

## Shop Order-00-10-15: Unclassified

Shawn Andrews 33 Pleasant Street PO Box 79 Guysborough, NS B0H 1N0

Milford Haven Fire Department

902 533 2033 Home 902 870 2304 Work 902 533 2749 Fax sandrews@modg.ca

**Exp. Date:** 03/22/2014

Quote No: JMINS-0011 Job/Order No: 18188

**BODY:** 00-10-15 Metalfab Pumper - ULC 05/13

PART NO	S	STN CODE	DESCRIPTION	QTY	ID
	S		CHANGE ORDER B	1	MTL
			METALFAB QUOTEWRITER VERSION MAY 2013	1	MTL
00-10-1500			Metalfab Pumper E	1	MTL
00-20-1000			Company Profile E	1	MTL
00-20-1500			Standard Body Warranty	1	MTL
00-20-1550			Metalfab Limited Ten (10) Year Paint and Corrosion Warranty	1	MTL
00-20-1700			Hale Pump Warranty - 5 years	1	MTL
00-20-1800			Ultra Tank Lifetime Warranty	1	MTL
00-20-2000			Plant Visits - unlimited at customer expense	1	MTL
00-20-3000			No Bonding Required	1	MTL
00-20-3500			Certification for Fusion Welding of Aluminum	1	MTL
00-20-4000			Quality System registered to ISO 9001:2008	1	MTL
00-20-4500			Fire Apparatus Manufacturers' Association Membership	1	MTL
			GENERAL INFORMATION	1	MTL
10-11-0000			Intent	1	MTL
10-11-0105			Vehicle Data Recorder not requested	1	MTL
10-11-1100			BLC S515-04 Compliance	1	MTL
10-11-1500		>	ULC Testing - Pumper	1	MTL
10-11-2100	S		Maximum length - 384"	1	MTL
10-11-2200	S	<	Maximum height - 116" front, 113" rear	1	MTL
			116" is the max door opening - Keep as low as possible. The		
			rear of the body needs to be under 113" to fit under the		
			beam in the middle of the apparatus bay		
10-11-2400			Overall length is 30' or more	1	MTL
10-11-2500			General Construction	1	MTL
10-11-3000			Manuals - two copies	1	MTL
10-11-3600	S	>	Delivery - FOB Fire Department	1	MTL
10-11-4000			Payment Terms - Chassis Net 10 days, Balance COD	1	MTL
10-20-1000	S		Hose bed capacity - standard ULC Pumper	1	MTL
10-20-2000			Equipment carrying capacity - standard ULC Pumper	1	MTL
			CHASSIS INFORMATION	1	MTL
20-11-1000	S	<	Chassis supplied by Metalfab	1	MTL
			2016 Freightliner M2-112 two door, two person cab		
			GVW - 62,000 lb (16FA, 46 RA)		
			Wheelbase 224" Cab to axle approx 158"		
			Detroit DD13 12.8L 450 HP@1800 rpm, 1650 torque@1100		
			rpm		

02/10/2017					Page 2
PART NO	S	STN C		QTY	ID
			Allison 4000 EVS automatic transmission, 275 Amp alternator		
			189 liter fuel tank, left side cab		
			Horizontal exhaust, left side		
			Fog lights under front bumper included with chassis.		
			Steel wheels N0006 white - will be painted job colour as per		
			60-33-0500		
			Chassis cab color to match Manchester Boylston M11-15688		
20-11-1500			2013 Emission chassis modifications	1	MTL
20-11-1500			Chassis Motor Vehicle Inspection not required	1	MTL
20-21-0500			Fluid capacity plate	1	MTL
20-21-0600			Pumping test plate	1	MTL
20-21-1000			Maximum riders sign - 2 persons	1	MTL
20-21-1500			Seat belt warning labels - 2 door chassis	1	MTL
20-21-1550			Tire Pressure Indicators not requested	1	MTL
20-21-1600			Apparatus Information Label	1	MTL
20-21-2000			Non removable key	1	MTL
20-21-2500			Shifter lock not required E	1	MTL
20-21-3500			Rear step warning label	1	MTL
20-21-3810			Front mudflaps provided with chassis	1	MTL
			Ε		
20-21-4000			Rear mudflaps - Metalfab Logo	1	MTL
20-31-0200			Fuel fill label -Ultra Low Sulfur Diesel only	1	MTL
20-31-0500			Alum tread fuel tank trim, Conv - 2 door	1	MTL
20-31-1900			Chassis cab not painted E	1	MTL
20-31-7500			Console in cab	1	MTL
20-41-0600			Intake air shutoff for engine not required	1	MTL
20-41-0900			Auxiliary braking system disabled when pumping	1	MTL
20-41-1100			Transmission programming - Allison WT	1	MTL
20-41-1510			Extend exhaust pipe - LS front of rear wheels	1	MTL
00 44 4000			E	4	N ATT
20-41-1900	_		Battery boost terminals with chassis E	1	MTL
20-41-2200	S		Chassis batteries relocated to pump compartment	<i>1</i>	MTL
20-41-2510 20-41-2600			Fuel fill at step fuel tank under cab Chassis fuel tank remains in OEM location	•	MTL
20-41-5000			Rear Tow Hooks - under body	1	MTL MTL
<b>20-41-5500</b>			ON SPOT Automatic traction chains	1	MTL
20-51-0710			Master Battery Disconnect included with Freightliner chassis	1	MTL
20-51-2500			Back up alarm included with chassis	1	MTL
20-51-3400			Protection valve installed for air operated accessories	1	MTL
20-51-4000			Auto eject for air inlet - LS	1	MTL
20-51-6200	S	>	120 volt 20 A shore line connection in chassis cab	2	MTL
20-51-6500		·	Kussmaul Autocharge 1000 battery conditioner w/battery saver	1	MTL
			,		
20-51-7100			Electric System Manager	1	MTL
20-51-7500			Super Auto eject for 120 v - 20 A with sealed enclosure	1	MTL
20-51-8500			Engine compartment lights (pair)	1	MTL
20-51-9001	S		Air horns - with chassis	1	MTL
20-52-3500		>	Chassis steering wheel lined up by Metalfab	1	MTL
			E		
20-52-4000		<	Rear View Camera system	1	MTL
			Monitor to be installed on the dash so that it remains in the		
			line of sight of the rear view mirrors		
20 52 4222			Page View Compre graters		NAT!
<b>20-52-4000</b>	S		Rear View Camera system	1	MTL
20-60-0400			Chassis wheelbase does not change PUMP AND PLUMBING	1	MTL MTL
30-11-5600			Hale QFLO Single stage 1050 IGPM	1	MTL
30-11-3600			Mechanical seal for Hale QFLO/QPAK pumps	1	MTL
30-15-0103			Plumbing - Hale manifold pump SM	1	MTL
30 10 0100			E	•	
			<del>-</del>		
-					

02/10/2017					Page 3
PART NO	S	STN CODE	DESCRIPTION	QTY	ID
30-20-0500		<	Valves and controls - side mount panel	1	MTL
			Pump panel will be mounted on the Right side (Curb side).		
30-20-1001			Valve brand not specified E	1	MTL
30-20-1500			Piping galvanized steel - general	1	MTL
30-20-1700	S		1-1/2" thread specifications - NPSH	1	MTL
30-20-1800	S		2-1/2" thread specifications - NSZ1 - 3.23 x 5	1	MTL
30-20-2000	Ŭ		Piping hydrostatic test	1	MTL
30-20-2505			Anodes in suction and discharge piping not requested	1	MTL
30-21-5500			Tank to Pump 3" w/ check valve manifold pump	1	MTL
			Tank fill valve 2"	•	
30-22-0500	_			1	MTL
30-31-4010	S		Suction - 6" each side manifold pump	1	MTL
30-31-7200		>	Hale master intake suction valve - electric control	2	MTL
30-32-8000			Suction - 2-1/2" right side, bleeder, Hale manifold pump	1	MTL
30-40-2500			4" left discharge, plumbed 3", Hale manifold pump	1	MTL
30-41-2000			2-1/2" RS discharge, bleeder, Hale manifold pump	2	MTL
30-41-2500			2-1/2" LS discharge, bleeder, Hale manifold pump	1	MTL
30-44-0500	S	<	1-1/2" crosslay (each), 2" valve, bleeder	1	MTL
	_		Divider to be offset to handle one side of 1.75" and one side	-	
			of 2.5"		
			Hose to be carried in the 1-1/2" Mattydale hose lay		
			_200'_		
			_200 _		
30-44-3500	S	_	2-1/2" crosslay, plumbed 2-1/2", bleeder	1	MTL
30-44-3300	3	•		ı	IVI I L
			Divider to be offset to handle one side of 1.75" and one side		
			of 2.5"		
			Hose to be carried in the 2-1/2" Mattydale hose lay		
			_200'_		
30-51-0500			Pump shift-Midship air	1	MTL
30-51-0700			Pump Gearbox mounted manual over ride for pump shift	1	MTL
			E		
30-51-6800			FRC InControl Governor/Throttle engine display with throttle	1	MTL
			knob		
30-51-7000			Suction side relief V/V, manifold pump	2	MTL
30-51-7700			Primer Hale oil less ESP with oil tank Hale	1	MTL
30-51-7800			Pre Primer for gated suction Hale primer	2	MTL
30-51-8100			Heat exchanger included with chassis	1	MTL
30-52-1000			Master drain V/V, 12 port	1	MTL
30-52-1000			Foam system not requested E	1	MTL
30-99-05AA	U		4" Rear discharge plumbed 3", bleeder	•	IVIIL
30-99-03AA	U			1	N ATTI
40 44 0400			WATER AND FOAM TANKS	1	MTL
40-11-2100			Ultra-Tank water tank (Imperial gallons)	1	MTL
40-11-2200			Water tank capacity certification (tank manufacturer)	1	MTL
40-11-7000			Tank capacity 2000 Imperial Gallons	1	MTL
40-21-0500			3" tank to pump connection	1	MTL
40-22-0500			2" tank fill connection	1	MTL
40-23-0500			1" water level gauge connection	1	MTL
40-23-1040			4" direct fill connection	1	MTL
40-23-1060			10" Newton dump connection	1	MTL
40-30-0500			Sump drain valve (3" gate valve) with linkage	1	MTL
			E		
40-30-1100			Water Fill Box middle left side	1	MTL
40-31-4500			10" rear Newton dump, painted steel	1	MTL
40-31-5000			Newton dump - 36" telechute painted steel	1	MTL
40-31-5500			Electric operator for Newton dump	1	MTL
40-31-5600			Rotating dump chute for Newton dump painted steel	1	MTL
		>		1	MTL
40-31-5800			Support for rotating dump chute if necessary	-	
40-31-8000	,,		4" Storz rear gtd fill	1	MTL
40-99-05AA	U		Dump valve control in chassis cab	1	

