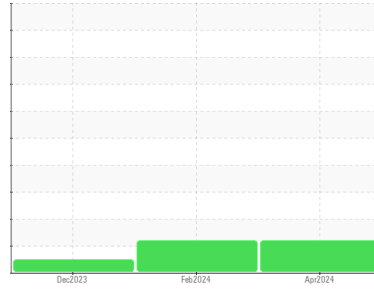




OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Machine Id

834006

Component

Natural Gas Engine

Fluid

PETRO CANADA DURON SHP 15W40 (--- GAL)

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 acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0106912	GFL0092184	GFL0092006
Sample Date	Client Info		16 Apr 2024	08 Feb 2024	07 Dec 2023
Machine Age	hrs	Client Info	1752	1172	0
Oil Age	hrs	Client Info	600	1172	0
Oil Changed	Client Info		Changed	N/A	Not Changd
Sample Status			ATTENTION	ABNORMAL	NORMAL

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	14	32	24
Chromium	ppm	ASTM D5185m >4	<1	<1	<1
Nickel	ppm	ASTM D5185m >2	0	1	<1
Titanium	ppm	ASTM D5185m	0	0	<1
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >9	5	9	2
Lead	ppm	ASTM D5185m >30	<1	<1	0
Copper	ppm	ASTM D5185m >35	2	2	2
Tin	ppm	ASTM D5185m >4	1	<1	<1
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	0	0	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<1	13	33
Barium	ppm	ASTM D5185m 0	0	0	3
Molybdenum	ppm	ASTM D5185m 60	53	53	50
Manganese	ppm	ASTM D5185m 0	<1	2	2
Magnesium	ppm	ASTM D5185m 1010	549	572	552
Calcium	ppm	ASTM D5185m 1070	1705	1491	1485
Phosphorus	ppm	ASTM D5185m 1150	698	695	720
Zinc	ppm	ASTM D5185m 1270	928	941	887
Sulfur	ppm	ASTM D5185m 2060	2775	2424	2620

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	5	8	7
Sodium	ppm	ASTM D5185m	7	7	6
Potassium	ppm	ASTM D5185m >20	58	▲ 116	19

INFRA-RED

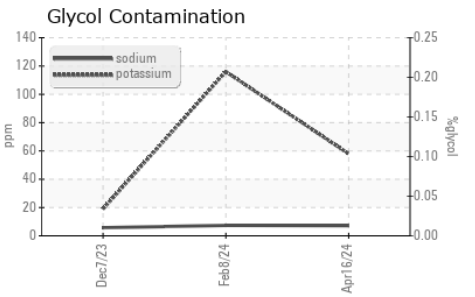
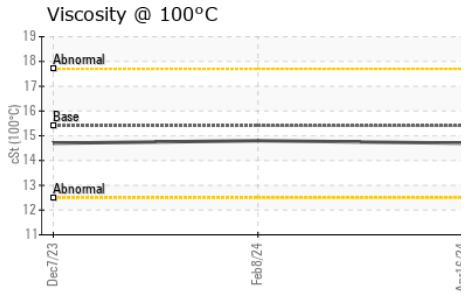
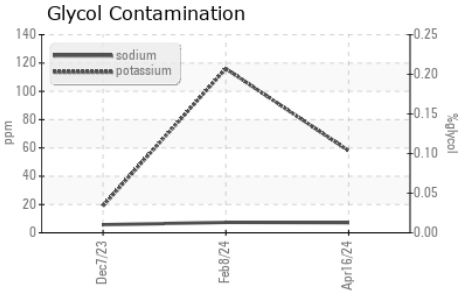
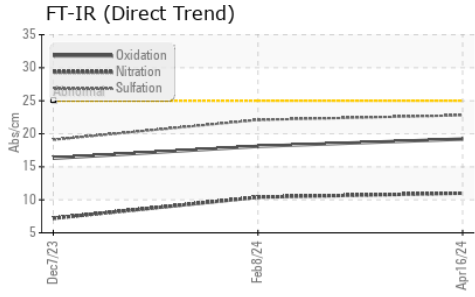
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	0	0	0
Nitration	Abs/cm	*ASTM D7624 >20	11.0	10.4	7.2
Sulfation	Abs/.1mm	*ASTM D7415 >30	22.8	22.1	19.1

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	19.2	18.1	16.3
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	3.7	4.6	8.1



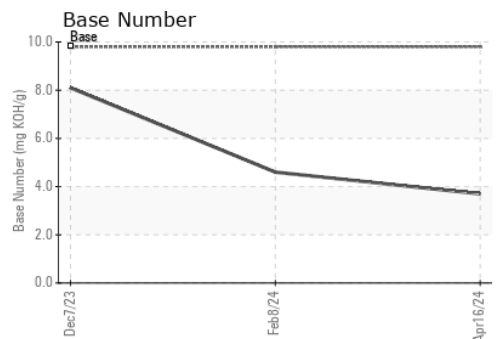
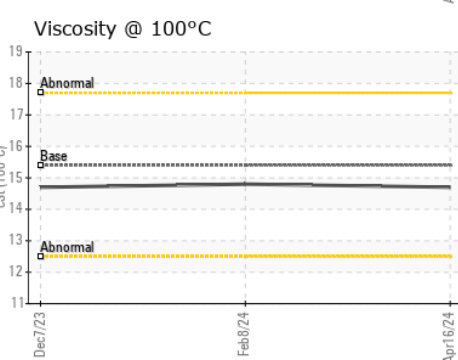
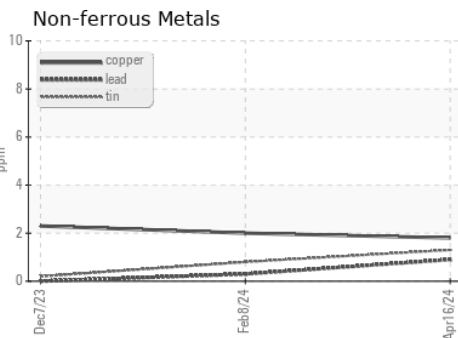
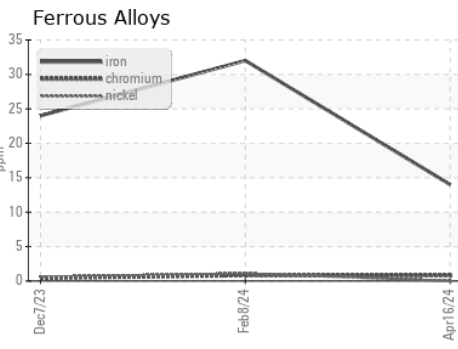
OIL ANALYSIS REPORT



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	15.4	14.7	14.8

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0106912 **Received** : 19 Apr 2024
Lab Number : 06154069 **Tested** : 23 Apr 2024
Unique Number : 10989492 **Diagnosed** : 23 Apr 2024 - Jonathan Hester
Test Package : FLEET (Additional Tests: Glycol)

GFL Environmental - 856 - Houston South
 8515 Highway 6 South
 Houston, TX
 US 77083
 Contact: Apolinar Zacarias
 pzacariascano@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)