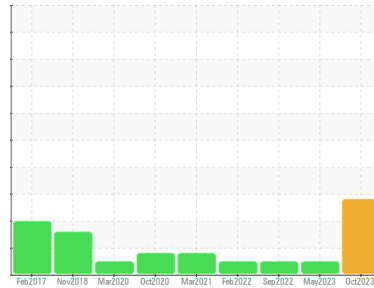


PROBLEM SUMMARY

Sample Rating Trend

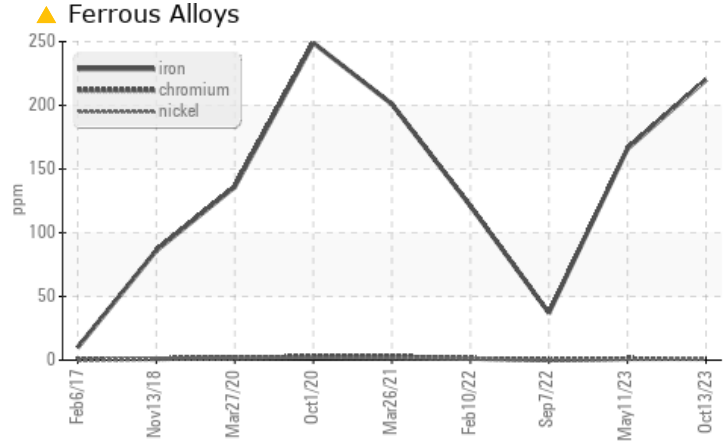
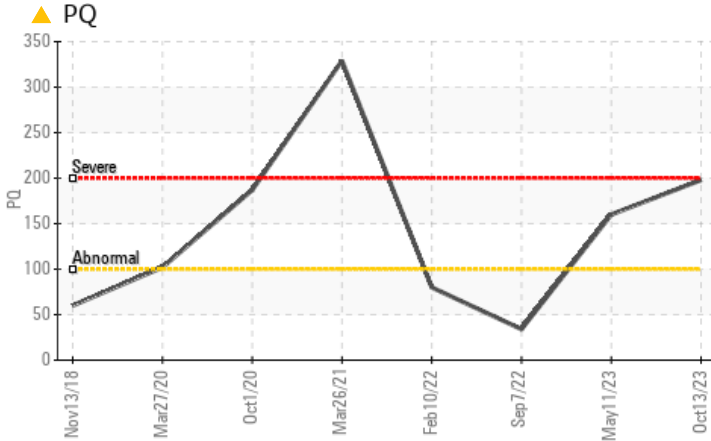


WEAR



Area
MELT SHOP - SGP
Machine Id
#1 SLAB GRINDER #3 GEARBOX (S/N 15-4000-0820)
Component
Gearbox
Fluid
GEAR OIL ISO 320 (--- QTS)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

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

PROBLEMATIC TEST RESULTS

Sample Status		ABNORMAL	NORMAL	NORMAL
PQ	ASTM D8184	▲ 198	160	34
Iron	ppm ASTM D5185m >200	▲ 220	166	37

Customer Id: OUTCALAL
Sample No.: RP0038611
Lab Number: 05979821
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

11 May 2023 Diag: Don Baldrige

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



07 Sep 2022 Diag: Wes Davis

NORMAL



Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample. All component wear rates are normal. The water content is negligible. 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: Wes Davis

NORMAL



Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample. All component wear rates are normal. The water content is negligible. 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.

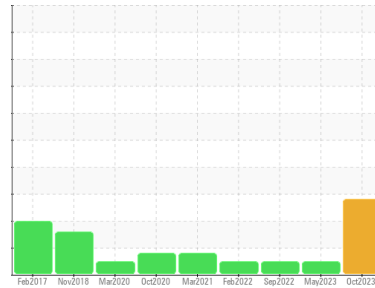
view report





OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area
MELT SHOP - SGP
 Machine Id
#1 SLAB GRINDER #3 GEARBOX (S/N 15-4000-0820)
 Component
Gearbox
 Fluid
GEAR OIL ISO 320 (--- 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

The water content is negligible. 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	RP0038611	RP0034573	RP0029742
Sample Date	Client Info	13 Oct 2023	11 May 2023	07 Sep 2022
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		ABNORMAL	NORMAL	NORMAL

WEAR METALS

method	limit/base	current	history1	history2	
PQ	ASTM D8184	▲ 198	160	34	
Iron	ppm	ASTM D5185m >200	▲ 220	166	37
Chromium	ppm	ASTM D5185m >15	1	1	0
Nickel	ppm	ASTM D5185m >15	<1	<1	0
Titanium	ppm	ASTM D5185m	<1	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	6	3	<1
Tin	ppm	ASTM D5185m >25	<1	<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 50	4	4	6
Barium	ppm	ASTM D5185m 15	2	0	0
Molybdenum	ppm	ASTM D5185m 15	0	<1	0
Manganese	ppm	ASTM D5185m	2	2	<1
Magnesium	ppm	ASTM D5185m 50	2	0	0
Calcium	ppm	ASTM D5185m 50	6	4	5
Phosphorus	ppm	ASTM D5185m 350	175	217	196
Zinc	ppm	ASTM D5185m 100	51	17	37

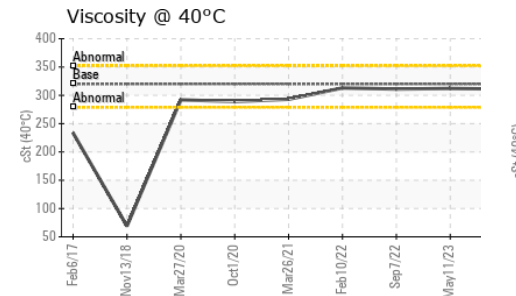
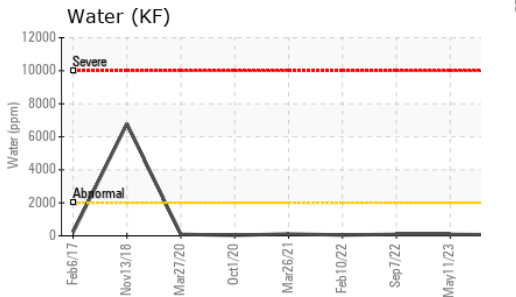
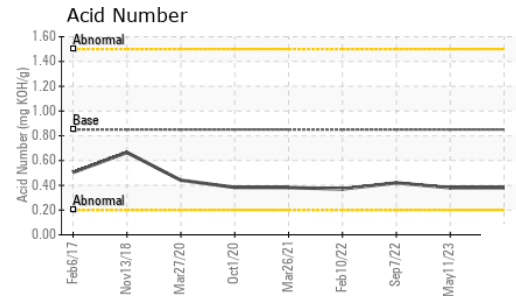
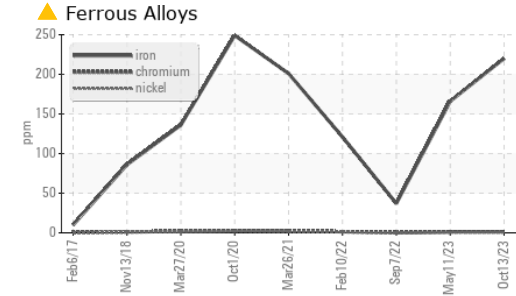
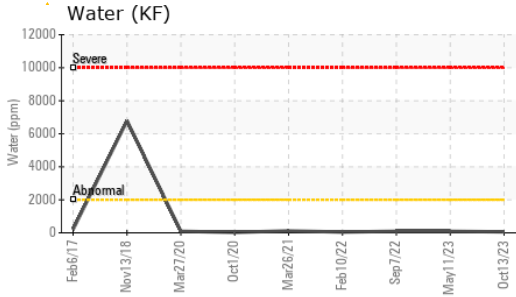
CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >50	14	10	4
Sodium	ppm	ASTM D5185m	0	2	<1
Potassium	ppm	ASTM D5185m >20	<1	1	0
Water	%	ASTM D6304 >0.2	0.005	0.009	0.009
ppm Water	ppm	ASTM D6304 >2000	59.6	90.0	93.8

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.85	0.38	0.38	0.42

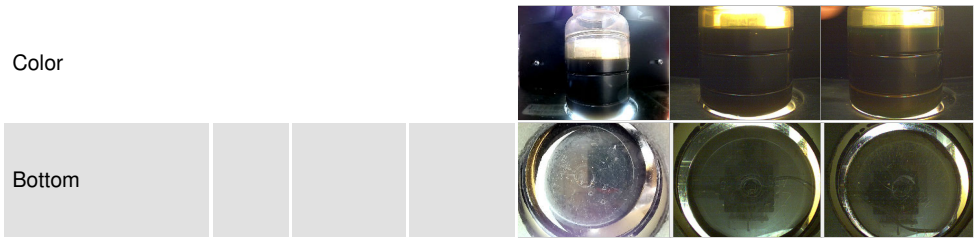
OIL ANALYSIS REPORT



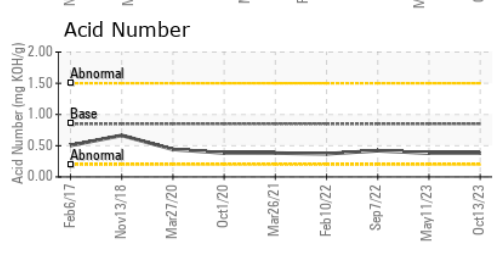
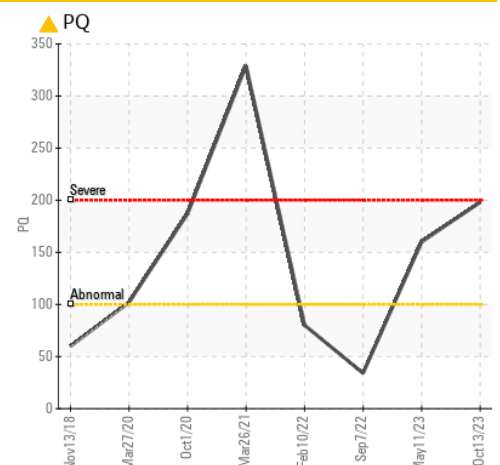
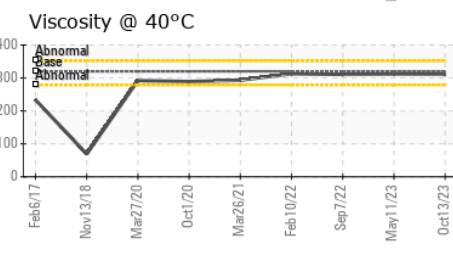
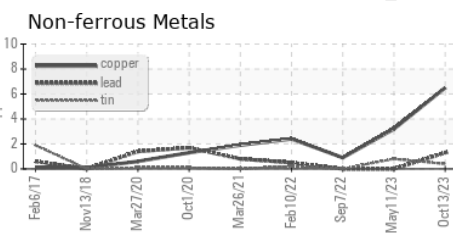
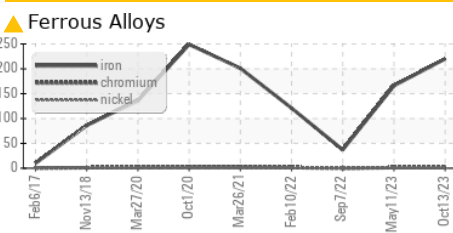
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	MODER	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	320	311	312	311

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0038611 **Received** : 16 Oct 2023
Lab Number : 05979821 **Diagnosed** : 18 Oct 2023
Unique Number : 10697116 **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)