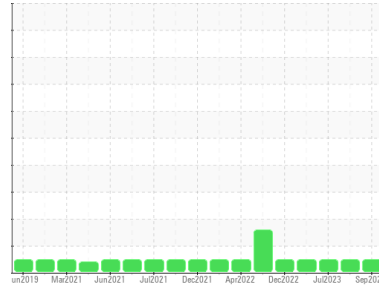




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**10873C**

Component  
**Natural Gas Engine**

Fluid  
**PETRO CANADA DURON GEO LD 15W40 (46 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 suitable for further service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>GFL0074443</b>	GFL0080545	GFL0066838
Sample Date	Client Info	<b>29 Sep 2023</b>	20 Jul 2023	04 Jul 2023
Machine Age	hrs	Client Info	9201	9201
Oil Age	hrs	Client Info	9201	9201
Oil Changed	Client Info	<b>Changed</b>	Changed	Changed
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	<b>17</b>	11	10
Chromium	ppm	ASTM D5185m >4	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	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>0</b>	0	<1
Copper	ppm	ASTM D5185m >35	<b>&lt;1</b>	0	2
Tin	ppm	ASTM D5185m >4	<b>&lt;1</b>	0	<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>2</b>	18	23
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 50	<b>55</b>	55	53
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m 560	<b>587</b>	673	648
Calcium	ppm	ASTM D5185m 1510	<b>1527</b>	1667	1561
Phosphorus	ppm	ASTM D5185m 780	<b>695</b>	843	815
Zinc	ppm	ASTM D5185m 870	<b>1009</b>	1062	1016
Sulfur	ppm	ASTM D5185m 2040	<b>2331</b>	3094	3037

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >+100	<b>6</b>	4	6
Sodium	ppm	ASTM D5185m	<b>7</b>	6	6
Potassium	ppm	ASTM D5185m >20	<b>16</b>	10	20

## INFRA-RED

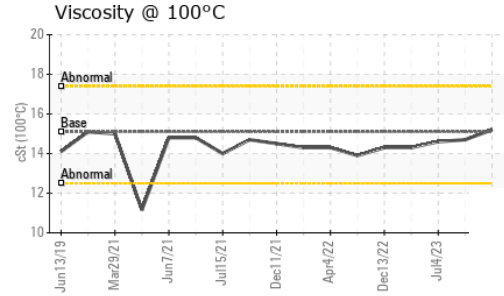
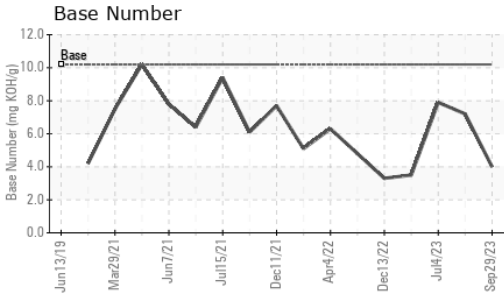
method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	<b>0</b>	0	0.1
Nitration	Abs/cm	*ASTM D7624 >20	<b>11.5</b>	8.8	8.4
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>22.9</b>	19.0	19.4

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>19.7</b>	16.5	16.5
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>4.0</b>	7.2	7.9



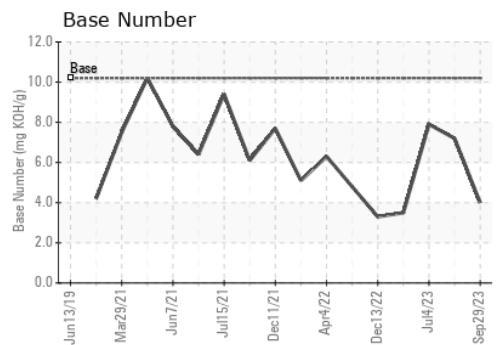
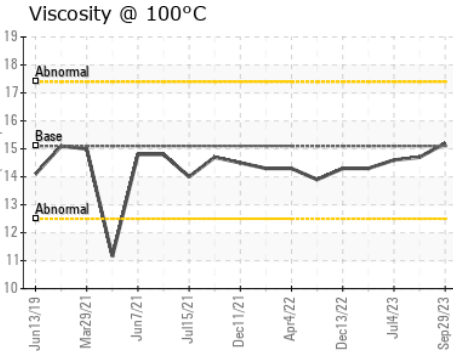
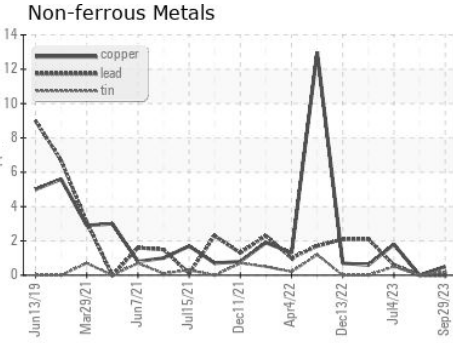
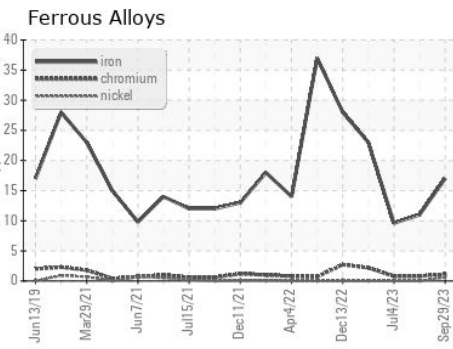
# OIL ANALYSIS REPORT



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>15.2</b>	14.7	14.6

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0074443 **Received** : 02 Oct 2023  
**Lab Number** : **05966032** **Diagnosed** : 02 Oct 2023  
**Unique Number** : 10672583 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 018 - Fayetteville**  
 4621 Marracco Drive  
 Hope Mills, NC  
 US 28348  
 Contact: Robert Carter  
 robert.carter@gflenv.com  
 T: (910)596-1170  
 F:

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)