



INVOICE

PLEASE REMIT TO

Frontline Machinery Ltd
26290 Fraser Highway
Aldergrove, BC V4W 2Z7
Ph: (604) 856-7278 Fax: (604) 856-7294

HST/GST: 89297 4692

WORK ORDER NUMBER

23-00384

INVOICE NUMBER

SRVCE03868

INVOICE DATE

4/23/2024

CUSTOMER PO

TOTAL DUE

\$29,454.50

BILL TO

Lonetrack Equipment (2017) Ltd
17257 26A Ave
Surrey, BC V3Z 0E6

LOCATION

Lonetrack Equipment (2017) Ltd. Shop
Chilliwack, BC

WORK ORDER DESCRIPTION PREP FOR SALE

Manufacturer	Model	Serial No	Machine Hours	Order Date	Completion Date
CEDARAPIDS	VSI	48288	N/A	8/23/2023	4/23/2024

Service Report

August 23/23

- Removed wedges from lid; removed lid
- Test ran plant
- Hooked up truck and moved plant to wash bay

December 12/23

- Created parts list

January 10/24

- Moved machine into shop and began to sort and lay out conveyors
- Set up walkways and handrails

January 11/24

- 2 techs levelled plant chassis in shop
- Used battle jacks to get anvil ring unstuck
- Removed anvil ring with crane; set on blocks
- Removed upper bowl wedge pins
- Removed wedges
- Removed battle jack pins
- Inspected upper bowl and lower liner; upper bowl stuck
- Air hammered dirt and rocks out of gaps

January 15/24

- Used battle jacks to lift upper tub; used crane to remove upper tub
- Air hammered out dirt and rocks
- Removed worn shoes from table; removed table liner - 2 techs
- Removed table bolts to fly wheel; prepped for table removal

January 16/24

- Removed table bolts
- Rigged table with crane
- Removed table and inspected it
- Air hammered dirt and rocks out of shaft and bearing housing stump
- Inspected table guard 2 worn plates
- Removed shaft cap screw; used 1" impact gun and a lot of heat to removed bolt
- Threaded in lifting eye
- Dismantled rotor - 2 techs
- Checked for excessive play in bearings with dial indicator; measured bearing tolerance January 18/24
- Removed broken exhaust manifold studs
- Prepped exhaust manifold for complete removal
- Removed VSI lube filter; cut open filter to inspect for metal shavings
- Assisted with lube filter inspection; ordered new filter

January 18/24 (cont'd)

- Started filling engine oil
- Removed wear plates from cone ring; replaced with new ones from walkway / 4 wear plates replaced

January 19/24

- Finished service
- Filled engine oil; 64 ltrs of 15W40
- Filled fuel filter and reinstalled
- Changed coolant filter
- Tried removing broken bolts in table with easy outs; no luck
- Removed armour package
- Welded nuts to broken bolts; removed 2 of 3 broken bolts

January 22/24

- Reinstalled table armour
- Installed alignment pins
- Flipped table; prepped for table liner removal
- Inspected filter housing on lube oil system
 - Missing by pass spring
 - Looked up spring part #'s
 - Ordered o-ring kit and spring
 - Determined correct spring (2 types available)
- Removed broken bolt from VSI table

January 23/24

- Removed table liner bolts on flange
- Heated bolts with torch to remove Locktite
- Removed bolts with 1" impact gun
- Removed flange and liner
- Cleaned table liner seat; prepped for new liner
- Reviewed exhaust manifold work with foreman
- Measured and created drawings to send to IMS for welding and fabrication of drop in wear component

January 24/24

- Removed and capped turbo coolant lines
- Removed and capped turbo oil lines
- Removed turbo boot
- Removed muffler from turbo
- Removed exhaust manifold
- Cleaned mating surfaces with die-grinder
- Reinstalled manifold with new gaskets and bolt

January 25/24

- Finished torquing the manifold bolts
- Installed coolant and oil lines
- Installed muffler
- Cleaned machine; tarped engine and capped exhaust pipe
- Installed coolant level sensor
- Moved machine out of shop into the yard

February 27/24

- Set up power; closed up VSI lid, locked down and wrapped up cables

April 9/24

- Cleaned parts and prepped table; installed table wear ring

April 16/24

- Moved machine into the shop
- Installed four exhaust manifold bolts; torqued to 35' lbs
- Installed filter
- Assisted with the attempted install of the wear ring; doesn't fit
 - Requires welding of lifting eyes; come-a-long put into place for following day

April 17/24

- Began assembling VSI
- Installed tub wear ring
- Welded eyes and come-a-long into place
- Installed anvil ring
- Installed main outer frame ring and wedges
- Installed rotor table and top plate
- Installed rotor shoes

April 18/24

- Diagnosed over fill VSI oil reservoir
- Checked oil reservoirs for water contamination; none found
- Rebuilt coolant level sensor and plug
- Primed fuel system
- Removed table to inspect lube leak
- Wired lube system pump; leaking at base of vertical housing
- Diagnosed main lube and lube supply leak
- Disassembled rotor to gain access to supply line
- Removed rotor shoes; top plate and rotor assembly
- Removed vertical housing shroud
- Removed damaged supply line

April 19/24

- Lube supply line repaired
- Extracted broken lube line fittings
- Dropped off line and fittings at Coast Hose
- Replaced two worn liners on vertical housing shroud
- Purchased new line and fittings at Coast Hose; installed new supply line
- Tested lube system for leaks; none found
- Reinstalled housing shroud
- Installed rotor assembly; rotor, cap and shoes
- Installed bottom inspection plate

April 22/24

- Topped up lube oil
- Installed bottom wedge retainers
- Repaired fuel tank return line
- Prepped unit for test run
- Prepped under belt for test run; rewired motor
- Organized spare parts

April 23/24

- Final test run of machine with shop foreman
- Started engine; monitored machine will running - runs well
- Engaged clutch; monitored machine again while running - runs well
- Wired under belt conveyor into shop test panel
- Test ran conveyor; runs well
- Installed impactor lid assembly
- Stowed and stored spare parts on deck
- Moved machine out of the shop

Detail of Charges

Item Number / Date	Description	Unit	Quantity	Unit Price	Line Total
LABOUR					
8/23/2023	1 Technician - Regular Time	Hrs	5.50	\$115.00	\$632.50
12/12/2023	1 Technician - Regular Time	Hrs	1.00	\$115.00	\$115.00
1/10/2024	1 Apprentice - Regular Time	Hrs	2.00	\$115.00	\$230.00
1/10/2024	2 Technicians - Regular Time	Hrs	3.50	\$115.00	\$402.50
1/11/2024	2 Technicians - Regular Time	Hrs	10.00	\$115.00	\$1,150.00
1/15/2024	2 Technicians - Regular Time	Hrs	8.50	\$115.00	\$977.50
1/16/2024	2 Technicians - Regular Time	Hrs	8.50	\$115.00	\$977.50
1/16/2024	1 Technician - Overtime	Hrs	1.00	\$135.00	\$135.00
1/18/2024	3 Technicians - Regular Time	Hrs	17.00	\$115.00	\$1,955.00
1/19/2024	1 Technician - Regular Time	Hrs	4.00	\$115.00	\$460.00
1/19/2024	1 Technician - Overtime	Hrs	2.00	\$135.00	\$270.00
1/22/2024	2 Technicians - Regular Time	Hrs	8.50	\$115.00	\$977.50
1/23/2024	2 Technicians - Regular Time	Hrs	9.50	\$115.00	\$1,092.50
1/24/2024	1 Technician - Regular Time	Hrs	8.00	\$115.00	\$920.00
1/25/2024	1 Technician - Regular Time	Hrs	5.50	\$115.00	\$632.50
2/27/2024	1 Technician - Regular Time	Hrs	1.00	\$115.00	\$115.00
4/9/2024	1 Technician - Regular Time	Hrs	1.50	\$115.00	\$172.50
4/16/2024	2 Technicians - Regular Time	Hrs	7.50	\$115.00	\$862.50
4/17/2024	2 Technicians - Regular Time	Hrs	11.00	\$115.00	\$1,265.00
4/18/2024	2 Technicians - Regular Time	Hrs	16.00	\$115.00	\$1,840.00
4/18/2024	1 Technician - Overtime	Hrs	1.00	\$135.00	\$135.00
4/19/2024	1 Technician - Regular Time	Hrs	8.00	\$115.00	\$920.00
4/22/2024	1 Technician - Regular Time	Hrs	2.50	\$115.00	\$287.50
4/23/2024	1 Technician - Regular Time	Hrs	2.00	\$115.00	\$230.00
4/24/2024	1 Technician - Regular Time	Hrs	2.00	\$115.00	\$230.00
PARTS INVENTORY					
BF1259	Fuel/Water Separator Filter, Spin-On (Baldwin)	EACH	2.00	\$22.96	\$45.91
BD103	Filter, Lube, Spin-On, Dual Flow	EACH	2.00	\$46.87	\$93.74

