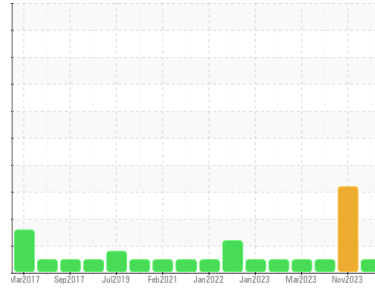




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**(YA134171)**

Machine Id  
**10692**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (8 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>GFL0090048</b>	GFL0080608	GFL0080549
Sample Date	Client Info	<b>02 Apr 2024</b>	15 Nov 2023	20 Jul 2023
Machine Age	hrs	<b>8432</b>	8432	8432
Oil Age	hrs	<b>0</b>	8432	8432
Oil Changed	Client Info	<b>Not Chngd</b>	N/A	Changed
Sample Status		<b>NORMAL</b>	ABNORMAL	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>4</b>	34	10
Chromium	ppm ASTM D5185m >5	<b>&lt;1</b>	4	<1
Nickel	ppm ASTM D5185m >4	<b>0</b>	0	0
Titanium	ppm ASTM D5185m >2	<b>&lt;1</b>	0	0
Silver	ppm ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >15	<b>2</b>	4	2
Lead	ppm ASTM D5185m >25	<b>0</b>	<1	0
Copper	ppm ASTM D5185m >100	<b>&lt;1</b>	82	<1
Tin	ppm ASTM D5185m >4	<b>&lt;1</b>	<1	0
Vanadium	ppm ASTM D5185m	<b>&lt;1</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>	6	5
Barium	ppm ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 60	<b>58</b>	60	59
Manganese	ppm ASTM D5185m 0	<b>0</b>	<1	<1
Magnesium	ppm ASTM D5185m 1010	<b>893</b>	950	987
Calcium	ppm ASTM D5185m 1070	<b>1076</b>	1155	1114
Phosphorus	ppm ASTM D5185m 1150	<b>964</b>	1096	1048
Zinc	ppm ASTM D5185m 1270	<b>1145</b>	1268	1314
Sulfur	ppm ASTM D5185m 2060	<b>3083</b>	3080	3667

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>3</b>	20	3
Sodium	ppm ASTM D5185m	<b>2</b>	30	6
Potassium	ppm ASTM D5185m >20	<b>2</b>	466	<1

## INFRA-RED

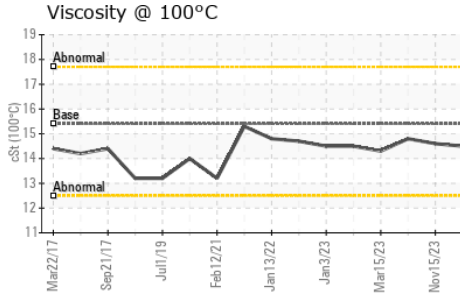
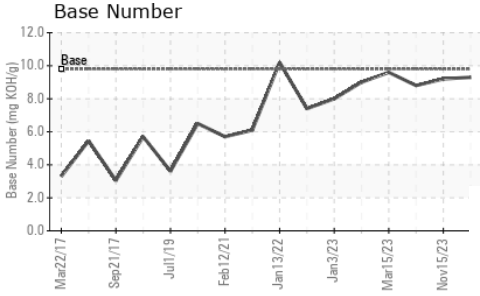
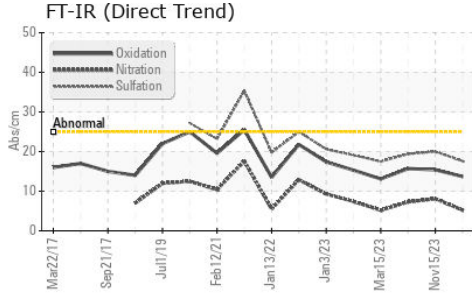
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >6	<b>0.1</b>	0.2	0.1
Nitration	Abs/cm *ASTM D7624 >20	<b>5.2</b>	8.1	7.3
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>17.6</b>	20.0	19.4

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>13.7</b>	15.4	15.7
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>9.3</b>	9.2	8.8



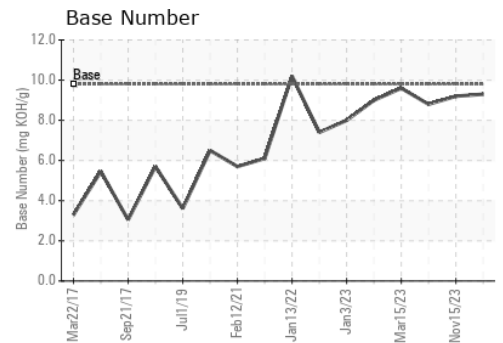
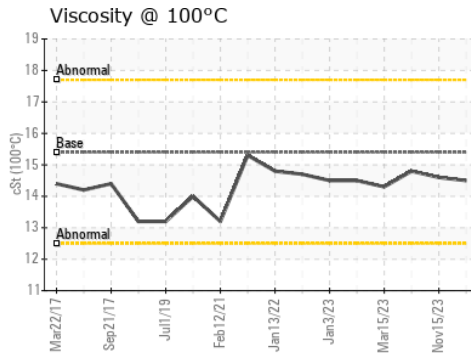
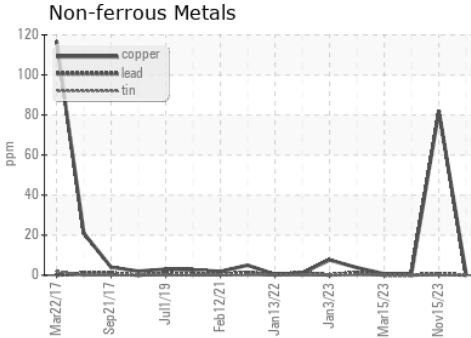
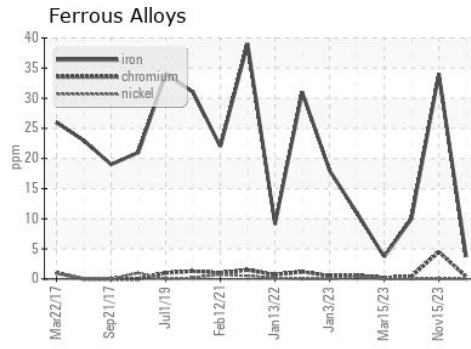
# OIL ANALYSIS REPORT



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	14.5	14.6

## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : GFL0090048  
 Lab Number : 06138252  
 Unique Number : 10963060  
 Test Package : FLEET

GFL Environmental - 018 - Fayetteville  
 4621 Marracco Drive  
 Hope Mills, NC  
 US 28348

Contact: Robert Carter  
 robert.carter@gflenv.com

T: (910)596-1170

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)