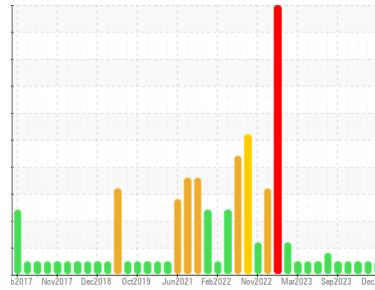




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**10714**

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>GFL0101161</b>	GFL0101267	GFL0094319
Sample Date	Client Info	<b>22 Dec 2023</b>	04 Dec 2023	26 Sep 2023
Machine Age	hrs	<b>1546</b>	1412	1007
Oil Age	hrs	<b>539</b>	405	185
Oil Changed	Client Info	<b>Changed</b>	Not Changd	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>3</b>	40	25
Chromium	ppm ASTM D5185m >5	<b>&lt;1</b>	1	1
Nickel	ppm ASTM D5185m >4	<b>0</b>	0	0
Titanium	ppm ASTM D5185m >2	<b>0</b>	0	0
Silver	ppm ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >15	<b>2</b>	2	3
Lead	ppm ASTM D5185m >25	<b>0</b>	0	0
Copper	ppm ASTM D5185m >100	<b>0</b>	8	41
Tin	ppm ASTM D5185m >4	<b>0</b>	0	0
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>6</b>	4	9
Barium	ppm ASTM D5185m 0	<b>0</b>	2	2
Molybdenum	ppm ASTM D5185m 60	<b>68</b>	59	62
Manganese	ppm ASTM D5185m 0	<b>0</b>	0	<1
Magnesium	ppm ASTM D5185m 1010	<b>1011</b>	777	787
Calcium	ppm ASTM D5185m 1070	<b>1125</b>	1025	1059
Phosphorus	ppm ASTM D5185m 1150	<b>1104</b>	830	902
Zinc	ppm ASTM D5185m 1270	<b>1321</b>	1051	1085
Sulfur	ppm ASTM D5185m 2060	<b>3740</b>	2811	2806

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>6</b>	8	7
Sodium	ppm ASTM D5185m	<b>2</b>	4	6
Potassium	ppm ASTM D5185m >20	<b>2</b>	2	1

## INFRA-RED

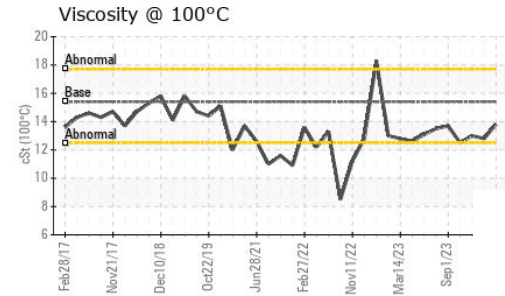
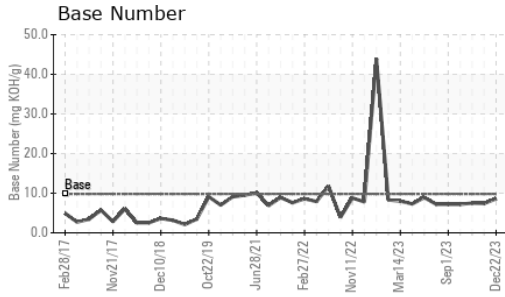
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >6	<b>0.1</b>	1.2	0.7
Nitration	Abs/cm *ASTM D7624 >20	<b>4.2</b>	7.7	6.0
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>16.7</b>	18.9	17.6

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>11.8</b>	12.7	11.6
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>8.6</b>	7.4	7.5



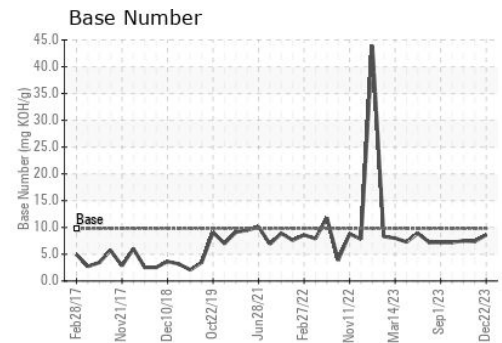
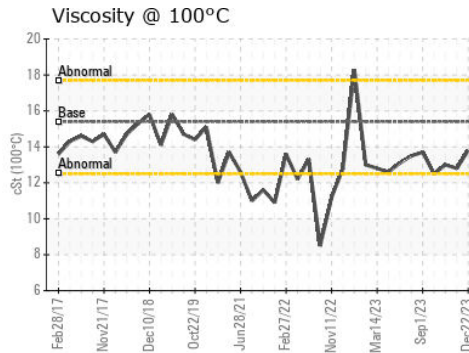
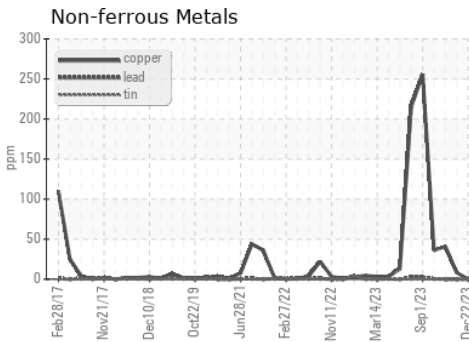
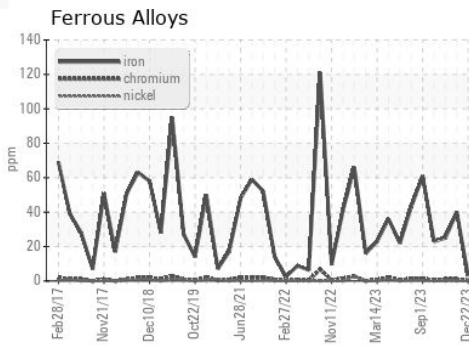
# OIL ANALYSIS REPORT



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>13.8</b>	12.8	13.0

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0101161 **Received** : 27 Dec 2023  
**Lab Number** : **06045816** **Diagnosed** : 28 Dec 2023  
**Unique Number** : 10806424 **Diagnostician** : 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)

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F: