



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	NORMAL

Area
TPR-Conroe
 Machine Id
231147 SENNEBOGEN 830M 830.0.2016
 Component
Diesel Engine
 Fluid
SHELL ROTELLA T 15W40 (10 GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DJJ0013652	DJJ0013665	DJJ0013690
Sample Date		Client Info		11 Apr 2024	30 Jan 2024	29 Nov 2023
Machine Age	hrs	Client Info		1350	11305	11047
Oil Age	hrs	Client Info		1350	258	11047
Filter Age	hrs	Client Info		1350	0	11047
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				MARGINAL	SEVERE	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	20	16	43
Chromium	ppm	ASTM D5185m	>20	1	0	1
Nickel	ppm	ASTM D5185m	>2	1	0	0
Titanium	ppm	ASTM D5185m	>2	<1	0	<1
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	2	2	2
Lead	ppm	ASTM D5185m	>40	1	0	0
Copper	ppm	ASTM D5185m	>330	2	4	32
Tin	ppm	ASTM D5185m	>15	2	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

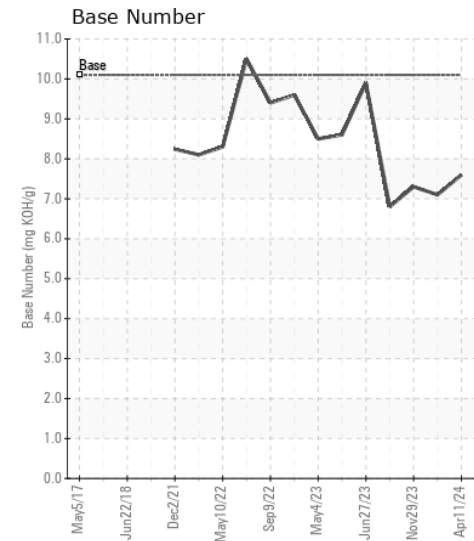
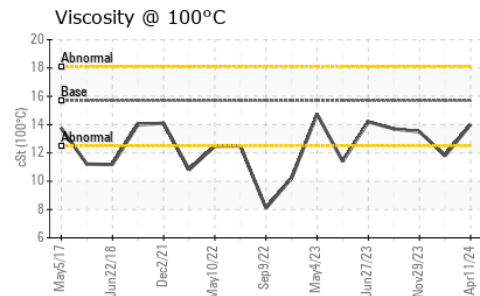
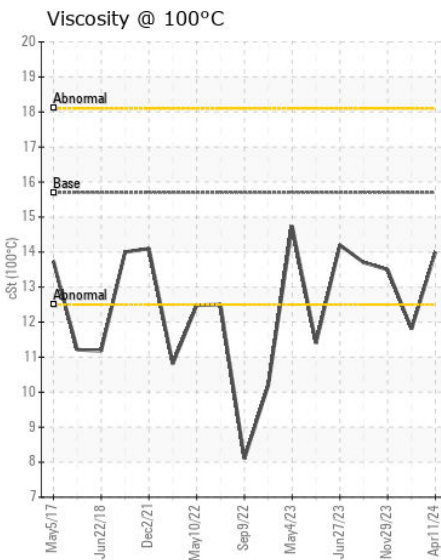
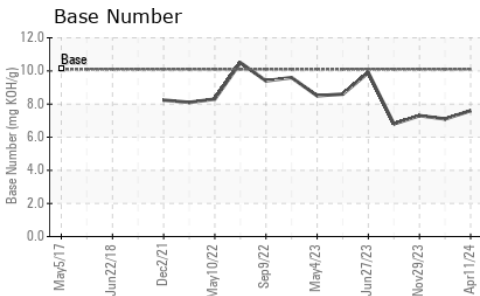
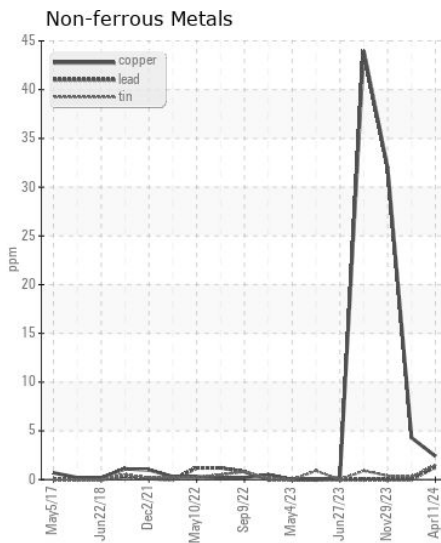
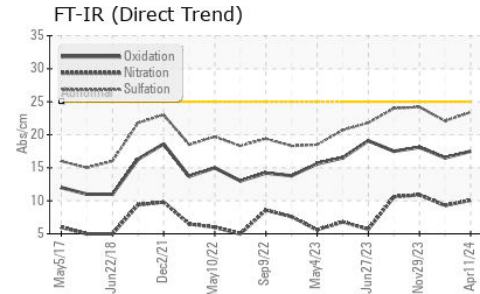
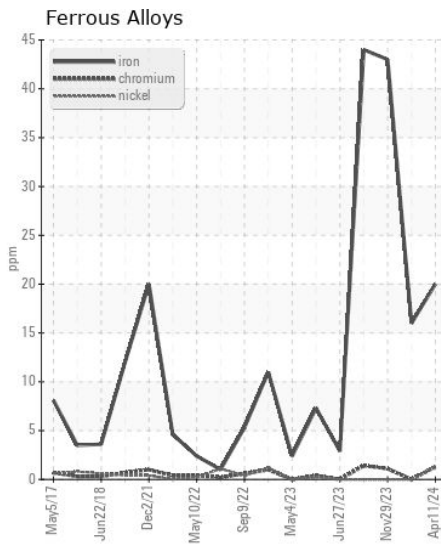
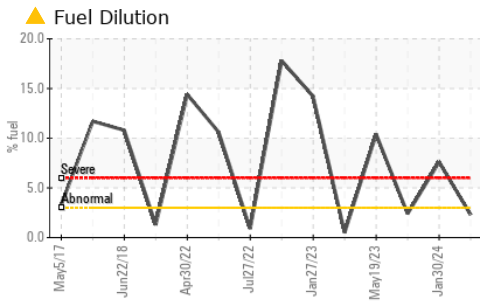
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185m	>25	11	9	8
Potassium	ppm	ASTM D5185m	>20	10	7	11
Fuel	%	ASTM D3524	>3.0	▲ 2.3	▲ 7.6	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>6	1.6	1.3	2.1
Nitration	Abs/cm	*ASTM D7624	>20	10.1	9.3	10.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.4	22.1	24.2
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		2	2	0
Boron	ppm	ASTM D5185m	316	111	110	63
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	1.2	3	7	<1
Manganese	ppm	ASTM D5185m		1	0	<1
Magnesium	ppm	ASTM D5185m	24	38	38	12
Calcium	ppm	ASTM D5185m	2292	2123	1945	2116
Phosphorus	ppm	ASTM D5185m	1064	1054	937	914
Zinc	ppm	ASTM D5185m	1160	1152	1121	1105
Sulfur	ppm	ASTM D5185m	4996	3954	3316	3172
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.5	16.5	18.1
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	7.6	7.1	7.3
Visc @ 100°C	cSt	ASTM D445	15.7	14.0	▲ 11.8	13.5



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0013652 **Received** : 18 Apr 2024
Lab Number : 06152738 **Tested** : 22 Apr 2024
Unique Number : 10982816 **Diagnosed** : 22 Apr 2024 - Wes Davis
Test Package : CONST (Additional Tests: 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)