



OIL ANALYSIS REPORT

Sample Rating Trend

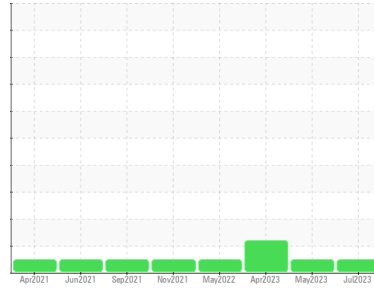
NORMAL



Machine Id
729068-362012

Component
Natural Gas Engine

Fluid
PETRO CANADA DURON GEO LD 15W40 (--- LTR)



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: Top Up Amount: 4 LTR)

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	history 1	history 2
Sample Number	Client Info	GFL0071713	GFL0071753	GFL0058454
Sample Date	Client Info	05 Jul 2023	26 May 2023	13 Apr 2023
Machine Age	hrs	10951	10672	10386
Oil Age	hrs	300	600	1200
Oil Changed	Client Info	Oil Added	Oil Added	Changed
Sample Status		NORMAL	NORMAL	ABNORMAL

WEAR METALS

method	limit/base	current	history 1	history 2	
Iron	ppm	ASTM D5185m >50	7	3	12
Chromium	ppm	ASTM D5185m >4	<1	<1	<1
Nickel	ppm	ASTM D5185m >2	0	<1	<1
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >9	2	<1	2
Lead	ppm	ASTM D5185m >30	1	2	12
Copper	ppm	ASTM D5185m >35	1	0	1
Tin	ppm	ASTM D5185m >4	<1	<1	0
Vanadium	ppm	ASTM D5185m	0	<1	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history 1	history 2	
Boron	ppm	ASTM D5185m 50	14	28	0
Barium	ppm	ASTM D5185m 5	0	0	0
Molybdenum	ppm	ASTM D5185m 50	52	51	58
Manganese	ppm	ASTM D5185m 0	<1	<1	<1
Magnesium	ppm	ASTM D5185m 560	566	535	587
Calcium	ppm	ASTM D5185m 1510	1599	1554	1626
Phosphorus	ppm	ASTM D5185m 780	777	781	741
Zinc	ppm	ASTM D5185m 870	1026	992	1013
Sulfur	ppm	ASTM D5185m 2040	3089	3080	3022

CONTAMINANTS

method	limit/base	current	history 1	history 2	
Silicon	ppm	ASTM D5185m >+100	3	6	2
Sodium	ppm	ASTM D5185m	7	4	16
Potassium	ppm	ASTM D5185m >20	2	2	0

INFRA-RED

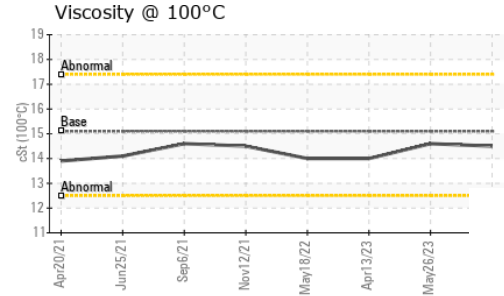
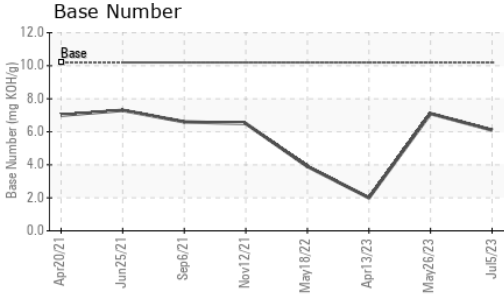
method	limit/base	current	history 1	history 2	
Soot %	%	*ASTM D7844	0.1	0	0
Nitration	Abs/cm	*ASTM D7624 >20	10.4	8.6	11.5
Sulfation	Abs/.1mm	*ASTM D7415 >30	20.6	20.8	23.8

FLUID DEGRADATION

method	limit/base	current	history 1	history 2	
Oxidation	Abs/.1mm	*ASTM D7414 >25	17.4	17.2	20.3
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	6.1	7.1	▲ 2.0



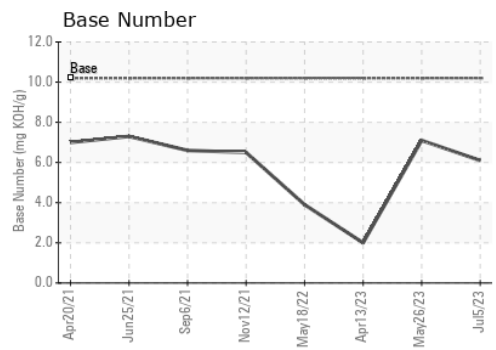
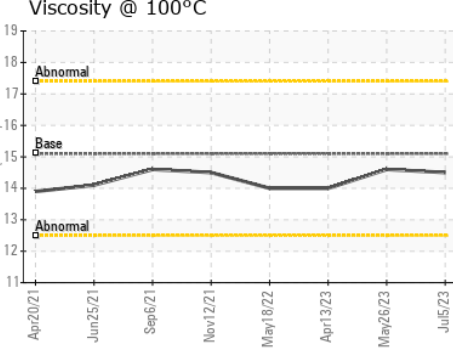
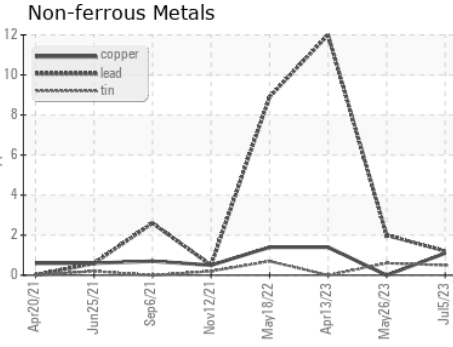
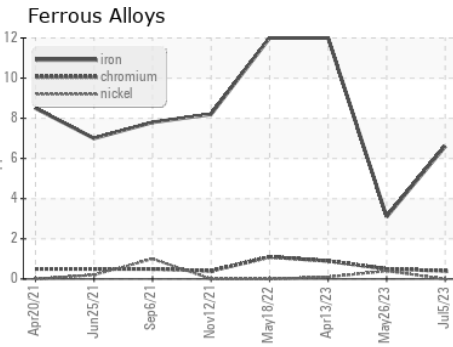
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history 1	history 2
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	history 1	history 2
Visc @ 100°C	cSt	ASTM D445	15.1	14.5	14.6	14.0

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0071713 **Received** : 07 Jul 2023
Lab Number : **05892637** **Diagnosed** : 10 Jul 2023
Unique Number : 10548447 **Diagnostician** : Sean Felton
Test Package : FLEET

GFL Environmental - 883 - Orange City
 1378 South Volusia Ave
 Orange City, FL
 US 32763
 Contact: Kenneth Pearce
 kpearce@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)

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