



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area
AMR-St Louis
Machine Id
574178 SENNEBOGEN 840M 840.0.1021
Component
Hydraulic System
Fluid
SHELL AW HYDRAULIC S2 46 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DJJ0020861	DJJ0020640	DJJ0019342
Sample Date		Client Info		05 Feb 2024	01 Sep 2023	21 Apr 2023
Machine Age	hrs	Client Info		17789	17174	16700
Oil Age	hrs	Client Info		500	1000	0
Filter Age	hrs	Client Info		500	0	0
Oil Changed		Client Info		Not Changd	N/A	N/A
Filter Changed		Client Info		Not Changd	Changed	N/A
Sample Status				ABNORMAL	NORMAL	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	7	8	8
Chromium	ppm	ASTM D5185m	>10	4	3	2
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	1	2	2
Tin	ppm	ASTM D5185m	>10	0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

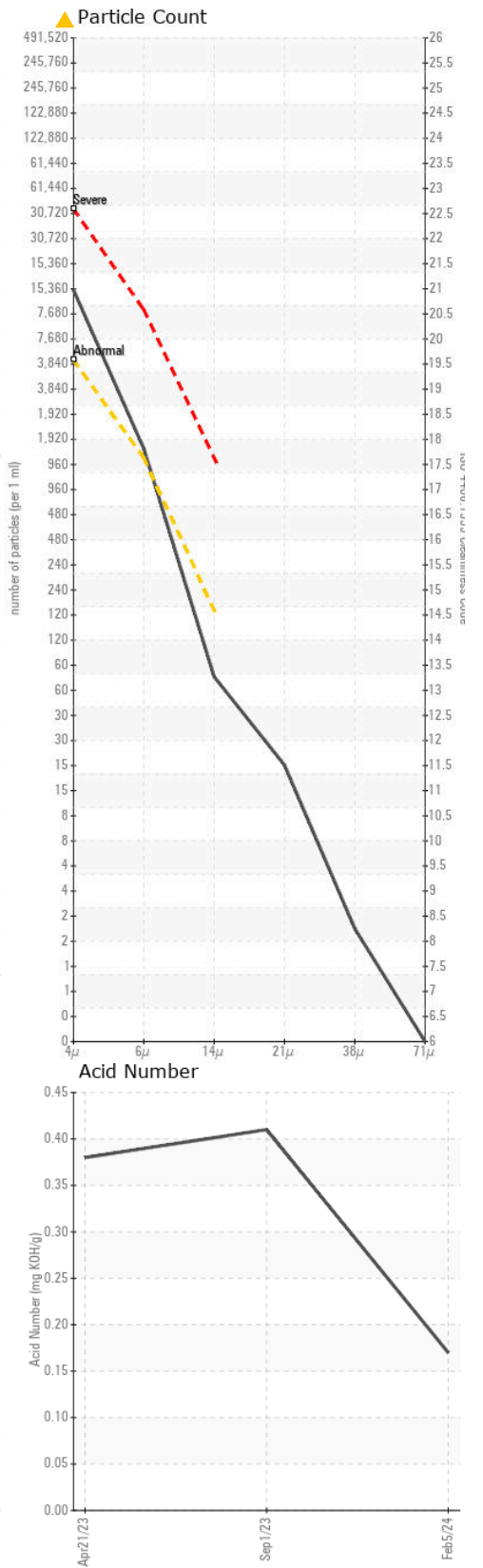
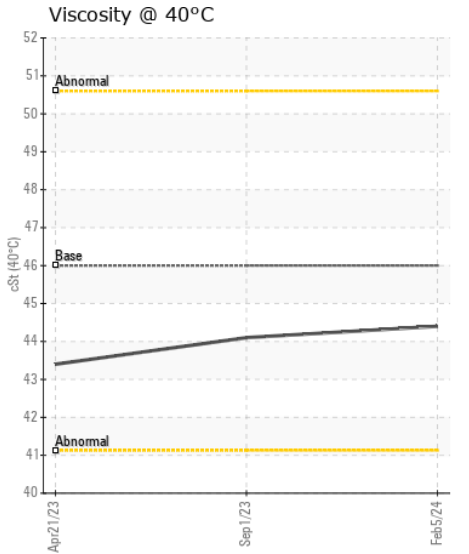
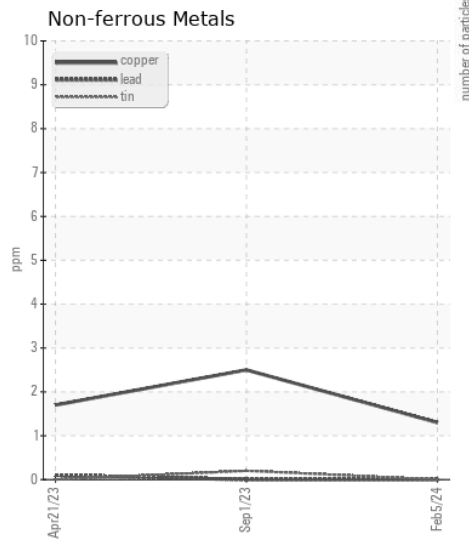
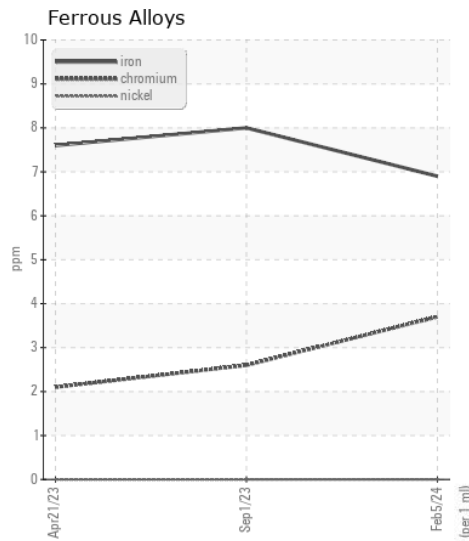
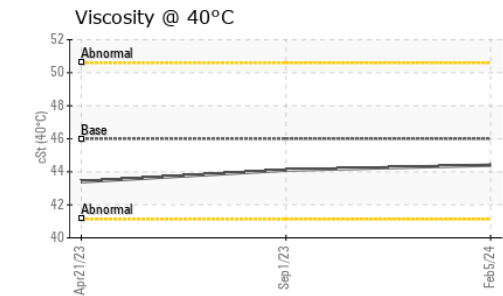
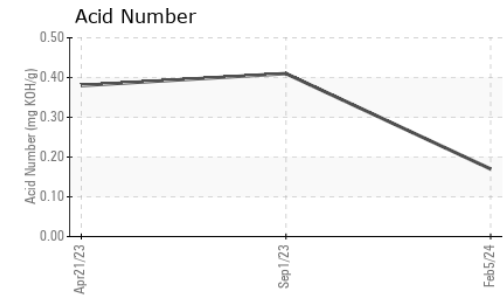
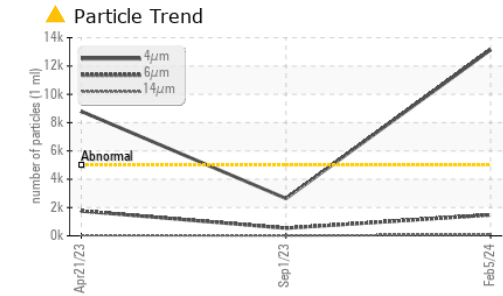
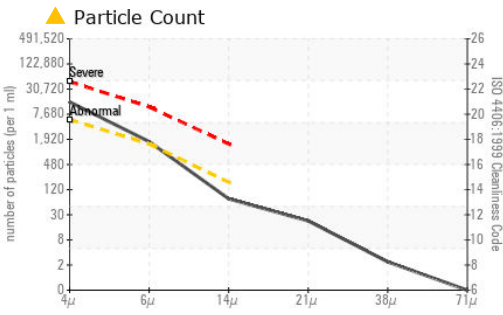
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	<1	2	1
Potassium	ppm	ASTM D5185m	>20	0	0	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	▲ 13145	2639	● 8800
Particles >6µm		ASTM D7647	>1300	● 1479	544	● 1755
Particles >14µm		ASTM D7647	>160	64	23	41
Particles >21µm		ASTM D7647	>40	19	5	8
Particles >38µm		ASTM D7647	>10	2	0	1
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 21/18/13	19/16/12	● 20/18/13
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	5	<1
Boron	ppm	ASTM D5185m		7	4	4
Barium	ppm	ASTM D5185m		0	20	0
Molybdenum	ppm	ASTM D5185m		3	5	6
Manganese	ppm	ASTM D5185m		0	<1	0
Magnesium	ppm	ASTM D5185m		58	54	56
Calcium	ppm	ASTM D5185m		72	86	101
Phosphorus	ppm	ASTM D5185m		303	323	303
Zinc	ppm	ASTM D5185m		355	360	389
Sulfur	ppm	ASTM D5185m		1276	989	1045
Acid Number (AN)	mg KOH/g	ASTM D8045		0.170	0.41	0.38
Visc @ 40°C	cSt	ASTM D445	46	44.4	44.1	43.4



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0020861 **Received** : 29 Feb 2024
Lab Number : 06105566 **Tested** : 06 Mar 2024
Unique Number : 10903796 **Diagnosed** : 06 Mar 2024 - Jonathan Hester
Test Package : MOBCE

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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)