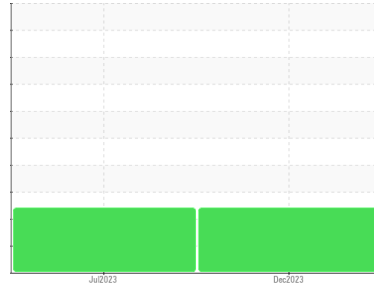




OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id
INTERNATIONAL 557

Component
Diesel Engine

Fluid
PETRO CANADA DURON-E XL 15W40 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check the fuel injection system. 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

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

Fluid Condition

Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0878893	WC0792788	---
Sample Date	Client Info		14 Dec 2023	27 Jul 2023	---
Machine Age	mls	Client Info	114606	112280	---
Oil Age	mls	Client Info	5000	0	---
Oil Changed	Client Info		Changed	Not Changd	---
Sample Status			SEVERE	SEVERE	---

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	46	20	---
Chromium	ppm	ASTM D5185m >20	1	<1	---
Nickel	ppm	ASTM D5185m >4	<1	0	---
Titanium	ppm	ASTM D5185m	0	0	---
Silver	ppm	ASTM D5185m >3	0	0	---
Aluminum	ppm	ASTM D5185m >20	10	8	---
Lead	ppm	ASTM D5185m >40	8	<1	---
Copper	ppm	ASTM D5185m >330	2	1	---
Tin	ppm	ASTM D5185m >15	2	<1	---
Vanadium	ppm	ASTM D5185m	0	0	---
Cadmium	ppm	ASTM D5185m	0	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 1	7	13	---
Barium	ppm	ASTM D5185m 0	0	0	---
Molybdenum	ppm	ASTM D5185m 60	51	56	---
Manganese	ppm	ASTM D5185m 0	<1	<1	---
Magnesium	ppm	ASTM D5185m 1010	774	855	---
Calcium	ppm	ASTM D5185m 1070	841	988	---
Phosphorus	ppm	ASTM D5185m 1150	849	914	---
Zinc	ppm	ASTM D5185m 1270	1011	1121	---
Sulfur	ppm	ASTM D5185m 2060	2387	3165	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	5	3	---
Sodium	ppm	ASTM D5185m	2	<1	---
Potassium	ppm	ASTM D5185m >20	2	0	---
Fuel	%	ASTM D3524 >5	14.3	12.6	---

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	1.1	0.7	---
Nitration	Abs/cm	*ASTM D7624 >20	13.1	10.3	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	24.8	21.3	---

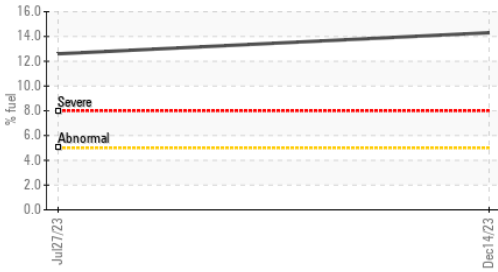
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	27.2	20.1	---
Base Number (BN)	mg KOH/g	ASTM D2896 10.0	5.7	7.7	---

