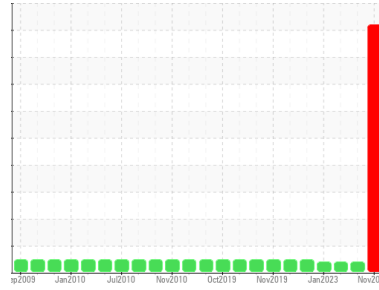




PROBLEM SUMMARY

Sample Rating Trend



GLYCOL



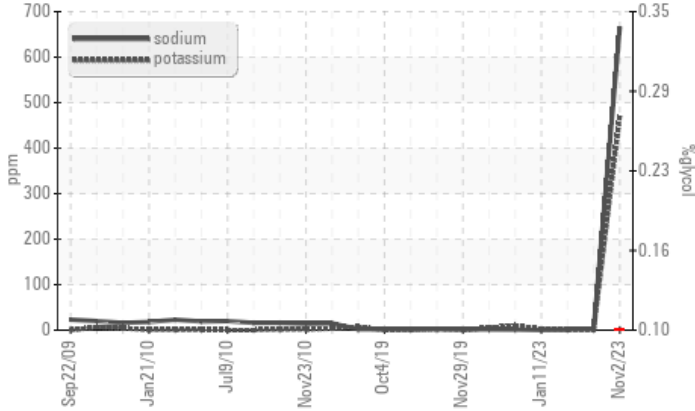
Machine Id
942T

Component
Diesel Engine

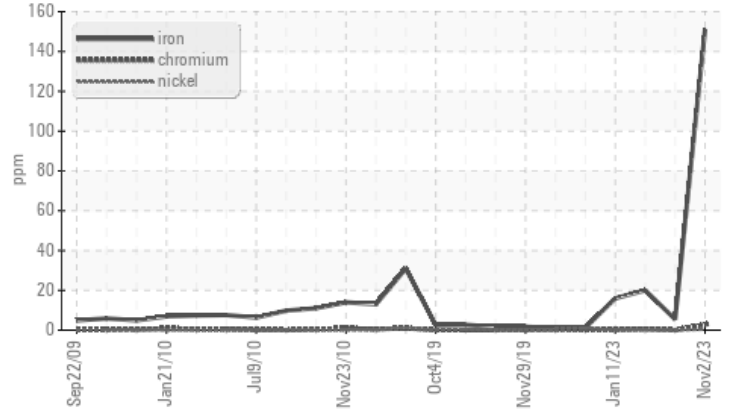
Fluid
CHEVRON DELO 400 LE 15W40 (40 QTS)

COMPONENT CONDITION SUMMARY

● Glycol Contamination



▲ Ferrous Alloys



RECOMMENDATION

We advise that you check for the source of the coolant leak. Check for low coolant level. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	ATTENTION	ATTENTION
Iron	ppm	ASTM D5185m	>100	▲ 151	6	20
Sodium	ppm	ASTM D5185m		▲ 666	2	2
Potassium	ppm	ASTM D5185m	>20	▲ 472	0	<1
Glycol	%	*ASTM D2982		● 0.10	NEG	NEG

Customer Id: GFL072
Sample No.: GFL0083070
Lab Number: 06001390
Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

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

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Glycol Access	---	---	?	We advise that you check for the source of the coolant leak.

HISTORICAL DIAGNOSIS

31 Mar 2023 Diag: Don Baldrige

VISCOSITY



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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

[view report](#)



02 Mar 2023 Diag: Angela Borella

VISCOSITY



Oil and filter change at the time of sampling has been noted. 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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

[view report](#)



11 Jan 2023 Diag: Jonathan Hester

VISCOSITY



Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. Fuel content negligible. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

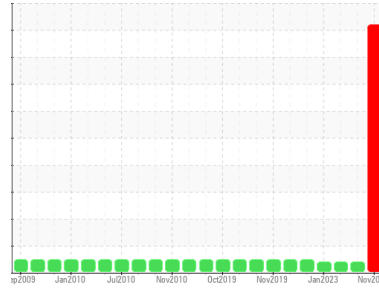
[view report](#)





OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Machine Id
942T

Component
Diesel Engine

Fluid
CHEVRON DELO 400 LE 15W40 (40 QTS)

DIAGNOSIS

Recommendation

We advise that you check for the source of the coolant leak. Check for low coolant level. We recommend an early resample to monitor this condition.

Wear

Cylinder, crank, or cam shaft wear is indicated.

Contamination

Sodium and/or potassium levels are high. Test for glycol is positive.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0083070	GFL0071344	GFL0071332
Sample Date	Client Info		02 Nov 2023	31 Mar 2023	02 Mar 2023
Machine Age	mls	Client Info	0	0	4517
Oil Age	mls	Client Info	0	0	4337
Oil Changed	Client Info		Not Changed	N/A	Changed
Sample Status			SEVERE	ATTENTION	ATTENTION

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	<1.0

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	▲ 151	6	20
Chromium	ppm	ASTM D5185m >20	3	0	<1
Nickel	ppm	ASTM D5185m >2	<1	0	0
Titanium	ppm	ASTM D5185m >2	<1	<1	<1
Silver	ppm	ASTM D5185m >2	<1	0	0
Aluminum	ppm	ASTM D5185m >25	16	0	2
Lead	ppm	ASTM D5185m >40	<1	0	<1
Copper	ppm	ASTM D5185m >330	4	0	<1
Tin	ppm	ASTM D5185m >15	0	0	<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	17	20	55
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	118	60	75
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m	767	831	838
Calcium	ppm	ASTM D5185m	1019	1037	1176
Phosphorus	ppm	ASTM D5185m 1200	837	912	869
Zinc	ppm	ASTM D5185m 1300	1096	1110	1080
Sulfur	ppm	ASTM D5185m 3200	2694	3028	2908

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	14	3	4
Sodium	ppm	ASTM D5185m	▲ 666	2	2
Potassium	ppm	ASTM D5185m >20	▲ 472	0	<1
Glycol	%	*ASTM D2982	◆ 0.10	NEG	NEG

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	1.8	0.1	0.3
Nitration	Abs/cm	*ASTM D7624 >20	12.7	4.8	6.9
Sulfation	Abs/.1mm	*ASTM D7415 >30	23.3	16.9	19.3

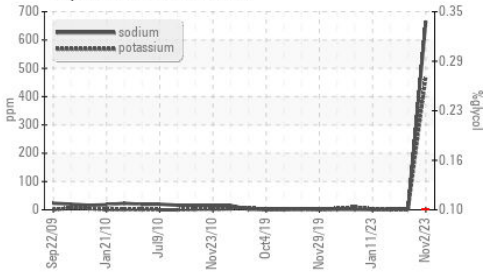
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	16.2	12.4	14.3
Base Number (BN)	mg KOH/g	ASTM D2896 9.6	10.8	8.4	8.8

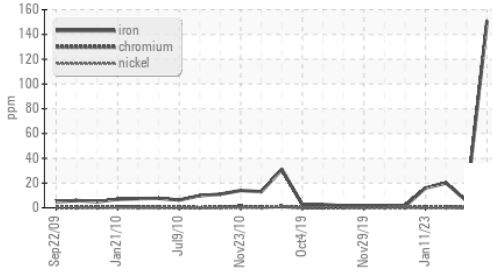


OIL ANALYSIS REPORT

Glycol Contamination



Ferrous Alloys



VISUAL

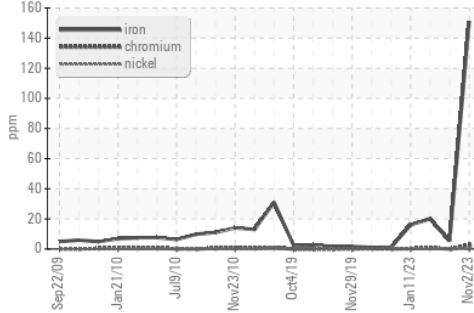
	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES

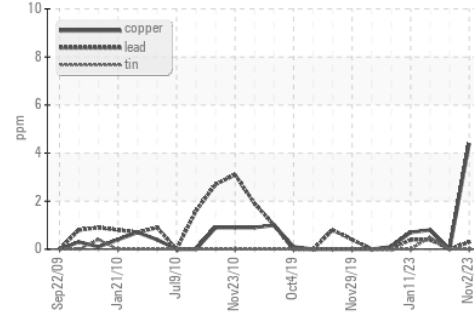
	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.7	12.7	▲ 11.4 ▲ 11.6

GRAPHS

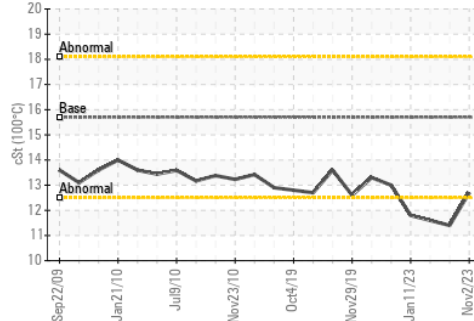
▲ Ferrous Alloys



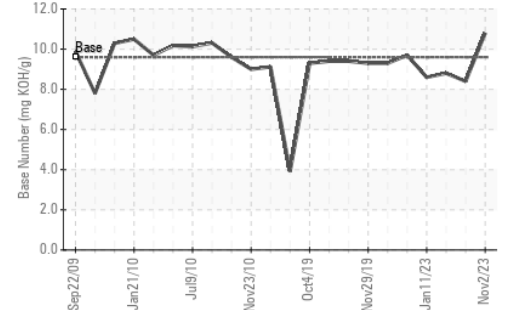
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0083070 **Received** : 08 Nov 2023
Lab Number : 06001390 **Diagnosed** : 09 Nov 2023
Unique Number : 10729750 **Diagnostician** : Jonathan Hester
Test Package : FLEET (Additional Tests: Glycol)

GFL Environmental - 072 - Americus - Transwaste
 361 McMath Mill Road
 Americus, GA
 US 31719
 Contact: RICHARD HEINZERLING
 richard.heinzerling@gflenv.com
 T: (229)924-3669
 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)