

# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**PULL OUT**  
Component  
**Top Hydraulic System**  
Fluid  
**FUCHS RENOLIN UNISYN CLP 220 (--- GAL)**

## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. Please note that this is a corrected copy.

### Wear

All component wear rates are normal.

### Contamination

There is a high amount of particulates 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>FCH0000238</b>	---	---
Sample Date	Client Info	<b>13 Jun 2024</b>	---	---
Machine Age	hrs Client Info	<b>0</b>	---	---
Oil Age	hrs Client Info	<b>0</b>	---	---
Oil Changed	Client Info	<b>N/A</b>	---	---
Sample Status		<b>ABNORMAL</b>	---	---

## WEAR METALS

method	limit/base	current	history1	history2
Iron ppm ASTM D5185m	>20	<b>0</b>	---	---
Chromium ppm ASTM D5185m	>20	<b>0</b>	---	---
Nickel ppm ASTM D5185m	>20	<b>0</b>	---	---
Titanium ppm ASTM D5185m		<b>0</b>	---	---
Silver ppm ASTM D5185m		<b>0</b>	---	---
Aluminum ppm ASTM D5185m	>20	<b>0</b>	---	---
Lead ppm ASTM D5185m	>20	<b>0</b>	---	---
Copper ppm ASTM D5185m	>20	<b>0</b>	---	---
Tin ppm ASTM D5185m	>20	<b>0</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>10</b>	---	---
Barium ppm ASTM D5185m		<b>0</b>	---	---
Molybdenum ppm ASTM D5185m		<b>0</b>	---	---
Manganese ppm ASTM D5185m		<b>0</b>	---	---
Magnesium ppm ASTM D5185m		<b>&lt;1</b>	---	---
Calcium ppm ASTM D5185m		<b>11</b>	---	---
Phosphorus ppm ASTM D5185m		<b>212</b>	---	---
Zinc ppm ASTM D5185m		<b>4</b>	---	---
Sulfur ppm ASTM D5185m		<b>6262</b>	---	---

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm ASTM D5185m	>15	<b>&lt;1</b>	---	---
Sodium ppm ASTM D5185m		<b>0</b>	---	---
Potassium ppm ASTM D5185m	>20	<b>0</b>	---	---
Water % ASTM D6304	>0.05	<b>NEG</b>	---	---

## FLUID CLEANLINESS

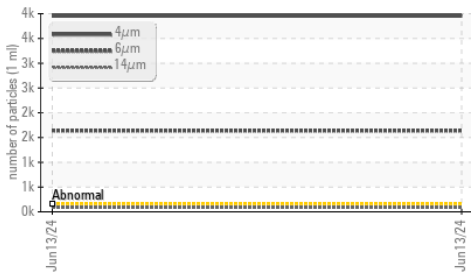
method	limit/base	current	history1	history2
Particles >4µm ASTM D7647	>160	<b>▲ 3953</b>	---	---
Particles >6µm ASTM D7647		<b>▲ 1639</b>	---	---
Particles >14µm ASTM D7647		<b>▲ 83</b>	---	---
Particles >21µm ASTM D7647	>3	<b>▲ 6</b>	---	---
Particles >38µm ASTM D7647	>3	<b>0</b>	---	---
Particles >71µm ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness ISO 4406 (c)	>14/6/4	<b>▲ 19/18/14</b>	---	---

## FLUID DEGRADATION

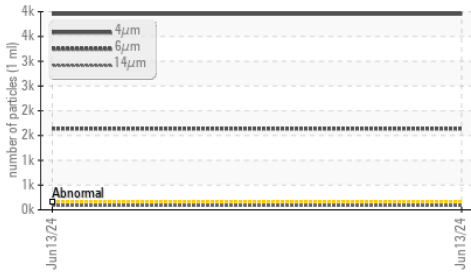
method	limit/base	current	history1	history2
Acid Number (AN) mg KOH/g ASTM D8045	0.6	<b>0.56</b>	---	---

# OIL ANALYSIS REPORT

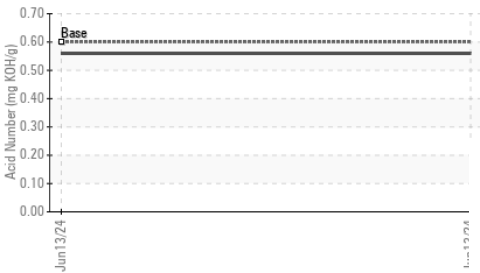
### ▲ Particle Trend



### ▲ Particle Trend



### Acid Number



### Viscosity @ 40°C



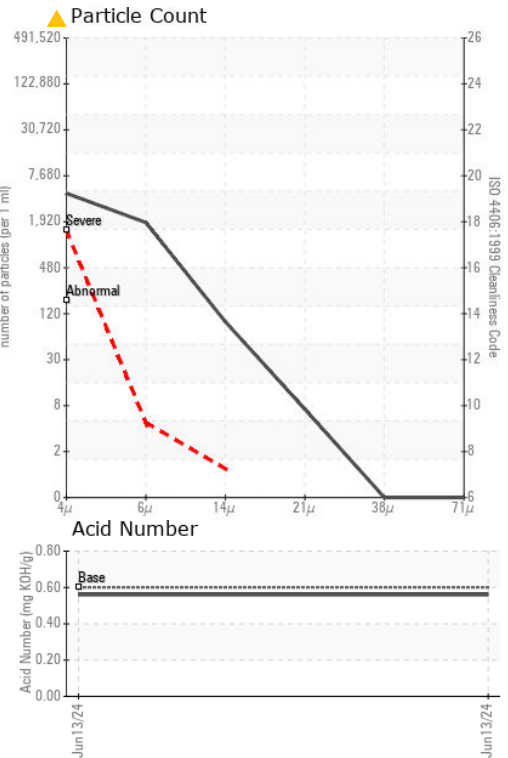
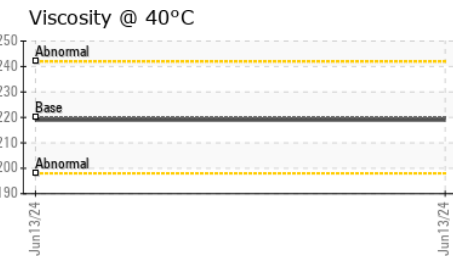
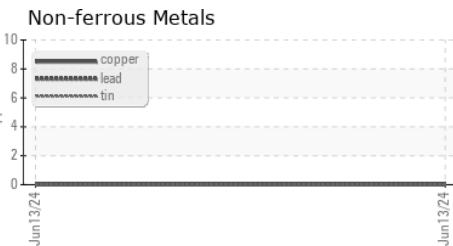
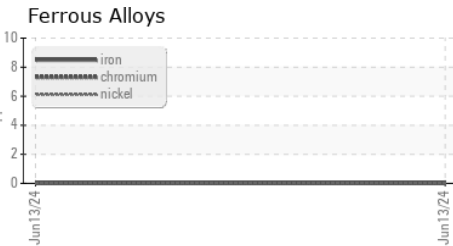
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
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 220	219	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color				no image	no image
Bottom				no image	no image

### GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : FCH0000238  
**Lab Number** : 06210077  
**Unique Number** : 11082941  
**Test Package** : PLANT

**Received** : 14 Jun 2024  
**Tested** : 27 Jun 2024  
**Diagnosed** : 27 Jun 2024 - Doug Bogart

**ATLAS TUBE**  
 5661 E STATE STREET HWY 137  
 BLYTHEVILLE, AR  
 US 72315  
 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)

T:  
F: