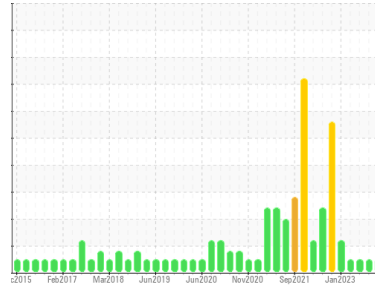




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**10529**

Component  
**Diesel Engine**

Fluid  
**DIESEL ENGINE OIL SAE 15W40 (11 GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

### 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>GFL0074616</b>	GFL0074611	GFL0072191
Sample Date	Client Info	<b>12 Jan 2024</b>	01 Aug 2023	29 Jun 2023
Machine Age	hrs	<b>23280</b>	22731	22518
Oil Age	hrs	<b>192</b>	549	0
Oil Changed	Client Info	<b>Not Chngd</b>	Changed	Changed
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >3.0	<b>&lt;1.0</b>	<1.0	<1.0
Water	WC Method >0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >75	<b>26</b>	29	22
Chromium	ppm ASTM D5185m >5	<b>&lt;1</b>	2	<1
Nickel	ppm ASTM D5185m >4	<b>&lt;1</b>	0	0
Titanium	ppm ASTM D5185m >2	<b>0</b>	<1	0
Silver	ppm ASTM D5185m >2	<b>&lt;1</b>	0	0
Aluminum	ppm ASTM D5185m >15	<b>3</b>	5	2
Lead	ppm ASTM D5185m >25	<b>2</b>	1	0
Copper	ppm ASTM D5185m >100	<b>9</b>	2	1
Tin	ppm ASTM D5185m >4	<b>&lt;1</b>	0	0
Vanadium	ppm ASTM D5185m	<b>0</b>	<1	<1
Cadmium	ppm ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 250	<b>59</b>	2	4
Barium	ppm ASTM D5185m 10	<b>2</b>	0	0
Molybdenum	ppm ASTM D5185m 100	<b>56</b>	64	63
Manganese	ppm ASTM D5185m	<b>2</b>	<1	<1
Magnesium	ppm ASTM D5185m 450	<b>536</b>	897	889
Calcium	ppm ASTM D5185m 3000	<b>1531</b>	1073	1069
Phosphorus	ppm ASTM D5185m 1150	<b>788</b>	955	974
Zinc	ppm ASTM D5185m 1350	<b>908</b>	1217	1199
Sulfur	ppm ASTM D5185m 4250	<b>2722</b>	3138	3374

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>20</b>	9	6
Sodium	ppm ASTM D5185m >158	<b>5</b>	23	19
Potassium	ppm ASTM D5185m >20	<b>2</b>	8	5

## INFRA-RED

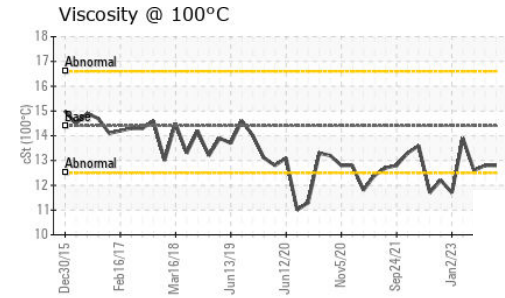
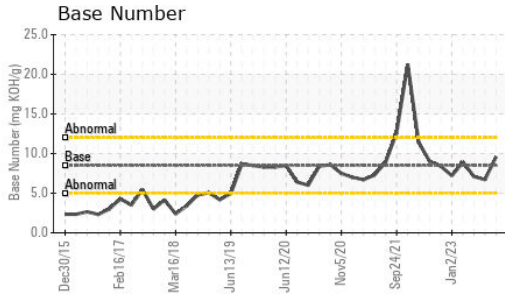
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >6	<b>0.2</b>	1.2	0.8
Nitration	Abs/cm *ASTM D7624 >20	<b>7.2</b>	10.9	8.9
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>21.3</b>	21.6	20.1

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>19.1</b>	17.2	16.2
Base Number (BN)	mg KOH/g ASTM D2896 8.5	<b>9.6</b>	6.7	7.1



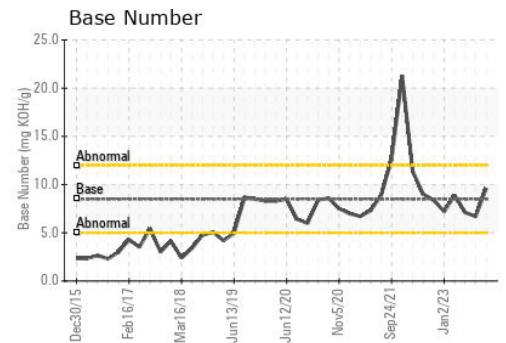
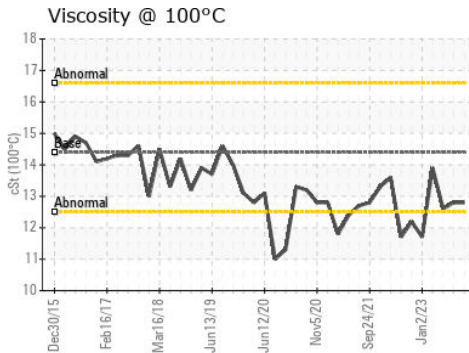
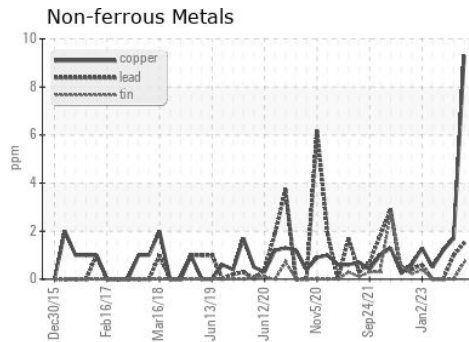
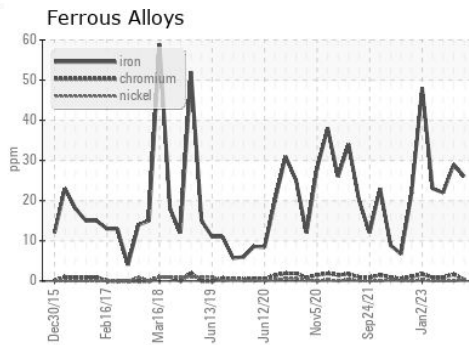
# OIL ANALYSIS REPORT



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	14.4	<b>12.8</b>	12.8

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0074616 **Received** : 17 Jan 2024  
**Lab Number** : **06063356** **Diagnosed** : 18 Jan 2024  
**Unique Number** : 10834738 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 095 - Atlanta West**  
 2699 Cochran Industrial Blvd  
 Douglasville, GA  
 US 30127-1332  
 Contact: Darrell Welch  
 darrell.welch@gflenv.com  
 T: (800)207-6618  
 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)