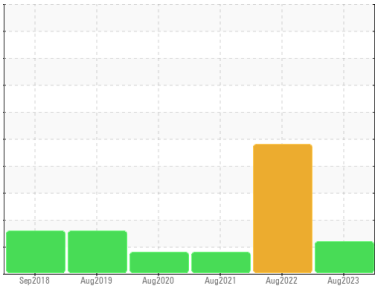
STAUFF FILTRATION TECHNOLOGY

PROBLEM SUMMARY

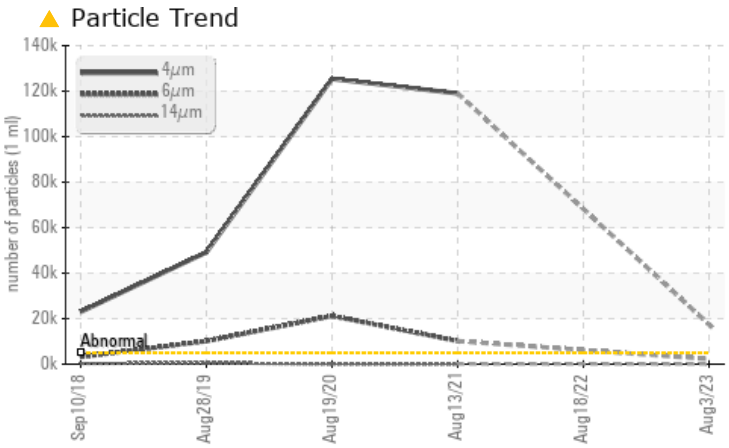
Sample Rating Trend



ISO

Machine Id
TEREX DIGGER DERRICK 194 (S/N 2130849197)
Component
Hydraulic System
Fluid
CASTROL AERIAL HYD FLUID 22 (30 GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

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.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL
Particles >4µm		ASTM D7647	>5000	▲ **17448**	---	▲ 118995
Particles >6µm		ASTM D7647	>1300	▲ **2197**	---	▲ 10137
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **21/18/12**	---	▲ 24/21/12

Customer Id: COBMARGA
Sample No.: ST44184
Lab Number: 05926754
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
Contact Required	---	---	?	Due to an abnormal test result it is recommended to contact Stauff Corp at (201)-444-7800 for help resolving the issue.

HISTORICAL DIAGNOSIS

18 Aug 2022 Diag: Angela Borella

WATER

There is too much water present in this sample to perform a particle count. 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 moderate amount of visible silt present in the sample. There is a light concentration of water present in the oil. Free water present. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

view report

13 Aug 2021 Diag: Doug Bogart

ISO

We recommend you service the filters on this component if applicable. 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 silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

19 Aug 2020 Diag: Jonathan Hester

ISO

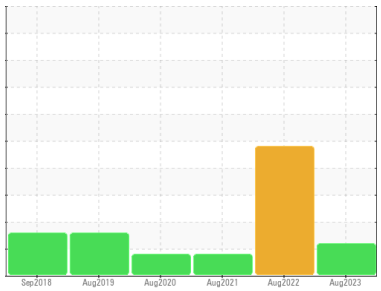
We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. Due to an abnormal test result it is recommended to contact Stauff Corp at (201)-444-7800 for help resolving the issue.All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

STAUFF FILTRATION TECHNOLOGY

OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Machine Id
TEREX DIGGER DERRICK 194 (S/N 2130849197)
Component
Hydraulic System
Fluid
CASTROL AERIAL HYD FLUID 22 (30 GAL)

DIAGNOSIS

Recommendation
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.

Wear
All component wear rates are normal.

Contamination
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition
The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**ST44184**	ST40836	ST40669
Sample Date		Client Info		**03 Aug 2023**	18 Aug 2022	13 Aug 2021
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	**2**	6	6
Chromium	ppm	ASTM D5185m	>10	**<1**	<1	<1
Nickel	ppm	ASTM D5185m	>10	**0**	0	0
Titanium	ppm	ASTM D5185m		**<1**	<1	<1
Silver	ppm	ASTM D5185m		**0**	1	0
Aluminum	ppm	ASTM D5185m	>10	**0**	6	7
Lead	ppm	ASTM D5185m	>10	**<1**	<1	<1
Copper	ppm	ASTM D5185m	>75	**3**	8	7
Tin	ppm	ASTM D5185m	>10	**<1**	<1	<1
Antimony	ppm	ASTM D5185m		**---**	---	0
Vanadium	ppm	ASTM D5185m		**<1**	0	0
Cadmium	ppm	ASTM D5185m		**<1**	<1	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	2	2
Barium	ppm	ASTM D5185m		**0**	2	0
Molybdenum	ppm	ASTM D5185m		**2**	4	4
Manganese	ppm	ASTM D5185m		**<1**	<1	0
Magnesium	ppm	ASTM D5185m		**5**	10	16
Calcium	ppm	ASTM D5185m		**60**	120	143
Phosphorus	ppm	ASTM D5185m		**320**	442	460
Zinc	ppm	ASTM D5185m		**197**	134	146
Sulfur	ppm	ASTM D5185m		**1278**	1299	1251

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	**4**	8	9
Sodium	ppm	ASTM D5185m		**2**	26	1
Potassium	ppm	ASTM D5185m	>20	**1**	0	0
Water	%	ASTM D6304	>0.1	**0.002**	▲ 0.466	0.010
ppm Water	ppm	ASTM D6304	>1000	**17.6**	▲ 4660	103.1

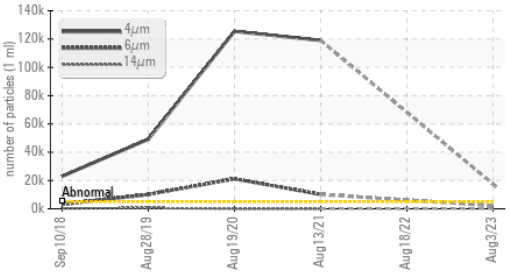
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	▲ **17448**	---	▲ 118995
Particles >6µm		ASTM D7647	>1300	▲ **2197**	---	▲ 10137
Particles >14µm		ASTM D7647	>160	**29**	---	22
Particles >21µm		ASTM D7647	>40	**7**	---	5
Particles >38µm		ASTM D7647	>10	**0**	---	0
Particles >71µm		ASTM D7647	>3	**0**	---	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **21/18/12**	---	▲ 24/21/12

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.25**	0.18	0.188

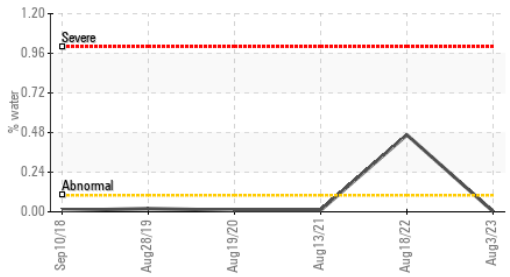
STAUFF FILTRATION TECHNOLOGY

OIL ANALYSIS REPORT

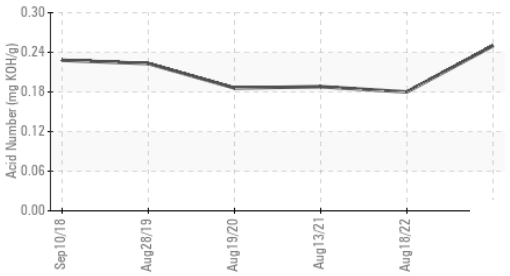
Particle Trend



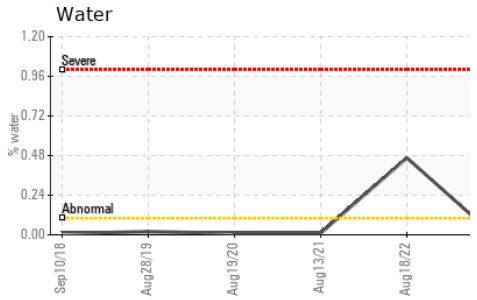
Water



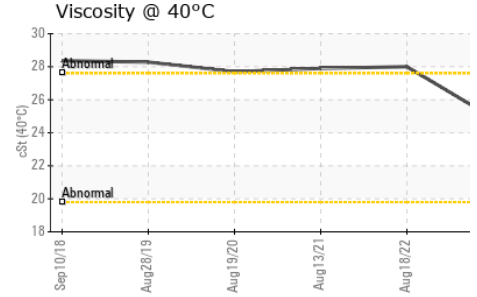
Acid Number



Water

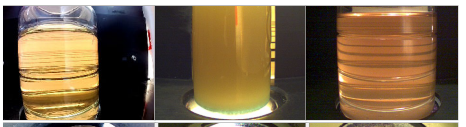
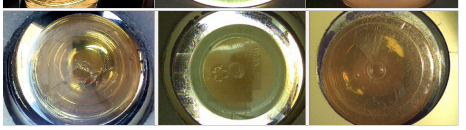


Viscosity @ 40°C



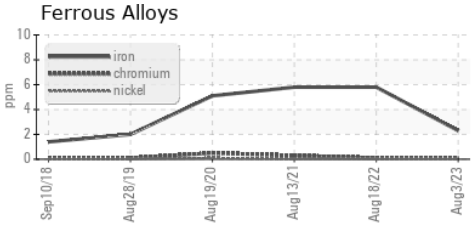
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	▲ MODER	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	▲ HAZY	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	**NEG**	0.2%	NEG
Free Water	scalar	*Visual		**NEG**	▲ 1.0	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		**24.9**	28.0	27.9

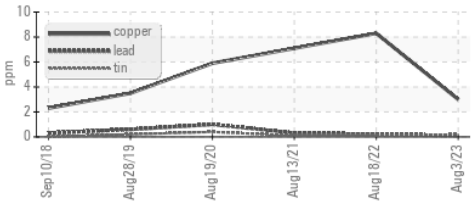
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

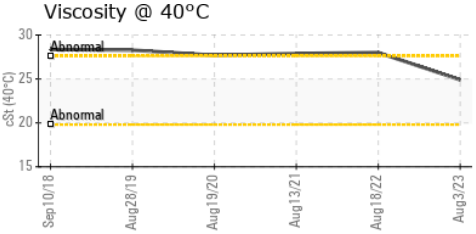
Ferrous Alloys



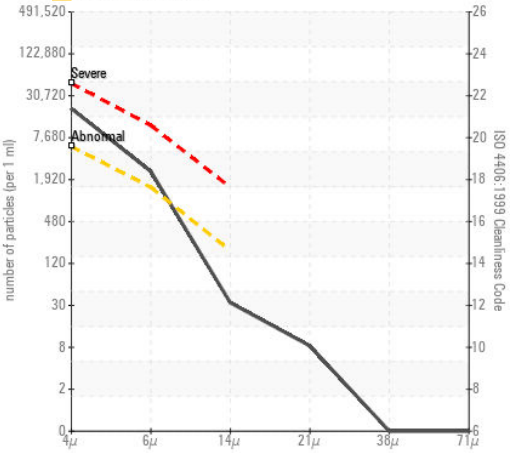
Non-ferrous Metals



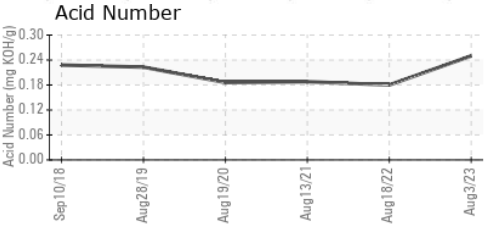
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ST44184 **Received** : 16 Aug 2023
Lab Number : 05926754 **Diagnosed** : 17 Aug 2023
Unique Number : 10606701 **Diagnostician** : Doug Bogart
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)

COBB EMC
1000 EMC PKWY
MARIETTA, GA
US 30060
Contact: WADE HARRIS
wade.harris@cobbemc.com
T: (678)355-3379
F: