



# OIL ANALYSIS REPORT

WEAR	<b>ABNORMAL</b>
CONTAMINATION	<b>ABNORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**MOFFETT ABC93535**

Component  
**Hydraulic System**

Fluid  
**AW HYDRAULIC OIL ISO 32 (--- GAL)**

## RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0623930</b>	---	---
Sample Date		Client Info		<b>28 Feb 2023</b>	---	---
Machine Age	hrs	Client Info		<b>877</b>	---	---
Oil Age	hrs	Client Info		<b>0</b>	---	---
Filter Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed		Client Info		<b>Changed</b>	---	---
Filter Changed		Client Info		<b>Changed</b>	---	---
Sample Status				<b>ABNORMAL</b>	---	---

## WEAR

The iron level is abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	<b>▲ 34</b>	---	---
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	---	---
Titanium	ppm	ASTM D5185m		<b>0</b>	---	---
Silver	ppm	ASTM D5185m		<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>10	<b>&lt;1</b>	---	---
Lead	ppm	ASTM D5185m	>10	<b>2</b>	---	---
Copper	ppm	ASTM D5185m	>75	<b>3</b>	---	---
Tin	ppm	ASTM D5185m	>10	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---

## CONTAMINATION

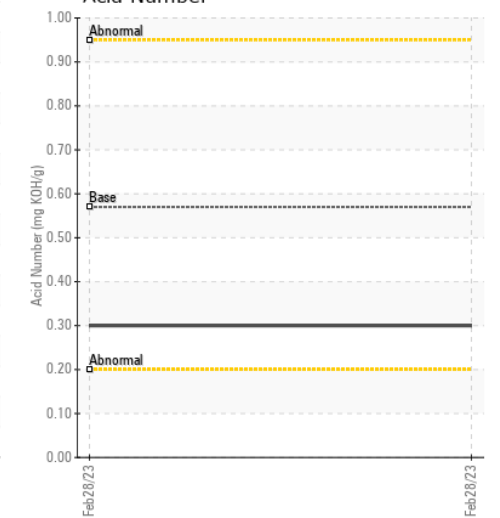
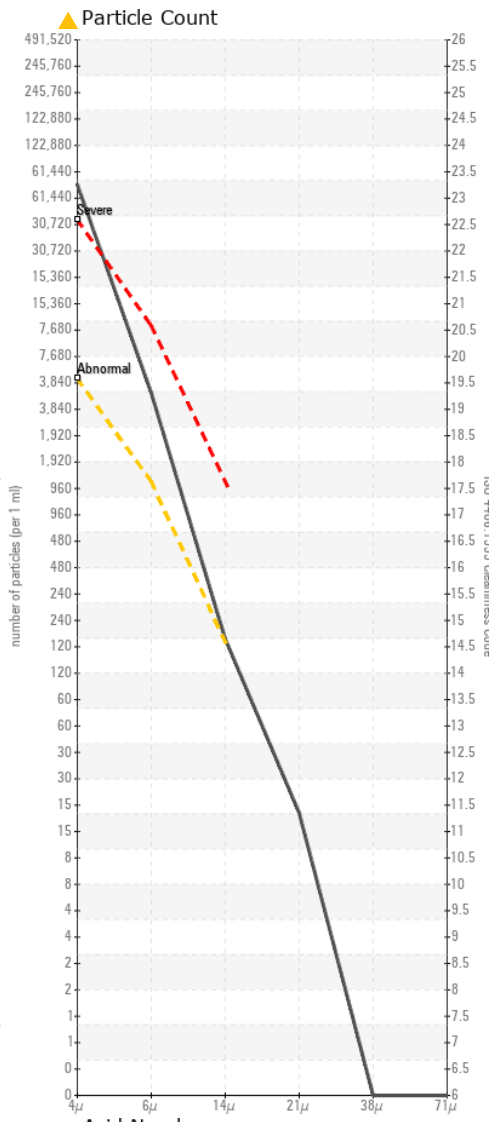
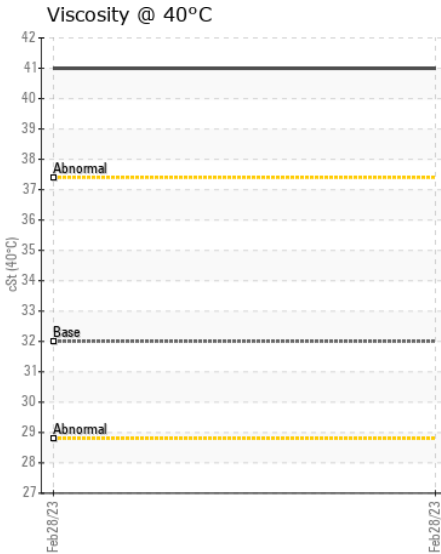
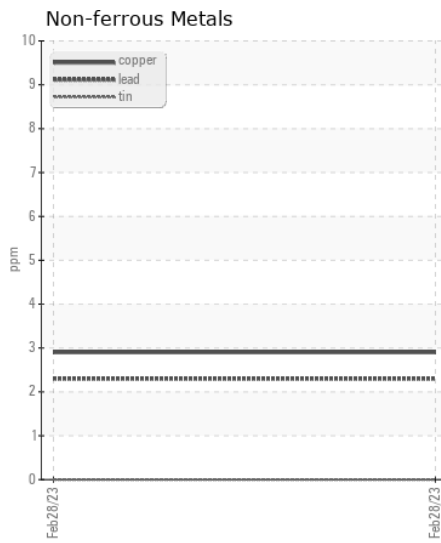
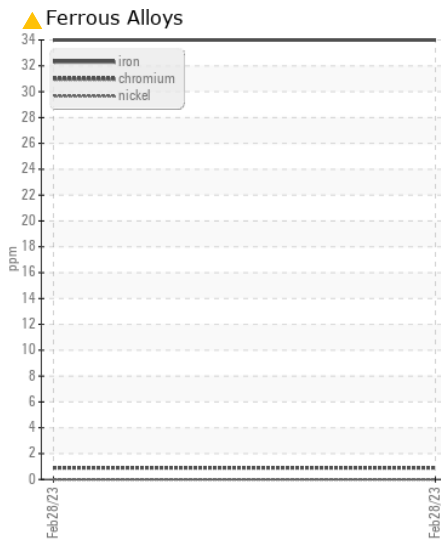
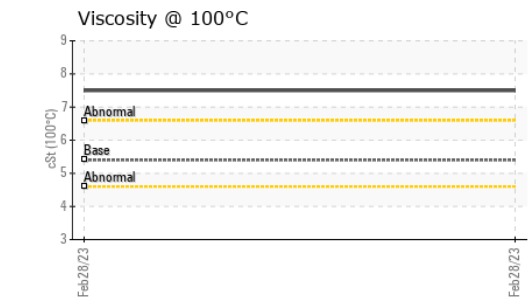
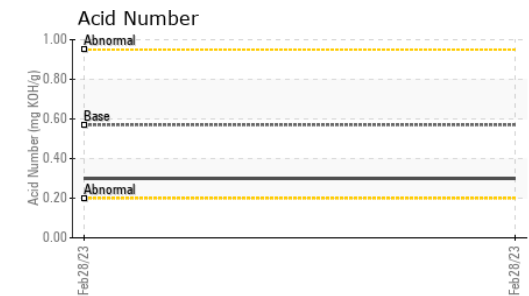
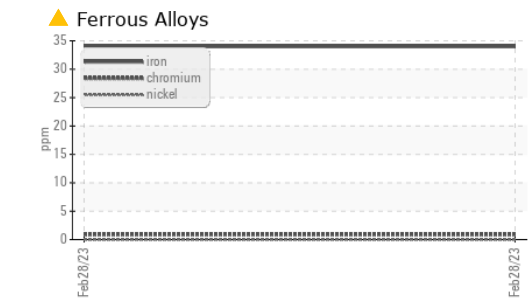
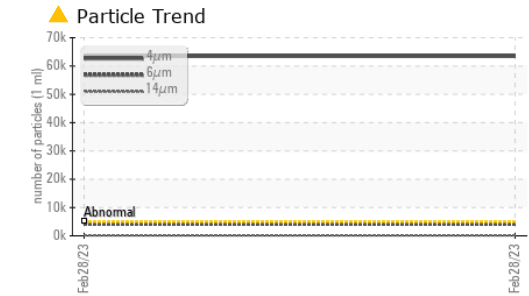
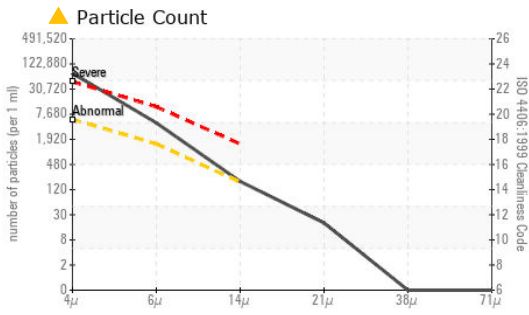
There is a high amount of particulates present in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>2</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	---	---
Water		WC Method	>0.1	<b>NEG</b>	---	---
Particles >4µm		ASTM D7647	>5000	<b>▲ 63445</b>	---	---
Particles >6µm		ASTM D7647	>1300	<b>▲ 4151</b>	---	---
Particles >14µm		ASTM D7647	>160	<b>▲ 166</b>	---	---
Particles >21µm		ASTM D7647	>40	<b>17</b>	---	---
Particles >38µm		ASTM D7647	>10	<b>0</b>	---	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>▲ 23/19/15</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	---	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	---	---

## FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Boron	ppm	ASTM D5185m	5	<b>0</b>	---	---
Barium	ppm	ASTM D5185m	5	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m	5	<b>&lt;1</b>	---	---
Manganese	ppm	ASTM D5185m		<b>1</b>	---	---
Magnesium	ppm	ASTM D5185m	25	<b>&lt;1</b>	---	---
Calcium	ppm	ASTM D5185m	200	<b>43</b>	---	---
Phosphorus	ppm	ASTM D5185m	300	<b>225</b>	---	---
Zinc	ppm	ASTM D5185m	370	<b>292</b>	---	---
Sulfur	ppm	ASTM D5185m	2500	<b>2635</b>	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	<b>0.30</b>	---	---
Visc @ 40°C	cSt	ASTM D445	32	<b>41.0</b>	---	---
Visc @ 100°C	cSt	ASTM D445	5.4	<b>7.5</b>	---	---
Viscosity Index (VI)	Scale	ASTM D2270	102	<b>151</b>	---	---



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0623930 **Received** : 20 Mar 2023  
**Lab Number** : 05796650 **Diagnosed** : 22 Mar 2023  
**Unique Number** : 10386334 **Diagnostician** : Angela Borella  
**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 - Carnegie**  
 200 1ST AVE  
 CARNEGIE, PA  
 US 15106  
 Contact: GARY SPANGLE  
 gary.spangle@hiab.com  
 T: (419)482-6000  
 F: