

# **OIL ANALYSIS REPORT**

Sample Rating Trend

NORMAL



#### Area Action Newark Machine Id CATERPILLAR 5659 Component

Front Differential

{not provided} (--- GAL)

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

# Fluid Condition

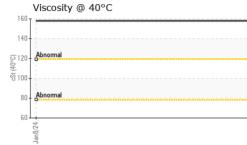
The condition of the oil is acceptable for the time in service.

| SAMPLE INFORM    | IATION | method      | limit/base | current         | history1        | history2       |
|------------------|--------|-------------|------------|-----------------|-----------------|----------------|
| Sample Number    |        | Client Info |            | WC0889573       |                 |                |
| Sample Date      |        | Client Info |            | 08 Jan 2024     |                 |                |
| Machine Age      | hrs    | Client Info |            | 10359           |                 |                |
| Oil Age          | hrs    | Client Info |            | 0               |                 |                |
| Oil Changed      |        | Client Info |            | N/A             |                 |                |
| Sample Status    |        |             |            | NORMAL          |                 |                |
| CONTAMINATION    | ٧      | method      | limit/base | current         | history1        | history2       |
| Water            |        | WC Method   | >.2        | NEG             |                 |                |
| WEAR METALS      |        | method      | limit/base | current         | history1        | history2       |
| Iron             | ppm    | ASTM D5185m | >500       | 41              |                 |                |
| Chromium         | ppm    | ASTM D5185m | >3         | <1              |                 |                |
| Nickel           | ppm    | ASTM D5185m | >3         | 0               |                 |                |
| Titanium         | ppm    | ASTM D5185m | >2         | 0               |                 |                |
| Silver           | ppm    | ASTM D5185m | >2         | 0               |                 |                |
| Aluminum         | ppm    | ASTM D5185m | >30        | 2               |                 |                |
| Lead             | ppm    | ASTM D5185m | >13        | 0               |                 |                |
| Copper           | ppm    | ASTM D5185m | >103       | 4               |                 |                |
| Tin              | ppm    | ASTM D5185m | >5         | 0               |                 |                |
| Vanadium         | ppm    | ASTM D5185m |            | 0               |                 |                |
| Cadmium          | ppm    | ASTM D5185m |            | 0               |                 |                |
| ADDITIVES        |        | method      | limit/base | current         | history1        | history2       |
| Boron            | ppm    | ASTM D5185m |            | 10              |                 |                |
| Barium           | ppm    | ASTM D5185m |            | 3               |                 |                |
| Molybdenum       | ppm    | ASTM D5185m |            | 2               |                 |                |
| Manganese        | ppm    | ASTM D5185m |            | 0               |                 |                |
| Magnesium        | ppm    | ASTM D5185m |            | 25              |                 |                |
| Calcium          | ppm    | ASTM D5185m |            | 2936            |                 |                |
| Phosphorus       | ppm    | ASTM D5185m |            | 1008            |                 |                |
| Zinc             | ppm    | ASTM D5185m |            | 1291            |                 |                |
| Sulfur           | ppm    | ASTM D5185m |            | 10038           |                 |                |
| CONTAMINANTS     |        | method      | limit/base | current         | history1        | history2       |
| Silicon          | ppm    | ASTM D5185m | >100       | 4               |                 |                |
| Sodium           | ppm    | ASTM D5185m |            | 0               |                 |                |
| Potassium        | ppm    | ASTM D5185m | >20        | 5               |                 |                |
| VISUAL           |        | method      | limit/base | current         | history1        | history2       |
| White Metal      | scalar | *Visual     | NONE       | NONE            |                 |                |
| Yellow Metal     | scalar | *Visual     | NONE       | NONE            |                 |                |
| Precipitate      | scalar | *Visual     | NONE       | NONE            |                 |                |
| Silt             | scalar | *Visual     | NONE       | NONE            |                 |                |
| Debris           | scalar | *Visual     | NONE       | NONE            |                 |                |
| Sand/Dirt        | scalar | *Visual     | NONE       | NONE            |                 |                |
| Appearance       | scalar | *Visual     | NORML      | NORML           |                 |                |
| Odor             | scalar | *Visual     | NORML      | NORML           |                 |                |
| Emulsified Water | scalar | *Visual     | >.2        | NEG             |                 |                |
| Free Water       | scalar | *Visual     |            | NEG             |                 |                |
| 3:24:09) Rev: 1  |        |             | С          | ontact/Location | : Robert Witvns | ki - INT110NEW |

