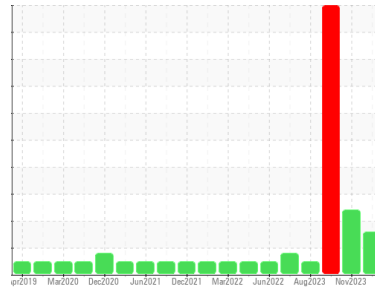




# OIL ANALYSIS REPORT

Sample Rating Trend



COOL CHEMICALS



Area  
**(YA150042)**

Machine Id  
**3843C**

Component  
**Natural Gas Engine**

Fluid  
**CHEVRON DELO 400 NG (46 GAL)**

## DIAGNOSIS

### Recommendation

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 remain high. There is a moderate amount of visible silt present in the sample. Test for glycol is negative.

### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>GFL0090014</b>	GFL0099792	GFL0089984
Sample Date	Client Info			<b>05 Mar 2024</b>	20 Nov 2023	07 Nov 2023
Machine Age	hrs	Client Info		<b>1466</b>	1466	7641
Oil Age	hrs	Client Info		<b>0</b>	7641	7641
Oil Changed	Client Info			<b>Changed</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	ABNORMAL	SEVERE

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.1	<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>10</b>	31	10
Chromium	ppm	ASTM D5185m	>4	<b>0</b>	2	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>9	<b>2</b>	3	1
Lead	ppm	ASTM D5185m	>30	<b>0</b>	22	8
Copper	ppm	ASTM D5185m	>35	<b>6</b>	2	▲ 129
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	▲ 8
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>29</b>	10	28
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>52</b>	61	43
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>566</b>	670	532
Calcium	ppm	ASTM D5185m		<b>1475</b>	1889	1435
Phosphorus	ppm	ASTM D5185m	800	<b>763</b>	920	750
Zinc	ppm	ASTM D5185m	880	<b>902</b>	1147	950
Sulfur	ppm	ASTM D5185m		<b>2276</b>	2657	2303

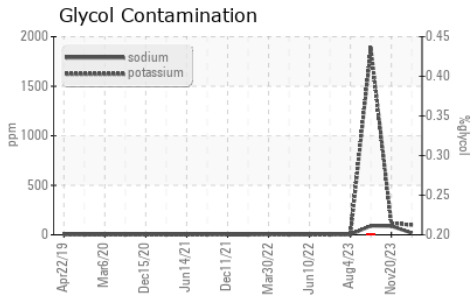
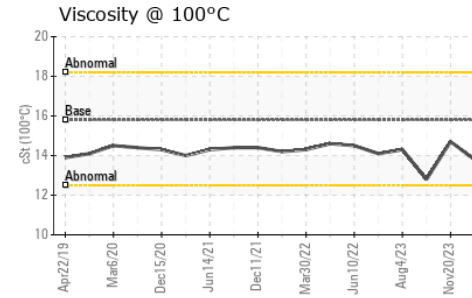
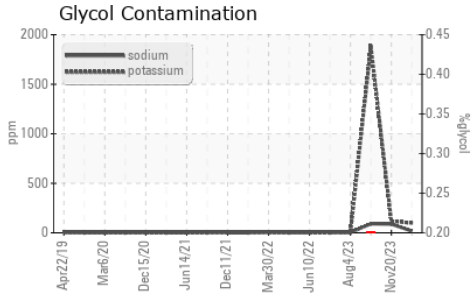
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>+100	<b>8</b>	10	7
Sodium	ppm	ASTM D5185m		<b>18</b>	▲ 88	● 91
Potassium	ppm	ASTM D5185m	>20	▲ <b>99</b>	▲ 116	▲ 1879
Glycol	%	*ASTM D2982		<b>---</b>	---	▲ 0.20

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		<b>0</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.6</b>	12.8	8.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.5</b>	28.7	19.6

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.8</b>	24.5	15.7
Base Number (BN)	mg KOH/g	ASTM D2896	6.1	<b>6.5</b>	3.5	14.0



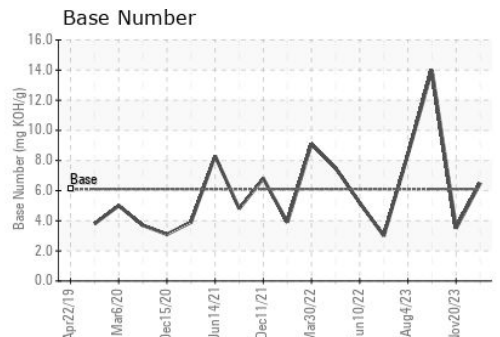
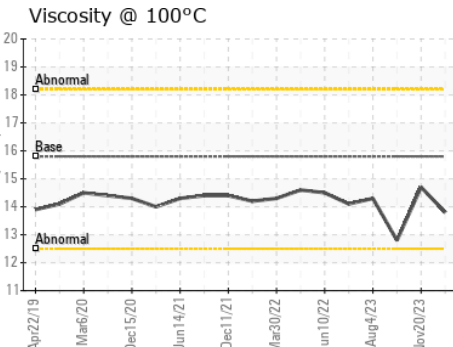
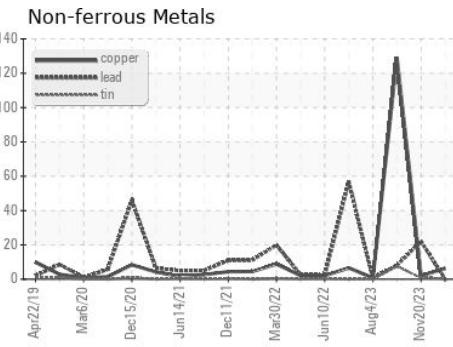
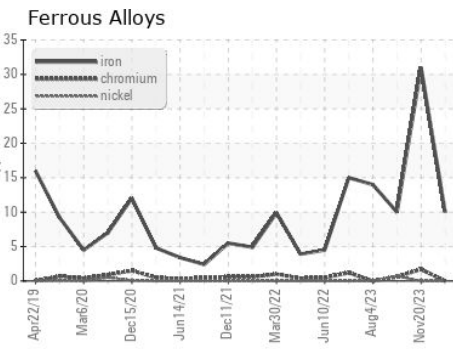
# OIL ANALYSIS REPORT



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	▲ MODER	NONE	LIGHT
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	13.8	14.7

## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : GFL0090014 Received : 06 Mar 2024  
 Lab Number : 06109985 Tested : 11 Mar 2024  
 Unique Number : 10913482 Diagnosed : 11 Mar 2024 - Jonathan Hester  
 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)