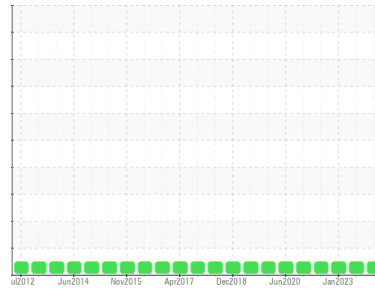




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
IZ/5WM
 Component
Gearbox

Fluid
MOBIL MOBILGEAR SHC XMP 320 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

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

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC0807460	WC0807368	WC0695200
Sample Date	Client Info			15 Nov 2023	01 Jun 2023	18 Jan 2023
Machine Age	mths	Client Info		0	0	203765
Oil Age	mths	Client Info		54	49	0
Oil Changed	Client Info			N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	30	25	27
Chromium	ppm	ASTM D5185m	>15	0	0	<1
Nickel	ppm	ASTM D5185m	>15	0	1	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	0	0	0
Lead	ppm	ASTM D5185m	>100	0	<1	0
Copper	ppm	ASTM D5185m	>200	<1	<1	<1
Tin	ppm	ASTM D5185m	>25	0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0	0
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		<1	<1	<1
Calcium	ppm	ASTM D5185m	0	0	1	0
Phosphorus	ppm	ASTM D5185m	485	442	445	431
Zinc	ppm	ASTM D5185m	0	23	11	26
Sulfur	ppm	ASTM D5185m		5069	4393	4428

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	2	3	5
Sodium	ppm	ASTM D5185m	>15	<1	<1	<1
Potassium	ppm	ASTM D5185m	>20	0	2	<1
Water	%	ASTM D6304	>0.2	NEG	NEG	NEG

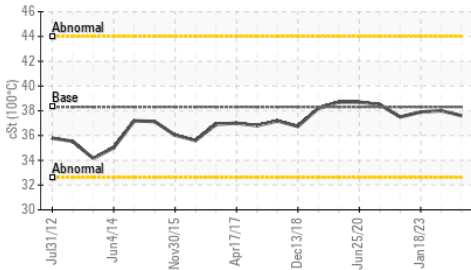
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	1285	1022	1164
Particles >6µm		ASTM D7647	>5000	298	304	237
Particles >14µm		ASTM D7647	>640	18	20	7
Particles >21µm		ASTM D7647	>160	5	4	3
Particles >38µm		ASTM D7647	>40	1	0	1
Particles >71µm		ASTM D7647	>10	1	0	1
Oil Cleanliness		ISO 4406 (c)	>21/19/16	17/15/11	17/15/11	17/15/10

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.85	1.34	1.21	1.22

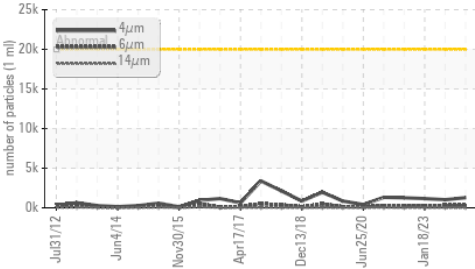


OIL ANALYSIS REPORT

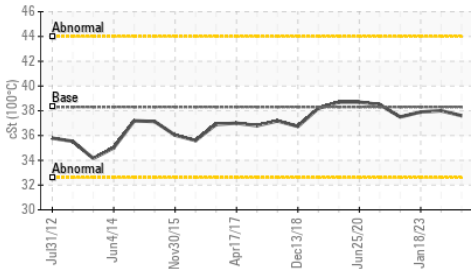
Viscosity @ 100°C



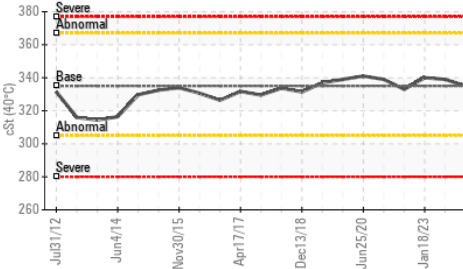
Particle Trend



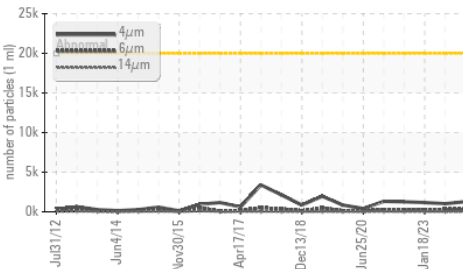
Viscosity @ 100°C



Viscosity @ 40°C



Particle Trend

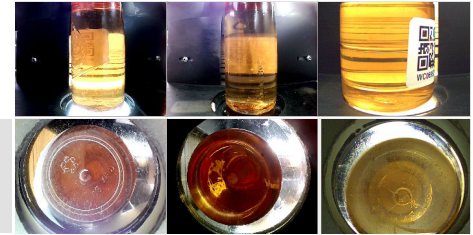


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	335	339	340
Visc @ 100°C	cSt	ASTM D445	38.3	38.0	37.9
Viscosity Index (VI)	Scale	ASTM D2270	164	161	160

SAMPLE IMAGES	method	limit/base	current	history1	history2
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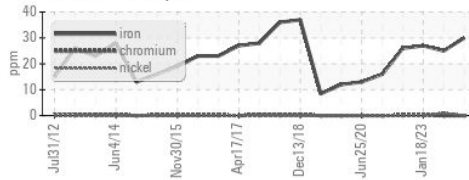
Color



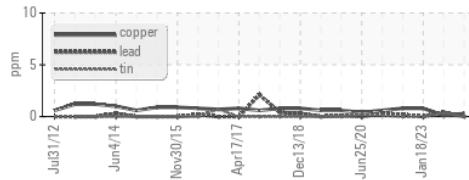
Bottom

GRAPHS

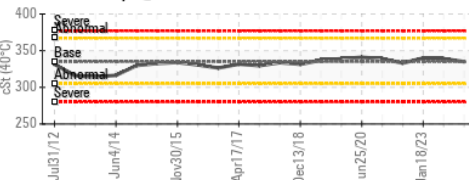
Ferrous Alloys



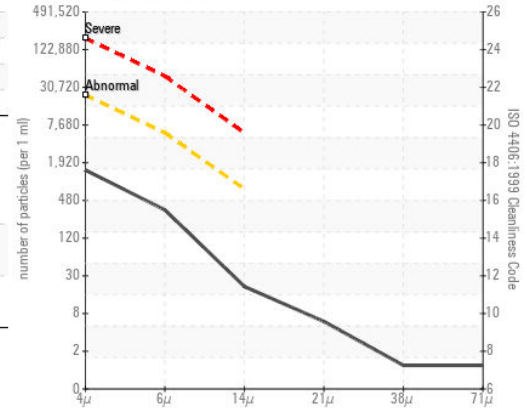
Non-ferrous Metals



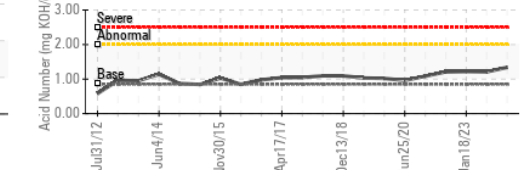
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : WC0807460

Lab Number : 06159107

Unique Number : 10994530

Test Package : PLANT (Additional Tests: KV100, VI)

Received : 24 Apr 2024

Tested : 26 Apr 2024

Diagnosed : 26 Apr 2024 - Jonathan Hester

JPHYTEC

JP
Contact: Service

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)

T:

F: