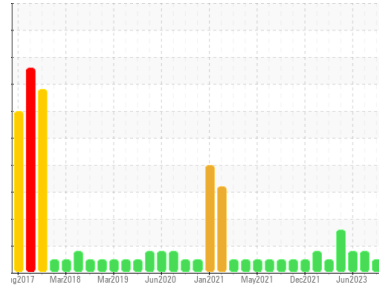




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
(P633832)
 Machine Id
3764C
 Component
Natural Gas Engine
 Fluid
PETRO CANADA DURON GEO LD 15W40 (40 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		GFL0117970	GFL0117967	GFL0070786
Sample Date	Client Info		09 May 2024	24 Apr 2024	07 Jun 2023
Machine Age	hrs	Client Info	14617	13900	13325
Oil Age	hrs	Client Info	600	600	600
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	ABNORMAL	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	42	40	29
Chromium	ppm	ASTM D5185m	>4	7	7	6
Nickel	ppm	ASTM D5185m	>2	1	0	2
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>9	9	8	6
Lead	ppm	ASTM D5185m	>30	2	2	<1
Copper	ppm	ASTM D5185m	>35	19	15	28
Tin	ppm	ASTM D5185m	>4	<1	0	1
Vanadium	ppm	ASTM D5185m		<1	0	<1
Cadmium	ppm	ASTM D5185m		<1	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	50	7	5	6
Barium	ppm	ASTM D5185m	5	2	0	0
Molybdenum	ppm	ASTM D5185m	50	58	50	52
Manganese	ppm	ASTM D5185m	0	2	1	1
Magnesium	ppm	ASTM D5185m	560	544	569	594
Calcium	ppm	ASTM D5185m	1510	1585	1635	1663
Phosphorus	ppm	ASTM D5185m	780	736	764	749
Zinc	ppm	ASTM D5185m	870	905	957	1002
Sulfur	ppm	ASTM D5185m	2040	2286	2666	2790

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>+100	11	8	6
Sodium	ppm	ASTM D5185m		5	6	8
Potassium	ppm	ASTM D5185m	>20	4	2	5

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844		0	0	0.1
Nitration	Abs/cm	*ASTM D7624	>20	11.2	11.0	11.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.5	21.4	22.5

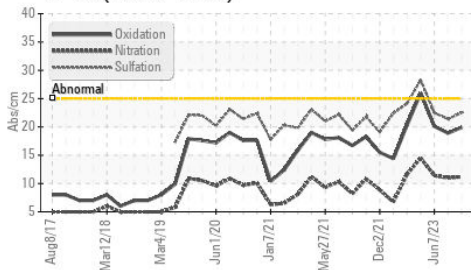
FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.9	18.9	20.1
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	4.5	4.6	4.6

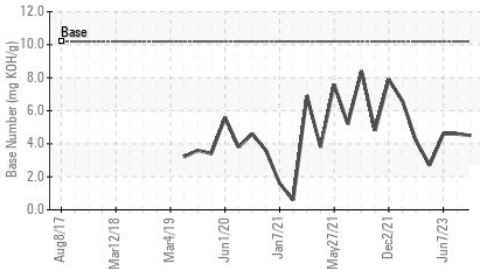


OIL ANALYSIS REPORT

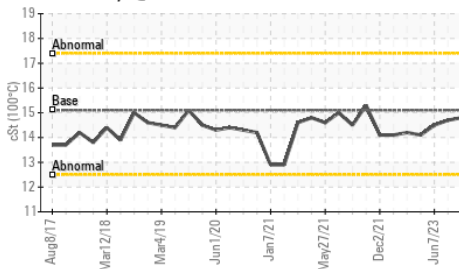
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C



VISUAL

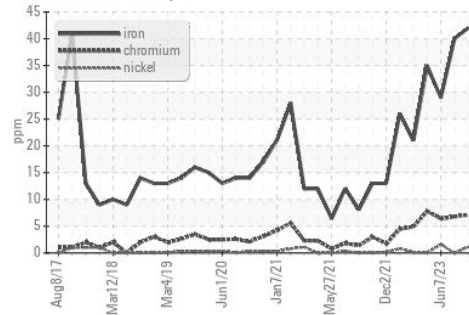
	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar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

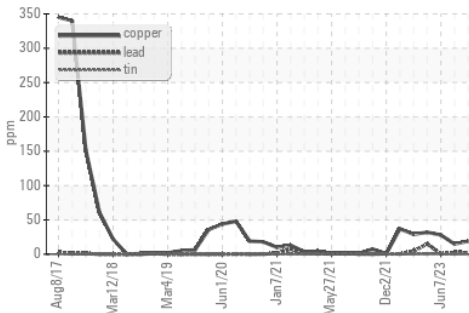
	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	14.8	14.7

GRAPHS

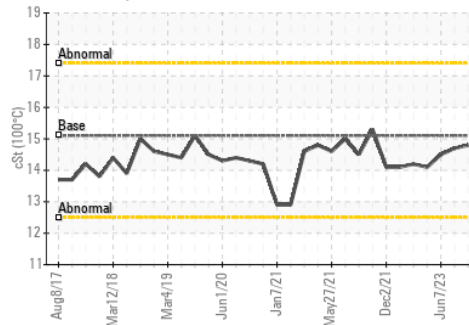
Ferrous Alloys



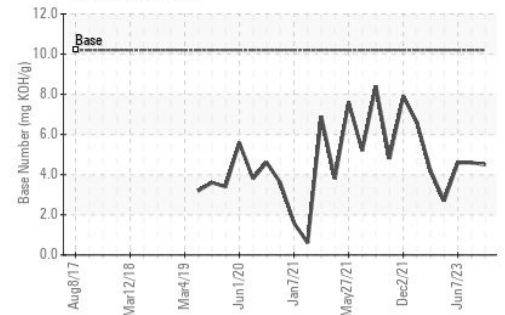
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0117970
Lab Number : 06176510
Unique Number : 11022563
Test Package : FLEET

Received : 10 May 2024
Tested : 13 May 2024
Diagnosed : 14 May 2024 - Sean Felton

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: