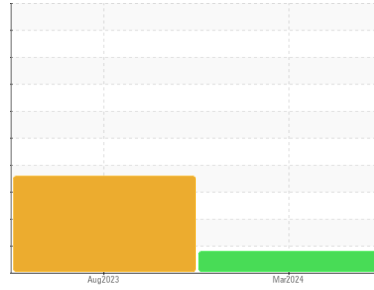




# OIL ANALYSIS REPORT

## Sample Rating Trend



FUEL



Machine Id

## INTERNATIONAL 556

Component

Diesel Engine

Fluid

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

### DIAGNOSIS

#### Recommendation

The oil 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 moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

#### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

### SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0878890</b>	WC0727259	---
Sample Date	Client Info		<b>15 Mar 2024</b>	10 Aug 2023	---
Machine Age	mls	Client Info	<b>169477</b>	156100	---
Oil Age	mls	Client Info	<b>5000</b>	5000	---
Oil Changed	Client Info		<b>Changed</b>	N/A	---
Sample Status			<b>ABNORMAL</b>	SEVERE	---

### CONTAMINATION

	method	limit/base	current	history1	history2
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>21</b>	63	---
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	2	---
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	1	---
Titanium	ppm	ASTM D5185m		<b>0</b>	0	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>20	<b>7</b>	13	---
Lead	ppm	ASTM D5185m	>40	<b>1</b>	9	---
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	4	---
Tin	ppm	ASTM D5185m	>15	<b>2</b>	1	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	---

### ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	1	<b>4</b>	7	---
Barium	ppm	ASTM D5185m	0	<b>0</b>	1	---
Molybdenum	ppm	ASTM D5185m	60	<b>60</b>	51	---
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m	1010	<b>952</b>	617	---
Calcium	ppm	ASTM D5185m	1070	<b>1073</b>	839	---
Phosphorus	ppm	ASTM D5185m	1150	<b>1056</b>	729	---
Zinc	ppm	ASTM D5185m	1270	<b>1262</b>	886	---
Sulfur	ppm	ASTM D5185m	2060	<b>3750</b>	2159	---

### CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	<b>4</b>	18	---
Sodium	ppm	ASTM D5185m		<b>4</b>	7	---
Potassium	ppm	ASTM D5185m	>20	<b>20</b>	▲ 62	---
Fuel	%	ASTM D3524	>5	▲ <b>5.4</b>	▲ 21.5	---

### INFRA-RED

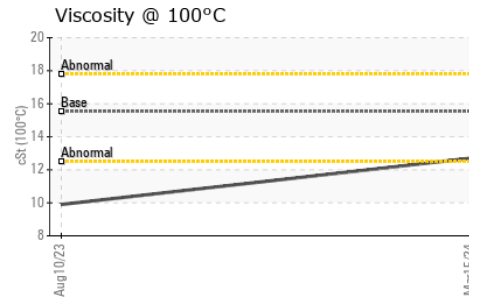
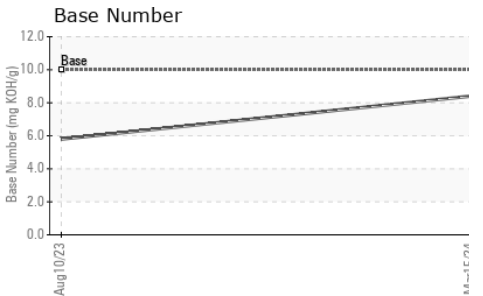
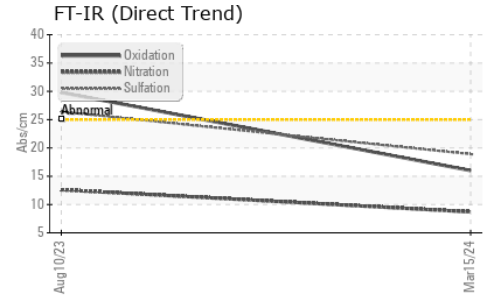
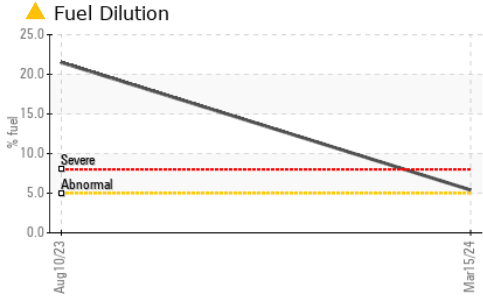
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	<b>0.5</b>	1.4	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.7</b>	12.6	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.9</b>	26.4	---

### FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.0</b>	29.8	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.0	<b>8.4</b>	5.8	---



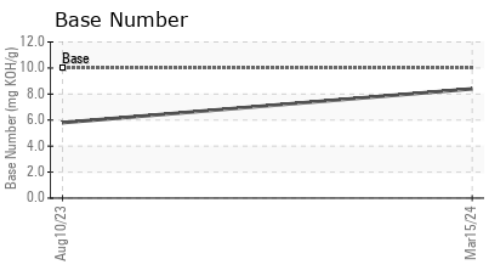
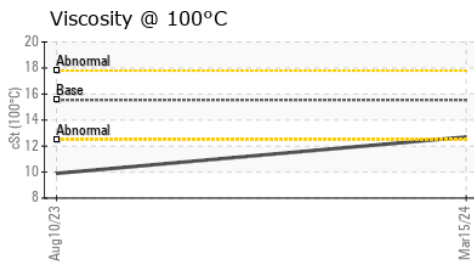
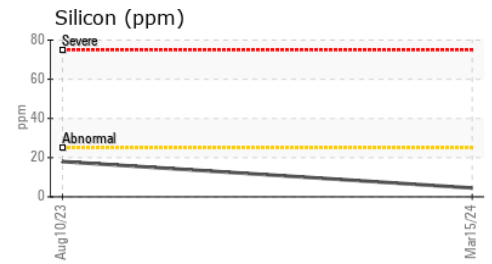
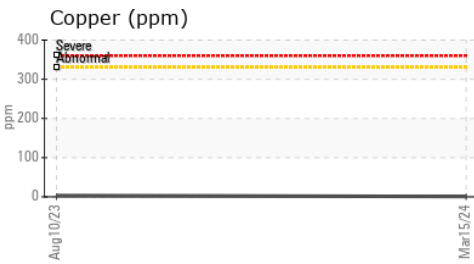
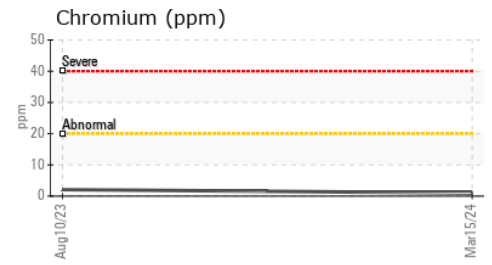
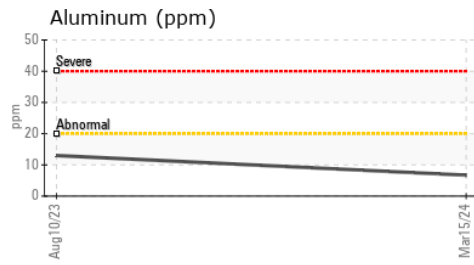
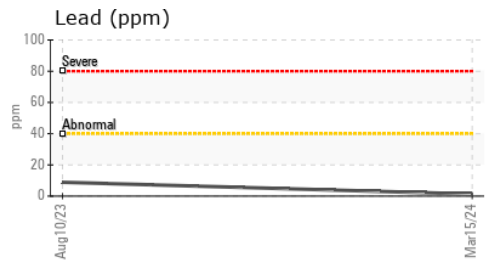
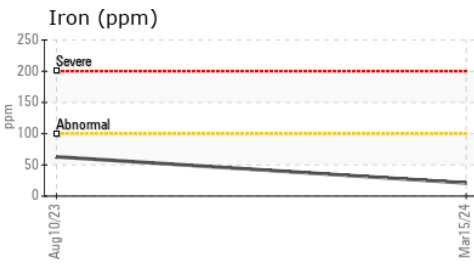
# OIL ANALYSIS REPORT



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	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.54	12.7	▲ 9.9

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0878890      **Received** : 02 Apr 2024  
**Lab Number** : 06136836      **Tested** : 05 Apr 2024  
**Unique Number** : 10956301      **Diagnosed** : 05 Apr 2024 - Wes Davis  
**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)