



OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Machine Id
HIAB 50282 - ABC SUPPLY
 Component
Hydraulic System
 Fluid
AW HYDRAULIC OIL ISO 32 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a high amount of particulates 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	WC0741634	---	---
Sample Date	Client Info	23 Mar 2023	---	---
Machine Age	yrs Client Info	0	---	---
Oil Age	yrs Client Info	0	---	---
Oil Changed	Client Info	Not Changed	---	---
Sample Status		ABNORMAL	---	---

WEAR METALS

method	limit/base	current	history1	history2
Iron ppm	ASTM D5185m >20	7	---	---
Chromium ppm	ASTM D5185m >10	<1	---	---
Nickel ppm	ASTM D5185m >10	0	---	---
Titanium ppm	ASTM D5185m	0	---	---
Silver ppm	ASTM D5185m	0	---	---
Aluminum ppm	ASTM D5185m >10	<1	---	---
Lead ppm	ASTM D5185m >10	0	---	---
Copper ppm	ASTM D5185m >75	<1	---	---
Tin ppm	ASTM D5185m >10	0	---	---
Vanadium ppm	ASTM D5185m	0	---	---
Cadmium ppm	ASTM D5185m	0	---	---

ADDITIVES

method	limit/base	current	history1	history2
Boron ppm	ASTM D5185m 5	0	---	---
Barium ppm	ASTM D5185m 5	0	---	---
Molybdenum ppm	ASTM D5185m 5	0	---	---
Manganese ppm	ASTM D5185m	<1	---	---
Magnesium ppm	ASTM D5185m 25	3	---	---
Calcium ppm	ASTM D5185m 200	49	---	---
Phosphorus ppm	ASTM D5185m 300	331	---	---
Zinc ppm	ASTM D5185m 370	407	---	---
Sulfur ppm	ASTM D5185m 2500	4384	---	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm	ASTM D5185m >20	1	---	---
Sodium ppm	ASTM D5185m	<1	---	---
Potassium ppm	ASTM D5185m >20	<1	---	---

FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	▲ 35362	---	---
Particles >6µm	ASTM D7647 >1300	▲ 10183	---	---
Particles >14µm	ASTM D7647 >160	▲ 577	---	---
Particles >21µm	ASTM D7647 >40	▲ 115	---	---
Particles >38µm	ASTM D7647 >10	1	---	---
Particles >71µm	ASTM D7647 >3	0	---	---
Oil Cleanliness	ISO 4406 (c) >19/17/14	▲ 22/21/16	---	---

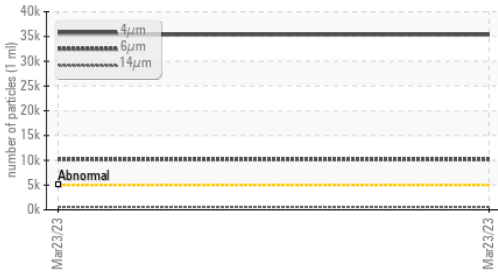
FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN) mg KOH/g	ASTM D8045 0.57	0.31	---	---



OIL ANALYSIS REPORT

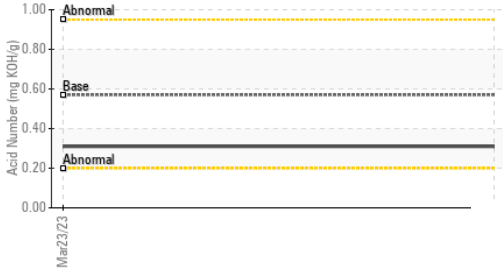
Particle Trend



Viscosity @ 100°C



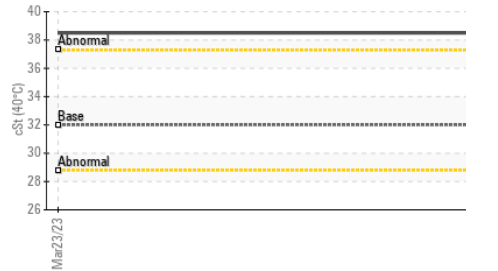
Acid Number



Viscosity @ 100°C



Viscosity @ 40°C



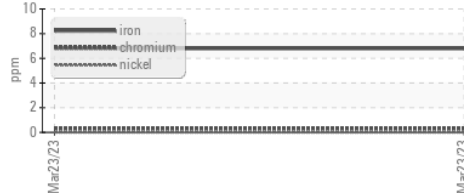
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	LIGHT	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	32	38.5	---
Visc @ 100°C	cSt	ASTM D445	5.4	6.8	---
Viscosity Index (VI)	Scale	ASTM D2270	102	135	---

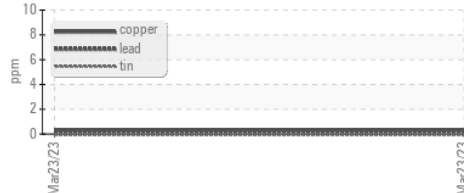
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image

GRAPHS

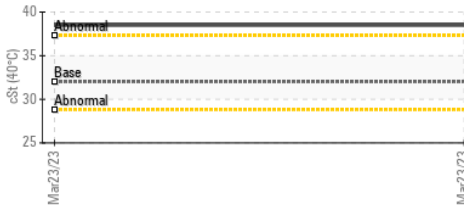
Ferrous Alloys



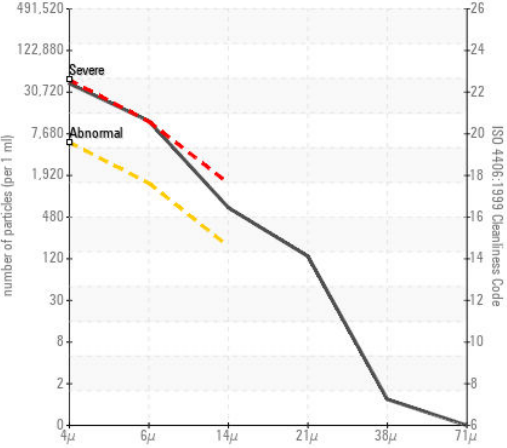
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : WC0741634 Received : 14 Aug 2023
 Lab Number : 05924232 Diagnosed : 15 Aug 2023
 Unique Number : 10604179 Diagnostician : Don Baldrige
 Test Package : MOB 2 (Additional Tests: KV100, VI)

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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)