLs OF INTERFACE TO SURFACE.
Event	16	Check Floats	Check Floats	6/11/2019	00:32:47	USER	8.05	0.00	3165.00	376.70	RELEASE PRESSURE BACK TO TRUCK, FLOATS HELD, GOT 4 BBLs BACK.
Event	17	End Job	End Job	6/11/2019	00:34:43	COM4	8.00	0.00	1.00	0.00	END JOB DATA RECORDING.
Event	18	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	6/11/2019	00:40:00	USER	8.00	0.00	4.00	0.00	DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH WEATHER, LOCATION AND RIGGING DOWN IRON AND HOSES.
Event	19	Rig-Down Completed	Rig-Down Completed	6/11/2019	01:30:00	USER					ALL HALLIBURTON ITEMS WERE STOWED FOR TRAVEL.
Event	20	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	6/11/2019	01:45:00	USER					DISCUSSED ROUTES HAZARDS AND COMMUNICATION WITH CREW.
Event	21	Crew Leave Location	Crew Leave Location	6/11/2019	02:00:00	USER					THANK YOU FOR USING HALLIBURTON - THOMAS HAAS AND CREW.

## 3.0 Attachments

### 3.1 Confluence 70 Ranch 10-12-3L Production Chart

