



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
TENNESSEE MERCHANT (S/N 8-47382)
Component
Starboard Reduction Gear
Fluid
MOBIL DTE OIL HEAVY (65 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0044721	MW0044751	MW0044879
Sample Date		Client Info		05 Jul 2024	01 Jun 2024	14 May 2024
Machine Age	hrs	Client Info		43918	43222	42790
Oil Age	hrs	Client Info		1268	562	180
Filter Age	hrs	Client Info		1268	562	180
Oil Changed		Client Info		Not Changd	Changed	Not Changd
Filter Changed		Client Info		None	Changed	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	7	4	5
Chromium	ppm	ASTM D5185m	>10	0	0	<1
Nickel	ppm	ASTM D5185m	>10	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>25	<1	0	1
Lead	ppm	ASTM D5185m	>100	0	0	1
Copper	ppm	ASTM D5185m	>50	13	10	9
Tin	ppm	ASTM D5185m	>10	<1	0	1
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

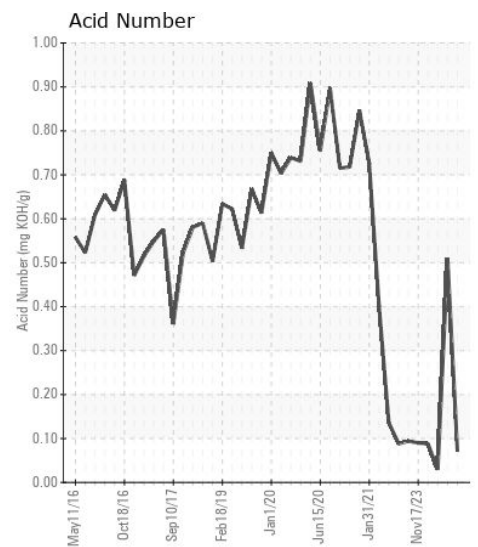
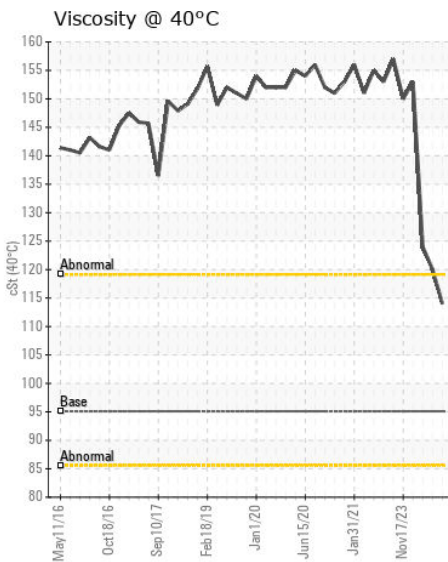
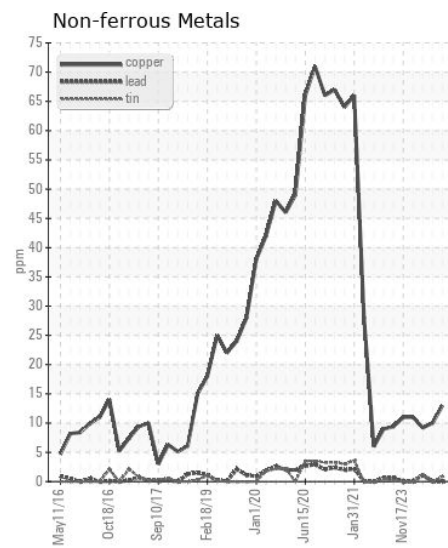
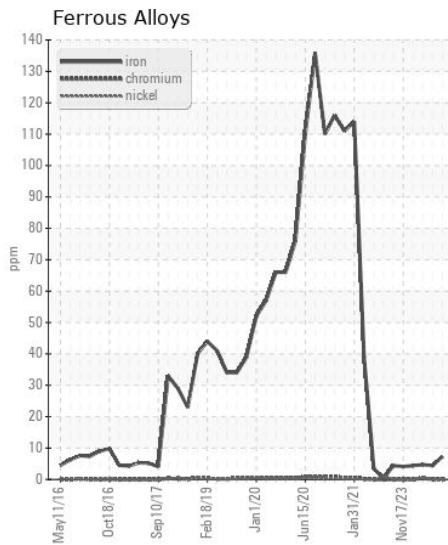
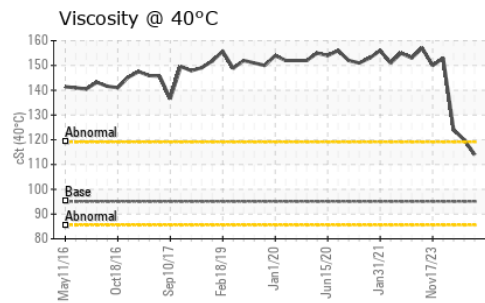
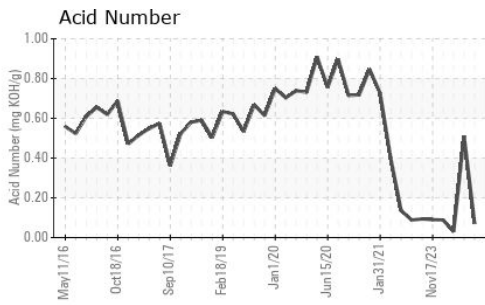
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	1	<1	2
Potassium	ppm	ASTM D5185m	>20	<1	0	2
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		0	<1	0
Boron	ppm	ASTM D5185m		8	8	4
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		<1	2	3
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m		8	7	20
Calcium	ppm	ASTM D5185m		40	79	72
Phosphorus	ppm	ASTM D5185m		120	110	117
Zinc	ppm	ASTM D5185m		64	68	80
Sulfur	ppm	ASTM D5185m		1580	1551	1747
Acid Number (AN)	mg KOH/g	ASTM D8045		0.071	0.51	0.03
Visc @ 40°C	cSt	ASTM D445	95.1	114	120	124



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0044721
Lab Number : 06235105
Unique Number : 11123939
Test Package : MAR 2

Received : 12 Jul 2024
Tested : 15 Jul 2024
Diagnosed : 15 Jul 2024 - Sean Felton

AMERICAN COMMERCIAL LINES
 PO BOX 610, 1701 E. MARKET STREET
 JEFFERSONVILLE, IN
 US 47130
 Contact: RONALD SCHNEIDER
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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)

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