



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION



Machine Id
LIEBHERR LH80M 1218-157090
Component
Swing Drive
Fluid
SAE 30W (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

There is no indication of any contamination in the oil.

FLUID CONDITION

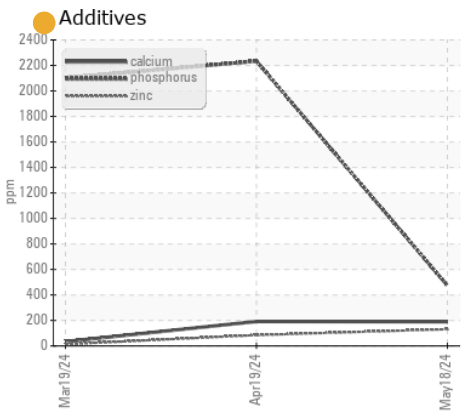
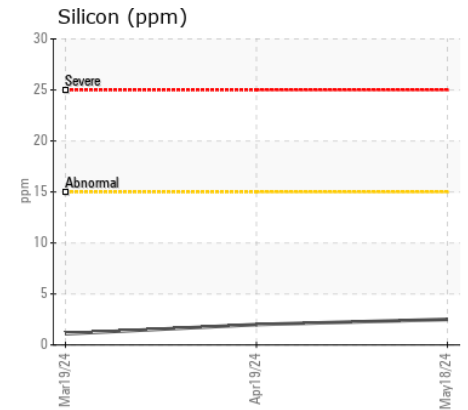
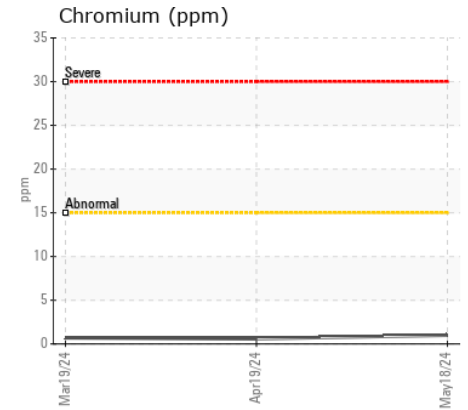
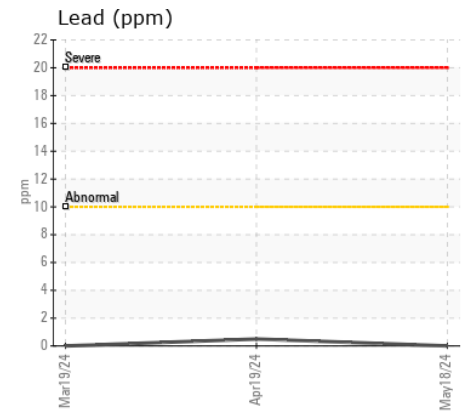
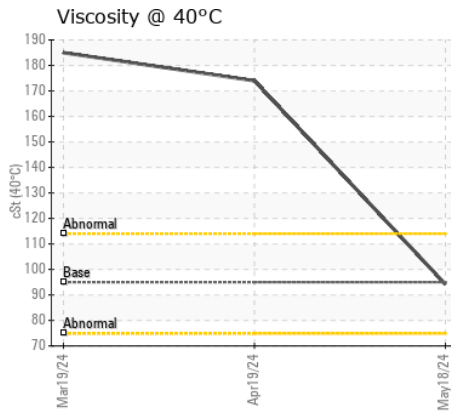
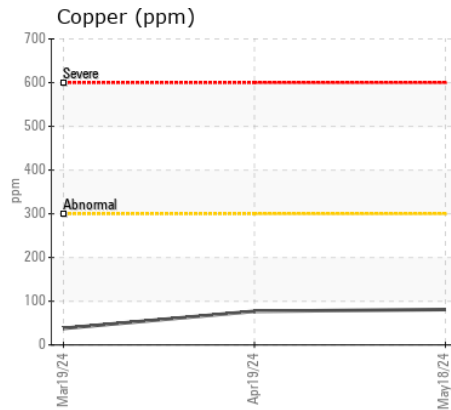
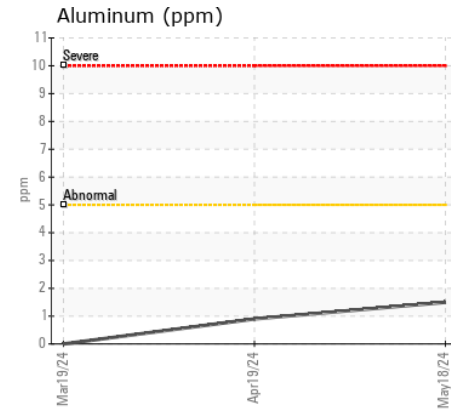
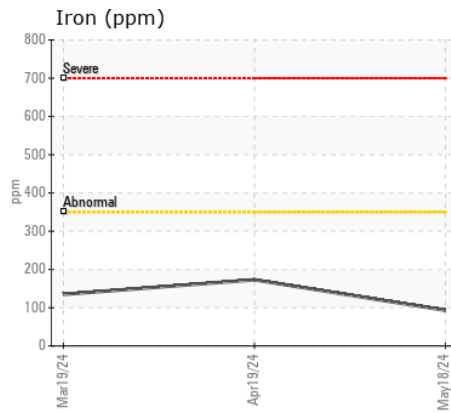
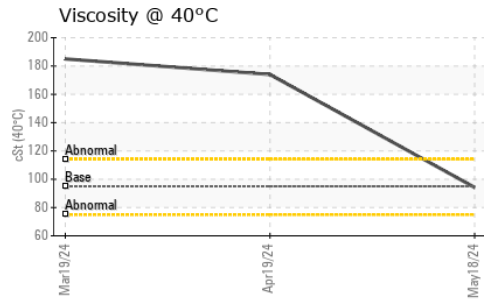
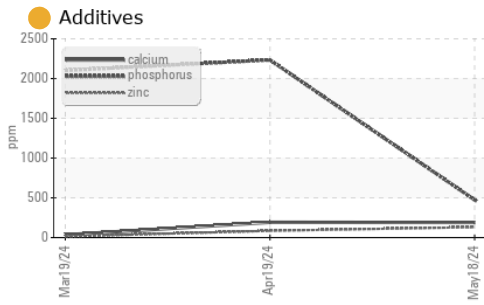
Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0282875	LH0282886	LH0282897
Sample Date		Client Info		18 May 2024	19 Apr 2024	19 Mar 2024
Machine Age	hrs	Client Info		1559	997	545
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Chngd	Changed	Not Chngd
Filter Changed		Client Info		N/A	N/A	None
Sample Status				ATTENTION	ATTENTION	ATTENTION

Iron	ppm	ASTM D5185m	>350	93	173	135
Chromium	ppm	ASTM D5185m	>15	1	<1	<1
Nickel	ppm	ASTM D5185m	>5	<1	<1	<1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>5	2	<1	0
Lead	ppm	ASTM D5185m	>10	0	<1	0
Copper	ppm	ASTM D5185m	>300	81	77	38
Tin	ppm	ASTM D5185m	>15	<1	3	3
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

Silicon	ppm	ASTM D5185m	>15	2	2	1
Potassium	ppm	ASTM D5185m	>20	2	3	2
Water		WC Method	>0.2	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	>0.2	NEG	NEG	NEG

Sodium	ppm	ASTM D5185m		4	3	3
Boron	ppm	ASTM D5185m		6	8	4
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		5	<1	1
Manganese	ppm	ASTM D5185m		<1	2	2
Magnesium	ppm	ASTM D5185m		● 34	● 7	● 0
Calcium	ppm	ASTM D5185m		● 190	● 192	● 34
Phosphorus	ppm	ASTM D5185m		● 474	● 2234	● 2102
Zinc	ppm	ASTM D5185m		● 131	● 85	● 13
Sulfur	ppm	ASTM D5185m		● 12893	● 30073	● 28826
Visc @ 40°C	cSt	ASTM D445	95.0	94.2	● 174	● 185



Certificate L2367

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

Sample No. : LH0282875

Lab Number : 06192608

Unique Number : 11049360

Test Package : MOBCE

Received : 28 May 2024

Tested : 29 May 2024

Diagnosed : 30 May 2024 - Don Baldrige

KINDER MORGAN

4301 IVERSON

TRINITY, AL

US 35601

Contact: RICKY JOHNSON

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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)