**WEAR CONTAMINATION FLUID CONDITION**  **ABNORMAL ABNORMAL NORMAL** 

## [703489 IHFT]

## SENNEBOGEN 830R 2296

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.	Sample Number		Client Info		VCP454549	VCP431176	VCP39939
	Sample Date		Client Info		24 May 2024	05 Dec 2023	09 Feb 202
	Machine Age	hrs	Client Info		3753	2444	619
	Oil Age	hrs	Client Info		1000	1000	2000
	Filter Age	hrs	Client Info		0	0	0
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Not Changd	Not Changd	Not Chang
	Sample Status				ABNORMAL	SEVERE	ABNORMA
WEAR	Iron	ppm	ASTM D5185m	>500	380	▲ 3644	<u></u> 1384
The copper level has decreased, but is still abnormal. All other component wear rates are normal.	Chromium	ppm	ASTM D5185m		3	<b>▲</b> 28	<u>1001</u>
	Nickel	ppm	ASTM D5185m		<1	3	<1
	Titanium	ppm	ASTM D5185m	7.0	2	15	4
	Silver	ppm	ASTM D5185m		<1	0	0
	Aluminum	ppm	ASTM D5185m	>25	<u> </u>	<b>1</b> 96	48
	Lead	ppm	ASTM D5185m	>25	6	<b>△</b> 35	10
	Copper	ppm	ASTM D5185m	>50	<u></u> 45	<b>1</b> 93	<b>△</b> 63
	Tin	ppm	ASTM D5185m	>10	2	<u> </u>	1
	Vanadium	ppm	ASTM D5185m		<1	1	<1
	White Metal	scalar	*Visual	NONE	NONE	NONE	MODER
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>75	<u>^</u> 89	<b>A</b> 877	<u>^</u> 206
Elemental levels of silicon (Si) and aluminum (Al) indicate aluminasilicate (coarse dirt) ingress. There is a light concentration of water present in the oil.	Potassium	ppm	ASTM D5185m		5	44	11
	Water	%	ASTM D6304	>0.2	<u></u> 0.318	▲ 2.24	<b>△</b> 0.289
	ppm Water	ppm	ASTM D6304	>2000	<u></u> 4 3180	<b>22400</b>	<u>^</u> 2890
	Silt	scalar	*Visual	NONE	MODER	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
	Appearance	scalar	*Visual	NORML	NORML	NORML	NORMI
	Odor	scalar	*Visual	NORML	NORML	NORML	NORM
	<b>Emulsified Water</b>	scalar	*Visual	>0.2	0.2%	▲ 0.2%	0.2%
							6
FLUID CONDITION	Sodium	maa	ASTM D5185m		3	27	0
	Sodium	ppm	ASTM D5185m	379	3 37	27 59	
	Sodium Boron Barium	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		3 37 0	27 59 2	131
	Boron	ppm	ASTM D5185m	0.0	37	59	131
	Boron Barium	ppm	ASTM D5185m ASTM D5185m	0.0	37 0	59 2	131
	Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0.0 0.8 0.0	37 0 <1	59 2 2	131 <1 <1
	Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0.0 0.8 0.0 31	37 0 <1 6	59 2 2 45	131 <1 <1 14
FLUID CONDITION  The condition of the oil is acceptable for the time in service.	Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0.0 0.8 0.0 31 38	37 0 <1 6 36	59 2 2 45 316	131 <1 <1 14 63
FLUID CONDITION  The condition of the oil is acceptable for the time in service.	Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0.0 0.8 0.0 31 38 1077	37 0 <1 6 36 230	59 2 2 45 316 1392	131 <1 <1 14 63 313

Sulfur

Visc @ 40°C

12014

208

18376

149

ASTM D5185m 23526

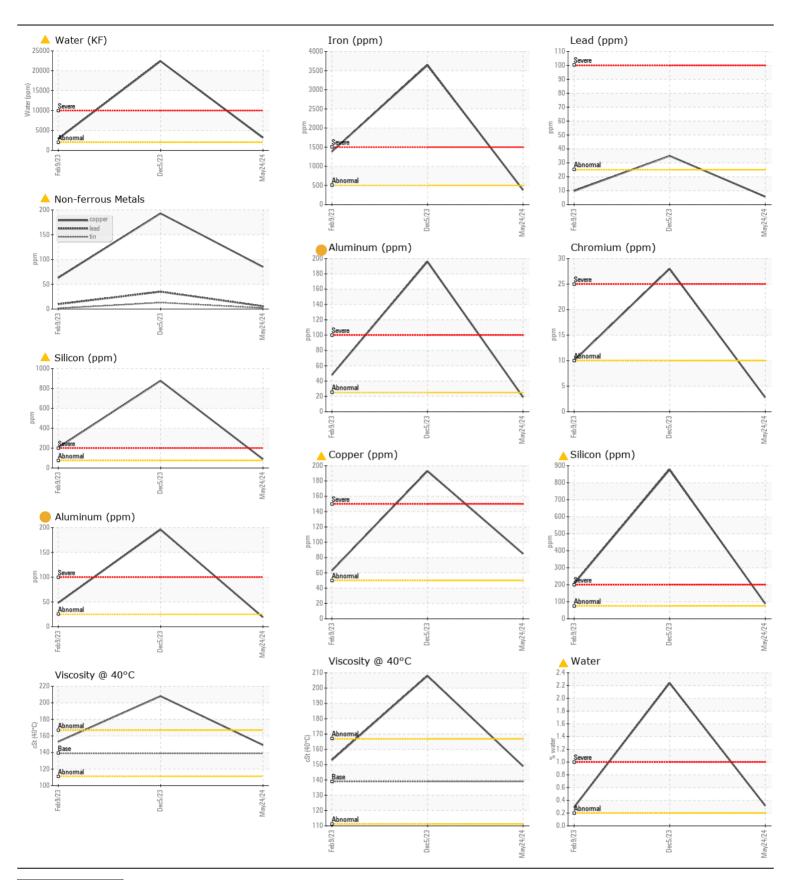
ASTM D445 139

ppm

cSt

153

15535





Laboratory Sample No. Lab Number Unique Number : 11049299

: VCP454549 : 06192547

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received **Tested** 

Diagnosed

: 30 May 2024 : 30 May 2024 - Don Baldridge

: 28 May 2024

**ALTA EQUIPMENT COMPANY - METRO WEST** 56195 PONTIAC TRAIL

NEW HUDSON, MI US 48165

Contact: PAUL ELZERMAN paul.elzerman@altaequipment.com

T: (248)356-5200 F: (248)356-2029

Test Package : MOB 1 (Additional Tests: KF) Certificate L2367 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)