



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ATTENTION



Machine Id
CATERPILLAR D4G XL DZ4427 (S/N 0HYD02484)
Component
Hydraulic System
Fluid
DURALENE ZD ADVANCED 46 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DC0031148	---	---
Sample Date		Client Info		28 Dec 2023	---	---
Machine Age	hrs	Client Info		1448	---	---
Oil Age	hrs	Client Info		1100	---	---
Filter Age	hrs	Client Info		1100	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	6	---	---
Chromium	ppm	ASTM D5185m	>10	<1	---	---
Nickel	ppm	ASTM D5185m	>10	0	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>10	3	---	---
Lead	ppm	ASTM D5185m	>10	1	---	---
Copper	ppm	ASTM D5185m	>75	15	---	---
Tin	ppm	ASTM D5185m	>10	<1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	LIGHT	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

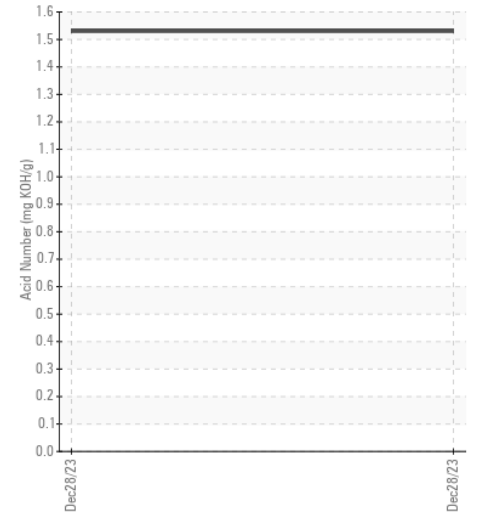
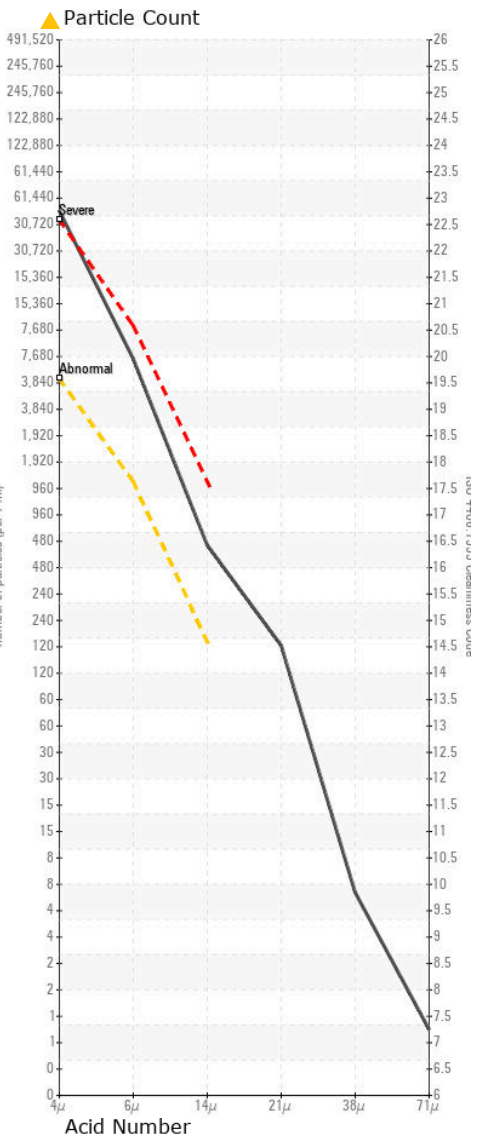
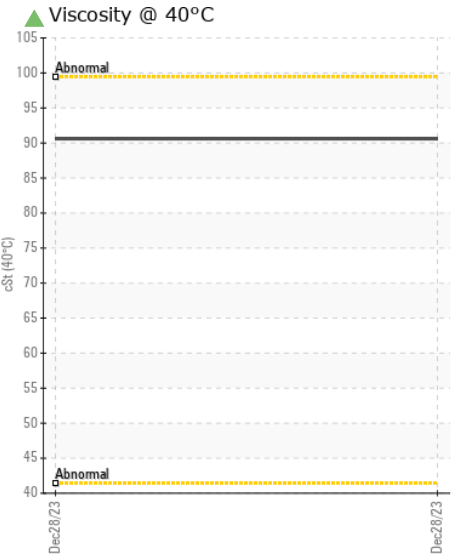
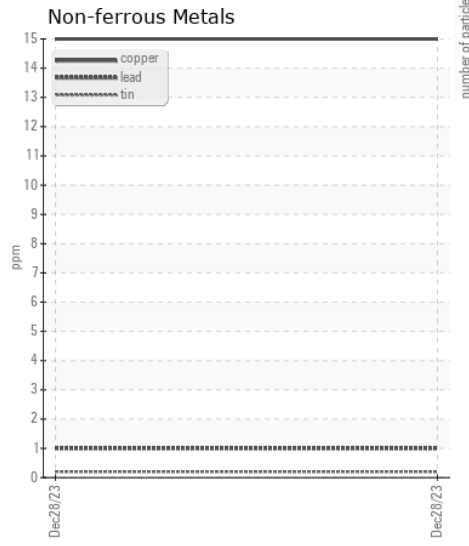
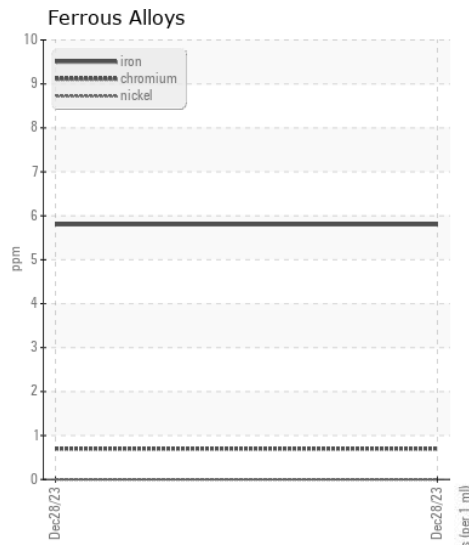
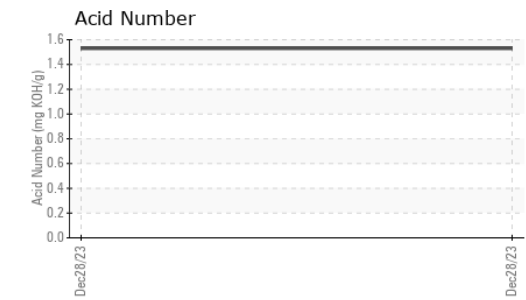
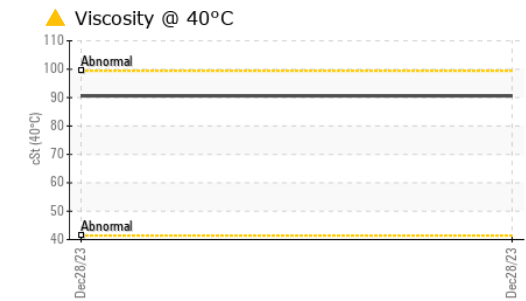
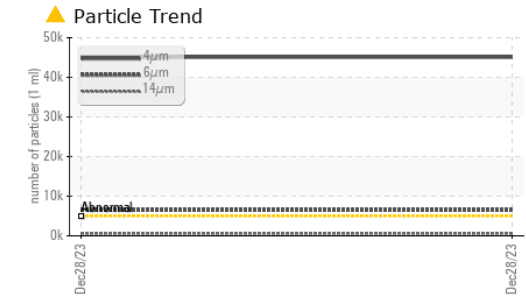
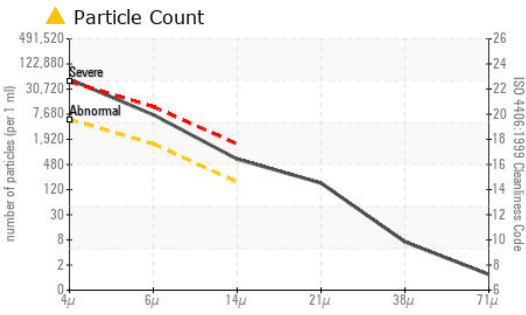
There is a high amount of particulates present in the oil.

Silicon	ppm	ASTM D5185m	>20	9	---	---
Potassium	ppm	ASTM D5185m	>20	0	---	---
Water		WC Method	>0.1	NEG	---	---
Particles >4µm		ASTM D7647	>5000	▲ 45087	---	---
Particles >6µm		ASTM D7647	>1300	▲ 6472	---	---
Particles >14µm		ASTM D7647	>160	▲ 566	---	---
Particles >21µm		ASTM D7647	>40	▲ 152	---	---
Particles >38µm		ASTM D7647	>10	6	---	---
Particles >71µm		ASTM D7647	>3	1	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 23/20/16	---	---
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	>0.1	NEG	---	---

FLUID CONDITION

The oil viscosity is higher than normal. Confirm oil type. The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m		4	---	---
Boron	ppm	ASTM D5185m		35	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		7	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m		108	---	---
Calcium	ppm	ASTM D5185m		2610	---	---
Phosphorus	ppm	ASTM D5185m		1025	---	---
Zinc	ppm	ASTM D5185m		1220	---	---
Sulfur	ppm	ASTM D5185m		4655	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045		1.53	---	---
Visc @ 40°C	cSt	ASTM D445		▲ 90.61	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DC0031148 **Received** : 02 Jan 2024
Lab Number : 06048773 **Diagnosed** : 05 Jan 2024
Unique Number : 10809381 **Diagnostician** : Jonathan Hester
Test Package : MOB 2

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)

COMER CONSTRUCTION

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