



OIL ANALYSIS REPORT

| | |
|-----------------|---------------|
| WEAR | NORMAL |
| CONTAMINATION | NORMAL |
| FLUID CONDITION | NORMAL |

Machine Id
GENERAC NSTATE(FURNITURE LANDS)
 Component
Liquid Petroleum Gas
 Fluid
SHELL ROTELLA T 15W40 (4 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | WC0712748 | WC0647412 | WC0395618 |
| Sample Date | | Client Info | | 29 Jan 2024 | 17 Jan 2022 | 22 Nov 2019 |
| Machine Age | hrs | Client Info | | 552 | 520 | 485 |
| Oil Age | hrs | Client Info | | 0 | 0 | 0 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | Changed | Changed | Changed |
| Filter Changed | | Client Info | | Changed | Changed | Changed |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >120 | <1 | 2 | 2 |
| Chromium | ppm | ASTM D5185m | >10 | 0 | <1 | 0 |
| Nickel | ppm | ASTM D5185m | >5 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Silver | ppm | ASTM D5185m | >5 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >20 | 1 | 2 | 3 |
| Lead | ppm | ASTM D5185m | >40 | 0 | <1 | 2 |
| Copper | ppm | ASTM D5185m | >300 | 0 | 1 | <1 |
| Tin | ppm | ASTM D5185m | >10 | 0 | <1 | 0 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

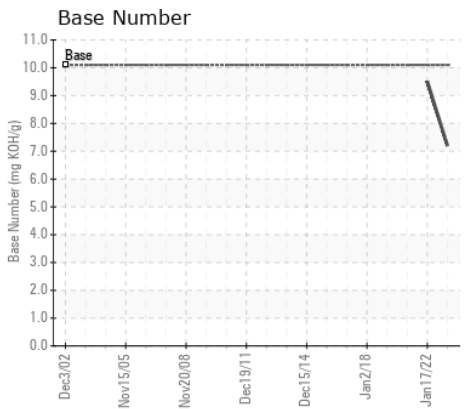
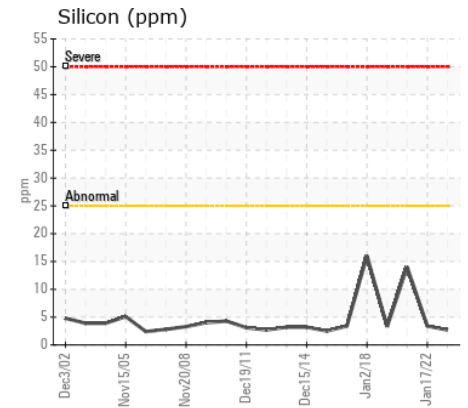
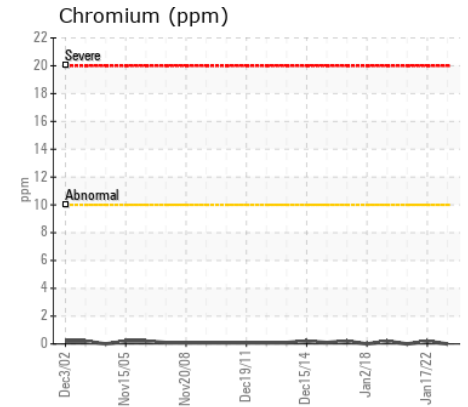
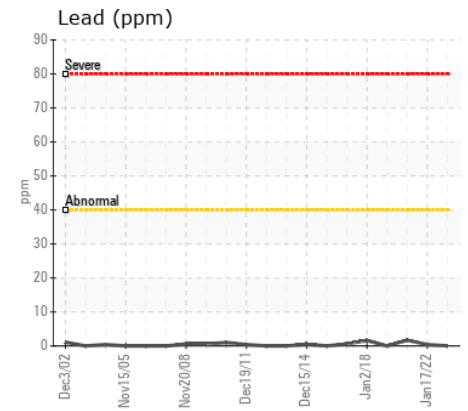
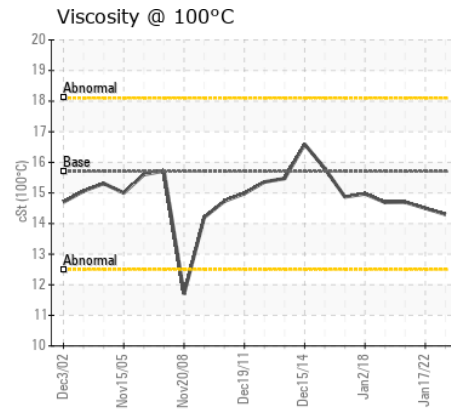
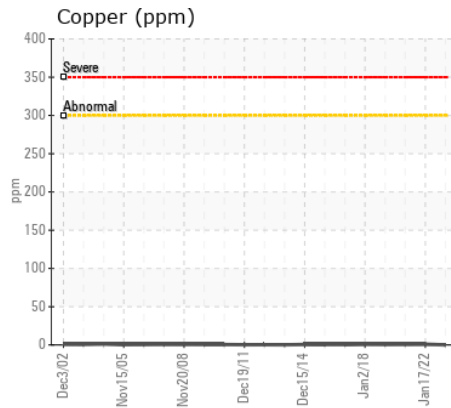
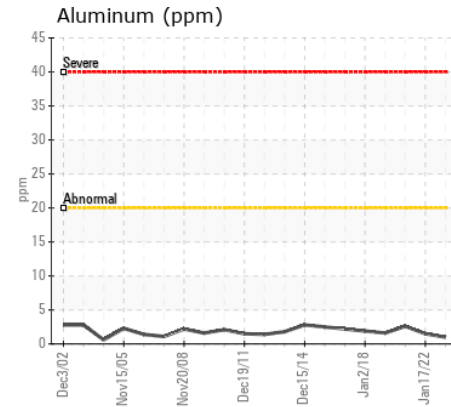
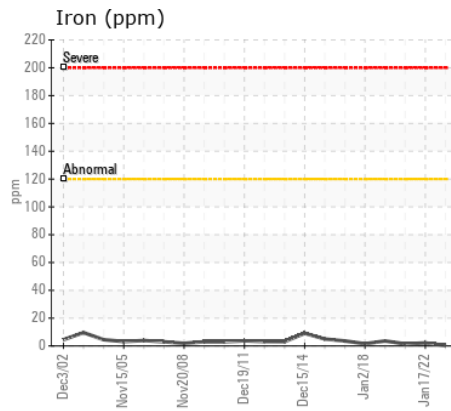
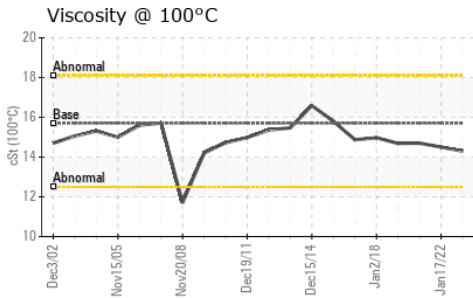
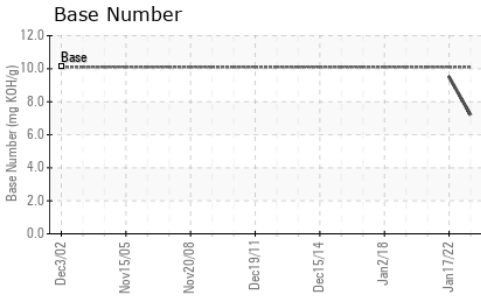
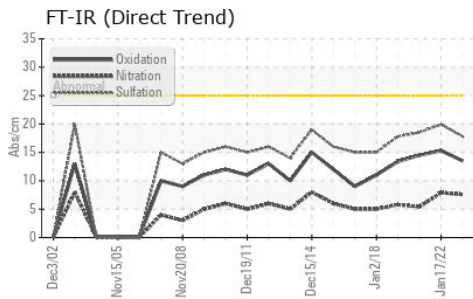
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|-------------|-------|--------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >25 | 3 | 3 | 14 |
| Potassium | ppm | ASTM D5185m | >20 | <1 | 1 | 0 |
| Water | | WC Method | >0.1 | NEG | NEG | NEG |
| Soot % | % | *ASTM D7844 | | 0 | 0.4 | 0 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 7.6 | 7.9 | 5.4 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 17.8 | 19.9 | 18.5 |
| 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 BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

| | | | | | | |
|------------------|----------|-------------|------|-------------|------|------|
| Sodium | ppm | ASTM D5185m | | 2 | 2 | 2 |
| Boron | ppm | ASTM D5185m | 316 | 87 | 103 | 7 |
| Barium | ppm | ASTM D5185m | 0.0 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 1.2 | 83 | 56 | 63 |
| Manganese | ppm | ASTM D5185m | | 0 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | 24 | 145 | 405 | 1077 |
| Calcium | ppm | ASTM D5185m | 2292 | 2410 | 1874 | 1196 |
| Phosphorus | ppm | ASTM D5185m | 1064 | 1136 | 1059 | 1084 |
| Zinc | ppm | ASTM D5185m | 1160 | 1305 | 1226 | 1248 |
| Sulfur | ppm | ASTM D5185m | 4996 | 4576 | 3184 | 2766 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 13.5 | 15.3 | 14.5 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 10.1 | 7.2 | 9.5 | --- |
| Visc @ 100°C | cSt | ASTM D445 | 15.7 | 14.3 | 14.5 | 14.7 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0712748
Lab Number : 06146950
Unique Number : 10977028
Test Package : MOB 1 (Additional Tests: TBN)

Received : 12 Apr 2024
Tested : 15 Apr 2024
Diagnosed : 15 Apr 2024 - Sean Felton

PIEDMONT GENERATOR
 7560 NC HWY 22 NORTH
 CLIMAX, NC
 US 27233

Contact: TERRY SHEPPARD
 terry1pg@bellsouth.net; bill3pg@bellsouth.net

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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