

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

WMPT_U1 WMPT_U1_P1 Component

Non-Drive End Pump SHELL TELLUS 32 (--- GAL)

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The water content is negligible. There is no indication of any contamination in the oil.

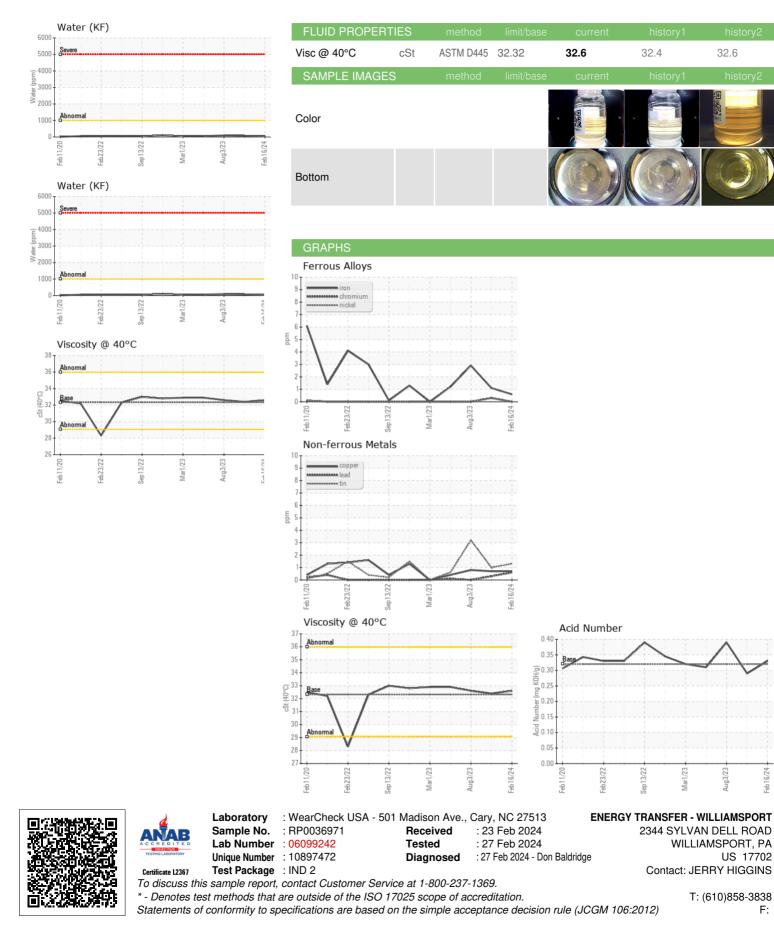
Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

| Name Name Name Name Name Name Name Name SAMPLE INFORMATION method imit/base current RP0036971 RP0026622 RP0026622 RP0026622 RP0036971 RP0026622 RP0036971 RP0026622 RP0036971 RP0026622 RP0036971 RP0036971 RP0036971 RP0036971 RP0036971 RD014222 G3 Aug 2023 Machine Age hrs Client Info 0 0 0 0 0 Oil Changed Client Info N/A N/A N/A N/A N/A Sample Status method Imit/base current history1 history1 history1 Iron ppm ASIM 05185m >0 <1 1 3 Silver ppm ASIM 05185m >3 0 <1 1 3 Silver ppm ASIM 05185m >1 1 3 0 1 1 Auminum ppm ASIM 05185m >1 | | | | | | | |
|---|------------------|----------|-------------|-----------------|-----------------|---------------|---------------|
| Sample Number Client Info PP0036971 RP0026622 RP002615 Sample Date Client Info 0 0 0 0 Machine Age hrs Client Info 0 0 0 0 Oll Age hrs Client Info 0 0 0 0 Oll Age Client Info N/A N/A N/A N/A Sample Status remetod Imit/base current History! History! Kronnium ppm ASTM D5185m >90 <1 1 3 Kronnium ppm ASTM D5185m >30 0 <1 0 Silver ppm ASTM D5185m >30 0 <1 0 Silver ppm ASTM D5185m >30 <1 1 3 Silver ppm ASTM D5185m 30 <1 1 0 Copper ppm ASTM D5185m 30 <1 0 0 < | | | Feb 2020 | Feb2022 Sep2022 | Mar2023 Aug2023 | Feb 2024 | |
| Sample Date Client Info 16 Feb 2024 31 Oct 2023 03 Aug 2023 Machine Age hrs Client Info 0 0 0 Oil Age hrs Client Info 0 0 0 Oil Changed Client Info N/A N/A N/A Sample Status method imit/base current history1 NoRMAL WEAR METALS method imit/base current history1 history1 history2 Iron ppm ASTM 05155m >5 0 <1 | SAMPLE INFORM | 1ATION | method | limit/base | current | history1 | history2 |
| Machine Age hrs Client Info 0 0 0 Oil Age hrs Client Info 0 0 0 Oil Age hrs Client Info N/A N/A N/A Sample Status Image Client Info NORMAL NORMAL NORMAL WEAR METALS method limit/base current history1 history1 Iron ppm ASTM D5185m >90 <1 | Sample Number | | Client Info | | RP0036971 | RP0026622 | RP0026615 |
| Oil Age hrs Client Info 0 0 0 Oil Changed Client Info N/A N/A N/A N/A Sample Status Image Client Info N/A NORMAL NORMAL WEAR METALS method Imilibase Normal Normal Normal Cornonium ppm ASTM 05185m >5 0 <1 | Sample Date | | Client Info | | 16 Feb 2024 | 31 Oct 2023 | 03 Aug 2023 |
| Oil Changed Client Info IVA N/A N/A Sample Status method limit/base current history1 NormAL WEAR METALS method limit/base current history1 history2 Iron ppm ASTM 05185m >50 <1 | Machine Age | hrs | Client Info | | 0 | 0 | 0 |
| Sample Status Moritha NORMAL NORMAL NORMAL WEAR METALS method Imitibase current history1 history2 Iron ppm ASTM D5185m >50 <1 | Oil Age | hrs | Client Info | | 0 | 0 | 0 |
| WEAR METALS method limit/base current history1 history2 from ppm ASTM 05165m >50 <1 | Oil Changed | | Client Info | | | N/A | N/A |
| Iron ppm ASTM D5185n >90 <1 1 3 Chromium ppm ASTM D5185n >5 0 <1 | Sample Status | | | | NORMAL | NORMAL | NORMAL |
| Chromium ppm ASTM D5185m >5 0 <1 | WEAR METALS | | method | limit/base | current | history1 | history2 |
| Nickel ppm ASTM D5185m >5 0 <1 0 Titanium ppm ASTM D5185m >3 0 <1 | Iron | ppm | ASTM D5185m | >90 | <1 | 1 | 3 |
| Titanium ppm ASTM D5185m >3 0 <1 0 Silver ppm ASTM D5185m >3 0 <1 | Chromium | ppm | ASTM D5185m | >5 | 0 | <1 | 0 |
| Silver ppm ASTM D5185m >3 0 <1 0 Aluminum ppm ASTM D5185m >7 <1 | Nickel | ppm | ASTM D5185m | >5 | 0 | <1 | 0 |
| Aluminum ppm ASTM D5185m >7 <1 2 0 Lead ppm ASTM D5185m >12 <1 | Titanium | ppm | ASTM D5185m | >3 | 0 | <1 | 0 |
| Lead ppm ASTM D5185m >12 <1 <1 0 Copper ppm ASTM D5185m >30 <1 | Silver | ppm | ASTM D5185m | >3 | 0 | <1 | 0 |
| Copper ppm ASTM D5185m >30 <1 <1 <1 Tin ppm ASTM D5185m >9 1 1 3 Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 <1 | Aluminum | ppm | ASTM D5185m | >7 | <1 | 2 | 0 |
