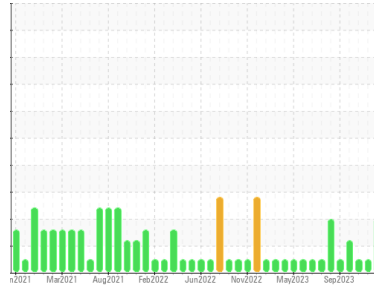




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
**MELT SHOP - HYDRAULIC**  
 Machine Id  
**MELT SHOP LTS DE SLAG HYDRAULIC UNIT (S/N 15-4000-0770)**  
 Component  
**Tank Hydraulic System**  
 Fluid  
**FIRE-RESISTANT FLUID ISO 46 (200 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 @ 10.0. 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>RP0039321</b>	RP0038639	RP0038012
Sample Date	Client Info	<b>31 Jan 2024</b>	04 Jan 2024	06 Dec 2023
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>ATTENTION</b>	NORMAL	NORMAL

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >20	<1	0	0
Chromium	ppm	ASTM D5185m >20	0	0	0
Nickel	ppm	ASTM D5185m >20	1	0	<1
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m	<1	0	<1
Aluminum	ppm	ASTM D5185m >20	<1	0	<1
Lead	ppm	ASTM D5185m >20	2	0	0
Copper	ppm	ASTM D5185m >20	4	<1	3
Tin	ppm	ASTM D5185m >20	2	0	0
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	1	0	1

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 5	0	0	0
Barium	ppm	ASTM D5185m 5	<1	0	0
Molybdenum	ppm	ASTM D5185m 5	<1	0	0
Manganese	ppm	ASTM D5185m	2	0	<1
Magnesium	ppm	ASTM D5185m 5	5	0	3
Calcium	ppm	ASTM D5185m 50	5	0	2
Phosphorus	ppm	ASTM D5185m 175	19	0	10
Zinc	ppm	ASTM D5185m 62	52	0	17

## CONTAMINANTS

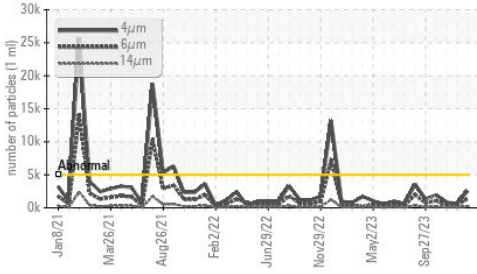
method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >15	<1	0	<1
Sodium	ppm	ASTM D5185m	3	0	<1
Potassium	ppm	ASTM D5185m >20	4	0	<1
Water	%	ASTM D6304 >55	35.7	36.2	35.1
ppm Water	ppm	ASTM D6304 >55000	357000	362000	351000

## FLUID CLEANLINESS

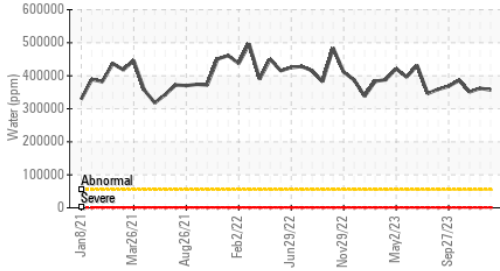
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	2540	679	809
Particles >6µm	ASTM D7647 >1300	▲ 1384	370	441
Particles >14µm	ASTM D7647 >160	▲ 236	63	75
Particles >21µm	ASTM D7647 >40	▲ 79	21	25
Particles >38µm	ASTM D7647 >10	▲ 12	3	4
Particles >71µm	ASTM D7647 >3	1	0	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	▲ 19/18/15	17/16/13	17/16/13

# OIL ANALYSIS REPORT

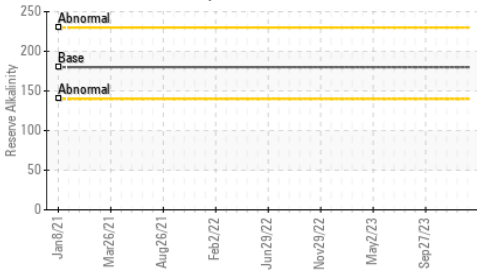
## ▲ Particle Trend



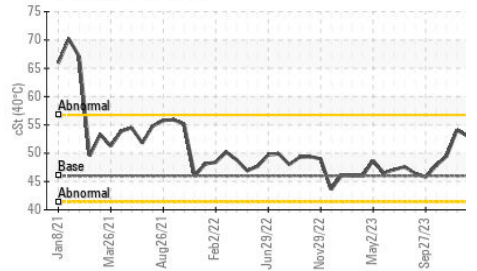
## Water (KF)



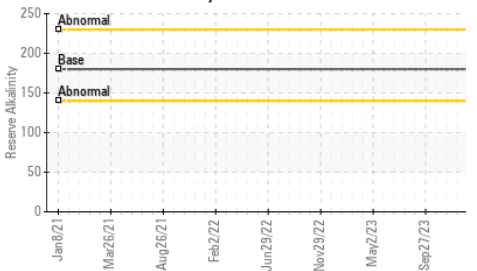
## Reserve Alkalinity



## Viscosity @ 40°C



## Reserve Alkalinity

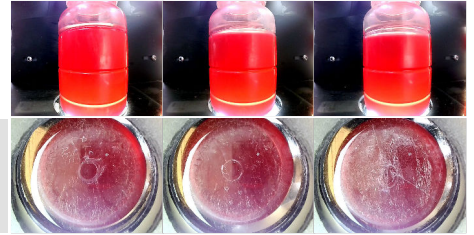


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	10.0	9.00	9.0
Visc @ 40°C	cSt	ASTM D445	46	53.0	54.1

SAMPLE IMAGES	method	limit/base	current	history1	history2
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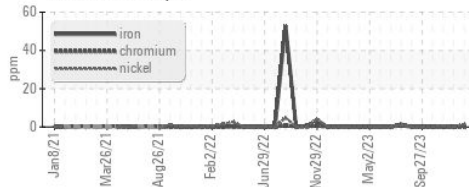
Color



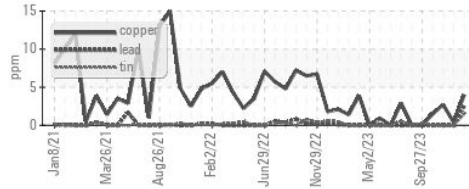
Bottom

## GRAPHS

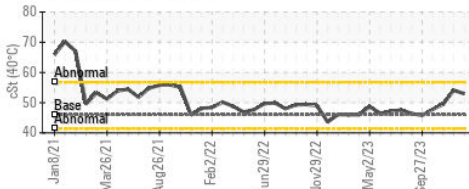
### Ferrous Alloys



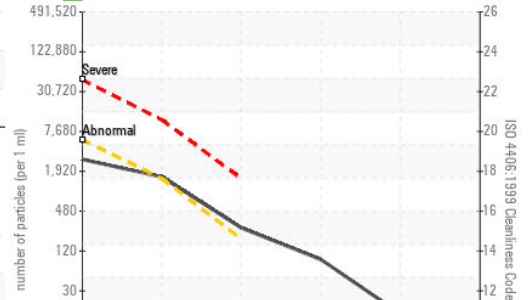
### Non-ferrous Metals



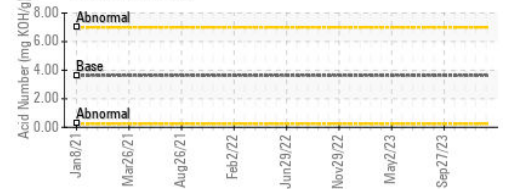
### Viscosity @ 40°C



### ▲ Particle Count



### Acid Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RP0039321 **Received** : 01 Feb 2024  
**Lab Number** : 06077752 **Tested** : 07 Feb 2024  
**Unique Number** : 10859843 **Diagnosed** : 07 Feb 2024 - 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)

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