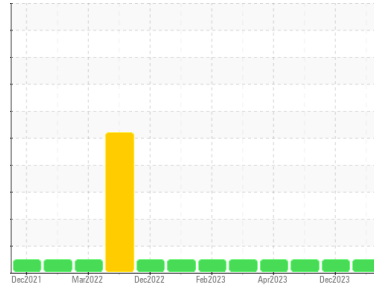




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**749006-310058**

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>GFL0106822</b>	GFL0092004	GFL0084739
Sample Date	Client Info		<b>26 Feb 2024</b>	13 Dec 2023	20 Jun 2023
Machine Age	hrs	Client Info	<b>14494</b>	137678	137678
Oil Age	hrs	Client Info	<b>600</b>	13383	0
Oil Changed	Client Info		<b>Changed</b>	Changed	Not 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 >100	<b>26</b>	32	21
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	2	1
Nickel	ppm	ASTM D5185m >4	<b>0</b>	1	<1
Titanium	ppm	ASTM D5185m	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>2</b>	2	2
Lead	ppm	ASTM D5185m >40	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m >330	<b>&lt;1</b>	<1	0
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	<1	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>15</b>	12	21
Barium	ppm	ASTM D5185m 0	<b>0</b>	12	0
Molybdenum	ppm	ASTM D5185m 60	<b>54</b>	56	51
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 1010	<b>602</b>	540	600
Calcium	ppm	ASTM D5185m 1070	<b>1564</b>	1555	1611
Phosphorus	ppm	ASTM D5185m 1150	<b>788</b>	702	758
Zinc	ppm	ASTM D5185m 1270	<b>992</b>	939	976
Sulfur	ppm	ASTM D5185m 2060	<b>2457</b>	2369	2905

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>6</b>	8	7
Sodium	ppm	ASTM D5185m	<b>6</b>	6	5
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	2	1

## INFRA-RED

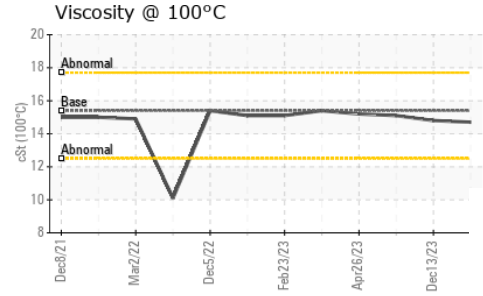
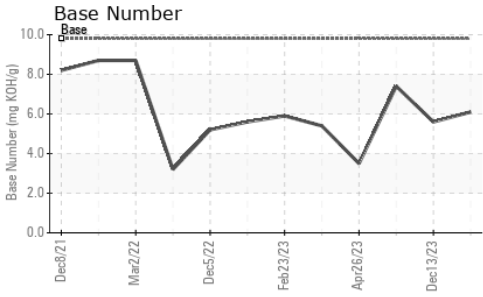
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0</b>	0	0.1
Nitration	Abs/cm	*ASTM D7624 >20	<b>9.4</b>	9.9	9.0
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>19.8</b>	20.2	20.0

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>16.8</b>	17.5	17.3
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>6.1</b>	5.6	7.4



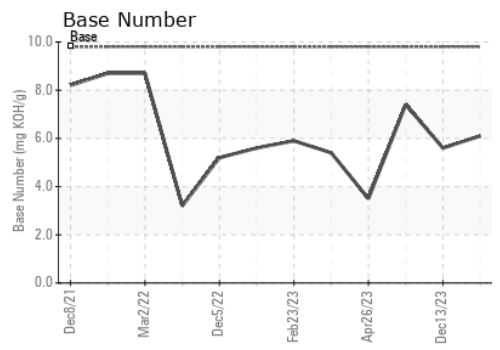
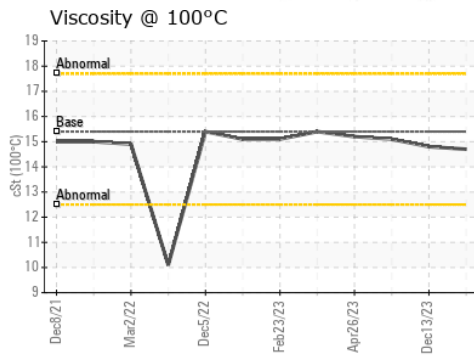
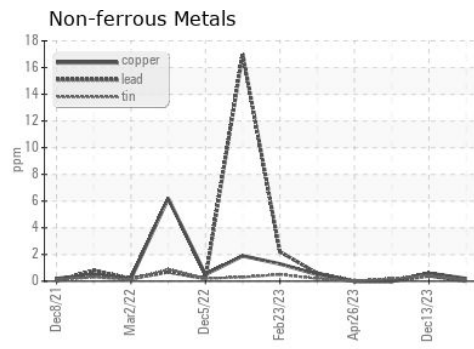
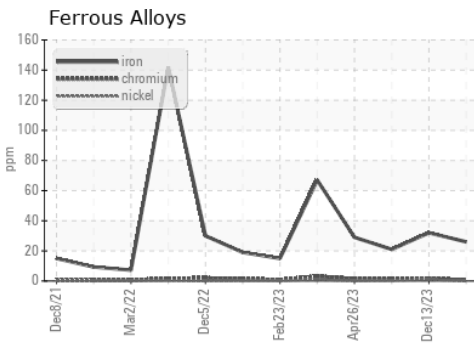
# OIL ANALYSIS REPORT



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>14.7</b>	14.8	15.1

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0106822 **Received** : 28 Feb 2024  
**Lab Number** : 06103483 **Tested** : 02 Mar 2024  
**Unique Number** : 10901713 **Diagnosed** : 02 Mar 2024 - Don Baldrige  
**Test Package** : FLEET

**GFL Environmental - 856 - Houston South**  
 8515 Highway 6 South  
 Houston, TX  
 US 77083  
 Contact: Apolinar Zacarias  
 pzacariascano@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)