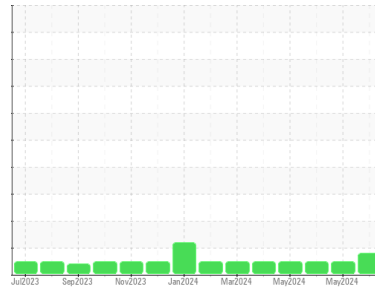




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id

733020

Component

Natural Gas Engine

Fluid

PETRO CANADA DURON GEO LD 15W40 (--- QTS)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

Cylinder, crank, or cam shaft wear is indicated.

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	GFL0124058	GFL0120233	GFL0117168
Sample Date	Client Info	28 Jun 2024	31 May 2024	14 May 2024
Machine Age	hrs	2062	1899	1797
Oil Age	hrs	0	1200	0
Oil Changed	Client Info	Not Chngd	Changed	Not Chngd
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	▲ 48	17	12
Chromium	ppm ASTM D5185m >4	2	2	1
Nickel	ppm ASTM D5185m >2	<1	0	1
Titanium	ppm ASTM D5185m	<1	0	<1
Silver	ppm ASTM D5185m >3	<1	0	<1
Aluminum	ppm ASTM D5185m >9	6	17	2
Lead	ppm ASTM D5185m >30	4	<1	3
Copper	ppm ASTM D5185m >35	8	3	2
Tin	ppm ASTM D5185m >4	2	<1	1
Vanadium	ppm ASTM D5185m	0	0	<1
Cadmium	ppm ASTM D5185m	0	0	<1

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 50	13	<1	12
Barium	ppm ASTM D5185m 5	0	0	0
Molybdenum	ppm ASTM D5185m 50	60	62	55
Manganese	ppm ASTM D5185m 0	8	1	<1
Magnesium	ppm ASTM D5185m 560	757	789	526
Calcium	ppm ASTM D5185m 1510	1726	1575	1705
Phosphorus	ppm ASTM D5185m 780	873	943	832
Zinc	ppm ASTM D5185m 870	1105	1186	1043
Sulfur	ppm ASTM D5185m 2040	2915	3153	3139

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >+100	15	<1	4
Sodium	ppm ASTM D5185m	5	6	7
Potassium	ppm ASTM D5185m >20	4	48	2

INFRA-RED

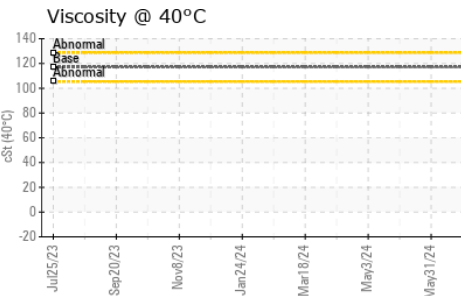
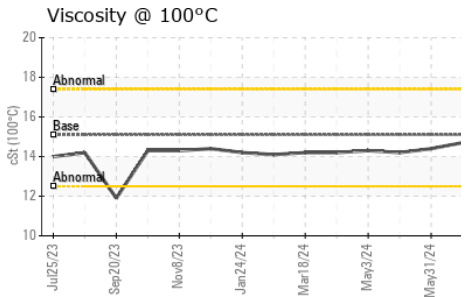
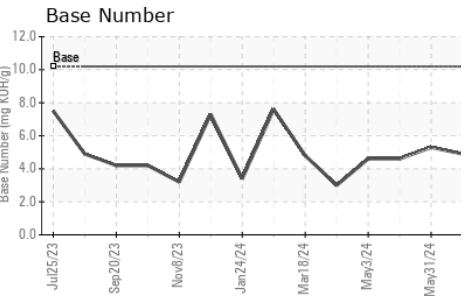
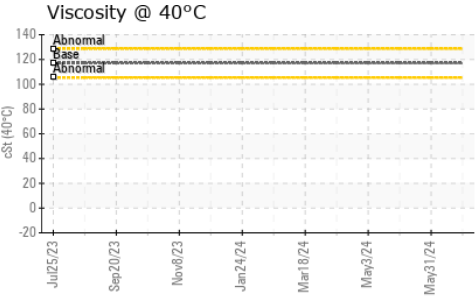
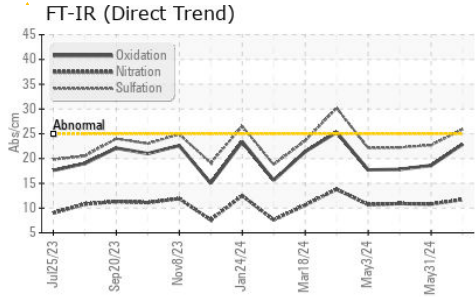
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	0	0.3	0.1
Nitration	Abs/cm *ASTM D7624 >20	11.7	10.8	10.9
Sulfation	Abs/.1mm *ASTM D7415 >30	25.9	22.7	22.2

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	22.9	18.6	17.8
Base Number (BN)	mg KOH/g ASTM D2896 10.2	4.9	5.3	4.6



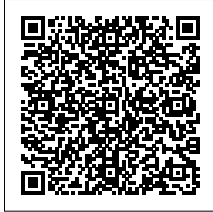
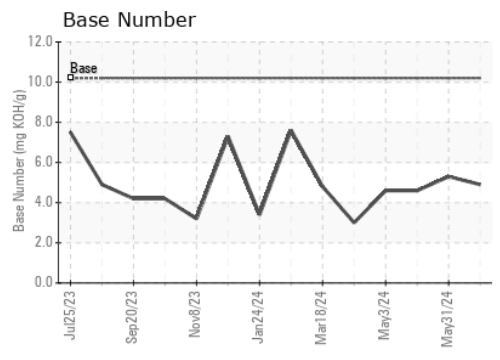
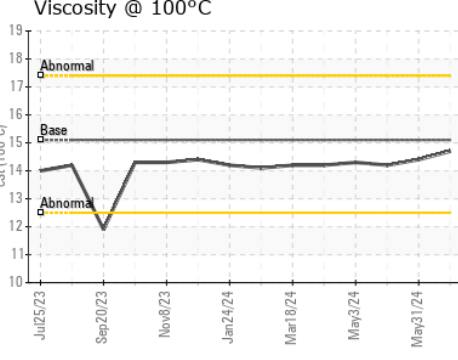
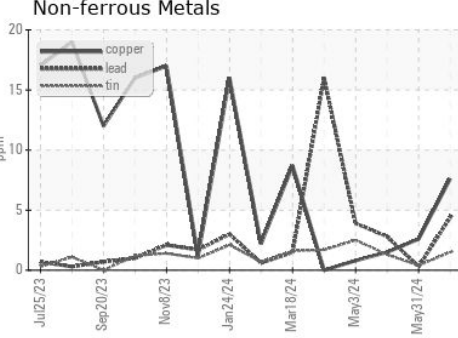
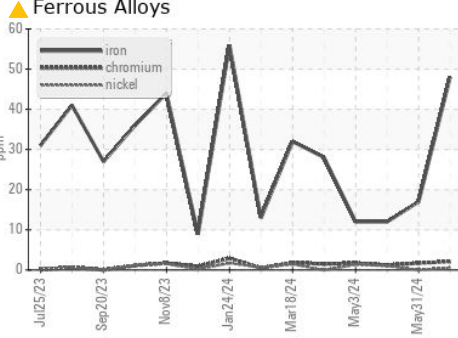
OIL ANALYSIS REPORT



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	14.7	14.4

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0124058
Lab Number : 06225935
Unique Number : 11109428
Test Package : FLEET (Additional Tests: KV40)

GFL Environmental - 836 - Kansas City Hauling
 7801 East Truman Road
 Kansas City, MO
 US 64126
 Contact: Loyce Stewart
 loyce.stewart@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)