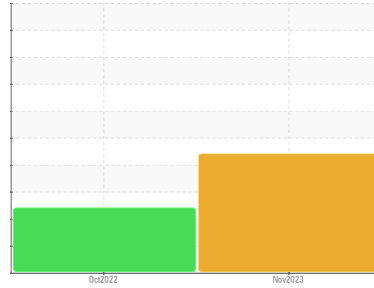
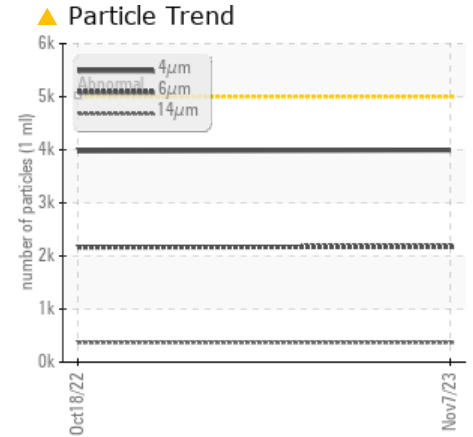
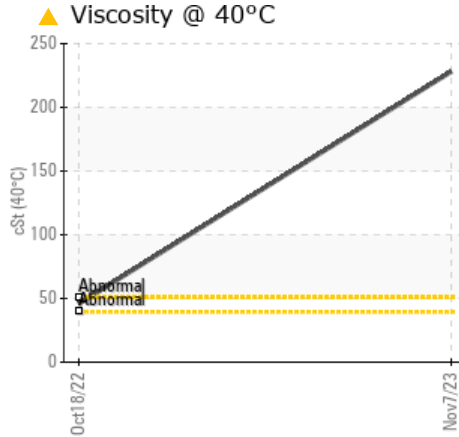
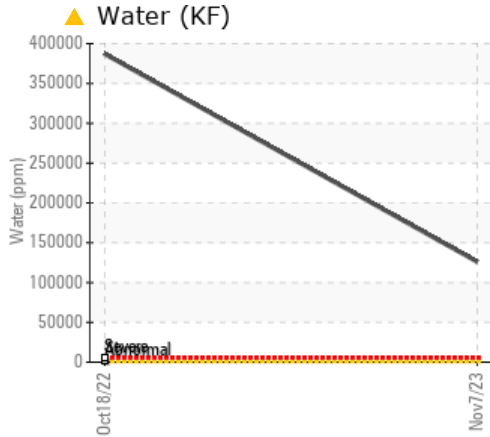




Machine Id
TUNDISH TILT
Component
Hydraulic System
Fluid
NOT GIVEN (--- GAL)



COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you replenish the water content and add per manufacturer's recommendations. We advise an early resample to confirm this situation.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	---
Water	%	ASTM D6304	>0.05	▲ 12.6	38.7	---
ppm Water	ppm	ASTM D6304	>500	▲ 126000	387000	---
Particles >6µm		ASTM D7647	>1300	▲ 2175	▲ 2166	---
Particles >14µm		ASTM D7647	>160	▲ 370	▲ 369	---
Particles >21µm		ASTM D7647	>40	▲ 125	▲ 124	---
Particles >38µm		ASTM D7647	>10	▲ 19	▲ 19	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 19/18/16	▲ 19/18/16	---
pH	Scale 0-14	ASTM D1287		▲ 7.00	9.00	---
Visc @ 40°C	cSt	ASTM D445		▲ 228.0	45.8	---

Customer Id: NUCMAR
Sample No.: ST44101
Lab Number: 06007029
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
Doug Bogart +1 (800)237-1369 x4016
dougb@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Service/change Fluid	---	---	?	We advise that you replenish the supplemental coolant additives (SCAs) and add per manufacturer's recommendations.
Resample	---	---	?	We advise an early resample to confirm this situation.

HISTORICAL DIAGNOSIS

18 Oct 2022 Diag: Jonathan Hester

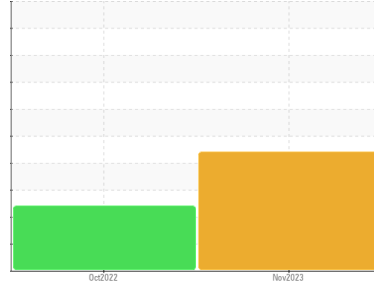
ISO



We recommend you service the filters on this component. Resample at the next service interval to monitor. Due to an abnormal test result it is recommended to contact Stauff Corp at (201)-444-7800 for help resolving the issue. All component wear rates are normal. There is a high amount of particulates present in the oil. The pH level of this fluid is within the acceptable limits. The pH is 9.00. The condition of the oil is acceptable for the time in service.

view report





Machine Id
TUNDISH TILT
 Component
Hydraulic System
 Fluid
NOT GIVEN (--- GAL)

DIAGNOSIS

▲ Recommendation

We advise that you replenish the water content and add per manufacturer's recommendations. We advise an early resample to confirm this situation.

Wear

All component wear rates are normal.

▲ Contamination

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

▲ Fluid Condition

The water content is lower than normal. The oil viscosity is higher than normal. The pH is low.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			ST44101	ST39236	---
Sample Date	Client Info			07 Nov 2023	18 Oct 2022	---
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	---

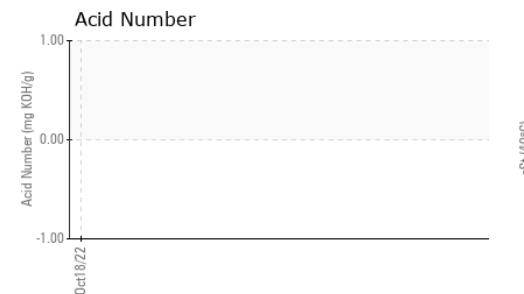
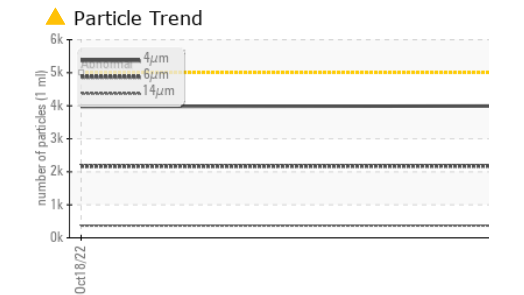
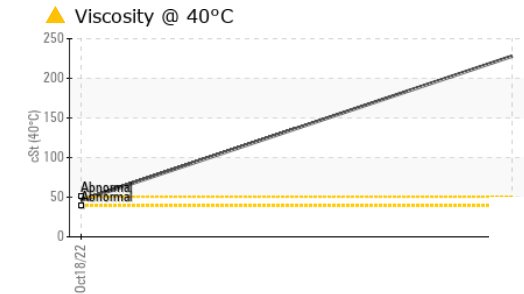
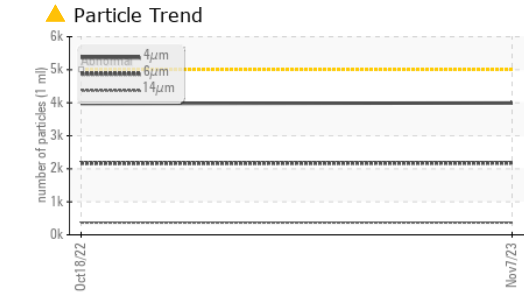
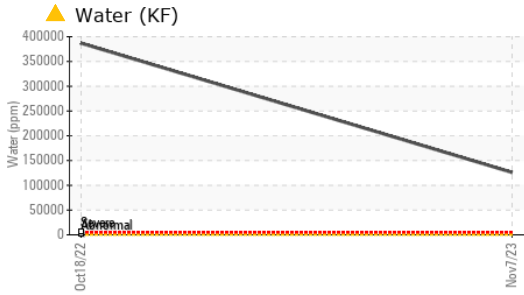
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	3	0	---
Chromium	ppm	ASTM D5185m	>20	<1	0	---
Nickel	ppm	ASTM D5185m	>20	<1	0	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m		0	<1	---
Aluminum	ppm	ASTM D5185m	>20	5	0	---
Lead	ppm	ASTM D5185m	>20	0	0	---
Copper	ppm	ASTM D5185m	>20	<1	5	---
Tin	ppm	ASTM D5185m	>20	0	0	---
Vanadium	ppm	ASTM D5185m		<1	<1	---
Cadmium	ppm	ASTM D5185m		<1	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		0	0	---
Manganese	ppm	ASTM D5185m		0	<1	---
Magnesium	ppm	ASTM D5185m		2	0	---
Calcium	ppm	ASTM D5185m		4	0	---
Phosphorus	ppm	ASTM D5185m		13	14	---
Zinc	ppm	ASTM D5185m		0	0	---
Sulfur	ppm	ASTM D5185m		0	0	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<1	<1	---
Sodium	ppm	ASTM D5185m		25	0	---
Potassium	ppm	ASTM D5185m	>20	5	0	---
Water	%	ASTM D6304	>0.05	▲ 12.6	38.7	---
ppm Water	ppm	ASTM D6304	>500	▲ 126000	387000	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	3993	3976	---
Particles >6µm		ASTM D7647	>1300	▲ 2175	▲ 2166	---
Particles >14µm		ASTM D7647	>160	▲ 370	▲ 369	---
Particles >21µm		ASTM D7647	>40	▲ 125	▲ 124	---
Particles >38µm		ASTM D7647	>10	▲ 19	▲ 19	---
Particles >71µm		ASTM D7647	>3	2	▲ 2	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 19/18/16	▲ 19/18/16	---

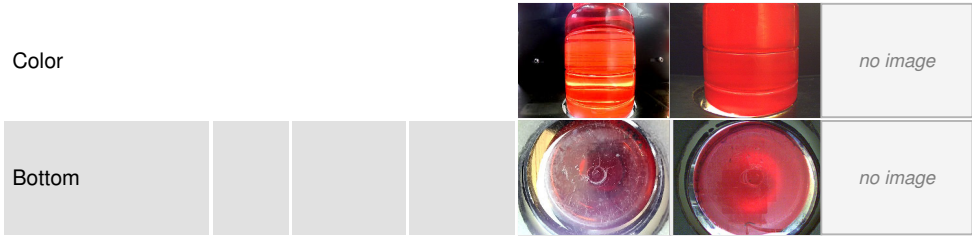
OIL ANALYSIS REPORT



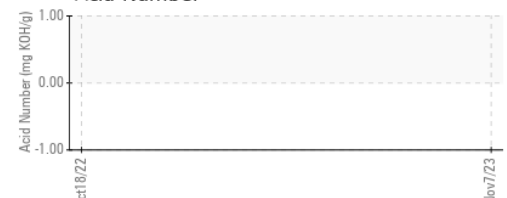
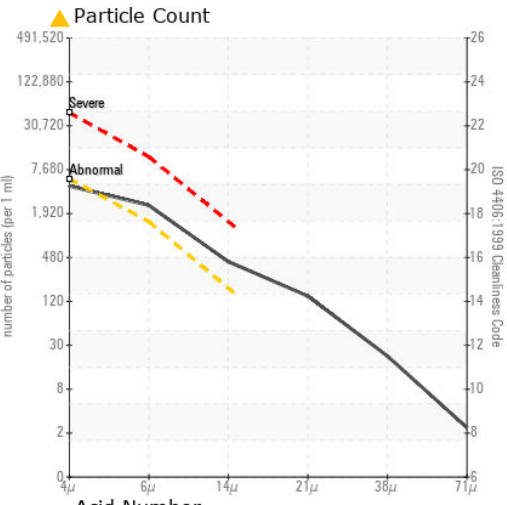
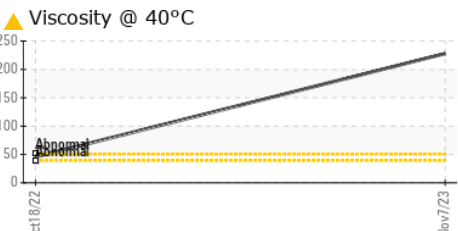
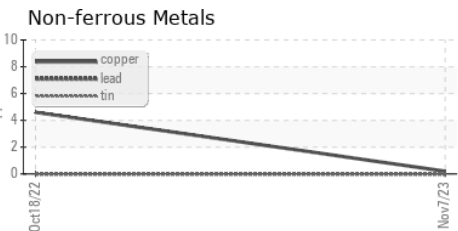
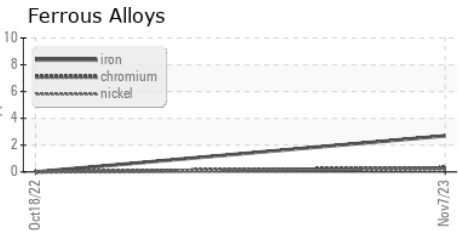
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	VLITE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	VLITE	---
Sand/Dirt	scalar	*Visual	NONE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

FLUID PROPERTIES	method	limit/base	current	history1	history2
pH	Scale 0-14	ASTM D1287	▲ 7.00	9.00	---
Visc @ 40°C	cSt	ASTM D445	▲ 228.0	45.8	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ST44101 **Received** : 14 Nov 2023
Lab Number : 06007029 **Diagnosed** : 29 Nov 2023
Unique Number : 10740791 **Diagnostician** : Doug Bogart
Test Package : IND 2 (Additional Tests: KF, ph, VI)

NUCOR STEEL MARION
 912 CHENEY AVE
 MARION, OH
 US 43302
 Contact: TODD EBLIN

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: (740)383-4011
 F: (740)375-5871