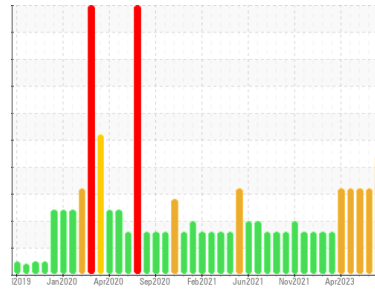


PROBLEM SUMMARY

Sample Rating Trend



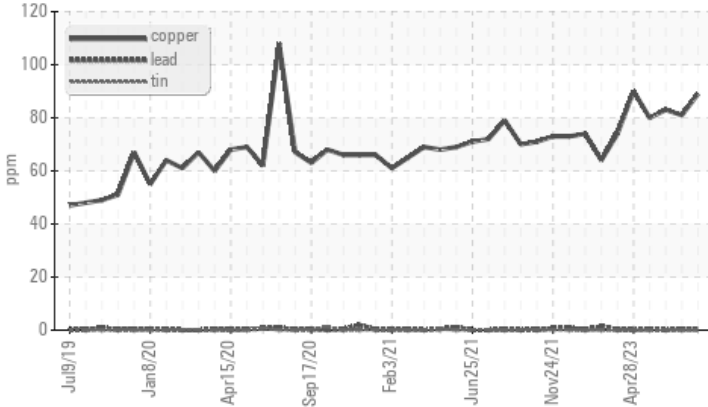
VISUAL METAL



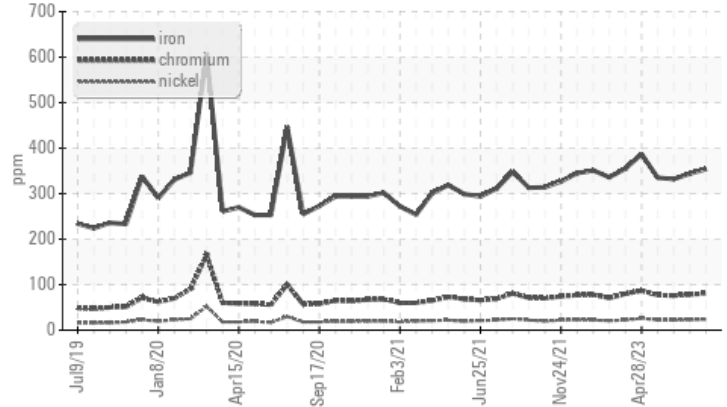
Area
CRM64
Machine Id
CRM 64 DIRTY OIL TANK (S/N 16-2300-1025)
Component
Tank Bulk Fluid Tank
Fluid
NOT GIVEN (59438 GAL)

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				ABNORMAL	ATTENTION	ATTENTION
Iron	ppm	ASTM D5185m		▲ 354	▲ 344	▲ 332
Chromium	ppm	ASTM D5185m		▲ 81	▲ 78	▲ 76
Nickel	ppm	ASTM D5185m		▲ 24	▲ 23	▲ 22
Copper	ppm	ASTM D5185m		▲ 89	▲ 81	▲ 83
White Metal	scalar	*Visual	NONE	▲ MODER	NONE	NONE

Customer Id: OUTCALAL
Sample No.: RP0035348
Lab Number: 05964922
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	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

26 Jul 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](#)



28 Jun 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 May 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.

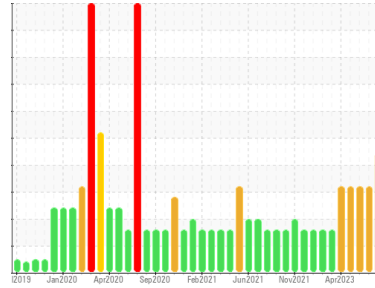
[view report](#)





OIL ANALYSIS REPORT

Sample Rating Trend



VISUAL METAL



Area
CRM64
 Machine Id
CRM 64 DIRTY OIL TANK (S/N 16-2300-1025)
 Component
Tank Bulk Fluid Tank
 Fluid
NOT GIVEN (59438 GAL)

DIAGNOSIS

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

Wear
 Moderate concentration of visible metal present. 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		RP0035348	RP0035602	RP0035359
Sample Date	Client Info		27 Sep 2023	26 Jul 2023	28 Jun 2023
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	ATTENTION	ATTENTION

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184		16	15	11
Iron	ppm	ASTM D5185m	▲ 354	▲ 344	▲ 332
Chromium	ppm	ASTM D5185m	▲ 81	▲ 78	▲ 76
Nickel	ppm	ASTM D5185m	▲ 24	▲ 23	▲ 22
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m	5	<1	<1
Lead	ppm	ASTM D5185m	<1	<1	0
Copper	ppm	ASTM D5185m	▲ 89	▲ 81	▲ 83
Tin	ppm	ASTM D5185m	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	2	2	1
Manganese	ppm	ASTM D5185m	17	17	17
Magnesium	ppm	ASTM D5185m	3	<1	4
Calcium	ppm	ASTM D5185m	7	10	7
Phosphorus	ppm	ASTM D5185m	990	1005	996
Zinc	ppm	ASTM D5185m	46	50	45

