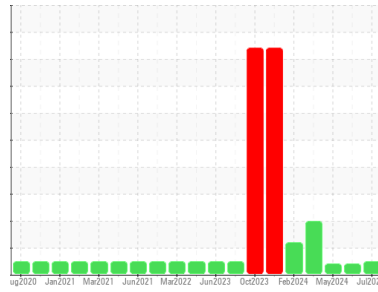




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**(26831XA)**

Machine Id  
**528006**

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>GFL0070930</b>	GFL0119275	GFL0070958
Sample Date	Client Info	<b>03 Jul 2024</b>	15 Jun 2024	16 May 2024
Machine Age	hrs	<b>15026</b>	14902	14684
Oil Age	hrs	<b>184</b>	0	0
Oil Changed	Client Info	<b>Not Changed</b>	Changed	Not Changed
Sample Status		<b>NORMAL</b>	ATTENTION	ATTENTION

## 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>6</b>	21	17
Chromium	ppm ASTM D5185m >20	<b>&lt;1</b>	0	<1
Nickel	ppm ASTM D5185m >4	<b>0</b>	<1	0
Titanium	ppm ASTM D5185m	<b>&lt;1</b>	<1	<1
Silver	ppm ASTM D5185m >3	<b>&lt;1</b>	<1	<1
Aluminum	ppm ASTM D5185m >20	<b>1</b>	3	3
Lead	ppm ASTM D5185m >40	<b>0</b>	0	<1
Copper	ppm ASTM D5185m >330	<b>2</b>	4	3
Tin	ppm ASTM D5185m >15	<b>0</b>	<1	0
Vanadium	ppm ASTM D5185m	<b>&lt;1</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>12</b>	28	62
Barium	ppm ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 60	<b>51</b>	30	28
Manganese	ppm ASTM D5185m 0	<b>&lt;1</b>	1	<1
Magnesium	ppm ASTM D5185m 1010	<b>914</b>	785	754
Calcium	ppm ASTM D5185m 1070	<b>1214</b>	1428	1473
Phosphorus	ppm ASTM D5185m 1150	<b>946</b>	902	860
Zinc	ppm ASTM D5185m 1270	<b>1091</b>	1016	982
Sulfur	ppm ASTM D5185m 2060	<b>3212</b>	3642	3733

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>4</b>	9	7
Sodium	ppm ASTM D5185m	<b>5</b>	6	4
Potassium	ppm ASTM D5185m >20	<b>1</b>	15	11

## INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.2</b>	0.4	0.3
Nitration	Abs/cm *ASTM D7624 >20	<b>6.6</b>	9.1	8.4
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>18.9</b>	21.1	18.6

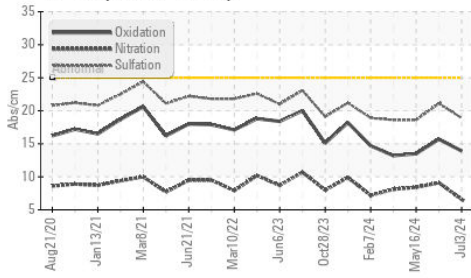
## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>13.9</b>	15.7	13.5
Base Number (BN)	mg KOH/g ASTM D2896 9.8	<b>8.7</b>	6.2	6.8

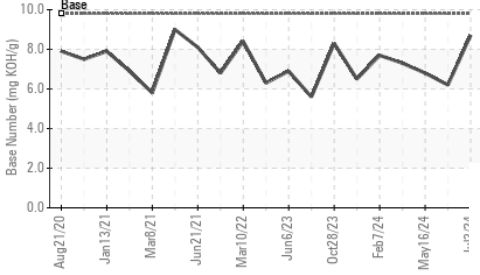


# OIL ANALYSIS REPORT

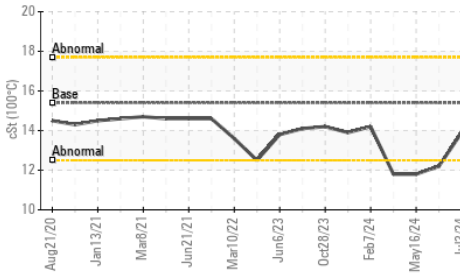
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

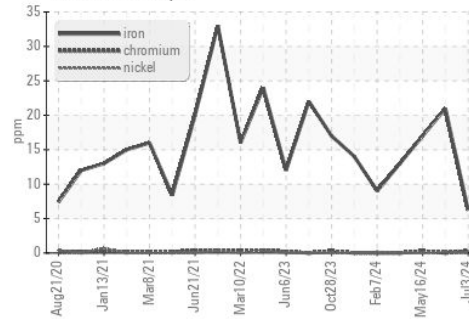


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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

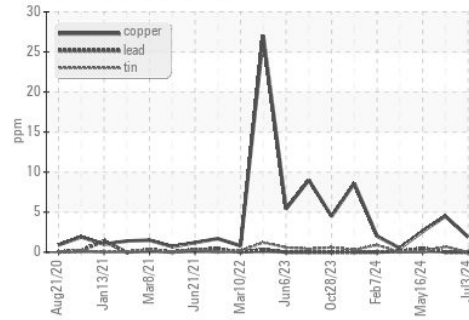
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	13.9	12.2

## GRAPHS

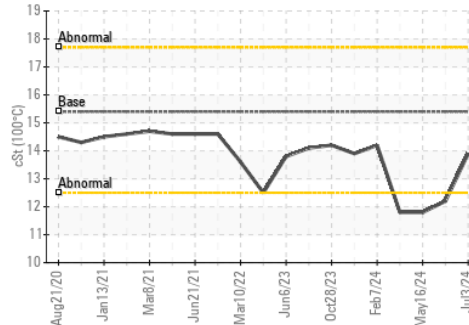
Ferrous Alloys



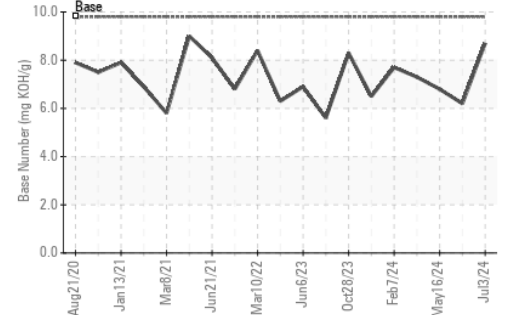
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : GFL0070930  
 Lab Number : 06228399  
 Unique Number : 11111892  
 Test Package : FLEET

Received : 05 Jul 2024  
 Tested : 08 Jul 2024  
 Diagnosed : 08 Jul 2024 - Wes Davis

GFL Environmental - 654 - Richmond Hauling  
 11800 Lewis Road  
 Chester, VA  
 US 23831  
 Contact: Jimmy Mayes  
 jmayes@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)