

## **OIL ANALYSIS REPORT**

Sample Rating Trend







Machine Id 031324C-17

Component Fluid Fluid {not provided} (--- GAL)

## DIAGNOSIS

Recommendation

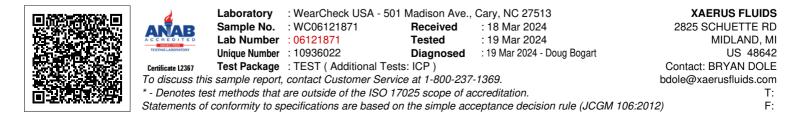
This is a baseline read-out on the submitted sample.

| Water         WC Method         NEG             WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         0              Chromium         ppm         ASTM D5185m         <1              Nickel         ppm         ASTM D5185m         <1              Silver         ppm         ASTM D5185m         0              Aluminum         ppm         ASTM D5185m         0              Auminum         ppm         ASTM D5185m         0              Lead         ppm         ASTM D5185m         0              Vanadium         ppm         ASTM D5185m         0              Vanadium         ppm         ASTM D5185m         0              Vanadium         ppm         ASTM D5185m         0   | SAMPLE INFORM | IATION | method      | limit/base | current     | history1 | history2 |
|---|---------------|--------|-------------|------------|-------------|----------|----------|
| Machine Age         hrs         Client Info         0             Oil Age         hrs         Client Info         0             Sample Status         Client Info         N/A             CONTAMINATION         method         limit/base         current         history1         history2           Water         WC Method         NEG              WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         0              WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         0              Silver         ppm         ASTM D5185m         0              Silver         ppm         ASTM D5185m         0              Gopper         ppm         ASTM D5185m         0   | Sample Number |        | Client Info |            | WC06121871  |          |          |
| Oil Age         hrs         Client Info         0             Oil Changed         Client Info         N/A             Sample Status         ORRMAL             CONTAMINATION         method         limit/base         current         history1         history2           Water         WC Method         NEG              WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         0              Chromium         ppm         ASTM D5185m         <1              Silver         ppm         ASTM D5185m         0              Aluminum         ppm         ASTM D5185m         0              Lead         ppm         ASTM D5185m         0              Cadmium         ppm         ASTM D5185m         0             Qanadium         ppm         ASTM D5185m   | Sample Date   |        | Client Info |            | 13 Mar 2024 |          |          |
| Oil Changed     Client Info     N/A         Sample Status     NORMAL         CONTAMINATION     method     limit/base     current     history1     history2       Water     WC Method     NEG         WEAR METALS     method     limit/base     current     history1     history2       Iron     ppm     ASTM D5185m     0         Okcel     ppm     ASTM D5185m     <1  | -             | hrs    | Client Info |            | 0           |          |          |
| Sample Status     NORMAL         CONTAMINATION     method     limit/base     current     history1     history2       Water     WC Method     NEG         WEAR METALS     method     limit/base     current     history1     history2       Iron     ppm     ASTM D5185n     0         Chromium     ppm     ASTM D5185n     <1         Nickel     ppm     ASTM D5185n     0         Silver     ppm     ASTM D5185n     0         Aluminum     ppm     ASTM D5185n     0         Copper     ppm     ASTM D5185n     0         Tin     ppm     ASTM D5185n     0         Vanadium     ppm     ASTM D5185n     0         Vanadium     ppm     ASTM D5185n     0         ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185n     0         Molybdenum     ppm     ASTM D5185n     1  | Oil Age       | hrs    | Client Info |            | 0           |          |          |
| CONTAMINATIONmethodlimit/basecurrenthistory1history2WaterWC MethodNEGWEAR METALSmethodlimit/basecurrenthistory1history2IronppmASTM D5185m0OthomiumppmASTM D5185m<1NickelppmASTM D5185m<1NickelppmASTM D5185m0AluminumppmASTM D5185m0AluminumppmASTM D5185m0LeadppmASTM D5185m0CopperppmASTM D5185m0VanadiumppmASTM D5185m0ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m0ManganeseppmASTM D5185m0ManganeseppmASTM D5185m<1ContramppmASTM D5185m<1SulfurppmASTM D5185m<1SulfurppmASTM D5185m<1ContramppmASTM D5185m<1SulfurppmASTM D5185m<1SulfurppmASTM D5185m<1 <th>Oil Changed</th> <th></th> <th>Client Info</th> <th></th> <th>N/A</th> <th></th> <th></th>  | Oil Changed   |        | Client Info |            | N/A         |          |          |
| Water         WC Method         NEG             WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         0              Chromium         ppm         ASTM D5185m         <1              Nickel         ppm         ASTM D5185m         <1              Aluminum         ppm         ASTM D5185m         0              Aluminum         ppm         ASTM D5185m         0              Aluminum         ppm         ASTM D5185m         0              Lead         ppm         ASTM D5185m         0              Vanadium         ppm         ASTM D5185m         0              Cadmium         ppm         ASTM D5185m         0              Barium         ppm         ASTM D5185m         0 <th>Sample Status</th> <th></th> <th></th> <th></th> <th>NORMAL</th> <th></th> <th></th>  | Sample Status |        |             |            | NORMAL      |          |          |
| WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         0              Chromium         ppm         ASTM D5185m         <1              Nickel         ppm         ASTM D5185m         <1              Aluminum         ppm         ASTM D5185m         0              Aluminum         ppm         ASTM D5185m         0              Aluminum         ppm         ASTM D5185m         0              Lead         ppm         ASTM D5185m         0              Vanadium         ppm         ASTM D5185m         0              Cadmium         ppm         ASTM D5185m         0              Molybdenum         ppm         ASTM D5185m         0              Maganese         ppm         ASTM  | CONTAMINATION | ١      | method      | limit/base | current     | history1 | history2 |
| Iron         ppm         ASTM D5185m         0            Chromium         ppm         ASTM D5185m         <1            Nickel         ppm         ASTM D5185m         <1            Titanium         ppm         ASTM D5185m         0            Aluminum         ppm         ASTM D5185m         0            Aluminum         ppm         ASTM D5185m         0            Lead         ppm         ASTM D5185m         0            Copper         ppm         ASTM D5185m         0            Tin         ppm         ASTM D5185m         0            Qanadium         ppm         ASTM D5185m         0            Cadmium         ppm         ASTM D5185m         0            Cadmium         ppm         ASTM D5185m         0            Barium         ppm         ASTM D5185m         0            Molybdenum         ppm         ASTM D5185m         0            Manganese         ppm         ASTM D5185m         <1 | Water         |        | WC Method   |            | NEG         |          |          |
| Chromium         ppm         ASTM D5185m         <1   | WEAR METALS   |        | method      | limit/base | current     | history1 | history2 |
| Nickel         ppm         ASTM D5185m         <1   | Iron          | ppm    | ASTM D5185m |            | 0           |          |          |
| Titanium         ppm         ASTM D5185m         0             Silver         ppm         ASTM D5185m         0              Aluminum         ppm         ASTM D5185m         0              Lead         ppm         ASTM D5185m         0              Copper         ppm         ASTM D5185m         0              Vanadium         ppm         ASTM D5185m         0              Vanadium         ppm         ASTM D5185m         0              Vanadium         ppm         ASTM D5185m         0              ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0              Malganese         ppm         ASTM D5185m         <1              Magnesium         ppm         ASTM D5185m         <1  | Chromium      | ppm    | ASTM D5185m |            | <1          |          |          |
| Silver         ppm         ASTM D5185m         0             Aluminum         ppm         ASTM D5185m         <1             Lead         ppm         ASTM D5185m         0             Copper         ppm         ASTM D5185m         0             Tin         ppm         ASTM D5185m         0             Vanadium         ppm         ASTM D5185m         0             Cadmium         ppm         ASTM D5185m         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0             Barium         ppm         ASTM D5185m         2             Molybdenum         ppm         ASTM D5185m         0             Manganese         ppm         ASTM D5185m         <1             Magnesium         ppm         ASTM D5185m         <1   | Nickel        | ppm    | ASTM D5185m |            | <1          |          |          |
