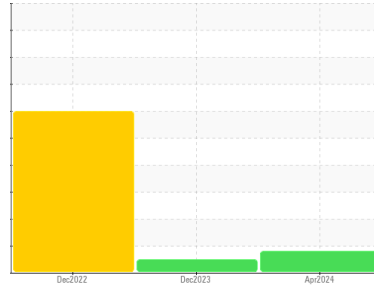




# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Machine Id  
**INTERNATIONAL 550**

Component  
**Diesel Engine**

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

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

### Wear

The aluminum level is abnormal. All other component wear rates are normal.

### 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 suitable for further service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0878888</b>	WC0727302	WC0727341
Sample Date	Client Info		<b>04 Apr 2024</b>	21 Dec 2023	07 Dec 2022
Machine Age	mls	Client Info	<b>143985</b>	139842	125106
Oil Age	mls	Client Info	<b>5000</b>	5000	0
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>ABNORMAL</b>	NORMAL	SEVERE

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	0.7	▲ 11.2
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>23</b>	15	▲ 157
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	3
Nickel	ppm	ASTM D5185m >4	<b>1</b>	0	2
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	▲ <b>30</b>	9	▲ 45
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	<1	2
Copper	ppm	ASTM D5185m >330	<b>0</b>	<1	2
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>12</b>	12	6
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>62</b>	58	53
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m	<b>938</b>	879	711
Calcium	ppm	ASTM D5185m	<b>1054</b>	1054	872
Phosphorus	ppm	ASTM D5185m	<b>1064</b>	1044	780
Zinc	ppm	ASTM D5185m	<b>1248</b>	1179	971
Sulfur	ppm	ASTM D5185m	<b>3603</b>	3135	2821

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>5</b>	3	7
Sodium	ppm	ASTM D5185m	<b>1</b>	<1	1
Potassium	ppm	ASTM D5185m >20	<b>5</b>	<1	2

## INFRA-RED

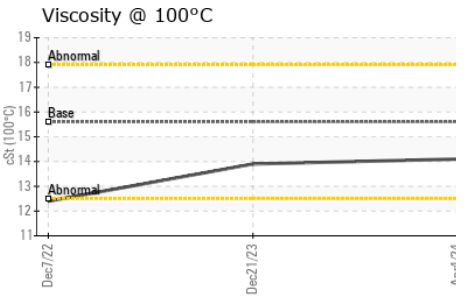
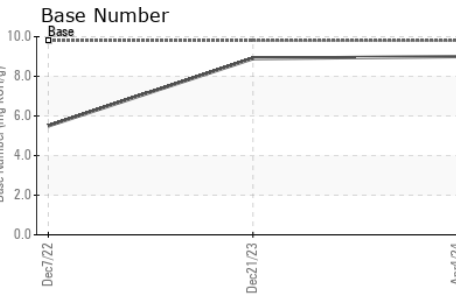
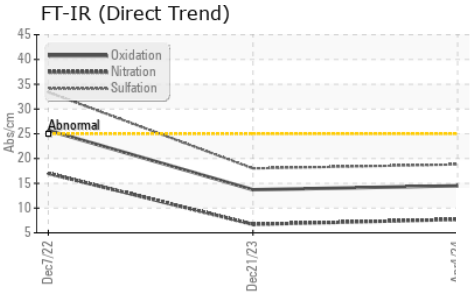
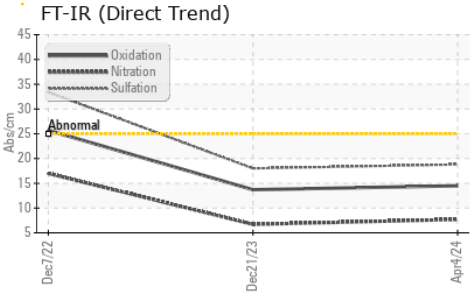
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.6</b>	0.3	▲ 5.4
Nitration	Abs/cm	*ASTM D7624 >20	<b>7.7</b>	6.7	17.0
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>18.8</b>	18.0	33.4

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>14.5</b>	13.7	25.7
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>9.0</b>	8.9	5.5



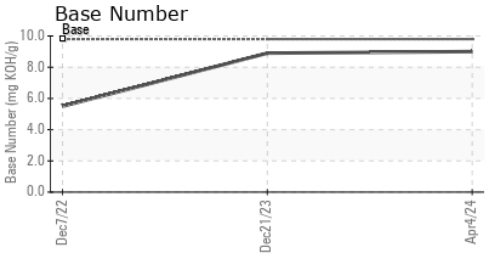
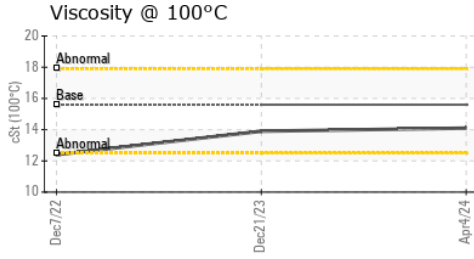
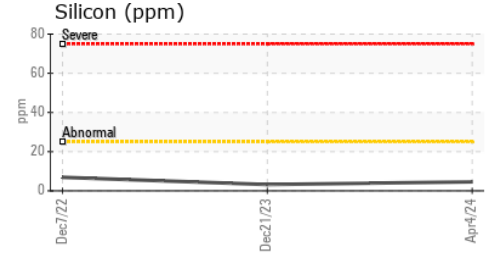
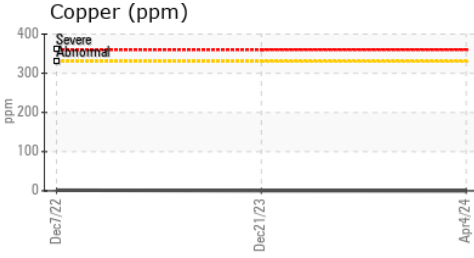
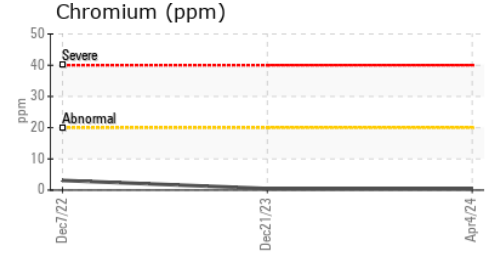
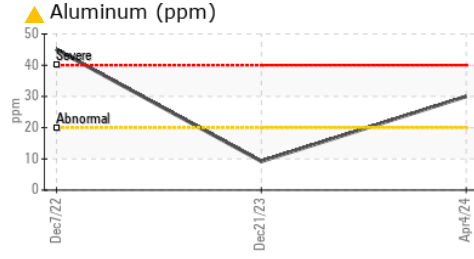
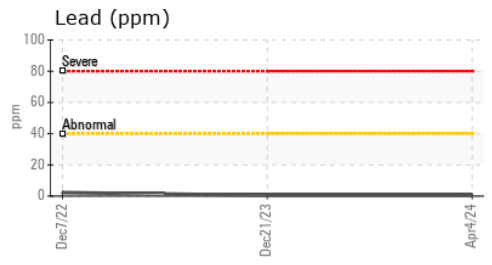
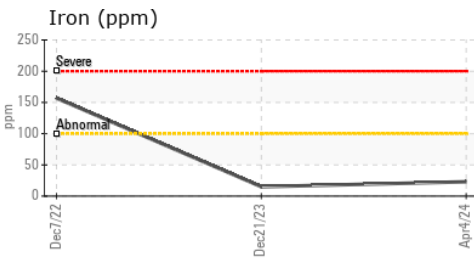
# OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.6	14.1	13.9 ▲ 12.4

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0878888      **Received** : 10 Apr 2024  
**Lab Number** : 06145174      **Tested** : 11 Apr 2024  
**Unique Number** : 10969982      **Diagnosed** : 13 Apr 2024 - Don Baldrige  
**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)