



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

DENNIS BOTTORFF

Machine Id

[DENNIS BOTTORFF] 006 569953-6

Component

Starboard Reduction Gear

Fluid

CHEVRON MEROPA 320 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0065995	MW0065677	MW0064290
Sample Date		Client Info		01 May 2024	01 Apr 2024	01 Mar 2024
Machine Age	hrs	Client Info		71066	42926	69738
Oil Age	hrs	Client Info		71066	42926	69738
Filter Age	hrs	Client Info		71066	0	0
Oil Changed		Client Info		Changed	Not Changd	N/A
Filter Changed		Client Info		None	None	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	108	114	133
Chromium	ppm	ASTM D5185m	>10	2	2	2
Nickel	ppm	ASTM D5185m	>10	2	<1	<1
Titanium	ppm	ASTM D5185m		1	0	<1
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>25	7	6	6
Lead	ppm	ASTM D5185m	>100	2	<1	1
Copper	ppm	ASTM D5185m	>50	14	15	15
Tin	ppm	ASTM D5185m	>10	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

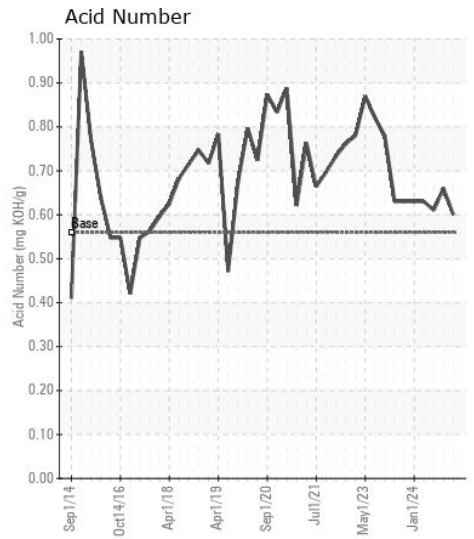
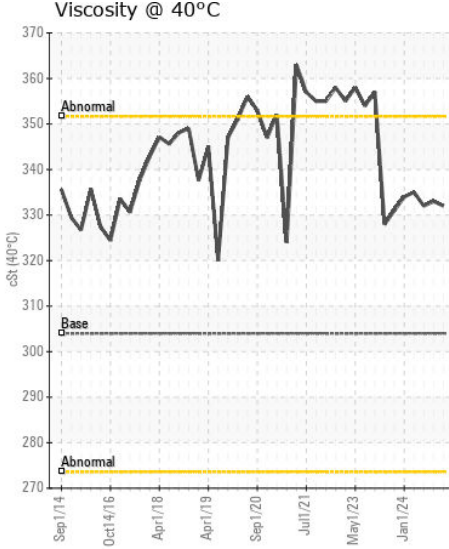
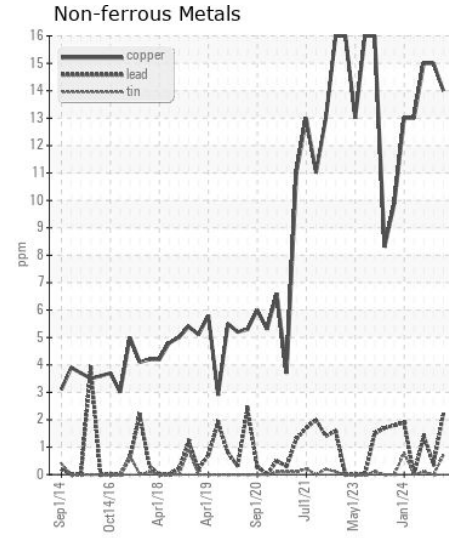
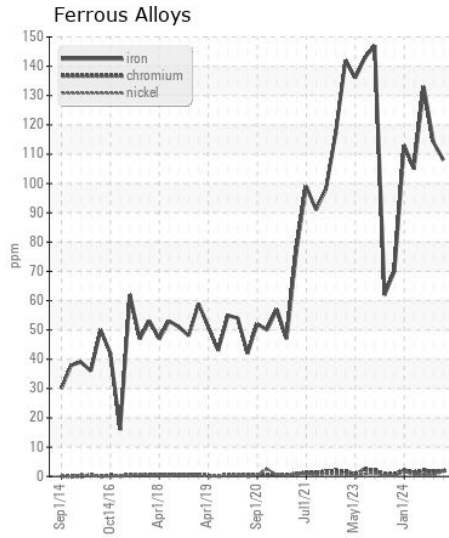
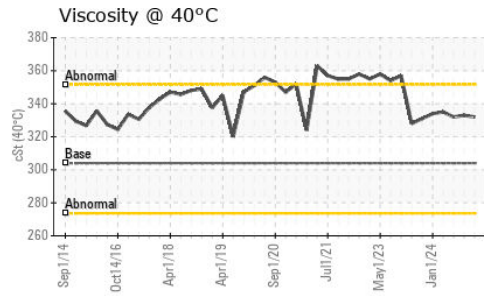
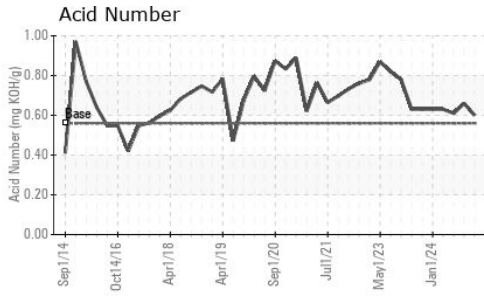
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	6	4	6
Potassium	ppm	ASTM D5185m	>20	4	3	4
Water		WC Method	>0.1	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	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		8	7	7
Boron	ppm	ASTM D5185m	20	14	9	13
Barium	ppm	ASTM D5185m		2	3	0
Molybdenum	ppm	ASTM D5185m	0	11	8	9
Manganese	ppm	ASTM D5185m		2	2	<1
Magnesium	ppm	ASTM D5185m		26	19	14
Calcium	ppm	ASTM D5185m	25	84	56	75
Phosphorus	ppm	ASTM D5185m	235	287	249	302
Zinc	ppm	ASTM D5185m		41	33	28
Sulfur	ppm	ASTM D5185m		6780	7422	7144
Acid Number (AN)	mg KOH/g	ASTM D8045	0.56	0.60	0.66	0.61
Visc @ 40°C	cSt	ASTM D445	304	332	333	332



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0065995
Lab Number : 06217404
Unique Number : 11090268
Test Package : MAR 2
Received : 21 Jun 2024
Tested : 25 Jun 2024
Diagnosed : 25 Jun 2024 - Sean Felton

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)