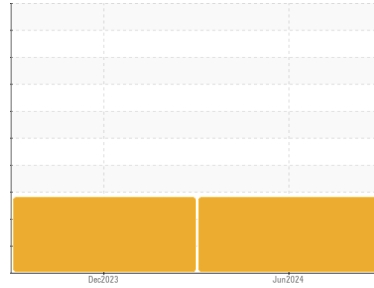




OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



Machine Id
INTERNATIONAL 465

Component
Diesel Engine

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

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Elemental level of silicon (Si) above normal indicating ingress of seal material. Light fuel dilution occurring.

Fluid Condition

Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0905896	WC0868027	---
Sample Date	Client Info		06 Jun 2024	18 Dec 2023	---
Machine Age	mls	Client Info	159304	154278	---
Oil Age	mls	Client Info	5000	5000	---
Oil Changed	Client Info		Changed	N/A	---
Sample Status			ABNORMAL	ABNORMAL	---

CONTAMINATION

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

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>100	26	27	---
Chromium	ppm	ASTM D5185m	>20	<1	<1	---
Nickel	ppm	ASTM D5185m	>4	1	<1	---
Titanium	ppm	ASTM D5185m		0	<1	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	5	4	---
Lead	ppm	ASTM D5185m	>40	6	13	---
Copper	ppm	ASTM D5185m	>330	14	57	---
Tin	ppm	ASTM D5185m	>15	2	8	---
Vanadium	ppm	ASTM D5185m		0	0	---
Cadmium	ppm	ASTM D5185m		2	0	---

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		19	103	---
Barium	ppm	ASTM D5185m		0	11	---
Molybdenum	ppm	ASTM D5185m		58	48	---
Manganese	ppm	ASTM D5185m		2	2	---
Magnesium	ppm	ASTM D5185m		822	396	---
Calcium	ppm	ASTM D5185m		1160	1469	---
Phosphorus	ppm	ASTM D5185m		953	997	---
Zinc	ppm	ASTM D5185m		1143	1042	---
Sulfur	ppm	ASTM D5185m		3143	3296	---

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	▲ 33	▲ 96	---
Sodium	ppm	ASTM D5185m		5	2	---
Potassium	ppm	ASTM D5185m	>20	5	10	---
Fuel	%	ASTM D3524	>5	▲ 3.6	▲ 3.8	---

INFRA-RED

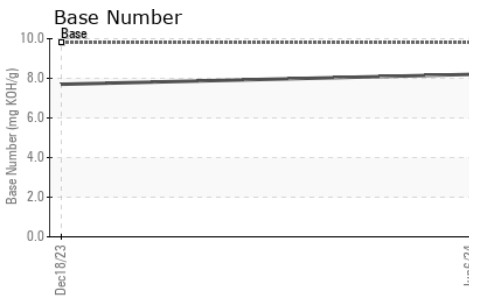
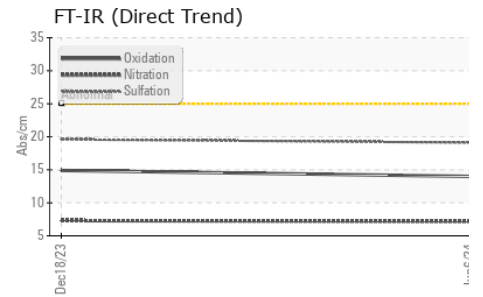
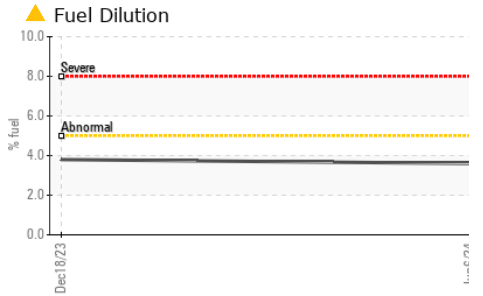
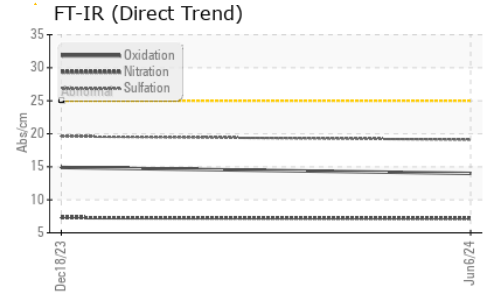
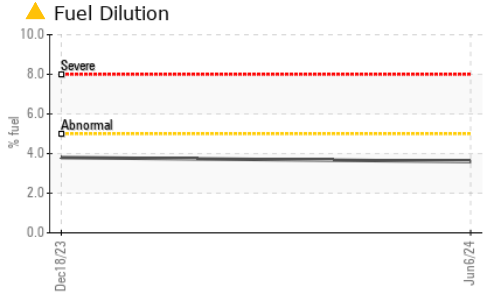
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	0.4	0.3	---
Nitration	Abs/cm	*ASTM D7624	>20	7.2	7.3	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.1	19.6	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.0	14.9	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.2	7.7	---



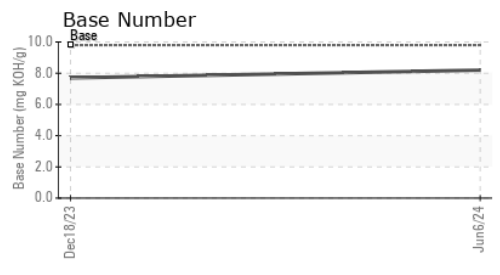
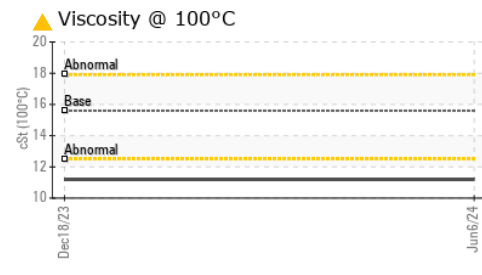
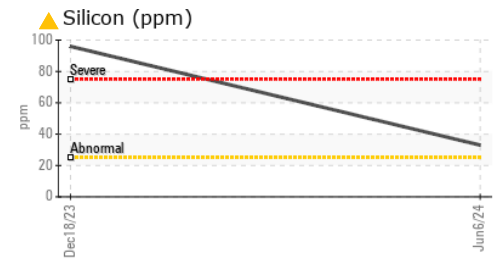
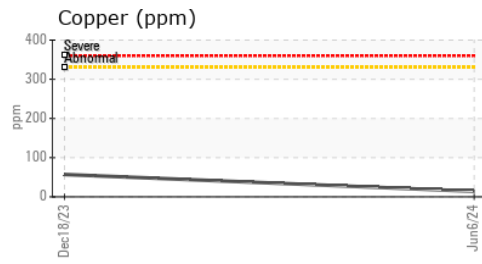
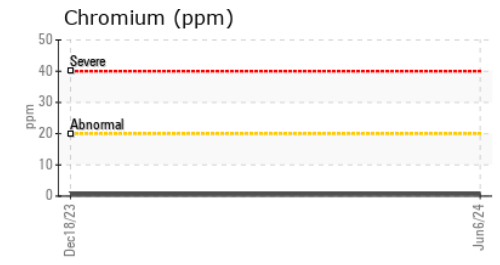
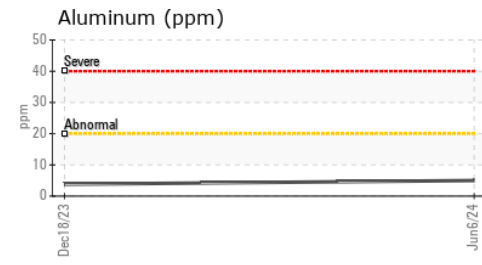
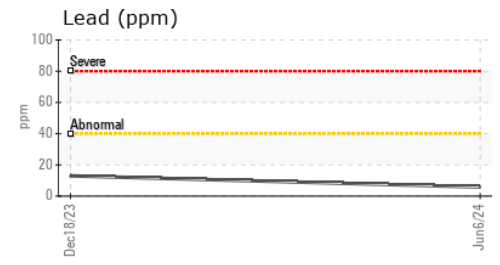
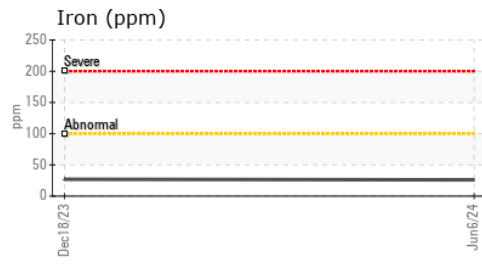
OIL ANALYSIS REPORT



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	▲ 11.2	▲ 11.2

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0905896 **Received** : 13 Jun 2024
Lab Number : 06209508 **Tested** : 19 Jun 2024
Unique Number : 11076969 **Diagnosed** : 19 Jun 2024 - Jonathan Hester
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)