MAR I WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Machine Id
STBD GEARBOX
Component
Starboard Gearbox
Fluid
Mobilgear 629 (850 LTR)

RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill. 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

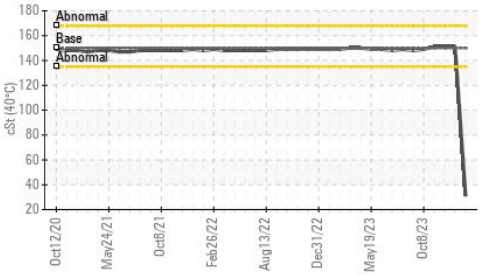
There is no indication of any contamination in the oil.

FLUID CONDITION

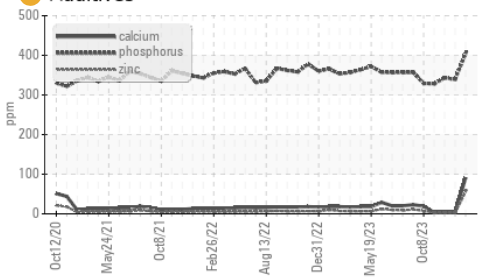
Viscosity of sample indicates oil is within ATF range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The condition of the oil is acceptable for the time in service (unconfirmed).

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0803043	WC0803027	WC0803087
Sample Date		Client Info		20 Mar 2024	25 Feb 2024	04 Feb 2024
Machine Age	hrs	Client Info		41523	44631	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Not Changd	N/A
Filter Changed		Client Info		N/A	Not Changd	N/A
Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185(m)	>150	18	<1	<1
Chromium	ppm	ASTM D5185(m)	>10	0	0	0
Nickel	ppm	ASTM D5185(m)	>10	0	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>5	<1	<1	<1
Lead	ppm	ASTM D5185(m)	>65	0	<1	0
Copper	ppm	ASTM D5185(m)	>80	<1	2	1
Tin	ppm	ASTM D5185(m)	>8	0	<1	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	VLITE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185(m)	>20	<1	<1	4
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	Visual*	NONE	VLITE	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)		1	0	0
Boron	ppm	ASTM D5185(m)		<1	26	27
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)		3	<1	<1
Calcium	ppm	ASTM D5185(m)		● 91	4	3
Phosphorus	ppm	ASTM D5185(m)		405	339	343
Zinc	ppm	ASTM D5185(m)		● 56	3	2
Sulfur	ppm	ASTM D5185(m)		● 1681	12436	12450
Visc @ 40°C	cSt	ASTM D7279(m)	150	▲ 31.1	151	151

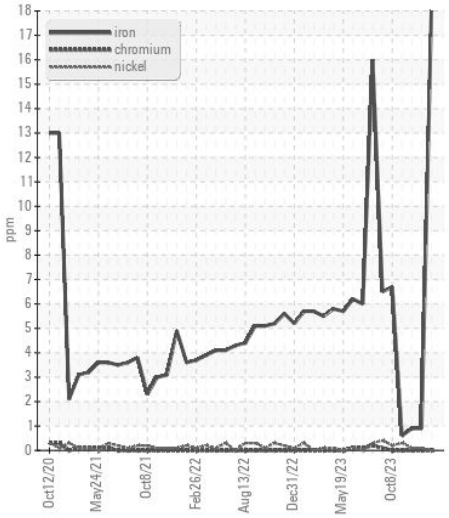
Viscosity @ 40°C



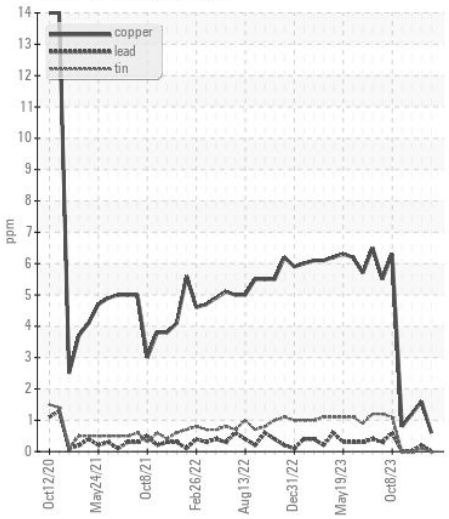
Additives



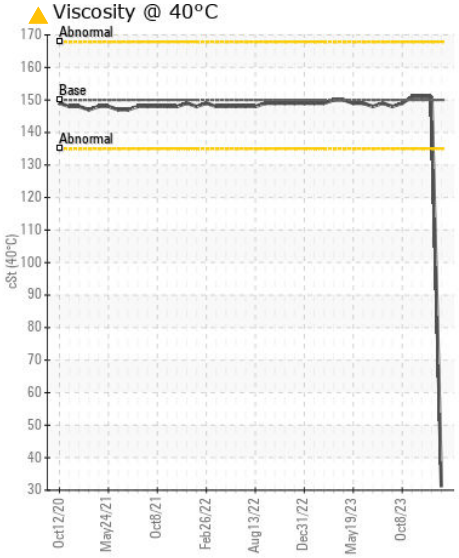
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



ISO 17025:2017 Accredited Laboratory

Laboratory	: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9			**Siem Offshore Canada LP.**
Sample No.	: WC0803043	**Received**	: 02 Apr 2024	M/V Avalon Sea, 140 WATER STREET SUITE 1000
Lab Number	: 02626188	**Tested**	: 02 Apr 2024	ST. JOHN`S, NL
Unique Number	: 5759320	**Diagnosed**	: 03 Apr 2024 - Kevin Marson	CA A1C 6H6
Test Package	: MAR 1			Contact: Avalon Sea

To discuss this sample report, contact Customer Service at 1-800-268-2131. ecr@avalonsea.siemoffshore.com

Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. T:

Validity of results and interpretation are based on the sample and information as supplied. F: