MOB II WEAR CHECK

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ATTENTION

Machine Id
HIAB 219786 - SUBURBAN PROPANE
Component
Hydraulic System
Fluid
AW HYDRAULIC OIL ISO 46 (--- GAL)

RECOMMENDATION

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

WEAR

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

CONTAMINATION

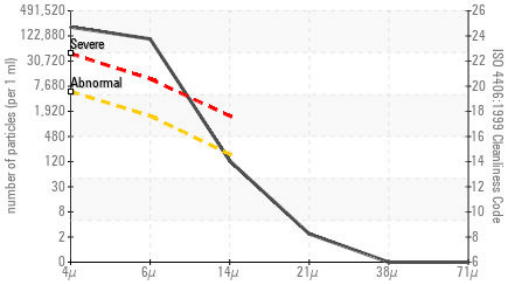
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

FLUID CONDITION

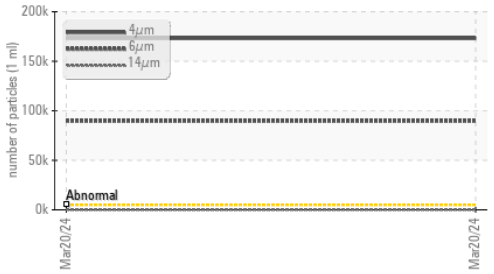
Viscosity of sample indicates oil is within ISO 32 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0762684	---	---
Sample Date		Client Info		20 Mar 2024	---	---
Machine Age	yrs	Client Info		0	---	---
Oil Age	yrs	Client Info		1	---	---
Filter Age	yrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	---	---
Iron	ppm	ASTM D5185m	>20	0	---	---
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	▲ 25	---	---
Lead	ppm	ASTM D5185m	>10	0	---	---
Copper	ppm	ASTM D5185m	>75	2	---	---
Tin	ppm	ASTM D5185m	>10	0	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Silicon	ppm	ASTM D5185m	>20	<1	---	---
Potassium	ppm	ASTM D5185m	>20	0	---	---
Water		WC Method	>0.1	NEG	---	---
Particles >4µm		ASTM D7647	>5000	▲ 173108	---	---
Particles >6µm		ASTM D7647	>1300	▲ 89741	---	---
Particles >14µm		ASTM D7647	>160	111	---	---
Particles >21µm		ASTM D7647	>40	2	---	---
Particles >38µm		ASTM D7647	>10	0	---	---
Particles >71µm		ASTM D7647	>3	0	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 25/24/14	---	---
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	---	---
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		<1	---	---
Magnesium	ppm	ASTM D5185m	25	<1	---	---
Calcium	ppm	ASTM D5185m	200	50	---	---
Phosphorus	ppm	ASTM D5185m	300	316	---	---
Zinc	ppm	ASTM D5185m	370	391	---	---
Sulfur	ppm	ASTM D5185m	2500	1271	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.37	---	---
Visc @ 40°C	cSt	ASTM D445	46	● 33.3	---	---
Visc @ 100°C	cSt	ASTM D445	6.7	● 6.2	---	---
Viscosity Index (VI)	Scale	ASTM D2270	97	137	---	---

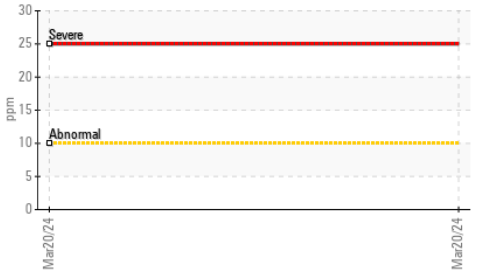
Particle Count



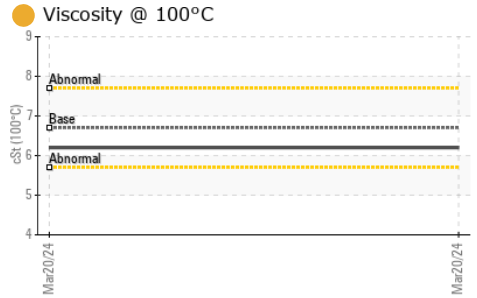
Particle Trend



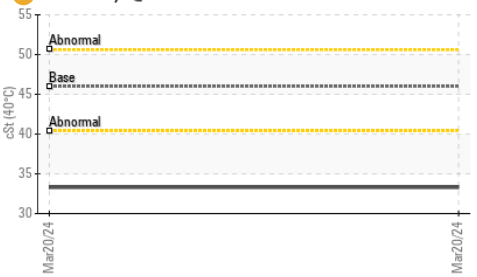
Aluminum (ppm)



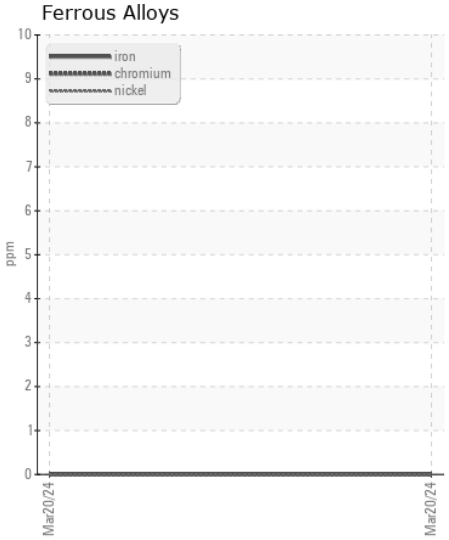
Viscosity @ 100°C



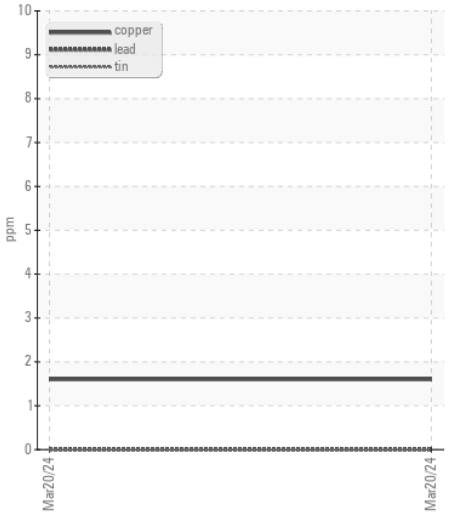
Viscosity @ 40°C



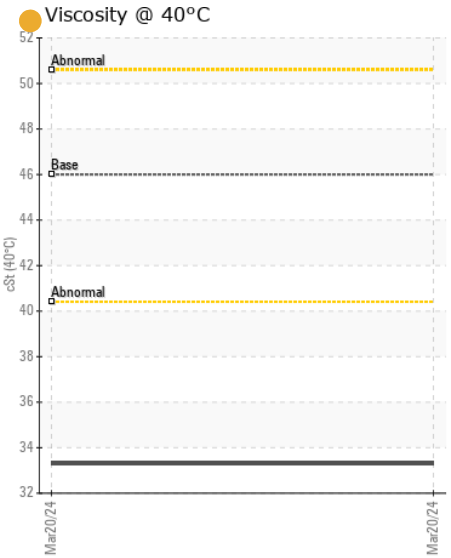
Ferrous Alloys



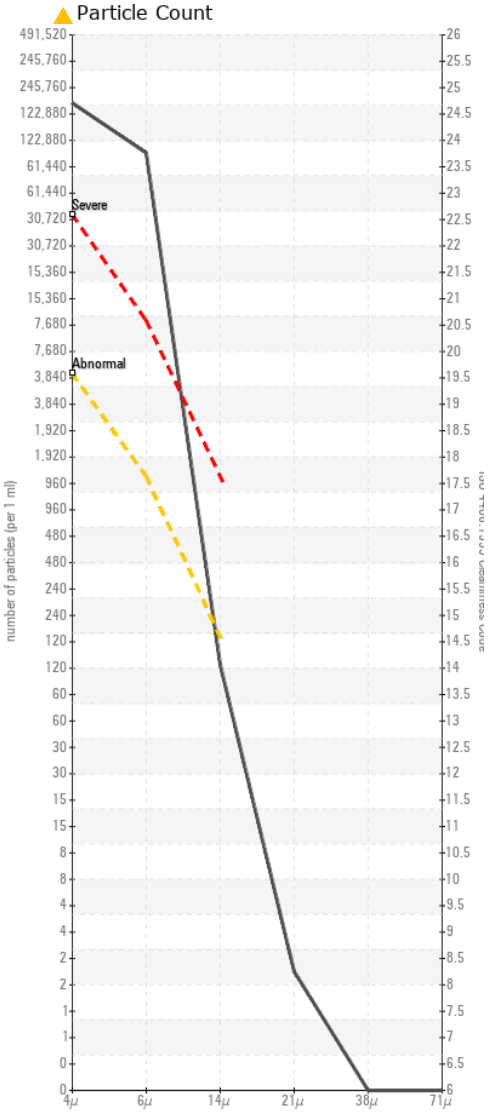
Non-ferrous Metals



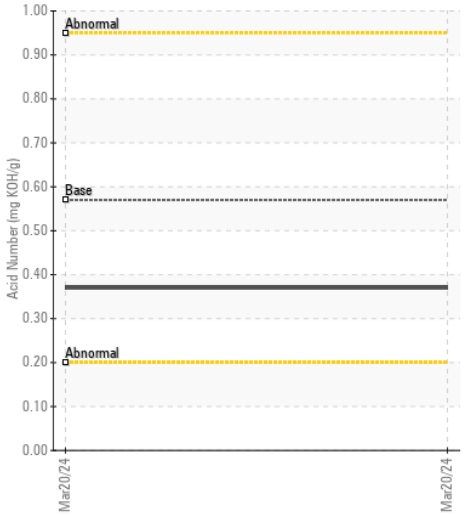
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0762684 **Received** : 28 May 2024
Lab Number : 06192190 **Tested** : 29 May 2024
Unique Number : 11048942 **Diagnosed** : 31 May 2024 - Jonathan Hester
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 - SOUTH
8960 HWY 5 BLDG A
DOUGLASVILLE, GA
US 30135
Contact: CHARLES FOERSTER
charles.foerster@hiab.com
T: (404)787-0966
F: (770)949-7552