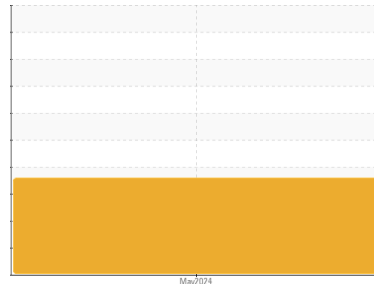




OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id
INTERNATIONAL 551

Component
Diesel Engine

Fluid
PETRO CANADA DURON HP 15W40 (--- GAL)

DIAGNOSIS

▲ Recommendation

We advise that you check the fuel injection system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

▲ Wear

Aluminum ppm levels are abnormal. Piston wear is indicated.

▲ Contamination

There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

▲ Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0906250	---	---
Sample Date	Client Info		31 May 2024	---	---
Machine Age	mls	Client Info	0	---	---
Oil Age	mls	Client Info	0	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			SEVERE	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	---	---
Glycol	WC Method		NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	36	---
Chromium	ppm	ASTM D5185m	>20	1	---
Nickel	ppm	ASTM D5185m	>4	1	---
Titanium	ppm	ASTM D5185m		0	---
Silver	ppm	ASTM D5185m	>3	0	---
Aluminum	ppm	ASTM D5185m	>20	▲ 26	---
Lead	ppm	ASTM D5185m	>40	5	---
Copper	ppm	ASTM D5185m	>330	2	---
Tin	ppm	ASTM D5185m	>15	0	---
Vanadium	ppm	ASTM D5185m		0	---
Cadmium	ppm	ASTM D5185m		2	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		5	---
Barium	ppm	ASTM D5185m		0	---
Molybdenum	ppm	ASTM D5185m		53	---
Manganese	ppm	ASTM D5185m		1	---
Magnesium	ppm	ASTM D5185m		770	---
Calcium	ppm	ASTM D5185m		924	---
Phosphorus	ppm	ASTM D5185m		822	---
Zinc	ppm	ASTM D5185m		1001	---
Sulfur	ppm	ASTM D5185m		2674	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	4	---
Sodium	ppm	ASTM D5185m		6	---
Potassium	ppm	ASTM D5185m	>20	4	---
Fuel	%	ASTM D3524	>2.0	▲ 14.3	---

INFRA-RED

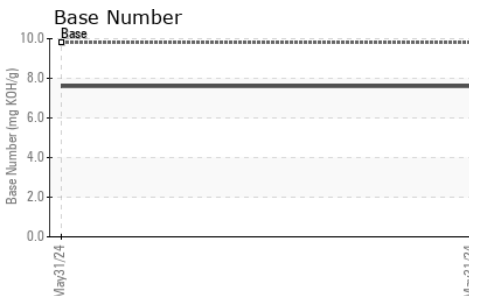
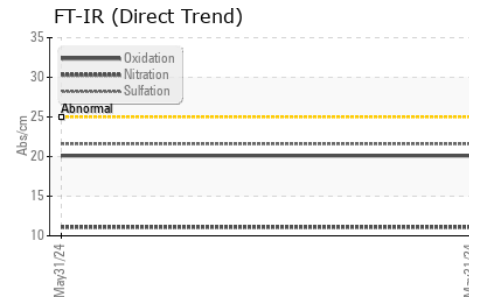
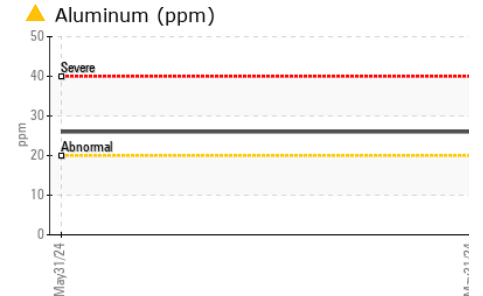
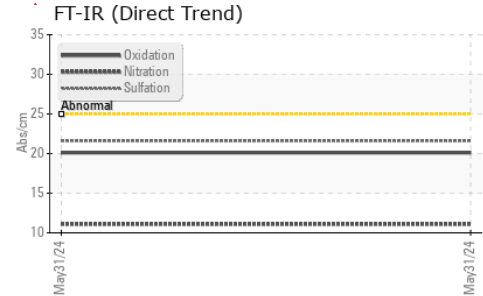
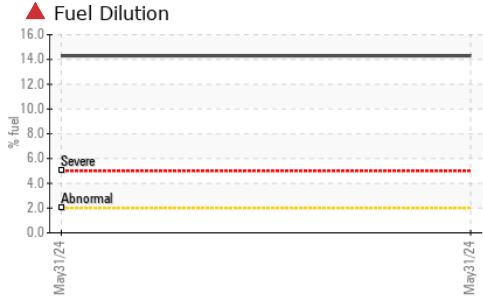
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	1	---
Nitration	Abs/cm	*ASTM D7624	>20	11.1	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.6	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.1	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	7.6	---



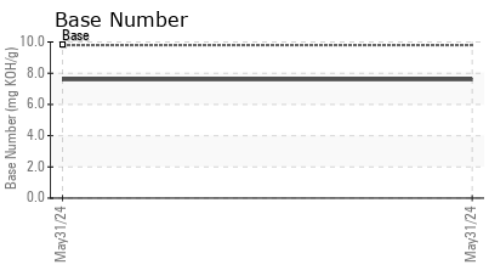
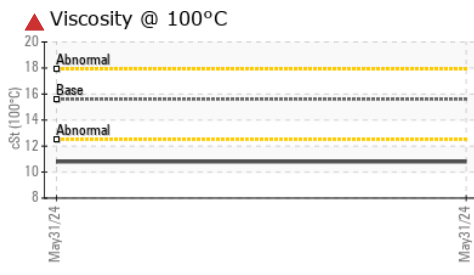
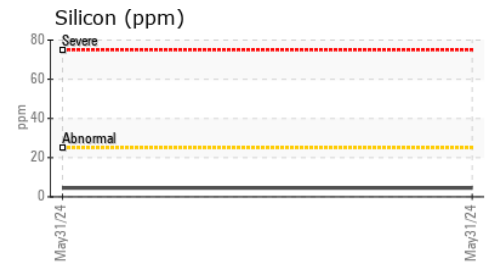
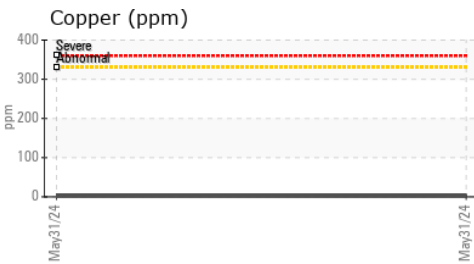
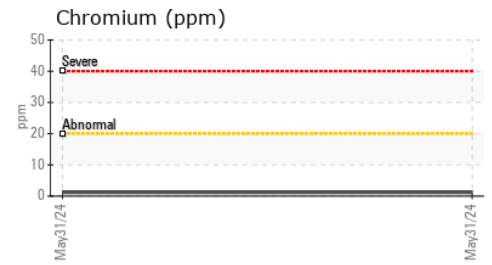
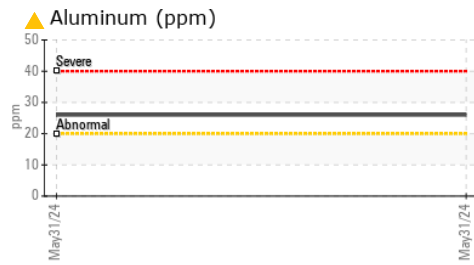
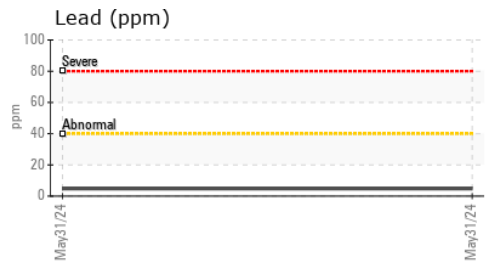
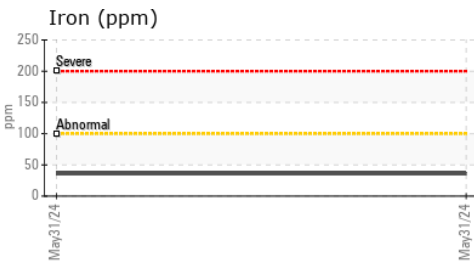
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---
Free Water	scalar	*Visual		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.6 ▲ 10.8	---	---

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0906250 **Received** : 13 Jun 2024
Lab Number : 06209509 **Tested** : 19 Jun 2024
Unique Number : 11076970 **Diagnosed** : 19 Jun 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, TBN)

WAYNE CO SCHOOL BUS GARAGE
 1603 SALEM CHURCH RD
 GOLDSBORO, NC
 US 27530
 Contact: BRANDON BRIGGS
 brandonbriggs@wcps.org

To discuss this sample report, contact Customer Service at 1-800-237-1369.
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)