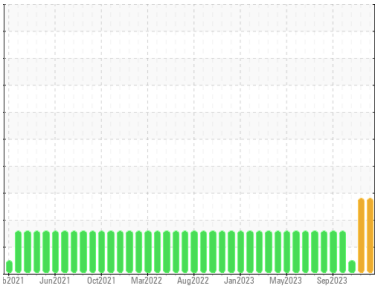
OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Area
MELT SHOP - HYDRAULIC
Machine Id
MELT SHOP GRINDER LUBE TANK (S/N 15-4000-0770)
Component
Tank Bulk Fluid Tank
Fluid
FIRE-RESISTANT FLUID ISO 68 (275 QTS)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a high amount of silt (particulates < 14 microns in size) present in the oil. There is a light concentration of water present 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		**RP0039318**	RP0038543	RP0038071
Sample Date		Client Info		**31 Jan 2024**	04 Jan 2024	06 Dec 2023
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				**ABNORMAL**	ABNORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m		**18**	25	9
Chromium	ppm	ASTM D5185m		**0**	<1	0
Nickel	ppm	ASTM D5185m		**0**	0	0
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m		**<1**	0	0
Lead	ppm	ASTM D5185m		**<1**	0	0
Copper	ppm	ASTM D5185m		**0**	<1	1
Tin	ppm	ASTM D5185m		**<1**	<1	<1
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	5	**0**	0	0
Barium	ppm	ASTM D5185m	5	**0**	0	0
Molybdenum	ppm	ASTM D5185m	5	**0**	0	0
Manganese	ppm	ASTM D5185m		**<1**	<1	<1
Magnesium	ppm	ASTM D5185m	5	**0**	0	0
Calcium	ppm	ASTM D5185m	50	**0**	0	3
Phosphorus	ppm	ASTM D5185m	175	**550**	597	591
Zinc	ppm	ASTM D5185m	62	**0**	0	0

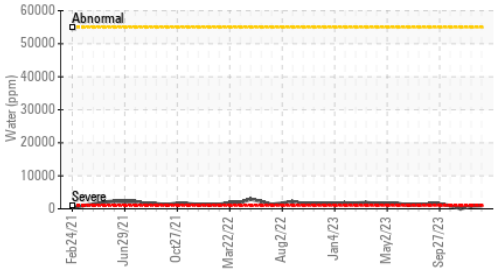
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m		**<1**	<1	<1
Sodium	ppm	ASTM D5185m		**0**	0	<1
Potassium	ppm	ASTM D5185m	>20	**2**	<1	0
Water	%	ASTM D6304	>55	▲ **0.092**	▲ 0.081	0.003
ppm Water	ppm	ASTM D6304	>55000	▲ **930**	▲ 811	37

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	▲ **115835**	▲ 138274	19227
Particles >6µm		ASTM D7647	>5000	▲ **18712**	▲ 33884	1568
Particles >14µm		ASTM D7647	>640	**68**	299	55
Particles >21µm		ASTM D7647	>160	**4**	23	13
Particles >38µm		ASTM D7647	>40	**0**	0	1
Particles >71µm		ASTM D7647	>10	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ **24/21/13**	▲ 24/22/15	21/18/13

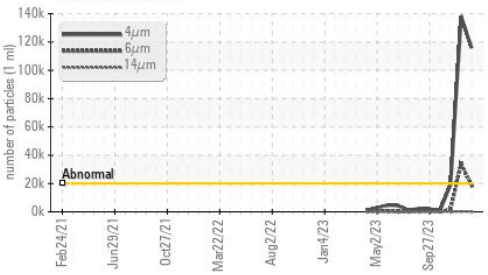
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	3.63	**0.63**	0.56	0.52

OIL ANALYSIS REPORT

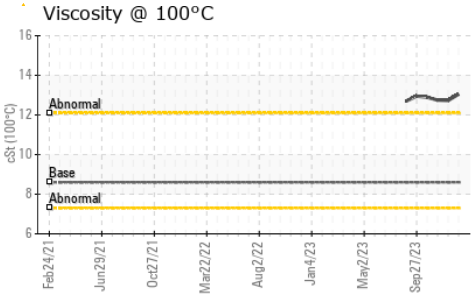
Water (KF)



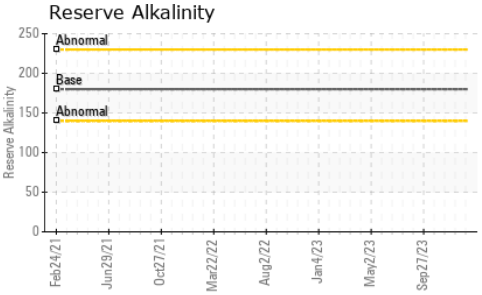
Particle Trend



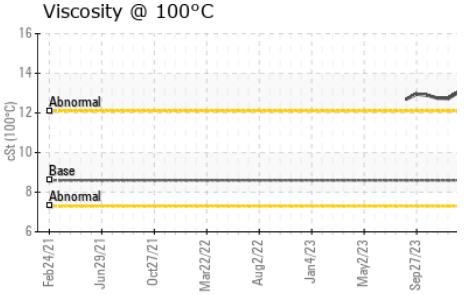
Viscosity @ 100°C



Reserve Alkalinity



Viscosity @ 100°C



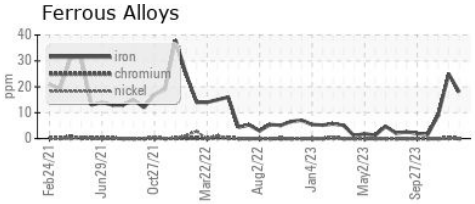
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	68	**70.64**	70.63	70.29
Visc @ 100°C	cSt	ASTM D445	8.6	**13.05**	12.73	12.75
Viscosity Index (VI)	Scale	ASTM D2270	96	**188**	182	183

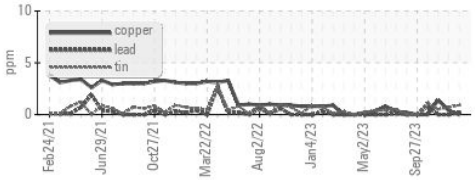
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

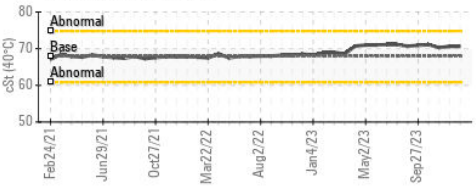
Ferrous Alloys



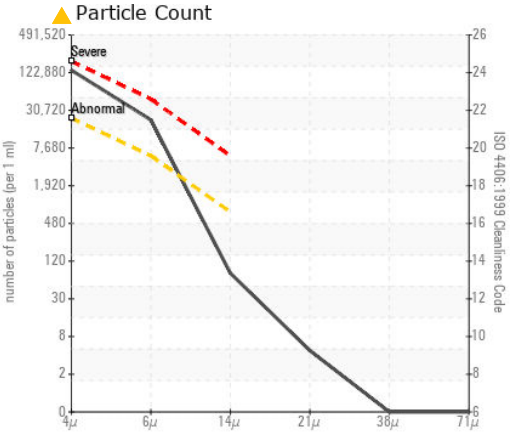
Non-ferrous Metals



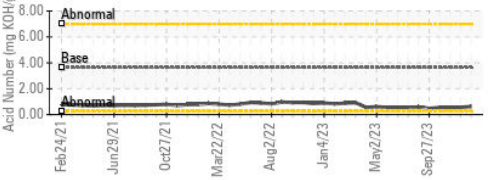
Viscosity @ 40°C



Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0039318 **Received** : 01 Feb 2024
Lab Number : 06077908 **Tested** : 05 Feb 2024
Unique Number : 10859999 **Diagnosed** : 05 Feb 2024 - Jonathan Hester
Test Package : IND 2 (Additional Tests: KV100, pH, PrtCount, ReserveAlk, VI)

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)

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

Report Id: OUTCALAL [WUSCAR] 06077908 (Generated: 02/07/2024 14:43:17) Rev: 1

Submitted By: DALE ROBINSON