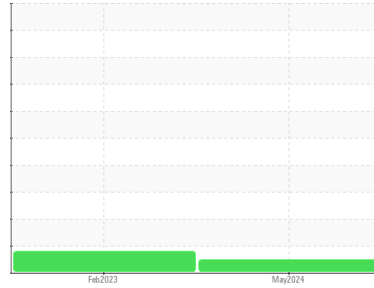




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id

**439**

Component

**Diesel Engine**

Fluid

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

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All 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>WC0905975</b>	WC0727262	---
Sample Date	Client Info		<b>30 May 2024</b>	27 Feb 2023	---
Machine Age	mls	Client Info	<b>249256</b>	237065	---
Oil Age	mls	Client Info	<b>0</b>	237065	---
Oil Changed	Client Info		<b>Not Changed</b>	Not Changed	---
Sample Status			<b>NORMAL</b>	ABNORMAL	---

### CONTAMINATION

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

### WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>25</b>	32	---
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185m >4	<b>&lt;1</b>	0	---
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	---
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m >20	<b>3</b>	2	---
Lead	ppm	ASTM D5185m >40	<b>1</b>	<1	---
Copper	ppm	ASTM D5185m >330	<b>2</b>	1	---
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	---
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	---
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	---

### ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>8</b>	10	---
Barium	ppm	ASTM D5185m	<b>0</b>	<1	---
Molybdenum	ppm	ASTM D5185m	<b>65</b>	64	---
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m	<b>863</b>	799	---
Calcium	ppm	ASTM D5185m	<b>1188</b>	1304	---
Phosphorus	ppm	ASTM D5185m	<b>977</b>	985	---
Zinc	ppm	ASTM D5185m	<b>1238</b>	1229	---
Sulfur	ppm	ASTM D5185m	<b>3351</b>	3434	---

### CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>4</b>	3	---
Sodium	ppm	ASTM D5185m	<b>2</b>	2	---
Potassium	ppm	ASTM D5185m >20	<b>8</b>	0	---

### INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>2.2</b>	▲ 3.2	---
Nitration	Abs/cm	*ASTM D7624 >20	<b>8.1</b>	10.7	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>21.1</b>	24.5	---

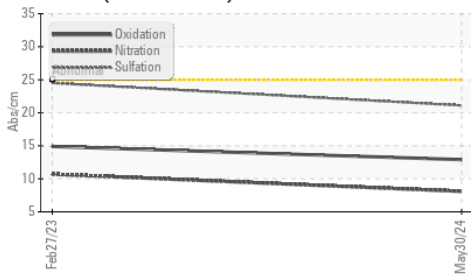
### FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>12.9</b>	14.9	---
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>9.4</b>	8.7	---

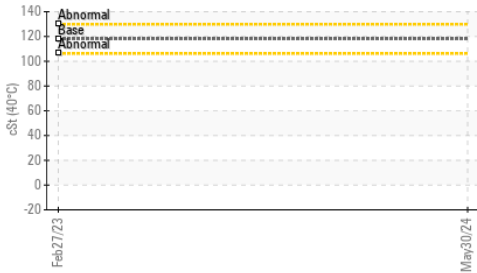


# OIL ANALYSIS REPORT

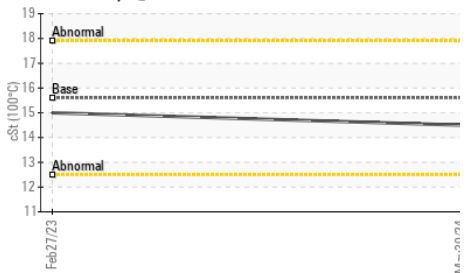
FT-IR (Direct Trend)



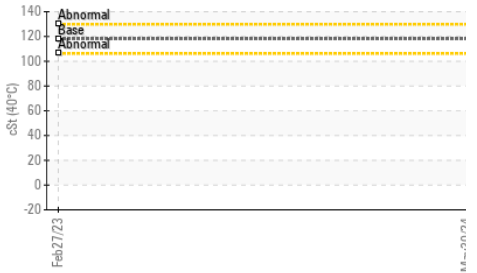
Viscosity @ 40°C



Viscosity @ 100°C



Viscosity @ 40°C



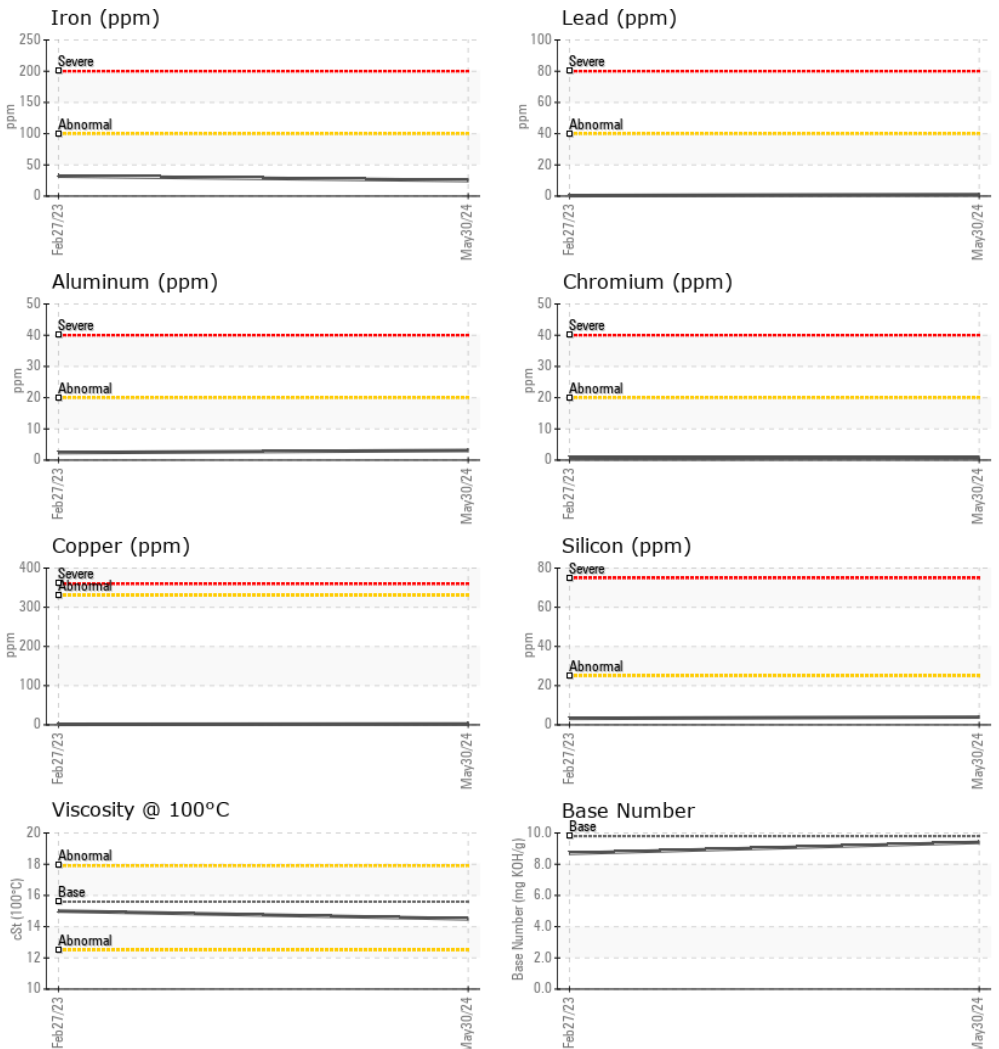
Viscosity @ 100°C



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	14.5	15.0

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0905975 **Received** : 11 Jun 2024  
**Lab Number** : 06207264 **Tested** : 14 Jun 2024  
**Unique Number** : 11074725 **Diagnosed** : 14 Jun 2024 - Sean Felton  
**Test Package** : MOB 1 ( Additional Tests: KV40, 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: