

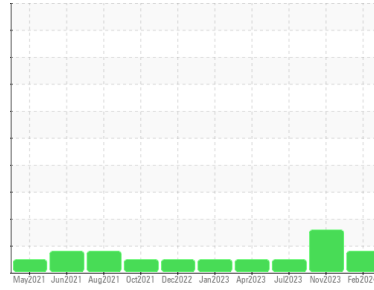


# OIL ANALYSIS REPORT

Sample Rating Trend

**WEAR**

Area  
**(P8963D)**  
 Machine Id  
**945008-260260**  
 Component  
**Natural Gas Engine**  
 Fluid  
**PETRO CANADA DURON GEO LD 15W40 (7 GAL)**



## DIAGNOSIS

- Recommendation**  
No corrective action is recommended at this time. Resample at the next service interval to monitor.
- Wear**  
Cylinder, crank, or cam shaft wear is indicated.
- 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 acceptable for the time in service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>GFL0081090</b>	GFL0081108	GFL0081062
Sample Date	Client Info		<b>21 Feb 2024</b>	02 Nov 2023	26 Jul 2023
Machine Age	hrs	Client Info	<b>17066</b>	3192	17066
Oil Age	hrs	Client Info	<b>941</b>	1200	150
Oil Changed	Client Info		<b>Not Chngd</b>	Changed	Changed
Sample Status			<b>ABNORMAL</b>	ABNORMAL	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>▲ 69</b>	▲ 107	11
Chromium	ppm	ASTM D5185m >4	<b>3</b>	▲ 8	<1
Nickel	ppm	ASTM D5185m >2	<b>2</b>	4	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	1	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >9	<b>6</b>	12	2
Lead	ppm	ASTM D5185m >30	<b>2</b>	3	3
Copper	ppm	ASTM D5185m >35	<b>1</b>	1	2
Tin	ppm	ASTM D5185m >4	<b>2</b>	2	1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</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>5</b>	153	225
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 50	<b>61</b>	101	72
Manganese	ppm	ASTM D5185m 0	<b>1</b>	3	3
Magnesium	ppm	ASTM D5185m 560	<b>536</b>	446	500
Calcium	ppm	ASTM D5185m 1510	<b>1699</b>	1559	1515
Phosphorus	ppm	ASTM D5185m 780	<b>758</b>	977	893
Zinc	ppm	ASTM D5185m 870	<b>946</b>	1349	1093
Sulfur	ppm	ASTM D5185m 2040	<b>2265</b>	3245	3466

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	<b>12</b>	56	9
Sodium	ppm	ASTM D5185m	<b>11</b>	4	4
Potassium	ppm	ASTM D5185m >20	<b>2</b>	5	<1

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	<b>0.8</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624 >20	<b>9.7</b>	7.6	5.6
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>23.7</b>	21.2	19.0

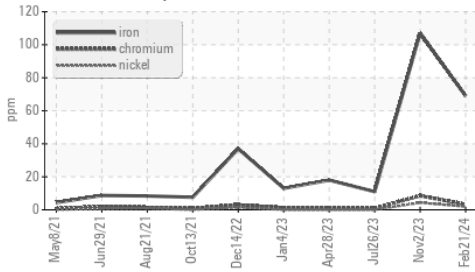
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>18.5</b>	15.8	14.3
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>4.8</b>	5.6	8.3

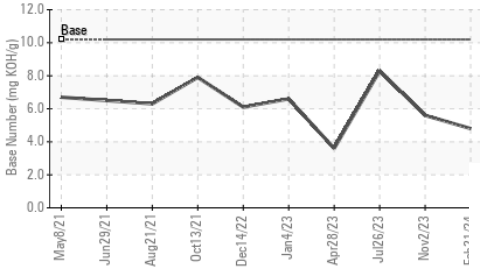


# OIL ANALYSIS REPORT

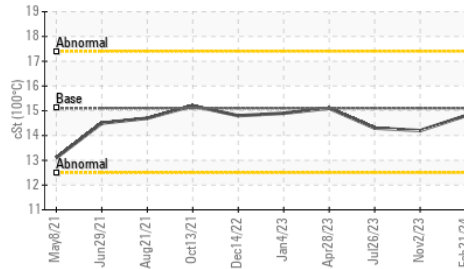
## ▲ Ferrous Alloys



## Base Number



## Viscosity @ 100°C



## VISUAL

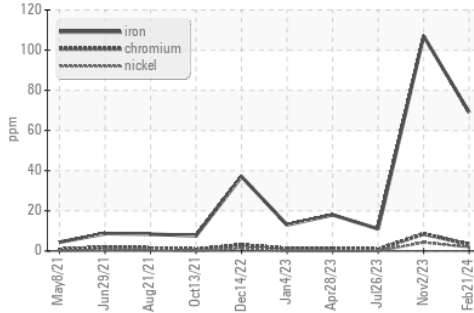
method	limit/base	current	history1	history2		
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

## FLUID PROPERTIES

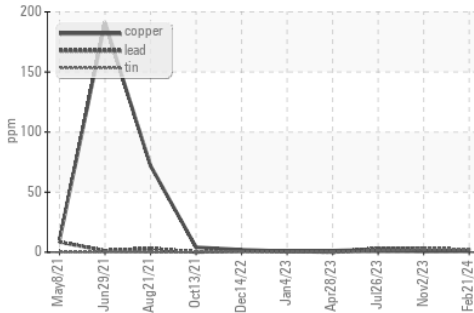
method	limit/base	current	history1	history2		
Visc @ 100°C	cSt	ASTM D445	15.1	14.8	14.2	14.3

## GRAPHS

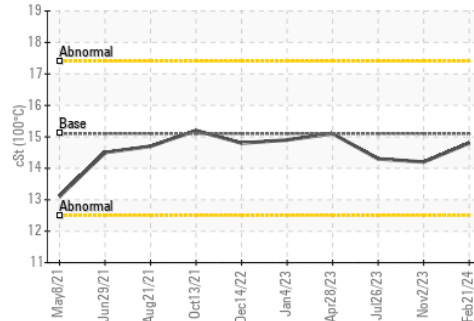
### ▲ Ferrous Alloys



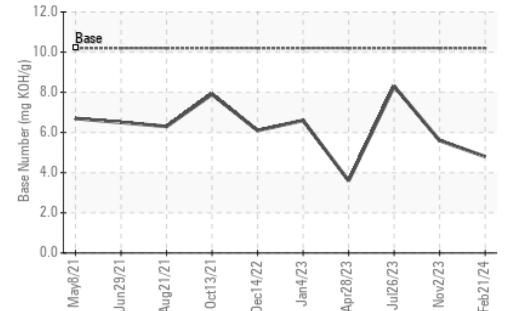
### Non-ferrous Metals



### Viscosity @ 100°C



### Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : GFL0081090  
 Lab Number : 06096800  
 Unique Number : 10889653  
 Test Package : FLEET

Received : 22 Feb 2024  
 Tested : 23 Feb 2024  
 Diagnosed : 23 Feb 2024 - Sean Felton

GFL Environmental - 884 - Lake County - Tavares  
 321 Southridge Industrial Way  
 Tavares, FL  
 US 32778  
 Contact: RON FERAGOTTI

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: