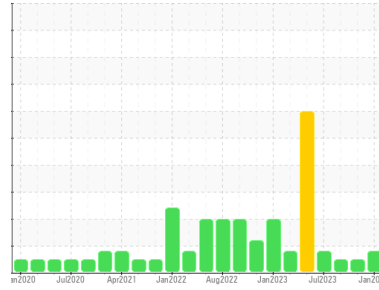




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
**PADDLE MIXERS**

Machine Id  
**M-641**

Component  
**Gearbox**

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

## DIAGNOSIS

### Recommendation

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

### Wear

All component wear rates are normal.

### Contamination

There is a high amount of silt (particulates < 6 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>WC0896632</b>	WC0871609	WC0844698
Sample Date	Client Info		<b>12 Jan 2024</b>	23 Oct 2023	07 Aug 2023
Machine Age	mths	Client Info	<b>26</b>	26	23
Oil Age	mths	Client Info	<b>12</b>	9	7
Oil Changed	Client Info		<b>N/A</b>	Not Changd	Not Changd
Sample Status			<b>ABNORMAL</b>	NORMAL	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>138</b>	115	122
Chromium	ppm	ASTM D5185m	>15	<b>1</b>	1	<1
Nickel	ppm	ASTM D5185m	>15	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>1</b>	0	<1
Lead	ppm	ASTM D5185m	>100	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>200	<b>4</b>	1	1
Tin	ppm	ASTM D5185m	>25	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		<b>35</b>	27	36
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	1	<1
Magnesium	ppm	ASTM D5185m		<b>&lt;1</b>	4	2
Calcium	ppm	ASTM D5185m		<b>7</b>	6	2
Phosphorus	ppm	ASTM D5185m		<b>296</b>	310	331
Zinc	ppm	ASTM D5185m		<b>0</b>	12	5
Sulfur	ppm	ASTM D5185m		<b>9551</b>	9772	11277

## CONTAMINANTS

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

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	<b>▲ 50183</b>	21952	15990
Particles >6µm	ASTM D7647	>5000	<b>4876</b>	3357	2400
Particles >14µm	ASTM D7647	>640	<b>63</b>	246	67
Particles >21µm	ASTM D7647	>160	<b>14</b>	25	8
Particles >38µm	ASTM D7647	>40	<b>1</b>	0	0
Particles >71µm	ASTM D7647	>10	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>21/19/16	<b>▲ 23/19/13</b>	22/19/15	21/18/13

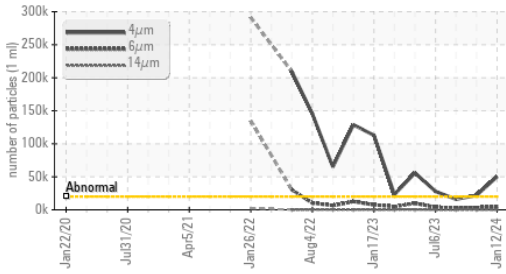
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>2.19</b>	1.67	1.26

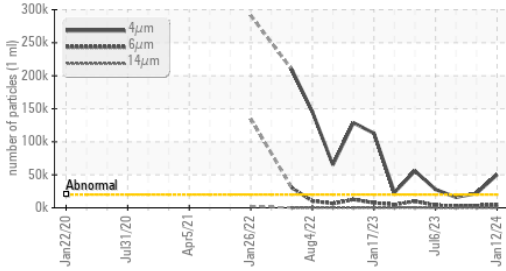


# OIL ANALYSIS REPORT

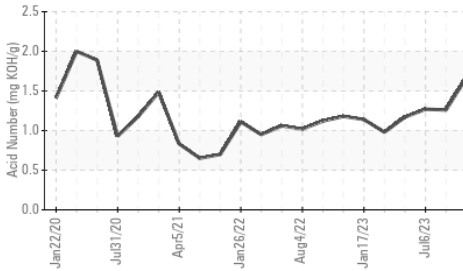
▲ Particle Trend



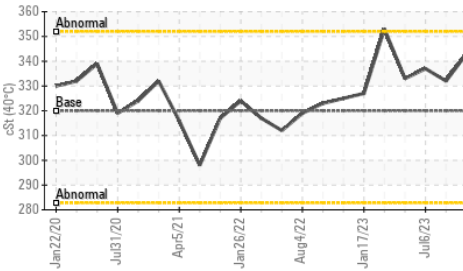
▲ Particle Trend



Acid Number



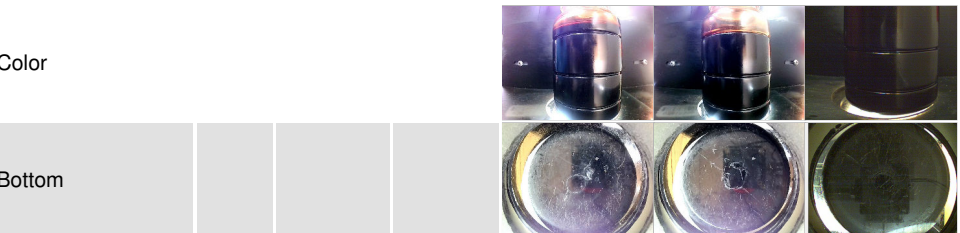
Viscosity @ 40°C



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

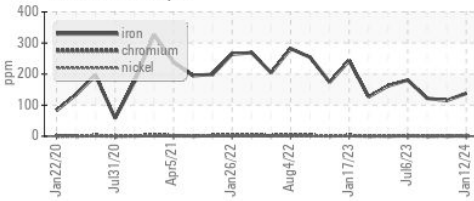
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	320	356	343

SAMPLE IMAGES

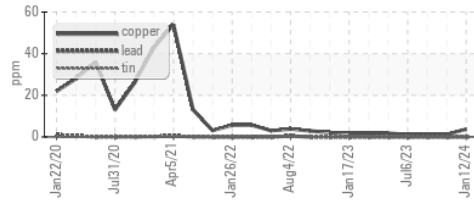


GRAPHS

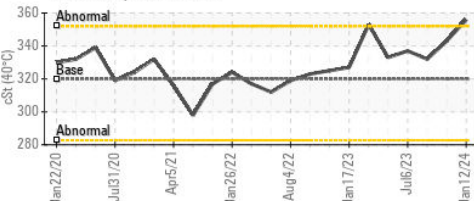
Ferrous Alloys



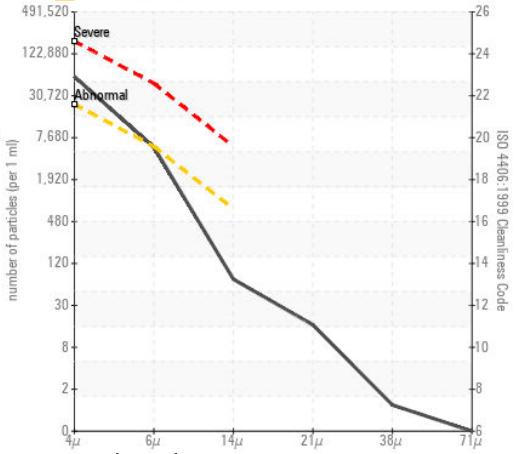
Non-ferrous Metals



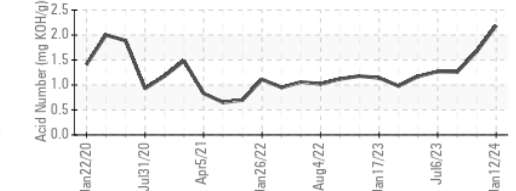
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : WC0896632      Recieved : 17 Jan 2024  
 Lab Number : 06062618      Diagnosed : 19 Jan 2024  
 Unique Number : 10834000      Diagnostician : Jonathan Hester  
 Test Package : IND 2 ( Additional Tests: PrtCount )

**POET BIOREFINING - Groton**  
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 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)