

HALLIBURTON

iCem® Service

MALLARD EXPLORATION LLC

For: Larry Siegel

Date: Tuesday, December 08, 2020

BLUE TEAL FED 15-3-2HN

BLUE TEAL FED 15-3-2HN

Job Date: Tuesday, December 08, 2020

Sincerely,

Nick Roles and Crew

Legal Notice

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Customer: MALLARD EXPLORATION LLC
 Job: BLUE TEAL FED 15-3-2HNN 9.625" SURFACE
 Case: BLUE TEAL FED 15-3-2HNN | SO#: 906839908

1.0 Real-Time Job Summary

1.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	DS Pump Press (psi)	Pump Stg Tot (bbl)	Water Stg Tot (gal)	Comments
Event	1	Check Floats	Pre-Convoy Safety Meeting	12/7/2020	11:45:00	USER						Held meeting with all personnel in convoy to discuss directions and hazards associated with drive, all fit to drive.
Event	2	Depart from Service Center or Other Site	Depart from Service Center or Other Site	12/7/2020	12:00:00	USER						Journey Management prior to departure
Event	3	Arrive at Location from Service Center	Arrive at Location from Service Center	12/7/2020	14:00:00	USER						Upon arrival met with company man to discuss job details and calculations, performed hazard hunt and site assessment.
Event	4	Call Out	Call Out	12/7/2020	16:00:00	USER						Called out by Service Coordinator for O/L at 2200
Event	5	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	12/7/2020	21:45:00	USER						Discussed rigging up hazards and procedure according to HMS.
Event	6	Rig-Up Date/Time	Rig-Up Date/Time	12/7/2020	22:00:00	USER						Begin Rig-up.
Event	7	Rig-Up Completed	Rig-Up Completed	12/7/2020	22:30:00	USER						Rig-up complete with no injuries.
Event	8	Other	Other	12/7/2020	22:35:00	USER						Water test- PH-6, Chlor-0, Temp-65. Cement temp-70.
Event	9	Pre-Job Safety Meeting	Pre-Job Safety Meeting	12/8/2020	00:15:00	USER	8.42	0.00	16.00	0.00	797.0	Held safety meeting with all job associated personnel to discuss job procedure, hazards and stop work authority.
Event	10	Start Job	Start Job	12/8/2020	00:46:16	COM5	8.41	0.00	14.00	0.00	0.0	TD-1975' 13.5", TP-1977'

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9.625" 36#, FC-1934.5',
 Mud-8.8#

Event 11	Test Lines	Test Lines	12/8/2020	00:50:05	COMS	8.61	0.00	25.00	5.40	68.0	Pumped 10bbls to fill lines, established circulation, shutdown and closed manifold, performed 500psi k/o function test, continued with 5th gear stall at 2250psi proceeded to bring pressure to 3500psi. Held good no leaks.
Event 12	Pump Spacer 1	Pump Spacer 1	12/8/2020	00:52:08	COMS	8.55	0.00	68.00	5.40	68.0	Pumped 10bbls fresh water with 2# Red Dye at 5bpm 195psi.
Event 13	Pump Lead Cement	Pump Lead Cement	12/8/2020	00:54:58	COMS	8.59	5.00	117.00	0.00	4.0	Pumped 600sks or 186bbls 13.5# 1.74y 9.17g/s Swifcem at 9bpm 410psi.
Event 14	Shutdown	Shutdown	12/8/2020	01:18:05	COMS	14.15	0.00	114.00	199.30	5130.0	shut down
Event 15	Drop Top Plug	Drop Top Plug	12/8/2020	01:18:55	COMS	-0.20	0.00	-6.00	199.30	5130.0	Dropped by HES supervisor witnessed by company man
Event 16	Pump Displacement	Pump Displacement	12/8/2020	01:18:57	COMS	-0.20	0.00	-6.00	199.30	5130.0	Pumped 150bbls fresh water at 10bpm.
Event 17	Bump Plug	Bump Plug	12/8/2020	01:39:42	COMS	8.28	0.00	1028.00	156.50	6363.0	Slowed down to 4bpm at 100bbls away, final circulating pressure - 620psi, Bumped at 1150psi.
Event 18	Check Floats	Check Floats	12/8/2020	01:40:15	USER	8.27	0.00	1029.00	156.50	6363.0	Released pressure, got 0.5bbls fresh water to surface. Floats held.
Event 19	End Job	End Job	12/8/2020	01:41:05	COMS	8.23	0.00	-27.00	156.50	6363.0	Got 11bbls cement to surface.
Event 20	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	12/8/2020	01:55:00	USER	8.26	4.00	-13.00	21.70	166.0	Discussed rigging down hazards and procedure according to HMS with all HES personnel

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Event 21	Safety Meeting - Departing Location	12/8/2020	02:45:00	USER	Held meeting with all personnel in convoy to discuss directions and hazards associated with drive, all fit to drive.
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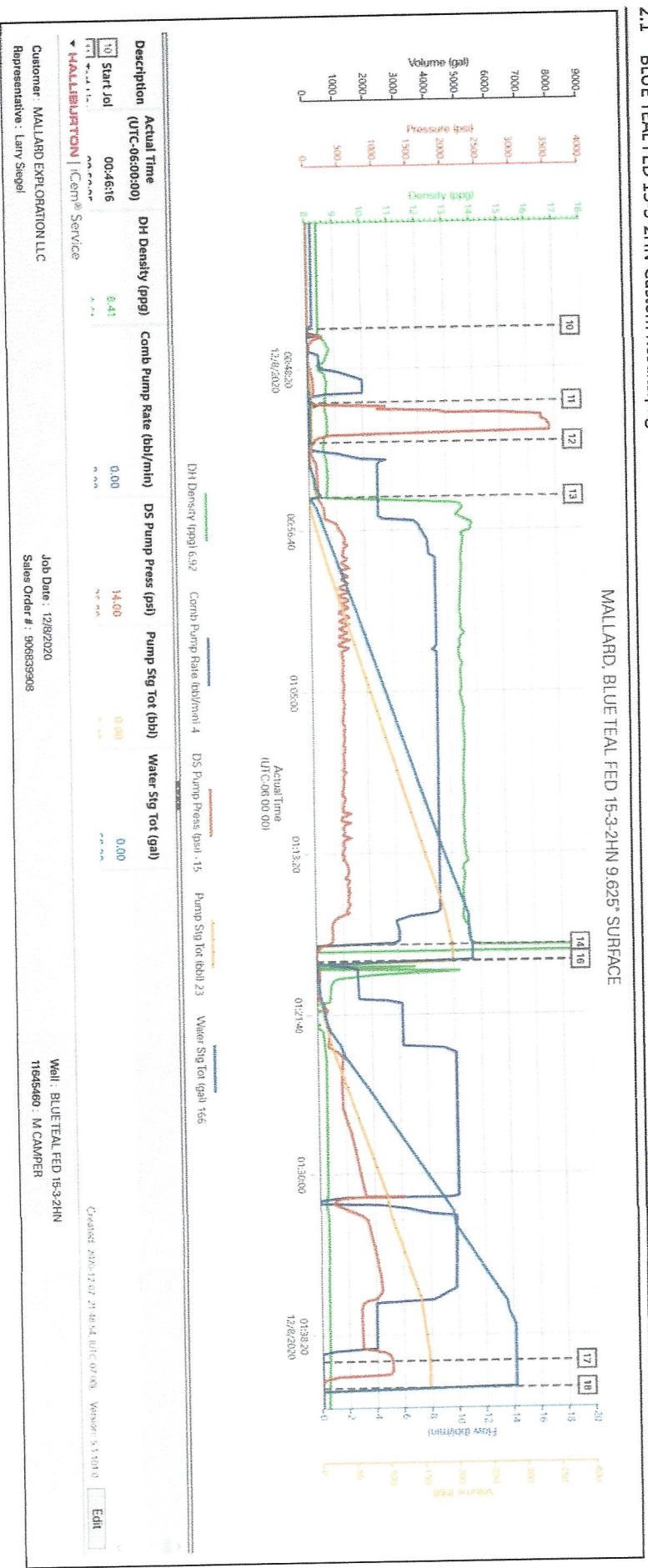
Event 22	Depart Location for Service Center or Other Site	12/8/2020	03:00:00	USER	Pre journey management prior to departure.
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2.0 Attachments

2.1 BLUE TEAL FED 15-3-2HN-Custom Results.png



Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 380921	Ship To #: 380921	Quote #:	Sales Order #: 0906839908
Customer: MALLARD EXPLORATION LLC-EBUS		Customer Rep: Larry Siegel	
Well Name: Blue Teal Fed	Well #: 15-3-2HN	API/UWI #:	
Field:	City (SAP): Fort Lupton	County/Parish: WELD	State: COLORADO
Legal Description:			
Contractor:		Rig/Platform Name/Num: Cartel 15	
Job BOM: 7521 7521			
Well Type: OIL & GAS WELL			
Sales Person: HALAMERICA\HB41307		Srvc Supervisor: Nicholas Roles	
Job			

Formation Name			
Formation Depth (MD)	Top		Bottom
Form Type			BHST
Job depth MD	1977ft		Job Depth TVD
Water Depth			Wk Ht Above Floor
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
Open Hole Section			13.5				0	1975		1975
Casing		9.625	8.921	36			0	1977		1977

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	9.625				Top Plug	9.625	1	HES
Float Shoe	9.625			1977	Bottom Plug	9.625		HES
Float Collar	9.625			1934.5	SSR plug set	9.625		HES
Insert Float	9.625				Plug Container	9.625	1	HES
Stage Tool	9.625				Centralizers	9.625		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	Water with dye	Water with dye	10	bbl	8.34			5	

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	SwiftCem	SWIFTCEM (TM) SYSTEM	600	sack	13.5	1.74		9	9.17
			9.17 Gal						FRESH WATER

Cementing Job Summary

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal
3	Displacement	Displacement	150	bbl	8.34			10	
Cement Left In Pipe		Amount	42 ft		Reason			Shoe Joint	
Mix Water:		pH 07	Mix Water Chloride:		0 ppm		Mix Water Temperature: 80 °F °C		
Cement Temperature:		## °F °C	Plug Displaced by:		8.33 lb/gal		Disp. Temperature: 80 °F °C		
Plug Bumped?		Yes	Bump Pressure:		1150 psi MPa		Floats Held? Yes		
Cement Returns:		11 bbl m3	Returns Density:		## lb/gal kg/m ³		Returns Temperature: ## °F °C		
Comment Got 11bbls cement to surface. Floats held with 0.5bbls to surface.									