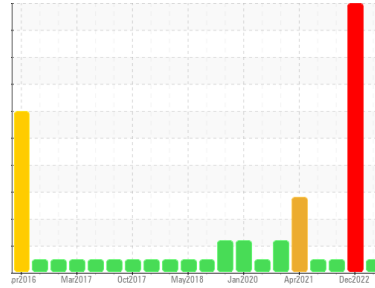




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
3660C

Component
Natural Gas Engine

Fluid
PETRO CANADA DURON GEO LD 15W40 (35 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	history 1	history 2	
Sample Number	Client Info	GFL0058808	GFL0048106	GFL0039410	
Sample Date	Client Info	05 May 2023	11 Dec 2022	03 Mar 2022	
Machine Age	hrs	Client Info	38270	0	38270
Oil Age	hrs	Client Info	38270	0	38270
Oil Changed	Client Info	N/A	N/A	N/A	
Sample Status		NORMAL	SEVERE	NORMAL	

WEAR METALS

method	limit/base	current	history 1	history 2	
Iron	ppm	ASTM D5185m >50	14	114	36
Chromium	ppm	ASTM D5185m >4	1	6	5
Nickel	ppm	ASTM D5185m >2	1	2	1
Titanium	ppm	ASTM D5185m	0	<1	<1
Silver	ppm	ASTM D5185m >3	0	0	<1
Aluminum	ppm	ASTM D5185m >9	0	6	4
Lead	ppm	ASTM D5185m >30	1	5	6
Copper	ppm	ASTM D5185m >35	<1	4	3
Tin	ppm	ASTM D5185m >4	1	1	2
Antimony	ppm	ASTM D5185m	---	---	0
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history 1	history 2	
Boron	ppm	ASTM D5185m 50	36	15	14
Barium	ppm	ASTM D5185m 5	0	0	0
Molybdenum	ppm	ASTM D5185m 50	52	78	72
Manganese	ppm	ASTM D5185m 0	<1	4	2
Magnesium	ppm	ASTM D5185m 560	625	735	769
Calcium	ppm	ASTM D5185m 1510	1444	2011	1918
Phosphorus	ppm	ASTM D5185m 780	818	1063	1035
Zinc	ppm	ASTM D5185m 870	992	1277	1149
Sulfur	ppm	ASTM D5185m 2040	3137	3547	2593

CONTAMINANTS

method	limit/base	current	history 1	history 2	
Silicon	ppm	ASTM D5185m >+100	7	22	16
Sodium	ppm	ASTM D5185m	5	13	10
Potassium	ppm	ASTM D5185m >20	3	5	<1

INFRA-RED

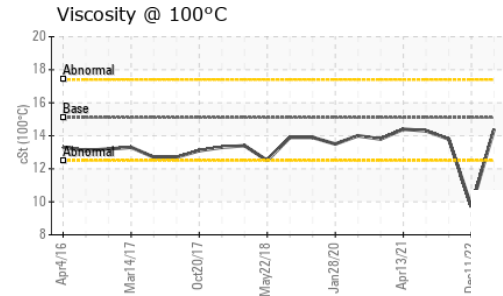
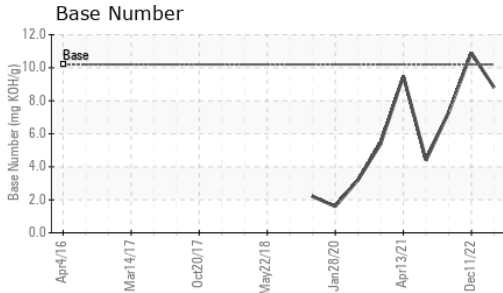
method	limit/base	current	history 1	history 2	
Soot %	%	*ASTM D7844	0	0.1	0.1
Nitration	Abs/cm	*ASTM D7624 >20	6.5	16.9	14.1
Sulfation	Abs/.1mm	*ASTM D7415 >30	18.9	26.7	25.4

FLUID DEGRADATION

method	limit/base	current	history 1	history 2	
Oxidation	Abs/.1mm	*ASTM D7414 >25	15.3	21.2	18.8
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	8.8	10.9	7.3



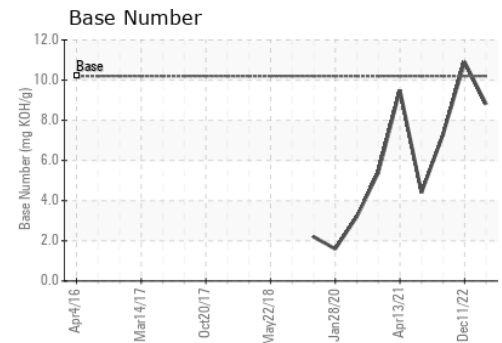
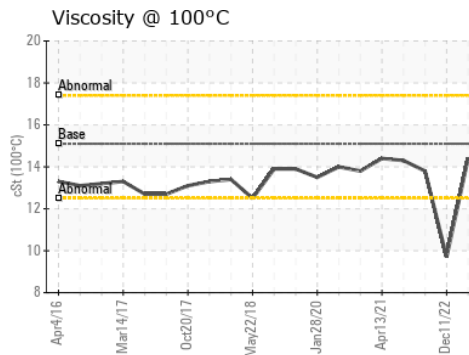
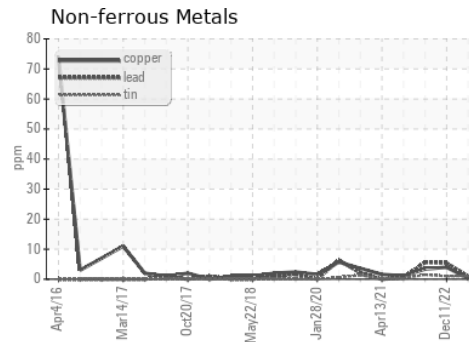
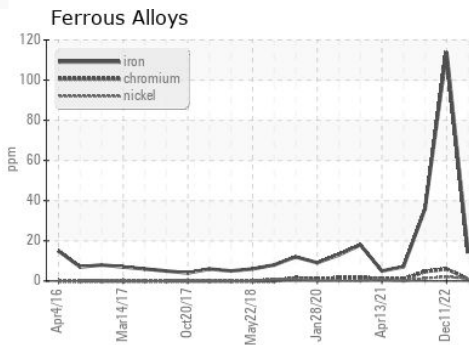
OIL ANALYSIS REPORT



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	14.4	▲ 9.7	13.8

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0058808 **Received** : 10 May 2023
Lab Number : 05842965 **Diagnosed** : 11 May 2023
Unique Number : 10467072 **Diagnostician** : Wes Davis
Test Package : FLEET

GFL Environmental - 019 - Greenville/TriEast
 415 Staton Road
 Greenville, NC
 US 27834
 Contact: Spencer Ligon
 spencer.ligon@gflenv.com
 T: (800)207-6618
 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)