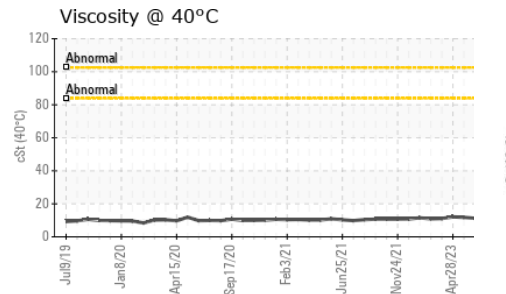
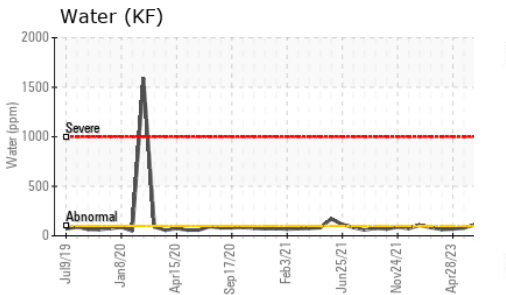
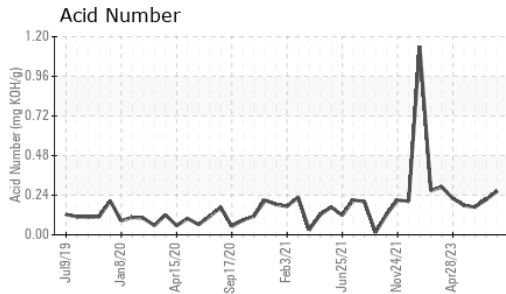
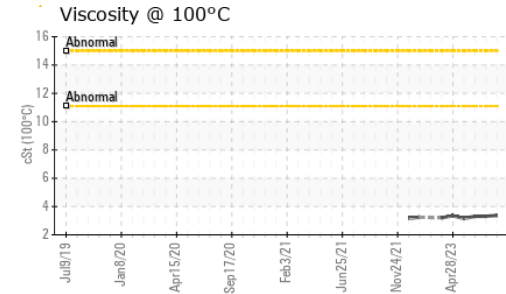
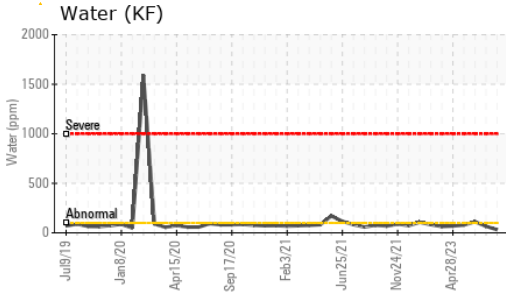
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	3	3	2
Sodium	ppm	ASTM D5185m	2	1	2
Potassium	ppm	ASTM D5185m	>20	2	1
Water	%	ASTM D6304	0.003	0.006	0.011
ppm Water	ppm	ASTM D6304	31.3	65.9	112.0

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.265	0.213	0.168

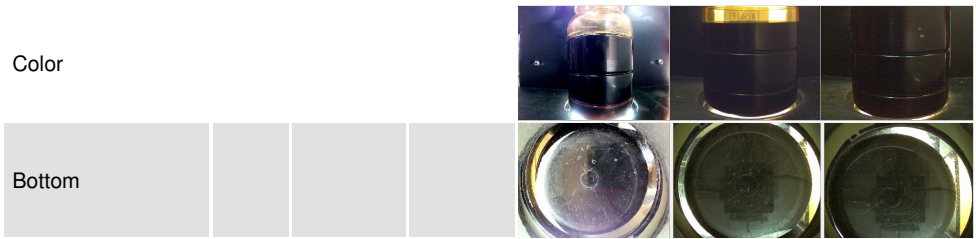
OIL ANALYSIS REPORT



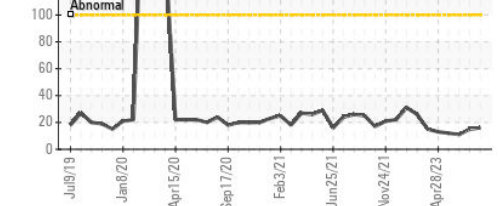
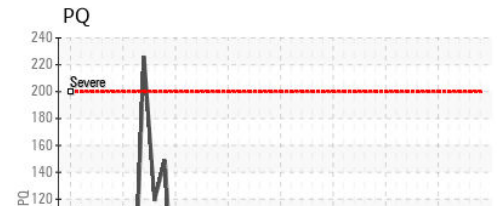
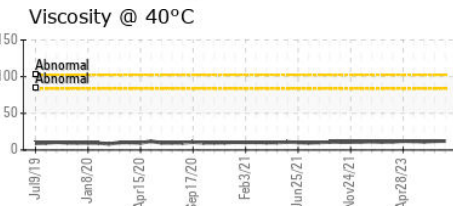
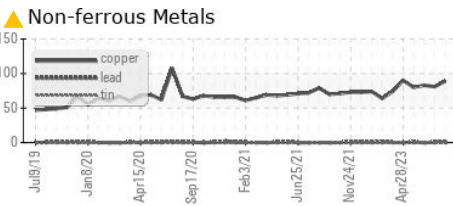
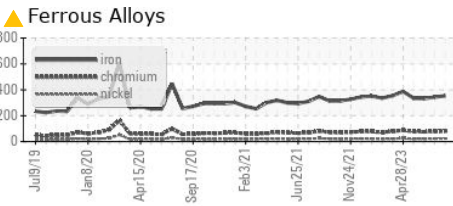
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	▲ MODER	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	12.2	12.00	11.2
Visc @ 100°C	cSt	ASTM D445	3.37	3.31	3.31
Viscosity Index (VI)	Scale	ASTM D2270	159	155	183

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0035348 **Received** : 29 Sep 2023
Lab Number : 05964922 **Diagnosed** : 03 Oct 2023
Unique Number : 10671473 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: KV100, PQ, VI)

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

Certificate L2367
 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)