



Machine Id
STIR STATION

Component
Hydraulic System

Fluid
KOST ACHIEVAL FRH-200 (--- GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

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

Fluid Condition

The pH level of this fluid is within the acceptable limits at 9.0. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PCA0107863	---	---
Sample Date	Client Info		19 Jan 2024	---	---
Machine Age	days	Client Info	0	---	---
Oil Age	days	Client Info	90	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			ABNORMAL	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	0	---	---
Chromium	ppm	ASTM D5185m >20	0	---	---
Nickel	ppm	ASTM D5185m >20	<1	---	---
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	<1	---	---
Tin	ppm	ASTM D5185m >20	<1	---	---
Vanadium	ppm	ASTM D5185m	0	---	---
Cadmium	ppm	ASTM D5185m	<1	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	---	---
Barium	ppm	ASTM D5185m	<1	---	---
Molybdenum	ppm	ASTM D5185m	0	---	---
Manganese	ppm	ASTM D5185m	<1	---	---
Magnesium	ppm	ASTM D5185m	<1	---	---
Calcium	ppm	ASTM D5185m	1	---	---
Phosphorus	ppm	ASTM D5185m	2	---	---
Zinc	ppm	ASTM D5185m	9	---	---
Sulfur	ppm	ASTM D5185m	0	---	---

CONTAMINANTS

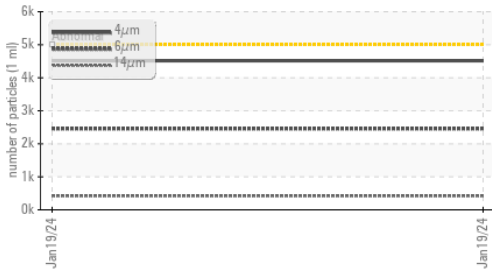
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	0	---	---
Sodium	ppm	ASTM D5185m	0	---	---
Potassium	ppm	ASTM D5185m >20	<1	---	---
Water	%	ASTM D6304 >0.05	29.9	---	---
ppm Water	ppm	ASTM D6304 >500	299000	---	---

FLUID CLEANLINESS

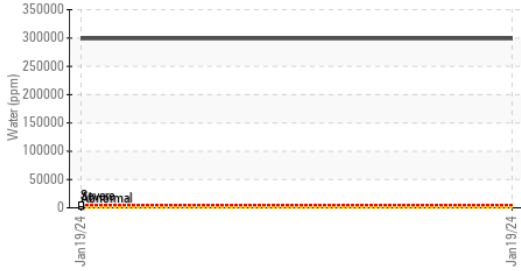
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	4515	---	---
Particles >6µm	ASTM D7647	>1300	▲ 2460	---	---
Particles >14µm	ASTM D7647	>160	▲ 419	---	---
Particles >21µm	ASTM D7647	>40	▲ 141	---	---
Particles >38µm	ASTM D7647	>10	▲ 22	---	---
Particles >71µm	ASTM D7647	>3	▲ 2	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 19/18/16	---	---

OIL ANALYSIS REPORT

▲ Particle Trend



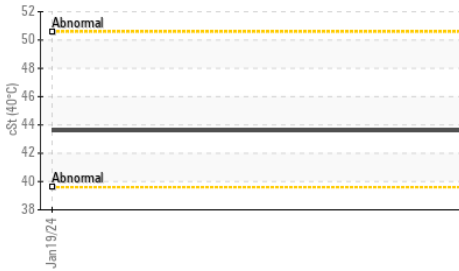
Water (KF)



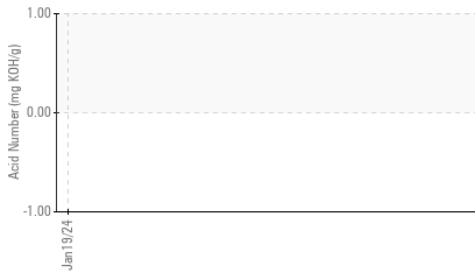
Water (KF)



Viscosity @ 40°C





Acid Number



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	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.05	0.2%	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
pH	Scale 0-14	ASTM D1287	9.00	---	---
Visc @ 40°C	cSt	ASTM D445	43.6	---	---

SAMPLE IMAGES

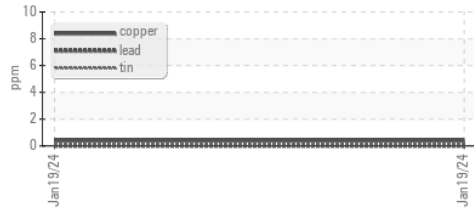
method	limit/base	current	history1	history2
Color			no image	no image
Bottom			no image	no image

GRAPHS

Ferrous Alloys



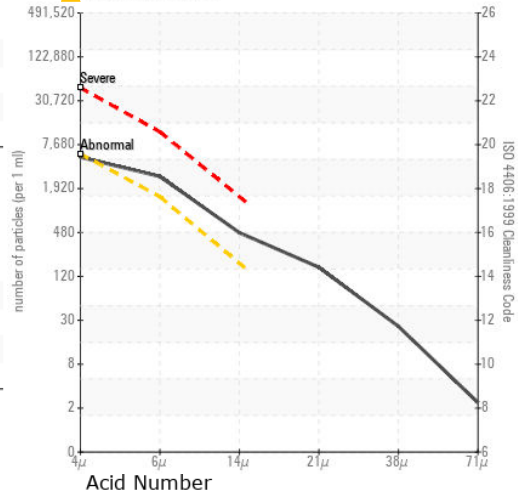
Non-ferrous Metals



Viscosity @ 40°C



▲ Particle Count



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0107863 **Received** : 01 Feb 2024
Lab Number : 06076968 **Diagnosed** : 05 Feb 2024
Unique Number : 10859059 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, PH)

NUCOR STEEL KANKAKEE
 ONE NUCOR WAY
 BOURBONNAIS, IL
 US 60914
 Contact: NATHAN DUNNILL
 nathan.dunnill@nucor.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)

T:
F: