



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
SENNEBOGEN 830M 830.0.3509
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0224903	JR0199695	JR0147867
Sample Date		Client Info		25 Jun 2024	20 Feb 2024	08 Jan 2024
Machine Age	hrs	Client Info		1015	488	311
Oil Age	hrs	Client Info		0	0	311
Filter Age	hrs	Client Info		0	0	311
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	9	9	13
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	4	3
Lead	ppm	ASTM D5185m	>40	0	0	1
Copper	ppm	ASTM D5185m	>330	<1	2	11
Tin	ppm	ASTM D5185m	>15	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

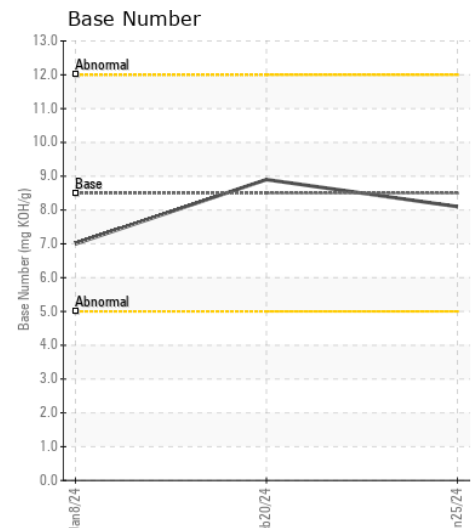
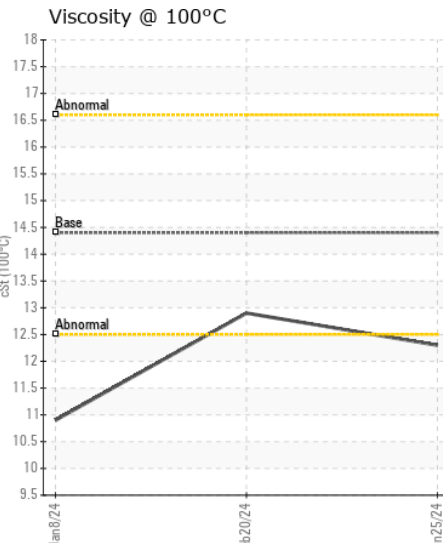
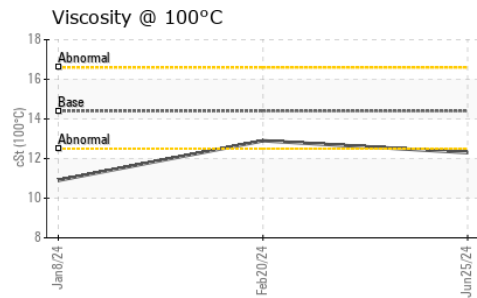
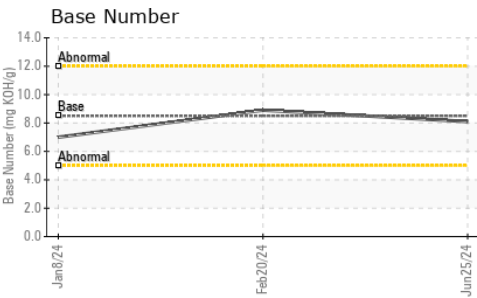
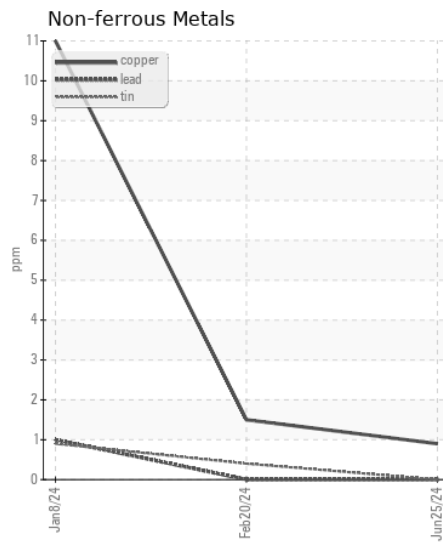
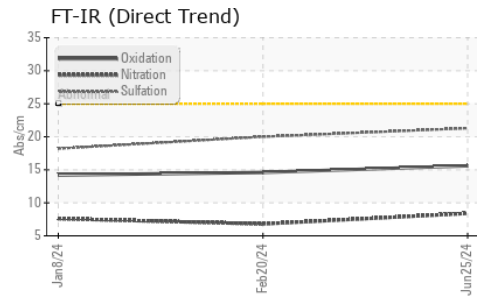
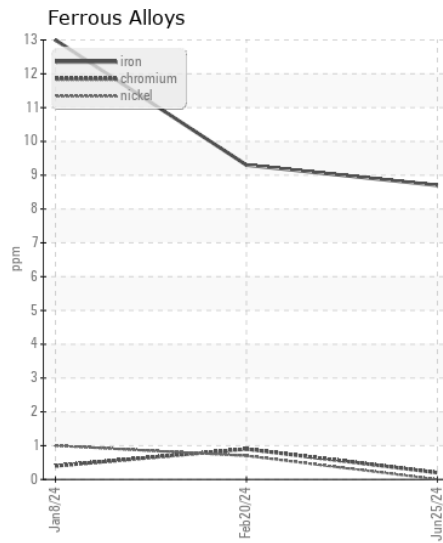
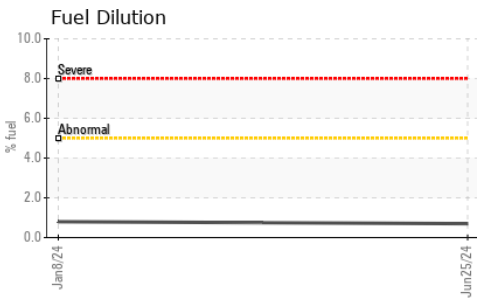
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	7	10	24
Potassium	ppm	ASTM D5185m	>20	2	3	0
Fuel	%	ASTM D3524	>5	0.7	<1.0	0.8
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	8.4	6.8	7.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.3	20.0	18.2
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	>0.2	NEG	NEG	NEG

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>158	<1	<1	<1
Boron	ppm	ASTM D5185m	250	219	248	85
Barium	ppm	ASTM D5185m	10	<1	2	0
Molybdenum	ppm	ASTM D5185m	100	237	233	74
Manganese	ppm	ASTM D5185m		0	1	3
Magnesium	ppm	ASTM D5185m	450	774	669	162
Calcium	ppm	ASTM D5185m	3000	1414	1220	1901
Phosphorus	ppm	ASTM D5185m	1150	830	766	960
Zinc	ppm	ASTM D5185m	1350	1122	954	1189
Sulfur	ppm	ASTM D5185m	4250	2965	2880	3659
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.6	14.6	14.2
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.1	8.9	7.0
Visc @ 100°C	cSt	ASTM D445	14.4	12.3	12.9	10.9



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0224903 **Received** : 26 Jun 2024
Lab Number : 06220973 **Tested** : 01 Jul 2024
Unique Number : 11099170 **Diagnosed** : 01 Jul 2024 - Wes Davis
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

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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)