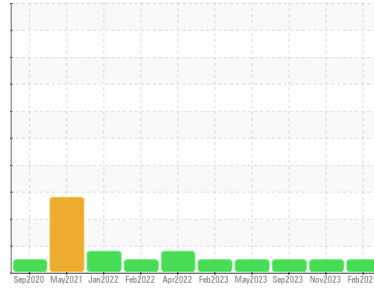




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**822006-191**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP E6 10W40 (--- LTR)**

## 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>GFL0103909</b>	GFL0097369	GFL0089556
Sample Date	Client Info	<b>02 Feb 2024</b>	28 Nov 2023	15 Sep 2023
Machine Age	hrs	<b>10805</b>	10805	10805
Oil Age	hrs	<b>10805</b>	10805	10805
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
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 >80	<b>15</b>	12	14
Chromium	ppm ASTM D5185m >5	<b>&lt;1</b>	<1	<1
Nickel	ppm ASTM D5185m >2	<b>2</b>	<1	0
Titanium	ppm ASTM D5185m	<b>0</b>	0	0
Silver	ppm ASTM D5185m >3	<b>&lt;1</b>	0	0
Aluminum	ppm ASTM D5185m >30	<b>5</b>	4	2
Lead	ppm ASTM D5185m >30	<b>1</b>	0	0
Copper	ppm ASTM D5185m >150	<b>2</b>	0	<1
Tin	ppm ASTM D5185m >5	<b>&lt;1</b>	0	0
Vanadium	ppm ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 1	<b>4</b>	6	8
Barium	ppm ASTM D5185m 0	<b>0</b>	0	<1
Molybdenum	ppm ASTM D5185m 49	<b>58</b>	58	62
Manganese	ppm ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185m 930	<b>886</b>	930	993
Calcium	ppm ASTM D5185m 1350	<b>1027</b>	1002	1111
Phosphorus	ppm ASTM D5185m 810	<b>1030</b>	1091	1102
Zinc	ppm ASTM D5185m 930	<b>1238</b>	1274	1303
Sulfur	ppm ASTM D5185m 2500	<b>3105</b>	3194	3823

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >20	<b>3</b>	4	3
Sodium	ppm ASTM D5185m	<b>5</b>	3	5
Potassium	ppm ASTM D5185m >20	<b>8</b>	4	3

## INFRA-RED

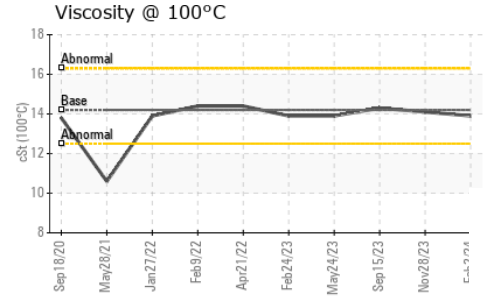
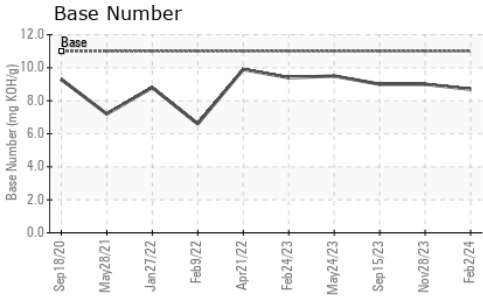
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.4</b>	0.4	0.4
Nitration	Abs/cm *ASTM D7624 >20	<b>7.6</b>	7.1	6.1
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>18.8</b>	18.4	17.9

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>14.8</b>	14.5	13.6
Base Number (BN)	mg KOH/g ASTM D2896 11.0	<b>8.7</b>	9.0	9.0



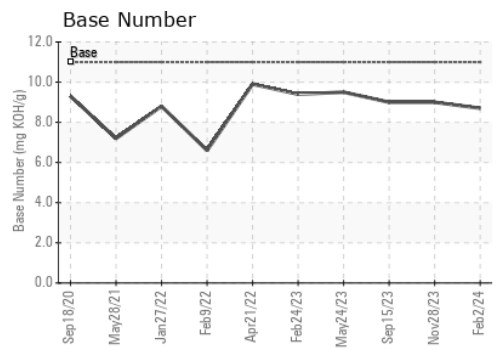
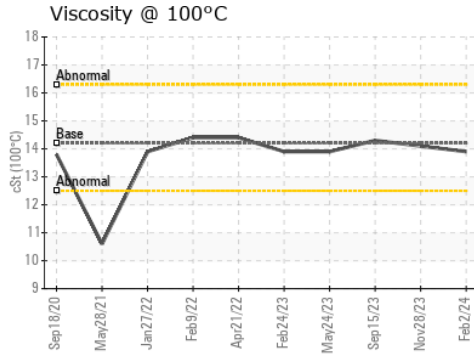
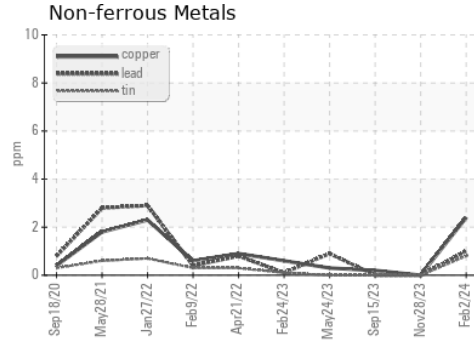
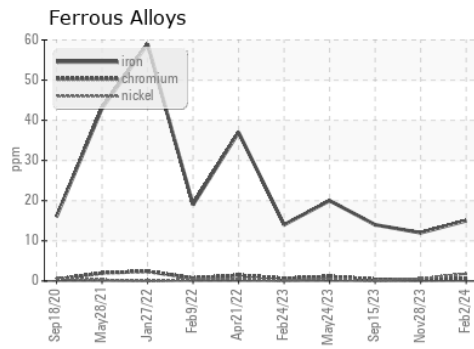
# OIL ANALYSIS REPORT



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	14.2	<b>13.9</b>	14.1	14.3

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0103909  
**Lab Number** : 06081933  
**Unique Number** : 10869378  
**Test Package** : FLEET  
**Received** : 06 Feb 2024  
**Tested** : 07 Feb 2024  
**Diagnosed** : 07 Feb 2024 - Wes Davis

**GFL Environmental - 654S - Midlothian**  
 12230 Deergrove Road  
 Midlothian, VA  
 US 23112  
 Contact: Corbin Umphlet  
 cumphlet@gflenv.com  
 T:  
 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)