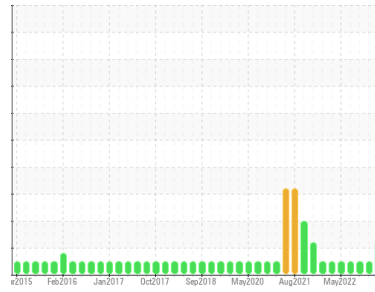




OIL ANALYSIS REPORT

Sample Rating Trend



COOL CHEMICALS



Area

(Vin)

Machine Id
10503C Autocar ACX64

Component

Natural Gas Engine

Fluid

PETRO CANADA DURON GEO LD 15W40 (28 QTS)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Sodium and/or potassium levels are high. Test for glycol is negative.

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	GFL0117465	GFL0103237	GFL0089345
Sample Date	Client Info	24 Jun 2024	29 Dec 2023	20 Jul 2023
Machine Age	hrs	9207	8061	7241
Oil Age	hrs	0	0	0
Oil Changed	Client Info	Not Changed	Changed	Not Changed
Sample Status		ABNORMAL	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	21	13	15
Chromium	ppm ASTM D5185m >4	2	1	2
Nickel	ppm ASTM D5185m >2	<1	0	<1
Titanium	ppm ASTM D5185m	<1	0	<1
Silver	ppm ASTM D5185m >3	0	0	0
Aluminum	ppm ASTM D5185m >9	5	2	5
Lead	ppm ASTM D5185m >30	2	0	0
Copper	ppm ASTM D5185m >35	2	0	10
Tin	ppm ASTM D5185m >4	<1	0	<1
Vanadium	ppm ASTM D5185m	<1	0	<1
Cadmium	ppm ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 50	4	<1	15
Barium	ppm ASTM D5185m 5	0	4	0
Molybdenum	ppm ASTM D5185m 50	53	48	54
Manganese	ppm ASTM D5185m 0	<1	0	<1
Magnesium	ppm ASTM D5185m 560	580	498	585
Calcium	ppm ASTM D5185m 1510	1644	1468	1707
Phosphorus	ppm ASTM D5185m 780	742	707	797
Zinc	ppm ASTM D5185m 870	1031	902	977
Sulfur	ppm ASTM D5185m 2040	2764	2529	2928

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >+100	16	0	6
Sodium	ppm ASTM D5185m	22	3	10
Potassium	ppm ASTM D5185m >20	▲ 50	8	4

INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	0	0	0
Nitration	Abs/cm *ASTM D7624 >20	11.8	11.1	10.1
Sulfation	Abs/.1mm *ASTM D7415 >30	24.5	21.5	21.7

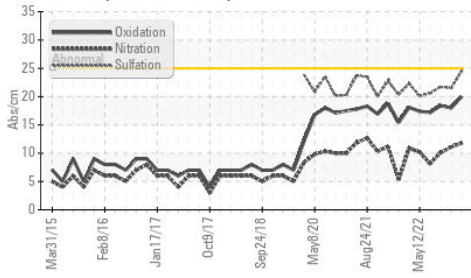
FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	20.0	18.0	18.4
Base Number (BN)	mg KOH/g ASTM D2896 10.2	3.2	3.8	5.8

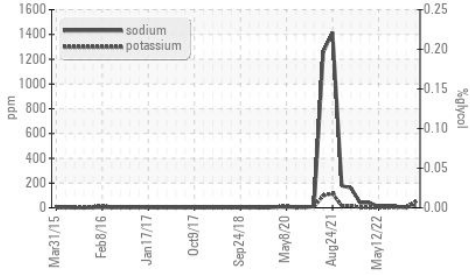


OIL ANALYSIS REPORT

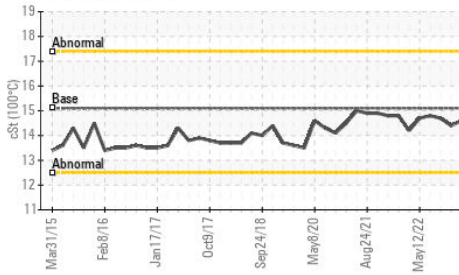
FT-IR (Direct Trend)



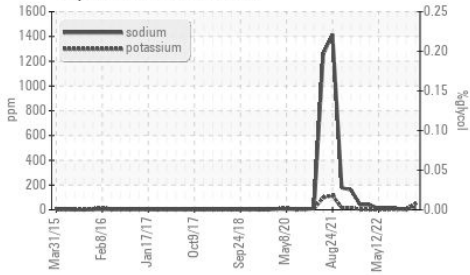
Glycol Contamination



Viscosity @ 100°C



Glycol Contamination

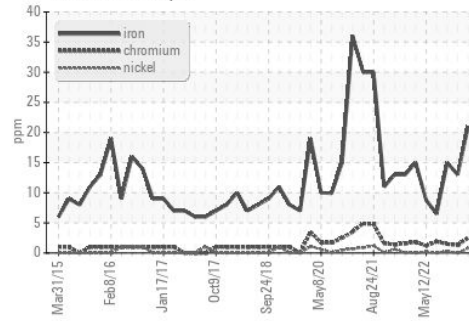


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

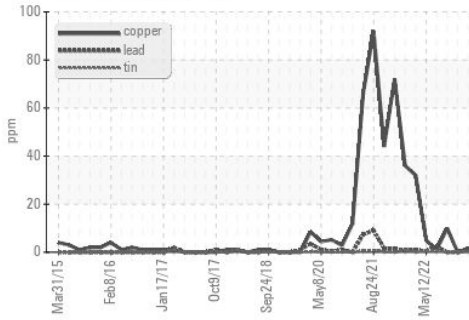
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	14.6	14.4

GRAPHS

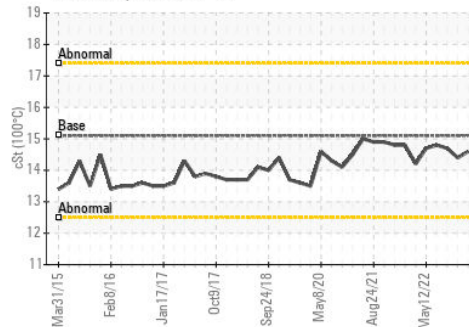
Ferrous Alloys



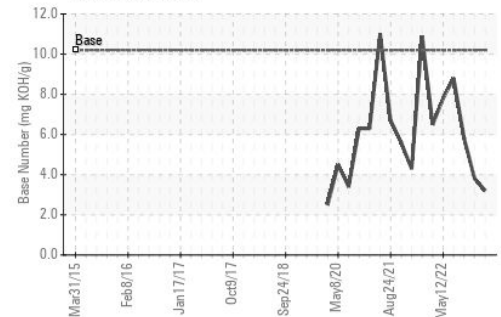
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : GFL0117465

Lab Number : 06221997

Unique Number : 11100194

Test Package : FLEET (Additional Tests: Glycol)

Received : 27 Jun 2024

Tested : 01 Jul 2024

Diagnosed : 01 Jul 2024 - Jonathan Hester

GFL Environmental - 001 - Raleigh(CNG)

3741 Conquest Drive

Garner, NC

US 27529

Contact: Craig Johnson

craig.johnson@gflenv.com

T: (919)662-7100

F: (919)662-7130

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)