



## ZF 20321528 - INBOARD - PORT GEARBOX

Sample No: VPA056277

Oil Type: DIESEL ENGINE OIL SAE 30

| CAMPLE INCORNA | TION  |               |      |  |
|----------------|-------|---------------|------|--|
| SAMPLE INFORMA | ATIUN |               |      |  |
| Sample Number  |       | VPA056277     | <br> |  |
| Sample Date    |       | 26 Sep 2023   | <br> |  |
| Machine Hours  |       | 438           | <br> |  |
| Oil Hours      |       | 0             | <br> |  |
| Oil Changed    |       | Not Changd    | <br> |  |
| Sample Status  |       | NORMAL        | <br> |  |
| OIL CONDITION  |       |               |      |  |
| Visc @ 40°C    | cSt   | ■83.5         | <br> |  |
| CONTAMINATION  |       |               |      |  |
| Silicon        | ppm   | <b>4</b>      | <br> |  |
| Sodium         | ppm   | <b>2</b>      | <br> |  |
| Potassium      | ppm   | <b>■&lt;1</b> | <br> |  |
| 1 0(833)4111   | РРПП  |               |      |  |
| WEAR METALS    |       |               |      |  |
| PQ             |       | <b>17</b>     | <br> |  |
| Iron           | ppm   | <b>15</b>     | <br> |  |
| Copper         | ppm   | <b>75</b>     | <br> |  |
| Lead           | ppm   | <b>2</b>      | <br> |  |
| Tin            | ppm   | <b>1</b>      | <br> |  |
| Aluminum       | ppm   | <b>2</b>      | <br> |  |
| Chromium       | ppm   | <b>■&lt;1</b> | <br> |  |
| Molybdenum     | ppm   | <b>108</b>    | <br> |  |
| Nickel         | ppm   | <b>■&lt;1</b> | <br> |  |
| Titanium       | ppm   | O             | <br> |  |
| Silver         | ppm   | 0             | <br> |  |
| Manganese      | ppm   | <b>■&lt;1</b> | <br> |  |
| Vanadium       | ppm   | 0             | <br> |  |
| ADDITIVES      |       |               |      |  |
| Calcium        | ppm   | <b>2392</b>   | <br> |  |
| Magnesium      | ppm   | <b>■</b> 148  | <br> |  |
| Zinc           | ppm   | <b>1188</b>   | <br> |  |
| Phosphorus     | ppm   | ■1075         | <br> |  |
| Barium         | ppm   | ■0            | <br> |  |
| Boron          | ppm   | <b>7</b>      | <br> |  |
| 20.011         | PPIII |               |      |  |

## FDDA FT PIERCE - POWER CENTER

FORT PIERCE, FL US Contact: KYLE GRASER k.graser@kirbycorp.com T: F:

## 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 condition of the oil is acceptable for the time in service.

Depot:VP208659Unique No:10669659Signed:Doug BogartReport Date:28 Sep 2023

## **OIL ANALYSIS REPORT**



