



Machine Id  
**13095**  
 Component  
**Hydraulic System**  
 Fluid  
**AW HYDRAULIC OIL ISO 220 (--- GAL)**

**RECOMMENDATION**

We recommend you service the filters on this component. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0121157	---	---
Sample Date		Client Info		10 Apr 2024	---	---
Machine Age	hrs	Client Info		0	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				SEVERE	---	---

**WEAR**

The copper level is severe.

Iron	ppm	ASTM D5185m	>20	13	---	---
Chromium	ppm	ASTM D5185m	>20	0	---	---
Nickel	ppm	ASTM D5185m	>20	0	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>20	0	---	---
Lead	ppm	ASTM D5185m	>20	0	---	---
Copper	ppm	ASTM D5185m	>20	▲ 141	---	---
Tin	ppm	ASTM D5185m	>20	<1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

**CONTAMINATION**

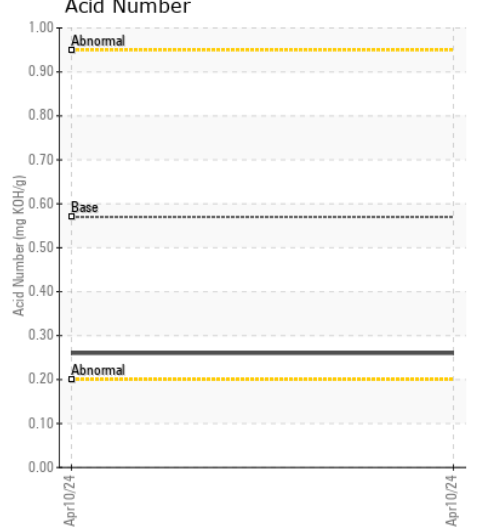
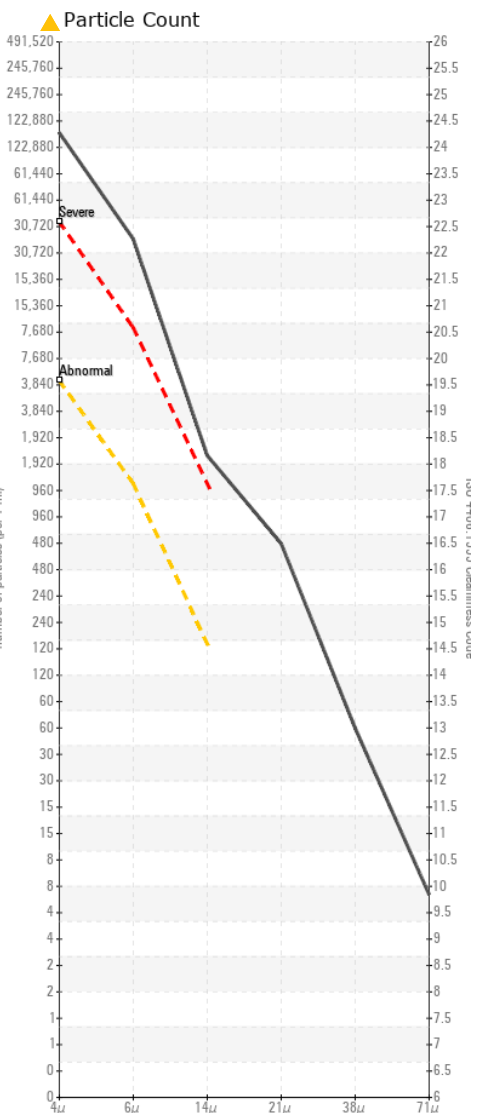
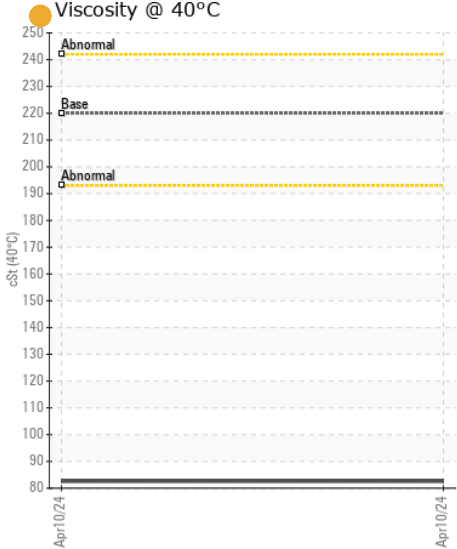
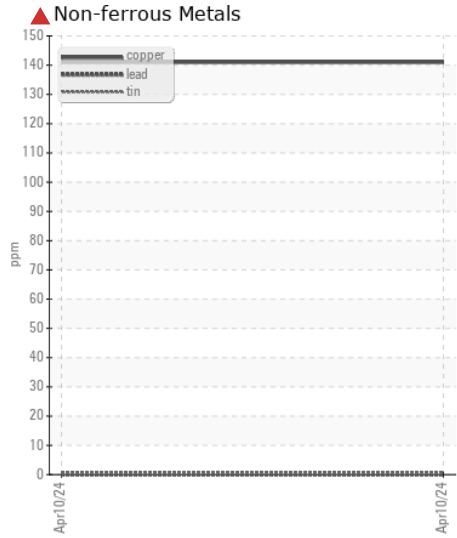
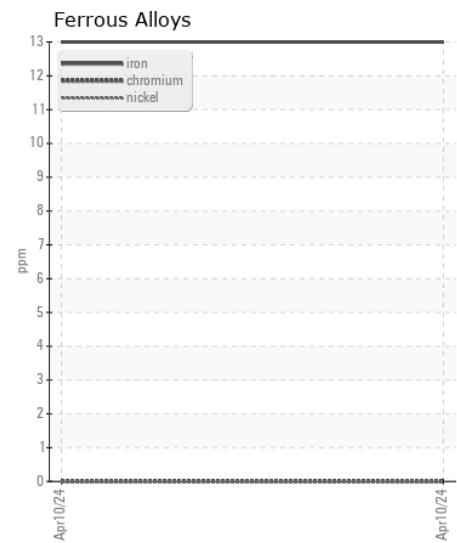
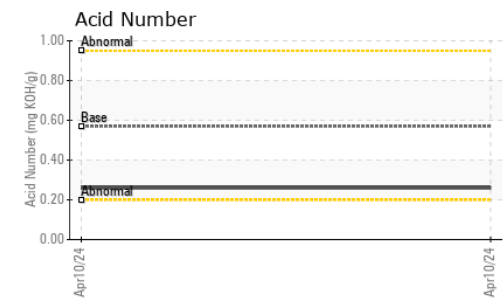
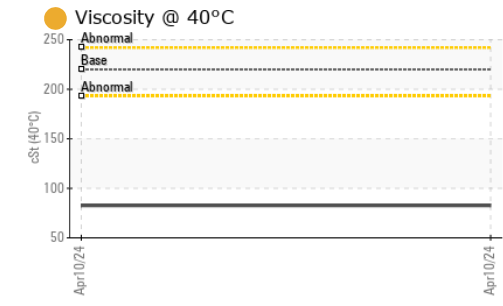
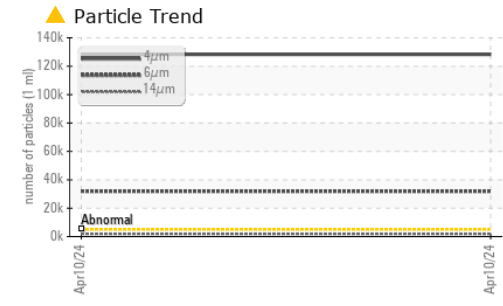
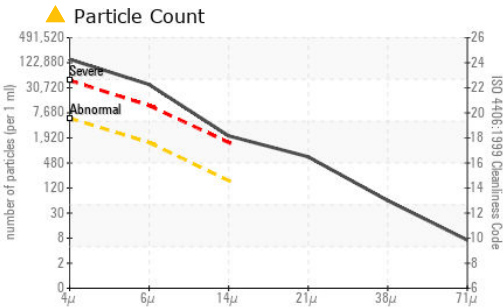
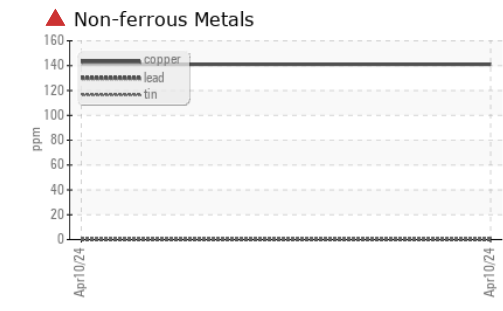
There is a high amount of particulates present in the oil.

Silicon	ppm	ASTM D5185m	>15	<1	---	---
Potassium	ppm	ASTM D5185m	>20	0	---	---
Water	%	ASTM D6304	>0.05	NEG	---	---
Particles >4µm		ASTM D7647	>5000	▲ 128301	---	---
Particles >6µm		ASTM D7647	>1300	▲ 31930	---	---
Particles >14µm		ASTM D7647	>160	▲ 1879	---	---
Particles >21µm		ASTM D7647	>40	▲ 593	---	---
Particles >38µm		ASTM D7647	>10	▲ 53	---	---
Particles >71µm		ASTM D7647	>3	▲ 6	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 24/22/18	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	LIGHT	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.05	NEG	---	---

**FLUID CONDITION**

The oil viscosity is lower than normal. Confirm oil type.

Sodium	ppm	ASTM D5185m		1	---	---
Boron	ppm	ASTM D5185m	5	0	---	---
Barium	ppm	ASTM D5185m	5	0	---	---
Molybdenum	ppm	ASTM D5185m	5	0	---	---
Manganese	ppm	ASTM D5185m		0	---	---
Magnesium	ppm	ASTM D5185m	25	0	---	---
Calcium	ppm	ASTM D5185m	200	11	---	---
Phosphorus	ppm	ASTM D5185m	300	287	---	---
Zinc	ppm	ASTM D5185m	370	159	---	---
Sulfur	ppm	ASTM D5185m	2500	1589	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.26	---	---
Visc @ 40°C	cSt	ASTM D445	220	● 82.6	---	---



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0121157 **Received** : 16 Apr 2024  
**Lab Number** : 06150304 **Tested** : 22 Apr 2024  
**Unique Number** : 10980382 **Diagnosed** : 22 Apr 2024 - Jonathan Hester  
**Test Package** : PLANT

**RAYBESTOS POWERTRAIN**  
 1204 DARLINGTON AVE  
 CRAWFORDSVILLE, IN  
 US 47933  
 Contact: DON B.

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)