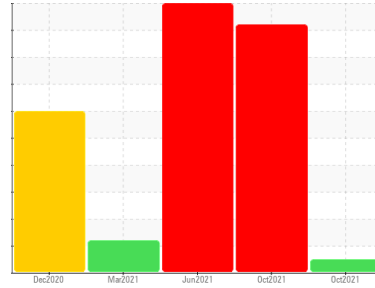




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



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

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

The water content is negligible. 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.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0579475</b>	WC0579467	WC0541062
Sample Date	Client Info		<b>19 Oct 2021</b>	18 Oct 2021	07 Jun 2021
Machine Age	hrs	Client Info	<b>20021</b>	20021	18579
Oil Age	hrs	Client Info	<b>8000</b>	8000	0
Oil Changed	Client Info		<b>Changed</b>	Changed	N/A
Sample Status			<b>NORMAL</b>	SEVERE	SEVERE

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >500	<b>0</b>	190	411
Chromium	ppm	ASTM D5185m >8	<b>&lt;1</b>	10	▲ 44
Nickel	ppm	ASTM D5185m >5	<b>&lt;1</b>	6	▲ 32
Titanium	ppm	ASTM D5185m	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m >5	<b>0</b>	4	4
Lead	ppm	ASTM D5185m >5	<b>0</b>	9	2
Copper	ppm	ASTM D5185m >50	<b>4</b>	▲ 334	▲ 303
Tin	ppm	ASTM D5185m	<b>&lt;1</b>	▲ 32	▲ 30
Antimony	ppm	ASTM D5185m	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	0	5
Barium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Molybdenum	ppm	ASTM D5185m	<b>&lt;1</b>	<1	3
Manganese	ppm	ASTM D5185m	<b>0</b>	2	11
Magnesium	ppm	ASTM D5185m	<b>0</b>	6	11
Calcium	ppm	ASTM D5185m	<b>0</b>	4	13
Phosphorus	ppm	ASTM D5185m	<b>268</b>	238	257
Zinc	ppm	ASTM D5185m	<b>0</b>	5	2
Sulfur	ppm	ASTM D5185m	<b>5997</b>	6514	7208

## CONTAMINANTS

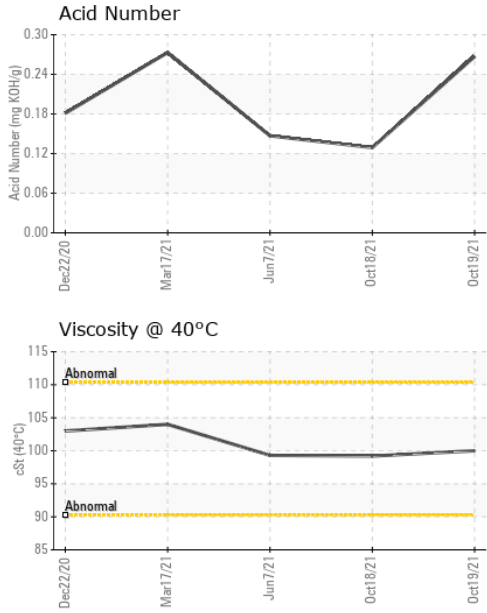
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>&lt;1</b>	4	14
Sodium	ppm	ASTM D5185m	<b>2</b>	18	15
Potassium	ppm	ASTM D5185m >20	<b>1</b>	2	0

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.267</b>	0.129	0.147



# OIL ANALYSIS REPORT

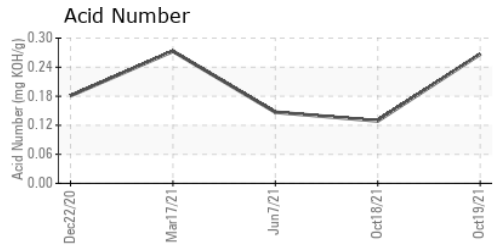
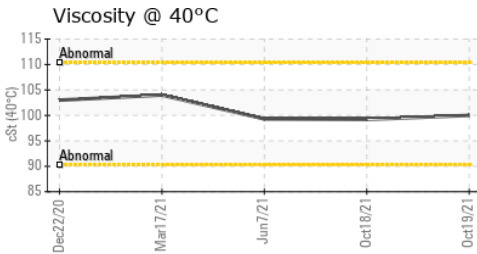
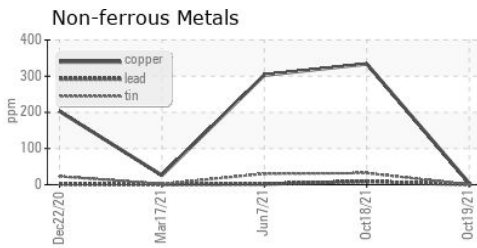
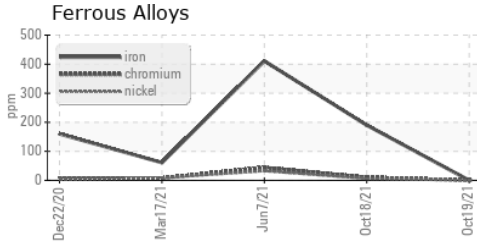


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	▲ HEAVY
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	100	99.2	99.3

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

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0579475 **Received** : 02 Nov 2021  
**Lab Number** : 05388956 **Tested** : 03 Nov 2021  
**Unique Number** : 9723089 **Diagnosed** : 03 Nov 2021 - Don Baldrige  
**Test Package** : MAR 2

**ALASKA VESSEL AGENTS**  
 PO BOX 920785  
 DUTCH HARBOR, AK  
 US 99692  
 Contact: MONIKA BERGERT  
 monika.bergert@alaskavesselagents.com  
 T: (907)581-4591  
 F:

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)