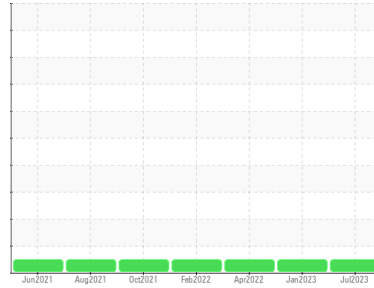




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
744000

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	history 1	history 2	
Sample Number	Client Info	GFL0085405	GFL0066765	GFL0048265	
Sample Date	Client Info	07 Jul 2023	16 Jan 2023	28 Apr 2022	
Machine Age	hrs	Client Info	23933	22863	0
Oil Age	hrs	Client Info	22863	1998	0
Oil Changed	Client Info	Changed	Changed	N/A	
Sample Status		NORMAL	NORMAL	NORMAL	

WEAR METALS

method	limit/base	current	history 1	history 2	
Iron	ppm	ASTM D5185m >50	9	12	9
Chromium	ppm	ASTM D5185m >4	<1	1	<1
Nickel	ppm	ASTM D5185m >2	<1	<1	1
Titanium	ppm	ASTM D5185m	<1	<1	<1
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >9	3	2	2
Lead	ppm	ASTM D5185m >30	1	2	2
Copper	ppm	ASTM D5185m >35	1	1	5
Tin	ppm	ASTM D5185m >4	<1	<1	1
Antimony	ppm	ASTM D5185m	---	---	---
Vanadium	ppm	ASTM D5185m	<1	0	<1
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

method	limit/base	current	history 1	history 2	
Boron	ppm	ASTM D5185m 50	7	10	20
Barium	ppm	ASTM D5185m 5	0	0	0
Molybdenum	ppm	ASTM D5185m 50	49	54	53
Manganese	ppm	ASTM D5185m 0	<1	<1	<1
Magnesium	ppm	ASTM D5185m 560	496	525	608
Calcium	ppm	ASTM D5185m 1510	1564	1615	1675
Phosphorus	ppm	ASTM D5185m 780	599	654	843
Zinc	ppm	ASTM D5185m 870	904	937	984
Sulfur	ppm	ASTM D5185m 2040	2555	2685	2207

CONTAMINANTS

method	limit/base	current	history 1	history 2	
Silicon	ppm	ASTM D5185m >+100	4	7	4
Sodium	ppm	ASTM D5185m	7	10	7
Potassium	ppm	ASTM D5185m >20	3	2	<1

INFRA-RED

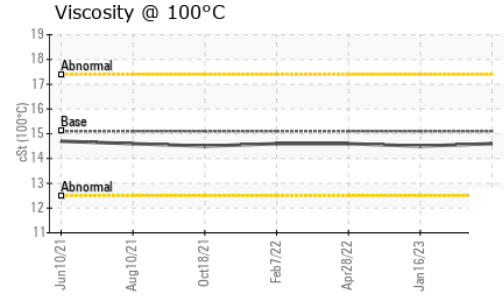
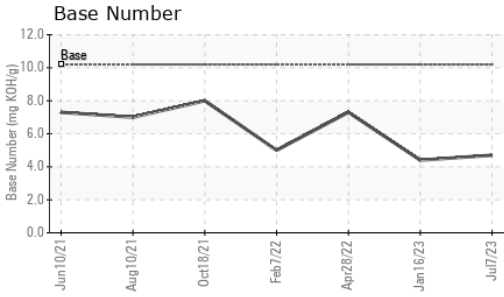
method	limit/base	current	history 1	history 2	
Soot %	%	*ASTM D7844	0.1	0.1	0
Nitration	Abs/cm	*ASTM D7624 >20	11.4	10.8	9.9
Sulfation	Abs/.1mm	*ASTM D7415 >30	22.6	22.0	20.8

FLUID DEGRADATION

method	limit/base	current	history 1	history 2	
Oxidation	Abs/.1mm	*ASTM D7414 >25	18.7	17.6	17.6
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	4.7	4.4	7.3



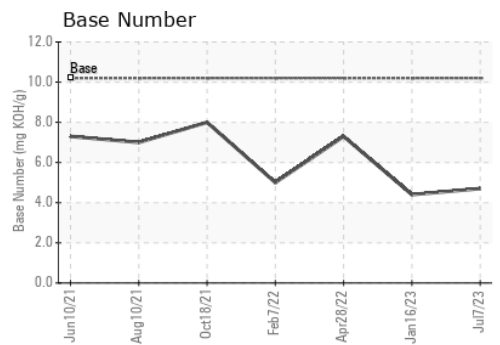
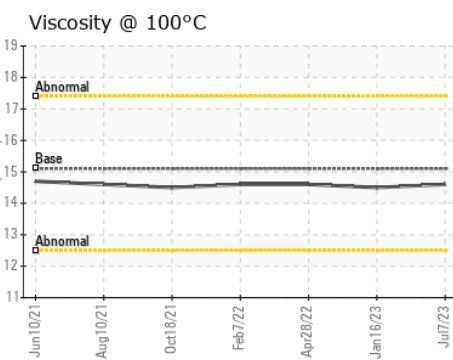
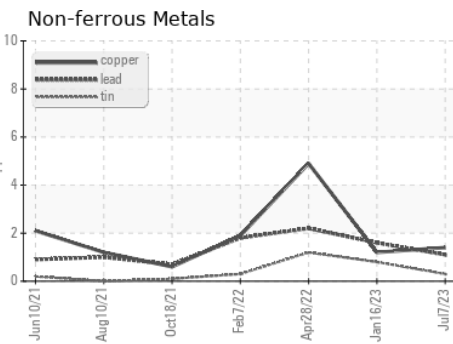
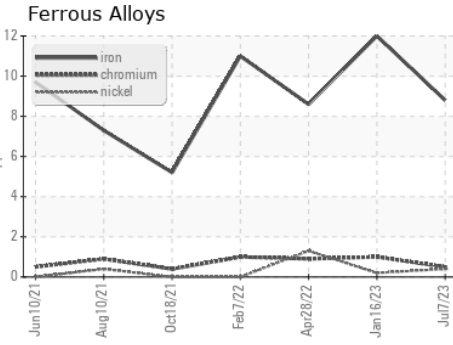
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history 1	history 2
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	history 1	history 2
Visc @ 100°C	cSt	ASTM D445	15.1	14.6	14.5	14.6

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0085405 **Received** : 11 Jul 2023
Lab Number : 05894827 **Diagnosed** : 11 Jul 2023
Unique Number : 10550637 **Diagnostician** : 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)