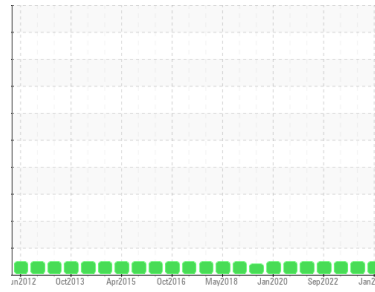




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
IZ/12WM

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 oil. 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		WC0807517	WC0807375	WC0695213
Sample Date	Client Info		16 Jan 2024	19 Jun 2023	21 Feb 2023
Machine Age	mths	Client Info	0	0	112605
Oil Age	mths	Client Info	60	53	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	41	37	39
Chromium	ppm	ASTM D5185m >15	0	<1	<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	0	1	2
Tin	ppm	ASTM D5185m >25	0	<1	0
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	<1

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	0	<1	<1
Magnesium	ppm	ASTM D5185m	0	2	<1
Calcium	ppm	ASTM D5185m 0	0	1	<1
Phosphorus	ppm	ASTM D5185m 485	428	440	393
Zinc	ppm	ASTM D5185m 0	16	6	21
Sulfur	ppm	ASTM D5185m	5355	4575	4516

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	2	3	4
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	1981	11356	6418
Particles >6µm	ASTM D7647	>5000	416	2359	1657
Particles >14µm	ASTM D7647	>640	22	151	69
Particles >21µm	ASTM D7647	>160	4	38	10
Particles >38µm	ASTM D7647	>40	0	1	1
Particles >71µm	ASTM D7647	>10	0	0	0
Oil Cleanliness	ISO 4406 (c)	>21/19/16	18/16/12	21/18/14	20/18/13

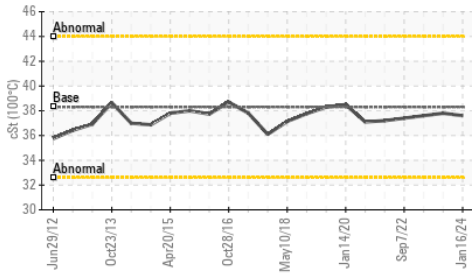
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.85	1.30	1.15	1.14

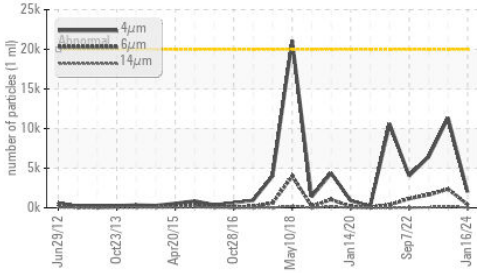


OIL ANALYSIS REPORT

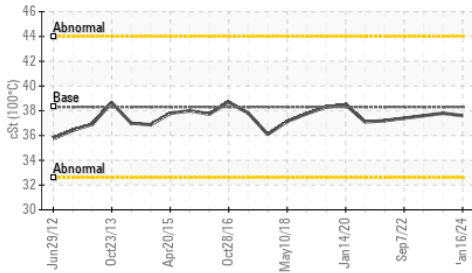
Viscosity @ 100°C



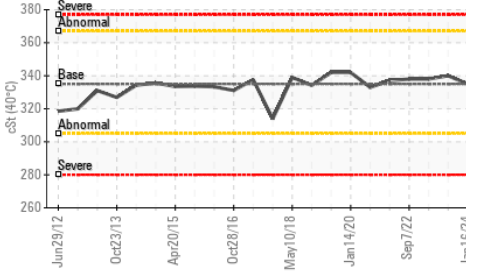
Particle Trend



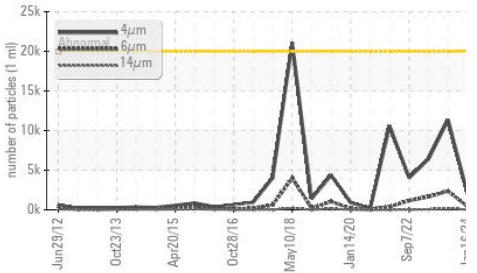
Viscosity @ 100°C



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	340	338
Visc @ 100°C	cSt	ASTM D445	37.6	37.8	37.6
Viscosity Index (VI)	Scale	ASTM D2270	161	160	160

SAMPLE IMAGES	method	limit/base	current	history1	history2
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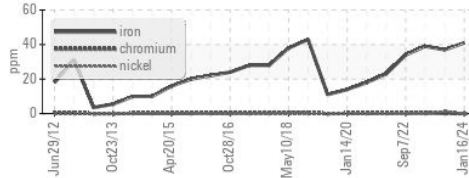
Color

Bottom

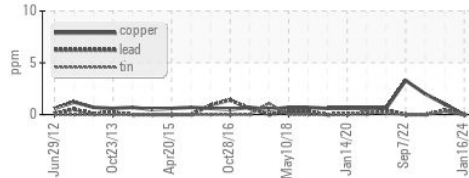


GRAPHS

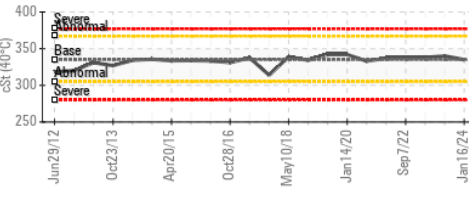
Ferrous Alloys



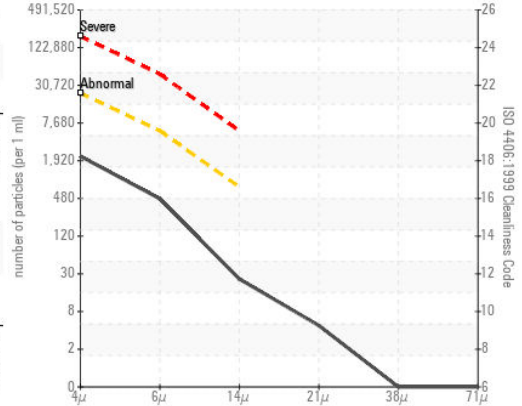
Non-ferrous Metals



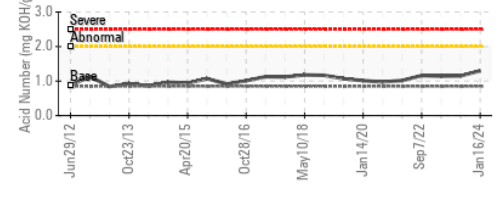
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : WC0807517 Received : 24 Apr 2024
 Lab Number : 06159101 Tested : 26 Apr 2024
 Unique Number : 10994524 Diagnosed : 26 Apr 2024 - Jonathan Hester
 Test Package : PLANT (Additional Tests: KV100, VI)

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: