



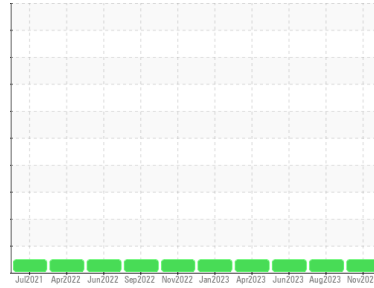
OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
940008-192501
 Component
Natural Gas Engine
 Fluid
PETRO CANADA DURON GEO LD 15W40 (--- LTR)



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 suitable for further service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0073225	GFL0088467	GFL0073233
Sample Date	Client Info	16 Nov 2023	23 Aug 2023	12 Jun 2023
Machine Age	hrs	11267	10679	10083
Oil Age	hrs	650	650	650
Oil Changed	Client Info	Changed	Changed	Changed
Sample Status		NORMAL	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	29	22	7
Chromium	ppm ASTM D5185m >5	3	1	0
Nickel	ppm ASTM D5185m >4	1	<1	0
Titanium	ppm ASTM D5185m >5	<1	<1	<1
Silver	ppm ASTM D5185m >3	0	0	0
Aluminum	ppm ASTM D5185m >25	6	6	<1
Lead	ppm ASTM D5185m >40	3	<1	0
Copper	ppm ASTM D5185m >150	<1	<1	<1
Tin	ppm ASTM D5185m >4	1	0	0
Vanadium	ppm ASTM D5185m	<1	0	<1
Cadmium	ppm ASTM D5185m	0	0	<1

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 50	9	23	8
Barium	ppm ASTM D5185m 5	0	0	0
Molybdenum	ppm ASTM D5185m 50	89	72	58
Manganese	ppm ASTM D5185m 0	<1	<1	<1
Magnesium	ppm ASTM D5185m 560	797	619	910
Calcium	ppm ASTM D5185m 1510	2314	1899	1155
Phosphorus	ppm ASTM D5185m 780	1113	862	1012
Zinc	ppm ASTM D5185m 870	1452	1100	1289
Sulfur	ppm ASTM D5185m 2040	2875	3226	3817

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	10	9	2
Sodium	ppm ASTM D5185m	14	5	2
Potassium	ppm ASTM D5185m >20	<1	0	2

INFRA-RED

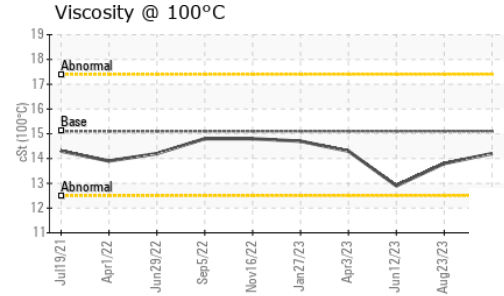
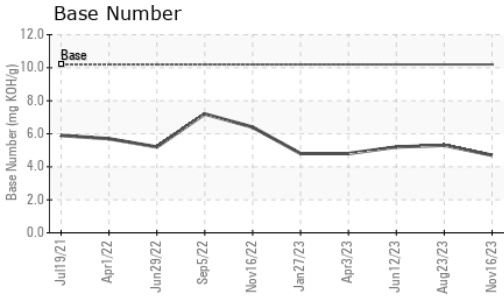
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	0.1	0.1	0.1
Nitration	Abs/cm *ASTM D7624 >20	12.7	10.5	10.1
Sulfation	Abs/.1mm *ASTM D7415 >30	27.8	23.2	23.2

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	20.7	19.0	19.4
Base Number (BN)	mg KOH/g ASTM D2896 10.2	4.7	5.3	5.2



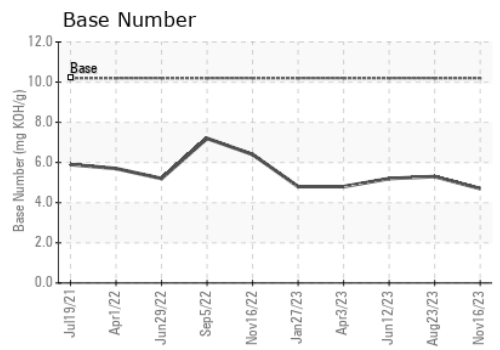
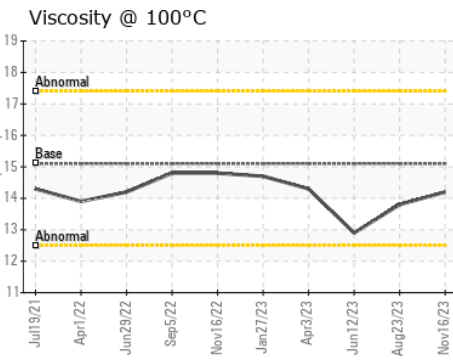
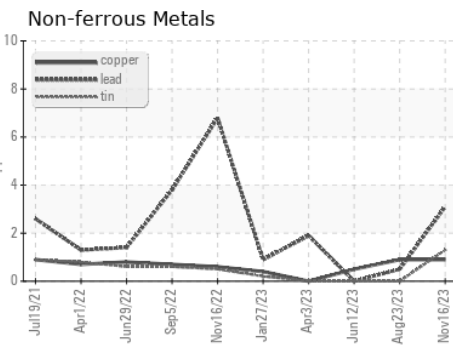
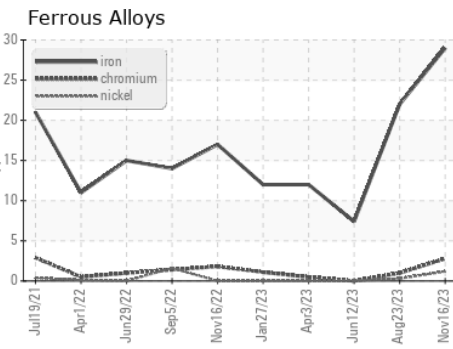
OIL ANALYSIS REPORT



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	14.2	13.8	12.9

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0073225 **Received** : 20 Nov 2023
Lab Number : 06011957 **Diagnosed** : 21 Nov 2023
Unique Number : 10751101 **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:

Certificate L2367
 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)