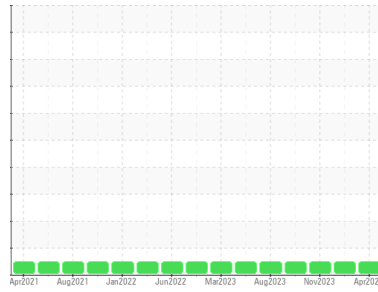




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**729013-1260**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (24 QTS)**

## 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>GFL0110323</b>	GFL0102772	GFL0102799
Sample Date	Client Info		<b>05 Apr 2024</b>	11 Jan 2024	30 Nov 2023
Machine Age	hrs	Client Info	<b>15185</b>	14587	14272
Oil Age	hrs	Client Info	<b>598</b>	606	13981
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	>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 >80	<b>19</b>	20	10
Chromium	ppm	ASTM D5185m >5	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >2	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >30	<b>1</b>	2	3
Lead	ppm	ASTM D5185m >30	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >150	<b>&lt;1</b>	1	<1
Tin	ppm	ASTM D5185m >5	<b>0</b>	0	<1
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>2</b>	6	8
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>60</b>	61	60
Manganese	ppm	ASTM D5185m 0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m 1010	<b>913</b>	883	879
Calcium	ppm	ASTM D5185m 1070	<b>1129</b>	1085	1047
Phosphorus	ppm	ASTM D5185m 1150	<b>1000</b>	963	1027
Zinc	ppm	ASTM D5185m 1270	<b>1227</b>	1175	1227
Sulfur	ppm	ASTM D5185m 2060	<b>3259</b>	2756	3007

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<b>2</b>	4	6
Sodium	ppm	ASTM D5185m	<b>6</b>	5	4
Potassium	ppm	ASTM D5185m >20	<b>1</b>	3	3

## INFRA-RED

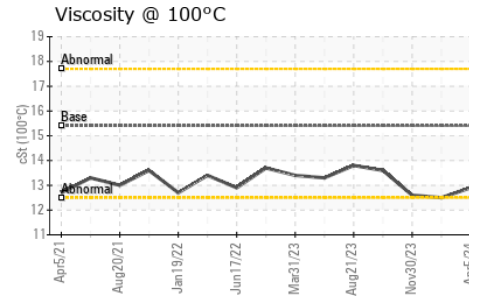
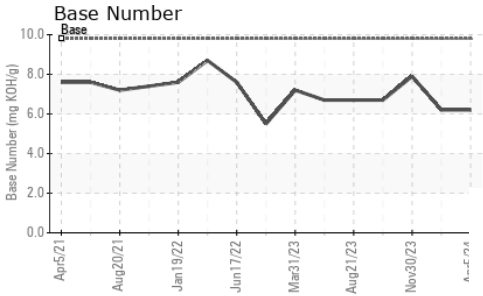
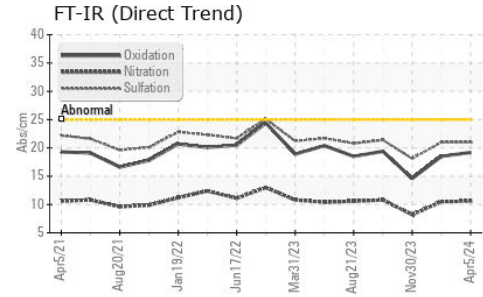
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.5</b>	0.5	0.3
Nitration	Abs/cm	*ASTM D7624 >20	<b>10.6</b>	10.5	8.2
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>21.0</b>	21.0	18.1

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>19.2</b>	18.5	14.6
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>6.2</b>	6.2	7.9



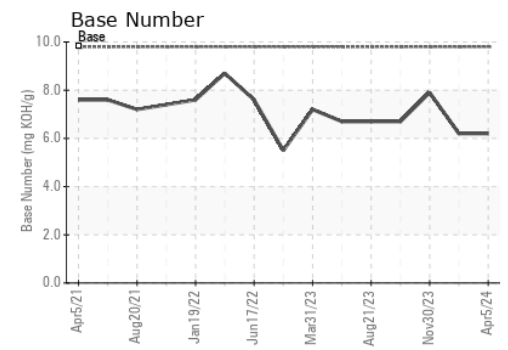
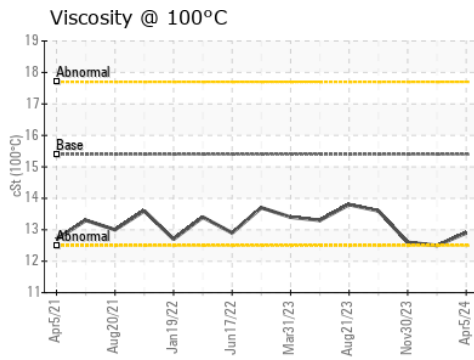
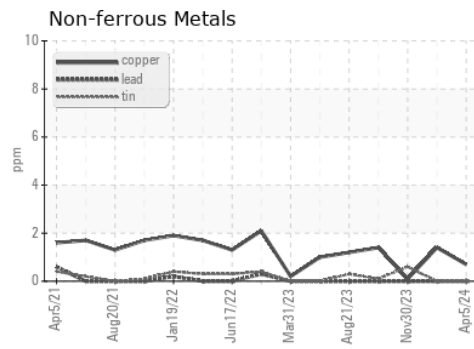
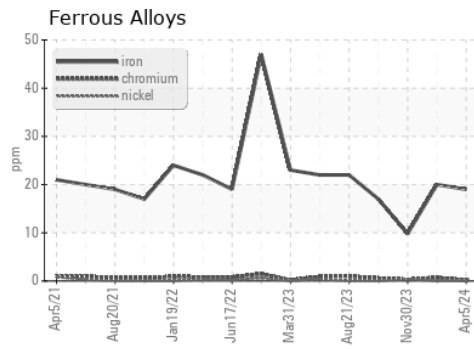
# OIL ANALYSIS REPORT



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	12.9	12.5	12.6

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0110323  
**Lab Number** : **06142113**  
**Unique Number** : 10966921  
**Test Package** : FLEET  
**Received** : 08 Apr 2024  
**Tested** : 09 Apr 2024  
**Diagnosed** : 09 Apr 2024 - Wes Davis

**GFL Environmental - 622 - Traverse City Hauling**  
 160 Hughes Dr  
 Traverse City, MI  
 US 49686  
 Contact: GARY BREWER

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)

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F: