

# **OIL ANALYSIS REPORT**

Sample Rating Trend



## GRINDER AUTO LUBER 2 Component

Bearing Lube Fluid MOBIL DTE FM 32 (1 GAL)

## DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

### Fluid Condition

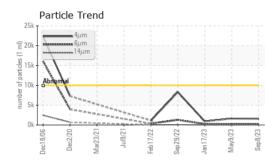
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

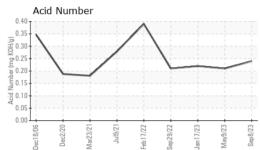
| SAMPLE INFORM    | ΛΑΤΙΟΝ   | method       | limit/base | current     | history1    | history2    |
|------------------|----------|--------------|------------|-------------|-------------|-------------|
| Sample Number    |          | Client Info  |            | PCA0099626  | PCA0092049  | PCA0080246  |
| Sample Date      |          | Client Info  |            | 08 Sep 2023 | 09 May 2023 | 17 Jan 2023 |
| Machine Age      | hrs      | Client Info  |            | 0           | 0           | 0           |
| Oil Age          | hrs      | Client Info  |            | 0           | 0           | 0           |
| Oil Changed      |          | Client Info  |            | N/A         | N/A         | N/A         |
| Sample Status    |          |              |            | NORMAL      | NORMAL      | NORMAL      |
| WEAR METALS      |          | method       | limit/base | current     | history1    | history2    |
| Iron             | ppm      | ASTM D5185m  | >120       | 3           | 0           | 0           |
| Chromium         | ppm      | ASTM D5185m  | >5         | 0           | 0           | 0           |
| Nickel           | ppm      | ASTM D5185m  | >20        | 0           | 0           | 0           |
| Titanium         | ppm      | ASTM D5185m  |            | 0           | 0           | 0           |
| Silver           | ppm      | ASTM D5185m  |            | 0           | 0           | 0           |
| Aluminum         | ppm      | ASTM D5185m  | >4         | 0           | 0           | 0           |
| Lead             | ppm      | ASTM D5185m  | >30        | 0           | 0           | 0           |
| Copper           | ppm      | ASTM D5185m  | >17        | 0           | 0           | 0           |
| Tin              | ppm      | ASTM D5185m  | >10        | 0           | 0           | 0           |
| Vanadium         | ppm      | ASTM D5185m  |            | 0           | 0           | 0           |
| Cadmium          | ppm      | ASTM D5185m  |            | 0           | 0           | 0           |
| ADDITIVES        |          | method       | limit/base | current     | history1    | history2    |
| Boron            | ppm      | ASTM D5185m  |            | 0           | 0           | 0           |
| Barium           | ppm      | ASTM D5185m  |            | 0           | 2           | 1           |
| Molybdenum       | ppm      | ASTM D5185m  |            | 0           | 2           | 0           |
| Manganese        | ppm      | ASTM D5185m  |            | 0           | 0           | 0           |
| Magnesium        | ppm      | ASTM D5185m  |            | <1          | <1          | 0           |
| Calcium          | ppm      | ASTM D5185m  |            | 0           | <1          | 0           |
| Phosphorus       | ppm      | ASTM D5185m  |            | 489         | 480         | 480         |
| Zinc             | ppm      | ASTM D5185m  |            | 0           | <1          | 2           |
| Sulfur           | ppm      | ASTM D5185m  |            | 576         | 964         | 591         |
| CONTAMINAN       | TS       | method       | limit/base | current     | history1    | history2    |
| Silicon          | ppm      | ASTM D5185m  | >25        | 1           | 1           | 1           |
| Sodium           | ppm      | ASTM D5185m  |            | 0           | 0           | 0           |
| Potassium        | ppm      | ASTM D5185m  | >20        | <1          | <1          | <1          |
| FLUID CLEANL     | INESS    | method       | limit/base | current     | history1    | history2    |
| Particles >4µm   |          | ASTM D7647   | >10000     | 1515        | 1620        | 920         |
| Particles >6µm   |          | ASTM D7647   | >2500      | 226         | 243         | 235         |
| Particles >14µm  |          | ASTM D7647   | >640       | 27          | 8           | 20          |
| Particles >21µm  |          | ASTM D7647   | >160       | 8           | 3           | 6           |
| Particles >38µm  |          | ASTM D7647   | >40        | 0           | 0           | 1           |
| Particles >71µm  |          | ASTM D7647   | >10        | 0           | 0           | 0           |
| Oil Cleanliness  |          | ISO 4406 (c) | >20/18/16  | 18/15/12    | 18/15/10    | 17/15/11    |
| FLUID DEGRAD     | DATION   | method       | limit/base | current     | history1    | history2    |
| Acid Number (AN) | mg KOH/g | ASTM D8045   |            | 0.24        | 0.21        | 0.22        |
|                  |          |              |            |             |             |             |

