



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 | | MW0065726 | MW0068797 | MW0068850 |
| Sample Date | | Client Info | | 01 Jun 2024 | 03 May 2024 | 06 Apr 2024 |
| Machine Age | hrs | Client Info | | 25028 | 24677 | 24403 |
| Oil Age | hrs | Client Info | | 367 | 376 | 485 |
| Filter Age | hrs | Client Info | | 367 | 376 | 485 |
| Oil Changed | | Client Info | | Not Changd | Not Changd | Not Changd |
| Filter Changed | | Client Info | | Not Changd | Not Changd | Not Changd |
| Sample Status | | | | ATTENTION | ATTENTION | ABNORMAL |

WEAR

All component wear rates are normal.

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

CONTAMINATION

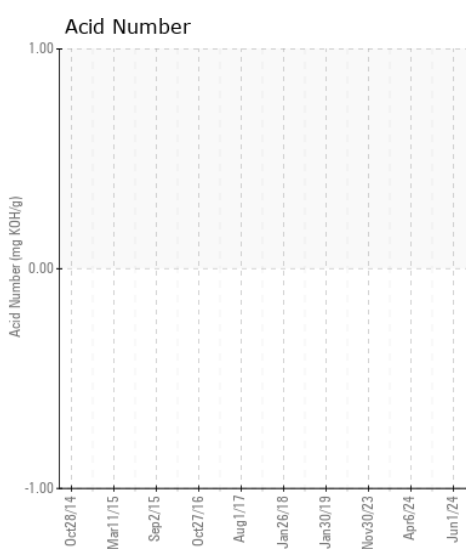
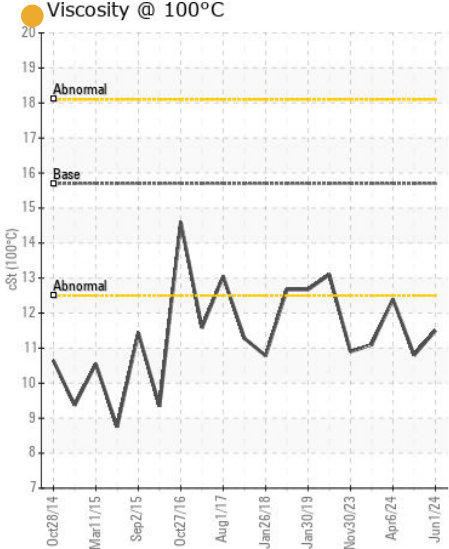
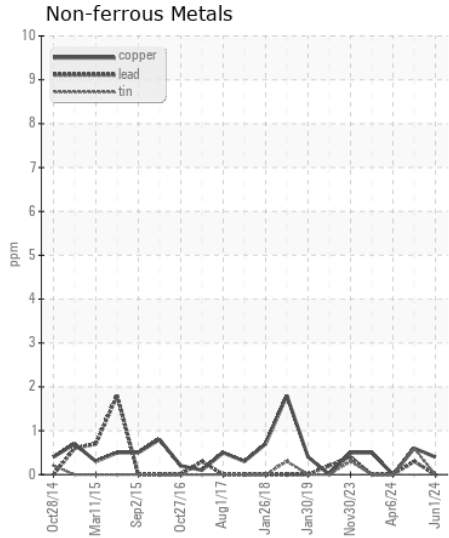
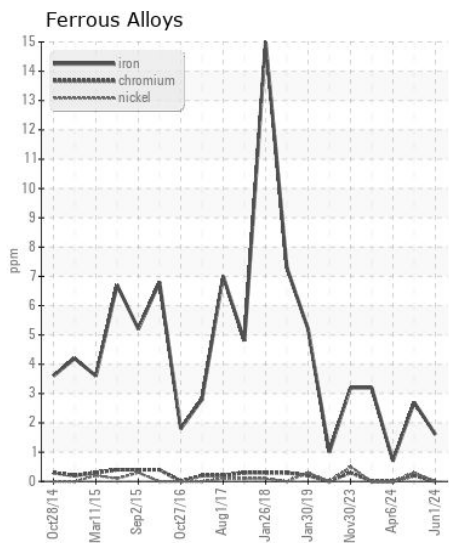
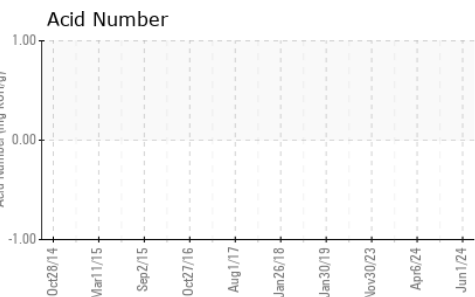
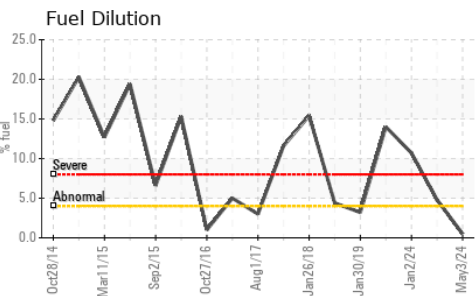
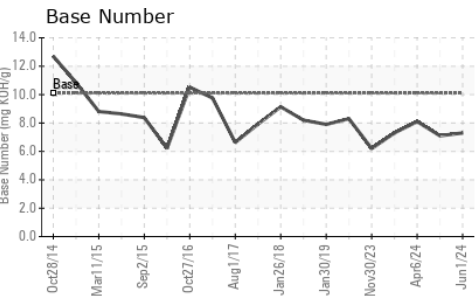
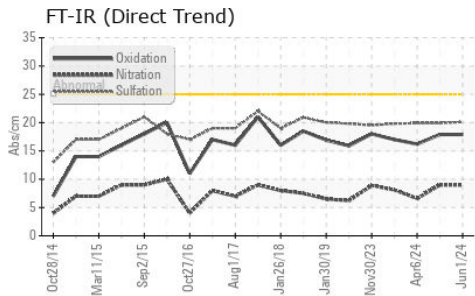
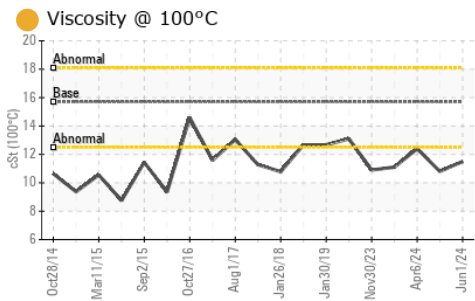
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|-------------|-------|----------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >25 | 8 | 23 | 17 |
| Potassium | ppm | ASTM D5185m | >20 | 8 | 8 | 5 |
| Fuel | % | ASTM D3524 | >4.0 | <1.0 | 0.5 | ▲ 4.8 |
| Water | | WC Method | >0.1 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| Soot % | % | *ASTM D7844 | | 0.2 | 0.2 | 0.1 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 9.0 | 9.0 | 6.6 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 20.1 | 19.9 | 19.9 |
| 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 | | 1 | 0 | <1 |
| Boron | ppm | ASTM D5185m | 316 | 127 | 149 | 190 |
| Barium | ppm | ASTM D5185m | 0.0 | 0 | 0 | 2 |
| Molybdenum | ppm | ASTM D5185m | 1.2 | 12 | 13 | 11 |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | 0 |
| Magnesium | ppm | ASTM D5185m | 24 | 67 | 62 | 57 |
| Calcium | ppm | ASTM D5185m | 2292 | 1985 | 1840 | 2346 |
| Phosphorus | ppm | ASTM D5185m | 1064 | 879 | 826 | 1024 |
| Zinc | ppm | ASTM D5185m | 1160 | 1088 | 1015 | 1280 |
| Sulfur | ppm | ASTM D5185m | 4996 | 3571 | 3358 | 4249 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 17.9 | 17.9 | 16.2 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 10.1 | 7.3 | 7.1 | 8.1 |
| Visc @ 100°C | cSt | ASTM D445 | 15.7 | ● 11.5 | ● 10.8 | ▲ 12.4 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0065726 **Received** : 25 Jun 2024
Lab Number : 06220479 **Tested** : 27 Jun 2024
Unique Number : 11098676 **Diagnosed** : 27 Jun 2024 - Don Baldrige
Test Package : MAR 2 (Additional Tests: FuelDilution, PercentFuel, TAN Man)

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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