WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL



Machine Id 813062 Component Diesel Engine

CERTIFIED SPECTRA XTREME 15W40 CK4 (--- GAL)

| CERTIFIED SPECTRA XTREME 15W40 CK4 ( GAL)                       |                  |          |               |           |             |          |          |
|---|------------------|----------|---------------|-----------|-------------|----------|----------|
| RECOMMENDATION  | Test             | UOM      | Method        | Limit/Abn | Current     | History1 | History2 |
| Resample at the next service interval to monitor.               | Sample Number    |          | Client Info   |           | GFL0105898  |          |          |
|   | Sample Date      |          | Client Info   |           | 26 Feb 2024 |          |          |
|   | Machine Age      | hrs      | Client Info   |           | 2390        |          |          |
|   | Oil Age          | hrs      | Client Info   |           | 646         |          |          |
|   | Filter Age       | hrs      | Client Info   |           | 646         |          |          |
|   | Oil Changed      |          | Client Info   |           | Changed     |          |          |
|   | Filter Changed   |          | Client Info   |           | Changed     |          |          |
|   | Sample Status    |          |               |           | NORMAL      |          |          |
| WEAR  | Iron             | ppm      | ASTM D5185(m) | >80       | 21          |          |          |
| All component wear rates are normal.                            | Chromium         | ppm      | ASTM D5185(m) | >5        | <1          |          |          |
| 7 iii component wear rates are normal.                          | Nickel           | ppm      | ASTM D5185(m) | >2        | <1          |          |          |
|   | Titanium         | ppm      | ASTM D5185(m) |           | 0           |          |          |
|   | Silver           | ppm      | ASTM D5185(m) | >3        | 0           |          |          |
|   | Aluminum         | ppm      | ASTM D5185(m) | >30       | 4           |          |          |
|   | Lead             | ppm      | ASTM D5185(m) | >30       | 0           |          |          |
|   | Copper           | ppm      | ASTM D5185(m) | >150      | 2           |          |          |
|   | Tin              | ppm      | ASTM D5185(m) | >5        | 0           |          |          |
|   | Vanadium         | ppm      | ASTM D5185(m) |           | 0           |          |          |
| CONTAMINATION   | Silicon          | nnm      | ASTM D5185(m) | > 20      | 6           |          |          |
|   | Potassium        | ppm      | ASTM D5185(m) |           | 3           |          |          |
| There is no indication of any contamination in the oil.         | Fuel             | ррпп     | WC Method     |           | <1.0        |          |          |
|   | Water            |          | WC Method     |           | NEG         |          |          |
|   | Glycol           |          | WC Method     |           | NEG         |          |          |
|   | Soot %           | %        | ASTM D7844*   | >3        | 0.7         |          |          |
|   | Nitration        | Abs/cm   | ASTM D7624*   | >20       | 9.4         |          |          |
|   | Sulfation        | Abs/.1mm | ASTM D7415*   | >30       | 21.0        |          |          |
|   | Emulsified Water | scalar   | Visual*       | >0.2      | NEG         |          |          |
| FLUID CONDITION   | Sodium           | ppm      | ASTM D5185(m) |           | 3           |          |          |
| The condition of the oil is acceptable for the time in service. | Boron            | ppm      | ASTM D5185(m) |           | 5           |          |          |
|   | Barium           | ppm      | ASTM D5185(m) |           | 0           |          |          |
|   | Molybdenum       | ppm      | ASTM D5185(m) |           | 297         |          |          |
|   | Manganese        | ppm      | ASTM D5185(m) |           | 0           |          |          |
|   | Magnesium        | ppm      | ASTM D5185(m) |           | 1008        |          |          |
|   | Calcium          | ppm      | ASTM D5185(m) |           | 1116        |          |          |
|   | Phosphorus       | ppm      | ASTM D5185(m) |           | 1197        |          |          |
|   | Zinc             | ppm      | ASTM D5185(m) |           | 1251        |          |          |
|   | Sulfur           | ppm      | ASTM D5185(m) |           | 3042        |          |          |
|   | Oxidation        | Abs/.1mm | ASTM D7414*   |           | 17.5        |          |          |
|   | Visc @ 100°C     | cSt      | ASTM D7279(m) | 16        | 13.8        |          |          |
|   |                  |          |               |           | 0 1         |          | -        |





ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

 Sample No.
 : GFL0105898
 Received
 : 05 Mar 2024

 Lab Number
 : 02619838
 Tested
 : 05 Mar 2024

 Unique Number
 : 5736948
 Diagnosed
 : 05 Mar 2024 - Wes Davis

Test Package : MOB 1

To discuss this sample report, contact Customer Service at 1-800-268-2131.

Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

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Contact: Royce Reid roycereid@gflenv.com

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