MAR II

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
SEAWARD ENDEAVOR
Machine Id
Endeavor
Component
Port Reduction Gear
Fluid
SHELL ROTELLA T 30 (9 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

There is no indication of any contamination in the oil.

FLUID CONDITION

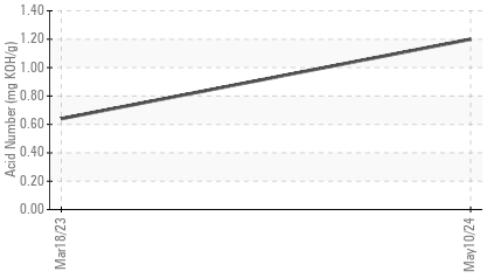
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**WC0907673**	WC0779522	---
Sample Date		Client Info		**10 May 2024**	18 Mar 2023	---
Machine Age	hrs	Client Info		**17246**	13183	---
Oil Age	hrs	Client Info		**0**	13183	---
Filter Age	hrs	Client Info		**0**	13183	---
Oil Changed		Client Info		**N/A**	Not Changd	---
Filter Changed		Client Info		**N/A**	Not Changd	---
Sample Status				**NORMAL**	NORMAL	---
Iron	ppm	ASTM D5185m	>150	**8**	13	---
Chromium	ppm	ASTM D5185m	>10	**0**	<1	---
Nickel	ppm	ASTM D5185m	>10	**<1**	0	---
Titanium	ppm	ASTM D5185m		**0**	<1	---
Silver	ppm	ASTM D5185m		**0**	3	---
Aluminum	ppm	ASTM D5185m	>25	**1**	3	---
Lead	ppm	ASTM D5185m	>100	**0**	<1	---
Copper	ppm	ASTM D5185m	>50	**46**	6	---
Tin	ppm	ASTM D5185m	>10	**0**	<1	---
Vanadium	ppm	ASTM D5185m		**0**	0	---
White Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Silicon	ppm	ASTM D5185m	>50	**13**	19	---
Potassium	ppm	ASTM D5185m	>20	**2**	2	---
Water		WC Method	>0.1	**NEG**	NEG	---
Silt	scalar	*Visual	NONE	**NONE**	NONE	---
Debris	scalar	*Visual	NONE	**NONE**	NONE	---
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	---
Appearance	scalar	*Visual	NORML	**NORML**	NORML	---
Odor	scalar	*Visual	NORML	**NORML**	NORML	---
Emulsified Water	scalar	*Visual	>0.1	**NEG**	NEG	---
Sodium	ppm	ASTM D5185m		**13**	7	---
Boron	ppm	ASTM D5185m	0	**2**	363	---
Barium	ppm	ASTM D5185m		**0**	0	---
Molybdenum	ppm	ASTM D5185m	0	**<1**	43	---
Manganese	ppm	ASTM D5185m		**<1**	<1	---
Magnesium	ppm	ASTM D5185m		**245**	43	---
Calcium	ppm	ASTM D5185m	1890	**3630**	3710	---
Phosphorus	ppm	ASTM D5185m	680	**909**	939	---
Zinc	ppm	ASTM D5185m	750	**1006**	1064	---
Sulfur	ppm	ASTM D5185m		**5042**	4814	---
Acid Number (AN)	mg KOH/g	ASTM D8045		**1.20**	0.64	---
Visc @ 40°C	cSt	ASTM D445	97.7	**123**	91.9	---

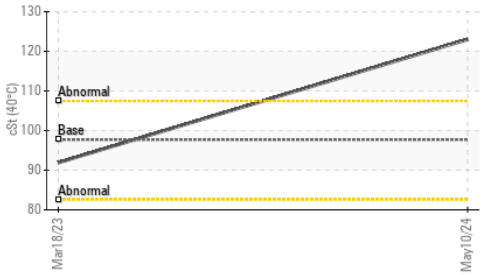
Report Id: SEANEW [WUSCAR] 06211915 (Generated: 06/22/2024 00:42:34) Rev: 1

