



Area
SANDY B
Machine Id
[SANDY B] 007 562531-7
Component
Port Genset
Fluid
SHELL ROTELLA T 15W40 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0068797	MW0068850	MW0061661
Sample Date		Client Info		03 May 2024	06 Apr 2024	02 Jan 2024
Machine Age	hrs	Client Info		24677	24403	23268
Oil Age	hrs	Client Info		376	485	285
Filter Age	hrs	Client Info		376	485	285
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				ATTENTION	ABNORMAL	SEVERE

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	3	<1	3
Chromium	ppm	ASTM D5185m	>4	<1	0	0
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>5	0	0	0
Aluminum	ppm	ASTM D5185m	>12	2	0	<1
Lead	ppm	ASTM D5185m	>17	<1	0	0
Copper	ppm	ASTM D5185m	>70	<1	0	<1
Tin	ppm	ASTM D5185m	>15	<1	0	0
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

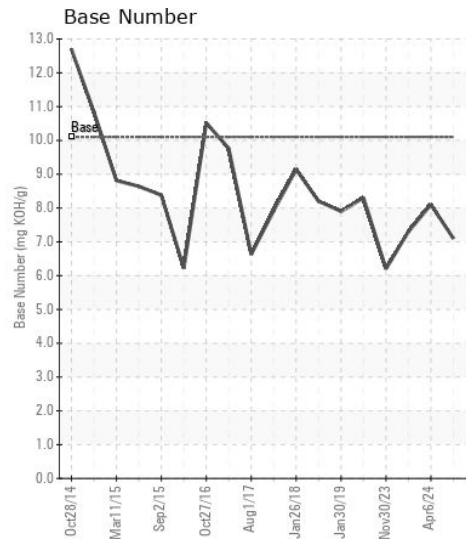
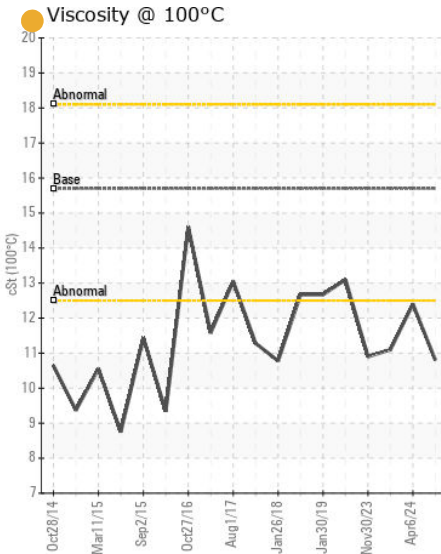
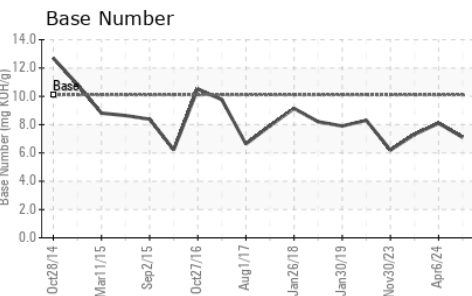
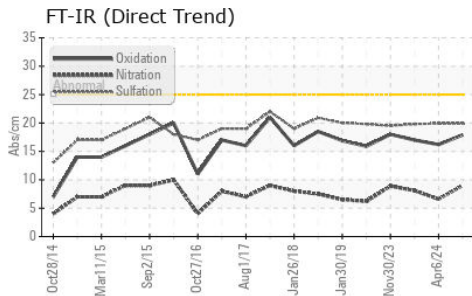
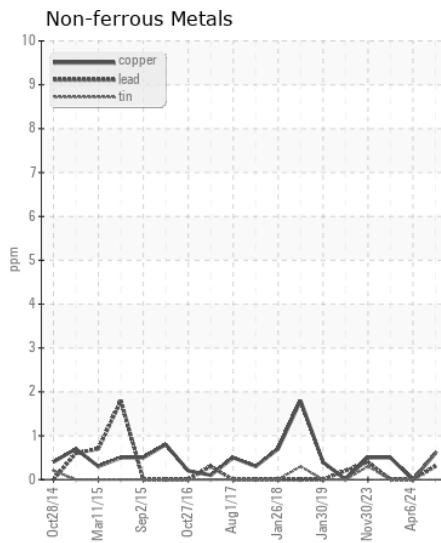
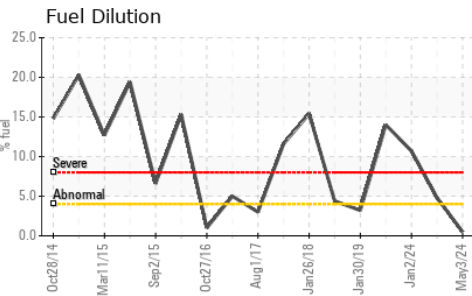
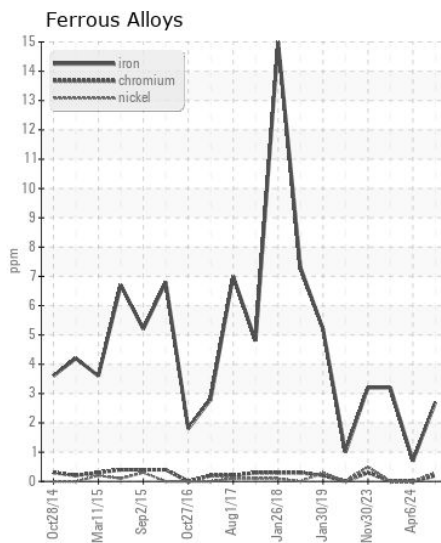
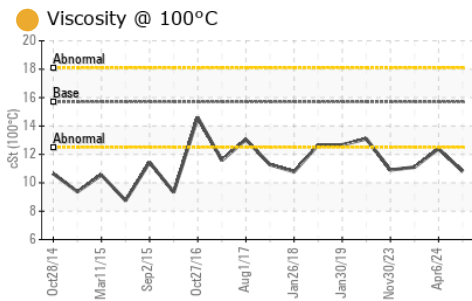
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	23	17	3
Potassium	ppm	ASTM D5185m	>20	8	5	6
Fuel	%	ASTM D3524	>4.0	0.5	▲ 4.8	▲ 10.7
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844		0.2	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	9.0	6.6	8.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.9	19.9	19.8
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	>0.1	NEG	NEG	NEG

FLUID CONDITION

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		0	<1	1
Boron	ppm	ASTM D5185m	316	149	190	148
Barium	ppm	ASTM D5185m	0.0	0	2	0
Molybdenum	ppm	ASTM D5185m	1.2	13	11	10
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m	24	62	57	70
Calcium	ppm	ASTM D5185m	2292	1840	2346	1953
Phosphorus	ppm	ASTM D5185m	1064	826	1024	888
Zinc	ppm	ASTM D5185m	1160	1015	1280	1069
Sulfur	ppm	ASTM D5185m	4996	3358	4249	3165
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.9	16.2	17.0
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	7.1	8.1	7.3
Visc @ 100°C	cSt	ASTM D445	15.7	● 10.8	▲ 12.4	▲ 11.1



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0068797 **Received** : 13 May 2024
Lab Number : 06178122 **Tested** : 21 May 2024
Unique Number : 11029448 **Diagnosed** : 21 May 2024 - Jonathan Hester
Test Package : MAR 2 (Additional Tests: PercentFuel)

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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)