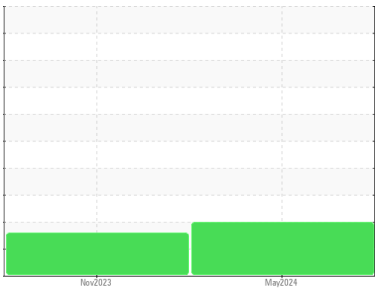
OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Area
SEAWARD EXPLORER
Machine Id
Explorer - 2 Genset PTO Hub
Component
Distribution Gear
Fluid
GEAR OIL SAE 80W90 (2 GAL)

DIAGNOSIS

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

Wear
Gear wear is indicated.

Contamination
There is no indication of any contamination in the oil.

Fluid Condition
Viscosity of sample indicates oil is within ISO 460 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0907668**	WC0859386	---
Sample Date		Client Info		**13 May 2024**	03 Nov 2023	---
Machine Age	hrs	Client Info		**12106**	0	---
Oil Age	hrs	Client Info		**0**	0	---
Oil Changed		Client Info		**N/A**	Not Changd	---
Sample Status				**ABNORMAL**	ABNORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.2	**NEG**	NEG	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>300	▲ **612**	▲ 609	---
Chromium	ppm	ASTM D5185m	>3	▲ **4**	▲ 4	---
Nickel	ppm	ASTM D5185m	>10	**3**	2	---
Titanium	ppm	ASTM D5185m		**1**	1	---
Silver	ppm	ASTM D5185m		**0**	<1	---
Aluminum	ppm	ASTM D5185m	>5	**8**	2	---
Lead	ppm	ASTM D5185m	>60	**0**	0	---
Copper	ppm	ASTM D5185m	>35	**3**	2	---
Tin	ppm	ASTM D5185m	>5	**0**	0	---
Vanadium	ppm	ASTM D5185m		**0**	<1	---
Cadmium	ppm	ASTM D5185m		**<1**	<1	---

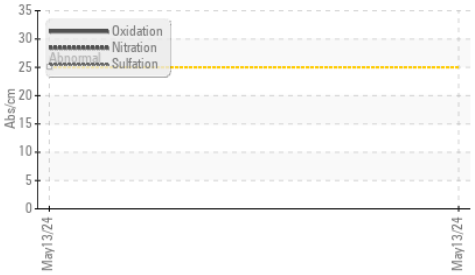
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	400	**12**	17	---
Barium	ppm	ASTM D5185m	200	**<1**	0	---
Molybdenum	ppm	ASTM D5185m	12	**<1**	2	---
Manganese	ppm	ASTM D5185m		**7**	9	---
Magnesium	ppm	ASTM D5185m	12	**13**	8	---
Calcium	ppm	ASTM D5185m	150	**46**	18	---
Phosphorus	ppm	ASTM D5185m	1650	**341**	1230	---
Zinc	ppm	ASTM D5185m	125	**31**	4	---
Sulfur	ppm	ASTM D5185m	22500	**21508**	17527	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**7**	8	---
Sodium	ppm	ASTM D5185m	>170	**4**	2	---
Potassium	ppm	ASTM D5185m	>20	**2**	4	---

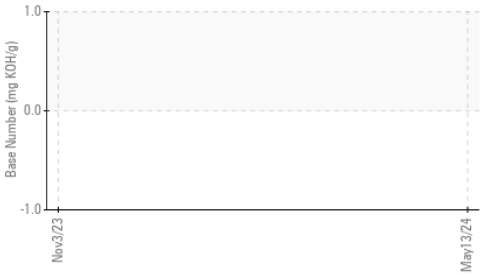
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	2.00	**0.674**	0.45	---

OIL ANALYSIS REPORT

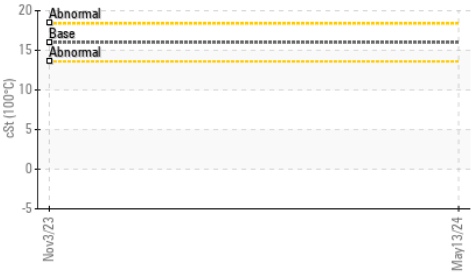
FT-IR (Direct Trend)



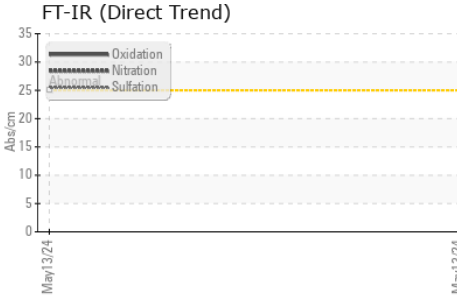
Base Number



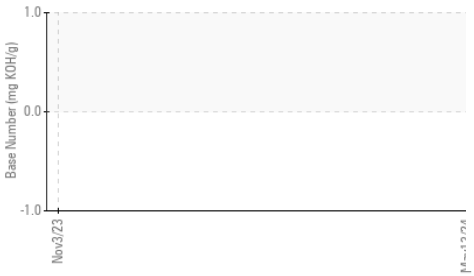
Viscosity @ 100°C



FT-IR (Direct Trend)



Base Number



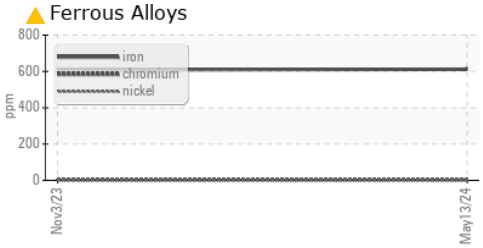
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	---
Silt	scalar	*Visual	NONE	**NONE**	NONE	---
Debris	scalar	*Visual	NONE	**NONE**	NONE	---
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	---
Appearance	scalar	*Visual	NORML	**NORML**	NORML	---
Odor	scalar	*Visual	NORML	**NORML**	NORML	---
Emulsified Water	scalar	*Visual	>0.2	**NEG**	0.2%	---
Free Water	scalar	*Visual		**NEG**	NEG	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	143	**434.5**	142	---

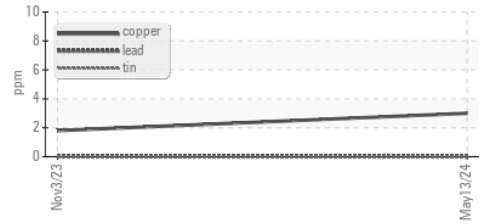
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			*no image*	*no image*	*no image*
Bottom			*no image*	*no image*	*no image*

GRAPHS

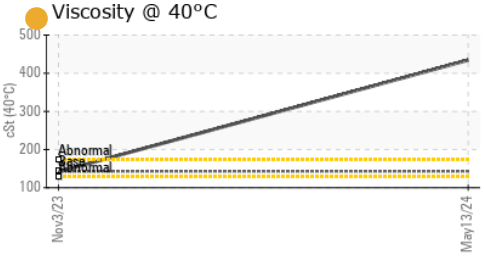
Ferrous Alloys



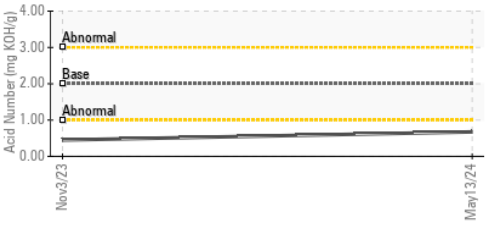
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0907668 **Received** : 17 Jun 2024
Lab Number : 06211326 **Tested** : 21 Jun 2024
Unique Number : 11084190 **Diagnosed** : 21 Jun 2024 - Jonathan Hester
Test Package : MAR 2 (Additional Tests: FT-IR, KV100, TBN)

Certificate L2367

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] 06211326 (Generated: 06/21/2024 19:56:46) Rev: 1

Submitted By: PETER CHARBONNET