

WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL

Area

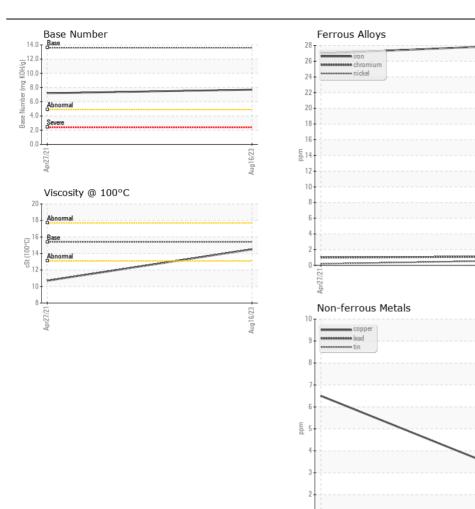
**Store 1 - Cowen [142220]** 

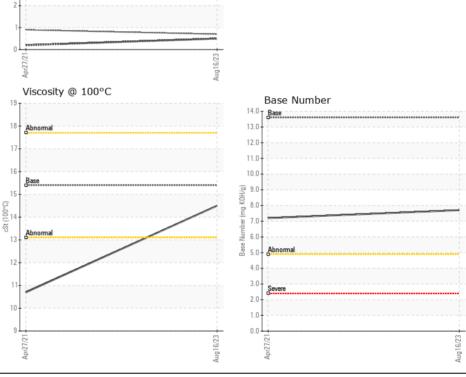
## **JOHN DEERE 85G 1FF085GXVJJ019833**

Component Diesel Engine

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (3 GAL)

| RECOMMENDATION  | Test             | UOM      | Method      | Limit/Abn | Current     | History1     | History2 |
|---|------------------|----------|-------------|-----------|-------------|--------------|----------|
| Resample at the next service interval to monitor.   | Sample Number    |          | Client Info |           | LEC0043517  | LEC0019366   |          |
|   | Sample Date      |          | Client Info |           | 16 Aug 2023 | 27 Apr 2021  |          |
|   | Machine Age      | hrs      | Client Info |           | 1058        | 339          |          |
|   | Oil Age          | hrs      | Client Info |           | 719         | 339          |          |
|   | Filter Age       | hrs      | Client Info |           | 719         | 339          |          |
|   | Oil Changed      |          | Client Info |           | Changed     | Changed      |          |
|   | Filter Changed   |          | Client Info |           | Changed     | Changed      |          |
|   | Sample Status    |          |             |           | NORMAL      | ABNORMAL     |          |
| WEAR  | Iron             | ppm      | ASTM D5185m | >51       | 28          | 27           |          |
| All component wear rates are normal.  | Chromium         | ppm      | ASTM D5185m | >11       | 1           | 1            |          |
|   | Nickel           | ppm      | ASTM D5185m | >5        | <1          | <1           |          |
|   | Titanium         | ppm      | ASTM D5185m |           | <1          | <1           |          |
|   | Silver           | ppm      | ASTM D5185m | >3        | <1          | 0            |          |
|   | Aluminum         | ppm      | ASTM D5185m | >31       | 5           | 0            |          |
|   | Lead             | ppm      | ASTM D5185m | >26       | <1          | <1           |          |
|   | Copper           | ppm      | ASTM D5185m |           | 3           | 6            |          |
|   | Tin              | ppm      | ASTM D5185m | >4        | <1          | <1           |          |
|   | Vanadium         | ppm      | ASTM D5185m |           | <1          | 0            |          |
|   | White Metal      | scalar   | *Visual     | NONE      | NONE        | NONE         |          |
|   | Yellow Metal     | scalar   | *Visual     | NONE      | NONE        | NONE         |          |
| CONTAMINATION   | Silicon          | ppm      | ASTM D5185m | >!20      | 16          | 41           |          |
|   | Potassium        | ppm      | ASTM D5185m | >20       | 32          | <u></u> 191  |          |
| There is no indication of any contamination in the oil.   | Fuel             |          | WC Method   | >2.1      | <1.0        | 0.1          |          |
|   | Water            |          | WC Method   | >0.21     | NEG         | NEG          |          |
|   | Glycol           |          | WC Method   |           | NEG         | NEG          |          |
|   | Soot %           | %        | *ASTM D7844 | >3        | 0.7         | 0.3          |          |
|   | Nitration        | Abs/cm   | *ASTM D7624 | >20       | 9.4         | 8.6          |          |
|   | Sulfation        | Abs/.1mm | *ASTM D7415 | >30       | 23.6        | 19           |          |
|   | Silt             | scalar   | *Visual     | NONE      | NONE        | NONE         |          |
|   | Debris           | scalar   | *Visual     | NONE      | NONE        | NONE         |          |
|   | Sand/Dirt        | scalar   | *Visual     | NONE      | NONE        | NONE         |          |
|   | Appearance       | scalar   | *Visual     | NORML     | NORML       | NORML        |          |
|   | Odor             | scalar   | *Visual     | NORML     | NORML       | NORML        |          |
|   | Emulsified Water | scalar   | *Visual     | >0.21     | NEG         | NEG          |          |
| LUID CONDITION  | Sodium           | ppm      | ASTM D5185m | >31       | 3           | 11           |          |
|   | Boron            | ppm      | ASTM D5185m |           | 213         | 229          |          |
| The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service. | Barium           | ppm      | ASTM D5185m |           | 0           | 1            |          |
|   | Molybdenum       | ppm      | ASTM D5185m |           | 228         | 179          |          |
|   | Manganese        | ppm      | ASTM D5185m |           | 1           | <1           |          |
|   | Magnesium        | ppm      | ASTM D5185m |           | 744         | 35           |          |
|   | Calcium          | ppm      | ASTM D5185m |           | 1719        | 2340         |          |
|   | Phosphorus       | ppm      | ASTM D5185m |           | 896         | 648          |          |
|   | Zinc             | ppm      | ASTM D5185m |           | 1124        | 789          |          |
|   | Sulfur           | ppm      | ASTM D5185m |           | 3411        | 2021         |          |
|   | Oxidation        | Abs/.1mm | *ASTM D7414 | >25       | 18.3        | 13.7         |          |
|   | Base Number (BN) | mg KOH/g | ASTM D2896  | 13.6      | 7.7         | 7.2          |          |
|   | Visc @ 100°C     | cSt      | ASTM D445   | 45.4      | 14.5        | <b>1</b> 0.7 |          |







Laboratory Sample No.

Lab Number : 05928576 Unique Number: 10608523

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : LEC0043517

Received **Tested** Diagnosed

: 18 Aug 2023 : 20 Aug 2023 : 20 Aug 2023 - Wes Davis

Test Package : CONST (Additional Tests: TBN) 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)

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