



# OIL ANALYSIS REPORT

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



Machine Id  
**CATERPILLAR 329E 329E-743 (S/N PLW01676)**  
Component  
**Hydraulic System**  
Fluid  
**MOBIL MOBILTRANS AST 30 (--- GAL)**

## RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>TLY0002230</b>	TLY0001995	TLY0001344
Sample Date		Client Info		<b>16 Apr 2024</b>	21 Nov 2023	15 Mar 2023
Machine Age	hrs	Client Info		<b>6384</b>	5965	0
Oil Age	hrs	Client Info		<b>5965</b>	1965	1425
Filter Age	hrs	Client Info		<b>5965</b>	1965	1425
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Sample Status				<b>ATTENTION</b>	ABNORMAL	ATTENTION

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	<b>17</b>	15	16
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	1
Lead	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m	>75	<b>17</b>	16	15
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

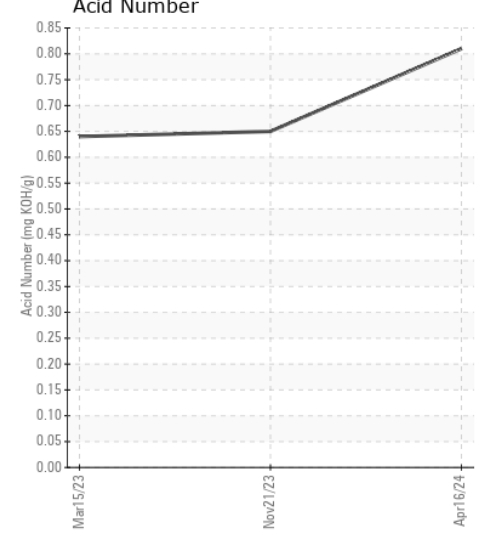
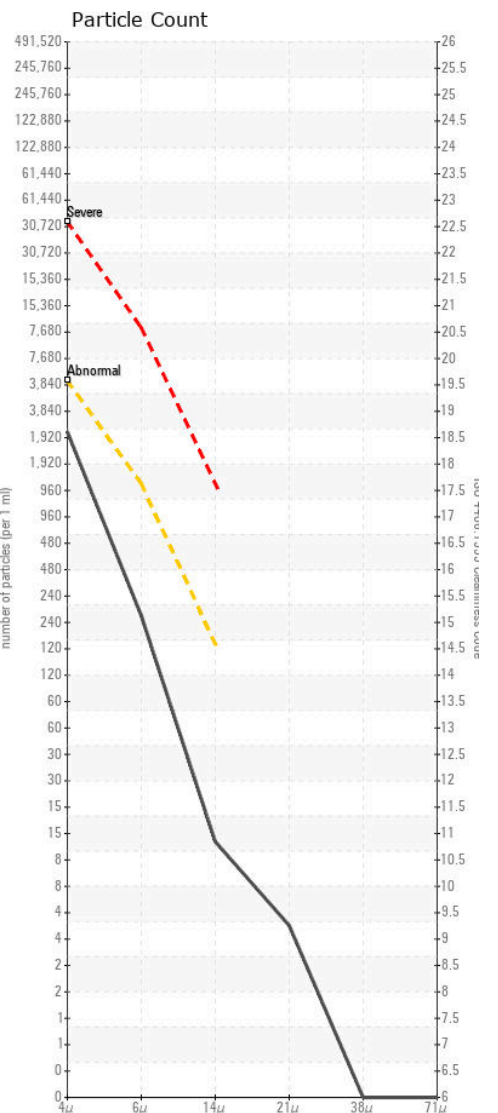
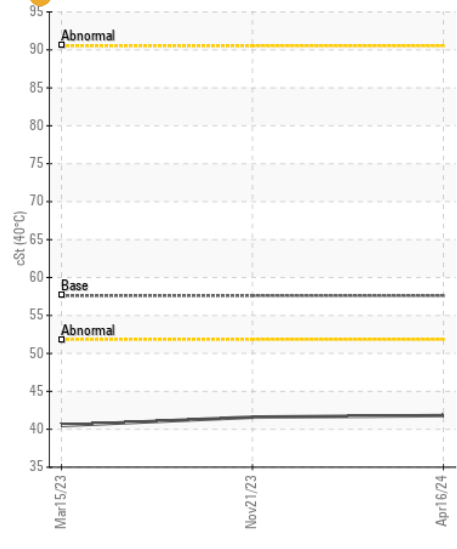
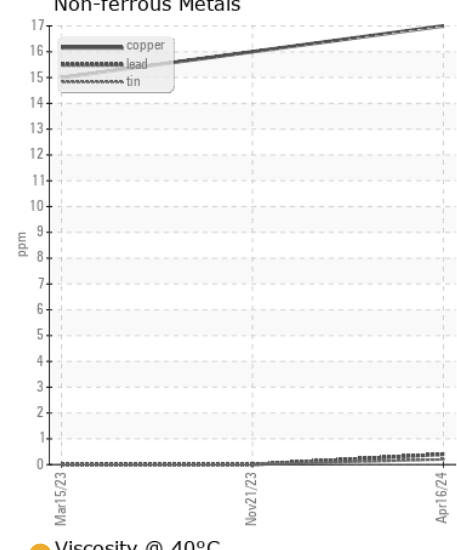
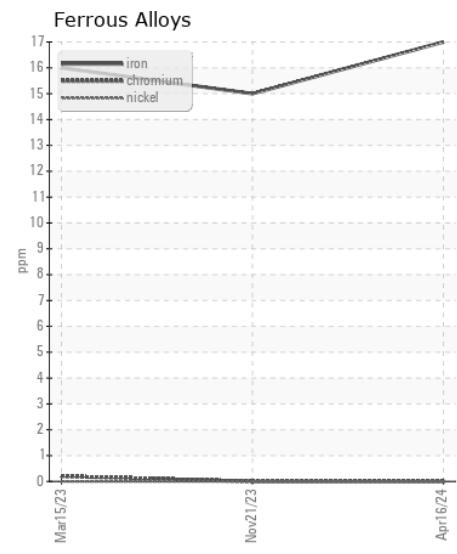
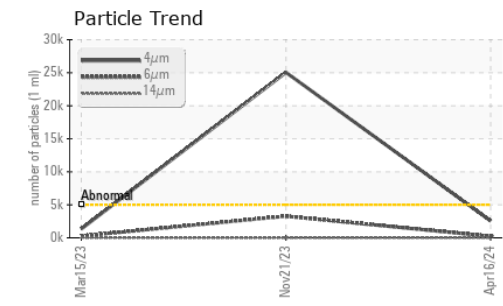
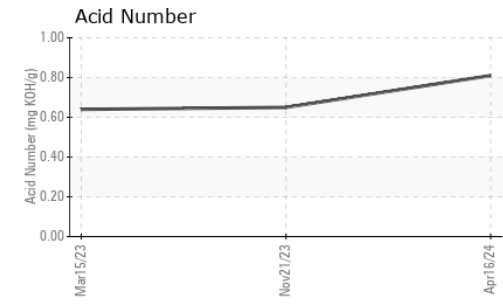
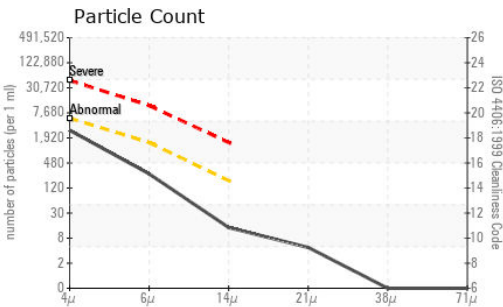
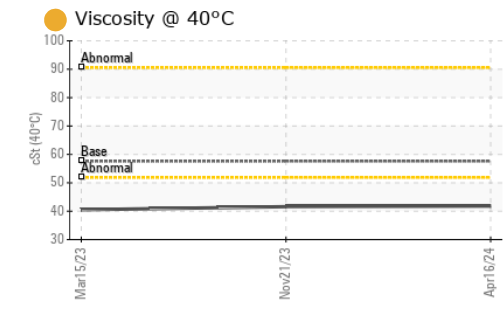
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>20	<b>3</b>	3	2
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	<1	2
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>2567</b>	▲ 25049	1346
Particles >6µm		ASTM D7647	>1300	<b>231</b>	▲ 3277	265
Particles >14µm		ASTM D7647	>160	<b>12</b>	8	19
Particles >21µm		ASTM D7647	>40	<b>4</b>	1	7
Particles >38µm		ASTM D7647	>10	<b>0</b>	0	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>19/15/11</b>	▲ 22/19/10	18/15/11
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

Viscosity of sample indicates oil is within ISO 46 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m		<b>4</b>	2	<1
Boron	ppm	ASTM D5185m		<b>6</b>	4	4
Barium	ppm	ASTM D5185m		<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m		<b>4</b>	4	5
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>40</b>	34	39
Calcium	ppm	ASTM D5185m		<b>441</b>	408	335
Phosphorus	ppm	ASTM D5185m		<b>774</b>	723	690
Zinc	ppm	ASTM D5185m		<b>958</b>	839	918
Sulfur	ppm	ASTM D5185m		<b>2484</b>	1859	2312
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.81</b>	0.65	0.64
Visc @ 40°C	cSt	ASTM D445	57.6	<b>41.8</b>	● 41.6	● 40.5



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TLY0002230 **Received** : 19 Apr 2024  
**Lab Number** : 06154307 **Tested** : 22 Apr 2024  
**Unique Number** : 10989730 **Diagnosed** : 23 Apr 2024 - Jonathan Hester  
**Test Package** : CONST

**GAINES & COMPANY**  
 112 WESTMINSTER RD  
 REISTERSTOWN, MD  
 US 21136  
 Contact: LANCE TANCRAITOR  
 ltancraitor@gainesandco.com  
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Certificate L2367  
 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)