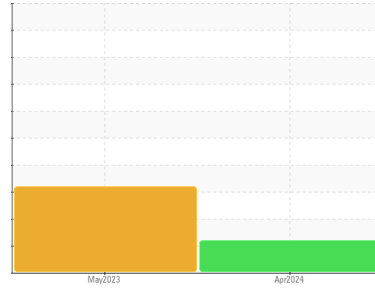




OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Machine Id

23

Component

Diesel Engine

Fluid

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

DIAGNOSIS

Recommendation

We advise that you check for possible coolant leak. Check for low coolant level. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Sodium and/or potassium levels are high. Fuel content negligible.

Fluid Condition

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		WC0867978	WC0740599	---
Sample Date	Client Info		08 Apr 2024	30 May 2023	---
Machine Age	mls	Client Info	155000	144520	---
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
Water	WC Method	>0.2	NEG	NEG	---

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>100	34	67	---
Chromium	ppm	ASTM D5185m	>20	3	4	---
Nickel	ppm	ASTM D5185m	>4	2	<1	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m	>3	<1	0	---
Aluminum	ppm	ASTM D5185m	>20	4	5	---
Lead	ppm	ASTM D5185m	>40	2	3	---
Copper	ppm	ASTM D5185m	>330	2	2	---
Tin	ppm	ASTM D5185m	>15	1	<1	---
Vanadium	ppm	ASTM D5185m		<1	<1	---
Cadmium	ppm	ASTM D5185m		1	0	---

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		8	2	---
Barium	ppm	ASTM D5185m		0	2	---
Molybdenum	ppm	ASTM D5185m		69	51	---
Manganese	ppm	ASTM D5185m		1	<1	---
Magnesium	ppm	ASTM D5185m		860	744	---
Calcium	ppm	ASTM D5185m		1215	921	---
Phosphorus	ppm	ASTM D5185m		1166	812	---
Zinc	ppm	ASTM D5185m		1281	1040	---
Sulfur	ppm	ASTM D5185m		3761	2483	---

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	6	13	---
Sodium	ppm	ASTM D5185m		9	2	---
Potassium	ppm	ASTM D5185m	>20	117	8	---
Fuel	%	ASTM D3524	>5	1.0	▲ 16.4	---
Glycol	%	*ASTM D2982		NEG	NEG	---

INFRA-RED

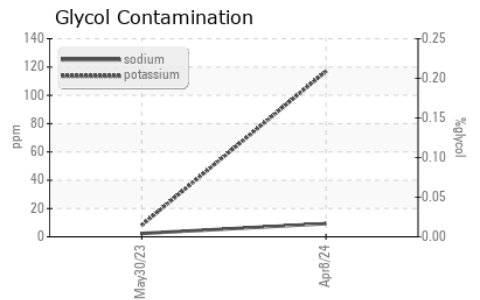
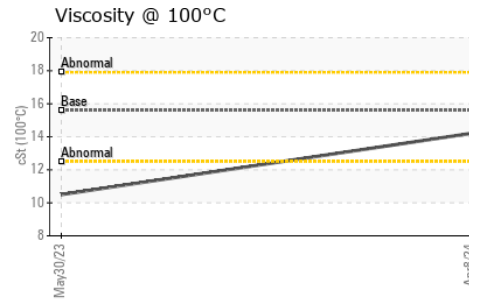
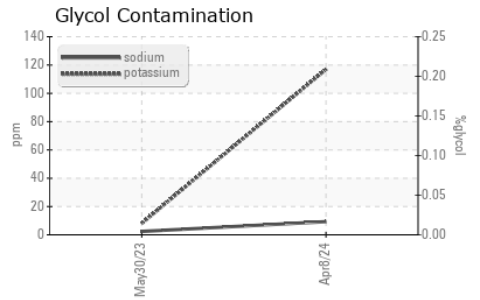
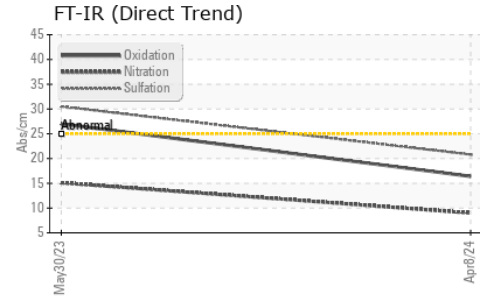
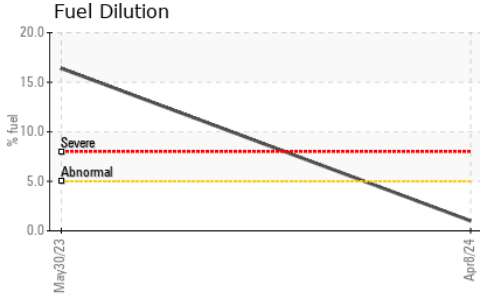
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	1.1	▲ 3.4	---
Nitration	Abs/cm	*ASTM D7624	>20	9.0	15.1	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.8	30.5	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.4	27.0	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.4	6.2	---



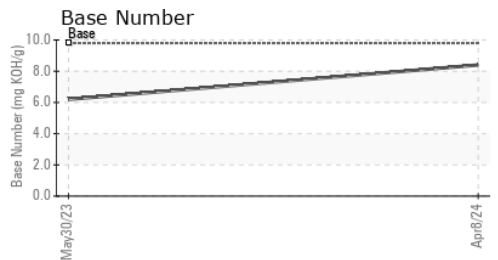
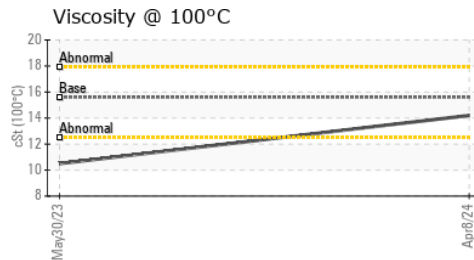
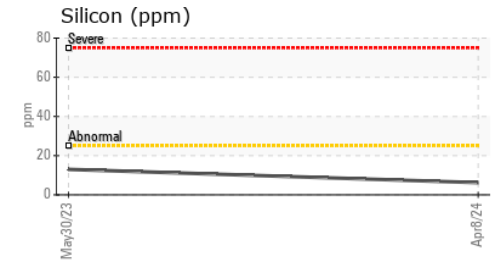
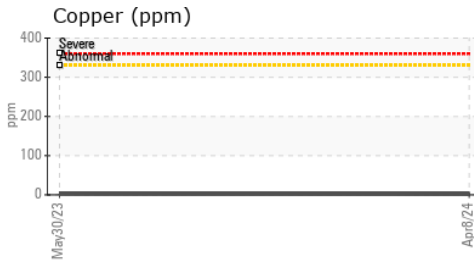
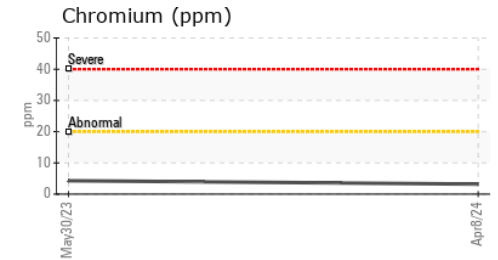
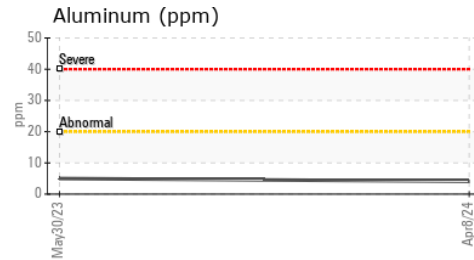
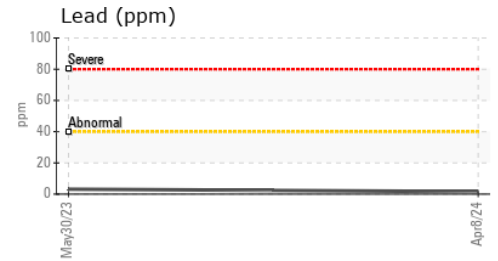
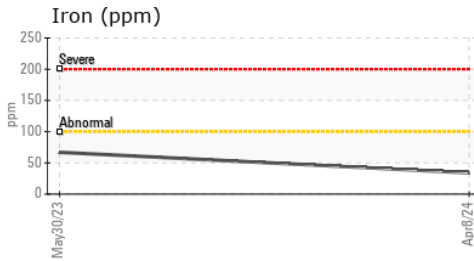
OIL ANALYSIS REPORT



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	NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.6	14.2	▲ 10.5

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : WC0867978

Lab Number : 06152521

Unique Number : 10982599

Test Package : MOB 1 (Additional Tests: Glycol, PercentFuel, TBN)

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)

Received : 17 Apr 2024

Tested : 23 Apr 2024

Diagnosed : 23 Apr 2024 - Jonathan Hester

ANSON CO SCHOOL BUS GARAGE

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WADESBORO, NC

US 28135

Contact: MATT POWELL

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