



WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Machine Id
CATERPILLAR 924K RTL-13 (S/N PWR04554)
Component
Transmission (Manual)
Fluid
TDTO FLUID SAE 30 (--- GAL)

RECOMMENDATION

We advise that you check for the source of water entry. We recommend that you drain the fluid 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		CL0005262	CL0005009	CL0004021
Sample Date		Client Info		13 Mar 2024	13 Dec 2023	13 Feb 2023
Machine Age	hrs	Client Info		6024	5930	5470
Oil Age	hrs	Client Info		6024	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changed	Not Changed	Not Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

The iron level is abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	▲ 234	62	62
Chromium	ppm	ASTM D5185m	>5	1	<1	<1
Nickel	ppm	ASTM D5185m	>5	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>7	0	<1	0
Aluminum	ppm	ASTM D5185m	>25	6	4	1
Lead	ppm	ASTM D5185m	>45	3	3	2
Copper	ppm	ASTM D5185m	>225	2	4	<1
Tin	ppm	ASTM D5185m	>10	<1	1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	MODER	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

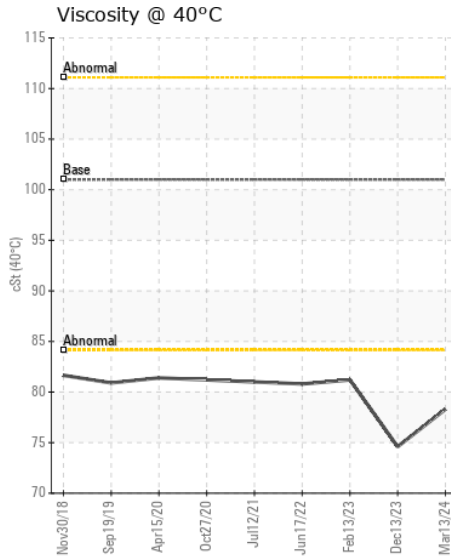
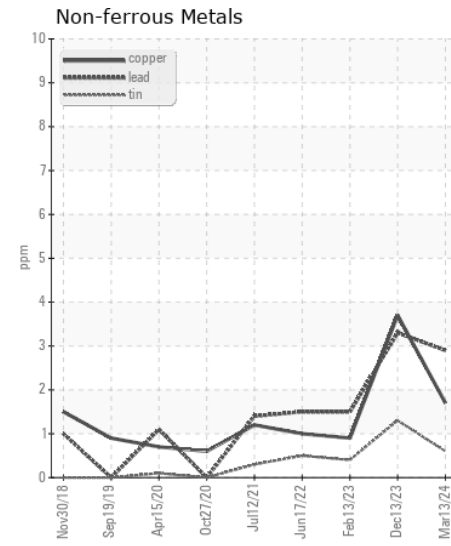
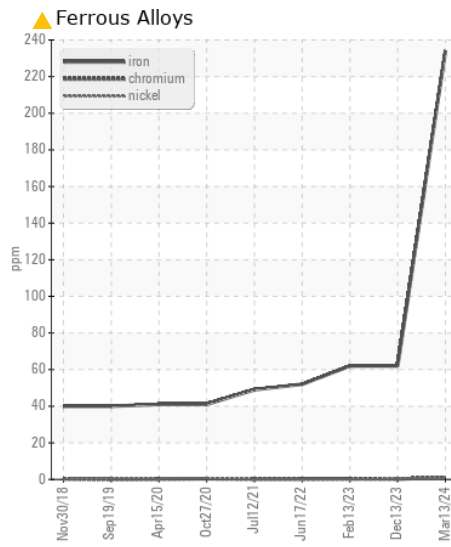
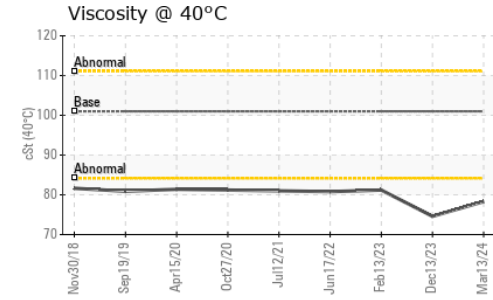
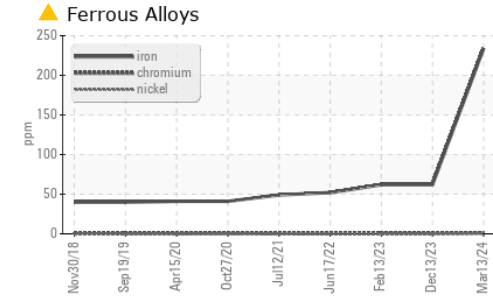
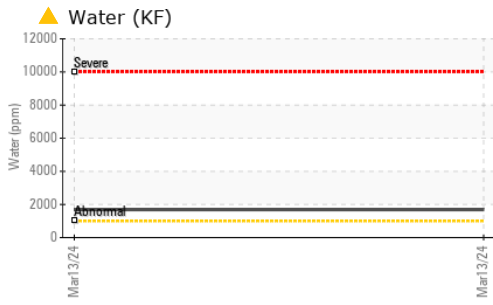
There is a light concentration of water present in the fluid.

Silicon	ppm	ASTM D5185m	>125	33	20	24
Potassium	ppm	ASTM D5185m	>20	4	3	3
Water	%	ASTM D6304	>0.1	▲ 0.169	---	---
ppm Water	ppm	ASTM D6304	>1000	▲ 1690	---	---
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	>0.1	0.2%	NEG	NEG

FLUID CONDITION

The fluid is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		10	10	7
Boron	ppm	ASTM D5185m	37	4	11	3
Barium	ppm	ASTM D5185m	7	1	2	0
Molybdenum	ppm	ASTM D5185m	5	3	<1	3
Manganese	ppm	ASTM D5185m		5	2	1
Magnesium	ppm	ASTM D5185m	40	30	32	31
Calcium	ppm	ASTM D5185m	2650	2652	2446	2908
Phosphorus	ppm	ASTM D5185m	1050	966	971	1012
Zinc	ppm	ASTM D5185m	1075	1115	1059	1166
Sulfur	ppm	ASTM D5185m	5750	8049	6873	6920
Visc @ 40°C	cSt	ASTM D445	101	78.3	74.6	81.2



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : CL0005262
Lab Number : 06121851
Unique Number : 10936002
Test Package : CONST (Additional Tests: KF)
Received : 18 Mar 2024
Tested : 21 Mar 2024
Diagnosed : 21 Mar 2024 - Angela Borella

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)

T:
F: