



# OIL ANALYSIS REPORT

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



Machine Id  
**CATERPILLAR D4G LGP DZ4424 (S/N TLX00757)**  
Component  
**Right Final Drive**  
Fluid  
**DURALENE Dura-Trans TO-4 50 (--- GAL)**

## RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DC0033650	---	---
Sample Date		Client Info		16 Apr 2024	---	---
Machine Age	hrs	Client Info		17008	---	---
Oil Age	hrs	Client Info		17008	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Not Changd	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				SEVERE	---	---

## WEAR

Gear wear is indicated.

Iron	ppm	ASTM D5185m	>800	▲ 1533	---	---
Chromium	ppm	ASTM D5185m	>10	▲ 15	---	---
Nickel	ppm	ASTM D5185m	>5	<1	---	---
Titanium	ppm	ASTM D5185m	>15	6	---	---
Silver	ppm	ASTM D5185m	>2	0	---	---
Aluminum	ppm	ASTM D5185m	>75	● 64	---	---
Lead	ppm	ASTM D5185m	>10	<1	---	---
Copper	ppm	ASTM D5185m	>75	2	---	---
Tin	ppm	ASTM D5185m	>8	<1	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

## CONTAMINATION

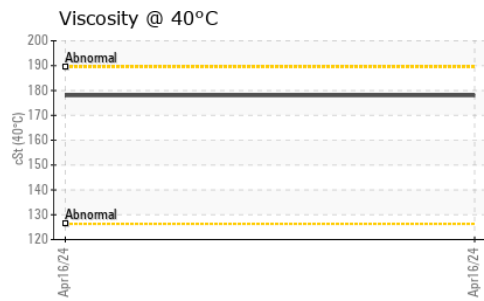
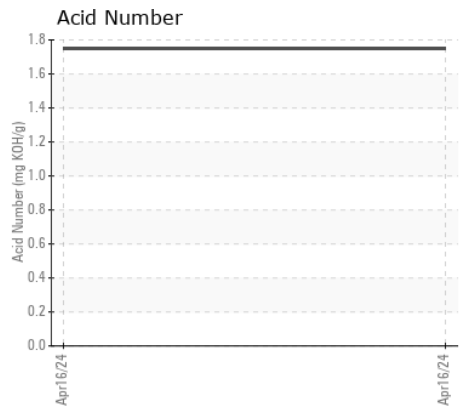
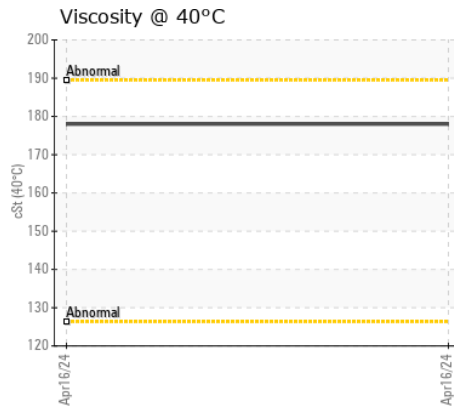
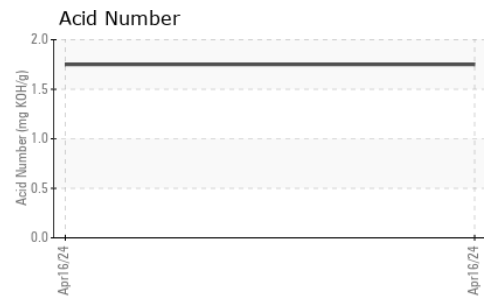
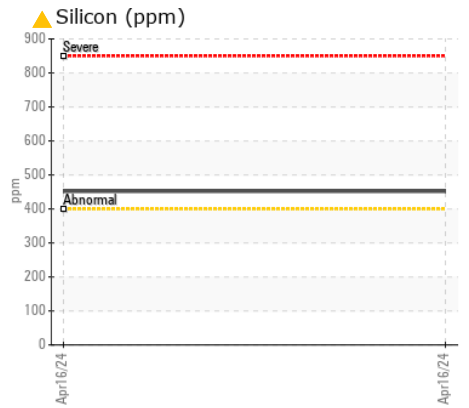
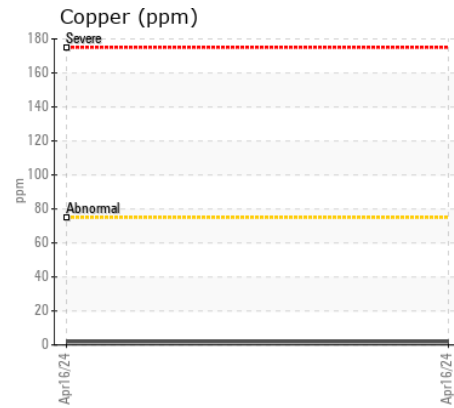
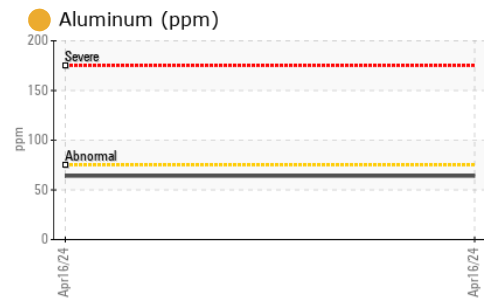
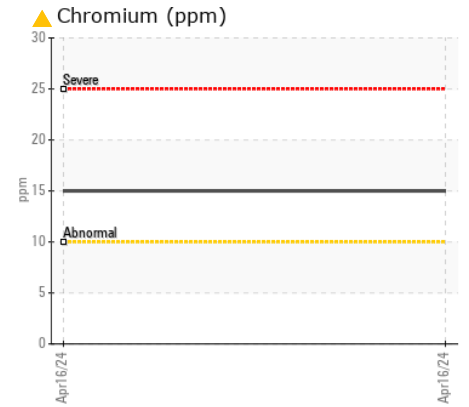
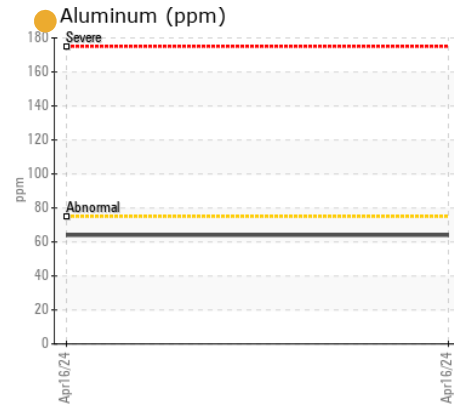
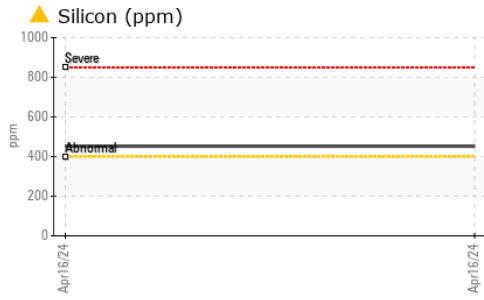
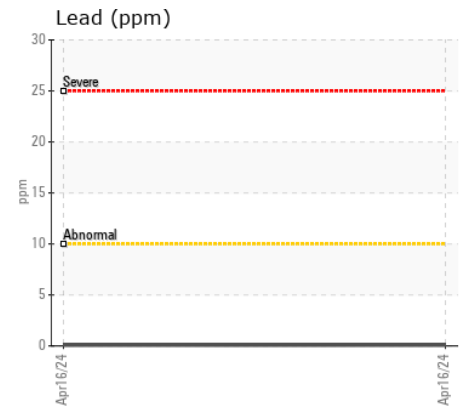
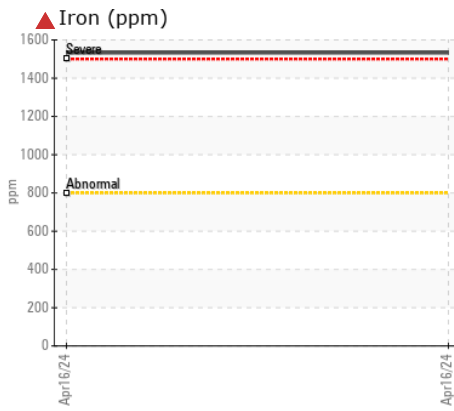
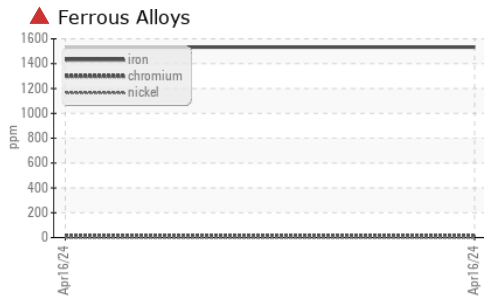
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>400	▲ 452	---	---
Potassium	ppm	ASTM D5185m	>20	18	---	---
Water		WC Method	>0.2	NEG	---	---
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	---	---

## FLUID CONDITION

The AN level is acceptable for this fluid. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		12	---	---
Boron	ppm	ASTM D5185m		5	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		7	---	---
Manganese	ppm	ASTM D5185m		14	---	---
Magnesium	ppm	ASTM D5185m		75	---	---
Calcium	ppm	ASTM D5185m		2964	---	---
Phosphorus	ppm	ASTM D5185m		1063	---	---
Zinc	ppm	ASTM D5185m		1217	---	---
Sulfur	ppm	ASTM D5185m		14074	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045		1.75	---	---
Visc @ 40°C	cSt	ASTM D445		178	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : DC0033650

Lab Number : 06152642

Unique Number : 10982720

Test Package : MOB 2

Received : 17 Apr 2024

Tested : 18 Apr 2024

Diagnosed : 22 Apr 2024 - Don Baldrige

COMER CONSTRUCTION

2100 SLADE LANE

FOREST HILL, MD

US 21050

Contact: DONALD FOX

dfox@comerconstruction.com

T: (443)269-1379

F: (410)638-0289

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)