

Machine Id CR1224 - OUTER Component Rear Left Planetary Fluid GEAR OIL ISO 220 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

There is no indication of any contamination in the oil.

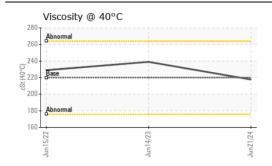
FLUID CONDITION

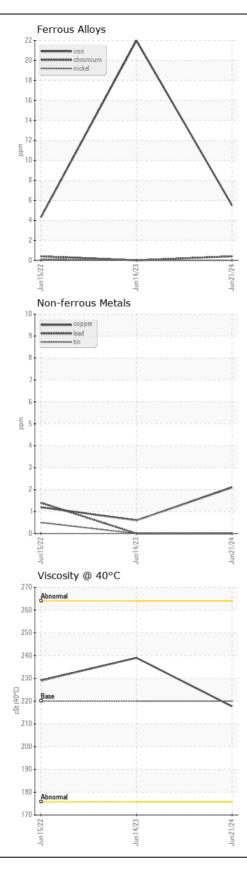
The condition of the oil is acceptable for the time in service.

| TestUOMMethodLimitAbCurrentHistory1History2Sample NumberClient InfoVC0952167WC0809370WC0704512Sample DateClient Info21 Jun 202414 Jun 202315 Jun 2022Machine AgehrsClient Info24951680825Oil AgehrsClient InfoInfo10000Oil ChangedClient InfoKot ChangedChangedChangedFilter AgehrsClient InfoNot ChangedChangedChangedSample StatusClient InfoNot ChangedChangedChangedIronppmASTM D51858>50062224ChromiumppmASTM D51858>1000<1NickelppmASTM D51858>100<1<1NickelppmASTM D51858>100<1<1SilverppmASTM D51858>200<1<1AuminumppmASTM D51858>200<1<1IrinppmASTM D51858>2100<1<1VanadiumppmASTM D51858>22530<1<1VanadiumppmASTM D51858>2100<1<1VanadiumppmASTM D51858>2230<1<1VanadiumppmASTM D51858>2010<1<1VanadiumppmASTM D51858>201 | | | | | | | |
|--|------------------|--------|-------------|-----------|-------------|-------------|-------------|
| Sample DateClient InfoZ1 Jun 202314 Jun 202315 Jun 2022Machine AgehrsClient Info24951680825Oil AgehrsClient Info010000Oil ChangedClient InfoCChangedChangedChangedFilter ChangedClient InfoImageChangedChangedChangedSample StatusClient InfoNot ChangedChangedChangedIronppmASTM D5185m>5006224ChromiumppmASTM D5185m>1000<1NickelppmASTM D5185m>1000<1NickelppmASTM D5185m>1000<1SilverppmASTM D5185m>253001LeadppmASTM D5185m>25001<1VanadiumppmASTM D5185m>752<111TinppmASTM D5185m>75230<1<1VenadiumppmASTM D5185m>75230<1<1VenadiumppmASTM D5185m>75230<1<1VenadiumppmASTM D5185m>75232NONENONEVenadiumppmASTM D5185m>75232NONENONENONESiliconppmASTM D5185m>75 <td< th=""><th>Test</th><th>UOM</th><th>Method</th><th>Limit/Abn</th><th>Current</th><th>History1</th><th>History2</th></td<> | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
| Machine AgehrsClient Info24951680825Oil AgehrsClient Info8151000825Filter AgehrsClient Info010000Oil ChangedClient InfoNot ChangedChangedChangedFilter ChangedQClient InfoNot ChangedChangedChangedSample StatusVNORMALNORMALNORMALNORMALIronppmASTM D5185m>5006224ChromiumppmASTM D5185m>100<1NickelppmASTM D5185m>100<1<1SilverppmASTM D5185m>2530<1LeadppmASTM D5185m>752<11CopperppmASTM D5185m>752<1<1VanadiumppmASTM D5185m>7523NONEVeltow Metalscalar'VisualNONENONENONENONEVeltow Metalscalar'VisualNONENONENONENONESiliconppmASTM D5185m>75232PotassiumppmASTM D5185m>75232PotassiumppmASTM D5185mS2101SiliconppmASTM D5185mS2101SiliconppmASTM D5185mS2101Silicon <t< th=""><th>Sample Number</th><th></th><th>Client Info</th><th></th><th>WC0952167</th><th>WC0809370</th><th>WC0704612</th></t<> | Sample Number | | Client Info | | WC0952167 | WC0809370 | WC0704612 |
| Name of Coll Age Filter Age Filter Age AgeNo Collent InfoB151000825Filter Changed Sample StatusClient InfoChangedChangedChangedChangedFilter Changed Sample StatusClient InfoNo ChangedChangedChangedIronppmASTM D5185m>50062224ChromiumppmASTM D5185m>1000<1NickelppmASTM D5185m>1000<1NickelppmASTM D5185m>250300<1NickelppmASTM D5185m>255300<1AluminumppmASTM D5185m>255300<1LeadppmASTM D5185m>25300<1CopperppmASTM D5185m>752<11TinppmASTM D5185m>752<1<1VanduiumppmASTM D5185m>7523<0Vellow Metalscalar"VisualNONENONENONENONESiliconppmASTM D5185m>75232PotassiumppmASTM D5185m>201018Vellow Metalscalar"VisualNONENONENONENONESiliconppmASTM D5185m>201018Vellow Metalscalar"VisualNONENONENONENONESilicon< | Sample Date | | Client Info | | 21 Jun 2024 | 14 Jun 2023 | 15 Jun 2022 |
| Filter Age Oil ChangedhrsClient InfoO10000Oil ChangedClient InfoChangedChangedChangedChangedChangedFilter ChangedOilent InfoNot ChangedNoRMALNORMALNORMALIronppmASTM D5185m>5006224ChromiumppmASTM D5185m>1000<1NickelppmASTM D5185m>1000<1NickelppmASTM D5185m>200<1<1SilverppmASTM D5185m>2530<1AluminumppmASTM D5185m>2500<1LeadppmASTM D5185m>752<11TinppmASTM D5185m>100<1<1VanadiumppmASTM D5185m>100<1<1VanadiumppmASTM D5185m>752<1<1Vellow Metalscalar"VisualNONENONENONENONESiliconppmASTM D5185m>75232<18SiliconppmASTM D5185m>201018Vellow Metalscalar"VisualNONENONENONENONESiliconppmASTM D5185m>201018Vellow Metalscalar"VisualNONENONENONENONESodiumppmAS | Machine Age | hrs | Client Info | | 2495 | 1680 | 825 |
| Oil Changed Filter ChangedClient InfoChanged Not Changed Not Changed Changed Changed Changed Changed Sample StatusClient InfoNot Changed Not Changed Not Changed NORMALChanged Changed Changed Changed NoRMALNORMALIronppmASTM D5185m ASTM D5185m>106224ChromiumppmASTM D5185m ASTM D5185m>100<1<1NickelppmASTM D5185m ASTM D5185m>100<1<1SilverppmASTM D5185m ASTM D5185m>2500<1AluminumppmASTM D5185m ASTM D5185m>25001CopperppmASTM D5185m ASTM D5185m>100<1<1TinppmASTM D5185m ASTM D5185m>100<1<1VanadiumppmASTM D5185m ASTM D5185m>75232VanadiumppmASTM D5185m ASTM D5185m>75232VanadiumppmASTM D5185m ASTM D5185m>75232VanadiumppmASTM D5185m ASTM D5185m>01018WaterwC Method ASTM D5185m>01018ValuevisualNONENONENONENONENONESiliconppmASTM D5185m ASTM D5185mNONENONENONENONESoliconppmASTM D5185m ASTM D5185mNONENONE <td< th=""><th>Oil Age</th><th>hrs</th><th>Client Info</th><th></th><th>815</th><th>1000</th><th>825</th></td<> | Oil Age | hrs | Client Info | | 815 | 1000 | 825 |
| Filter ChangedClient InfoNat Rot ChangedChangedChangedSample StatusClient InfoNORMALNORMALNORMALIronppmASTM D5185m>5006224ChromiumppmASTM D5185m>10C10<1NickelppmASTM D5185m>100<1<1NickelppmASTM D5185m>100<1<1SilverppmASTM D5185mS00<1AluminumppmASTM D5185m>2500<1LeadppmASTM D5185m>2500<1CopperppmASTM D5185m>752<11TinppmASTM D5185m>752<1<1VanadiumppmASTM D5185m>75232VanadiumppmASTM D5185m>75232Vellow Metalscalar*VisualNONENONENONEVellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>75232PotassiumppmASTM D5185m>75232SiliconppmASTM D5185m>75232PotassiumppmASTM D5185m>201018WaterVisualNONENONENONENONENONESodurppmASTM | Filter Age | hrs | Client Info | | 0 | 1000 | 0 |
