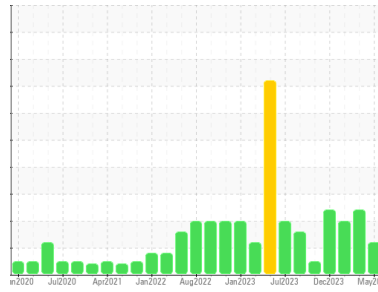




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
**PADDLE MIXERS**

Machine Id  
**M-611**

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 < 14 microns in size) present in the oil.

### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0929834</b>	WC0929826	WC0896631
Sample Date	Client Info		<b>09 May 2024</b>	09 Apr 2024	12 Jan 2024
Machine Age	mths	Client Info	<b>3</b>	3	3
Oil Age	mths	Client Info	<b>1</b>	3	3
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## 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>95</b>	▲ 304	141
Chromium	ppm	ASTM D5185m >15	<b>1</b>	3	1
Nickel	ppm	ASTM D5185m >15	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>2</b>	0	1
Lead	ppm	ASTM D5185m >100	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m >200	<b>3</b>	0	<1
Tin	ppm	ASTM D5185m >25	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>29</b>	30	30
Barium	ppm	ASTM D5185m	<b>0</b>	11	9
Molybdenum	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	2	1
Magnesium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Calcium	ppm	ASTM D5185m	<b>4</b>	9	13
Phosphorus	ppm	ASTM D5185m	<b>364</b>	316	366
Zinc	ppm	ASTM D5185m	<b>4</b>	2	0
Sulfur	ppm	ASTM D5185m	<b>10819</b>	10539	10716

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	<b>7</b>	9	9
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	3	3
Potassium	ppm	ASTM D5185m >20	<b>2</b>	<1	2

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	▲ <b>54400</b>	▲ 100062	▲ 68835
Particles >6µm	ASTM D7647	>5000	● <b>7269</b>	▲ 17764	▲ 8368
Particles >14µm	ASTM D7647	>640	<b>602</b>	▲ 1504	▲ 651
Particles >21µm	ASTM D7647	>160	<b>153</b>	477	▲ 215
Particles >38µm	ASTM D7647	>40	<b>3</b>	12	4
Particles >71µm	ASTM D7647	>10	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>21/19/16	▲ <b>23/20/16</b>	▲ 24/21/18	▲ 23/20/17

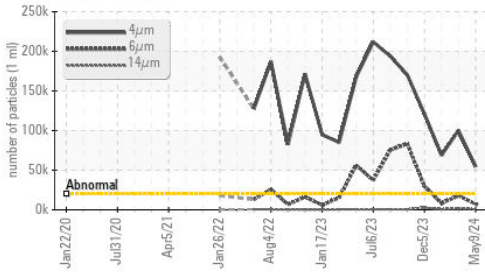
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>1.10</b>	1.15	1.03

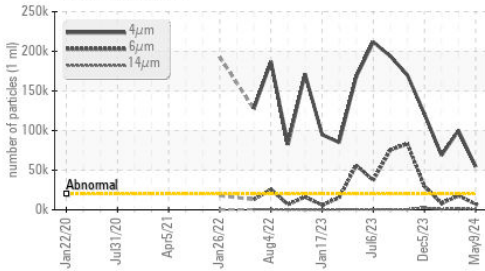


# OIL ANALYSIS REPORT

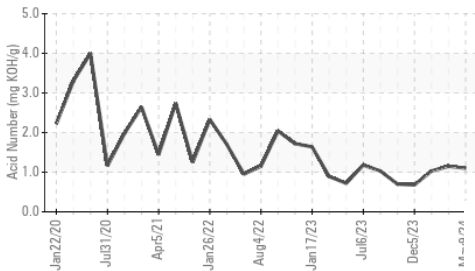
▲ Particle Trend



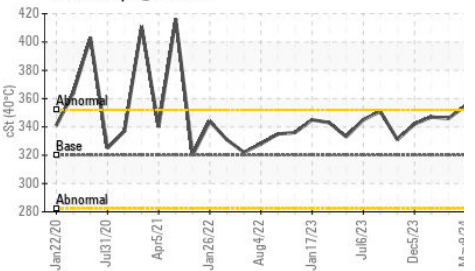
▲ Particle Trend



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	LIGHT
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	355	346

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

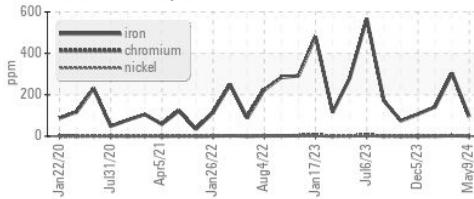


Bottom

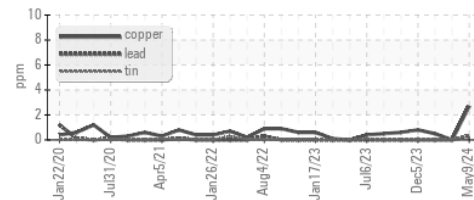


## GRAPHS

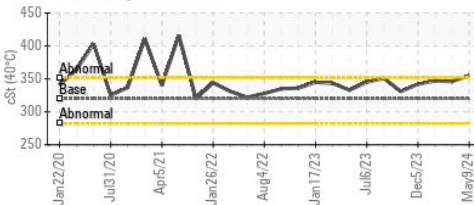
Ferrous Alloys



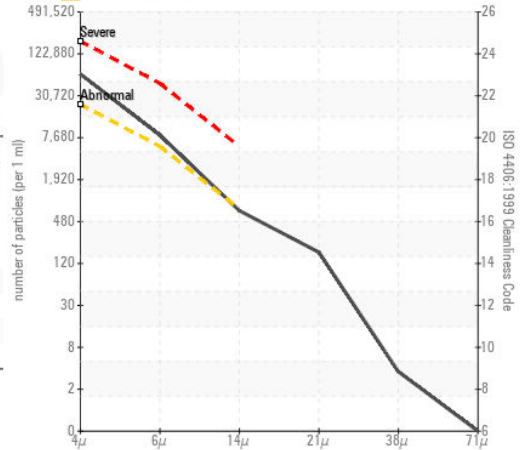
Non-ferrous Metals



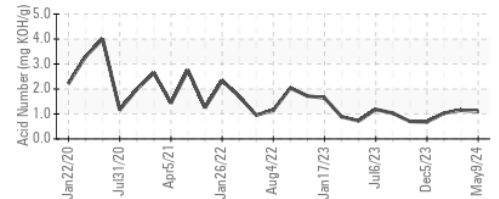
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

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

Sample No. : WC0929834

Lab Number : 06180149

Unique Number : 11031475

Test Package : IND 2 ( Additional Tests: PrtCount )

Received : 15 May 2024

Tested : 16 May 2024

Diagnosed : 17 May 2024 - Angela Borella

POET BIOREFINING - Groton

40425 133RD STREET

GROTON, SD

US 57445-6400

Contact: GAVIN KRUEGER

Gavin.Krueger@POET.COM

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)