



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
2201
 Component
Diesel Engine
 Fluid
TOTAL FINA RUBIA TIR 7900 FE 10W30 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0766405	WC0524003	---
Sample Date		Client Info		30 Oct 2023	09 Feb 2023	---
Machine Age	hrs	Client Info		2000	820	---
Oil Age	hrs	Client Info		0	820	---
Filter Age	hrs	Client Info		0	820	---
Oil Changed		Client Info		N/A	Changed	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	43	60	---
Chromium	ppm	ASTM D5185(m)	>20	1	2	---
Nickel	ppm	ASTM D5185(m)	>4	3	11	---
Titanium	ppm	ASTM D5185(m)		0	<1	---
Silver	ppm	ASTM D5185(m)	>3	0	<1	---
Aluminum	ppm	ASTM D5185(m)	>20	12	21	---
Lead	ppm	ASTM D5185(m)	>40	1	3	---
Copper	ppm	ASTM D5185(m)	>330	39	112	---
Tin	ppm	ASTM D5185(m)	>15	2	5	---
Vanadium	ppm	ASTM D5185(m)		0	<1	---

CONTAMINATION

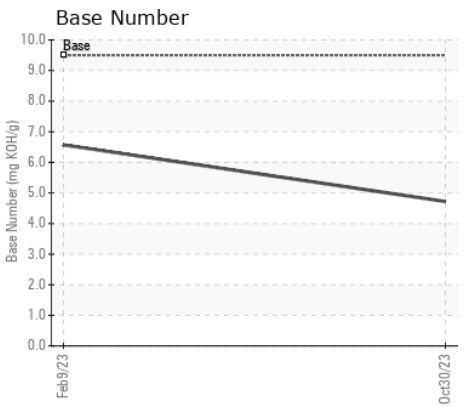
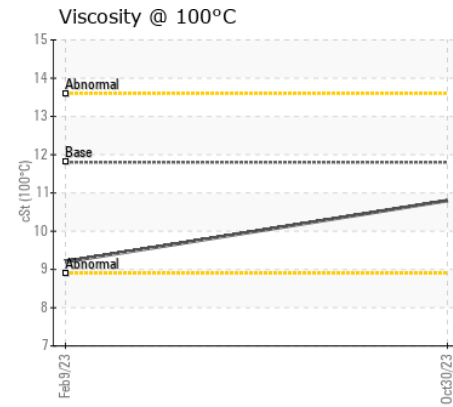
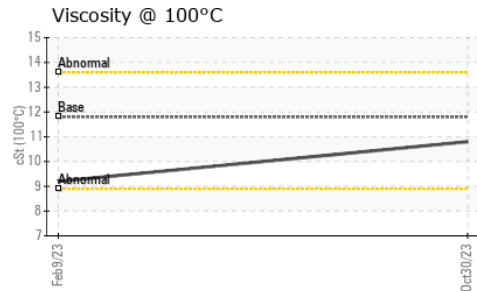
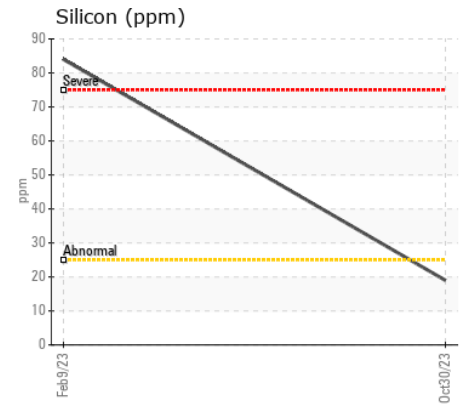
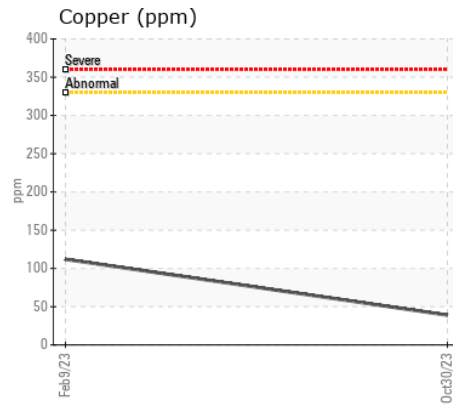
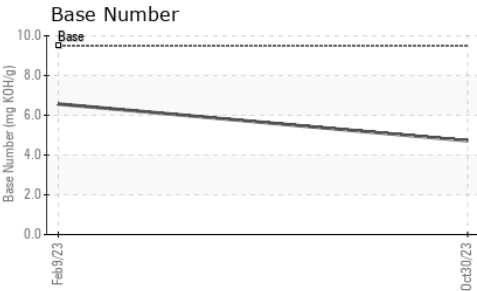
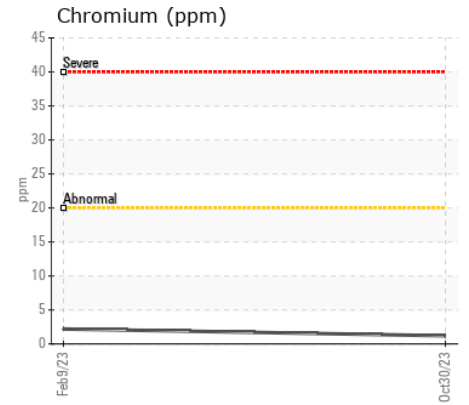
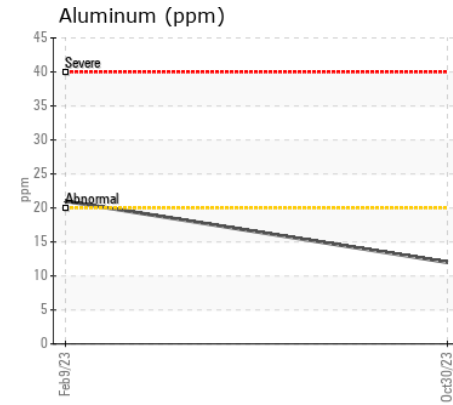
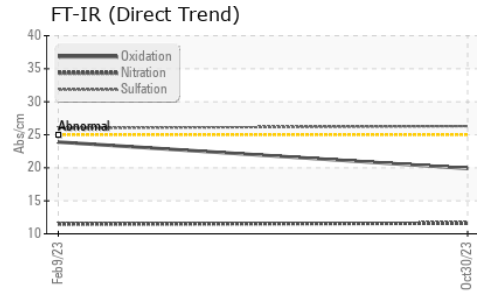
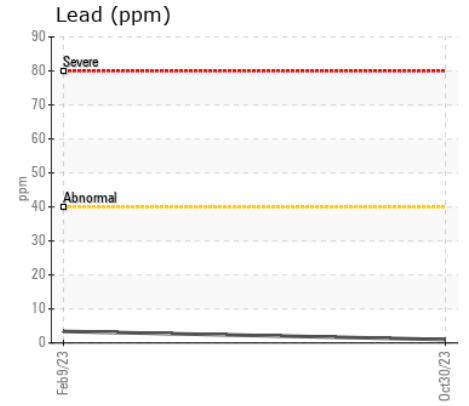
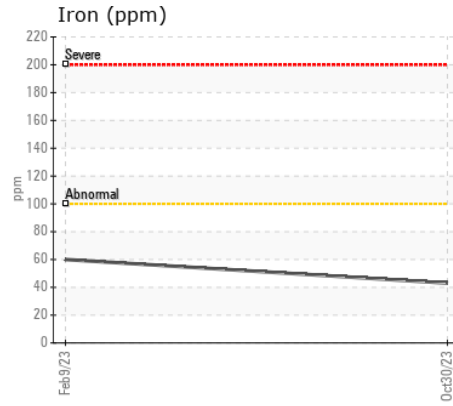
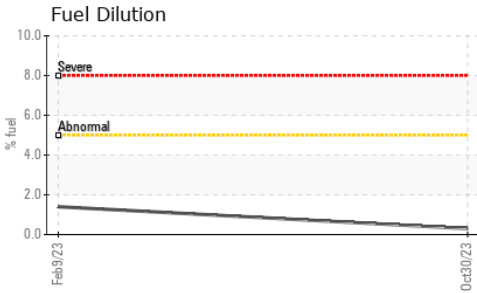
Fuel content negligible. Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	19	84	---
Potassium	ppm	ASTM D5185(m)	>20	36	60	---
Fuel	%	ASTM D7593*	>5	0.3	1.4	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	ASTM D7844*	>3	0.4	0.1	---
Nitration	Abs/cm	ASTM D7624*	>20	11.6	11.5	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	26.3	26.0	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185(m)		4	4	---
Boron	ppm	ASTM D5185(m)		11	166	---
Barium	ppm	ASTM D5185(m)		0	0	---
Molybdenum	ppm	ASTM D5185(m)		91	103	---
Manganese	ppm	ASTM D5185(m)		1	5	---
Magnesium	ppm	ASTM D5185(m)		70	659	---
Calcium	ppm	ASTM D5185(m)	3290	2152	1437	---
Phosphorus	ppm	ASTM D5185(m)	1200	920	690	---
Zinc	ppm	ASTM D5185(m)	1400	1103	748	---
Sulfur	ppm	ASTM D5185(m)	4000	2545	1859	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	19.9	23.9	---
Base Number (BN)	mg KOH/g	ASTM D2896*	9.5	4.72	6.57	---
Visc @ 100°C	cSt	ASTM D7279(m)	11.8	10.8	9.2	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0766405 **Received** : 22 Apr 2024
Lab Number : 02630538 **Tested** : 24 Apr 2024
Unique Number : 5763670 **Diagnosed** : 24 Apr 2024 - Kevin Marson
Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel)

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.

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