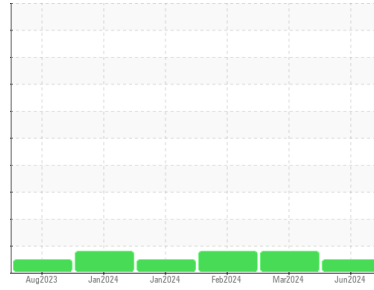




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**SEAWARD EXPLORER**  
 Machine Id  
**Explorer**  
 Component  
**Port Reduction Gear**  
 Fluid  
**MOBIL DELVAC 1640 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.  
 NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

### 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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>WC0946161</b>	WC0886564	WC0859379
Sample Date	Client Info			<b>03 Jun 2024</b>	23 Mar 2024	07 Feb 2024
Machine Age	hrs	Client Info		<b>17773</b>	17378	16717
Oil Age	hrs	Client Info		<b>384</b>	665	4
Oil Changed	Client Info			<b>Not Changed</b>	Not Changed	Not Changed
Sample Status				<b>NORMAL</b>	ABNORMAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.1	<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>150	<b>7</b>	15	13
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>&lt;1</b>	2	<1
Lead	ppm	ASTM D5185m	>100	<b>0</b>	<1	3
Copper	ppm	ASTM D5185m	>50	<b>49</b>	▲ 123	▲ 107
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	1	1

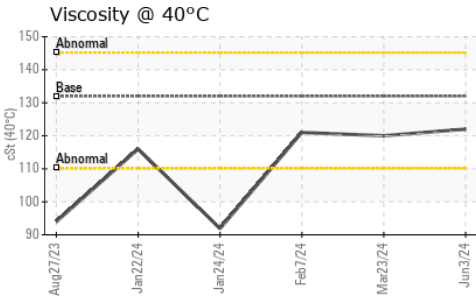
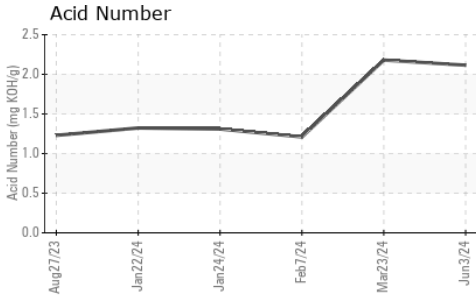
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>2</b>	1	2
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	3	2
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>247</b>	243	295
Calcium	ppm	ASTM D5185m		<b>3634</b>	3434	3869
Phosphorus	ppm	ASTM D5185m		<b>935</b>	862	939
Zinc	ppm	ASTM D5185m		<b>996</b>	932	1096
Sulfur	ppm	ASTM D5185m		<b>5086</b>	4018	4061

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	<b>12</b>	13	12
Sodium	ppm	ASTM D5185m		<b>13</b>	23	22
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	3	<1

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>2.115</b>	2.18	1.21



# OIL ANALYSIS REPORT



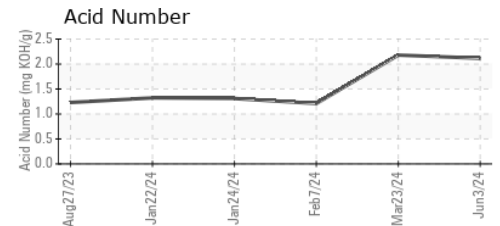
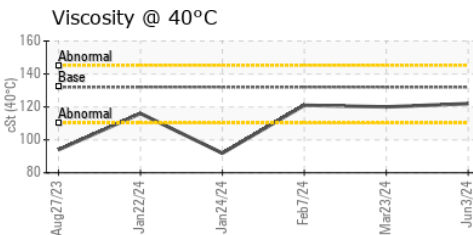
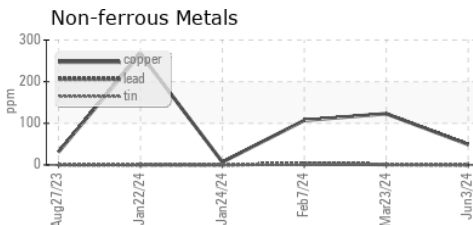
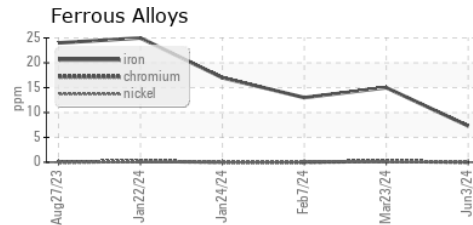
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	132	122	120

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

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0946161  
**Lab Number** : 06211913  
**Unique Number** : 11084777  
**Test Package** : MAR 2

**Received** : 17 Jun 2024  
**Tested** : 18 Jun 2024  
**Diagnosed** : 18 Jun 2024 - Wes Davis

**SEAWARD SERVICES**  
 222 PEARL ST  
 NEW ALBANY, IN  
 US 47150

Contact: PETER CHARBONNET  
 PCHARBONNET@HMS-SEAWARD.COM

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)

T:  
F: