## **OIL ANALYSIS REPORT**

### TIFFINE TOLLEN SAM CUMMINS/ONAN TIFFINE TOLLEN (S/N N/A) - GENSET

Sample No: VPA059161

Oil Type: DIESEL ENGINE OIL SAE 15W40

#### SAMPLE INFORMATION

| Sample Number    |          | VPA059161   | <br> |  |
|------------------|----------|-------------|------|--|
| Sample Date      |          | 22 Feb 2024 | <br> |  |
| Machine Hours    |          | 0           | <br> |  |
| Oil Hours        |          | 0           | <br> |  |
| Oil Changed      |          | Changed     | <br> |  |
| Sample Status    |          | NORMAL      | <br> |  |
|                  |          |             |      |  |
| OIL CONDITION    |          |             |      |  |
| Visc @ 100°C     | cSt      | 12.7        | <br> |  |
| Base Number (BN) | mg KOH/g | 9.4         | <br> |  |
| Oxidation (PA)   | %        | 66          | <br> |  |
| CONTAMINATION    |          |             |      |  |
| Water            | %        | NEG         | <br> |  |
| Soot %           | %        | 0.1         | <br> |  |
| Nitration (PA)   | %        | 68          | <br> |  |
| Sulfation (PA)   | %        | 54          | <br> |  |
| Glycol           | %        | NEG         | <br> |  |
| Fuel             | %        | <1.0        | <br> |  |
| Silicon          | ppm      | 7           | <br> |  |
| Sodium           | ppm      | <b>4</b>    | <br> |  |
| Potassium        | ppm      | 2           | <br> |  |
| WEAR METALS      |          |             |      |  |
| Iron             | ppm      | <b>1</b> 5  | <br> |  |
| Copper           | ppm      | 2           | <br> |  |
| Lead             | ppm      | <b>□</b> <1 | <br> |  |
| Tin              | ppm      | ∎1          | <br> |  |
| Aluminum         | ppm      | 3           | <br> |  |
| Chromium         | ppm      | <b>1</b>    | <br> |  |
| Molybdenum       | ppm      | ■61         | <br> |  |
| Nickel           | ppm      | <b>□</b> <1 | <br> |  |
| Titanium         | ppm      | <b>■</b> <1 | <br> |  |
| Silver           | ppm      | 0           | <br> |  |
| Manganese        | ppm      | ∎1          | <br> |  |
| Vanadium         | ppm      | <1          | <br> |  |
| ADDITIVES        |          |             |      |  |
| Calcium          | ppm      | 1032        | <br> |  |
| Magnesium        | ppm      | 937         | <br> |  |
| Zinc             | ppm      | <b>1222</b> | <br> |  |
| Phosphorus       | ppm      | 966         | <br> |  |
| Barium           | ppm      | 2           | <br> |  |
| Boron            | ppm      | 3           | <br> |  |
|                  |          |             |      |  |



Endor Marine LLC - Coastal Marine - 152124 4300 11th Ave. NW SEATTLE, WA US 98107 Contact: WILLOW YANARELLA service@coastalmarineengine.com T: (206)784-3703 F: (206)784-8823

#### 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.

 Depot:
 VP794951

 Unique No:
 10900900

 Signed:
 Don Baldridge

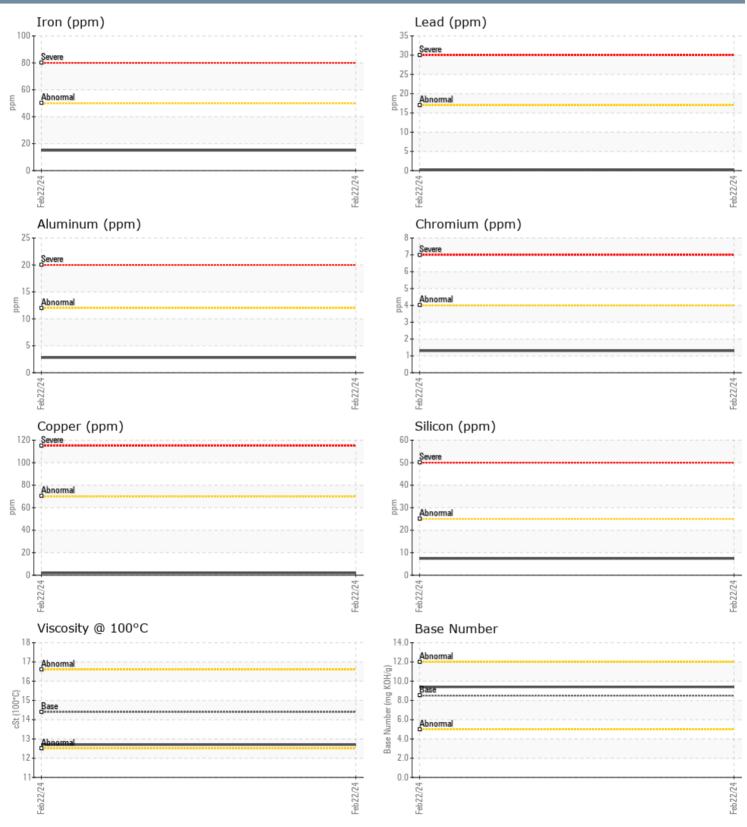
 Report Date:
 29 Feb 2024

Contact/Location: WILLOW YANARELLA - VP794951

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#### GRAPHS



Report Id: VP794951 [WUSCAR] 06102670 (Generated: 03/04/2024 09:29:53) Rev: 1

Contact/Location: WILLOW YANARELLA - VP794951