



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**JACKY ONEAL (S/N 7-474092-1)**  
Component  
**Starboard Reduction Gear**  
Fluid  
**CHEVRON MEROPA 220 (215 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>MW0066361</b>	MW0066571	MW0066560
Sample Date		Client Info		<b>12 Mar 2024</b>	15 Feb 2024	24 Jan 2024
Machine Age	hrs	Client Info		<b>27500</b>	26865	26477
Oil Age	hrs	Client Info		<b>0</b>	26865	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	Not Changd	N/A
Filter Changed		Client Info		<b>N/A</b>	None	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	<b>30</b>	32	30
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m		<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>25	<b>&lt;1</b>	<1	2
Lead	ppm	ASTM D5185m	>100	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m	>50	<b>5</b>	6	5
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

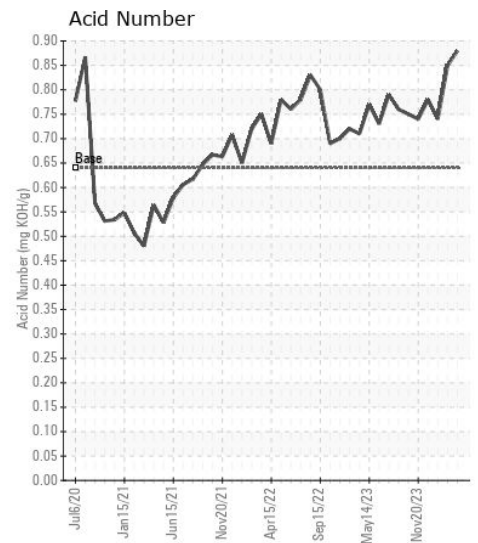
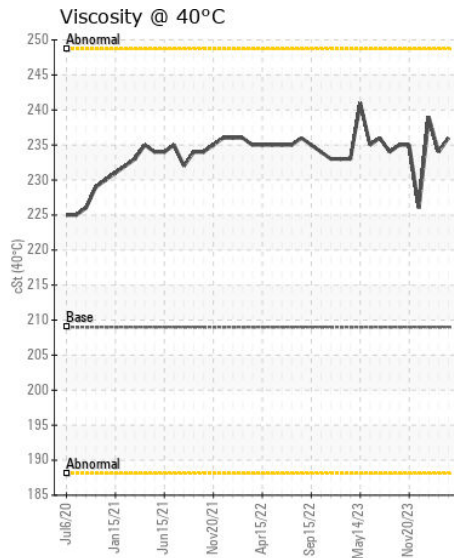
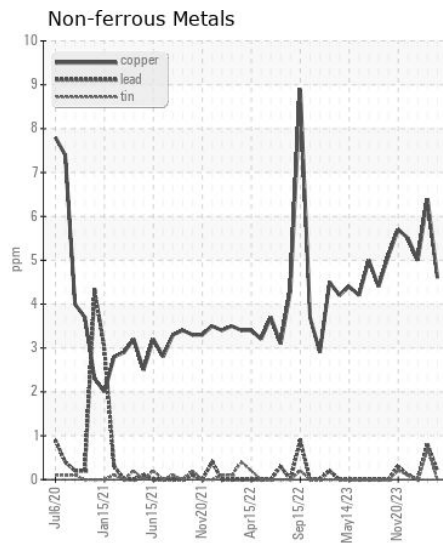
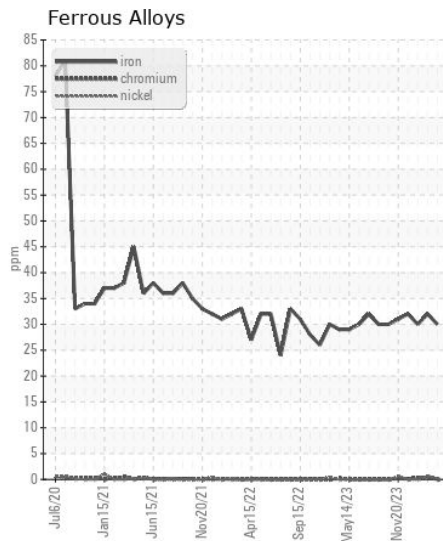
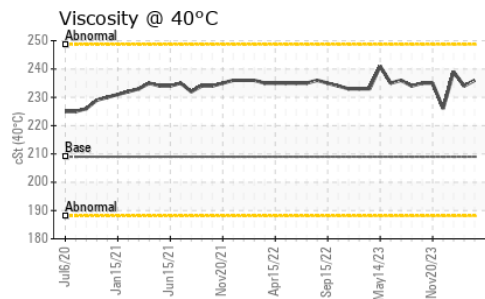
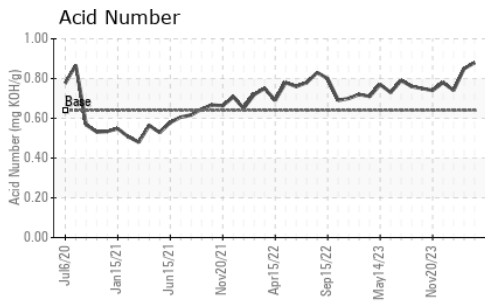
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	<b>1</b>	2	0
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	3	1
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>3</b>	0	<1
Boron	ppm	ASTM D5185m	40	<b>2</b>	2	2
Barium	ppm	ASTM D5185m		<b>0</b>	5	2
Molybdenum	ppm	ASTM D5185m		<b>0</b>	1	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Calcium	ppm	ASTM D5185m		<b>29</b>	28	27
Phosphorus	ppm	ASTM D5185m	270	<b>224</b>	208	226
Zinc	ppm	ASTM D5185m		<b>0</b>	7	0
Sulfur	ppm	ASTM D5185m	8600	<b>6245</b>	5949	5148
Acid Number (AN)	mg KOH/g	ASTM D8045	0.64	<b>0.88</b>	0.85	0.74
Visc @ 40°C	cSt	ASTM D445	209	<b>236</b>	234	239



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW0066361  
**Lab Number** : 06121672  
**Unique Number** : 10930505  
**Test Package** : MAR 2

**Received** : 18 Mar 2024  
**Tested** : 19 Mar 2024  
**Diagnosed** : 19 Mar 2024 - Wes Davis

**AMERICAN COMMERCIAL LINES**  
 PO BOX 610, 1701 E. MARKET STREET  
 JEFFERSONVILLE, IN  
 US 47130

Contact: RONALD SCHNEIDER  
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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)

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