02/10/2017					Page 4
PART NO	S	STN CODE		QTY	ID
			ELECTRICAL	1	
50-11-0500			Base electrical system	1	MTL
50-11-0600			Warning Light Certification	1	MTL
50-11-0700			Low Voltage Electrical system test	1	MTL
50-11-0800			Low Voltage Electrical System Documents	1	MTL
50-11-0900			Rocker switch panel with master warning switch	1	MTL
50-11-1400			Federal PA300 100 watt siren	1	MTL
50-11-1620			Siren speaker,100 watt, in front bumper	1	MTL
50-11-2600			Siren to be accessible to driver and officer	1	MTL
50-11-5001	S	_	Code 3 LED 21TR light bar NFPA	1	MTL
	3	>		•	MTL
50-11-6600			Rear LED Traffic Advisor warning lights - surface mount	1	
50-11-8000		<	Rear beacons-Code 3 550 red (pr)	7	MTL
			Both with red lenses.		
50-12-0400			Front flashers (pr)-red Code 3 45R LED	1	MTL
50-12-1100			Front side inter Its (pr)-red Code 3 45R LED	1	MTL
50-12-1200			Body side inter Its (pr)-red Code 3 45R LED	2	MTL
50-12-1300			Rear flashers (pr)-red Code 3 45R LED	1	MTL
50-21-1500			Rear floods (pr)-Unity	1	MTL
50-21-1600		<	Parking (ditch) lights in rear fenders	1	MTL
00 27 7000		•	Interlock with reverse of transmission and have a switch in	•	
			the cab.		
			tile Cab.		
50-21-5100		_	Compartment lighting - LED tube lights in each compartment	1	MTL
50-21-5100		>		ı	IVIIL
50.04.5500			(rollup doors)		
50-21-5500			Door Ajar warning light	1	MTL
50-21-8001			Step lights for body steps - 4" LED	1	MTL
50-21-8201			Step lights for chassis steps - LED marker type	1	MTL
50-21-8600			LED clearance Its and reflectors	1	MTL
50-21-8800			LED intermediate turn signal/clearance/reflector length >30'	1	MTL
50-22-0700			Whelan 64 LED tail/brake-turn-backup module (pr)	1	MTL
50-31-6006		>	Scene lights (pr) - Federal QL97 LED	2	MTL
50-31-6010			Scene light boxes (pr) - tread plate	2	MTL
50-31-6550			Ground lighting (LED Lumabar) - 2 door chassis	1	MTL
50-31-6570			Ground lighting (LED Lumabar) - side mount body	1	MTL
50-31-7000		>	Work light for crosslay hose beds	1	MTL
50-35-0500			Installation of customer supplied mobile radio	1	MTL
50-35-0560			VHF antenna with base - commercial chassis	1	MTL
				_	
50-35-0590	_		Cellular/TMR antenna with base - commercial chassis	1	MTL
50-35-1000	S		Supply and install 16 channel mobile radio - analog Motorola	1	MTL
			PM400		
			BODY	1	MTL
60-10-1600			Tandem axle extruded aluminum body	1	MTL
60-10-4100			No "beavertail" rear step supports	1	MTL
60-10-4600			Painted fender surround E	1	MTL
60-10-4700			Integral aluminum fender trim	1	MTL
60-10-5400		>	Diamondback pumphouse steps	1	MTL
60-10-5430		>	Diamondback 19" rear step	1	MTL
60-10-6000			Extruded rub rail	1	MTL
60-11-0200		>	Front left side compartments intermediate height	1	MTL
60-11-0500		>	Front right side compartment to top of wheel well	1	MTL
<i>60-11-0900</i>			Rear left side compartments intermediate height	1	MTL
60-11-1100		>			MTL
		>	Rear right side compartment to top of wheel well	1	
60-11-1900		>	Low side compartment (up to 18") each	2	MTL
60-11-2000		>	High side compartment (over 18") each	1	MTL
60-11-3100			No rear compartment E	1	MTL
60-11-4500			Flush mount aluminum door - single with "D" handle	2	MTL
60-11-5500			Rollup door - standard height	3	MTL
60-11-5510			Rollup door - intermediate height	2	MTL
60-11-5530			Rollup door - to enclose pump panel	1	MTL
T					

02/10/2017				Page 5
PART NO	S STN CODE		QTY	ID
60-31-4100		Extruded aluminum handrails	1	MTL
60-31-5000		Zico access Ladder at rear of unit	1	MTL
60-31-5500	<	Steps at rear of body (folding)	1	MTL
		Right side only		
		<b>g</b> •		
60-31-5600		Steps and grab handles at front of body next to pump panel	1	MTL
60-31-6500		Compartment matting-Turtle tile	1	MTL
60-31-8000		BA bottle compt (ea)-fender well	2	MTL
60-31-9600	S >	Adjustable shelf (ea)	3	MTL
	S >			
60-32-3550		Two adjustable hose divider (each)	1	MTL
60-32-7500		Hose bed - aluminum	1	MTL
60-33-0000		Paint exterior - Imron Elite	1	MTL
60-33-0200		Undercoat vehicle with KROWN rust protection	1	MTL
60-33-0500		Paint chassis wheels job colour with silver trim	1	MTL
60-33-1000		Paint pump and plumbing job colour	1	MTL
60-33-1500		Buffed finish compartment interior	1	MTL
60-33-2200		Lettering - 80 letters up to 3" tall - 3 colour	1	MTL
60-33-3000		Reflective stripe - 4" white	1	MTL
60-33-3310		Reflective stripe - red and yellow chevron at rear	1	MTL
60-33-3500		Tarp over hose bed - black	1	MTL
60-33-4000		Tarp over crosslays - black	1	MTL
60-40-5500		Suction hose tube (each) with door	3	MTL
60-40-8500	>	Tail light box Fire Extinguisher tubes (pr)	1	MTL
60-40-9000	>	Tube mount for ladders, with rear door	1	MTL
60-40-9500	>	Tube for portable tank storage, with rear door	1	MTL
60-41-1015		Pike Pole tube in suction hose tube	2	MTL
		Attic ladder tube with rear door	1	MTL
60-41-1500		INSTRUMENTATION	1	MTL
70-11-0000			1	MTL
		Warning Label on Pump Operator's Panel	1	MTL
70-11-0500		Side mount instrument panel	-	
70-11-1500		Stainless steel instrument panels	1	MTL
70-11-3200		Colour coded tags	1	MTL
70-11-4600		Diamondback grip type panel hood step left side	1	MTL
70-11-5100		Open storage at rear top of pump house	1	MTL
70-11-5600		Left side tread plate pump access door	1	MTL
70-11-7500		Heat pan-aluminum	1	MTL
70-11-8000		Heater in pump compartment	1	MTL
70-20-1500		2-1/2" pressure gauge - dual face 0-600	7	MTL
70-20-2500		Primer control	3	MTL
70-20-3300		FRC InControl Governor Control	1	MTL
70-20-3510		Electric water level gauge on pump panel and at rear, Class	1	MTL
		One		
70-20-3700	<	Additional remote water level gauge readout, Class One	1	MTL
		Class 1 Mini 4 light readout to be installed in chassis cab		
		(70-20-3640).		
70-20-6500		Test gauge panel	1	MTL
70-20-7500		Heat exchanger control valve	1	MTL
70-21-5500		Panel readout for Battery Conditioner	1	MTL
		ACCESSORIES	1	MTL
80-11-5000		6" x 10' lightweight suction hose (ea)	3	MTL
80-12-2500		6" barrel strainer	1	MTL
80-12-2700		6" floating strainer	1	MTL
80-12-4500	>	6" low level strainer with 1-1/2" venturi connection	1	MTL
80-13-0500		Rubber mallet	1	MTL
80-13-2500	S <	Pike pole, fibreglass handle	2	MTL
		One 8'		
		One 10'		
80-13-4000		Axe, pick head, fibreglass handle and bracket	1	MTL
		, ,	-	_

02/10/2017					Page 6
PART NO	S	STN CODE	DESCRIPTION	QTY	ID
80-13-4500		Axe, flat head, fibreg	lass handle and bracket	1	MTL
80-14-0500		24' 2 section extension	on ladder PEL 24	1	MTL
80-14-5500		14' aluminum roof lad		1	MTL
80-14-8500		10' aluminum folding		1	MTL
80-15-1005		2500 l gallon portable	tank - Husky	1	MTL
80-17-0500	S	20# dry chemical fire		1	MTL
	S	45# CO2 fire extingui	exunguisner		MTL
80-17-1000	3	15# CO2 fire extingui	sner	1	
80-18-0500		SCBA bracket with s	trap - compt mount	2	MTL
80-99-25AA	U		andle Female x 6" NH Male Suction elbow	1	
80-99-30AA	U	Honorary plaque		1	
80-99-35AA	U	Collapsible Wild Land	d Water Tanks	4	