



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

Propulsion/Steering

Machine Id

Azimuth Thruster #3 (S/N C-13234)

Component

3 Gearbox

Fluid

MOBIL MOBILGEAR 600 XP ISO100 (850 LTR)

RECOMMENDATION

Resample at the next service interval to monitor. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using MAR 2 test kits, this testkit includes AN to determine the suitability of the oil for continued use.

WEAR

All component wear rates are normal.

CONTAMINATION

There is no indication of any contamination in the oil.

FLUID CONDITION

The condition of the oil is acceptable for the time in service (unconfirmed).

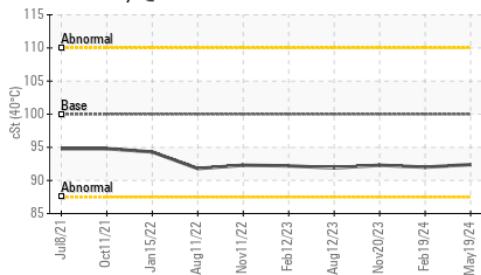
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0850489	WC0850504	WC0850507
Sample Date		Client Info		19 May 2024	19 Feb 2024	20 Nov 2023
Machine Age	hrs	Client Info		16099	15522	15255
Oil Age	hrs	Client Info		577	0	15255
Filter Age	hrs	Client Info		0	0	2018
Oil Changed		Client Info		Not Changed	Not Changed	Not Changed
Filter Changed		Client Info		Not Changed	Not Changed	Not Changed
Sample Status				NORMAL	NORMAL	NORMAL

Iron	ppm	ASTM D5185(m)	>200	13	13	12
Chromium	ppm	ASTM D5185(m)	>10	0	0	0
Nickel	ppm	ASTM D5185(m)	>10	0	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	<1
Aluminum	ppm	ASTM D5185(m)	>25	<1	<1	<1
Lead	ppm	ASTM D5185(m)	>50	4	3	4
Copper	ppm	ASTM D5185(m)	>200	37	33	31
Tin	ppm	ASTM D5185(m)	>10	2	2	2
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

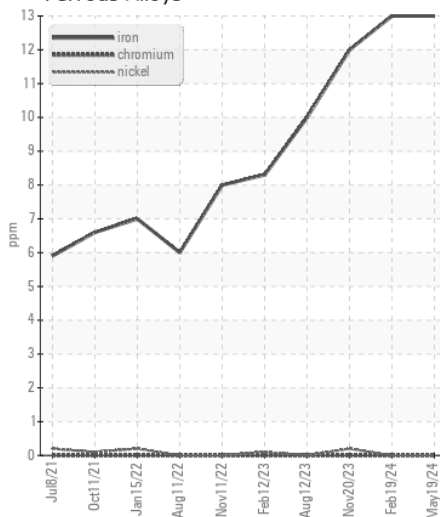
Silicon	ppm	ASTM D5185(m)	>50	<1	0	1
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	0
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

Sodium	ppm	ASTM D5185(m)		3	3	3
Boron	ppm	ASTM D5185(m)		3	1	6
Barium	ppm	ASTM D5185(m)		0	0	<1
Molybdenum	ppm	ASTM D5185(m)		0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		2	2	2
Calcium	ppm	ASTM D5185(m)		3	4	4
Phosphorus	ppm	ASTM D5185(m)		299	297	303
Zinc	ppm	ASTM D5185(m)		14	16	13
Sulfur	ppm	ASTM D5185(m)		9278	9440	9578
Visc @ 40°C	cSt	ASTM D7279(m)	100	92.4	92.0	92.3

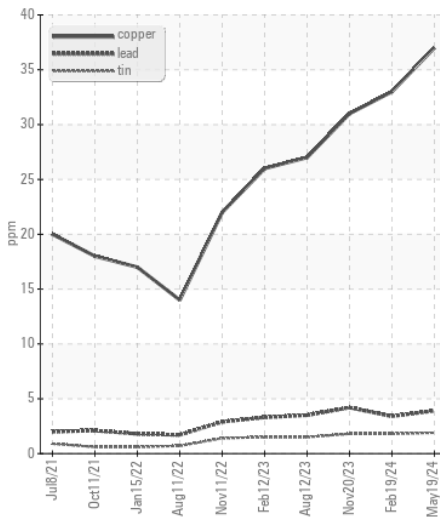
Viscosity @ 40°C



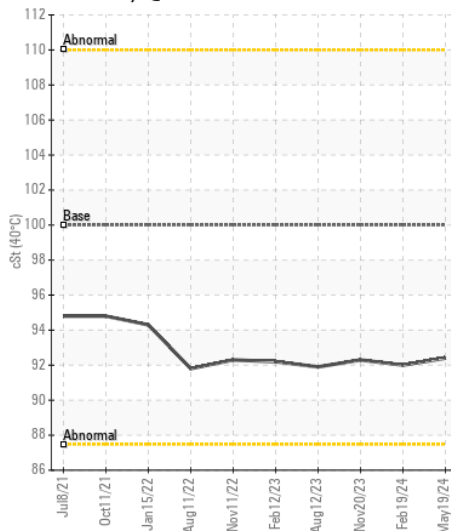
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **Horizon Maritime Services Ltd. - Horizon Enabler**
Sample No. : WC0850489 **Received** : 07 Jun 2024 87 Water Street, 2nd Floor
Lab Number : 02640532 **Tested** : 07 Jun 2024 St. John's, NL
Unique Number : 5789694 **Diagnosed** : 07 Jun 2024 - Wes Davis CA A1C 1A5
Test Package : MAR 1 Contact: Stephen Nowlan
 Cheng.Enabler@northsea.no

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.