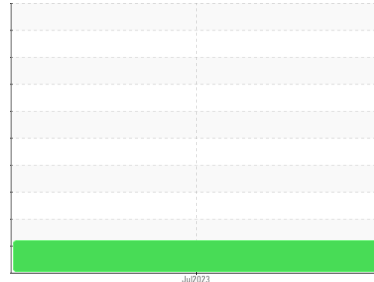




OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Machine Id
HIAB 3580099

Component
Hydraulic System

Fluid
AW HYDRAULIC OIL ISO 68 (--- 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 silt (particulates < 6 microns in size) present in the oil.

▲ Fluid Condition

Viscosity of sample indicates oil is within ISO 46 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	WC0689579	---	---
Sample Date	Client Info	13 Jul 2023	---	---
Machine Age	hrs	Client Info	0	---
Oil Age	hrs	Client Info	0	---
Oil Changed	Client Info	N/A	---	---
Sample Status		ATTENTION	---	---

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	8	---
Chromium	ppm	ASTM D5185m >10	0	---
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	2	---
Tin	ppm	ASTM D5185m >10	0	---
Vanadium	ppm	ASTM D5185m	<1	---
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	<1	---
Manganese	ppm	ASTM D5185m	<1	---
Magnesium	ppm	ASTM D5185m 25	2	---
Calcium	ppm	ASTM D5185m 200	49	---
Phosphorus	ppm	ASTM D5185m 300	361	---
Zinc	ppm	ASTM D5185m 370	437	---
Sulfur	ppm	ASTM D5185m 2500	3947	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<1	---
Sodium	ppm	ASTM D5185m	<1	---
Potassium	ppm	ASTM D5185m >20	0	---

FLUID CLEANLINESS

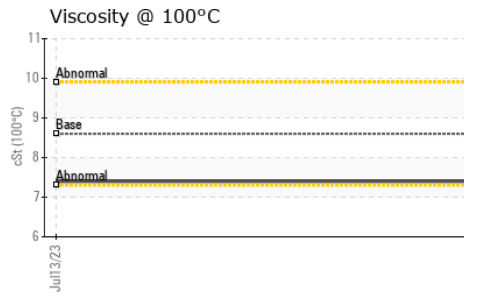
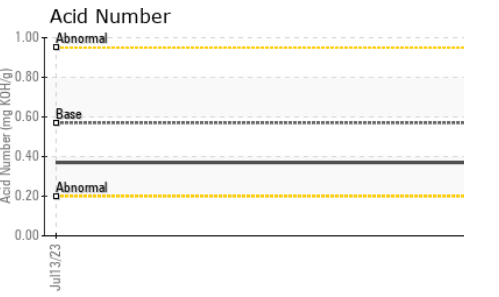
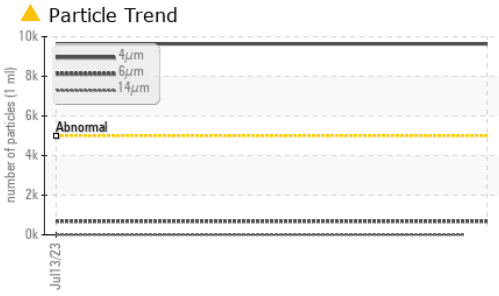
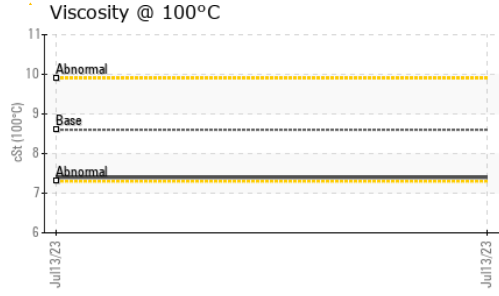
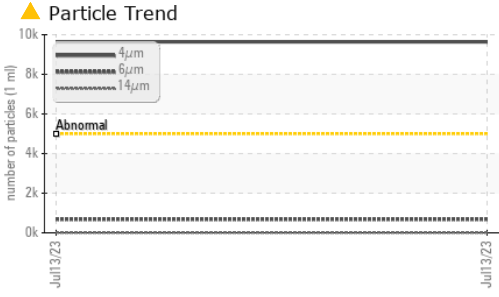
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	▲ 9637	---
Particles >6µm	ASTM D7647	>1300	685	---
Particles >14µm	ASTM D7647	>160	11	---
Particles >21µm	ASTM D7647	>40	2	---
Particles >38µm	ASTM D7647	>10	0	---
Particles >71µm	ASTM D7647	>3	0	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 20/17/11	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.57	0.37	---



OIL ANALYSIS REPORT



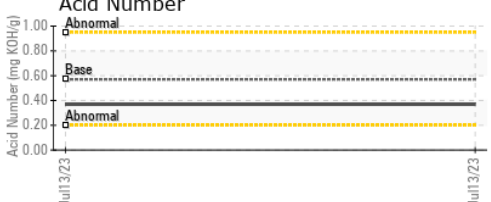
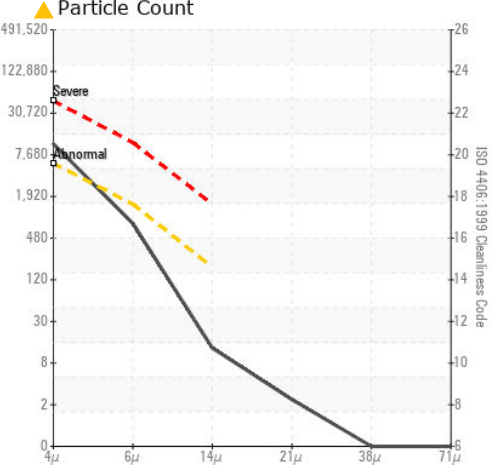
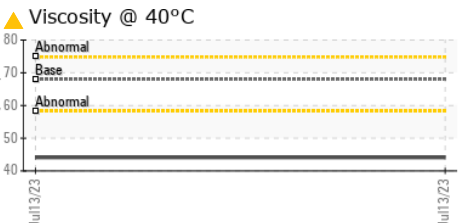
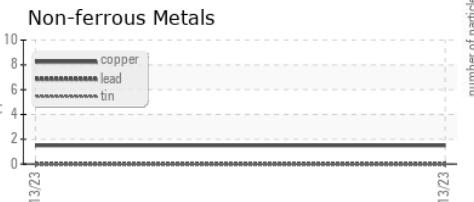
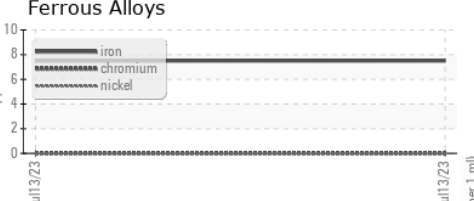
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	68	▲ 44.1	---
Visc @ 100°C	cSt	ASTM D445	8.6	7.4	---
Viscosity Index (VI)	Scale	ASTM D2270	96	132	---

SAMPLE IMAGES

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

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0689579 **Received** : 14 Jul 2023
Lab Number : 05899312 **Diagnosed** : 18 Jul 2023
Unique Number : 10560668 **Diagnostician** : Jonathan Hester
Test Package : MOB 2 (Additional Tests: KV100, VI)

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 11989 FM 529, HARRIS COUNTY
 HOUSTON, TX
 US 77041
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 shannon.barlow@hiab.com
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 F:

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)