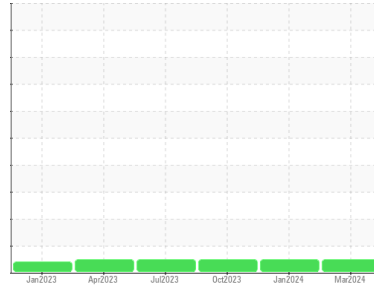




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**913073**  
 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>GFL0092548</b>	GFL0100403	GFL0092512
Sample Date	Client Info		<b>27 Mar 2024</b>	18 Jan 2024	03 Oct 2023
Machine Age	hrs	Client Info	<b>3156</b>	2754	2145
Oil Age	hrs	Client Info	<b>402</b>	609	451
Oil Changed	Client Info		<b>Changed</b>	Changed	Not Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<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 >120	<b>8</b>	12	10
Chromium	ppm	ASTM D5185m >20	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m >5	<b>2</b>	3	2
Titanium	ppm	ASTM D5185m >2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m >20	<b>1</b>	1	2
Lead	ppm	ASTM D5185m >40	<b>0</b>	0	1
Copper	ppm	ASTM D5185m >330	<b>&lt;1</b>	1	4
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	2
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>7</b>	<1	3
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>59</b>	55	62
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 1010	<b>957</b>	943	1024
Calcium	ppm	ASTM D5185m 1070	<b>1084</b>	1000	1083
Phosphorus	ppm	ASTM D5185m 1150	<b>1063</b>	1025	1083
Zinc	ppm	ASTM D5185m 1270	<b>1255</b>	1182	1340
Sulfur	ppm	ASTM D5185m 2060	<b>3431</b>	2789	3094

## CONTAMINANTS

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

## INFRA-RED

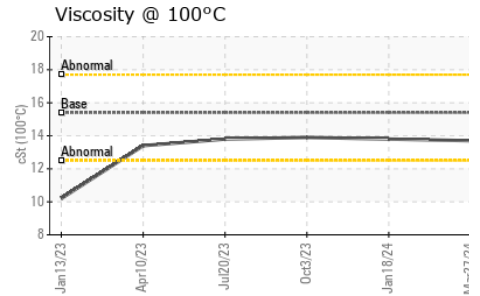
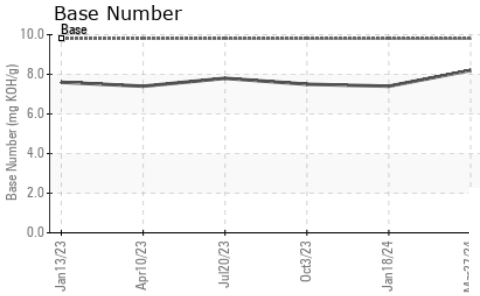
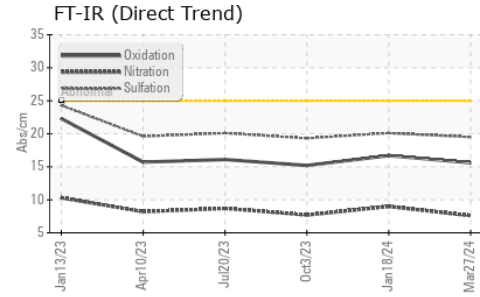
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >4	<b>0.5</b>	0.7	0.5
Nitration	Abs/cm	*ASTM D7624 >20	<b>7.6</b>	9.0	7.7
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>19.5</b>	20.1	19.3

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>15.6</b>	16.7	15.2
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>8.2</b>	7.4	7.5



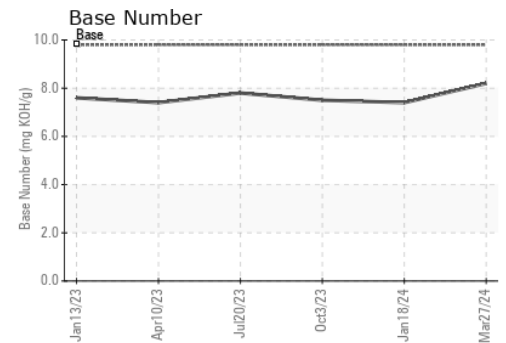
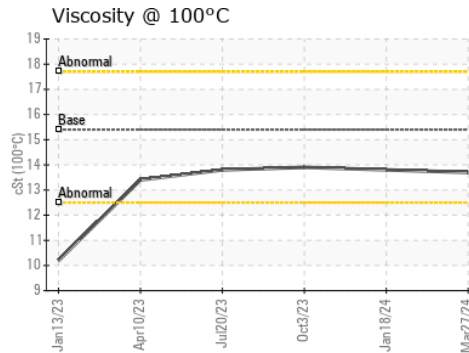
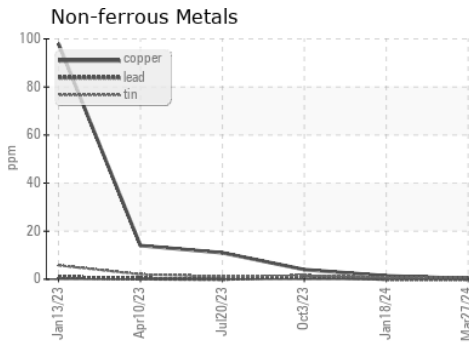
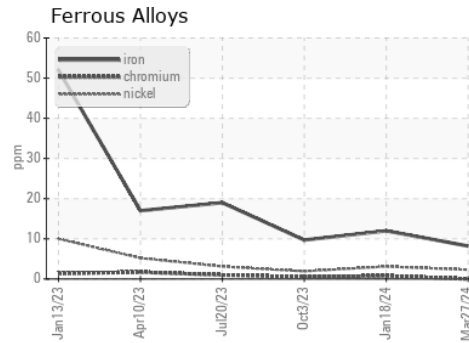
# OIL ANALYSIS REPORT



PARAMETER	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	13.7	13.8

## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : GFL0092548  
 Lab Number : 06137891  
 Unique Number : 10962699  
 Test Package : FLEET

Received : 03 Apr 2024  
 Tested : 04 Apr 2024  
 Diagnosed : 04 Apr 2024 - Wes Davis

GFL Environmental - 935 - Omro HC  
 250 Alder Avenue  
 Omro, WI  
 US 54963

Contact: Tim Kieffer  
 tim.kieffer@gflenv.com

T: (608)219-0288

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)