



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
RICK HARNACK
Machine Id
[RICK HARNACK] 006 685578-6
Component
Starboard Reduction Gear
Fluid
CHEVRON REGAL OIL R&O 150 (65 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0068291	MW0068082	MW0068077
Sample Date		Client Info		01 Apr 2024	01 Mar 2024	01 Feb 2024
Machine Age	hrs	Client Info		31803	31064	30370
Oil Age	hrs	Client Info		31803	430	8128
Filter Age	hrs	Client Info		31803	430	8128
Oil Changed		Client Info		Changed	Changed	Not Changd
Filter Changed		Client Info		Changed	None	None
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	9	7	33
Chromium	ppm	ASTM D5185m	>10	<1	<1	0
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>25	1	3	0
Lead	ppm	ASTM D5185m	>100	1	0	0
Copper	ppm	ASTM D5185m	>50	2	1	6
Tin	ppm	ASTM D5185m	>10	1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

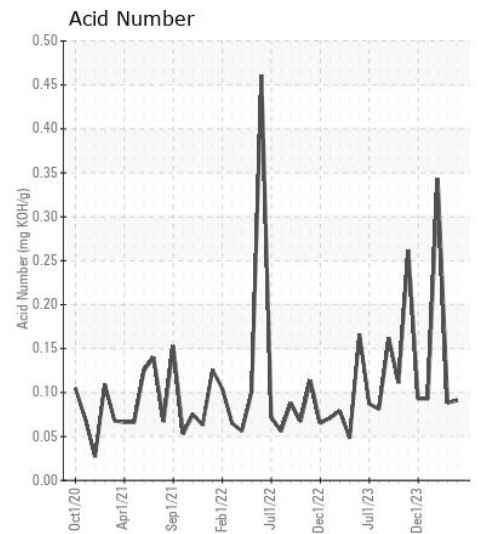
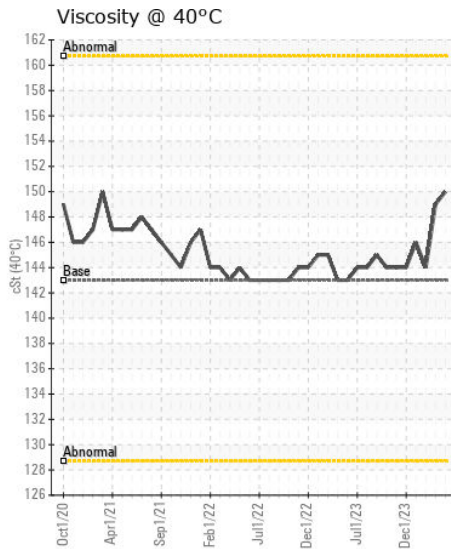
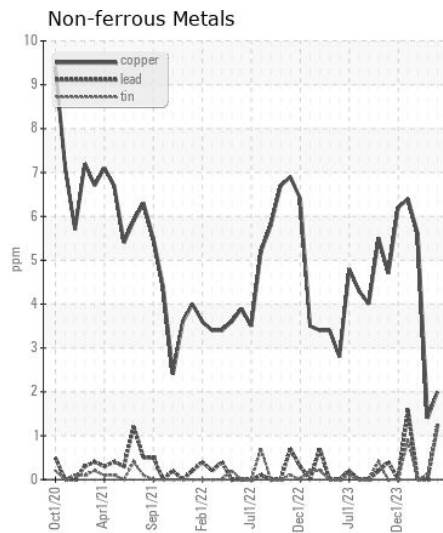
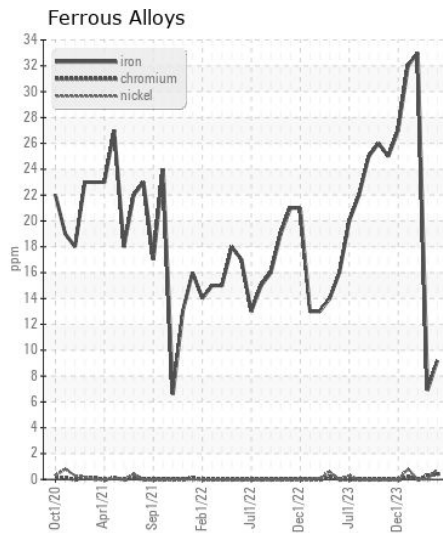
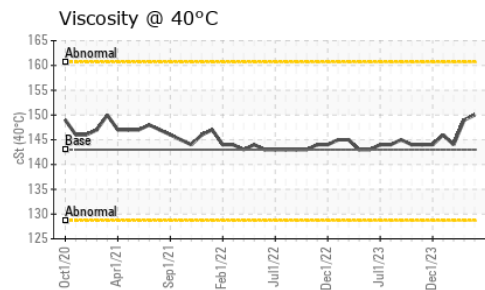
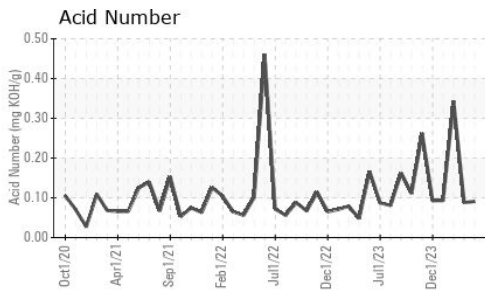
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	<1	<1	2
Potassium	ppm	ASTM D5185m	>20	<1	<1	0
Water		WC Method	>0.1	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	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		0	0	0
Boron	ppm	ASTM D5185m	0	8	9	10
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	4	3	4
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m	0	15	16	20
Calcium	ppm	ASTM D5185m	0	101	103	140
Phosphorus	ppm	ASTM D5185m	0	29	31	29
Zinc	ppm	ASTM D5185m	0	21	23	30
Sulfur	ppm	ASTM D5185m	4046	912	1259	1073
Acid Number (AN)	mg KOH/g	ASTM D8045		0.091	0.088	0.343
Visc @ 40°C	cSt	ASTM D445	143	150	149	144



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : MW0068291

Lab Number : 06146688

Unique Number : 10976766

Test Package : MAR 2

Received : 11 Apr 2024

Tested : 15 Apr 2024

Diagnosed : 15 Apr 2024 - Wes Davis

INGRAM BARGE

900 S 3RD ST

PADUCAH, KY

US 42003

Contact: ANTHONY VAN CURA

anthony.vancura@ingrambarga.com

T: (270)415-4467

F: (615)695-3697

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)