



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Area
Store 8 - Pikeville [148906]
Machine Id
KLEEMANN MC100Ri K011.0035

Component
Hydraulic System
Fluid
WIRTGEN GROUP HYDRAULIC OIL HVLP 46 (58 GAL)

RECOMMENDATION

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0044173	LEC0042255	LEC0037795
Sample Date		Client Info		19 Mar 2024	18 Jul 2023	19 Dec 2022
Machine Age	hrs	Client Info		1896	1401	756
Oil Age	hrs	Client Info		1896	1401	756
Filter Age	hrs	Client Info		0	645	0
Oil Changed		Client Info		Not Changed	Not Changed	Not Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				SEVERE	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
Iron	ppm	ASTM D5185m	>20	<1	0	<1
Chromium	ppm	ASTM D5185m	>10	<1	0	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	0	<1	0
Lead	ppm	ASTM D5185m	>10	0	0	<1
Copper	ppm	ASTM D5185m	>75	3	2	2
Tin	ppm	ASTM D5185m	>10	<1	0	0
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

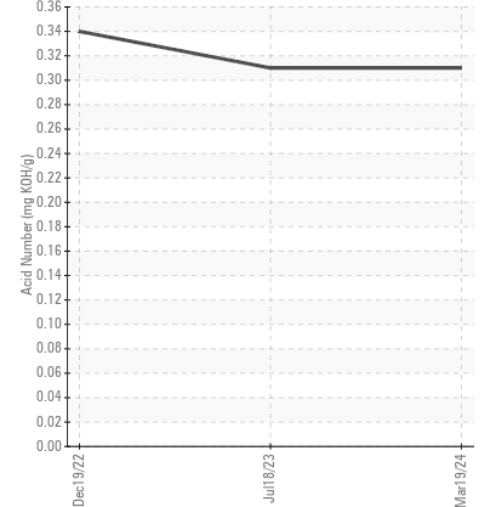
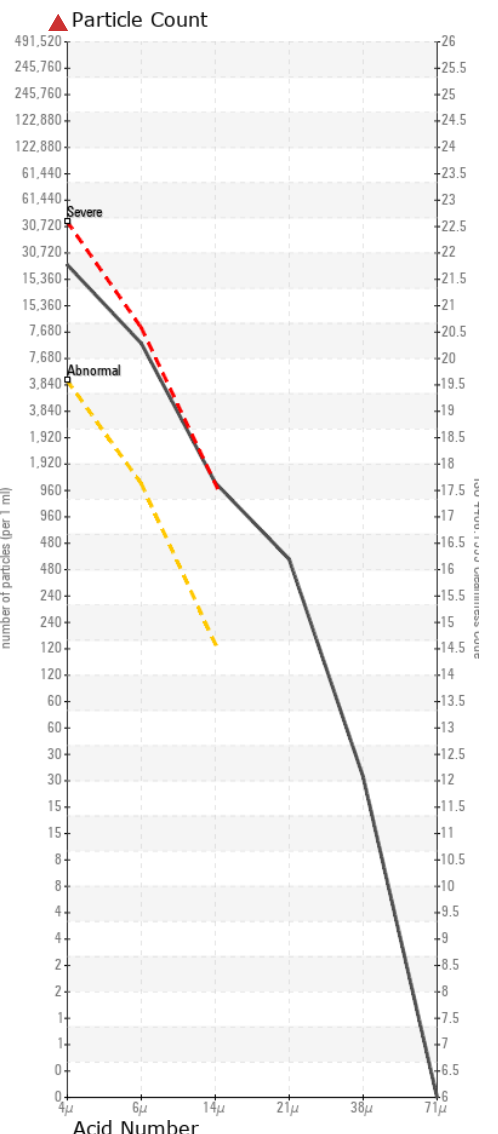
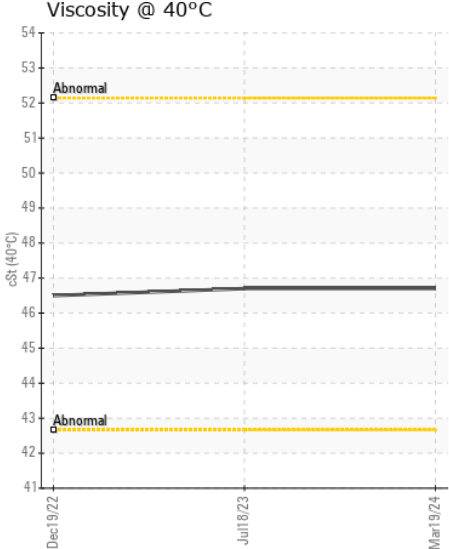
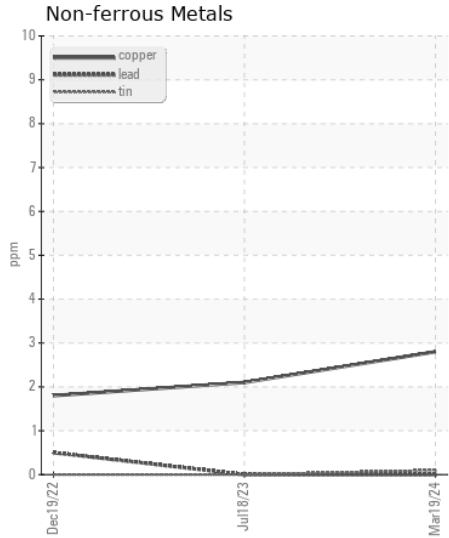
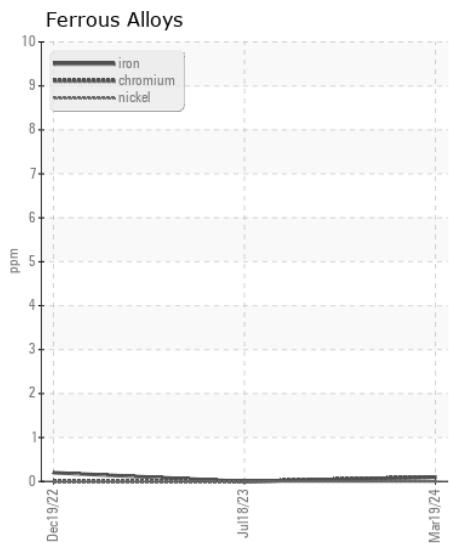
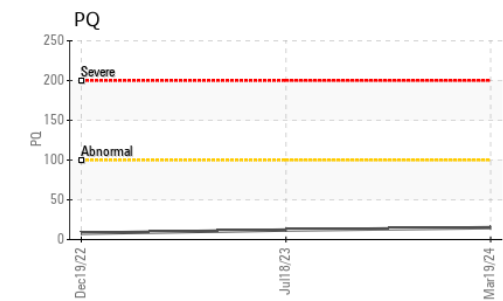
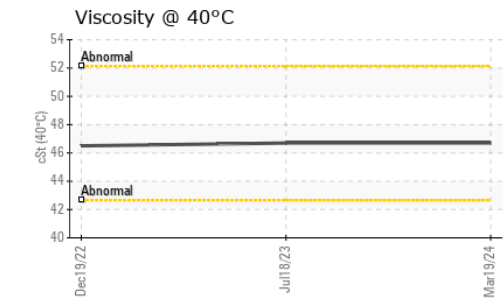
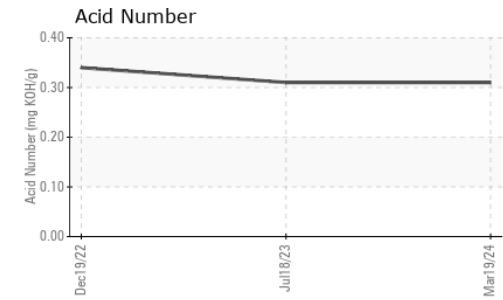
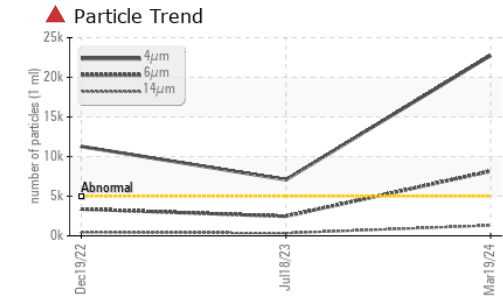
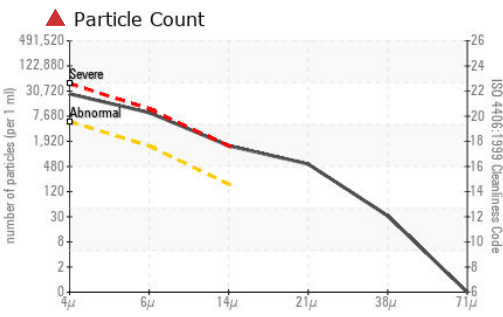
There is a high amount of particulates (2 to 100 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	2	2	3
