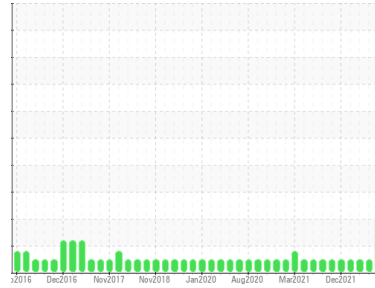




PROBLEM SUMMARY

Sample Rating Trend



DEGRADATION



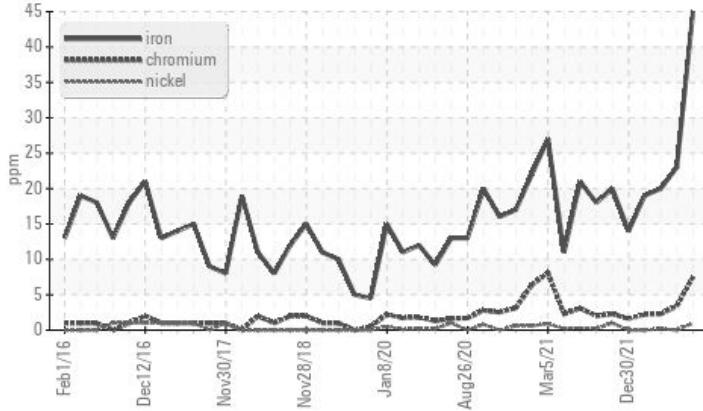
Machine Id
10502C ISL

Component
Natural Gas Engine

Fluid
PETRO CANADA DURON GEO LD 15W40 (28 QTS)

COMPONENT CONDITION SUMMARY

▲ Ferrous Alloys



RECOMMENDATION

Oil and filter 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
Chromium	ppm	ASTM D5185m	>4	▲ 8	3	2
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	▲ 1.8	4.3	7.1

Customer Id: GFL001
Sample No.: GFL0056676
Lab Number: 05821288
Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldrige +1
don.b505@comcast.net

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.
Other Action (see Note)	DONE	Apr 19 2023	?	No recommended actions

HISTORICAL DIAGNOSIS

25 Jul 2022 Diag: Don Baldrige

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



03 May 2022 Diag: Don Baldrige

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



17 Feb 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

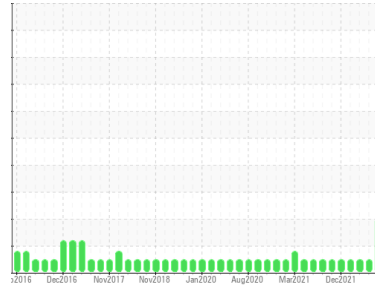
Sample Rating Trend

DEGRADATION

Machine Id
10502C ISL

Component
Natural Gas Engine

Fluid
PETRO CANADA DURON GEO LD 15W40 (28 QTS)



DIAGNOSIS

Recommendation

Oil and filter 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

The chromium level is abnormal. All other component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The BN level is low.

SAMPLE INFORMATION

method	limit/base	current	history 1	history 2
Sample Number	Client Info	GFL0056676	GFL0052281	GFL0048570
Sample Date	Client Info	12 Apr 2023	25 Jul 2022	03 May 2022
Machine Age	hrs	1686	449	21133
Oil Age	hrs	1606	325	334
Oil Changed	Client Info	Changed	Changed	Not Changed
Sample Status		ABNORMAL	NORMAL	NORMAL

WEAR METALS

method	limit/base	current	history 1	history 2	
Iron	ppm	ASTM D5185m >50	45	23	20
Chromium	ppm	ASTM D5185m >4	▲ 8	3	2
Nickel	ppm	ASTM D5185m >2	1	0	<1
Titanium	ppm	ASTM D5185m	0	0	<1
Silver	ppm	ASTM D5185m >3	0	0	3
Aluminum	ppm	ASTM D5185m >9	5	4	4
Lead	ppm	ASTM D5185m >30	8	<1	<1
Copper	ppm	ASTM D5185m >35	1	<1	2
Tin	ppm	ASTM D5185m >4	0	<1	<1
Antimony	ppm	ASTM D5185m	---	---	---
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history 1	history 2	
Boron	ppm	ASTM D5185m 50	2	9	14
Barium	ppm	ASTM D5185m 5	0	0	0
Molybdenum	ppm	ASTM D5185m 50	54	52	51
Manganese	ppm	ASTM D5185m 0	2	<1	<1
Magnesium	ppm	ASTM D5185m 560	537	499	623
Calcium	ppm	ASTM D5185m 1510	1605	1576	1550
Phosphorus	ppm	ASTM D5185m 780	715	650	787
Zinc	ppm	ASTM D5185m 870	929	946	975
Sulfur	ppm	ASTM D5185m 2040	3013	2937	2338

CONTAMINANTS

method	limit/base	current	history 1	history 2	
Silicon	ppm	ASTM D5185m >+100	8	19	15
Sodium	ppm	ASTM D5185m	8	7	8
Potassium	ppm	ASTM D5185m >20	6	7	5

INFRA-RED

method	limit/base	current	history 1	history 2	
Soot %	%	*ASTM D7844	0	0.1	0.2
Nitration	Abs/cm	*ASTM D7624 >20	11.3	12.2	10.8
Sulfation	Abs/.1mm	*ASTM D7415 >30	25.8	24.1	21.3

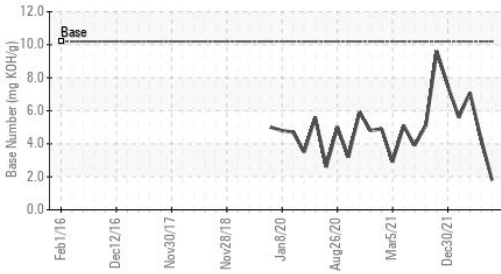
FLUID DEGRADATION

method	limit/base	current	history 1	history 2	
Oxidation	Abs/.1mm	*ASTM D7414 >25	21.6	19.4	18.2
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	▲ 1.8	4.3	7.1

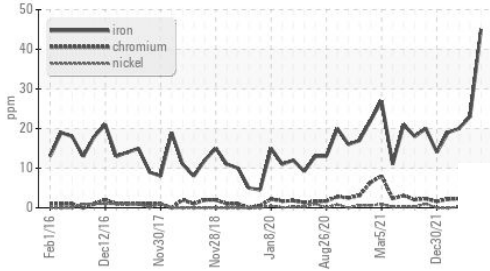


OIL ANALYSIS REPORT

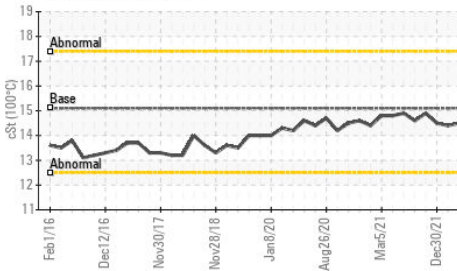
▲ Base Number



▲ Ferrous Alloys



Viscosity @ 100°C



VISUAL

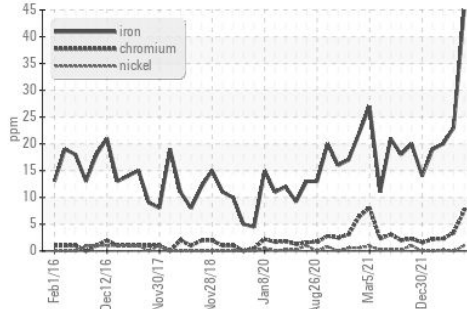
	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*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

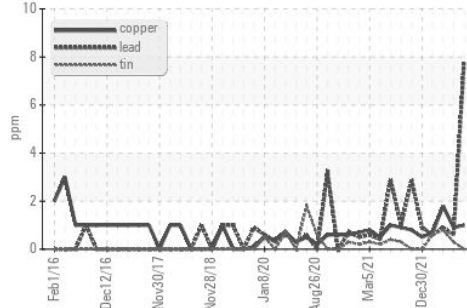
	method	limit/base	current	history 1	history 2
Visc @ 100°C	cSt	ASTM D445	15.1	13.6	15.0

GRAPHS

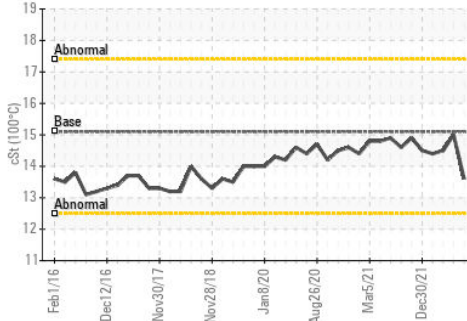
▲ Ferrous Alloys



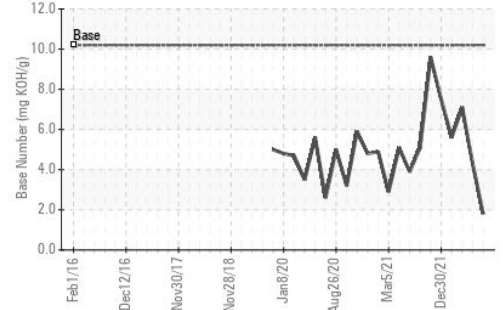
Non-ferrous Metals



Viscosity @ 100°C



▲ Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0056676 **Received** : 17 Apr 2023
Lab Number : 05821288 **Diagnosed** : 18 Apr 2023
Unique Number : 10429371 **Diagnostician** : Don Baldrige
Test Package : FLEET

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)

3741 Conquest Drive
 Garner, NC
 US 27529

Contact: Craig Johnson
 craig.johnson@gflenv.com

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