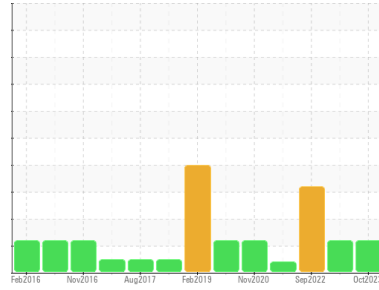


PROBLEM SUMMARY

Sample Rating Trend



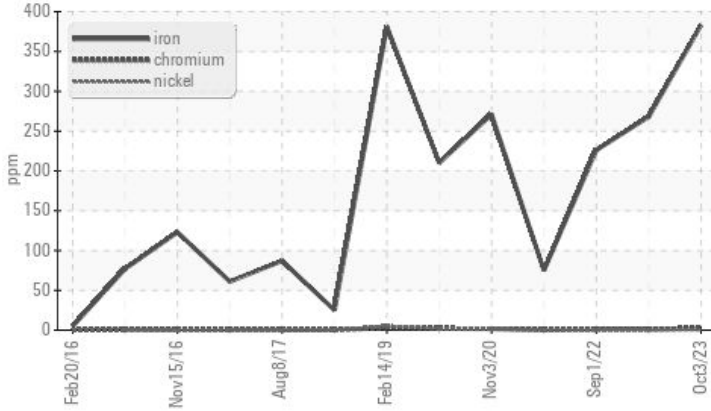
WEAR



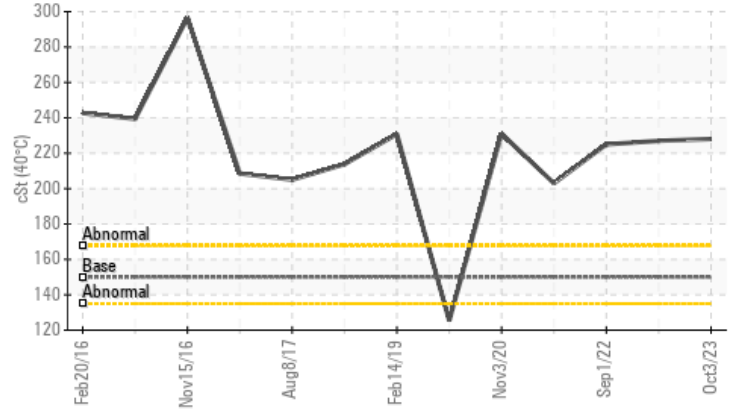
Area
STL64.1
Machine Id
STL 64.1 SCRAP CHOPPER M/S (S/N 16-5130-0235)
Component
Gearbox
Fluid
GEAR OIL ISO 150 (--- QTS)

COMPONENT CONDITION SUMMARY

▲ Ferrous Alloys



▲ Viscosity @ 40°C



RECOMMENDATION

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

PROBLEMATIC TEST RESULTS

Sample Status		ABNORMAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m >200	▲ 383	▲ 268
Visc @ 40°C	cSt	ASTM D445 150	▲ 228	▲ 225

Customer Id: OUTCALAL
Sample No.: RP0038612
Lab Number: 05969036
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

25 Apr 2023 Diag: Don Baldrige

WEAR



No corrective action is recommended at this time. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Gear wear is indicated. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within ISO 220 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

view report



01 Sep 2022 Diag: Angela Borella

WEAR



We recommend that you drain the oil from the component if this has not already been done. Resample at the next service interval to monitor. The iron level is abnormal. Gear wear is indicated. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within ISO 220 range, advise investigate. Confirm oil type. 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



09 Mar 2022 Diag: Doug Bogart

VISCOSITY



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within ISO 220 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

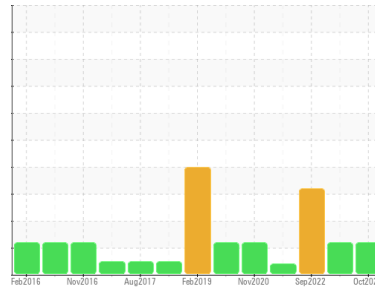
view report





OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area
STL64.1
 Machine Id
STL 64.1 SCRAP CHOPPER M/S (S/N 16-5130-0235)
 Component
Gearbox
 Fluid
GEAR OIL ISO 150 (--- QTS)

DIAGNOSIS

Recommendation

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

Wear

Gear wear is indicated.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

Viscosity of sample indicates oil is within ISO 220 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		RP0038612	RP0031253	RP0029670
Sample Date	Client Info		03 Oct 2023	25 Apr 2023	01 Sep 2022
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
PQ	ASTM D8184		283	185	▲ 778
Iron	ppm	ASTM D5185m >200	▲ 383	▲ 268	▲ 226
Chromium	ppm	ASTM D5185m >15	2	1	1
Nickel	ppm	ASTM D5185m >15	<1	0	0
Titanium	ppm	ASTM D5185m	3	2	<1
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >25	6	5	4
Lead	ppm	ASTM D5185m >100	0	0	<1
Copper	ppm	ASTM D5185m >200	1	<1	1
Tin	ppm	ASTM D5185m >25	<1	0	<1
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	0	0	2
Barium	ppm	ASTM D5185m 15	0	0	3
Molybdenum	ppm	ASTM D5185m 15	<1	<1	<1
Manganese	ppm	ASTM D5185m	3	2	2
Magnesium	ppm	ASTM D5185m 50	3	7	3
Calcium	ppm	ASTM D5185m 50	8	12	7
Phosphorus	ppm	ASTM D5185m 350	108	106	289
Zinc	ppm	ASTM D5185m 100	0	10	15

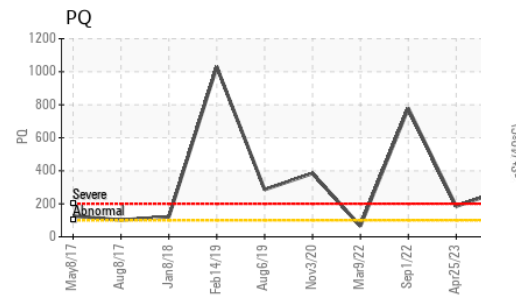
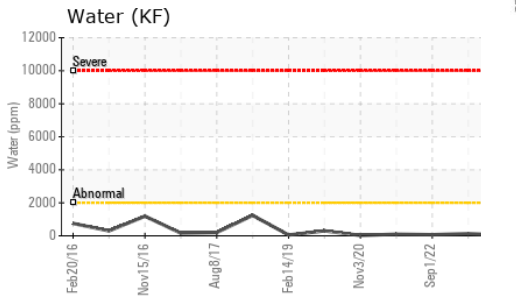
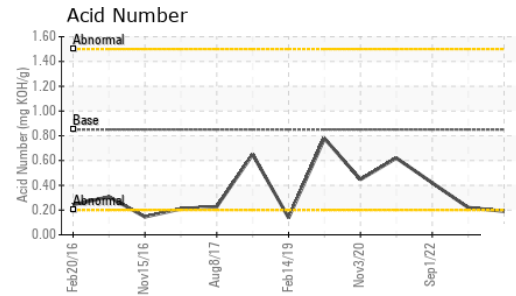
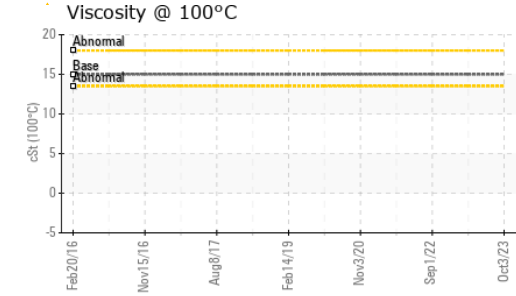
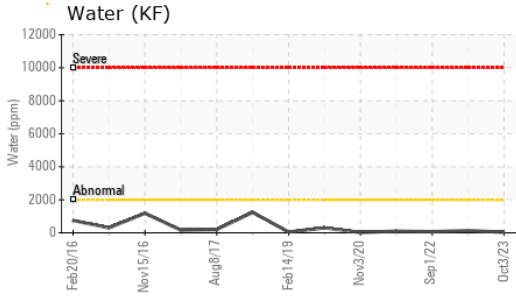
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	20	17	11
Sodium	ppm	ASTM D5185m	4	<1	0
Potassium	ppm	ASTM D5185m >20	2	2	2
Water	%	ASTM D6304 >0.2	0.003	0.013	0.006
ppm Water	ppm	ASTM D6304 >2000	38.1	130.5	67.5

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.85	0.19	0.22	0.42

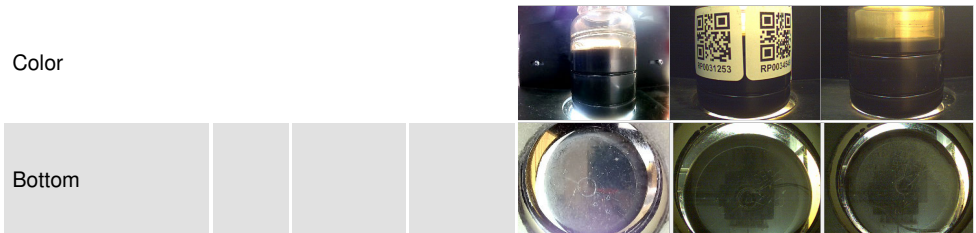
OIL ANALYSIS REPORT



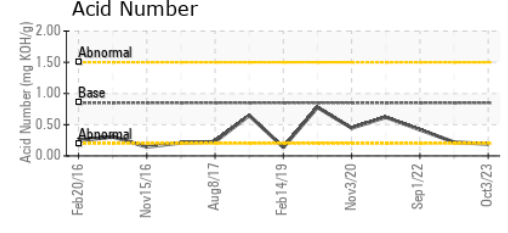
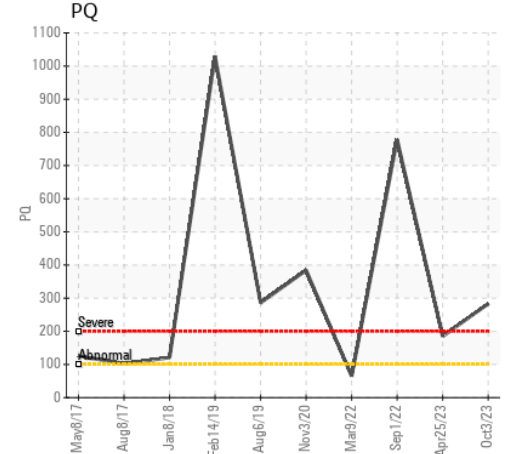
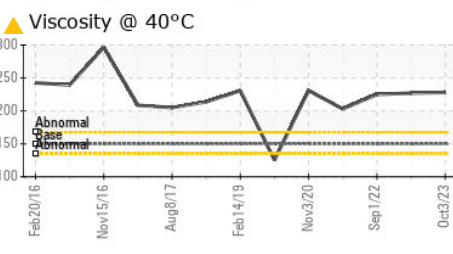
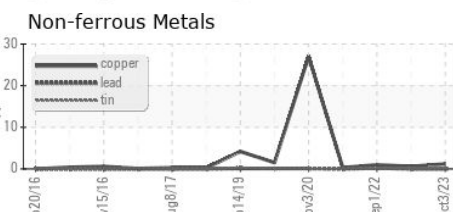
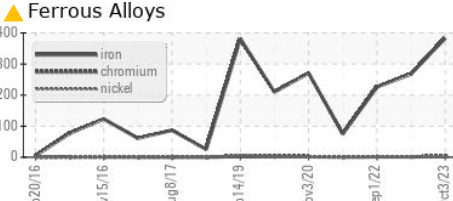
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	150 ▲ 228	▲ 227	▲ 225

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0038612 **Received** : 04 Oct 2023
Lab Number : 05969036 **Diagnosed** : 06 Oct 2023
Unique Number : 10675587 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: FT-IR, KV100, PQ)

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

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)