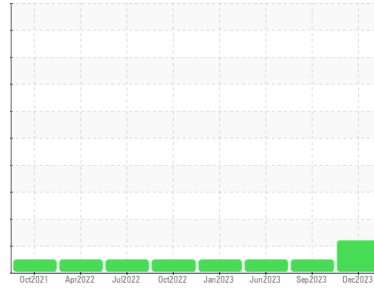




PROBLEM SUMMARY

Sample Rating Trend



DEGRADATION



Machine Id
940009-192504
 Component
Natural Gas Engine
 Fluid
PETRO CANADA DURON GEO LD 15W40 (--- LTR)

COMPONENT CONDITION SUMMARY

No relevant graphs to display

RECOMMENDATION

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

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	NORMAL	NORMAL
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	▲ 3.7	4.1	5.7

Customer Id: GFL146
 Sample No.: GFL0088458
 Lab Number: 06027320
 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Sean Felton +1 919-379-4092
sfelton@wearcheckusa.com

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.

HISTORICAL DIAGNOSIS

13 Sep 2023 Diag: Sean Felton

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

[view report](#)



12 Jun 2023 Diag: Don Baldrige

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

[view report](#)



11 Jan 2023 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

[view report](#)

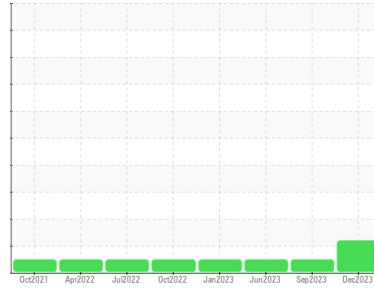




OIL ANALYSIS REPORT

Sample Rating Trend

DEGRADATION



Machine Id
940009-192504
 Component
Natural Gas Engine
 Fluid
PETRO CANADA DURON GEO LD 15W40 (--- LTR)

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. 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 level is low.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0088458	GFL0088473	GFL0073234
Sample Date	Client Info	01 Dec 2023	13 Sep 2023	12 Jun 2023
Machine Age	hrs	10381	9762	9174
Oil Age	hrs	600	9174	650
Oil Changed	Client Info	Changed	Changed	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	17	14	37
Chromium	ppm	ASTM D5185m >5	<1	1	1
Nickel	ppm	ASTM D5185m >4	0	<1	0
Titanium	ppm	ASTM D5185m >5	8	<1	<1
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >25	2	4	6
Lead	ppm	ASTM D5185m >40	<1	1	<1
Copper	ppm	ASTM D5185m >150	2	3	<1
Tin	ppm	ASTM D5185m >4	0	2	0
Vanadium	ppm	ASTM D5185m	0	0	<1
Cadmium	ppm	ASTM D5185m	<1	<1	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 50	9	14	4
Barium	ppm	ASTM D5185m 5	0	45	0
Molybdenum	ppm	ASTM D5185m 50	52	57	66
Manganese	ppm	ASTM D5185m 0	0	2	<1
Magnesium	ppm	ASTM D5185m 560	847	459	1054
Calcium	ppm	ASTM D5185m 1510	1126	1243	1259
Phosphorus	ppm	ASTM D5185m 780	1056	594	1125
Zinc	ppm	ASTM D5185m 870	1206	831	1422
Sulfur	ppm	ASTM D5185m 2040	3644	2324	4040

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	5	10	3
Sodium	ppm	ASTM D5185m	0	2	4
Potassium	ppm	ASTM D5185m >20	4	3	2

INFRA-RED

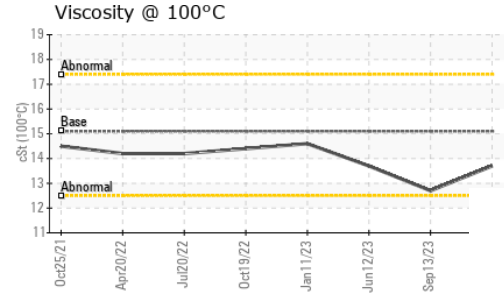
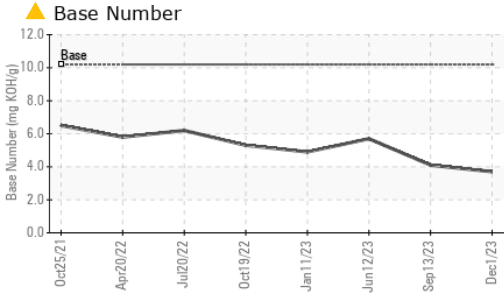
method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	0	0.1	0.1
Nitration	Abs/cm	*ASTM D7624 >20	10.7	9.0	7.0
Sulfation	Abs.1mm	*ASTM D7415 >30	21.9	19.7	22.3

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs.1mm	*ASTM D7414 >25	17.5	15.2	15.8
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	▲ 3.7	4.1	5.7



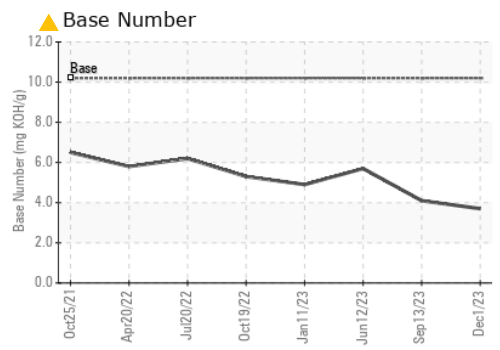
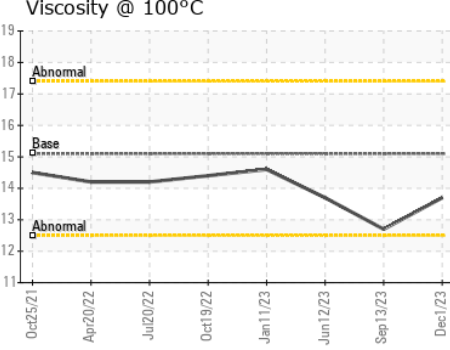
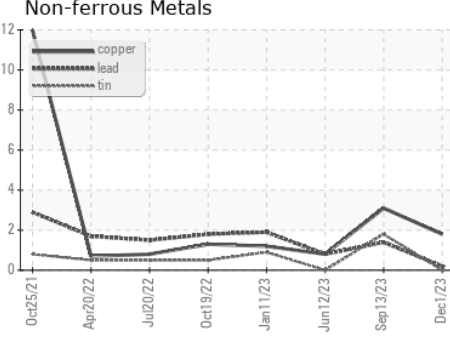
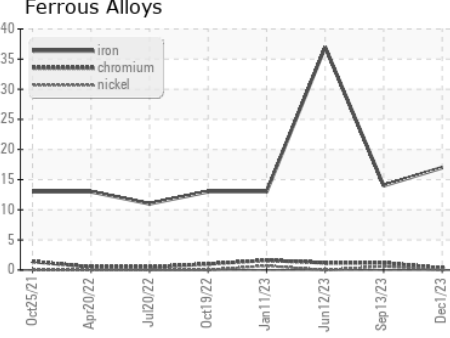
OIL ANALYSIS REPORT



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	13.7	12.7

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0088458 **Received** : 07 Dec 2023
Lab Number : 06027320 **Diagnosed** : 08 Dec 2023
Unique Number : 10777111 **Diagnostician** : Sean Felton
Test Package : FLEET

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