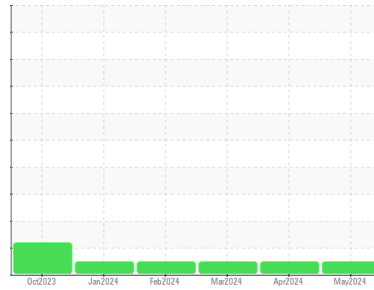




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
(THX0606)

Machine Id
934055

Component
Natural Gas Engine

Fluid
PETRO CANADA DURON GEO LD 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. 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			GFL0117828	GFL0117759	GFL0114402
Sample Date	Client Info			28 May 2024	24 Apr 2024	20 Mar 2024
Machine Age	mls	Client Info		29795	2113	22943
Oil Age	mls	Client Info		0	0	0
Oil Changed	Client Info			Changed	Not Changd	Changed
Sample Status				NORMAL	NORMAL	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	12	27
Chromium	ppm	ASTM D5185m	>4	1	2	3
Nickel	ppm	ASTM D5185m	>2	0	2	1
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>9	21	19	105
Lead	ppm	ASTM D5185m	>30	3	1	5
Copper	ppm	ASTM D5185m	>35	2	2	2
Tin	ppm	ASTM D5185m	>4	<1	2	<1
Vanadium	ppm	ASTM D5185m		0	<1	<1
Cadmium	ppm	ASTM D5185m		0	1	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	50	5	13	8
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	50	56	56	62
Manganese	ppm	ASTM D5185m	0	<1	1	2
Magnesium	ppm	ASTM D5185m	560	612	630	683
Calcium	ppm	ASTM D5185m	1510	1820	1918	2031
Phosphorus	ppm	ASTM D5185m	780	827	907	848
Zinc	ppm	ASTM D5185m	870	1038	1127	1118
Sulfur	ppm	ASTM D5185m	2040	2946	3301	3328

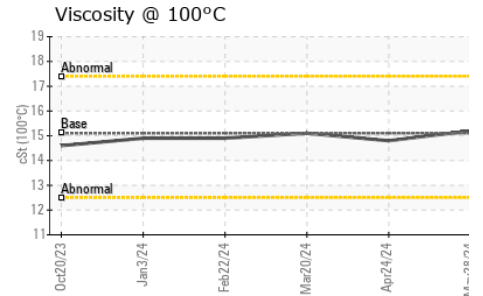
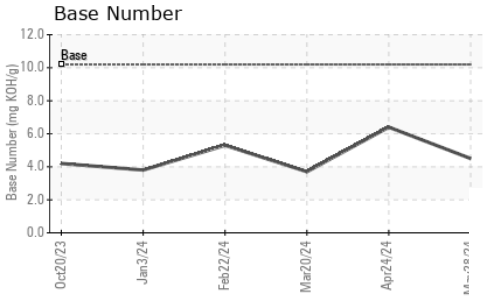
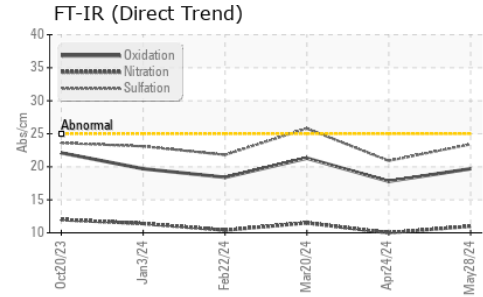
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>+100	0	8	8
Sodium	ppm	ASTM D5185m		8	7	8
Potassium	ppm	ASTM D5185m	>20	62	51	289

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		0.1	0	0
Nitration	Abs/cm	*ASTM D7624	>20	11.0	10.0	11.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.4	20.9	25.8

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.7	17.8	21.3
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	4.5	6.4	3.7



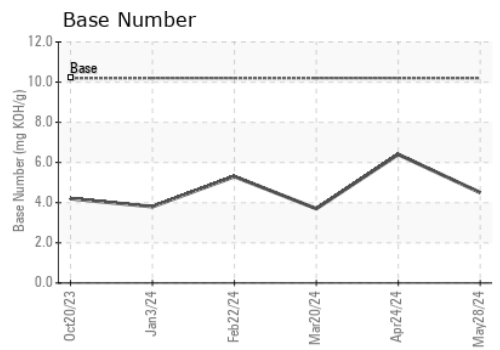
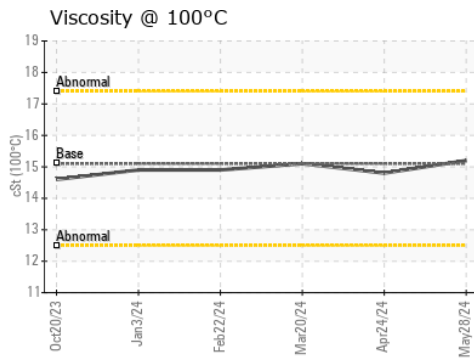
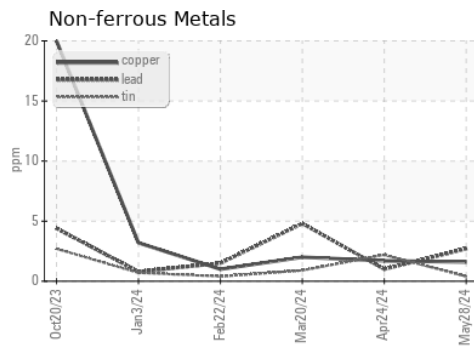
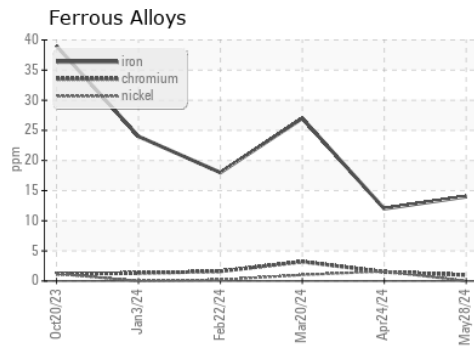
OIL ANALYSIS REPORT



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	15.2	14.8

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0117828 **Received** : 04 Jun 2024
Lab Number : 06198799 **Tested** : 05 Jun 2024
Unique Number : 11060922 **Diagnosed** : 05 Jun 2024 - Wes Davis
Test Package : FLEET

GFL Environmental - 865 - East Mount Hauling
 7213 East Mount Houston Road
 Houston, TX
 US 77050
 Contact: TECHNICIAN ACCOUNT
 wcgfldemo@gmail.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)