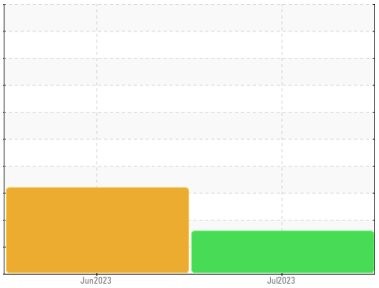
PROBLEM SUMMARY

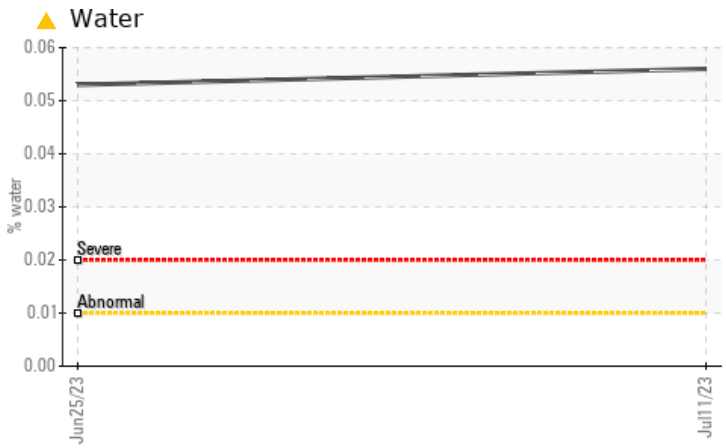
Sample Rating Trend



WATER

Machine Id
[] WC-9800-0103-5 Chiller #3
Component
Chiller
Fluid
YORK TYPE K (--- 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				**MARGINAL**	ABNORMAL	---
Water	%	ASTM D6304	>0.01	▲ **0.056**	▲ 0.053	---
ppm Water	ppm	ASTM D6304	>100	▲ **566.5**	▲ 530.9	---

Customer Id: CHUANN
Sample No.: WC0827381
Lab Number: 05899352
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

To change component or sample information:
Customer Service +1 1-800-237-1369
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

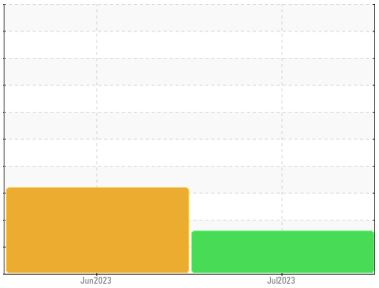
WATER

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. Elemental level of silicon (Si) above normal. 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-9800-0103-5 Chiller #3
Component
Chiller
Fluid
YORK TYPE K (--- 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		**WC0827381**	WC0827396	---
Sample Date		Client Info		**11 Jul 2023**	25 Jun 2023	---
Machine Age	hrs	Client Info		**31508**	31181	---
Oil Age	hrs	Client Info		**0**	0	---
Oil Changed		Client Info		**N/A**	N/A	---
Sample Status				**MARGINAL**	ABNORMAL	---

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

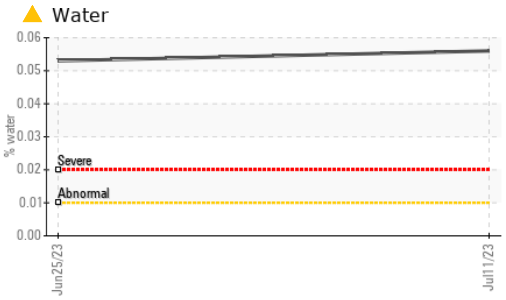
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	0	---
Barium	ppm	ASTM D5185m		**0**	0	---
Molybdenum	ppm	ASTM D5185m		**0**	0	---
Manganese	ppm	ASTM D5185m		**0**	<1	---
Magnesium	ppm	ASTM D5185m		**<1**	0	---
Calcium	ppm	ASTM D5185m		**0**	0	---
Phosphorus	ppm	ASTM D5185m		**4**	<1	---
Zinc	ppm	ASTM D5185m		**0**	0	---
Sulfur	ppm	ASTM D5185m		**0**	10	---

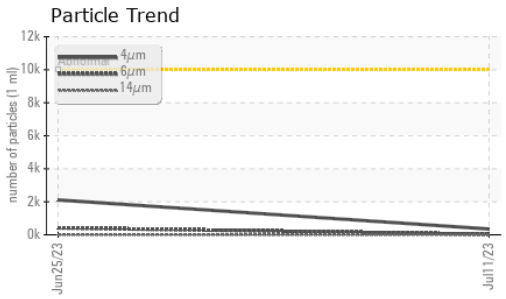
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**9**	▲ 16	---
Sodium	ppm	ASTM D5185m		**0**	0	---
Potassium	ppm	ASTM D5185m	>20	**0**	0	---
Water	%	ASTM D6304	>0.01	▲ **0.056**	▲ 0.053	---
ppm Water	ppm	ASTM D6304	>100	▲ **566.5**	▲ 530.9	---

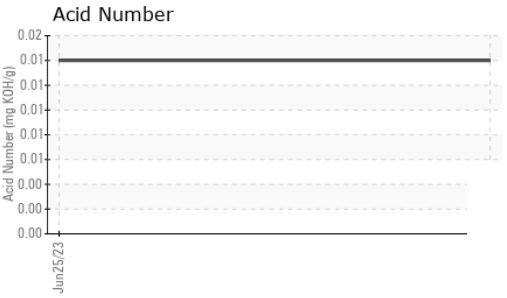
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	**352**	2112	---
Particles >6µm		ASTM D7647	>2500	**28**	416	---
Particles >14µm		ASTM D7647	>320	**5**	10	---
Particles >21µm		ASTM D7647	>80	**2**	1	---
Particles >38µm		ASTM D7647	>20	**0**	0	---
Particles >71µm		ASTM D7647	>4	**0**	0	---
Oil Cleanliness		ISO 4406 (c)	>20/18/15	**16/12/10**	18/16/10	---

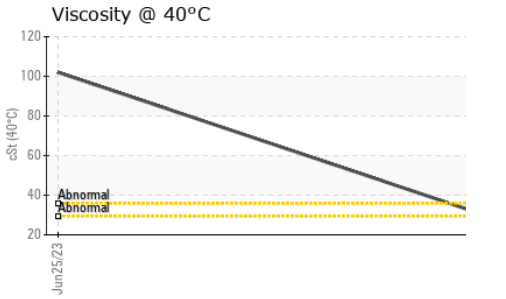
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.014**	0.014	---

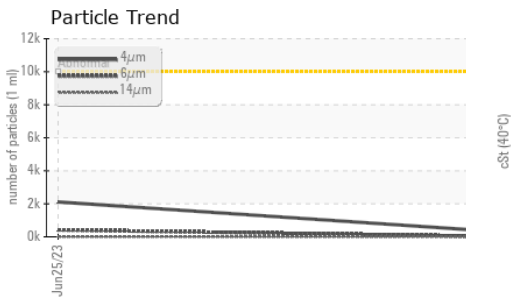
OIL ANALYSIS REPORT





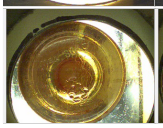




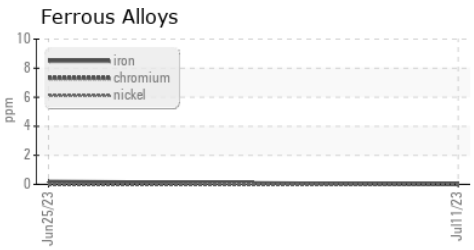


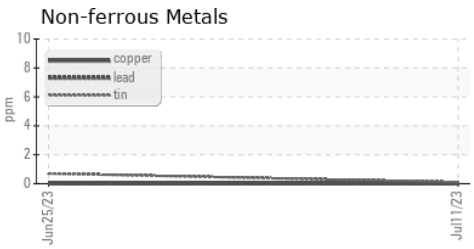
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	---
Silt	scalar	*Visual	NONE	**NONE**	NONE	---
Debris	scalar	*Visual	NONE	**NONE**	LIGHT	---
Sand/Dirt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

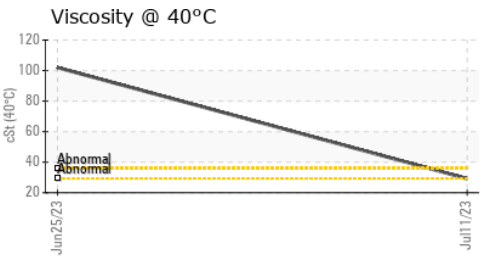
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		**29.2**	102	---

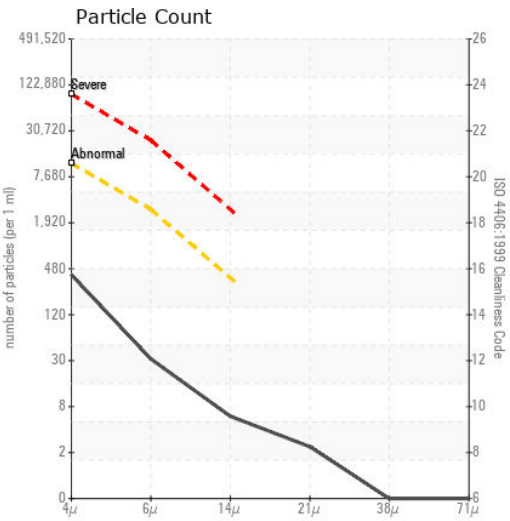
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					*no image*
Bottom					*no image*

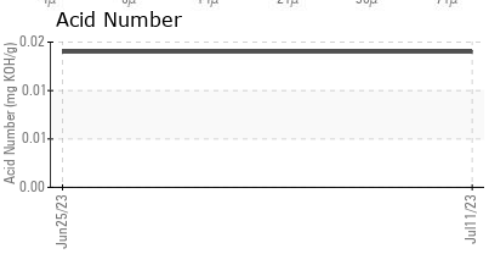
GRAPHS











Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0827381
Lab Number : 05899352
Unique Number : 10560708
Test Package : PLANT

Received : 14 Jul 2023
Diagnosed : 20 Jul 2023
Diagnostician : Angela Borella

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)

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