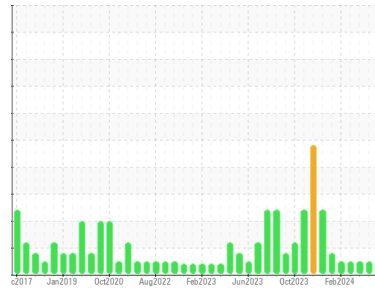




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**10809**  
 Component  
**Diesel Engine**  
 Fluid

**PETRO CANADA DURON SHP 15W40 (7 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>GFL0122153</b>	GFL0118087	GFL0115725
Sample Date	Client Info		<b>01 Jul 2024</b>	21 May 2024	01 Apr 2024
Machine Age	hrs	Client Info	<b>20325</b>	20085	20062
Oil Age	hrs	Client Info	<b>240</b>	286	263
Oil Changed	Client Info		<b>Not 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 >75	<b>30</b>	14	3
Chromium	ppm	ASTM D5185m >5	<b>&lt;1</b>	1	0
Nickel	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	0
Aluminum	ppm	ASTM D5185m >15	<b>4</b>	4	1
Lead	ppm	ASTM D5185m >25	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m >100	<b>2</b>	1	<1
Tin	ppm	ASTM D5185m >4	<b>&lt;1</b>	1	0
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>30</b>	52	11
Barium	ppm	ASTM D5185m 0	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>57</b>	47	60
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m 1010	<b>761</b>	726	906
Calcium	ppm	ASTM D5185m 1070	<b>1182</b>	1114	1085
Phosphorus	ppm	ASTM D5185m 1150	<b>706</b>	727	936
Zinc	ppm	ASTM D5185m 1270	<b>868</b>	828	1154
Sulfur	ppm	ASTM D5185m 2060	<b>2021</b>	2582	3542

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>13</b>	10	5
Sodium	ppm	ASTM D5185m	<b>26</b>	11	3
Potassium	ppm	ASTM D5185m >20	<b>3</b>	2	<1

## INFRA-RED

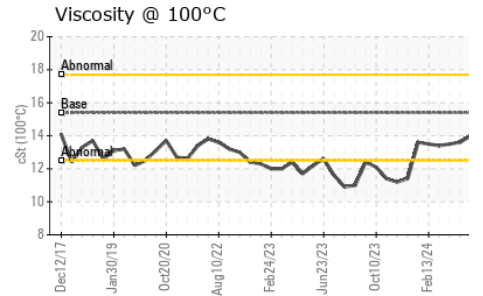
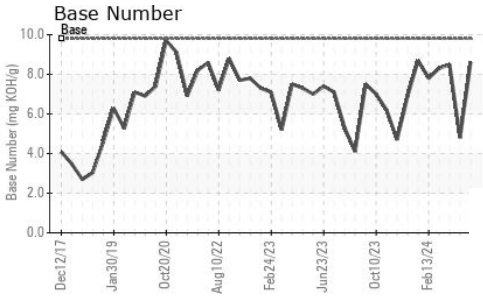
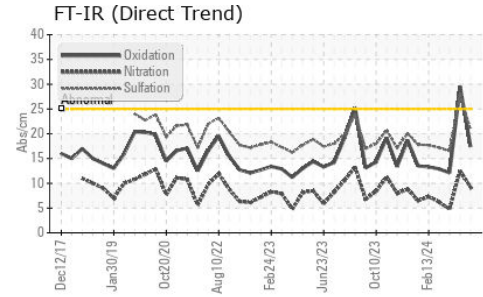
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >6	<b>0.6</b>	0.2	0.1
Nitration	Abs/cm	*ASTM D7624 >20	<b>9.2</b>	12.5	4.8
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>20.8</b>	27.9	16.5

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>17.4</b>	29.5	12.1
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>8.6</b>	4.8	8.5



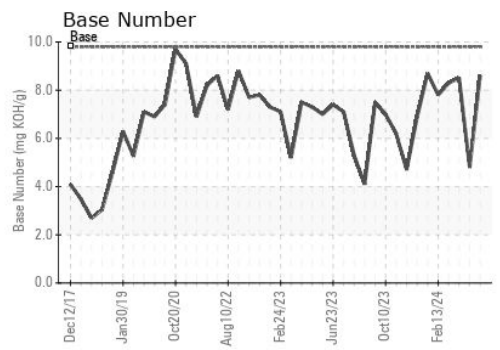
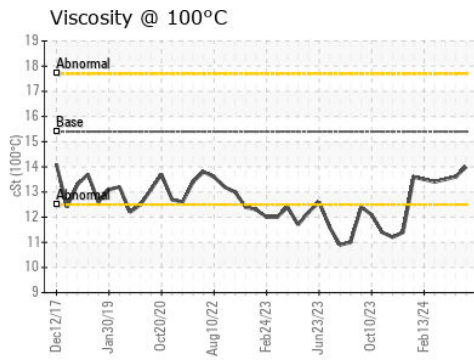
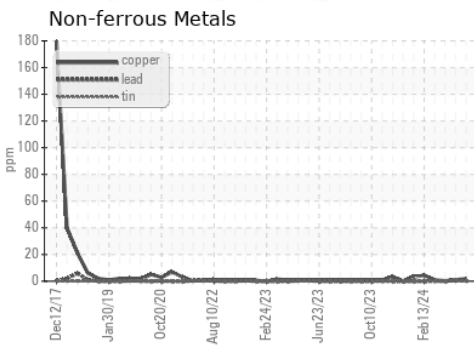
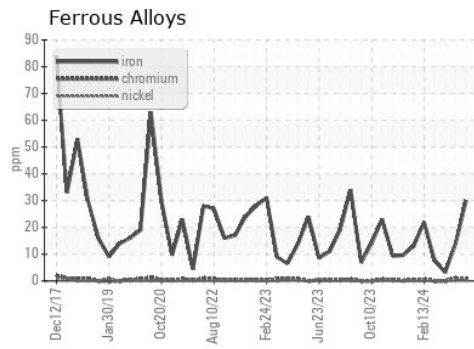
# OIL ANALYSIS REPORT



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	<b>14.0</b>	13.6

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0122153      **Received** : 02 Jul 2024  
**Lab Number** : **06225972**      **Tested** : 03 Jul 2024  
**Unique Number** : 11109465      **Diagnosed** : 03 Jul 2024 - Angela Borella  
**Test Package** : FLEET

**GFL Environmental - 010 - Stockbridge**  
 1280 Rum Creek Parkway  
 Stockbridge, GA  
 US 30281  
 Contact: JOSHUA TINKER  
 joshuatinker@gflenv.com

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)