



OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id

HIAB 3351474

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 silt (particulates < 14 microns in size) 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			WC0891948	---	---
Sample Date	Client Info			08 Apr 2024	---	---
Machine Age	yrs	Client Info		0	---	---
Oil Age	yrs	Client Info		0	---	---
Oil Changed	Client Info			Not Changed	---	---
Sample Status				ABNORMAL	---	---

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.1	NEG	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	5	---	---
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	0	---	---
Lead	ppm	ASTM D5185m	>10	0	---	---
Copper	ppm	ASTM D5185m	>75	4	---	---
Tin	ppm	ASTM D5185m	>10	<1	---	---
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	0	---	---
Calcium	ppm	ASTM D5185m	200	51	---	---
Phosphorus	ppm	ASTM D5185m	300	353	---	---
Zinc	ppm	ASTM D5185m	370	447	---	---
Sulfur	ppm	ASTM D5185m	2500	5092	---	---

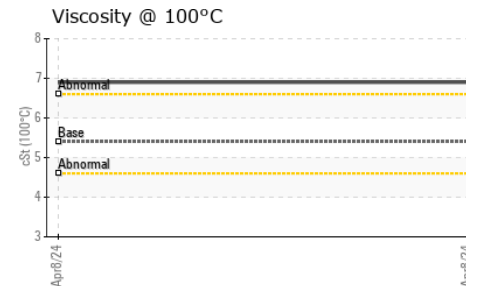
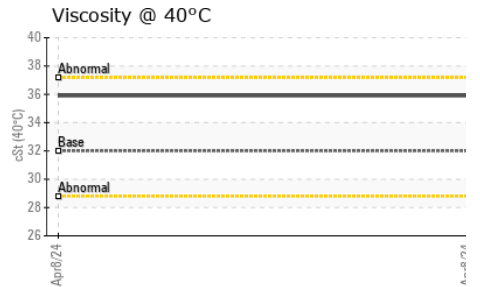
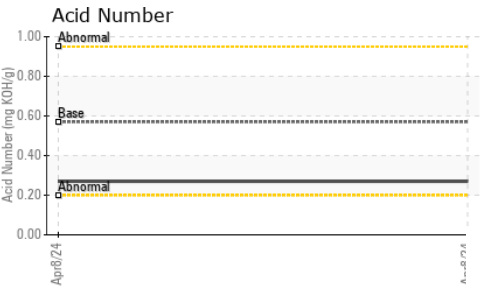
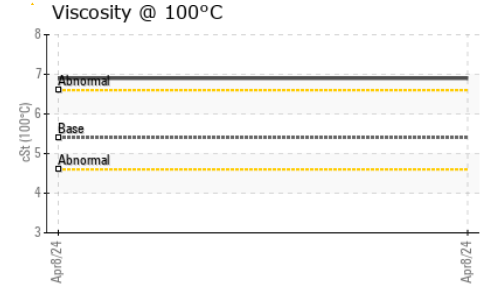
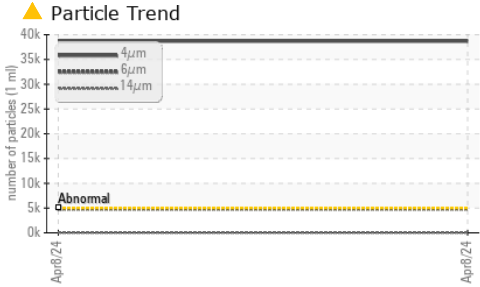
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	1	---	---
Sodium	ppm	ASTM D5185m		2	---	---
Potassium	ppm	ASTM D5185m	>20	1	---	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	▲ 38696	---	---
Particles >6µm		ASTM D7647	>1300	▲ 4864	---	---
Particles >14µm		ASTM D7647	>160	47	---	---
Particles >21µm		ASTM D7647	>40	4	---	---
Particles >38µm		ASTM D7647	>10	0	---	---
Particles >71µm		ASTM D7647	>3	0	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 22/19/13	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.27	---	---



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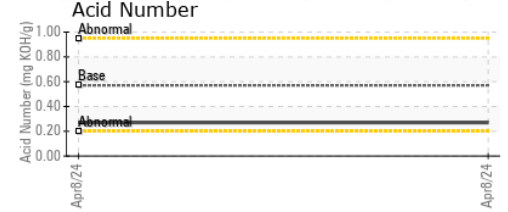
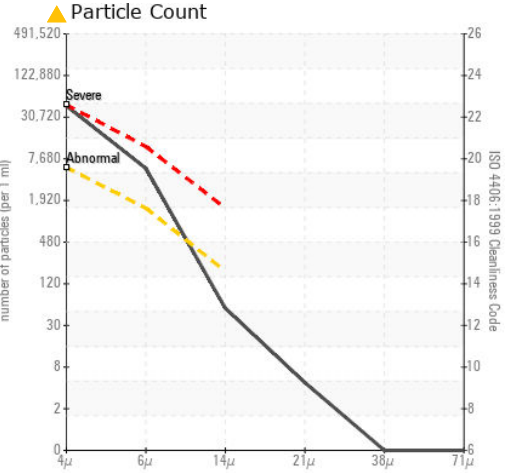
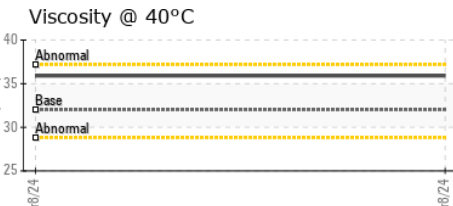
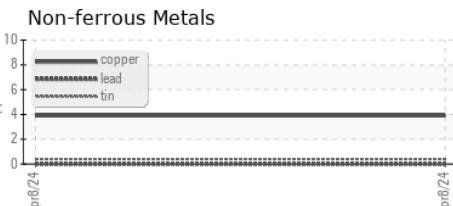
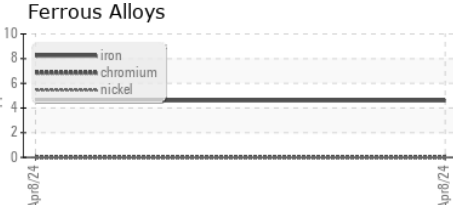
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
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	32	35.9	---	---
Visc @ 100°C	cSt	ASTM D445	5.4	6.9	---	---
Viscosity Index (VI)	Scale	ASTM D2270	102	155	---	---

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. : WC0891948 **Received** : 20 May 2024
Lab Number : 06184962 **Tested** : 22 May 2024
Unique Number : 11036288 **Diagnosed** : 22 May 2024 - Don Baldrige
Test Package : MOB 2 (Additional Tests: KV100, VI)

HIAB USA - MINNEAPOLIS
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 MAT.ENGLER@HIAB.COM

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)