



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[MH-5]
 Machine Id
LIEBHERR R954C MH5 (S/N 034273-1381)
 Component
Hydraulic System
 Fluid
DURALENE ZFH HVI 68 (120 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DC0027581	DC0009087	DC0007118
Sample Date		Client Info		20 Feb 2024	15 Apr 2022	23 Nov 2020
Machine Age	hrs	Client Info		11300	10221	9017
Oil Age	hrs	Client Info		3000	3000	1000
Filter Age	hrs	Client Info		1000	1000	1000
Oil Changed		Client Info		Not Changed	Not Changed	Not Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	30	22	14
Chromium	ppm	ASTM D5185m	>15	11	10	5
Nickel	ppm	ASTM D5185m	>5	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>8	1	1	0
Lead	ppm	ASTM D5185m	>5	<1	<1	<1
Copper	ppm	ASTM D5185m	>15	3	2	1
Tin	ppm	ASTM D5185m	>5	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

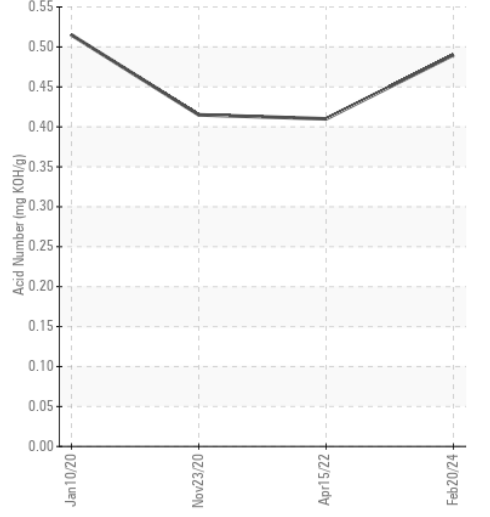
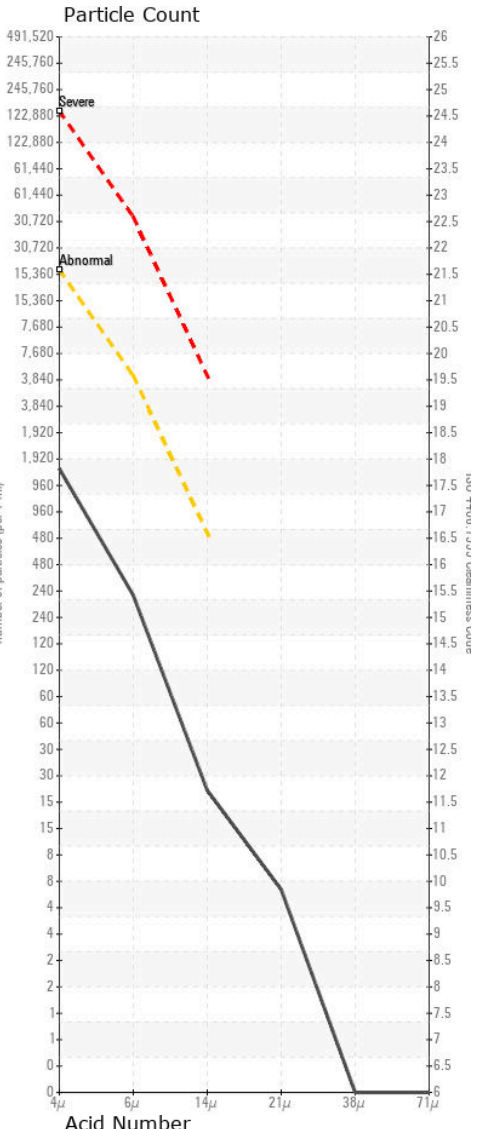
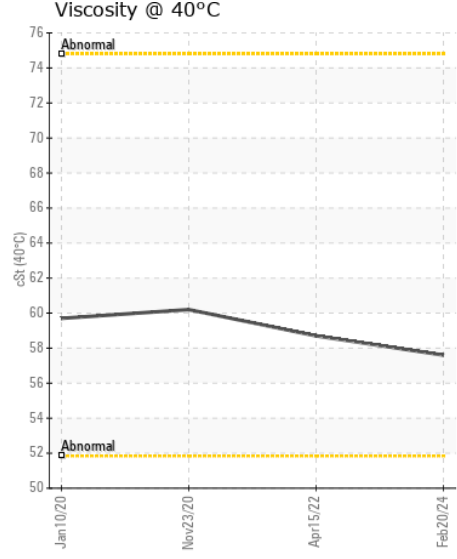
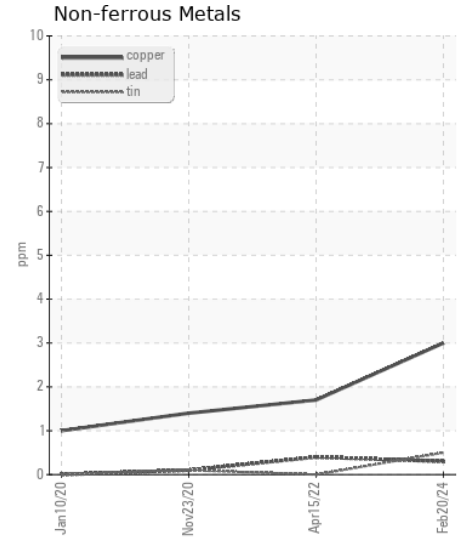
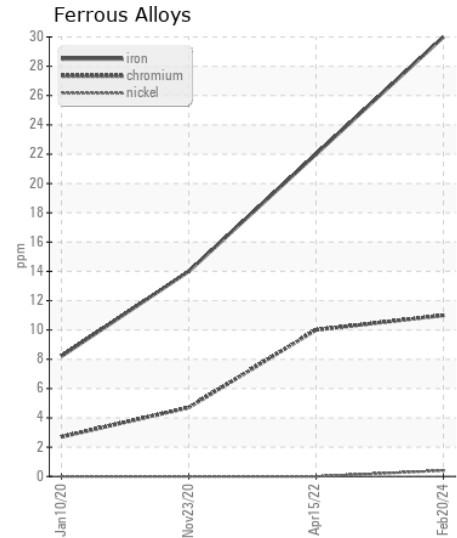
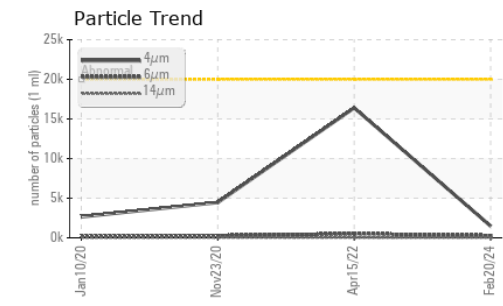
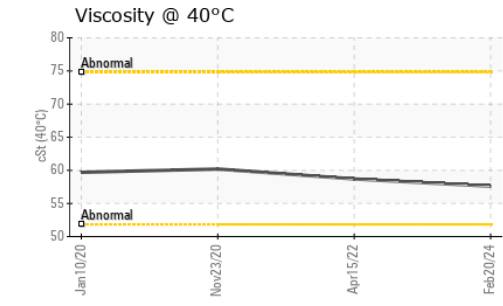
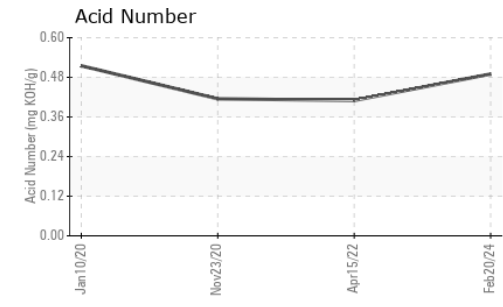
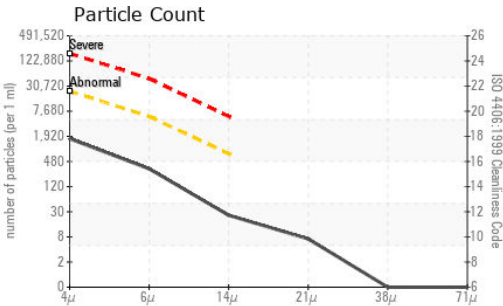
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>25	4	2	<1
Potassium	ppm	ASTM D5185m	>20	1	2	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>20000	1483	16395	4457
Particles >6µm		ASTM D7647	>5000	282	504	276
Particles >14µm		ASTM D7647	>640	22	20	23
Particles >21µm		ASTM D7647	>160	6	5	5
Particles >38µm		ASTM D7647	>40	0	0	1
Particles >71µm		ASTM D7647	>10	0	0	1
Oil Cleanliness		ISO 4406 (c)	>21/19/16	18/15/12	21/16/11	19/15/12
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 condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		2	0	0
Boron	ppm	ASTM D5185m		10	14	17
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		3	3	4
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		16	16	21
Calcium	ppm	ASTM D5185m		444	494	595
Phosphorus	ppm	ASTM D5185m		282	290	362
Zinc	ppm	ASTM D5185m		314	347	431
Sulfur	ppm	ASTM D5185m		4060	3505	4992
Acid Number (AN)	mg KOH/g	ASTM D8045		0.49	0.41	0.415
Visc @ 40°C	cSt	ASTM D445		57.6	58.7	60.2



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DC0027581 **Received** : 29 Feb 2024
Lab Number : 06104301 **Tested** : 01 Mar 2024
Unique Number : 10902531 **Diagnosed** : 01 Mar 2024 - Wes Davis
Test Package : MOB 2

CONSERVIT INC.
 PO BOX 1517
 HAGERSTOWN, MD
 US 21740
 Contact: DON LONG

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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