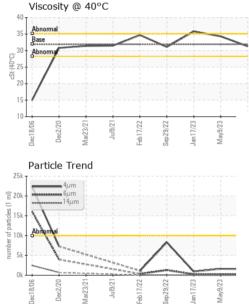


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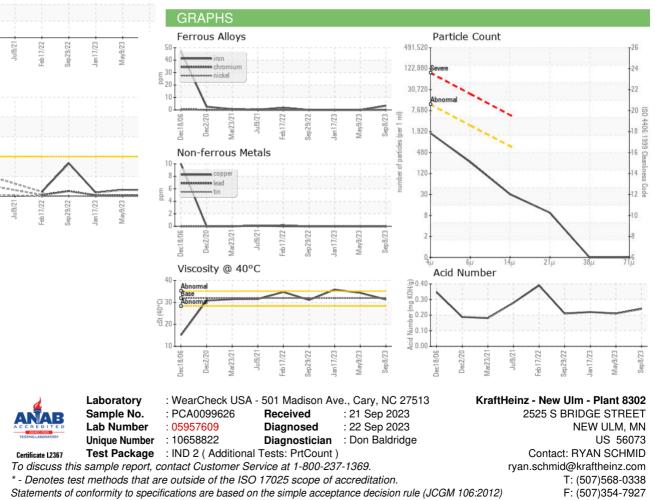






| VISUAL<br>White Metal |        | method    |            | current | history1   |          |
|-----------------------|--------|-----------|------------|---------|------------|----------|
| White Metal           |        |           |            | ounon   | Thistory I | history2 |
| ······                | scalar | *Visual   | NONE       | NONE    | NONE       | NONE     |
| Yellow Metal          | scalar | *Visual   | NONE       | NONE    | NONE       | NONE     |
| Precipitate           | scalar | *Visual   | NONE       | NONE    | NONE       | NONE     |
| Silt                  | scalar | *Visual   | NONE       | NONE    | NONE       | NONE     |
| Debris                | scalar | *Visual   | NONE       | NONE    | NONE       | VLITE    |
| Sand/Dirt             | scalar | *Visual   | NONE       | NONE    | NONE       | NONE     |
| Appearance            | scalar | *Visual   | NORML      | NORML   | NORML      | NORML    |
| Odor                  | scalar | *Visual   | NORML      | NORML   | NORML      | NORML    |
| Emulsified Water      | scalar | *Visual   | >0.2       | NEG     | NEG        | NEG      |
| Free Water            | scalar | *Visual   |            | NEG     | NEG        | NEG      |
| FLUID PROPEI          | RTIES  | method    | limit/base | current | history1   | history2 |
| Visc @ 40°C           | cSt    | ASTM D445 | 31.9       | 31.3    | 34.3       | 35.8     |
| SAMPLE IMAG           | ES     | method    | limit/base | current | history1   | history2 |
| Color                 |        |           |            | RACONCE |            |          |

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