



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Area
[05W44442]
 Machine Id
CATERPILLAR 938M 0J3R03125
 Component
Transmission (Manual)
 Fluid
CAT TDTO TRANS-DRIVE SAE 30 (20 QTS)

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. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

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

FLUID CONDITION

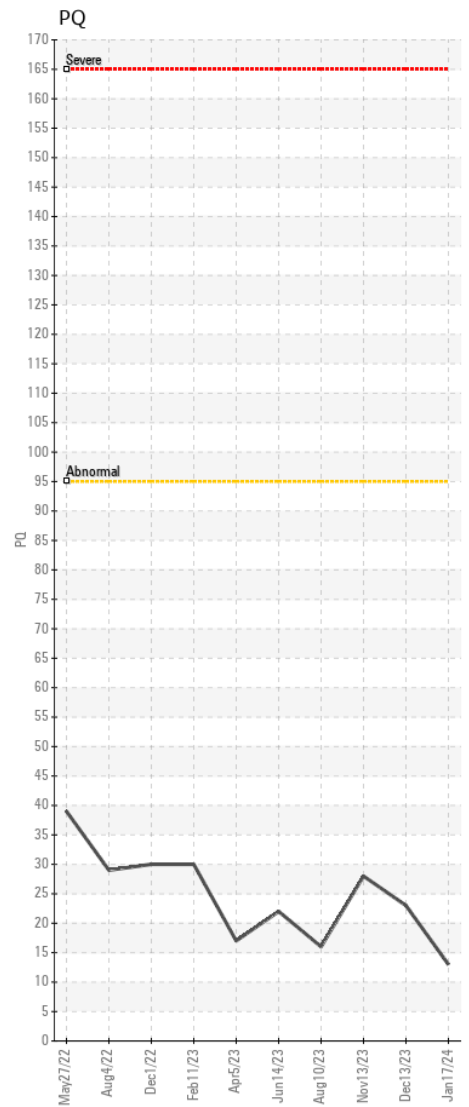
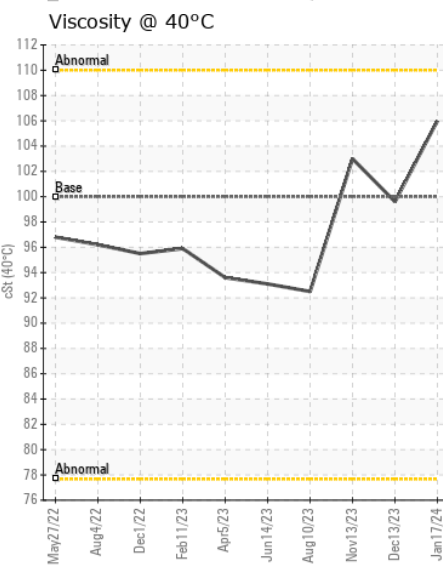
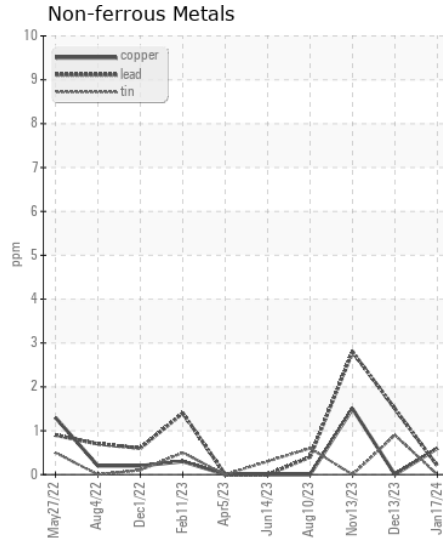
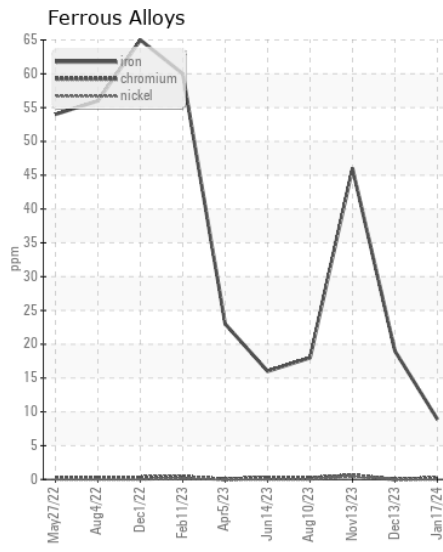
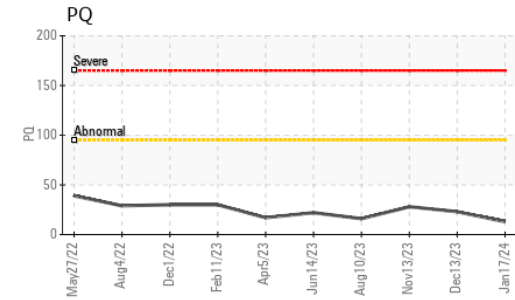
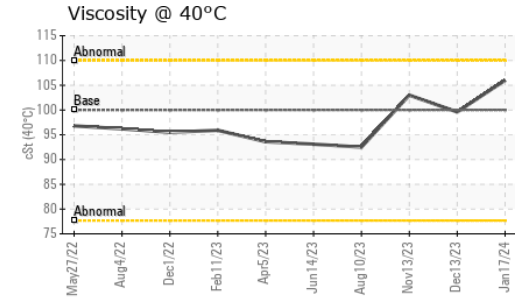
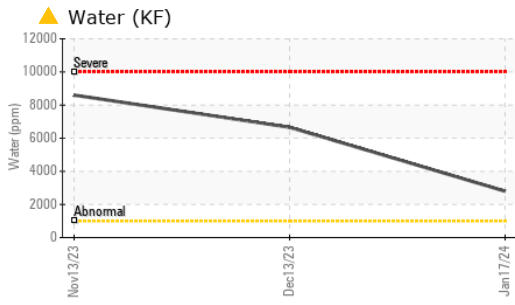
The fluid is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0199202	JR0189984	JR0192063
Sample Date		Client Info		17 Jan 2024	13 Dec 2023	13 Nov 2023
Machine Age	hrs	Client Info		14960	14521	14521
Oil Age	hrs	Client Info		439	14521	13098
Filter Age	hrs	Client Info		439	0	0
Oil Changed		Client Info		Not Changed	Not Changed	Changed
Filter Changed		Client Info		Not Changed	Not Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

PQ		ASTM D8184	>95	13	23	28
Iron	ppm	ASTM D5185m	>200	9	19	46
Chromium	ppm	ASTM D5185m	>5	<1	0	<1
Nickel	ppm	ASTM D5185m	>5	0	0	<1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>7	0	0	<1
Aluminum	ppm	ASTM D5185m	>25	2	<1	2
Lead	ppm	ASTM D5185m	>45	<1	2	3
Copper	ppm	ASTM D5185m	>225	<1	0	2
Tin	ppm	ASTM D5185m	>10	0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

Silicon	ppm	ASTM D5185m	>125	5	8	7
Potassium	ppm	ASTM D5185m	>20	2	1	6
Water	%	ASTM D6304	>0.1	▲ 0.280	▲ 0.666	▲ 0.860
ppm Water	ppm	ASTM D6304	>1000	▲ 2800	▲ 6660	▲ 8600
Silt	scalar	*Visual	NONE	NONE	▲ MODER	▲ HEAVY
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	▲ HAZY	▲ HAZY
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	0.2%	0.2%	0.2%

Sodium	ppm	ASTM D5185m		0	3	5
Boron	ppm	ASTM D5185m		1	7	9
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	<1
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		10	<1	20
Calcium	ppm	ASTM D5185m	2980	2716	2693	2655
Phosphorus	ppm	ASTM D5185m	1100	993	921	1076
Zinc	ppm	ASTM D5185m	1270	1153	1165	1328
Sulfur	ppm	ASTM D5185m		6487	5956	7005
Visc @ 40°C	cSt	ASTM D445	100	106	99.6	103



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0199202 **Received** : 18 Jan 2024
Lab Number : 06065141 **Diagnosed** : 24 Jan 2024
Unique Number : 10836523 **Diagnostician** : Doug Bogart
Test Package : CONST (Additional Tests: KF, PQ)

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)

JRE - MANASSAS PARK
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