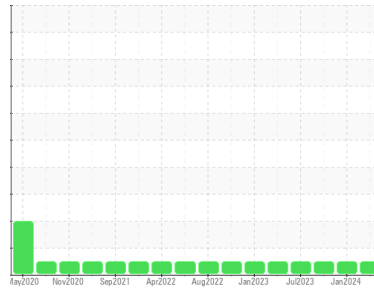




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**729010-5045**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (20 QTS)**

## 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>GFL0096501</b>	GFL0090905	GFL0090910
Sample Date	Client Info		<b>01 Apr 2024</b>	09 Jan 2024	12 Oct 2023
Machine Age	hrs	Client Info	<b>11063</b>	10490	9882
Oil Age	hrs	Client Info	<b>573</b>	608	618
Oil Changed	Client Info		<b>Changed</b>	Changed	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>18</b>	21	30
Chromium	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	2
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>3</b>	3	4
Lead	ppm	ASTM D5185m >45	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >85	<b>0</b>	2	3
Tin	ppm	ASTM D5185m >4	<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>5</b>	16	5
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>58</b>	60	62
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m 1010	<b>908</b>	916	896
Calcium	ppm	ASTM D5185m 1070	<b>1082</b>	1168	1031
Phosphorus	ppm	ASTM D5185m 1150	<b>987</b>	1038	947
Zinc	ppm	ASTM D5185m 1270	<b>1231</b>	1268	1196
Sulfur	ppm	ASTM D5185m 2060	<b>3420</b>	2955	3039

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >30	<b>6</b>	8	10
Sodium	ppm	ASTM D5185m	<b>8</b>	8	9
Potassium	ppm	ASTM D5185m >20	<b>5</b>	1	8

## INFRA-RED

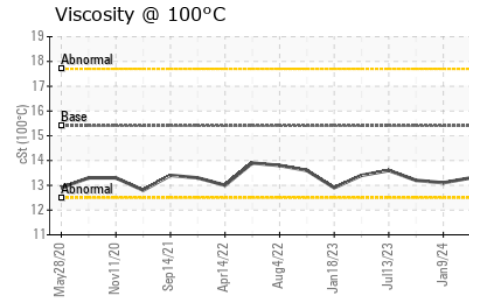
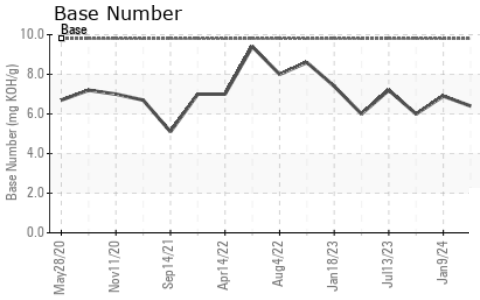
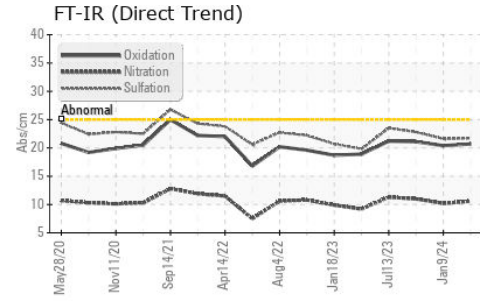
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.5</b>	0.5	0.7
Nitration	Abs/cm	*ASTM D7624 >20	<b>10.6</b>	10.2	11.0
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>21.7</b>	21.6	22.8

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>20.7</b>	20.4	21.1
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>6.4</b>	6.9	6.0



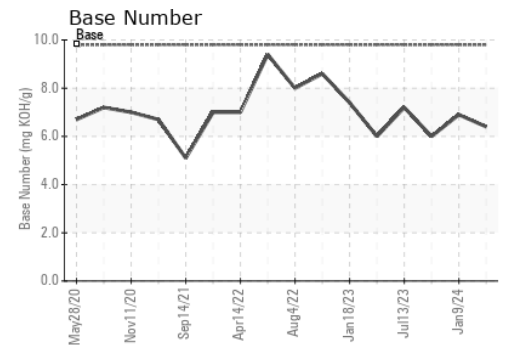
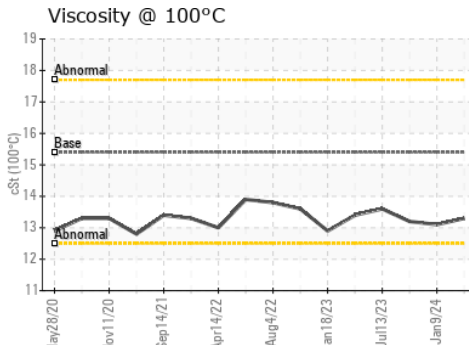
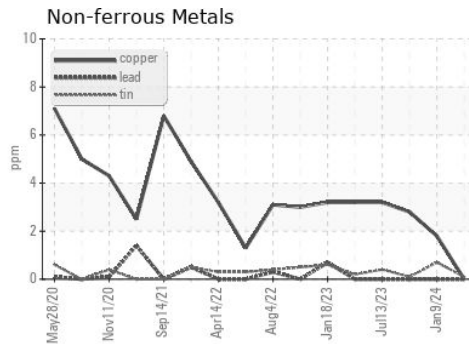
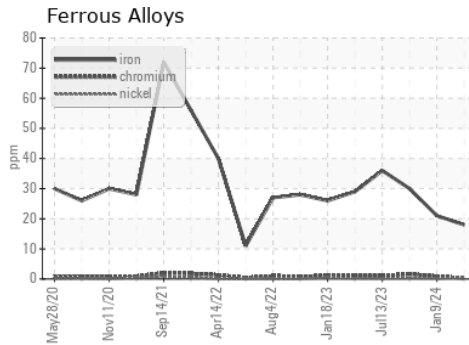
# OIL ANALYSIS REPORT



PARAMETER	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	13.3	13.1

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0096501  
**Lab Number** : 06145215  
**Unique Number** : 10970023  
**Test Package** : FLEET

**Received** : 10 Apr 2024  
**Tested** : 11 Apr 2024  
**Diagnosed** : 11 Apr 2024 - Wes Davis

**GFL Environmental - 656 - Culpeper Hauling**  
 15490 Montanus Drive  
 Culpeper, VA  
 US 22701

Contact: Matt Hanna  
 mhanna@gflenv.com  
 T: (540)727-0887

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)