

# OIL ANALYSIS REPORT

Sample Rating Trend



**DEGRADATION**



Machine Id  
**CHS WINONA 4TH FLOOR UNIT**  
Component  
**Hydraulic System**  
Fluid  
**MOBIL EAL 224H (--- GAL)**

**DIAGNOSIS**

**Recommendation**

We recommend that you drain the oil from the component if this has not already been done. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. Please submit a sample of the new (unused) oil to establish a baseline.

**Wear**

All component wear rates are normal.

**Contamination**

There is a trace of moisture present in the oil. The amount and size of particulates present in the system are acceptable.

**Fluid Condition**

The AN level is above the recommended limit.

**SAMPLE INFORMATION** method limit/base current history1 history2

Sample Number	Client Info	<b>Y2K0001547</b>	---	---
Sample Date	Client Info	<b>29 May 2024</b>	---	---
Machine Age	hrs	Client Info	<b>0</b>	---
Oil Age	hrs	Client Info	<b>0</b>	---
Oil Changed	Client Info	<b>Not Changed</b>	---	---
Sample Status		<b>ABNORMAL</b>	---	---

**WEAR METALS** method limit/base current history1 history2

Iron	ppm	ASTM D5185m	>20	<b>1</b>	---	---
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	---	---
Nickel	ppm	ASTM D5185m	>20	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185m		<b>0</b>	---	---
Silver	ppm	ASTM D5185m		<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>20	<b>1</b>	---	---
Lead	ppm	ASTM D5185m	>20	<b>&lt;1</b>	---	---
Copper	ppm	ASTM D5185m	>20	<b>2</b>	---	---
Tin	ppm	ASTM D5185m	>20	<b>&lt;1</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	---	---

**ADDITIVES** method limit/base current history1 history2

Boron	ppm	ASTM D5185m		<b>2</b>	---	---
Barium	ppm	ASTM D5185m		<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185m		<b>0</b>	---	---
Calcium	ppm	ASTM D5185m		<b>0</b>	---	---
Phosphorus	ppm	ASTM D5185m		<b>99</b>	---	---
Zinc	ppm	ASTM D5185m		<b>4</b>	---	---
Sulfur	ppm	ASTM D5185m		<b>0</b>	---	---

**CONTAMINANTS** method limit/base current history1 history2

Silicon	ppm	ASTM D5185m	>15	<b>1</b>	---	---
Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	---	---
Water	%	ASTM D6304	>0.05	<b>0.079</b>	---	---
ppm Water	ppm	ASTM D6304	>500	<b>797</b>	---	---

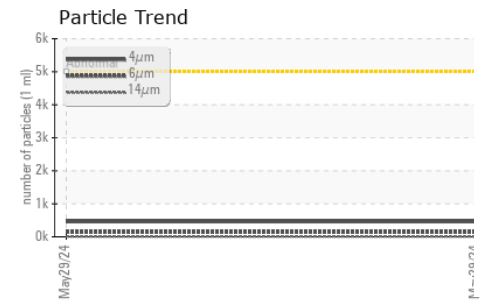
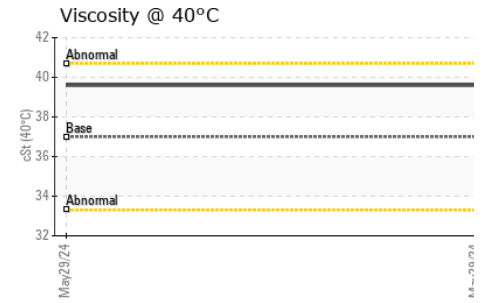
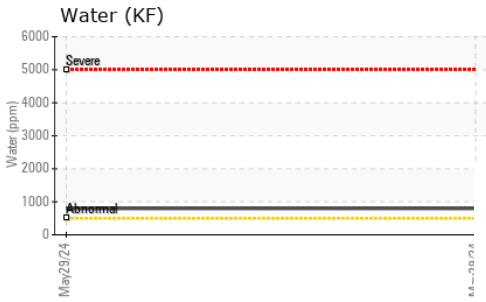
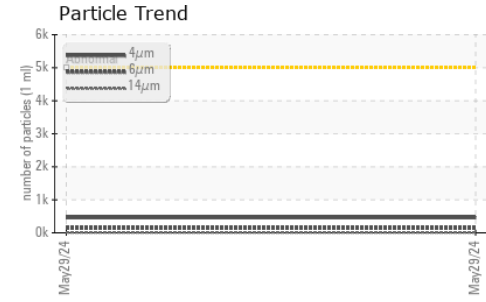
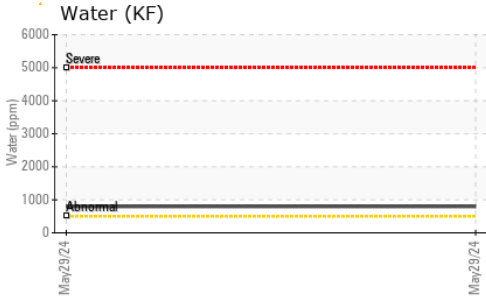
**FLUID CLEANLINESS** method limit/base current history1 history2

