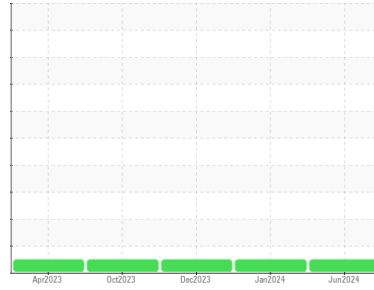




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id  
**525146- SW7537**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (--- 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>GFL0123552</b>	GFL0105492	GFL0066575
Sample Date	Client Info		<b>26 Jun 2024</b>	27 Jan 2024	19 Dec 2023
Machine Age	hrs	Client Info	<b>337311</b>	15266	0
Oil Age	hrs	Client Info	<b>337311</b>	0	0
Oil Changed	Client Info		<b>Changed</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>36</b>	23	12
Chromium	ppm	ASTM D5185m >5	<b>2</b>	<1	<1
Nickel	ppm	ASTM D5185m >2	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m >30	<b>9</b>	6	4
Lead	ppm	ASTM D5185m >30	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m >150	<b>8</b>	4	3
Tin	ppm	ASTM D5185m >5	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>0</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>0</b>	0	<1
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>58</b>	53	51
Manganese	ppm	ASTM D5185m 0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m 1010	<b>8</b>	32	12
Calcium	ppm	ASTM D5185m 1070	<b>2913</b>	2542	2568
Phosphorus	ppm	ASTM D5185m 1150	<b>1254</b>	1117	1158
Zinc	ppm	ASTM D5185m 1270	<b>1486</b>	1327	1372
Sulfur	ppm	ASTM D5185m 2060	<b>3200</b>	3058	3334

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<b>11</b>	8	7
Sodium	ppm	ASTM D5185m	<b>3</b>	<1	<1
Potassium	ppm	ASTM D5185m >20	<b>2</b>	2	3

## INFRA-RED

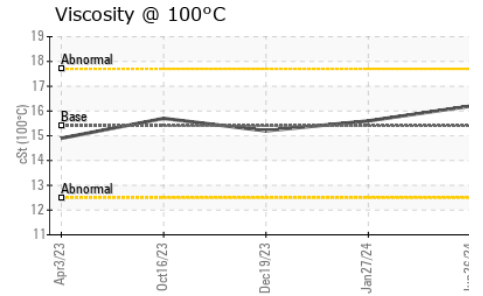
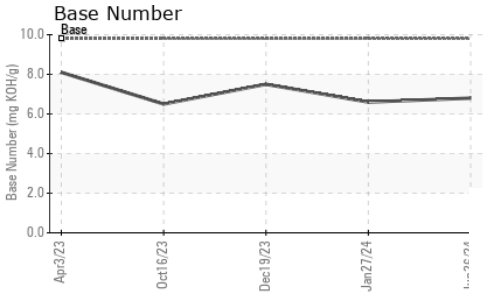
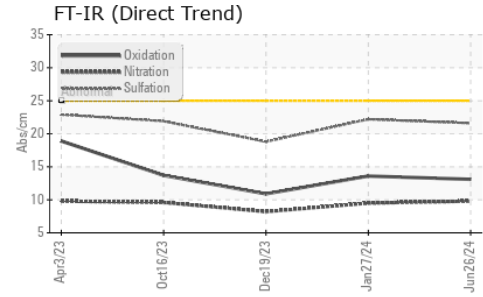
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.8</b>	0.6	0.5
Nitration	Abs/cm	*ASTM D7624 >20	<b>9.8</b>	9.5	8.2
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>21.6</b>	22.2	18.8

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>13.1</b>	13.6	10.9
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>6.8</b>	6.6	7.5



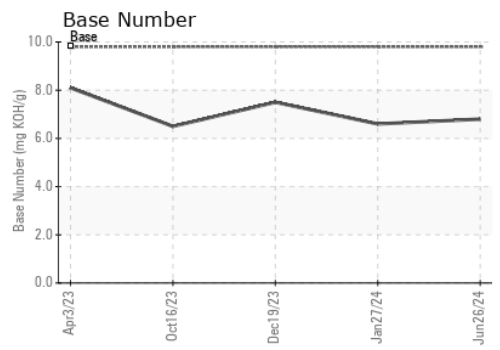
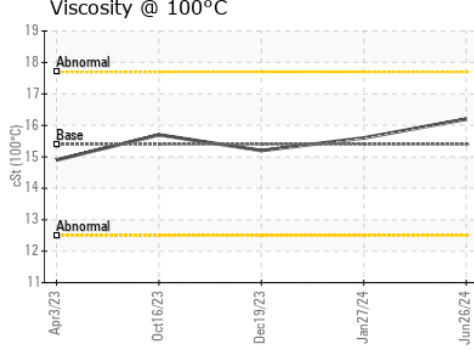
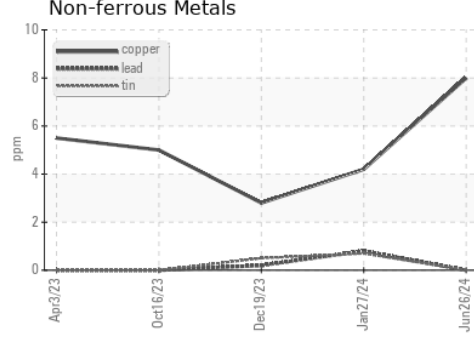
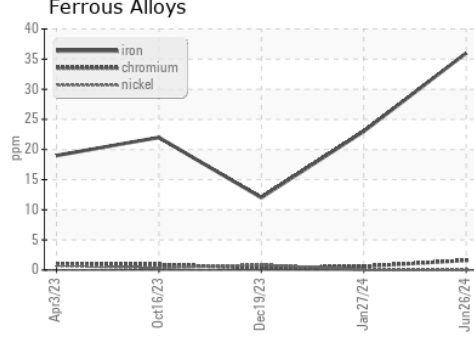
# OIL ANALYSIS REPORT



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	16.2	15.6

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0123552      **Received** : 03 Jul 2024  
**Lab Number** : **06227037**      **Tested** : 05 Jul 2024  
**Unique Number** : 11110530      **Diagnosed** : 05 Jul 2024 - Don Baldrige  
**Test Package** : FLEET

**GFL Environmental - 983 - Sugar Land Hauling**  
 16011 West Belfort Street  
 Sugar Land, TX  
 US 77498  
 Contact: Adrian Martinez  
 adrianmartinez@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)