



# OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Machine Id  
**A-615**

Component  
**Gearbox**

Fluid  
**MOBIL SHC 630 (--- GAL)**

## DIAGNOSIS

### Recommendation

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 oil viscosity is lower than normal. Confirmed.  
The AN level is acceptable for this fluid.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>USP0008209</b>	USP243188	---
Sample Date	Client Info		<b>26 Mar 2024</b>	07 Jun 2023	---
Machine Age	hrs	Client Info	<b>0</b>	0	---
Oil Age	hrs	Client Info	<b>0</b>	0	---
Oil Changed	Client Info		<b>N/A</b>	N/A	---
Sample Status			<b>ABNORMAL</b>	ABNORMAL	---

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>200	<b>26</b>	51	---
Chromium	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185m	>15	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	---
Silver	ppm	ASTM D5185m		<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>25	<b>0</b>	0	---
Lead	ppm	ASTM D5185m	>100	<b>0</b>	0	---
Copper	ppm	ASTM D5185m	>200	<b>0</b>	<1	---
Tin	ppm	ASTM D5185m	>25	<b>&lt;1</b>	0	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	---
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		<b>2</b>	0	---
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	---
Manganese	ppm	ASTM D5185m		<b>2</b>	3	---
Magnesium	ppm	ASTM D5185m		<b>1</b>	0	---
Calcium	ppm	ASTM D5185m		<b>10</b>	3	---
Phosphorus	ppm	ASTM D5185m		<b>654</b>	629	---
Zinc	ppm	ASTM D5185m		<b>16</b>	10	---
Sulfur	ppm	ASTM D5185m		<b>20643</b>	18366	---

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>50	<b>36</b>	34	---
Sodium	ppm	ASTM D5185m		<b>2</b>	4	---
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	<1	---
Water	%	ASTM D6304	>0.2	<b>0.002</b>	0.008	---
ppm Water	ppm	ASTM D6304	>2000	<b>23</b>	80.1	---

## FLUID CLEANLINESS

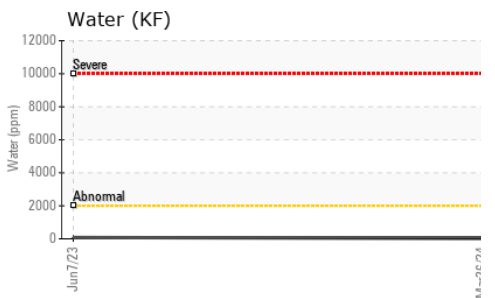
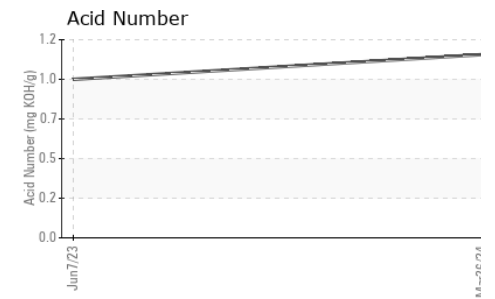
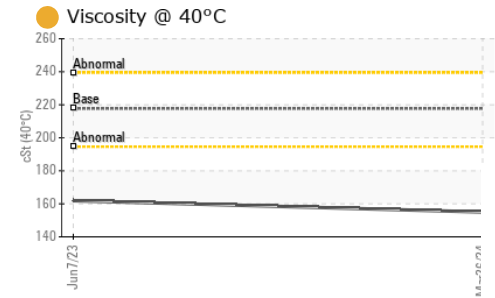
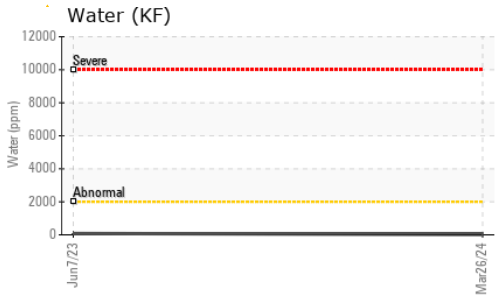
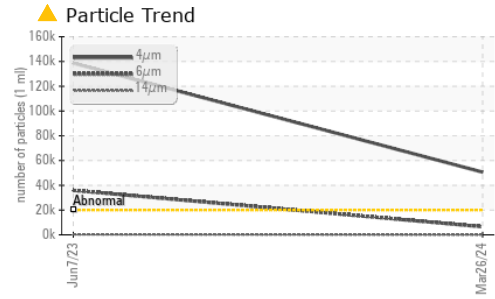
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	<b>▲ 50601</b>	▲ 138685	---
Particles >6µm	ASTM D7647	>5000	<b>● 6525</b>	▲ 35900	---
Particles >14µm	ASTM D7647	>640	<b>104</b>	315	---
Particles >21µm	ASTM D7647	>160	<b>19</b>	40	---
Particles >38µm	ASTM D7647	>40	<b>0</b>	1	---
Particles >71µm	ASTM D7647	>10	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c)	>21/19/16	<b>▲ 23/20/14</b>	▲ 24/22/15	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>1.11</b>	0.96	---



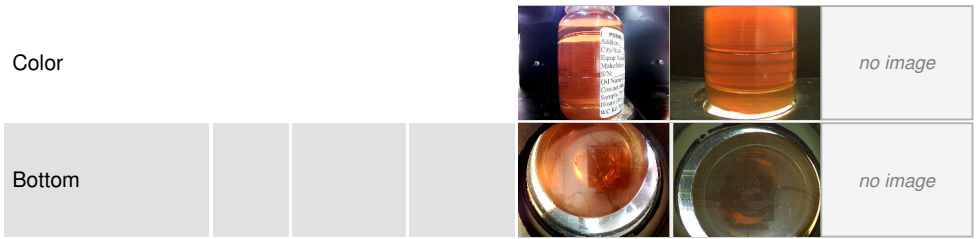
# OIL ANALYSIS REPORT



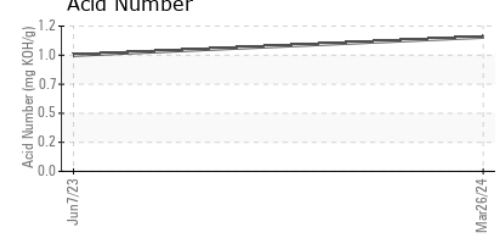
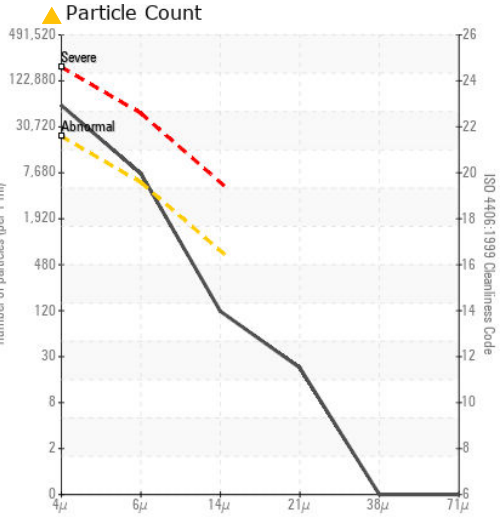
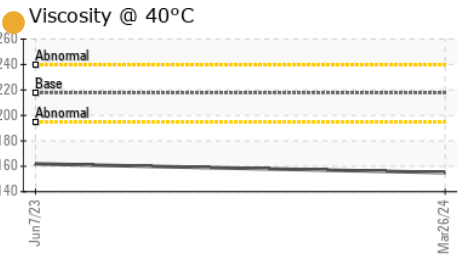
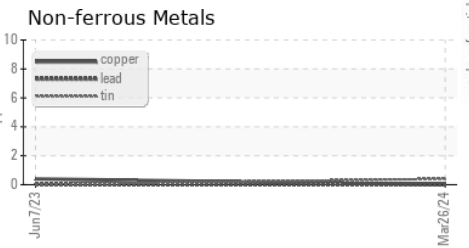
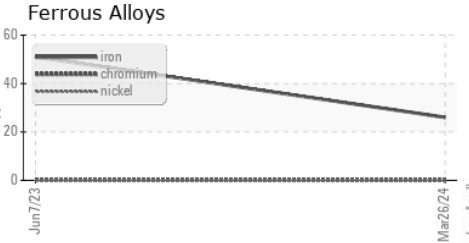
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	217.7 ● 155	161.9	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : USP0008209 **Received** : 01 Apr 2024  
**Lab Number** : 06135015 **Tested** : 02 Apr 2024  
**Unique Number** : 10954480 **Diagnosed** : 03 Apr 2024 - Doug Bogart  
**Test Package** : IND 2

**POET BIOPROCESSING**  
 3638 FIR AVE  
 HANLONTOWN, IA  
 US 50444  
 Contact: Service Manager

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)