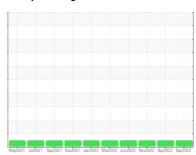


# **OIL ANALYSIS REPORT**

### Sample Rating Trend



NORMAL



# 749003

Component

**Natural Gas Engine** 

PETRO CANADA DURON GEO LD 15W40 (--- LTR)

# 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.

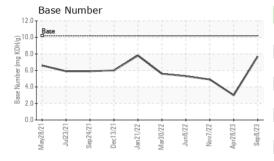
# **Fluid Condition**

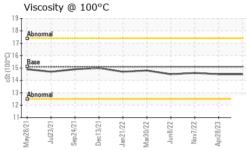
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

May2021 Ju2021 Sep2021 Dec2021 Jan2022 May2022 Jun2022 Hov2022 App2023 Sep2023						
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0089712	GFL0077348	GFL0063863
Sample Date		Client Info		08 Sep 2023	28 Apr 2023	07 Nov 2022
Machine Age	hrs	Client Info		11476	10493	9354
Oil Age	hrs	Client Info		983	1139	1688
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	4	14	18
Chromium	ppm	ASTM D5185m	>4	0	<1	2
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>9	<1	0	1
Lead	ppm	ASTM D5185m	>30	0	1	3
Copper	ppm	ASTM D5185m	>35	<1	<1	<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	27	4	7
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	50	51	73	54
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	560	595	580	554
Calcium	ppm	ASTM D5185m	1510	1656	1523	1638
Phosphorus	ppm	ASTM D5185m	780	792	711	751
Zinc	ppm	ASTM D5185m	870	984	976	987
Sulfur	ppm	ASTM D5185m	2040	2975	2559	2849
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>+100	3	4	4
Sodium	ppm	ASTM D5185m		5	6	6
Potassium	ppm	ASTM D5185m	>20	<1	3	1
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		0.1	0	0.1
Nitration	Abs/cm	*ASTM D7624	>20	8.1	10.4	12.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.2	20.7	25.4
FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.6	17.2	20.0
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	7.7	3.0	4.9



# **OIL ANALYSIS REPORT**



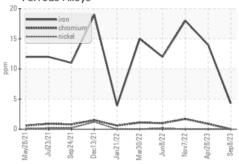


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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

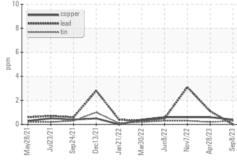
FLUID PROPERTIES		method				history2	
Visc @ 100°C	cSt	ASTM D445	15.1	14.5	14.5	14.6	

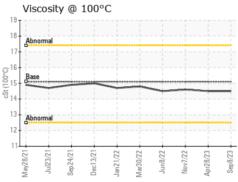
# **GRAPHS**

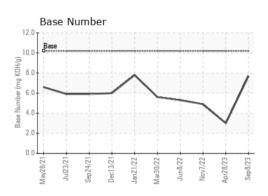
## Ferrous Alloys



## Non-ferrous Metals











Certificate L2367

Laboratory Sample No. Lab Number Unique Number : 10645787 Test Package : FLEET

: GFL0089712 : 05949828

To discuss this sample report, contact Customer Service at 1-800-237-1369.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 13 Sep 2023

Diagnosed : 15 Sep 2023 Diagnostician : Wes Davis

GFL Environmental - 882 - Gainesville

5002 SW 41st Blvd Gainesville, FL US 32608

Contact: ROBERT CLARK

robert.clark@gflenv.com T:

\* - 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)

F: