



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
MIDWEST LEADER
Component
Steering
Fluid
{not provided} (--- GAL)

RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0045844	MW0020826	MW0011456
Sample Date		Client Info		24 Jan 2023	14 Apr 2022	25 Jan 2021
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>60	11	13	12
Chromium	ppm	ASTM D5185m	>12	2	2	2
Nickel	ppm	ASTM D5185m	>6	0	0	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m		0	<1	<1
Aluminum	ppm	ASTM D5185m	>4	0	<1	<1
Lead	ppm	ASTM D5185m	>12	<1	0	0
Copper	ppm	ASTM D5185m	>30	<1	<1	<1
Tin	ppm	ASTM D5185m		0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

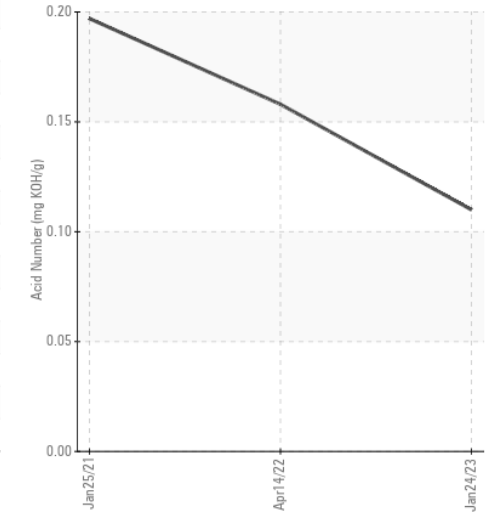
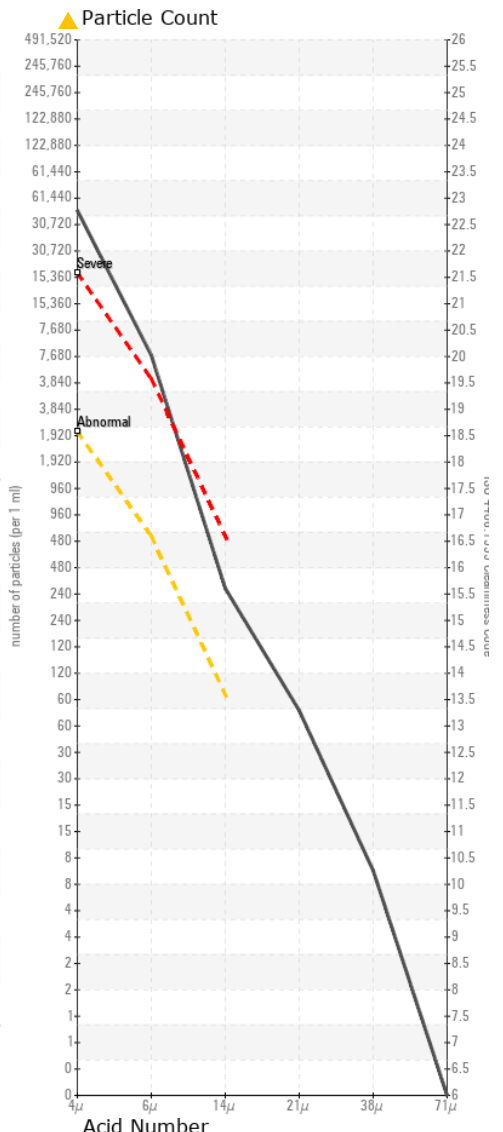
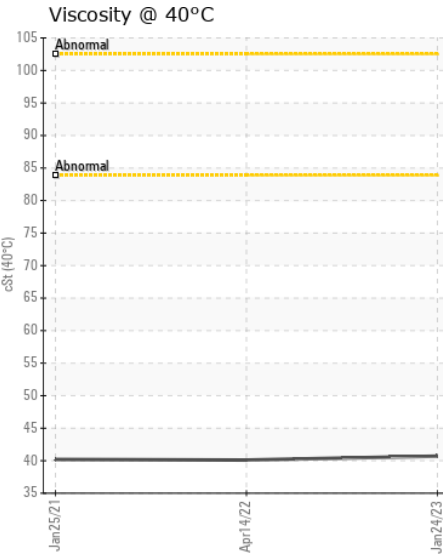
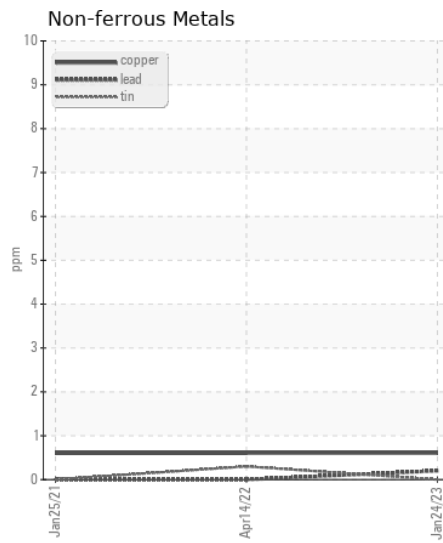
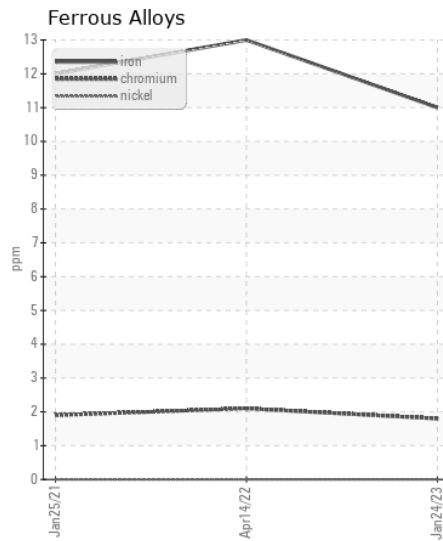
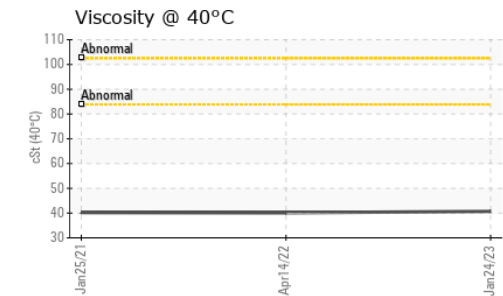
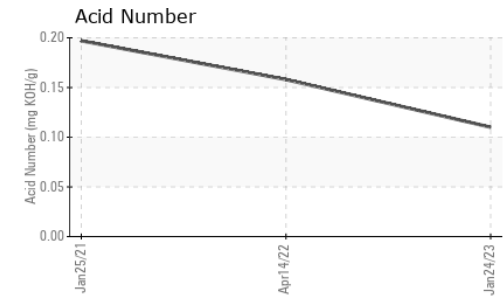
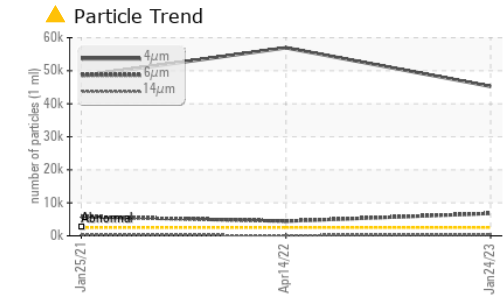
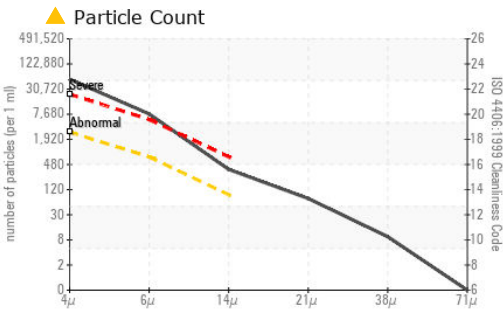
There is a high amount of particulates present in the fluid.

Silicon	ppm	ASTM D5185m	>10	1	1	1
Potassium	ppm	ASTM D5185m	>20	1	0	<1
Water		WC Method		NEG	NEG	NEG
Particles >4µm		ASTM D7647	>2500	▲ 45253	▲ 56958	▲ 48362
Particles >6µm		ASTM D7647	>640	▲ 6799	▲ 4448	▲ 5794
Particles >14µm		ASTM D7647	>80	▲ 322	▲ 148	▲ 245
Particles >21µm		ASTM D7647	>20	▲ 65	▲ 37	▲ 45
Particles >38µm		ASTM D7647	>4	▲ 8	1	2
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>18/16/13	▲ 23/20/16	▲ 23/19/14	▲ 23/20/15
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	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		NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		0	3	4
Boron	ppm	ASTM D5185m		0	1	1
Barium	ppm	ASTM D5185m		1	0	0
Molybdenum	ppm	ASTM D5185m		<1	<1	<1
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		4	3	4
Calcium	ppm	ASTM D5185m		40	40	38
Phosphorus	ppm	ASTM D5185m		277	333	315
Zinc	ppm	ASTM D5185m		91	95	94
Sulfur	ppm	ASTM D5185m		712	701	709
Acid Number (AN)	mg KOH/g	ASTM D8045		0.11	0.158	0.197
Visc @ 40°C	cSt	ASTM D445		40.7	40.1	40.2



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0045844 **Received** : 25 Jan 2023
Lab Number : 05749476 **Tested** : 26 Jan 2023
Unique Number : 10309080 **Diagnosed** : 26 Jan 2023 - Jonathan Hester
Test Package : MAR 2 (Additional Tests: PrtCount)

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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)