| Sample StatusNORMALNORMALNORMALIronppmASTM D5185m>5006224ChromiumppmASTM D5185m>10<10<1NickelppmASTM D5185m>100<1<1NickelppmASTM D5185m>100<1<1SilverppmASTM D5185m>2530<1AluminumppmASTM D5185m>2530<1LeadppmASTM D5185m>25001CopperppmASTM D5185m>752<11TinppmASTM D5185m>100<1<1VanadiumppmASTM D5185m>75232VanadiumppmASTM D5185m>75232Vellow Metalscalar*VisualNONENONENONENONEVellow Metalscalar*VisualNONENONENONENONESiliconppmASTM D5185m>752322PotassiumppmASTM D5185m>201018WaterVisualNONENONENONENONENONESolitscalar*VisualNORNONENONENONEDebrisscalar*VisualNORMNORMLNORMLNORMLAppearancescalar*VisualNORMNORMNORMNORML <tr< th=""><th>Oil Changed</th><th></th><th>Client Info</th><th></th><th>Changed</th><th>Changed</th><th>Changed</th></tr<> | Oil Changed | | Client Info | | Changed | Changed | Changed |
| Iron ppm ASTM D5185m >500 6 22 4 Chromium ppm ASTM D5185m >10 <1 0 <1 Nickel ppm ASTM D5185m >10 0 <1 <1 Titanium ppm ASTM D5185m >10 0 <1 <1 Silver ppm ASTM D5185m >25 3 0 <1 Aluminum ppm ASTM D5185m >25 0 0 <1 Lead ppm ASTM D5185m >25 0 0 <1 Copper ppm ASTM D5185m >10 0 <1 <1 Vinadium ppm ASTM D5185m >10 0 <1 <1 Vinte Metal scalar *Visual NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE Silicon ppm ASTM D5185m >20 <t< th=""><th>Filter Changed</th><th></th><th>Client Info</th><th></th><th>Not Changd</th><th>Changed</th><th>Changed</th></t<> | Filter Changed | | Client Info | | Not Changd | Changed | Changed |
| Chromium ppm ASTM D5185m >10 <1 | Sample Status | | | | NORMAL | NORMAL | NORMAL |
| Chromium ppm ASTM D5185m >10 <1 | Iron | nnm | AQTM D5195m | > 500 | 6 | 22 | Л |
| NickelppmASTM D5185m>100<1 | - | | | | - | | |
| Titanium ppm ASTM D5185m 0 <1 | | | | | | | |
| Silver ppm ASTM D5185m 0 0 <1 | | | | >10 | - | - | |
| Aluminum ppm ASTM D5185m >25 3 0 <1 | | | | | | | |
| Lead ppm ASTM D5185m >25 0 0 1 Copper ppm ASTM D5185m >75 2 <1 1 Tin ppm ASTM D5185m >10 0 0 <1 Vanadium ppm ASTM D5185m >10 0 <1 <1 White Metal scalar *Visual NONE NONE NONE MODE Yellow Metal scalar *Visual NONE NONE NONE NONE NONE Silicon ppm ASTM D5185m >75 2 3 2 Potassium ppm ASTM D5185m >75 2 NONE NONE Silicon ppm ASTM D5185m >75 2 3 2 Potassium ppm ASTM D5185m >75 2 3 2 Silicon scalar *Visual NONE NONE NONE NONE Debris scalar *Visual | | | | >25 | - | | |
| Copper ppm ASTM D5185m >75 2 <1 | | | | | | | |
| TinppmASTM D5185m>1000<1 | | | | | - | - | |
| VanadiumppmASTM D5185m0<1 | | | | | _ | | |
| White Metalscalar*VisualNONENONENONENONEMODERYellow Metalscalar*VisualNONENONENONENONENONENONESiliconppmASTM D5185m>75232PotassiumppmASTM D5185m>201018WaterWC Method>0.2NEGNEGNEGSilitscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLBoronppmASTM D5185m15002BariumppmASTM D5185m1501<1<ManganeseppmASTM D5185m5001<1ManganeseppmASTM D5185m5001<1ManganesiumppmASTM D5185m50070PhosphorusppmASTM D5185m100200SulfurppmASTM D5185m100200SulfurppmASTM D5185m125008263473939 | | | | ~10 | - | - | |
| Yellow Metalscalar*VisualNONENONENONENONESiliconppmASTM D5185m>75232PotassiumppmASTM D5185m>201018WaterWC Method>0.2NEGNEGNEGSiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLBoronppmASTM D5185m15002BariumppmASTM D5185m1500<1MaganeseppmASTM D5185m5001<1MagnesiumppmASTM D5185m50070PhosphorusppmASTM D5185m50070PhosphorusppmASTM D5185m100200SulfurppmASTM D5185m100200SulfurppmASTM D5185m125008263473939 | | | | NONE | | | |
| SiliconppmASTM D5185m>75232PotassiumppmASTM D5185m>201018WaterWC Method>0.2NEGNEGNEGSiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLSodiumppmASTM D5185m50402BariumppmASTM D5185m1500MagnesiumppmASTM D5185m5001<1< | | | | | - | | |
| PotassiumppmASTM D5185m>201018WaterWC Method>0.2NEGNEGNEGSiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGSodiumppmASTM D5185m50402BariumppmASTM D5185m15000MolybdenumppmASTM D5185m1501<1MagnesiumppmASTM D5185m5001<1PhosphorusppmASTM D5185m50070PhosphorusppmASTM D5185m35051130358ZincppmASTM D5185m125008263473939 | | Scalar | •15041 | | | NONE | NONE |
| WaterWC Method>0.2NEGNEGNEGSiltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONENONENONENONENONESand/Dirtscalar*VisualNONENONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGSodiumppmASTM D5185m50402BariumppmASTM D5185m15000MolybdenumppmASTM D5185m1501<1MagnesiumppmASTM D5185m50070PhosphorusppmASTM D5185m50070PhosphorusppmASTM D5185m100200SulfurppmASTM D5185m100200SulfurppmASTM D5185m12508263473939 | Silicon | ppm | ASTM D5185m | >75 | 2 | 3 | 2 |
| Siltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONENONENONENONENONESand/Dirtscalar*VisualNONENONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLCorscalar*Visual>0.2NEGNEGNEGSodiumppmASTM D5185m50402BariumppmASTM D5185m15000MolybdenumppmASTM D5185m1500<1ManganeseppmASTM D5185m5001<1MagnesiumppmASTM D5185m50070PhosphorusppmASTM D5185m100200SulfurppmASTM D5185m100200SulfurppmASTM D5185m100200 | Potassium | ppm | ASTM D5185m | >20 | 1 | 0 | 18 |
| Debrisscalar*VisualNONENONENONENONENONESand/Dirtscalar*VisualNONENONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGSodiumppmASTM D5185m50402BaronppmASTM D5185m15000MolybdenumppmASTM D5185m1500<1MagnesiumppmASTM D5185m5001<1MagnesiumppmASTM D5185m50070PhosphorusppmASTM D5185m35051130358ZincppmASTM D5185m125008263473939 | Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Sand/Dirtscalar*VisualNONENONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGSodiumppmASTM D5185m50402BaronppmASTM D5185m15000MolybdenumppmASTM D5185m1500<1MagnesiumppmASTM D5185m5001<1MagnesiumppmASTM D5185m50070PhosphorusppmASTM D5185m35051130358ZincppmASTM D5185m100200SulfurppmASTM D5185m125008263473939 | Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Appearancescalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGSodiumppmASTM D5185m50402BoronppmASTM D5185m15000MolybdenumppmASTM D5185m1500<1ManganeseppmASTM D5185m5001<1MagnesiumppmASTM D5185m50001CalciumppmASTM D5185m50070PhosphorusppmASTM D5185m100200ZincppmASTM D5185m100200SulfurppmASTM D5185m125008263473939 | Debris | scalar | *Visual | NONE | NONE | NONE | NONE |
| Odorscalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGSodiumppmASTM D5185m50402BoronppmASTM D5185m50402BariumppmASTM D5185m15000MolybdenumppmASTM D5185m1500<1ManganeseppmASTM D5185m5001<1MagnesiumppmASTM D5185m50001CalciumppmASTM D5185m50070PhosphorusppmASTM D5185m100200ZincppmASTM D5185m100200SulfurppmASTM D5185m125008263473939 | Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Emulsified Water scalar *Visual >0.2 NEG NEG NEG Sodium ppm ASTM D5185m 50 4 0 2 Boron ppm ASTM D5185m 50 4 0 2 Barium ppm ASTM D5185m 15 0 0 0 Molybdenum ppm ASTM D5185m 15 0 0 <11 Manganese ppm ASTM D5185m 50 0 1 <1 Magnesium ppm ASTM D5185m 50 0 0 1 Calcium ppm ASTM D5185m 50 0 7 0 Phosphorus ppm ASTM D5185m 50 0 7 0 Phosphorus ppm ASTM D5185m 350 511 303 58 Zinc ppm ASTM D5185m 100 2 0 0 Sulfur ppm ASTM D5185m 12500 826 | Appearance | scalar | *Visual | NORML | NORML | NORML | NORML |
| Sodium ppm ASTM D5185m 2 <1 | Odor | scalar | *Visual | NORML | NORML | NORML | NORML |
| Boron ppm ASTM D5185m 50 4 0 2 Barium ppm ASTM D5185m 15 0 0 0 Molybdenum ppm ASTM D5185m 15 0 0 <1 Manganese ppm ASTM D5185m 50 0 1 <1 Magnesium ppm ASTM D5185m 50 0 0 1 Calcium ppm ASTM D5185m 50 0 7 0 Phosphorus ppm ASTM D5185m 50 0 7 0 Phosphorus ppm ASTM D5185m 50 0 7 0 Phosphorus ppm ASTM D5185m 100 2 0 0 Sulfur ppm ASTM D5185m 100 2 0 0 | Emulsified Water | scalar | *Visual | >0.2 | NEG | NEG | NEG |
| Boron ppm ASTM D5185m 50 4 0 2 Barium ppm ASTM D5185m 15 0 0 0 Molybdenum ppm ASTM D5185m 15 0 0 <1 Manganese ppm ASTM D5185m 50 0 1 <1 Magnesium ppm ASTM D5185m 50 0 0 1 Calcium ppm ASTM D5185m 50 0 7 0 Phosphorus ppm ASTM D5185m 50 0 7 0 Phosphorus ppm ASTM D5185m 50 0 7 0 Phosphorus ppm ASTM D5185m 100 2 0 0 Sulfur ppm ASTM D5185m 100 2 0 0 | Sodium | nnm | ASTM D5185m | | 2 | <1 | 8 |
| Barium ppm ASTM D5185m 15 0 0 0 Molybdenum ppm ASTM D5185m 15 0 0 <1 | | | | 50 | | | |
| Molybdenum ppm ASTM D5185m 15 O 0 <1 | | | | | | | |
| Manganese ppm ASTM D5185m 0 1 <1 | | | | | | | |
| Magnesium ppm ASTM D5185m 50 0 0 1 Calcium ppm ASTM D5185m 50 0 7 0 Phosphorus ppm ASTM D5185m 350 511 303 58 Zinc ppm ASTM D5185m 100 2 0 0 Sulfur ppm ASTM D5185m 12500 826 3473 939 | | | | | | | |
| Calcium ppm ASTM D5185m 50 0 7 0 Phosphorus ppm ASTM D5185m 350 511 303 58 Zinc ppm ASTM D5185m 100 2 0 0 Sulfur ppm ASTM D5185m 12500 826 3473 939 | - | | | 50 | | | |
| Phosphorus ppm ASTM D5185m 350 511 303 58 Zinc ppm ASTM D5185m 100 2 0 0 Sulfur ppm ASTM D5185m 12500 826 3473 939 | 0 | | | | | | |
| Zinc ppm ASTM D5185m 100 2 0 0 Sulfur ppm ASTM D5185m 12500 826 3473 939 | | | | | | | |
| Sulfur ppm ASTM D5185m 12500 826 3473 939 | • | | | | | | |
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Report Id: BUCGRA [WUSCAR] 06226573 (Generated: 07/09/2024 17:26:05) Rev: 1

Contact/Location: MICHAEL LAWSON - BUCGRA



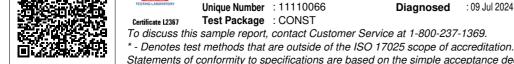


Received

Diagnosed

Tested

BUCKNER HEAVY LIFT : WearCheck USA - 501 Madison Ave., Cary, NC 27513 : 02 Jul 2024 4732 NC 54 EAST : 09 Jul 2024 GRAHAM, NC : 09 Jul 2024 - Jonathan Hester US 27253-9215 Contact: MICHAEL LAWSON michaell@bucknercompanies.com T: (336)376-8888 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (336)376-4090



Laboratory

Sample No.

Lab Number : 06226573

: WC0952167

Contact/Location: MICHAEL LAWSON - BUCGRA Page 2 of 2