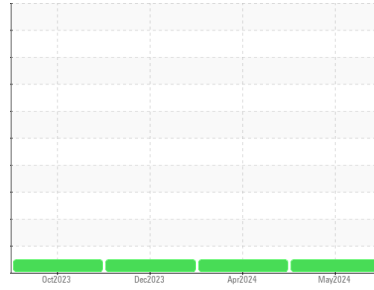




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**(TLD5317)**  
 Machine Id  
**733026**  
 Component  
**Natural Gas Engine**  
 Fluid  
**PETRO CANADA DURON GEO LD 15W40 (--- 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>GFL0117775</b>	GFL0117746	GFL0100549
Sample Date	Client Info	<b>20 May 2024</b>	24 Apr 2024	23 Dec 2023
Machine Age	hrs Client Info	<b>1341</b>	14014	580
Oil Age	hrs Client Info	<b>761</b>	0	201
Oil Changed	Client Info	<b>Changed</b>	Not Changd	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>29</b>	31	47
Chromium	ppm ASTM D5185m >4	<b>&lt;1</b>	<1	<1
Nickel	ppm ASTM D5185m >2	<b>&lt;1</b>	1	<1
Titanium	ppm ASTM D5185m	<b>0</b>	<1	<1
Silver	ppm ASTM D5185m >3	<b>&lt;1</b>	0	0
Aluminum	ppm ASTM D5185m >9	<b>5</b>	6	10
Lead	ppm ASTM D5185m >30	<b>2</b>	<1	2
Copper	ppm ASTM D5185m >35	<b>5</b>	5	18
Tin	ppm ASTM D5185m >4	<b>&lt;1</b>	1	1
Vanadium	ppm ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm ASTM D5185m	<b>0</b>	<1	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 50	<b>11</b>	9	9
Barium	ppm ASTM D5185m 5	<b>0</b>	3	2
Molybdenum	ppm ASTM D5185m 50	<b>62</b>	52	52
Manganese	ppm ASTM D5185m 0	<b>4</b>	8	15
Magnesium	ppm ASTM D5185m 560	<b>680</b>	623	734
Calcium	ppm ASTM D5185m 1510	<b>1863</b>	1346	1267
Phosphorus	ppm ASTM D5185m 780	<b>815</b>	675	653
Zinc	ppm ASTM D5185m 870	<b>1128</b>	879	925
Sulfur	ppm ASTM D5185m 2040	<b>3248</b>	2399	2296

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >+100	<b>10</b>	21	32
Sodium	ppm ASTM D5185m	<b>9</b>	7	5
Potassium	ppm ASTM D5185m >20	<b>10</b>	16	29

## INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	<b>0</b>	0.1	0
Nitration	Abs/cm *ASTM D7624 >20	<b>12.1</b>	10.9	11.7
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>26.0</b>	24.3	22.5

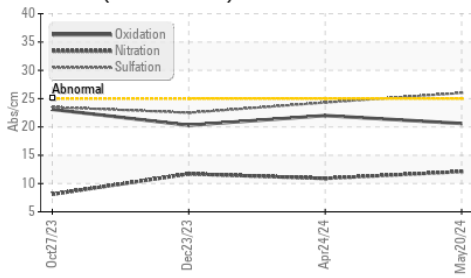
## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>20.6</b>	22.0	20.3
Base Number (BN)	mg KOH/g ASTM D2896 10.2	<b>3.0</b>	4.5	4.3

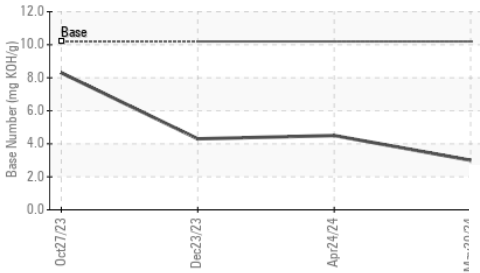


# OIL ANALYSIS REPORT

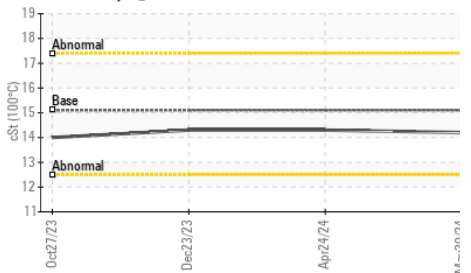
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

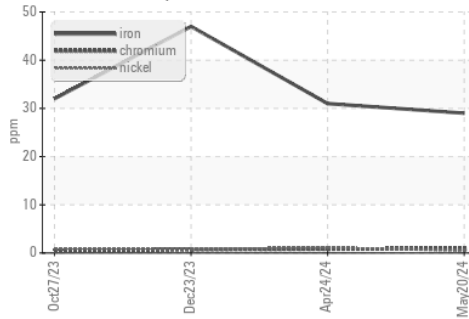


PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

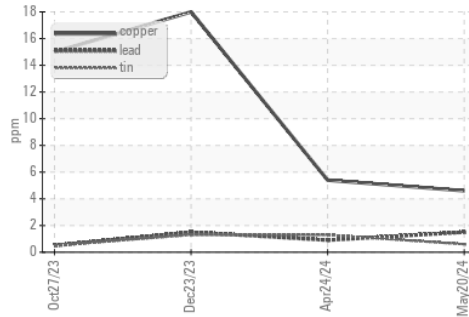
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	14.2	14.3

## GRAPHS

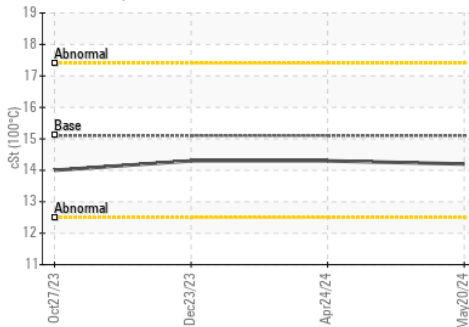
Ferrous Alloys



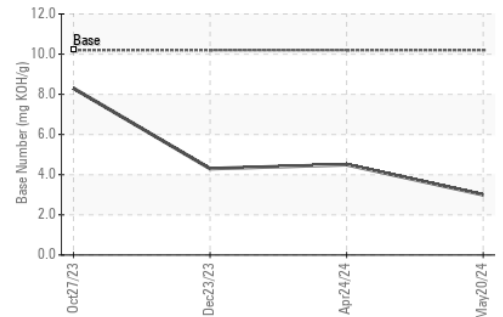
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0117775  
**Lab Number** : 06193346  
**Unique Number** : 11050098  
**Test Package** : FLEET

**Received** : 28 May 2024  
**Tested** : 30 May 2024  
**Diagnosed** : 30 May 2024 - Wes Davis

**GFL Environmental - 865 - East Mount Hauling**  
 7213 East Mount Houston Road  
 Houston, TX  
 US 77050  
 Contact: TECHNICIAN ACCOUNT  
 wcgfldemo@gmail.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: