

# **OIL ANALYSIS REPORT**

# NORMAL



Machine Id 834053 Component

**Natural Gas Engine** 

PETRO CANADA DURON GEO LD 15W40 (--- GAL)

# DIAGNOSIS

## Recommendation

Resample at the next service interval to monitor.

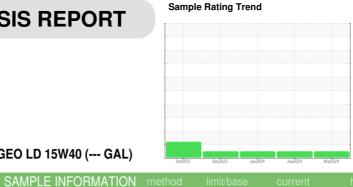
All component wear rates are normal.

### Contamination

There is no indication of any contamination in the

## **Fluid Condition**

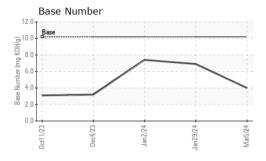
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

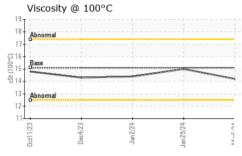


Sample Number		Client Info		GFL0114122	GFL0103275	GFL0103348
Sample Date		Client Info		05 Mar 2024	29 Jan 2024	02 Jan 2024
Machine Age	hrs	Client Info		1037	884	771
Oil Age	hrs	Client Info		1037	0	0
Oil Changed		Client Info		Not Changd NORMAL	Not Changd	Not Changd NORMAL
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	28	9	11
Chromium	ppm	ASTM D5185m	>5	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	<1	<1
Titanium	ppm	ASTM D5185m	>5	0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>25	3	3	2
Lead	ppm	ASTM D5185m	>40	2	5	1
Copper	ppm	ASTM D5185m	>150	6	1	<1
Tin	ppm	ASTM D5185m	>4	<1	1	<1
Vanadium Cadmium	ppm	ASTM D5185m ASTM D5185m		0	<1 0	0
	ppm	ASTIVI DOTOSIII		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	50	7	19	50
Barium	ppm	ASTM D5185m	5	<1	0	0
Molybdenum	ppm	ASTM D5185m	50	51	50	51
Manganese	ppm	ASTM D5185m	0	2	<1	<1
Magnesium	ppm	ASTM D5185m	560	578	551	571
Calcium	ppm	ASTM D5185m	1510	1700	1573	1503 768
Phosphorus Zinc	ppm	ASTM D5185m ASTM D5185m	780 870	762 1014	835 1016	962
Sulfur	ppm	ASTM D5185m	2040	2971	2613	2469
CONTAMINAN		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m		8	6	8
Sodium	ppm	ASTM D5185m	<i>&gt;</i> 20	7	9	5
Potassium	ppm	ASTM D5185m	>20	2	4	<1
INFRA-RED		method	limit/base	current	history1	history2
	0/	*ASTM D7844	mma sass		0.1	
Soot % Nitration	% Abs/cm	*ASTM D7624	>20	0 11.6	11.2	0 7.7
Sulfation	Abs/.1mm	*ASTM D7624	>30	21.3	19.3	20.4
FLUID DEGRAD			limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.8	17.1	16.2
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	4.0	6.9	7.4



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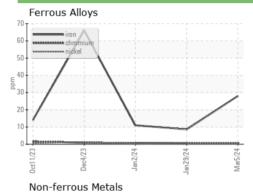


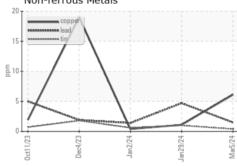


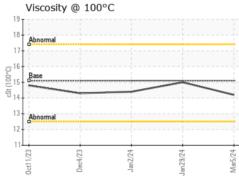
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
<b>Emulsified Water</b>	scalar	*Visual	>0.1	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

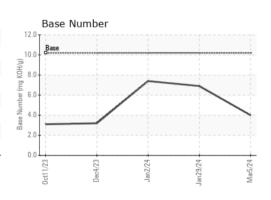
FLUID PROPERTIES		method				history2
Visc @ 100°C	cSt	ASTM D445	15.1	14.2	15.0	14.4

## **GRAPHS**













Laboratory Sample No.

Test Package : FLEET

: GFL0114122 Lab Number : 06114975 Unique Number : 10923808

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 11 Mar 2024 **Tested** : 12 Mar 2024

: 12 Mar 2024 - Wes Davis

GFL Environmental - 836 - Kansas City Hauling

7801 East Truman Road Kansas City, MO US 64126

Contact: Loyce Stewart loyce.stewart@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)

Diagnosed

Report Id: GFL836 [WUSCAR] 06114975 (Generated: 03/12/2024 16:45:21) Rev: 1

Submitted By: JEREMY BROWN

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