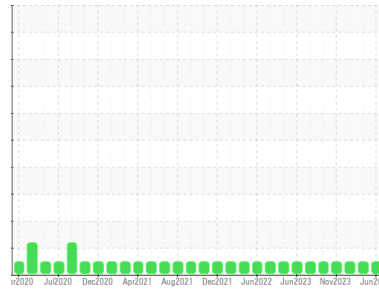




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**(NL2920)**  
 Machine Id  
**910000**  
 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>GFL0110413</b>	GFL0094893	GFL0090128
Sample Date	Client Info	<b>19 Jun 2024</b>	06 May 2024	25 Jan 2024
Machine Age	hrs	<b>11724</b>	11500	10578
Oil Age	hrs	<b>11724</b>	11500	10578
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 >165	<b>29</b>	6	16
Chromium	ppm ASTM D5185m >5	<b>1</b>	<1	1
Nickel	ppm ASTM D5185m >4	<b>0</b>	0	0
Titanium	ppm ASTM D5185m >2	<b>&lt;1</b>	0	<1
Silver	ppm ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >20	<b>3</b>	2	2
Lead	ppm ASTM D5185m >150	<b>1</b>	<1	<1
Copper	ppm ASTM D5185m >90	<b>&lt;1</b>	0	<1
Tin	ppm ASTM D5185m >5	<b>0</b>	<1	<1
Vanadium	ppm ASTM D5185m	<b>&lt;1</b>	0	<1
Cadmium	ppm ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	<b>1</b>	4	<1
Barium	ppm ASTM D5185m 0	<b>&lt;1</b>	0	0
Molybdenum	ppm ASTM D5185m 60	<b>61</b>	58	58
Manganese	ppm ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185m 1010	<b>1067</b>	920	917
Calcium	ppm ASTM D5185m 1070	<b>1246</b>	1053	1049
Phosphorus	ppm ASTM D5185m 1150	<b>1137</b>	1024	986
Zinc	ppm ASTM D5185m 1270	<b>1447</b>	1240	1170
Sulfur	ppm ASTM D5185m 2060	<b>4000</b>	3589	2594

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >35	<b>6</b>	2	2
Sodium	ppm ASTM D5185m	<b>4</b>	2	4
Potassium	ppm ASTM D5185m >20	<b>3</b>	2	2

## INFRA-RED

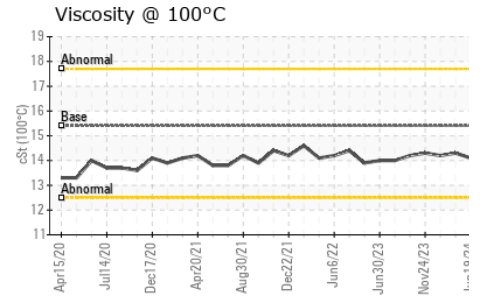
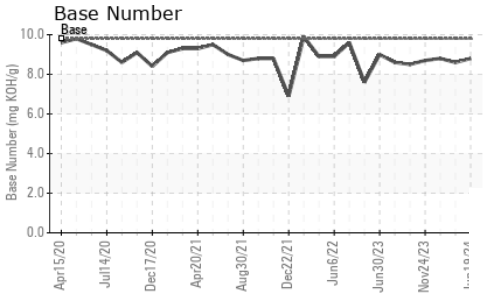
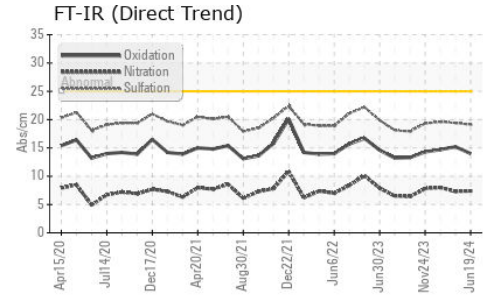
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >7.5	<b>0.6</b>	0.5	0.9
Nitration	Abs/cm *ASTM D7624 >20	<b>7.4</b>	7.3	8.0
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>19.1</b>	19.4	19.6

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>14.0</b>	15.2	14.7
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>8.8</b>	8.6	8.8



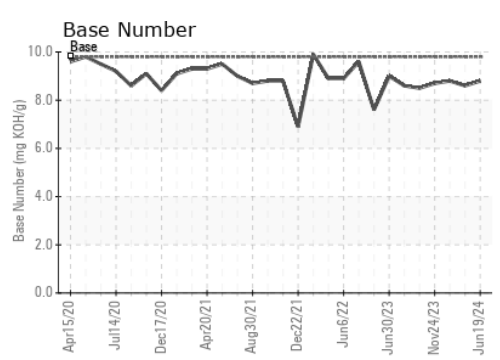
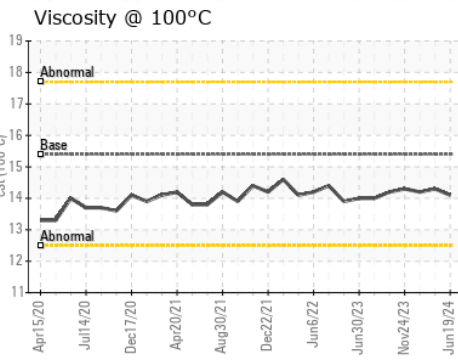
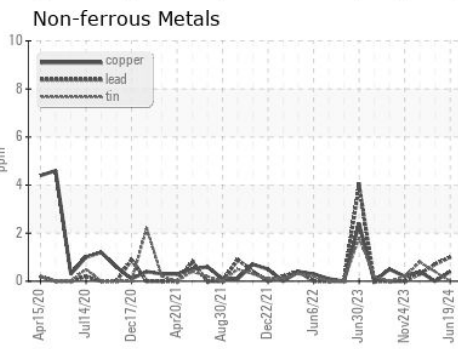
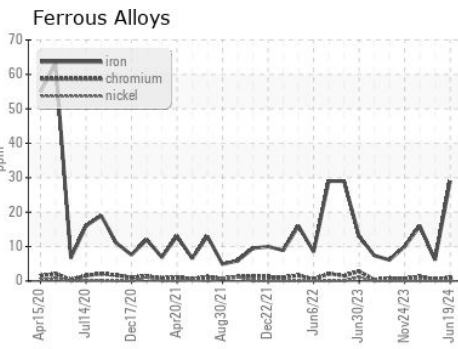
# OIL ANALYSIS REPORT



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>14.1</b>	14.3	14.2

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0110413      **Received** : 20 Jun 2024  
**Lab Number** : **06215668**      **Tested** : 21 Jun 2024  
**Unique Number** : 11088532      **Diagnosed** : 21 Jun 2024 - Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 044 - Elizabeth City**  
 657 Old US 17  
 Elizabeth City, NC  
 US 27909  
 Contact: TOM BAIRD  
 tom.baird@gflenv.com  
 T: (252)562-2645  
 F: (252)264-4411

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)