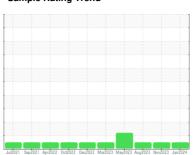


# **OIL ANALYSIS REPORT**

## Sample Rating Trend







# 949002

Component

**Natural Gas Engine** 

PETRO CANADA DURON GEO LD 15W40 (--- 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**

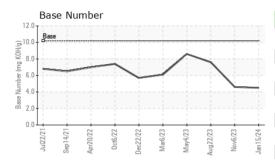
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

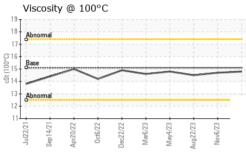
( GAL)		Jul2021 Sep2	021 Apr2022 Oct2022 Dec2	022 Mar2023 May2023 Aug2023 Nov2	023 Jan2024	
SAMPLE INFOR	RMATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0078647	GFL0078621	GFL0082065
Sample Date		Client Info		15 Jan 2024	06 Nov 2023	22 Aug 2023
Machine Age	hrs	Client Info		11444	10813	10290
Oil Age	hrs	Client Info		603	600	600
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	TION	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	NEG
WEAR METAL	_S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	11	19	7
Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	<1	<1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>9	2	2	5
Lead	ppm	ASTM D5185m	>30	<1	<1	0
Copper	ppm	ASTM D5185m	>35	<1	2	1
Tin	ppm	ASTM D5185m	>4	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	50	6	4	116
Barium	ppm	ASTM D5185m	5	0	1	7
Molybdenum	ppm	ASTM D5185m	50	53	57	117
Manganese	ppm	ASTM D5185m	0	<1	1	1
Magnesium	ppm	ASTM D5185m	560	589	523	654
Calcium	ppm	ASTM D5185m	1510	1671	1497	1234
Phosphorus	ppm	ASTM D5185m	780	702	629	700
Zinc	ppm	ASTM D5185m	870	1003	934	832
Sulfur	ppm	ASTM D5185m	2040	2504	2735	3295
CONTAMINAN	NTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>+100	5	14	11
Sodium	ppm	ASTM D5185m		17	51	50
Potassium	ppm	ASTM D5185m	>20	0	2	1
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		0	0.1	0
Nitration	Abs/cm	*ASTM D7624	>20	11.2	10.8	3.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.3	21.2	19.7
FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.8	17.8	12.6
- Aldation	/ 10/0/ · 1111111		100		17.5	

Base Number (BN) mg KOH/g ASTM D2896 10.2 4.5



# **OIL ANALYSIS REPORT**



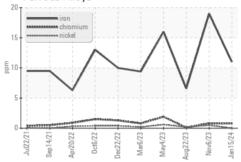


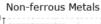
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
<b>Emulsified Water</b>	scalar	*Visual	>0.1	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

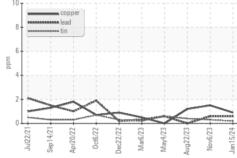
FLUID PROPERTIES		method				history2	
Visc @ 100°C	cSt	ASTM D445	15.1	14.8	14.7	14.5	

## **GRAPHS**

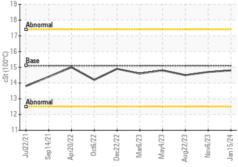
## Ferrous Alloys



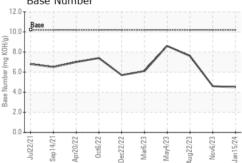








Base Number







Certificate L2367

Laboratory Sample No. Lab Number Unique Number : 10845612 Test Package : FLEET

: GFL0078647 : 06068935

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Recieved : 23 Jan 2024 Diagnosed : 24 Jan 2024

Diagnostician : Wes Davis

GFL Environmental - 152 - Jacksonville 7580 PHILIPS HWY

Jacksonville, FL US 32256

Contact: GRANVILLE CARROLL

gcarroll@gflenv.com

T: 1(904)252-6815

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)