

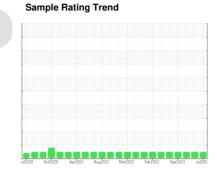
# **OIL ANALYSIS REPORT**



OKLAHOMA/102/EG - DOZER 36.22L [OKLAHOMA^102^EG - DOZER]

Diesel Engine

MOBIL DELVAC 1300 SUPER 15W40 (7 GAL)







## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the

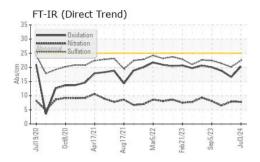
## **Fluid Condition**

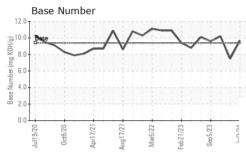
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

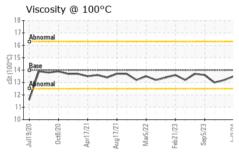
| SAMPLE INFORM                    | MATION             | method                                    | limit/base        | current            | history1           | history2           |
|----------------------------------|--------------------|---|-------------------|--------------------|--------------------|--------------------|
| Sample Number                    |                    | Client Info                               |                   | WC0945610          | WC0935196          | WC0886953          |
| Sample Date                      |                    | Client Info                               |                   | 03 Jul 2024        | 08 May 2024        | 29 Jan 2024        |
| Machine Age                      | hrs                | Client Info                               |                   | 7769               | 7440               | 7238               |
| Oil Age                          | hrs                | Client Info                               |                   | 250                | 202                | 250                |
| Oil Changed                      | 1110               | Client Info                               |                   | Changed            | Changed            | Changed            |
| Sample Status                    |                    | Oliciti IIIIo                             |                   | NORMAL             | NORMAL             | NORMAL             |
| CONTAMINATION                    | V                  | method                                    | limit/base        | current            | history1           | history2           |
| Fuel                             |                    | WC Method                                 | >5                | <1.0               | <1.0               | <1.0               |
| Water                            |                    | WC Method                                 | >0.2              | NEG                | NEG                | NEG                |
| Glycol                           |                    | WC Method                                 |                   | NEG                | NEG                | NEG                |
| WEAR METALS                      |                    | method                                    | limit/base        | current            | history1           | history2           |
| Iron                             | ppm                | ASTM D5185m                               | >100              | 7                  | 6                  | 6                  |
| Chromium                         | ppm                | ASTM D5185m                               | >20               | <1                 | <1                 | <1                 |
| Nickel                           | ppm                | ASTM D5185m                               | >2                | 0                  | 0                  | <1                 |
| Titanium                         | ppm                | ASTM D5185m                               | >2                | <1                 | <1                 | <1                 |
| Silver                           | ppm                | ASTM D5185m                               | >2                | <1                 | <1                 | 1                  |
| Aluminum                         | ppm                | ASTM D5185m                               | >25               | 3                  | 4                  | 5                  |
| Lead                             | ppm                | ASTM D5185m                               | >40               | <1                 | <1                 | <1                 |
| Copper                           | ppm                | ASTM D5185m                               | >330              | 1                  | <1                 | <1                 |
| Tin                              | ppm                | ASTM D5185m                               | >15               | <1                 | <1                 | <1                 |
| Vanadium                         | ppm                | ASTM D5185m                               |                   | <1                 | <1                 | 0                  |
| Cadmium                          | ppm                | ASTM D5185m                               |                   | 0                  | 0                  | <1                 |
| ADDITIVES                        |                    | method                                    | limit/base        | current            | history1           | history2           |
| Boron                            | ppm                | ASTM D5185m                               | 0                 | 31                 | 52                 | 60                 |
| Barium                           | ppm                | ASTM D5185m                               | 0                 | <1                 | 0                  | <1                 |
| Molybdenum                       | ppm                | ASTM D5185m                               | 0                 | 43                 | 41                 | 48                 |
| Manganese                        | ppm                | ASTM D5185m                               |                   | 0                  | 0                  | <1                 |
| Magnesium                        | ppm                | ASTM D5185m                               | 0                 | 504                | 495                | 612                |
| Calcium                          | ppm                | ASTM D5185m                               |                   | 1803               | 1686               | 1897               |
| Phosphorus                       | ppm                | ASTM D5185m                               |                   | 736                | 862                | 965                |
| Zinc                             | ppm                | ASTM D5185m                               |                   | 955                | 931                | 1144               |
| Sulfur                           | ppm                | ASTM D5185m                               |                   | 2488               | 2948               | 3543               |
| CONTAMINANTS                     |                    | method                                    | limit/base        | current            | history1           | history2           |
| Silicon                          | ppm                | ASTM D5185m                               | >25               | 5                  | 5                  | 6                  |
| Sodium                           | ppm                | ASTM D5185m                               |                   | 0                  | 2                  | 2                  |
| Potassium                        | ppm                | ASTM D5185m                               | >20               | 2                  | 2                  | 2                  |
|                                  |                    |   | line it /le e e e | current            | history1           | history2           |
| INFRA-RED                        |                    | method                                    | limit/base        | ourrent            | <u> </u>           |                    |
| INFRA-RED                        | %                  | *ASTM D7844                               | >3                | 0.6                | 0.3                | 0.4                |
|                                  | %<br>Abs/cm        |   |                   |                    |                    |                    |
| Soot %                           |                    | *ASTM D7844                               | >3<br>>20         | 0.6                | 0.3                | 0.4                |
| Soot %<br>Nitration              | Abs/cm<br>Abs/.1mm | *ASTM D7844<br>*ASTM D7624                | >3<br>>20         | 0.6<br>7.8         | 0.3<br>7.9         | 0.4<br>6.5         |
| Soot %<br>Nitration<br>Sulfation | Abs/cm<br>Abs/.1mm | *ASTM D7844<br>*ASTM D7624<br>*ASTM D7415 | >3<br>>20<br>>30  | 0.6<br>7.8<br>22.4 | 0.3<br>7.9<br>20.1 | 0.4<br>6.5<br>21.4 |



# **OIL ANALYSIS REPORT**



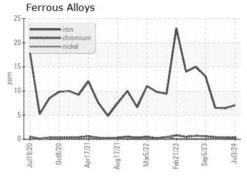


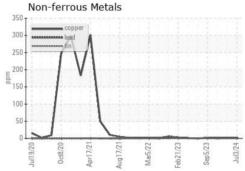


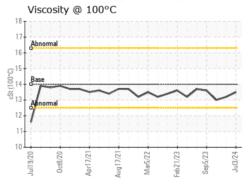
| VISUAL                  |        | method  | limit/base | current | history1 | history2 |
|-------------------------|--------|---------|------------|---------|----------|----------|
| White Metal             | scalar | *Visual | NONE       | NONE    | NONE     | NONE     |
| Yellow Metal            | 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     | NONE     |
| Sand/Dirt               | scalar | *Visual | NONE       | NONE    | NONE     | NONE     |
| Appearance              | scalar | *Visual | NORML      | NORML   | NORML    | NORML    |
| Odor                    | scalar | *Visual | NORML      | NORML   | NORML    | NORML    |
| <b>Emulsified Water</b> | scalar | *Visual | >0.2       | NEG     | NEG      | NEG      |
| Free Water              | scalar | *Visual |            | NEG     | NEG      | NEG      |

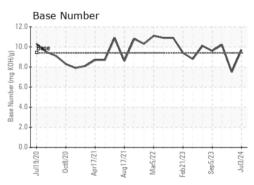
| FLUID PROPER | TIES | method    |    |      |      | history2 |
|--------------|------|-----------|----|------|------|----------|
| Visc @ 100°C | cSt  | ASTM D445 | 14 | 13.5 | 13.2 | 13.0     |

## **GRAPHS**













Laboratory Sample No.

Lab Number : 06235554

: WC0945610 Unique Number : 11124388

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received **Tested** Diagnosed

: 15 Jul 2024 : 15 Jul 2024 : 15 Jul 2024 - Wes Davis

SHERWOOD CONSTRUCTION CO INC 3219 WEST MAY ST WICHITA, KS

US 67213 Contact: DOUG KING doug.king@sherwood.net T: (316)617-3161

Test Package : CONST ( Additional Tests: TBN ) Certificate 12367 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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