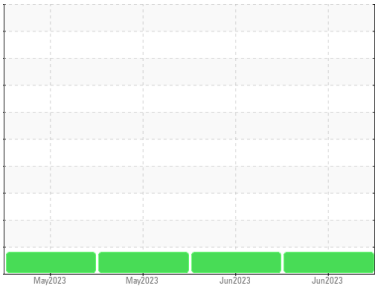
PROBLEM SUMMARY

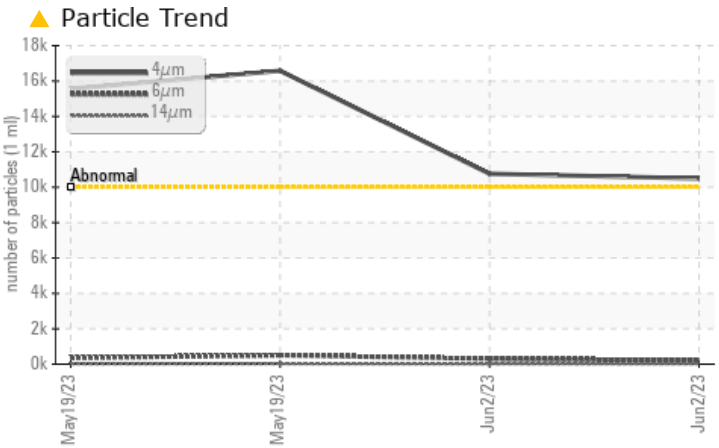
Sample Rating Trend



ISO

Area
Paper Machine
Machine Id
Dry End Lubrication System
Component
Bearing Lube
Fluid
MOBIL DTE PM 220 (20000 LTR)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor. (Customer Sample Comment: Sample #1 Before filter probe on machine read 4750ppm of water (suspecting bad calibration or bad logic in DCS))

PROBLEMATIC TEST RESULTS

Sample Status				**ATTENTION**	ATTENTION	ATTENTION
Particles >4µm		ASTM D7647	>10000	▲ **10758**	▲ 10492	▲ 15564
Oil Cleanliness		ISO 4406 (c)	>20/18/14	▲ **21/15/11**	▲ 21/15/11	▲ 21/16/12

Customer Id: CASASH
Sample No.: WC0776618
Lab Number: 05867289
Test Package: PLANT

To manage this report scan the QR code

To discuss the diagnosis or test data:
Angela Borella +1 800-237-1369
angela.borella@wearcheckusa.com

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

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

02 Jun 2023 Diag: Angela Borella

ISO

No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate amount of silt (particulates < 6 microns in size) present in the oil. The water content is negligible. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

---

19 May 2023 Diag: Doug Bogart

ISO

No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate amount of silt (particulates < 6 microns in size) present in the oil. The water content is negligible. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

---

19 May 2023 Diag: Doug Bogart

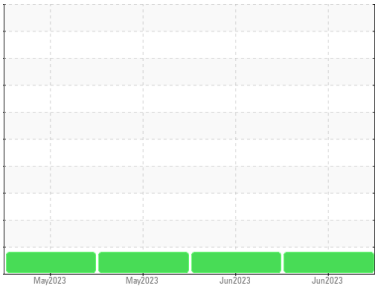
ISO

No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate amount of silt (particulates < 6 microns in size) present in the oil. The water content is negligible. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Area
Paper Machine
Machine Id
Dry End Lubrication System
Component
Bearing Lube
Fluid
MOBIL DTE PM 220 (20000 LTR)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor. (Customer Sample Comment: Sample #1 Before filter probe on machine read 4750ppm of water (suspecting bad calibration or bad logic in DCS))

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of silt (particulates < 6 microns in size) present in the oil. The water content is negligible.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0776618**	WC0776619	WC0776579
Sample Date		Client Info		**02 Jun 2023**	02 Jun 2023	19 May 2023
Machine Age	mths	Client Info		**0**	0	0
Oil Age	mths	Client Info		**0**	0	6
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ATTENTION**	ATTENTION	ATTENTION

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>120	**28**	28	26
Chromium	ppm	ASTM D5185m	>5	**0**	0	<1
Nickel	ppm	ASTM D5185m	>20	**0**	0	0
Titanium	ppm	ASTM D5185m		**0**	0	<1
Silver	ppm	ASTM D5185m		**0**	0	<1
Aluminum	ppm	ASTM D5185m	>4	**0**	0	1
Lead	ppm	ASTM D5185m	>30	**0**	0	<1
Copper	ppm	ASTM D5185m	>17	**1**	1	<1
Tin	ppm	ASTM D5185m	>10	**0**	0	<1
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	0	0
Barium	ppm	ASTM D5185m		**<1**	<1	0
Molybdenum	ppm	ASTM D5185m		**<1**	<1	<1
Manganese	ppm	ASTM D5185m		**<1**	<1	<1
Magnesium	ppm	ASTM D5185m		**1**	1	11
Calcium	ppm	ASTM D5185m		**128**	125	142
Phosphorus	ppm	ASTM D5185m		**883**	870	885
Zinc	ppm	ASTM D5185m		**1185**	1172	1167
Sulfur	ppm	ASTM D5185m		**15191**	15033	14583

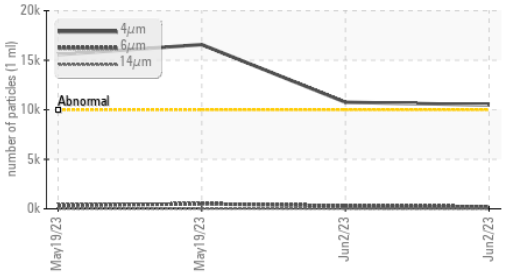
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**3**	3	3
Sodium	ppm	ASTM D5185m		**2**	2	3
Potassium	ppm	ASTM D5185m	>20	**<1**	<1	<1
Water	%	ASTM D6304	>0.2	**0.016**	0.016	0.013
ppm Water	ppm	ASTM D6304	>2000	**164.4**	162.0	135.8

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	▲ **10758**	▲ 10492	▲ 15564
Particles >6µm		ASTM D7647	>2500	**302**	215	355
Particles >14µm		ASTM D7647	>160	**18**	14	22
Particles >21µm		ASTM D7647	>40	**2**	4	4
Particles >38µm		ASTM D7647	>10	**0**	1	1
Particles >71µm		ASTM D7647	>3	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>20/18/14	▲ **21/15/11**	▲ 21/15/11	▲ 21/16/12

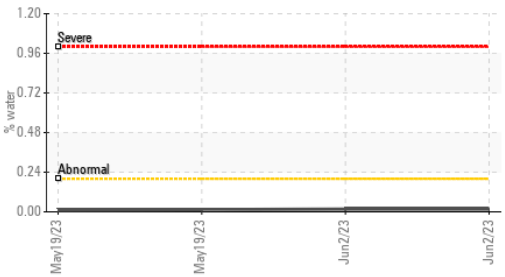
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**1.54**	1.58	1.019

OIL ANALYSIS REPORT

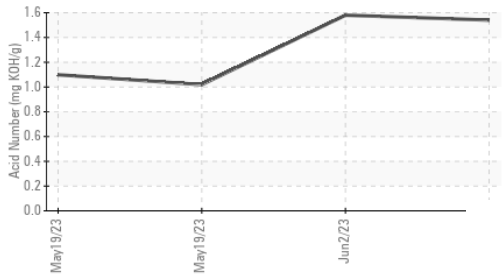
Particle Trend



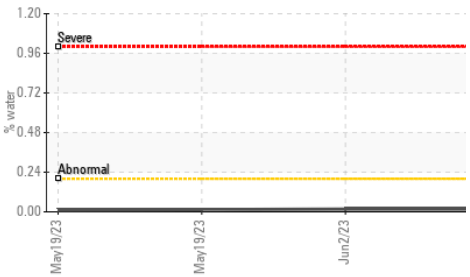
Water



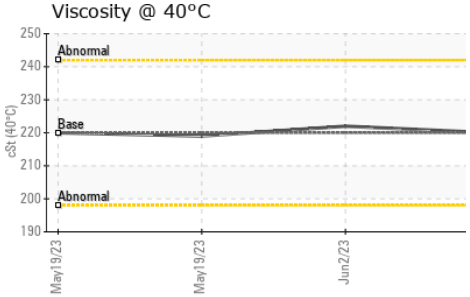
Acid Number



Water



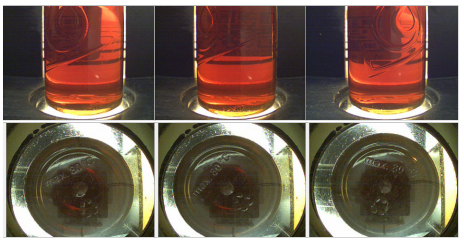
Viscosity @ 40°C



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**	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	>0.2	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

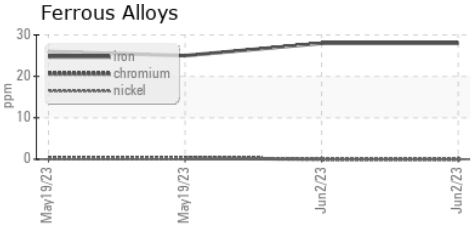
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	220	**220**	222	219

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

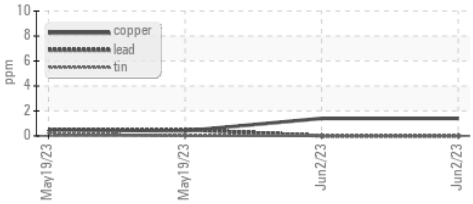


GRAPHS

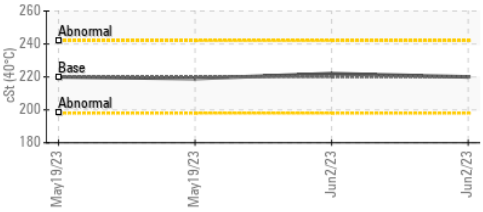
Ferrous Alloys



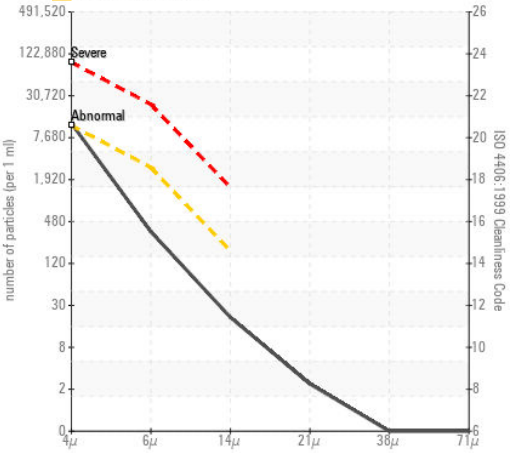
Non-ferrous Metals



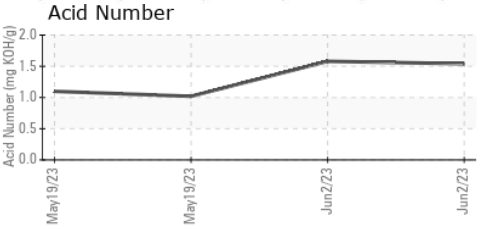
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0776618
Lab Number : 05867289
Unique Number : 10507073
Test Package : PLANT

Received : 07 Jun 2023
Diagnosed : 09 Jun 2023
Diagnostician : Angela Borella

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)

CASCADES CONTAINERBOARD PACKAGING - BEARPACK PROJECT
10026 OLD RIDGE ROAD
ASHLAND, VA
US 23005
Contact: MARC-ANDRE HUBERT
marc-andre_hubert@cascades.com
T:
F: