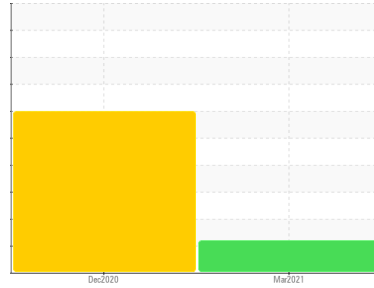




OIL ANALYSIS REPORT

Sample Rating Trend



VISUAL METAL



Machine Id
OSV HERCULES 1PH
 Component
Port Wheel Hub
 Fluid
OMALA S2 G 100 (25 GAL)

DIAGNOSIS

▲ Recommendation

We suspect abnormal metal contamination may be due to sampling method. We recommend you service the filters on this component if applicable. We advise that you inspect for the source(s) of metal. Resample at the next service interval to monitor.

▲ Wear

Moderate concentration of visible metal present. 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.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0541049	WC0423676	---
Sample Date	Client Info		17 Mar 2021	22 Dec 2020	---
Machine Age	hrs	Client Info	18041	17476	---
Oil Age	hrs	Client Info	187	4977	---
Oil Changed	Client Info		Not Chngd	Not Chngd	---
Sample Status			MARGINAL	SEVERE	---

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	>500	61	160
Chromium	ppm	ASTM D5185m	>8	8	7
Nickel	ppm	ASTM D5185m	>5	8	3
Titanium	ppm	ASTM D5185m		<1	0
Silver	ppm	ASTM D5185m		<1	<1
Aluminum	ppm	ASTM D5185m	>5	4	4
Lead	ppm	ASTM D5185m	>5	<1	1
Copper	ppm	ASTM D5185m	>50	26	▲ 203
Tin	ppm	ASTM D5185m		2	▲ 23
Antimony	ppm	ASTM D5185m		0	0
Vanadium	ppm	ASTM D5185m		0	0
Cadmium	ppm	ASTM D5185m		0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		2	<1
Barium	ppm	ASTM D5185m		0	0
Molybdenum	ppm	ASTM D5185m		<1	<1
Manganese	ppm	ASTM D5185m		2	3
Magnesium	ppm	ASTM D5185m		4	3
Calcium	ppm	ASTM D5185m		23	0
Phosphorus	ppm	ASTM D5185m		204	242
Zinc	ppm	ASTM D5185m		0	0
Sulfur	ppm	ASTM D5185m		5254	7242

CONTAMINANTS

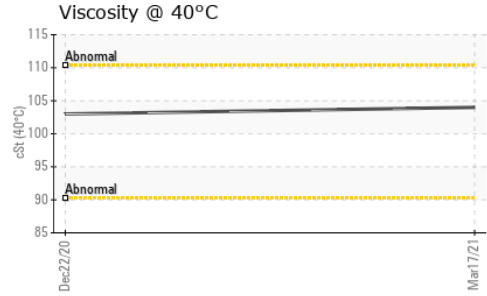
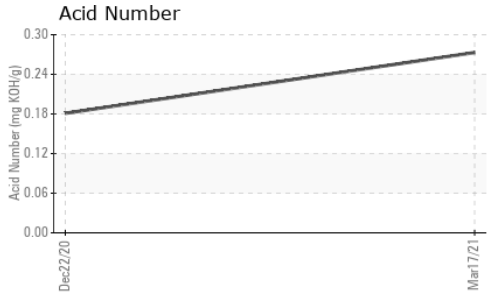
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	3	4
Sodium	ppm	ASTM D5185m		3	6
Potassium	ppm	ASTM D5185m	>20	<1	<1

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.273	0.181



OIL ANALYSIS REPORT



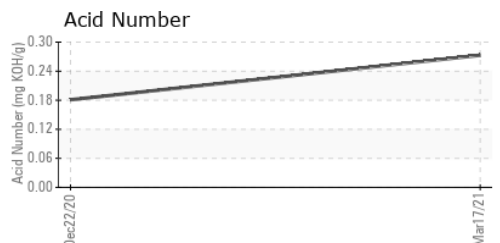
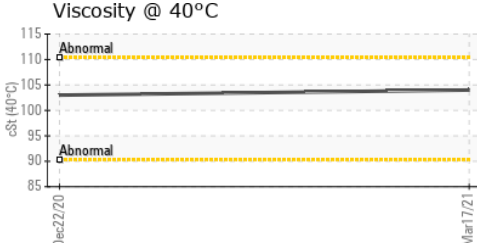
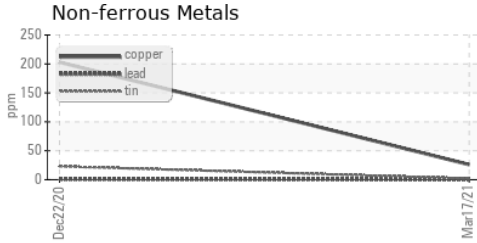
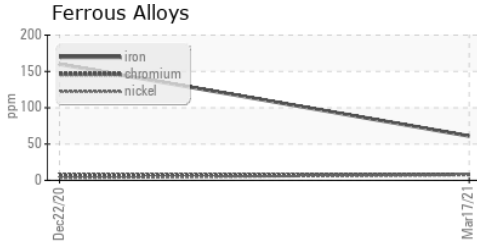
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	▲ MODER	NONE
Yellow Metal	scalar	*Visual	NONE	▲ MODER	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	104	103	---

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

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0541049 **Received** : 12 Apr 2021
Lab Number : 05226793 **Tested** : 14 Apr 2021
Unique Number : 9460700 **Diagnosed** : 14 Apr 2021 - Doug Bogart
Test Package : MAR 2 (Additional Tests: PrtCount)

ALASKA VESSEL AGENTS
 PO BOX 920785
 DUTCH HARBOR, AK
 US 99692

Contact: MONIKA BERGERT
 monika.bergert@alaskavesselagents.com
 T: (907)581-4591

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)

F: