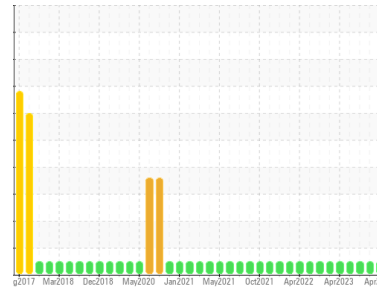




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**(P633833)**  
 Machine Id  
**3761C**  
 Component  
**Natural Gas Engine**  
 Fluid  
**PETRO CANADA DURON GEO LD 15W40 (40 QTS)**

## 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>GFL0101769</b>	GFL0101798	GFL0090074
Sample Date	Client Info		<b>30 Apr 2024</b>	23 Feb 2024	02 Nov 2023
Machine Age	hrs	Client Info	<b>19701</b>	19100	18600
Oil Age	hrs	Client Info	<b>601</b>	600	600
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>13</b>	12	21
Chromium	ppm	ASTM D5185m >4	<b>1</b>	<1	2
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >9	<b>3</b>	2	1
Lead	ppm	ASTM D5185m >30	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m >35	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m >4	<b>&lt;1</b>	0	<1
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 50	<b>34</b>	20	17
Barium	ppm	ASTM D5185m 5	<b>0</b>	8	<1
Molybdenum	ppm	ASTM D5185m 50	<b>75</b>	54	57
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m 560	<b>797</b>	562	725
Calcium	ppm	ASTM D5185m 1510	<b>2270</b>	1540	1459
Phosphorus	ppm	ASTM D5185m 780	<b>1164</b>	827	814
Zinc	ppm	ASTM D5185m 870	<b>1365</b>	975	1084
Sulfur	ppm	ASTM D5185m 2040	<b>3548</b>	2602	2538

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	<b>6</b>	4	22
Sodium	ppm	ASTM D5185m	<b>8</b>	2	6
Potassium	ppm	ASTM D5185m >20	<b>2</b>	2	0

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	<b>0</b>	0	0.1
Nitration	Abs/cm	*ASTM D7624 >20	<b>9.1</b>	9.5	10.6
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>20.2</b>	21.0	17.5

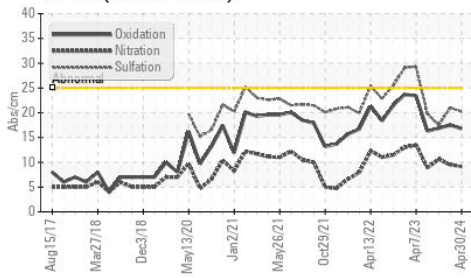
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>16.8</b>	17.5	16.9
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>7.3</b>	6.7	9.5

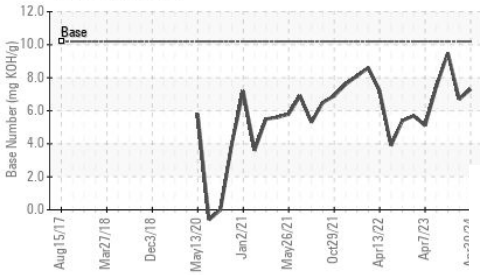


# OIL ANALYSIS REPORT

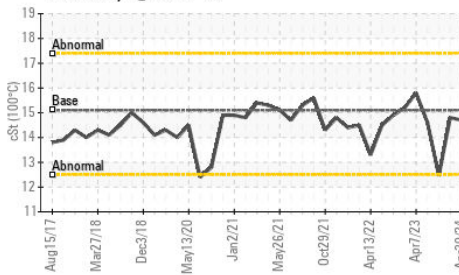
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C



## VISUAL

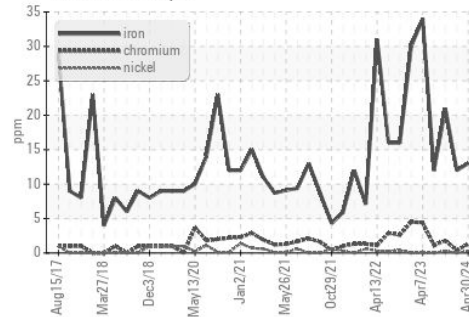
	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

## FLUID PROPERTIES

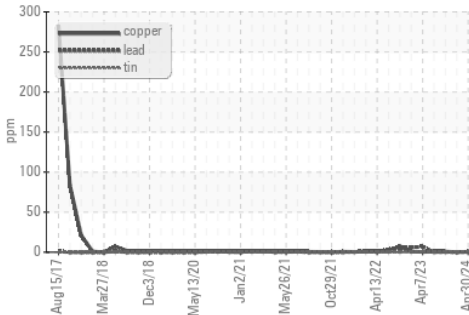
	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	14.7	14.8

## GRAPHS

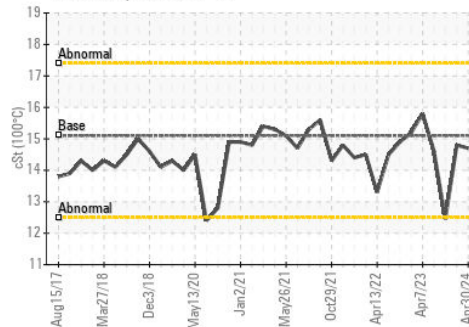
Ferrous Alloys



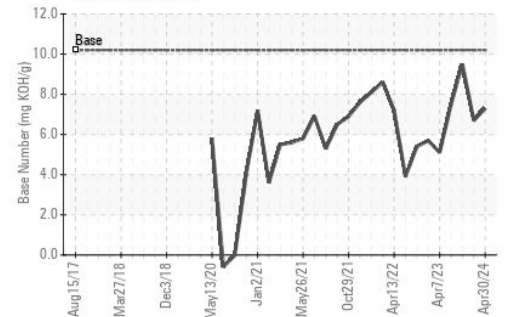
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : GFL0101769

Lab Number : 06174962

Unique Number : 11021015

Test Package : FLEET

Received : 09 May 2024

Tested : 10 May 2024

Diagnosed : 13 May 2024 - Don Baldrige

GFL Environmental - 030 - Conway Myrtle Beach

3010 HWY 378

Conway, SC

US 29527

Contact: ARCILIO RUEZ

aruiz@gflenv.com

T:

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)