Particles >4µm	ASTM D7647	>5000	<b>461</b>	---	---
Particles >6µm	ASTM D7647	>1300	<b>143</b>	---	---
Particles >14µm	ASTM D7647	>160	<b>10</b>	---	---
Particles >21µm	ASTM D7647	>40	<b>2</b>	---	---
Particles >38µm	ASTM D7647	>10	<b>0</b>	---	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>16/14/10</b>	---	---

**FLUID DEGRADATION** method limit/base current history1 history2

Acid Number (AN)	mg KOH/g	ASTM D8045		<b>▲ 7.655</b>	---	---
------------------	----------	------------	--	----------------	-----	-----

# OIL ANALYSIS REPORT



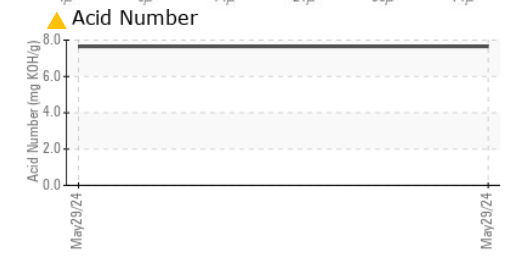
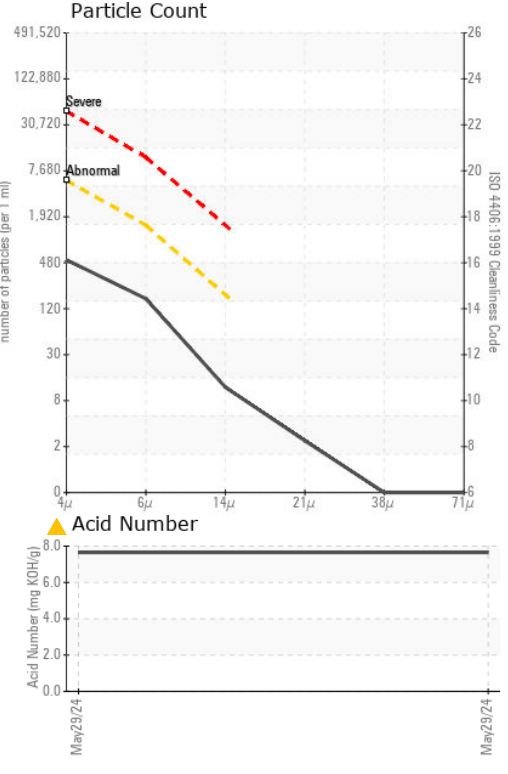
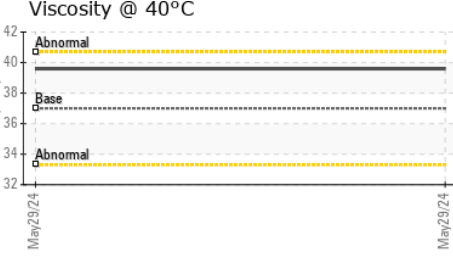
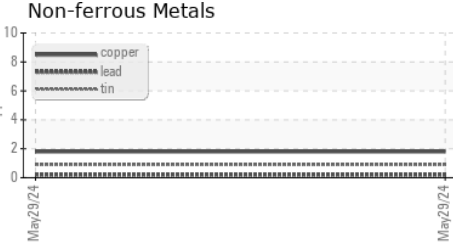
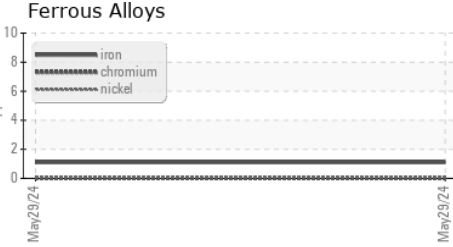
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.05	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	37	39.6	---

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

Color				no image	no image
Bottom				no image	no image

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : Y2K0001547  
**Lab Number** : 06210151  
**Unique Number** : 11083015  
**Test Package** : MOB 2 ( Additional Tests: KF )  
**Received** : 14 Jun 2024  
**Tested** : 19 Jun 2024  
**Diagnosed** : 19 Jun 2024 - Doug Bogart

**Y2K FLUID POWER**  
 3620 N LEWIS AVE  
 SIOUX FALLS, SD  
 US 57104  
 Contact: SERVICE MANAGER  
 sales@y2kfiltration.com

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)