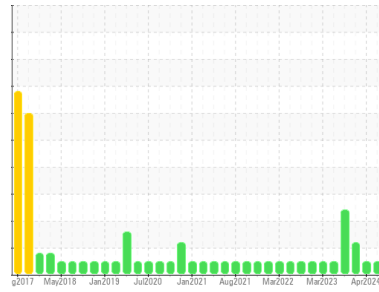




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**(P633834)**

Machine Id  
**3755C**

Component  
**Natural Gas Engine**

Fluid  
**PETRO CANADA DURON GEO LD 15W40 (30 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>GFL0125697</b>	GFL0117963	GFL0101755
Sample Date	Client Info		<b>03 Jul 2024</b>	24 Apr 2024	03 Apr 2024
Machine Age	mls	Client Info	<b>153000</b>	152600	152000
Oil Age	mls	Client Info	<b>600</b>	600	600
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	ABNORMAL

## 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>33</b>	8	31
Chromium	ppm	ASTM D5185m >4	<b>5</b>	1	5
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>9</b>	<1	9
Lead	ppm	ASTM D5185m >30	<b>6</b>	1	3
Copper	ppm	ASTM D5185m >35	<b>1</b>	0	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>0</b>	0	<1

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	<b>5</b>	37	5
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 50	<b>56</b>	47	56
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	2
Magnesium	ppm	ASTM D5185m 560	<b>572</b>	561	577
Calcium	ppm	ASTM D5185m 1510	<b>1660</b>	1538	1709
Phosphorus	ppm	ASTM D5185m 780	<b>872</b>	828	731
Zinc	ppm	ASTM D5185m 870	<b>1017</b>	956	996
Sulfur	ppm	ASTM D5185m 2040	<b>2390</b>	2892	2604

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	<b>8</b>	4	9
Sodium	ppm	ASTM D5185m	<b>15</b>	7	16
Potassium	ppm	ASTM D5185m >20	<b>39</b>	9	▲ 56

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	<b>0</b>	0	0
Nitration	Abs/cm	*ASTM D7624 >20	<b>12.6</b>	6.8	12.2
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>26.6</b>	19.5	24.6

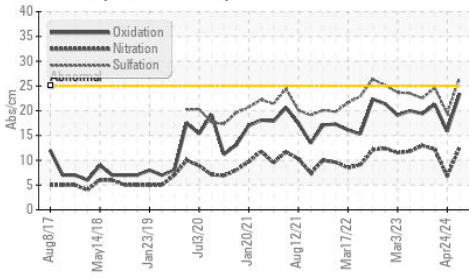
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>23.4</b>	15.9	21.3
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>2.9</b>	7.4	3.0

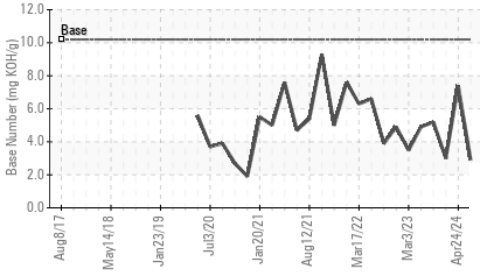


# OIL ANALYSIS REPORT

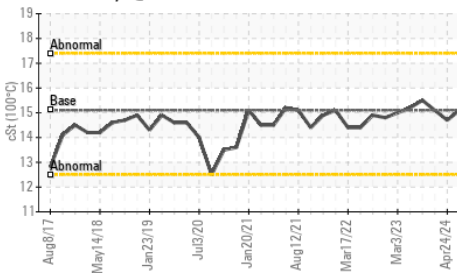
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C



## VISUAL

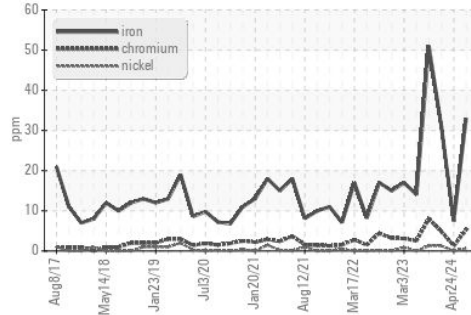
	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar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

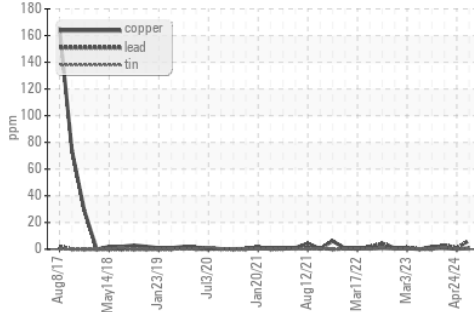
	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	14.7	15.1

## GRAPHS

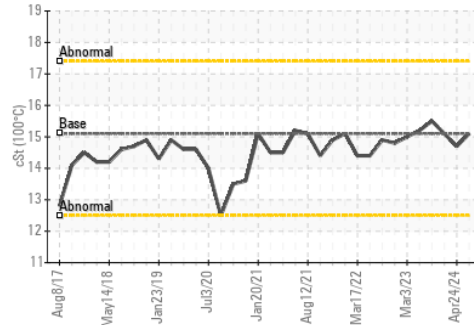
Ferrous Alloys



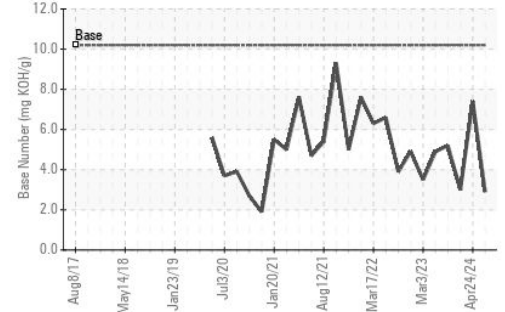
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

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

Sample No. : GFL0125697

Lab Number : 06229991

Unique Number : 11113484

Test Package : FLEET

Received : 08 Jul 2024

Tested : 09 Jul 2024

Diagnosed : 09 Jul 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)