



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
HIAB KB21937
 Component
Hydraulic System
 Fluid
AW HYDRAULIC OIL ISO 32 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0698815	---	---
Sample Date		Client Info		17 Nov 2022	---	---
Machine Age	yrs	Client Info		0	---	---
Oil Age	yrs	Client Info		0	---	---
Filter Age	yrs	Client Info		1	---	---
Oil Changed		Client Info		Not Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				NORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	<1	---	---
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	1	---	---
Tin	ppm	ASTM D5185m	>10	0	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

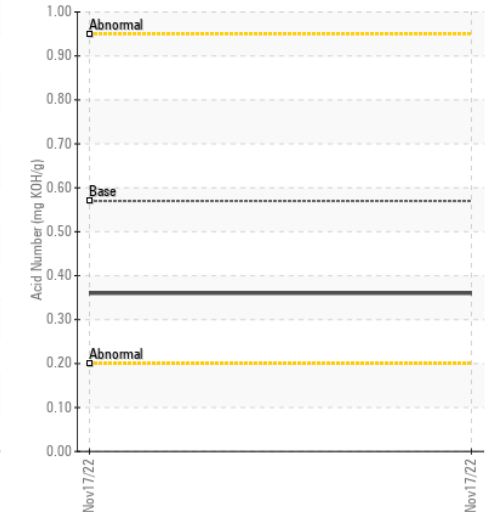
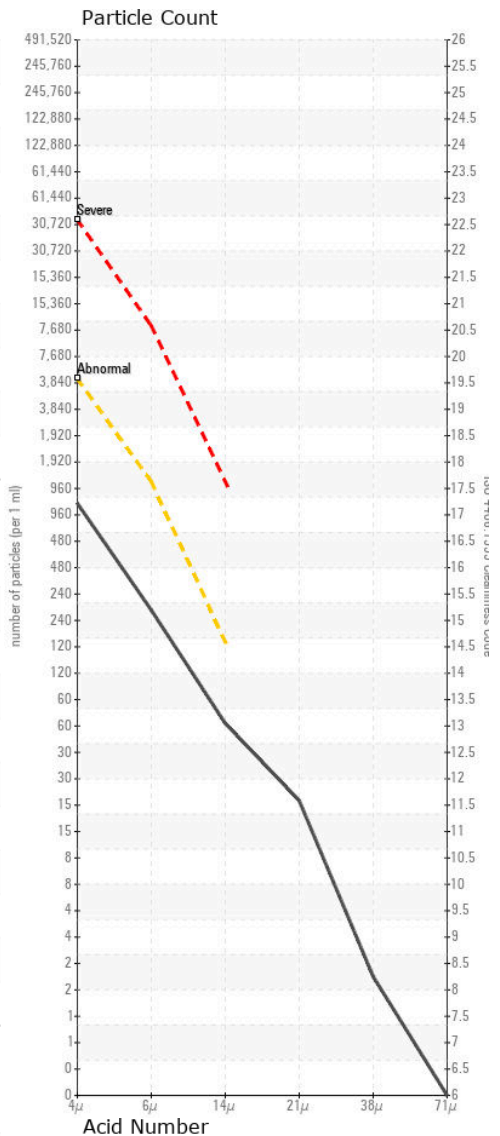
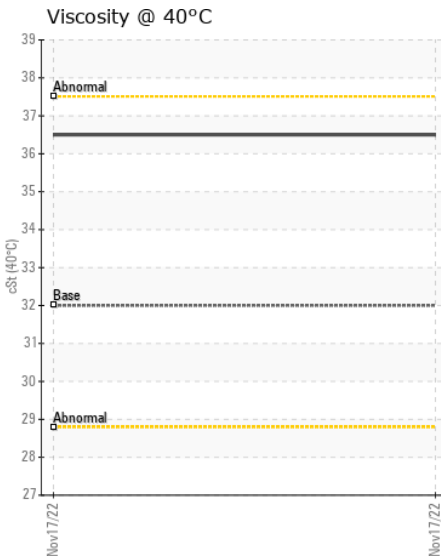
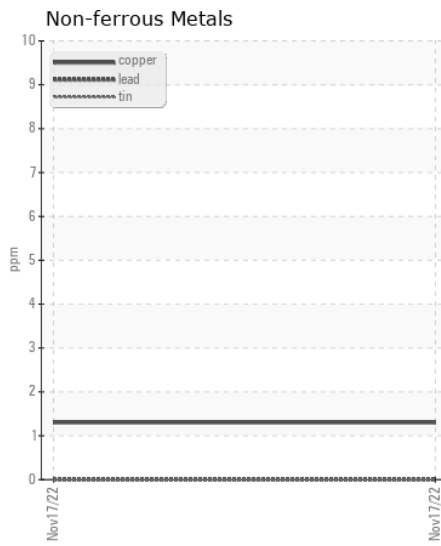
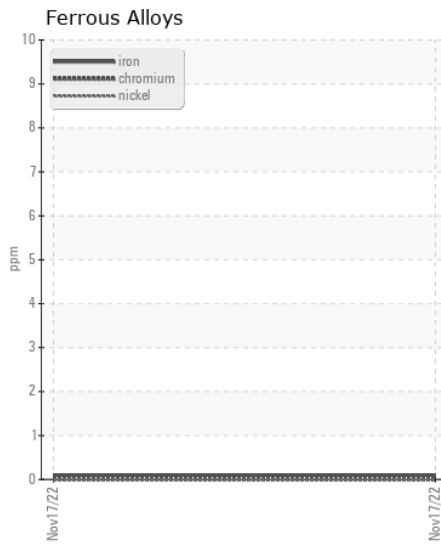
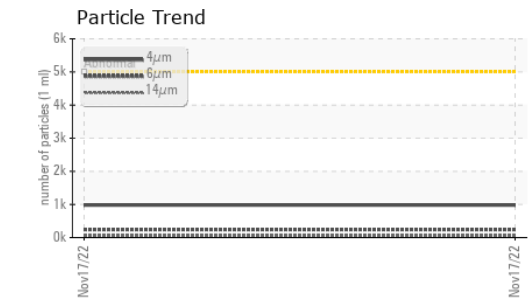
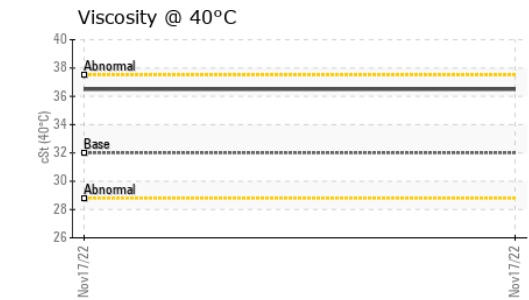
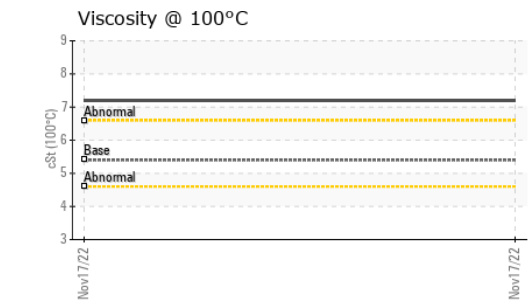
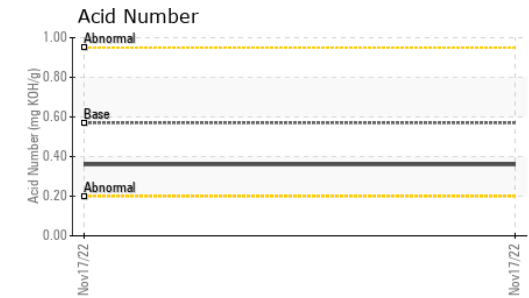
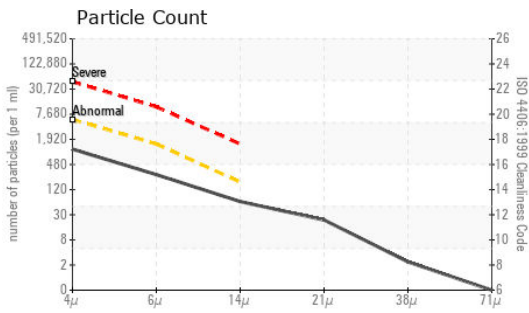
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>20	<1	---	---
Potassium	ppm	ASTM D5185m	>20	1	---	---
Water		WC Method	>0.1	NEG	---	---
Particles >4µm		ASTM D7647	>5000	980	---	---
Particles >6µm		ASTM D7647	>1300	242	---	---
Particles >14µm		ASTM D7647	>160	55	---	---
Particles >21µm		ASTM D7647	>40	20	---	---
Particles >38µm		ASTM D7647	>10	2	---	---
Particles >71µm		ASTM D7647	>3	0	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	17/15/13	---	---
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	---	---

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		0	---	---
Boron	ppm	ASTM D5185m	5	0	---	---
Barium	ppm	ASTM D5185m	5	0	---	---
Molybdenum	ppm	ASTM D5185m	5	0	---	---
Manganese	ppm	ASTM D5185m		0	---	---
Magnesium	ppm	ASTM D5185m	25	0	---	---
Calcium	ppm	ASTM D5185m	200	46	---	---
Phosphorus	ppm	ASTM D5185m	300	334	---	---
Zinc	ppm	ASTM D5185m	370	452	---	---
Sulfur	ppm	ASTM D5185m	2500	4273	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.36	---	---
Visc @ 40°C	cSt	ASTM D445	32	36.5	---	---
Visc @ 100°C	cSt	ASTM D445	5.4	7.2	---	---
Viscosity Index (VI)	Scale	ASTM D2270	102	165	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0698815 **Received** : 10 Feb 2023
Lab Number : 05765083 **Diagnosed** : 13 Feb 2023
Unique Number : 10334691 **Diagnostician** : Doug Bogart
Test Package : MOB 2 (Additional Tests: KV100, VI)

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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