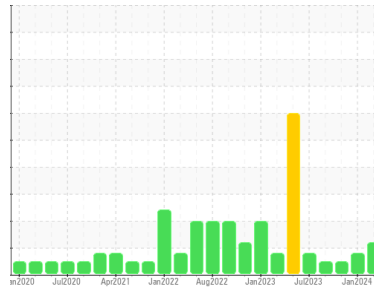




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
**PADDLE MIXERS**

Machine Id  
**M-641**

Component  
**Gearbox**

Fluid  
**MOBIL MOBILGEAR 600 XP 320 (15 GAL)**

## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

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

### 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		<b>WC0929827</b>	WC0896632	WC0871609
Sample Date	Client Info		<b>09 Apr 2024</b>	12 Jan 2024	23 Oct 2023
Machine Age	mths	Client Info	<b>26</b>	26	26
Oil Age	mths	Client Info	<b>3</b>	12	9
Oil Changed	Client Info		<b>N/A</b>	N/A	Not Changd
Sample Status			<b>ABNORMAL</b>	ABNORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>200	<b>149</b>	138	115
Chromium	ppm	ASTM D5185m	>15	<b>&lt;1</b>	1	1
Nickel	ppm	ASTM D5185m	>15	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>0</b>	1	0
Lead	ppm	ASTM D5185m	>100	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>200	<b>4</b>	4	1
Tin	ppm	ASTM D5185m	>25	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		<b>35</b>	35	27
Barium	ppm	ASTM D5185m		<b>2</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>1</b>	<1	1
Magnesium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	4
Calcium	ppm	ASTM D5185m		<b>8</b>	7	6
Phosphorus	ppm	ASTM D5185m		<b>266</b>	296	310
Zinc	ppm	ASTM D5185m		<b>&lt;1</b>	0	12
Sulfur	ppm	ASTM D5185m		<b>9830</b>	9551	9772

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>50	<b>2</b>	1	<1
Sodium	ppm	ASTM D5185m		<b>4</b>	2	0
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	<1	<1

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	<b>▲ 105622</b>	▲ 50183	21952
Particles >6µm	ASTM D7647	>5000	<b>▲ 18598</b>	4876	3357
Particles >14µm	ASTM D7647	>640	<b>308</b>	63	246
Particles >21µm	ASTM D7647	>160	<b>41</b>	14	25
Particles >38µm	ASTM D7647	>40	<b>1</b>	1	0
Particles >71µm	ASTM D7647	>10	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>21/19/16	<b>▲ 24/21/15</b>	▲ 23/19/13	22/19/15

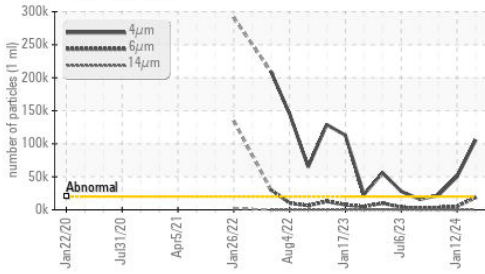
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>2.34</b>	2.19	1.67

