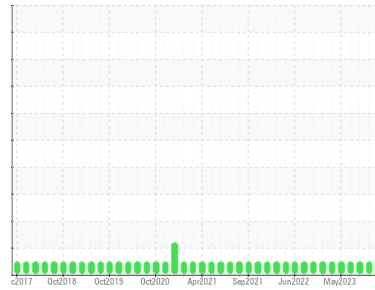




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
(P633847)
 Machine Id
10764C
 Component
Natural Gas Engine
 Fluid
PETRO CANADA DURON GEO LD 15W40 (30 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	GFL0117975	GFL0101752	GFL0101801
Sample Date	Client Info	09 May 2024	23 Feb 2024	13 Feb 2024
Machine Age	hrs	18470	17000	16561
Oil Age	hrs	600	600	0
Oil Changed	Client Info	Changed	Changed	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	9	18	12
Chromium	ppm ASTM D5185m >4	<1	2	<1
Nickel	ppm ASTM D5185m >2	<1	<1	0
Titanium	ppm ASTM D5185m	<1	<1	0
Silver	ppm ASTM D5185m >3	0	0	0
Aluminum	ppm ASTM D5185m >9	2	2	1
Lead	ppm ASTM D5185m >30	<1	0	0
Copper	ppm ASTM D5185m >35	<1	2	0
Tin	ppm ASTM D5185m >4	<1	<1	0
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	31	9	17
Barium	ppm ASTM D5185m 5	2	9	8
Molybdenum	ppm ASTM D5185m 50	53	58	49
Manganese	ppm ASTM D5185m 0	<1	<1	0
Magnesium	ppm ASTM D5185m 560	531	599	492
Calcium	ppm ASTM D5185m 1510	1534	1378	1388
Phosphorus	ppm ASTM D5185m 780	802	707	625
Zinc	ppm ASTM D5185m 870	917	918	861
Sulfur	ppm ASTM D5185m 2040	2550	2429	2244

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >+100	6	9	6
Sodium	ppm ASTM D5185m	2	16	2
Potassium	ppm ASTM D5185m >20	3	13	36

INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	0	0	0
Nitration	Abs/cm *ASTM D7624 >20	8.0	12.1	9.7
Sulfation	Abs/.1mm *ASTM D7415 >30	19.4	23.0	20.3

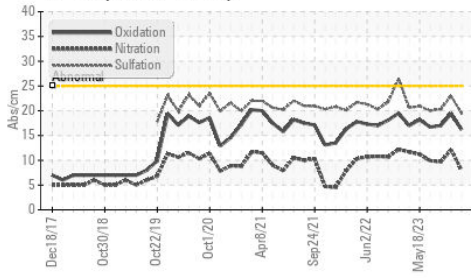
FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	16.2	19.4	17.0
Base Number (BN)	mg KOH/g ASTM D2896 10.2	7.3	4.1	5.9

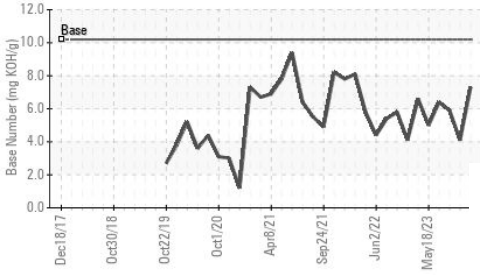


OIL ANALYSIS REPORT

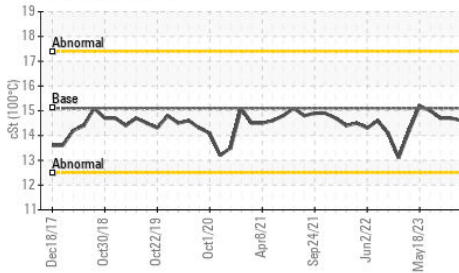
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C



VISUAL

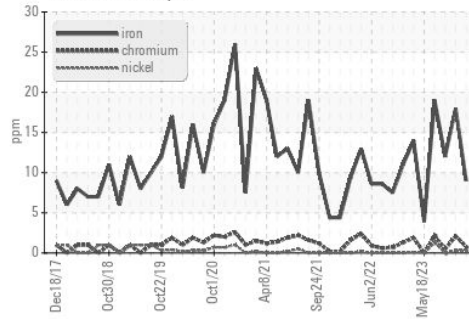
	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar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

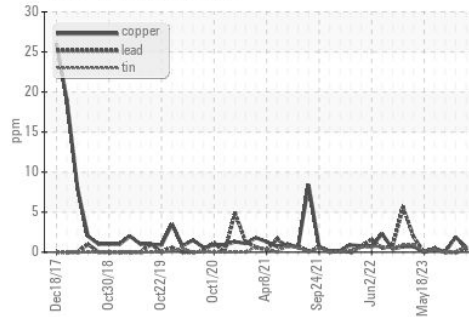
	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	14.6	14.7

GRAPHS

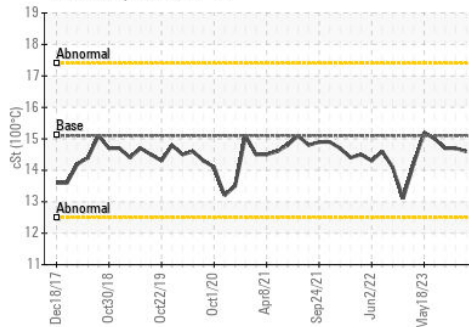
Ferrous Alloys



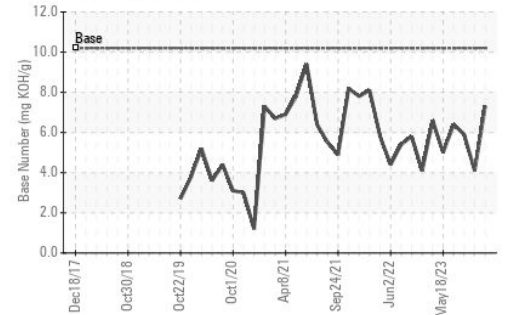
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : GFL0117975
 Lab Number : 06176512
 Unique Number : 11022565
 Test Package : FLEET

Received : 10 May 2024
 Tested : 13 May 2024
 Diagnosed : 13 May 2024 - Wes Davis

GFL Environmental - 030 - Conway Myrtle Beach
 3010 HWY 378
 Conway, SC
 US 29527
 Contact: ARCILIO RUEZ
 aruiz@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: