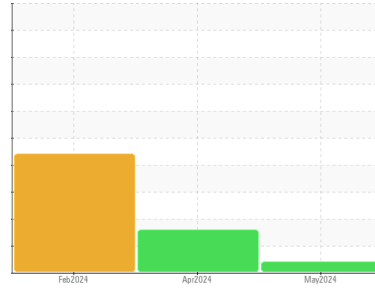


OIL ANALYSIS REPORT

Sample Rating Trend



VIS DEBRIS



Machine Id
SENNEBOGEN 835 MH-87
 Component
Hydraulic System
 Fluid
AW HYDRAULIC OIL ISO 46 (--- GAL)

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear

All component wear rates are normal.

Contamination

Moderate concentration of visible dirt/debris present in the oil.

Fluid Condition

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

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			PCA0124691	PCA0120881	PCA0113825
Sample Date	Client Info			17 May 2024	11 Apr 2024	12 Feb 2024
Machine Age	hrs	Client Info		4256	3964	3476
Oil Age	hrs	Client Info		292	0	250
Oil Changed	Client Info			Changed	Changed	N/A
Sample Status				ABNORMAL	ABNORMAL	SEVERE

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.1	NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	<1	0	2
Chromium	ppm	ASTM D5185m	>10	1	<1	<1
Nickel	ppm	ASTM D5185m	>10	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m		<1	<1	0
Aluminum	ppm	ASTM D5185m	>10	0	2	0
Lead	ppm	ASTM D5185m	>10	1	1	<1
Copper	ppm	ASTM D5185m	>75	<1	<1	1
Tin	ppm	ASTM D5185m	>10	0	1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
Cadmium	ppm	ASTM D5185m		<1	<1	0

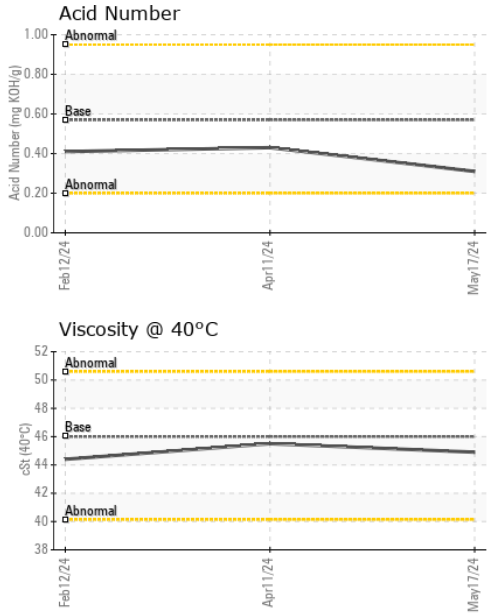
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	5	0	0	0
Barium	ppm	ASTM D5185m	5	0	<1	0
Molybdenum	ppm	ASTM D5185m	5	0	1	0
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	25	0	<1	2
Calcium	ppm	ASTM D5185m	200	71	55	103
Phosphorus	ppm	ASTM D5185m	300	341	327	316
Zinc	ppm	ASTM D5185m	370	459	422	438
Sulfur	ppm	ASTM D5185m	2500	952	860	880

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	<1	2	<1
Sodium	ppm	ASTM D5185m		1	0	2
Potassium	ppm	ASTM D5185m	>20	0	1	<1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	---	▲ 33284	▲ 52029	
Particles >6µm	ASTM D7647	>1300	---	▲ 5121	▲ 13192	
Particles >14µm	ASTM D7647	>160	---	● 166	▲ 745	
Particles >21µm	ASTM D7647	>40	---	51	▲ 163	
Particles >38µm	ASTM D7647	>10	---	4	3	
Particles >71µm	ASTM D7647	>3	---	0	0	
Oil Cleanliness	ISO 4406 (c)	>19/17/14	---	▲ 22/20/15	▲ 23/21/17	

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.31	0.43	0.41

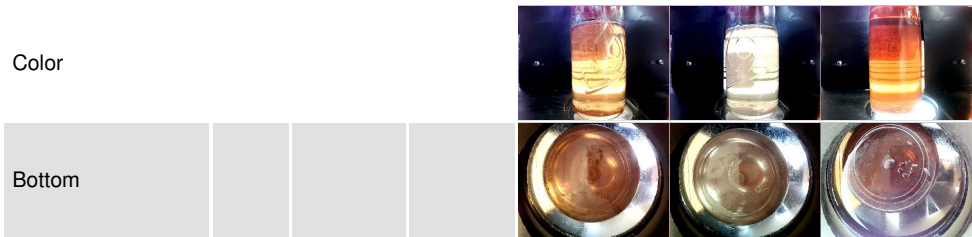
OIL ANALYSIS REPORT



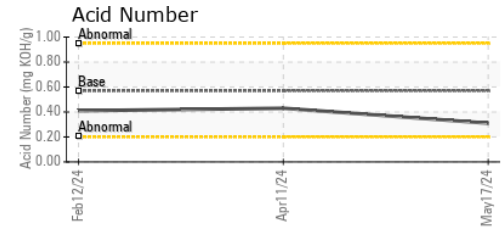
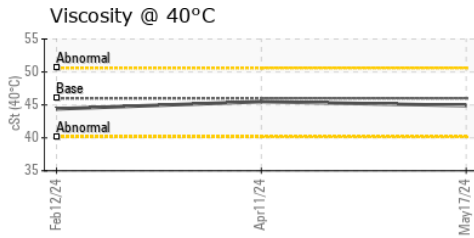
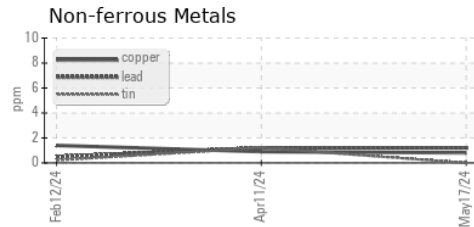
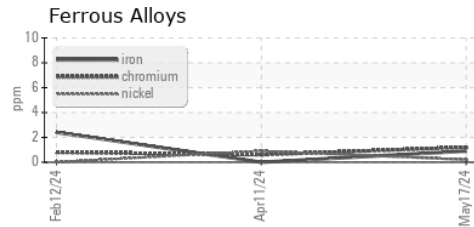
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ MODER	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	46	44.9	45.5	44.4

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0124691 **Received** : 21 May 2024
Lab Number : **06186672** **Tested** : 23 May 2024
Unique Number : 11043424 **Diagnosed** : 23 May 2024 - Don Baldrige
Test Package : MOB 2

SCRAP METAL SERVICES NON-FERROUS DIVISION
 3000 W 139TH ST
 BLUE ISLAND, IL
 US 60406
 Contact: SERGIO FERNANDEZ
 sfernandez@scrapmetalservices.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: