



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
RASA 60 IN MTBM 60 IN RASA MTBM

Component
5 Gear Motor

Fluid
{not provided} (--- GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We advise that you check for the source of water entry. We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.

WEAR

Moderate concentration of visible metal present. Gear wear is indicated.

CONTAMINATION

There is a moderate amount of visible silt present in the sample. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. Moderate concentration of visible dirt/debris present in the oil. There is a moderate concentration of water present in the oil. Free water present.

FLUID CONDITION

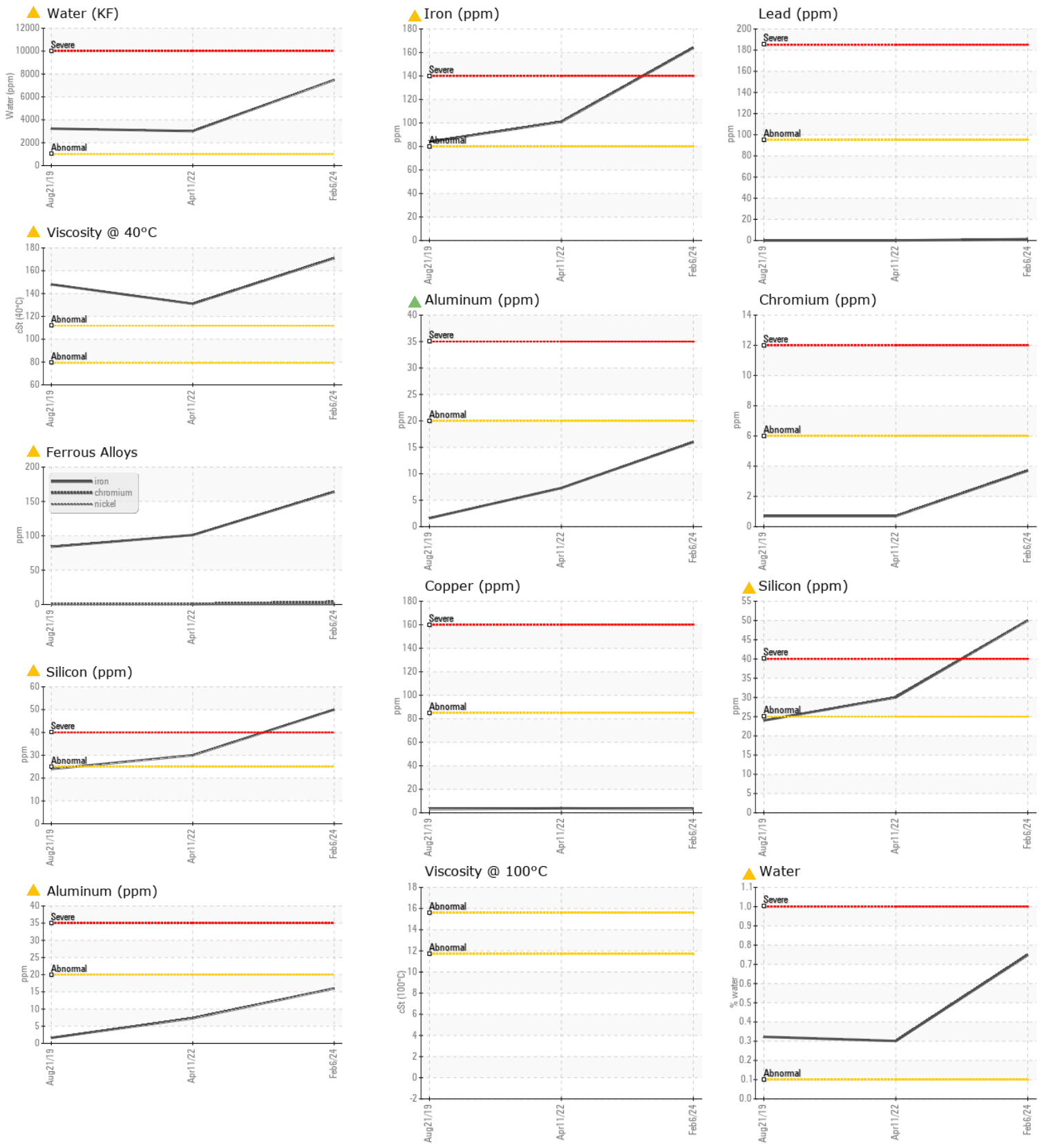
The AN level is acceptable for this fluid.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DC0021927	DC0018402	DC0000655
Sample Date		Client Info		06 Feb 2024	11 Apr 2022	21 Aug 2019
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	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

Iron	ppm	ASTM D5185m	>80	▲ 164	▲ 101	▲ 84
Chromium	ppm	ASTM D5185m	>6	4	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	<1
Titanium	ppm	ASTM D5185m	>2	2	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	▲ 16	▲ 7	2
Lead	ppm	ASTM D5185m	>95	1	0	0
Copper	ppm	ASTM D5185m	>85	3	4	3
Tin	ppm	ASTM D5185m	>9	<1	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	▲ MODER	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

Silicon	ppm	ASTM D5185m	>25	▲ 50	▲ 30	24
Potassium	ppm	ASTM D5185m	>20	6	2	0
Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Water	%	ASTM D6304	>0.1	▲ 0.748	▲ 0.301	▲ 0.323
ppm Water	ppm	ASTM D6304	>1000	▲ 7480	▲ 3010	▲ 3230
Glycol		WC Method		NEG	NEG	NEG
Silt	scalar	*Visual	NONE	▲ MODER	NONE	NONE
Debris	scalar	*Visual	NONE	▲ MODER	▲ MODER	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	▲ HAZY	▲ HAZY	▲ MILKY
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	0.2%	0.2%	0.2%

Sodium	ppm	ASTM D5185m		2	0	<1
Boron	ppm	ASTM D5185m		0	<1	2
Barium	ppm	ASTM D5185m		0	0	<1
Molybdenum	ppm	ASTM D5185m		0	<1	2
Manganese	ppm	ASTM D5185m		2	1	1
Magnesium	ppm	ASTM D5185m		0	3	1
Calcium	ppm	ASTM D5185m		41	20	30
Phosphorus	ppm	ASTM D5185m		40	114	136
Zinc	ppm	ASTM D5185m		26	29	34
Sulfur	ppm	ASTM D5185m		13940	13591	10747
Acid Number (AN)	mg KOH/g	ASTM D8045		0.13	0.04	---
Visc @ 40°C	cSt	ASTM D445		▲ 171	131	148



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DC0021927 **Received** : 09 Feb 2024
Lab Number : 06084931 **Tested** : 12 Feb 2024
Unique Number : 10872376 **Diagnosed** : 12 Feb 2024 - Don Baldrige
Test Package : MOB 2 (Additional Tests: KF, KV40)

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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)