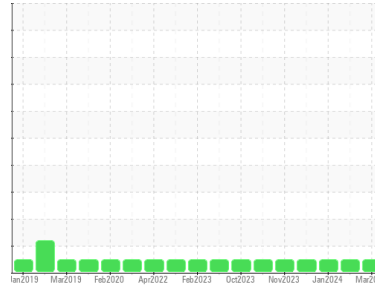




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**721009-361464**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (8 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>GFL0098676</b>	GFL0098706	GFL0098731
Sample Date	Client Info	<b>01 Mar 2024</b>	26 Jan 2024	08 Jan 2024
Machine Age	hrs	<b>14647</b>	14505	14347
Oil Age	hrs	<b>600</b>	150	150
Oil Changed	Client Info	<b>Changed</b>	Not Changd	Not Changd
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 >100	<b>28</b>	37	19
Chromium	ppm ASTM D5185m >20	<b>2</b>	<1	1
Nickel	ppm ASTM D5185m >4	<b>0</b>	<1	<1
Titanium	ppm ASTM D5185m	<b>0</b>	0	<1
Silver	ppm ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >20	<b>2</b>	3	2
Lead	ppm ASTM D5185m >40	<b>1</b>	3	1
Copper	ppm ASTM D5185m >330	<b>2</b>	2	2
Tin	ppm ASTM D5185m >15	<b>&lt;1</b>	1	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>	3	3
Barium	ppm ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 60	<b>63</b>	63	66
Manganese	ppm ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185m 1010	<b>965</b>	983	1062
Calcium	ppm ASTM D5185m 1070	<b>1039</b>	1045	1142
Phosphorus	ppm ASTM D5185m 1150	<b>1013</b>	1091	1164
Zinc	ppm ASTM D5185m 1270	<b>1247</b>	1304	1374
Sulfur	ppm ASTM D5185m 2060	<b>2937</b>	2922	3600

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>6</b>	8	5
Sodium	ppm ASTM D5185m	<b>4</b>	2	2
Potassium	ppm ASTM D5185m >20	<b>1</b>	2	2

## INFRA-RED

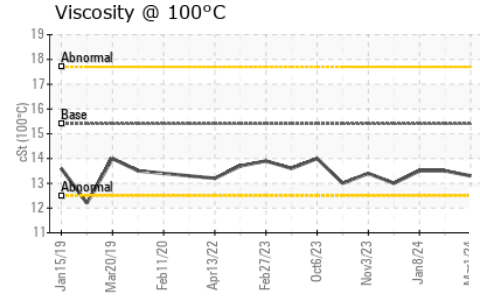
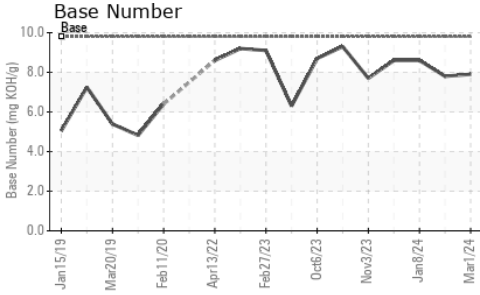
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.4</b>	2.2	0.3
Nitration	Abs/cm *ASTM D7624 >20	<b>7.9</b>	9.4	6.7
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>19.6</b>	23.0	18.9

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>16.1</b>	16.4	14.9
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>7.9</b>	7.8	8.6



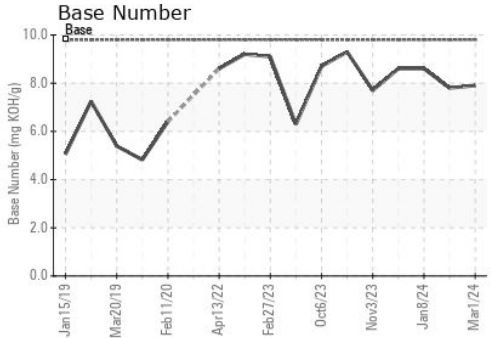
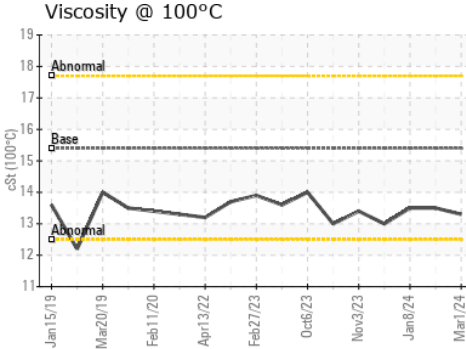
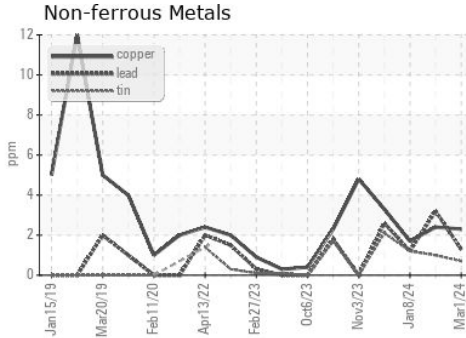
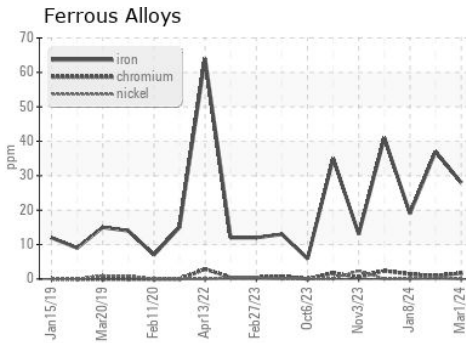
# OIL ANALYSIS REPORT



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>13.3</b>	13.5	13.5

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0098676  
**Lab Number** : **06108377**  
**Unique Number** : 10911874  
**Test Package** : FLEET

**Received** : 05 Mar 2024  
**Tested** : 06 Mar 2024  
**Diagnosed** : 06 Mar 2024 - Wes Davis

**GFL Environmental - 829 - Wilco Hauling**  
 5054 Highway HH  
 Hartville, MO  
 US 65667  
 Contact: James Jones  
 james.jones@gflenv.com  
 T: (417)349-5006  
 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)