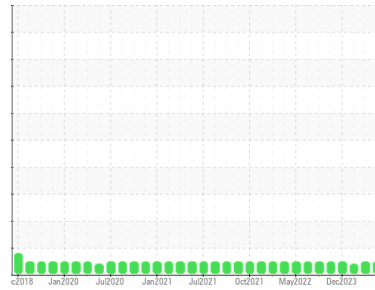




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**(P662031)**  
 Machine Id  
**10892C**  
 Component  
**Natural Gas Engine**  
 Fluid  
**PETRO CANADA DURON GEO LD 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>GFL0109575</b>	GFL0110378	GFL0096913
Sample Date	Client Info		<b>30 May 2024</b>	15 Feb 2024	07 Feb 2024
Machine Age	hrs	Client Info	<b>6451</b>	5650	5580
Oil Age	hrs	Client Info	<b>9961</b>	5650	5580
Oil Changed	Client Info		<b>Changed</b>	Not Changd	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>16</b>	12	43
Chromium	ppm	ASTM D5185m >4	<b>1</b>	1	4
Nickel	ppm	ASTM D5185m >2	<b>1</b>	1	2
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m >3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m >9	<b>3</b>	3	4
Lead	ppm	ASTM D5185m >30	<b>10</b>	1	7
Copper	ppm	ASTM D5185m >35	<b>&lt;1</b>	1	2
Tin	ppm	ASTM D5185m >4	<b>1</b>	<1	1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	<b>7</b>	23	10
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m 50	<b>64</b>	83	73
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	1	2
Magnesium	ppm	ASTM D5185m 560	<b>681</b>	898	749
Calcium	ppm	ASTM D5185m 1510	<b>1672</b>	2156	1750
Phosphorus	ppm	ASTM D5185m 780	<b>903</b>	1009	922
Zinc	ppm	ASTM D5185m 870	<b>1103</b>	1437	1206
Sulfur	ppm	ASTM D5185m 2040	<b>2759</b>	3849	2595

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	<b>9</b>	9	43
Sodium	ppm	ASTM D5185m	<b>9</b>	8	8
Potassium	ppm	ASTM D5185m >20	<b>2</b>	2	4

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	<b>0.1</b>	0	0.1
Nitration	Abs/cm	*ASTM D7624 >20	<b>12.1</b>	9.7	13.6
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>26.6</b>	20.4	25.1

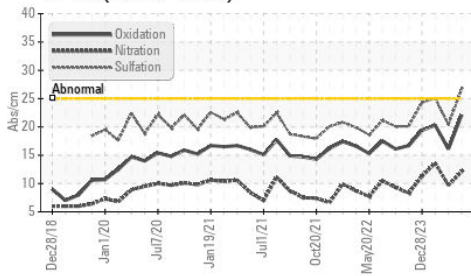
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>22.1</b>	16.1	20.3
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>2.4</b>	5.3	6.3

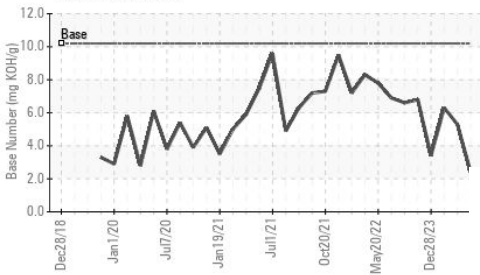


# OIL ANALYSIS REPORT

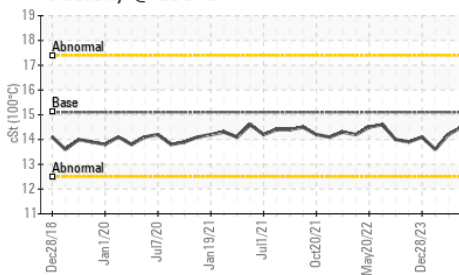
### FT-IR (Direct Trend)



### Base Number



### Viscosity @ 100°C

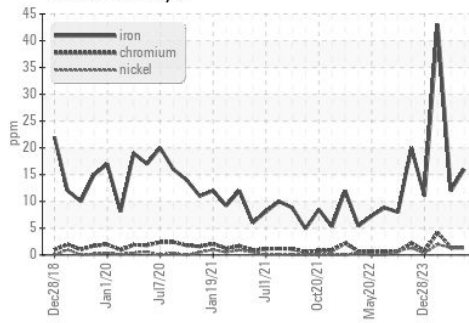


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

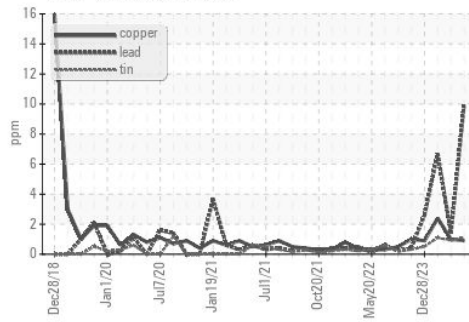
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	14.2	13.6

### GRAPHS

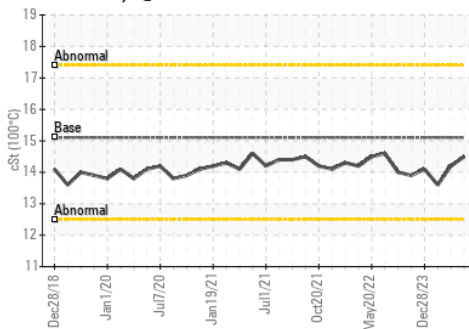
#### Ferrous Alloys



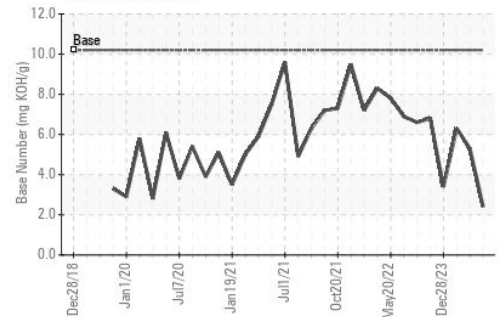
#### Non-ferrous Metals



#### Viscosity @ 100°C



#### Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0109575  
**Lab Number** : 06197359  
**Unique Number** : 11059482  
**Test Package** : FLEET

**Received** : 03 Jun 2024  
**Tested** : 04 Jun 2024  
**Diagnosed** : 04 Jun 2024 - Wes Davis

**GFL Environmental - 031 - Greenville/Spartanburg**  
 1635 Antioch Church Rd  
 Piedmont, SC  
 US 29673  
 Contact: TECHNICIAN ACCOUNT  
 catherine.anastasio@wearcheck.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)