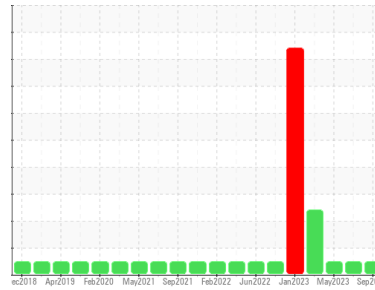




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
3801C
 Component
Natural Gas Engine
 Fluid

PETRO CANADA DURON GEO LD 15W40 (46 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		GFL0074447	GFL0080593	GFL0074427
Sample Date	Client Info		05 Sep 2023	20 Jul 2023	11 May 2023
Machine Age	hrs	Client Info	9310	9310	9310
Oil Age	hrs	Client Info	9310	9310	9310
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	15	10	11
Chromium	ppm	ASTM D5185m >4	2	<1	2
Nickel	ppm	ASTM D5185m >2	<1	0	1
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m >3	0	0	<1
Aluminum	ppm	ASTM D5185m >9	2	1	4
Lead	ppm	ASTM D5185m >30	0	0	2
Copper	ppm	ASTM D5185m >35	0	0	<1
Tin	ppm	ASTM D5185m >4	<1	0	1
Vanadium	ppm	ASTM D5185m	0	0	<1
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	4	16	4
Barium	ppm	ASTM D5185m 5	2	0	0
Molybdenum	ppm	ASTM D5185m 50	64	53	64
Manganese	ppm	ASTM D5185m 0	<1	<1	<1
Magnesium	ppm	ASTM D5185m 560	965	647	920
Calcium	ppm	ASTM D5185m 1510	1404	1642	1286
Phosphorus	ppm	ASTM D5185m 780	1061	817	1015
Zinc	ppm	ASTM D5185m 870	1289	1039	1312
Sulfur	ppm	ASTM D5185m 2040	3446	3008	3747

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	6	4	6
Sodium	ppm	ASTM D5185m	11	6	33
Potassium	ppm	ASTM D5185m >20	25	10	29

INFRA-RED

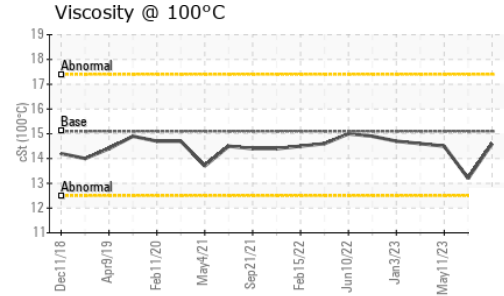
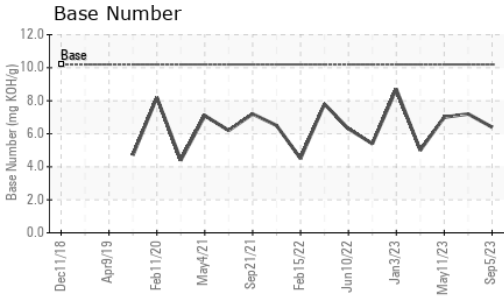
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	0	0	0
Nitration	Abs/cm	*ASTM D7624 >20	9.0	8.8	8.8
Sulfation	Abs/.1mm	*ASTM D7415 >30	20.6	19.0	19.8

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	16.1	16.4	15.6
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	6.4	7.2	7.0



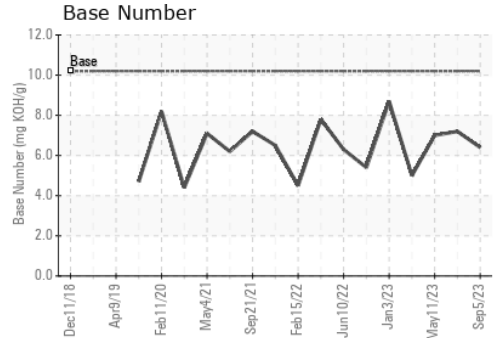
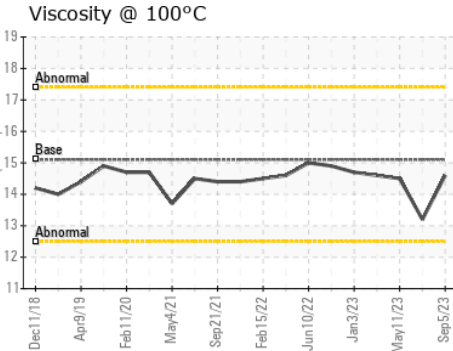
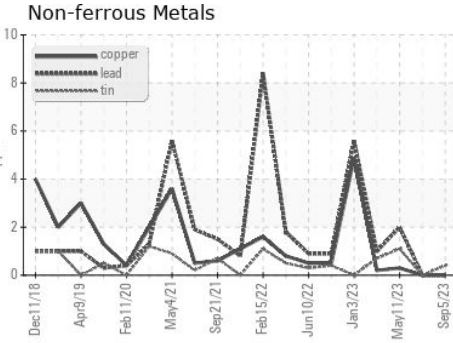
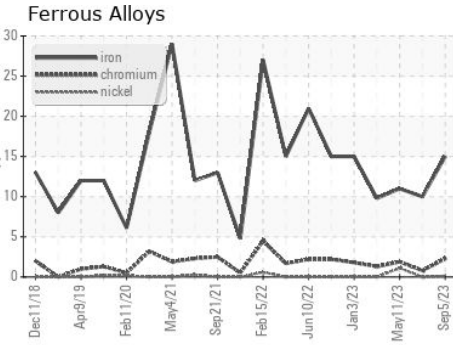
OIL ANALYSIS REPORT



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	14.6	13.2	14.5

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0074447
Lab Number : **05943403**
Unique Number : 10634015
Test Package : FLEET
Received : 06 Sep 2023
Diagnosed : 08 Sep 2023
Diagnostician : Don Baldrige

GFL Environmental - 018 - Fayetteville
 4621 Marracco Drive
 Hope Mills, NC
 US 28348
 Contact: Robert Carter
 robert.carter@gflenv.com
 T: (910)596-1170
 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)