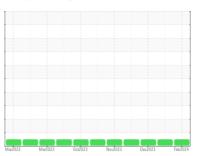


# **OIL ANALYSIS REPORT**

Sample Rating Trend



NORMAL



921046-260380

Component

**Diesel Engine** 

PETRO CANADA DURON SHP 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.

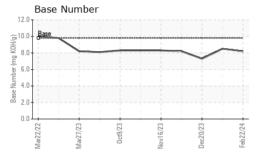
### **Fluid Condition**

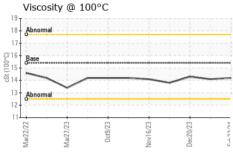
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

GAL)		Mar2022	Mar2023 Oct2023	Nov2023 Dec2023	Feb2024	
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0108063	GFL0108125	GFL0102484
Sample Date		Client Info		22 Feb 2024	25 Jan 2024	20 Dec 2023
Machine Age	hrs	Client Info		7598	7418	7183
Oil Age	hrs	Client Info		1706	0	0
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	.S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	19	14	2
Chromium	ppm	ASTM D5185m	>20	1	1	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	<1
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	2	2
Lead	ppm	ASTM D5185m	>40	0	<1	<1
Copper	ppm	ASTM D5185m	>330	<1	<1	0
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	<1	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	2	<1	3
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m	60	64	61	61
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	1010	992	977	1005
Calcium	ppm	ASTM D5185m	1070	1122	979	1095
Phosphorus	ppm	ASTM D5185m	1150	1126	921	1158
Zinc Sulfur	ppm	ASTM D5185m ASTM D5185m	1270 2060	1342 3248	1263 2756	1398 3508
CONTAMINAN		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	3	4	3
Sodium	ppm	ASTM D5185m	<i>&gt;</i> 20	4	0	2
Potassium	ppm	ASTM D5185m	>20	6	6	2
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	1.2	0.8	0.2
Nitration	Abs/cm	*ASTM D7624	>20	7.8	6.8	9.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.3	19.5	19.9
FLUID DEGRAI	DATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.5	14.0	16.8
Base Number (BN)	mg KOH/g		9.8	8.2	8.5	7.3



# **OIL ANALYSIS REPORT**

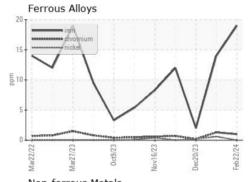


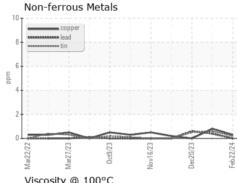


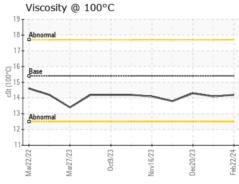
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

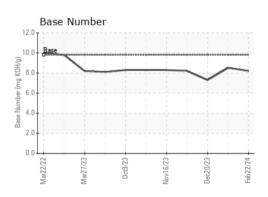
FLUID PROPERTIES		method				history2
Visc @ 100°C	cSt	ASTM D445	15.4	14.2	14.1	14.3

## **GRAPHS**













Laboratory Sample No.

Lab Number : 06103569

: GFL0108063

Unique Number: 10901799 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 28 Feb 2024

**Tested** : 01 Mar 2024 Diagnosed : 01 Mar 2024 - Wes Davis

GFL Environmental - 837 - Harrison TS

22820 S State Route 291 Harrisonville, MO US 64701

Contact: JOHNNY PEREZ

Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. johnny.perez@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: