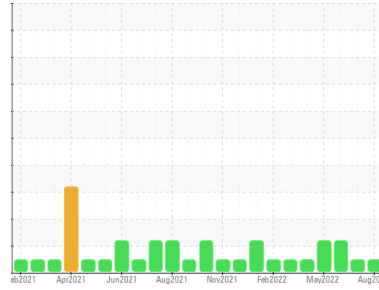


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
810022

Component
Natural Gas Engine

Fluid
PETRO CANADA DURON GEO LD 15W40 (36 QTS)

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	PCA0101736	PCA0074702	PCA0074737
Sample Date	Client Info	07 Aug 2023	13 Mar 2023	10 Oct 2022
Machine Age	hrs	8064	6902	5724
Oil Age	hrs	1162	1178	1041
Oil Changed	Client Info	Changed	Changed	Changed
Sample Status		NORMAL	NORMAL	ABNORMAL

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	21	18	14
Chromium	ppm	ASTM D5185m >4	<1	1	1
Nickel	ppm	ASTM D5185m >2	<1	<1	0
Titanium	ppm	ASTM D5185m	0	0	<1
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >9	2	4	6
Lead	ppm	ASTM D5185m >30	5	11	16
Copper	ppm	ASTM D5185m >35	<1	1	2
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	5	<1	2
Barium	ppm	ASTM D5185m 5	0	<1	2
Molybdenum	ppm	ASTM D5185m 50	55	52	48
Manganese	ppm	ASTM D5185m 0	1	1	<1
Magnesium	ppm	ASTM D5185m 560	604	555	459
Calcium	ppm	ASTM D5185m 1510	1718	1588	1360
Phosphorus	ppm	ASTM D5185m 780	778	700	644
Zinc	ppm	ASTM D5185m 870	1020	959	848
Sulfur	ppm	ASTM D5185m 2040	3085	3020	3436

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >+100	8	7	9
Sodium	ppm	ASTM D5185m	8	7	10
Potassium	ppm	ASTM D5185m >20	1	0	2

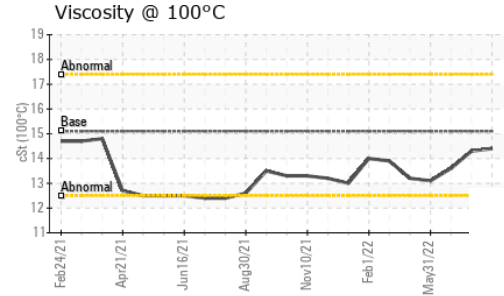
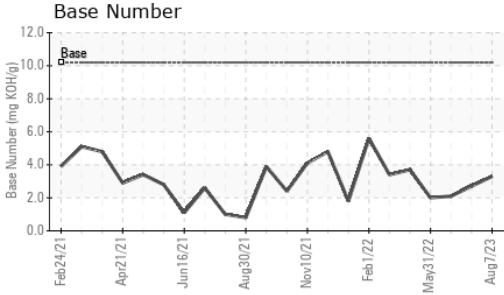
INFRA-RED

method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	0	0.1	0.1
Nitration	Abs/cm	*ASTM D7624 >20	11.2	11.8	11.7
Sulfation	Abs/.1mm	*ASTM D7415 >30	24.4	26.7	29.0

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414 >25	19.5	21.7	23.5
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	3.3	2.7	▲ 2.1

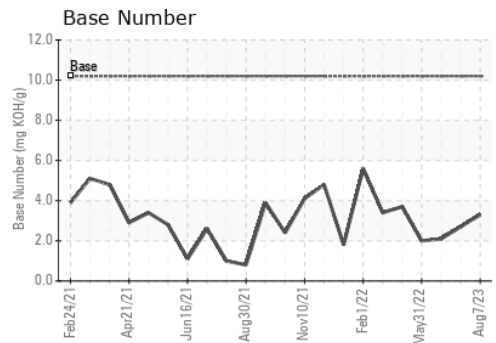
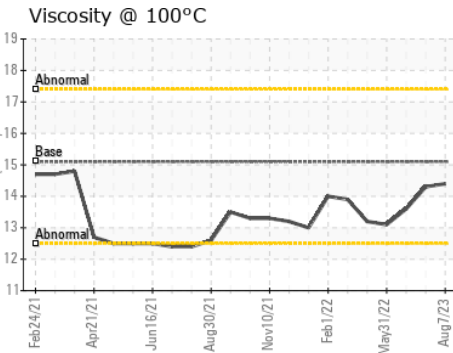
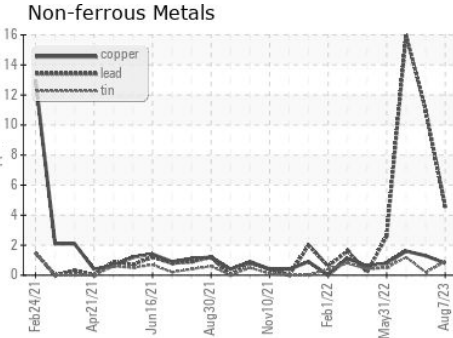
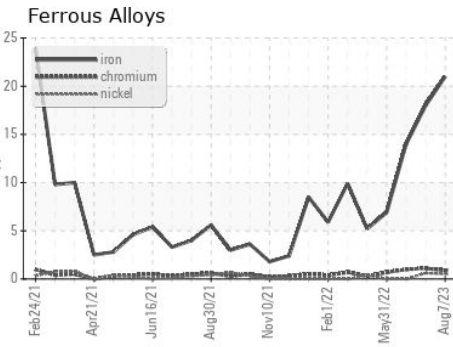
OIL ANALYSIS REPORT



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	14.4	14.3	13.6

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0101736
Lab Number : 05919656
Unique Number : 10591570
Test Package : FLEET

GFL Environmental - 002 - Vance-Granville
 241 Vanco Mill Rd
 Henderson, NC
 US 27537
 Contact: Cameron King
 cameron.king@gflenv.com
 T: (252)438-5333
 F: (252)431-1635

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)