



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
ARTHUR J CARSON
Machine Id
[ARTHUR J CARSON] 006 556145-6
Component
Starboard Reduction Gear
Fluid
CHEVRON URSA SUPER PLUS 40 (--- GAL)

RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW06174687	MW06101081	MW06036194
Sample Date		Client Info		03 Apr 2024	04 Feb 2024	03 Dec 2023
Machine Age	hrs	Client Info		52246	51226	50075
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	5	0	2
Chromium	ppm	ASTM D5185m	>10	0	<1	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	1
Aluminum	ppm	ASTM D5185m	>25	<1	<1	0
Lead	ppm	ASTM D5185m	>100	<1	<1	<1
Copper	ppm	ASTM D5185m	>50	0	3	4
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

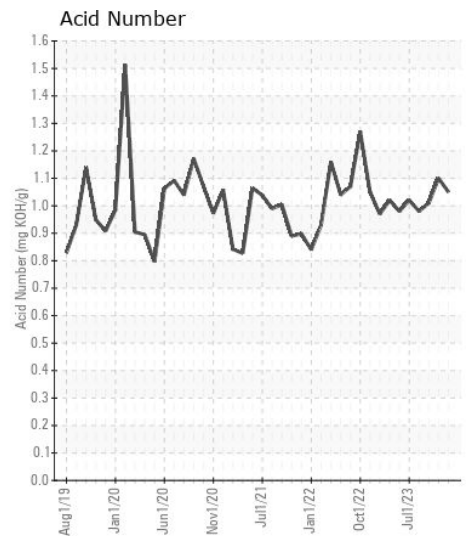
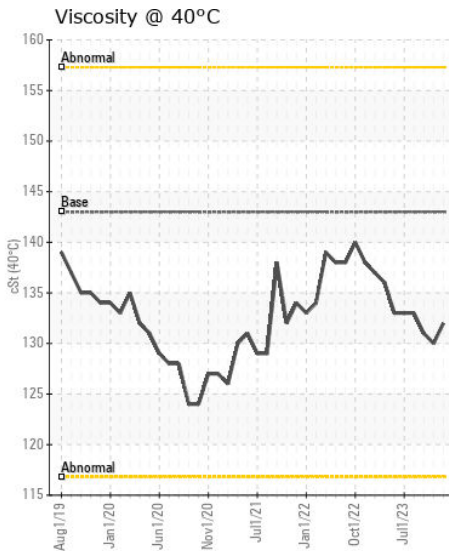
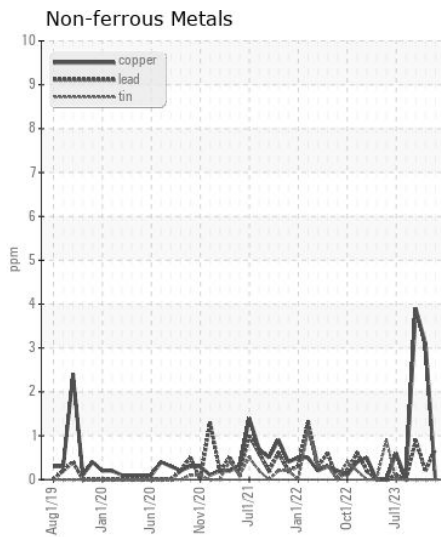
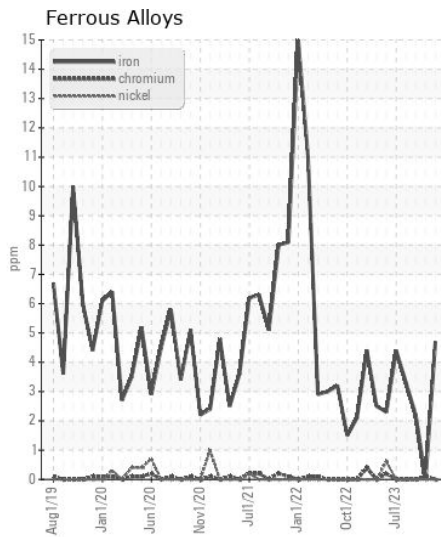
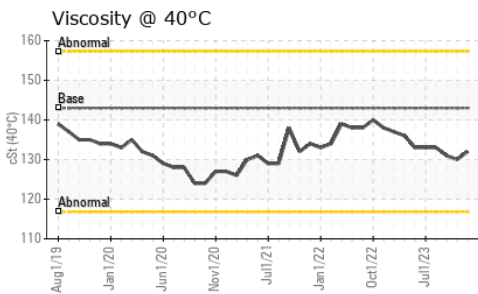
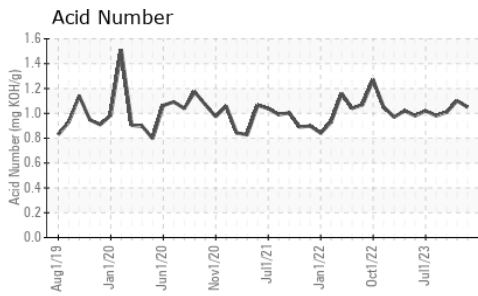
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	4	3	4
Potassium	ppm	ASTM D5185m	>20	<1	0	0
Water		WC Method	>0.1	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	LIGHT
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		2	0	5
Boron	ppm	ASTM D5185m		327	272	306
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		32	32	33
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m		19	33	30
Calcium	ppm	ASTM D5185m		2376	2227	2261
Phosphorus	ppm	ASTM D5185m	1000	744	676	738
Zinc	ppm	ASTM D5185m	1090	781	818	806
Sulfur	ppm	ASTM D5185m		3398	2676	2896
Acid Number (AN)	mg KOH/g	ASTM D8045		1.05	1.10	1.01
Visc @ 40°C	cSt	ASTM D445	143	132	130	131



Certificate L2367

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

Sample No. : MW06174687

Lab Number : 06174687

Unique Number : 11020740

Test Package : MAR 2

Received : 09 May 2024

Tested : 10 May 2024

Diagnosed : 10 May 2024 - Wes Davis

INGRAM BARGE

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PADUCAH, KY

US 42003

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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)