



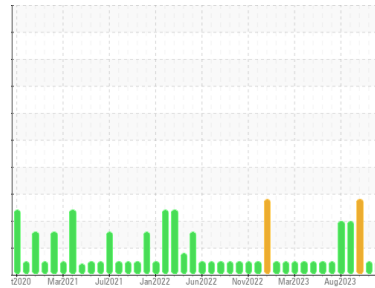
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**MELT SHOP - HYDRAULIC**  
 Machine Id  
**MELT SHOP TUNDISH FLIPPING STAND**  
 Component  
**Hydraulic System**  
 Fluid  
**FIRE-RESISTANT FLUID ISO 46 (275 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 no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

### Fluid Condition

The pH level of this fluid is within the acceptable limits at 9.0. The condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>RP0038015</b>	RP0039146	RP0035332
Sample Date	Client Info		<b>06 Dec 2023</b>	21 Nov 2023	07 Nov 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>NORMAL</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>0</b>	0	0
Nickel	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	3
Aluminum	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	0
Lead	ppm	ASTM D5185m >20	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m >20	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	2

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 5	<b>0</b>	0	2
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 5	<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m 5	<b>&lt;1</b>	0	0
Calcium	ppm	ASTM D5185m 50	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m 175	<b>2</b>	0	0
Zinc	ppm	ASTM D5185m 62	<b>0</b>	0	0

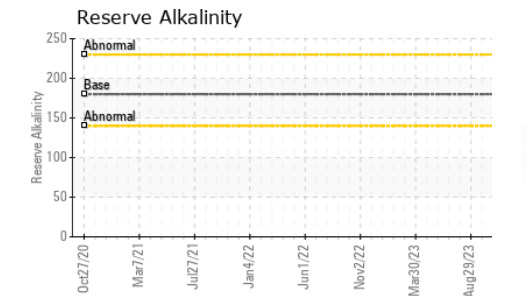
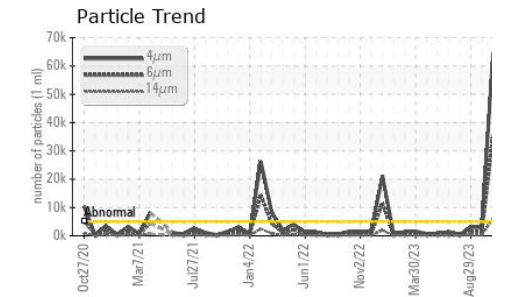
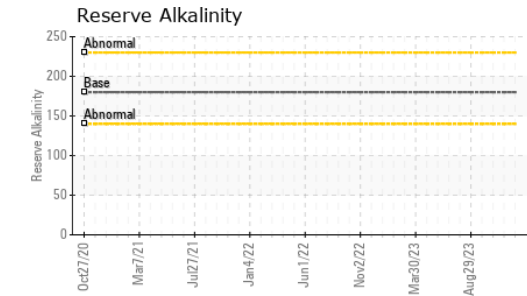
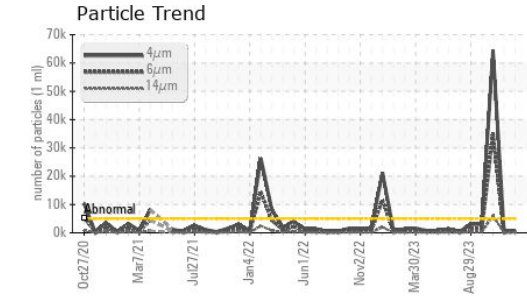
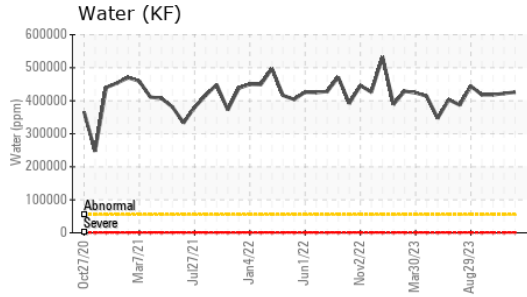
## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	<1
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Potassium	ppm	ASTM D5185m >20	<b>1</b>	0	2
Water	%	ASTM D6304 >55	<b>42.6</b>	42.2	41.8
ppm Water	ppm	ASTM D6304 >55000	<b>426000</b>	422000	418000

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>800</b>	496	▲ 64447
Particles >6µm	ASTM D7647	>1300	<b>436</b>	270	▲ 35108
Particles >14µm	ASTM D7647	>160	<b>74</b>	46	▲ 5975
Particles >21µm	ASTM D7647	>40	<b>25</b>	15	▲ 2013
Particles >38µm	ASTM D7647	>10	<b>4</b>	2	▲ 311
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	▲ 32
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>17/16/13</b>	16/15/13	▲ 23/22/20

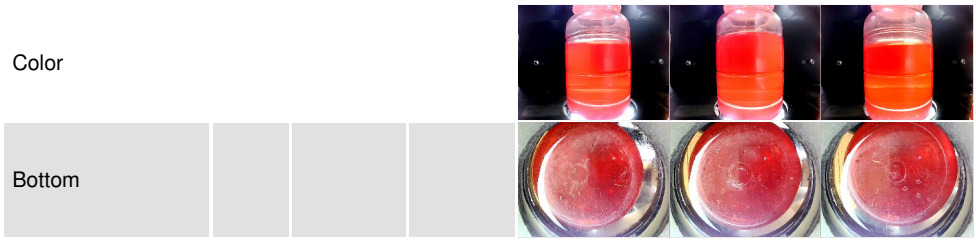
# OIL ANALYSIS REPORT



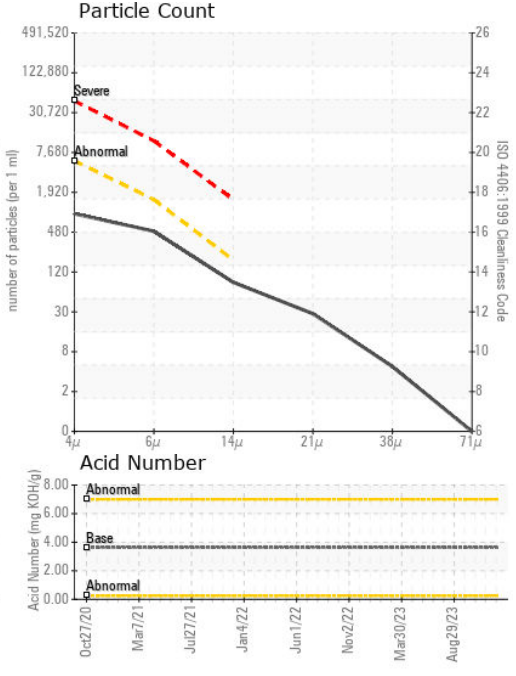
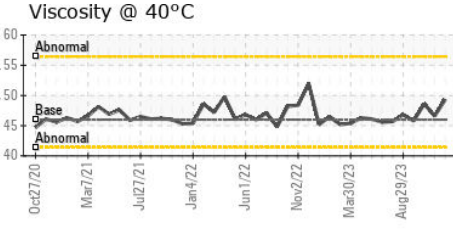
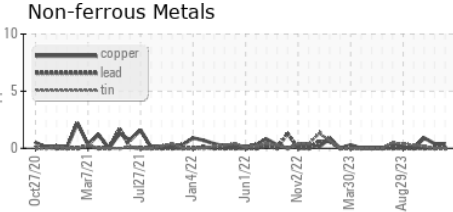
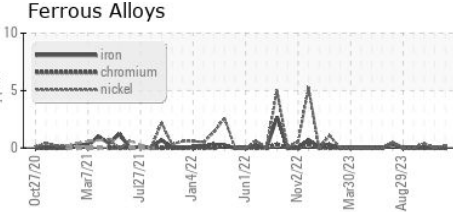
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>55	0.2%	0.2%
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
pH	Scale 0-14	ASTM D1287	9.0	9.0	10.0
Visc @ 40°C	cSt	ASTM D445	46	46.6	48.6

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RP0038015 **Received** : 07 Dec 2023  
**Lab Number** : 06028740 **Diagnosed** : 13 Dec 2023  
**Unique Number** : 10778531 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: pH, ReserveAlk )

**OUTOKUMPU STAINLESS USA**  
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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)