| Tin ppm ASTM D5185m >9 1 1 3 Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 <1 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 1 Molybdenum ppm ASTM D5185m 0 <1 <1 <1 Manganese ppm ASTM D5185m 0 <11 66 65 <1 Calcium ppm ASTM D5185m 35 13 12 17 Phosphorus ppm ASTM D5185m 259 295 276 284 Zinc ppm ASTM D5185m 277 346 341 356 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 <1 | Lead | ppm | ASTM D5185m | >12 | <1 | <1 | 0 |
| Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 <1 | Copper | ppm | ASTM D5185m | >30 | <1 | <1 | <1 |
| Cadmium ppm ASTM D5185m 0 <1 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 0 Barium ppm ASTM D5185m 0 <1 <1 Manganese ppm ASTM D5185m 0 <11 <1 Manganese ppm ASTM D5185m <11 67 66 65 Calcium ppm ASTM D5185m 259 295 276 284 Zinc ppm ASTM D5185m 277 346 341 356 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m 277 346 341 356 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 <1 0.007 0.009 </td <td>Tin</td> <td>ppm</td> <td>ASTM D5185m</td> <td>>9</td> <th>1</th> <td>1</td> <td>3</td> | Tin | ppm | ASTM D5185m | >9 | 1 | 1 | 3 |
| ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m000BariumppmASTM D5185m0<1 | Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| BoronppmASTM D5185m0000BariumppmASTM D5185m0-11-11MolybdenumppmASTM D5185m0-11-11ManganeseppmASTM D5185m11676665CalciumppmASTM D5185m11676665CalciumppmASTM D5185m259295276284ZincppmASTM D5185m277346341356CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>60<1 | Cadmium | ppm | ASTM D5185m | | 0 | <1 | 0 |
| Barium ppm ASTM D5185m 0 0 1 Molybdenum ppm ASTM D5185m 0 <1 <1 Manganese ppm ASTM D5185m <1 0 0 Magnesium ppm ASTM D5185m 11 67 66 65 Calcium ppm ASTM D5185m 35 13 12 17 Phosphorus ppm ASTM D5185m 259 295 276 284 Zinc ppm ASTM D5185m 277 346 341 356 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >60 <1 1 0 Sodium ppm ASTM D5185m >20 <1 1 0 Water % ASTM D6304 >.1 0.0005 0.007 0.009 ppm ASTM D6304 >.1000 57 72.1 94.8 <t< th=""><th>ADDITIVES</th><th></th><th>method</th><th>limit/base</th><th>current</th><th>history1</th><th>history2</th></t<> | ADDITIVES | | method | limit/base | current | history1 | history2 |
| Molybdenum ppm ASTM D5185m 0 <1 <1 Manganese ppm ASTM D5185m 11 67 66 65 Calcium ppm ASTM D5185m 35 13 12 17 Phosphorus ppm ASTM D5185m 259 295 276 284 Zinc ppm ASTM D5185m 257 346 341 356 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m 260 <1 | Boron | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Manganese ppm ASTM D5185m <1 0 0 Magnesium ppm ASTM D5185m 11 67 66 65 Calcium ppm ASTM D5185m 35 13 12 17 Phosphorus ppm ASTM D5185m 259 295 276 284 Zinc ppm ASTM D5185m 277 346 341 356 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >60 <1 | Barium | ppm | ASTM D5185m | | 0 | 0 | 1 |
| MarganeseppmASTM D5185m<1676665MagnesiumppmASTM D5185m11676665CalciumppmASTM D5185m35131217PhosphorusppmASTM D5185m259295276284ZincppmASTM D5185m277346341356CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>60<1 | Molybdenum | ppm | ASTM D5185m | | 0 | <1 | <1 |
| MagnesiumppmASTM D5185m11676665CalciumppmASTM D5185m35131217PhosphorusppmASTM D5185m259295276284ZincppmASTM D5185m277346341356CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>60<1 | • | | ASTM D5185m | | <1 | 0 | 0 |
| CalciumppmASTM D5185m35131217PhosphorusppmASTM D5185m259295276284ZincppmASTM D5185m277346341356CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>60<1 | | ppm | ASTM D5185m | 11 | 67 | 66 | 65 |
| ZincppmASTM D5185m277346341356CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>60<1 | Calcium | ppm | ASTM D5185m | 35 | 13 | 12 | 17 |
| ZincppmASTM D5185m277346341356CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>60<1 | Phosphorus | ppm | ASTM D5185m | 259 | 295 | 276 | 284 |
| SiliconppmASTM D5185m>60<1<1<1SodiumppmASTM D5185m<1 | Zinc | ppm | ASTM D5185m | 277 | 346 | 341 | 356 |
| SodiumppmASTM D5185m<1 | CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| PotassiumppmASTM D5185m>20<110Water%ASTM D6304>.10.0050.0070.009ppmWaterppmASTM D6304>10005772.194.8FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg KOH/gASTM D80450.320.330.290.39VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLRegular%isualNORMLNORMLNORMLNORMLNORML | Silicon | ppm | ASTM D5185m | >60 | <1 | <1 | <1 |
| Water%ASTM D6304>.10.0050.0070.009ppm WaterppmASTM D6304>10005772.194.8FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg KOH/gASTM D80450.320.330.290.39VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>.1NEGNEGNEG | Sodium | ppm | ASTM D5185m | | <1 | 0 | 1 |
| Water%ASTM D6304>.10.0050.0070.009ppm WaterppmASTM D6304>10005772.194.8FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg KOHgASTM D80450.320.330.290.39VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>.1NEGNEGNEG | Potassium | ppm | ASTM D5185m | >20 | <1 | 1 | 0 |
| ppm WaterppmASTM D6304>10005772.194.8FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg KOHgASTM D80450.320.330.290.39VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>.1NEGNEG | Water | | ASTM D6304 | >.1 | 0.005 | 0.007 | 0.009 |
| Acid Number (AN)mg KOH/gASTM D80450.320.330.290.39VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>.1NEGNEGNEG | ppm Water | ppm | | | 57 | | |
| VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONENONEYellow Metalscalar*VisualNONENONENONENONENONEPrecipitatescalar*VisualNONENONENONENONENONESiltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>.1NEGNEG | FLUID DEGRADA | TION | method | limit/base | current | history1 | history2 |
| White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONENONEPrecipitatescalar*VisualNONENONENONENONENONESiltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONENONENONENONELIGHTSand/Dirtscalar*VisualNONENONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>.1NEGNEGNEG | Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.32 | 0.33 | 0.29 | 0.39 |
| Yellow Metalscalar*VisualNONENONENONENONENONEPrecipitatescalar*VisualNONENONENONENONENONESiltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONENONENONENONELIGHTSand/Dirtscalar*VisualNONENONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>.1NEGNEGNEG | VISUAL | | method | limit/base | current | history1 | history2 |
| Precipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>.1NEGNEG | White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Siltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONENONENONELIGHTSand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>.1NEGNEG | Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Siltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONENONENONELIGHTSand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>.1NEGNEG | Precipitate | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debrisscalar*VisualNONENONENONELIGHTSand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>.1NEGNEGNEG | | scalar | *Visual | NONE | | NONE | NONE |
| Appearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>.1NEGNEG | Debris | scalar | | | | | LIGHT |
| Appearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>.1NEGNEG | Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Odor scalar *Visual NORML NORML NORML NORML NORML Emulsified Water scalar *Visual >.1 NEG NEG NEG | | | | | | | |
| Emulsified Water scalar *Visual >.1 NEG NEG NEG | | scalar | *Visual | NORML | | NORML | |
| | Emulsified Water | scalar | | | NEG | NEG | |
| | Free Water | | *Visual | | NEG | SNE Gnitted B | y:Nikades Puc |



OIL ANALYSIS REPORT



Page 2 of 2

Feb 16/24

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