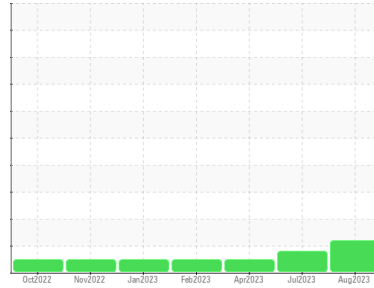


PROBLEM SUMMARY

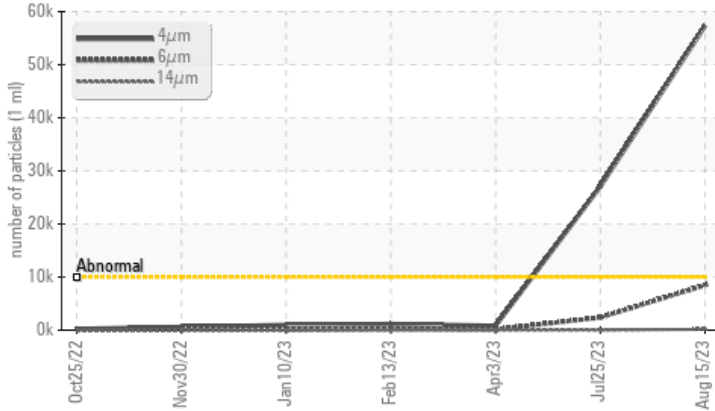
Sample Rating Trend



Area
Paper Side
 Machine Id
PM 1 Wet End Bowser
 Component
Bearing Lube
 Fluid
SHELL PM S2 M 220 (400 GAL)

COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

No corrective action is recommended at this time.
 Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	ABNORMAL	NORMAL
Particles >4µm	ASTM D7647	>10000	▲ 57330	▲ 27041	827
Particles >6µm	ASTM D7647	>2500	▲ 8467	2366	138
Oil Cleanliness	ISO 4406 (c)	>20/18/14	▲ 23/20/14	▲ 22/18/11	17/14/11

Customer Id: MCKPOR
 Sample No.: PE0000970
 Lab Number: 05928714
 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

25 Jul 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 high amount of silt (particulates < 6 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



03 Apr 2023 Diag: Angela Borella

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



13 Feb 2023 Diag: Angela Borella

NORMAL

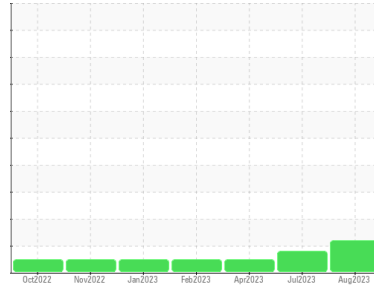


Resample at the next service interval to monitor. All component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



Area
Paper Side
 Machine Id
PM 1 Wet End Bowser
 Component
Bearing Lube
 Fluid
SHELL PM S2 M 220 (400 GAL)



DIAGNOSIS

Recommendation
 No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear
 All component wear rates are normal.

Contamination
 There is a high amount of silt (particulates < 6 microns in size) present in the oil.

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	PE0000970	PE0000962	PE0000884
Sample Date	Client Info	15 Aug 2023	25 Jul 2023	03 Apr 2023
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ABNORMAL	ABNORMAL	NORMAL

WEAR METALS

method	limit/base	current	history1	history2	
PQ	ASTM D8184	7	11	11	
Iron	ppm	ASTM D5185m >120	1	0	<1
Chromium	ppm	ASTM D5185m >5	0	0	0
Nickel	ppm	ASTM D5185m >20	0	0	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >4	0	0	0
Lead	ppm	ASTM D5185m >30	0	0	0
Copper	ppm	ASTM D5185m >17	<1	<1	<1
Tin	ppm	ASTM D5185m >10	0	0	0
Vanadium	ppm	ASTM D5185m	0	<1	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	0	0	0
Molybdenum	ppm	ASTM D5185m	<1	0	<1
Manganese	ppm	ASTM D5185m	0	0	0
Magnesium	ppm	ASTM D5185m	1	2	2
Calcium	ppm	ASTM D5185m	34	33	53
Phosphorus	ppm	ASTM D5185m	364	418	347
Zinc	ppm	ASTM D5185m	578	644	583
Sulfur	ppm	ASTM D5185m	3605	4771	3455

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	2	1	2
Sodium	ppm	ASTM D5185m	0	1	0
Potassium	ppm	ASTM D5185m >20	0	1	<1

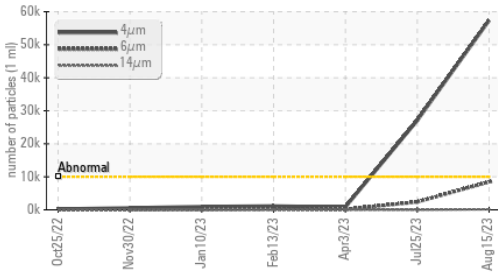
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >10000	▲ 57330	▲ 27041	827
Particles >6µm	ASTM D7647 >2500	▲ 8467	2366	138
Particles >14µm	ASTM D7647 >160	158	20	12
Particles >21µm	ASTM D7647 >40	36	5	2
Particles >38µm	ASTM D7647 >10	1	0	1
Particles >71µm	ASTM D7647 >3	0	0	0
Oil Cleanliness	ISO 4406 (c) >20/18/14	▲ 23/20/14	▲ 22/18/11	17/14/11

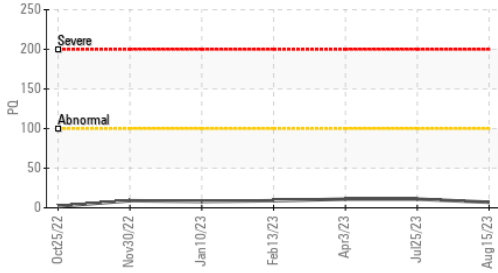
FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	0.75	0.75	0.72

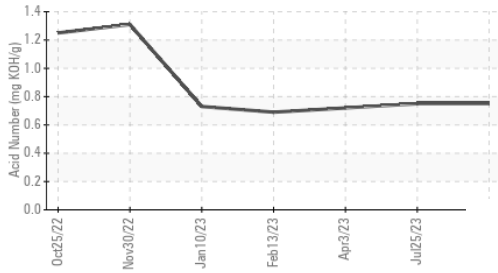
▲ Particle Trend



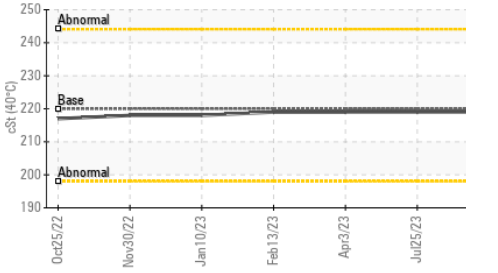
PQ



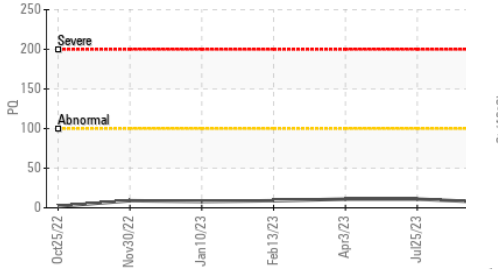
Acid Number



Viscosity @ 40°C



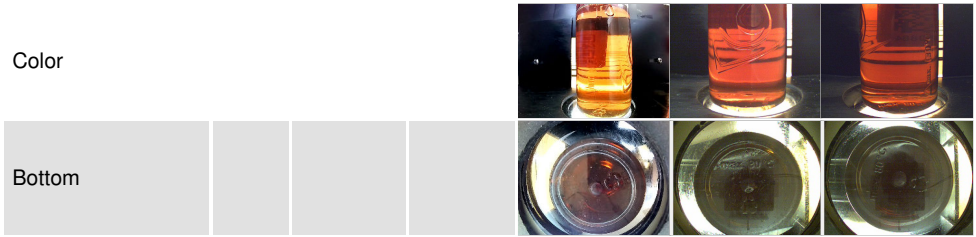
PQ



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

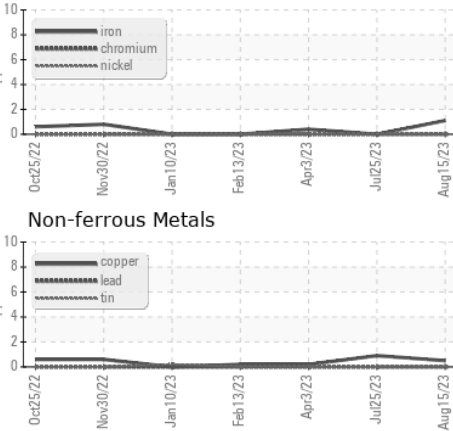
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	220	219	219

SAMPLE IMAGES	method	limit/base	current	history1	history2
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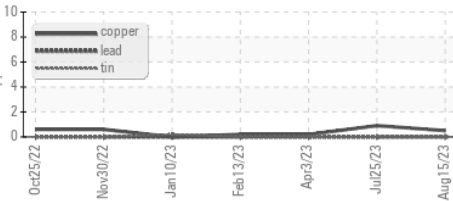


GRAPHS

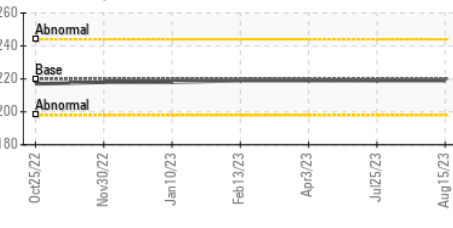
Ferrous Alloys



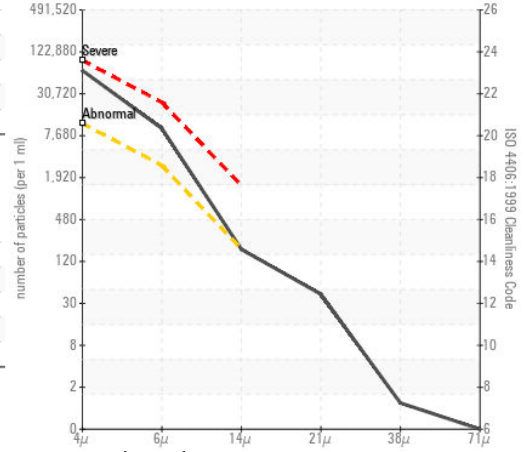
Non-ferrous Metals



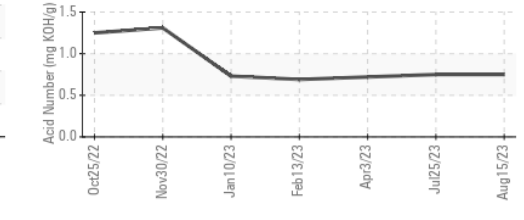
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PE0000970 **Received** : 18 Aug 2023
Lab Number : 05928714 **Diagnosed** : 21 Aug 2023
Unique Number : 10608661 **Diagnostician** : Angela Borella
Test Package : PLANT (Additional Tests: ICP, KV40, PQ, PrtCount, SCREEN)

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)

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