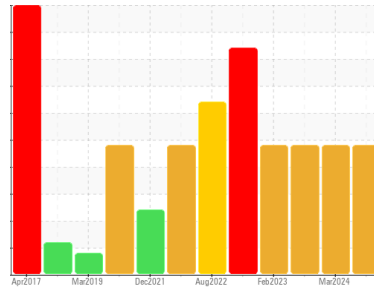




OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Machine Id
8406
 Component
Natural Gas Engine
 Fluid
PETRO CANADA DURON GEO LD 15W40 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check for the source of the coolant leak. We recommend that you drain the oil from the component if this has not already been done. We advise that you flush the component thoroughly before re-filling with oil. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Test for glycol is positive. There is a moderate concentration of glycol present in the oil.

Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0112506	GFL0102671	GFL0097607
Sample Date	Client Info		22 May 2024	11 Mar 2024	02 Nov 2023
Machine Age	hrs	Client Info	281009	1067	259149
Oil Age	hrs	Client Info	0	0	25750
Oil Changed	Client Info		N/A	Changed	Changed
Sample Status			ABNORMAL	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 D5185(m)	>50	18	22	29
Chromium	ppm	ASTM D5185(m)	>4	<1	<1	1
Nickel	ppm	ASTM D5185(m)	>2	0	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>9	1	2	2
Lead	ppm	ASTM D5185(m)	>30	0	<1	2
Copper	ppm	ASTM D5185(m)	>35	<1	1	1
Tin	ppm	ASTM D5185(m)	>4	0	0	<1
Antimony	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	50	2	2	2
Barium	ppm	ASTM D5185(m)	5	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	50	60	65	67
Manganese	ppm	ASTM D5185(m)	0	<1	0	<1
Magnesium	ppm	ASTM D5185(m)	560	495	524	485
Calcium	ppm	ASTM D5185(m)	1510	1456	1461	1452
Phosphorus	ppm	ASTM D5185(m)	780	568	601	578
Zinc	ppm	ASTM D5185(m)	870	798	813	793
Sulfur	ppm	ASTM D5185(m)	2040	1818	1929	1856
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>+100	3	3	6
Sodium	ppm	ASTM D5185(m)		350	461	501
Potassium	ppm	ASTM D5185(m)	>20	24	44	46
Glycol	%	ASTM D7922*		0.05	0.01	0.029

INFRA-RED

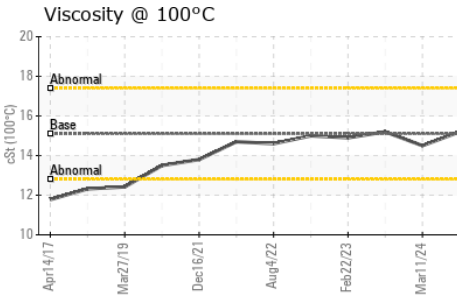
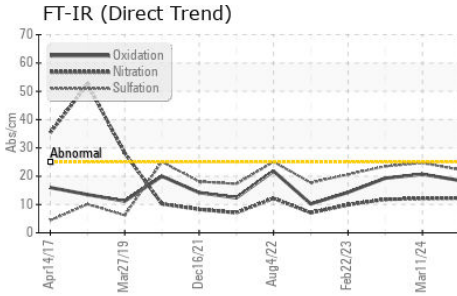
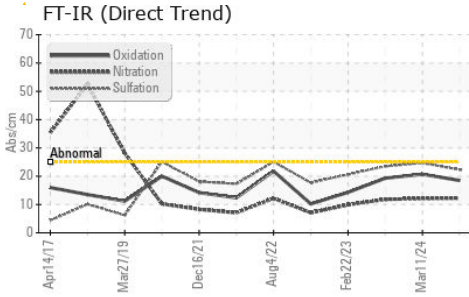
	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	12.2	12.1	11.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.3	24.7	23.5

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.5	20.7	19.3



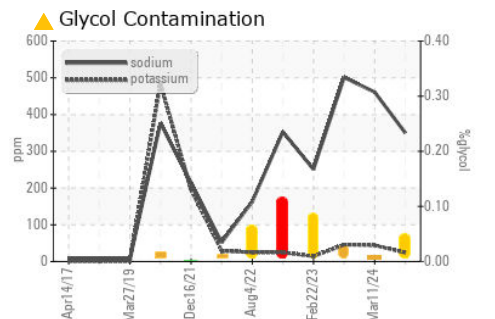
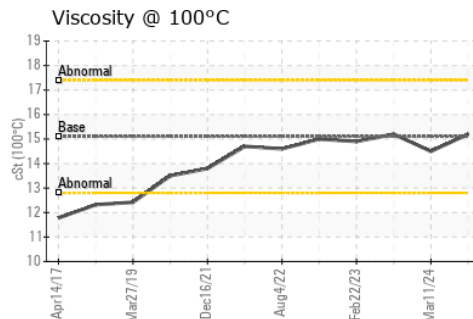
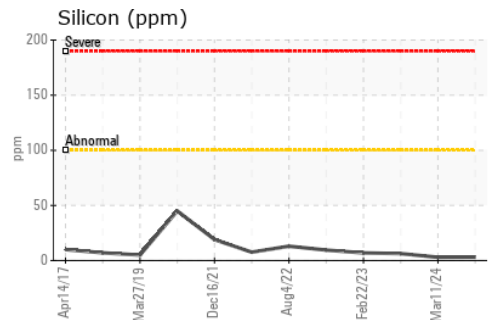
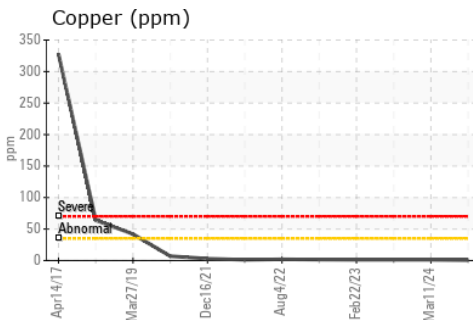
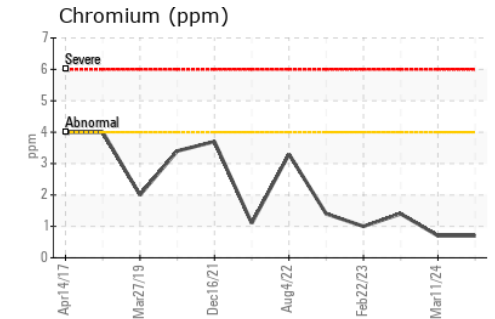
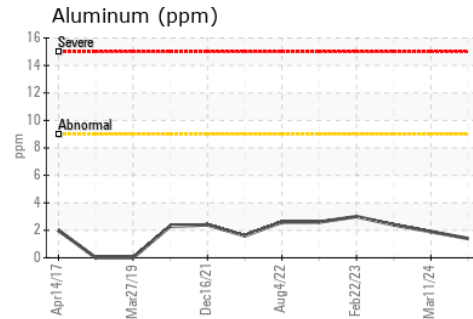
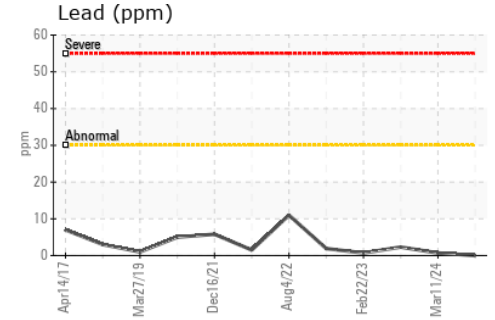
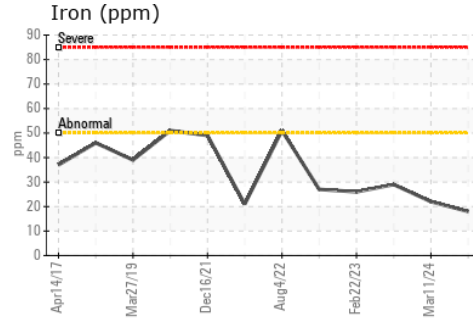
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
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 D7279(m)	15.1	15.2	14.5

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0112506
Lab Number : 02637108
Unique Number : 5786270
Test Package : MOB 1 (Additional Tests: Glycol)
Received : 23 May 2024
Tested : 24 May 2024
Diagnosed : 24 May 2024 - Kevin Marson

GFL Environmental - 554 - Edmonton SW
 8409 -15th Street NW
 Edmonton, AB
 CA T6P 0B8
 Contact: Tim Greig
 tgreig@gflenv.com
 T: (780)231-0521
 F:

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.