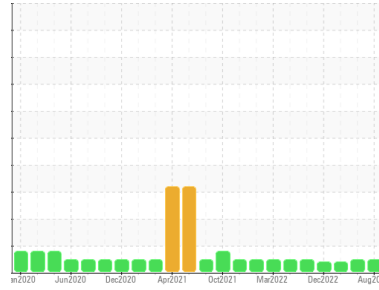




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**12072 autocar ACX64**

Component  
**Natural Gas Engine**

Fluid  
**PETRO CANADA DURON GEO LD 15W40 (28 QTS)**

## 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>GFL0089357</b>	GFL0056756	GFL0056589
Sample Date	Client Info	<b>25 Aug 2023</b>	24 May 2023	03 Mar 2023
Machine Age	hrs	<b>9307</b>	8597	1031
Oil Age	hrs	<b>710</b>	862	396
Oil Changed	Client Info	<b>Changed</b>	Changed	Not Changed
Sample Status		<b>NORMAL</b>	NORMAL	ATTENTION

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	<b>16</b>	16	14
Chromium	ppm	ASTM D5185m >4	<b>1</b>	1	<1
Nickel	ppm	ASTM D5185m >2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m >9	<b>2</b>	4	3
Lead	ppm	ASTM D5185m >30	<b>0</b>	1	<1
Copper	ppm	ASTM D5185m >35	<b>1</b>	5	2
Tin	ppm	ASTM D5185m >4	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	<1	0

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 50	<b>9</b>	4	10
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m 50	<b>65</b>	58	52
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 560	<b>947</b>	924	758
Calcium	ppm	ASTM D5185m 1510	<b>1311</b>	1070	986
Phosphorus	ppm	ASTM D5185m 780	<b>1078</b>	962	859
Zinc	ppm	ASTM D5185m 870	<b>1319</b>	1177	1032
Sulfur	ppm	ASTM D5185m 2040	<b>3616</b>	2996	2463

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >+100	<b>8</b>	5	4
Sodium	ppm	ASTM D5185m	<b>7</b>	9	12
Potassium	ppm	ASTM D5185m >20	<b>0</b>	2	5

## INFRA-RED

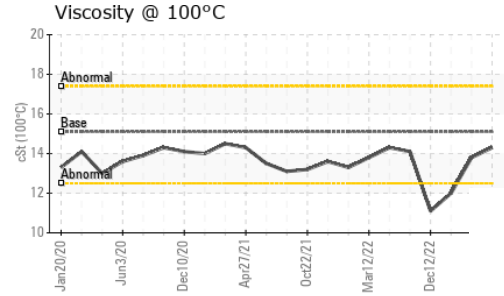
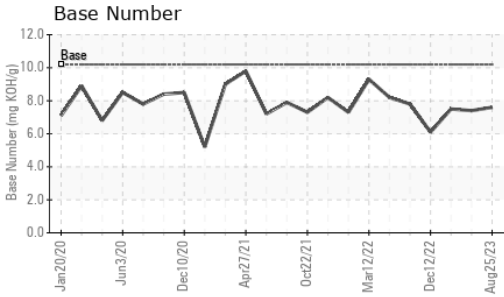
method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	<b>0.5</b>	0.5	0.3
Nitration	Abs/cm	*ASTM D7624 >20	<b>9.3</b>	9.3	9.5
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>20.2</b>	21.0	20.6

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>16.9</b>	18.6	20.0
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>7.6</b>	7.4	7.5



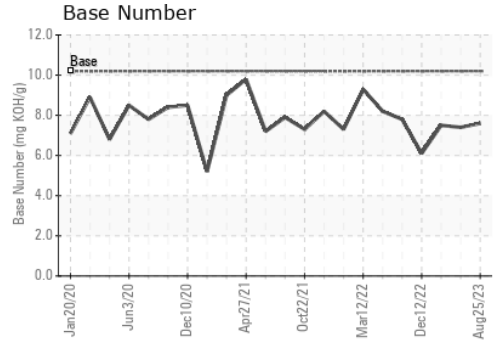
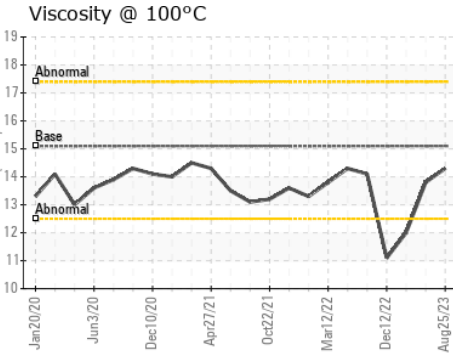
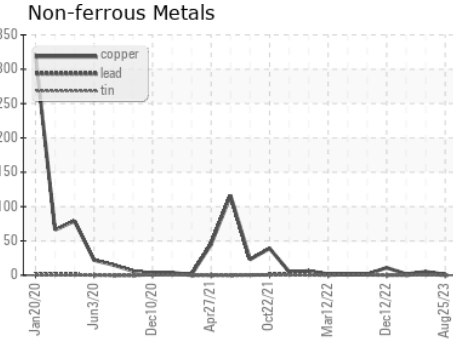
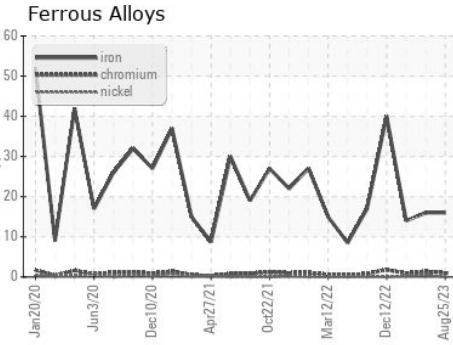
# OIL ANALYSIS REPORT



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>14.3</b>	13.8 ▲ 12.0

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0089357 **Received** : 28 Aug 2023  
**Lab Number** : **05935990** **Diagnosed** : 29 Aug 2023  
**Unique Number** : 10621261 **Diagnostician** : Don Baldrige  
**Test Package** : FLEET

**GFL Environmental - 001 - Raleigh(CNG)**  
 3741 Conquest Drive  
 Garner, NC  
 US 27529  
 Contact: Craig Johnson  
 craig.johnson@gflenv.com  
 T: (919)662-7100  
 F: (919)662-7130

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)