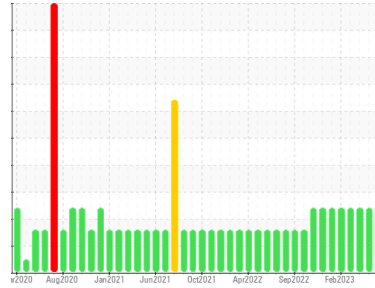


PROBLEM SUMMARY

Sample Rating Trend



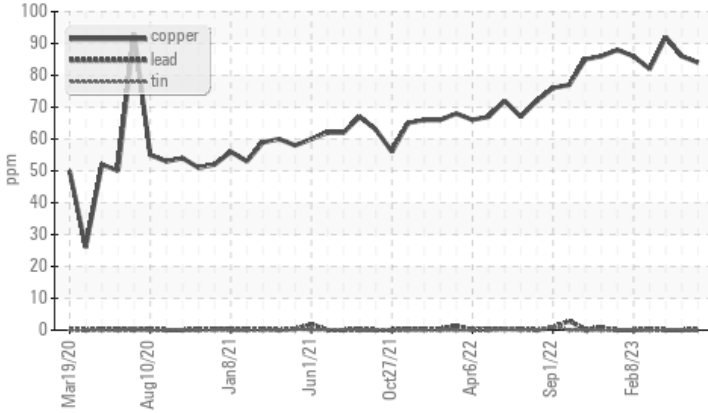
WEAR



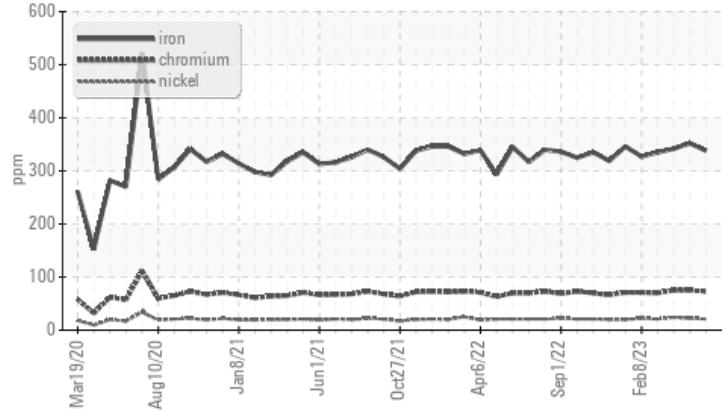
Area
CRM54
 Machine Id
CRM 54 CLEAN OIL TANK (S/N 16-2200-1026)
 Component
Tank New (Unused) Oil
 Fluid
NOT GIVEN (--- QTS)

COMPONENT CONDITION SUMMARY

▲ Non-ferrous Metals



▲ Ferrous Alloys



RECOMMENDATION

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

PROBLEMATIC TEST RESULTS

Sample Status				ATTENTION	ATTENTION	ATTENTION
Iron	ppm	ASTM D5185m	>5	▲ 338	▲ 352	▲ 342
Chromium	ppm	ASTM D5185m	>5	▲ 73	▲ 75	▲ 75
Copper	ppm	ASTM D5185m	>5	▲ 84	▲ 86	▲ 92

Customer Id: OUTCALAL
 Sample No.: RP0035049
 Lab Number: 05861130
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Jonathan Hester +1 919-379-4092 x4092
jhester@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
Resample	MISSED	Jul 06 2023	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

28 Apr 2023 Diag: Jonathan Hester

WEAR



No corrective action is recommended at this time. We recommend an early resample to monitor this condition. Bearing and/or gear wear is indicated. 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](#)



30 Mar 2023 Diag: Angela Borella

WEAR



This is the baseline readout on this new (unused) oil. We advise that you inspect for the source(s) of wear. Please specify the brand, type, and viscosity of the oil on your next sample. Chromium, copper and iron ppm levels are noted. The water content is negligible. There is no indication of any contamination in the new (unused) oil. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

[view report](#)



27 Feb 2023 Diag: Jonathan Hester

WEAR



No corrective action is recommended at this time. We recommend an early resample to monitor this condition. Bearing and/or gear wear is indicated. 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.

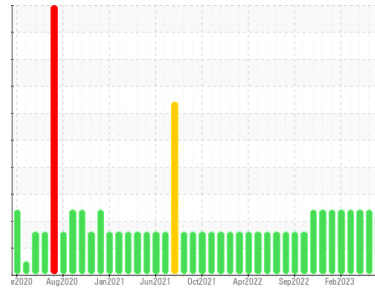
[view report](#)





OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area
CRM54
 Machine Id
CRM 54 CLEAN OIL TANK (S/N 16-2200-1026)
 Component
Tank New (Unused) Oil
 Fluid
NOT GIVEN (--- QTS)

DIAGNOSIS

Recommendation

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

Wear

Bearing and/or gear wear is indicated.

Contamination

There is no indication of any contamination 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	RP0035049	RP0034559	RP0029666
Sample Date	Client Info	30 May 2023	28 Apr 2023	30 Mar 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		ATTENTION	ATTENTION	ATTENTION

WEAR METALS

method	limit/base	current	history1	history2	
PQ	ASTM D8184	12	16	15	
Iron	ppm	ASTM D5185m >5	▲ 338	▲ 352	▲ 342
Chromium	ppm	ASTM D5185m >5	▲ 73	▲ 75	▲ 75
Nickel	ppm	ASTM D5185m >5	21	22	24
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m >5	0	0	0
Aluminum	ppm	ASTM D5185m >5	0	<1	<1
Lead	ppm	ASTM D5185m >5	<1	0	0
Copper	ppm	ASTM D5185m >5	▲ 84	▲ 86	▲ 92
Tin	ppm	ASTM D5185m >5	0	0	0
Vanadium	ppm	ASTM D5185m	<1	<1	<1
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	2	1	2
Manganese	ppm	ASTM D5185m	21	20	20
Magnesium	ppm	ASTM D5185m	0	0	0
Calcium	ppm	ASTM D5185m	7	49	8
Phosphorus	ppm	ASTM D5185m	1160	1263	1115
Zinc	ppm	ASTM D5185m	34	29	33

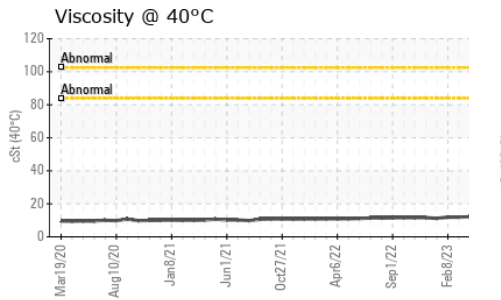
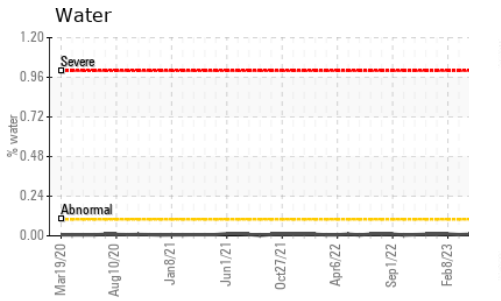
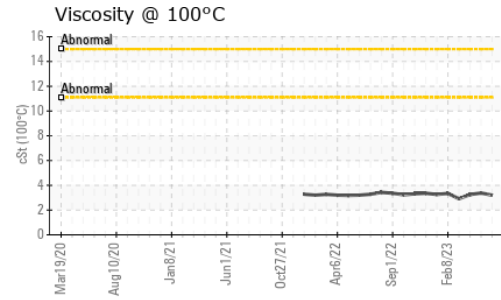
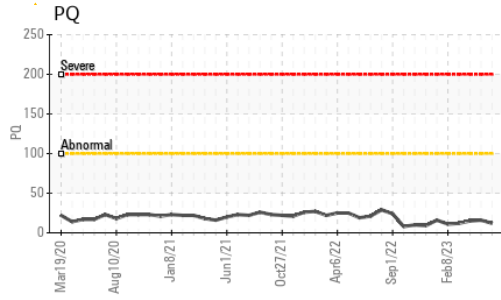
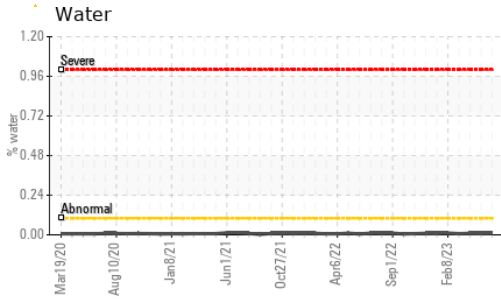
CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >15	4	4	3
Sodium	ppm	ASTM D5185m	<1	<1	2
Potassium	ppm	ASTM D5185m >20	<1	0	<1
Water	%	ASTM D6304	0.008	0.008	0.009
ppm Water	ppm	ASTM D6304	82.5	80.0	92.1

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	0.177	0.318	0.166

OIL ANALYSIS REPORT



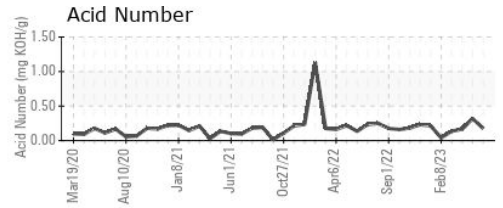
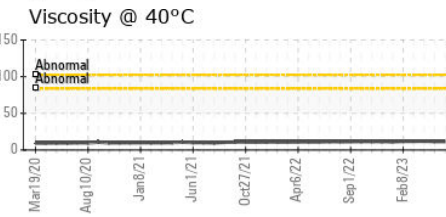
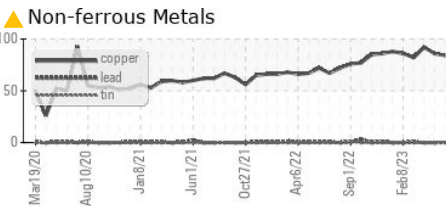
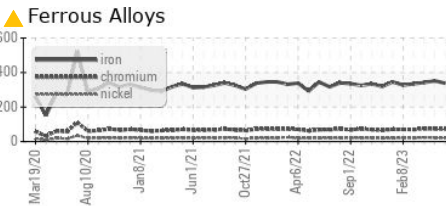
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	11.7	11.6	12.1
Visc @ 100°C	cSt	ASTM D445	3.2	3.38	3.25
Viscosity Index (VI)	Scale	ASTM D2270	145	181	142

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0035049 **Received** : 31 May 2023
Lab Number : 05861130 **Diagnosed** : 02 Jun 2023
Unique Number : 10495595 **Diagnostician** : Jonathan Hester

OUTOKUMPU STAINLESS USA
 HWY 43 N
 CALVERT, AL
 US 36513
 Contact: MARIO JOHNSON
 Mario.johnson@outokumpu.com
 T: (251)321-4105
 F: x:

Test Package : IND 2 (Additional Tests: FT-IR, ICP-NewOil, KV100, PQ, PrtCount, VI)
 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)