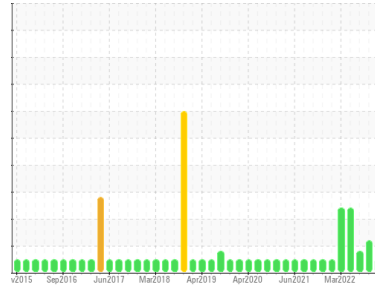




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
(YA122719)

Machine Id
3635C

Component
Natural Gas Engine

Fluid
PETRO CANADA DURON GEO LD 15W40 (--- GAL)

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 acceptable for the time in service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0109692	GFL0092734	GFL0072420
Sample Date	Client Info	18 Mar 2024	13 Dec 2023	07 Jun 2023
Machine Age	hrs	19875	18750	18750
Oil Age	hrs	611	711	440
Oil Changed	Client Info	Changed	Changed	N/A
Sample Status		NORMAL	ATTENTION	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	21	20	10
Chromium	ppm ASTM D5185m >4	2	3	1
Nickel	ppm ASTM D5185m >2	<1	0	<1
Titanium	ppm ASTM D5185m	<1	0	0
Silver	ppm ASTM D5185m >3	0	0	0
Aluminum	ppm ASTM D5185m >9	3	2	<1
Lead	ppm ASTM D5185m >30	1	0	0
Copper	ppm ASTM D5185m >35	12	25	▲ 97
Tin	ppm ASTM D5185m >4	<1	<1	<1
Vanadium	ppm ASTM D5185m	0	0	0
Cadmium	ppm ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 50	10	12	10
Barium	ppm ASTM D5185m 5	0	0	0
Molybdenum	ppm ASTM D5185m 50	62	59	55
Manganese	ppm ASTM D5185m 0	<1	<1	<1
Magnesium	ppm ASTM D5185m 560	643	616	733
Calcium	ppm ASTM D5185m 1510	1552	1466	1401
Phosphorus	ppm ASTM D5185m 780	780	706	700
Zinc	ppm ASTM D5185m 870	1051	966	1010
Sulfur	ppm ASTM D5185m 2040	2447	2300	2792

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >+100	11	18	5
Sodium	ppm ASTM D5185m	44	● 93	28
Potassium	ppm ASTM D5185m >20	17	34	4

INFRA-RED

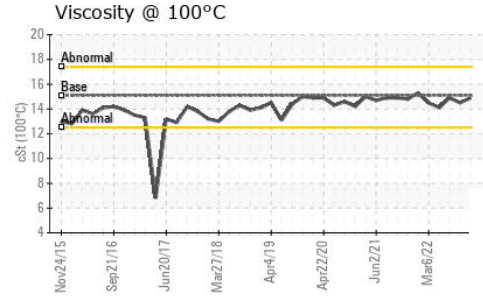
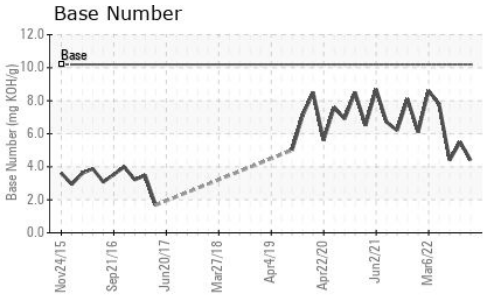
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	0	0.1	0.1
Nitration	Abs/cm *ASTM D7624 >20	10.4	9.9	10.8
Sulfation	Abs/.1mm *ASTM D7415 >30	24.7	19.5	22.3

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	21.5	16.7	21.1
Base Number (BN)	mg KOH/g ASTM D2896 10.2	4.4	5.5	4.4



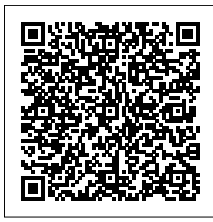
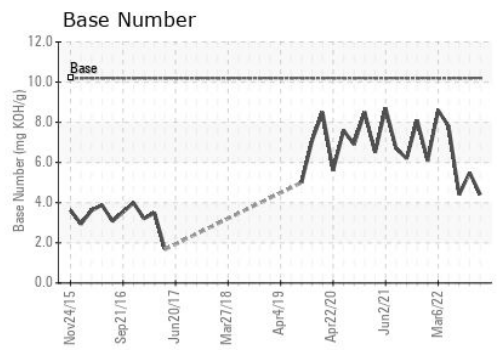
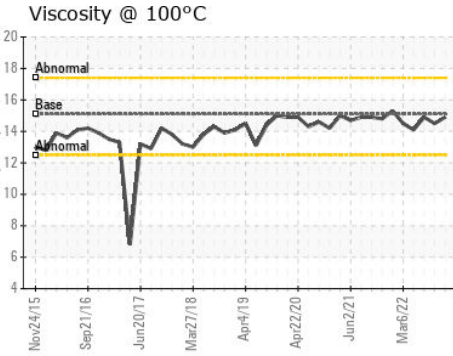
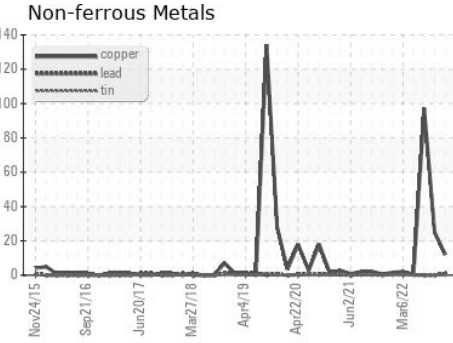
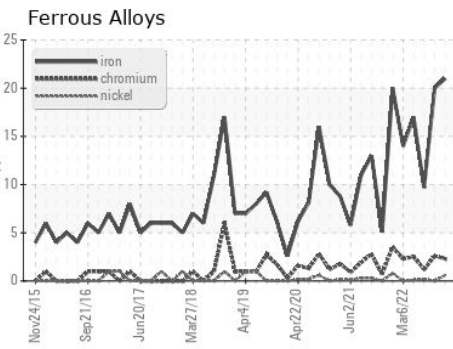
OIL ANALYSIS REPORT



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	14.9	14.5

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0109692
Lab Number : 06126158
Unique Number : 10940309
Test Package : FLEET
Received : 22 Mar 2024
Tested : 22 Mar 2024
Diagnosed : 26 Mar 2024 - Don Baldrige

GFL Environmental - 005 - Wilson/Tri-East(CNG)
 2810 Contentnea Road S
 Wilson, NC
 US 27893-8501
 Contact: SPENCER LIGGON
 spencer.liggon@gflenv.com
 T: (800)207-6618
 F:

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)