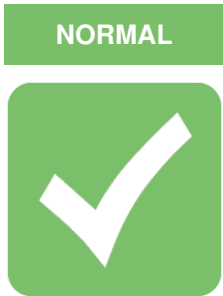
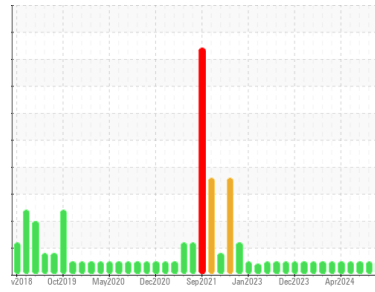




# OIL ANALYSIS REPORT

Area  
**(62A1N88) ALEXANDER CITY**  
 Machine Id  
**10818**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (11 GAL)**

Sample Rating Trend



## 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>GFL0079736</b>	GFL0091347	GFL0079739
Sample Date	Client Info			<b>09 May 2024</b>	17 Apr 2024	11 Apr 2024
Machine Age	hrs Client Info			<b>5749</b>	16624	16587
Oil Age	hrs Client Info			<b>2419</b>	2222	2185
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>9</b>	10	10
Chromium	ppm ASTM D5185m	>5		<b>&lt;1</b>	<1	<1
Nickel	ppm ASTM D5185m	>4		<b>&lt;1</b>	0	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>3</b>	2	2
Lead	ppm ASTM D5185m	>25		<b>&lt;1</b>	0	<1
Copper	ppm ASTM D5185m	>100		<b>4</b>	<1	<1
Tin	ppm ASTM D5185m	>4		<b>&lt;1</b>	0	<1
Vanadium	ppm ASTM D5185m			<b>&lt;1</b>	<1	<1
Cadmium	ppm ASTM D5185m			<b>&lt;1</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	0		<b>9</b>	11	12
Barium	ppm ASTM D5185m	0		<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m	60		<b>60</b>	58	60
Manganese	ppm ASTM D5185m	0		<b>0</b>	<1	0
Magnesium	ppm ASTM D5185m	1010		<b>817</b>	832	881
Calcium	ppm ASTM D5185m	1070		<b>1020</b>	1005	1087
Phosphorus	ppm ASTM D5185m	1150		<b>942</b>	870	999
Zinc	ppm ASTM D5185m	1270		<b>1128</b>	1051	1185
Sulfur	ppm ASTM D5185m	2060		<b>2938</b>	3060	3371

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m	>25		<b>5</b>	5	5
Sodium	ppm ASTM D5185m			<b>8</b>	29	32
Potassium	ppm ASTM D5185m	>20		<b>3</b>	0	16

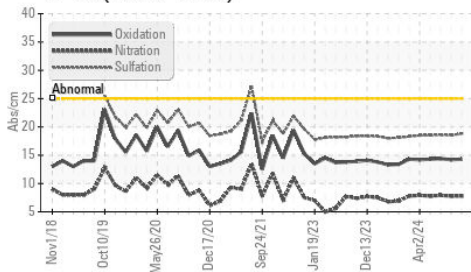
INFRA-RED		method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	>6		<b>0.3</b>	0.3	0.3
Nitration	Abs/cm *ASTM D7624	>20		<b>7.8</b>	7.8	7.9
Sulfation	Abs/.1mm *ASTM D7415	>30		<b>18.8</b>	18.5	18.6

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414	>25		<b>14.3</b>	14.2	14.4
Base Number (BN)	mg KOH/g ASTM D2896	9.8		<b>6.7</b>	7.8	7.8

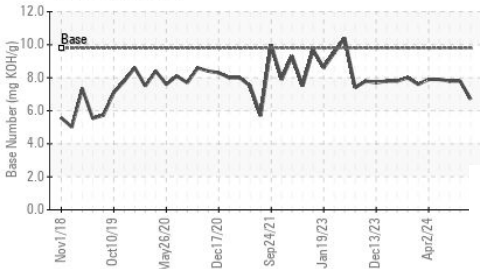


# OIL ANALYSIS REPORT

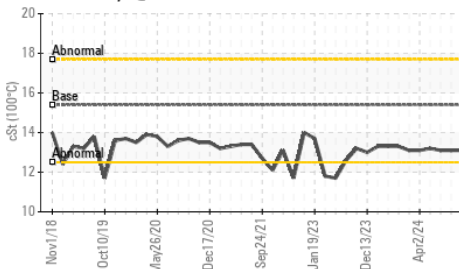
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

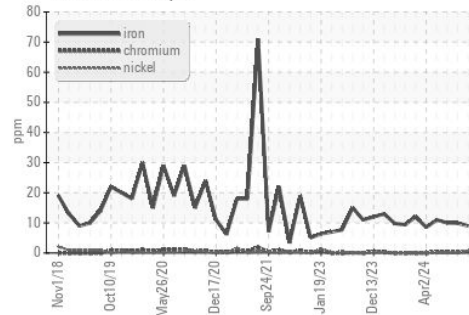


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

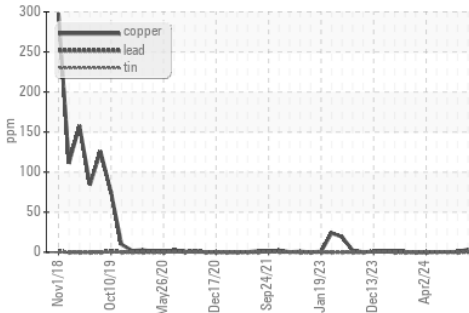
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	13.1	13.1

## GRAPHS

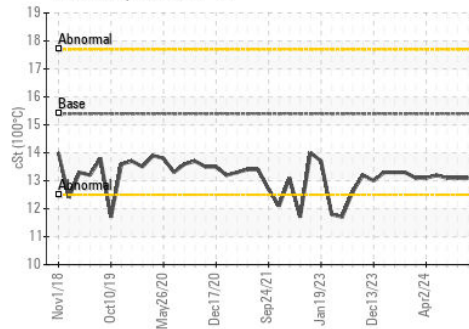
Ferrous Alloys



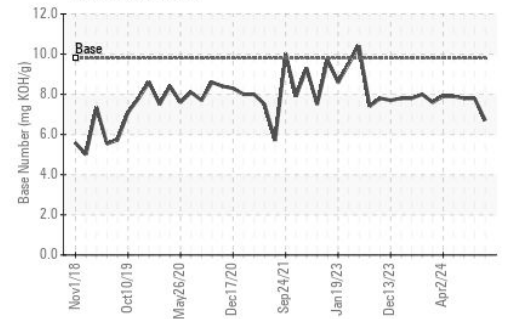
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0079736  
**Lab Number** : 06178555  
**Unique Number** : 11029881  
**Test Package** : FLEET

**Received** : 14 May 2024  
**Tested** : 15 May 2024  
**Diagnosed** : 15 May 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: