



# PROBLEM SUMMARY

Sample Rating Trend

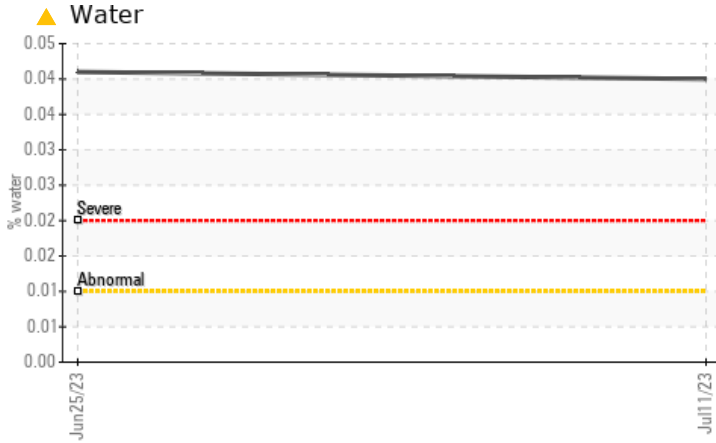
**WATER**



Machine Id  
**WC-8906-0201-5 Chiller #1**  
Component  
**Chiller**  
Fluid  
**YORK TYPE H (--- GAL)**



## COMPONENT CONDITION SUMMARY



## RECOMMENDATION

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

## PROBLEMATIC TEST RESULTS

Sample Status				<b>MARGINAL</b>	MARGINAL	---
Water	%	ASTM D6304	>0.01	▲ <b>0.040</b>	▲ 0.041	---
ppm Water	ppm	ASTM D6304	>100	▲ <b>404.4</b>	▲ 410.6	---

Customer Id: CHUANN  
Sample No.: WC0827382  
Lab Number: 05899350  
Test Package: PLANT



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Angela Borella +1 800-237-1369  
[angela.borella@wearcheckusa.com](mailto:angela.borella@wearcheckusa.com)

To change component or sample information:  
Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Resample	---	---	?	We recommend an early resample to monitor this condition.

## HISTORICAL DIAGNOSIS

25 Jun 2023 Diag: Jonathan Hester

### WATER



No corrective action is recommended at this time. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a light concentration of water present in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report





# OIL ANALYSIS REPORT

Sample Rating Trend

**WATER**



Machine Id  
**WC-8906-0201-5 Chiller #1**  
 Component  
**Chiller**  
 Fluid  
**YORK TYPE H (--- GAL)**



## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### Contamination

There is a light concentration of water present in the oil. The amount and size of particulates present in the system are acceptable.

### 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>WC0827382</b>	WC0784750	---
Sample Date	Client Info		<b>11 Jul 2023</b>	25 Jun 2023	---
Machine Age	hrs	Client Info	<b>81142</b>	80788	---
Oil Age	hrs	Client Info	<b>0</b>	0	---
Oil Changed		Client Info	<b>N/A</b>	N/A	---
Sample Status			<b>MARGINAL</b>	MARGINAL	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >8	<b>1</b>	1	---
Chromium	ppm	ASTM D5185m >2	<b>0</b>	0	---
Nickel	ppm	ASTM D5185m	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m	<b>0</b>	0	---
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m >3	<b>&lt;1</b>	0	---
Lead	ppm	ASTM D5185m >2	<b>0</b>	0	---
Copper	ppm	ASTM D5185m >8	<b>2</b>	2	---
Tin	ppm	ASTM D5185m >4	<b>0</b>	<1	---
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>0</b>	0	---
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	0	---
Manganese	ppm	ASTM D5185m 0	<b>0</b>	<1	---
Magnesium	ppm	ASTM D5185m 0	<b>1</b>	0	---
Calcium	ppm	ASTM D5185m 0	<b>0</b>	0	---
Phosphorus	ppm	ASTM D5185m 0	<b>11</b>	4	---
Zinc	ppm	ASTM D5185m 0	<b>0</b>	0	---
Sulfur	ppm	ASTM D5185m 0	<b>21</b>	18	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<b>12</b>	11	---
Sodium	ppm	ASTM D5185m	<b>0</b>	0	---
Potassium	ppm	ASTM D5185m >20	<b>0</b>	0	---
Water	%	ASTM D6304 >0.01	<b>▲ 0.040</b>	▲ 0.041	---
ppm Water	ppm	ASTM D6304 >100	<b>▲ 404.4</b>	▲ 410.6	---

## FLUID CLEANLINESS

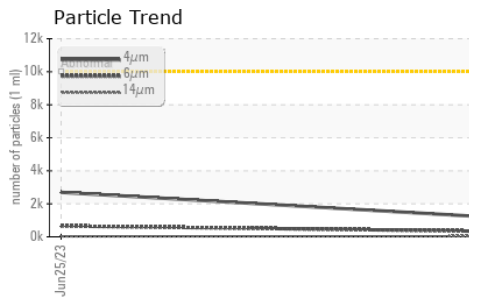
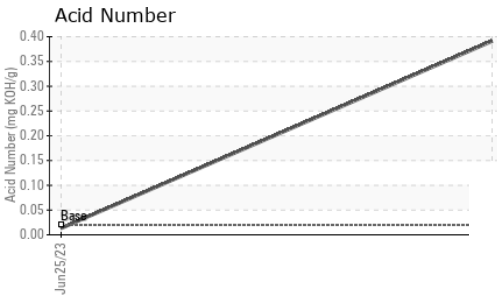
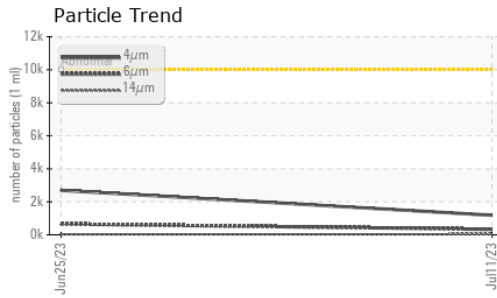
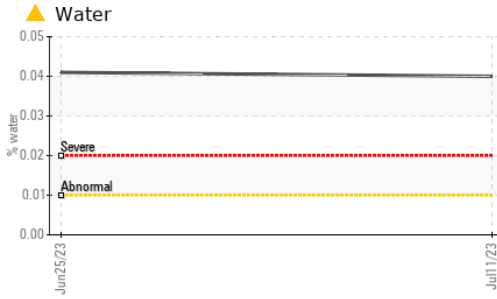
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	<b>1183</b>	2695	---
Particles >6µm	ASTM D7647	>2500	<b>333</b>	658	---
Particles >14µm	ASTM D7647	>320	<b>36</b>	29	---
Particles >21µm	ASTM D7647	>80	<b>11</b>	5	---
Particles >38µm	ASTM D7647	>20	<b>0</b>	0	---
Particles >71µm	ASTM D7647	>4	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c)	>20/18/15	<b>17/16/12</b>	19/17/12	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.02	<b>0.391</b>	0.013	---



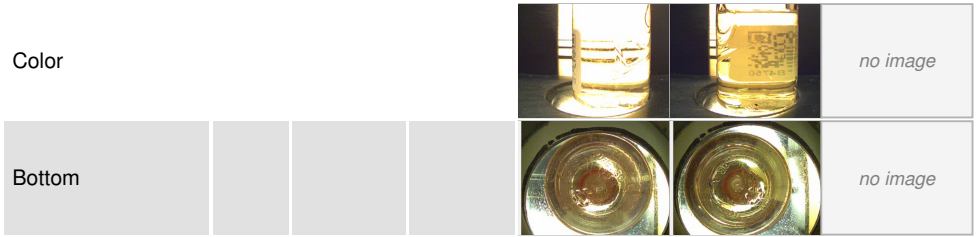
# OIL ANALYSIS REPORT



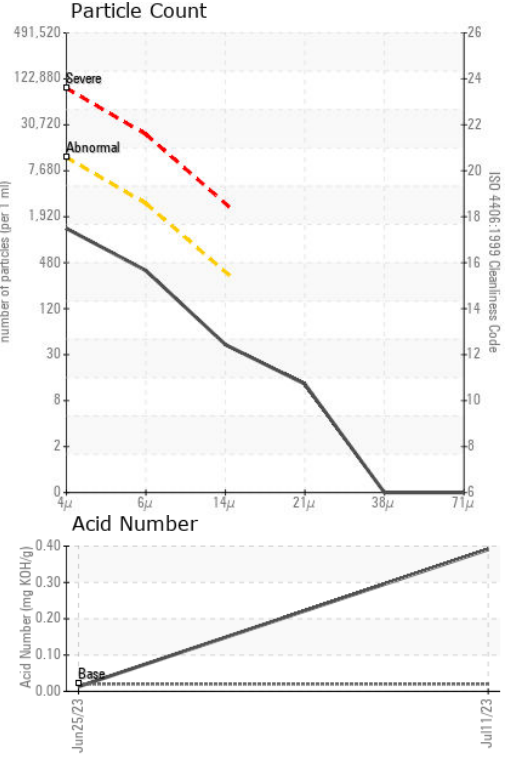
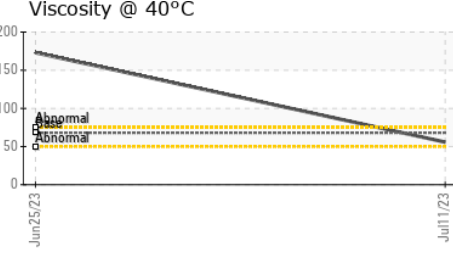
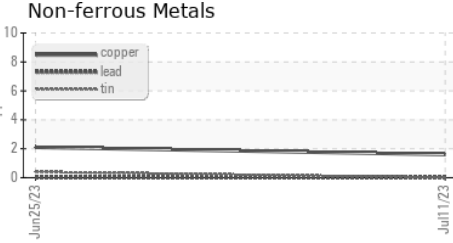
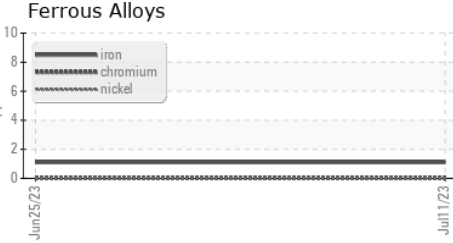
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.01	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	68.0	55.8	173

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0827382 **Received** : 14 Jul 2023  
**Lab Number** : 05899350 **Diagnosed** : 20 Jul 2023  
**Unique Number** : 10560706 **Diagnostician** : Angela Borella  
**Test Package** : PLANT

**Chugach Consolidated Solutions - NSA**  
 10840 Guilford Road, Suites 406-407  
 Annapolis Junction, MD  
 US 20701  
 Contact: Susan Nord  
 susan.nord@chugachgov.com  
 T: (301)688-6363  
 F: (443)479-5666

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)