



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
AMR-St Louis
 Machine Id
574177 SENNEBOGEN 840M 804.0.1020
 Component
Rear Differential
 Fluid
SHELL SPIRAX HD 80W90 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DJJ0020660	DJJ0019249	DJJ0012426
Sample Date		Client Info		11 Mar 2024	12 Oct 2023	21 Feb 2023
Machine Age	hrs	Client Info		20641	20128	19063
Oil Age	hrs	Client Info		500	2000	1000
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Chngd	Changed	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	7	2	27
Chromium	ppm	ASTM D5185m	>10	<1	0	0
Nickel	ppm	ASTM D5185m	>10	0	<1	<1
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	2	<1	1
Lead	ppm	ASTM D5185m	>25	0	<1	<1
Copper	ppm	ASTM D5185m	>100	3	<1	1
Tin	ppm	ASTM D5185m	>10	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

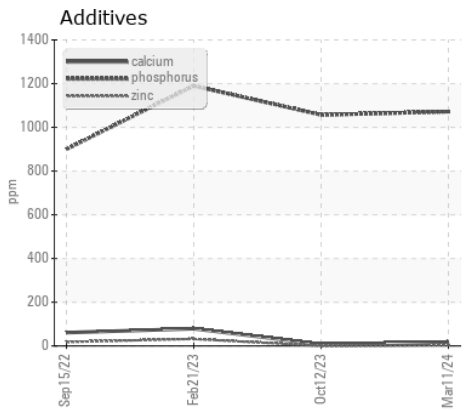
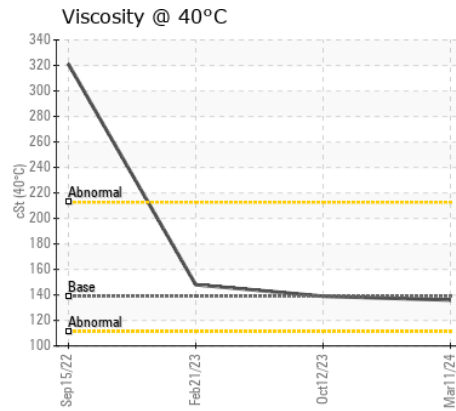
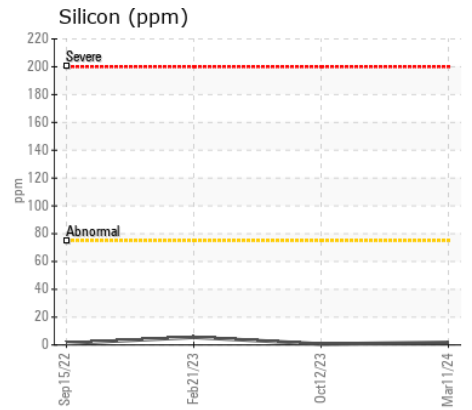
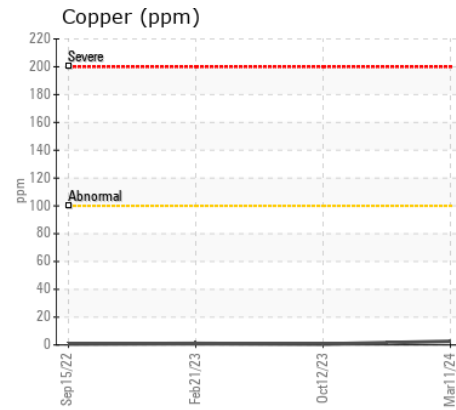
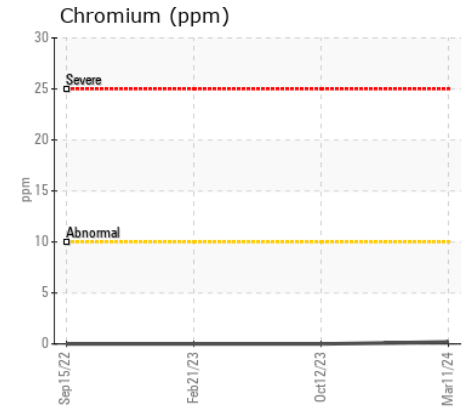
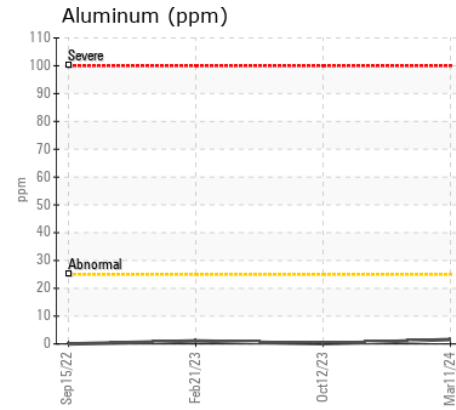
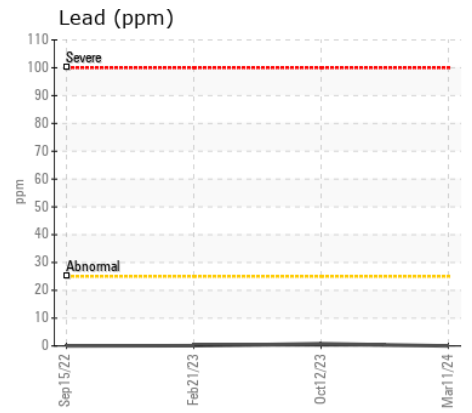
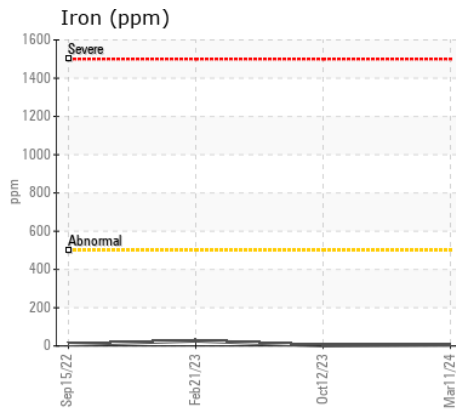
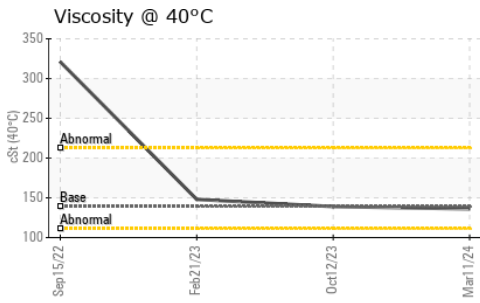
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	2	<1	6
Potassium	ppm	ASTM D5185m	>20	2	1	<1
Water		WC Method	>.2	NEG	NEG	NEG
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	>.2	NEG	NEG	NEG

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<1	4	<1
Boron	ppm	ASTM D5185m	234	283	257	311
Barium	ppm	ASTM D5185m	0.1	0	0	2
Molybdenum	ppm	ASTM D5185m	0	<1	0	<1
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	0.0	<1	15	3
Calcium	ppm	ASTM D5185m	0.4	18	7	79
Phosphorus	ppm	ASTM D5185m	864	1072	1057	1190
Zinc	ppm	ASTM D5185m	0.6	4	0	32
Sulfur	ppm	ASTM D5185m	16893	22226	19953	20525
Visc @ 40°C	cSt	ASTM D445	139	136	139	148



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0020660
Lab Number : 06121787
Unique Number : 10935938
Test Package : MOBCE

Received : 18 Mar 2024
Tested : 19 Mar 2024
Diagnosed : 19 Mar 2024 - Wes Davis

ADVANTAGE METALS RECYCLING - ST LOUIS
 5 N MARKET
 ST LOUIS, MO
 US 63102

Contact: JEANETTE VAGO
 jeanette.vago@advantagerecycling.com

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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