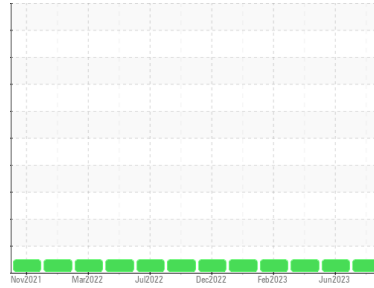




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
946015-260296

Component
Natural Gas Engine

Fluid
PETRO CANADA DURON GEO LD 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 INFORMATION

method	limit/base	current	history1	history2	
Sample Number	Client Info	GFL0092129	GFL0084734	GFL0073609	
Sample Date	Client Info	29 Dec 2023	20 Jun 2023	06 Mar 2023	
Machine Age	mls	Client Info	179371	152196	148751
Oil Age	mls	Client Info	25645	0	0
Oil Changed	Client Info	Changed	Not Changd	Not Changd	
Sample Status		NORMAL	NORMAL	NORMAL	

CONTAMINATION

method	limit/base	current	history1	history2	
Water	WC Method	>0.1	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185m	>50	4	9	2
Chromium	ppm	ASTM D5185m	>4	0	<1	0
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>9	1	2	<1
Lead	ppm	ASTM D5185m	>30	0	0	0
Copper	ppm	ASTM D5185m	>35	2	1	0
Tin	ppm	ASTM D5185m	>4	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185m	50	44	45	40
Barium	ppm	ASTM D5185m	5	3	0	0
Molybdenum	ppm	ASTM D5185m	50	43	48	45
Manganese	ppm	ASTM D5185m	0	2	<1	1
Magnesium	ppm	ASTM D5185m	560	770	604	506
Calcium	ppm	ASTM D5185m	1510	1168	1470	1517
Phosphorus	ppm	ASTM D5185m	780	758	766	671
Zinc	ppm	ASTM D5185m	870	899	931	841
Sulfur	ppm	ASTM D5185m	2040	2301	2957	2299

CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>+100	9	19	6
Sodium	ppm	ASTM D5185m		3	3	3
Potassium	ppm	ASTM D5185m	>20	2	<1	0

INFRA-RED

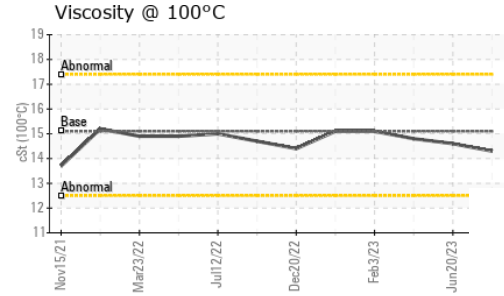
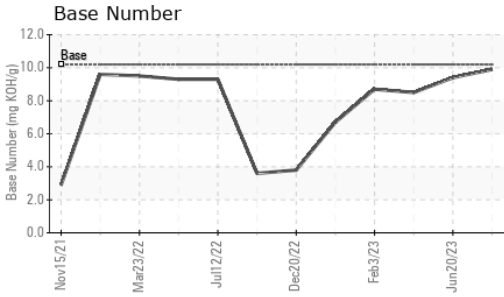
method	limit/base	current	history1	history2		
Soot %	%	*ASTM D7844		0	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	6.1	7.0	6.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.4	19.4	19.1

FLUID DEGRADATION

method	limit/base	current	history1	history2		
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.3	16.5	15.4
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	9.9	9.4	8.5



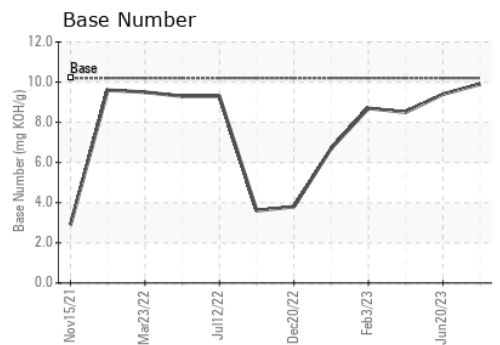
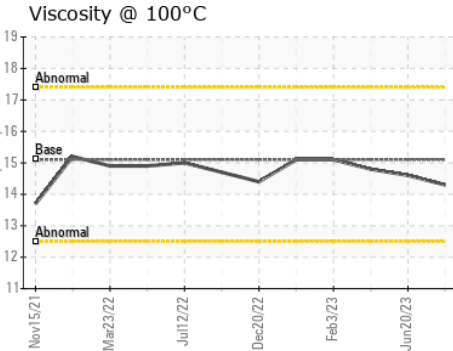
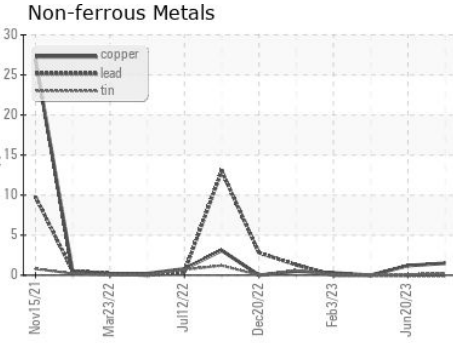
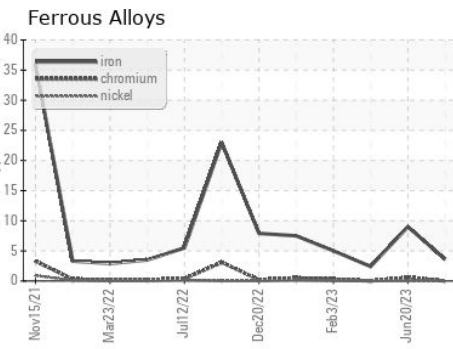
OIL ANALYSIS REPORT



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
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.1	14.3	14.6	14.8

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0092129 **Received** : 05 Jan 2024
Lab Number : **06052368** **Diagnosed** : 08 Jan 2024
Unique Number : 10818317 **Diagnostician** : Wes Davis
Test Package : FLEET

GFL Environmental - 856 - Houston South
 8515 Highway 6 South
 Houston, TX
 US 77083
 Contact: Apolinar Zacarias
 pzacariascano@gflenv.com
 T:
 F:

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)