## OIL ANALYSSS REPORT

## WOODWARD 500-222 JC ONANG150851004-GENSET

Sample No: VPA057104<br>Oil Type: SHELL ROTELLA T 15W40

## SAMPLE IV:OMMATION

| Sample Number | VPA057104 |
| :--- | :--- |
| Sample Date | 11 Dec 2023 |
| Machine Hours | $\mathbf{9 0 5}$ |
| Oil Hours | $\mathbf{1 0 0}$ |
| Oil Changed | Changed |
| Sample Status | NORMAL |


| OLL CONDIIIION |  |  |
| :--- | :--- | :--- |
| Visc @ $100^{\circ} \mathrm{C}$ | cSt | $\square \mathbf{1 3 . 1}$ |
| Base Number (BN) | $\mathrm{mg} \mathrm{KOH} / \mathrm{g}$ | $\square \mathbf{8 . 5}$ |
| Oxidation (PA) | $\%$ | $\mathbf{6 1}$ |


| CONITAMNATIDN |  |  |
| :--- | :--- | :---: |
| Water | $\%$ | NEG |
| Soot $\%$ | $\%$ | $\square \mathbf{0 . 1}$ |
| Nitration (PA) | $\%$ | $\mathbf{4 9}$ |
| Sulfation (PA) | $\%$ | $\mathbf{5 4}$ |
| Glycol | $\%$ | NEG |
| Fuel | $\%$ | $<\mathbf{1 . 0}$ |
| Silicon | ppm | $\square \mathbf{7}$ |
| Sodium | ppm | $\square \mathbf{1}$ |
| Potassium | ppm | $\square \mathbf{4}$ |

## WEAR METALS

| Iron | ppm | $\square 3$ | --- | --- | --- |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Copper | ppm | $\square 1$ | --- | --- | --- |
| Lead | ppm | $\square 0$ | --- | --- | --- |
| Tin | ppm | $\square<1$ | --- | --- | --- |
| Aluminum | ppm | $\square<1$ | --- | --- | --- |
| Chromium | ppm | $\square 0$ | --- | --- | --- |
| Molybdenum | ppm | $\square 11$ | --- | --- | --- |
| Nickel | ppm | $\square 0$ | --- | --- | --- |
| Titanium | ppm | <1 | --- | --- | --- |
| Silver | ppm | $\square 0$ | --- | --- | --- |
| Manganese | ppm | $\square<1$ | --- | --- | --- |
| Vanadium | ppm | <1 | --- | --- | --- |
| ADOTITES |  |  |  |  |  |
| Calcium | ppm | $\square 1875$ | --- | --- | --- |
| Magnesium | ppm | 171 | --- | --- | --- |
| Zinc | ppm | $\square 1118$ | --- | --- | --- |
| Phosphorus | ppm | $\square 938$ | --- | --- | --- |
| Barium | ppm | $\square 0$ | --- | --- | --- |
| Boron | ppm | $\square 152$ | --- | --- | --- |


| Depot: | VP153685 |
| :--- | :--- |
| Unique No: | 10816295 |
| Signed: | Sean Felton |
| Report Date: | 04 Jan 2024 |

## OIL ANAIYSIS REPORT

## GRAPHS




Aluminum (ppm)


Copper (ppm)


Viscosity @ $100^{\circ} \mathrm{C}$



