CONST

LIEBHERR

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
LIEBHERR LH30 115841-1253
Component
Hydraulic System
Fluid
{not provided} (--- GAL)

RECOMMENDATION

We recommend you service the filters on this component. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. We were unable to perform a particle count due to metal particles present in this sample.

WEAR

The iron level is abnormal. Moderate concentration of visible metal present.

CONTAMINATION

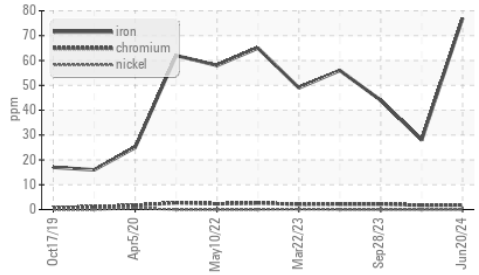
There is no indication of any contamination in the oil.

FLUID CONDITION

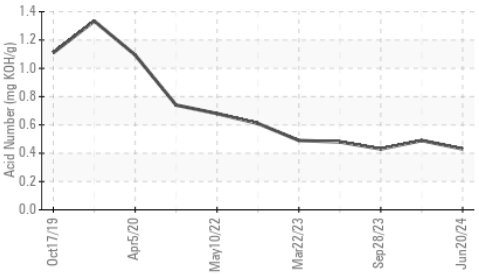
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0285573	LH06062601	LH0235736
Sample Date		Client Info		20 Jun 2024	11 Jan 2024	28 Sep 2023
Machine Age	hrs	Client Info		12685	11390	10707
Oil Age	hrs	Client Info		500	0	0
Filter Age	hrs	Client Info		500	0	0
Oil Changed		Client Info		Not Changd	Not Changd	N/A
Filter Changed		Client Info		Not Changd	N/A	N/A
Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>50	▲ 77	28	44
Chromium	ppm	ASTM D5185m	>5	2	2	2
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>2	0	1	0
Lead	ppm	ASTM D5185m	>4	0	<1	<1
Copper	ppm	ASTM D5185m	>10	4	2	4
Tin	ppm	ASTM D5185m	>2	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	▲ MODER	NONE	NONE
Silicon	ppm	ASTM D5185m	>17	<1	1	1
Potassium	ppm	ASTM D5185m	>20	0	<1	1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>20000	---	959	6879
Particles >6µm		ASTM D7647	>5000	---	150	3289
Particles >14µm		ASTM D7647	>640	---	12	564
Particles >21µm		ASTM D7647	>160	---	3	153
Particles >38µm		ASTM D7647	>40	---	0	1
Particles >71µm		ASTM D7647	>10	---	0	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	---	17/14/11	20/19/16
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
Sodium	ppm	ASTM D5185m		2	<1	1
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		0	0	<1
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		53	55	46
Calcium	ppm	ASTM D5185m		58	95	102
Phosphorus	ppm	ASTM D5185m		290	304	273
Zinc	ppm	ASTM D5185m		352	344	359
Sulfur	ppm	ASTM D5185m		966	959	1164
Acid Number (AN)	mg KOH/g	ASTM D8045		0.43	0.49	0.43
Visc @ 40°C	cSt	ASTM D445		62.9	62.9	59.6

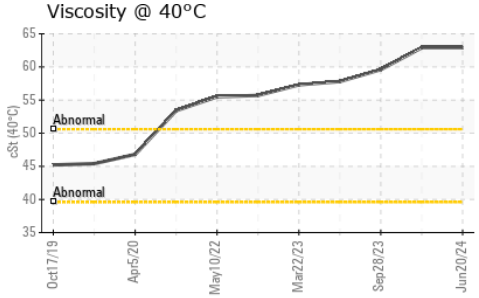
Ferrous Alloys



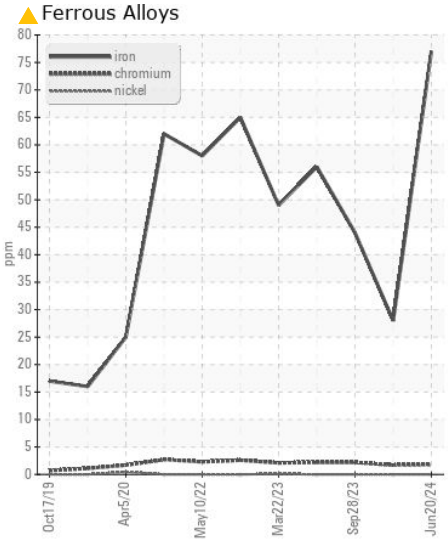
Acid Number



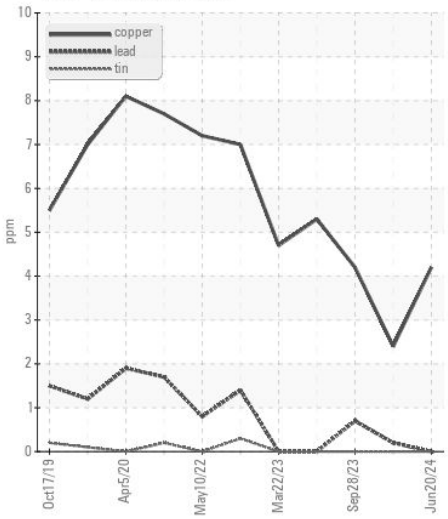
Viscosity @ 40°C



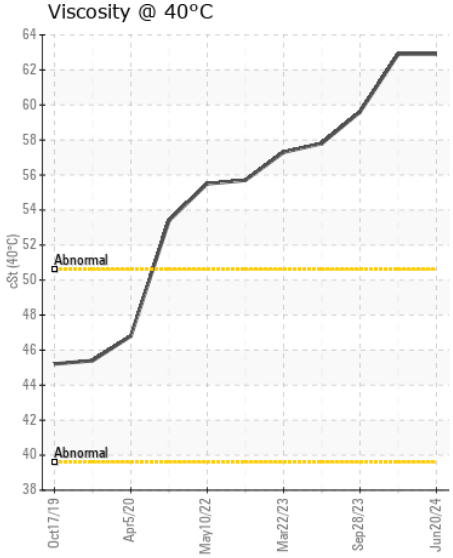
Ferrous Alloys



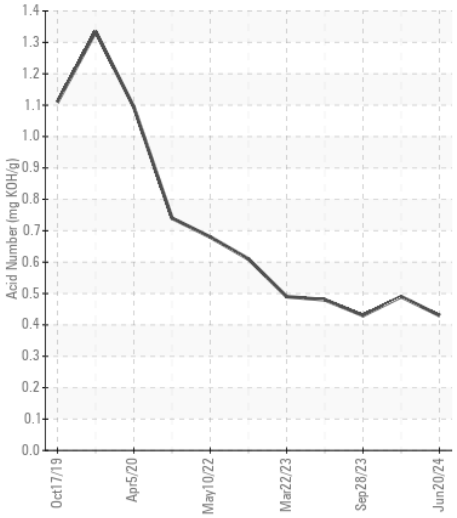
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory	: WearCheck USA - 501 Madison Ave., Cary, NC 27513		
Sample No.	: LH0285573	**Received**	: 27 Jun 2024
Lab Number	: 06222286	**Tested**	: 02 Jul 2024
Unique Number	: 11100483	**Diagnosed**	: 02 Jul 2024 - Jonathan Hester
Test Package	: CONST		

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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