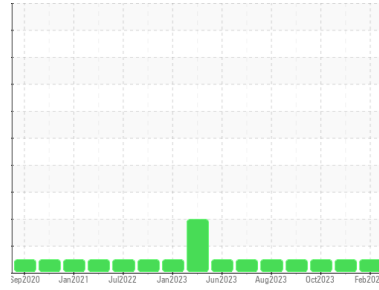




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**928012-9046**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (--- 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>GFL0101311</b>	GFL0101320	GFL0091750
Sample Date	Client Info		<b>21 Feb 2024</b>	13 Jan 2024	31 Oct 2023
Machine Age	hrs	Client Info	<b>17784</b>	17454	17110
Oil Age	hrs	Client Info	<b>0</b>	0	17110
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	>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 >110	<b>10</b>	0	11
Chromium	ppm	ASTM D5185m >4	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m >25	<b>&lt;1</b>	<1	1
Lead	ppm	ASTM D5185m >45	<b>1</b>	0	2
Copper	ppm	ASTM D5185m >85	<b>1</b>	1	1
Tin	ppm	ASTM D5185m >4	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>2</b>	<1	2
Barium	ppm	ASTM D5185m 0	<b>&lt;1</b>	0	4
Molybdenum	ppm	ASTM D5185m 60	<b>62</b>	57	64
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m 1010	<b>922</b>	898	970
Calcium	ppm	ASTM D5185m 1070	<b>1034</b>	975	1044
Phosphorus	ppm	ASTM D5185m 1150	<b>1029</b>	1028	1021
Zinc	ppm	ASTM D5185m 1270	<b>1219</b>	1172	1241
Sulfur	ppm	ASTM D5185m 2060	<b>3144</b>	2856	2888

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >30	<b>6</b>	5	6
Sodium	ppm	ASTM D5185m	<b>3</b>	<1	<1
Potassium	ppm	ASTM D5185m >20	<b>10</b>	0	1

## INFRA-RED

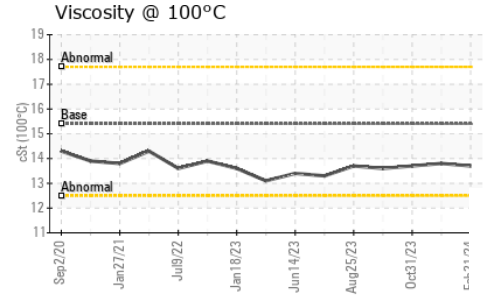
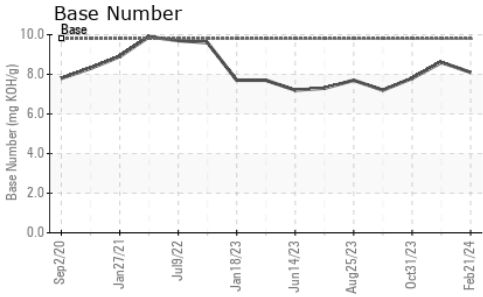
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.3</b>	0.2	0.4
Nitration	Abs/cm	*ASTM D7624 >20	<b>8.1</b>	6.1	8.7
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>19.9</b>	18.2	20.6

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>15.9</b>	14.8	16.5
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>8.1</b>	8.6	7.8



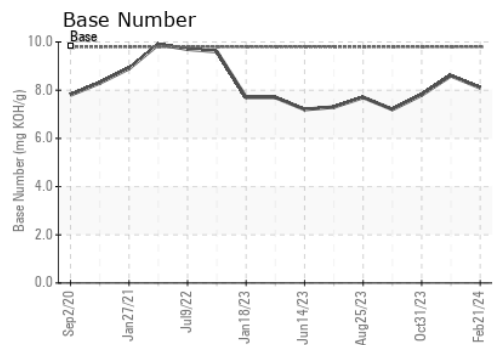
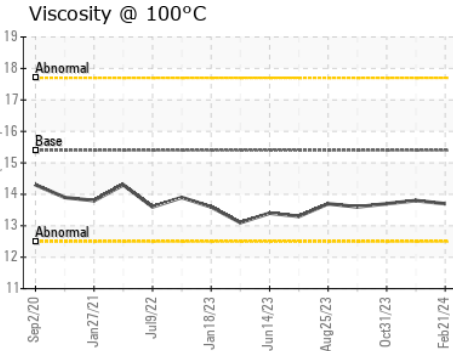
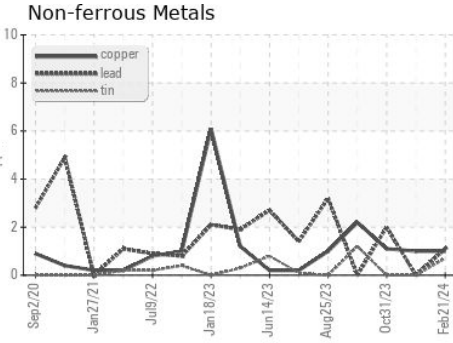
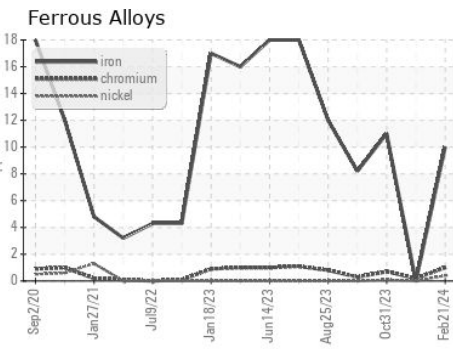
# OIL ANALYSIS REPORT



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>13.7</b>	13.8	13.7

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0101311      **Received** : 27 Feb 2024  
**Lab Number** : 06102311      **Tested** : 28 Feb 2024  
**Unique Number** : 10900541      **Diagnosed** : 28 Feb 2024 - Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 654 - Richmond Hauling**  
 11800 Lewis Road  
 Chester, VA  
 US 23831  
 Contact: Jimmy Mayes  
 jmayes@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)