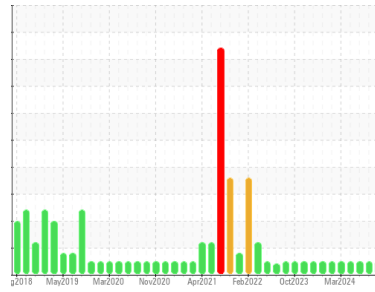




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**(62A1N88) ALEXANDER CITY**  
 Machine Id  
**10818**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (11 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>GFL0079739</b>	GFL0079740	GFL0089926
Sample Date	Client Info		<b>11 Apr 2024</b>	10 Apr 2024	02 Apr 2024
Machine Age	hrs	Client Info	<b>16587</b>	16575	16507
Oil Age	hrs	Client Info	<b>2185</b>	0	2105
Oil Changed	Client Info		<b>N/A</b>	N/A	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>10</b>	11	8
Chromium	ppm	ASTM D5185m >5	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m >4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m >2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >15	<b>2</b>	2	2
Lead	ppm	ASTM D5185m >25	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m >100	<b>&lt;1</b>	<1	0
Tin	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</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>	12	13
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>60</b>	62	59
Manganese	ppm	ASTM D5185m 0	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m 1010	<b>881</b>	887	862
Calcium	ppm	ASTM D5185m 1070	<b>1087</b>	1091	1033
Phosphorus	ppm	ASTM D5185m 1150	<b>999</b>	1013	942
Zinc	ppm	ASTM D5185m 1270	<b>1185</b>	1191	1140
Sulfur	ppm	ASTM D5185m 2060	<b>3371</b>	3401	3069

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>5</b>	5	5
Sodium	ppm	ASTM D5185m	<b>32</b>	31	32
Potassium	ppm	ASTM D5185m >20	<b>16</b>	16	0

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >6	<b>0.3</b>	0.3	0.3
Nitration	Abs/cm	*ASTM D7624 >20	<b>7.9</b>	7.8	7.9
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>18.6</b>	18.5	18.5

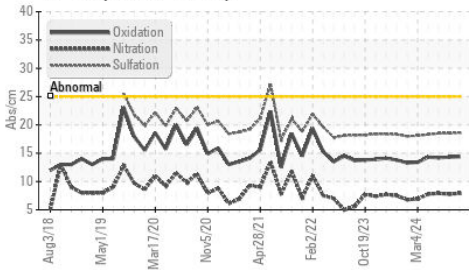
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>14.4</b>	14.3	14.2
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>7.8</b>	7.9	7.9

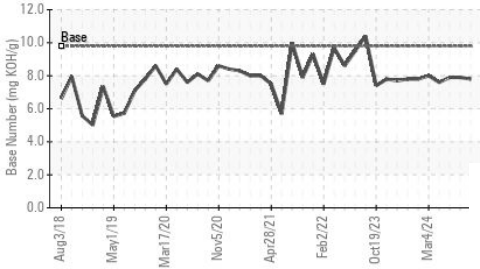


# OIL ANALYSIS REPORT

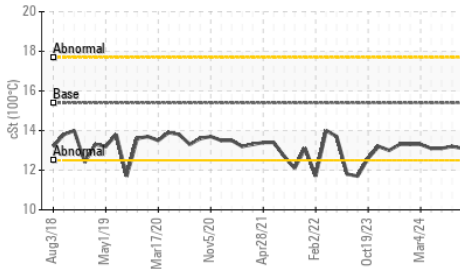
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

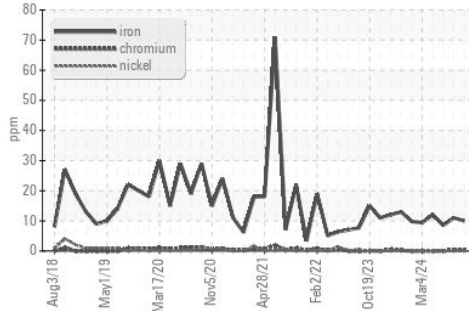


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

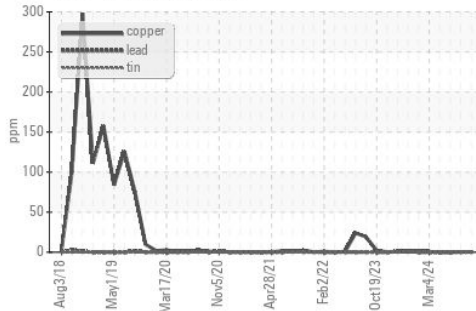
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	13.1	13.2

## GRAPHS

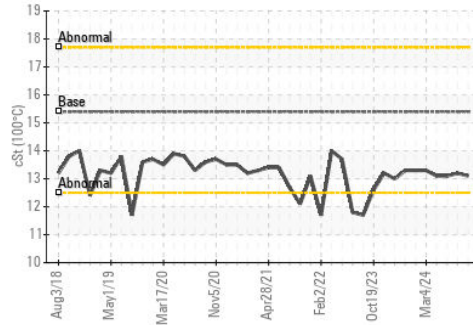
Ferrous Alloys



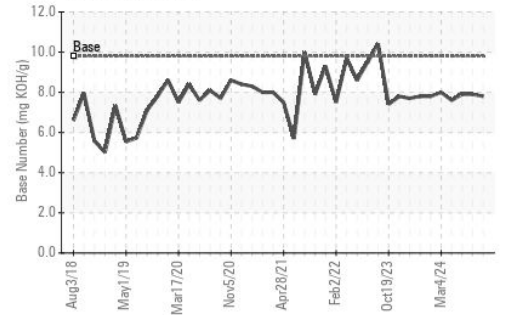
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0079739  
**Lab Number** : 06150901  
**Unique Number** : 10980979  
**Test Package** : FLEET

**Received** : 16 Apr 2024  
**Tested** : 17 Apr 2024  
**Diagnosed** : 17 Apr 2024 - Wes Davis

GFL Environmental - 172 - Montgomery-Alexander City-Tallahassee  
 Multiple Sites  
 Montgomery, AL  
 US 36108

Contact: BRANDON HURST  
 brandonhurst@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)

T:  
F: