

## **OIL ANALYSIS REPORT**

Sample Rating Trend

GLYCOL



Machine Id **JOHN DEERE 350D 350-466** Component

**Diesel Engine** Fluid

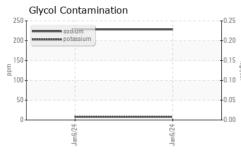
CHEVRON 15W40 (--- GAL)

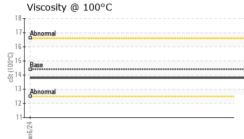
| DIAGNOSIS  | SAMPLE INFORM   |   | method   | limit/base  | current  | history1   | history2   |
|--|---|---|--|---|--|--|--|
|  |   |   |  | minubase  |  |  |  |
| Recommendation We advise that you check for the source of the                                | Sample Number   |   | Client Info  |   | JR0169971  |  |  |
| We advise that you check for the source of the coolant leak. Check for low coolant level. We | Sample Date   | 1   | Client Info  |   | 06 Jan 2024  |  |  |
| recommend an early resample to monitor this  | Machine Age   | hrs   | Client Info  |   | 1011   |  |  |
| condition.   | Oil Age   | hrs   | Client Info  |   | 1  |  |  |
| Vear   | Oil Changed   |   | Client Info  |   | Not Changd   |  |  |
| All component wear rates are normal.   | Sample Status   |   |  |   | ABNORMAL   |  |  |
| Contamination  | CONTAMINATION   | N   | method   | limit/base  |  | history1   | history2   |
| Sodium and/or potassium levels are high.   | Fuel  |   | WC Method  |   | <1.0   |  |  |
| Fluid Condition<br>he BN result indicates that there is suitable                             | Water   |   | WC Method  |   | NEG  |  |  |
| alkalinity remaining in the oil.   | WEAR METALS   |   | method   | limit/base  | current  | history1   | history2   |
|  | Iron  | ppm   | ASTM D5185m  |   | 14   |  |  |
|  | Chromium  | ppm   | ASTM D5185m  | >11   | 0  |  |  |
|  | Nickel  | ppm   | ASTM D5185m  | >5  | <1   |  |  |
|  | Titanium  | ppm   | ASTM D5185m  |   | 0  |  |  |
|  | Silver  | ppm   | ASTM D5185m  | >3  | 0  |  |  |
|  | Aluminum  | ppm   | ASTM D5185m  | >31   | 4  |  |  |
|  | Lead  | ppm   | ASTM D5185m  | >26   | 3  |  |  |
|  | Copper  | ppm   | ASTM D5185m  | >26   | 15   |  |  |
|  | Tin   | ppm   | ASTM D5185m  | >4  | 1  |  |  |
|  | Vanadium  | ppm   | ASTM D5185m  |   | 0  |  |  |
|  | Cadmium   | ppm   | ASTM D5185m  |   | <1   |  |  |
|  | ADDITIVES   |   | method   | limit/base  | current  | history1   | history2   |
|  | ADDITIVEO   |   | mothod   |   |  | ,  |  |
|  | Boron   | ppm   | ASTM D5185m  |   | 212  |  |  |
|  |   | ppm<br>ppm  |  |   |  |  |  |
|  | Boron   |   | ASTM D5185m  |   | 212  |  |  |
|  | Boron<br>Barium   | ppm   | ASTM D5185m<br>ASTM D5185m   |   | 212<br>0   |  |  |
|  | Boron<br>Barium<br>Molybdenum   | ppm<br>ppm  | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m  |   | 212<br>0<br>128  |  |  |
|  | Boron<br>Barium<br>Molybdenum<br>Manganese  | ppm<br>ppm<br>ppm   | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m   |   | 212<br>0<br>128<br><1  |  |  |
|  | Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium  | ppm<br>ppm<br>ppm<br>ppm<br>ppm   | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m  |   | 212<br>0<br>128<br><1<br>627   |  | <br><br>   |
|  | Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium   | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm  | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m   |   | 212<br>0<br>128<br><1<br>627<br>1259   | <br><br>   |  |
|  | Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus  | ppm<br>ppm<br>ppm<br>ppm<br>ppm   | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m   |   | 212<br>0<br>128<br><1<br>627<br>1259<br>707  | <br><br><br>   | <br><br><br>   |
|  | Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc  | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm   | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m  | limit/base  | 212<br>0<br>128<br><1<br>627<br>1259<br>707<br>802<br>2407   | <br><br><br><br><br>   |  |
|  | Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc<br>Sulfur  | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm   | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m   | limit/base  | 212<br>0<br>128<br><1<br>627<br>1259<br>707<br>802<br>2407   |  |  |
|  | Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>CONTAMINANTS  | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm   | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m   | limit/base<br>>22   | 212<br>0<br>128<br><1<br>627<br>1259<br>707<br>802<br>2407<br>current  |  |  |
|  | Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>CONTAMINANTS<br>Silicon   | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm   | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br><b>method</b>  | limit/base<br>>22<br>>50  | 212<br>0<br>128<br><1<br>627<br>1259<br>707<br>802<br>2407<br>current<br>10  | <br><br><br><br><br>history1   | <br><br><br><br><br>history2   |
|  | Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>CONTAMINANTS<br>Silicon<br>Sodium   | ppm   | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br><b>method</b><br>ASTM D5185m<br>ASTM D5185m   | limit/base<br>>22<br>>50  | 212<br>0<br>128<br><1<br>627<br>1259<br>707<br>802<br>2407<br>current<br>10<br>▲ 228   | <br><br><br><br><br>history1   | <br><br><br><br><br>history2   |
|  | Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium  | ppm  <br>ppm  <br>ppm  <br>ppm  <br>ppm  <br>ppm  <br>ppm  <br>ppm  <br>ppm  <br>ppm        | ASTM D5185m<br>ASTM D5185m  | limit/base<br>>22<br>>50  | 212<br>0<br>128<br><1<br>627<br>1259<br>707<br>802<br>2407<br>current<br>10<br>▲ 228<br>8<br>8<br>NEG                                    | history1   | <br><br><br><br>history2   |
|  | Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium<br>Glycol<br>INFRA-RED                                     | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm                          | ASTM D5185m<br>ASTM D5185m<br>*ASTM D2982   | limit/base<br>>22<br>>50<br>>20<br>limit/base                                   | 212<br>0<br>128<br><1<br>627<br>1259<br>707<br>802<br>2407<br>current<br>10<br>228<br>8<br>8<br>NEG                                      | <br><br><br><br><br><br>history1<br><br><br><br>history1                         | <br><br><br><br><br>history2<br><br><br><br>history2                                 |
|  | Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium<br>Glycol<br>INFRA-RED<br>Soot %                           | ppm  <br>ppm  <br>ppm  <br>ppm  <br>ppm  <br>ppm  <br>ppm  <br>ppm  <br>ppm  <br>ppm  <br>% | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>*ASTM D2982<br>method<br>*ASTM D7844                                       | limit/base<br>>22<br>>50<br>>20<br>limit/base<br>>3                             | 212<br>0<br>128<br><1<br>627<br>1259<br>707<br>802<br>2407<br>current<br>10<br>228<br>8<br>NEG<br>current<br>0.2                         | <br><br><br><br><br><br>history1<br><br><br><br>history1                         | <br><br><br><br>history2<br><br><br>history2   |
|  | Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium<br>Glycol<br>INFRA-RED                                     | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm                          | ASTM D5185m<br>ASTM D5185m<br>*ASTM D2982   | limit/base<br>>22<br>>50<br>>20<br>limit/base<br>>3<br>>20                      | 212<br>0<br>128<br><1<br>627<br>1259<br>707<br>802<br>2407<br>current<br>10<br>228<br>8<br>8<br>NEG                                      | <br><br><br><br><br><br>history1<br><br><br><br>history1                         | <br><br><br><br><br>history2<br><br><br><br>history2                                 |
|  | Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium<br>Glycol<br>INFRA-RED<br>Soot %<br>Nitration              | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm                          | ASTM D5185m<br>ASTM D2982<br>method<br>*ASTM D7844<br>*ASTM D7844          | limit/base<br>>22<br>>50<br>>20<br>limit/base<br>>3<br>>20                      | 212<br>0<br>128<br><1<br>627<br>1259<br>707<br>802<br>2407<br>current<br>10<br>▲ 228<br>8<br>NEG<br>0.2<br>current<br>0.2<br>7.5<br>20.5 | <br><br><br><br><br><br><br>history1<br><br><br><br><br><br><br><br><br>history1 | <br><br><br><br><br><br>history2<br><br><br><br>history2                             |
|  | Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium<br>Glycol<br>INFRA-RED<br>Soot %<br>Nitration<br>Sulfation | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm                          | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>*ASTM D2982<br><b>method</b><br>*ASTM D7844<br>*ASTM D7844<br>*ASTM D7415  | limit/base<br>>22<br>>50<br>>20<br>limit/base<br>>3<br>>20<br>>30<br>limit/base | 212<br>0<br>128<br><1<br>627<br>1259<br>707<br>802<br>2407<br>02<br>2407<br>02<br>2407<br>0<br>0.2<br>0.2<br>7.5<br>20.5<br>0.2<br>0.5   |  | <br><br><br><br><br><br><br>history2<br><br>history2<br><br>history2<br><br>history2 |
|  | Boron<br>Barium<br>Molybdenum<br>Manganese<br>Magnesium<br>Calcium<br>Phosphorus<br>Zinc<br>Sulfur<br>CONTAMINANTS<br>Silicon<br>Sodium<br>Potassium<br>Glycol<br>INFRA-RED<br>Soot %<br>Nitration<br>Sulfation | ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm<br>ppm                          | ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>ASTM D5185m<br>*ASTM D5185m<br>*ASTM D2982<br><b>method</b><br>*ASTM D7844<br>*ASTM D7844<br>*ASTM D7415 | limit/base<br>>22<br>>50<br>>20<br>limit/base<br>>3<br>>20<br>>30<br>limit/base | 212<br>0<br>128<br><1<br>627<br>1259<br>707<br>802<br>2407<br>current<br>10<br>▲ 228<br>8<br>NEG<br>0.2<br>current<br>0.2<br>7.5<br>20.5 |  | history2 history2 history2   |

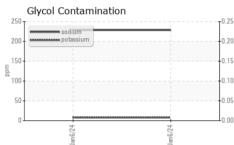


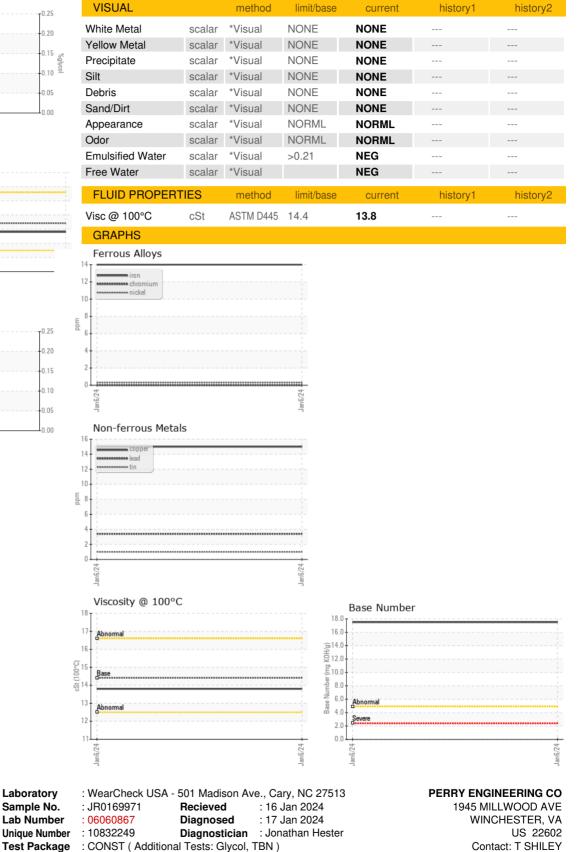


## **OIL ANALYSIS REPORT**









To discuss this sample report, contact Customer Service at 1-800-237-1369. \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Certificate L2367

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