| Aluminum         ppm         ASTM D5185m         <1   | Titanium      | ppm    | ASTM D5185m |            | 0           |          |          |
| Lead         ppm         ASTM D5185m         0             Copper         ppm         ASTM D5185m         0             Tin         ppm         ASTM D5185m         0             Vanadium         ppm         ASTM D5185m         0             Vanadium         ppm         ASTM D5185m         0             Cadmium         ppm         ASTM D5185m         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0             Malganese         ppm         ASTM D5185m         0             Manganese         ppm         ASTM D5185m         <1             Manganesium         ppm         ASTM D5185m         <1             Calcium         ppm         ASTM D5185m         0             Sulfur         ppm         ASTM D5185m         0  | Silver        | ppm    | ASTM D5185m |            | 0           |          |          |
| Copper         ppm         ASTM D5185m         0             Tin         ppm         ASTM D5185m         0             Vanadium         ppm         ASTM D5185m         0             Cadmium         ppm         ASTM D5185m         0             Cadmium         ppm         ASTM D5185m         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0             Barium         ppm         ASTM D5185m         0             Molybdenum         ppm         ASTM D5185m         0             Manganese         ppm         ASTM D5185m         <1             Magnesium         ppm         ASTM D5185m         <1             Calcium         ppm         ASTM D5185m         0             Zinc         ppm         ASTM D5185m         0        <   | Aluminum      | ppm    | ASTM D5185m |            | <1          |          |          |
| TinppmASTM D5185m0VanadiumppmASTM D5185m0CadmiumppmASTM D5185m0ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m0BariumppmASTM D5185m2BariumppmASTM D5185m2MolybdenumppmASTM D5185m0ManganeseppmASTM D5185m<1MagnesiumppmASTM D5185m<1CalciumppmASTM D5185m<1PhosphorusppmASTM D5185m0SulfurppmASTM D5185m0SulfurppmASTM D5185m4SodiumppmASTM D5185m2SodiumppmASTM D5185m2SodiumppmASTM D5185m>20<1SAMPLE IMAGESmethodlimit/basecurrenthistory1history2   | Lead          | ppm    | ASTM D5185m |            | 0           |          |          |
| Vanadium         ppm         ASTM D5185m         0             Cadmium         ppm         ASTM D5185m         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0             Barium         ppm         ASTM D5185m         2             Barium         ppm         ASTM D5185m         0             Molybdenum         ppm         ASTM D5185m         c1             Maganese         ppm         ASTM D5185m         c1             Magnesium         ppm         ASTM D5185m         c1             Calcium         ppm         ASTM D5185m         q0             Phosphorus         ppm         ASTM D5185m         q1             Sulfur         ppm         ASTM D5185m         q1             Sodium         ppm         ASTM D5185m         q2  | Copper        | ppm    | ASTM D5185m |            | 0           |          |          |
| CadmiumppmASTM D5185m0ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m0BariumppmASTM D5185m0MolybdenumppmASTM D5185m0ManganeseppmASTM D5185m<1MagnesiumppmASTM D5185m<1CalciumppmASTM D5185m<1PhosphorusppmASTM D5185m0ZincppmASTM D5185m0SulfurppmASTM D5185m0SulfurppmASTM D5185m2PotassiumppmASTM D5185m<1SodiumppmASTM D5185m<2SAMPLE IMAGESmethodlimit/basecurrenthistory1history2SAMPLE IMAGESmethodlimit/basecurrenthistory1history2  | Tin           | ppm    | ASTM D5185m |            | 0           |          |          |
| ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m0BariumppmASTM D5185m2MolybdenumppmASTM D5185m0ManganeseppmASTM D5185m<1MagnesiumppmASTM D5185m<1MagnesiumppmASTM D5185m<1CalciumppmASTM D5185m0PhosphorusppmASTM D5185m0ZincppmASTM D5185m0SulfurppmASTM D5185m4SulfurppmASTM D5185m<1PotassiumppmASTM D5185m2SAMPLE IMAGESmethodlimit/basecurrenthistory1history2SAMPLE IMAGESmethodlimit/basecurrenthistory1history2  | Vanadium      | ppm    | ASTM D5185m |            | 0           |          |          |
| Boron         ppm         ASTM D5185m         0             Barium         ppm         ASTM D5185m         2             Molybdenum         ppm         ASTM D5185m         0             Manganese         ppm         ASTM D5185m         <1             Magnesium         ppm         ASTM D5185m         <1             Calcium         ppm         ASTM D5185m         <1             Phosphorus         ppm         ASTM D5185m         <1             Zinc         ppm         ASTM D5185m         0             Sulfur         ppm         ASTM D5185m         4             Sulfur         ppm         ASTM D5185m         <1             Sodium         ppm         ASTM D5185m         <1             Sodium         ppm         ASTM D5185m         <2             Potassium         ppm         ASTM D5185m<>20         <1   | Cadmium       | ppm    | ASTM D5185m |            | 0           |          |          |
| Barium         ppm         ASTM D5185m         2             Molybdenum         ppm         ASTM D5185m         0             Manganese         ppm         ASTM D5185m         <1             Magnesium         ppm         ASTM D5185m         <1             Calcium         ppm         ASTM D5185m         <1             Calcium         ppm         ASTM D5185m         <1             Phosphorus         ppm         ASTM D5185m         0             Zinc         ppm         ASTM D5185m         0             Sulfur         ppm         ASTM D5185m         4             Sulfur         ppm         ASTM D5185m         <1             Sodium         ppm         ASTM D5185m         2             Sodium         ppm         ASTM D5185m         >20         <1             SAMPLE IMAGES         method         limit/base         current         history1  | ADDITIVES     |        | method      | limit/base | current     | history1 | history2 |
| Molybdenum         ppm         ASTM D5185m         0             Manganese         ppm         ASTM D5185m         <1   | Boron         | ppm    | ASTM D5185m |            | 0           |          |          |
| Manganese         ppm         ASTM D5185m         <1  | Barium        | ppm    | ASTM D5185m |            | 2           |          |          |
| Magnesium         ppm         ASTM D5185m         <1  | Molybdenum    | ppm    | ASTM D5185m |            | 0           |          |          |
| Calcium         ppm         ASTM D5185m         <1  | Manganese     | ppm    | ASTM D5185m |            | <1          |          |          |
| PhosphorusppmASTM D5185m0ZincppmASTM D5185m0SulfurppmASTM D5185m4CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m<1SodiumppmASTM D5185m2PotassiumppmASTM D5185m>20<1SAMPLE IMAGESmethodlimit/basecurrenthistory1history2  | Magnesium     | ppm    | ASTM D5185m |            | <1          |          |          |
| ZincppmASTM D5185m0SulfurppmASTM D5185m4CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m<1SodiumppmASTM D5185m2PotassiumppmASTM D5185m>20<1SAMPLE IMAGESmethodlimit/basecurrenthistory1history2   | Calcium       | ppm    | ASTM D5185m |            | <1          |          |          |
| Sulfur     ppm     ASTM D5185m     4         CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     <1  | Phosphorus    | ppm    | ASTM D5185m |            | 0           |          |          |
| CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     <1         Sodium     ppm     ASTM D5185m     2         Potassium     ppm     ASTM D5185m     >20     <1        SAMPLE IMAGES     method     limit/base     current     history1     history2  | Zinc          | ppm    | ASTM D5185m |            | 0           |          |          |
| Silicon     ppm     ASTM D5185m     <1  | Sulfur        | ppm    | ASTM D5185m |            | 4           |          |          |
| Sodium     ppm     ASTM D5185m     2        Potassium     ppm     ASTM D5185m     >20     <1  | CONTAMINANTS  |        | method      | limit/base | current     | history1 | history2 |
| Potassium     ppm     ASTM D5185m     >20     <1  | Silicon       | ppm    | ASTM D5185m |            | <1          |          |          |
| SAMPLE IMAGES method limit/base current history1 history2   | Sodium        | ppm    | ASTM D5185m |            | 2           |          |          |
|   | Potassium     | ppm    | ASTM D5185m | >20        | <1          |          |          |
| Color no image no image no image  | SAMPLE IMAGES | 5      | method      | limit/base | current     | history1 | history2 |
|   | Color         |        |             |            | no image    | no image | no image |
| Bottom no image no image no image   | Bottom        |        |             |            | no image    | no image | no image |



## **OIL ANALYSIS REPORT**

GRAPHS



Contact/Location: BRYAN DOLE - XAEMID