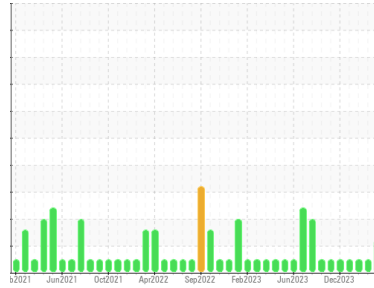




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area

MELT SHOP - HYDRAULIC

Machine Id

MELT SHOP LADLE WALL SLIDE GATE HYDRAULIC UNIT (S/N 15-3000-0470)

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 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	RP0042696	RP0042615	RP0039325
Sample Date	Client Info	28 Mar 2024	05 Mar 2024	31 Jan 2024
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	NORMAL	NORMAL

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >20	2	0	0
Chromium	ppm	ASTM D5185m >20	<1	0	0
Nickel	ppm	ASTM D5185m >20	<1	<1	<1
Titanium	ppm	ASTM D5185m	<1	0	0
Silver	ppm	ASTM D5185m	0	0	<1
Aluminum	ppm	ASTM D5185m >20	7	<1	<1
Lead	ppm	ASTM D5185m >20	0	<1	2
Copper	ppm	ASTM D5185m >20	<1	0	2
Tin	ppm	ASTM D5185m >20	<1	<1	1
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	<1	<1	<1

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	<1	0	<1
Manganese	ppm	ASTM D5185m	<1	<1	2
Magnesium	ppm	ASTM D5185m 5	2	2	1
Calcium	ppm	ASTM D5185m 50	7	1	1
Phosphorus	ppm	ASTM D5185m 175	4	4	4
Zinc	ppm	ASTM D5185m 62	<1	<1	3

CONTAMINANTS

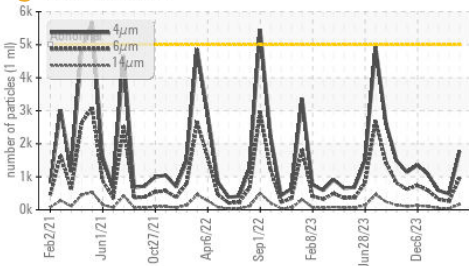
method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >15	2	0	<1
Sodium	ppm	ASTM D5185m	14	0	2
Potassium	ppm	ASTM D5185m >20	3	<1	3
Water	%	ASTM D6304 >55	38.0	43.5	35.3
ppm Water	ppm	ASTM D6304 >55000	380000	435000	353000

FLUID CLEANLINESS

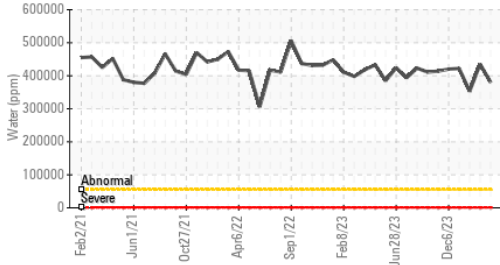
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	1775	479	583
Particles >6µm	ASTM D7647 >1300	967	261	317
Particles >14µm	ASTM D7647 >160	165	44	54
Particles >21µm	ASTM D7647 >40	55	15	18
Particles >38µm	ASTM D7647 >10	9	2	3
Particles >71µm	ASTM D7647 >3	1	0	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	18/17/15	16/15/13	16/15/13

OIL ANALYSIS REPORT

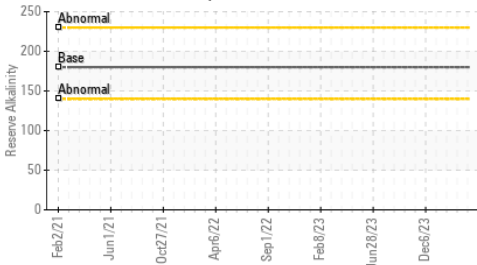
Particle Trend



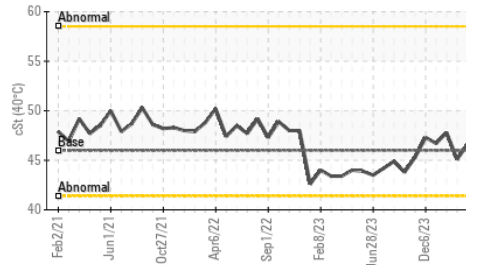
Water (KF)



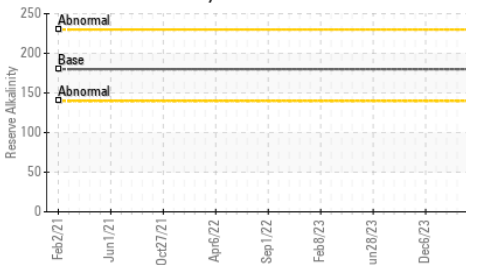
Reserve Alkalinity



Viscosity @ 40°C



Reserve Alkalinity



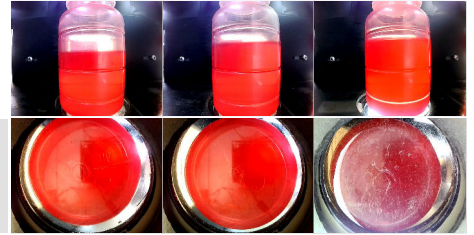
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	9.00	10.0	10.0
Visc @ 40°C	cSt	ASTM D445	46	45.1	47.8

SAMPLE IMAGES	method	limit/base	current	history1	history2
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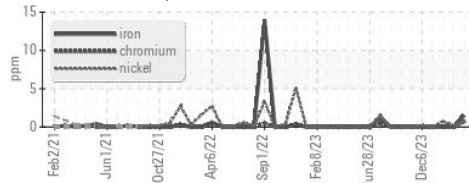
Color

Bottom

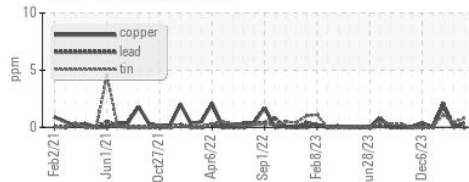


GRAPHS

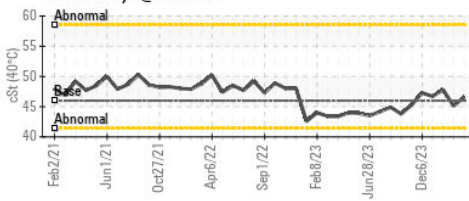
Ferrous Alloys



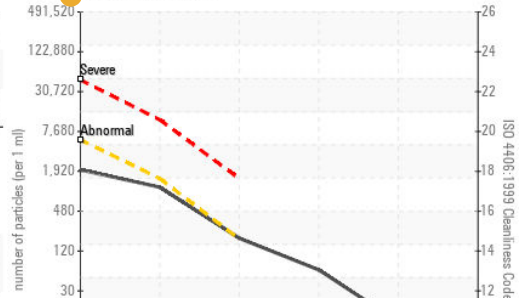
Non-ferrous Metals



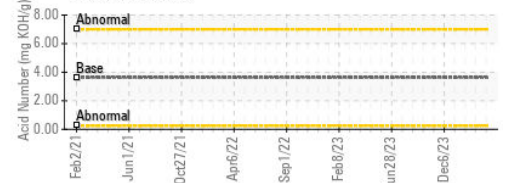
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0042696 **Received** : 29 Mar 2024
Lab Number : 06134119 **Tested** : 03 Apr 2024
Unique Number : 10953584 **Diagnosed** : 03 Apr 2024 - Jonathan Hester
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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