Contact/Location: PETER CHARBONNET - SEANEW

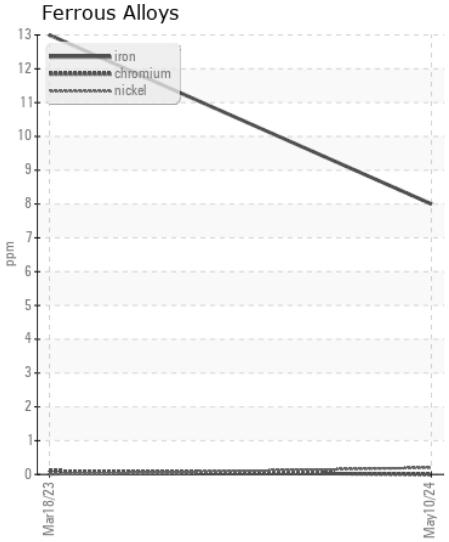
Acid Number



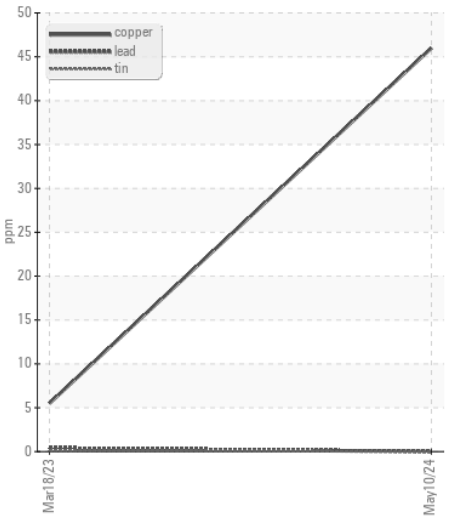
Viscosity @ 40°C



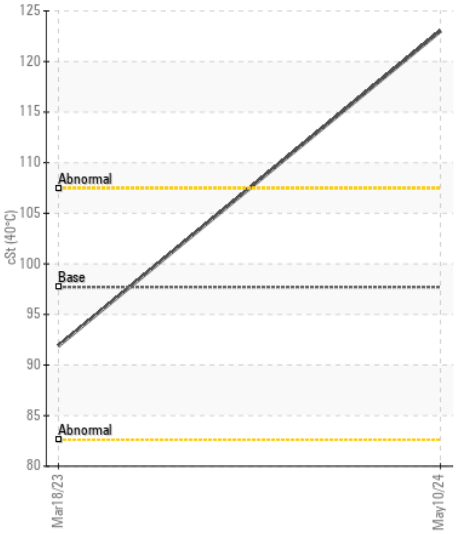
Ferrous Alloys



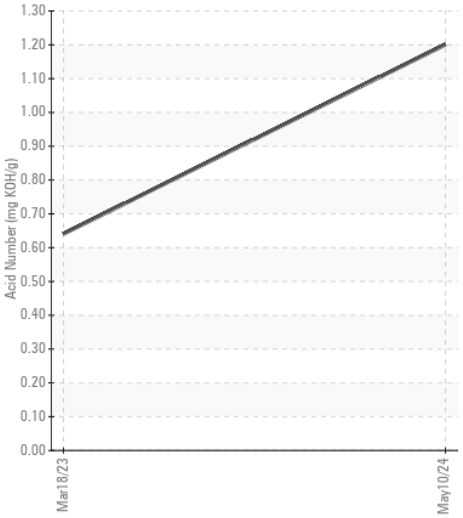
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0907673
Lab Number : 06211915
Unique Number : 11084779
Test Package : MAR 2

Received : 17 Jun 2024
Tested : 18 Jun 2024
Diagnosed : 19 Jun 2024 - Angela Borella

To discuss this sample report, contact Customer Service at 1-800-237-1369.
** - Denotes test methods that are outside of the ISO 17025 scope of accreditation.*
Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

SEAWARD SERVICES
222 PEARL ST
NEW ALBANY, IN
US 47150
Contact: PETER CHARBONNET
PCHARBONNET@HMS-SEAWARD.COM
T:
F: