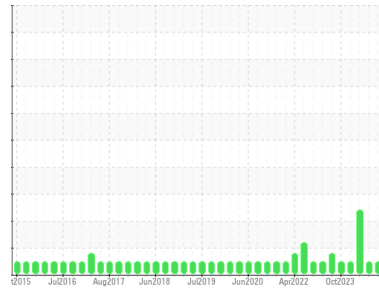




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

3588C AUTOCAR ACX

Component

Natural Gas Engine

Fluid

PETRO CANADA DURON GEO LD 15W40 (48 QTS)

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	GFL0117417	GFL0094644	GFL0094757	
Sample Date	Client Info	09 Jul 2024	05 Dec 2023	25 Nov 2023	
Machine Age	hrs	Client Info	0	43395	43324
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info	N/A	Not Changd	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	16	17	46
Chromium	ppm	ASTM D5185m	>4	<1	2	6
Nickel	ppm	ASTM D5185m	>2	<1	0	2
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>9	3	2	8
Lead	ppm	ASTM D5185m	>30	1	<1	9
Copper	ppm	ASTM D5185m	>35	1	2	13
Tin	ppm	ASTM D5185m	>4	1	1	2
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	<1

ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185m	50	11	33	6
Barium	ppm	ASTM D5185m	5	3	5	1
Molybdenum	ppm	ASTM D5185m	50	48	47	65
Manganese	ppm	ASTM D5185m	0	2	0	2
Magnesium	ppm	ASTM D5185m	560	653	470	611
Calcium	ppm	ASTM D5185m	1510	1377	1338	1707
Phosphorus	ppm	ASTM D5185m	780	732	699	734
Zinc	ppm	ASTM D5185m	870	950	790	1008
Sulfur	ppm	ASTM D5185m	2040	2812	2296	2692

CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>+100	12	7	17
Sodium	ppm	ASTM D5185m		4	5	▲ 59
Potassium	ppm	ASTM D5185m	>20	9	22	▲ 53

INFRA-RED

method	limit/base	current	history1	history2		
Soot %	%	*ASTM D7844		0.1	0	0
Nitration	Abs/cm	*ASTM D7624	>20	10.8	7.3	13.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.4	19.6	27.8

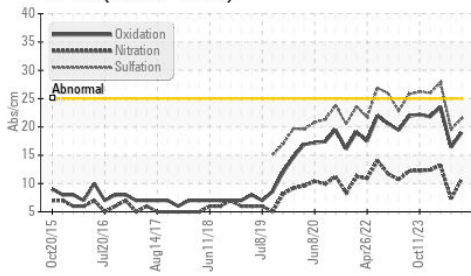
FLUID DEGRADATION

method	limit/base	current	history1	history2		
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.0	16.4	23.5
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	5.5	8.0	2.5

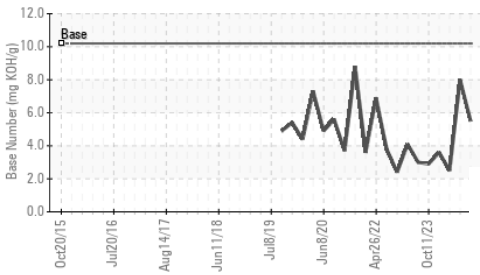


OIL ANALYSIS REPORT

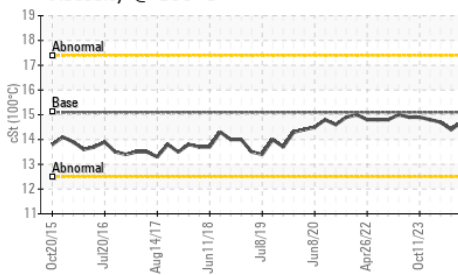
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

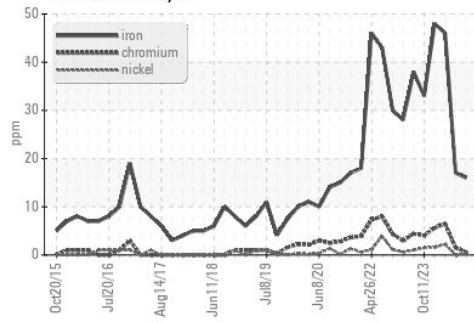


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

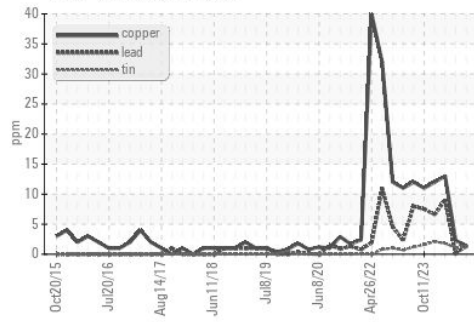
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	14.7	14.4

GRAPHS

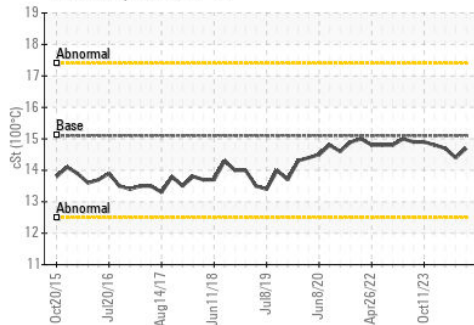
Ferrous Alloys



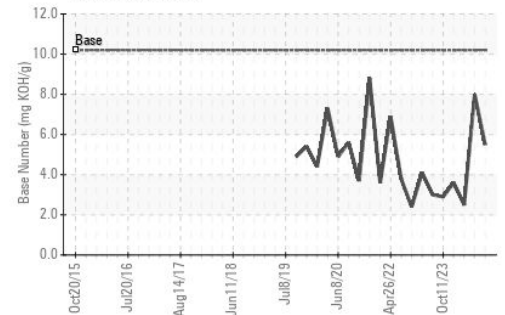
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : GFL0117417
 Lab Number : 06231924
 Unique Number : 11115417
 Test Package : FLEET

Received : 10 Jul 2024
 Tested : 10 Jul 2024
 Diagnosed : 10 Jul 2024 - Wes Davis

GFL Environmental - 001 - Raleigh(CNG)
 3741 Conquest Drive
 Garner, NC
 US 27529

Contact: Ronald Gregory
 rgregory@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: (919)662-1730