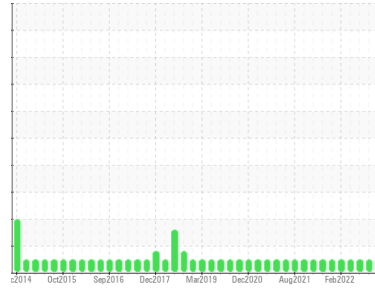




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id

**2573**

Component

**Diesel Engine**

Fluid

**PETRO CANADA DURON SHP 15W40 (10 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>GFL0069752</b>	GFL0069779	GFL0050879	
Sample Date	Client Info	<b>03 Jan 2024</b>	23 Aug 2023	17 May 2023	
Machine Age	hrs	Client Info	<b>22641</b>	22221	21641
Oil Age	hrs	Client Info	<b>0</b>	0	21641
Oil Changed	Client Info	<b>Not Changed</b>	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 >165	<b>12</b>	20	19
Chromium	ppm ASTM D5185m >5	<b>&lt;1</b>	1	1
Nickel	ppm ASTM D5185m >4	<b>0</b>	<1	<1
Titanium	ppm ASTM D5185m >2	<b>&lt;1</b>	0	0
Silver	ppm ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >20	<b>1</b>	3	1
Lead	ppm ASTM D5185m >150	<b>&lt;1</b>	2	1
Copper	ppm ASTM D5185m >90	<b>&lt;1</b>	<1	<1
Tin	ppm ASTM D5185m >5	<b>&lt;1</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>11</b>	8	9
Barium	ppm ASTM D5185m 0	<b>11</b>	2	0
Molybdenum	ppm ASTM D5185m 60	<b>63</b>	71	66
Manganese	ppm ASTM D5185m 0	<b>0</b>	<1	<1
Magnesium	ppm ASTM D5185m 1010	<b>801</b>	880	865
Calcium	ppm ASTM D5185m 1070	<b>1054</b>	1211	1108
Phosphorus	ppm ASTM D5185m 1150	<b>1058</b>	1027	1008
Zinc	ppm ASTM D5185m 1270	<b>1091</b>	1203	1210
Sulfur	ppm ASTM D5185m 2060	<b>3353</b>	2983	3063

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >35	<b>4</b>	6	7
Sodium	ppm ASTM D5185m	<b>3</b>	5	3
Potassium	ppm ASTM D5185m >20	<b>5</b>	6	3

## INFRA-RED

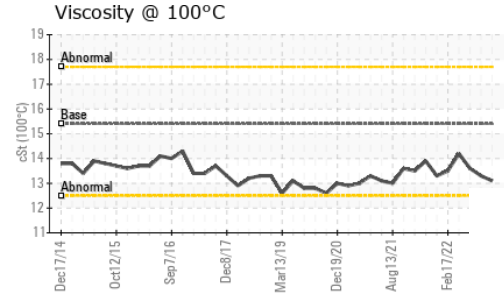
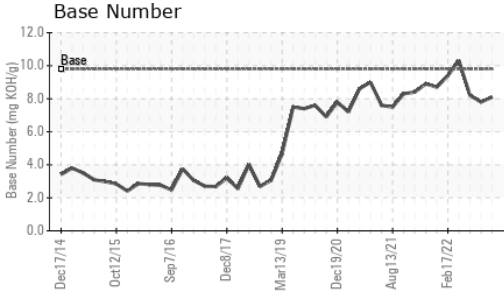
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >7.5	<b>1.1</b>	1.2	1.1
Nitration	Abs/cm *ASTM D7624 >20	<b>9.8</b>	11.2	10.8
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>21.2</b>	22.5	22.4

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>16.3</b>	18.4	18.4
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>8.1</b>	7.8	8.2



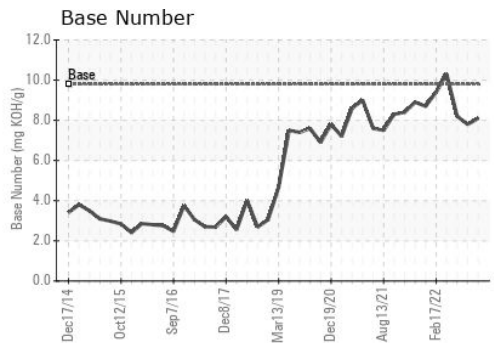
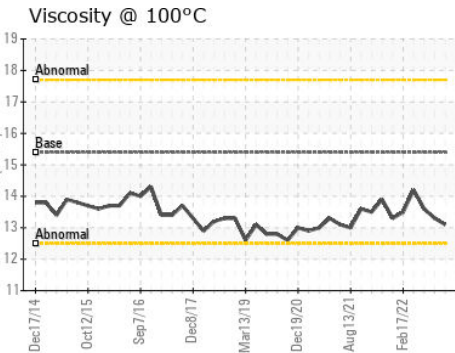
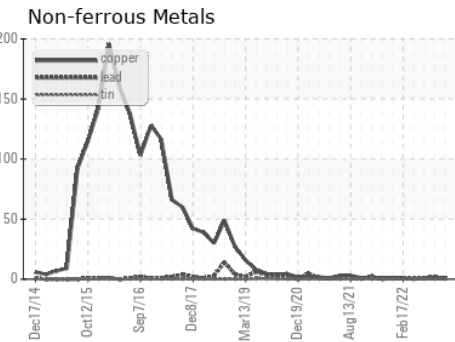
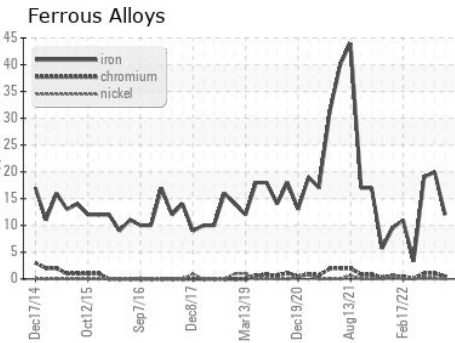
# OIL ANALYSIS REPORT



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>13.1</b>	13.3	13.6

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0069752 **Received** : 05 Jan 2024  
**Lab Number** : **06052712** **Diagnosed** : 08 Jan 2024  
**Unique Number** : 10818661 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 031 - Greenville/Spartanburg**  
 1635 Antioch Church Rd  
 Piedmont, SC  
 US 29673  
 Contact: TECHNICIAN ACCOUNT  
 catherine.anastasio@wearcheck.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)