



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
AMA
Machine Id
AMA
Component
Starboard Reduction Gear
Fluid
CHEVRON MEROPA 320 (270 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MWM715450	MWM730819	MWM679518
Sample Date		Client Info		17 Feb 2023	31 Oct 2022	28 Jul 2022
Machine Age	hrs	Client Info		26040	75496	73712
Oil Age	hrs	Client Info		26040	23125	73712
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changed	Not Changed	Not Changed
Filter Changed		Client Info		Not Changed	Not Changed	Not Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	46	42	39
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	0	0	<1
Lead	ppm	ASTM D5185m	>100	0	0	0
Copper	ppm	ASTM D5185m	>50	2	2	3
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	LIGHT	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

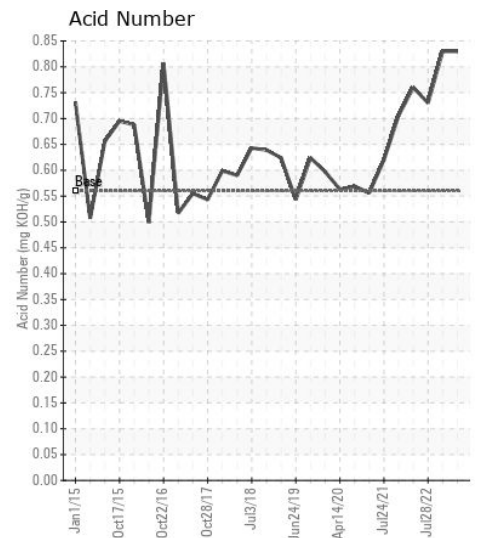
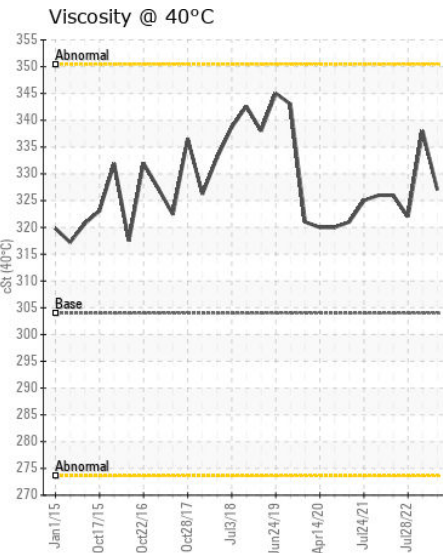
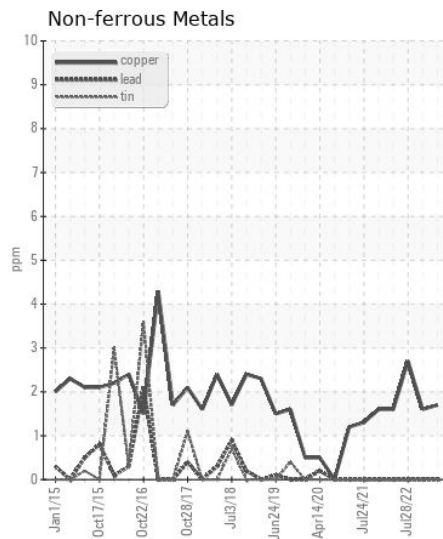
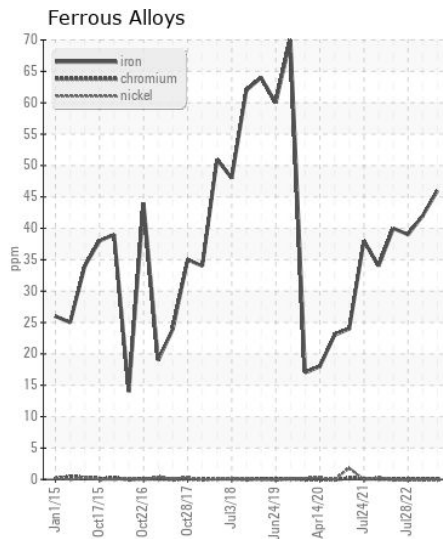
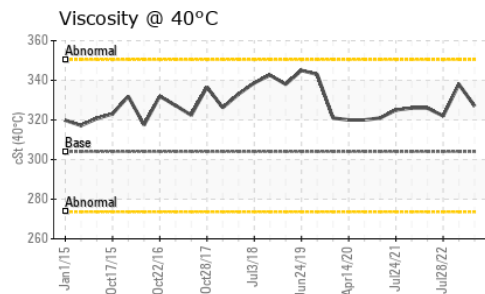
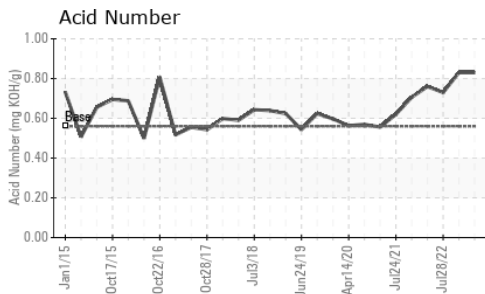
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	1	1	1
Potassium	ppm	ASTM D5185m	>20	0	<1	0
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		1	1	3
Boron	ppm	ASTM D5185m	20	2	3	8
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m	0	<1	<1	1
Manganese	ppm	ASTM D5185m		1	1	<1
Magnesium	ppm	ASTM D5185m		1	<1	0
Calcium	ppm	ASTM D5185m	25	20	26	18
Phosphorus	ppm	ASTM D5185m	235	226	225	226
Zinc	ppm	ASTM D5185m		0	0	11
Sulfur	ppm	ASTM D5185m		5000	5064	4418
Acid Number (AN)	mg KOH/g	ASTM D8045	0.56	0.83	0.83	0.73
Visc @ 40°C	cSt	ASTM D445	304	327	338	322



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MWM715450 **Received** : 07 Mar 2023
Lab Number : 05785157 **Diagnosed** : 09 Mar 2023
Unique Number : 10364827 **Diagnostician** : Wes Davis
Test Package : MAR 2

AMERICAN RIVER TRANSPORTATION CO.
P.O. BOX 2889
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US 63111
Contact: BRIAN GRIEWING
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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)