

HALLIBURTON

iCem® Service

EXPEDITION WATER SOLUTIONS LLC

For: JEREMIAH DEMUTH

Date: Monday, January 23, 2017

EWS 4A

903799601 SURFACE

Job Date: Monday, January 23, 2017

Sincerely,

ANDREW BRENNECKE

Field Ticket Number: 0903799601	Field Ticket Date: Monday, January 23, 2017	Planning Order #: NA
Bill To: EXPEDITION WATER SOLUTIONS LLC 1023 39TH AVE STE E GREELEY CO 80634	Job Name: 9 5/8" Surface Order Type: ZOH Well Name: EWS 4A Company Code: 1100 Customer PO No.: NA AFE: Shipping Point: Fort Lupton, CO Shipping Point Sales Office: ROCKY MOUNTAINS BD Well Type: INJECTION Well Category: Development Rig Name/#: ENSIGN 121	
Ship To: EWS 4A,WELD EWS 4A KEENESBURG CO 80643 US		

Material	Description	QTY	UOM	Unit Amount	Gross Amount	Discount	Net Amount
7521	CMT SURFACE CASING BOM	1	JOB				
2	MILEAGE FOR CEMENTING CREW <i>Number of Units</i>	48 1	MI				
1	ZI-MILEAGE FROM NEAREST HES BASE,UNIT <i>Number of Units</i>	48 1	MI				
16091	ZI - PUMPING CHARGE <i>FEET/METERS (FT/M)</i> <i>DEPTH</i>	1 FT 1002	EA	5			
452990	CMT, SwiftCem (TM) system	285	SK				
101216940	CHEM, Pol-E-Flake, 25 lb bag <i>Poly-E-Flake</i>	36	LB				
76400	MILEAGE,CMT MTLs DEL/RET MIN <i>NUMBER OF TONS</i>	24 14.16	MI				
3965	HANDLE&DUMP SVC CHRg, CMT&ADDITIVES,ZI <i>NUMBER OF EACH</i> <i>Unit of Measurement</i>	310 1 EA	CF				
100008028	CHEM, SUGAR,GRANULATED, 50LB BAG	100	LB				
528788	SBM, CMT- MUD FLUSH III Red Dye	20	BBL				
45	SPEC EQUIP CHRg, NO PRICE ESTABLISHED ZI	1	EA				

Totals

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>	PS Pump Press <i>(psi)</i>	Pump Stg Tot <i>(bbl)</i>	Comments
Event	1	Call Out	Call Out	1/22/2017	14:00:00	USER					
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	1/22/2017	17:45:00	USER					ALL HES PRESENT
Event	3	Crew Leave Yard	Crew Leave Yard	1/22/2017	18:00:00	USER					
Event	4	Arrive at Location from Service Center	Arrive at Location from Service Center	1/22/2017	19:00:00	USER					RIG HAD NOT STARTED CASING
Event	5	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	1/22/2017	19:30:00	USER					
Event	6	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	1/23/2017	01:30:00	USER					ALL HES PRESENT
Event	7	Rig-Up Completed	Rig-Up Completed	1/23/2017	02:00:00	USER					1-RED TIGER, 1-660 BULK TRAILER, 9.625" QUICK LATCH PLUG CONTAINER, 2" PUMP IRON, 4" SUCTION HOSE
Event	8	Pre-Job Safety Meeting	Pre-Job Safety Meeting	1/23/2017	02:10:00	USER					ALL HES AND RIG CREW PRESENT
Event	9	Start Job	Start Job	1/23/2017	02:29:57	COM5	8.35	0.00	5.00	0.0	TD-1004', TP-1007.77' SET @ 1002', SJ-44.99', CSG-9.625" 36#, OH-12.25", MUD-9.2PPG
Event	10	Prime Pumps	Prime Pumps	1/23/2017	02:33:00	USER	8.39	2.10	29.00	2.0	FRESH WATER
Event	11	Test Lines	Test Lines	1/23/2017	02:37:53	COM5	8.40	0.00	2582.00	2.1	PRESSURE VERIFIED TO HOLD
Event	12	Pump Spacer 1	Pump Spacer 1	1/23/2017	02:44:21	COM5	8.35	3.00	61.00	20.0	MUD FLUSH III/DYE

Event	13	Pump Cement	Pump Cement	1/23/2017	02:59:26	COM5	13.50	6.00	142.00	88.3	SWIFTCEM 285SKS, 13.5PPG, 1.74CF/SK, 9.2GAL/SK
Event	14	Shutdown	Shutdown	1/23/2017	03:20:35	USER					WASHED UP ON TOP OF PLUG
Event	15	Drop Plug	Drop Plug	1/23/2017	03:25:54	USER					PLUG DROP VERIFIED BY TATTLE TAIL
Event	16	Pump Displacement	Pump Displacement	1/23/2017	03:26:38	COM5	8.40	5.10	386.00	74.4	FRESH WATER
Event	17	Slow Rate	Slow Rate	1/23/2017	03:35:52	USER	8.44	0.50	166.00	50.0	SLOW DOWN FOR RIG TO SWAP LINES
Event	18	Slow Rate	Slow Rate	1/23/2017	03:44:44	USER	8.46	2.00	290.00	64.0	SLOW DOWN LAST 10 BBLS
Event	19	Bump Plug	Bump Plug	1/23/2017	03:48:19	COM5	8.45	2.00	285.00	74.4	PLUG BUMPED 285PSI
Event	20	Check Floats	Check Floats	1/23/2017	03:51:25	USER	8.43	0.00	861.00	74.4	FLOATS HELD 1 BBL BACK
Event	21	End Job	End Job	1/23/2017	03:53:00	USER	8.44	0.00	-7.00	74.4	GOOD RETURNS THROUGH OUT JOB, 28.4 BBLS CEMENT TO SURFACE
Event	22	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	1/23/2017	03:57:00	USER					ALL HES PRESENT
Event	23	Crew Leave Location	Crew Leave Location	1/23/2017	05:30:00	USER					THANK YOU FOR CHOOSING HALLIBURTON, ANDREW BRENECKE AND CREW

EXPEDITION WATER SOLUTIONS - EWS 4A - 9.625" SURFACE

