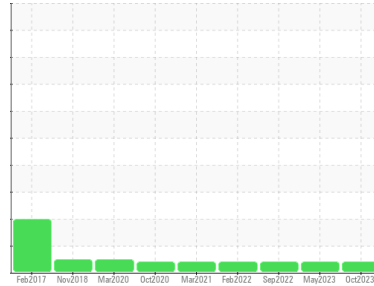


PROBLEM SUMMARY

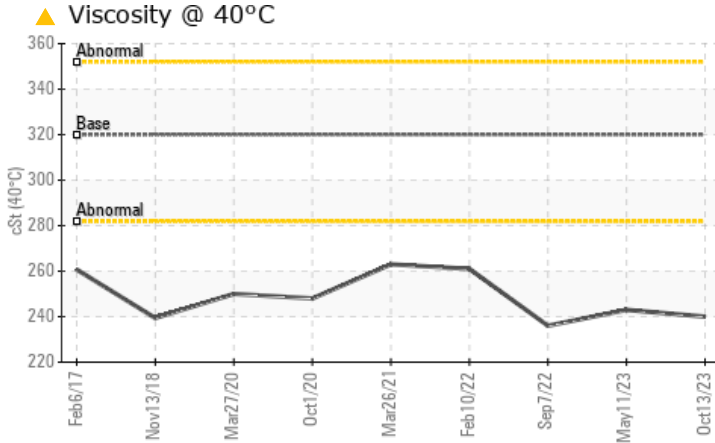
Sample Rating Trend

VISCOSITY

Area
MELT SHOP - SGP
Machine Id
NORTHSIDE GRINDER NORTH GEARBOX (S/N 15-4000-0820)
Component
Gearbox
Fluid
EP 320 (--- QTS)



COMPONENT CONDITION SUMMARY



RECOMMENDATION

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

PROBLEMATIC TEST RESULTS

Sample Status				ATTENTION	ATTENTION	ATTENTION
Visc @ 40°C	cSt	ASTM D445	320	▲ 240	▲ 243	▲ 236

Customer Id: OUTCALAL
Sample No.: RP0038603
Lab Number: 05979828
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

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. 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



07 Sep 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



10 Feb 2022 Diag: Angela Borella

VISCOSITY



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 oil viscosity is lower than normal. Confirm oil type. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

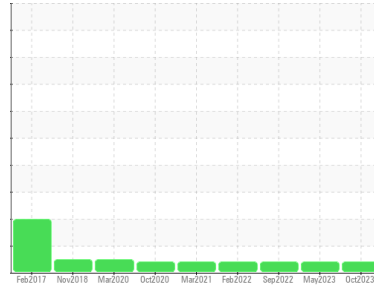
view report





OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Area
MELT SHOP - SGP
 Machine Id
NORTHSIDE GRINDER NORTH GEARBOX (S/N 15-4000-0820)
 Component
Gearbox
 Fluid
EP 320 (--- QTS)

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

The water content is negligible. 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		RP0038603	RP0034445	RP0029744
Sample Date	Client Info		13 Oct 2023	11 May 2023	07 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			ATTENTION	ATTENTION	ATTENTION

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184		59	187	69
Iron	ppm	ASTM D5185m >200	96	100	86
Chromium	ppm	ASTM D5185m >15	<1	1	<1
Nickel	ppm	ASTM D5185m >15	<1	<1	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >25	0	2	<1
Lead	ppm	ASTM D5185m >100	<1	0	0
Copper	ppm	ASTM D5185m >200	<1	4	5
Tin	ppm	ASTM D5185m >25	0	<1	0
Antimony	ppm	ASTM D5185m >5	---	---	---
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	0	0	0
Barium	ppm	ASTM D5185m	3	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	2	2	1
Magnesium	ppm	ASTM D5185m	<1	0	0
Calcium	ppm	ASTM D5185m	90	121	105
Phosphorus	ppm	ASTM D5185m	210	279	249
Zinc	ppm	ASTM D5185m	51	85	97

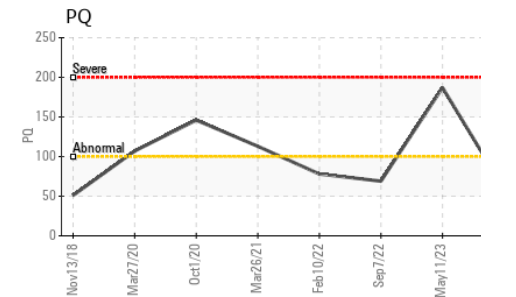
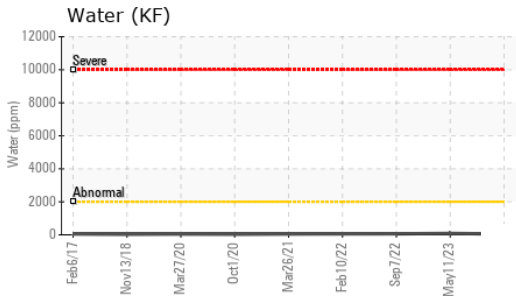
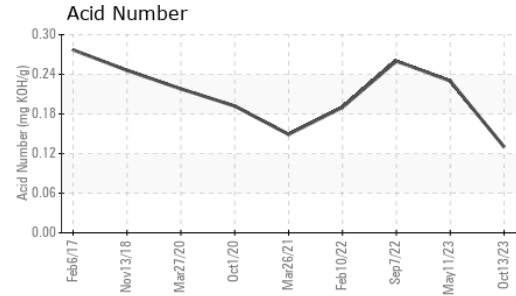
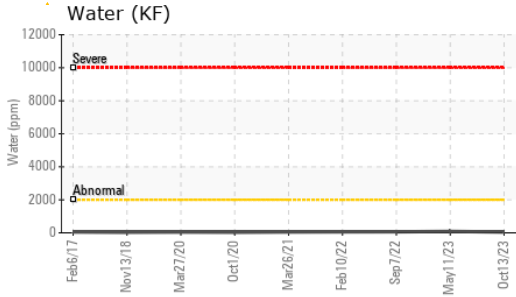
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	3	4	4
Sodium	ppm	ASTM D5185m	0	3	2
Potassium	ppm	ASTM D5185m >20	1	1	0
Water	%	ASTM D6304 >0.2	0.004	0.008	0.006
ppm Water	ppm	ASTM D6304 >2000	45.7	86.3	60.5

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.13	0.23	0.26

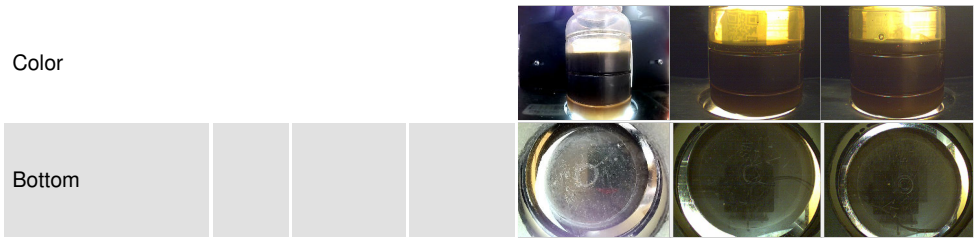
OIL ANALYSIS REPORT



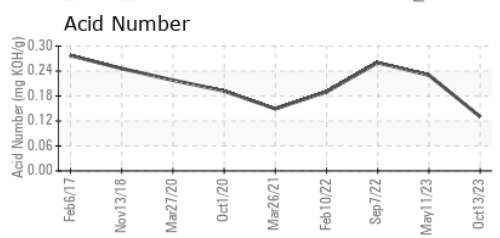
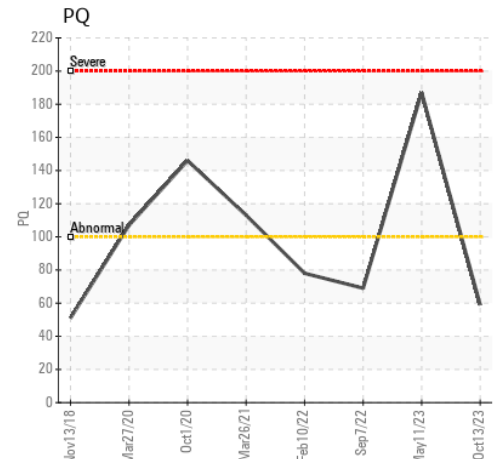
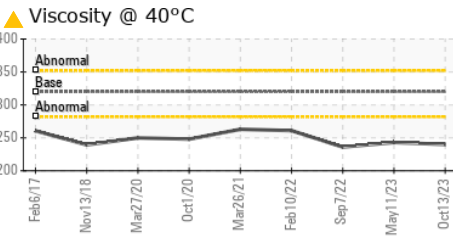
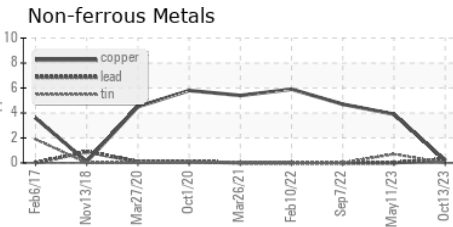
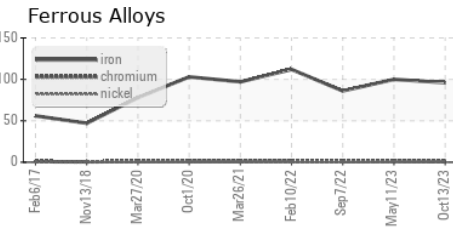
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	320 ▲ 240	▲ 243	▲ 236

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0038603 **Received** : 16 Oct 2023
Lab Number : 05979828 **Diagnosed** : 18 Oct 2023
Unique Number : 10697123 **Diagnostician** : Jonathan Hester
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)