PROBLEM SUMMARY

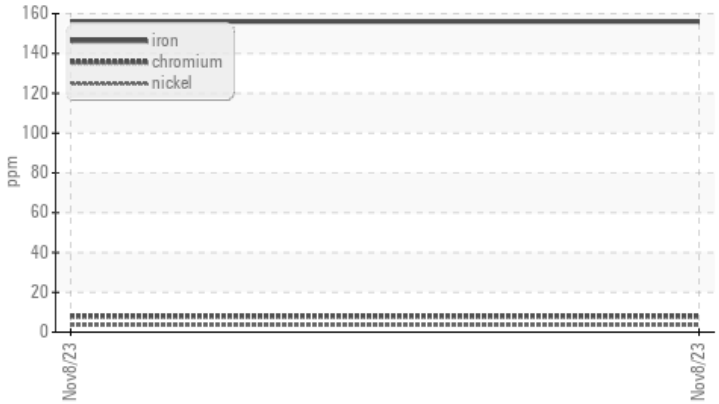
Area
SEAWARD EXPLORER
Machine Id
Explorer - RHIB
Component
Port Diesel Engine
Fluid
MOBIL DELVAC 1330 (--- GAL)

Sample Rating Trend

WEAR

COMPONENT CONDITION SUMMARY

▲ Ferrous Alloys



RECOMMENDATION

No corrective action is recommended at this time.
Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	---	---
Iron	ppm	ASTM D5185m	>100	▲ **156**	---	---

Customer Id: SEANEW
Sample No.: WC0859367
Lab Number: 06012185
Test Package: MAR 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldridge +1
don.b505@comcast.net

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

OIL ANALYSIS REPORT

Sample Rating Trend

WEAR

Area
SEAWARD EXPLORER
Machine Id
Explorer - RHIB
Component
Port Diesel Engine
Fluid
MOBIL DELVAC 1330 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

Cylinder, crank, or cam shaft wear is indicated. All other metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0859367**	---	---
Sample Date		Client Info		**08 Nov 2023**	---	---
Machine Age	hrs	Client Info		**98**	---	---
Oil Age	hrs	Client Info		**98**	---	---
Oil Changed		Client Info		**Not Changd**	---	---
Sample Status				**ABNORMAL**	---	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel		WC Method	>5	**<1.0**	---	---
Water		WC Method	>0.2	**NEG**	---	---
Glycol		WC Method		**NEG**	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	▲ **156**	---	---
Chromium	ppm	ASTM D5185m	>20	**8**	---	---
Nickel	ppm	ASTM D5185m	>4	**4**	---	---
Titanium	ppm	ASTM D5185m		**<1**	---	---
Silver	ppm	ASTM D5185m	>3	**0**	---	---
Aluminum	ppm	ASTM D5185m	>20	**21**	---	---
Lead	ppm	ASTM D5185m	>40	**<1**	---	---
Copper	ppm	ASTM D5185m	>330	**26**	---	---
Tin	ppm	ASTM D5185m	>15	**<1**	---	---
Vanadium	ppm	ASTM D5185m		**0**	---	---
Cadmium	ppm	ASTM D5185m		**0**	---	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**<1**	---	---
Barium	ppm	ASTM D5185m		**0**	---	---
Molybdenum	ppm	ASTM D5185m		**66**	---	---
Manganese	ppm	ASTM D5185m		**1**	---	---
Magnesium	ppm	ASTM D5185m		**928**	---	---
Calcium	ppm	ASTM D5185m		**1067**	---	---
Phosphorus	ppm	ASTM D5185m		**1006**	---	---
Zinc	ppm	ASTM D5185m		**1212**	---	---
Sulfur	ppm	ASTM D5185m		**3531**	---	---

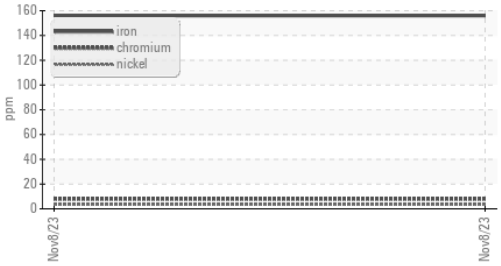
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**13**	---	---
Sodium	ppm	ASTM D5185m		**3**	---	---
Potassium	ppm	ASTM D5185m	>20	**23**	---	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	**0.2**	---	---
Nitration	Abs/cm	*ASTM D7624	>20	**6.0**	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	**18.0**	---	---

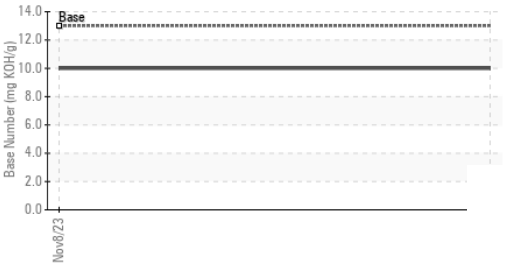
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**13.6**	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	13	**10.0**	---	---

OIL ANALYSIS REPORT

Ferrous Alloys



Base Number



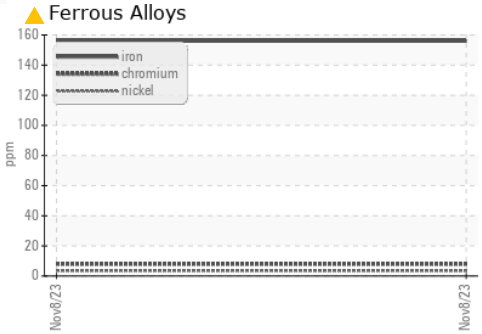
Viscosity @ 100°C

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	---	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	---	---
Precipitate	scalar	*Visual	NONE	**NONE**	---	---
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	>0.2	**NEG**	---	---
Free Water	scalar	*Visual		**NEG**	---	---

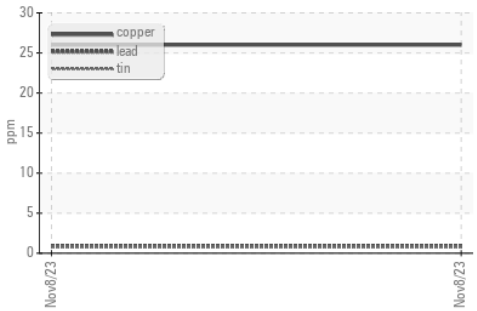
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	11.5	**13.3**	---	---

GRAPHS

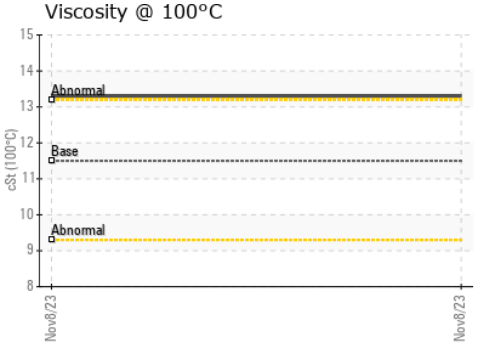
Ferrous Alloys



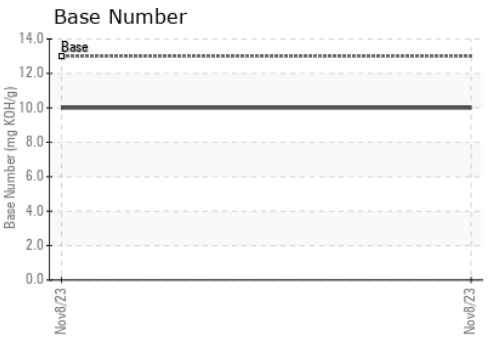
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0859367 **Received** : 20 Nov 2023
Lab Number : 06012185 **Diagnosed** : 21 Nov 2023
Unique Number : 10751329 **Diagnostician** : Don Baldridge
Test Package : MAR 2

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:

Report Id: SEANEW [WUSCAR] 06012185 (Generated: 11/21/2023 15:21:22) Rev: 1

Submitted By: PETER CHARBONNET