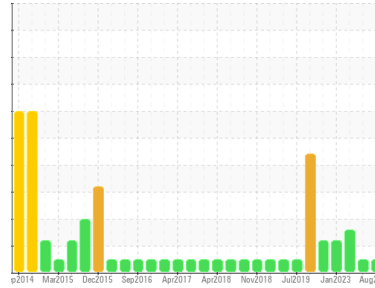




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**10543**

Component  
**Diesel Engine**  
Fluid

**CHEVRON DELO 400 SDE SAE 15W40 (36 GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### 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>GFL0069119</b>	GFL0068730	GFL0068977
Sample Date	Client Info		<b>07 Aug 2023</b>	19 Jun 2023	20 Apr 2023
Machine Age	hrs	Client Info	<b>19140</b>	18886	18815
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Not Changed</b>	Changed	Not Changed
Sample Status			<b>NORMAL</b>	NORMAL	ABNORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>12</b>	26	23
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185m >4	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m >3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>2</b>	3	3
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185m >330	<b>8</b>	3	27
Tin	ppm	ASTM D5185m >15	<b>0</b>	0	<1
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>6</b>	6	▲ 11
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>67</b>	83	63
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>929</b>	1118	817
Calcium	ppm	ASTM D5185m	<b>1101</b>	1282	975
Phosphorus	ppm	ASTM D5185m 760	<b>1001</b>	1251	938
Zinc	ppm	ASTM D5185m 800	<b>1198</b>	1474	1124
Sulfur	ppm	ASTM D5185m 3000	<b>3097</b>	3711	3767

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>5</b>	9	12
Sodium	ppm	ASTM D5185m	<b>37</b>	0	▲ 249
Potassium	ppm	ASTM D5185m >20	<b>2</b>	2	4

## INFRA-RED

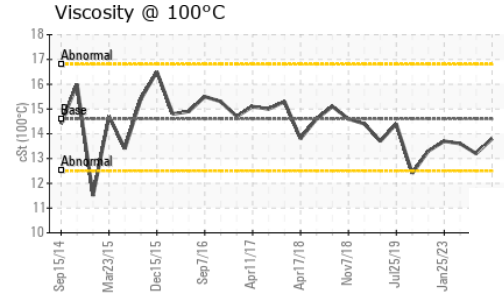
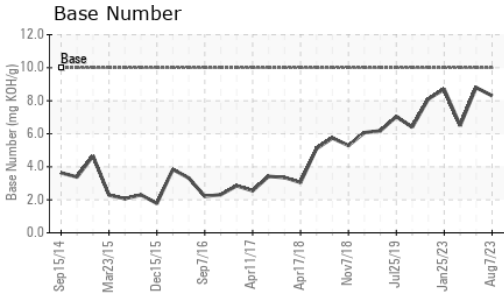
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.1</b>	0.2	0.2
Nitration	Abs/cm	*ASTM D7624 >20	<b>6.5</b>	7.7	8.9
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>17.8</b>	18.9	19.7

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>13.6</b>	15.2	15.6
Base Number (BN)	mg KOH/g	ASTM D2896 10	<b>8.3</b>	8.8	6.5



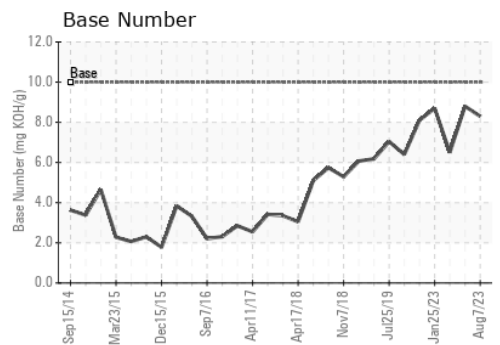
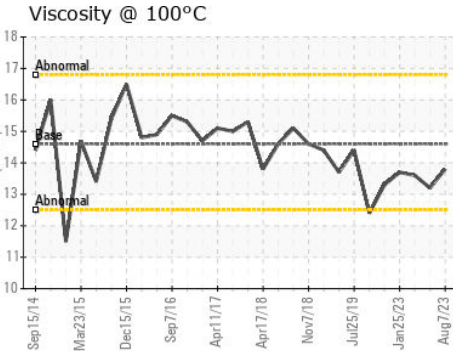
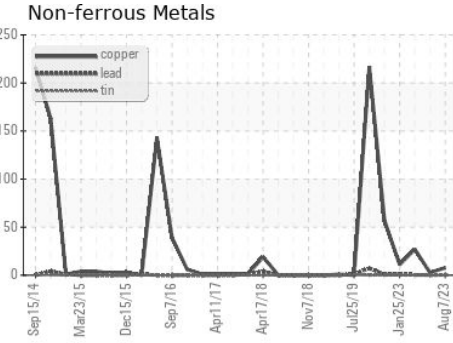
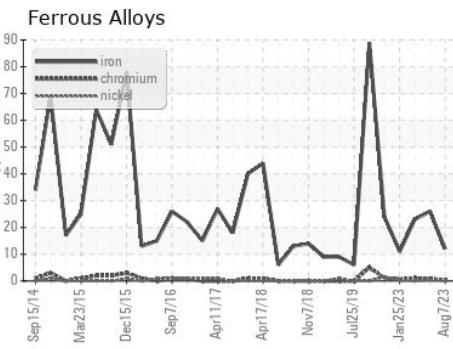
# OIL ANALYSIS REPORT



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	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	14.6	<b>13.8</b>	13.2	13.6

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0069119 **Received** : 09 Aug 2023  
**Lab Number** : **05920054** **Diagnosed** : 10 Aug 2023  
**Unique Number** : 10591968 **Diagnostician** : Sean Felton  
**Test Package** : FLEET

**GFL Environmental - 073 - Warner Robbins - Transwaste**  
 155 Story Road  
 Warner Robbins, GA  
 US 31093  
 Contact: JOSH MALONEY  
 jmaloney@gflenv.com

Certificate L2367  
 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)