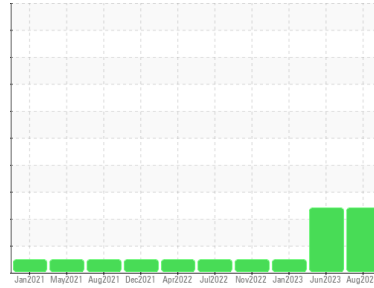




# PROBLEM SUMMARY

Sample Rating Trend



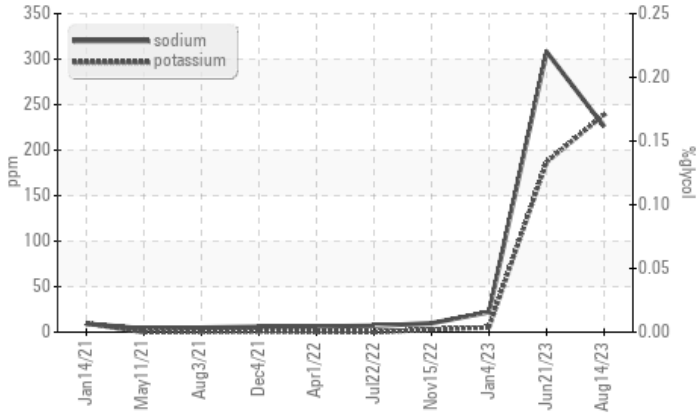
COOL CHEMICALS



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

## COMPONENT CONDITION SUMMARY

### ▲ Glycol Contamination



## RECOMMENDATION

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.

## PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	ABNORMAL	NORMAL
Sodium	ppm	ASTM D5185m	▲ 226	▲ 308	22
Potassium	ppm	ASTM D5185m >20	▲ 239	▲ 187	5

Customer Id: GFL018  
 Sample No.: GFL0080590  
 Lab Number: 05925330  
 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Angela Borella +1 800-237-1369  
[angela.borella@wearcheckusa.com](mailto:angela.borella@wearcheckusa.com)

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

21 Jun 2023 Diag: Jonathan Hester

### COOL CHEMICALS



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](#)



04 Jan 2023 Diag: Sean Felton

### 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](#)



15 Nov 2022 Diag: Angela Borella

### 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.

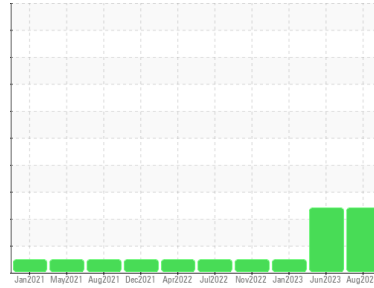
[view report](#)





# OIL ANALYSIS REPORT

Sample Rating Trend



COOL CHEMICALS



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. Oil and filter 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.

### 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		<b>GFL0080590</b>	GFL0066844	GFL0066804
Sample Date	Client Info		<b>14 Aug 2023</b>	21 Jun 2023	04 Jan 2023
Machine Age	hrs	Client Info	<b>10605</b>	10605	10605
Oil Age	hrs	Client Info	<b>10605</b>	10605	10605
Oil Changed	Client Info		<b>Changed</b>	Changed	Not Changed
Sample Status			<b>ABNORMAL</b>	ABNORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>17</b>	16	6
Chromium	ppm	ASTM D5185m >4	<b>2</b>	1	<1
Nickel	ppm	ASTM D5185m >2	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m >3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m >9	<b>3</b>	1	2
Lead	ppm	ASTM D5185m >30	<b>1</b>	8	<1
Copper	ppm	ASTM D5185m >35	<b>0</b>	<1	0
Tin	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>12</b>	10	17
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>61</b>	71	51
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>572</b>	499	554
Calcium	ppm	ASTM D5185m	<b>1593</b>	1688	1560
Phosphorus	ppm	ASTM D5185m 800	<b>728</b>	681	655
Zinc	ppm	ASTM D5185m 880	<b>972</b>	998	949
Sulfur	ppm	ASTM D5185m	<b>2920</b>	2672	2828

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	<b>9</b>	9	7
Sodium	ppm	ASTM D5185m	<b>▲ 226</b>	▲ 308	22
Potassium	ppm	ASTM D5185m >20	<b>▲ 239</b>	▲ 187	5

## INFRA-RED

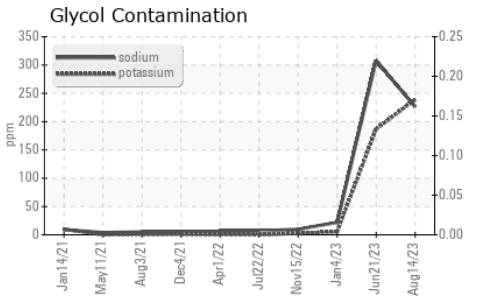
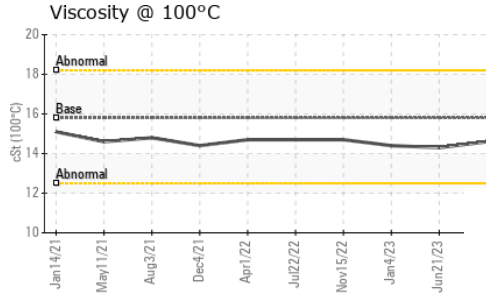
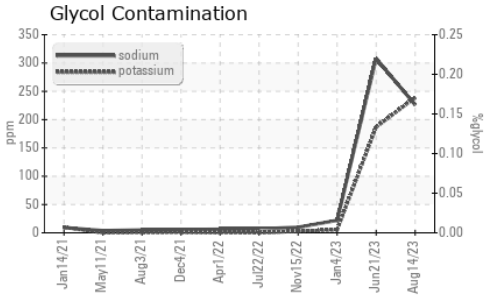
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	<b>0.1</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624 >20	<b>10.3</b>	12.1	10.7
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>21.1</b>	24.2	21.6

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>17.8</b>	20.5	18.1
Base Number (BN)	mg KOH/g	ASTM D2896 6.1	<b>6.5</b>	4.9	4.8



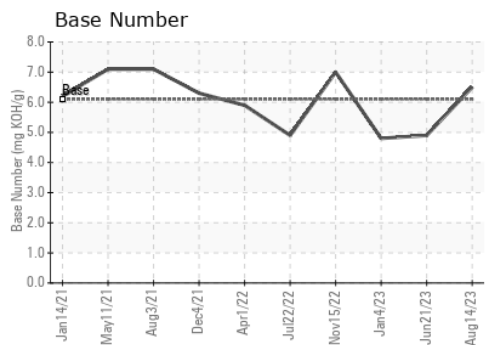
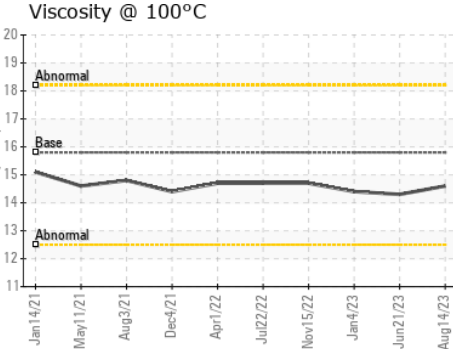
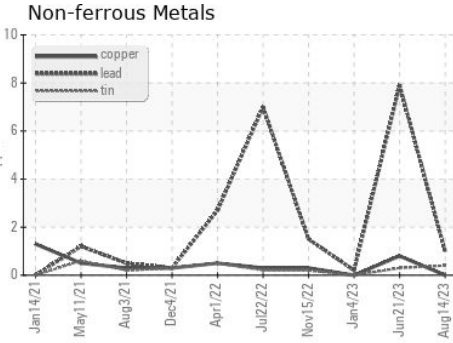
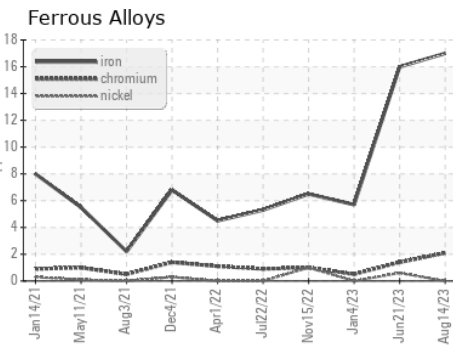
# OIL ANALYSIS REPORT



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	15.8	14.6	14.3

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0080590 **Received** : 15 Aug 2023  
**Lab Number** : 05925330 **Diagnosed** : 16 Aug 2023  
**Unique Number** : 10605277 **Diagnostician** : Angela Borella  
**Test Package** : FLEET ( Additional Tests: Glycol )

**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)