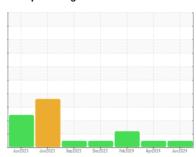


# **OIL ANALYSIS REPORT**

Sample Rating Trend







Machine Id 933034 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

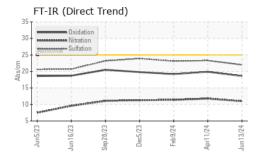
### **Fluid Condition**

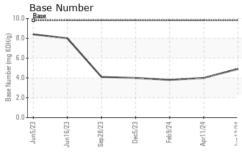
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

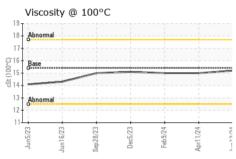
GAL)		Jun2023	Jun2023 Sep2023	Dec2023 Feb2024 Apr2024	Jun 2024	
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0121775	GFL0106750	GFL0106845
Sample Date		Client Info		13 Jun 2024	11 Apr 2024	09 Feb 2024
Machine Age	hrs	Client Info		3521	2948	2392
Oil Age	hrs	Client Info		600	600	600
Oil Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	ABNORMAL
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	8	8	13
Chromium	ppm	ASTM D5185m	>20	<1	<1	1
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	6	10	20
Lead	ppm	ASTM D5185m	>40	<1	<1	<1
Copper	ppm	ASTM D5185m	>330	<1	0	<1
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	8	8	8
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	56	53	56
Manganese	ppm	ASTM D5185m	0	<1	0	<1
Magnesium	ppm	ASTM D5185m	1010	652	548	573
Calcium	ppm	ASTM D5185m	1070	1755	1662	1623
Phosphorus	ppm	ASTM D5185m	1150	827	690	737
Zinc	ppm	ASTM D5185m	1270	1071	956	1001
Sulfur	ppm	ASTM D5185m	2060	2960	2677	2524
CONTAMINAN	ITS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	6	5	7
Sodium	ppm	ASTM D5185m		8	6	7
Potassium	ppm	ASTM D5185m	>20	17	30	67
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0	0	0
Nitration	Abs/cm	*ASTM D7624	>20	11.0	11.8	11.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.0	23.3	23.1
FLUID DEGRADATION method limit/base current history1 history2						
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.6	19.9	19.2
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	4.9	4.0	▲ 3.8



# **OIL ANALYSIS REPORT**



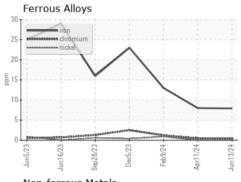


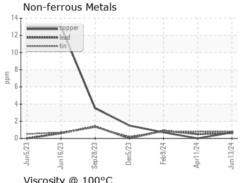


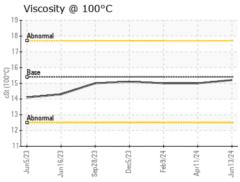
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual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

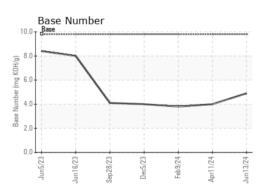
FLUID PROPERTIES		method				history2	
Visc @ 100°C	cSt	ASTM D445	15.4	15.2	15.0	15.0	

## **GRAPHS**













Certificate 12367

Laboratory Sample No.

: GFL0121775 Lab Number : 06216714 Unique Number : 11089578

Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received **Tested** 

: 24 Jun 2024 Diagnosed : 24 Jun 2024 - Sean Felton

: 21 Jun 2024

GFL Environmental - 856 - Houston South

8515 Highway 6 South Houston, TX

US 77083 Contact: Apolinar Zacarias pzacariascano@gflenv.com

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)

T:

F: