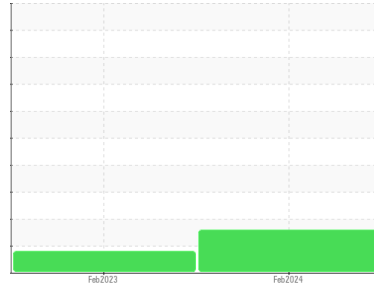




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id

542

Component

Diesel Engine

Fluid

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

DIAGNOSIS

▲ Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

▲ Wear

Piston, ring and cylinder wear is indicated.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0906009	WC0727361	---
Sample Date	Client Info		06 Feb 2024	13 Feb 2023	---
Machine Age	mls	Client Info	124191	114633	---
Oil Age	mls	Client Info	0	0	---
Oil Changed	Client Info		N/A	Changed	---
Sample Status			ABNORMAL	ABNORMAL	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	---
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	▲ 114	55	---
Chromium	ppm	ASTM D5185m >20	3	2	---
Nickel	ppm	ASTM D5185m >4	2	1	---
Titanium	ppm	ASTM D5185m	0	0	---
Silver	ppm	ASTM D5185m >3	0	0	---
Aluminum	ppm	ASTM D5185m >20	▲ 42	▲ 34	---
Lead	ppm	ASTM D5185m >40	2	1	---
Copper	ppm	ASTM D5185m >330	3	2	---
Tin	ppm	ASTM D5185m >15	0	<1	---
Vanadium	ppm	ASTM D5185m	0	0	---
Cadmium	ppm	ASTM D5185m	0	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	6	7	---
Barium	ppm	ASTM D5185m	0	0	---
Molybdenum	ppm	ASTM D5185m	61	65	---
Manganese	ppm	ASTM D5185m	1	<1	---
Magnesium	ppm	ASTM D5185m	822	786	---
Calcium	ppm	ASTM D5185m	990	1123	---
Phosphorus	ppm	ASTM D5185m	823	978	---
Zinc	ppm	ASTM D5185m	1066	1155	---
Sulfur	ppm	ASTM D5185m	2908	2933	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	6	6	---
Sodium	ppm	ASTM D5185m	4	3	---
Potassium	ppm	ASTM D5185m >20	0	3	---

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	1.7	1.1	---
Nitration	Abs/cm	*ASTM D7624 >20	15.7	11.7	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	26.6	21.7	---

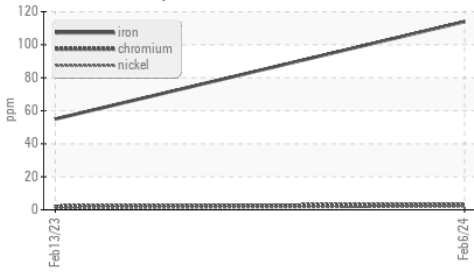
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	27.3	19.4	---
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	6.1	7.4	---

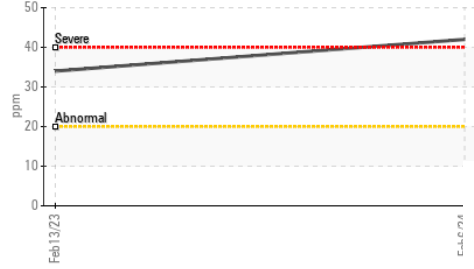


OIL ANALYSIS REPORT

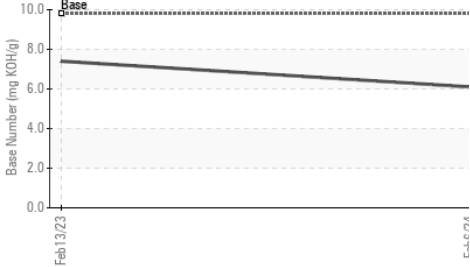
▲ Ferrous Alloys



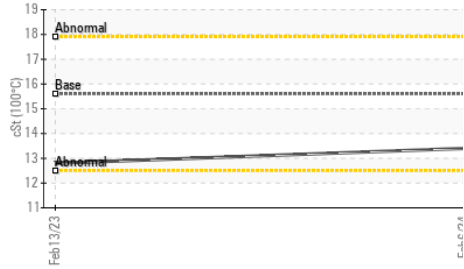
▲ Aluminum (ppm)



Base Number



Viscosity @ 100°C

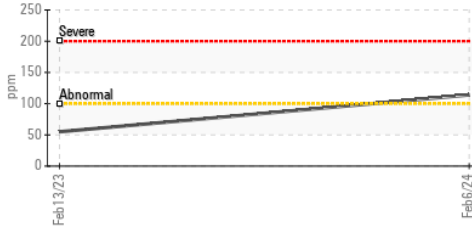


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

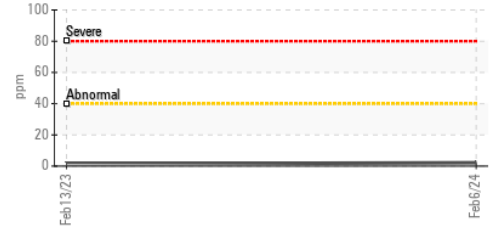
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.6	13.4	12.8

GRAPHS

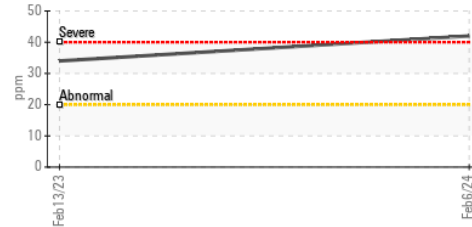
▲ Iron (ppm)



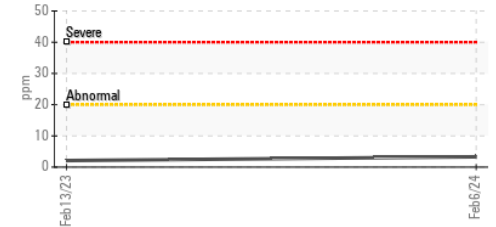
Lead (ppm)



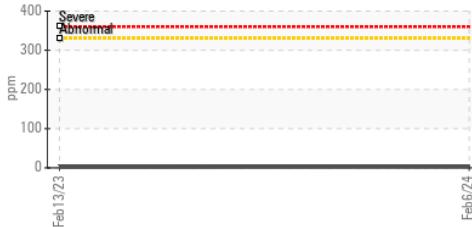
▲ Aluminum (ppm)



Chromium (ppm)



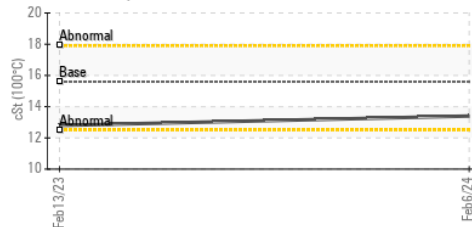
▲ Copper (ppm)



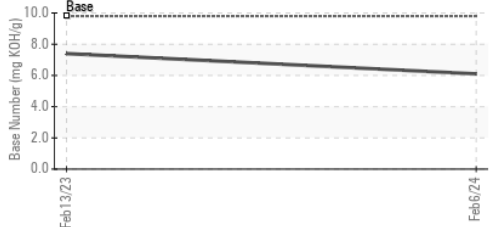
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0906009 **Received** : 28 Mar 2024
Lab Number : 06132658 **Tested** : 01 Apr 2024
Unique Number : 10952123 **Diagnosed** : 02 Apr 2024 - Sean Felton
Test Package : MOB 1 (Additional Tests: 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)

T:
F: