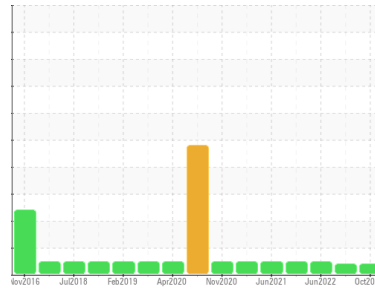


PROBLEM SUMMARY

Sample Rating Trend



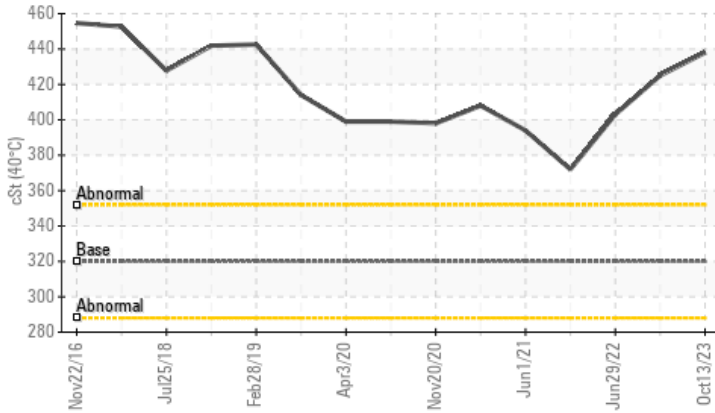
VISCOSITY



Area
MELT SHOP - AOD
Machine Id
MELT SHOP - CONVERTER TILTING LUBE SYSTEM (S/N 15-3000-0130)
Component
Lube System
Fluid
GEAR OIL ISO 320 (--- QTS)

COMPONENT CONDITION SUMMARY

▲ Viscosity @ 40°C



RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ATTENTION	ATTENTION	NORMAL
Visc @ 40°C	cSt	ASTM D445	320	▲ 438	▲ 425	403

Customer Id: OUTCALAL
Sample No.: RP0038345
Lab Number: 05979819
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldrige +1
don.b505@comcast.net

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

11 May 2023 Diag: Don Baldrige

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. The oil viscosity is higher than normal. The AN level is acceptable for this fluid.

view report



29 Jun 2022 Diag: Jonathan Hester

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. 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



10 Feb 2022 Diag: Angela Borella

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. 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.

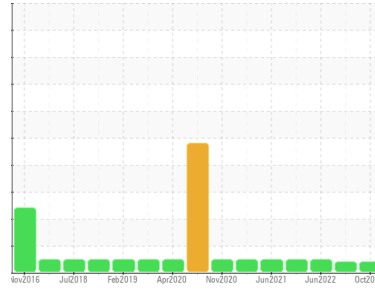
view report





OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Area
MELT SHOP - AOD
 Machine Id
MELT SHOP - CONVERTER TILTING LUBE SYSTEM (S/N 15-3000-0130)
 Component
Lube System
 Fluid
GEAR OIL ISO 320 (--- QTS)

DIAGNOSIS

▲ Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

▲ Fluid Condition

The oil viscosity is higher than normal. The AN level is acceptable for this fluid.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		RP0038345	RP0034566	RP0026342
Sample Date	Client Info		13 Oct 2023	11 May 2023	29 Jun 2022
Machine Age	Client Info		0	0	0
Oil Age	Client Info		0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ATTENTION	ATTENTION	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184		19	21	25
Iron	ppm ASTM D5185m	>20	5	8	4
Chromium	ppm ASTM D5185m	>20	0	<1	0
Nickel	ppm ASTM D5185m	>20	<1	<1	0
Titanium	ppm ASTM D5185m		0	0	0
Silver	ppm ASTM D5185m		0	0	<1
Aluminum	ppm ASTM D5185m	>20	0	<1	0
Lead	ppm ASTM D5185m	>20	<1	0	0
Copper	ppm ASTM D5185m	>20	1	0	<1
Tin	ppm ASTM D5185m	>20	0	<1	0
Antimony	ppm ASTM D5185m		---	---	---
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	50	12	8	8
Barium	ppm ASTM D5185m	15	2	0	2
Molybdenum	ppm ASTM D5185m	15	<1	<1	0
Manganese	ppm ASTM D5185m		0	<1	0
Magnesium	ppm ASTM D5185m	50	2	0	<1
Calcium	ppm ASTM D5185m	50	9	7	15
Phosphorus	ppm ASTM D5185m	350	184	235	123
Zinc	ppm ASTM D5185m	100	9	0	12

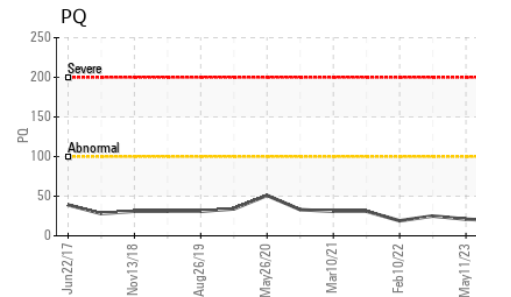
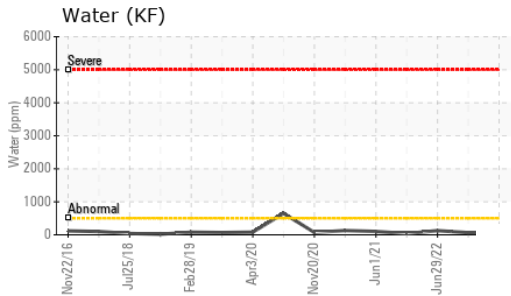
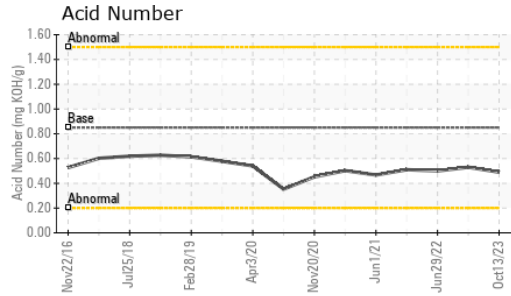
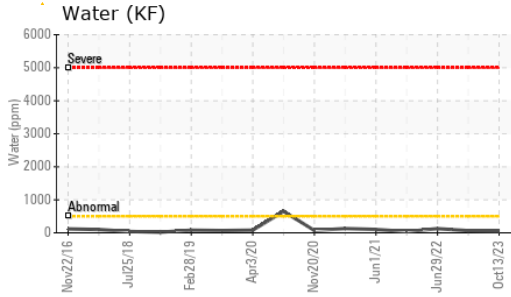
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m	>15	2	2	1
Sodium	ppm ASTM D5185m		0	<1	0
Potassium	ppm ASTM D5185m	>20	<1	<1	<1
Water	% ASTM D6304	>0.05	0.004	0.006	0.012
ppm Water	ppm ASTM D6304	>500	44.0	65.7	127.4

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045	0.85	0.49	0.53	0.50

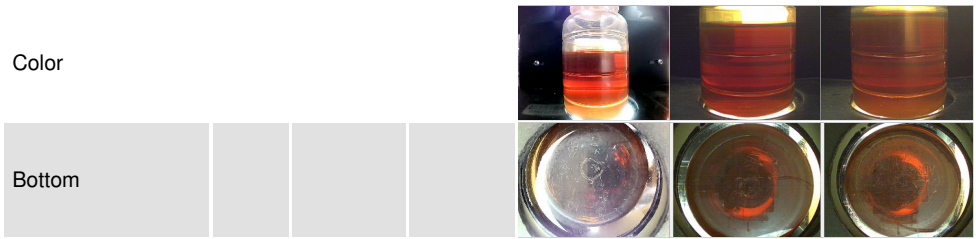
OIL ANALYSIS REPORT



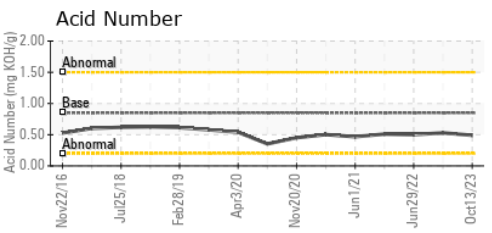
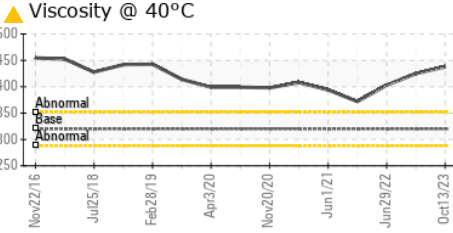
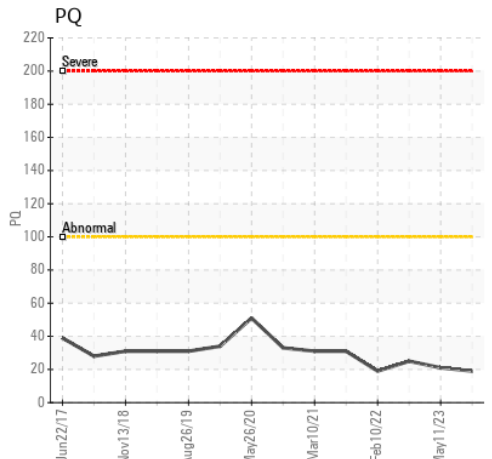
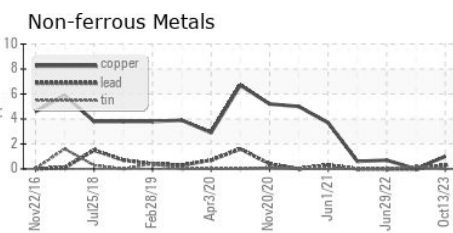
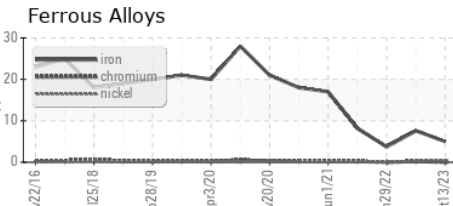
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	320 ▲ 438	425	403

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0038345 **Received** : 16 Oct 2023
Lab Number : 05979819 **Diagnosed** : 18 Oct 2023
Unique Number : 10697114 **Diagnostician** : Don Baldrige
Test Package : IND 2 (Additional Tests: PQ)

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)