



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR L580 1414-56018
Component
Transmission (Manual)
Fluid
TDTO FLUID SAE 10W (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH06225432	LH06112389	LH0158435
Sample Date		Client Info		30 Jun 2024	06 Mar 2024	06 Dec 2023
Machine Age	hrs	Client Info		17000	15997	9000
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	8	7	8
Chromium	ppm	ASTM D5185m	>5	<1	0	<1
Nickel	ppm	ASTM D5185m	>5	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>7	<1	<1	0
Aluminum	ppm	ASTM D5185m	>25	3	1	2
Lead	ppm	ASTM D5185m	>45	<1	0	<1
Copper	ppm	ASTM D5185m	>225	<1	<1	<1
Tin	ppm	ASTM D5185m	>10	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

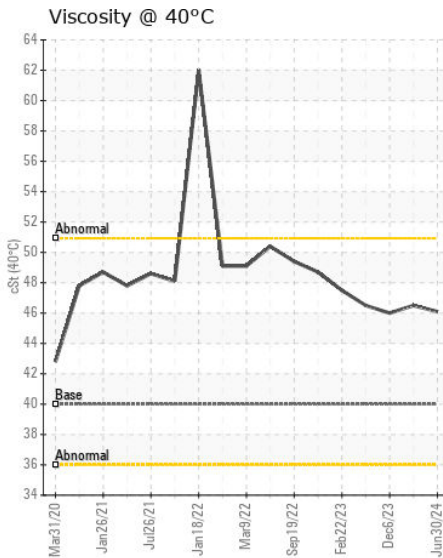
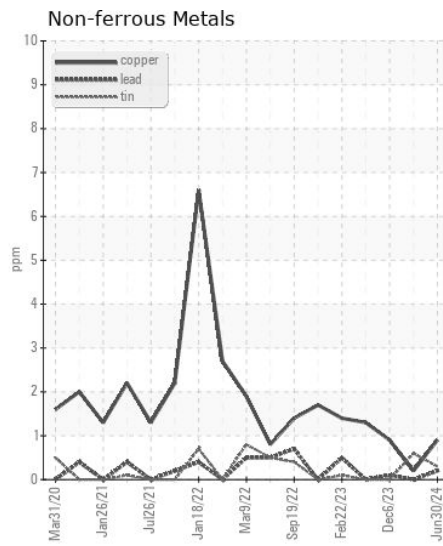
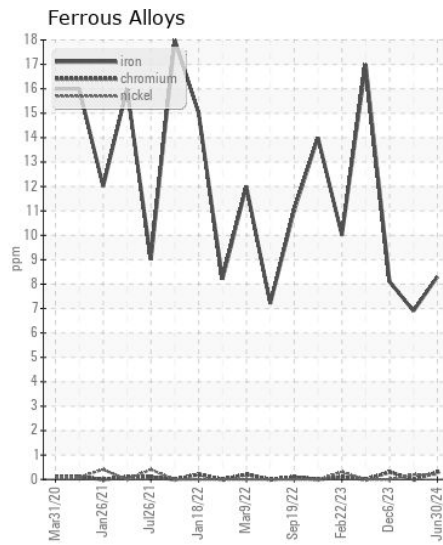
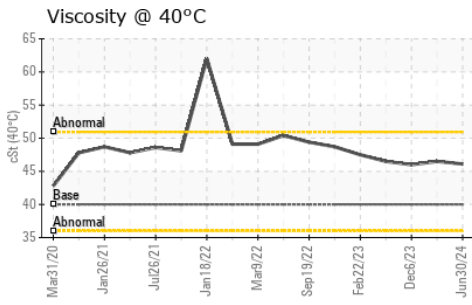
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>125	9	7	8
Potassium	ppm	ASTM D5185m	>20	3	2	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 condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		6	9	4
Boron	ppm	ASTM D5185m	37	140	116	134
Barium	ppm	ASTM D5185m	7	<1	0	0
Molybdenum	ppm	ASTM D5185m	5	<1	0	<1
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m	40	10	23	8
Calcium	ppm	ASTM D5185m	2650	4079	3352	3626
Phosphorus	ppm	ASTM D5185m	1050	1311	1177	1281
Zinc	ppm	ASTM D5185m	1075	1657	1440	1514
Sulfur	ppm	ASTM D5185m	5750	6810	5782	7231
Visc @ 40°C	cSt	ASTM D445	40	46.1	46.5	46.0



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : LH06225432

Lab Number : 06225432

Unique Number : 11103629

Test Package : CONST

Received : 01 Jul 2024

Tested : 02 Jul 2024

Diagnosed : 03 Jul 2024 - Jonathan Hester

VERSO CORP - QUINNESEC MILL

W6791 US HWY 2

QUINNESEC, MI

US 49876

Contact: ERIC LARSON

eric.larson@versoco.com

T:

F:

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)