



WEAR	SEVERE
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
CATERPILLAR 950K PML-2 (S/N VR4A00551)
Component
Rear Differential
Fluid
TDTO FLUID SAE 30 (--- GAL)

RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		CL0005481	CL0005116	CL0004868
Sample Date		Client Info		18 May 2024	31 Jan 2024	25 Oct 2023
Machine Age	hrs	Client Info		21027	20510	19975
Oil Age	hrs	Client Info		21027	20510	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	ATTENTION	ATTENTION

WEAR

Gear wear is indicated.

Iron	ppm	ASTM D5185m	>500	▲ 1034	250	243
Chromium	ppm	ASTM D5185m	>3	1	<1	<1
Nickel	ppm	ASTM D5185m	>3	0	0	0
Titanium	ppm	ASTM D5185m	>2	<1	1	1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>30	9	10	10
Lead	ppm	ASTM D5185m	>13	0	<1	0
Copper	ppm	ASTM D5185m	>103	26	47	55
Tin	ppm	ASTM D5185m	>5	0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

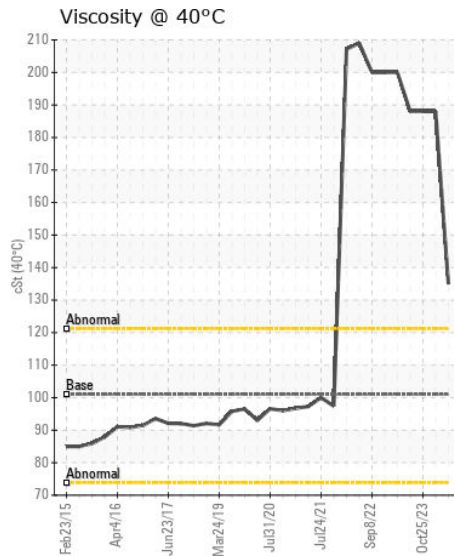
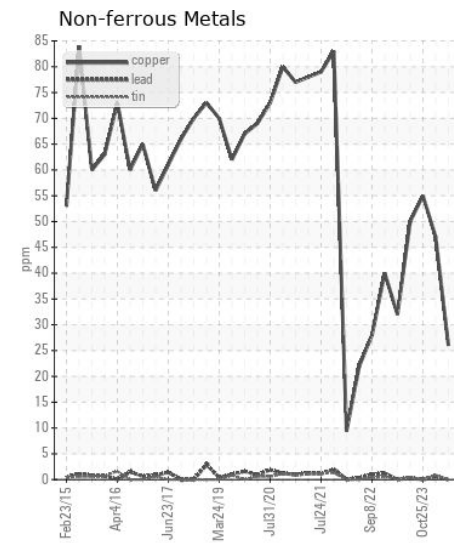
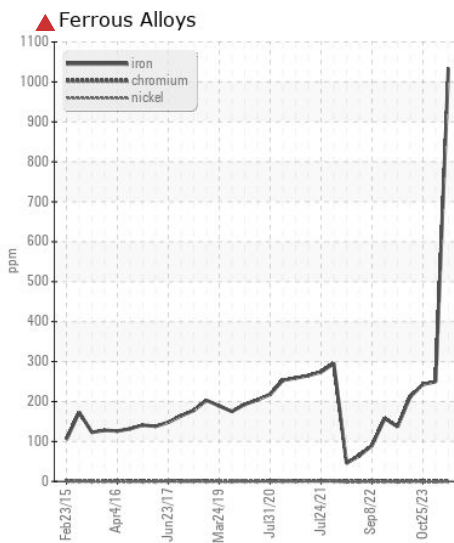
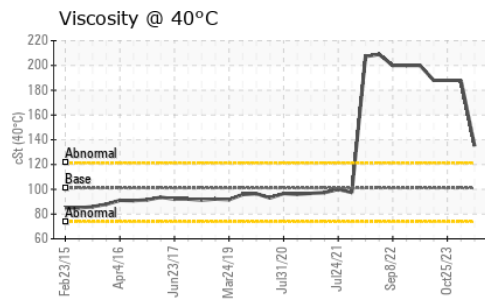
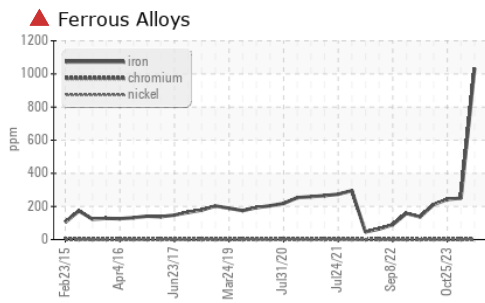
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>100	79	44	45
Potassium	ppm	ASTM D5185m	>20	0	2	0
Water		WC Method	>.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.2	NEG	NEG	NEG

FLUID CONDITION

The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Sodium	ppm	ASTM D5185m		5	9	10
Boron	ppm	ASTM D5185m	37	224	<1	<1
Barium	ppm	ASTM D5185m	7	<1	0	0
Molybdenum	ppm	ASTM D5185m	5	3	<1	0
Manganese	ppm	ASTM D5185m		5	2	2
Magnesium	ppm	ASTM D5185m	40	14	20	18
Calcium	ppm	ASTM D5185m	2650	903	2770	2850
Phosphorus	ppm	ASTM D5185m	1050	1304	999	989
Zinc	ppm	ASTM D5185m	1075	338	1227	1218
Sulfur	ppm	ASTM D5185m	5750	19405	6404	6391
Visc @ 40°C	cSt	ASTM D445	101	135	188	188



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : CL0005481
Lab Number : 06191345
Unique Number : 11048097
Test Package : CONST
Received : 24 May 2024
Tested : 28 May 2024
Diagnosed : 29 May 2024 - Sean Felton

PEDULLA
 146 MCLELLAND
 MOORESVILLE, NC
 US 28115
 Contact: LARRY

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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