



# OIL ANALYSIS REPORT

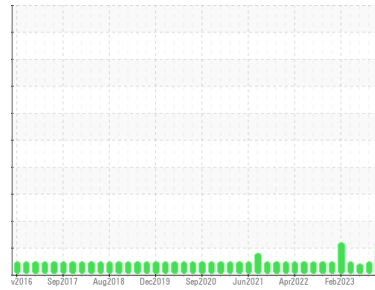
Sample Rating Trend

DEGRADATION

Machine Id  
**10582C AUTOCAR ACX**

Component  
**Natural Gas Engine**

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



## 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.

### 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	history1	history2
Sample Number	Client Info	<b>GFL0103252</b>	GFL0056736	GFL0087130
Sample Date	Client Info	<b>03 Jan 2024</b>	20 Sep 2023	18 Jul 2023
Machine Age	hrs	<b>4896</b>	4237	4020
Oil Age	hrs	<b>0</b>	0	0
Oil Changed	Client Info	<b>N/A</b>	Changed	N/A
Sample Status		<b>ABNORMAL</b>	NORMAL	ABNORMAL

## 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>14</b>	12	13
Chromium	ppm ASTM D5185m >4	<b>3</b>	2	2
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>0</b>	0	0
Aluminum	ppm ASTM D5185m >9	<b>3</b>	0	5
Lead	ppm ASTM D5185m >30	<b>8</b>	<1	<1
Copper	ppm ASTM D5185m >35	<b>1</b>	2	<1
Tin	ppm ASTM D5185m >4	<b>&lt;1</b>	<1	<1
Vanadium	ppm ASTM D5185m	<b>0</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>10</b>	8	12
Barium	ppm ASTM D5185m 5	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185m 50	<b>51</b>	52	51
Manganese	ppm ASTM D5185m 0	<b>&lt;1</b>	1	<1
Magnesium	ppm ASTM D5185m 560	<b>574</b>	574	510
Calcium	ppm ASTM D5185m 1510	<b>1550</b>	1677	1529
Phosphorus	ppm ASTM D5185m 780	<b>727</b>	703	716
Zinc	ppm ASTM D5185m 870	<b>974</b>	970	924
Sulfur	ppm ASTM D5185m 2040	<b>2303</b>	2848	2385

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >+100	<b>8</b>	14	17
Sodium	ppm ASTM D5185m	<b>7</b>	9	4
Potassium	ppm ASTM D5185m >20	<b>1</b>	2	2

## INFRA-RED

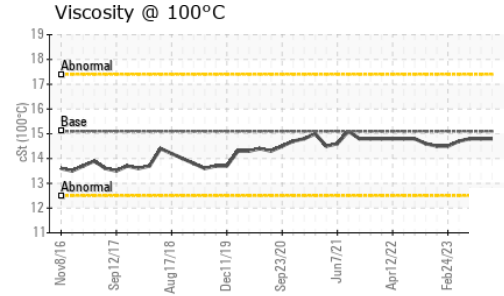
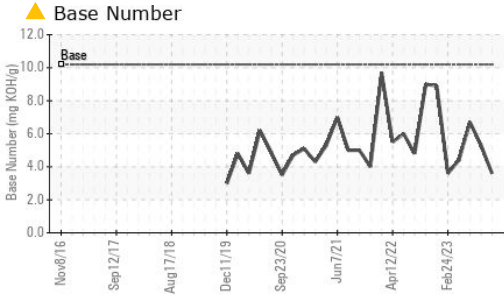
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	<b>0</b>	0	0.1
Nitration	Abs/cm *ASTM D7624 >20	<b>11.6</b>	11.3	9.5
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>24.5</b>	23.9	19.6

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>20.2</b>	19.7	16.7
Base Number (BN)	mg KOH/g ASTM D2896 10.2	<b>▲ 3.6</b>	5.3	6.7



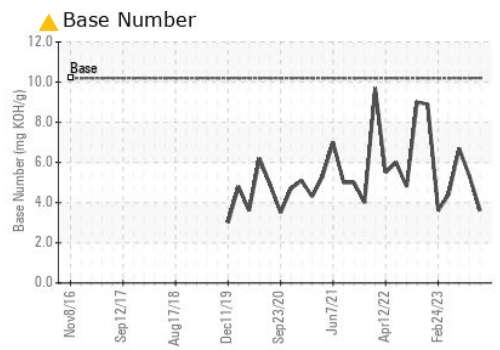
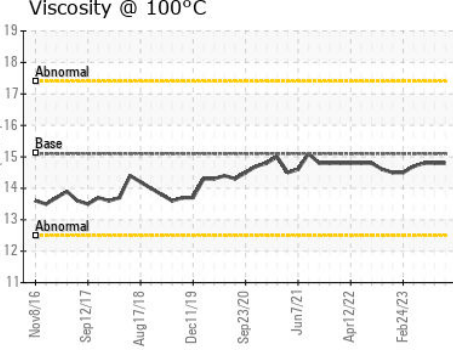
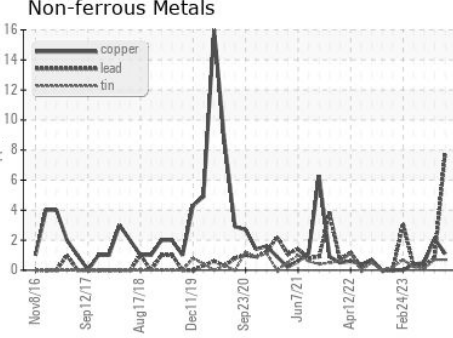
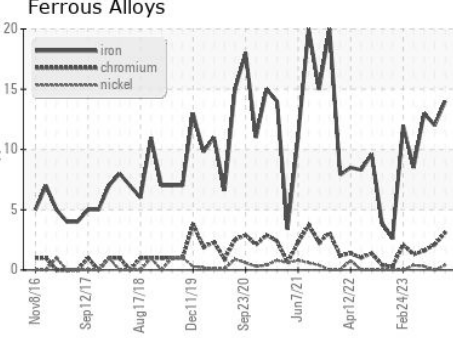
# OIL ANALYSIS REPORT



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	▲ MODER
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>14.8</b>	14.8

## GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : GFL0103252      Recieved : 04 Jan 2024  
 Lab Number : 06050683      Diagnosed : 04 Jan 2024  
 Unique Number : 10816632      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

Certificate L2367  
 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)