



LIEBHERR

OIL ANALYSIS REPORT

WEAR
CONTAMINATION
FLUID CONDITION

ABNORMAL

SEVERE

ATTENTION



Machine Id
LIEBHERR LH30M 1253-123497
Component
Swing Drive
Fluid
SUPER S 80W90 LS (--- GAL)

RECOMMENDATION

We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0273451	LH0258292	LH0212309
Sample Date		Client Info		20 Jun 2024	16 Aug 2023	30 Dec 2021
Machine Age	hrs	Client Info		5603	3960	981
Oil Age	hrs	Client Info		500	0	0
Filter Age	hrs	Client Info		500	0	0
Oil Changed		Client Info		Not Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	None
Sample Status				SEVERE	NORMAL	NORMAL

WEAR

Gear wear is indicated.

Iron	ppm	ASTM D5185m	>1450	▲ 1535	149	186
Chromium	ppm	ASTM D5185m	>11	▲ 12	<1	2
Nickel	ppm	ASTM D5185m	>3	0	0	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>4	0	0	0
Lead	ppm	ASTM D5185m	>4	<1	0	0
Copper	ppm	ASTM D5185m	>542	161	24	60
Tin	ppm	ASTM D5185m	>38	8	1	1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

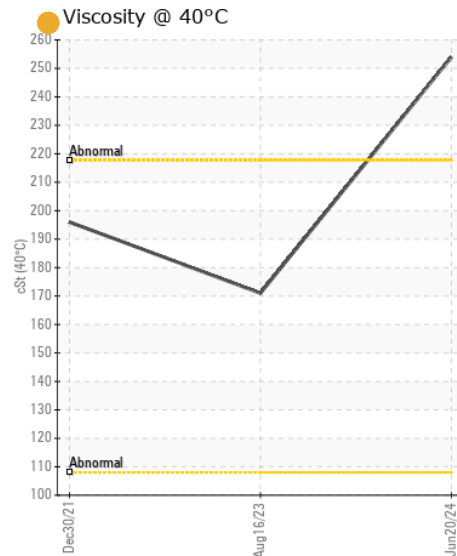
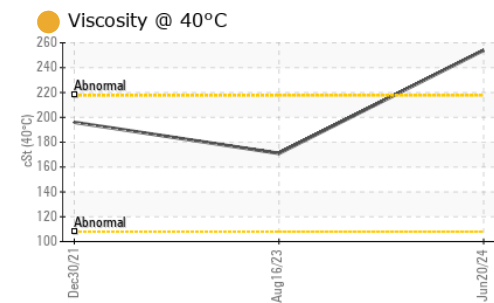
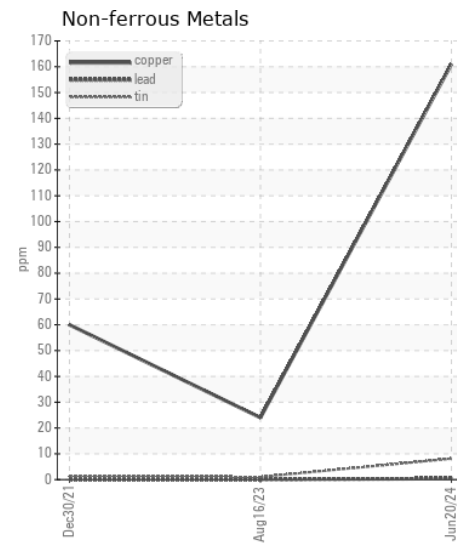
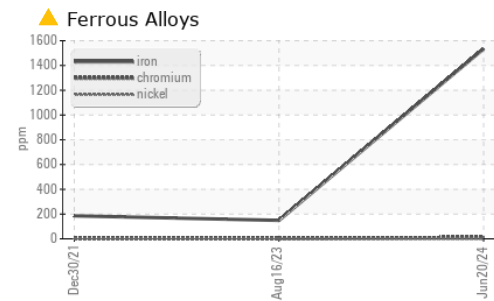
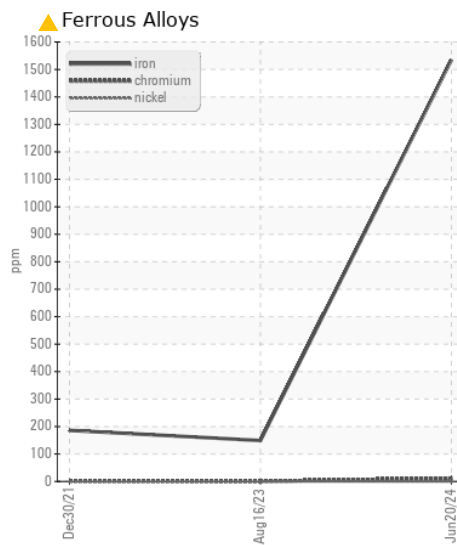
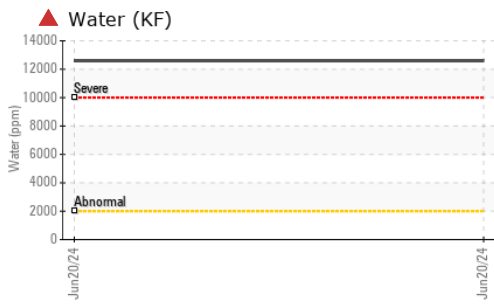
There is a high concentration of water present in the oil.

Silicon	ppm	ASTM D5185m	>15	4	<1	3
Potassium	ppm	ASTM D5185m	>20	0	<1	0
Water	%	ASTM D6304	>0.2	▲ 1.26	---	---
ppm Water	ppm	ASTM D6304	>2000	▲ 12600	---	---
Silt	scalar	*Visual	NONE	NONE	NONE	VLITE
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	>0.2	▲ 0.2%	NEG	NEG

FLUID CONDITION

The oil viscosity is higher than normal. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		2	2	4
Boron	ppm	ASTM D5185m		1	1	54
Barium	ppm	ASTM D5185m		2	0	0
Molybdenum	ppm	ASTM D5185m		0	0	1
Manganese	ppm	ASTM D5185m		10	2	2
Magnesium	ppm	ASTM D5185m		2	2	6
Calcium	ppm	ASTM D5185m		24	41	28
Phosphorus	ppm	ASTM D5185m		2325	2314	2375
Zinc	ppm	ASTM D5185m		51	23	22
Sulfur	ppm	ASTM D5185m		32168	25056	25056
Visc @ 40°C	cSt	ASTM D445		● 254	171	196



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LH0273451 **Received** : 27 Jun 2024
Lab Number : 06222645 **Tested** : 02 Jul 2024
Unique Number : 11100842 **Diagnosed** : 02 Jul 2024 - Don Baldrige
Test Package : CONST (Additional Tests: KF)

SPARTAN RECYCLING
 3071 HOWARD ST
 SPARTANBURG, SC
 US 29303
 Contact: SERVICE MANAGER

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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