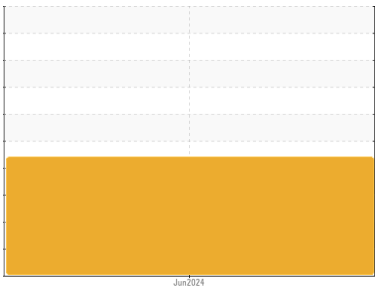
OIL ANALYSIS REPORT

Sample Rating Trend



DIRT

Machine Id
1
Component
Gearbox
Fluid
FUCHS RENOLIN CLP ISO 220 (--- LTR)

DIAGNOSIS

Recommendation
No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

Wear
All component wear rates are normal.

Contamination
Elemental level of silicon (Si) above normal indicating ingress of seal material. The amount and size of particulates present in the system are acceptable.

Fluid Condition
Additive levels indicate the addition of a different brand, or type of oil. The AN level is at the top-end of the recommended limit.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**FCH0000101**	---	---
Sample Date		Client Info		**12 Jun 2024**	---	---
Machine Age	hrs	Client Info		**0**	---	---
Oil Age	hrs	Client Info		**0**	---	---
Oil Changed		Client Info		**N/A**	---	---
Sample Status				**ABNORMAL**	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	**1**	---	---
Chromium	ppm	ASTM D5185m	>15	**0**	---	---
Nickel	ppm	ASTM D5185m	>15	**0**	---	---
Titanium	ppm	ASTM D5185m		**0**	---	---
Silver	ppm	ASTM D5185m		**0**	---	---
Aluminum	ppm	ASTM D5185m	>25	**4**	---	---
Lead	ppm	ASTM D5185m	>100	**0**	---	---
Copper	ppm	ASTM D5185m	>200	**3**	---	---
Tin	ppm	ASTM D5185m	>25	**0**	---	---
Vanadium	ppm	ASTM D5185m		**<1**	---	---
Cadmium	ppm	ASTM D5185m		**0**	---	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	20	**0**	---	---
Barium	ppm	ASTM D5185m		**4**	---	---
Molybdenum	ppm	ASTM D5185m		**1639**	---	---
Manganese	ppm	ASTM D5185m		**0**	---	---
Magnesium	ppm	ASTM D5185m		**<1**	---	---
Calcium	ppm	ASTM D5185m	25	**50**	---	---
Phosphorus	ppm	ASTM D5185m	230	**2655**	---	---
Zinc	ppm	ASTM D5185m		**961**	---	---
Sulfur	ppm	ASTM D5185m	4900	**8482**	---	---

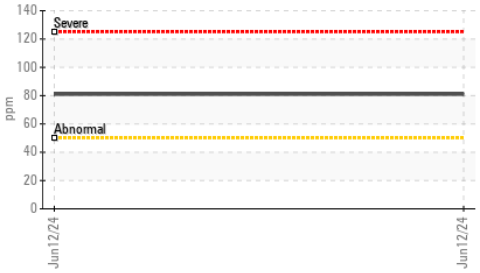
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**81**	---	---
Sodium	ppm	ASTM D5185m		**1**	---	---
Potassium	ppm	ASTM D5185m	>20	**0**	---	---
Water	%	ASTM D6304	>0.2	**NEG**	---	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	**2609**	---	---
Particles >6µm		ASTM D7647	>5000	**520**	---	---
Particles >14µm		ASTM D7647	>640	**25**	---	---
Particles >21µm		ASTM D7647	>160	**2**	---	---
Particles >38µm		ASTM D7647	>40	**0**	---	---
Particles >71µm		ASTM D7647	>10	**0**	---	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	**19/16/12**	---	---

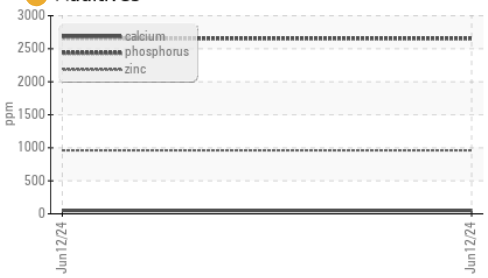
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.6	**3.63**	---	---

OIL ANALYSIS REPORT

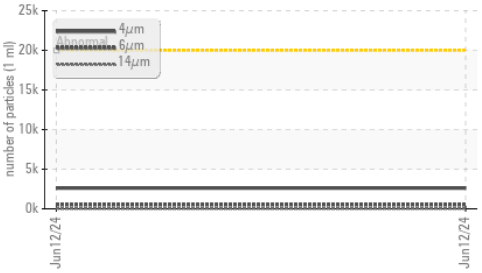
Silicon (ppm)



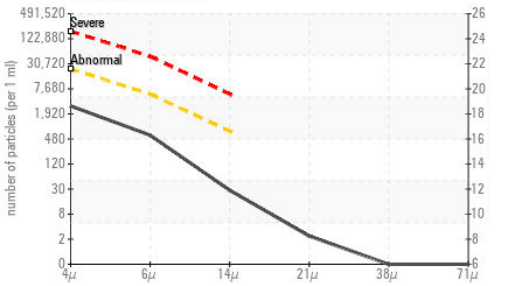
Additives



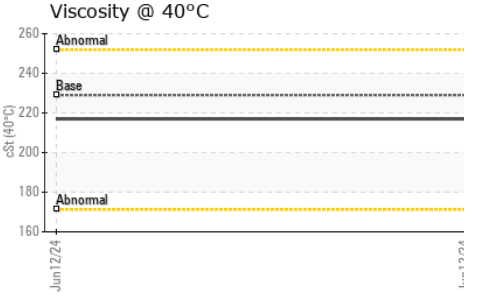
Particle Trend



Particle Count



Viscosity @ 40°C



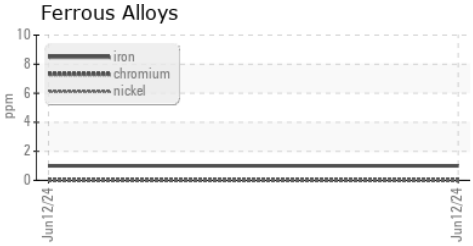
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	---	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	---	---
Precipitate	scalar	*Visual	NONE	**NONE**	---	---
Silt	scalar	*Visual	NONE	**NONE**	---	---
Debris	scalar	*Visual	NONE	**NONE**	---	---
Sand/Dirt	scalar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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	229	**217**	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				*no image*	*no image*
Bottom				*no image*	*no image*

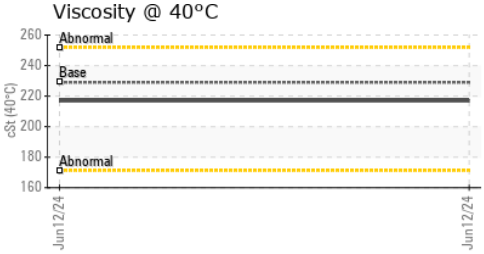
GRAPHS

Ferrous Alloys

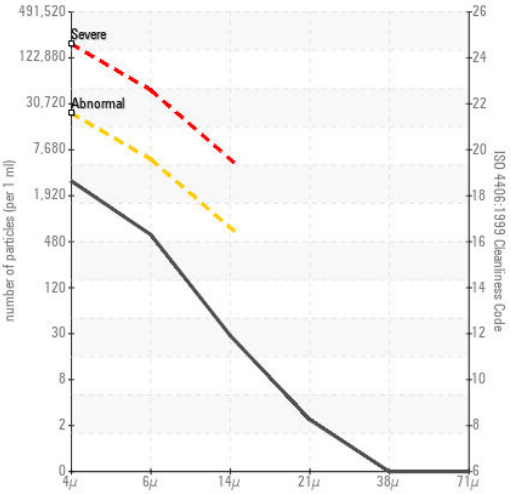


Non-ferrous Metals

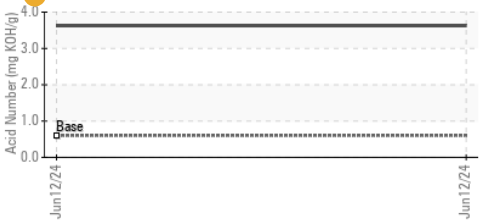
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : FCH0000101
Lab Number : 06210080
Unique Number : 11082944
Test Package : PLANT (Additional Tests: KF, PrtCount)

Received : 14 Jun 2024
Tested : 20 Jun 2024
Diagnosed : 20 Jun 2024 - Jonathan Hester

NTP DECATUR - NUCOR TUBULAR PRODUCTS
2000 INDEPENDENCE DR
DECATUR, AL
US 35601
Contact: Service Manager
T:
F:

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)