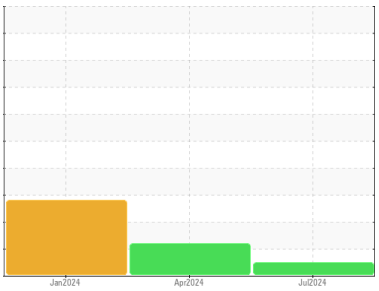
OIL DIAGNOSTICS

OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Machine Id
CASTER BED
Component
Hydraulic System
Fluid
KOST ACHIEVAL FRH 46 (--- GAL)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

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		**PCA0107870**	PCA0107860	PCA0107862
Sample Date		Client Info		**11 Jul 2024**	04 Apr 2024	19 Jan 2024
Machine Age	days	Client Info		**0**	0	0
Oil Age	days	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**MARGINAL**	ATTENTION	ABNORMAL

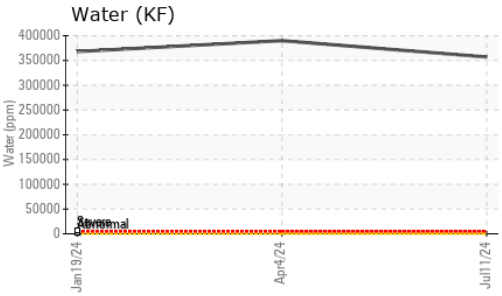
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	**<1**	6	0
Chromium	ppm	ASTM D5185m	>20	**0**	1	0
Nickel	ppm	ASTM D5185m	>20	**<1**	1	<1
Titanium	ppm	ASTM D5185m		**0**	<1	0
Silver	ppm	ASTM D5185m		**<1**	0	0
Aluminum	ppm	ASTM D5185m	>20	**0**	10	<1
Lead	ppm	ASTM D5185m	>20	**0**	0	0
Copper	ppm	ASTM D5185m	>20	**<1**	1	<1
Tin	ppm	ASTM D5185m	>20	**<1**	<1	<1
Vanadium	ppm	ASTM D5185m		**0**	1	0
Cadmium	ppm	ASTM D5185m		**<1**	2	<1

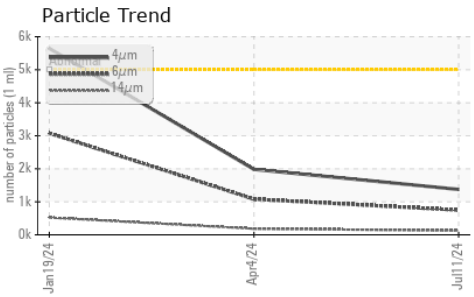
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	1	0
Barium	ppm	ASTM D5185m		**0**	0	<1
Molybdenum	ppm	ASTM D5185m		**0**	<1	0
Manganese	ppm	ASTM D5185m		**0**	<1	<1
Magnesium	ppm	ASTM D5185m		**3**	1	1
Calcium	ppm	ASTM D5185m		**2**	4	1
Phosphorus	ppm	ASTM D5185m		**11**	11	<1
Zinc	ppm	ASTM D5185m		**3**	11	8
Sulfur	ppm	ASTM D5185m		**24**	0	0

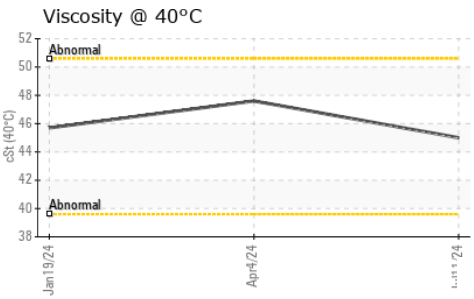
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**<1**	3	0
Sodium	ppm	ASTM D5185m		**0**	39	0
Potassium	ppm	ASTM D5185m	>20	**<1**	5	<1
Water	%	ASTM D6304	>0.05	**35.7**	39.0	36.8
ppm Water	ppm	ASTM D6304	>500	**357000**	390000	368000

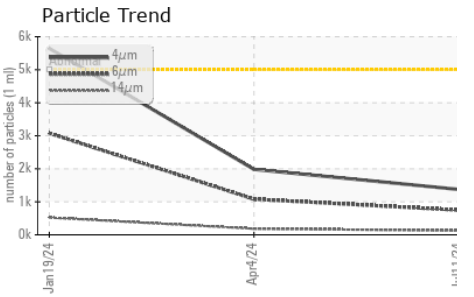
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	**1375**	1983	▲ 5646
Particles >6µm	ASTM D7647	>1300	**749**	1080	▲ 3076
Particles >14µm	ASTM D7647	>160	**127**	● 184	▲ 523
Particles >21µm	ASTM D7647	>40	**43**	● 62	▲ 176
Particles >38µm	ASTM D7647	>10	**7**	10	▲ 27
Particles >71µm	ASTM D7647	>3	**1**	1	▲ 3
Oil Cleanliness	ISO 4406 (c)	>19/17/14	**18/17/14**	● 18/17/15	▲ 20/19/16

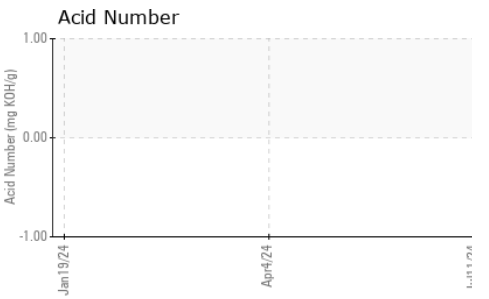
OIL ANALYSIS REPORT









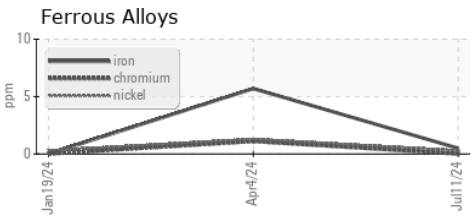


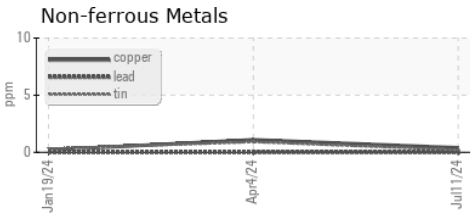
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	▲ **0.2%**	0.2%	0.2%
Free Water	scalar	*Visual		**NEG**	NEG	NEG

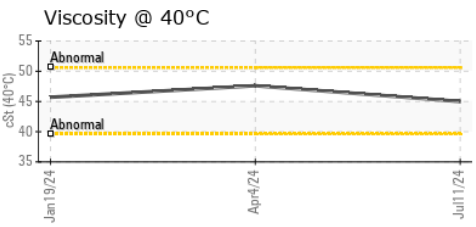
FLUID PROPERTIES		method	limit/base	current	history1	history2
pH	Scale 0-14	ASTM D1287		**9.00**	11.0	9.00
Visc @ 40°C	cSt	ASTM D445		**45.0**	47.6	45.7

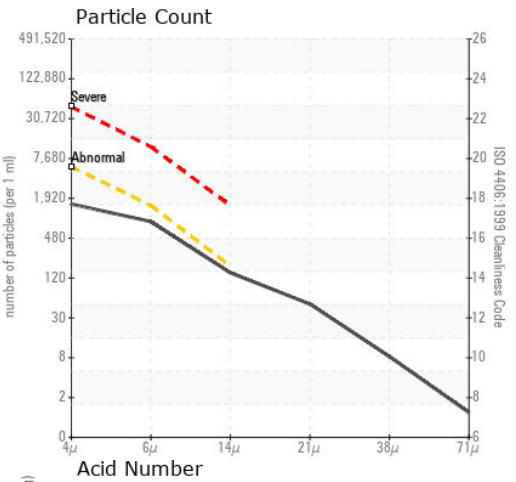
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

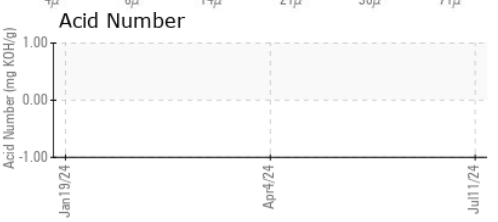
GRAPHS











Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0107870 **Received** : 17 Jul 2024
Lab Number : 06239198 **Tested** : 19 Jul 2024
Unique Number : 11128032 **Diagnosed** : 19 Jul 2024 - Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, pH)

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)

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