



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



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

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>CL0004021</b>	CL0003291	CL0002310
Sample Date		Client Info		<b>13 Feb 2023</b>	17 Jun 2022	12 Jul 2021
Machine Age	hrs	Client Info		<b>5470</b>	5045	4550
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changed</b>	Not Changed	Not Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	<b>62</b>	52	49
Chromium	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>7	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>25	<b>1</b>	2	0
Lead	ppm	ASTM D5185m	>45	<b>2</b>	2	1
Copper	ppm	ASTM D5185m	>225	<b>&lt;1</b>	1	1
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	VLITE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

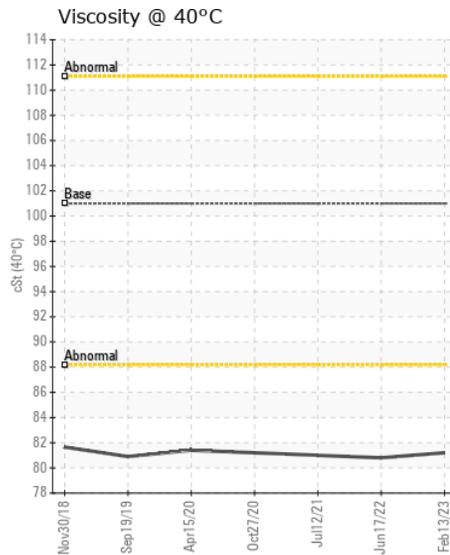
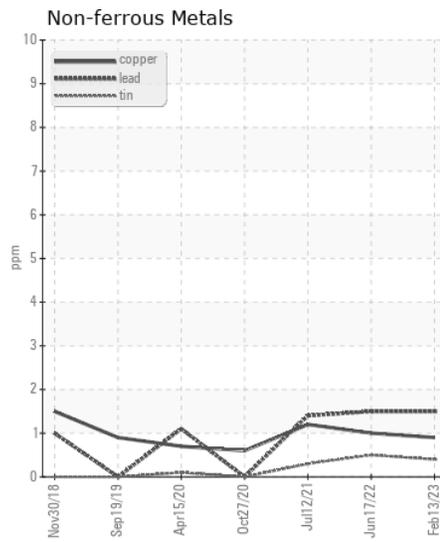
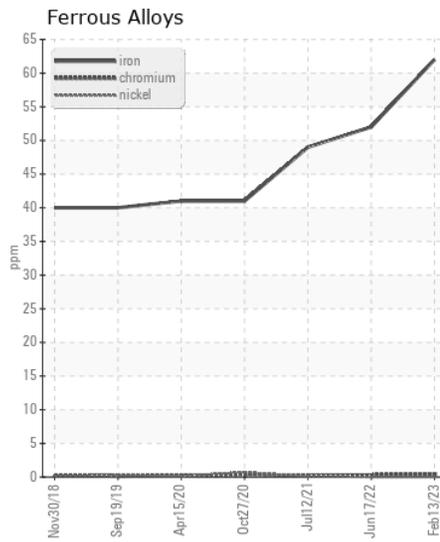
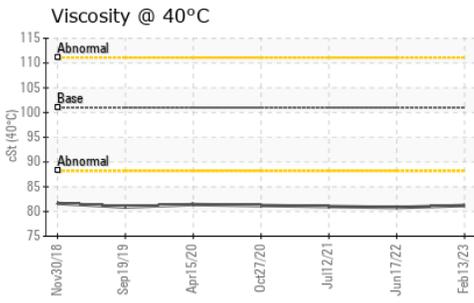
There is no indication of any contamination in the fluid.

Silicon	ppm	ASTM D5185m	>125	<b>24</b>	19	13
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	2	1
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

The condition of the fluid is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<b>7</b>	6	7
Boron	ppm	ASTM D5185m	37	<b>3</b>	7	13
Barium	ppm	ASTM D5185m	7	<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m	5	<b>3</b>	3	3
Manganese	ppm	ASTM D5185m		<b>1</b>	1	1
Magnesium	ppm	ASTM D5185m	40	<b>31</b>	30	31
Calcium	ppm	ASTM D5185m	2650	<b>2908</b>	2804	2874
Phosphorus	ppm	ASTM D5185m	1050	<b>1012</b>	991	970
Zinc	ppm	ASTM D5185m	1075	<b>1166</b>	1149	1150
Sulfur	ppm	ASTM D5185m	5750	<b>6920</b>	7100	6616
Visc @ 40°C	cSt	ASTM D445	101	<b>81.2</b>	80.8	81.0



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : CL0004021  
**Lab Number** : 05773624  
**Unique Number** : 10348241  
**Test Package** : CONST  
**Received** : 21 Feb 2023  
**Tested** : 24 Feb 2023  
**Diagnosed** : 24 Feb 2023 - Don Baldrige

**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: