

JOHN DEERE 344P 1LV344PAAZB074949

Hydraulic System

JOHN DEERE HYDRAU (--- QTS)

| | RECO | MM | ENC | ΟΑΤΙ | ON |
|--|------|----|-----|------|----|
|--|------|----|-----|------|----|

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

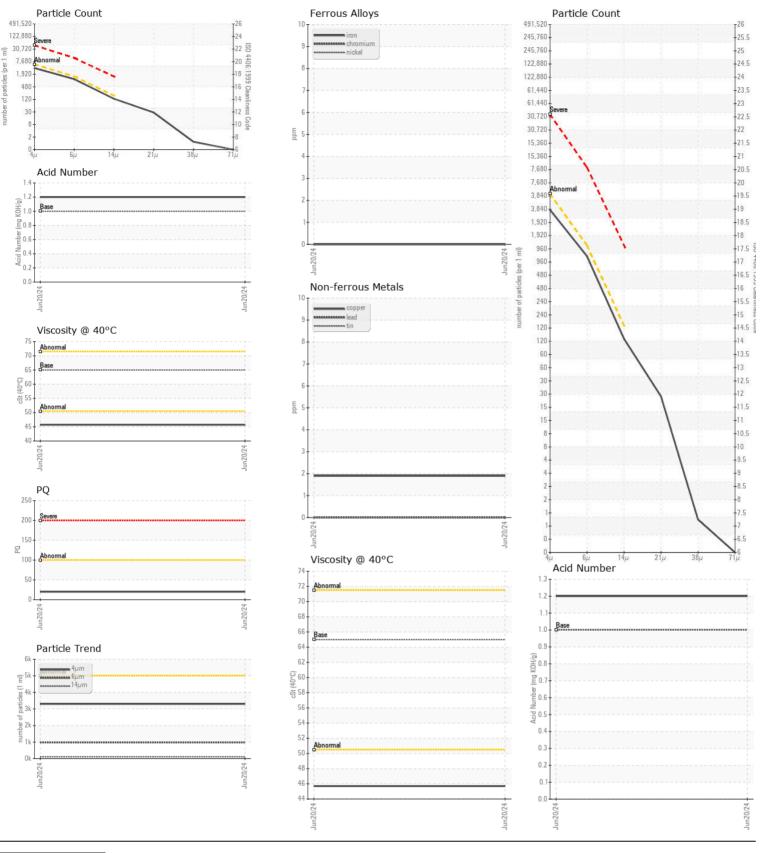
CONTAMINATION

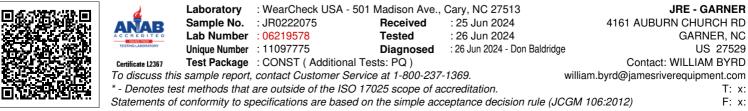
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

FLUID CONDITION

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

| Test UOM Method Limit/abs Current History1 History2 Sample Dumber Client Info 20 Jun 2024 Machine Age hrs Client Info 0 Machine Age hrs Client Info 0 Oil Age hrs Client Info 0 Oil Changed Client Info Not Changd Sample Status Sample Status Not Changd Sample Status PD ASTM D8168 >10 0 Silver ppm ASTM D8168 >10 0 Silver ppm ASTM D81685 >10 0 | | | | | | | |
|---|----------------|----------|-------------|-----------|-------------|----------|----------|
| Sample Date Client Info 20 Jun 2024 Machine Age hrs Client Info 430 Oil Age hrs Client Info 0 Oil Changed Client Info Not Changd Filter Changed Client Info Not Changd Sample Status NORMAL Sample Status NORMAL PQ ASTM D5185m >10 0 Silver ppm ASTM D5185m >20 2 | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
| Machine Age hrs Client Info 430 Oil Age hrs Client Info 0 Oil Changed Client Info Not Changd Filter Changed Client Info Not Changd Sample Status NORMAL PQ ASTM D5185m >20 0 Chromium ppm ASTM D5185m >20 0 Nickel ppm ASTM D5185m >10 0 Nickel ppm ASTM D5185m >10 <1 Aluminum ppm ASTM D5185m >10 <1 Lead ppm ASTM D5185m >10 <1 Vanadium ppm ASTM D5185m >20 2 Vanadium ppm ASTM D | Sample Number | | Client Info | | JR0222075 | | |
| Oil Age hrs Client Info 0 Filter Age hrs Client Info Not Change Oil Changed Client Info Not Change Sample Status Not Change PQ ASTM D5185m >20 0 Iron ppm ASTM D5185m >10 0 Nickel ppm ASTM D5185m >10 0 Silver ppm ASTM D5185m >10 0 Copper ppm ASTM D5185m >10 0 Yellow Metal scalar *Visual NONE NONE Yellow Metal scalar *Visual NONE Yellow Metal scalar *Visual NONE Yellow M | Sample Date | | Client Info | | 20 Jun 2024 | | |
| Filter Age hrs Client Info Not Changed Oil Changed Client Info Not Changd Sample Status Client Info Not Changd Sample Status Client Info Not Changd Sample Status Not Changd PQ ASTM D5185m >20 0 Chromium ppm ASTM D5185m >10 0 Nickel ppm ASTM D5185m >10 0 Aluminum pm ASTM D5185m >10 0 Itanium ppm ASTM D5185m >10 0 Aluminum pm ASTM D5185m >10 0 Vanadium ppm ASTM D5185m >20 1 Vellow Metal scalar *V | Machine Age | hrs | Client Info | | 430 | | |
| Oil Changed Client Info Not Changd Sample Status Client Info Not Changd PQ ASTM D8184 20 PQ ASTM D8185m >20 0 Nickel ppm ASTM D5185m >10 0 Nickel ppm ASTM D5185m >10 0 Nickel ppm ASTM D5185m 0 Nickel ppm ASTM D5185m >10 0 Aluminum ppm ASTM D5185m >10 0 Copper ppm ASTM D5185m >10 0 Vanadium pm ASTM D5185m >20 2 Vellow Metal scalar *Visual NONE NONE Vellow Metal <td< th=""><th>Oil Age</th><th>hrs</th><th>Client Info</th><th></th><th>0</th><th></th><th></th></td<> | Oil Age | hrs | Client Info | | 0 | | |
| Filter Changed Sample Status Client Info Not Changd NORMAL PQ ASTM D8184 20 Iron ppm ASTM D5185m >20 0 Nickel ppm ASTM D5185m >10 0 Nickel ppm ASTM D5185m >10 0 Silver ppm ASTM D5185m >10 0 Silver ppm ASTM D5185m >10 C1 Aluminum ppm ASTM D5185m >10 0 Vanadium ppm ASTM D5185m >10 0 Vellow Metal scalar "Visual NONE NONE Vellow Metal scalar "Visual NONE Silicon ppm ASTM D5185m >20 1 <th>Filter Age</th> <th>hrs</th> <th>Client Info</th> <th></th> <th>0</th> <th></th> <th></th> | Filter Age | hrs | Client Info | | 0 | | |
| Sample Status NORMAL PQ ASTM D8184 20 Iron ppm ASTM D5185n >20 0 Nickel ppm ASTM D5185n >10 0 Nickel ppm ASTM D5185n >10 0 Aluminum ppm ASTM D5185n >10 0 Aluminum ppm ASTM D5185n >10 0 Aluminum ppm ASTM D5185n >10 0 Vanadium ppm ASTM D5185n >10 0 Vanadium ppm ASTM D5185n >20 2 Vanadium ppm ASTM D5185n >20 2 Vanadium ppm ASTM D5185n >20 1 Vanadium | Oil Changed | | Client Info | | Not Changd | | |
| PQ ASTM D8184 20 Iron ppm ASTM D5185m >20 0 Chromium ppm ASTM D5185m >10 0 Nickel ppm ASTM D5185m >10 0 Silver ppm ASTM D5185m >10 0 Lead ppm ASTM D5185m >10 0 Lead ppm ASTM D5185m >10 0 Vanadium ppm ASTM D5185m >10 0 Vanadium ppm ASTM D5185m >20 2 Vanadium ppm ASTM D5185m >20 1 Vanadium ppm ASTM D5185m >20 1 Vanadium ppm ASTM D5185m >20 1 - | Filter Changed | | Client Info | | Not Changd | | |
| Iron ppm ASTM D5185m >20 0 Nickel ppm ASTM D5185m >10 0 Nickel ppm ASTM D5185m >10 0 Silver ppm ASTM D5185m 0 Aluminum ppm ASTM D5185m >10 c-1 Lead ppm ASTM D5185m >10 0 Vanadium ppm ASTM D5185m 0 Vanadium ppm ASTM D5185m 0 0 Vanadium ppm ASTM D5185m >20 1 Vanadium ppm ASTM D5185m >20 1 Silicon ppm ASTM D7647 >100 1 Silicon ppm ASTM D7647 >10 1 <th>Sample Status</th> <th></th> <th></th> <th></th> <th>NORMAL</th> <th></th> <th></th> | Sample Status | | | | NORMAL | | |
| Iron ppm ASTM D5185m >20 0 Nickel ppm ASTM D5185m >10 0 Nickel ppm ASTM D5185m >10 0 Silver ppm ASTM D5185m 0 Aluminum ppm ASTM D5185m >10 c-1 Lead ppm ASTM D5185m >10 0 Vanadium ppm ASTM D5185m 0 Vanadium ppm ASTM D5185m 0 0 Vanadium ppm ASTM D5185m >20 1 Vanadium ppm ASTM D5185m >20 1 Silicon ppm ASTM D7647 >100 1 Silicon ppm ASTM D7647 >10 1 <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> | | | | | | | |
| Chromium ppm ASTM D5185m >10 0 Nickel ppm ASTM D5185m >10 0 Silver ppm ASTM D5185m 0 Silver ppm ASTM D5185m >10 Lead ppm ASTM D5185m >10 0 Lead ppm ASTM D5185m >10 0 Vanadium ppm ASTM D5185m >10 0 Vanadium ppm ASTM D5185m >0 0 Vanadium ppm ASTM D5185m >0 0 Vellow Metal scalar *Visual NONE Yellow Metal scalar *Visual NONE Yellow Metal scalar *Visual NONE Particles >6µm | | | | | - | | |
| Nickel ppm ASTM D5185m >10 0 Silver ppm ASTM D5185m 0 Aluminum ppm ASTM D5185m >10 0 Aluminum ppm ASTM D5185m >10 0 Copper ppm ASTM D5185m >10 0 Copper ppm ASTM D5185m >10 0 Vanadium ppm ASTM D5185m >10 0 Vanadium ppm ASTM D5185m >20 2 Vellow Metal scalar *Visual NONE Vellow Metal scalar *Visual NONE Vater WC Method >0.1 NEG Particles >4µm ASTM D7647 >100 1 Particles >4µm ASTM D7647 >30 <t< th=""><th></th><th>ppm</th><th></th><th>-</th><th>-</th><th></th><th></th></t<> | | ppm | | - | - | | |
| Titanium ppm ASTM D5185m 0 Silver ppm ASTM D5185m >10 <1 Aluminum ppm ASTM D5185m >10 0 Lead ppm ASTM D5185m >10 0 Copper ppm ASTM D5185m >10 0 Vanadium ppm ASTM D5185m >10 0 Vanadium ppm ASTM D5185m >10 0 Vanadium ppm ASTM D5185m >20 1 Yellow Metal scalar *Visual NONE NONE Yellow Metal scalar *Visual NONE Yellow Metal scalar *Visual NONE Silicon ppm ASTM D7647 >100 11 Particles >14µm ASTM D7647 >30 0 - | Chromium | ppm | ASTM D5185m | >10 | - | | |
| Silver ppm ASTM D5185m 0 Aluminum ppm ASTM D5185m >10 <1 Lead ppm ASTM D5185m >10 0 Copper ppm ASTM D5185m >75 2 Vanadium ppm ASTM D5185m >10 0 Vanadium ppm ASTM D5185m >10 0 Vanadium ppm ASTM D5185m >20 1 Yellow Metal scalar *Visual NONE Yellow Metal scalar *Visual NONE NONE Yellow Metal scalar *Visual NONE NONE Vater WC Method >0.1 NEG Particles >4µm ASTM D7647 >10 1 <th></th> <th>ppm</th> <th></th> <th>>10</th> <th>0</th> <th></th> <th></th> | | ppm | | >10 | 0 | | |
| Aluminum ppm ASTM D5185m >10 <1 | | ppm | | | 0 | | |
| Lead ppm ASTM D5185m >10 0 Copper ppm ASTM D5185m >75 2 Tin ppm ASTM D5185m >10 0 Vanadium ppm ASTM D5185m 0 White Metal scalar *Visual NONE Yellow Metal scalar *Visual NONE Silicon ppm ASTM D5185m >20 2 Vater WC Method >.0.1 NEG Particles >4µm ASTM D7647 >1300 981 Particles >14µm ASTM D7647 >100 1 Particles >14µm ASTM D7647 >100 1 Particles >14µm ASTM D7647 >10 1 Particles >21µm< | | ppm | ASTM D5185m | | 0 | | |
| Copper ppm ASTM D5185m >75 2 Tin ppm ASTM D5185m >10 0 Vanadium ppm ASTM D5185m 0 White Metal scalar *Visual NONE NONE Yellow Metal scalar *Visual NONE NONE Silicon ppm ASTM D5185m >20 1 Potassium ppm ASTM D5185m >20 1 Water WC Method >0.1 NEG Particles >4µm ASTM D7647 >100 113 Particles >21µm ASTM D7647 >10 1 Particles >21µm ASTM D7647 >3 0 Oil Cleantiness ISO 4406 (c) >19/17/14 19/17/14 <t< th=""><th></th><th>ppm</th><th></th><th></th><th></th><th></th><th></th></t<> | | ppm | | | | | |
| Tin ppm ASTM D5185m >10 0 Vanadium ppm ASTM D5185m 0 White Metal scalar *Visual NONE NONE Yellow Metal scalar *Visual NONE NONE Silicon ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 1 Vater WC Method >0.1 NEG Particles >4µm ASTM D7647 >5000 3301 Particles >6µm ASTM D7647 >100 1 Particles >71µm ASTM D7647 >10 1 Sold Cleanliness Scalar *Visual NONE NONE Debris scalar </th <th></th> <th>ppm</th> <th></th> <th></th> <th>-</th> <th></th> <th></th> | | ppm | | | - | | |
| Vanadium ppm ASTM D5185m 0 White Metal scalar *Visual NONE NONE Yellow Metal scalar *Visual NONE NONE Silicon ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 1 Patticles >4µm ASTM D5185m >20 3301 Particles >6µm ASTM D7647 >100 113 Particles >6µm ASTM D7647 >10 1 Particles >4µm ASTM D7647 >10 1 Particles >71µm ASTM D7647 >10 1 Silt scalar *Visual NONE NONE SoddyDirt scalar *Visual NORML NORML | | | | | _ | | |
| White Metal scalar *Visual NONE NONE Yellow Metal scalar *Visual NONE NONE Silicon ppm ASTM D5185m >20 1 Potassium ppm ASTM D5185m >20 1 Water WC Method >0.1 NEG Particles >4µm ASTM 07647 >100 3001 Particles >14µm ASTM 07647 >400 25 Particles >21µm ASTM 07647 >10 1 Particles >38µm ASTM 07647 >3 0 Particles >31µm ASTM 07647 >3 0 Silt scalar *Visual NONE NONE Solt cleanliness scalar *Visual NORE NORE < | | ppm | | >10 | - | | |
| Yellow Metal scalar *Visual NONE NONE Silicon ppm ASTM D5185m >20 1 Potassium ppm ASTM D5185m >20 1 Water WC Method >0.1 NEG Particles >4µm ASTM D7647 >5000 3301 Particles >6µm ASTM D7647 >1300 981 Particles >6µm ASTM D7647 >40 25 Particles >38µm ASTM D7647 >3 0 Particles >71µm ASTM D7647 >3 0 Solt scalar *Visual NONE NONE Debris scalar *Visual NOR NORE Appearance scalar *Visual NORM NORE | | | | | - | | |
| Silicon ppm ASTM D5185m >20 2 Potassium ppm ASTM D5185m >20 1 Water WC Method >0.1 NEG Particles >4µm ASTM D7647 >5000 3301 Particles >6µm ASTM D7647 >1300 981 Particles >6µm ASTM D7647 >100 113 Particles >21µm ASTM D7647 >10 1 Particles >38µm ASTM D7647 >10 1 Particles >38µm ASTM D7647 >10 1 Particles >71µm ASTM D7647 >10 1 Silt scalar *Visual NONE Solt scalar *Visual NORM NORML Appearance | White Metal | scalar | *Visual | NONE | NONE | | |
| Potassium ppm ASTM D5185m >20 1 Water WC Method >0.1 NEG Particles >4µm ASTM D7647 >5000 3301 Particles >6µm ASTM D7647 >1300 981 Particles >6µm ASTM D7647 >160 113 Particles >6µm ASTM D7647 >10 1 Particles >21µm ASTM D7647 >10 1 Particles >38µm ASTM D7647 >10 1 Particles >71µm ASTM D7647 >3 0 Particles >71µm ASTM D7647 >3 0 Silt scalar *Visual NONE Silt scalar *Visual NONE Agpearance scalar *Visual NORML NORML Cdor scalar *Visual NORML NOR < | Yellow Metal | scalar | *Visual | NONE | NONE | | |
| Potassium ppm ASTM D5185m >20 1 Water WC Method >0.1 NEG Particles >4µm ASTM D7647 >5000 3301 Particles >6µm ASTM D7647 >1300 981 Particles >6µm ASTM D7647 >160 113 Particles >6µm ASTM D7647 >10 1 Particles >21µm ASTM D7647 >10 1 Particles >38µm ASTM D7647 >10 1 Particles >71µm ASTM D7647 >3 0 Particles >71µm ASTM D7647 >3 0 Silt scalar *Visual NONE Silt scalar *Visual NONE Agpearance scalar *Visual NORML NORML Cdor scalar *Visual NORML NOR < | 0''' | | | | • | | |
| Water WCM 0400 >0.1 NEG | | | | | _ | | |
| Particles >4μm ASTM D7647 >5000 3301 Particles >6μm ASTM D7647 >1300 981 Particles >14μm ASTM D7647 >160 113 Particles >21μm ASTM D7647 >40 25 Particles >38µm ASTM D7647 >3 0 Particles >14µm ASTM D7647 >3 0 Particles >38µm ASTM D7647 >3 0 Particles >14µm ASTM D7647 >3 0 Oil Cleanliness Scalar Yuisual NONE NONE Silt scalar Yuisual NOR NORE Sand/Dirt scalar Yuisual NORM NORML Appearance scalar Yuisual NOR NOR | | ppm | | - | | | |
| Particles >6µm ASTM D7647 >1300 981 Particles >14µm ASTM D7647 >160 113 Particles >21µm ASTM D7647 >40 25 Particles >38µm ASTM D7647 >10 1 Particles >71µm ASTM D7647 >3 0 Oil Cleanliness ISO 4406 (c) >19/17/14 19/17/14 Silt scalar *Visual NONE Sand/Dirt scalar *Visual NONE NONE Sand/Dirt scalar *Visual NORM NORML Odor scalar *Visual NORM NORML Odor scalar *Visual NORM NORML Sodium ppm ASTM D5185m 2 < | | | | | | | |
| Particles >14μm ASTM D7647 >160 113 Particles >21μm ASTM D7647 >40 25 Particles >38µm ASTM D7647 >10 1 Particles >71µm ASTM D7647 >3 0 Oil Cleanliness ISO 4406 (c) >19/17/14 19/17/14 Silt scalar *Visual NONE Sand/Dirt scalar *Visual NONE Appearance scalar *Visual NORM NORML Odor scalar *Visual NORM NORML Odor scalar *Visual NORM NORML Boron ppm ASTM D5185m 2 Barium ppm ASTM D5185m 0 Manganese <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> | | | | | | | |
| Particles >21µm ASTM D7647 >40 25 Particles >38µm ASTM D7647 >10 1 Particles >71µm ASTM D7647 >3 0 Oil Cleanliness ISO 4406 (c) >19/17/14 19/17/14 Silt scalar *Visual NONE Debris scalar *Visual NONE Sand/Dirt scalar *Visual NONE Appearance scalar *Visual NORM NORML Appearance scalar *Visual NORM NORML Godor scalar *Visual NOR NORML Boron ppm ASTM D5185m 2 Manganese ppm ASTM D5185m 10 | | | | | | | |
| Particles >38µm ASTM D7647 >10 1 Particles >71µm ASTM D7647 >3 0 Oil Cleanliness ISO 4406 (c) >19/17/14 19/17/14 Silt scalar *Visual NONE Debris scalar *Visual NONE Sand/Dirt scalar *Visual NORE Appearance scalar *Visual NORM NORML Odor scalar *Visual NORM NORML Sodium ppm ASTM D5185m NORML Boron ppm ASTM D5185m 2 Barium ppm ASTM D5185m 0 Manganese ppm ASTM D5185m 727 676 | | | | | - | | |
| Particles >71µm ASTM D7647 >3 0 Oil Cleanliness ISO 4406 (c) >19/17/14 19/17/14 Silt scalar *Visual NONE NONE Debris scalar *Visual NONE NONE Sand/Dirt scalar *Visual NONE NONE Appearance scalar *Visual NORM NORML Odor scalar *Visual NORM NORML Godor scalar *Visual NORM NORML Godor scalar *Visual NORM NORML Boron ppm ASTM D5185m 2 Barium ppm ASTM D5185m 0 Manganese ppm ASTM D5185m 3 | | | | | | | |
| Oil CleanlinessISO 4406 (c)>19/17/1419/17/14Siltscalar*VisualNONENONEDebrisscalar*VisualNONENONESand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORMLNORMLOdorscalar*VisualNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGSodiumppmASTM D5185m2BoronppmASTM D5185m0MalganeseppmASTM D5185m0MagnesiumppmASTM D5185m727676ZincppmASTM D5185m900765ZincppmASTM D5185m1.01.20 | | | | - | | | |
| Siltscalar*VisualNONENONEDebrisscalar*VisualNONENONESand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORMLNORMLAppearancescalar*VisualNORMLNORMLOdorscalar*VisualNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGSodiumppmASTM D5185m2BoronppmASTM D5185m0BariumppmASTM D5185m0MolybdenumppmASTM D5185m0MaganeseppmASTM D5185m723CalciumppmASTM D5185m727676PhosphorusppmASTM D5185m900765SulfurppmASTM D5185m15005362Acid Number (AN)mg KOHgASTM D80451.01.20 | | | | | - | | |
| Debrisscalar*VisualNONENONESand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORMLNORMLOdorscalar*VisualNORMLNORMLCdorscalar*Visual>0.1NEGEmulsified Waterscalar*Visual>0.1NEGSodiumppmASTM D5185m2BoronppmASTM D5185m0BariumppmASTM D5185m0MolybdenumppmASTM D5185m0MagnaeseppmASTM D5185m3MagnesiumppmASTM D5185m727676PhosphorusppmASTM D5185m900765ZincppmASTM D5185m15005362Acid Number (AN)mg KOHgASTM D80451.01.20 | | aaalar | () | | | | |
| Sand/Dirtscalar*VisualNONENONEAppearancescalar*VisualNORMLNORMLOdorscalar*VisualNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGSodiumppmASTM D5185m2BoronppmASTM D5185m0BariumppmASTM D5185m0MolybdenumppmASTM D5185m0MagnaeseppmASTM D5185m3MagnesiumppmASTM D5185m727676PhosphorusppmASTM D5185m900765ZincppmASTM D5185m15005362Acid Number (AN)mg KOHgASTM D80451.01.20 | | | | | - | | |
| Appearancescalar*VisualNORMLNORMLOdorscalar*VisualNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGSodiumppmASTM D5185m2BoronppmASTM D5185m<1BariumppmASTM D5185m0MolybdenumppmASTM D5185m0MagnaeseppmASTM D5185m0MagnesiumppmASTM D5185m3CalciumppmASTM D5185m727676ZincppmASTM D5185m900765SulfurppmASTM D5185m1.01.20 | | | | - | _ | | |
| Odorscalar*VisualNORMLNORMLEmulsified Waterscalar*Visual>0.1NEGSodiumppmASTM D5185m2BoronppmASTM D5185m<1BariumppmASTM D5185m0MolybdenumppmASTM D5185m0MagnaeseppmASTM D5185m0MagnesiumppmASTM D5185m871512CalciumppmASTM D5185m727676PhosphorusppmASTM D5185m900765SulfurppmASTM D5185m15005362Acid Number (AN)mg KOHgASTM D80451.01.20 | | | | | | | |
| Emulsified Waterscalar*Visual>0.1NEGSodiumppmASTM D5185m2BoronppmASTM D5185m<1BariumppmASTM D5185m0MolybdenumppmASTM D5185m0MagnaeseppmASTM D5185m0MagnesiumppmASTM D5185m0CalciumppmASTM D5185m871512PhosphorusppmASTM D5185m727676ZincppmASTM D5185m900765SulfurppmASTM D5185m15005362Acid Number (AN)mg KOH'gASTM D80451.01.20 | | | | | | | |
| Sodium ppm ASTM D5185m 2 Boron ppm ASTM D5185m < <1 Barium ppm ASTM D5185m 0 Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 0 Maganese ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 87 1512 Calcium ppm ASTM D5185m 727 676 Phosphorus ppm ASTM D5185m 900 765 Zinc ppm ASTM D5185m 1500 5362 Sulfur ppm ASTM D8045 1.0 1.20 | | | | | | | |
| Boron ppm ASTM D5185m < | | | | | | | |
| Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 0 Manganese ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 87 1512 Calcium ppm ASTM D5185m 727 676 Phosphorus ppm ASTM D5185m 900 765 Sulfur ppm ASTM D5185m 1500 5362 Acid Number (AN) mg KOH/g ASTM D8045 1.0 1.20 | Sodium | ppm | ASTM D5185m | | 2 | | |
| Molybdenum ppm ASTM D5185m 0 Manganese ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 3 Calcium ppm ASTM D5185m 87 1512 Phosphorus ppm ASTM D5185m 727 676 Zinc ppm ASTM D5185m 900 765 Sulfur ppm ASTM D5185m 1500 5362 Acid Number (AN) mg KOH/g ASTM D8045 1.0 1.20 | Boron | ppm | ASTM D5185m | | <1 | | |
| Manganese ppm ASTM D5185m 0 Magnesium ppm ASTM D5185m 3 Calcium ppm ASTM D5185m 87 1512 Phosphorus ppm ASTM D5185m 727 676 Zinc ppm ASTM D5185m 900 765 Sulfur ppm ASTM D5185m 1500 5362 Acid Number (AN) mg KOH/g ASTM D8045 1.0 1.20 | Barium | ppm | ASTM D5185m | | 0 | | |
| Magnesium ppm ASTM D5185m 3 Calcium ppm ASTM D5185m 87 1512 Phosphorus ppm ASTM D5185m 727 676 Zinc ppm ASTM D5185m 900 765 Sulfur ppm ASTM D5185m 1500 5362 Acid Number (AN) mg KOH/g ASTM D8045 1.0 1.20 | Molybdenum | ppm | ASTM D5185m | | 0 | | |
| Calcium ppm ASTM D5185m 87 1512 Phosphorus ppm ASTM D5185m 727 676 Zinc ppm ASTM D5185m 900 765 Sulfur ppm ASTM D5185m 1500 5362 Acid Number (AN) mg KOH/g ASTM D8045 1.0 1.20 | Manganese | ppm | ASTM D5185m | | 0 | | |
| Phosphorus ppm ASTM D5185m 72.7 676 Zinc ppm ASTM D5185m 900 765 Sulfur ppm ASTM D5185m 1500 5362 Acid Number (AN) mg KOH/g ASTM D8045 1.0 1.20 | Magnesium | ppm | ASTM D5185m | | 3 | | |
| Zinc ppm ASTM D5185m 900 765 Sulfur ppm ASTM D5185m 1500 5362 Acid Number (AN) mg KOH/g ASTM D8045 1.0 1.20 | Calcium | ppm | ASTM D5185m | 87 | 1512 | | |
| Sulfur ppm ASTM D5185m 1500 5362 Acid Number (AN) mg KOH/g ASTM D8045 1.0 1.20 | Phosphorus | ppm | ASTM D5185m | 727 | 676 | | |
| Acid Number (AN) mg KOH/g ASTM D8045 1.0 1.20 | | ppm | ASTM D5185m | 900 | 765 | | |
| | Sulfur | ppm | ASTM D5185m | 1500 | 5362 | | |
| Visc @ 40°C cSt ASTM D445 65 45.7 | , | mg KOH/g | | 1.0 | | | |
| | Visc @ 40°C | cSt | ASTM D445 | 65 | 45.7 | | |





Contact/Location: WILLIAM BYRD - RWMGAR Page 2 of 2