



# OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id

**1630**

Component

**Diesel Engine**

Fluid

**CAT DIESEL ENGINE OIL 15W40 (--- GAL)**

## DIAGNOSIS

### ● Recommendation

No corrective action is recommended at this time. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

### Wear

Metal levels are typical for a new component breaking in.

### ▲ Contamination

Light fuel dilution occurring. No other contaminants were detected in the oil.

### ● Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. 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>WC0757406</b>	---	---
Sample Date	Client Info		<b>09 May 2024</b>	---	---
Machine Age	hrs	Client Info	<b>303</b>	---	---
Oil Age	hrs	Client Info	<b>24</b>	---	---
Oil Changed	Client Info		<b>Not Chngd</b>	---	---
Sample Status			<b>ATTENTION</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>2</b>	---	---
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185m >4	<b>0</b>	---	---
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185m >3	<b>&lt;1</b>	---	---
Aluminum	ppm	ASTM D5185m >20	<b>1</b>	---	---
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	---	---
Copper	ppm	ASTM D5185m >330	<b>2</b>	---	---
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	---	---
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	---	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>77</b>	---	---
Barium	ppm	ASTM D5185m	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m	● <b>40</b>	---	---
Manganese	ppm	ASTM D5185m	<b>0</b>	---	---
Magnesium	ppm	ASTM D5185m	● <b>462</b>	---	---
Calcium	ppm	ASTM D5185m	<b>1631</b>	---	---
Phosphorus	ppm	ASTM D5185m	<b>1017</b>	---	---
Zinc	ppm	ASTM D5185m 1460	<b>1111</b>	---	---
Sulfur	ppm	ASTM D5185m	<b>3269</b>	---	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>12</b>	---	---
Sodium	ppm	ASTM D5185m	<b>2</b>	---	---
Potassium	ppm	ASTM D5185m >20	<b>2</b>	---	---
Fuel	%	ASTM D3524 >5	▲ <b>3.1</b>	---	---

## INFRA-RED

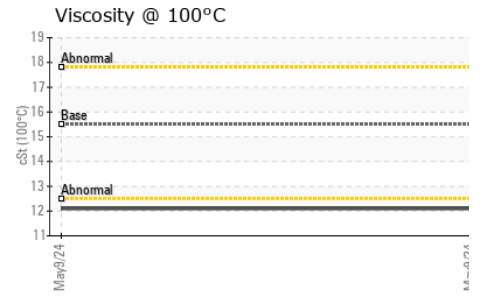
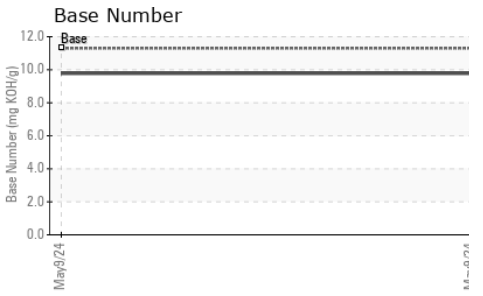
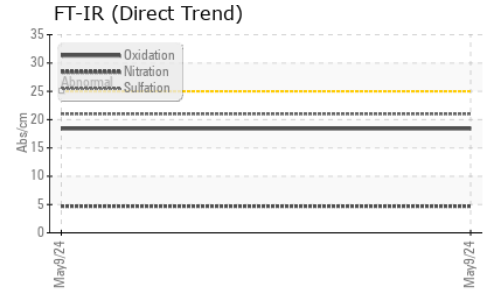
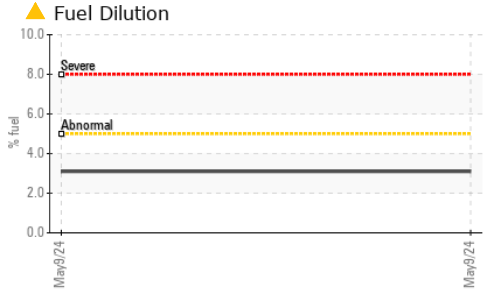
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.1</b>	---	---
Nitration	Abs/cm	*ASTM D7624 >20	<b>4.7</b>	---	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>21.0</b>	---	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>18.4</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896 11.3	<b>9.78</b>	---	---



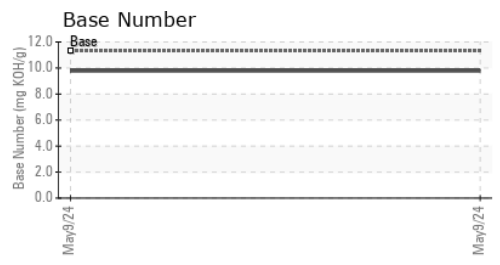
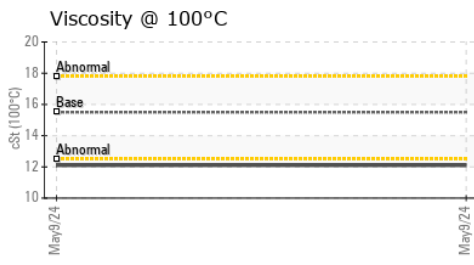
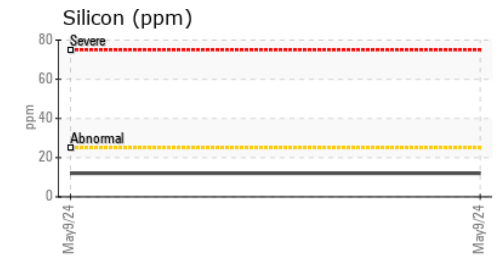
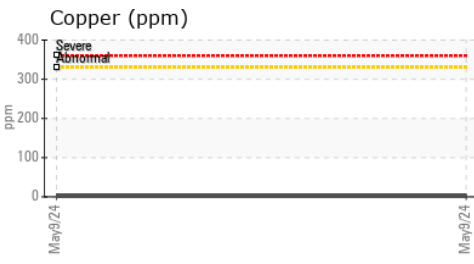
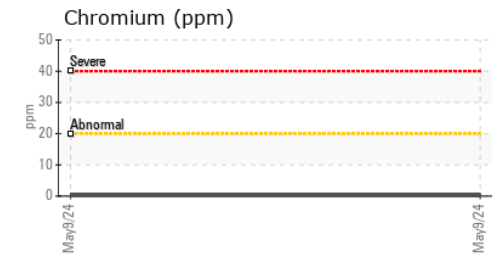
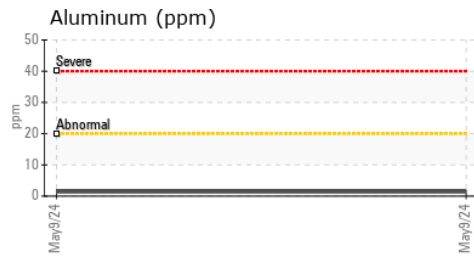
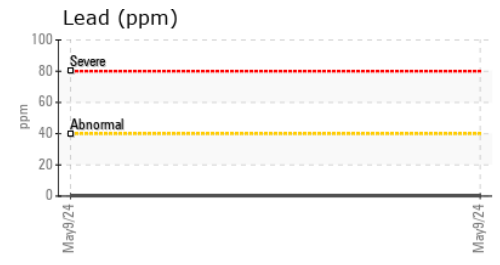
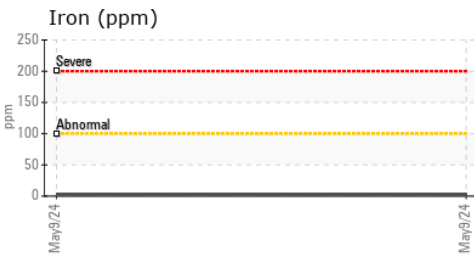
# OIL ANALYSIS REPORT



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	15.5	12.1	---

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0757406 **Received** : 20 May 2024  
**Lab Number** : 06185238 **Tested** : 23 May 2024  
**Unique Number** : 11036564 **Diagnosed** : 23 May 2024 - Wes Davis  
**Test Package** : MOB 2 ( Additional Tests: FuelDilution, PercentFuel )

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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)