



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Machine Id
FISHING VESSEL MV Hearn`s Endeavor
 Component
Hydraulic System
 Fluid
AW HYDRAULIC OIL ISO 32 (--- GAL)

RECOMMENDATION

We advise that you check all areas where contaminants can enter the system. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. Resample in 30-45 days to monitor this situation. (Customer Sample Comment: G2F installed. Water contamination PPM H2O)

WEAR

All component wear rates are normal.

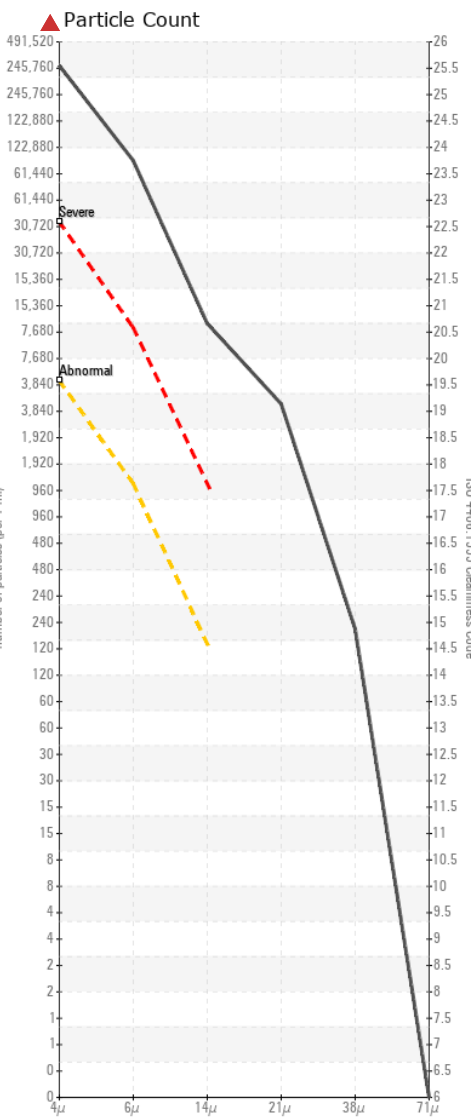
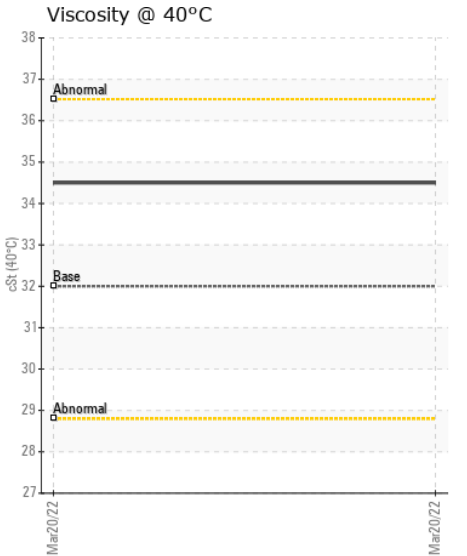
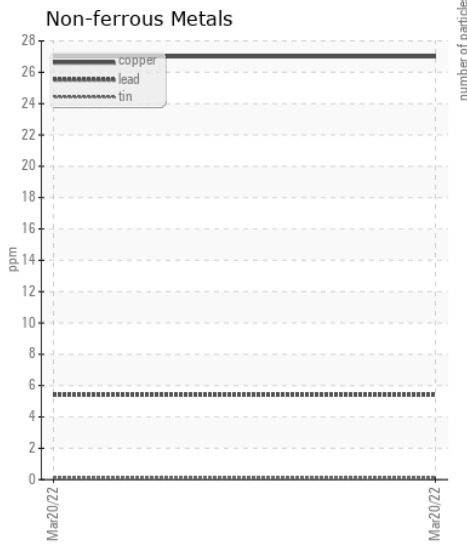
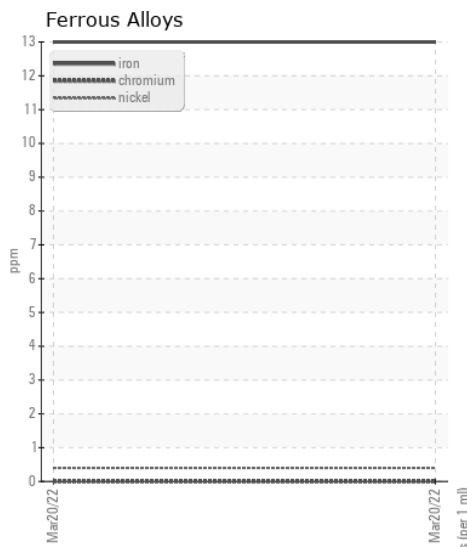
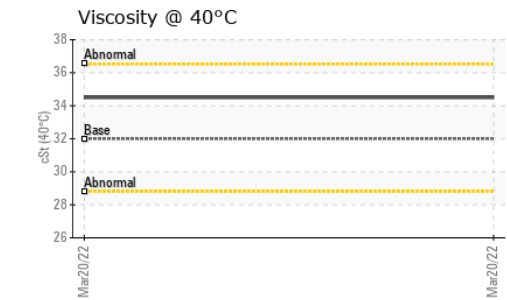
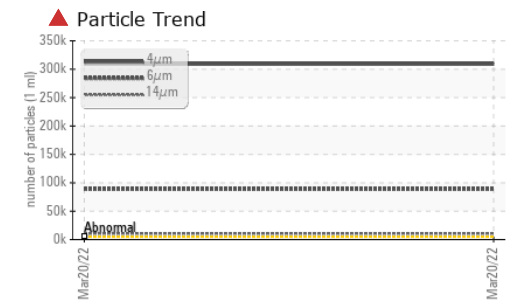
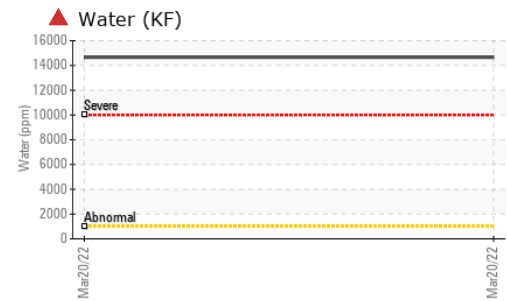
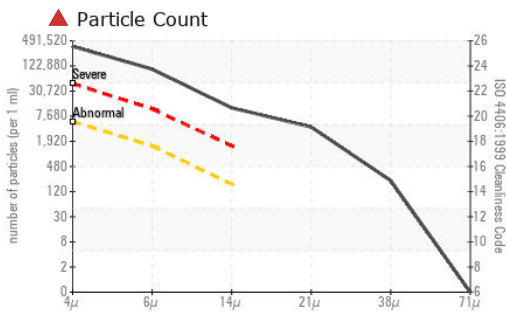
CONTAMINATION

Water and ppm water contamination levels are severe. Particles >14µm are severely high. Particles >21µm are severely high. Particles >38µm are severely high. Particles >6µm are severely high. Particles >4µm are severely high. Oil Cleanliness are severely high. There is a high concentration of water present in the oil.

FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		OF0000232	---	---
Sample Date		Client Info		20 Mar 2022	---	---
Machine Age	hrs	Client Info		0	---	---
Oil Age	hrs	Client Info		250	---	---
Filter Age	hrs	Client Info		250	---	---
Oil Changed		Client Info		Not Chngd	---	---
Filter Changed		Client Info		Not Chngd	---	---
Sample Status				SEVERE	---	---
Iron	ppm	ASTM D5185(m)	>20	13	---	---
Chromium	ppm	ASTM D5185(m)	>10	0	---	---
Nickel	ppm	ASTM D5185(m)		<1	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)		<1	---	---
Aluminum	ppm	ASTM D5185(m)	>10	1	---	---
Lead	ppm	ASTM D5185(m)	>10	5	---	---
Copper	ppm	ASTM D5185(m)	>75	27	---	---
Tin	ppm	ASTM D5185(m)	>10	<1	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Silicon	ppm	ASTM D5185(m)	>20	2	---	---
Potassium	ppm	ASTM D5185(m)	>20	6	---	---
Water	%	ASTM D6304*	>0.1	▲ 1.466	---	---
ppm Water	ppm	ASTM D6304*	>1000	▲ 14660.5	---	---
Particles >4µm		ASTM D7647	>5000	▲ 309071	---	---
Particles >6µm		ASTM D7647	>1300	▲ 89002	---	---
Particles >14µm		ASTM D7647	>160	▲ 10580	---	---
Particles >21µm		ASTM D7647	>40	▲ 3685	---	---
Particles >38µm		ASTM D7647	>10	▲ 194	---	---
Particles >71µm		ASTM D7647	>3	0	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 25/24/21	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	▲ MILKY	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.1	▲ 1%	---	---
Sodium	ppm	ASTM D5185(m)		183	---	---
Boron	ppm	ASTM D5185(m)	5	3	---	---
Barium	ppm	ASTM D5185(m)	5	0	---	---
Molybdenum	ppm	ASTM D5185(m)	5	0	---	---
Manganese	ppm	ASTM D5185(m)		<1	---	---
Magnesium	ppm	ASTM D5185(m)	25	15	---	---
Calcium	ppm	ASTM D5185(m)	200	6	---	---
Phosphorus	ppm	ASTM D5185(m)	300	336	---	---
Zinc	ppm	ASTM D5185(m)	370	195	---	---
Sulfur	ppm	ASTM D5185(m)	2500	1954	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	32	34.5	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : OF0000232 **Received** : 13 Jun 2022
Lab Number : 02494590 **Tested** : 15 Jun 2022
Unique Number : 5411549 **Diagnosed** : 15 Jun 2022 - Kevin Marson
Test Package : MOB 2 (Additional Tests: KF)

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.

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