Page 1 of 2



# **OIL ANALYSIS REPORT**



| FLUID PROPER<br>Visc @ 40°C   | RTIES<br>cSt                     | method<br>ASTM D445                        | limit/base                      | current<br>158                 | history1         | history2   |
|---|----------------------------------|--|---------------------------------|--------------------------------|------------------|--|
| SAMPLE IMAG   |                                  | method                                     | limit/base                      | current                        | history1         | history2   |
|   |                                  |  | [                               |                                |                  |  |
| Color   |                                  |  |                                 | no image                       | no image         | no image   |
|   |                                  |  |                                 |                                |                  |  |
| Bottom  |                                  |  |                                 | no image                       | no image         | no image   |
|   |                                  |  |                                 |                                |                  |  |
| GRAPHS  |                                  |  |                                 | Load (nnm)                     |                  |  |
| Iron (ppm)  |                                  |  |                                 | Lead (ppm)                     |                  |  |
| 800   |                                  |  | 25                              |                                |                  |  |
| 400 Abnormal  |                                  |  | 톱 15<br>10                      | Abnormal                       |                  |  |
| 200 -   |                                  |  | 5                               |                                |                  |  |
| Jan8/24 0   |                                  |  | Jan 8/24                        | Jan 8/24                       |                  | an 8/74  |
| ج<br>Aluminum (ppm  | )                                |  | Lai                             | ج<br>Chromium (p               | num)             |  |
| 60 Severe   |                                  |  | 7<br>ه                          |                                |                  |  |
| 40  |                                  |  | 5                               |                                |                  |  |
| B 30 - Abnormal   |                                  |  | u 4                             | Abnormal                       |                  |  |
| 10  |                                  |  | 1                               |                                |                  |  |
| an 8/24   |                                  |  | Jan 8/24                        | Jan 8/24                       |                  | Jan 8/24 -   |
| Copper (ppm)  |                                  |  |                                 | Silicon (ppm)                  |                  |  |
| 200 - Severe  |                                  |  | 200                             | Severe                         |                  |  |
| Abnormal  |                                  |  | 톱 100                           | Abnormal                       |                  |  |
| 50-   |                                  |  | 50                              |                                |                  |  |
| 0   |                                  |  | 0                               | **                             |                  |  |
| Jan 8/24  |                                  |  | Jan 8/24                        | Jan 8/24                       |                  | Jan 8/24   |
| Viscosity @ 40°   | C                                |  | - 3000                          | Additives                      |                  |  |
| 140-  |                                  |  | 2500                            | calcium<br>calcium<br>phosphor | a                |  |
| 다 120 - Abnormal<br>아마 아마 아                                      |                                  |  | 톱 2000                          |                                |                  |  |
| 80 - Abnormal   |                                  |  | 1500                            |                                |                  |  |
| 60 +2   |                                  |  | 1000                            | /24                            |                  | 24   |
| Jan8/24   |                                  |  | Jan8/24                         | Jan 8/24                       |                  | Jan 8/24   |
| tory : WearCheck USA<br>No. : WC0889573<br>mber : 06064624<br>Number : 10836006<br>ickage : MOB 1 | Recieved<br>Diagnose<br>Diagnost | : 18 J<br>ed : 21 J<br>i <b>cian</b> : Don | an 2024<br>an 2024<br>Baldridge |                                |                  | EN AVE, BAY<br>NEWARK, N<br>US 0711<br>Robert Wityns |
| report, contact Customer Se   |                                  |  |                                 |                                | RWitynski@inters |  |

Contact/Location: Robert Witynski - INT110NEW