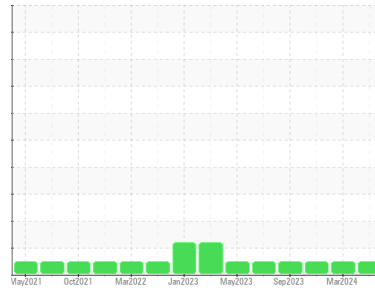




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

945005-260237

Component

Natural Gas Engine

Fluid

PETRO CANADA DURON GEO LD 15W40 (7 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		GFL0120939	GFL0114569	GFL0081077
Sample Date	Client Info		04 Jun 2024	26 Mar 2024	03 Jan 2024
Machine Age	hrs	Client Info	8893	8390	8052
Oil Age	hrs	Client Info	515	1200	719
Oil Changed	Client Info		Not Changed	Changed	Not 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	2	5	4
Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>9	4	2	2
Lead	ppm	ASTM D5185m	>30	0	0	0
Copper	ppm	ASTM D5185m	>35	<1	<1	<1
Tin	ppm	ASTM D5185m	>4	<1	2	<1
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	39	37	34
Barium	ppm	ASTM D5185m	5	1	0	0
Molybdenum	ppm	ASTM D5185m	50	52	50	48
Manganese	ppm	ASTM D5185m	0	0	<1	<1
Magnesium	ppm	ASTM D5185m	560	587	540	517
Calcium	ppm	ASTM D5185m	1510	1368	1651	1488
Phosphorus	ppm	ASTM D5185m	780	792	793	745
Zinc	ppm	ASTM D5185m	870	957	944	928
Sulfur	ppm	ASTM D5185m	2040	2707	3032	2370

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>+100	6	5	6
Sodium	ppm	ASTM D5185m		0	4	7
Potassium	ppm	ASTM D5185m	>20	2	1	2

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844		0.1	0	0
Nitration	Abs/cm	*ASTM D7624	>20	7.8	7.2	7.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.6	18.9	19.5

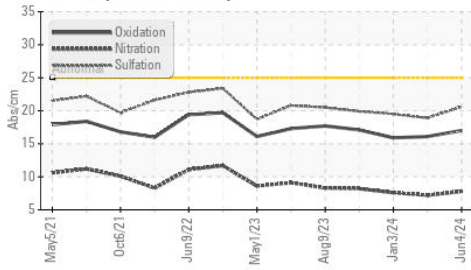
FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.0	16.1	15.9
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	6.6	8.0	7.4

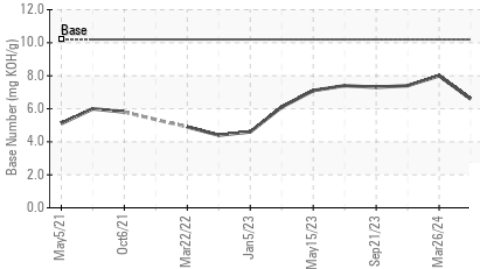


OIL ANALYSIS REPORT

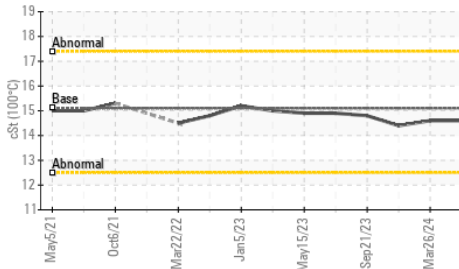
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

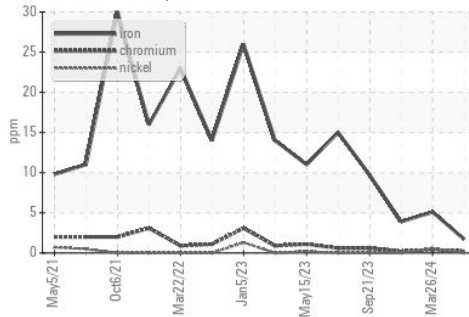


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

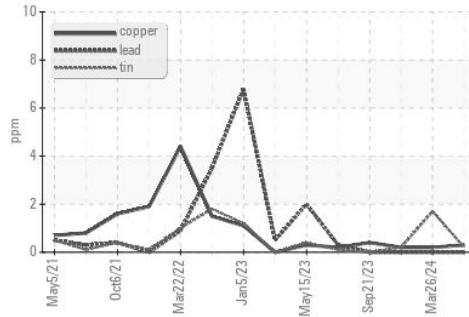
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	14.6	14.4

GRAPHS

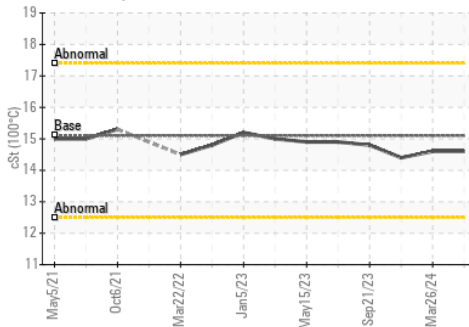
Ferrous Alloys



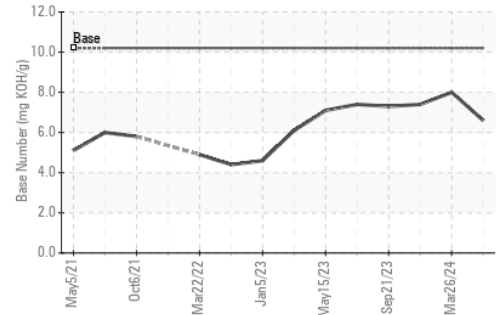
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : GFL0120939
 Lab Number : 06201001
 Unique Number : 11063124
 Test Package : FLEET

Received : 05 Jun 2024
 Tested : 07 Jun 2024
 Diagnosed : 07 Jun 2024 - Wes Davis

GFL Environmental - 884 - Lake County - Tavares
 321 Southridge Industrial Way
 Tavares, FL
 US 32778
 Contact: JEFF COOPERSMITH

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: