

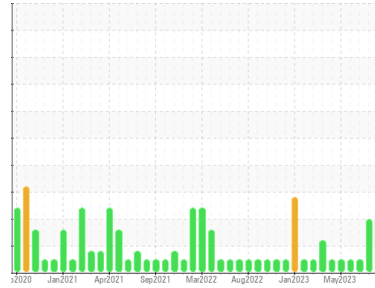
PROBLEM SUMMARY

Sample Rating Trend

ISO

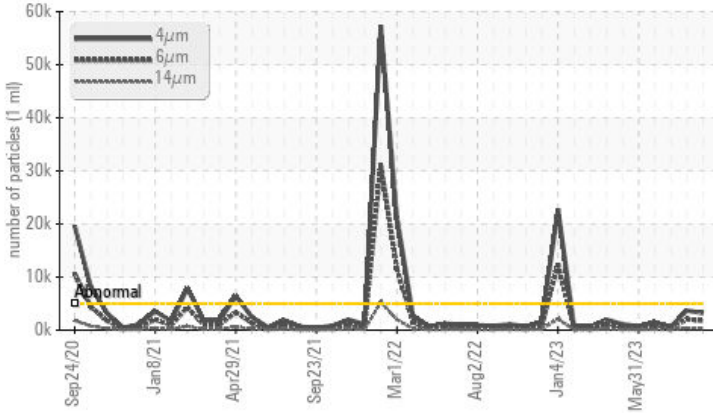


Area
MELT SHOP - HYDRAULIC
 Machine Id
MELT SHOP LSG LADLE SLIDE GATE (S/N 15-4000-0770)
 Component
Hydraulic System
 Fluid
FIRE-RESISTANT FLUID ISO 46 (66 GAL)



COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

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

PROBLEMATIC TEST RESULTS

Sample Status			ATTENTION	ABNORMAL	NORMAL
Particles >6µm	ASTM D7647	>1300	▲ 1744	▲ 2019	332
Particles >14µm	ASTM D7647	>160	▲ 297	▲ 344	56
Particles >21µm	ASTM D7647	>40	▲ 100	▲ 116	19
Particles >38µm	ASTM D7647	>10	▲ 15	▲ 18	3
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 19/18/15	▲ 19/18/16	16/16/13

Customer Id: OUTCALAL
 Sample No.: RP0035494
 Lab Number: 05964690
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Doug Bogart +1 (800)237-1369 x4016
dougb@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

29 Aug 2023 Diag: Doug Bogart

ISO



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

view report



26 Jul 2023 Diag: Jonathan Hester

NORMAL



No corrective action is recommended at this time. 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 amount and size of particulates present in the system are acceptable. The pH level of this fluid is within the acceptable limits at 11.0. The condition of the oil is acceptable for the time in service.

view report



28 Jun 2023 Diag: Jonathan Hester

NORMAL



No corrective action is recommended at this time. 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 amount and size of particulates present in the system are acceptable. 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.

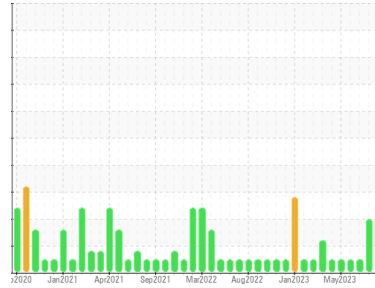
view report





OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
MELT SHOP - HYDRAULIC
 Machine Id
MELT SHOP LSG LADLE SLIDE GATE (S/N 15-4000-0770)
 Component
Hydraulic System
 Fluid
FIRE-RESISTANT FLUID ISO 46 (66 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 moderate amount of particulates present in the oil.

Fluid Condition

The pH level of this fluid is within the acceptable limits. pH is 11.0. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	RP0035494	RP0038428	RP0035474
Sample Date	Client Info	27 Sep 2023	29 Aug 2023	26 Jul 2023
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		ATTENTION	ABNORMAL	NORMAL

WEAR METALS

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

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 5	0	0	3
Barium	ppm	ASTM D5185m 5	0	0	<1
Molybdenum	ppm	ASTM D5185m 5	0	0	0
Manganese	ppm	ASTM D5185m	0	0	<1
Magnesium	ppm	ASTM D5185m 5	3	0	0
Calcium	ppm	ASTM D5185m 50	2	0	<1
Phosphorus	ppm	ASTM D5185m 175	4	3	5
Zinc	ppm	ASTM D5185m 62	9	0	10

CONTAMINANTS

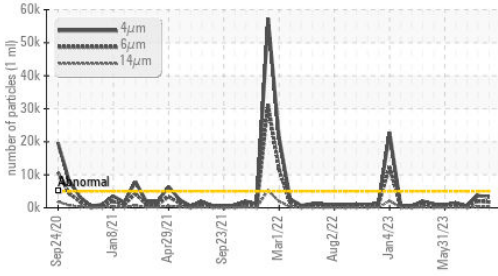
method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >15	0	0	2
Sodium	ppm	ASTM D5185m	0	0	41
Potassium	ppm	ASTM D5185m >20	<1	<1	4
Water	%	ASTM D6304 >55	40.3	36.5	40.1
ppm Water	ppm	ASTM D6304 >55000	403000	365000	401000

FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	3201	3706	609
Particles >6µm	ASTM D7647 >1300	▲ 1744	▲ 2019	332
Particles >14µm	ASTM D7647 >160	▲ 297	▲ 344	56
Particles >21µm	ASTM D7647 >40	▲ 100	▲ 116	19
Particles >38µm	ASTM D7647 >10	▲ 15	▲ 18	3
Particles >71µm	ASTM D7647 >3	2	2	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	▲ 19/18/15	▲ 19/18/16	16/16/13

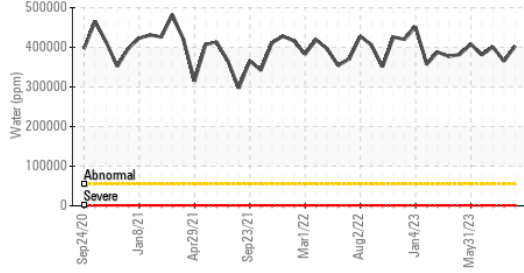
OIL ANALYSIS REPORT

▲ Particle Trend



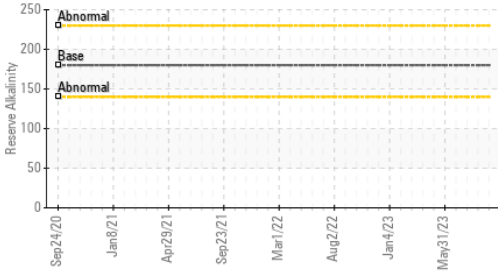
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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

Water (KF)



FLUID PROPERTIES	method	limit/base	current	history1	history2
pH	Scale 0-14	ASTM D1287	11.0	9.00	11.0
Visc @ 40°C	cSt	ASTM D445	46	44.7	43.5

Reserve Alkalinity



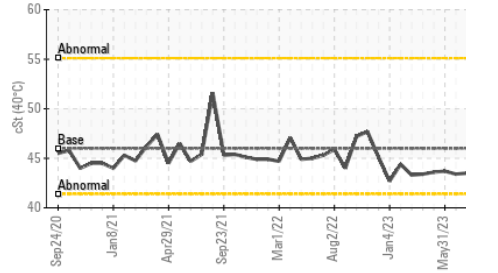
SAMPLE IMAGES

Color

Bottom

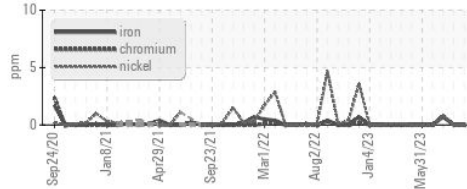


Viscosity @ 40°C

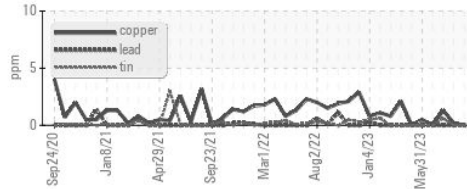


GRAPHS

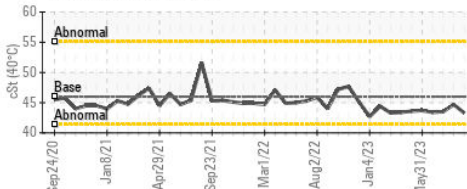
Ferrous Alloys



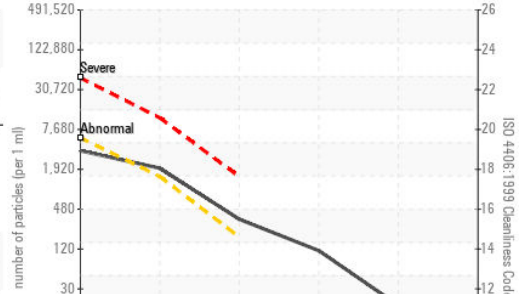
Non-ferrous Metals



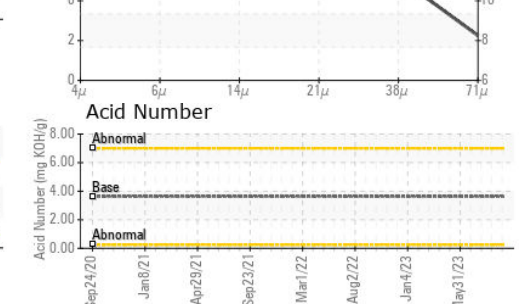
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0035494 **Received** : 29 Sep 2023
Lab Number : 05964690 **Diagnosed** : 03 Oct 2023
Unique Number : 10671241 **Diagnostician** : Doug Bogart
Test Package : IND 2 (Additional Tests: pH, ReserveAlk)

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)

OUTOKUMPU STAINLESS USA
 HWY 43 N
 CALVERT, AL
 US 36513
 Contact: MARIO JOHNSON
 Mario.johnson@outokumpu.com
 T: (251)321-4105
 F: x: