



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**541**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON HP 15W40 (--- GAL)**

## RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0727304</b>	WC0727393	---
Sample Date		Client Info		<b>10 Apr 2024</b>	14 Feb 2023	---
Machine Age	mls	Client Info		<b>133832</b>	5000	---
Oil Age	mls	Client Info		<b>0</b>	0	---
Filter Age	mls	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>Changed</b>	N/A	---
Filter Changed		Client Info		<b>Changed</b>	Not Changed	---
Sample Status				<b>NORMAL</b>	ABNORMAL	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>26</b>	35	---
Chromium	ppm	ASTM D5185m	>20	<b>2</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>16</b>	14	---
Lead	ppm	ASTM D5185m	>40	<b>2</b>	13	---
Copper	ppm	ASTM D5185m	>330	<b>2</b>	3	---
Tin	ppm	ASTM D5185m	>15	<b>0</b>	1	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

## CONTAMINATION

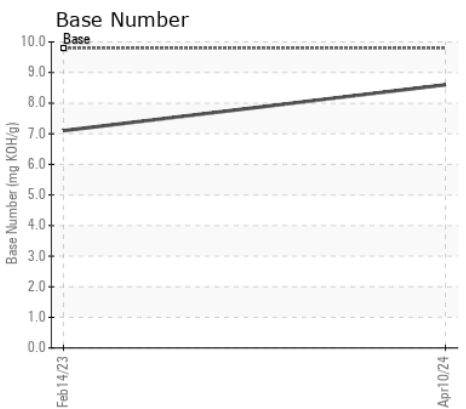
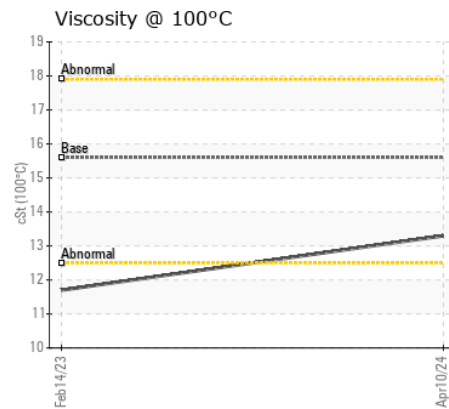
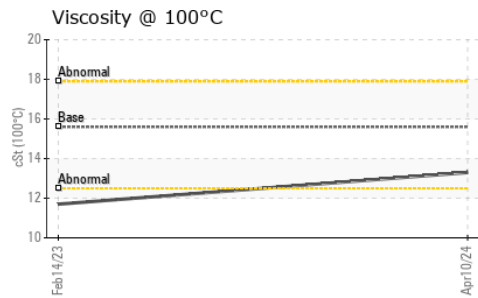
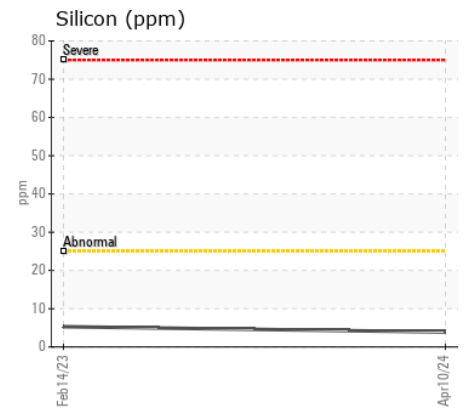
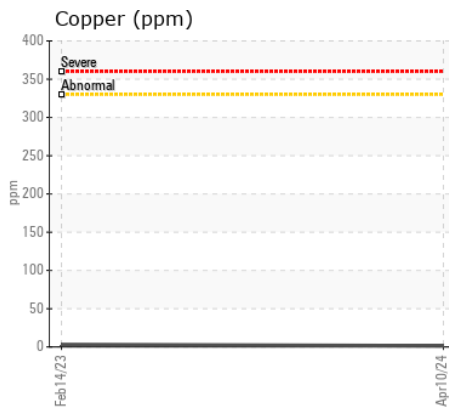
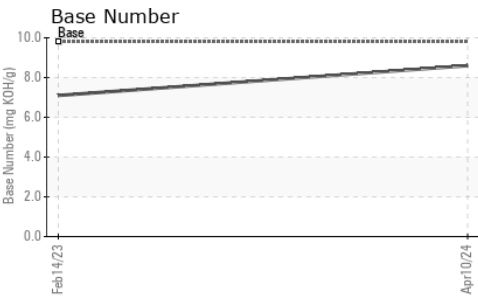
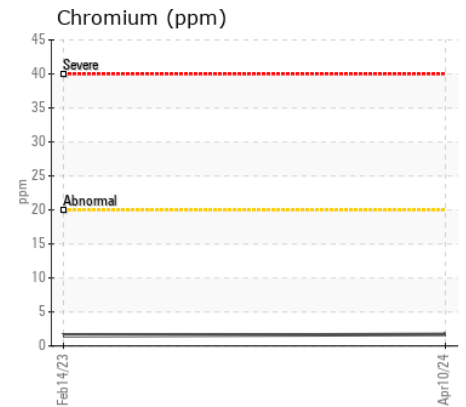
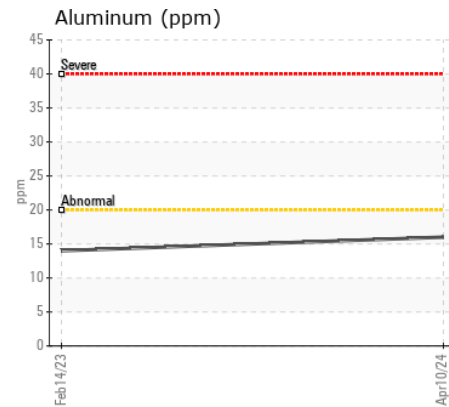
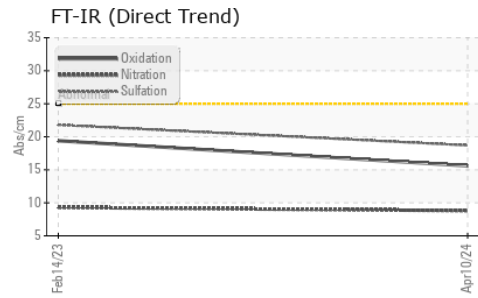
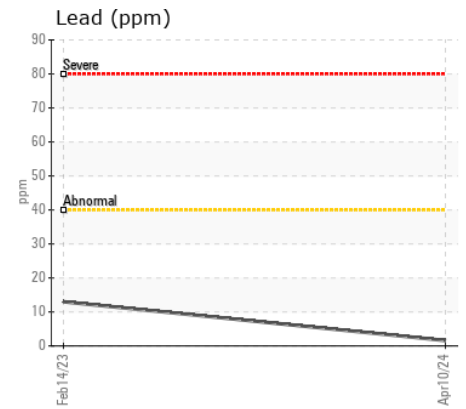
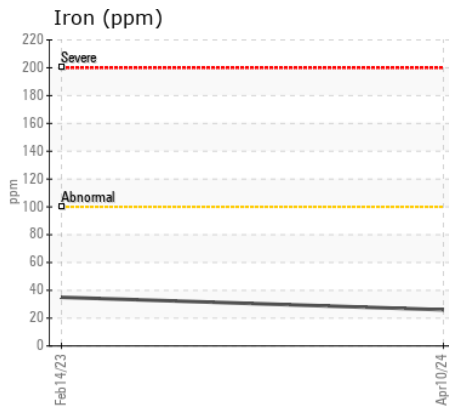
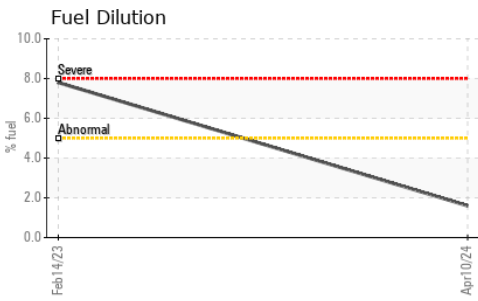
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	5	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	4	---
Fuel	%	ASTM D3524	>5	<b>1.6</b>	▲ 7.8	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	*ASTM D7844	>3	<b>0.4</b>	0.6	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.8</b>	9.3	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.7</b>	21.8	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	---

## 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.

Sodium	ppm	ASTM D5185m		<b>2</b>	<1	---
Boron	ppm	ASTM D5185m		<b>9</b>	149	---
Barium	ppm	ASTM D5185m		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>59</b>	53	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m		<b>874</b>	319	---
Calcium	ppm	ASTM D5185m		<b>1044</b>	1341	---
Phosphorus	ppm	ASTM D5185m		<b>957</b>	854	---
Zinc	ppm	ASTM D5185m		<b>1106</b>	982	---
Sulfur	ppm	ASTM D5185m		<b>3161</b>	2485	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.6</b>	19.4	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.6</b>	7.1	---
Visc @ 100°C	cSt	ASTM D445	15.6	<b>13.3</b>	▲ 11.7	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : WC0727304

Lab Number : 06147988

Unique Number : 10978066

Test Package : MOB 1 ( Additional Tests: PercentFuel, TBN )

Received : 12 Apr 2024

Tested : 17 Apr 2024

Diagnosed : 17 Apr 2024 - Wes Davis

WAYNE CO SCHOOL BUS GARAGE

1603 SALEM CHURCH RD

GOLDSBORO, NC

US 27530

Contact: BRANDON BRIGGS

brandonbriggs@wcps.org

T:

F:

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)