



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
HILL ENTERPRISES LTD
Machine Id
FISHING VESSEL M/V ATLANTIC TITAN
Component
Gearbox
Fluid
PETRO CANADA DURON MOTOR OIL SAE 30 (45 LTR)

RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill.
Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		OF0000477	OF0000487	---
Sample Date		Client Info		16 Apr 2024	16 Mar 2022	---
Machine Age	hrs	Client Info		0	2797	---
Oil Age	hrs	Client Info		822	1000	---
Filter Age	hrs	Client Info		510	1000	---
Oil Changed		Client Info		N/A	Changed	---
Filter Changed		Client Info		N/A	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

PQ		ASTM D8184*		0	0	---
Iron	ppm	ASTM D5185(m)	>200	8	9	---
Chromium	ppm	ASTM D5185(m)	>10	0	0	---
Nickel	ppm	ASTM D5185(m)	>10	0	<1	---
Titanium	ppm	ASTM D5185(m)		0	0	---
Silver	ppm	ASTM D5185(m)		0	0	---
Aluminum	ppm	ASTM D5185(m)	>25	<1	<1	---
Lead	ppm	ASTM D5185(m)	>50	0	<1	---
Copper	ppm	ASTM D5185(m)	>200	4	4	---
Tin	ppm	ASTM D5185(m)	>10	0	<1	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
White Metal	scalar	Visual*	NONE	VLITE	VLITE	---
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	---

CONTAMINATION

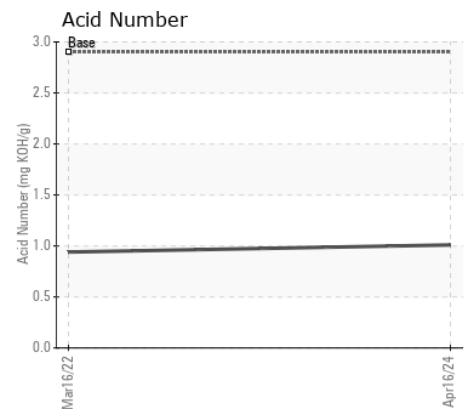
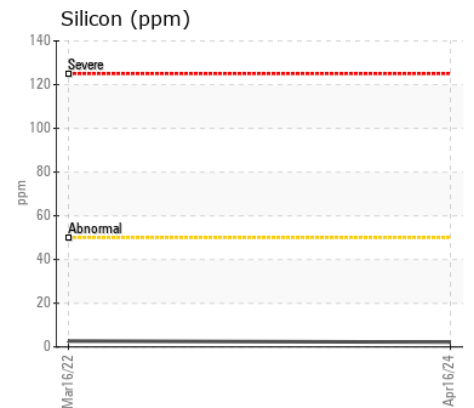
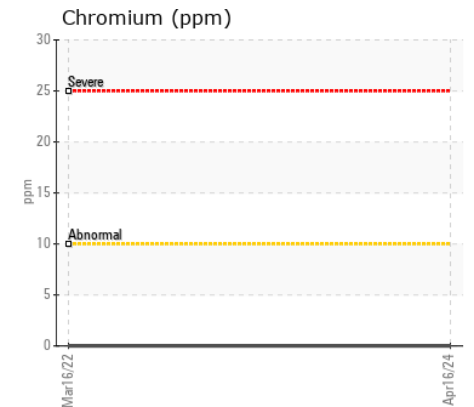
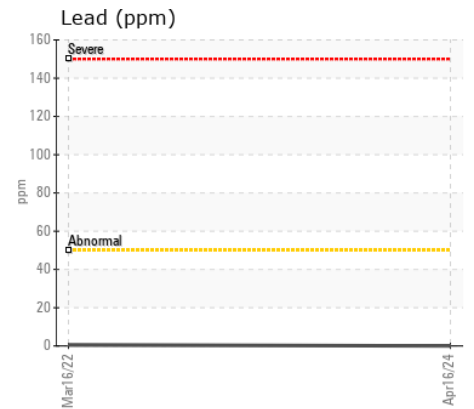
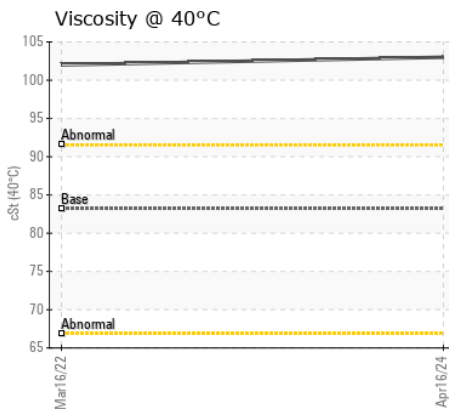
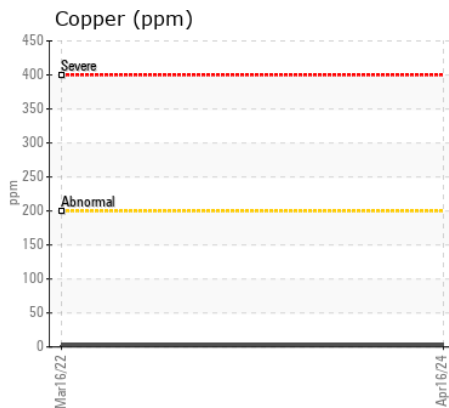
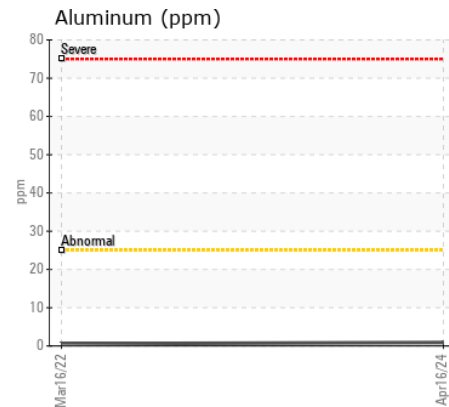
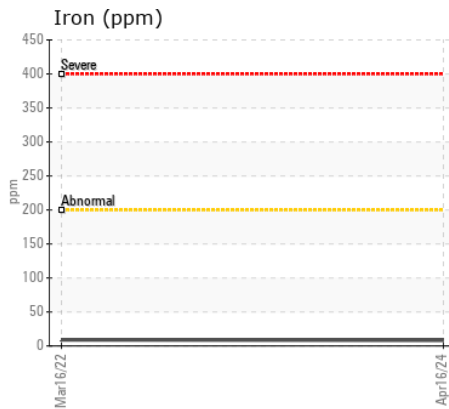
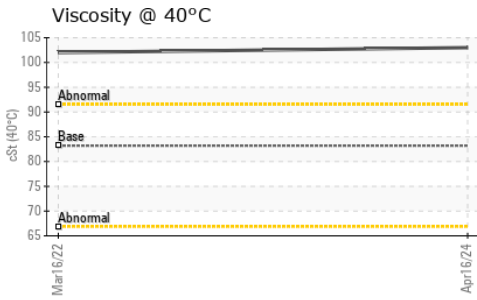
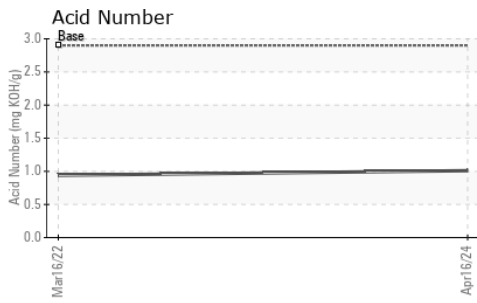
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>50	2	3	---
Potassium	ppm	ASTM D5185(m)	>20	0	0	---
Water		WC Method	>0.2	NEG	NEG	---
Silt	scalar	Visual*	NONE	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	VLITE	---
Appearance	scalar	Visual*	NORML	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---

FLUID CONDITION

Additive levels indicate the addition of a different brand, or type of oil.
The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		2	2	---
Boron	ppm	ASTM D5185(m)	1.0	2	3	---
Barium	ppm	ASTM D5185(m)	1.0	0	0	---
Molybdenum	ppm	ASTM D5185(m)	1.0	82	73	---
Manganese	ppm	ASTM D5185(m)	1	<1	<1	---
Magnesium	ppm	ASTM D5185(m)	15	160	153	---
Calcium	ppm	ASTM D5185(m)	2540	2168	2104	---
Phosphorus	ppm	ASTM D5185(m)	1000	762	743	---
Zinc	ppm	ASTM D5185(m)	1110	834	773	---
Sulfur	ppm	ASTM D5185(m)	3700	2949	3279	---
Acid Number (AN)	mg KOH/g	ASTM D974*	2.9	1.01	0.94	---
Visc @ 40°C	cSt	ASTM D7279(m)	83.2	103	102	---



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

Sample No. : OF0000477

Lab Number : 02632419

Unique Number : 5773572

Test Package : MOB 2 (Additional Tests: PQ)

Received : 30 Apr 2024

Tested : 30 Apr 2024

Diagnosed : 01 May 2024 - Kevin Marson

Oil Filtration Solutions Ltd.

PO BOX 16125

CONCEPTION BAY SOUTH, NL

CA A1X 2E2

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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.