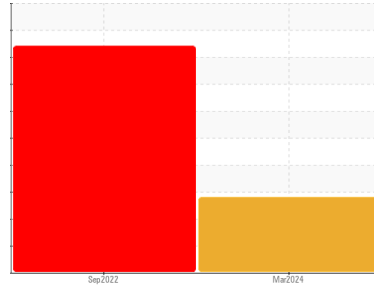




OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

152

Component

Diesel Engine

Fluid

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

DIAGNOSIS

▲ Recommendation

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

▲ Contamination

Sodium and/or potassium levels are high. Elemental level of silicon (Si) above normal indicating ingress of seal material. Test for glycol is negative.

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.

SAMPLE INFORMATION

method	limit/base	current	history1	history2	
Sample Number	Client Info	WC0906260	WC0727418	---	
Sample Date	Client Info	22 Mar 2024	26 Sep 2022	---	
Machine Age	mls	Client Info	70189	0	---
Oil Age	mls	Client Info	0	0	---
Oil Changed	Client Info	Not Chngd	Not Chngd	---	
Sample Status		ABNORMAL	SEVERE	---	

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<1.0	<1.0	---
Water	WC Method >0.2	NEG	NEG	---

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	33	▲ 262	---
Chromium	ppm ASTM D5185m >20	1	8	---
Nickel	ppm ASTM D5185m >4	<1	2	---
Titanium	ppm ASTM D5185m	<1	<1	---
Silver	ppm ASTM D5185m >3	0	0	---
Aluminum	ppm ASTM D5185m >20	4	● 18	---
Lead	ppm ASTM D5185m >40	2	<1	---
Copper	ppm ASTM D5185m >330	22	7	---
Tin	ppm ASTM D5185m >15	<1	<1	---
Vanadium	ppm ASTM D5185m	0	<1	---
Cadmium	ppm ASTM D5185m	0	0	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	26	6	---
Barium	ppm ASTM D5185m	<1	0	---
Molybdenum	ppm ASTM D5185m	64	66	---
Manganese	ppm ASTM D5185m	1	2	---
Magnesium	ppm ASTM D5185m	911	949	---
Calcium	ppm ASTM D5185m	1111	1191	---
Phosphorus	ppm ASTM D5185m	863	1011	---
Zinc	ppm ASTM D5185m	1129	1265	---
Sulfur	ppm ASTM D5185m	3275	3509	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	▲ 118	▲ 51	---
Sodium	ppm ASTM D5185m	13	<1	---
Potassium	ppm ASTM D5185m >20	▲ 55	24	---
Glycol	% *ASTM D2982	NEG	NEG	---

INFRA-RED

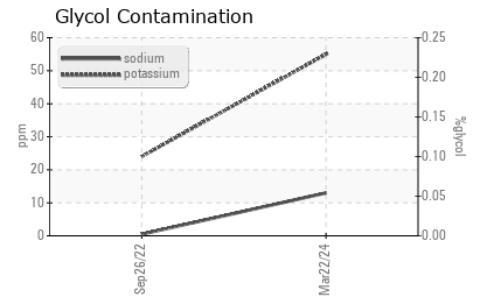
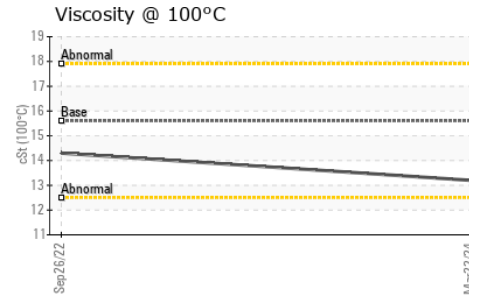
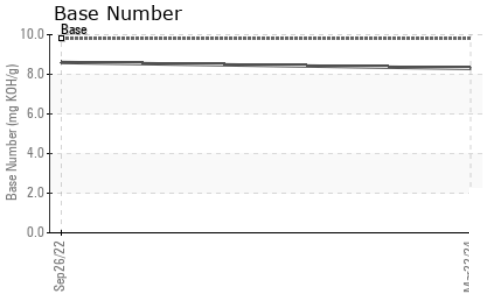
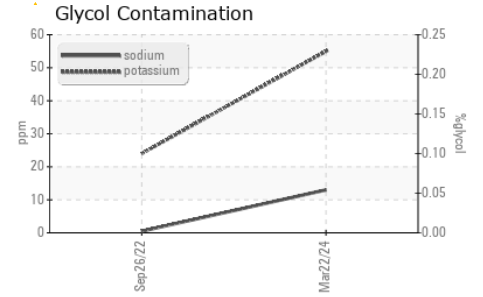
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	0.4	2.2	---
Nitration	Abs/cm *ASTM D7624 >20	7.6	13.0	---
Sulfation	Abs/.1mm *ASTM D7415 >30	19.6	25.3	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	15.1	20.2	---
Base Number (BN)	mg KOH/g ASTM D2896 9.8	8.3	8.6	---



