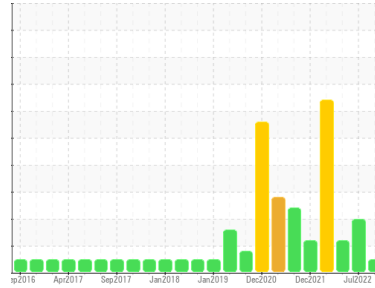




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**3661C**

Component  
**Natural Gas Engine**

Fluid  
**PETRO CANADA DURON GEO LD 15W40 (35 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	history 1	history 2
Sample Number	Client Info	<b>GFL0058797</b>	GFL0048076	GFL0020025
Sample Date	Client Info	<b>26 May 2023</b>	06 Jul 2022	18 Mar 2022
Machine Age	hrs	<b>9098</b>	9098	9098
Oil Age	hrs	<b>9098</b>	9098	9098
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>NORMAL</b>	ATTENTION	ABNORMAL

## WEAR METALS

method	limit/base	current	history 1	history 2	
Iron	ppm	ASTM D5185m >50	<b>25</b>	19	23
Chromium	ppm	ASTM D5185m >4	<b>1</b>	2	3
Nickel	ppm	ASTM D5185m >2	<b>1</b>	▲ <1	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >9	<b>3</b>	4	6
Lead	ppm	ASTM D5185m >30	<b>2</b>	<1	<1
Copper	ppm	ASTM D5185m >35	<b>2</b>	5	7
Tin	ppm	ASTM D5185m >4	<b>2</b>	<1	<1
Antimony	ppm	ASTM D5185m	<b>---</b>	---	---
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history 1	history 2	
Boron	ppm	ASTM D5185m 50	<b>5</b>	10	24
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 50	<b>63</b>	56	87
Manganese	ppm	ASTM D5185m 0	<b>4</b>	<1	<1
Magnesium	ppm	ASTM D5185m 560	<b>951</b>	517	658
Calcium	ppm	ASTM D5185m 1510	<b>1233</b>	1493	1665
Phosphorus	ppm	ASTM D5185m 780	<b>1010</b>	605	859
Zinc	ppm	ASTM D5185m 870	<b>1366</b>	859	1022
Sulfur	ppm	ASTM D5185m 2040	<b>3227</b>	2785	2514

## CONTAMINANTS

method	limit/base	current	history 1	history 2	
Silicon	ppm	ASTM D5185m >+100	<b>19</b>	5	8
Sodium	ppm	ASTM D5185m	<b>4</b>	▲ 87	▲ 465
Potassium	ppm	ASTM D5185m >20	<b>3</b>	2	11

## INFRA-RED

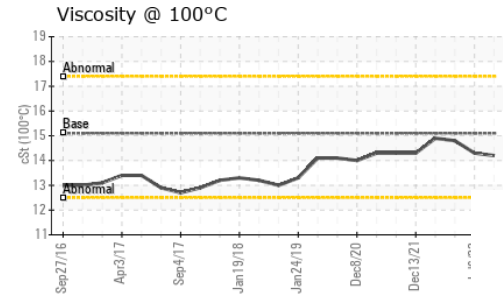
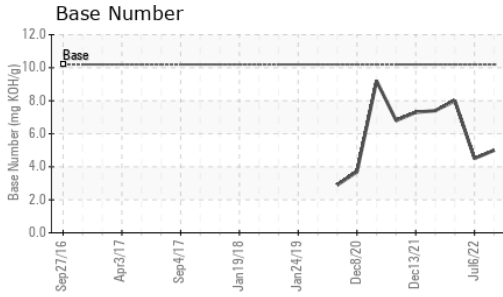
method	limit/base	current	history 1	history 2	
Soot %	%	*ASTM D7844	<b>0</b>	0.1	0
Nitration	Abs/cm	*ASTM D7624 >20	<b>10.2</b>	10.9	11.6
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>19.7</b>	22.7	22.8

## FLUID DEGRADATION

method	limit/base	current	history 1	history 2	
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>15.6</b>	18.5	18.3
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>5.0</b>	4.5	8



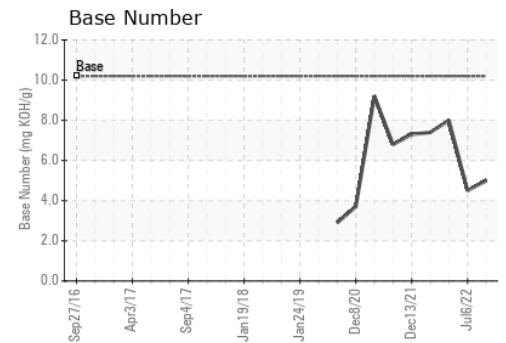
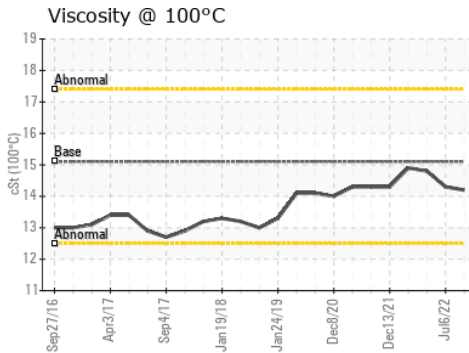
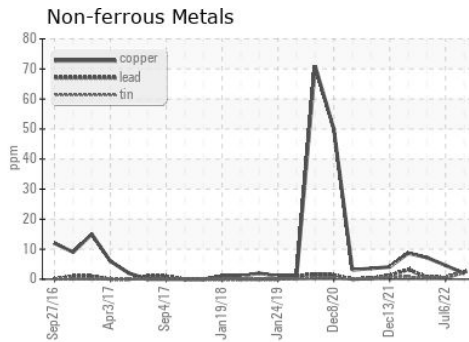
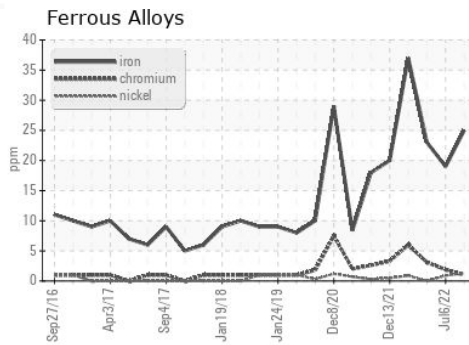
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history 1	history 2
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	LIGHT
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	history 1	history 2	
Visc @ 100°C	cSt	ASTM D445	15.1	<b>14.2</b>	14.3	14.8

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0058797 **Received** : 02 Jun 2023  
**Lab Number** : **05862804** **Diagnosed** : 05 Jun 2023  
**Unique Number** : 10497269 **Diagnostician** : Jonathan Hester  
**Test Package** : FLEET

**GFL Environmental - 019 - Greenville/TriEast**  
 415 Staton Road  
 Greenville, NC  
 US 27834  
 Contact: Spencer Ligon  
 spencer.ligon@gflenv.com  
 T: (800)207-6618  
 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)