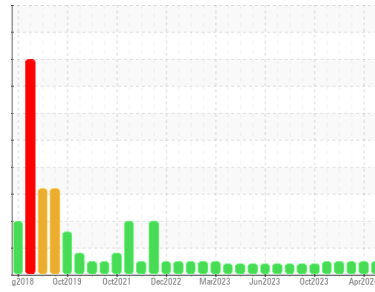




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**11319**  
 Component  
**Diesel Engine**  
 Fluid

**PETRO CANADA DURON SHP 15W40 (28 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>GFL0122179</b>	GFL0115697	GFL0115748
Sample Date	Client Info	<b>28 May 2024</b>	05 Apr 2024	11 Mar 2024
Machine Age	hrs	<b>7968</b>	7689	7551
Oil Age	hrs	<b>417</b>	138	371
Oil Changed	Client Info	<b>Not Changed</b>	Not Changed	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>11</b>	6	11
Chromium	ppm ASTM D5185m >5	<b>0</b>	<1	<1
Nickel	ppm ASTM D5185m >4	<b>0</b>	<1	0
Titanium	ppm ASTM D5185m >2	<b>0</b>	<1	0
Silver	ppm ASTM D5185m >2	<b>0</b>	<1	0
Aluminum	ppm ASTM D5185m >15	<b>&lt;1</b>	2	2
Lead	ppm ASTM D5185m >25	<b>0</b>	<1	<1
Copper	ppm ASTM D5185m >100	<b>0</b>	1	<1
Tin	ppm ASTM D5185m >4	<b>0</b>	<1	0
Vanadium	ppm ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm ASTM D5185m	<b>0</b>	<1	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	<b>6</b>	10	9
Barium	ppm ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 60	<b>62</b>	65	58
Manganese	ppm ASTM D5185m 0	<b>0</b>	<1	<1
Magnesium	ppm ASTM D5185m 1010	<b>834</b>	867	809
Calcium	ppm ASTM D5185m 1070	<b>988</b>	1043	947
Phosphorus	ppm ASTM D5185m 1150	<b>921</b>	942	932
Zinc	ppm ASTM D5185m 1270	<b>1114</b>	1144	1117
Sulfur	ppm ASTM D5185m 2060	<b>3044</b>	2916	3085

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>2</b>	4	3
Sodium	ppm ASTM D5185m	<b>31</b>	17	31
Potassium	ppm ASTM D5185m >20	<b>0</b>	2	2

## INFRA-RED

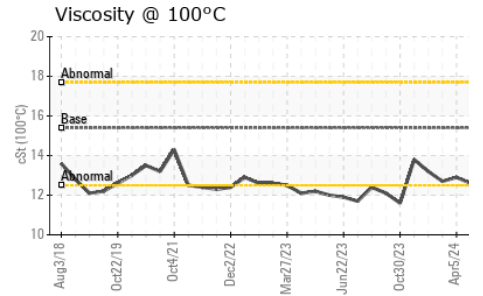
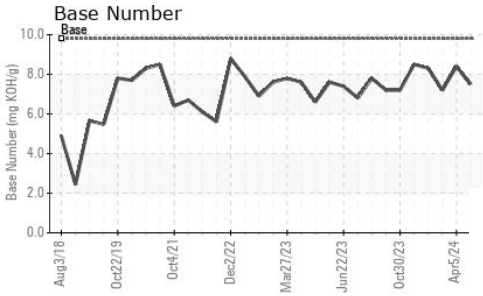
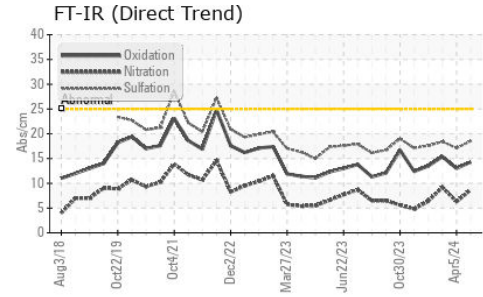
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >6	<b>0.5</b>	0.2	0.4
Nitration	Abs/cm *ASTM D7624 >20	<b>8.7</b>	6.3	9.2
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>18.5</b>	17.1	18.4

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>14.3</b>	13.0	15.4
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>7.5</b>	8.4	7.2



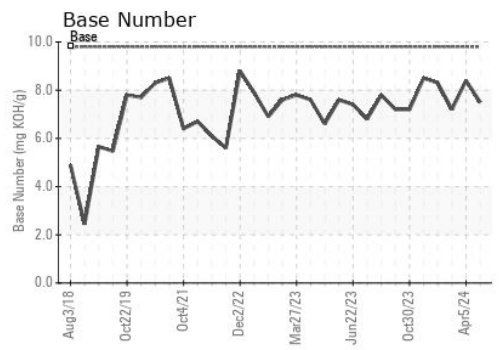
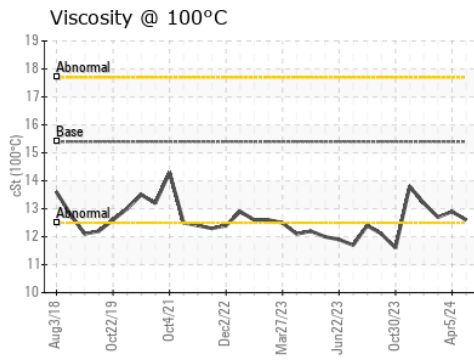
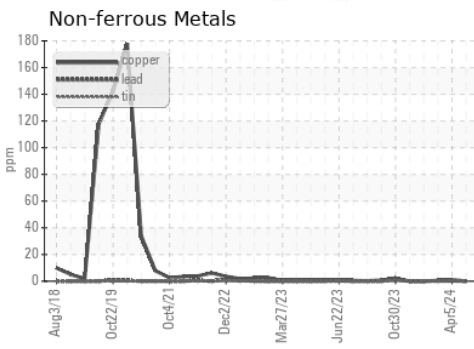
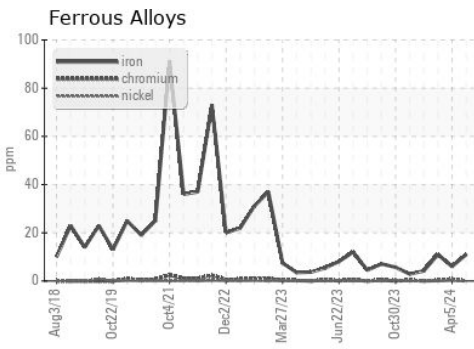
# OIL ANALYSIS REPORT



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>12.6</b>	12.9	12.7

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0122179      **Received** : 30 May 2024  
**Lab Number** : **06195180**      **Tested** : 31 May 2024  
**Unique Number** : 11057303      **Diagnosed** : 31 May 2024 - Wes Davis  
**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)