

[20591507] Machine Id ROSSI 810-M5530 (S/N 6672895-WA) Component Gearbox

ROYAL PURPLE POLYGUARD FDA 220 (--- GAL)

| Sample Date Client Info M 4 Åpr 2024 A hpr 2024 A | RECOMMENDATION | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|--|---|------------------|--------|-------------|-----------|-------------|-------------|----------|
| Sample Date Client Info 0 4 Apr 200 24 A | Resample at the next service interval to monitor. | Sample Number | | Client Info | | WC0904640 | WC0805844 | |
| Oil Age mths Client Ind Not Change | | Sample Date | | Client Info | | 04 Apr 2024 | 24 Apr 2023 | |
| Filter Age mths Client Info Not O | | Machine Age | mths | Client Info | | 0 | 0 | |
| Oil Changed Oil Change Not N | | Oil Age | mths | Client Info | | 0 | 0 | |
| Filter Changed Client Info Not Change No | | Filter Age | mths | Client Info | | 0 | 0 | |
| NORMALNORMA | | Oil Changed | | Client Info | | Not Changd | Not Changd | |
| Iron ppm ASTM D5185m >200 25 29 All component wear rates are normal. Chromium ppm ASTM D5185m >15 1 0 Nickel ppm ASTM D5185m >15 1 0 Titanium ppm ASTM D5185m >10 <1 0 Aluminum ppm ASTM D5185m >25 1 <1 0 Aluminum ppm ASTM D5185m >200 13 0 Copper ppm ASTM D5185m >200 13 0 Vanadium ppm ASTM D5185m >0 1 0 Vanadium ppm ASTM D5185m >0 1 0 Vanadium ppm ASTM D5185m >0 4 3 Tith oscial visual NONE NONE NONE Vanadium ppm< | | - | | Client Info | | Not Changd | Not Changd | |
| All component wear rates are normal. Chromium ppm ASTM D5185m >15 <1 | | Sample Status | | | | NORMAL | NORMAL | |
| Nickel ppm ASTM DS18sn >15 1 0 Titanium ppm ASTM DS18sn >15 1 0.0 Silver ppm ASTM DS18sn >10 0 Aluminum ppm ASTM DS18sn >20 1 0 Aluminum ppm ASTM DS18sn >200 1 0 ASTM DS18sn >200 1 0 Vanadium ppm ASTM DS18sn >200 1 0 Vanadium ppm ASTM DS18sn >20 1 0 Vanadium ppm ASTM DS18sn >20 1 0 Vanadium ppm ASTM DS18sn >50 4 3 | WEAR | Iron | ppm | ASTM D5185m | >200 | 25 | 29 | |
| Nicket pm ASTM D5168 >15 1 0.0 Titanium pm ASTM D5168 Silver pm ASTM D5168 >25 1 Aluminum pm ASTM D5168 >25 1 Lead pm ASTM D5168 >20 1 Tin pm ASTM D5168 >20 1 Tin pm ASTM D5168 >20 1 Vanadium pm ASTM D5168 >20 NONE NONE Silicon pm ASTM D5168 >20 NONE NONE CONTAMINATION Sala NON NONE NONE NONE NONE There is no indication of any contamination in the oil. S | All component wear rates are normal. | Chromium | ppm | ASTM D5185m | >15 | <1 | <1 | |
| Silver pp ASTM D5185m Q Q Q Q Q Q Aluminum ppm ASTM D5185m >200 1 Q Q Q Lead ppm ASTM D5185m >200 1 Q Q Q Copper ppm ASTM D5185m >200 1 Q Q Q Tin ppm ASTM D5185m >200 1 Q Q Q Vanadium ppm ASTM D5185m >20 1 Q Q Q Vanadium ppm ASTM D5185m >20 1 Q Q Q Vanadium ppm ASTM D5185m >50 4 3 - CONTAMINATION Silicon ppm ASTM D5185m >50 4 3 - Contrastion of any contamination in the oil. Silicon ppm ASTM D5185m >50 4 3 - Debris Scalar Visual | | Nickel | ppm | ASTM D5185m | >15 | 1 | 0 | |
| Aluminum ppm ASTM D5185m >25 1 <10 <10 <10 Lead ppm ASTM D5185m >100 1 0.0 Copper ppm ASTM D5185m >200 13 0.0 Vanadium ppm ASTM D5185m >200 13 0.0 White Metal scalar Visual NONE ACI 0.0 White Metal scalar Visual NONE NONE NONE NONE NONE CONTAMINATION Silicon ppm ASTM D5185m >0 4 3.3 There is no indication of any contamination in the oil. Silicon ppm ASTM D5185m >0.0 4 NONE NONE NONE NONE NONE NONE Debris scalar Visual NORE | | Titanium | ppm | ASTM D5185m | | <1 | 0 | |
| Lead ppm ASTM D5185m >100 1 0 Copper ppm ASTM D5185m >200 13 150 Tin ppm ASTM D5185m >25 1 0 Vanadium ppm ASTM D5185m 4 0 Vanadium scalar Visual NONE NONE NONE NONE NONE NONE CONTAMINATION Silicon pm ASTM D5185m >00 R | | Silver | ppm | ASTM D5185m | | 0 | <1 | |
| Copper ppm ASTM D516sm >200 13 15 Tin ppm ASTM D518sm >25 1 0 Vanadium ppm ASTM D518sm >25 1 0 Vanadium ppm ASTM D518sm V <1 | | Aluminum | ppm | ASTM D5185m | >25 | 1 | <1 | |
| Tin ppm ASTM D5165m >25 1 0.0 Vanadium ppm ASTM D5185m Image: Comparing the com | | Lead | ppm | ASTM D5185m | >100 | 1 | 0 | |
| VanadiumppmASTM D5185mII0IWhite Metalscalar'VisualNONENONENONENONEIVellow Metalscalar'VisualNONENONENONENONEIICONTAMINATIONSiliconppmASTM D5185m>50I33PotassiumppmASTM D5185m>2020NonePotassiumppmASTM D5185m>20I0Siliconscalar'VisualNONENONENONESiliconscalar'VisualNONENONENONESiliconscalar'VisualNONENONENONESiliconscalar'VisualNONENONENONEDebrisscalar'VisualNONENONENONEAppearancescalar'VisualNORMNORMLNORMLCOLDColscalar'VisualNORNORMNORMLSodiumppmASTM D5185mOBariumppmASTM D5185mI0MolybdenueppmASTM D5185mIManganesiumppmASTM D5185mI0ManganesiumppmASTM D5185m< | | Copper | ppm | ASTM D5185m | >200 | 13 | 15 | |
| White Metal Yellow Metalscalar*VisualNONENONENONEYellow Metalscalar*VisualNONENONENONENONECONTAMINATIONSiliconppmASTM D5185m>0020PotassiumppmASTM D5185m>0020WaterWaterWaterVisualNONENONENONENONESilitscalar*VisualNONENONENONENONESad/Dirtscalar*VisualNONENONENONENONECorrscalar*VisualNONENONENONENONESad/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORENORENORENOREClorscalar*VisualNORENORENORESoliuscalar*VisualNORENORENOREBoronppmASTM D5185mC0MolybdenumppmASTM D5185mI224297ManganeseppmASTM D5185mI21ManganeseppmASTM D5185mI109CalciumppmASTM D5185mI0Manganese | | Tin | ppm | ASTM D5185m | >25 | 1 | 0 | |
| Yellow Metal scalar 'Visual NONE NONE NONE CONTAMINATION Silicon ppm ASTM D5185m >5.0 4 3.0 There is no indication of any contamination in the oil. Potassium ppm ASTM D5185m >2.0 2 0 Water Water WC Metho >.0.2 NEG NNCE Solit scalar 'Visual NONE NONE NONE Sand/Dirt scalar 'Visual NONE NONE NONE Appearance scalar 'Visual NORH NORML NORML Mopearance scalar 'Visual NORH NORML NORML Appearance scalar 'Visual NORH NORML NORML NORML The AN level is acceptable for this fluid. The condition of the oil is suitable for further service. Sodium pm ASTM D5185m 0 0 Molydednam pp ASTM D5185m I 0 -1 -1 | | Vanadium | ppm | ASTM D5185m | | <1 | 0 | |
| Silicon ppm ASTM D5185m >50 4 3 Potassium ppm ASTM D5185m >20 2 0 Water WC Method >.02 NEG NEG NEG Silit scalar *Visual NONE NONE NONE Debris scalar *Visual NONE NONE NONE Sand/Dirt scalar *Visual NORM NONE NONE Appearance scalar *Visual NORM NORML NORML NORML | | White Metal | scalar | *Visual | NONE | NONE | NONE | |
| Potassium ppm ASTM D5185m >20 2 0 Water VC Method -0.2 NEG NEG Silt scalar *Visual NONE NONE NONE Silt scalar *Visual NONE NONE NONE Debris scalar *Visual NONE NONE NONE Sand/Dirt scalar *Visual NOR NORML NORML NORML Appearance scalar *Visual NORML NORML NORML Odor scalar *Visual NORML NORML NORML The AN level is acceptable for this fluid. The condition of the oil is suitable for further service. Sodium ppm ASTM D5185m 0 Barium ppm ASTM D5185m 1 Molybdenum ppm ASTM D5185m 1 Magnesium ppm ASTM D5185m 1 Magnesium ppm ASTM D5185m 1 Magnesium ppm ASTM D518 | | Yellow Metal | scalar | *Visual | NONE | NONE | NONE | |
| Potassium ppm ASTM D5185m >20 2 0 Water VC Method -0.2 NEG NEG Silt scalar *Visual NONE NONE NONE Silt scalar *Visual NONE NONE NONE Debris scalar *Visual NONE NONE NONE Sand/Dirt scalar *Visual NOR NORML NORML NORML Appearance scalar *Visual NORML NORML NORML Odor scalar *Visual NORML NORML NORML The AN level is acceptable for this fluid. The condition of the oil is suitable for further service. Sodium ppm ASTM D5185m 0 Barium ppm ASTM D5185m 1 Molybdenum ppm ASTM D5185m 1 Magnesium ppm ASTM D5185m 1 Magnesium ppm ASTM D5185m 1 Magnesium ppm ASTM D518 | CONTAMINATION | Silicon | ppm | ASTM D5185m | >50 | 4 | 3 | |
| Water WC Method \$-0.2 NEG NEG Silt scalar *Visual NONE NONE NONE Debris scalar *Visual NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE Appearance scalar *Visual NORH NORH NORH Odor scalar *Visual NORH NORH NORH Emulsified Water scalar *Visual NORH NORH NORH Boron ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 1 0 Maganese ppm ASTM D5185m 1 1 -1 Magnesium ppm ASTM D5185m 1 1 Magnesium ppm ASTM D5185m <th rowspan="8">There is no indication of any contamination in the oil.</th> <th>Potassium</th> <th></th> <th>ASTM D5185m</th> <th>>20</th> <th>2</th> <th>0</th> <th></th> | There is no indication of any contamination in the oil. | Potassium | | ASTM D5185m | >20 | 2 | 0 | |
| Debrisscalar'VisualNONENONENONESand/Dirtscalar'VisualNONENONENONEAppearancescalar'VisualNORENORMNORMLOdorscalar'VisualNORNORMLNORMLEmulsified Watescalar'VisualNORNORMLNORMLFLUID CONDITIONSodiumppmASTM D5185m0BoronppmASTM D5185m00BariumppmASTM D5185m1000MolybdenumppmASTM D5185m11<1 | | Water | | WC Method | >0.2 | NEG | NEG | |
| Sand/Dirt scalar *Visual NONE NONE INONE Inone Appearance scalar *Visual NORML NORML NORML Inormation Odor scalar *Visual NORML NORML NORML Inormation Ino | | Silt | scalar | *Visual | NONE | NONE | NONE | |
| Appearancescalar*VisualNORMLNORMLNORMLNORMLIOdorscalar*VisualNORMLNORMLNORMLIIIEmulsified Waterscalar*VisualNORMNORMLNORMLIIIFLUID CONDITIONScalarppmASTM D5185mI0II </td <td>Debris</td> <td>scalar</td> <td>*Visual</td> <td>NONE</td> <th>NONE</th> <td>NONE</td> <td></td> | | Debris | scalar | *Visual | NONE | NONE | NONE | |
| Odorscalar*VisualNORML <t< td=""><td>Sand/Dirt</td><td>scalar</td><td>*Visual</td><td>NONE</td><th>NONE</th><td>NONE</td><td></td></t<> | | Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | |
| Emulsified Waterscalar*Visual>0.2NEGNEGFLUID CONDITIONSodiumppmASTM D5185m0<1<1<The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.SodiumppmASTM D5185m000BoronppmASTM D5185m< | | Appearance | scalar | *Visual | NORML | NORML | NORML | |
| FLUID CONDITION Sodium ppm ASTM D5185m 0 <1 Boron ppm ASTM D5185m 0 | | Odor | scalar | *Visual | NORML | NORML | NORML | |
| Boron ppm ASTM D5185m 0 0 Barium ppm ASTM D5185m 224 297 Molybdenum ppm ASTM D5185m 21 0 Manganese ppm ASTM D5185m | | Emulsified Water | scalar | *Visual | >0.2 | NEG | NEG | |
| Boron ppm ASTM D5185m 0 0 Barium ppm ASTM D5185m 224 297 Molybdenum ppm ASTM D5185m 21 0 Manganese ppm ASTM D5185m | FLUID CONDITION | Sodium | ppm | ASTM D5185m | | 0 | <1 | |
| Barium ppm ASTM D5185m 224 297 Molybdenum ppm ASTM D5185m | | | | | | 0 | | |
| Molybdenum ppm ASTM D5185m | suitable for further service. | Barium | | | | 224 | 297 | |
| Manganese ppm ASTM D5185m 1 <1 Magnesium ppm ASTM D5185m 1 2 Calcium ppm ASTM D5185m 10 9 Phosphorus ppm ASTM D5185m 430 468 Zinc ppm ASTM D5185m 50 60 | | | | | | | 0 | |
| Magnesium ppm ASTM D5185m 1 2 Calcium ppm ASTM D5185m 10 9 Phosphorus ppm ASTM D5185m 430 468 Zinc ppm ASTM D5185m 50 60 | | Manganese | ppm | | | | <1 | |
| Phosphorus ppm ASTM D5185m 430 468 Zinc ppm ASTM D5185m 50 60 | | Magnesium | | ASTM D5185m | | 1 | 2 | |
| Zinc ppm ASTM D5185m 50 60 | | Calcium | ppm | ASTM D5185m | | 10 | 9 | |
| | | Phosphorus | ppm | ASTM D5185m | | 430 | 468 | |
| Sulfur ppm ASTM D5185m 2051 2378 | | Zinc | ppm | ASTM D5185m | | 50 | 60 | |
| | | Sulfur | ppm | ASTM D5185m | | 2051 | 2378 | |

Acid Number (AN) mg KOH/g ASTM D8045

ASTM D445

Visc @ 40°C cSt

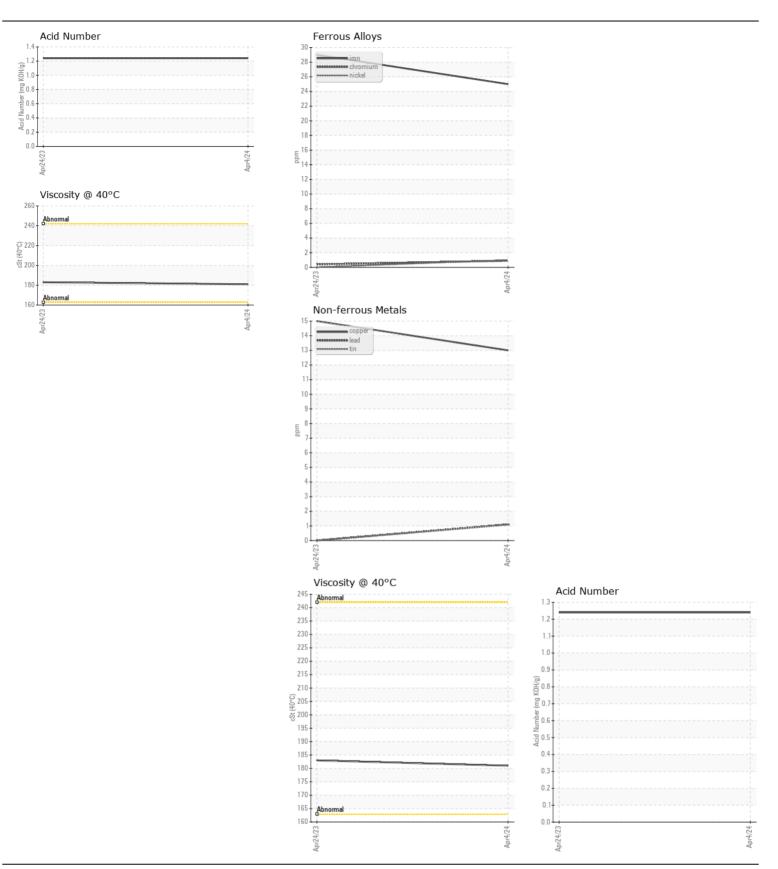
Contact/Location: BARRY OLIVER - ROCFLO

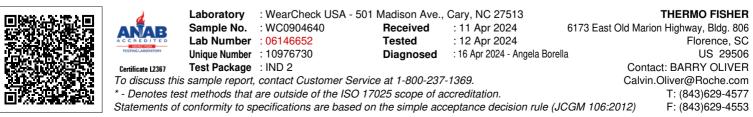
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Contact/Location: BARRY OLIVER - ROCFLO Page 2 of 2