

# **OIL ANALYSIS REPORT**





Machine Id **728080** Component **Diesel Engine** 

PETRO CANADA DURON SHP 15W40 (--- GAL)

# DIAGNOSIS

## Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the

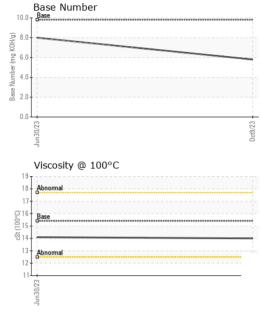
## **Fluid Condition**

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

14 3111 13W 40 (	GAL)		Jun2023	0ct2023		
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0085303	GFL0085308	
Sample Date		Client Info		09 Oct 2023	30 Jun 2023	
Machine Age	hrs	Client Info		10887	10887	
Oil Age	hrs	Client Info		600	383	
Oil Changed		Client Info		N/A	N/A	
Sample Status				NORMAL	NORMAL	
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	
Glycol		WC Method		NEG	NEG	
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	24	16	
Chromium	ppm	ASTM D5185m	>5	<1	<1	
Nickel	ppm	ASTM D5185m	>2	<1	0	
Titanium	ppm	ASTM D5185m		<1	0	
Silver	ppm	ASTM D5185m	>3	0	0	
Aluminum	ppm	ASTM D5185m	>30	4	1	
Lead	ppm	ASTM D5185m	>30	0	0	
Copper	ppm	ASTM D5185m	>150	2	2	
Tin	ppm	ASTM D5185m	>5	<1	<1	
Vanadium	ppm	ASTM D5185m		<1	<1	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<1	1	
Barium	ppm	ASTM D5185m	0	12	<1	
Molybdenum	ppm	ASTM D5185m	60	57	58	
Manganese	ppm	ASTM D5185m	0	<1	<1	
Magnesium	ppm	ASTM D5185m	1010	933	968	
Calcium	ppm	ASTM D5185m	1070	1001	1105	
Phosphorus	ppm	ASTM D5185m	1150	912	994	
Zinc	ppm	ASTM D5185m	1270	1179	1256	
Sulfur	ppm	ASTM D5185m	2060	2833	3530	
CONTAMINAN	ITS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	6	5	
Sodium	ppm	ASTM D5185m		7	6	
Potassium	ppm	ASTM D5185m	>20	10	6	
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.5	0.4	
Nitration	Abs/cm	*ASTM D7624	>20	10.5	9.5	
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.2	21.1	
FLUID DEGRAI	OATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.9	18.8	
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	5.8	8.0	



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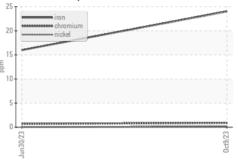
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Precipitate	scalar	*Visual	NONE	NONE	NONE	
Silt	scalar	*Visual	NONE	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	NONE	
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Appearance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

14.0

14.1

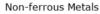
Visc @	100°C
GRA	PHS

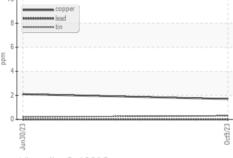
Ferrous Alloys



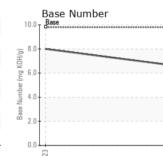
cSt

ASTM D445 15.4











Laboratory Sample No. Lab Number

Unique Number : 10696007

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : GFL0085303 : 05978712

Received : 13 Oct 2023 Diagnosed : 16 Oct 2023 Diagnostician : Wes Davis

GFL Environmental - 958 - Tri County HC Morton

1090 W. Jefferson St. Morton, IL US 61550

Contact: Bryan Link blink@gflenv.com T:

Test Package : FLEET 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)

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