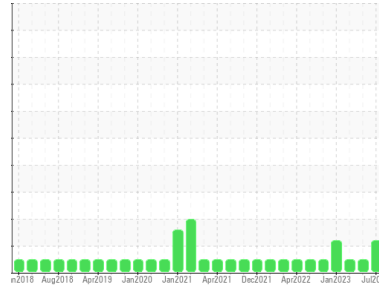




# PROBLEM SUMMARY

Sample Rating Trend



## DEGRADATION



Machine Id  
**3779C**  
 Component  
**Natural Gas Engine**  
 Fluid  
**PETRO CANADA DURON GEO LD 15W40 (7 GAL)**

## COMPONENT CONDITION SUMMARY

No relevant graphs to display

## RECOMMENDATION

The oil is near the end of its useful service life, recommend schedule an oil change. Resample at the next service interval to monitor. ( Customer Sample Comment: Sample )

## PROBLEMATIC TEST RESULTS

Sample Status				<b>ABNORMAL</b>	NORMAL	NORMAL
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	<b>▲ 3.8</b>	6.1	3.6

**Customer Id:** GFL331  
**Sample No.:** GFL0071816  
**Lab Number:** 05893451  
**Test Package:** FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Sean Felton +1 919-379-4092  
[sfelton@wearcheckusa.com](mailto:sfelton@wearcheckusa.com)

To change component or sample information:  
 Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Service/change Fluid	---	---	?	The oil is near the end of it's useful service life, recommend schedule an oil change.

## HISTORICAL DIAGNOSIS

25 Apr 2023 Diag: Don Baldrige

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report



28 Feb 2023 Diag: Don Baldrige

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report



30 Jan 2023 Diag: Don Baldrige

DEGRADATION



The oil is near the end of it's useful service life, recommend schedule an oil change. Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN level is low. The condition of the oil is acceptable for the time in service.

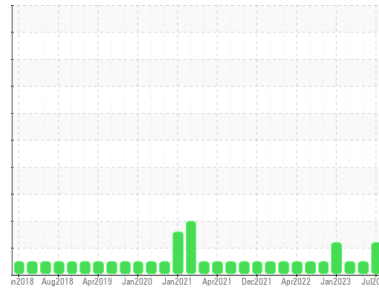
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



DEGRADATION



Machine Id  
**3779C**

Component  
**Natural Gas Engine**

Fluid  
**PETRO CANADA DURON GEO LD 15W40 (7 GAL)**

## DIAGNOSIS

### Recommendation

The oil is near the end of its useful service life, recommend schedule an oil change. Resample at the next service interval to monitor. ( Customer Sample Comment: Sample )

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

The BN level is low. The condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

method	limit/base	current	history 1	history 2
Sample Number	Client Info	<b>GFL0071816</b>	GFL0071839	GFL0071807
Sample Date	Client Info	<b>07 Jul 2023</b>	25 Apr 2023	28 Feb 2023
Machine Age	hrs	Client Info	3858	3488
Oil Age	hrs	Client Info	370	1150
Oil Changed	Client Info	<b>Not Chngd</b>	Not Chngd	Changed
Sample Status		<b>ABNORMAL</b>	NORMAL	NORMAL

## WEAR METALS

method	limit/base	current	history 1	history 2	
Iron	ppm	ASTM D5185m >50	<b>13</b>	10	30
Chromium	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	3
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	1
Titanium	ppm	ASTM D5185m	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m >3	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185m >9	<b>&lt;1</b>	1	4
Lead	ppm	ASTM D5185m >30	<b>&lt;1</b>	0	3
Copper	ppm	ASTM D5185m >35	<b>2</b>	1	3
Tin	ppm	ASTM D5185m >4	<b>&lt;1</b>	0	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history 1	history 2	
Boron	ppm	ASTM D5185m 50	<b>2</b>	13	6
Barium	ppm	ASTM D5185m 5	<b>&lt;1</b>	0	2
Molybdenum	ppm	ASTM D5185m 50	<b>59</b>	54	62
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m 560	<b>552</b>	597	604
Calcium	ppm	ASTM D5185m 1510	<b>1712</b>	1606	1758
Phosphorus	ppm	ASTM D5185m 780	<b>731</b>	778	780
Zinc	ppm	ASTM D5185m 870	<b>990</b>	971	1074
Sulfur	ppm	ASTM D5185m 2040	<b>2379</b>	2971	2753

## CONTAMINANTS

method	limit/base	current	history 1	history 2	
Silicon	ppm	ASTM D5185m >+100	<b>7</b>	6	17
Sodium	ppm	ASTM D5185m	<b>4</b>	7	11
Potassium	ppm	ASTM D5185m >20	<b>2</b>	0	3

## INFRA-RED

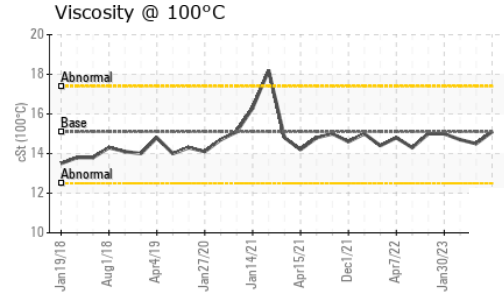
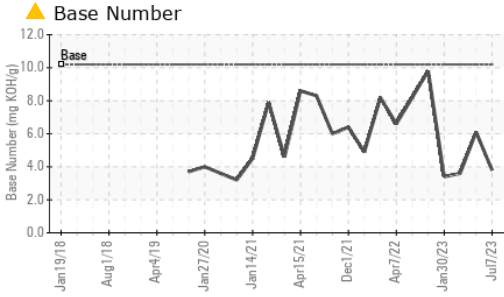
method	limit/base	current	history 1	history 2	
Soot %	%	*ASTM D7844	<b>0.1</b>	0	0.1
Nitration	Abs/cm	*ASTM D7624 >20	<b>12.6</b>	10.7	13.2
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>25.7</b>	18.0	26.8

## FLUID DEGRADATION

method	limit/base	current	history 1	history 2	
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>21.2</b>	16.6	21.9
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>▲ 3.8</b>	6.1	3.6



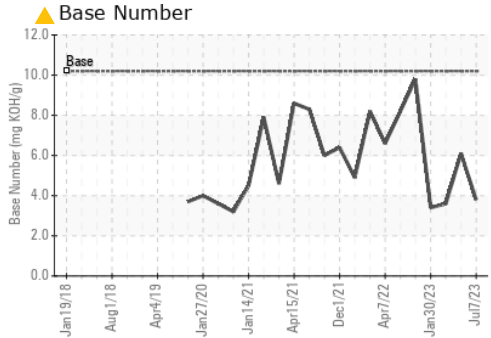
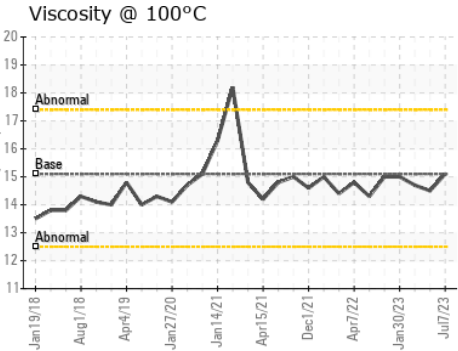
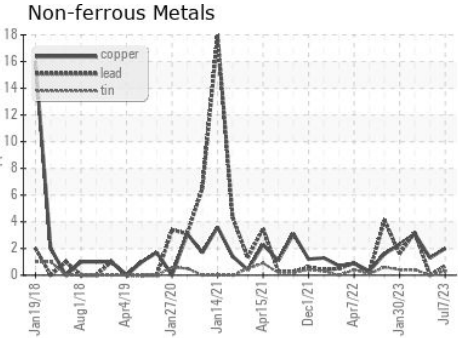
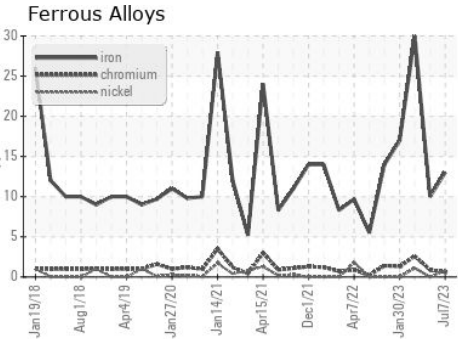
# OIL ANALYSIS REPORT



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	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	history 1	history 2
Visc @ 100°C	cSt	ASTM D445	15.1	14.5	14.7

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0071816 **Received** : 10 Jul 2023  
**Lab Number** : 05893451 **Diagnosed** : 11 Jul 2023  
**Unique Number** : 10549261 **Diagnostician** : Sean Felton  
**Test Package** : FLEET

**GFL Environmental - 331 - Columbus**  
 180 Ada Moore Rd  
 Columbus, NC  
 US 28722  
 Contact: Matt Segars  
 matt.segars@gflenv.com  
 T: (800)207-6618  
 F: (252)617-2494

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)