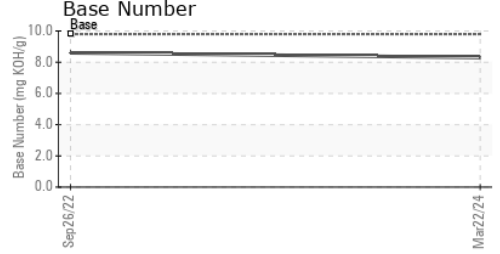
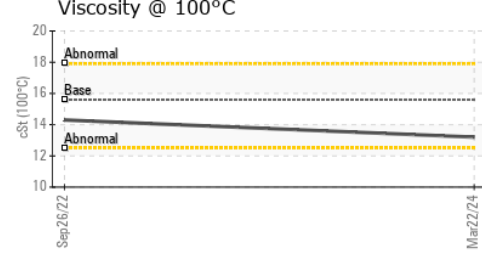
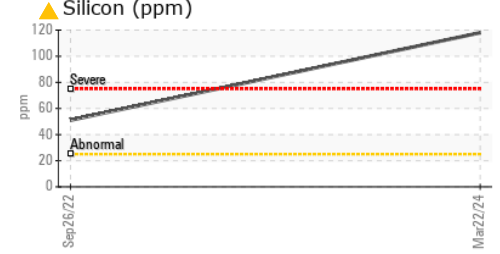
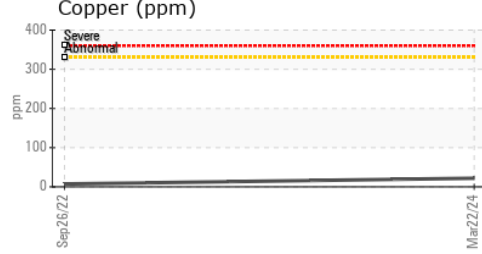
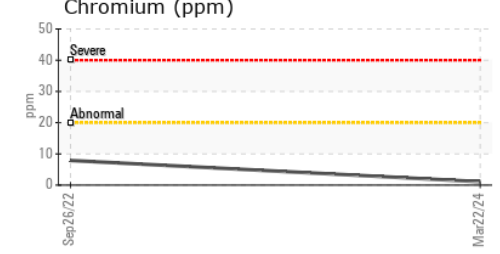
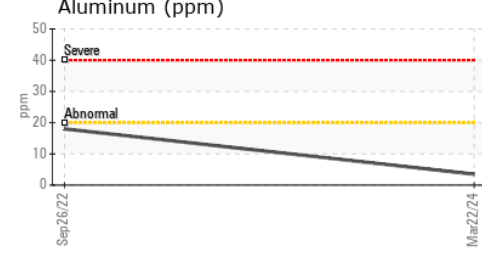
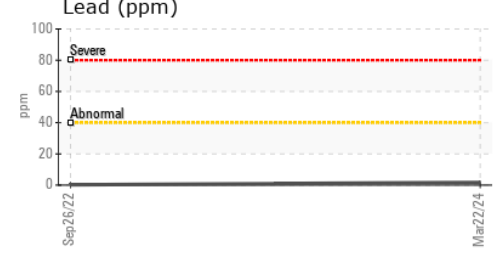
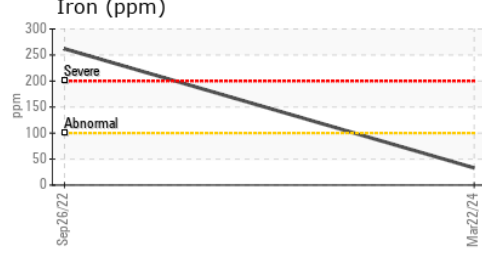
OIL ANALYSIS REPORT



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	13.2	14.3

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0906260 **Received** : 28 Mar 2024
Lab Number : 06132665 **Tested** : 03 Apr 2024
Unique Number : 10952130 **Diagnosed** : 03 Apr 2024 - Jonathan Hester
Test Package : MOB 1 (Additional Tests: Glycol, TBN)

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

Certificate L2367
 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)