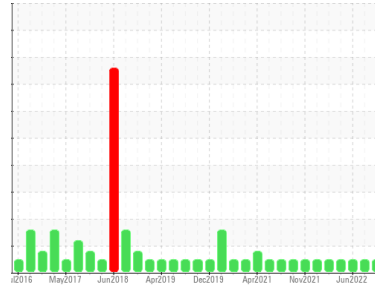




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**3683C**  
 Component  
**Natural Gas Engine**  
 Fluid

**PETRO CANADA DURON GEO LD 15W40 (36 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>GFL0092697</b>	GFL0072393	GFL0048901
Sample Date	Client Info	<b>03 Oct 2023</b>	24 Jan 2023	06 Jun 2022
Machine Age	hrs	<b>13891</b>	13891	0
Oil Age	hrs	<b>622</b>	13891	228
Oil Changed	Client Info	<b>Changed</b>	Not Changd	Not Changed
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	<b>35</b>	26	4
Chromium	ppm	ASTM D5185m >4	<b>1</b>	2	<1
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	<1
Aluminum	ppm	ASTM D5185m >9	<b>4</b>	5	1
Lead	ppm	ASTM D5185m >30	<b>3</b>	13	<1
Copper	ppm	ASTM D5185m >35	<b>3</b>	1	<1
Tin	ppm	ASTM D5185m >4	<b>&lt;1</b>	2	<1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 50	<b>16</b>	11	80
Barium	ppm	ASTM D5185m 5	<b>10</b>	0	0
Molybdenum	ppm	ASTM D5185m 50	<b>58</b>	57	53
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	1	<1
Magnesium	ppm	ASTM D5185m 560	<b>614</b>	620	600
Calcium	ppm	ASTM D5185m 1510	<b>1368</b>	1594	1473
Phosphorus	ppm	ASTM D5185m 780	<b>833</b>	784	777
Zinc	ppm	ASTM D5185m 870	<b>973</b>	980	930
Sulfur	ppm	ASTM D5185m 2040	<b>2476</b>	2824	2690

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >+100	<b>9</b>	11	7
Sodium	ppm	ASTM D5185m	<b>9</b>	10	3
Potassium	ppm	ASTM D5185m >20	<b>6</b>	<1	0

## INFRA-RED

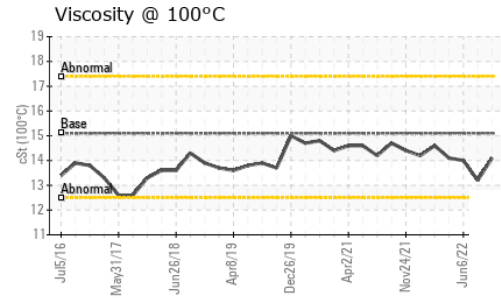
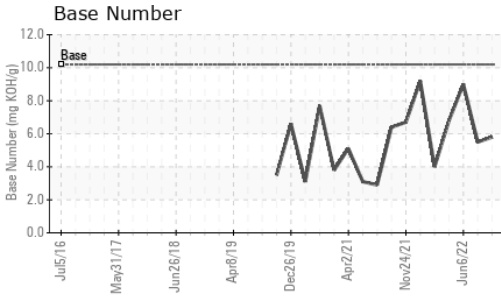
method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	<b>0</b>	0.1	0
Nitration	Abs/cm	*ASTM D7624 >20	<b>9.5</b>	11.8	6.3
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>20.9</b>	24.6	18.3

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>16.5</b>	18.7	14.6
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>5.8</b>	5.5	9.0



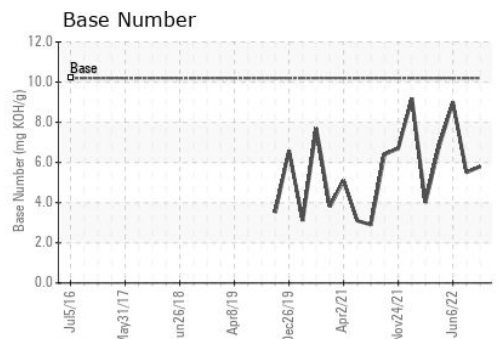
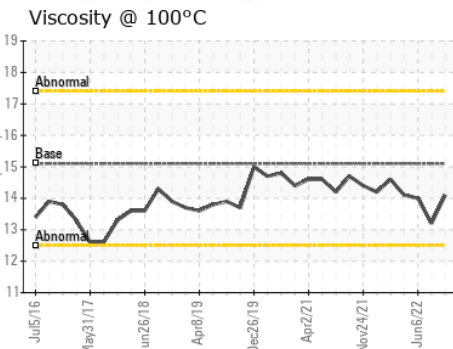
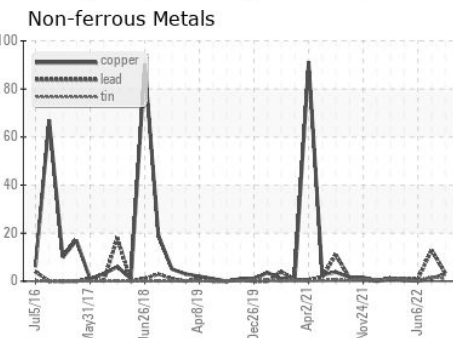
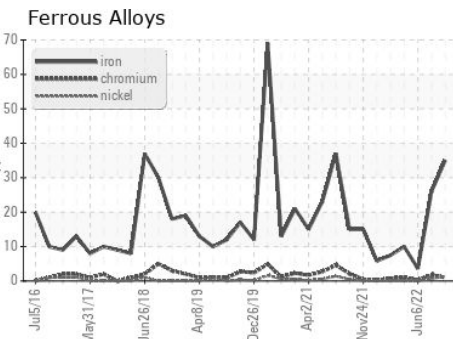
# OIL ANALYSIS REPORT



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	14.1	13.2

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0092697 **Received** : 17 Oct 2023  
**Lab Number** : 05981124 **Diagnosed** : 18 Oct 2023  
**Unique Number** : 10698419 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 005 - Wilson/Tri-East(CNG)**  
 2810 Contentnea Road S  
 Wilson, NC  
 US 27893-8501  
 Contact: SPENCER LIGGON  
 spencer.liggon@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)