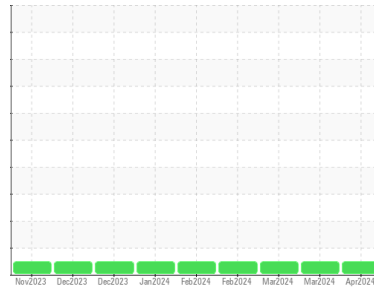




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

834047

Component

Natural Gas Engine

Fluid

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

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

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	GFL0118761	GFL0114162	GFL0108035	
Sample Date	Client Info	16 Apr 2024	27 Mar 2024	05 Mar 2024	
Machine Age	hrs	Client Info	1459	1319	1185
Oil Age	hrs	Client Info	1459	1319	1123
Oil Changed	Client Info	Not Chngd	Filtered	N/A	
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	18	14	77
Chromium	ppm	ASTM D5185m	>4	<1	0	<1
Nickel	ppm	ASTM D5185m	>2	1	0	2
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>9	3	<1	6
Lead	ppm	ASTM D5185m	>30	1	0	2
Copper	ppm	ASTM D5185m	>35	4	2	19
Tin	ppm	ASTM D5185m	>4	1	0	2
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0

ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185m	50	22	32	0
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	50	52	50	62
Manganese	ppm	ASTM D5185m	0	3	1	14
Magnesium	ppm	ASTM D5185m	560	560	624	896
Calcium	ppm	ASTM D5185m	1510	1475	1691	1280
Phosphorus	ppm	ASTM D5185m	780	801	826	836
Zinc	ppm	ASTM D5185m	870	910	952	1002
Sulfur	ppm	ASTM D5185m	2040	2573	2941	2669

CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>+100	8	6	31
Sodium	ppm	ASTM D5185m		4	5	6
Potassium	ppm	ASTM D5185m	>20	2	<1	<1

INFRA-RED

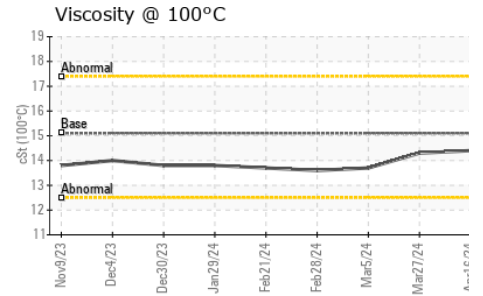
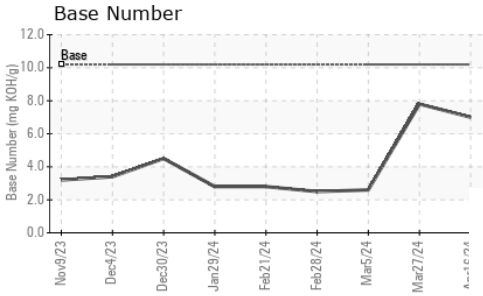
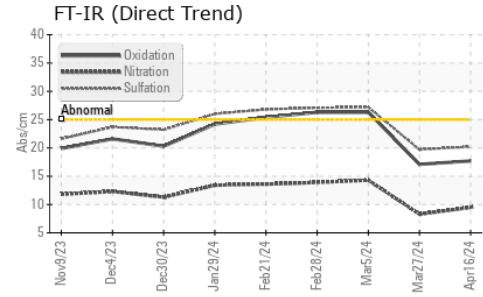
method	limit/base	current	history1	history2		
Soot %	%	*ASTM D7844		0.1	0	0.1
Nitration	Abs/cm	*ASTM D7624	>20	9.5	8.3	14.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.2	19.7	27.2

FLUID DEGRADATION

method	limit/base	current	history1	history2		
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.7	17.1	26.3
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	7.0	7.8	2.6



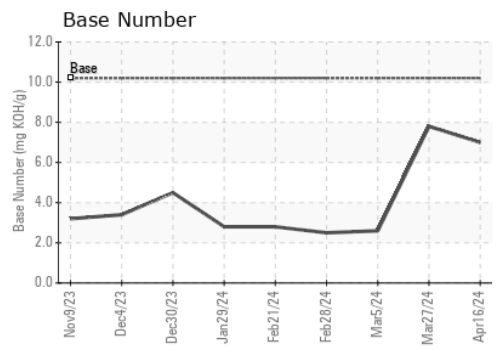
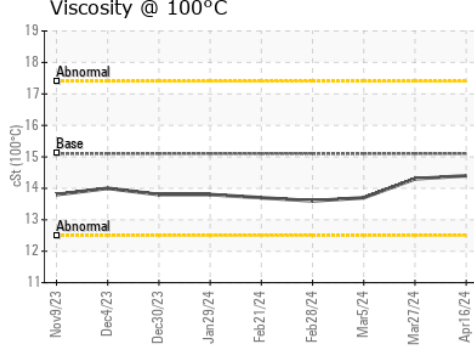
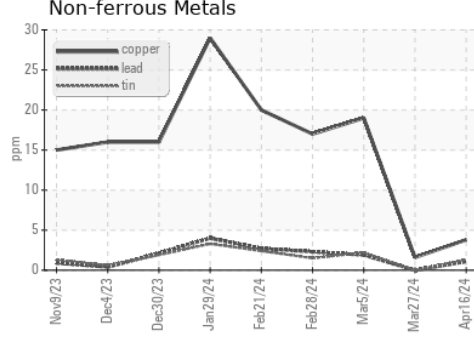
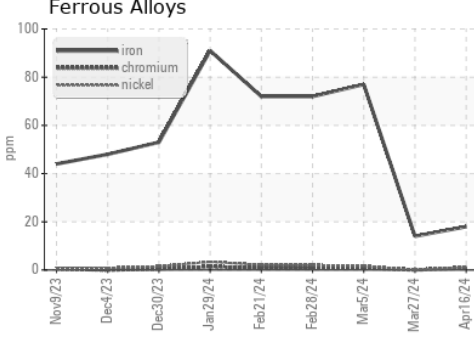
OIL ANALYSIS REPORT



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	14.4	14.3

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0118761
Lab Number : 06156769
Unique Number : 10992192
Test Package : FLEET
Received : 22 Apr 2024
Tested : 23 Apr 2024
Diagnosed : 24 Apr 2024 - Sean Felton

GFL Environmental - 837 - Harrison TS
 22820 S State Route 291
 Harrisonville, MO
 US 64701
 Contact: SARA PATRICK
 spatrack@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)