



**Boersma Enterprises Ltd.**  
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GST Registration No.: 750678732RT0001

**BILL TO**

R Batke Oilfield Ltd  
box 6516  
Bonnyville Ab T9N2H1

**INVOICE 233768**

**DATE** 2024-05-27 **TERMS** Due on receipt

**DUE DATE** 2024-06-14

*Unit 124*

**MILEAGE/HOURS**

24492HRS/ 1104946KM

**UNIT #/ VIN#**

vin: 955699

DATE	ACTIVITY	DESCRIPTION	TAX	QTY	RATE	AMOUNT
2024-05-27	Labor	REPAIR- ENGINE REBUILD  Engine came disassembled in crate. Organize parts and parts bags. Quote engine overhaul and make parts list required to repair unit. Install ISX 152mm overhaul kit and new cylinder head. New main bearings, new rod bearings, new liners, new pistons, new piston rings, new wrist pins, new piston cooling nozzles and all required gaskets and hardware to re-assemble engine. Polish camshaft and replace several worn rockers. New front and rear rocker shafts. New lower scissor gear and upper solid idler gear (bearings worn/grooved). New EGR cooler to water pump housing coolant pipe. Paint engine after completing overhaul.	GST	60	140.00	8,400.00

*Randy Paying  
c Bank Draft*

**ENTERED**  
*13069*

DATE	ACTIVITY	DESCRIPTION	TAX	QTY	RATE	AMOUNT
	Labor	INSTALL STACKS - EXTRA- Install DS & PS exhaust stacks. Rotate to 45 degrees. Truck arrived at shop without stacks installed. Cleaned and lubricate slip joints and clamps for proper re-assembly.	GST	1	140.00	140.00
	Labor	CALIBRATE AND INSTALL TURBO ACTUATOR ON TO TURBO CUSTOMER SUPPLIED - was not assembled	GST	0.50	140.00	70.00
	Labor	UNIT IS DEAD- REMOVE SIDE PANEL AND PUT BATTERIES ON CHARGER-	GST	0.50	140.00	70.00
	Labor	Polish crankshaft. Upon bottom end disassembly find main and rod journals severely grooved and rough. Polish out all imperfections and bring crank journals back to factory spec.  EXTRA- Upon complete disassembly of the bottom end found that all crankshaft main and rod journals required polishing. Originally estimated 3 hours extra to polish based off partial disassembly. Once completely disassembled was able to see the full extent of the damage and more time was required to restore all 6 rod journals and 7 main journals.	GST	8	140.00	1,120.00
	Labor	FUEL LEAK AT GEAR PUMP REPAIR WAS DENIED BUT WHEN YOU KEY ON THE UNIT IT LEAKS EXCESSIVELY HAD TO REPAIR- REPLACE FUEL LINE SEALING WASHERS AND CLEAN SEALING SURFACES	GST	1.50	140.00	210.00
	Labor	EXTRA- Install turbo down pipe and flex pipe. Cleaned exhaust flanges and clamps. Re-used clamps with new gaskets. Not required to remove for engine overhaul.	GST	1	140.00	140.00
	Labor	EXTRA-Assemble all A/C lines and hoses including brackets. Not required to remove for engine overhaul.	GST	1	140.00	140.00

DATE	ACTIVITY	DESCRIPTION	TAX	QTY	RATE	AMOUNT
	Labor	EXTRA- Program injector trim codes. (Codes programed did not match the codes from the supplied injectors in parts crate)	GST	0.50	140.00	70.00
	Labor	EXTRA- Road test verification and check over after completing overhaul and all repairs.	GST	1	140.00	140.00
	Labor	CUT ENGINE BLOCK Cut ISX counterbores to 0.032 thou shims and sand inner bore edges. Set liner protrusion to max spec at 0.014 thou. -\$1500  POLISH CAM- SENT OUT - \$600	GST	1	2,100.00	2,100.00
	Consumables	10% SHOP SUPPLIES ON LABOUR ON ESTIMATED TIME. DISCOUNTED THE SUPPLYS COST ON THE EXTRA TIME	GST	0.10	8,400.00	840.00

DATE	ACTIVITY	DESCRIPTION	TAX	QTY	RATE	AMOUNT
	<b>Parts</b>	1-NA298234VS CYLHEAD 1-KIF2023/04CRB INFRAME KIT 152MM 6-5298565- SHIM 6-3687058- COOLING NOZZLES 12-4965698 12-4965512 1-5575513 1-3680882 2-3896408 7-3678506 1-3688113 1-3678756 1-5462277NX 1-K37-1004 1-FF5776FLG 1-LF14000NNFLG 1-F65-1080-696094 1-HWU01765 1-HWU01778 2-HWC06894 4-HWU05795 1-3688596 2-5484228 2-5484229 1-5484230 1-5484231 1-2882570 1-2882571 1-3693161 1-3680260 1-3689630 1-3686018 1-5532478	GST	1	27,689.83	27,689.83
	<b>core</b>	Cores- \$500.00 HEAD CORE- HEAD CORE WAS RETURNED IN FULL	GST	0	0.00	0.00
	<b>Parts</b>	PARTS NOT ON THE ESTIMATE:  1-29331- \$59.78 1-mcc-20- \$41.48 freight- \$180.00 3-3163075-\$54.25ea 2-3963991CUM-\$10.83 3-2866636- \$27.08 1-5462277NXCUM- \$164.46	GST	1	711.37	711.37

DATE	ACTIVITY	DESCRIPTION	TAX	QTY	RATE	AMOUNT
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WARRANTY WILL BE 1 YEAR  
AFTER BUILD DATE AND  
AFTER ITS INSPECTED BY A  
BOERSMA ENTERPRISES  
LTD TECH.

ASLONG AS CUSTOMER HAS  
UNIT RUN ON THE DYNO  
WITHIN 5 ENGINE HOURS OF  
BUILD TIME TO VERIFY THE  
POWER OUTPUTS ARE  
FACTORY RATED.- DYNO  
RESULTS 483.31HP AND  
6674.61 FT-LBS TQ-  
APPROVED

UNAUTHORIZED ENGINE  
MODIFICATIONS OR DPF  
DELETES DO NOT QUALIFY  
FOR WARRANTY.

NO TRAVEL OR TOWING IS  
COVERED WITH WARRANTY.

2024-06-14	Labor	ONCE RETURNED FROM DYNO- CHECK ENGINE LIGHT CAME ON FOR CRANK CASE PRESSURE AT KENWORTH. GOT TO THE SHOP TROUBLE SHOT AND FOUND THE SENSOR WAS BAD REPLACED SENSOR AND RAN CHECKS.	GST	1.50	140.00	210.00
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estimate approved for aftermarket kit and head along with the other needed parts- Randy 12:40pm phone call may29/24	SUBTOTAL	42,051.20
	GST @ 5%	2,102.56
OIL LEAKS ON FROM OF ENGINE COMPONENTS - DENIED OIL LEAKS FOR REAR STRUCTURE LEAKS- DENIED REAR STRUCTURE OIL PAN BOLT IS STRIPPED OUT WILL NEED REPLACED WHEN THE STRUCTURE IS REPLACED.- TEMPORALLY INSTALLED.	TOTAL	44,153.76

TOTAL DUE	\$44,153.76
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TAX SUMMARY		
	RATE	TAX
	GST @ 5%	2,102.56
		42,051.20