

Machine Id
E-47
Component
Tank Hydraulic System
Fluid
AW HYDRAULIC OIL ISO 46 (--- GAL)

DIAGNOSIS

Recommendation
We advise that you check all areas where contaminants can enter the system. The oil change at the time of sampling has been noted. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation. Please specify the component make and model with your next sample.

Wear
All component wear rates are normal.

Contamination
There is a high amount of particulates (2 to 100 microns in size) present in the oil.

Fluid Condition
The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PCA0124674	PCA0103214	---
Sample Date	Client Info		09 May 2024	26 Jul 2023	---
Machine Age	hrs	Client Info	10553	9403	---
Oil Age	hrs	Client Info	2	16	---
Oil Changed	Client Info		Changed	Changed	---
Sample Status			SEVERE	ABNORMAL	---

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	NEG	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	3	15	---
Chromium	ppm	ASTM D5185m >10	2	2	---
Nickel	ppm	ASTM D5185m >10	0	0	---
Titanium	ppm	ASTM D5185m	0	0	---
Silver	ppm	ASTM D5185m	0	0	---
Aluminum	ppm	ASTM D5185m >10	0	0	---
Lead	ppm	ASTM D5185m >10	0	<1	---
Copper	ppm	ASTM D5185m >75	3	2	---
Tin	ppm	ASTM D5185m >10	<1	0	---
Vanadium	ppm	ASTM D5185m	0	0	---
Cadmium	ppm	ASTM D5185m	0	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 5	0	0	---
Barium	ppm	ASTM D5185m 5	0	2	---
Molybdenum	ppm	ASTM D5185m 5	0	<1	---
Manganese	ppm	ASTM D5185m	1	0	---
Magnesium	ppm	ASTM D5185m 25	0	7	---
Calcium	ppm	ASTM D5185m 200	55	76	---
Phosphorus	ppm	ASTM D5185m 300	338	341	---
Zinc	ppm	ASTM D5185m 370	439	438	---
Sulfur	ppm	ASTM D5185m 2500	956	893	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<1	1	---
Sodium	ppm	ASTM D5185m	<1	0	---
Potassium	ppm	ASTM D5185m >20	0	<1	---

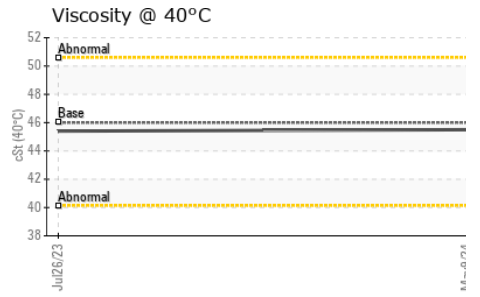
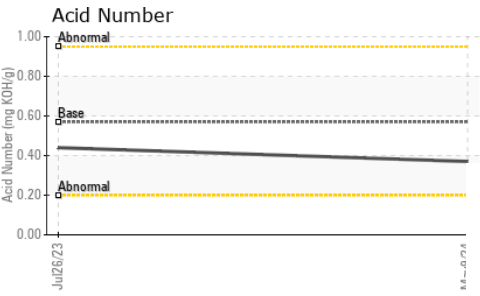
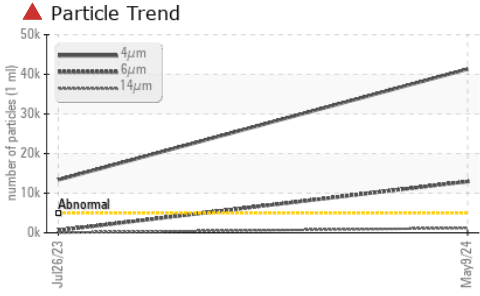
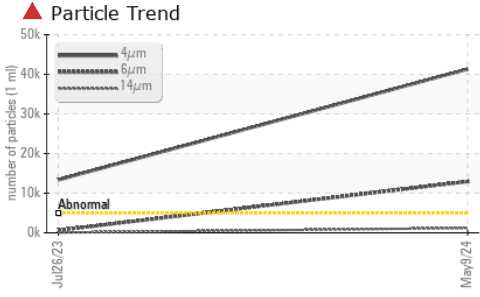
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	▲ 41327	▲ 13363	---
Particles >6µm	ASTM D7647	>1300	▲ 12954	633	---
Particles >14µm	ASTM D7647	>160	▲ 1192	52	---
Particles >21µm	ASTM D7647	>40	▲ 226	14	---
Particles >38µm	ASTM D7647	>10	3	2	---
Particles >71µm	ASTM D7647	>3	0	1	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 23/21/17	▲ 21/16/13	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.57	0.37	0.44	---

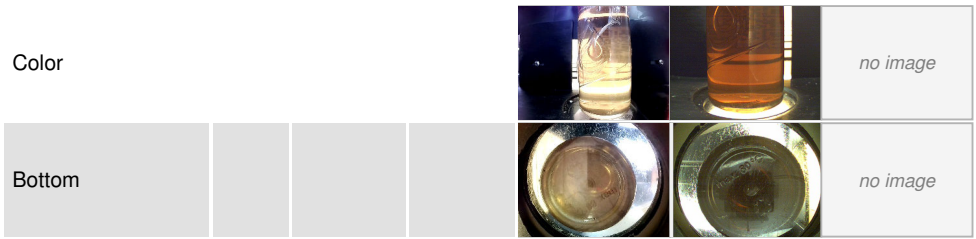
OIL ANALYSIS REPORT



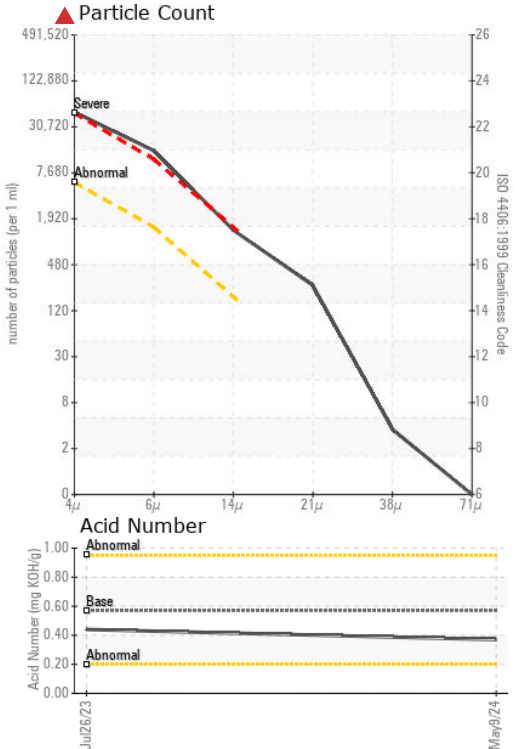
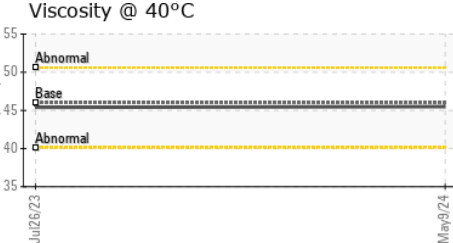
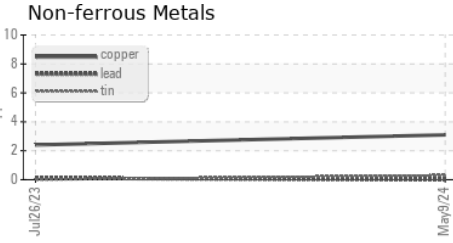
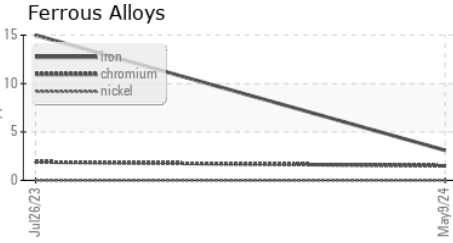
PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	45.5	45.4

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0124674
Lab Number : 06177092
Unique Number : 11023145
Test Package : MOB 2

Received : 13 May 2024
Tested : 14 May 2024
Diagnosed : 14 May 2024 - Wes Davis

SCRAP METAL SERVICES NON-FERROUS DIVISION
 3000 W 139TH ST
 BLUE ISLAND, IL
 US 60406
 Contact: SERGIO FERNANDEZ
 sfernandez@scrapmetalservices.com

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)