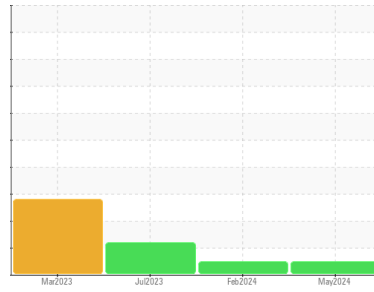




OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
LIM_MLU3 LIM_MLU3
 Component
Outboard Pump
 Fluid
 {not provided} (--- GAL)

DIAGNOSIS

- Recommendation**
 Resample at the next service interval to monitor.
- Wear**
 All component wear rates are normal.
- Contamination**
 The water content is negligible. There is no indication of any contamination in the oil.
- Fluid Condition**
 The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	RP0033140	RP0039819	RP0032852
Sample Date	Client Info	29 May 2024	27 Feb 2024	20 Jul 2023
Machine Age	hrs Client Info	0	0	0
Oil Age	hrs Client Info	0	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		NORMAL	NORMAL	ABNORMAL

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >90	25	22	30
Chromium	ppm ASTM D5185m >5	<1	0	0
Nickel	ppm ASTM D5185m >5	0	0	0
Titanium	ppm ASTM D5185m >3	0	0	0
Silver	ppm ASTM D5185m >3	0	0	0
Aluminum	ppm ASTM D5185m >7	0	<1	<1
Lead	ppm ASTM D5185m >12	12	12	▲ 23
Copper	ppm ASTM D5185m >30	13	12	23
Tin	ppm ASTM D5185m >9	0	<1	<1
Vanadium	ppm ASTM D5185m	<1	0	<1
Cadmium	ppm ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	0	0	0
Barium	ppm ASTM D5185m	0	0	0
Molybdenum	ppm ASTM D5185m	0	0	0
Manganese	ppm ASTM D5185m	<1	1	<1
Magnesium	ppm ASTM D5185m	40	52	50
Calcium	ppm ASTM D5185m	<1	<1	<1
Phosphorus	ppm ASTM D5185m	18	15	32
Zinc	ppm ASTM D5185m	24	16	33

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >60	2	2	3
Sodium	ppm ASTM D5185m	2	0	2
Potassium	ppm ASTM D5185m >20	0	0	1
Water	% ASTM D6304 >.1	0.008	0.008	0.014
ppm Water	ppm ASTM D6304 >1000	86	89	147.9

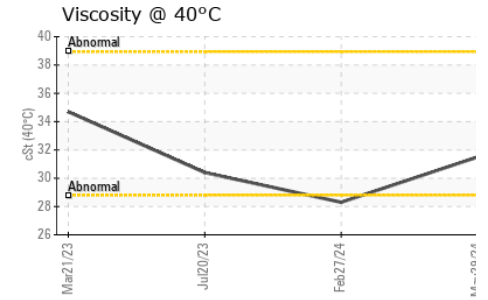
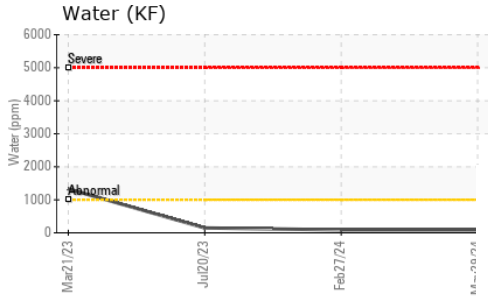
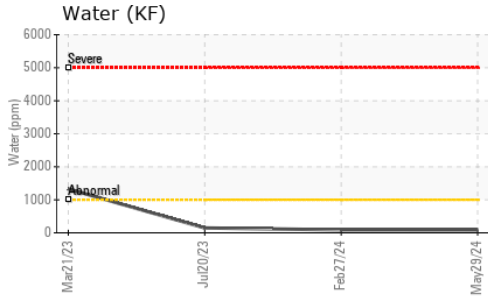
FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045	0.28	0.31	0.28

VISUAL

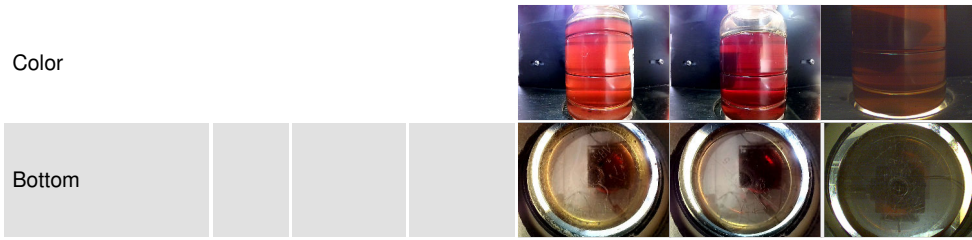
method	limit/base	current	history1	history2
White Metal	scalar *Visual NONE	LIGHT	NONE	NONE
Yellow Metal	scalar *Visual NONE	NONE	NONE	NONE
Precipitate	scalar *Visual NONE	NONE	NONE	NONE
Silt	scalar *Visual NONE	NONE	NONE	NONE
Debris	scalar *Visual NONE	NONE	NONE	▲ MODER
Sand/Dirt	scalar *Visual NONE	NONE	NONE	NONE
Appearance	scalar *Visual NORML	NORML	NORML	NORML
Odor	scalar *Visual NORML	NORML	NORML	NORML
Emulsified Water	scalar *Visual >.1	NEG	NEG	NEG
Free Water	scalar *Visual	NEG	NEG	NEG

OIL ANALYSIS REPORT

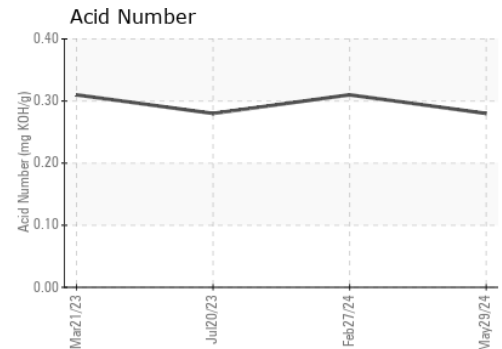
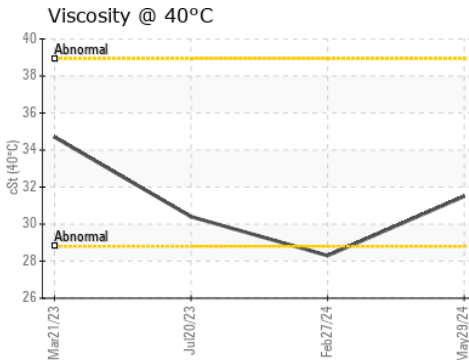
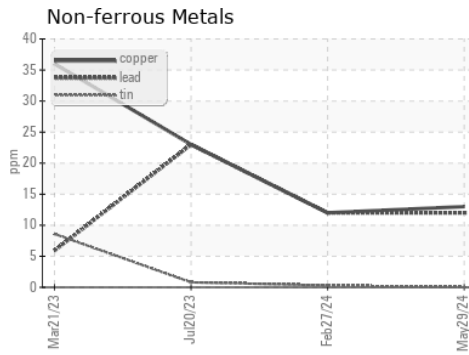
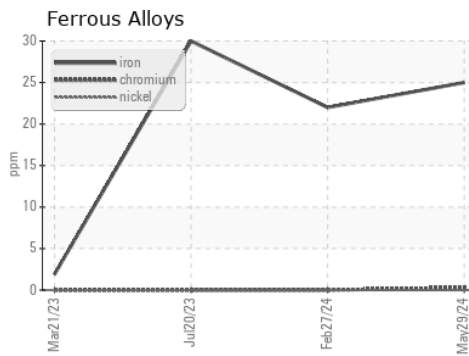


FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		31.5	28.3	30.4

SAMPLE IMAGES		method	limit/base	current	history1	history2
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GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0033140
Lab Number : 06202854
Unique Number : 11070315
Test Package : IND 2
Received : 07 Jun 2024
Tested : 10 Jun 2024
Diagnosed : 10 Jun 2024 - Don Baldrige

ENERGY TRANSFER - LIMA
 1520 BUCKEYE RD
 LIMA, OH
 US 45804

Contact: ANDREW WYDERKA
 andrew.wyderka@energytransfer.com

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)

T: (419)618-1505

F: