

Machine Id 2227111 Compone **Front Differential** GEAR OIL SAE 75W90 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

WEAR

All component wear rates are normal.

CONTAMINATION

There is no indication of any contamination in the oil.

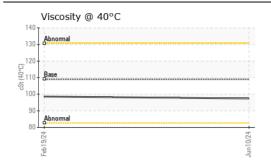
FLUID CONDITION

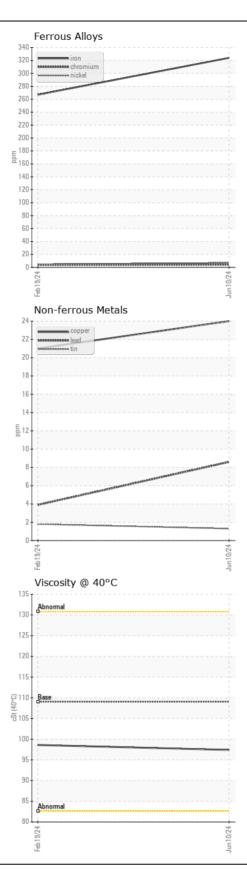
The condition of the oil is acceptable for the time in service.

| TestUOMMethodLimit/AbCurrentHistory1History2Sample NumberClient InfoPCA0128343PCA0119545Sample DateClient InfoI0 Jun 202419 Feb 2024Machine AgemlsClient Info4100621063Oil AgemlsClient Info4100621063Filter AgemlsClient Info4100621063Oil ChangedClient InfoMot ChangdNot ChangdFilter ChangedClient InfoNot ChangdNot ChangdFilter ChangedSample StatusS5003242667IronppmASTM D5185m>5003242667NickelppmASTM D5185m>1044NickelppmASTM D5185m>1075SilverppmASTM D5185m>2594AuminumppmASTM D5185m>2594VanadiumppmASTM D5185m>1012Yellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>203<1Yellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>203<1SiliconppmASTM D5185m>203<1< | | | | | | | |
|---|------------------|--------|-------------|-----------|-------------|-------------|----------|
| Sample DateClient InfoID Jun 202419 Feb 2024Machine AgemlsClient Info410060Oil AgemlsClient Info4100621063Filter AgemlsClient Info4100621063Oil ChangedClient InfoNot ChangdNot ChangdFilter ChangedClient InfoNot ChangdNot ChangdSample StatusClient InfoNot ChangdNot ChangdIronppmASTM D5185m>5003242677ChromiumppmASTM D5185m>1044NickelppmASTM D5185m>1075SilverppmASTM D5185m>2594AluminumppmASTM D5185m>2594AluminumppmASTM D5185m>102421VanadiumppmASTM D5185m>1012VanadiumppmASTM D5185m>1012VanadiumppmASTM D5185m>7540411SiliconppmASTM D5185m>7540411Yellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>7540411PotassiumppmASTM D5185m>203<1 <th>Test</th> <th>UOM</th> <th>Method</th> <th>Limit/Abn</th> <th>Current</th> <th>History1</th> <th>History2</th> | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
| Machine Age Oil AgemlsClient Info410060Oil Age Filter AgemlsClient Info4100621063Filter AgemlsClient Info4100621063Oil ChangedClient InfoNot ChangdNot ChangdFilter ChangedClient InfoNot ChangdNot ChangdSample StatusClient InfoNot ChangdNot ChangdIronppmASTM D5185m>5003242677ChromiumppmASTM D5185m>1044NickelppmASTM D5185m>1075SilverppmASTM D5185m>2544AluminumppmASTM D5185m>2594LeadppmASTM D5185m>2594VanadiumppmASTM D5185m>1012VanadiumppmASTM D5185m>1012YanadiumppmASTM D5185m>7540411SiliconppmASTM D5185m>7540411Yellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>7540411PotassiumppmASTM D5185m>203<1Siliconscalar*VisualNONENONE <th>Sample Number</th> <th></th> <th>Client Info</th> <th></th> <th>PCA0128343</th> <th>PCA0119545</th> <th></th> | Sample Number | | Client Info | | PCA0128343 | PCA0119545 | |
| Oil AgemlsClient Info4100621063Filter AgemlsClient Info4100621063Oil ChangedClient InfoNot ChangdNot ChangdFilter ChangedClient InfoNot ChangdNot ChangdSample StatusVolt ChangedNot ChangdNot ChangdIronppmASTM D5185m>500 324 2677ChromiumppmASTM D5185m>10 4 4NickelppmASTM D5185m>10 7 5TitaniumppmASTM D5185m>25 4 4AluminumppmASTM D5185m>25 9 4AluminumppmASTM D5185m>10012YanadiumppmASTM D5185m>10012YanadiumppmASTM D5185m>7012YanadiumppmASTM D5185m>7012Yellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>724041Yellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>203<1PotassiumppmASTM D5185m>203<1Siliconscalar*VisualNONE <th>Sample Date</th> <th></th> <th>Client Info</th> <th></th> <th>10 Jun 2024</th> <th>19 Feb 2024</th> <th></th> | Sample Date | | Client Info | | 10 Jun 2024 | 19 Feb 2024 | |
| Filter Age mis Client Info 41006 21063 Gil Changed Client Info Not Changd Not Changd Filter Changed Client Info Not Changd Not Changd Sample Status Vient Info Not RMAL ABNORMAL Iron ppm ASTM D5185m >500 324 267 Chromium ppm ASTM D5185m >10 4 4 Nickel ppm ASTM D5185m >10 7 5 Aluminum ppm ASTM D5185m >25 4 4 Aluminum ppm ASTM D5185m >25 9 4 Aluminum ppm ASTM D5185m >25 9 4 Aluminum ppm ASTM D5185m >10 1 2 Aluminum ppm ASTM D5185m >10 1 2 Vanadium ppm ASTM D5185m >10 1 2 <th>Machine Age</th> <th>mls</th> <th>Client Info</th> <th></th> <th>41006</th> <th>0</th> <th></th> | Machine Age | mls | Client Info | | 41006 | 0 | |
| Oil ChangedClient InfoNot ChangdNot ChangdFilter ChangedClient InfoNot ChangdNot ChangdSample StatusNORMALABNORMALIronppmASTM D5185m>500324267ChromiumppmASTM D5185m>1044NickelppmASTM D5185m>1075TitaniumppmASTM D5185m>2544NuminumppmASTM D5185m>2594AluminumppmASTM D5185m>2594LeadppmASTM D5185m>10024211TinppmASTM D5185m>10012VanadiumppmASTM D5185m>10010White Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>203<1VaterWC Method>.2NEGNONESiliconppmASTM D5185m>203<1Suitscalar*VisualNONENONENONESuitscalar*VisualNONENONESuitscalar*VisualNONENONESuitonppmASTM D5185m>203<1Suitonscalar*VisualNONENONESuitonscalar*Visual | Oil Age | mls | Client Info | | 41006 | 21063 | |
| Filter Changed Sample Status Client Info Not Changd Not Changd Not Changd ABNORMAL | Filter Age | mls | Client Info | | 41006 | 21063 | |
| Sample StatusNORMALABNORMALIronppmASTM D5185m>500324267ChromiumppmASTM D5185m>1044NickelppmASTM D5185m>1075TitaniumppmASTM D5185m>1075SilverppmASTM D5185m>2544AluminumppmASTM D5185m>2594LeadppmASTM D5185m>10024211CopperppmASTM D5185m>10012VanadiumppmASTM D5185m>1012VanadiumppmASTM D5185m>1012Yellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>7540411Yellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>203<1Silitscalar*VisualNONENONENONESoldurppmASTM D5185m>203<1Qandriberscalar*VisualNONENONENONESilitscalar*VisualNONENONENONEQdorscalar*VisualNORMLNORML <t< th=""><th>Oil Changed</th><th></th><th>Client Info</th><th></th><th>Not Changd</th><th>Not Changd</th><th></th></t<> | Oil Changed | | Client Info | | Not Changd | Not Changd | |
| Iron ppm ASTM D5185m >500 324 267 Chromium ppm ASTM D5185m >10 4 4 Nickel ppm ASTM D5185m >10 7 5 Titanium ppm ASTM D5185m >10 7 5 Silver ppm ASTM D5185m >25 4 4 Aluminum ppm ASTM D5185m >25 9 4 Lead ppm ASTM D5185m >25 9 4 Copper ppm ASTM D5185m >100 24 21 Vanadium ppm ASTM D5185m >10 1 2 Vanadium ppm ASTM D5185m >10 1 2 Vendettal scalar *Visual NONE NONE NONE Yellow Metal scalar *Visual NONE </th <th>Filter Changed</th> <th></th> <th>Client Info</th> <th></th> <th>Not Changd</th> <th>Not Changd</th> <th></th> | Filter Changed | | Client Info | | Not Changd | Not Changd | |
| Chromium ppm ASTM D5185m >10 4 4 Nickel ppm ASTM D5185m >10 7 5 Titanium ppm ASTM D5185m >10 7 5 Silver ppm ASTM D5185m >10 7 5 Aluminum ppm ASTM D5185m >25 4 4 Lead ppm ASTM D5185m >25 9 4 Copper ppm ASTM D5185m >100 24 21 Vanadium ppm ASTM D5185m >10 1 2 Vanadium ppm ASTM D5185m >10 0 0 Vanadium ppm ASTM D5185m >75 40 411 Yellow Metal scalar *Visual NONE NONE NONE Silicon ppm ASTM D5185m >20 <th>Sample Status</th> <th></th> <th></th> <th></th> <th>NORMAL</th> <th>ABNORMAL</th> <th></th> | Sample Status | | | | NORMAL | ABNORMAL | |
| Chromium ppm ASTM D5185m >10 4 4 Nickel ppm ASTM D5185m >10 7 5 Titanium ppm ASTM D5185m >10 7 5 Silver ppm ASTM D5185m >0 0 Aluminum ppm ASTM D5185m >25 4 4 Lead ppm ASTM D5185m >25 9 4 Copper ppm ASTM D5185m >100 24 21 Vanadium ppm ASTM D5185m >10 1 2 Vanadium ppm ASTM D5185m >10 1 2 Vanadium ppm ASTM D5185m >10 1 2 Vanadium ppm ASTM D5185m >75 40 411 Yellow Metal scalar *Visual NONE NONE | Iron | nom | ASTM D5185m | >500 | 304 | 267 | |
| Nickel ppm ASTM D5185m >10 7 5 Titanium ppm ASTM D5185m <1 <1 Silver ppm ASTM D5185m 0 0 Aluminum ppm ASTM D5185m >25 4 4 Lead ppm ASTM D5185m >25 9 4 Copper ppm ASTM D5185m >100 24 21 Vanadium ppm ASTM D5185m >10 1 2 Vanadium ppm ASTM D5185m >10 0 0 Vanadium ppm ASTM D5185m >10 1 2 Vanadium ppm ASTM D5185m >10 0 0 Valew scalar *Visual NONE NONE NONE Silicon ppm ASTM D5185m >20 < | - | | | | - | | |
| Titanium ppm ASTM D5185m <1 | | | | | - | | |
| Silver ppm ASTM D5185m > 25 4 4 Aluminum ppm ASTM D5185m > 25 4 4 Lead ppm ASTM D5185m > 25 9 4 Copper ppm ASTM D5185m > 100 24 21 Tin ppm ASTM D5185m > 100 1 2 Vanadium ppm ASTM D5185m > 100 0 0 Vanadium ppm ASTM D5185m > 10 1 2 Vanadium ppm ASTM D5185m > 10 0 0 Vanadium ppm ASTM D5185m > 75 40 41 Yellow Metal scalar *Visual NONE NONE NONE Silicon ppm ASTM D5185m > 20 3 <1 Solicon ppm ASTM D5185m < | | | | ~10 | - | | |
| Aluminum ppm ASTM D5185m >25 4 4 Lead ppm ASTM D5185m >25 9 4 Copper ppm ASTM D5185m >25 9 4 Copper ppm ASTM D5185m >100 24 21 Vanadium ppm ASTM D5185m >10 1 2 Vanadium ppm ASTM D5185m >10 1 2 Vanadium ppm ASTM D5185m >10 1 2 Vanadium ppm ASTM D5185m >10 0 0 Vanadium ppm ASTM D5185m >75 40 411 Yellow Metal scalar *Visual NONE NONE NONE Silicon ppm ASTM D5185m >20 3 <1 Sudor scalar *Visual NONE </th <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> | | | | | | | |
| LeadppmASTM D5185m>2594CopperppmASTM D5185m>1002421TinppmASTM D5185m>1012VanadiumppmASTM D5185m>1012White Metalscalar*VisualNONENONENONEYellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>754041PotassiumppmASTM D5185m>203<1SiliconppmASTM D5185m>203<1VaterWC Method>.2NEGNEGSilitscalar*VisualNONENONENONEDebrisscalar*VisualNONENONENONEAppearancescalar*VisualNORLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLSodiumppmASTM D5185m2.2NEGNEGSodiumppmASTM D5185m20020BoronppmASTM D5185m20020BariumppmASTM D5185m20020MolybdenumppmASTM D5185m1200 | | | | >25 | - | | |
| CopperppmASTM D5185m>1002421TinppmASTM D5185m>1012VanadiumppmASTM D5185m>1000White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>754041PotassiumppmASTM D5185m>203<1WaterWC Method>.2NEGNEGSilitscalar*VisualNONENONENONEDebrisscalar*VisualNONENONENONESand/Dirtscalar*VisualNORMLNORMLNORMLAppearancescalar*VisualNORMLNORMLNORMLGdorscalar*VisualNORMLNORMLNORMLSodiumppmASTM D5185m2.2NEGNEGSodiumppmASTM D5185m400143147BariumppmASTM D5185m20020MolybdenumppmASTM D5185m1200 | | | | | - | | |
| TinppmASTM D5185m>1012VanadiumppmASTM D5185m000White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>754041PotassiumppmASTM D5185m>203<1WaterWC Method>.2NEGNONESilitscalar*VisualNONENONENONEDebrisscalar*VisualNONENONEMODERSand/Dirtscalar*VisualNORHNORHLNORHLAppearancescalar*VisualNORMLNORMLNORMLSodiumppmASTM D5185m2.2NEGNEGSodiumppmASTM D5185m400143147BariumppmASTM D5185m20020MolybdenumppmASTM D5185m1200 | | | | | - | | |
| VanadiumppmASTM D5185m00White Metalscalar*VisualNONENONENONEYellow Metalscalar*VisualNONENONENONEYellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>754041PotassiumppmASTM D5185m>203<1WaterWC Method>.2NEGNEGSilitscalar*VisualNONENONENONEDebrisscalar*VisualNONENONEMODERSand/Dirtscalar*VisualNORMLNORMLNORMLAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLSodiumppmASTM D5185m20020BariumppmASTM D5185m20020MolybdenumppmASTM D5185m1200 | | | | | | | |
| White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONESiliconppmASTM D5185m>754041PotassiumppmASTM D5185m>203<1WaterWC Method>.2NEGNEGSilitscalar*VisualNONENONENONEDebrisscalar*VisualNONENONENONESand/Dirtscalar*VisualNORMNORMLNONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLSodiumppmASTM D5185m20020BoronppmASTM D5185m20020MolybdenumppmASTM D5185m20020 | | | | 210 | - | | |
| Yellow Metalscalar*VisualNONENONENONENONESiliconppmASTM D5185m>754041PotassiumppmASTM D5185m>203<1WaterWC Method>.2NEGNEGSiltscalar*VisualNONENONENONEDebrisscalar*VisualNONENONEMODERSand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLEmulsified Waterscalar*Visual>.2NEGNEGSodiumppmASTM D5185m400143147BariumppmASTM D5185m20020MolybdenumppmASTM D5185m1200 | | | | NONE | | - | |
| SiliconppmASTM D5185m>754041PotassiumppmASTM D5185m>203<1WaterWC Method>.2NEGNEGSiltscalar*VisualNONENONENONEDebrisscalar*VisualNONENONEMODERSand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLEmulsified Waterscalar*Visual>.2NEGNEGSodiumppmASTM D5185m400143147BariumppmASTM D5185m20020MolybdenumppmASTM D5185m1200 | | | | | - | | |
| PotassiumppmASTM D5185m>203<1 | | | | | | | |
| WaterWC Method>.2NEGNEGSiltscalar*VisualNONENONENONEDebrisscalar*VisualNONENONEMODERSand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLEmulsified Waterscalar*VisualNORMLNORMLNORMLSodiumppmASTM D5185m400143147BariumppmASTM D5185m20020MolybdenumppmASTM D5185m1200 | Silicon | ppm | ASTM D5185m | >75 | 40 | 41 | |
| Siltscalar*VisualNONENONENONEDebrisscalar*VisualNONENONEMODERSand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>.2NEGNEGSodiumppmASTM D5185m400143147BariumppmASTM D5185m20020MolybdenumppmASTM D5185m1200 | Potassium | ppm | ASTM D5185m | >20 | 3 | <1 | |
| Debrisscalar*VisualNONENONE▲ MODERSand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>.2NEGNEGSodiumppmASTM D5185m400143147BoronppmASTM D5185m20020MolybdenumppmASTM D5185m1200 | Water | | WC Method | >.2 | NEG | NEG | |
| Sand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>.2NEGNEGSodiumppmASTM D5185m400143147BoronppmASTM D5185m20020BariumppmASTM D5185m20020MolybdenumppmASTM D5185m1200 | Silt | scalar | *Visual | NONE | NONE | NONE | |
| Appearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>.2NEGNEGSodiumppmASTM D5185m400143147BoronppmASTM D5185m20020BariumppmASTM D5185m1200 | Debris | scalar | *Visual | NONE | NONE | A MODER | |
| Odorscalar*VisualNORMLNORMLNORMLEmulsified Waterscalar*Visual>.2NEGNEGSodiumppmASTM D5185m400143147BoronppmASTM D5185m20020BariumppmASTM D5185m20020MolybdenumppmASTM D5185m1200 | Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | |
| Emulsified Water scalar *Visual >.2 NEG NEG Sodium ppm ASTM D5185m 8 7 Boron ppm ASTM D5185m 400 143 147 Barium ppm ASTM D5185m 200 2 0 Molybdenum ppm ASTM D5185m 12 0 0 | Appearance | scalar | *Visual | NORML | NORML | NORML | |
| Sodium ppm ASTM D5185m 8 7 Boron ppm ASTM D5185m 400 143 147 Barium ppm ASTM D5185m 200 2 0 Molybdenum ppm ASTM D5185m 12 0 0 | Odor | scalar | *Visual | NORML | NORML | NORML | |
| Boron ppm ASTM D5185m 400 143 147 Barium ppm ASTM D5185m 200 2 0 Molybdenum ppm ASTM D5185m 12 0 0 | Emulsified Water | scalar | *Visual | >.2 | NEG | NEG | |
| Boron ppm ASTM D5185m 400 143 147 Barium ppm ASTM D5185m 200 2 0 Molybdenum ppm ASTM D5185m 12 0 0 | Sodium | maa | ASTM D5185m | | 8 | 7 | |
| Barium ppm ASTM D5185m 200 2 0 Molybdenum ppm ASTM D5185m 12 0 0 | | | | 400 | | | |
| Molybdenum ppm ASTM D5185m 12 0 | | | ASTM D5185m | 200 | | | |
| | Molybdenum | | ASTM D5185m | 12 | 0 | 0 | |
| Manganese ppm ASTM D5185m 15 14 | Manganese | ppm | ASTM D5185m | | 15 | 14 | |
| Magnesium ppm ASTM D5185m 12 1 0 | Magnesium | ppm | | 12 | 1 | 0 | |
| Calcium ppm ASTM D5185m 150 8 11 | Calcium | ppm | ASTM D5185m | 150 | 8 | 11 | |
| Phosphorus ppm ASTM D5185m 1650 1150 1088 | Phosphorus | ppm | ASTM D5185m | 1650 | 1150 | 1088 | |
| Zinc ppm ASTM D5185m 125 26 4 | Zinc | | ASTM D5185m | 125 | 26 | 4 | |
| Sulfur ppm ASTM D5185m 22500 25371 27833 | Sulfur | ppm | ASTM D5185m | 22500 | 25371 | 27833 | |
| Visc @ 40°C cSt ASTM D445 109 97.4 98.6 | N/ 0 4000 | cSt | ASTM D445 | 109 | 97.4 | 98.6 | |



Contact/Location: ROBERT LOCKWOOD - PERGEODE





PERDUE FARMS - GEORGETOWN Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : PCA0128343 Received : 25 Jun 2024 20621 SAVANAH RD Lab Number : 06220154 Tested : 26 Jun 2024 GEORGETOWN, DE Unique Number : 11098351 Diagnosed : 26 Jun 2024 - Wes Davis US 19947 Test Package : FLEET Contact: ROBERT LOCKWOOD Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. Robert.Lockwood@Perdue.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Т: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F:

Contact/Location: ROBERT LOCKWOOD - PERGEODE Page 2 of 2