Machine Id
TAYLOR THD-300M TAYLOR 300M (S/N S-T4-28889)
Diesel Engine
Fluid
TRC MOLY XL PROSPEC III 15W40 (4 GAL)


DIAGNOSIS

## Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

## $\triangle$ Wear

The copper level is abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core). All other component wear rates are normal.

## Contamination

There is no indication of any contamination in the oil.

## Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| SAMPLE INFORMATION |  | method | limit/base | current | history1 | history2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sample Number |  | Client Info |  | TR06177906 | TR06074155 | TR05927930 |
| Sample Date |  | Client Info |  | 26 Apr 2024 | 17 Jan 2024 | 08 Aug 2023 |
| Machine Age | hrs | Client Info |  | 1066 | 798 | 20559 |
| Oil Age | hrs | Client Info |  | 802 | 534 | 294 |
| Oil Changed |  | Client Info |  | Not Changd | Not Changd | Not Changd |
| Sample Status |  |  |  | ABNORMAL | NORMAL | NORMAL |
| CONTAMINATION |  | method | limit/base | current | history1 | history2 |
| Fuel |  | WC Method | >5 | <1.0 | <1.0 | <1.0 |
| Water |  | WC Method | $>0.2$ | NEG | NEG | NEG |
| Glycol |  | WC Method |  | NEG | NEG | NEG |
| WEAR METALS |  | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >250 | 27 | 24 | 24 |
| Chromium | ppm | ASTM D5185m | $>10$ | <1 | $<1$ | 1 |
| Nickel | ppm | ASTM D5185m | >5 | 0 | <1 | <1 |
| Titanium | ppm | ASTM D5185m |  | <1 | <1 | <1 |
| Silver | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >35 | 5 | 4 | 2 |
| Lead | ppm | ASTM D5185m | >100 | <1 | <1 | 1 |
| Copper | ppm | ASTM D5185m | $>60$ | $\triangle 107$ | 10 | 9 |
| Tin | ppm | ASTM D5185m | >5 | 1 | <1 | <1 |
| Vanadium | ppm | ASTM D5185m |  | <1 | <1 | <1 |
| Cadmium | ppm | ASTM D5185m |  | 0 | 0 | 0 |
| ADDITIVES |  | method | limitbase | current | history1 | history2 |
| Boron | ppm | ASTM D5185m |  | 199 | 219 | 224 |
| Barium | ppm | ASTM D5185m |  | 2 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m |  | 206 | 216 | 198 |
| Manganese | ppm | ASTM D5185m |  | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m |  | 419 | 403 | 415 |
| Calcium | ppm | ASTM D5185m | 4500 | 3778 | 3686 | 3530 |
| Phosphorus | ppm | ASTM D5185m |  | 888 | 786 | 800 |
| Zinc | ppm | ASTM D5185m | 1400 | 1018 | 1031 | 1010 |
| Sulfur | ppm | ASTM D5185m |  | 4232 | 3805 | 4165 |
| CONTAMINANTS |  | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >35 | 8 | 8 | 9 |
| Sodium | ppm | ASTM D5185m |  | 3 | 0 | 4 |
| Potassium | ppm | ASTM D5185m | >20 | 2 | 4 | 4 |
| INFRA-RED |  | method | limit/base | current | history1 | history2 |
| Soot \% | \% | *ASTM D7844 | >3 | 0.9 | 0.8 | 0.8 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 8.1 | 7.5 | 7.1 |
| Sulfation | Abs/. 1 mm | *ASTM D7415 | >30 | 21.9 | 21.0 | 20.2 |
| FLUID DEGRADATION |  | method | limit/base | current | history1 | history2 |
| Oxidation | Abs. 1 mm | *ASTM D7414 | >25 | 13.4 | 12.5 | 12.1 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 15 | 13.09 | 13.23 | 14.75 |

## OIL ANALYSIS REPORT



| VISUAL |  | method | limit/base | current | history1 | history2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE | NONE |
| 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 | >0.2 | NEG | NEG | NEG |
| Free Water | scalar | *Visual |  | NEG | NEG | NEG |
| FLUID PROPERTIES |  | method | limit/base | current | history1 | history2 |
| Visc@ $100^{\circ} \mathrm{C}$ | cSt | ASTM D445 | 15.5 | 16.2 | 16.1 | 16.0 |
| GRAPHS |  |  |  |  |  |  |





Chromium (ppm)




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


Lab Number : 06177906 Tested : 14 May 2024
Unique Number : 11029232 Diagnosed : 15 May 2024 -Sean Felton

