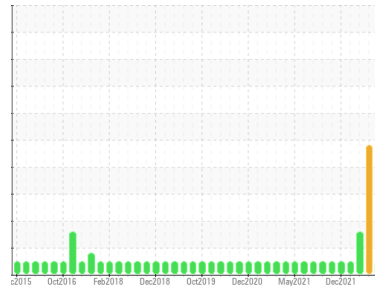




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
3647C

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

No evidence of coolant present in the oil. 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		GFL0092684	GFL0086421	GFL0072392
Sample Date	Client Info		04 Jan 2024	29 Jun 2023	24 Jan 2023
Machine Age	hrs	Client Info	18265	18265	18265
Oil Age	hrs	Client Info	313	762	18265
Oil Changed	Client Info		Not Changed	Changed	Not Changed
Sample Status			NORMAL	ABNORMAL	ABNORMAL

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	15	59	▲ 51
Chromium	ppm	ASTM D5185m >4	2	7	▲ 5
Nickel	ppm	ASTM D5185m >2	1	3	2
Titanium	ppm	ASTM D5185m	<1	<1	<1
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >9	2	3	5
Lead	ppm	ASTM D5185m >30	2	19	20
Copper	ppm	ASTM D5185m >35	6	4	4
Tin	ppm	ASTM D5185m >4	1	2	3
Vanadium	ppm	ASTM D5185m	0	<1	0
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	4	9	12
Barium	ppm	ASTM D5185m 5	0	1	0
Molybdenum	ppm	ASTM D5185m 50	61	105	80
Manganese	ppm	ASTM D5185m 0	2	3	3
Magnesium	ppm	ASTM D5185m 560	889	1196	904
Calcium	ppm	ASTM D5185m 1510	1120	2281	2234
Phosphorus	ppm	ASTM D5185m 780	841	1443	1127
Zinc	ppm	ASTM D5185m 870	1220	1775	1373
Sulfur	ppm	ASTM D5185m 2040	2898	3904	3265

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	13	16	14
Sodium	ppm	ASTM D5185m	8	▲ 310	15
Potassium	ppm	ASTM D5185m >20	4	▲ 50	1
Glycol	%	*ASTM D2982	---	▲ 0.06	---

INFRA-RED

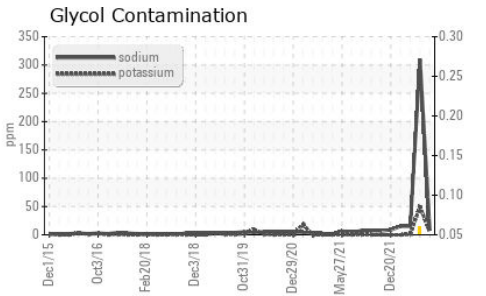
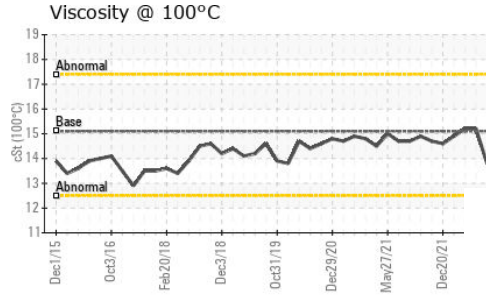
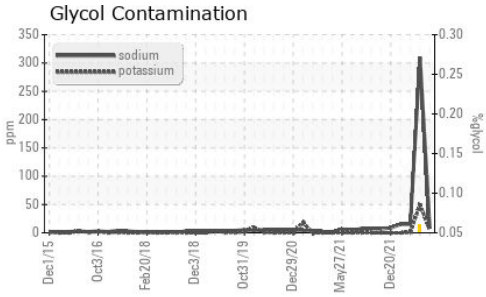
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	0	0.1	0.1
Nitration	Abs/cm	*ASTM D7624 >20	4.6	13.7	14.8
Sulfation	Abs/.1mm	*ASTM D7415 >30	16.9	33.0	33.9

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	12.3	25.8	29.6
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	9.2	6.2	3.5



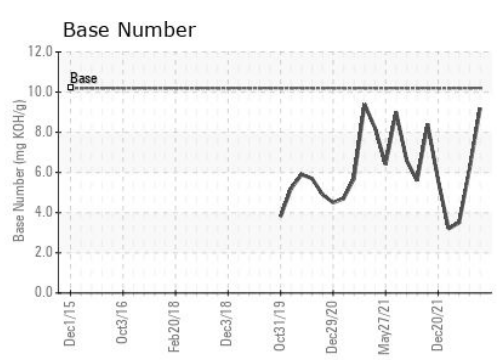
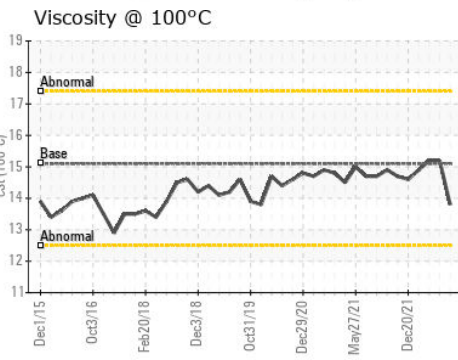
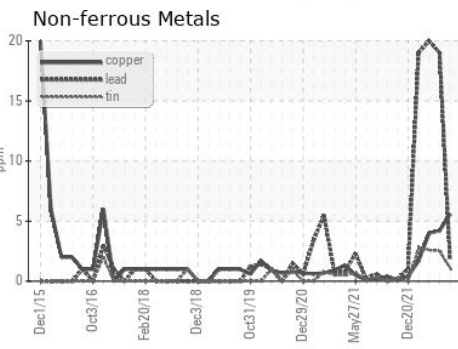
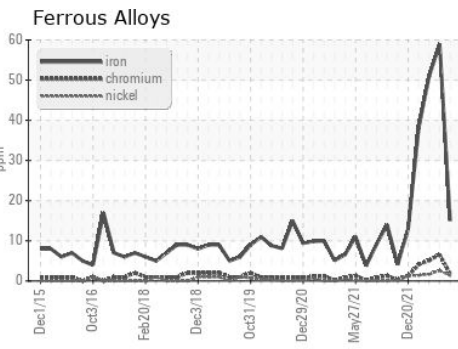
OIL ANALYSIS REPORT



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	13.8	15.2

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0092684 **Recieved** : 09 Jan 2024
Lab Number : 06055200 **Diagnosed** : 10 Jan 2024
Unique Number : 10821149 **Diagnostician** : Jonathan Hester
Test Package : FLEET

GFL Environmental - 005 - Wilson/Tri-East(CNG)
 2810 Contentnea Road S
 Wilson, NC
 US 27893-8501
 Contact: SPENCER LIGGON
 spencer.liggon@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)