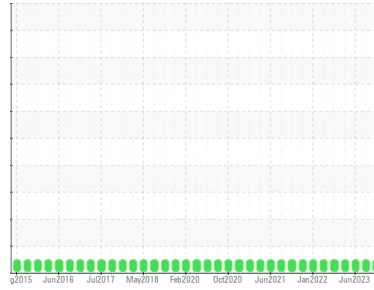




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
2617C

Component
Natural Gas Engine

Fluid
PETRO CANADA DURON GEO LD 15W40 (12 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	GFL0098092	GFL0079603	GFL0083294
Sample Date	Client Info	01 Nov 2023	03 Aug 2023	20 Jun 2023
Machine Age	hrs Client Info	11218	11218	11218
Oil Age	hrs Client Info	689	225	520
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		NORMAL	NORMAL	NORMAL

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >50	10	9	4
Chromium	ppm ASTM D5185m >4	2	3	<1
Nickel	ppm ASTM D5185m >2	0	0	0
Titanium	ppm ASTM D5185m	0	0	0
Silver	ppm ASTM D5185m >3	0	0	0
Aluminum	ppm ASTM D5185m >9	<1	1	<1
Lead	ppm ASTM D5185m >30	<1	0	0
Copper	ppm ASTM D5185m >35	<1	0	<1
Tin	ppm ASTM D5185m >4	0	0	0
Vanadium	ppm ASTM D5185m	0	0	0
Cadmium	ppm ASTM D5185m	<1	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 50	13	23	15
Barium	ppm ASTM D5185m 5	0	0	0
Molybdenum	ppm ASTM D5185m 50	54	47	49
Manganese	ppm ASTM D5185m 0	0	<1	<1
Magnesium	ppm ASTM D5185m 560	567	578	546
Calcium	ppm ASTM D5185m 1510	1581	1596	1610
Phosphorus	ppm ASTM D5185m 780	692	771	723
Zinc	ppm ASTM D5185m 870	973	973	946
Sulfur	ppm ASTM D5185m 2040	2869	2970	2855

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >+100	5	4	4
Sodium	ppm ASTM D5185m	1	6	6
Potassium	ppm ASTM D5185m >20	2	2	0

INFRA-RED

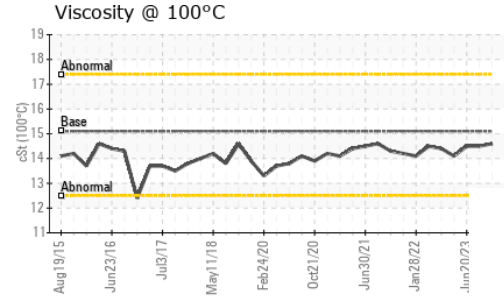
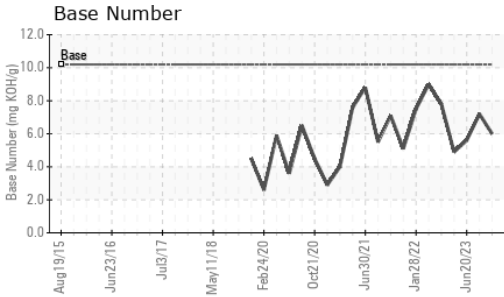
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	0	0.1	0.1
Nitration	Abs/cm *ASTM D7624 >20	10.2	8.7	10.6
Sulfation	Abs/.1mm *ASTM D7415 >30	20.6	19.5	21.6

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	17.8	16.4	18.1
Base Number (BN)	mg KOH/g ASTM D2896 10.2	6.0	7.2	5.6



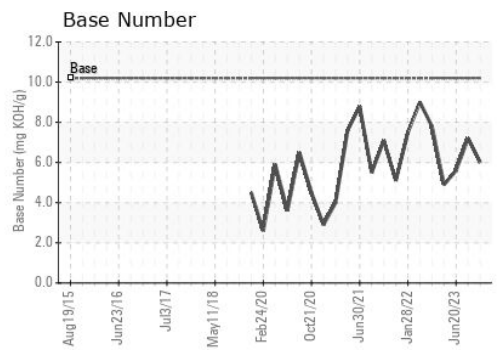
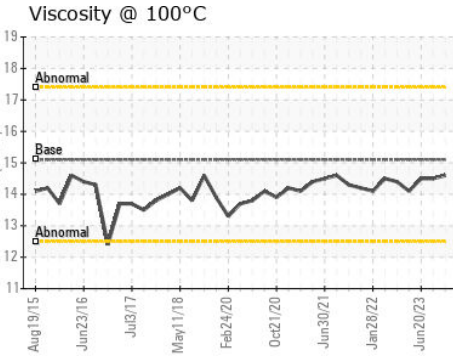
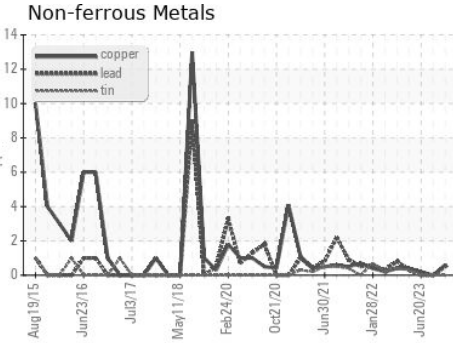
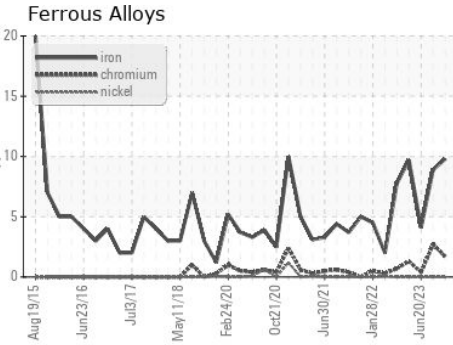
OIL ANALYSIS REPORT



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	14.6	14.5	14.5

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0098092 **Received** : 02 Nov 2023
Lab Number : **05997288** **Diagnosed** : 03 Nov 2023
Unique Number : 10725648 **Diagnostician** : Wes Davis
Test Package : FLEET

GFL Environmental - 017 - Durham
 148 Stone Park Court
 Durham, NC
 US 27703
 Contact: Shane Parks
 shane.parks@gflenv.com
 T: (919)596-1363
 F: (919)598-1852

Certificate L2367
 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)