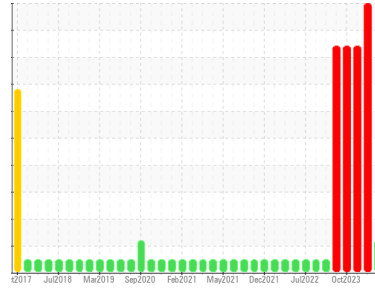




OIL ANALYSIS REPORT

Sample Rating Trend



COOL CHEMICALS



Area
(P633831)

Machine Id
3762C

Component
Natural Gas Engine

Fluid
PETRO CANADA DURON GEO LD 15W40 (30 QTS)

DIAGNOSIS

▲ Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

▲ Contamination

Sodium and/or potassium levels are high. Test for glycol is negative.

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		GFL0101799	GFL0090066	GFL0090100
Sample Date	Client Info		19 Feb 2024	20 Nov 2023	27 Oct 2023
Machine Age	hrs	Client Info	16764	16197	16132
Oil Age	hrs	Client Info	600	600	600
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			ABNORMAL	SEVERE	SEVERE

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	29	▲ 50	27
Chromium	ppm	ASTM D5185m >4	4	▲ 11	3
Nickel	ppm	ASTM D5185m >2	<1	2	<1
Titanium	ppm	ASTM D5185m	0	<1	<1
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >9	8	▲ 21	9
Lead	ppm	ASTM D5185m >30	2	4	3
Copper	ppm	ASTM D5185m >35	1	2	1
Tin	ppm	ASTM D5185m >4	1	1	<1
Vanadium	ppm	ASTM D5185m	0	<1	<1
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	11	4	4
Barium	ppm	ASTM D5185m 5	0	0	0
Molybdenum	ppm	ASTM D5185m 50	55	58	52
Manganese	ppm	ASTM D5185m 0	1	2	2
Magnesium	ppm	ASTM D5185m 560	661	619	519
Calcium	ppm	ASTM D5185m 1510	1532	1818	1513
Phosphorus	ppm	ASTM D5185m 780	831	792	561
Zinc	ppm	ASTM D5185m 870	1093	1070	890
Sulfur	ppm	ASTM D5185m 2040	2593	2373	2138

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	10	16	12
Sodium	ppm	ASTM D5185m	17	▲ 36	▲ 33
Potassium	ppm	ASTM D5185m >20	▲ 145	▲ 407	▲ 355
Glycol	%	*ASTM D2982	0.0	🔴 0.10	🔴 0.10

INFRA-RED

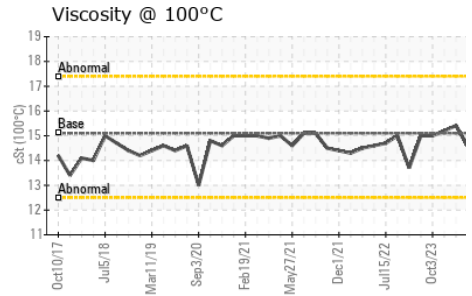
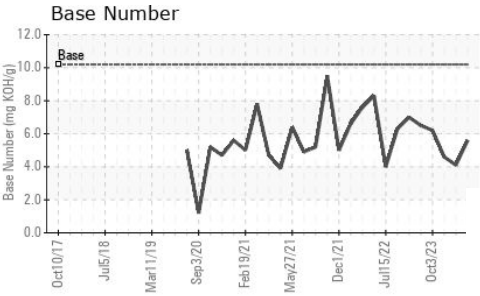
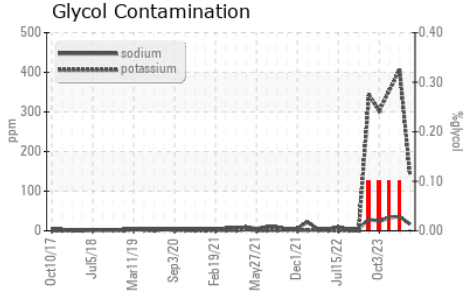
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	0	0	0
Nitration	Abs/cm	*ASTM D7624 >20	12.0	12.5	11.9
Sulfation	Abs/.1mm	*ASTM D7415 >30	23.7	25.4	23.0

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	20.0	20.7	19.9
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	5.6	4.1	4.6



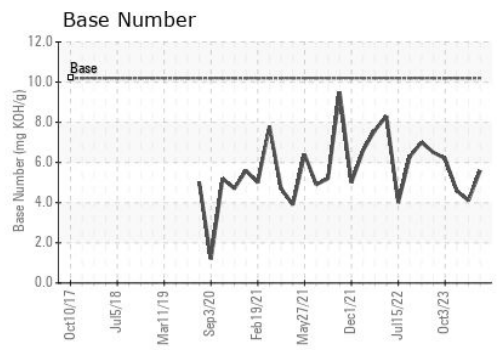
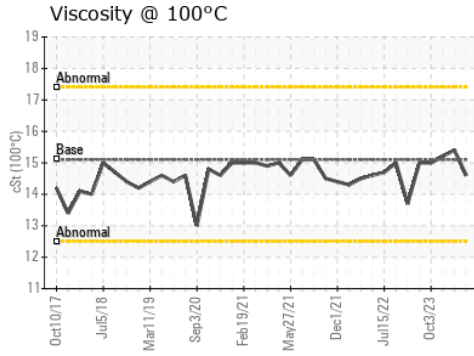
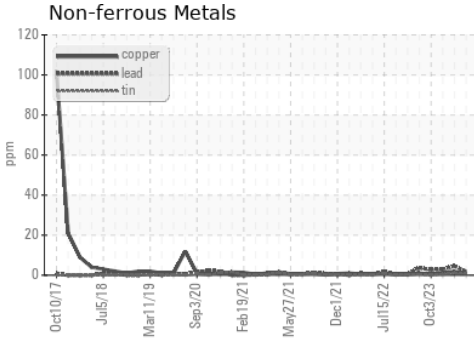
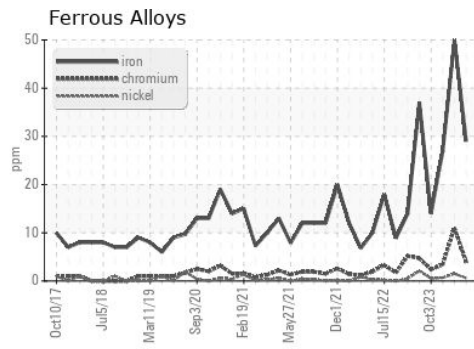
OIL ANALYSIS REPORT



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	15.41	15.2

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0101799 **Received** : 21 Feb 2024
Lab Number : 06095359 **Tested** : 23 Feb 2024
Unique Number : 10888212 **Diagnosed** : 24 Feb 2024 - Don Baldrige
Test Package : FLEET

GFL Environmental - 030 - Conway Myrtle Beach
 3010 HWY 378
 Conway, SC
 US 29527
 Contact: ARCILIO RUEZ
 aruiz@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)