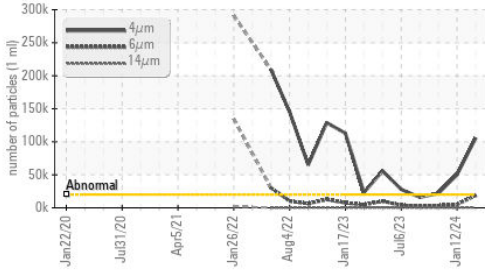


# OIL ANALYSIS REPORT

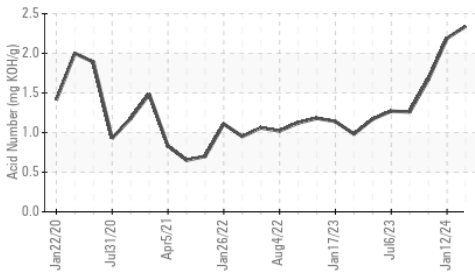
## ▲ Particle Trend



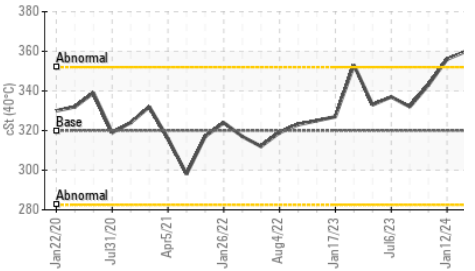
## ▲ Particle Trend



## Acid Number



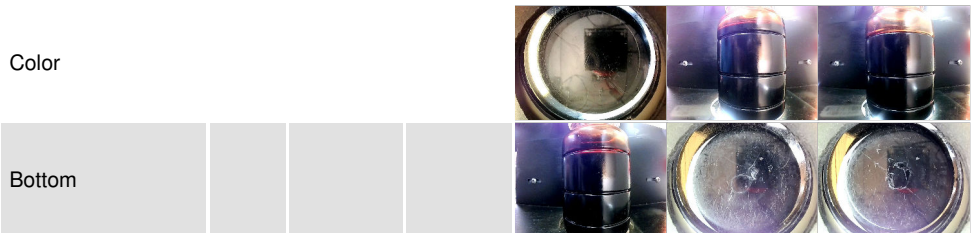
## Viscosity @ 40°C



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

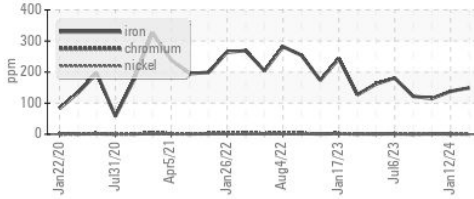
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	320	360	356

SAMPLE IMAGES	method	limit/base	current	history1	history2
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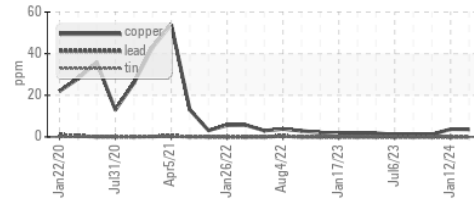


## GRAPHS

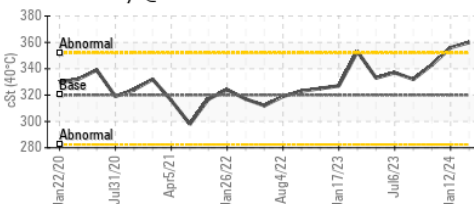
### Ferrous Alloys



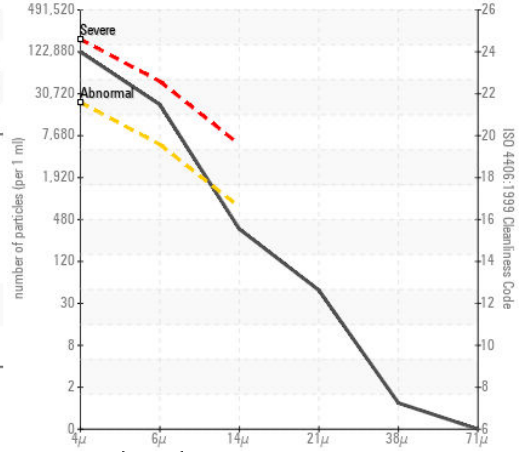
### Non-ferrous Metals



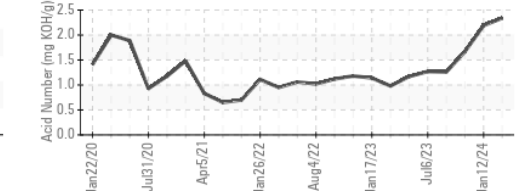
### Viscosity @ 40°C



### ▲ Particle Count



### Acid Number



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0929827 **Received** : 11 Apr 2024  
**Lab Number** : 06145826 **Tested** : 12 Apr 2024  
**Unique Number** : 10975904 **Diagnosed** : 15 Apr 2024 - Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: PrtCount )

**POET BIOREFINING - Groton**  
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 T: 6(05) 846-6863  
 F: (605)397-2754

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)