



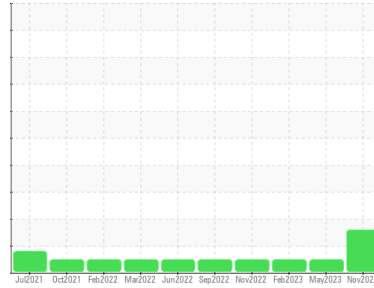
PROBLEM SUMMARY

Sample Rating Trend

DIRT

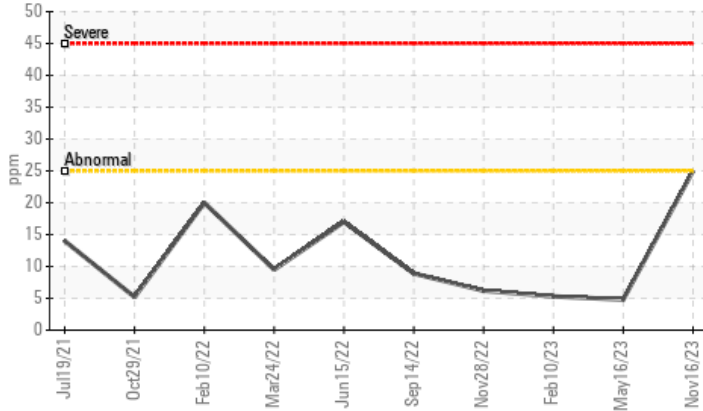


Machine Id
945001-152555
 Component
Natural Gas Engine
 Fluid
PETRO CANADA DURON GEO LD 15W40 (--- LTR)



COMPONENT CONDITION SUMMARY

▲ Silicon (ppm)



RECOMMENDATION

The oil 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
Silicon	ppm	ASTM D5185m	>25	▲ 25	5	5

Customer Id: GFL146
 Sample No.: GFL0073226
 Lab Number: 06011956
 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

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

16 May 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



10 Feb 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



28 Nov 2022 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





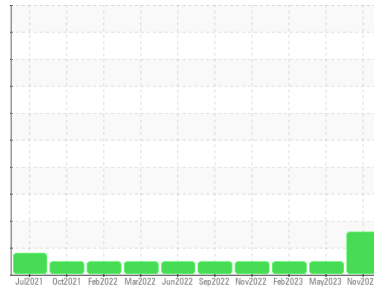
OIL ANALYSIS REPORT

Sample Rating Trend

DIRT



Machine Id
945001-152555
 Component
Natural Gas Engine
 Fluid
PETRO CANADA DURON GEO LD 15W40 (--- LTR)



DIAGNOSIS

Recommendation

The oil 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

Elemental level of silicon (Si) above normal indicating ingress of seal material.

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		GFL0073226	GFL0073230	GFL0040926
Sample Date	Client Info		16 Nov 2023	16 May 2023	10 Feb 2023
Machine Age	hrs	Client Info	20389	19391	18792
Oil Age	hrs	Client Info	19391	650	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	19	20	16
Chromium	ppm	ASTM D5185m	>5	2	3	2
Nickel	ppm	ASTM D5185m	>4	<1	1	<1
Titanium	ppm	ASTM D5185m	>5	<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>25	3	4	5
Lead	ppm	ASTM D5185m	>40	7	8	3
Copper	ppm	ASTM D5185m	>150	4	8	10
Tin	ppm	ASTM D5185m	>4	4	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	50	19	4	13
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	50	60	75	72
Manganese	ppm	ASTM D5185m	0	<1	1	<1
Magnesium	ppm	ASTM D5185m	560	720	546	586
Calcium	ppm	ASTM D5185m	1510	1372	1620	1517
Phosphorus	ppm	ASTM D5185m	780	685	713	699
Zinc	ppm	ASTM D5185m	870	959	971	942
Sulfur	ppm	ASTM D5185m	2040	2439	2432	2473

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	▲ 25	5	5
Sodium	ppm	ASTM D5185m		3	12	3
Potassium	ppm	ASTM D5185m	>20	<1	3	3

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844		0	0	0.1
Nitration	Abs/cm	*ASTM D7624	>20	11.6	12.7	11.4
Sulfation	Abs.1mm	*ASTM D7415	>30	22.0	26.0	23.6

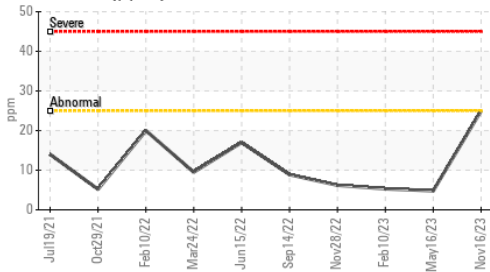
FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs.1mm	*ASTM D7414	>25	19.4	22.4	19.2
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	4.6	3.0	4.4

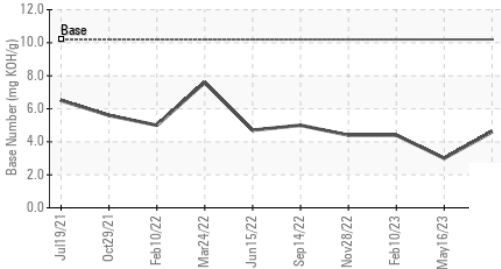


OIL ANALYSIS REPORT

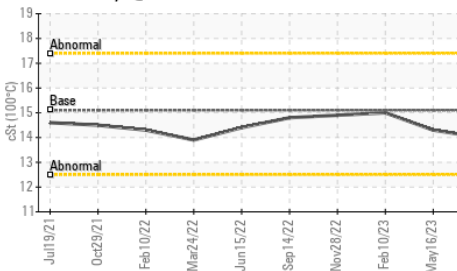
▲ Silicon (ppm)



Base Number



Viscosity @ 100°C

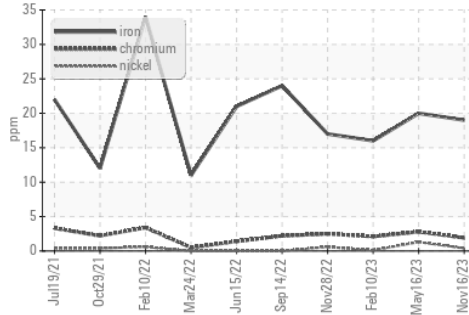


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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

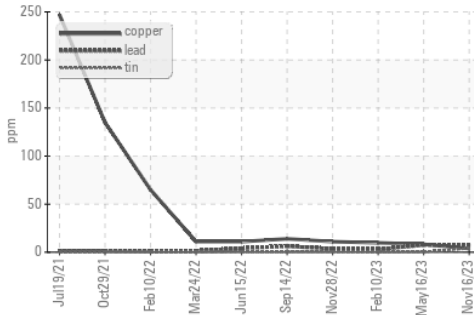
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	14.0	14.3

GRAPHS

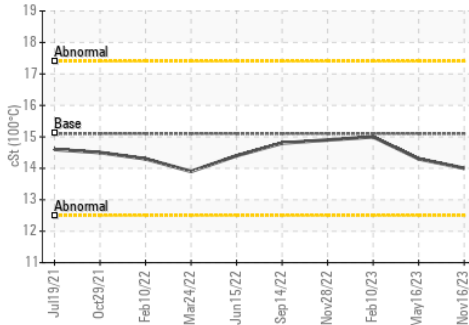
Ferrous Alloys



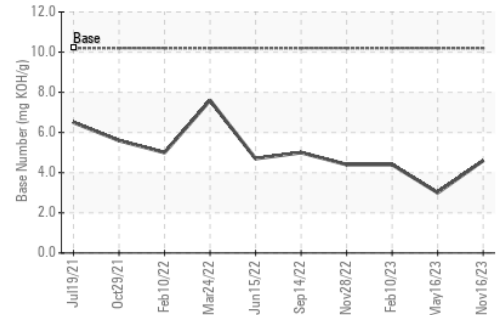
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0073226 **Received** : 20 Nov 2023
Lab Number : 06011956 **Diagnosed** : 21 Nov 2023
Unique Number : 10751100 **Diagnostician** : Sean Felton
Test Package : FLEET

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