



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
HIAB 28802870 - GULF EAGLE SUPPLY

Component
Hydraulic System

Fluid
AW HYDRAULIC OIL ISO 32 (55 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0698836	WCM2290235	WCM2321802
Sample Date		Client Info		08 Feb 2023	16 Feb 2020	05 Feb 2019
Machine Age	yrs	Client Info		0	0	0
Oil Age	yrs	Client Info		0	0	0
Filter Age	yrs	Client Info		1	0	1
Oil Changed		Client Info		Not Changed	N/A	Not Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				NORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

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

CONTAMINATION

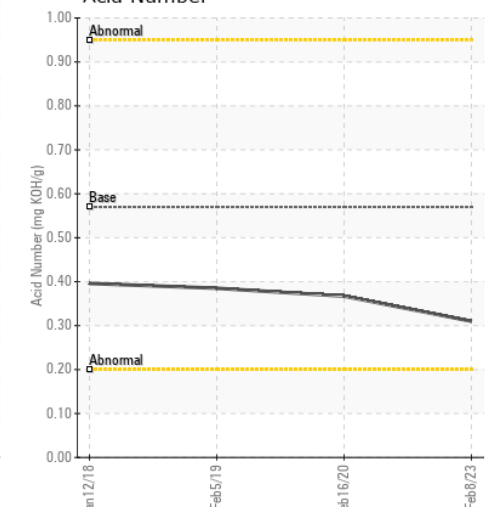
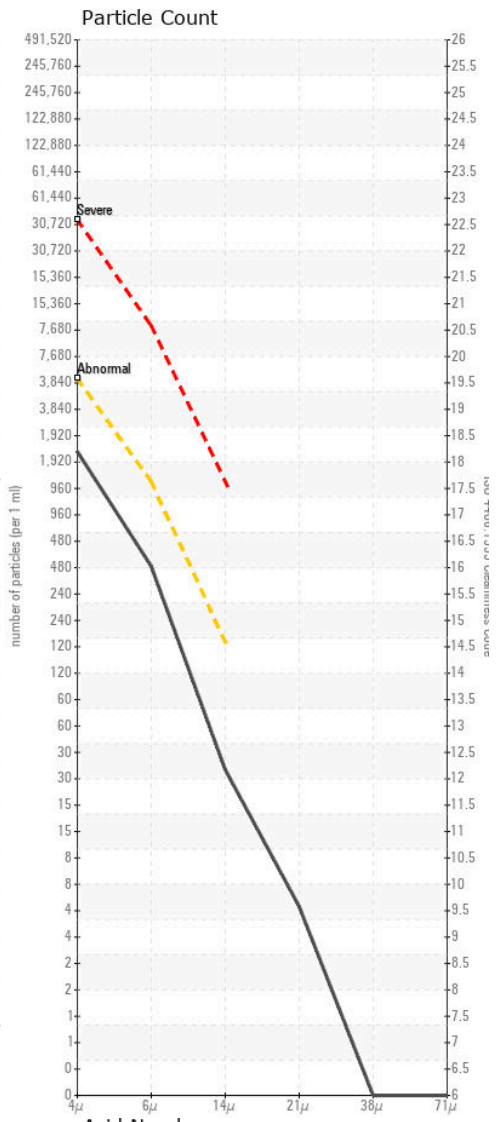
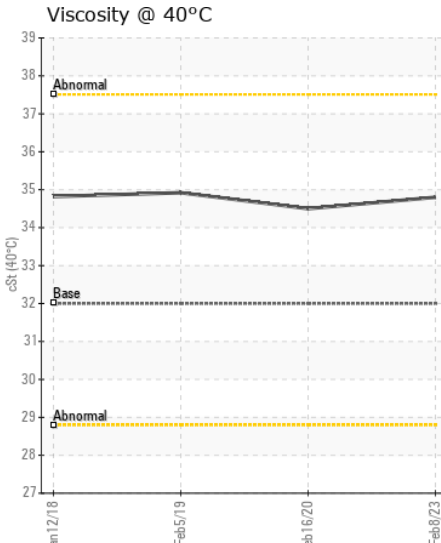
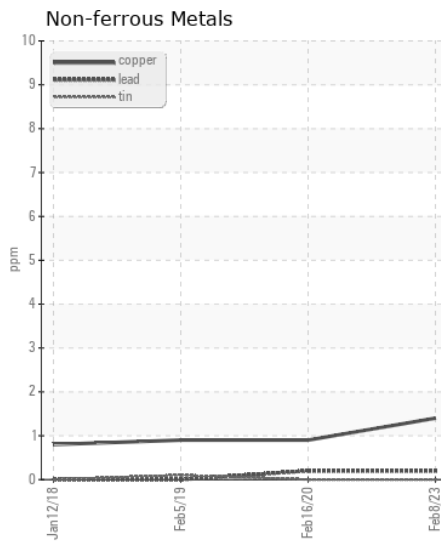
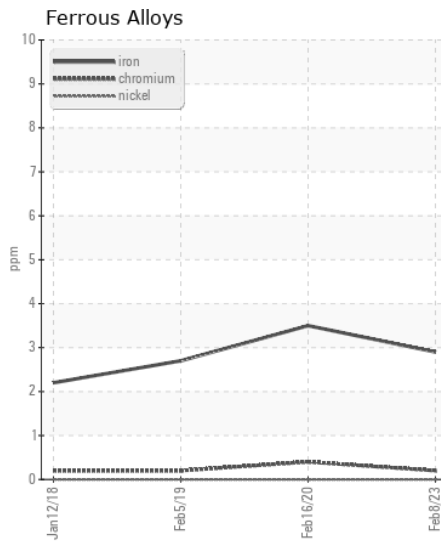
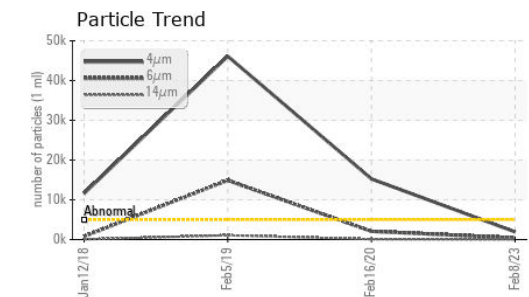
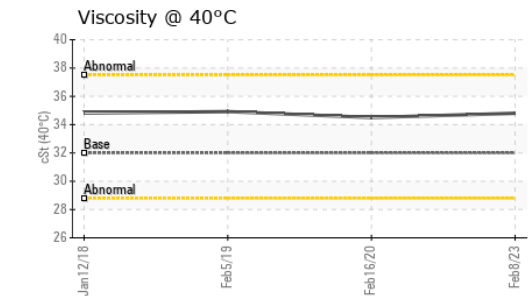
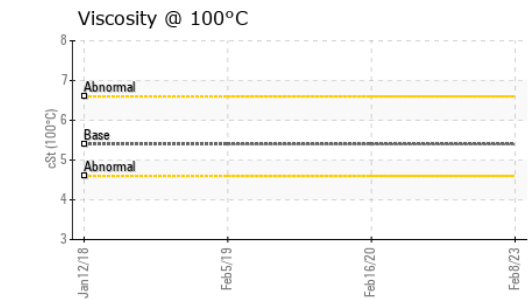
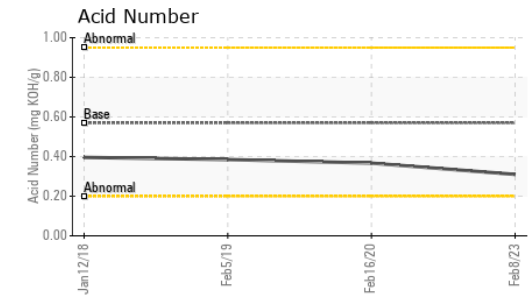
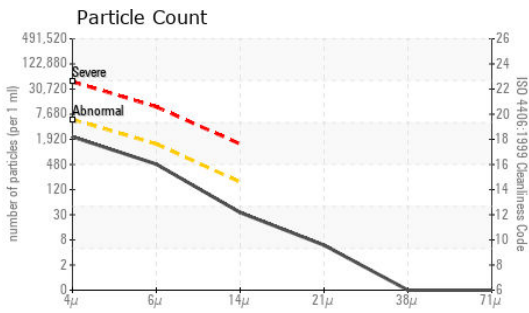
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	<1	<1	<1
Potassium	ppm	ASTM D5185m	>20	0	<1	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	1927	▲ 15259	▲ 46116
Particles >6µm		ASTM D7647	>1300	429	▲ 2074	▲ 14907
Particles >14µm		ASTM D7647	>160	30	79	▲ 1077
Particles >21µm		ASTM D7647	>40	5	26	▲ 250
Particles >38µm		ASTM D7647	>10	0	9	▲ 15
Particles >71µm		ASTM D7647	>3	0	2	2
Oil Cleanliness		ISO 4406 (c)	>19/17/14	18/16/12	▲ 21/18/13	▲ 23/21/17
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	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		0	<1	<1
Boron	ppm	ASTM D5185m	5	<1	7	7
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	5	2	3	3
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m	25	9	6	6
Calcium	ppm	ASTM D5185m	200	120	166	160
Phosphorus	ppm	ASTM D5185m	300	332	374	364
Zinc	ppm	ASTM D5185m	370	403	444	443
Sulfur	ppm	ASTM D5185m	2500	1730	1875	2060
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.31	0.367	0.385
Visc @ 40°C	cSt	ASTM D445	32	34.8	34.5	34.92
Visc @ 100°C	cSt	ASTM D445	5.4	6.3	---	---
Viscosity Index (VI)	Scale	ASTM D2270	102	132	---	---



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0698836 **Received** : 17 Feb 2023
Lab Number : 05771260 **Diagnosed** : 20 Feb 2023
Unique Number : 10345877 **Diagnostician** : Wes Davis
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)

HIAB USA - MIDWEST
 2827 COMMERCE ST
 FRANKLIN PARK, IL
 US 60131
 Contact: KEVIN VANNEWKIRK
 kevin.vannewkirk@hiab.com
 T: (847)323-3188
 F: (847)288-0192