



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
HIAB 54519 - ABC

Component
Hydraulic System

Fluid
AW HYDRAULIC OIL ISO 32 (--- QTS)

RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0803574	WC0708520	WC0708532
Sample Date		Client Info		09 Aug 2023	02 Dec 2022	28 Jul 2022
Machine Age	mths	Client Info		0	0	0
Oil Age	mths	Client Info		0	0	0
Filter Age	mths	Client Info		0	4	1
Oil Changed		Client Info		N/A	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Not Changd	Changed
Sample Status				ABNORMAL	ATTENTION	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	5	3	3
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	1	0	0
Lead	ppm	ASTM D5185m	>10	0	0	0
Copper	ppm	ASTM D5185m	>75	2	1	1
Tin	ppm	ASTM D5185m	>10	0	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

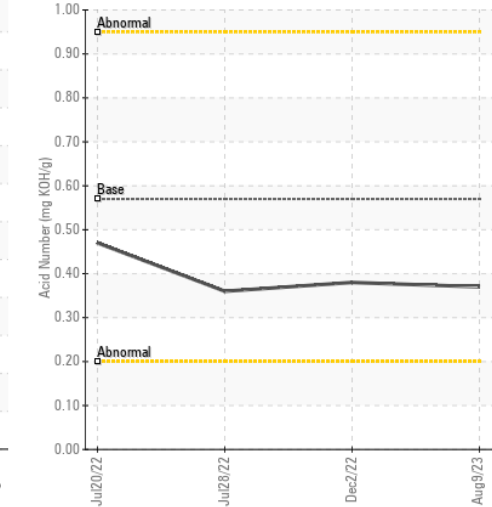
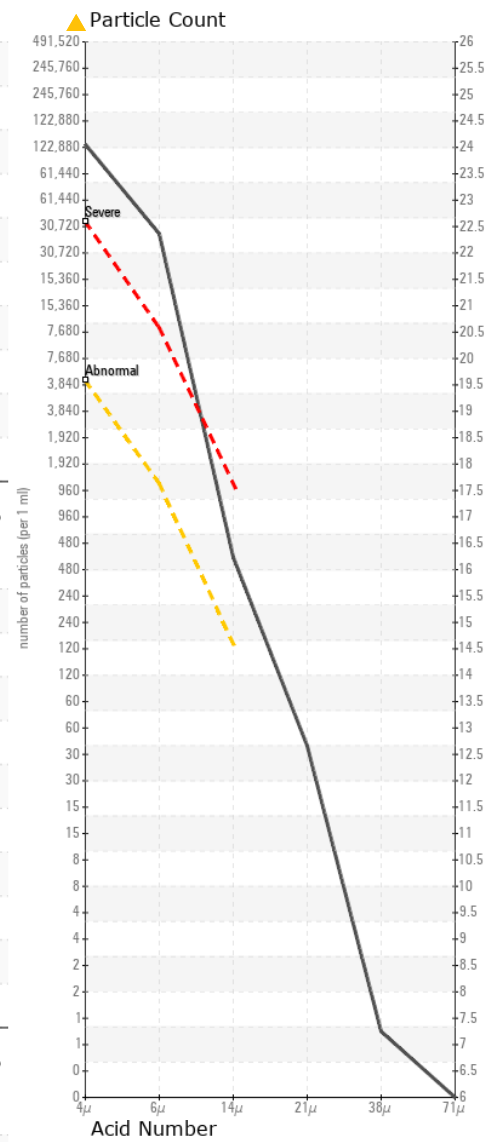
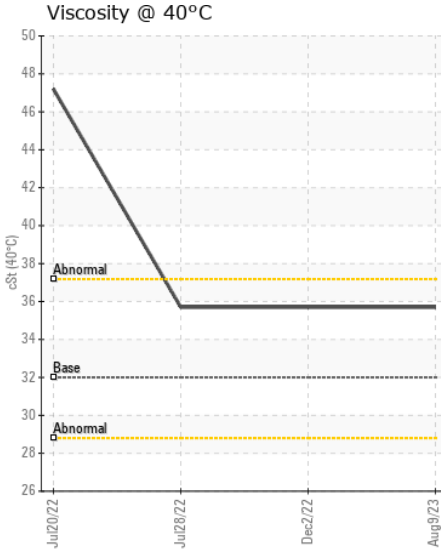
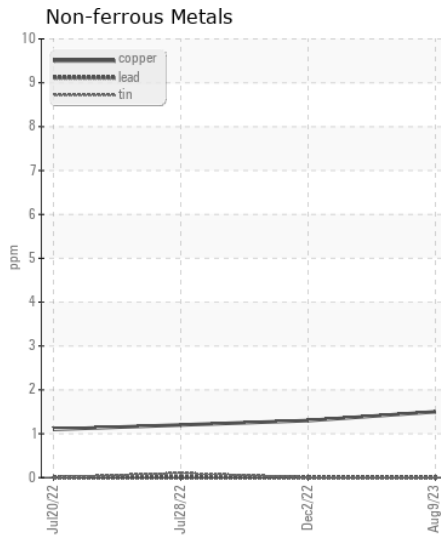
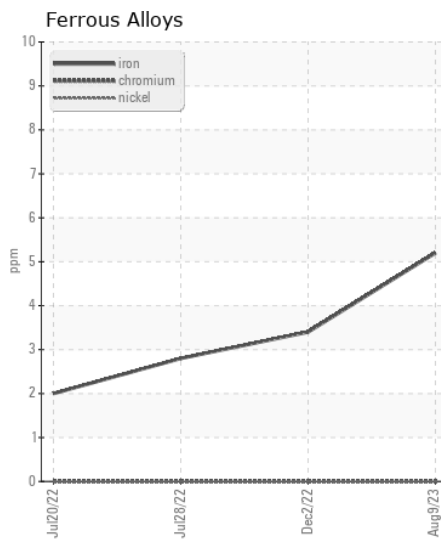
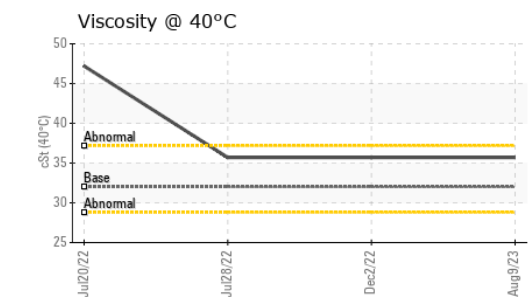
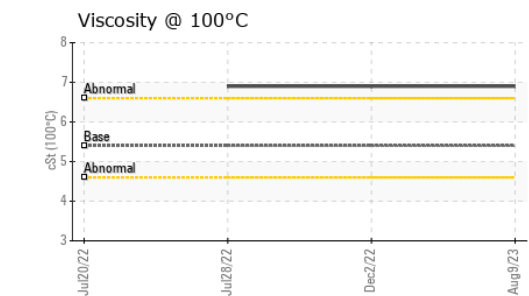
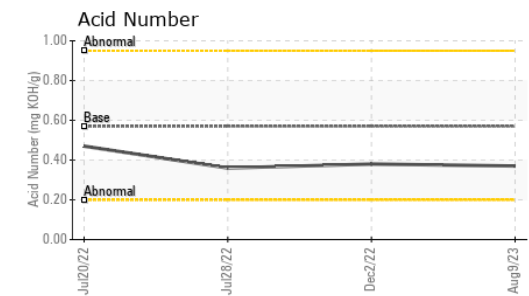
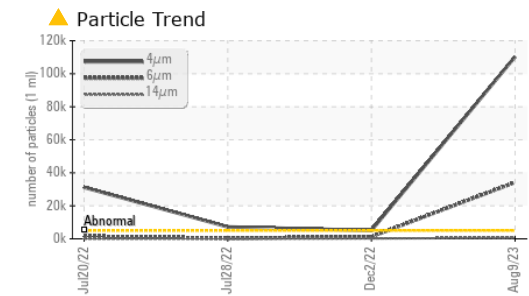
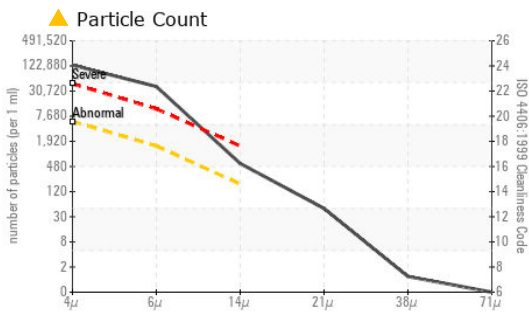
There is a high amount of particulates present in the oil.

Silicon	ppm	ASTM D5185m	>20	<1	<1	<1
Potassium	ppm	ASTM D5185m	>20	<1	<1	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	▲ 110292	▲ 5073	▲ 7218
Particles >6µm		ASTM D7647	>1300	▲ 34211	1287	317
Particles >14µm		ASTM D7647	>160	▲ 497	▲ 240	11
Particles >21µm		ASTM D7647	>40	▲ 42	▲ 95	4
Particles >38µm		ASTM D7647	>10	1	▲ 16	1
Particles >71µm		ASTM D7647	>3	0	2	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 24/22/16	▲ 20/17/15	▲ 20/15/11
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
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		0	0	1
Boron	ppm	ASTM D5185m	5	0	0	0
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	5	0	<1	<1
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m	25	2	2	1
Calcium	ppm	ASTM D5185m	200	62	53	55
Phosphorus	ppm	ASTM D5185m	300	388	339	353
Zinc	ppm	ASTM D5185m	370	420	430	432
Sulfur	ppm	ASTM D5185m	2500	4609	4253	4890
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.37	0.38	0.36
Visc @ 40°C	cSt	ASTM D445	32	35.7	35.7	35.7
Visc @ 100°C	cSt	ASTM D445	5.4	6.9	6.9	6.9
Viscosity Index (VI)	Scale	ASTM D2270	102	156	156	156



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0803574 **Received** : 17 Jan 2024
Lab Number : 06062652 **Diagnosed** : 19 Jan 2024
Unique Number : 10834034 **Diagnostician** : Jonathan Hester
Test Package : MOB 2 (Additional Tests: KV100, VI)

HIAB USA - MIDATLANTIC
 18627 STARCREEK DR
 CORNELIUS, NC
 US 28031
 Contact: JOHN MORRIS
 john.morris@hiab.com
 T: (704)883-4328
 F: (704)895-4801

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)