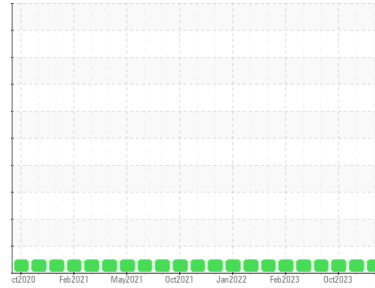




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**(MB9163)**  
Machine Id  
**AUTOCAR 910031**  
Component  
**Natural Gas Engine**  
Fluid  
**PETRO CANADA DURON GEO LD 15W40 (9 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 acceptable for the time in service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>GFL0087479</b>	GFL0087507	GFL0087461
Sample Date	Client Info		<b>19 Jan 2024</b>	26 Oct 2023	11 Oct 2023
Machine Age	hrs	Client Info	<b>8710</b>	8133	8030
Oil Age	hrs	Client Info	<b>577</b>	580	447
Oil Changed	Client Info		<b>N/A</b>	Not Changd	Not Changd
Sample Status			<b>NORMAL</b>	NORMAL	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>9</b>	4	7
Chromium	ppm	ASTM D5185m >4	<b>2</b>	<1	0
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >9	<b>2</b>	1	1
Lead	ppm	ASTM D5185m >30	<b>9</b>	1	2
Copper	ppm	ASTM D5185m >35	<b>2</b>	2	2
Tin	ppm	ASTM D5185m >4	<b>1</b>	<1	0
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	<b>9</b>	8	10
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 50	<b>57</b>	57	60
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m 560	<b>626</b>	511	577
Calcium	ppm	ASTM D5185m 1510	<b>1640</b>	1559	1572
Phosphorus	ppm	ASTM D5185m 780	<b>841</b>	675	720
Zinc	ppm	ASTM D5185m 870	<b>1068</b>	908	946
Sulfur	ppm	ASTM D5185m 2040	<b>2582</b>	2072	2301

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	<b>5</b>	6	9
Sodium	ppm	ASTM D5185m	<b>7</b>	7	6
Potassium	ppm	ASTM D5185m >20	<b>2</b>	<1	3
Fuel	%	ASTM D3524 >4.0	<b>0.1</b>	---	---

## INFRA-RED

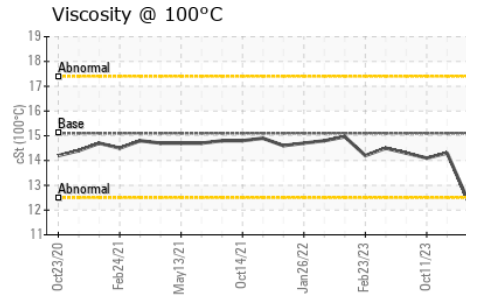
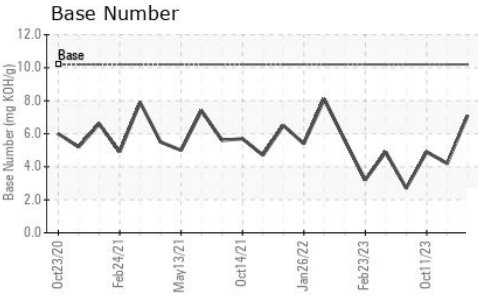
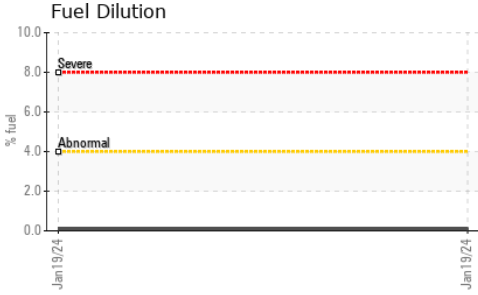
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	<b>0.1</b>	0	0
Nitration	Abs/cm	*ASTM D7624 >20	<b>15.1</b>	10.7	10.4
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>23.0</b>	22.2	21.0

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>23.2</b>	18.4	17.5
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>7.1</b>	4.2	4.9



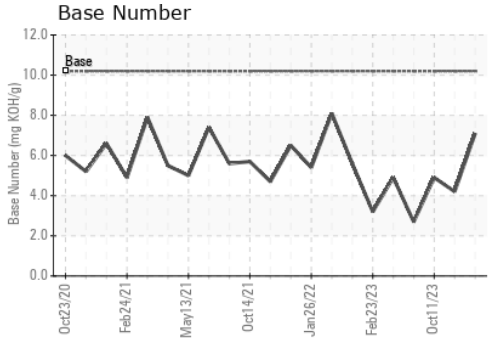
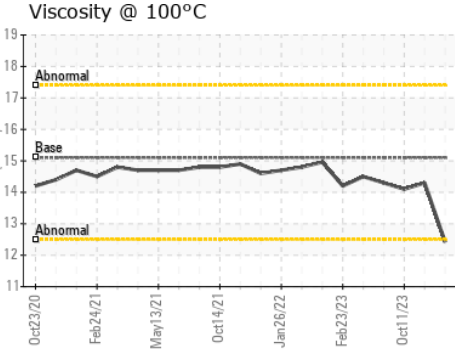
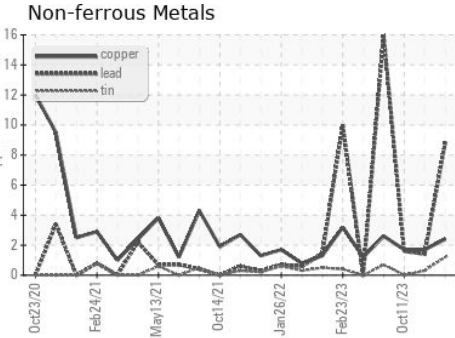
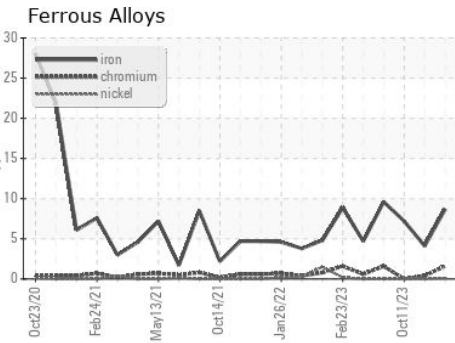
# OIL ANALYSIS REPORT



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	<b>12.42</b>	14.3	14.1

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0087479      **Received** : 22 Jan 2024  
**Lab Number** : 06066400      **Tested** : 07 Feb 2024  
**Unique Number** : 10843077      **Diagnosed** : 07 Feb 2024 - Doug Bogart  
**Test Package** : FLEET ( Additional Tests: FUELDILUTION, PercentFuel )

**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)