## OIL RNALYSIS REPORT

## MEENA BRRSOUM I1446MC CUMMNS 74535936-PORT DIESEL ENGINE

Sample No: VPA060209<br>Oil Type: SHELL ROTELLA T4 15W40

## SAMPLE IV:OMMATION

| Sample Number | VPA060209 | --- | --- | --- |
| :--- | :--- | :--- | :--- | :--- |
| Sample Date | 04 Oct 2023 | --- | --- | --- |
| Machine Hours | $\mathbf{0}$ | --- | --- | --- |
| Oil Hours | $\mathbf{0}$ | --- | --- | --- |
| Oil Changed | N/A | --- | --- | -- |
| Sample Status | NORMAL | --- |  |  |


| OLL CONDITIOS |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Visc @ $100^{\circ} \mathrm{C}$ | cSt | $\square 14.2$ | --- | --- | --- |
| Base Number (BN) | $\mathrm{mg} \mathrm{KOH} / \mathrm{g}$ | $\square 9.0$ | --- | --- | --- |
| Oxidation (PA) | \% | 66 | --- | --- | --- |


| CONIIAMINTION |  |  |
| :--- | :--- | :--- |
| Soot $\%$ | $\%$ | $\square \mathbf{0 . 5}$ |
| Nitration (PA) | $\%$ | $\mathbf{5 3}$ |
| Sulfation (PA) | $\%$ | $\mathbf{5 8}$ |
| Glycol | $\%$ | NEG |
| Fuel | $\%$ | $<\mathbf{1 . 0}$ |
| Silicon | ppm | $\square \mathbf{6}$ |
| Sodium | ppm | $\square \mathbf{2}$ |
| Potassium | ppm | $\square \mathbf{6}$ |

WEARMETALS

| Iron | ppm | $\square \mathbf{2 0}$ |
| :--- | :--- | :--- |
| Copper | ppm | $\square \mathbf{6 0}$ |
| Lead | ppm | $\square \mathbf{2}$ |
| Tin | $\square \mathbf{1}$ |  |
| Aluminum | ppm | $\square \mathbf{2}$ |
| Chromium | ppm | $\square<\mathbf{1}$ |
| Molybdenum | ppm | $\square \mathbf{8}$ |
| Nickel | ppm | $\square \mathbf{3}$ |
| Titanium | ppm | $\square \mathbf{0}$ |
| Silver | ppm | $\square<\mathbf{1}$ |
| Manganese | ppm | $\square \mathbf{1}$ |
| Vanadium | ppm | $<\mathbf{1}$ |


| ADITIINES |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Calcium | ppm | $\square 2081$ | --- | --- | --- |
| Magnesium | ppm | 65 | --- | --- | --- |
| Zinc | ppm | $\square 1186$ | --- | --- | --- |
| Phosphorus | ppm | $\square 1016$ | --- | --- | --- |
| Barium | ppm | $\square 0$ | --- | --- | --- |
| Boron | ppm | $\square 156$ | --- | --- | --- |

## BAY MARINE

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## Diagnosis

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

## OIL ANAIYSIS REPORT

## 6RAPHS




Copper (ppm)


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



Chromium (ppm)


Silicon (ppm)


## Base Number