PA2456	Filter, Outer Air	EACH	2.00	\$153.39	\$306.78
PA2457	Filter, Inner Air	EACH	2.00	\$101.57	\$203.14
BW5139	Filter, Corrosion	EACH	1.00	\$25.12	\$25.12
DHP15C16	Oil, Duron 15W40 (4 Litre Jug)	EACH	18.00	\$19.94	\$358.92
P176220	Hydraulic Filter Element (K300/K400) - Lube System	EACH	1.00	\$76.57	\$76.57
2-351 N70	O-Ring, 2-351 N70	EACH	1.00	\$0.53	\$0.53
2-227 N70	O-Ring, Bypass Valve	EACH	1.00	\$0.13	\$0.13
2-210 N70	O-Ring, 2-210 N70	EACH	1.00	\$0.06	\$0.06
3043097	Exhaust Manifold Gasket Cummins	EACH	6.00	\$29.51	\$177.05
3046283	Exhaust Manifold Bolt Cummins	EACH	24.00	\$48.99	\$1,175.81
FREIGHT	Incoming Freight from Vendor from P#304097 & 3046283	EACH	1.00	\$48.20	\$48.20
3046286	Exhaust Manifold Bolt Spacer Cummins	EACH	4.00	\$87.90	\$351.60
FREIGHT	Incoming Freight from Vendor for P#3046286	EACH	1.00	\$40.00	\$40.00
14461	Hex Capscrew, 1" NC x 2" Long, Grade 8, Plain	EACH	12.00	\$4.95	\$59.34
4383932	Low Coolant Sensor Cummins	EACH	1.00	\$257.18	\$257.18
PO0019439	1914-020 - Kit made as per Customers drawings and photos - Invoice 12280	EACH	1.00	\$3,864.64	\$3,864.64
337-9114-H	Shoe (CR2600 VSI)	EACH	1.00	\$445.32	\$445.32
337-9515-09	Outer Table Liner (CR2600 VSI)	EACH	1.00	\$2,218.50	\$2,218.50
FREIGHT	Incoming Freight from vendor for P#337-9515-09	EACH	1.00	\$260.00	\$260.00
7025-042	Socket Head Capscrew, 3/4" NC x 1-1/2" Long	EACH	3.00	\$2.57	\$7.71
P160130	Spring	EACH	1.00	\$55.22	\$55.22
PO0019676	Miscellaneous Hose & Fittings as Per Invoice 28639	EACH	1.00	\$55.58	\$55.58
SUBCONTRACTOR					
	Equipment Power Wash		1.00	\$770.00	\$770.00
SHOP SUPPLIES					
	1% Shop Supplies/Enviro		1.00	\$169.85	\$169.85
TERMS: Net 30 Days				Subtotal	\$28,051.90
				5% GST on Sales	\$1,402.60
SHOP SUPPLIES \$169.85	PARTS INVENTORY \$10,127.05	LABOR \$16,985.00			
SUBCONTRACTOR \$770.00	FREIGHT & TRAVEL \$0.00				Total Tax \$1,402.60
				Amount Paid	\$0.00
				Total	\$29,454.50