



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ATTENTION



Machine Id
LIEBHERR A944C-LI C-44 (S/N 028924-194)
Component
Swing Drive
Fluid
KENDALL LIMITED SLIP 80W90 (3 GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0899814	WC0709468	WC0669233
Sample Date		Client Info		08 Feb 2024	01 Aug 2022	28 Mar 2022
Machine Age	hrs	Client Info		33600	26858	21796
Oil Age	hrs	Client Info		910	1000	1179
Filter Age	hrs	Client Info		0	1000	1179
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Not Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>2150	1480	1060	1423
Chromium	ppm	ASTM D5185m	>20	12	13	17
Nickel	ppm	ASTM D5185m	>5	1	4	4
Titanium	ppm	ASTM D5185m		2	<1	<1
Silver	ppm	ASTM D5185m		0	<1	0
Aluminum	ppm	ASTM D5185m	>2	2	2	2
Lead	ppm	ASTM D5185m	>10	<1	2	0
Copper	ppm	ASTM D5185m	>685	183	313	267
Tin	ppm	ASTM D5185m	>30	7	4	3
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	MODER	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

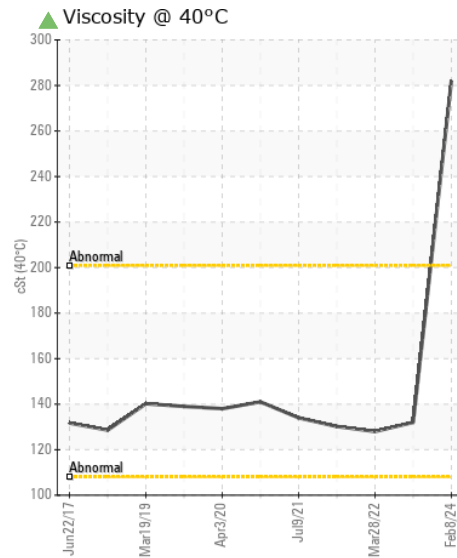
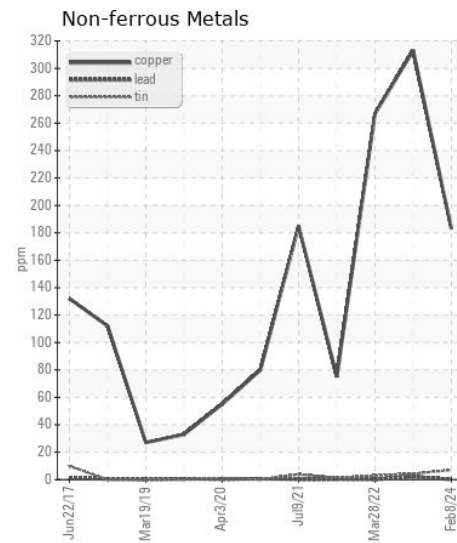
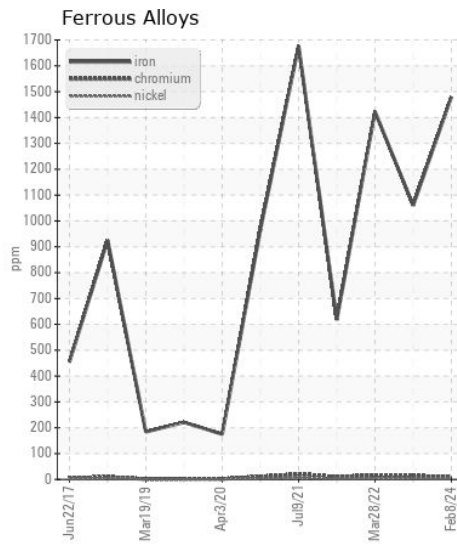
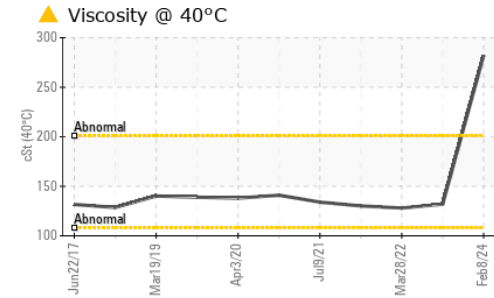
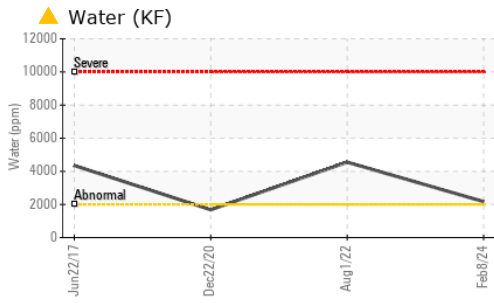
There is a light concentration of water present in the oil.

Silicon	ppm	ASTM D5185m	>15	7	4	6
Potassium	ppm	ASTM D5185m	>20	4	0	2
Water	%	ASTM D6304	>0.2	▲ 0.217	▲ 0.455	---
ppm Water	ppm	ASTM D6304	>2000	▲ 2170	▲ 4550	---
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	▲ 0.2%	▲ 0.2%	NEG

FLUID CONDITION

The oil viscosity is higher than normal. Confirm oil type.

Sodium	ppm	ASTM D5185m		<1	0	0
Boron	ppm	ASTM D5185m		<1	283	234
Barium	ppm	ASTM D5185m		30	0	0
Molybdenum	ppm	ASTM D5185m		<1	<1	1
Manganese	ppm	ASTM D5185m		10	6	8
Magnesium	ppm	ASTM D5185m		3	0	<1
Calcium	ppm	ASTM D5185m		19	89	27
Phosphorus	ppm	ASTM D5185m		2332	1513	1580
Zinc	ppm	ASTM D5185m		11	57	30
Sulfur	ppm	ASTM D5185m		32248	21437	16743
Visc @ 40°C	cSt	ASTM D445		▲ 282	132	128



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0899814 **Received** : 14 Feb 2024
Lab Number : 06089159 **Tested** : 19 Feb 2024
Unique Number : 10876604 **Diagnosed** : 19 Feb 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: KF)

FRANKLIN IRON & METAL CORP
 1939 EAST 1ST ST
 DAYTON, OH
 US 45403
 Contact: BILL PITTL JR
 parts@frankliniron.com
 T: (937)253-8184
 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)