

#### Machine Id 834101 Component Natural Gas Engine Fluid DIESEL ENGINE OIL SAE 40 (--- GAL)

## RECOMMENDATION

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 40. Please confirm.

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#### WEAR

All component wear rates are normal.

# CONTAMINATION

Elevated aluminum (AI) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

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| WEAR            | NORMAL |
|-----------------|--------|
| CONTAMINATION   | NORMAL |
| FLUID CONDITION | NORMAL |
|                 |        |

| Tes        | st                                     | UOM                         | Method                                | Limit/Abn          | Current      | History1            | History2            |
|------------|--|-----------------------------|---------------------------------------|--------------------|--------------|---------------------|---------------------|
| Sar        | mple Number                            |                             | Client Info                           |                    | GFL0122016   | GFL0122055          | GFL0116598          |
| Sai        | mple Date                              |                             | Client Info                           |                    | 25 Jun 2024  | 27 May 2024         | 13 May 2024         |
| Ma         | chine Age                              | hrs                         | Client Info                           |                    | 1386         | 1184                | 943                 |
| Oil        | Age                                    | hrs                         | Client Info                           |                    | 202          | 957                 | 716                 |
| Filt       | ter Age                                | hrs                         | Client Info                           |                    | 0            | 0                   | 0                   |
| Oil        | Changed                                |                             | Client Info                           |                    | Not Changd   | Changed             | Not Changd          |
| Filt       | er Changed                             |                             | Client Info                           |                    | Not Changd   | Changed             | Not Changd          |
| Sai        | mple Status                            |                             |                                       |                    | NORMAL       | NORMAL              | NORMAL              |
| Iror       | n                                      | ppm                         | ASTM D5185m                           | >50                | 12           | 96                  | 71                  |
|            | romium                                 | ppm                         | ASTM D5185m                           | >4                 | 1            | 8                   | 5                   |
| -          | ckel                                   | ppm                         | ASTM D5185m                           | >2                 | ،<br><1      | 5                   | 3                   |
|            | anium                                  | ppm                         | ASTM D5185m                           | ~_                 | <1           | <1                  | <1                  |
| Silv       |  | ppm                         | ASTM D5185m                           | >3                 | 0            | 0                   | 0                   |
| -          | iminum                                 | ppm                         | ASTM D5185m                           | >9                 | 15           | 126                 | 86                  |
| Lea        |  | ppm                         | ASTM D5185m                           | >30                | <1           | 3                   | 2                   |
|            | pper                                   | ppm                         | ASTM D5185m                           | >35                | 2            | 23                  | 16                  |
| Tin        |  | ppm                         | ASTM D5185m                           | >4                 | -<br><1      | 2                   | 1                   |
|            | nadium                                 | ppm                         | ASTM D5185m                           |                    | <1           | <1                  | 0                   |
|            | nite Metal                             | scalar                      | *Visual                               | NONE               | NONE         | NONE                | NONE                |
|            | llow Metal                             | scalar                      | *Visual                               | NONE               | NONE         | NONE                | NONE                |
|            |  |                             |                                       |                    |              |                     |                     |
| -          | icon                                   | ppm                         | ASTM D5185m                           | >+100              | 6            | 34                  | 25                  |
|            | tassium                                | ppm                         | ASTM D5185m                           | >20                | 32           | 322                 | 210                 |
|            | ater                                   |                             | WC Method                             | >0.1               | NEG          | NEG                 | NEG                 |
|            | ot %                                   | %                           | *ASTM D7844                           | 00                 | 0            | 0.1                 | 0.1                 |
|            | ration                                 | Abs/cm                      | *ASTM D7624                           | >20                | 8.7          | 12.5                | 12.8                |
|            | lfation                                | Abs/.1mm                    | *ASTM D7415                           | >30                | 20.1         | 26.2                | 26.8                |
| Silt       |  | scalar                      | *Visual                               | NONE               | NONE         | NONE                | NONE                |
| -          | bris<br>nd/Dirt                        | scalar                      | *Visual                               | NONE               | NONE<br>NONE | NONE                | NONE                |
|            |  | scalar                      | *Visual                               | NONE               | NORML        | NONE                | NONE                |
| Od         | pearance                               | scalar<br>scalar            | *Visual<br>*Visual                    | NORML              | NORML        | NORML               | NORML               |
|            | ulsified Water                         | scalar                      | *Visual                               | >0.1               | NEG          | NEG                 | NEG                 |
|            |  | Scalai                      | v isuai                               | 20.1               |              | NLG                 | NLG                 |
|            | dium                                   | ppm                         | ASTM D5185m                           | >216               | 9            | 12                  | 7                   |
| Boi        | ron                                    | ppm                         | ASTM D5185m                           | 250                | 21           | 12                  | 3                   |
|            | rium                                   | ppm                         | ASTM D5185m                           | 10                 | 0            | 3                   | 2                   |
| Mo         | lybdenum                               | ppm                         | ASTM D5185m                           | 100                | 52           | 100                 | 70                  |
|            | inganese                               | ppm                         | ASTM D5185m                           |                    | 2            | 20                  | 16                  |
|            | Ignesium                               | ppm                         | ASTM D5185m                           | 450                | 624          | 1191                | 878                 |
|            | lcium                                  | ppm                         | ASTM D5185m                           | 3000               | 1529         | 1899                | 1490                |
|            | osphorus                               | ppm                         | ASTM D5185m                           | 1150               | 867          | 1238                | 812                 |
| Zin        |  | ppm                         | ASTM D5185m                           | 1350               | 1065         | 1514                | 1038                |
| Sul        | lfur                                   | ppm                         | ASTM D5185m                           | 4250               | 2848         | 4026                | 2898                |
|            |  | AL / J                      | ******                                | . OE               | 40.0         | 00.0                | 24.5                |
| Oxi        | idation                                | Abs/.1mm                    | *ASTM D7414                           | >25                | 16.8         | 23.3                |                     |
| Oxi<br>Bas | idation<br>e Number (BN)<br>sc @ 100°C | Abs/.1mm<br>mg KOH/g<br>cSt | ASTM D7414<br>ASTM D2896<br>ASTM D445 | >25<br>8.5<br>14.4 | 7.2<br>14.8  | 23.3<br>3.4<br>14.2 | 24.5<br>2.5<br>14.1 |

### 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.

