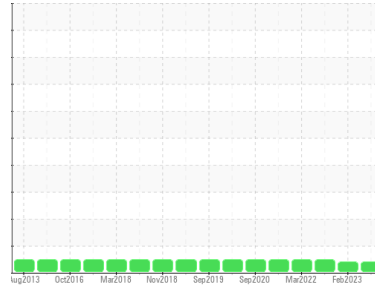




OIL ANALYSIS REPORT

Sample Rating Trend



ADDITIVES



Machine Id
HY/1WM

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

Additive levels indicate the addition of a different brand, or type of oil. Confirm oil type. The AN level is acceptable for this fluid.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0807338	WC0695080	WC0695277
Sample Date	Client Info		11 Mar 2024	21 Feb 2023	21 Oct 2022
Machine Age	hrs	Client Info	0	0	0
Oil Age	hrs	Client Info	12360	3144	192
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ATTENTION	ATTENTION	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>200	21	6	3
Chromium	ppm	ASTM D5185m	>15	<1	0	0
Nickel	ppm	ASTM D5185m	>15	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	2	<1	0
Lead	ppm	ASTM D5185m	>100	1	<1	0
Copper	ppm	ASTM D5185m	>200	1	<1	<1
Tin	ppm	ASTM D5185m	>25	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	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	2
Calcium	ppm	ASTM D5185m	0	<1	23	0
Phosphorus	ppm	ASTM D5185m	485	297	328	413
Zinc	ppm	ASTM D5185m	0	11	18	13
Sulfur	ppm	ASTM D5185m		182	369	3813

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>50	13	12	9
Sodium	ppm	ASTM D5185m	>15	0	0	<1
Potassium	ppm	ASTM D5185m	>20	2	<1	<1
Water	%	ASTM D6304	>0.2	NEG	NEG	NEG

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	7392	752	120
Particles >6µm	ASTM D7647	>5000	740	66	17
Particles >14µm	ASTM D7647	>640	34	8	2
Particles >21µm	ASTM D7647	>160	13	3	1
Particles >38µm	ASTM D7647	>40	1	0	1
Particles >71µm	ASTM D7647	>10	1	0	0
Oil Cleanliness	ISO 4406 (c)	>21/19/16	20/17/12	17/13/10	14/11/9

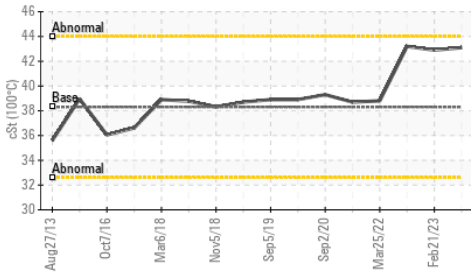
FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	0.85	0.70	0.66	0.71

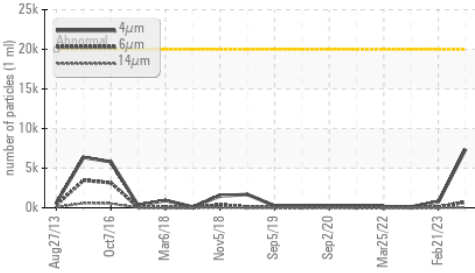


OIL ANALYSIS REPORT

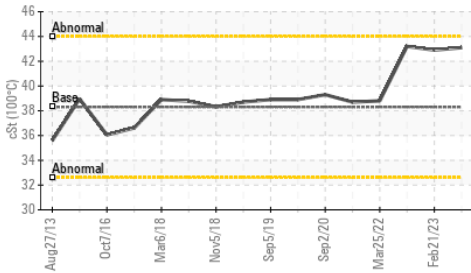
Viscosity @ 100°C



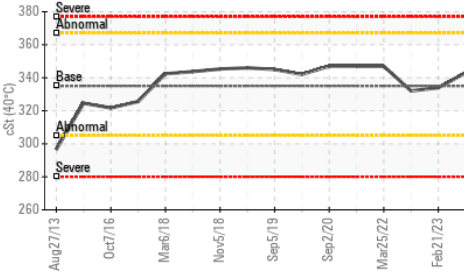
Particle Trend



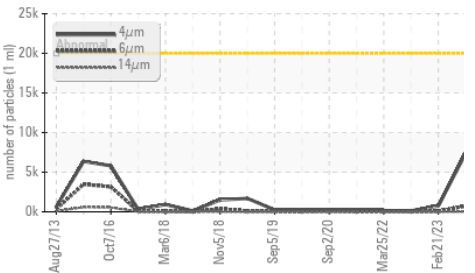
Viscosity @ 100°C



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	343	334
Visc @ 100°C	cSt	ASTM D445	38.3	43.1	42.9
Viscosity Index (VI)	Scale	ASTM D2270	164	182	185

SAMPLE IMAGES	method	limit/base	current	history1	history2
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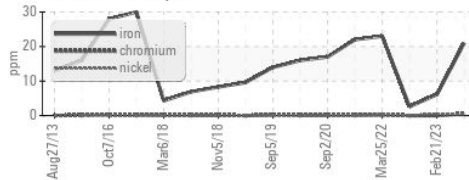
Color

Bottom

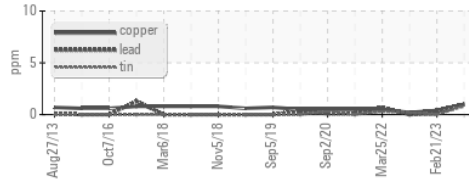


GRAPHS

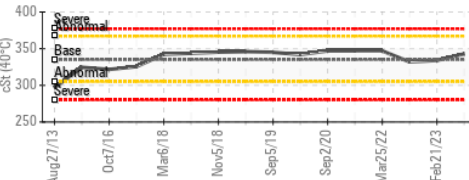
Ferrous Alloys



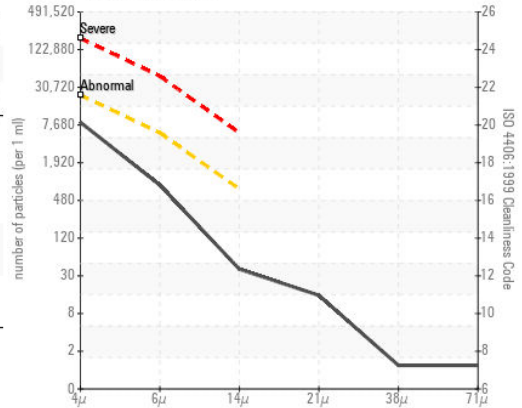
Non-ferrous Metals



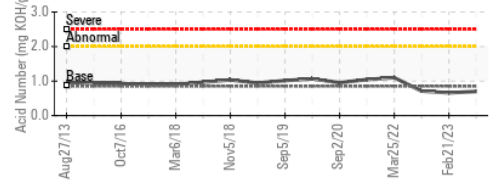
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

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

Sample No. : WC0807338

Lab Number : 06139778

Unique Number : 10964586

Test Package : PLANT (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)

Received : 05 Apr 2024

Tested : 08 Apr 2024

Diagnosed : 08 Apr 2024 - Don Baldrige

JPHYTEC

JP
Contact: Service

T:

F: