



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area  
**HILL ENTERPRISES LTD**  
 Machine Id  
**FISHING VESSEL M/V ATLANTIC TITAN**  
 Component  
**2 Hydraulic System**  
 Fluid  
**AW HYDRAULIC OIL ISO 32 (2000 LTR)**

## RECOMMENDATION

The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. ( Customer Sample Comment: G2F Installed. )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		OF0000492	---	---
Sample Date		Client Info		16 Mar 2022	---	---
Machine Age	hrs	Client Info		10000	---	---
Oil Age	hrs	Client Info		1000	---	---
Filter Age	hrs	Client Info		1000	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	---	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>20	1	---	---
Chromium	ppm	ASTM D5185(m)	>10	0	---	---
Nickel	ppm	ASTM D5185(m)		<1	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)		0	---	---
Aluminum	ppm	ASTM D5185(m)	>10	<1	---	---
Lead	ppm	ASTM D5185(m)	>10	<1	---	---
Copper	ppm	ASTM D5185(m)	>75	7	---	---
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	---	---

## CONTAMINATION

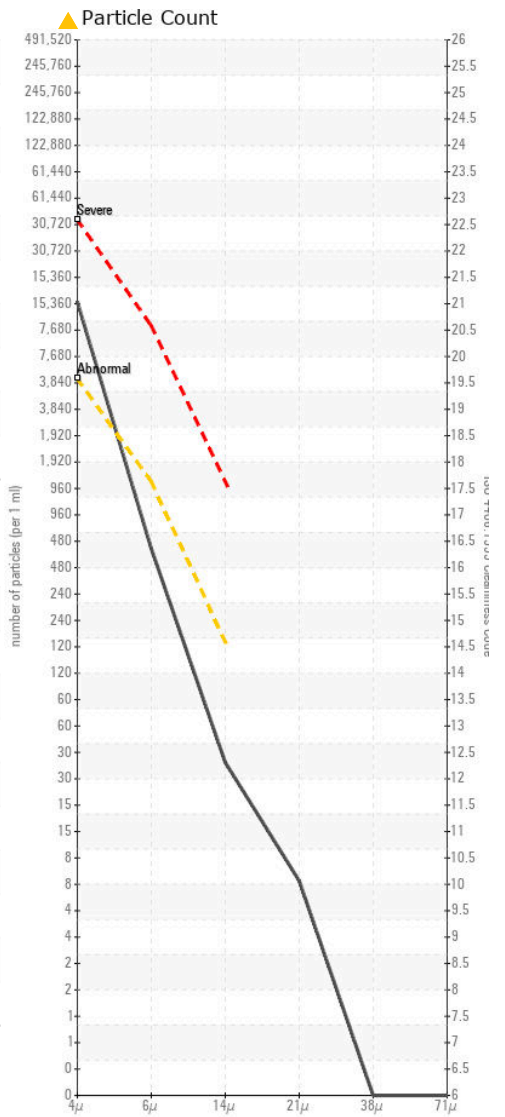
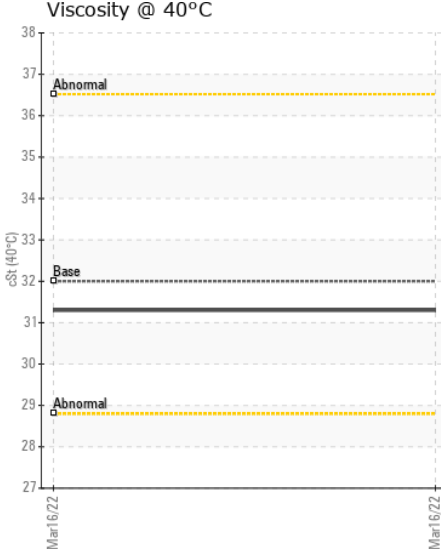
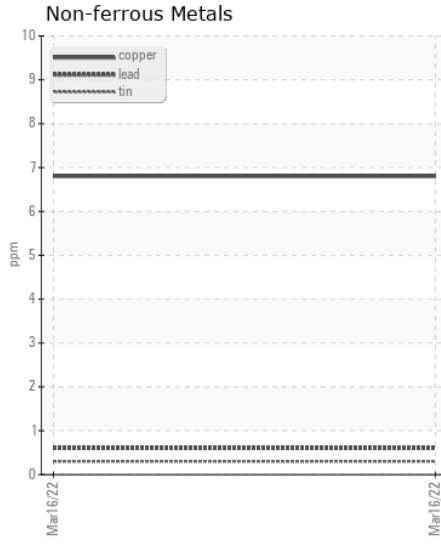
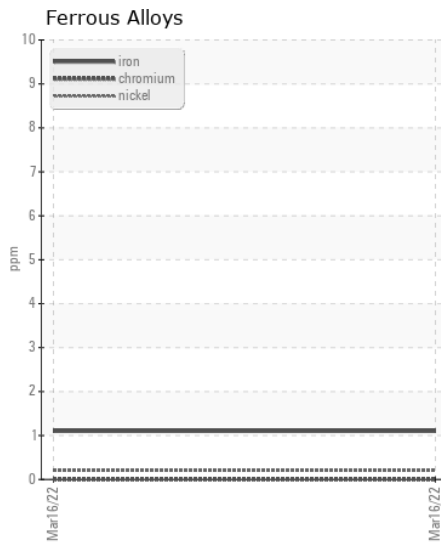
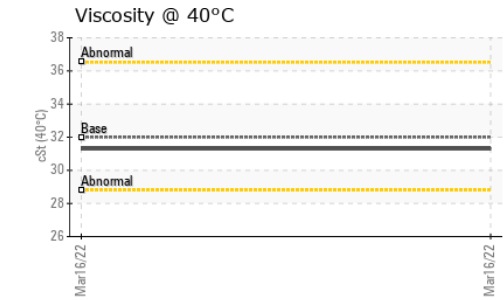
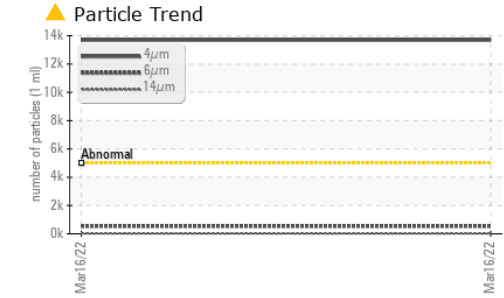
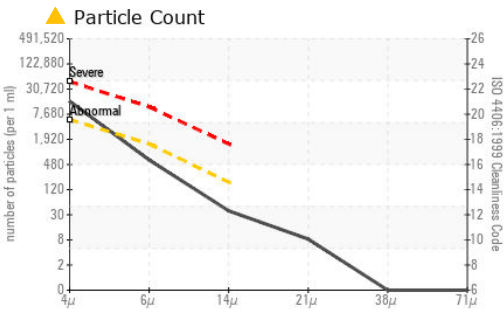
Particles >4µm and oil cleanliness are abnormally high.

Silicon	ppm	ASTM D5185(m)	>20	<1	---	---
Potassium	ppm	ASTM D5185(m)	>20	<1	---	---
Water		WC Method	>0.1	NEG	---	---
Particles >4µm		ASTM D7647	>5000	▲ 13691	---	---
Particles >6µm		ASTM D7647	>1300	541	---	---
Particles >14µm		ASTM D7647	>160	33	---	---
Particles >21µm		ASTM D7647	>40	7	---	---
Particles >38µm		ASTM D7647	>10	0	---	---
Particles >71µm		ASTM D7647	>3	0	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 21/16/12	---	---
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	---	---

## FLUID CONDITION

The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Sodium	ppm	ASTM D5185(m)		<1	---	---
Boron	ppm	ASTM D5185(m)	5	2	---	---
Barium	ppm	ASTM D5185(m)	5	0	---	---
Molybdenum	ppm	ASTM D5185(m)	5	<1	---	---
Manganese	ppm	ASTM D5185(m)		0	---	---
Magnesium	ppm	ASTM D5185(m)	25	18	---	---
Calcium	ppm	ASTM D5185(m)	200	68	---	---
Phosphorus	ppm	ASTM D5185(m)	300	318	---	---
Zinc	ppm	ASTM D5185(m)	370	351	---	---
Sulfur	ppm	ASTM D5185(m)	2500	1255	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	32	31.3	---	---



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : OF0000492  
**Lab Number** : **02494487**  
**Unique Number** : 5411446  
**Test Package** : MOB 2

**Received** : 13 Jun 2022  
**Tested** : 14 Jun 2022  
**Diagnosed** : 14 Jun 2022 - Kevin Marson

**Oil Filtration Solutions Ltd.**  
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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.