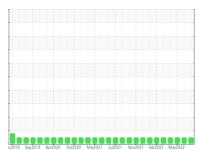


# **OIL ANALYSIS REPORT**

Sample Rating Trend



NORMAL



Machine Id 3815C Component

**Natural Gas Engine** 

PETRO CANADA DURON GEO LD 15W40 (8 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**

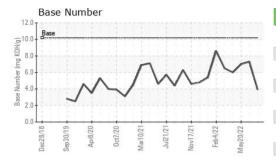
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

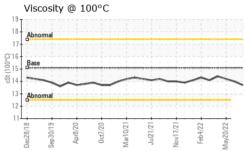
(8 GAL)  sc2018 Sup2019 Apr2020 Oct020 Mar2021 Ju00221 Nov2021 Feb2022 Mar2022 Mar2022						
SAMPLE INFOR	RMATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0096979	GFL0069706	GFL0043310
Sample Date		Client Info		15 Nov 2023	19 May 2023	20 May 2022
Machine Age	hrs	Client Info		78758	77799	8898
Oil Age	hrs	Client Info		77799	77799	177
Oil Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ΓΙΟΝ	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	7	3	4
Chromium	ppm	ASTM D5185m	>4	1	0	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>9	2	0	1
Lead	ppm	ASTM D5185m	>30	14	<1	<1
Copper	ppm	ASTM D5185m	>35	2	<1	<1
Tin	ppm	ASTM D5185m	>4	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	50	8	29	42
Barium	ppm	ASTM D5185m	5	10	0	0
Molybdenum	ppm	ASTM D5185m	50	61	53	46
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	560	648	624	552
Calcium	ppm	ASTM D5185m	1510	1530	1568	1620
Phosphorus	ppm	ASTM D5185m	780	841	794	771
Zinc	ppm	ASTM D5185m	870	1048	1011	925
Sulfur	ppm	ASTM D5185m	2040	2758	2834	2255
CONTAMINAN	NTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>+100	38	38	4
Sodium	ppm	ASTM D5185m		6	5	4
Potassium	ppm	ASTM D5185m	>20	3	2	<1
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		0.1	0	0.1
Nitration	Abs/cm	*ASTM D7624	>20	11.5	8.0	8.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.3	19.2	18.8
FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.8	15.7	15.5
D 11 / 771						

Base Number (BN) mg KOH/g ASTM D2896 10.2 3.9



# **OIL ANALYSIS REPORT**

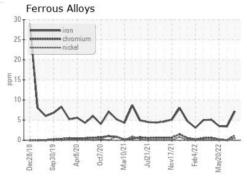


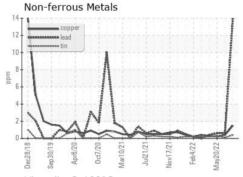


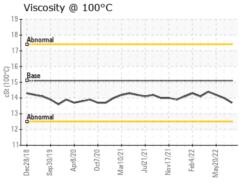
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual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

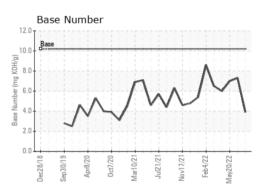
FLUID PROPERTIES		method				history2
Visc @ 100°C	cSt	ASTM D445	15.1	13.7	14.0	14.2

## **GRAPHS**













Certificate L2367

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

: GFL0096979 : 06013182

: 10752326

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

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 20 Nov 2023 Diagnosed : 21 Nov 2023

Diagnostician : Wes Davis

GFL Environmental - 031 - Greenville/Spartanburg

1635 Antioch Church Rd Piedmont, SC US 29673

Contact: TECHNICIAN ACCOUNT catherine.anastasio@wearcheck.com

\* - 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)

T:

F: