

## WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

Current

History1

History2



RECOMMENDATION

(SB14884) Machine Id 412014 Component

# Diesel Engine

DIESEL ENGINE OIL SAE 40 (--- GAL)

Test

Visc @ 100°C

cSt

ASTM D445

14.4

UOM

Method

Limit/Abn

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. Please specify the component make and model with your next sample.

Client Info GFL0069949 Sample Number 21 Nov 2023 Sample Date **Client Info** Machine Age hrs **Client Info** 0 Oil Age hrs Client Info 0 0 Filter Age hrs **Client Info** Oil Changed **Client Info** N/A Filter Changed Client Info N/A NORMAL Sample Status Iron ppm ASTM D5185m >100 13 Chromium ASTM D5185m >20 <1 ppm Nickel ASTM D5185m >4 1 ppm Titanium ppm ASTM D5185m <1 Silver ASTM D5185m >3 0 ppm Aluminum ppm ASTM D5185m >20 4 Lead ASTM D5185m >40 1 ppm Copper ppm ASTM D5185m >330 1 Tin ppm ASTM D5185m >15 <1 Vanadium ppm ASTM D5185m 0 White Metal NONE NONE scalar \*Visual ----NONE Yellow Metal scalar \*Visual NONE Silicon ASTM D5185m >25 5 ppm Potassium ASTM D5185m >20 ppm 7 Fuel WC Method >5 <1.0 Water WC Method >0.2 NEG Glycol WC Method NFG Soot % % \*ASTM D7844 >3 0.6 Nitration Abs/cm \*ASTM D7624 >20 8.8 Sulfation Abs/.1mm \*ASTM D7415 >30 20.4 Silt scalar \*Visual NONE NONE Debris scalar \*Visual NONE NONE Sand/Dirt \*Visual NONE NONE scalar Appearance scalar \*Visual NORML NORML NORML Odor scalar \*Visual NORML Emulsified Water scalar \*Visual >0.2 NEG Sodium ASTM D5185m >216 5 ppm Boron ASTM D5185m 250 2 ppm 0 Barium ppm ASTM D5185m 10 Molybdenum ASTM D5185m 100 62 ppm Manganese ASTM D5185m ppm 1ء 1056 Magnesium ppm ASTM D5185m 450 Calcium ASTM D5185m 3000 1156 ppm Phosphorus 870 ppm ASTM D5185m 1150 Zinc ppm ASTM D5185m 1350 1277 Sulfur ppm ASTM D5185m 4250 2768 Oxidation Abs/.1mm \*ASTM D7414 >25 16.2 Base Number (BN) mg KOH/g ASTM D2896 8.5 7.0

### All component wear rates are normal.

WEAR

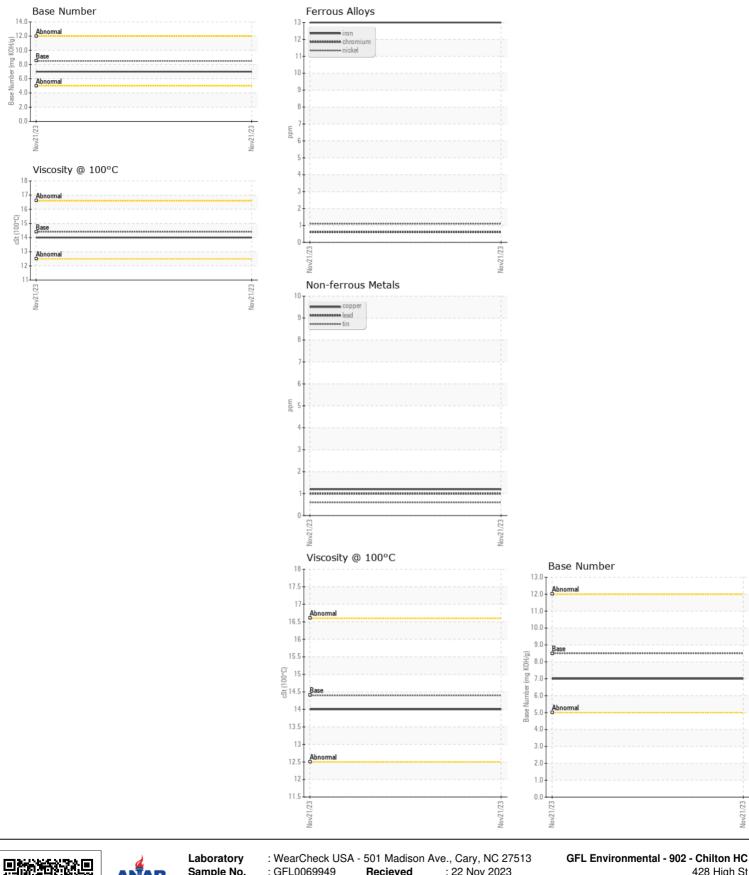
### CONTAMINATION

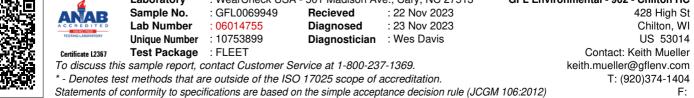
There is no indication of any contamination in the oil.

#### **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.

14.0





Contact/Location: See also GFL903 - Keith Mueller - GFL902