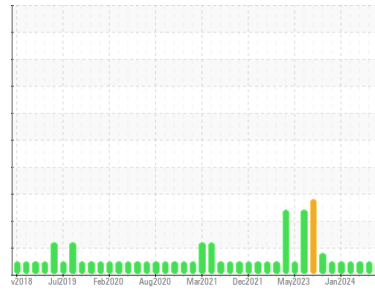




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**AUTOCAR 10851**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (7 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>GFL0116775</b>	GFL0116751	GFL0109020
Sample Date	Client Info			<b>03 Jun 2024</b>	06 May 2024	07 Mar 2024
Machine Age	hrs	Client Info		<b>31920</b>	31769	31621
Oil Age	hrs	Client Info		<b>20338</b>	20187	20039
Oil Changed	Client Info			<b>Not Changed</b>	Not Changed	N/A
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	>75	<b>58</b>	31	13
Chromium	ppm	ASTM D5185m	>5	<b>3</b>	3	0
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>15	<b>4</b>	4	<1
Lead	ppm	ASTM D5185m	>25	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>100	<b>2</b>	2	0
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</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>12</b>	17	10
Barium	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>65</b>	66	59
Manganese	ppm	ASTM D5185m	0	<b>1</b>	<1	0
Magnesium	ppm	ASTM D5185m	1010	<b>787</b>	749	703
Calcium	ppm	ASTM D5185m	1070	<b>1167</b>	1176	1061
Phosphorus	ppm	ASTM D5185m	1150	<b>978</b>	1046	810
Zinc	ppm	ASTM D5185m	1270	<b>1135</b>	1174	991
Sulfur	ppm	ASTM D5185m	2060	<b>3102</b>	3101	2500

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>10</b>	9	5
Sodium	ppm	ASTM D5185m		<b>38</b>	25	18
Potassium	ppm	ASTM D5185m	>20	<b>8</b>	10	2

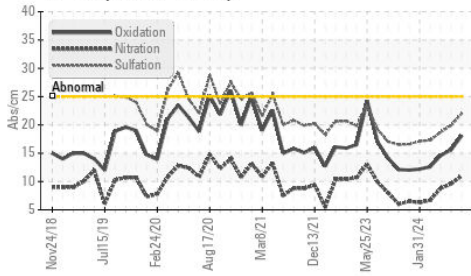
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>6	<b>0.9</b>	0.6	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.0</b>	9.6	8.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.0</b>	19.9	18.7

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.1</b>	15.6	14.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>5.2</b>	6.3	6.7

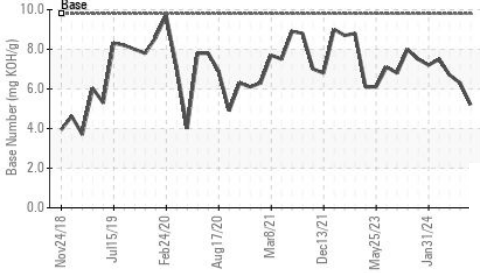


# OIL ANALYSIS REPORT

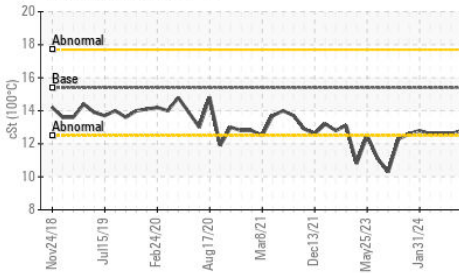
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C



## VISUAL

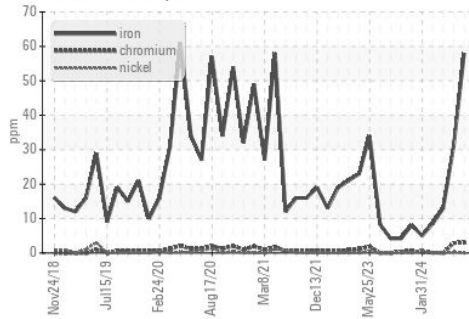
	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar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

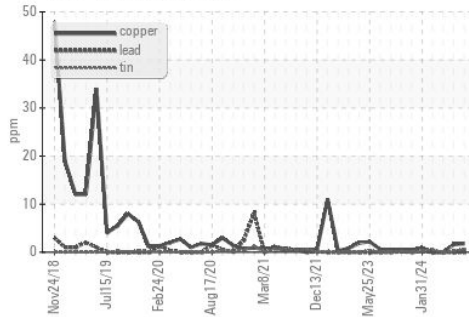
	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	12.8	12.6

## GRAPHS

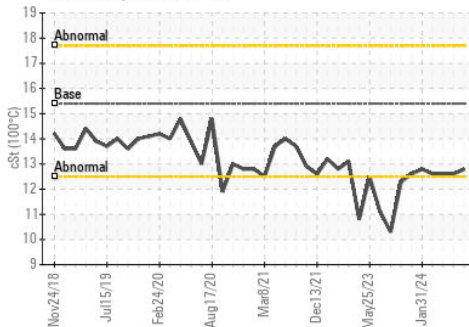
Ferrous Alloys



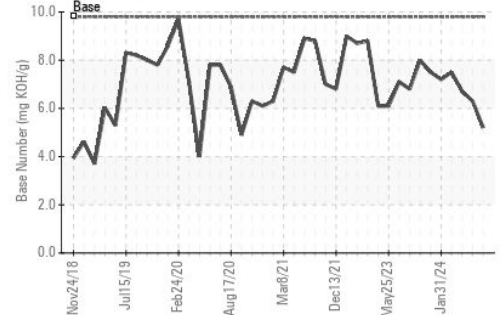
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : GFL0116775  
 Lab Number : 06199838  
 Unique Number : 11061961  
 Test Package : FLEET

Received : 05 Jun 2024  
 Tested : 05 Jun 2024  
 Diagnosed : 05 Jun 2024 - Wes Davis

GFL Environmental - 009 - Fairburn  
 6905 Roosevelt Hwy  
 Fairburn, GA  
 US 30213  
 Contact: Eric Jones  
 erjones@gflenv.com  
 T: (678)630-9927  
 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)