



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**4WM/ST/JPBD**  
Component  
**Gearbox**  
Fluid  
**MOBIL MOBILGEAR SHC XMP 320 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0932106</b>	WC0807384	WC0807313
Sample Date		Client Info		<b>12 Apr 2024</b>	26 Sep 2023	18 Apr 2023
Machine Age	mths	Client Info		<b>0</b>	0	33
Oil Age	mths	Client Info		<b>43</b>	37	0
Filter Age	mths	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	<b>26</b>	21	23
Chromium	ppm	ASTM D5185m	>15	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>15	<b>0</b>	1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>0</b>	0	0
Lead	ppm	ASTM D5185m	>100	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m	>200	<b>&lt;1</b>	0	<1
Tin	ppm	ASTM D5185m	>25	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

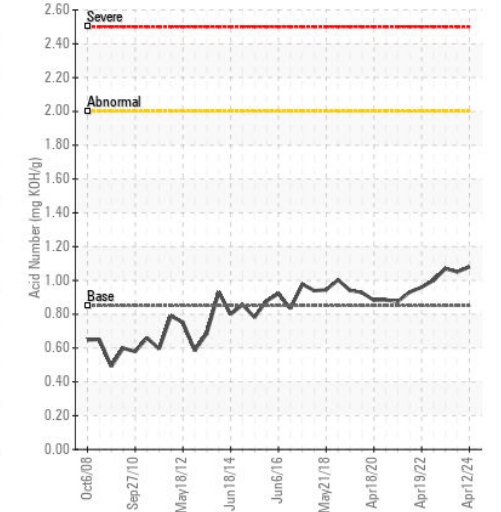
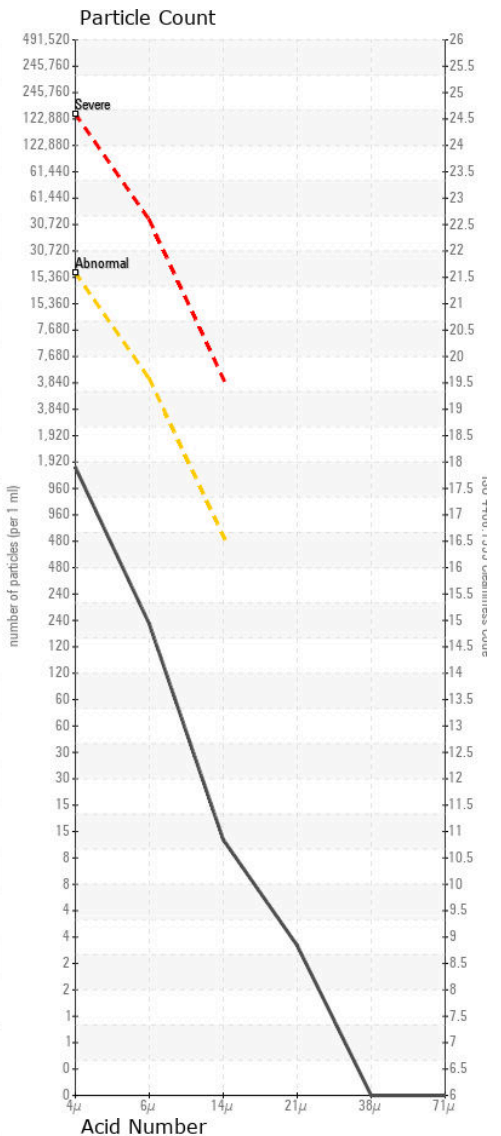
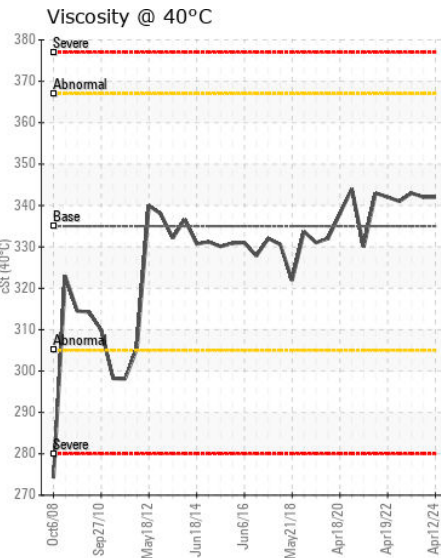
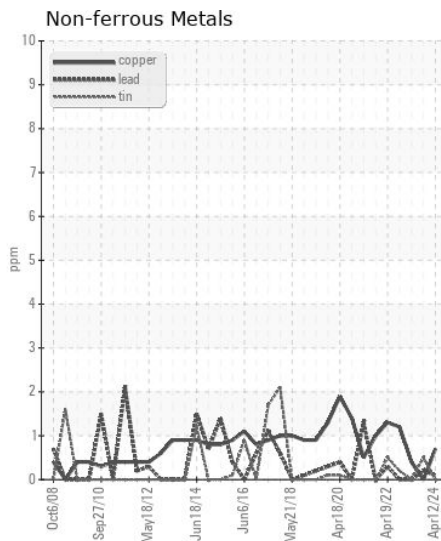
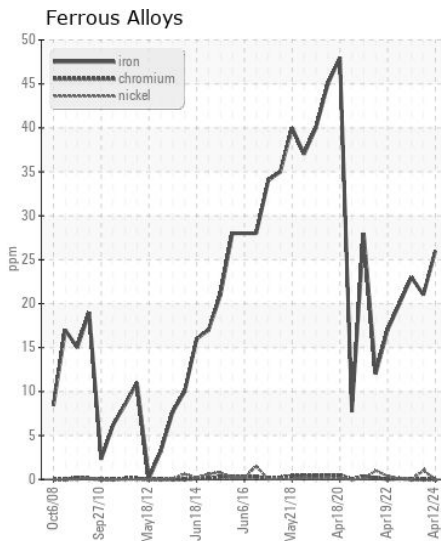
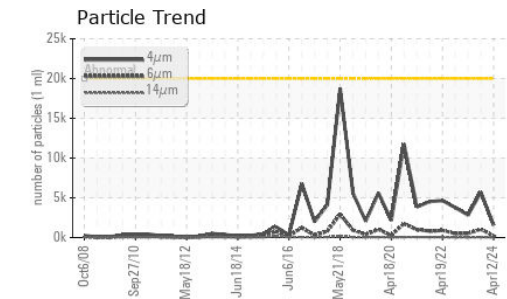
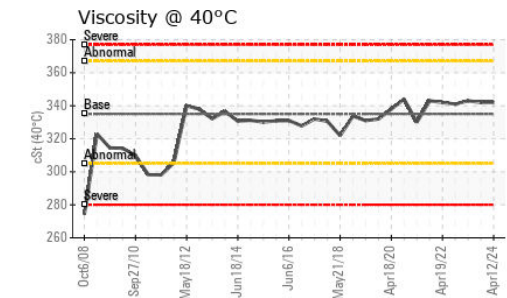
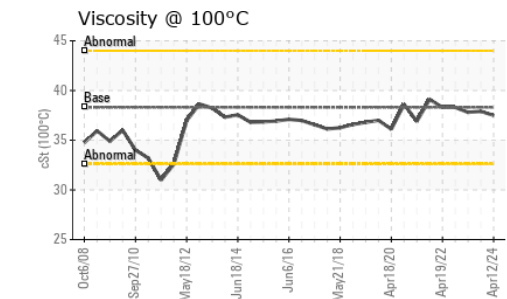
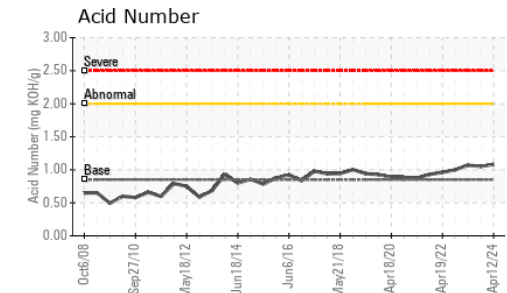
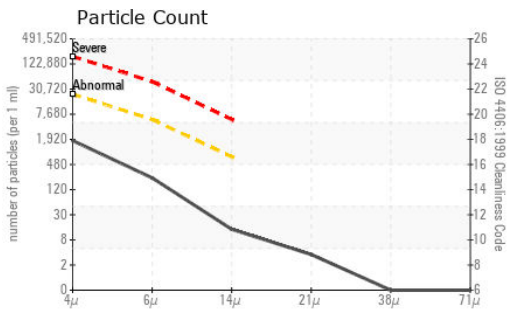
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	<b>12</b>	12	9
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	2	<1
Water	%	ASTM D6304	>0.2	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>20000	<b>1570</b>	5692	2832
Particles >6µm		ASTM D7647	>5000	<b>202</b>	1043	519
Particles >14µm		ASTM D7647	>640	<b>12</b>	41	21
Particles >21µm		ASTM D7647	>160	<b>3</b>	9	5
Particles >38µm		ASTM D7647	>40	<b>0</b>	1	1
Particles >71µm		ASTM D7647	>10	<b>0</b>	0	1
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<b>18/15/11</b>	20/17/13	19/16/12
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	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	>15	<b>2</b>	0	0
Boron	ppm	ASTM D5185m	0	<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Calcium	ppm	ASTM D5185m	0	<b>0</b>	1	0
Phosphorus	ppm	ASTM D5185m	485	<b>506</b>	440	483
Zinc	ppm	ASTM D5185m	0	<b>10</b>	0	<1
Sulfur	ppm	ASTM D5185m		<b>5850</b>	4518	5771
Acid Number (AN)	mg KOH/g	ASTM D8045	0.85	<b>1.08</b>	1.05	1.07
Visc @ 40°C	cSt	ASTM D445	335	<b>342</b>	342	343
Visc @ 100°C	cSt	ASTM D445	38.3	<b>37.5</b>	37.9	37.8
Viscosity Index (VI)	Scale	ASTM D2270	164	<b>158</b>	159	159



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0932106 **Received** : 23 May 2024  
**Lab Number** : 06189161 **Tested** : 28 May 2024  
**Unique Number** : 11045913 **Diagnosed** : 28 May 2024 - Don Baldrige  
**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)

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 F: