



# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id

**4168**

Component

**Diesel Engine**

Fluid

**CITGO CITGUARD 600 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

### Wear

All component wear rates are normal.

### Contamination

Fuel content negligible. 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>WC0901420</b>	---	---
Sample Date	Client Info			<b>06 May 2024</b>	---	---
Machine Age	mls Client Info			<b>198454</b>	---	---
Oil Age	mls Client Info			<b>14521</b>	---	---
Oil Changed	Client Info			<b>Changed</b>	---	---
Sample Status				<b>NORMAL</b>	---	---

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.2	<b>NEG</b>	---	---
Glycol	WC Method			<b>NEG</b>	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	<b>24</b>	---	---
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	---	---
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	---	---
Titanium	ppm	ASTM D5185m		<b>1</b>	---	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>20	<b>4</b>	---	---
Lead	ppm	ASTM D5185m	>40	<b>2</b>	---	---
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	---	---
Tin	ppm	ASTM D5185m	>15	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	---	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	13	<b>7</b>	---	---
Barium	ppm	ASTM D5185m	0	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m	57	<b>78</b>	---	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185m	825	<b>519</b>	---	---
Calcium	ppm	ASTM D5185m	1100	<b>1881</b>	---	---
Phosphorus	ppm	ASTM D5185m	933	<b>1093</b>	---	---
Zinc	ppm	ASTM D5185m	1089	<b>1330</b>	---	---
Sulfur	ppm	ASTM D5185m	2769	<b>3671</b>	---	---

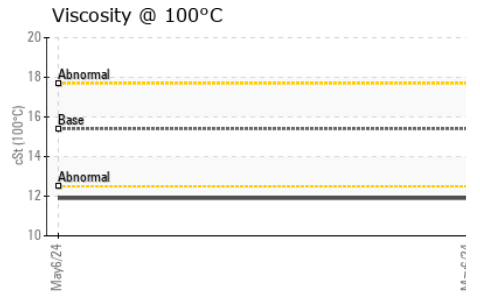
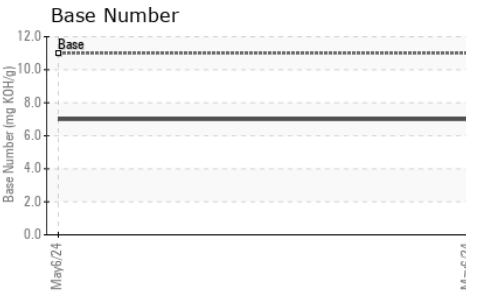
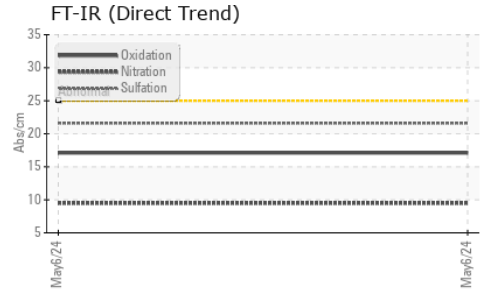
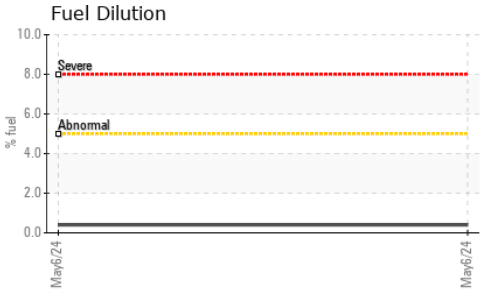
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>5</b>	---	---
Sodium	ppm	ASTM D5185m		<b>1</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	---	---
Fuel	%	ASTM D3524	>5	<b>0.4</b>	---	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.6</b>	---	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.5</b>	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.6</b>	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.1</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	11.0	<b>7.0</b>	---	---



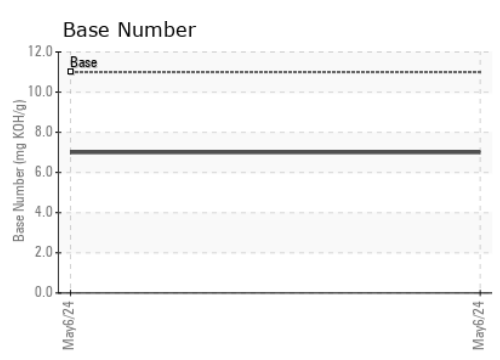
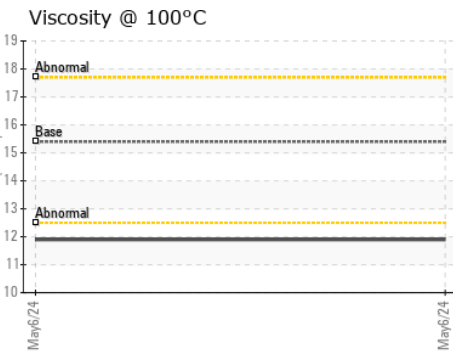
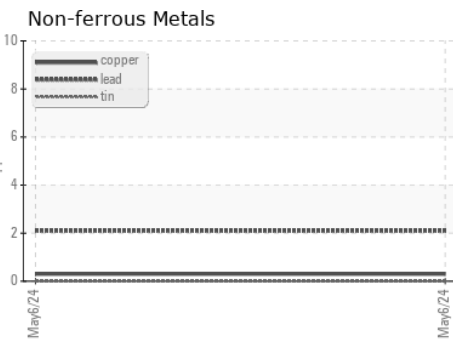
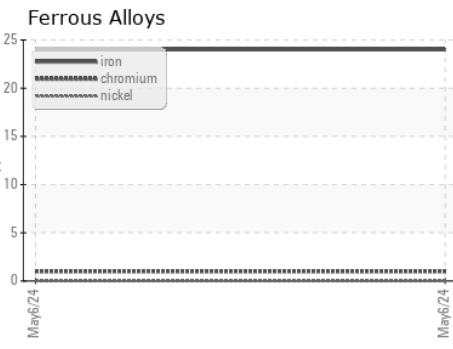
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---
Free Water	scalar	*Visual		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.4	11.9	---	---

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0901420      **Received** : 10 May 2024  
**Lab Number** : **06175154**      **Tested** : 15 May 2024  
**Unique Number** : 11021207      **Diagnosed** : 15 May 2024 - Wes Davis  
**Test Package** : FLEET ( Additional Tests: FuelDilution, PercentFuel )

**OMNISOURCE SE**  
 1426 WEST MAIN SHOP  
 KERNERSVILLE, NC  
 US 27284  
 Contact: JOE WOMACK  
 joe.womack@omnisource.com

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)