



Machine Id  
**LOUISIANA SKY**  
Component  
**Starboard Steering**  
Fluid  
**CHEVRON RANDO HD 32 (40 GAL)**

**RECOMMENDATION**

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>MW0042839</b>	---	---
Sample Date		Client Info		<b>26 Jan 2024</b>	---	---
Machine Age	hrs	Client Info		<b>0</b>	---	---
Oil Age	hrs	Client Info		<b>0</b>	---	---
Filter Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed		Client Info		<b>N/A</b>	---	---
Filter Changed		Client Info		<b>N/A</b>	---	---
Sample Status				<b>ABNORMAL</b>	---	---

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>0</b>	---	---
Chromium	ppm	ASTM D5185m	>15	<b>0</b>	---	---
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	---	---
Titanium	ppm	ASTM D5185m		<b>0</b>	---	---
Silver	ppm	ASTM D5185m		<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>5	<b>0</b>	---	---
Lead	ppm	ASTM D5185m	>10	<b>0</b>	---	---
Copper	ppm	ASTM D5185m	>50	<b>&lt;1</b>	---	---
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---

**CONTAMINATION**

There is a high amount of particulates present in the fluid.

Silicon	ppm	ASTM D5185m	>15	<b>&lt;1</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	---	---
Water		WC Method	>0.2	<b>NEG</b>	---	---
Particles >4µm		ASTM D7647	>2500	<b>▲ 9030</b>	---	---
Particles >6µm		ASTM D7647	>640	<b>▲ 3494</b>	---	---
Particles >14µm		ASTM D7647	>80	<b>▲ 320</b>	---	---
Particles >21µm		ASTM D7647	>20	<b>▲ 73</b>	---	---
Particles >38µm		ASTM D7647	>4	<b>1</b>	---	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>18/16/13	<b>▲ 20/19/15</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	---	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	---	---

**FLUID CONDITION**

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

Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Boron	ppm	ASTM D5185m		<b>0</b>	---	---
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Molybdenum	ppm	ASTM D5185m		<b>0</b>	---	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185m		<b>1</b>	---	---
Calcium	ppm	ASTM D5185m		<b>37</b>	---	---
Phosphorus	ppm	ASTM D5185m		<b>303</b>	---	---
Zinc	ppm	ASTM D5185m		<b>398</b>	---	---
Sulfur	ppm	ASTM D5185m		<b>684</b>	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.56</b>	---	---
Visc @ 40°C	cSt	ASTM D445	30.4	<b>32.2</b>	---	---

