



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
JAMES L HAMILTON
Machine Id
[JAMES L HAMILTON] 006 572403-6
Component
Starboard Reduction Gear
Fluid
CHEVRON MEROPA 320 (215 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0041848	MW0041855	MW0053830
Sample Date		Client Info		01 Dec 2023	13 Nov 2023	02 Oct 2023
Machine Age	hrs	Client Info		58860	57853	57422
Oil Age	hrs	Client Info		58860	57853	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Not Changd	N/A
Filter Changed		Client Info		N/A	None	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	51	40	39
Chromium	ppm	ASTM D5185m	>10	<1	0	0
Nickel	ppm	ASTM D5185m	>10	<1	<1	<1
Titanium	ppm	ASTM D5185m		1	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	6	6	4
Lead	ppm	ASTM D5185m	>100	0	0	0
Copper	ppm	ASTM D5185m	>50	7	5	7
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

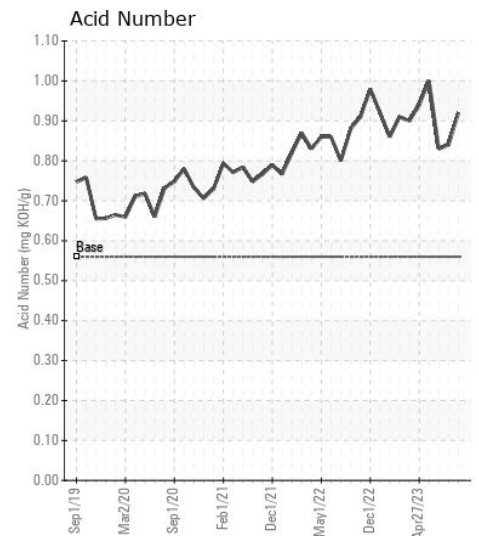
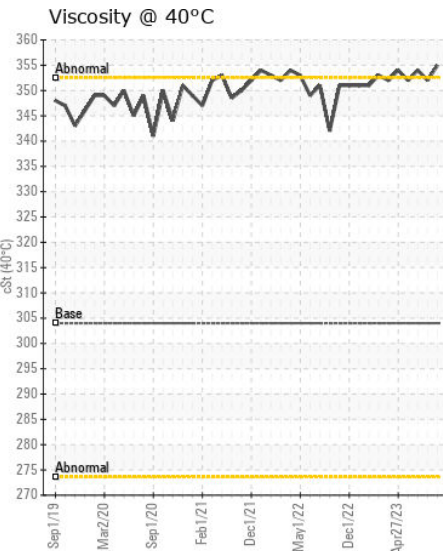
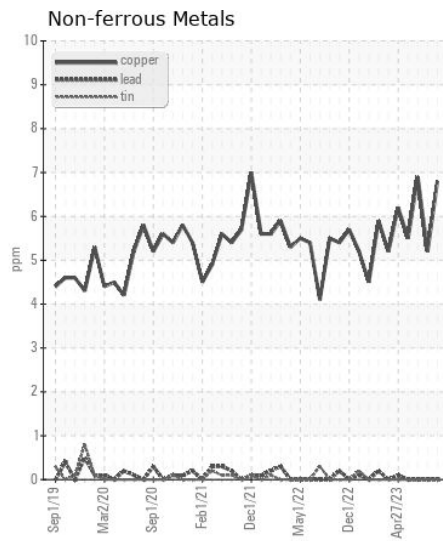
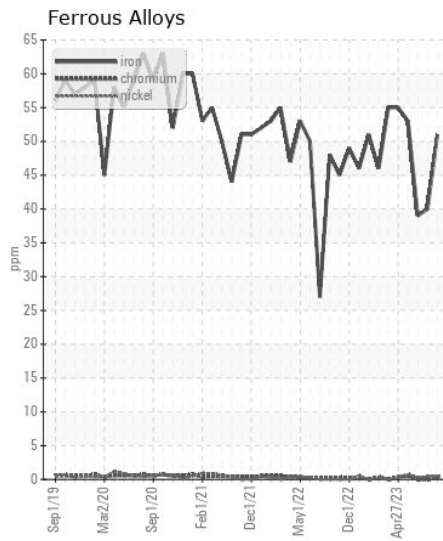
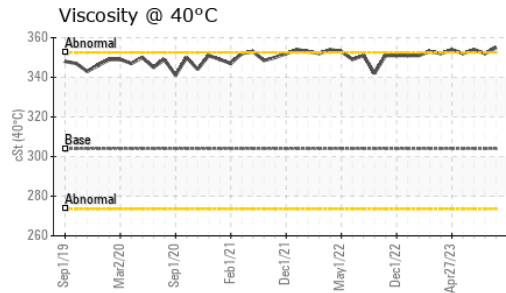
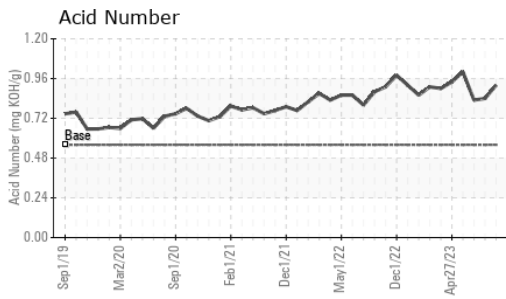
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	4	3	2
Potassium	ppm	ASTM D5185m	>20	3	0	2
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	5	0
Boron	ppm	ASTM D5185m	20	3	2	6
Barium	ppm	ASTM D5185m		0	0	7
Molybdenum	ppm	ASTM D5185m	0	3	0	3
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		2	0	2
Calcium	ppm	ASTM D5185m	25	30	27	57
Phosphorus	ppm	ASTM D5185m	235	275	217	280
Zinc	ppm	ASTM D5185m		0	0	3
Sulfur	ppm	ASTM D5185m		7225	6433	7258
Acid Number (AN)	mg KOH/g	ASTM D8045	0.56	0.92	0.84	0.83
Visc @ 40°C	cSt	ASTM D445	304	355	352	354



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0041848 **Recieved** : 11 Jan 2024
Lab Number : 06058814 **Diagnosed** : 15 Jan 2024
Unique Number : 10830196 **Diagnostician** : Don Baldrige
Test Package : MAR 2

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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