



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Machine Id  
**CATERPILLAR 330DL EX6124 (S/N 0MWP01222)**  
 Component  
**Diesel Engine**  
 Fluid  
**DURALENE Dura-Max Xtreme 15W40 (--- GAL)**

## RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor. ( Customer Sample Comment: Possible fuel dilution )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>DC0031149</b>	---	---
Sample Date		Client Info		<b>28 Dec 2023</b>	---	---
Machine Age	hrs	Client Info		<b>20946</b>	---	---
Oil Age	hrs	Client Info		<b>290</b>	---	---
Filter Age	hrs	Client Info		<b>290</b>	---	---
Oil Changed		Client Info		<b>Not Chngd</b>	---	---
Filter Changed		Client Info		<b>Not Chngd</b>	---	---
Sample Status				<b>NORMAL</b>	---	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>12</b>	---	---
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	---	---
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	---	---
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	---	---
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	---	---
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	---	---
Copper	ppm	ASTM D5185m	>330	<b>3</b>	---	---
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---

## CONTAMINATION

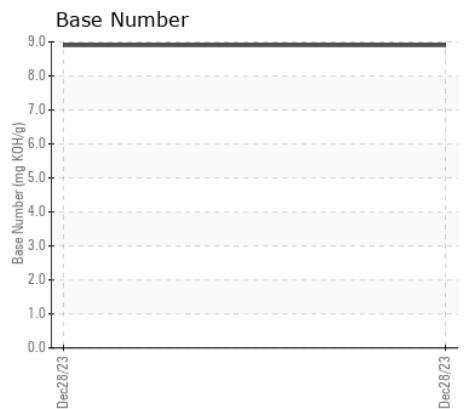
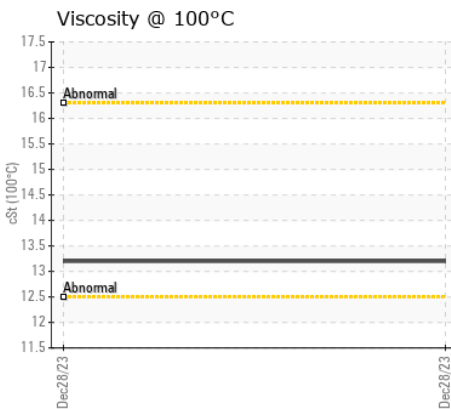
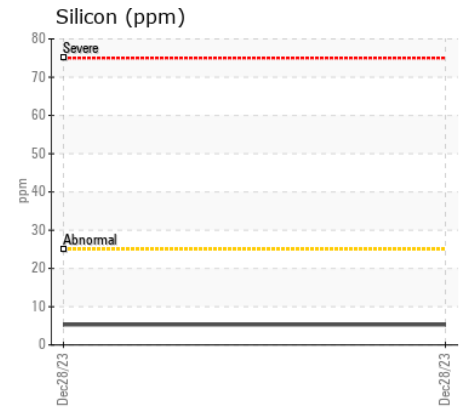
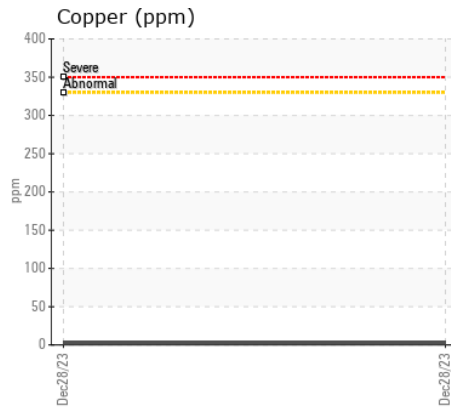
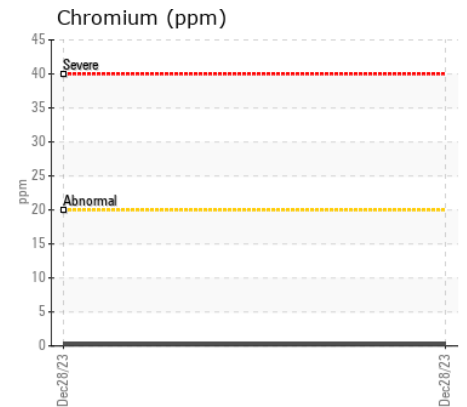
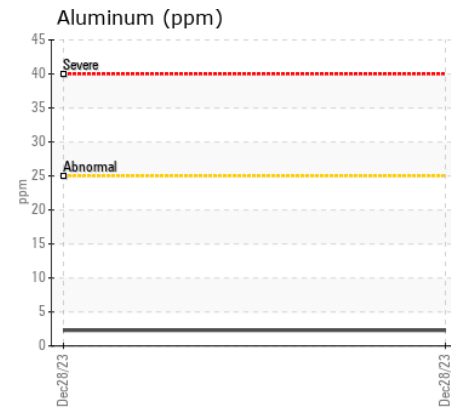
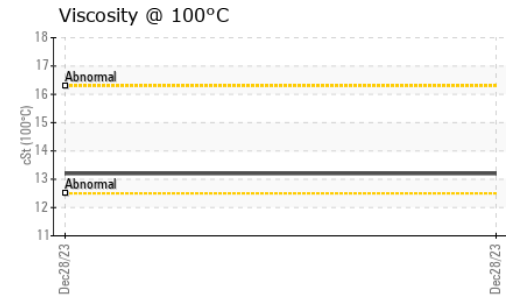
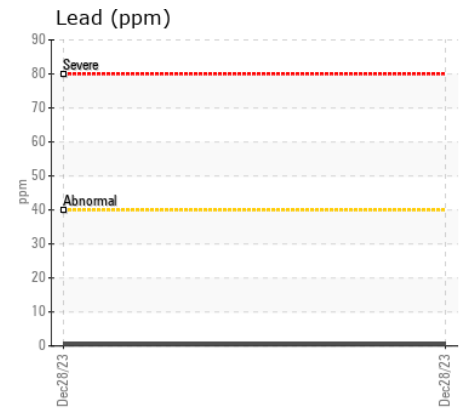
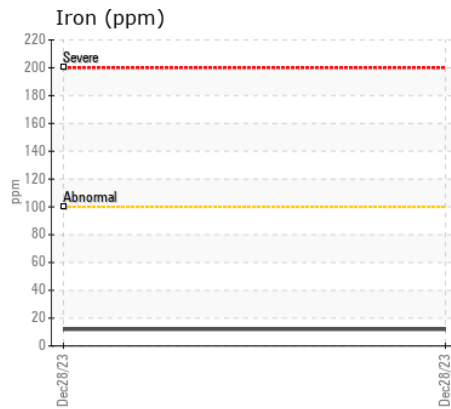
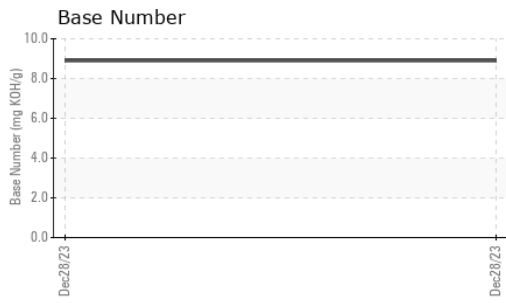
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>5</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	---	---
Fuel	%	ASTM D3524	>5	<b>&lt;1.0</b>	---	---
Water		WC Method	>0.2	<b>NEG</b>	---	---
Glycol		WC Method		<b>NEG</b>	---	---
Soot %	%	*ASTM D7844	>3	<b>0.5</b>	---	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.1</b>	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>24.2</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	---	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	---	---

## 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.

Sodium	ppm	ASTM D5185m		<b>3</b>	---	---
Boron	ppm	ASTM D5185m		<b>45</b>	---	---
Barium	ppm	ASTM D5185m		<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m		<b>54</b>	---	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185m		<b>554</b>	---	---
Calcium	ppm	ASTM D5185m		<b>1765</b>	---	---
Phosphorus	ppm	ASTM D5185m		<b>975</b>	---	---
Zinc	ppm	ASTM D5185m		<b>1168</b>	---	---
Sulfur	ppm	ASTM D5185m		<b>3182</b>	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>21.8</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		<b>8.90</b>	---	---
Visc @ 100°C	cSt	ASTM D445		<b>13.2</b>	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : DC0031149 **Received** : 02 Jan 2024  
**Lab Number** : 06049105 **Diagnosed** : 05 Jan 2024  
**Unique Number** : 10809713 **Diagnostician** : Angela Borella  
**Test Package** : MOB 2 ( Additional Tests: FUELDILUTION, PercentFuel )

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)

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