

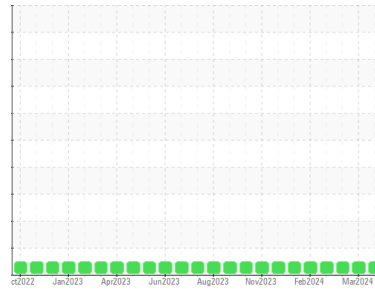


# OIL ANALYSIS REPORT



Area  
**(FAN285)**  
 Machine Id  
**428099**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

## Sample Rating Trend



**NORMAL**



## 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>GFL0068855</b>	GFL0111462	GFL0068901
Sample Date	Client Info		<b>17 Apr 2024</b>	29 Mar 2024	06 Mar 2024
Machine Age	hrs	Client Info	<b>15459</b>	15316	15167
Oil Age	hrs	Client Info	<b>143</b>	520	371
Oil Changed	Client Info		<b>Not Changed</b>	Changed	Not Changed
Sample Status			<b>NORMAL</b>	NORMAL	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 >120	<b>10</b>	5	0
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m >15	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>6</b>	4	3
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	0	1
Copper	ppm	ASTM D5185m >330	<b>2</b>	0	<1
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>3</b>	5	5
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>57</b>	55	54
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 1010	<b>906</b>	887	930
Calcium	ppm	ASTM D5185m 1070	<b>1028</b>	967	1017
Phosphorus	ppm	ASTM D5185m 1150	<b>1033</b>	969	974
Zinc	ppm	ASTM D5185m 1270	<b>1197</b>	1152	1198
Sulfur	ppm	ASTM D5185m 2060	<b>3123</b>	3164	2890

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>9</b>	6	6
Sodium	ppm	ASTM D5185m	<b>4</b>	3	2
Potassium	ppm	ASTM D5185m >20	<b>19</b>	11	9

## INFRA-RED

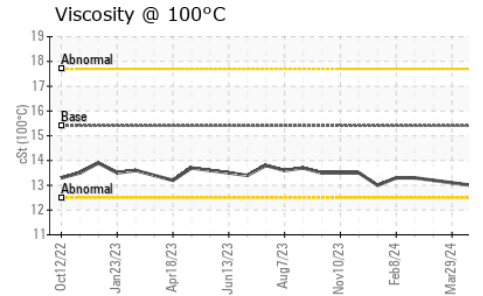
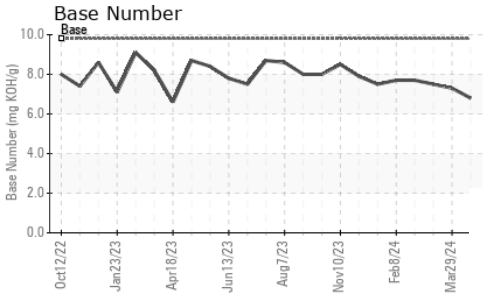
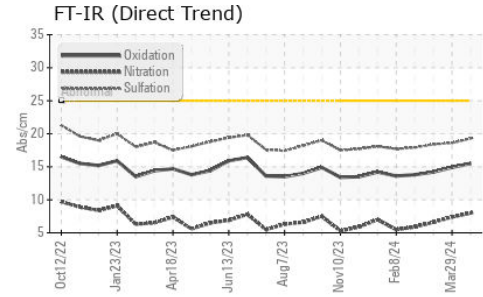
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >4	<b>0.4</b>	0.3	0.2
Nitration	Abs/cm	*ASTM D7624 >20	<b>8.0</b>	7.4	6.6
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>19.3</b>	18.6	18.4

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>15.5</b>	14.9	14.2
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>6.8</b>	7.3	7.5



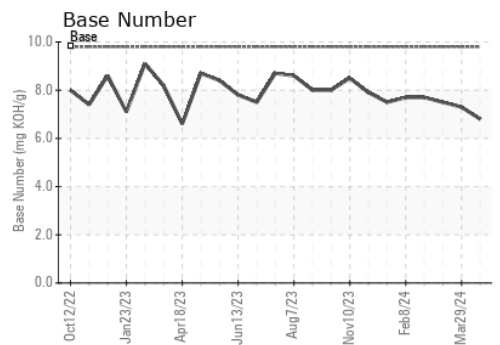
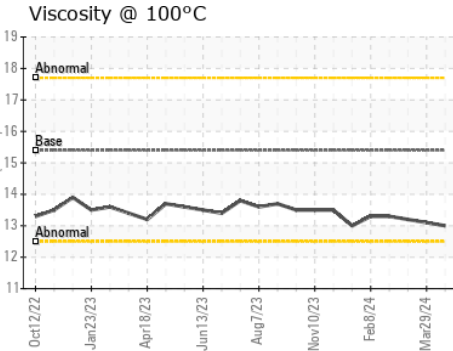
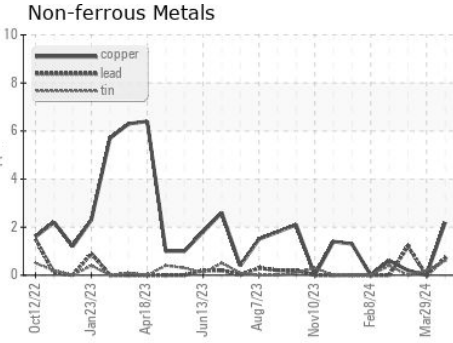
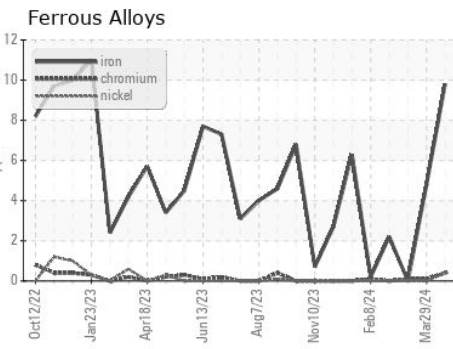
# OIL ANALYSIS REPORT



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	13.0	13.1

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0068855      **Received** : 19 Apr 2024  
**Lab Number** : 06155049      **Tested** : 22 Apr 2024  
**Unique Number** : 10990472      **Diagnosed** : 22 Apr 2024 - Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 073 - Warner Robins - Transwaste**  
 155 Story Road  
 Warner Robins, GA  
 US 31093  
 Contact: JOSH MALONEY  
 jmaloney@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)