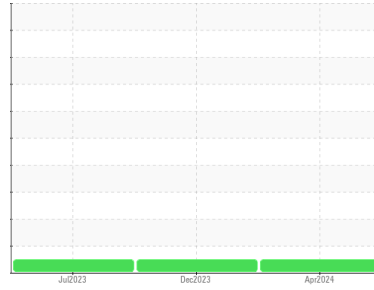




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id

**929057**

Component

**Diesel Engine**

Fluid

**PETRO CANADA DURON SHP 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>GFL0106236</b>	GFL0066982	GFL0066947
Sample Date	Client Info		<b>02 Apr 2024</b>	06 Dec 2023	24 Jul 2023
Machine Age	hrs	Client Info	<b>12672</b>	11792	10798
Oil Age	hrs	Client Info	<b>0</b>	456	0
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
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>5</b>	4	6
Chromium	ppm	ASTM D5185m >20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >4	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m >20	<b>1</b>	2	2
Lead	ppm	ASTM D5185m >40	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m >330	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m >15	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>1</b>	8	5
Barium	ppm	ASTM D5185m 0	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>60</b>	58	60
Manganese	ppm	ASTM D5185m 0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m 1010	<b>921</b>	910	931
Calcium	ppm	ASTM D5185m 1070	<b>1043</b>	1024	1132
Phosphorus	ppm	ASTM D5185m 1150	<b>987</b>	1041	1044
Zinc	ppm	ASTM D5185m 1270	<b>1208</b>	1241	1270
Sulfur	ppm	ASTM D5185m 2060	<b>3471</b>	3056	3780

## CONTAMINANTS

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

## INFRA-RED

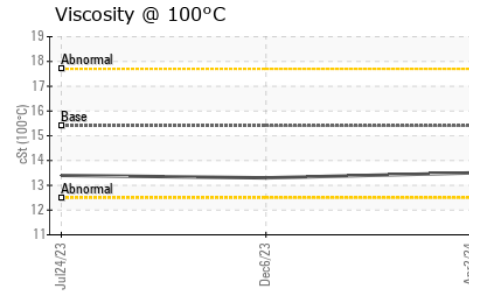
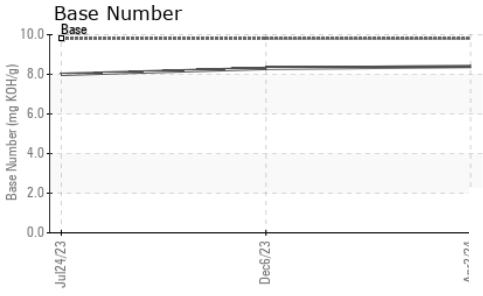
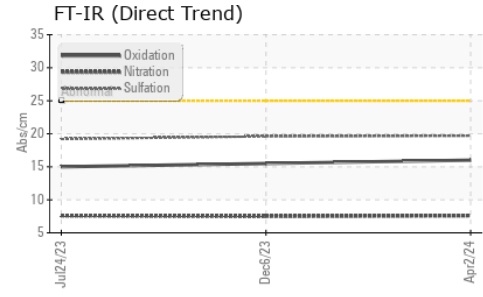
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.3</b>	0.4	0.4
Nitration	Abs/cm	*ASTM D7624 >20	<b>7.6</b>	7.5	7.6
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>19.7</b>	19.6	19.2

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>16.0</b>	15.5	15.0
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>8.4</b>	8.3	8.0



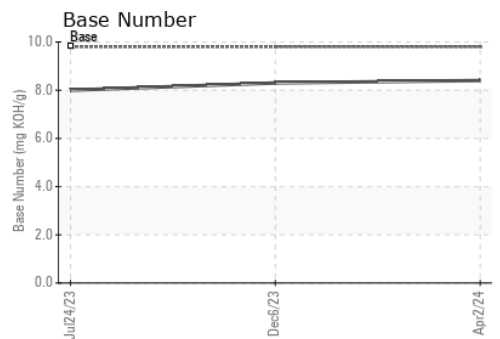
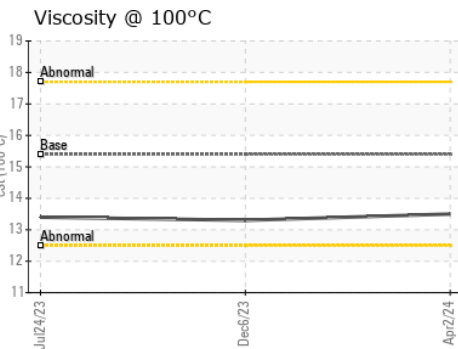
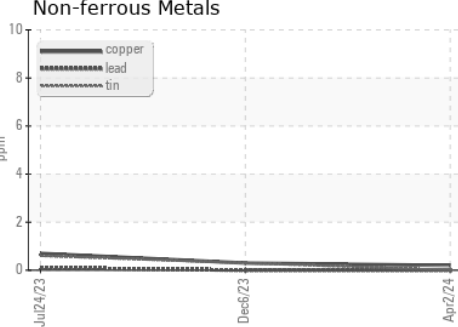
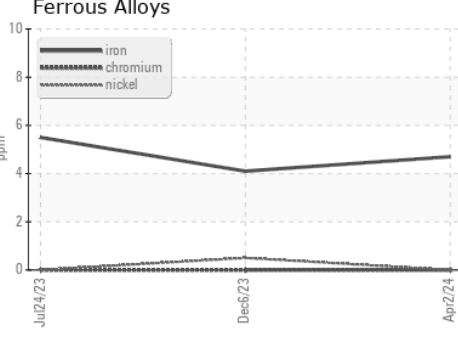
# OIL ANALYSIS REPORT



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	15.4	13.5	13.3

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0106236      **Received** : 23 Apr 2024  
**Lab Number** : 06157496      **Tested** : 24 Apr 2024  
**Unique Number** : 10992919      **Diagnosed** : 24 Apr 2024 - Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 916 - Greenbay HC**  
 1799 County Trunk PP  
 DePere, WI  
 US 54115  
 Contact: Travis Runge  
 travis.runge@gflenv.com  
 T: (920)351-2341  
 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)