



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id  
**1WM/ST/JPBD**  
Component  
**Gearbox**  
Fluid  
**MOBIL MOBILGEAR SHC XMP 320 (--- GAL)**

## RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0932103</b>	WC0807381	WC0807316
Sample Date		Client Info		<b>13 May 2024</b>	30 Oct 2023	09 May 2023
Machine Age	mths	Client Info		<b>0</b>	0	0
Oil Age	mths	Client Info		<b>30</b>	100	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>ABNORMAL</b>	NORMAL	ABNORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	<b>19</b>	18	26
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>0</b>	<1	0
Copper	ppm	ASTM D5185m	>200	<b>7</b>	5	3
Tin	ppm	ASTM D5185m	>25	<b>0</b>	0	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

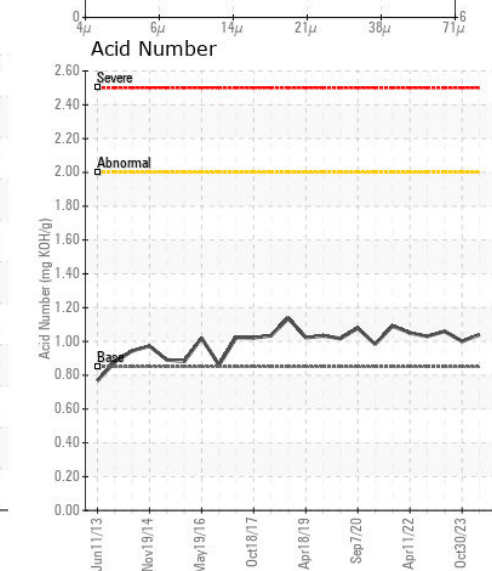
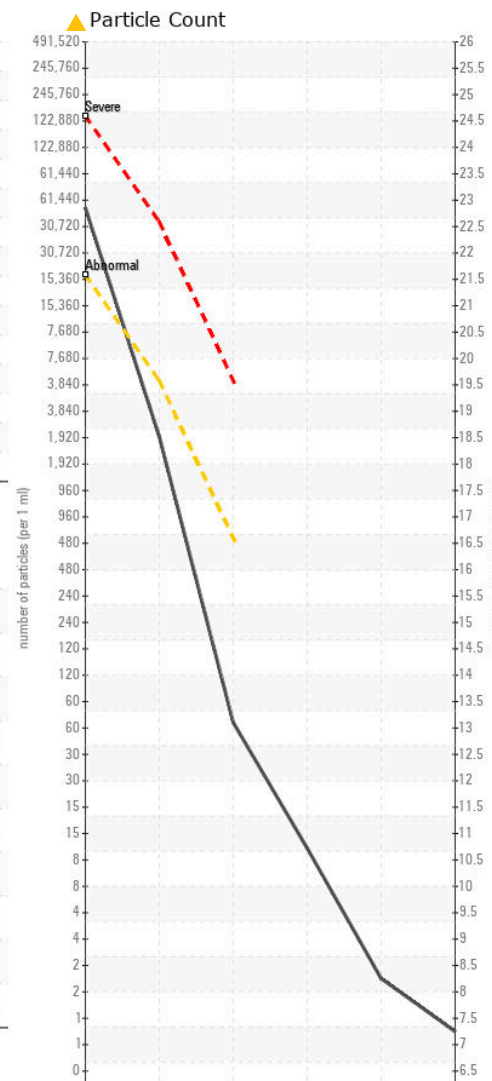
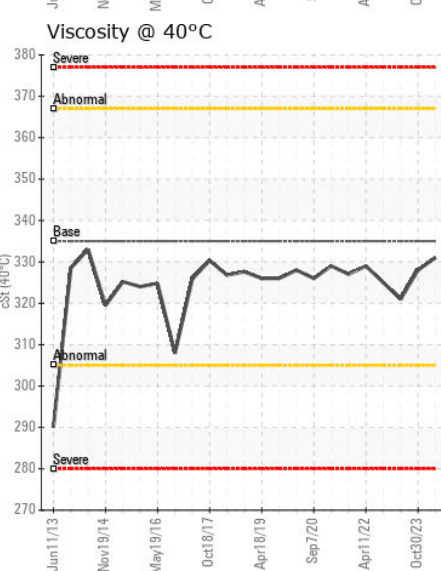
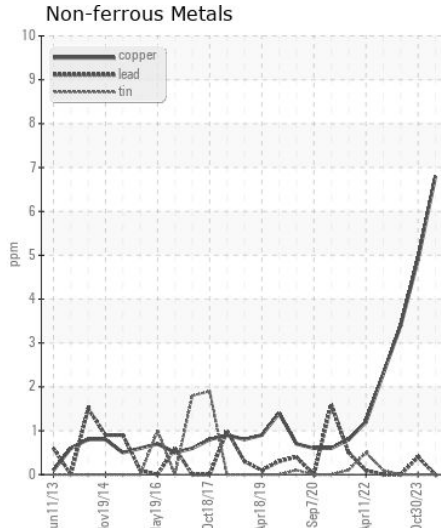
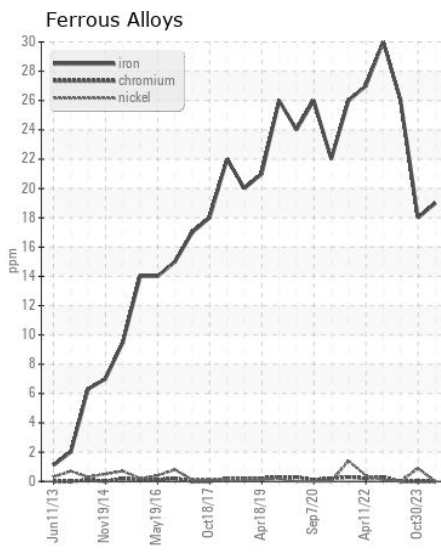
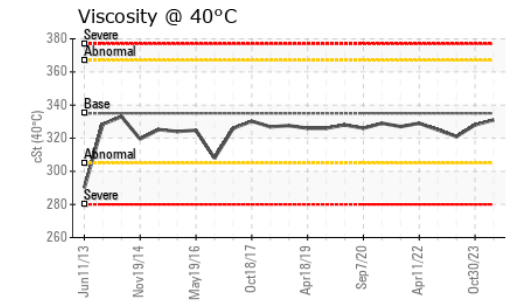
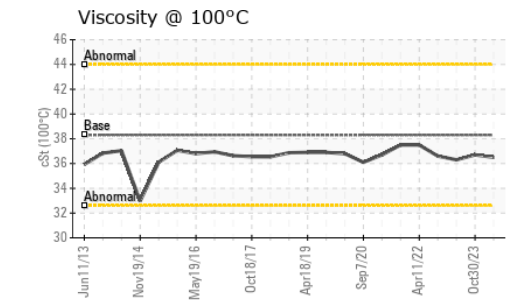
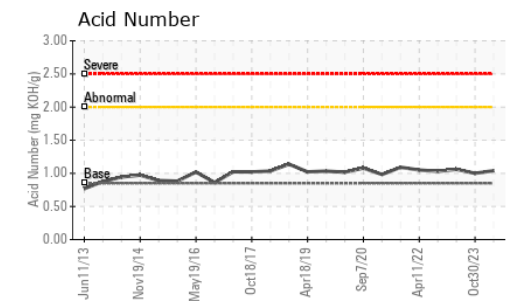
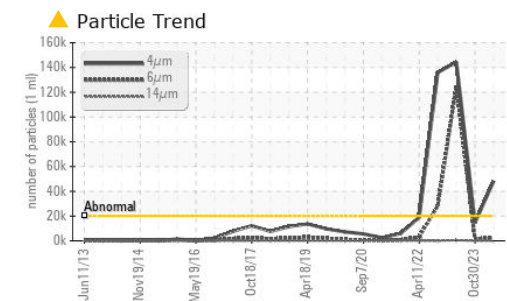
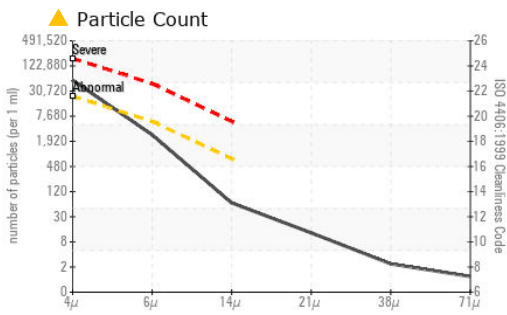
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>50	<b>12</b>	11	10
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	2	<1
Water	%	ASTM D6304	>0.2	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>20000	<b>▲ 48209</b>	14563	▲ 144334
Particles >6µm		ASTM D7647	>5000	<b>2411</b>	1684	▲ 124804
Particles >14µm		ASTM D7647	>640	<b>57</b>	66	519
Particles >21µm		ASTM D7647	>160	<b>11</b>	12	12
Particles >38µm		ASTM D7647	>40	<b>2</b>	0	0
Particles >71µm		ASTM D7647	>10	<b>1</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<b>▲ 23/18/13</b>	21/18/13	▲ 24/24/16
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>1</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	<1
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Calcium	ppm	ASTM D5185m	0	<b>0</b>	1	0
Phosphorus	ppm	ASTM D5185m	485	<b>388</b>	346	404
Zinc	ppm	ASTM D5185m	0	<b>34</b>	25	21
Sulfur	ppm	ASTM D5185m		<b>5590</b>	4342	5579
Acid Number (AN)	mg KOH/g	ASTM D8045	0.85	<b>1.04</b>	1.00	1.06
Visc @ 40°C	cSt	ASTM D445	335	<b>331</b>	328	321
Visc @ 100°C	cSt	ASTM D445	38.3	<b>36.5</b>	36.7	36.3
Viscosity Index (VI)	Scale	ASTM D2270	164	<b>157</b>	159	160



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0932103 **Received** : 23 May 2024  
**Lab Number** : 06189158 **Tested** : 28 May 2024  
**Unique Number** : 11045910 **Diagnosed** : 28 May 2024 - Don Baldrige  
**Test Package** : PLANT ( Additional Tests: KV100, VI )

**JPHYTEC**  
 JP  
 Contact: Service

Certificate L2367  
 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)