

Machine Id
GOODYEAR AKRON TEST 94 EAST
 Component
Hydraulic System
 Fluid
CONOCO MEGAFLOW AW 46 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of particulates (2 to 100 microns in size) present in the oil. The water content is negligible. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code.

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		ST46271	ST44228	---
Sample Date	Client Info		21 Apr 2024	02 Jan 2023	---
Machine Age	hrs	Client Info	0	0	---
Oil Age	hrs	Client Info	0	0	---
Oil Changed	Client Info		N/A	N/A	---
Sample Status			ABNORMAL	ABNORMAL	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	8	9	---
Chromium	ppm	ASTM D5185m >20	<1	0	---
Nickel	ppm	ASTM D5185m >20	<1	0	---
Titanium	ppm	ASTM D5185m	<1	0	---
Silver	ppm	ASTM D5185m	0	0	---
Aluminum	ppm	ASTM D5185m >20	2	0	---
Lead	ppm	ASTM D5185m >20	0	0	---
Copper	ppm	ASTM D5185m >20	6	5	---
Tin	ppm	ASTM D5185m >20	<1	<1	---
Vanadium	ppm	ASTM D5185m	<1	0	---
Cadmium	ppm	ASTM D5185m	<1	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	---
Barium	ppm	ASTM D5185m	<1	0	---
Molybdenum	ppm	ASTM D5185m	<1	0	---
Manganese	ppm	ASTM D5185m	<1	<1	---
Magnesium	ppm	ASTM D5185m	<1	0	---
Calcium	ppm	ASTM D5185m	9	13	---
Phosphorus	ppm	ASTM D5185m	331	275	---
Zinc	ppm	ASTM D5185m	257	223	---
Sulfur	ppm	ASTM D5185m	1110	1058	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	1	<1	---
Sodium	ppm	ASTM D5185m	1	2	---
Potassium	ppm	ASTM D5185m >20	1	0	---
Water	%	ASTM D6304 >0.05	0.00	0.007	---
ppm Water	ppm	ASTM D6304 >500	0	77.5	---

FLUID CLEANLINESS

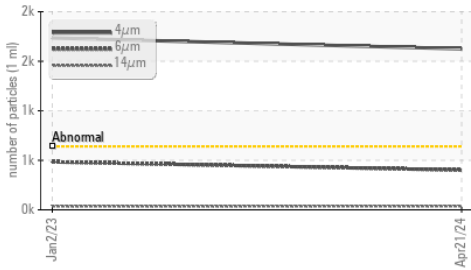
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>640	▲ 1625	▲ 1735	---
Particles >6µm	ASTM D7647	>160	▲ 401	▲ 484	---
Particles >14µm	ASTM D7647	>20	● 36	▲ 35	---
Particles >21µm	ASTM D7647	>4	▲ 12	▲ 10	---
Particles >38µm	ASTM D7647	>3	0	0	---
Particles >71µm	ASTM D7647	>3	0	0	---
Oil Cleanliness	ISO 4406 (c)	>16/14/11	▲ 18/16/12	▲ 18/16/12	---

FLUID DEGRADATION

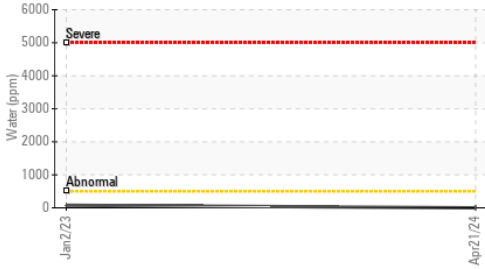
	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.38	0.32	0.28	---

OIL ANALYSIS REPORT

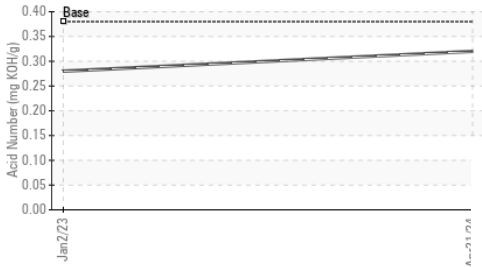
▲ Particle Trend



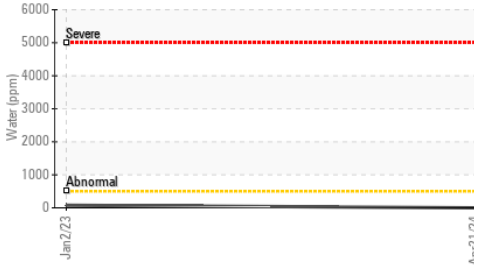
Water (KF)



Acid Number



Water (KF)



Viscosity @ 40°C

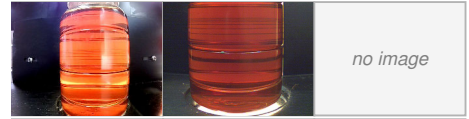


VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG	---
Free Water	scalar	*Visual		NEG	NEG	---

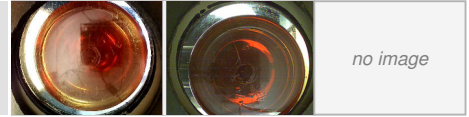
FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	46	45.2	45.2	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

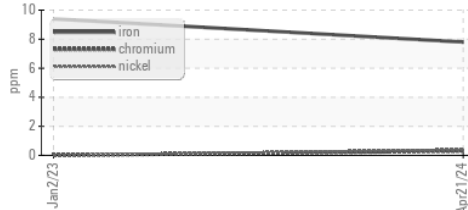


Bottom

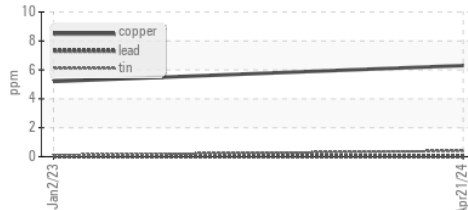


GRAPHS

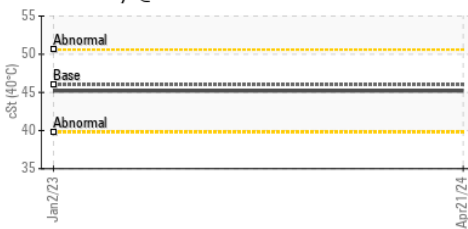
Ferrous Alloys



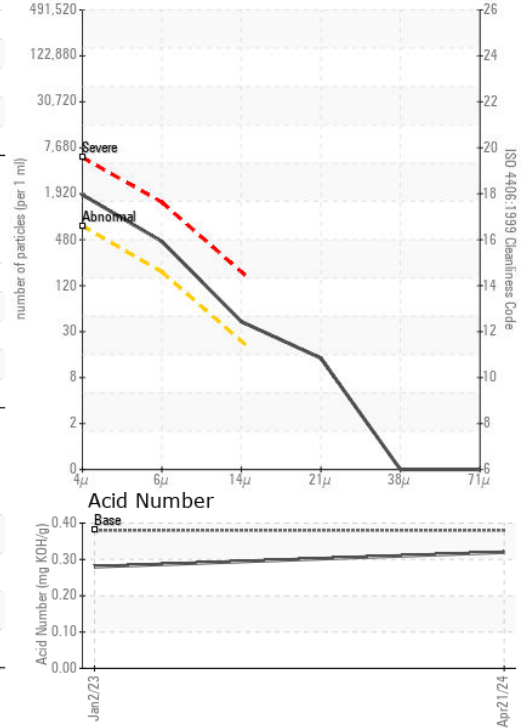
Non-ferrous Metals



Viscosity @ 40°C



▲ Particle Count



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : ST46271

Lab Number : 06155990

Unique Number : 10991413

Test Package : IND 2 (Additional Tests: KF)

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)

Received : 22 Apr 2024

Tested : 23 Apr 2024

Diagnosed : 23 Apr 2024 - Wes Davis

FLUID POWER SOLUTIONS

4400 Edgewyn Ave.

Hilliard, OH

US 43026

Contact: SCOTT ROGERS

srogers@fluid-power-solutions.com

T: (614)777-8954

F: (614)777-8640