



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



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

RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0708417	WC0708415	WC0606048
Sample Date		Client Info		25 Jan 2023	25 Jan 2023	13 Sep 2021
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	Not Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	8	7	5
Chromium	ppm	ASTM D5185m	>10	<1	0	0
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>5	0	0	0
Lead	ppm	ASTM D5185m	>4	0	0	0
Copper	ppm	ASTM D5185m	>15	1	1	1
Tin	ppm	ASTM D5185m	>4	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	VLITE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

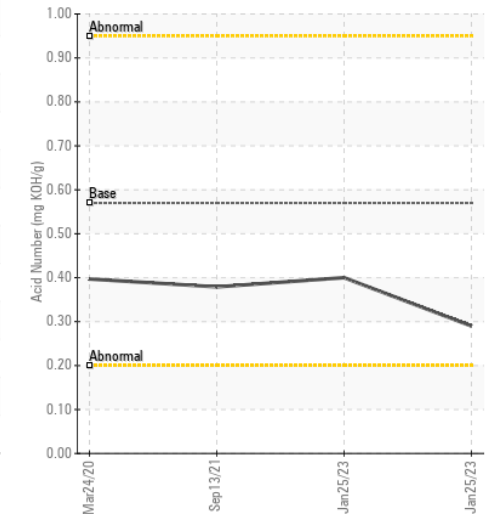
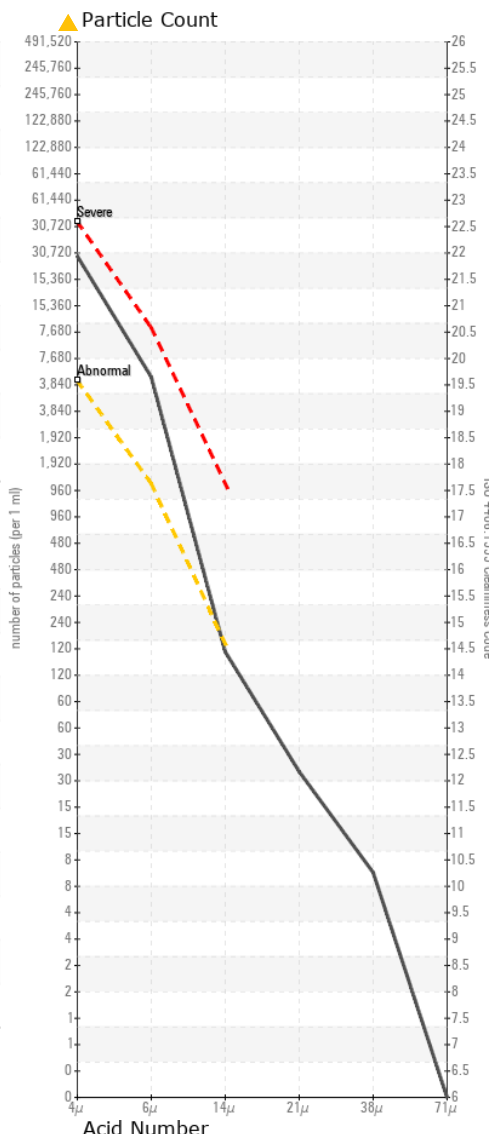
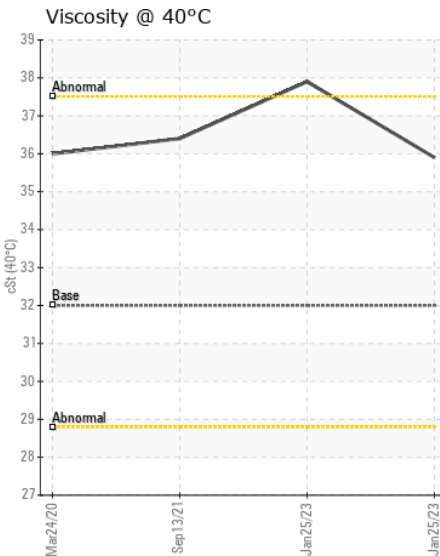
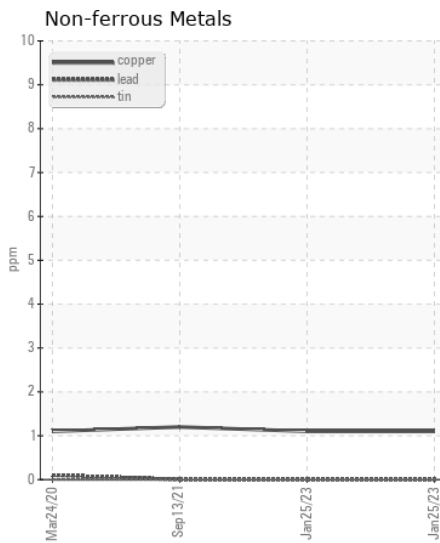
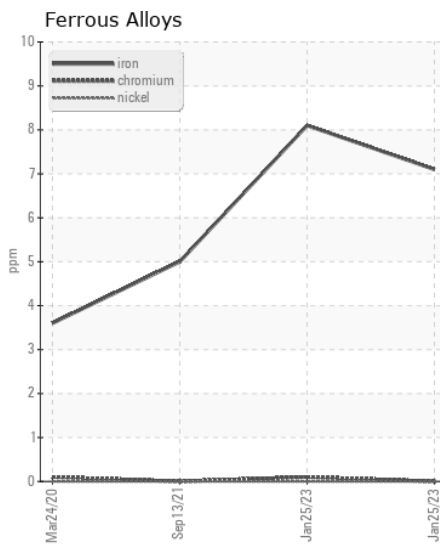
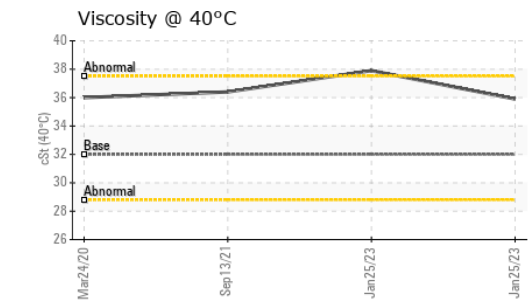
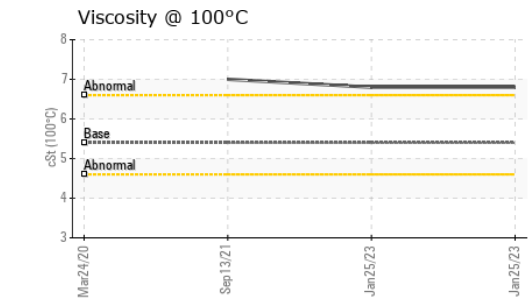
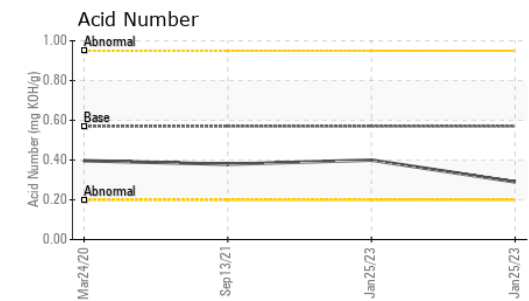
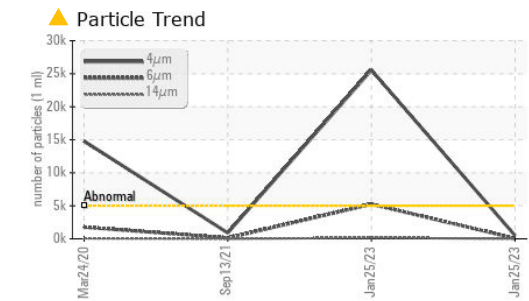
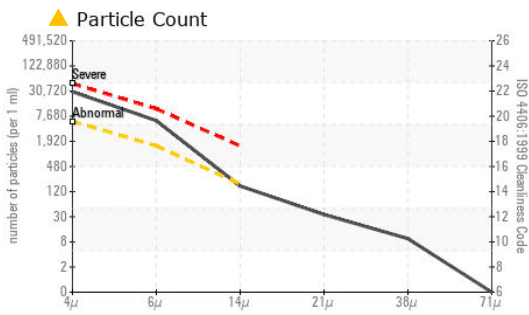
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>15	3	3	2
Potassium	ppm	ASTM D5185m	>20	2	3	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	▲ 25547	483	904
Particles >6µm		ASTM D7647	>1300	▲ 5247	55	129
Particles >14µm		ASTM D7647	>160	144	7	9
Particles >21µm		ASTM D7647	>40	30	3	3
Particles >38µm		ASTM D7647	>10	8	0	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 22/20/14	16/13/10	17/14/10
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	VLITE	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	NEG	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		<1	0	2
Boron	ppm	ASTM D5185m	5	6	6	12
Barium	ppm	ASTM D5185m	5	1	1	0
Molybdenum	ppm	ASTM D5185m	5	4	4	4
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m	25	13	12	11
Calcium	ppm	ASTM D5185m	200	204	202	190
Phosphorus	ppm	ASTM D5185m	300	360	359	325
Zinc	ppm	ASTM D5185m	370	454	449	405
Sulfur	ppm	ASTM D5185m	2500	4516	4202	3424
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.29	0.40	0.379
Visc @ 40°C	cSt	ASTM D445	32	35.9	37.9	36.4
Visc @ 100°C	cSt	ASTM D445	5.4	6.8	6.8	7
Viscosity Index (VI)	Scale	ASTM D2270	102	150	138	156



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0708417 **Received** : 26 Jan 2023
Lab Number : 05750830 **Diagnosed** : 29 Jan 2023
Unique Number : 10310434 **Diagnostician** : Don Baldrige
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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