



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area

(P633849)

Machine Id

10765C

Component

Natural Gas Engine

Fluid

PETRO CANADA DURON GEO LD 15W40 (30 QTS)

RECOMMENDATION

No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0117987	GFL0117971	GFL0117965
Sample Date		Client Info		22 May 2024	09 May 2024	24 Apr 2024
Machine Age	hrs	Client Info		18000	17692	17577
Oil Age	hrs	Client Info		600	600	600
Filter Age	hrs	Client Info		600	600	600
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	SEVERE

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	8	37	14
Chromium	ppm	ASTM D5185m	>4	1	6	1
Nickel	ppm	ASTM D5185m	>2	<1	2	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>9	2	3	1
Lead	ppm	ASTM D5185m	>30	2	14	8
Copper	ppm	ASTM D5185m	>35	<1	1	<1
Tin	ppm	ASTM D5185m	>4	<1	1	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

Moderate concentration of visible dirt/debris present in the oil.

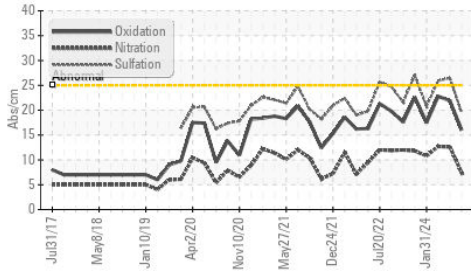
Silicon	ppm	ASTM D5185m	>+100	6	11	10
Potassium	ppm	ASTM D5185m	>20	4	6	▲ 678
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		---	---	▲ 0.10
Soot %	%	*ASTM D7844		0.1	0	0.1
Nitration	Abs/cm	*ASTM D7624	>20	7.4	12.6	12.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.5	26.5	25.9
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ MODER	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

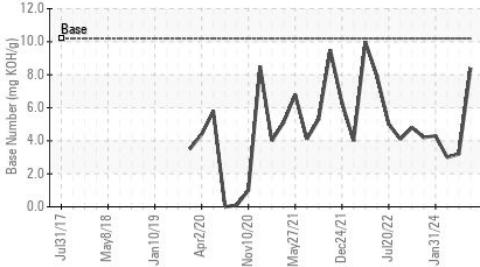
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		5	8	▲ 288
Boron	ppm	ASTM D5185m	50	45	4	2
Barium	ppm	ASTM D5185m	5	0	2	0
Molybdenum	ppm	ASTM D5185m	50	49	62	57
Manganese	ppm	ASTM D5185m	0	<1	1	<1
Magnesium	ppm	ASTM D5185m	560	566	568	487
Calcium	ppm	ASTM D5185m	1510	1518	1656	1450
Phosphorus	ppm	ASTM D5185m	780	774	755	657
Zinc	ppm	ASTM D5185m	870	950	929	872
Sulfur	ppm	ASTM D5185m	2040	2694	2363	2758
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.0	21.9	22.8
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	8.4	3.2	3.0
Visc @ 100°C	cSt	ASTM D445	15.1	14.4	13.7	14.1

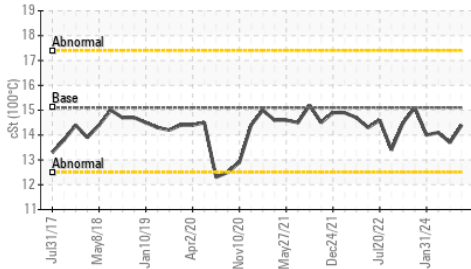
FT-IR (Direct Trend)



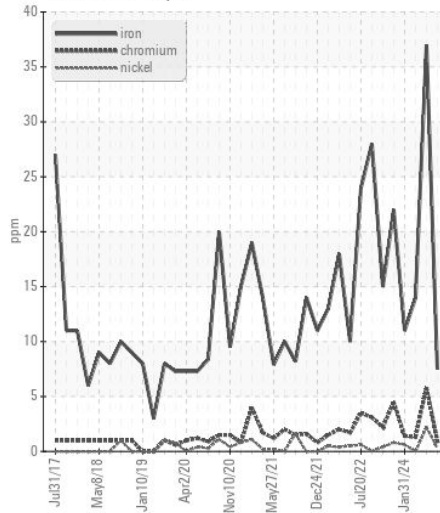
Base Number



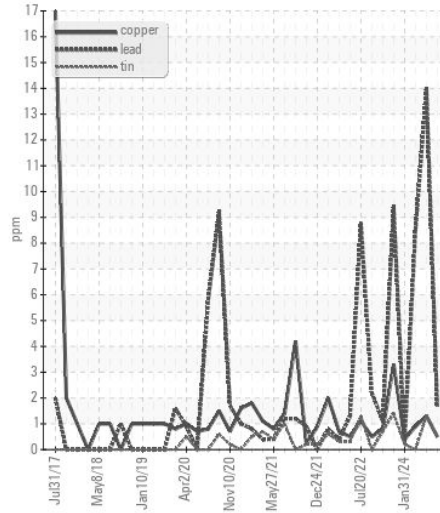
Viscosity @ 100°C



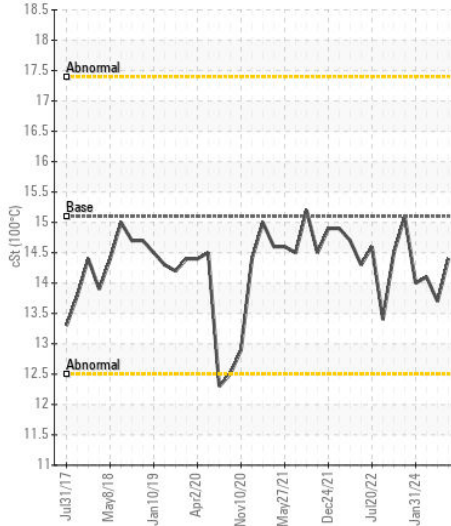
Ferrous Alloys



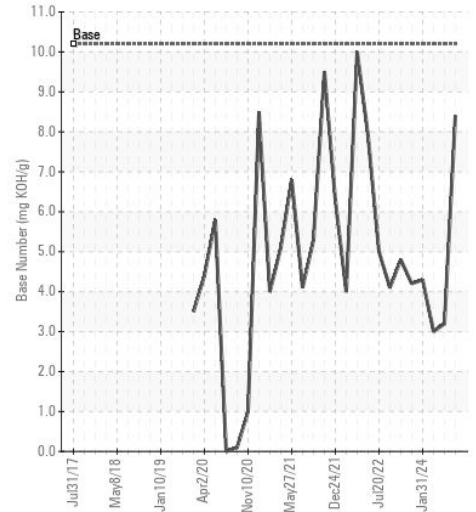
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0117987
Lab Number : 06188770
Unique Number : 11045522
Test Package : FLEET

Received : 23 May 2024
Tested : 24 May 2024
Diagnosed : 28 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)

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F: