



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
945001-152555
Component
Natural Gas Engine
Fluid
PETRO CANADA DURON GEO LD 15W40 (8 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0110800	GFL0088459	GFL0073226
Sample Date		Client Info		24 May 2024	05 Feb 2024	16 Nov 2023
Machine Age	hrs	Client Info		21537	20955	20389
Oil Age	hrs	Client Info		600	600	19391
Filter Age	hrs	Client Info		600	600	650
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	23	20	19
Chromium	ppm	ASTM D5185m	>5	2	3	2
Nickel	ppm	ASTM D5185m	>4	<1	3	<1
Titanium	ppm	ASTM D5185m	>5	<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>25	3	3	3
Lead	ppm	ASTM D5185m	>40	<1	8	7
Copper	ppm	ASTM D5185m	>150	2	9	4
Tin	ppm	ASTM D5185m	>4	<1	2	4
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

There is no indication of any contamination in the oil.

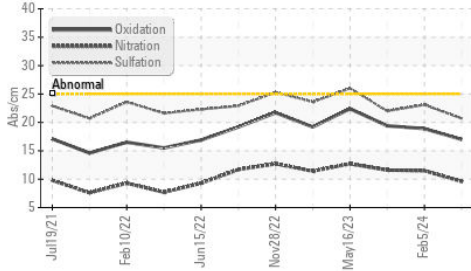
Silicon	ppm	ASTM D5185m	>25	8	8	▲ 25
Potassium	ppm	ASTM D5185m	>20	2	2	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	*ASTM D7844		0.2	0	0
Nitration	Abs/cm	*ASTM D7624	>20	9.6	11.5	11.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.7	23.1	22.0
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG

FLUID CONDITION

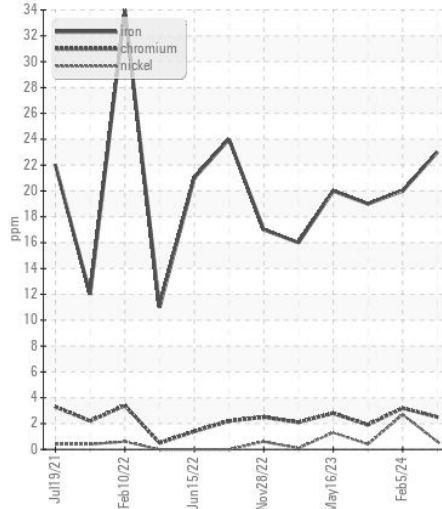
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		9	6	3
Boron	ppm	ASTM D5185m	50	16	4	19
Barium	ppm	ASTM D5185m	5	<1	15	0
Molybdenum	ppm	ASTM D5185m	50	62	60	60
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	560	545	515	720
Calcium	ppm	ASTM D5185m	1510	1602	1455	1372
Phosphorus	ppm	ASTM D5185m	780	737	661	685
Zinc	ppm	ASTM D5185m	870	968	882	959
Sulfur	ppm	ASTM D5185m	2040	2494	2526	2439
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.0	18.9	19.4
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	3.9	3.3	4.6
Visc @ 100°C	cSt	ASTM D445	15.1	13.9	14.1	14.0

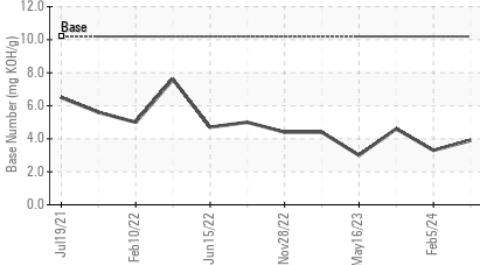
FT-IR (Direct Trend)



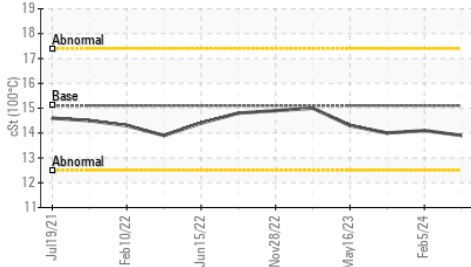
Ferrous Alloys



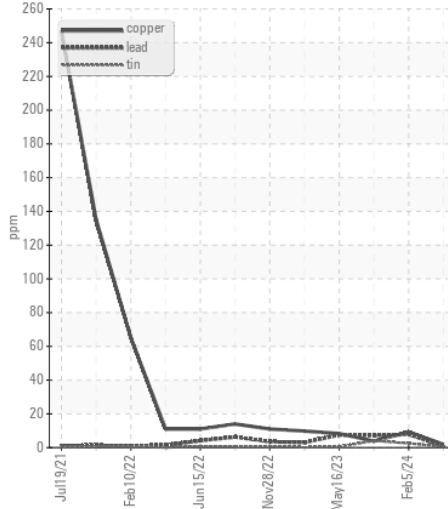
Base Number



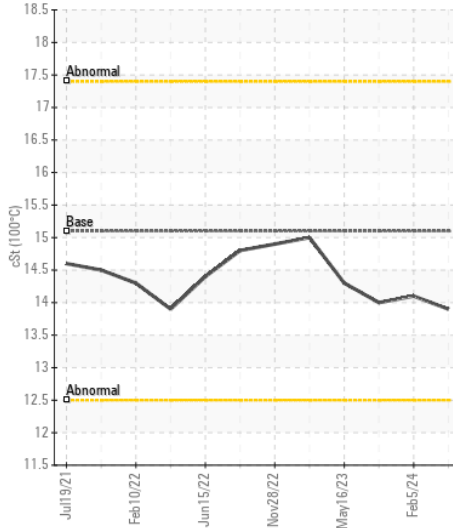
Viscosity @ 100°C



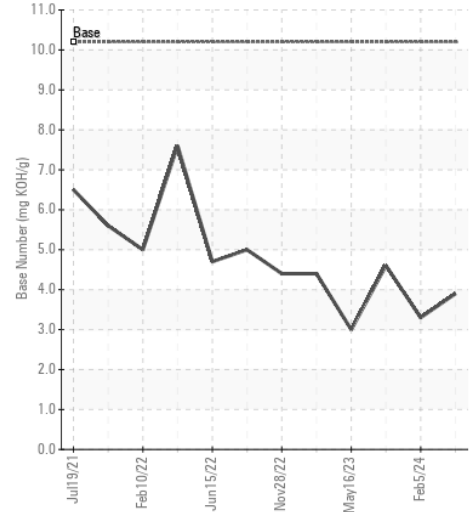
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : GFL0110800
 Lab Number : 06196315
 Unique Number : 11058438
 Test Package : FLEET

Received : 31 May 2024
 Tested : 03 Jun 2024
 Diagnosed : 03 Jun 2024 - Wes Davis

GFL Environmental - 146 - Augusta
 1064 Franke Industrial
 Augusta, GA
 US 30909
 Contact: JEFFERY WASHINGTON
 jeff.washington@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)

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