



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
HIAB BM4136
Component
Hydraulic System
Fluid
AW HYDRAULIC OIL ISO 32 (--- LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0698891	WC0636233	WC0545903
Sample Date		Client Info		14 Dec 2022	11 Jan 2022	07 Jul 2021
Machine Age	yrs	Client Info		0	760	6
Oil Age	yrs	Client Info		0	0	6
Filter Age	yrs	Client Info		1	0	1
Oil Changed		Client Info		Not Changed	Not Changed	Not Changed
Filter Changed		Client Info		Changed	Changed	Not Changed
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	4	4	4
Chromium	ppm	ASTM D5185m	>10	0	0	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	0	0	0
Lead	ppm	ASTM D5185m	>10	0	0	0
Copper	ppm	ASTM D5185m	>75	2	2	3
Tin	ppm	ASTM D5185m	>10	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

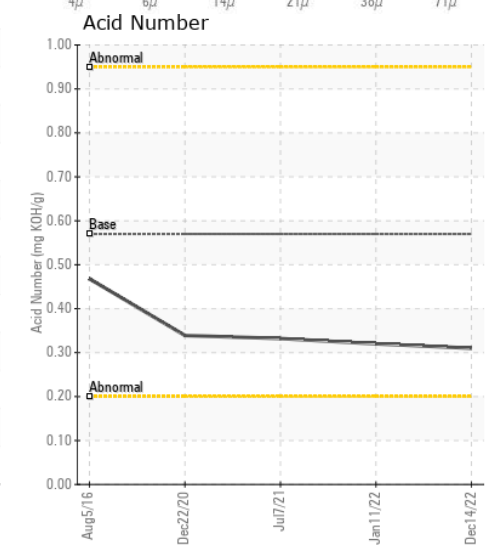
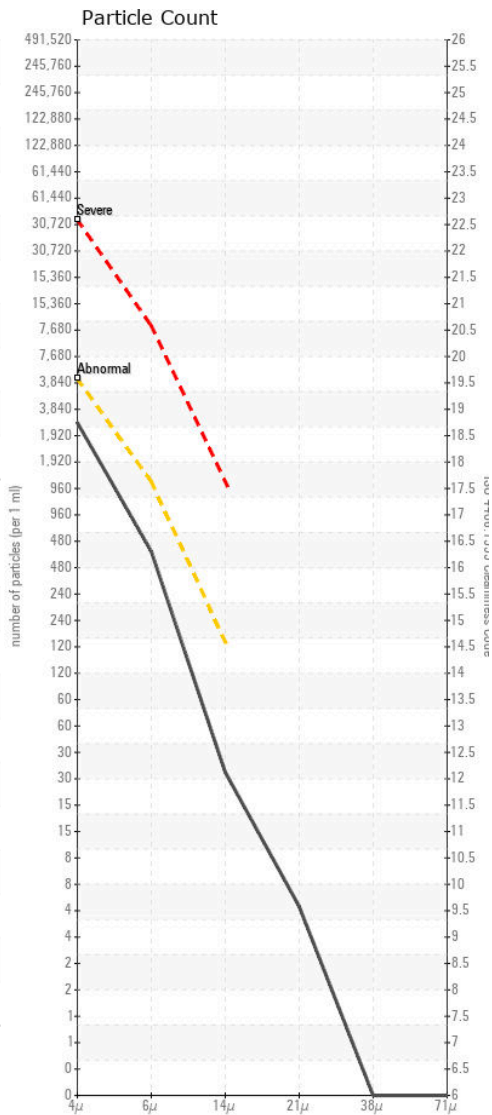
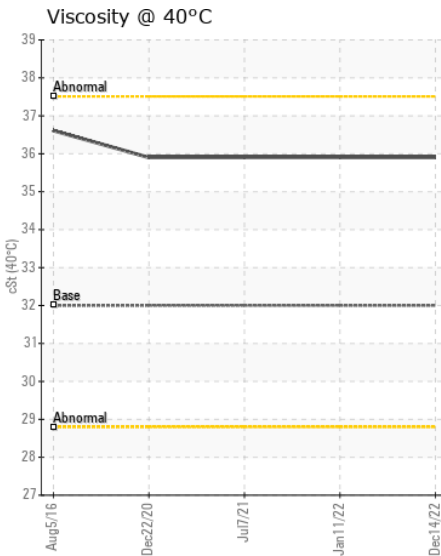
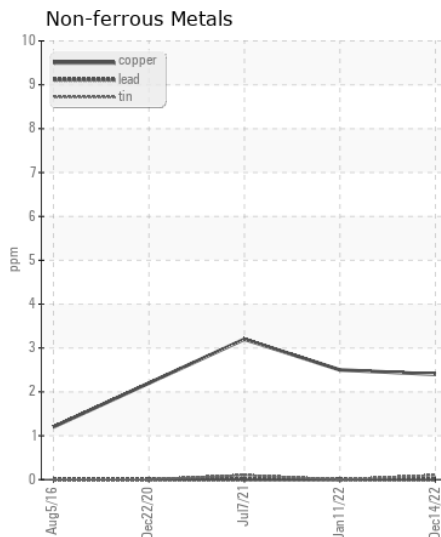
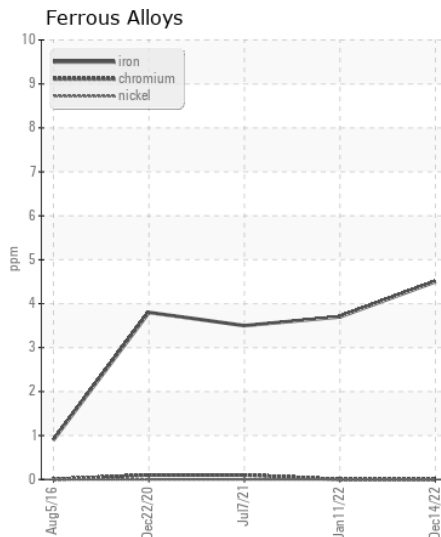
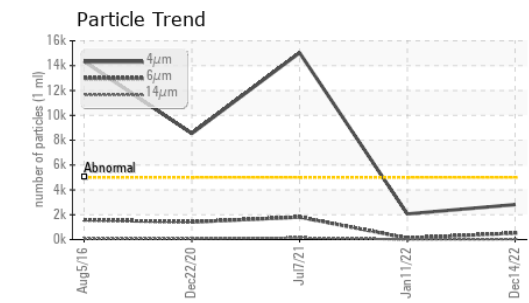
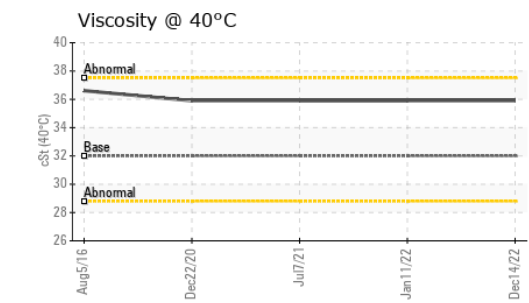
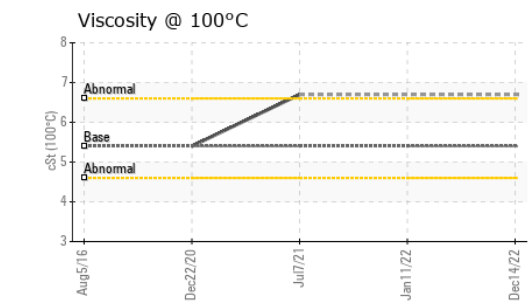
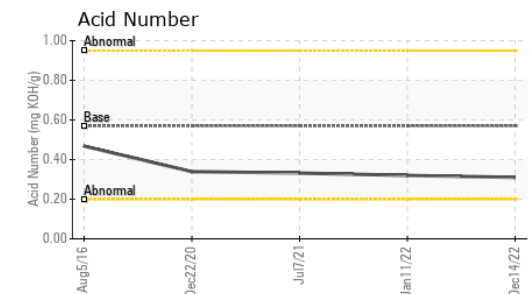
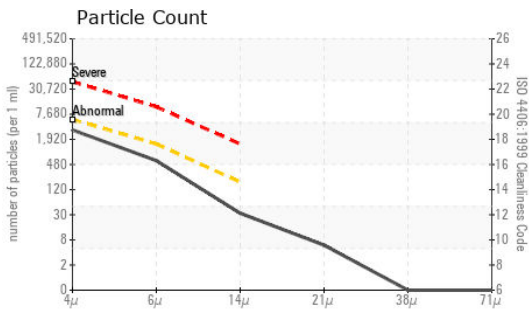
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	<1	<1	0
Potassium	ppm	ASTM D5185m	>20	0	0	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	2813	2061	▲ 15033
Particles >6µm		ASTM D7647	>1300	522	119	▲ 1808
Particles >14µm		ASTM D7647	>160	29	9	▲ 151
Particles >21µm		ASTM D7647	>40	5	3	▲ 67
Particles >38µm		ASTM D7647	>10	0	0	12
Particles >71µm		ASTM D7647	>3	0	0	3
Oil Cleanliness		ISO 4406 (c)	>19/17/14	19/16/12	18/14/10	▲ 21/18/14
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	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		<1	<1	1
Boron	ppm	ASTM D5185m	5	0	0	5
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	5	<1	<1	<1
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m	25	1	<1	2
Calcium	ppm	ASTM D5185m	200	55	59	63
Phosphorus	ppm	ASTM D5185m	300	327	370	347
Zinc	ppm	ASTM D5185m	370	432	460	478
Sulfur	ppm	ASTM D5185m	2500	3996	4476	3269
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.31	0.32	0.332
Visc @ 40°C	cSt	ASTM D445	32	35.9	35.9	35.9
Visc @ 100°C	cSt	ASTM D445	5.4	6.7	---	6.7
Viscosity Index (VI)	Scale	ASTM D2270	102	145	---	145



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0698891 **Received** : 17 Feb 2023
Lab Number : 05771262 **Diagnosed** : 20 Feb 2023
Unique Number : 10345879 **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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