



# OIL ANALYSIS REPORT

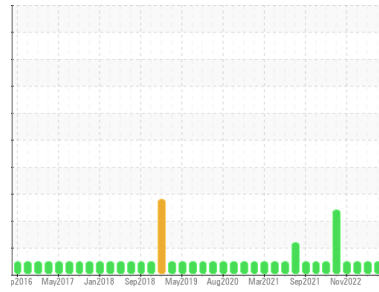
Area  
**(YA122780)**

Machine Id  
**2607C**

Component  
**Natural Gas Engine**

Fluid  
**PETRO CANADA DURON GEO LD 15W40 (40 GAL)**

Sample Rating Trend



**NORMAL**



## 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>GFL0109666</b>	GFL0092704	GFL0072401
Sample Date	Client Info	<b>09 Apr 2024</b>	26 Oct 2023	27 Jun 2023
Machine Age	hrs	<b>0</b>	18085	18085
Oil Age	hrs	<b>0</b>	652	606
Oil Changed	Client Info	<b>N/A</b>	N/A	Changed
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>18</b>	37	25
Chromium	ppm ASTM D5185m >4	<b>&lt;1</b>	2	3
Nickel	ppm ASTM D5185m >2	<b>0</b>	1	<1
Titanium	ppm ASTM D5185m	<b>&lt;1</b>	0	<1
Silver	ppm ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >9	<b>1</b>	1	<1
Lead	ppm ASTM D5185m >30	<b>0</b>	<1	<1
Copper	ppm ASTM D5185m >35	<b>18</b>	2	2
Tin	ppm ASTM D5185m >4	<b>3</b>	0	<1
Vanadium	ppm ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm ASTM D5185m	<b>0</b>	<1	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 50	<b>10</b>	32	14
Barium	ppm ASTM D5185m 5	<b>2</b>	0	0
Molybdenum	ppm ASTM D5185m 50	<b>53</b>	53	51
Manganese	ppm ASTM D5185m 0	<b>3</b>	0	<1
Magnesium	ppm ASTM D5185m 560	<b>846</b>	555	550
Calcium	ppm ASTM D5185m 1510	<b>1161</b>	1445	1436
Phosphorus	ppm ASTM D5185m 780	<b>1004</b>	778	749
Zinc	ppm ASTM D5185m 870	<b>1177</b>	911	947
Sulfur	ppm ASTM D5185m 2040	<b>3524</b>	2742	2697

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >+100	<b>36</b>	17	7
Sodium	ppm ASTM D5185m	<b>5</b>	<1	5
Potassium	ppm ASTM D5185m >20	<b>2</b>	2	1

## INFRA-RED

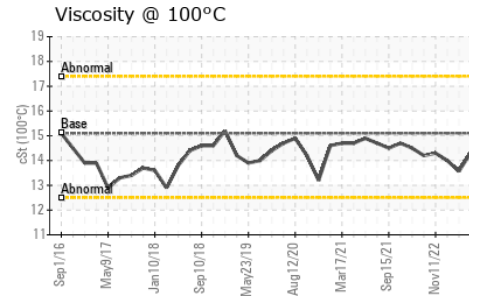
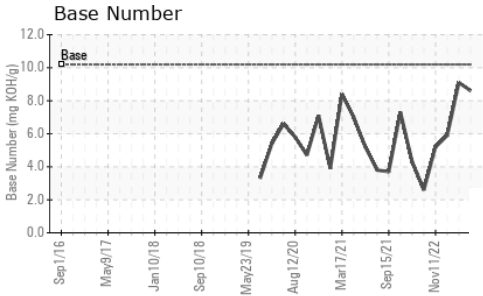
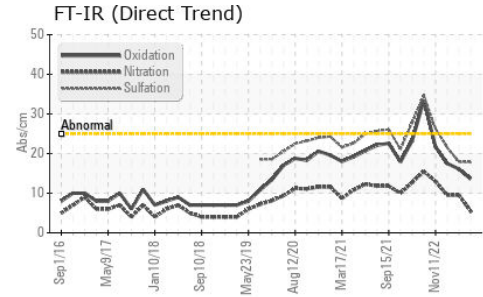
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	<b>0</b>	0.1	0.1
Nitration	Abs/cm *ASTM D7624 >20	<b>5.5</b>	9.5	9.5
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>17.8</b>	17.9	21.5

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>13.6</b>	16.1	17.5
Base Number (BN)	mg KOH/g ASTM D2896 10.2	<b>8.6</b>	9.1	5.9



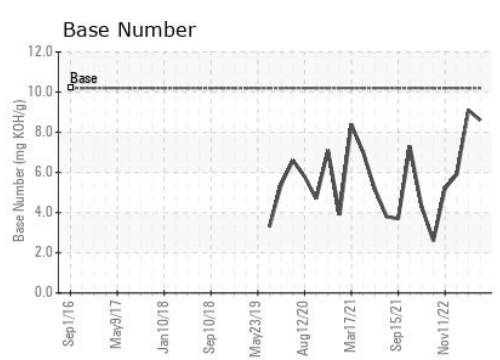
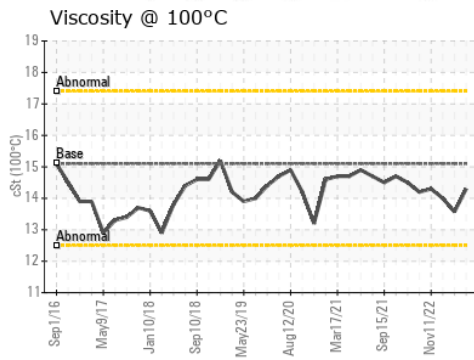
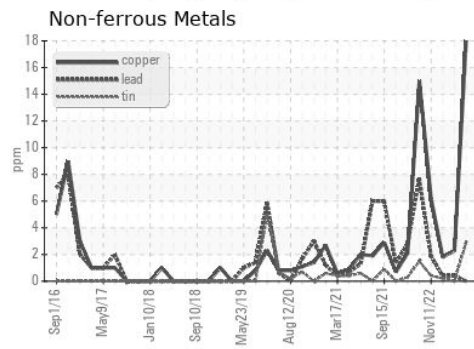
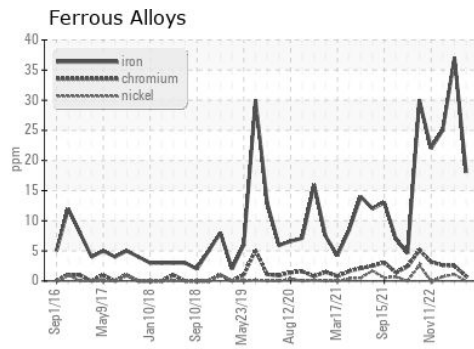
# OIL ANALYSIS REPORT



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>14.3</b>	13.57	14.0

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0109666      **Received** : 22 Apr 2024  
**Lab Number** : **06155627**      **Tested** : 23 Apr 2024  
**Unique Number** : 10991050      **Diagnosed** : 24 Apr 2024 - Don Baldrige  
**Test Package** : FLEET

**GFL Environmental - 005 - Wilson/Tri-East(CNG)**  
 2810 Contentnea Road S  
 Wilson, NC  
 US 27893-8501  
 Contact: SPENCER LIGGON  
 spencer.liggon@gflenv.com  
 T: (800)207-6618  
 F:

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)