Potassium	ppm	ASTM D5185m	>20	0	0	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	▲ 22757	▲ 7075	▲ 11274
Particles >6µm		ASTM D7647	>1300	▲ 8150	▲ 2462	▲ 3371
Particles >14µm		ASTM D7647	>160	▲ 1315	▲ 342	▲ 441
Particles >21µm		ASTM D7647	>40	▲ 483	▲ 135	▲ 140
Particles >38µm		ASTM D7647	>10	▲ 28	▲ 12	▲ 15
Particles >71µm		ASTM D7647	>3	0	▲ 2	1
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 22/20/18	▲ 20/18/16	▲ 21/19/16
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

FLUID CONDITION

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Sodium	ppm	ASTM D5185m		<1	1	0
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		<1	0	0
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m		0	<1	0
Calcium	ppm	ASTM D5185m		33	37	35
Phosphorus	ppm	ASTM D5185m		262	274	276
Zinc	ppm	ASTM D5185m		346	350	351
Sulfur	ppm	ASTM D5185m		1019	1100	1132
Acid Number (AN)	mg KOH/g	ASTM D8045		0.31	0.31	0.34
Visc @ 40°C	cSt	ASTM D445		46.7	46.7	46.5



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0044173 **Received** : 21 Mar 2024
Lab Number : 06124800 **Tested** : 22 Mar 2024
Unique Number : 10938951 **Diagnosed** : 22 Mar 2024 - Wes Davis
Test Package : CONST (Additional Tests: PQ)

LESLIE EQUIPMENT COMPANY
 105 TENNIS CENTER DR.
 MARIETTA, OH
 US 45750-9765
 Contact: LEANNE KENDALL
 KendalLeanne@lec1.com
 T:
 F: (740)373-5570

Certificate L2367
 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)