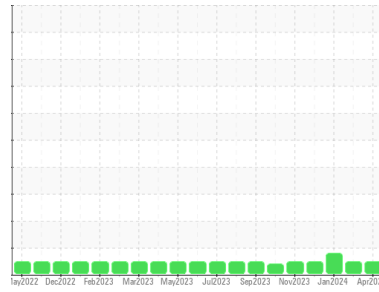




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

731118

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	GFL0114001	GFL0109794	GFL0103312	
Sample Date	Client Info	04 Apr 2024	27 Feb 2024	23 Jan 2024	
Machine Age	hrs	Client Info	6546	6355	6203
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info	Not Changed	Not Changed	Not Changed	
Sample Status		NORMAL	NORMAL	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	6	24	▲ 50
Chromium	ppm	ASTM D5185m	>4	<1	2	1
Nickel	ppm	ASTM D5185m	>2	0	1	1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>9	4	3	5
Lead	ppm	ASTM D5185m	>30	2	22	2
Copper	ppm	ASTM D5185m	>35	8	1	14
Tin	ppm	ASTM D5185m	>4	<1	2	2
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185m	50	10	10	13
Barium	ppm	ASTM D5185m	5	0	0	<1
Molybdenum	ppm	ASTM D5185m	50	51	63	47
Manganese	ppm	ASTM D5185m	0	<1	1	11
Magnesium	ppm	ASTM D5185m	560	580	777	752
Calcium	ppm	ASTM D5185m	1510	1686	2224	1323
Phosphorus	ppm	ASTM D5185m	780	816	907	759
Zinc	ppm	ASTM D5185m	870	1017	1347	842
Sulfur	ppm	ASTM D5185m	2040	3051	3040	2165

CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>+100	7	6	29
Sodium	ppm	ASTM D5185m		2	8	2
Potassium	ppm	ASTM D5185m	>20	0	<1	3

INFRA-RED

method	limit/base	current	history1	history2		
Soot %	%	*ASTM D7844		0	0	0
Nitration	Abs/cm	*ASTM D7624	>20	10.4	12.8	11.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.1	27.3	22.8

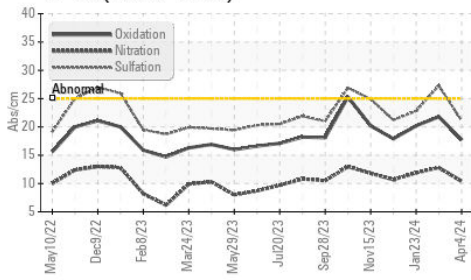
FLUID DEGRADATION

method	limit/base	current	history1	history2		
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.7	21.8	20.2
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	4.8	2.9	4.2

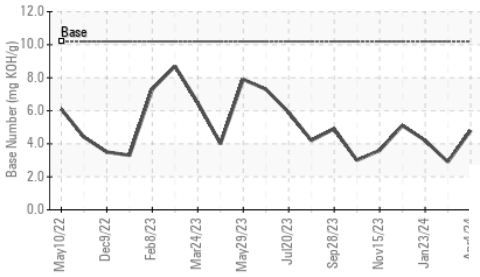


OIL ANALYSIS REPORT

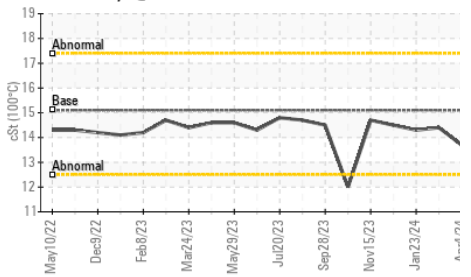
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

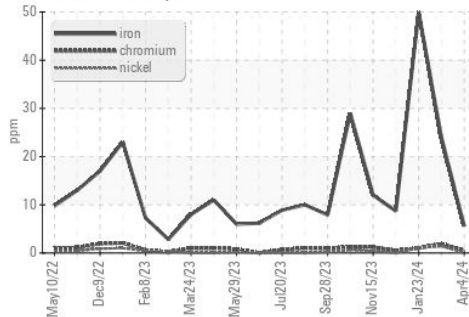


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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

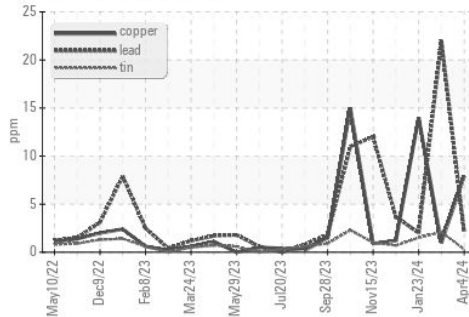
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	13.7	14.4

GRAPHS

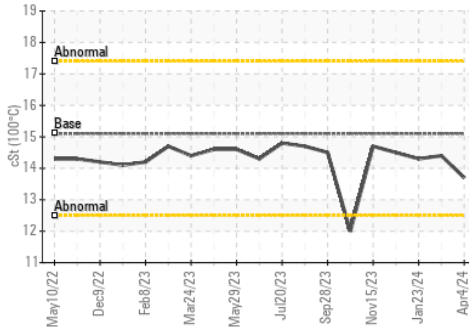
Ferrous Alloys



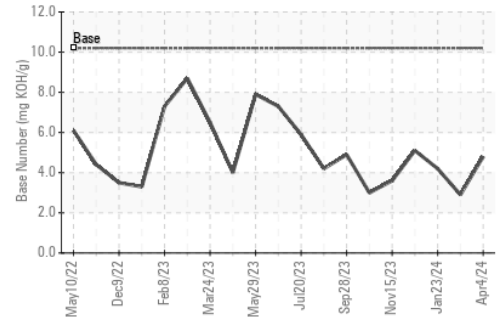
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : GFL0114001
 Lab Number : 06140844
 Unique Number : 10965652
 Test Package : FLEET

GFL Environmental - 836 - Kansas City Hauling
 7801 East Truman Road
 Kansas City, MO
 US 64126
 Contact: Loyce Stewart
 loyce.stewart@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)

T:
F: