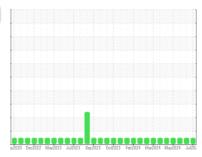


# **OIL ANALYSIS REPORT**

Sample Rating Trend



NORMAL



Machine Id **729069-362009** 

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

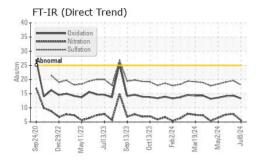
### **Fluid Condition**

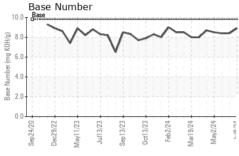
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

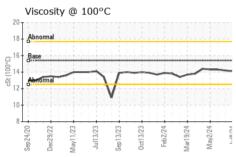
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2	
Sample Number		Client Info		GFL0121565	GFL0121480	GFL0105300	
Sample Date		Client Info		08 Jul 2024	20 Jun 2024	31 May 2024	
Machine Age	hrs	Client Info		14473	14366	14206	
Oil Age	hrs	Client Info		600	600	150	
Oil Changed		Client Info		Changed	Changed	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	6	17	13	
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1	
Nickel	ppm	ASTM D5185m	>4	<1	<1	<1	
Titanium	ppm	ASTM D5185m		<1	<1	<1	
Silver	ppm	ASTM D5185m	>3	0	<1	0	
Aluminum	ppm	ASTM D5185m	>20	2	3	2	
Lead	ppm	ASTM D5185m	>40	<1	<1	0	
Copper	ppm	ASTM D5185m	>330	1	3	2	
Tin	ppm	ASTM D5185m	>15	<1	<1	<1	
Vanadium	ppm	ASTM D5185m		<1	<1	0	
Cadmium	ppm	ASTM D5185m		<1	<1	0	
ADDITIVES		method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	0	<1	<1	0	
Barium	ppm	ASTM D5185m	0	0	1	0	
Molybdenum	ppm	ASTM D5185m	60	56	68	59	
Manganese	ppm	ASTM D5185m	0	<1	<1	0	
Magnesium	ppm	ASTM D5185m	1010	891	1067	900	
Calcium	ppm	ASTM D5185m	1070	1016	1209	1039	
Phosphorus	ppm	ASTM D5185m	1150	974	1240	874	
Zinc	ppm	ASTM D5185m	1270	1146	1440	1167	
Sulfur	ppm	ASTM D5185m	2060	2920	3655	2971	
CONTAMINAN	ITS	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	3	6	4	
Sodium	ppm	ASTM D5185m		4	4	2	
Potassium	ppm	ASTM D5185m	>20	2	3	2	
INFRA-RED		method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	0.4	0.8	0.7	
Nitration	Abs/cm	*ASTM D7624	>20	5.6	7.8	7.6	
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.1	19.6	19.1	
FLUID DEGRADATION method limit/base current history1 history2							
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.3	14.3	14.1	
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.9	8.4	8.4	
2430 Harribor (DIV)	ing itoring	. 10 1111 D2000	5.0	0.0	0. 1	0.1	



## **OIL ANALYSIS REPORT**



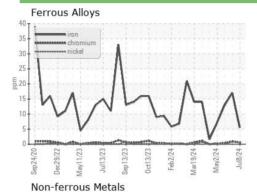


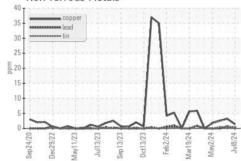


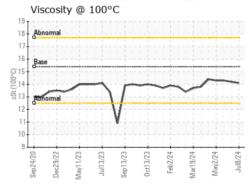
VISUAL		method				history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	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

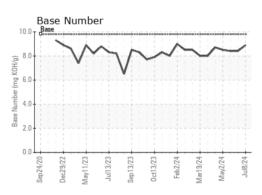
FLUID PROPERTIES		method				history2	
Visc @ 100°C	cSt	ASTM D445	15.4	14.1	14.2	14.3	

## **GRAPHS**













Certificate 12367

Laboratory Sample No. Unique Number : 11115499 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : GFL0121565 Lab Number : 06232006

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

Received **Tested** Diagnosed

: 10 Jul 2024 : 10 Jul 2024

: 10 Jul 2024 - Wes Davis

GFL Environmental - 821 - Ozarks Hauling 33924 Olath Drive Lebanon, MO US 65536

Contact: Landen Johnson landen.johnson@gflenv.com T: (417)664-0010

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.