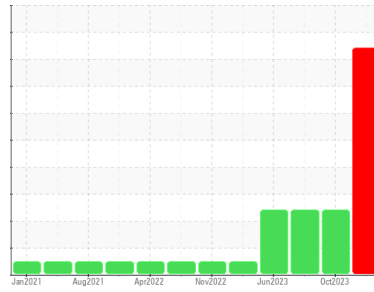




PROBLEM SUMMARY

Area
 (YA133468)
 Machine Id
2639C
 Component
Natural Gas Engine
 Fluid
CHEVRON DELO 400 NG (40 QTS)

Sample Rating Trend

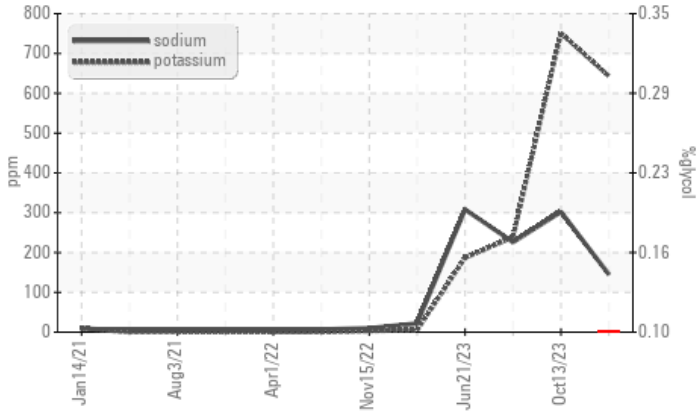


GLYCOL



COMPONENT CONDITION SUMMARY

▲ Glycol Contamination



RECOMMENDATION

We advise that you check for the source of the coolant leak. Check for low coolant level. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	ABNORMAL	ABNORMAL
Sodium	ppm	ASTM D5185m		▲ 145	▲ 302	▲ 226
Potassium	ppm	ASTM D5185m	>20	▲ 643	▲ 751	▲ 239
Glycol	%	*ASTM D2982		▲ 0.10	---	---

Customer Id: GFL018
 Sample No.: GFL0090024
 Lab Number: 06195100
 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
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

COOL CHEMICALS



13 Oct 2023 Diag: Jonathan Hester

We advise that you check for the source of the coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. Sodium and/or potassium levels are high. The BN result indicates that there is suitable alkalinity remaining in the oil.

[view report](#)



COOL CHEMICALS



14 Aug 2023 Diag: Angela Borella

We advise that you check for the source of the coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. Sodium and/or potassium levels are high. The BN result indicates that there is suitable alkalinity remaining in the oil.

[view report](#)



COOL CHEMICALS



21 Jun 2023 Diag: Jonathan Hester

We advise that you check for the source of the coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. Sodium and/or potassium levels are high. The BN result indicates that there is suitable alkalinity remaining in the oil.

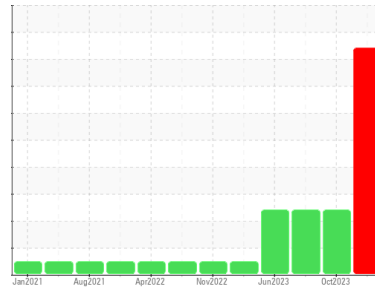
[view report](#)





OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Area
(YA133468)

Machine Id
2639C

Component
Natural Gas Engine

Fluid
CHEVRON DELO 400 NG (40 QTS)

DIAGNOSIS

Recommendation

We advise that you check for the source of the coolant leak. Check for low coolant level. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

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. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0090024	GFL0080513	GFL0080590
Sample Date	Client Info	29 May 2024	13 Oct 2023	14 Aug 2023
Machine Age	hrs	10605	10605	10605
Oil Age	hrs	0	10605	10605
Oil Changed	Client Info	Changed	Changed	Changed
Sample Status		SEVERE	ABNORMAL	ABNORMAL

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	21	26	17
Chromium	ppm	ASTM D5185m >4	2	3	2
Nickel	ppm	ASTM D5185m >2	0	<1	0
Titanium	ppm	ASTM D5185m	<1	<1	<1
Silver	ppm	ASTM D5185m >3	<1	0	<1
Aluminum	ppm	ASTM D5185m >9	3	0	3
Lead	ppm	ASTM D5185m >30	14	3	1
Copper	ppm	ASTM D5185m >35	2	1	0
Tin	ppm	ASTM D5185m >4	1	<1	<1
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	39	11	12
Barium	ppm	ASTM D5185m	0	2	0
Molybdenum	ppm	ASTM D5185m	58	67	61
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m	577	492	572
Calcium	ppm	ASTM D5185m	1695	1525	1593
Phosphorus	ppm	ASTM D5185m 800	885	663	728
Zinc	ppm	ASTM D5185m 880	1028	921	972
Sulfur	ppm	ASTM D5185m	3304	2467	2920

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >+100	9	13	9
Sodium	ppm	ASTM D5185m	▲ 145	▲ 302	▲ 226
Potassium	ppm	ASTM D5185m >20	▲ 643	▲ 751	▲ 239
Glycol	%	*ASTM D2982	▲ 0.10	---	---

INFRA-RED

method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	0.1	0	0.1
Nitration	Abs/cm	*ASTM D7624 >20	8.1	11.4	10.3
Sulfation	Abs/.1mm	*ASTM D7415 >30	20.2	23.2	21.1

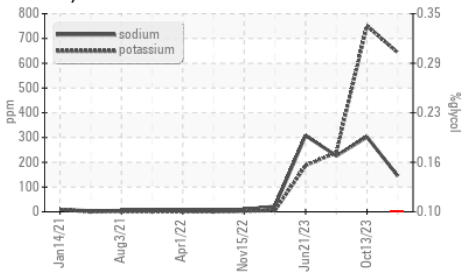
FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414 >25	16.2	19.1	17.8
Base Number (BN)	mg KOH/g	ASTM D2896 6.1	8.5	5.9	6.5

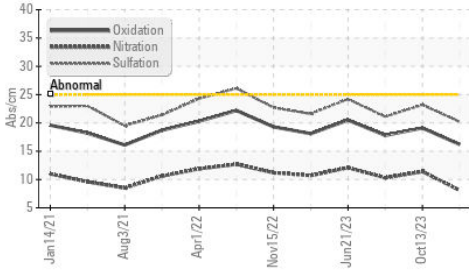


OIL ANALYSIS REPORT

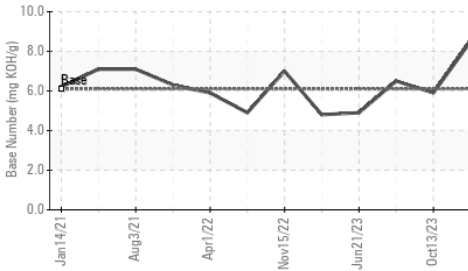
Glycol Contamination



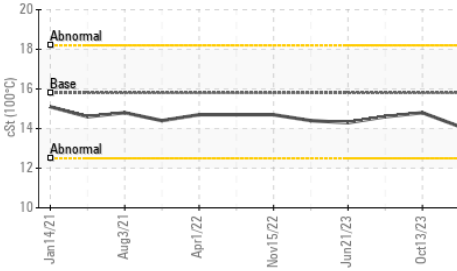
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C



VISUAL

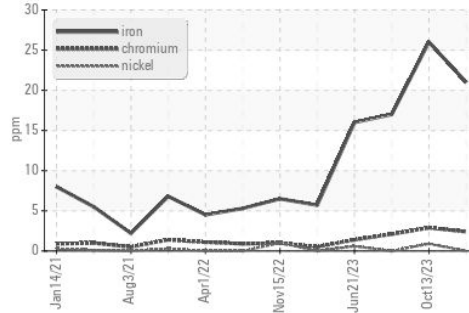
Property	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

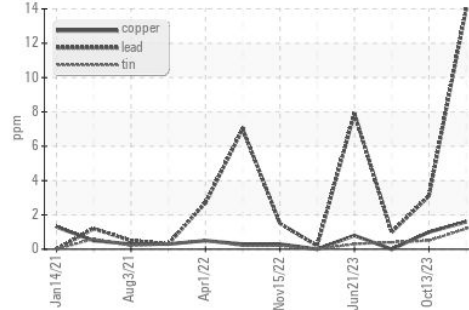
Property	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.8	14.1	14.8

GRAPHS

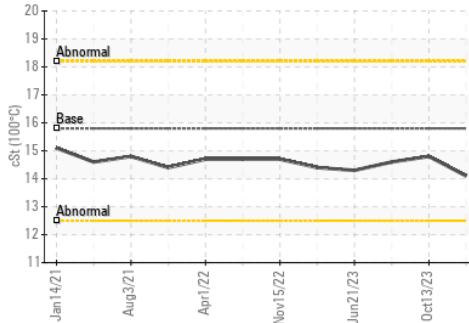
Ferrous Alloys



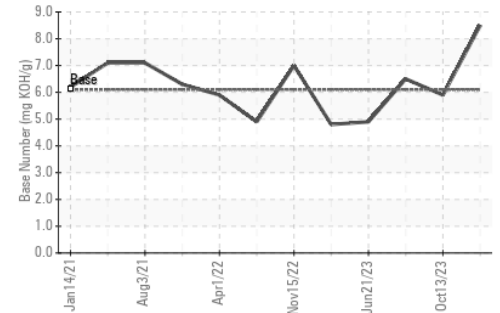
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : GFL0090024

Lab Number : 06195100

Unique Number : 11057223

Test Package : FLEET (Additional Tests: Glycol)

Received : 30 May 2024

Tested : 31 May 2024

Diagnosed : 01 Jun 2024 - Don Baldrige

GFL Environmental - 018 - Fayetteville

4621 Marracco Drive

Hope Mills, NC

US 28348

Contact: Robert Carter

robert.carter@gflenv.com

T: (910)596-1170

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)