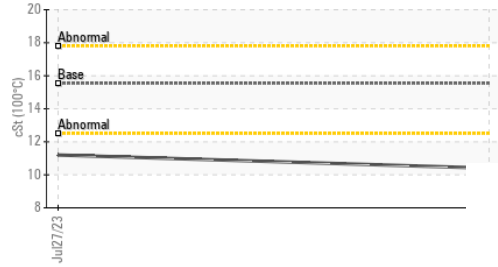


OIL ANALYSIS REPORT

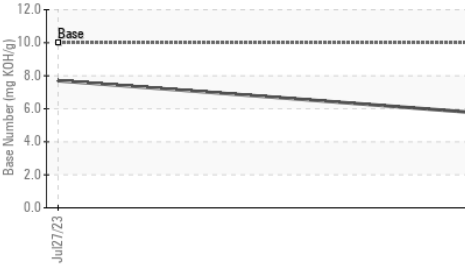
Fuel Dilution



Viscosity @ 100°C



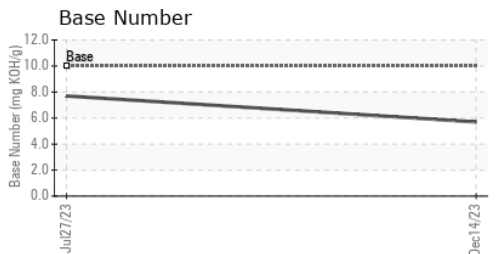
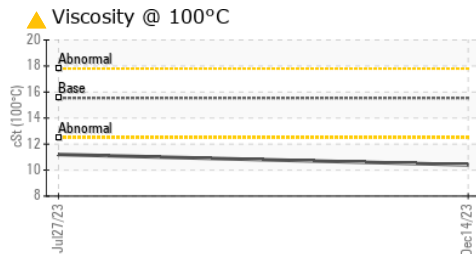
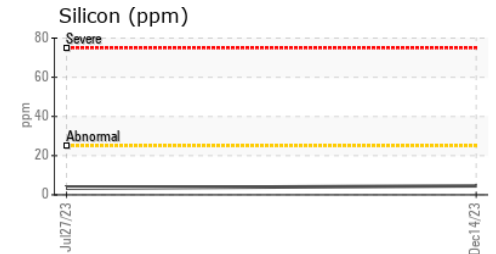
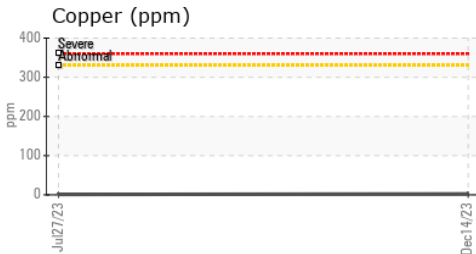
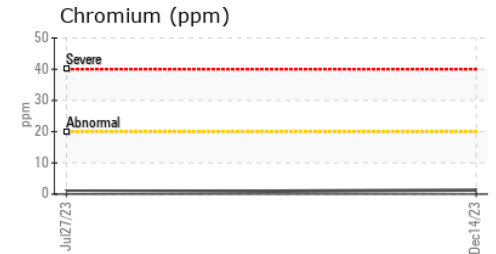
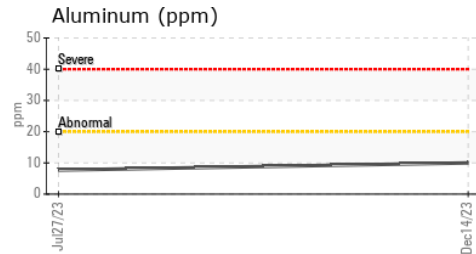
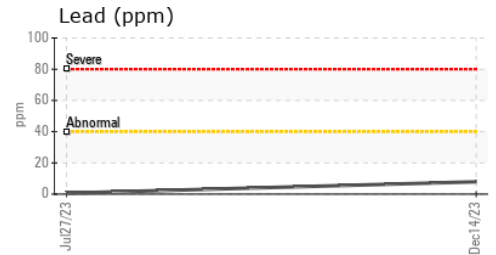
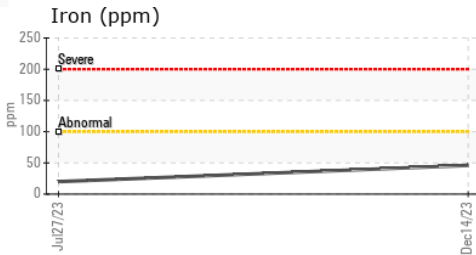
Base Number



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	▲ 10.4	▲ 11.2	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0878893 **Recieved** : 17 Jan 2024
Lab Number : 06063419 **Diagnosed** : 19 Jan 2024
Unique Number : 10834801 **Diagnostician** : Don Baldrige
Test Package : MOB 1 (Additional Tests: 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)

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F: