MOB II WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Machine Id
NORDBERG 52005
Component
Hydraulic System
Fluid
SHELL OMALA S2 GX 68 (250 GAL)

RECOMMENDATION

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. The filter change at the time of sampling has been noted. Resample in 30-45 days to monitor this situation.

WEAR

All component wear rates are normal.

CONTAMINATION

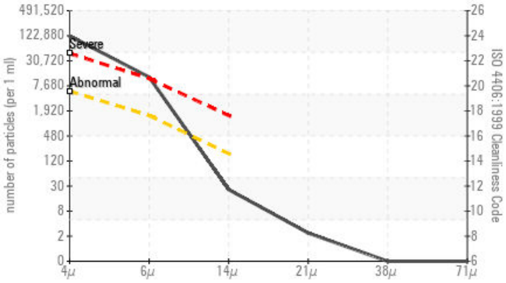
There is a high amount of silt (particulates < 14 microns in size) present in the oil. The system cleanliness code is much higher than the acceptable limit for the target ISO 4406 cleanliness code.

FLUID CONDITION

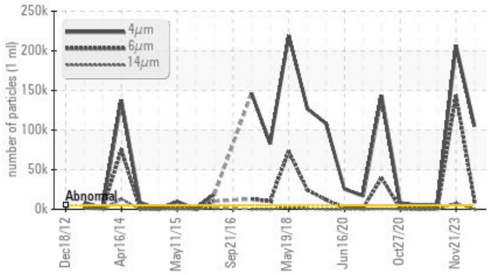
The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0954125	WC0823297	WC0823302
Sample Date		Client Info		05 Jun 2024	21 Nov 2023	29 Oct 2023
Machine Age	hrs	Client Info		10305	9924	9718
Oil Age	hrs	Client Info		301	1386	1256
Filter Age	hrs	Client Info		301	126	318
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Not Changd	Changed
Sample Status				SEVERE	ABNORMAL	ATTENTION
Iron	ppm	ASTM D5185m	>20	3	▲ 37	2
Chromium	ppm	ASTM D5185m	>10	0	0	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	1	● 17	3
Lead	ppm	ASTM D5185m	>10	3	▲ 32	17
Copper	ppm	ASTM D5185m	>75	7	▲ 64	18
Tin	ppm	ASTM D5185m	>10	0	3	<1
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>20	5	▲ 34	2
Potassium	ppm	ASTM D5185m	>20	0	7	2
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	▲ 104675	▲ 206637	● 5445
Particles >6µm		ASTM D7647	>1300	▲ 10773	▲ 144323	577
Particles >14µm		ASTM D7647	>160	22	▲ 7847	11
Particles >21µm		ASTM D7647	>40	2	▲ 313	0
Particles >38µm		ASTM D7647	>10	0	1	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 24/21/12	▲ 25/24/20	● 20/16/11
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	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
Sodium	ppm	ASTM D5185m		2	2	0
Boron	ppm	ASTM D5185m		0	16	18
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		<1	14	15
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m		3	47	46
Calcium	ppm	ASTM D5185m		15	106	108
Phosphorus	ppm	ASTM D5185m		282	324	329
Zinc	ppm	ASTM D5185m		16	78	67
Sulfur	ppm	ASTM D5185m		9855	7736	7582
Acid Number (AN)	mg KOH/g	ASTM D8045		0.32	0.42	0.47
Visc @ 40°C	cSt	ASTM D445	68	73.6	62.0	66.3

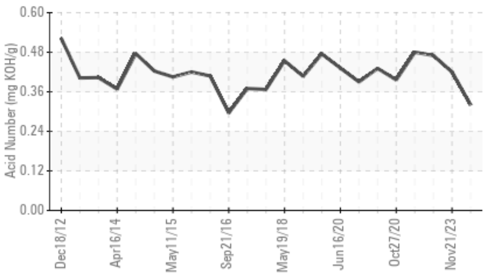
Particle Count



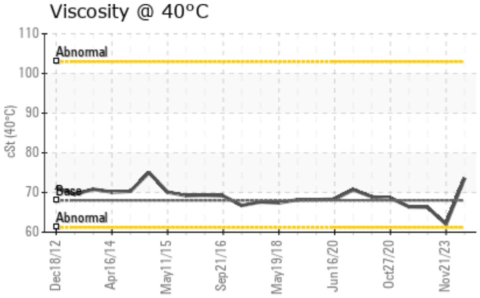
Particle Trend



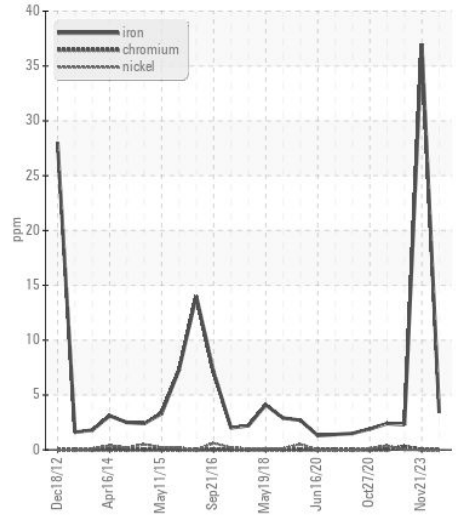
Acid Number



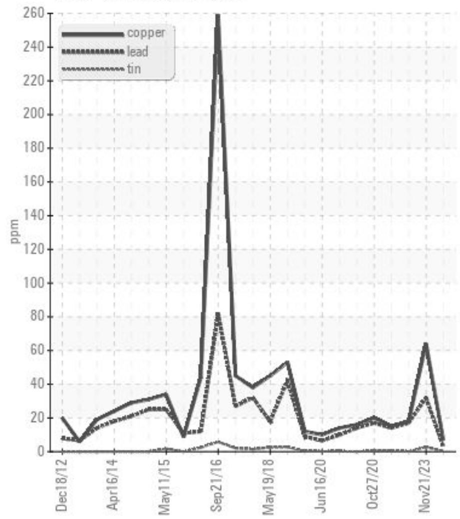
Viscosity @ 40°C



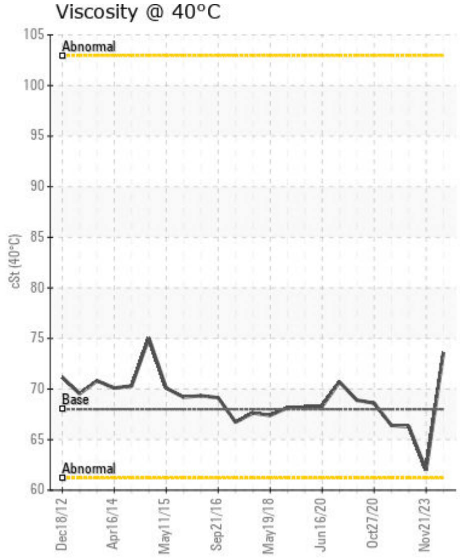
Ferrous Alloys



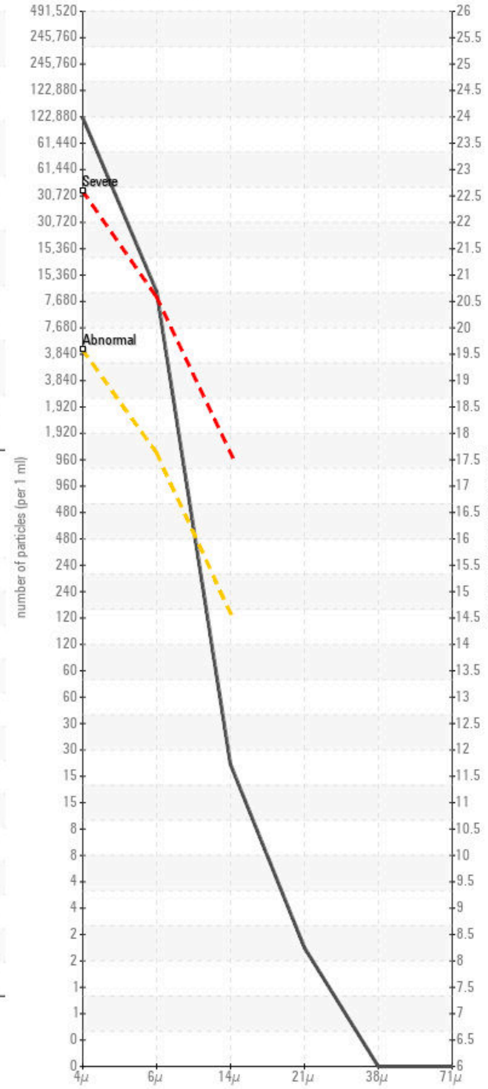
Non-ferrous Metals



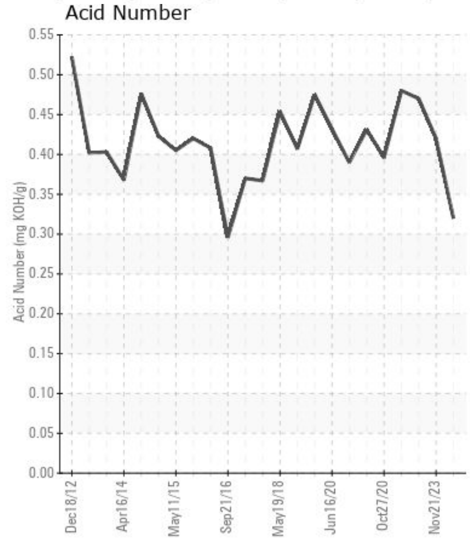
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory	: WearCheck USA - 501 Madison Ave., Cary, NC 27513		
Sample No.	: WC0954125	**Received**	: 17 Jun 2024
Lab Number	: 06212304	**Tested**	: 19 Jun 2024
Unique Number	: 11085168	**Diagnosed**	: 19 Jun 2024 - Wes Davis
Test Package	: MOB 2		

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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