



# OIL ANALYSIS REPORT

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



Machine Id  
**MACK 24937**  
Component  
**Hydraulic System**  
Fluid  
**AW HYDRAULIC OIL ISO 32 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0708415</b>	WC0606048	WC0399520
Sample Date		Client Info		<b>25 Jan 2023</b>	13 Sep 2021	24 Mar 2020
Machine Age	hrs	Client Info		<b>0</b>	0	0
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>N/A</b>	Not Changed	Not Changed
Filter Changed		Client Info		<b>N/A</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>7</b>	5	4
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Lead	ppm	ASTM D5185m	>4	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>15	<b>1</b>	1	1
Tin	ppm	ASTM D5185m	>4	<b>0</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

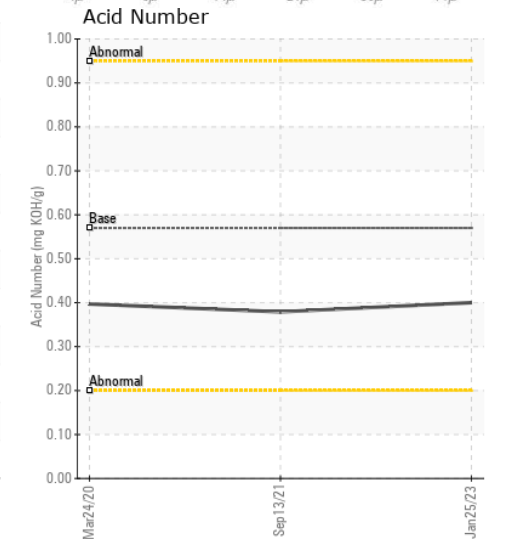
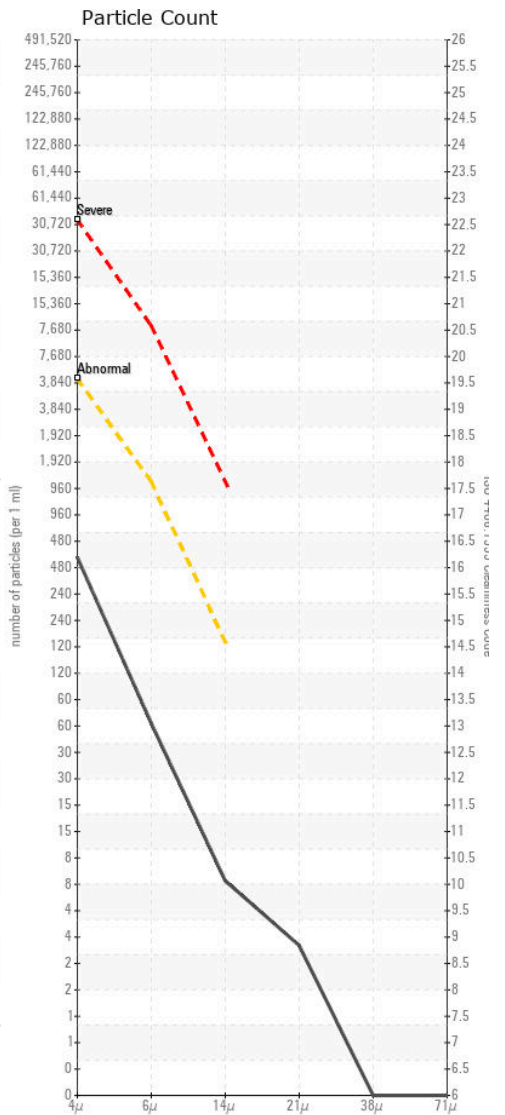
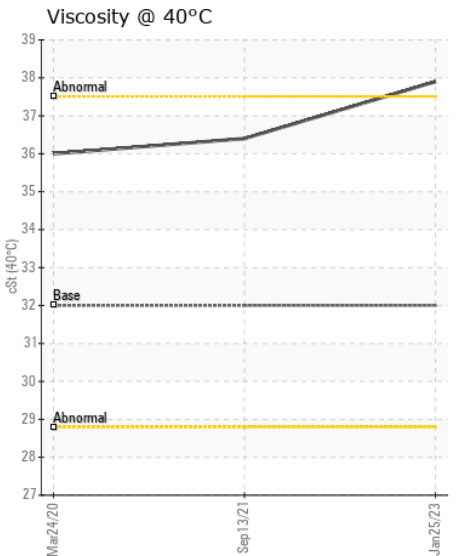
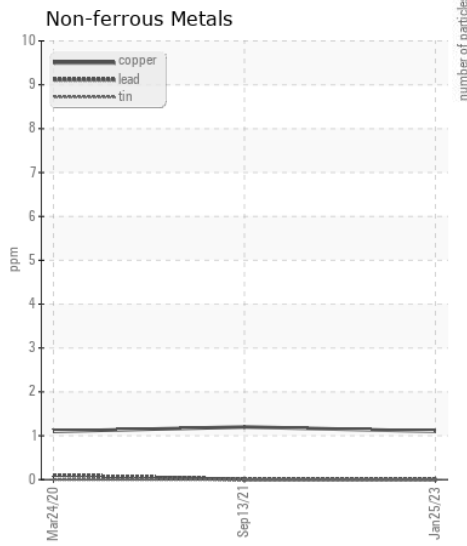
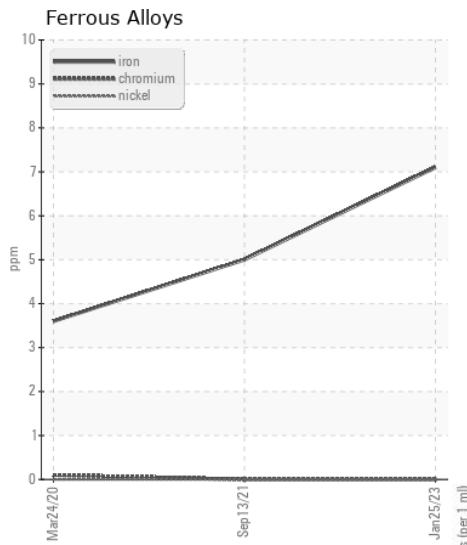
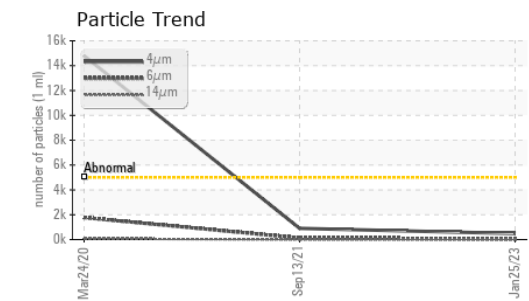
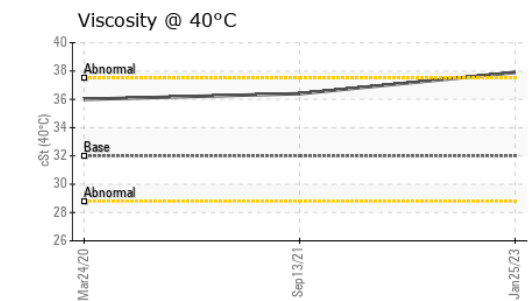
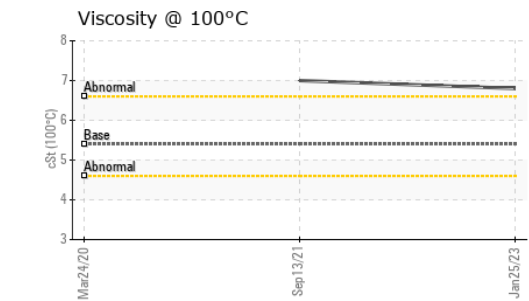
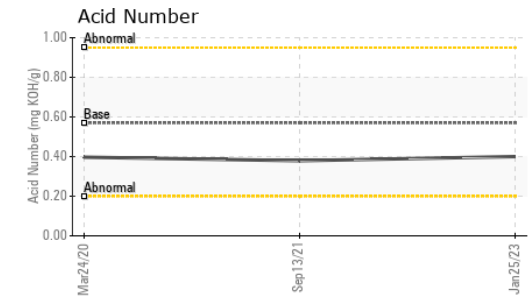
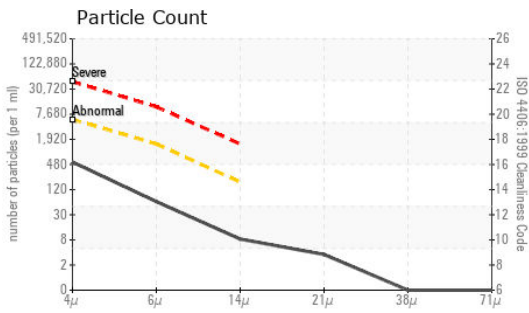
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>15	<b>3</b>	2	3
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>483</b>	904	▲ 14793
Particles >6µm		ASTM D7647	>1300	<b>55</b>	129	▲ 1770
Particles >14µm		ASTM D7647	>160	<b>7</b>	9	66
Particles >21µm		ASTM D7647	>40	<b>3</b>	3	24
Particles >38µm		ASTM D7647	>10	<b>0</b>	0	2
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>16/13/10</b>	17/14/10	▲ 21/18/13
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	LIGHT
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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>0</b>	2	1
Boron	ppm	ASTM D5185m	5	<b>6</b>	12	11
Barium	ppm	ASTM D5185m	5	<b>1</b>	0	0
Molybdenum	ppm	ASTM D5185m	5	<b>4</b>	4	4
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	25	<b>12</b>	11	12
Calcium	ppm	ASTM D5185m	200	<b>202</b>	190	203
Phosphorus	ppm	ASTM D5185m	300	<b>359</b>	325	359
Zinc	ppm	ASTM D5185m	370	<b>449</b>	405	441
Sulfur	ppm	ASTM D5185m	2500	<b>4202</b>	3424	3681
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	<b>0.40</b>	0.379	0.397
Visc @ 40°C	cSt	ASTM D445	32	<b>37.9</b>	36.4	36.0
Visc @ 100°C	cSt	ASTM D445	5.4	<b>6.8</b>	7	---
Viscosity Index (VI)	Scale	ASTM D2270	102	<b>138</b>	156	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0708415 **Received** : 26 Jan 2023  
**Lab Number** : 05750783 **Diagnosed** : 27 Jan 2023  
**Unique Number** : 10310387 **Diagnostician** : Wes Davis  
**Test Package** : MOB 2 ( Additional Tests: KV100, VI )

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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