

# **OIL ANALYSIS REPORT**

# Sample Rating Trend





Machine Id 921074 Component Diesel Engine Fluid

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

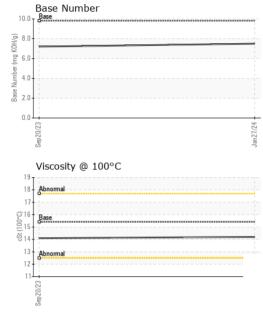
# **Fluid Condition**

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

N SHP 15W40 (	- GAL)		Sep2023	Jan 2024		
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0111180	GFL0087945	
Sample Date		Client Info		27 Jan 2024	20 Sep 2023	
Machine Age	hrs	Client Info		0	0	
Oil Age	hrs	Client Info		600	600	
Oil Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	NORMAL	
CONTAMINAT	ION	method	limit/base	current	history1	history2
-uel		WC Method	>3.0	<1.0	<1.0	
Nater		WC Method	>0.2	NEG	NEG	
Glycol		WC Method		NEG	NEG	
WEAR METAL	S	method	limit/base	current	history1	history2
ron	ppm	ASTM D5185m	>120	5	9	
Chromium	ppm	ASTM D5185m	>20	<1	<1	
Nickel	ppm	ASTM D5185m	>5	<1	<1	
Γitanium	ppm	ASTM D5185m	>2	<1	0	
Silver	ppm	ASTM D5185m	>2	0	0	
Aluminum	ppm	ASTM D5185m	>20	2	2	
_ead	ppm	ASTM D5185m	>40	0	<1	
Copper	ppm	ASTM D5185m	>330	3	2	
Γin	ppm	ASTM D5185m	>15	<1	<1	
√anadium	ppm	ASTM D5185m		0	0	
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	<1	0	
Molybdenum	ppm	ASTM D5185m	60	57	58	
Manganese	ppm	ASTM D5185m	0	0	<1	
Magnesium	ppm	ASTM D5185m	1010	885	883	
Calcium	ppm	ASTM D5185m	1070	1036	1072	
Phosphorus	ppm	ASTM D5185m	1150	933	914	
Zinc	ppm	ASTM D5185m	1270	1121	1189	
Sulfur	ppm	ASTM D5185m	2060	2851	2911	
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	2	3	
Sodium	ppm	ASTM D5185m		1	4	
Potassium	ppm	ASTM D5185m	>20	3	2	
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>4	0.6	0.7	
Nitration	Abs/cm	*ASTM D7624	>20	8.1	8.5	
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.6	20.7	
FLUID DEGRA	OATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.6	16.7	
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	7.5	7.2	



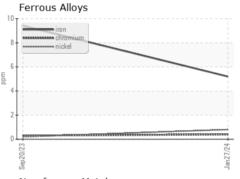
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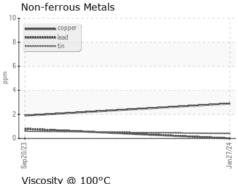


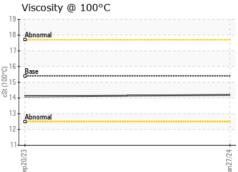
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Precipitate	scalar	*Visual	NONE	NONE	NONE	
Silt	scalar	*Visual	NONE	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	NONE	
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Appearance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

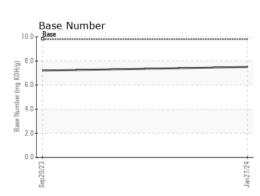
FLUID PROPE	ERITES	method	limit/base		history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	14.2	14.1	

# **GRAPHS**











Certificate L2367

Laboratory Sample No. Lab Number Test Package : FLEET

Unique Number : 10858775

: GFL0111180 : 06076684

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Recieved Diagnosed

: 01 Feb 2024 : 02 Feb 2024 Diagnostician : Wes Davis

GFL Environmental - 960B - Pittsfield HC 1335 W. Washington

Pittsfield, IL US 62363

Contact: David Bradshaw david.bradshaw@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)

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