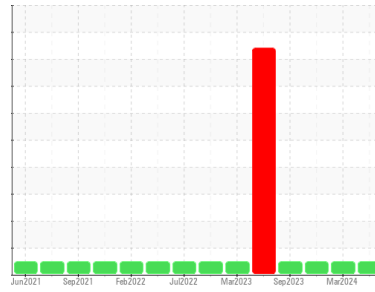




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

944025

Component

Natural Gas Engine

Fluid

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

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	GFL0119111	GFL0115496	GFL0106967
Sample Date	Client Info	11 Jul 2024	22 Mar 2024	16 Dec 2023
Machine Age	hrs	22006	21337	21037
Oil Age	hrs	669	300	607
Oil Changed	Client Info	Changed	Changed	Changed
Sample Status		NORMAL	NORMAL	NORMAL

CONTAMINATION

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

WEAR METALS

method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185m	>50	16	21	20
Chromium	ppm	ASTM D5185m	>4	<1	0	<1
Nickel	ppm	ASTM D5185m	>2	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>9	4	2	<1
Lead	ppm	ASTM D5185m	>30	2	1	1
Copper	ppm	ASTM D5185m	>35	2	<1	<1
Tin	ppm	ASTM D5185m	>4	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185m	50	7	4	<1
Barium	ppm	ASTM D5185m	5	<1	0	0
Molybdenum	ppm	ASTM D5185m	50	61	59	57
Manganese	ppm	ASTM D5185m	0	0	<1	<1
Magnesium	ppm	ASTM D5185m	560	650	875	823
Calcium	ppm	ASTM D5185m	1510	1502	1061	997
Phosphorus	ppm	ASTM D5185m	780	783	1033	890
Zinc	ppm	ASTM D5185m	870	1076	1240	1113
Sulfur	ppm	ASTM D5185m	2040	2586	3396	2756

CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>+100	4	3	3
Sodium	ppm	ASTM D5185m		26	17	17
Potassium	ppm	ASTM D5185m	>20	25	9	7

INFRA-RED

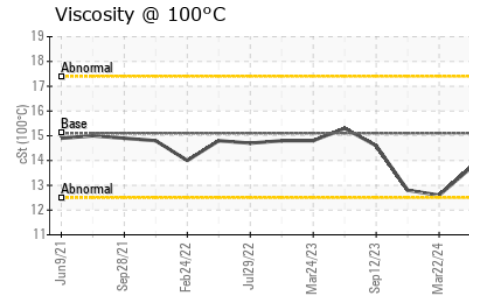
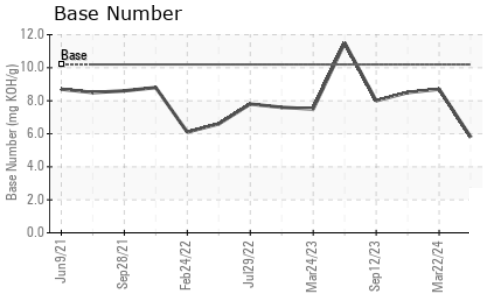
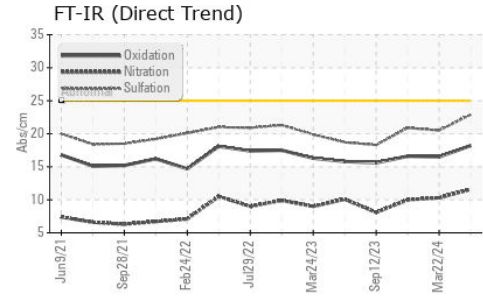
method	limit/base	current	history1	history2		
Soot %	%	*ASTM D7844		0.4	1.5	1.5
Nitration	Abs/cm	*ASTM D7624	>20	11.6	10.3	10.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.9	20.5	20.9

FLUID DEGRADATION

method	limit/base	current	history1	history2		
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.2	16.5	16.6
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	5.8	8.7	8.5



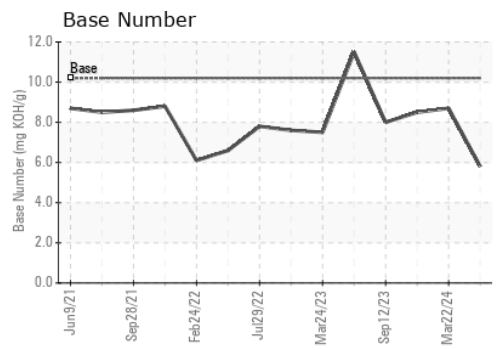
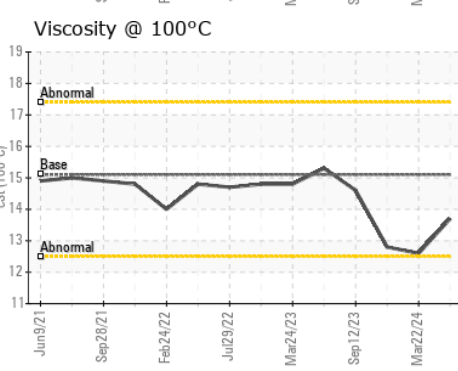
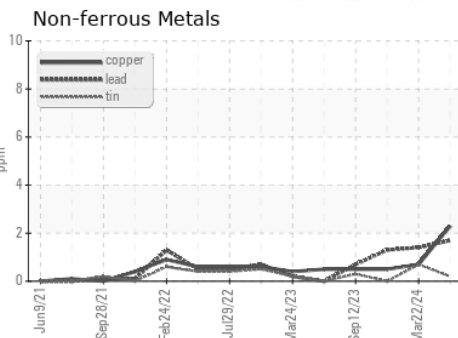
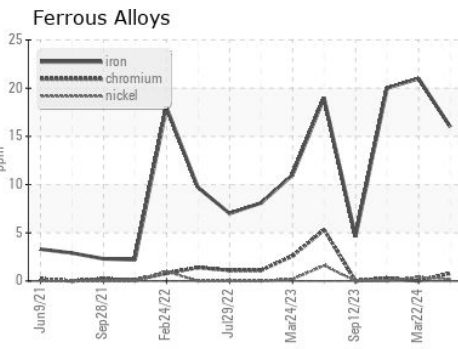
OIL ANALYSIS REPORT



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	13.7	12.6	12.8

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0119111 **Received** : 15 Jul 2024
Lab Number : **06235600** **Tested** : 15 Jul 2024
Unique Number : 11124434 **Diagnosed** : 15 Jul 2024 - Wes Davis
Test Package : FLEET

GFL Environmental - 882 - Gainesville
 5002 SW 41st Blvd
 Gainesville, FL
 US 32608
 Contact: ROBERT CLARK
 robert.clark@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)