



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area  
**AMR-St Louis**  
 Machine Id  
**574178 SENNEBOGEN 840M 84001021**  
 Component  
**Front Left Final Drive**  
 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		<b>DJJ0020858</b>	DJJ0020684	DJJ0019314
Sample Date		Client Info		<b>05 Feb 2024</b>	01 Sep 2023	21 Apr 2023
Machine Age	hrs	Client Info		<b>17789</b>	17174	16700
Oil Age	hrs	Client Info		<b>500</b>	1000	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Chngd</b>	Changed	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	ABNORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	<b>2</b>	107	168
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	<1	1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>0</b>	<1	<1
Lead	ppm	ASTM D5185m	>25	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>50	<b>&lt;1</b>	3	3
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	MODER
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

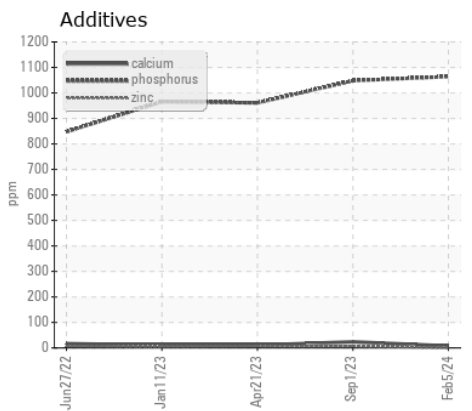
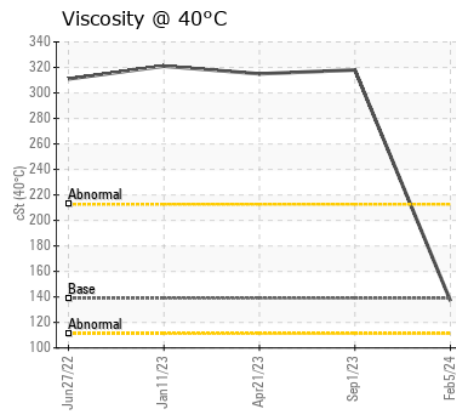
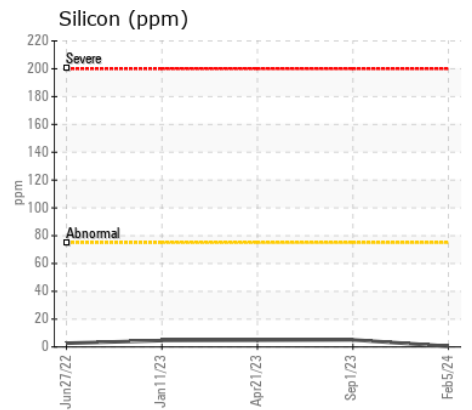
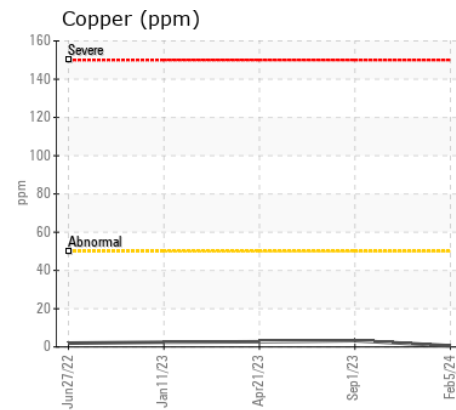
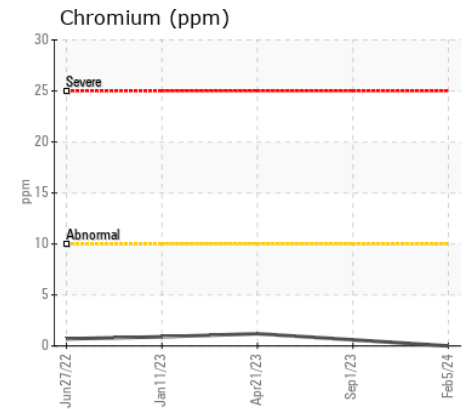
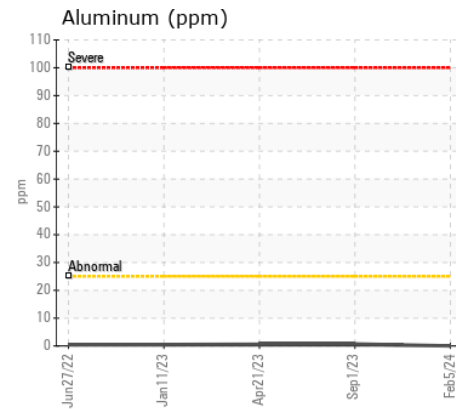
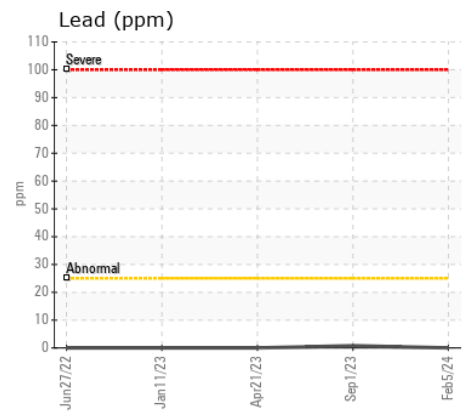
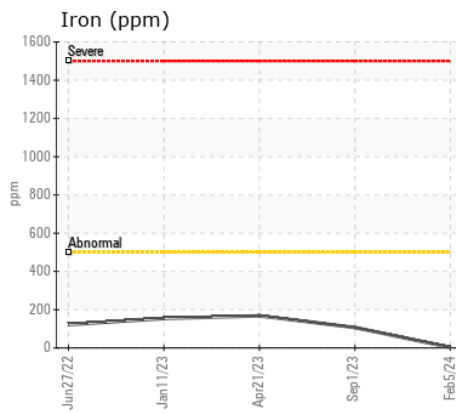
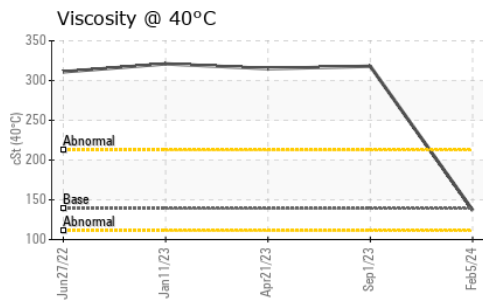
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	<b>&lt;1</b>	5	5
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	2	0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	▲ HEAVY	NONE
Debris	scalar	*Visual	NONE	<b>LIGHT</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		<b>1</b>	3	1
Boron	ppm	ASTM D5185m	234	<b>254</b>	249	288
Barium	ppm	ASTM D5185m	0.1	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	2	2
Magnesium	ppm	ASTM D5185m	0.0	<b>&lt;1</b>	15	<1
Calcium	ppm	ASTM D5185m	0.4	<b>8</b>	24	11
Phosphorus	ppm	ASTM D5185m	864	<b>1064</b>	1048	961
Zinc	ppm	ASTM D5185m	0.6	<b>0</b>	7	7
Sulfur	ppm	ASTM D5185m	16893	<b>21375</b>	24051	26925
Visc @ 40°C	cSt	ASTM D445	139	<b>137</b>	318	315



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : DJJ0020858  
**Lab Number** : 06105555  
**Unique Number** : 10903785  
**Test Package** : MOBCE

**Received** : 29 Feb 2024  
**Tested** : 02 Mar 2024  
**Diagnosed** : 02 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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F: