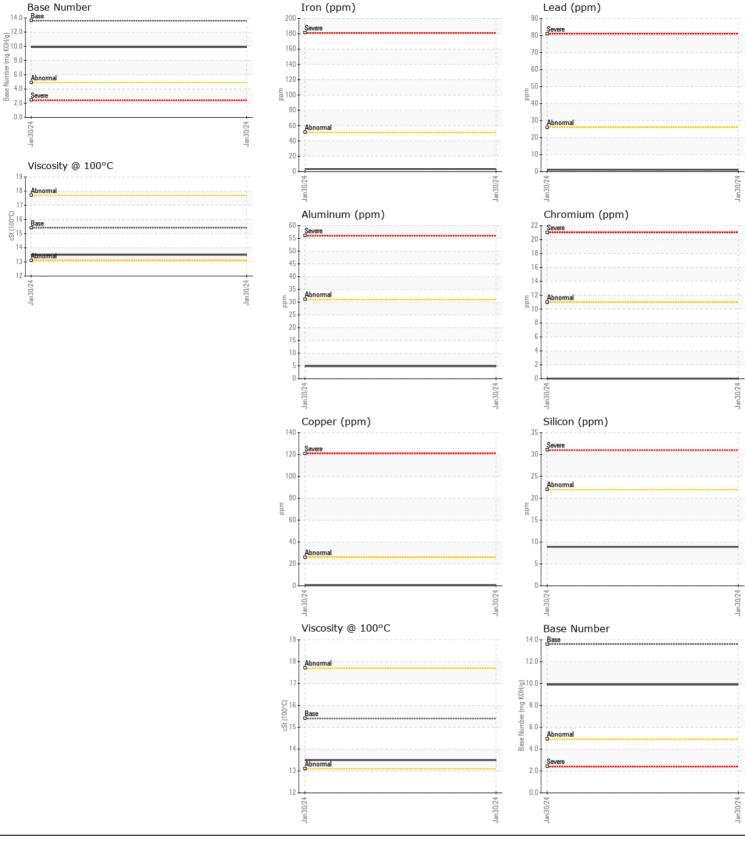


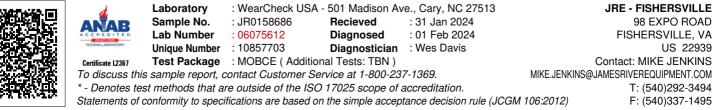
Machine Id JOHN DEERE 1025R 11000724

Component Diesel Engine

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- QTS)

| Test UCM Method Linksty History2 Sample Nation Client Info Corrent Sample Nation Client Info Corrent Sample Nation Sample Nation Client Info | JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (| (15) | | | | | | |
|--|---|------------------|----------|-------------|-----------|-------------|---|----------|
| Beample at the next service interval to monitor. Sample Number Sample Date Client Into UB015868 Image of the sample Sampl | RECOMMENDATION | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
| Single Data Cherry Info So data or Participation The Table Participation The Table Partable The Table Partipation The | | Sample Number | | Client Info | | JR0158686 | | |
| OI Age Ins Clent Ind O Ins Clent Ind O Ins Ins Filer Anago Ins Clent Ind Ins Change Ins In | | Sample Date | | Client Info | | 30 Jan 2024 | | |
| Filter Age Ins Client Info Changed Changed | | Machine Age | hrs | Client Info | | 221 | | |
| OIL Changed Hitter Changed Sample Status Client Info (Client Info Sample Status Changed (Client Info NORMA Changed (Client I | | Oil Age | hrs | Client Info | | 0 | | |
| Filter Changed Client Info Phanged | | Filter Age | hrs | Client Info | | 0 | | |
| Sample Status NPM In | | Oil Changed | | Client Info | | Changed | | |
| VEAR Iron ppm ASTU 0515m -51 3 Metal levels are typical for a new component breaking in. Promium ppm ASTU 0515m -5 -1 Silver ppm ASTU 0515m -5 -1 Aluminum ppm ASTU 0515m -5 -1 Aluminum ppm ASTU 0515m -56 1 Aluminum ppm ASTU 0515m -26 1 Auminum ppm ASTU 0515m -26 1 Auminum ppm ASTU 0515m -26 1 Auminum ppm ASTU 0515m -26 1 Vanadum ppm ASTU 0515m -22 9 Vanadum ppm ASTU 0515m -22 9 Ve | | Filter Changed | | Client Info | | Changed | | |
| Metal levels are typical for a new component breaking in. Chromium ppm ASTM 0585m >1 0 Nickel ppm ASTM 0585m > -1 Titanium ppm ASTM 0585m > 0 Silver ppm ASTM 0585m >26 1 Lead ppm ASTM 0585m >26 1 Vanadium ppm ASTM 0585m >4 <1 Vanadium ppm ASTM 0585m >2 9 Vanadium ppm ASTM 0585m >2 9 Vanadium | | Sample Status | | | | NORMAL | | |
| Metal levels are typical for a new component breaking in. Chromium ppm ASTM 0585m >1 0 Nickel ppm ASTM 0585m > -1 Titanium ppm ASTM 0585m > 0 Silver ppm ASTM 0585m >26 1 Lead ppm ASTM 0585m >26 1 Vanadium ppm ASTM 0585m >4 <1 Vanadium ppm ASTM 0585m >2 9 Vanadium ppm ASTM 0585m >2 9 Vanadium | | | | | | _ | | |
| Metal levels are typical for a new component breaking in. Nickel ppm ASTM 0585m -5 -1 Titraium ppm ASTM 0585m -3 0 Aluminum ppm ASTM 0585m -3 0 Aluminum ppm ASTM 0585m -31 5 Copper ppm ASTM 0585m -26 1 Tin ppm ASTM 0585m -26 1 Vanduum ppm ASTM 0585m -21 <10 Vanduum ppm ASTM 0585m >22 3 The | WEAR | | | | | | | |
| Nicker ppm Astrobatis ppm ppm Astrobatis ppm < | Metal levels are typical for a new component breaking in. | | | | | | | |
| Silver ppm ATM D5180n -31 0 Aluminum ppm ASTM D5180n -30 1 Lead ppm ASTM D5180n -26 -1 Copper ppm ASTM D5180n -26 -1 Vanadium ppm ASTM D5180n -26 -1 Vanadium ppm ASTM D5180n -26 -1 Valow Metal Scalar Visual NONE NONE Valow Metal Scalar Visual NONE NONE Silicon ppm ASTM D5180n -20 3 Water WC Method -2.1 <1.0 Glycol WC Method Sol 14 Silit Sccalar | | | | | >5 | | | |
| Aluminum ppm ASTM D5185n >31 5 Lead ppm ASTM D5185n >26 1 Copper ppm ASTM D5185n >26 1 Vanadum ppm ASTM D5185n >4 <1 Vanadum ppm ASTM D5185n >4 <1 Vanadum ppm ASTM D5185n >4 <1 Visual NONE NONE NONE Polassium ppm ASTM D5185n >22 9 Water polassium ppm ASTM D5185n >22 9 Visual NONE <1.0 Water polassium ppm ASTM D5185n >20 0.1 Sold for %6 <td< th=""><th></th><th></th><th></th><th>0</th><th></th><th></th><th></th></td<> | | | | | 0 | | | |
| Lead ppm ASTM D518m >26 1 Copper ppm ASTM D518m >26 -1 Tin ppm ASTM D518m >4 Vanadium ppm ASTM D518m >4 Vanadium ppm ASTM D518m >22 9 Value Mole scalar 'Visual NONE NONE Polassium ppm ASTM D518m >22 9 Mater work WC Method >0.21 NONE Water WC Method >0.21 NEG Solf % % % ' NEG Solf % % % ' NORE NORE | | | | | | | | |
| Copper ppm ASTU DB18m >26 c1 initial initial Tin ppm ASTU DB18m c1 initial initial Vanadium ppm ASTU DB18m c1 initial initial White Metal scalar 'Visual NONE NONE initial initial There is no indication of any contamination in the oil. Silicon ppm ASTU DB18m 22 9 initial initial Fuel WC Method >2.1 e1.0 initial initititititial< | | | | | | | | |
| Tin ppm ASTM D5185 -4 -1 Vanadium ppm ASTM D5185 - | | | | | | | | |
| Vanadium ppm ASTM D5185m <1 | | | | | | | | |
| White Metal Yellow Metal scalar *Visual NONE none none none CONTAMINATION Silicon ppm ASTM D5185m >22 9 There is no indication of any contamination in the oil. Silicon ppm ASTM D5185m >22 9 Water WC Method >0.21 NEG Glycol WC Method >0.21 NEG Soti % % YSIM D784 >3 0.1 Water WC Method >0.21 NEG Soti % % YSIM D784 >3 0.1 Soti % % Ysisual NONE NONE Sotifation Abs:tm 'Yisual NONE NONE Debrin scalar 'Visual NONE NONE | | | | | >4 | | | |
| Yellow Metal scalar *Visual NONE CONTAMINATION Silicon pp ASTM D5185m >22 9 There is no indication of any contamination in the oil. Fuel WC Method >2.1 <1.0 Water WC Method >2.1 <1.0 Glycol WC Method >2.1 <1.0 Soft % % *ASTM D764 >3 0.1 Site Soat % % *ASTM D764 >30 19.3 Site scalar *Visual NONE NONE Sand/Ditt scalar *Visual NONE NONE Odor scalar *Visual NORM NORM The BN result indicates that there is suitable alkalinity remaining in the oil is suitable for further service. Sodium pp <td< th=""><th></th><th></th><th></th><th>NONE</th><th></th><th></th><th></th></td<> | | | | | NONE | | | |
| CONTAMINATION Silicon ppm ASTM D5185m >22 9 There is no indication of any contamination in the oil. Potassium ppm ASTM D5185m >20 3 Fuel WC Method >2.1 <1.0 Water WC Method >0.21 NEG Glycol WC Method >0.21 NEG Water WC Method >0.21 NEG Silf cond %6 'ASTM D7844 >3 0.1 Nitration Abs/rm< 'ASTM D7845 >30 19.3 Silf atoin Abs/rm< 'ASTM D7845 >30 19.3 Silf atoin Abs/rm< 'ASTM D784 >30 10.1 Debris scalar<'Visual NORL NORE | | | | | | | | |
| Potassium ppm ASTM D5165m >20 3 Fuel WC Method >2.1 <1.0 Water WC Method >0.21 NEG Glycol WC Method >0.21 NEG Solt % % *STM D764t >3 0.1 Solt % % *ASTM D762t >20 6.5 Sultation Abs/:mi *ASTM D7162t >20 6.5 Sultation Abs/:mi *ASTM D7162t >20 6.5 Sultation Abs/:mi *ASTM D7165 30 19.3 Sand/Dirt scalar *Visual NONE NONE Sand/Dirt scalar *Visual NORML NORML The Sort suitable alkalinity remaining in the oil. Sodium ppm </th <th></th> <th>Yellow Metal</th> <th>scalar</th> <th>*Visual</th> <th>NONE</th> <th>NONE</th> <th></th> <th></th> | | Yellow Metal | scalar | *Visual | NONE | NONE | | |
| Potassium ppm ASTM D5165m >20 3 Fuel WC Method >2.1 <1.0 Water WC Method >0.21 NEG Glycol WC Method >0.21 NEG Solt % % *STM D764t >3 0.1 Solt % % *ASTM D762t >20 6.5 Sultation Abs/:mi *ASTM D7162t >20 6.5 Sultation Abs/:mi *ASTM D7162t >20 6.5 Sultation Abs/:mi *ASTM D7165 30 19.3 Sand/Dirt scalar *Visual NONE NONE Sand/Dirt scalar *Visual NORML NORML The Sort suitable alkalinity remaining in the oil. Sodium ppm </th <th>CONTAMINATION</th> <th>Silicon</th> <th>nnm</th> <th>ASTM D5185m</th> <th>>22</th> <th>9</th> <th></th> <th></th> | CONTAMINATION | Silicon | nnm | ASTM D5185m | >22 | 9 | | |
| There is no indication of any contamination in the oil. Fuel WC Method >2.1 <1.0 Water WC Method >0.21 NEG Glycol WC Method >0.21 NEG Sort % ASTM D764 >20 6.5 Nitration Abs/tmm *ASTM D764 >30 11.0 Sulfation Abs/tmm *ASTM D764 >30 19.3 Sulfation Abs/tmm *ASTM D764 >30 19.3 Sulfation Abs/tmm *ASTM D764 >30 19.3 Sulfation Abs/tmm *ASTM D744 S30 19.3 Sulfation Abs/tmm *ASTM D744 S30 19.3 Sulfation Abs/tmm Yisual NONE NONE NONE Sand/Dirt scalar 'Visual NORM NORML Phopearance scalar </th <th>CONTAMINATION</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> | CONTAMINATION | | | | | | | |
| Water WC Method >0.21 NEG Glycol WC Method >0.21 NEG NEG Soct % % YSTM D784 >20 6.5 Nitration Abs/cm YSTM D784 >20 6.5 Sulfation Abs/tm YSTM D784 >20 6.5 Sulfation Abs/tm YSTM D784 >20 6.5 Sulfation Abs/tm YStaul NONE NONE Sand/Dir scalar 'Visual NOR NORE Appearance scalar 'Visual NOR NORM Odor scalar 'Visual NOR NOR The N result indicates that there is suitable alkalinity remaining in the oil is suitable for further service. Softum ppm ASTM D5185m -31 2 < | There is no indication of any contamination in the oil. | | ppiii | | | | | |
| Glycol WC Method NEG Soot % % 'ASTM D7844 >3 0.1 Nitration Abs/cm 'ASTM D7844 >30 6.5 Sulfation Abs/tm 'ASTM D7845 >30 19.3 Sulfation Abs/tm 'Visual NONE NONE Sadd D71t scalar 'Visual NONE NONE Sand/D1t scalar 'Visual NONE NONE Sand/D1t scalar 'Visual NORE NORE Appearance scalar 'Visual NORH NORM Cdor scalar 'Visual NORM NORM Boron ppm ASTM D5185m >31 2 Maganese pm ASTM D5185m < | | | | | | | | |
| Sott % % *ASTM D7844 >3 0.1 Nitration Abs/cm *ASTM D7624 >20 6.5 Sulfation Abs/tm *ASTM D7624 >30 19.3 Sulfation Abs/tm *Visual NONE NONE Debris scalar *Visual NONE NONE Appearance scalar *Visual NORML NORML Procoddr scalar *Visual NORML NORML Baron ppm ASTM D5185m >31 2 Barium ppm | | | | | 20.21 | | | |
| Nitration Abs/cm *ASTM D7624 >20 6.5 Sulfation Abs/tm *ASTM D7415 >30 19.3 Silt scalar *Visual NONE NONE Silt scalar *Visual NONE NONE Sand/Dirt scalar *Visual NORE NONE Appearance scalar *Visual NORM NORML Odor scalar *Visual NORML NORML Odor scalar *Visual NORML NORML Emulsified Water scalar *Visual NORML NORML Boron ppm ASTM D5185m 0 Molybdenum prm ASTM D5185m ASTM D5185m 0 Maganese prm ASTM D5185m ASTM D5185m < | | | 0/_ | | ~3 | | | |
| SulfationAbs./tmm'ASTM D7415>3019.3Siltscalar'VisualNONENONEDebrisscalar'VisualNONENONESand/Dirtscalar'VisualNONENONEAppearancescalar'VisualNORMLNORMLOdorscalar'VisualNORMLNORMLOdorscalar'VisualNORMLNORMLEmulsified Waterscalar'VisualNORMLNORMLBoronppmASTM D5185n>312MarganeseppmASTM D5185n>31263MarganeseppmASTM D5185n<233MarganeseppmASTM D5185n<1189MarganeseppmASTM D5185n<1189MarganeseppmASTM D5185n<1189MarganeseppmASTM D5185n<11061NotifurppmASTM D5185n<1289MarganesiumppmASTM D5185n<1289MarganesiumppmASTM D5185n<1289MarganesiumppmASTM D5185n<1061< | | | | | | | | |
| Siltscalar*VisualNONENONEDebrisscalar*VisualNONENONESand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORENOREOdorscalar*VisualNORENOREDebrisscalar*VisualNORENOREOdorscalar*VisualNORENOREEmulsfied Waterscalar*Visuals0.21NEGNorescalar*Visuals0.21NEGBoronppmASTM D5185m-312BariumpmASTM D5185m-233MaganeseppmASTM D5185m-11MagnesiumppmASTM D5185m-11CalciumppmASTM D5185m-12.89PhosphorusppmASTM D5185m-10.61SilfurppmASTM D5185m-10.61QvidationAbs/.tim'ASTM D5185m-10.61Base Number (BN)mg KMbgASTM D5185m13.69.9Astm D5185m13.69.9Astm D5185m< | | | | | | | | |
| Debris scalar *Visual NONE NONE Sand/Dirt scalar *Visual NONE NONE Appearance scalar *Visual NORM NORML Odor scalar *Visual NORML NORML NORML Odor scalar *Visual NORML NORML Odor scalar *Visual NORML NORML Odor scalar *Visual NORML NORML Odor scalar *Visual NORML NORML Odor scalar *Visual NORML NORML NORML Debris scalar *Visual NORML NORML NORML NORML | | | | | | | | |
| Sand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORMNORMLOdorscalar*VisualNORMNORMLEmulsified Waterscalar*Visual>0.21NEGSodiumppmASTM D5185m>312BoronppmASTM D5185m>31263BariumppmASTM D5185m0MolybdenumppmASTM D5185m0ManganeseppmASTM D5185m-1289CalciumppmASTM D5185m-1289MagnesiumppmASTM D5185m-1289CalciumppmASTM D5185m-1061PhosphorusppmASTM D5185m-1061SulfurppmASTM D5185m-1061SulfurppmASTM D5185m-14.4OxidationAbs/Imm'ASTM D289613.69.9Sase Number (BN)mg KOHgASTM D289613.69.9AssASTM D5185m-14.4AssMarter (BN)MSHgASTM D289613.69.9AssMarter (BN)MSHgASTM D2896 | | | | | | | | |
| Appearancescalar*VisualNORMLNORMLOdorscalar*VisualNORMLNORMLEmulsified Waterscalar*Visual>0.21NEGNEGSodiumppmASTM D5185m>312BoronppmASTM D5185m>31263BariumppmASTM D5185m0MalybdenumppmASTM D5185m0MagnesumppmASTM D5185m233MagnesiumppmASTM D5185m21MagnesiumppmASTM D5185m1289PhosphorusppmASTM D5185m1061SulfurppmASTM D5185m1061SulfurppmASTM D5185m1292OxidationAbs/Imm'ASTM D7414-2514.4Base Number (BN)mg KOHlgASTM D28613.69.9 | | | | | | | | |
| Odorscalar*VisualNORMLEmulsified Waterscalar*Visual>0.21NEGNEGNEGNEGFLUID CONDITIONSodiumppmASTM D5185m>312BoronppmASTM D5185m263BariumppmASTM D5185m0MolybdenumppmASTM D5185m10233MaganeseeppmASTM D5185m121MagnesiumppmASTM D5185m11289MagnesiumppmASTM D5185m1061MagnesiumppmASTM D5185m1061NoshorusppmASTM D5185m1061SulfurppmASTM D5185m1061SulfurppmASTM D5185m169.9Sase Number (BN)mg KOHgASTM D289613.69.9Sase Number (BN)mg KOHgASTM D289613.69.9 | | | | | | | | |
| Emulsified Waterscalar*Visual>0.21NEGFLUID CONDITIONThe BN result indicates that there is suitable alkalinity remaining in the oil is suitable for further service.SodiumppmASTM D5185m>312BoronppmASTM D5185m0263BariumppmASTM D5185m0233MolybdenumppmASTM D5185m0233MagnesiumppmASTM D5185m1253MagnesiumppmASTM D5185m1MagnesiumppmASTM D5185m11289CalciumppmASTM D5185m11061ZincppmASTM D5185m11061SulfurppmASTM D5185m11061SulfurppmASTM D5185m114.4DxidationAbs/:1mm*ASTM D7414>2514.4Base Number (BN)mg KOHlgASTM D289613.69.9 | | | | | | | | |
| Sodium ppm ASTM D5185m >31 2 Boron ppm ASTM D5185m >31 263 Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 0 Manganese ppm ASTM D5185m 233 Magnesium ppm ASTM D5185m 1 Magnesium ppm ASTM D5185m 1289 Phosphorus ppm ASTM D5185m 912 Zinc ppm ASTM D5185m 1061 Sulfur ppm ASTM D5185m 14.4 Oxidation Abs/.1mm *ASTM D2886 13.6 9.9 | | | | | | | | |
| Boron ppm ASTM D5185m 263 Barium ppm ASTM D5185m 0 Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 0 Manganese ppm ASTM D5185m 10 Magnesium ppm ASTM D5185m Magnesium ppm ASTM D5185m Magnesium ppm ASTM D5185m Calcium ppm ASTM D5185m Phosphorus ppm ASTM D5185m 1289 Zinc ppm ASTM D5185m 912 Sulfur ppm ASTM D5185m 2992 Oxidation Abs/.1mm *ASTM D2896 13.6 9.9 Base Number (BN) mg KOHg ASTM D2896 13.6 9.9 <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>• • • • • • • • • • • • • • • • • • • •</th> <th></th> | | | | | | | • | |
| Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 233 Manganese ppm ASTM D5185m 213 Magnesium ppm ASTM D5185m 10 Magnesium ppm ASTM D5185m 1289 Calcium ppm ASTM D5185m 1289 Phosphorus ppm ASTM D5185m 1289 Zinc ppm ASTM D5185m 1061 Sulfur ppm ASTM D5185m 1061 Oxidation Abs/1mm *ASTM D7414 >25 14.4 Base Number (BN) mg KOHg ASTM D2896 13.6 9.9 | FLUID CONDITION | Sodium | ppm | ASTM D5185m | >31 | 2 | | |
| oil. The condition of the oil is suitable for further service. Banum ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 233 Manganese ppm ASTM D5185m Magnesium ppm ASTM D5185m Magnesium ppm ASTM D5185m Calcium ppm ASTM D5185m 912 Phosphorus ppm ASTM D5185m 912 Sulfur ppm ASTM D5185m 2992 Oxidation Abs/1mm *ASTM D7414 >25 14.4 Base Number (BN) mg KOHg ASTM D2896 13.6 9.9 | | Boron | ppm | ASTM D5185m | | 263 | | |
| Molybdenum ppm ASTM D5185m 233 Manganese ppm ASTM D5185m | , , | Barium | ppm | ASTM D5185m | | 0 | | |
| Magnesium ppm ASTM D5185m 7785 Calcium ppm ASTM D5185m 1289 Phosphorus ppm ASTM D5185m 912 Zinc ppm ASTM D5185m 1061 Sulfur ppm ASTM D5185m 2992 Oxidation Abs/.1mm *ASTM D2896 13.6 9.9 | | Molybdenum | ppm | ASTM D5185m | | 233 | | |
| Calcium ppm ASTM D5185m 1289 Phosphorus ppm ASTM D5185m 0 912 Zinc ppm ASTM D5185m 1061 Sulfur ppm ASTM D5185m 0 2992 Oxidation Abs/.1mm *ASTM D7414 >25 14.4 Base Number (BN) mg KOHg ASTM D2896 13.6 9.9 | | Manganese | ppm | ASTM D5185m | | <1 | | |
| Phosphorus ppm ASTM D5185m 912 Zinc ppm ASTM D5185m 1061 Sulfur ppm ASTM D5185m 2992 Oxidation Abs/.1mm *ASTM D7414 >25 14.4 Base Number (BN) mg KOHg ASTM D2896 13.6 9.9 | | Magnesium | ppm | ASTM D5185m | | 785 | | |
| Zinc ppm ASTM D5185m 1061 Sulfur ppm ASTM D5185m 2992 Oxidation Abs/.1mm *ASTM D7414 >25 14.4 Base Number (BN) mg KOH/g ASTM D2896 13.6 9.9 | | Calcium | ppm | ASTM D5185m | | 1289 | | |
| Sulfur ppm ASTM D5185m 2992 Oxidation Abs/.1mm *ASTM D7414 >25 14.4 Base Number (BN) mg KOH/g ASTM D2896 13.6 9.9 | | Phosphorus | ppm | ASTM D5185m | | 912 | | |
| Sulfur ppm ASTM D5185m 2992 Oxidation Abs/.1mm *ASTM D7414 >25 14.4 Base Number (BN) mg KOH/g ASTM D2896 13.6 9.9 | | Zinc | ppm | ASTM D5185m | | 1061 | | |
| Base Number (BN) mg KOH/g ASTM D2896 13.6 9.9 | | Sulfur | | ASTM D5185m | | 2992 | | |
| | | Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 14.4 | | |
| Visc @ 100°C cSt ASTM D445 15.4 13.5 | | Base Number (BN) | mg KOH/g | ASTM D2896 | 13.6 | 9.9 | | |
| | | Visc @ 100°C | | ASTM D445 | 15.4 | | | |





Contact/Location: MIKE JENKINS - JAMFIS

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