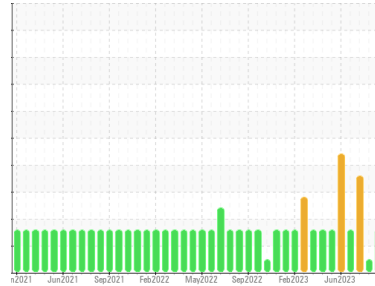


# PROBLEM SUMMARY

Sample Rating Trend



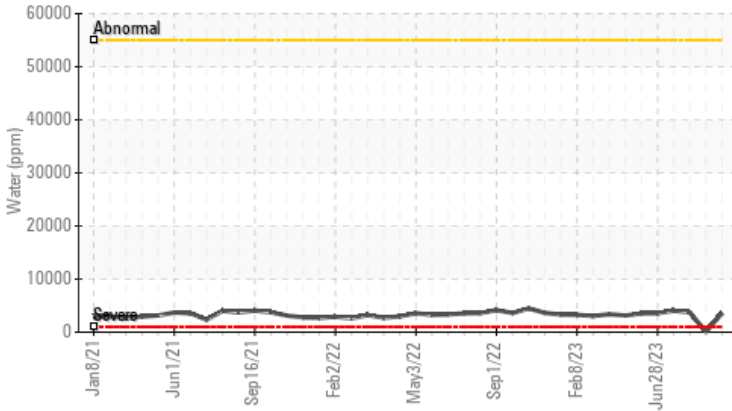
**WATER**



Area  
**MELT SHOP - HYDRAULIC**  
Machine Id  
**MELT SHOP GRINDER MAIN HYDRAULIC (S/N 15-8000-0815-0100)**  
Component  
**Tank Hydraulic System**  
Fluid  
**FIRE-RESISTANT FLUID ISO 46 (1056 GAL)**

## COMPONENT CONDITION SUMMARY

### ▲ Water (KF)



## RECOMMENDATION

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

## PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	NORMAL	ABNORMAL
Water	%	ASTM D6304	>55	▲ 0.355	0.004	▲ 0.372
ppm Water	ppm	ASTM D6304	>55000	▲ 3554.1	47.6	▲ 3726.8

Customer Id: OUTCALAL  
Sample No.: RP0038615  
Lab Number: 05968995  
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](mailto:don.b505@comcast.net)

To change component or sample information:  
Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

### 27 Sep 2023 Diag: Don Baldrige

NORMAL



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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 29 Aug 2023 Diag: Don Baldrige

WATER



We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. There is a light concentration of water present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 26 Jul 2023 Diag: Don Baldrige

WATER



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a light concentration of water present in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

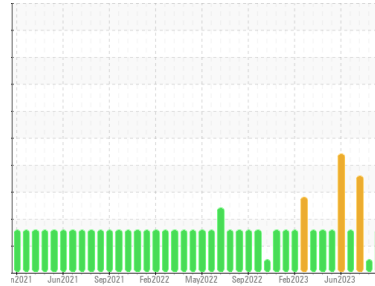
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



**WATER**



Area  
**MELT SHOP - HYDRAULIC**  
 Machine Id  
**MELT SHOP GRINDER MAIN HYDRAULIC (S/N 15-8000-0815-0100)**  
 Component  
**Tank Hydraulic System**  
 Fluid  
**FIRE-RESISTANT FLUID ISO 46 (1056 GAL)**

**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**

There is a light concentration of water present in the oil. The amount and size of particulates present in the system are acceptable.

**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		<b>RP0038615</b>	RP0035498	RP0038430
Sample Date	Client Info		<b>03 Oct 2023</b>	27 Sep 2023	29 Aug 2023
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>ABNORMAL</b>	NORMAL	ABNORMAL

**WEAR METALS**

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	<b>0</b>	0	0
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m >20	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>0</b>	0	<1
Lead	ppm	ASTM D5185m >20	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >20	<b>2</b>	0	<1
Tin	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0

**ADDITIVES**

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 5	<b>0</b>	0	0
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 5	<b>3</b>	0	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m 5	<b>0</b>	5	1
Calcium	ppm	ASTM D5185m 50	<b>6</b>	4	4
Phosphorus	ppm	ASTM D5185m 175	<b>573</b>	646	585
Zinc	ppm	ASTM D5185m 62	<b>0</b>	16	3

**CONTAMINANTS**

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<b>&lt;1</b>	0	0
Sodium	ppm	ASTM D5185m	<b>11</b>	10	11
Potassium	ppm	ASTM D5185m >20	<b>2</b>	<1	<1
Water	%	ASTM D6304 >55	<b>▲ 0.355</b>	0.004	▲ 0.372
ppm Water	ppm	ASTM D6304 >55000	<b>▲ 3554.1</b>	47.6	▲ 3726.8

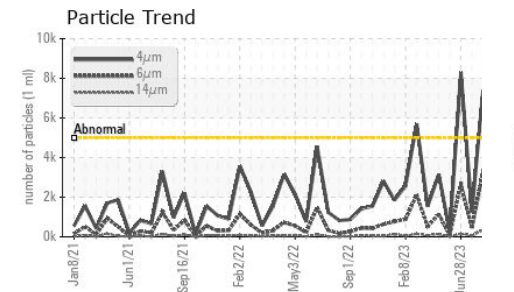
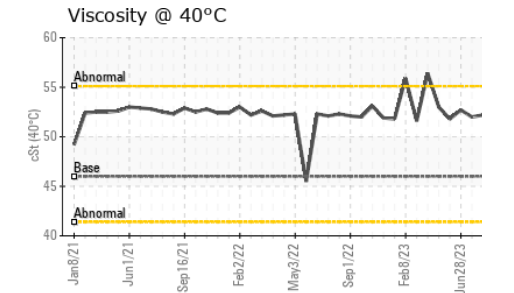
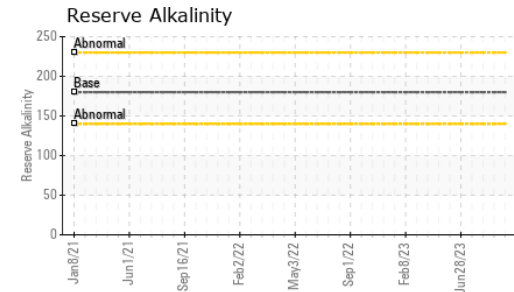
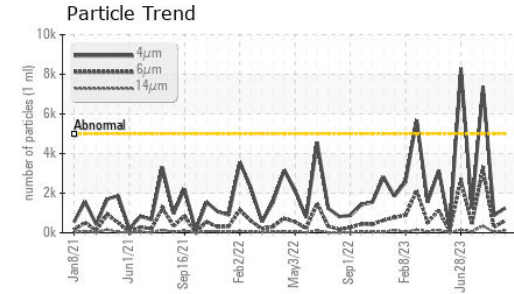
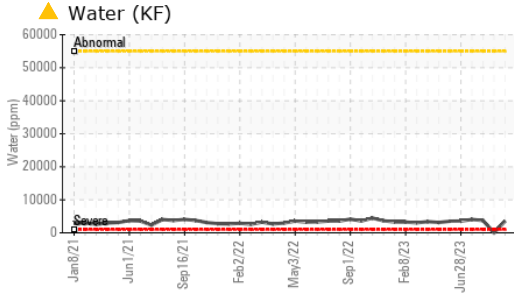
**FLUID CLEANLINESS**

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>1242</b>	882	▲ 7377
Particles >6µm	ASTM D7647	>1300	<b>607</b>	285	▲ 3235
Particles >14µm	ASTM D7647	>160	<b>112</b>	30	▲ 344
Particles >21µm	ASTM D7647	>40	<b>39</b>	9	▲ 86
Particles >38µm	ASTM D7647	>10	<b>4</b>	0	2
Particles >71µm	ASTM D7647	>3	<b>2</b>	0	1
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>17/16/14</b>	17/15/12	▲ 20/19/16

**FLUID DEGRADATION**

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 3.63	<b>0.51</b>	0.47	0.52

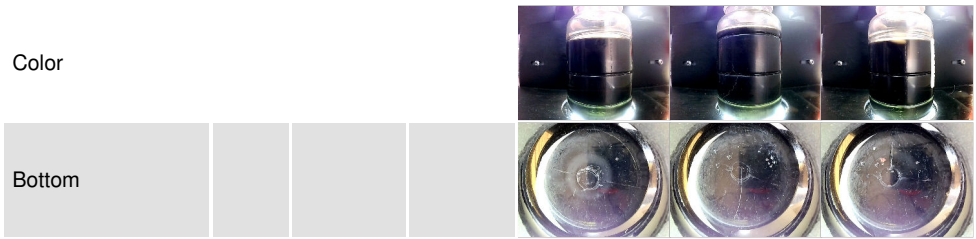
# OIL ANALYSIS REPORT



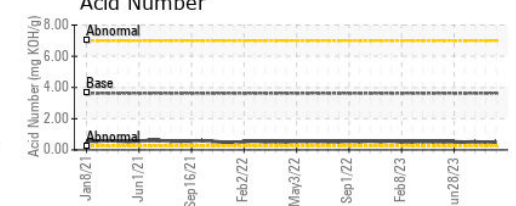
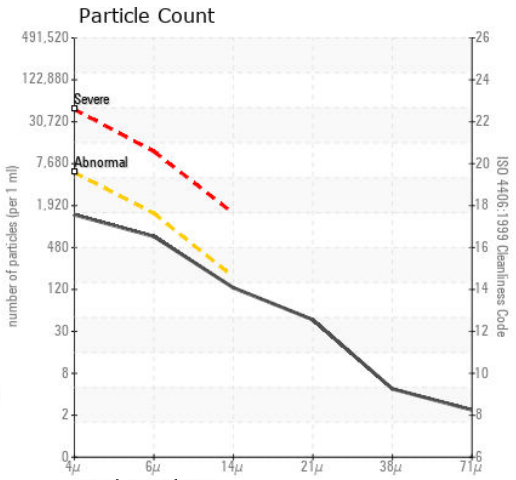
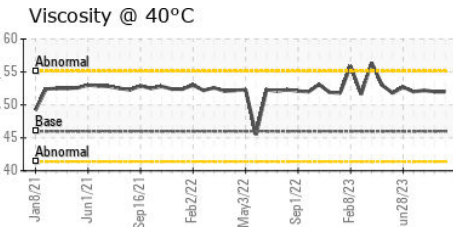
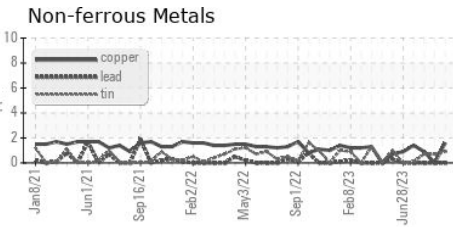
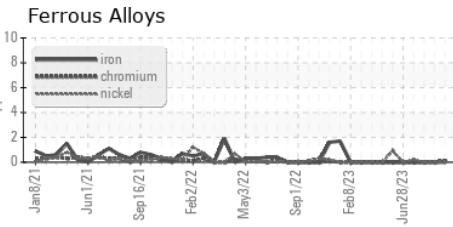
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>55	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	52.0	52.0

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RP0038615 **Received** : 04 Oct 2023  
**Lab Number** : 05968995 **Diagnosed** : 06 Oct 2023  
**Unique Number** : 10675546 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: pH, ReserveAlk )

**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)