

# **OIL ANALYSIS REPORT**

PETERBILT 22

Component

**Diesel Engine** 

**FACTORY (--- QTS)** 

# Sample Rating Trend



## Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

All component wear rates are normal.

# Contamination

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

# **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 INFORMATION   method   limit/base   current   history1	
Sample Number   Client Info   KL0006362       Sample Date   Client Info   17 Nov 2021         Sample Date   Client Info   10543         Simple Date   Client Info   10543         Simple Date   Client Info   10543         Simple Date   Client Info   Not Changd         Simple Date   Client Info   Not Changd         Simple Date   Contact   Contact	history2 history2
Sample Date   Client Info   17 Nov 2021           Machine Age   mls   Client Info   10543         Oil Age   mls   Client Info   10543         Oil Changed   Client Info   Not Changd         Sample Status   NORMAL         Water   WC Method   NORMAL         Water   WC Method   NEG       Glycol   WC Method   NEG       WEAR METALS   method   limit/base   current   history1     Iron   ppm   ASTM D5185m   >4   <1       Nickel   ppm   ASTM D5185m   >2   0       Titanium   ppm   ASTM D5185m   >2   0       Titanium   ppm   ASTM D5185m   >2   <1       Aluminum   ppm   ASTM D5185m   >25   11       Lead   ppm   ASTM D5185m   >45   <1       Copper   ppm   ASTM D5185m   >4   <1       Tin   ppm   ASTM D5185m   >4   <1       Antimony   ppm   ASTM D5185m   0       Antimony   ppm   ASTM D5185m   0       ADDITIVES   method   limit/base   current   history1     ADDITIVES   method   li	history2 history2
Machine Age         mls         Client Info         10543             Oil Age         mls         Client Info         10543             Oil Changed         Client Info         Not Changd             Sample Status         NORMAL             CONTAMINATION         method         limit/base         current         history1           Water         WC Method         NEG            WEAR METALS         method         limit/base         current         history1           WEAR METALS              WEAR METALS	history2 history2
Oil Age         mls         Client Info         10543             Oil Changed         Client Info         Not Changd             Sample Status         NORMAL             CONTAMINATION         method         limit/base         current         history1           Water         WC Method         NEG            WEAR METALS         method         limit/base         current         history1           WEAR METALS         method         limit/base         current         nethod            WEAR METALS         method         method          nethod         nethod	history2 history2
Oil Changed         Client Info         Not Changd            Sample Status         NORMAL            CONTAMINATION         method         limit/base         current         history1           Water         WC Method         NEG            WEAR METALS         method         limit/base         current         history1           Iron         ppm         ASTM D5185m         >110         26            Chromium         ppm         ASTM D5185m         >4         <1	history2 history2 history2
CONTAMINATION   method   limit/base   current   history1	history2 history2 history2
CONTAMINATION         method         limit/base         current         history1           Water         WC Method         >0.2         NEG            Glycol         WC Method         NEG            WEAR METALS         method         limit/base         current         history1           Iron         ppm         ASTM D5185m         >110         26            Chromium         ppm         ASTM D5185m         >4         <1	history2 history2
Water         WC Method         >0.2         NEG            Glycol         WC Method         NEG            WEAR METALS         method         limit/base         current         history1           Iron         ppm         ASTM D5185m         >110         26            Chromium         ppm         ASTM D5185m         >4         <1            Nickel         ppm         ASTM D5185m         >2         0            Nickel         ppm         ASTM D5185m         >2         0            Silver         ppm         ASTM D5185m         >2         <1            Silver         ppm         ASTM D5185m         >2         <1            Aluminum         ppm         ASTM D5185m         >45         <1            Lead         ppm         ASTM D5185m         >4         <1            Copper         ppm         ASTM D5185m         >4         <1            Antimony         ppm         ASTM D5185m         0            Vanadium         ppm         ASTM D5185m         0	history2
WEAR METALS         method         limit/base         current         history1           Iron         ppm         ASTM D5185m         >110         26            Chromium         ppm         ASTM D5185m         >4         <1            Nickel         ppm         ASTM D5185m         >2         0            Titanium         ppm         ASTM D5185m         >2         <1            Silver         ppm         ASTM D5185m         >2         <1            Aluminum         ppm         ASTM D5185m         >25         11            Lead         ppm         ASTM D5185m         >45         <1            Copper         ppm         ASTM D5185m         >85         10            Tin         ppm         ASTM D5185m         0            Antimony         ppm         ASTM D5185m         0            Vanadium         ppm         ASTM D5185m         0            Cadmium         ppm         ASTM D5185m         0            Boron         ppm         ASTM D5185m         0	history2
WEAR METALS         method         limit/base         current         history1           Iron         ppm         ASTM D5185m         >110         26            Chromium         ppm         ASTM D5185m         >4         <1	history2
Iron         ppm         ASTM D5185m         >110         26            Chromium         ppm         ASTM D5185m         >4         <1	
Chromium         ppm         ASTM D5185m         >4         <1            Nickel         ppm         ASTM D5185m         >2         0            Titanium         ppm         ASTM D5185m         >2         1            Silver         ppm         ASTM D5185m         >2         <1	
Nickel	
Titanium         ppm         ASTM D5185m         <1            Silver         ppm         ASTM D5185m         >2         <1	
Silver         ppm         ASTM D5185m         >2         <1            Aluminum         ppm         ASTM D5185m         >25         11            Lead         ppm         ASTM D5185m         >45         <1	
Aluminum         ppm         ASTM D5185m         >25         11            Lead         ppm         ASTM D5185m         >45         <1	
Lead         ppm         ASTM D5185m         >45         <1            Copper         ppm         ASTM D5185m         >85         10            Tin         ppm         ASTM D5185m         >4         <1	
Copper         ppm         ASTM D5185m         >85         10            Tin         ppm         ASTM D5185m         >4         <1	
Tin         ppm         ASTM D5185m         >4         <1            Antimony         ppm         ASTM D5185m         0            Vanadium         ppm         ASTM D5185m         0            Cadmium         ppm         ASTM D5185m         0            ADDITIVES         method         limit/base         current         history1           Boron         ppm         ASTM D5185m         45            Barium         ppm         ASTM D5185m         0            Molybdenum         ppm         ASTM D5185m         8            Manganese         ppm         ASTM D5185m         1            Magnesium         ppm         ASTM D5185m         731            Calcium         ppm         ASTM D5185m         1372	
Antimony         ppm         ASTM D5185m         0            Vanadium         ppm         ASTM D5185m         0            Cadmium         ppm         ASTM D5185m         0            ADDITIVES         method         limit/base         current         history1           Boron         ppm         ASTM D5185m         45            Barium         ppm         ASTM D5185m         0            Molybdenum         ppm         ASTM D5185m         8            Manganese         ppm         ASTM D5185m         1            Magnesium         ppm         ASTM D5185m         731            Calcium         ppm         ASTM D5185m         1372	
Vanadium         ppm         ASTM D5185m         0            Cadmium         ppm         ASTM D5185m         0            ADDITIVES         method         limit/base         current         history1           Boron         ppm         ASTM D5185m         45            Barium         ppm         ASTM D5185m         0            Molybdenum         ppm         ASTM D5185m         8            Manganese         ppm         ASTM D5185m         1            Magnesium         ppm         ASTM D5185m         731            Calcium         ppm         ASTM D5185m         1372	
Cadmium         ppm         ASTM D5185m         0            ADDITIVES         method         limit/base         current         history1           Boron         ppm         ASTM D5185m         45            Barium         ppm         ASTM D5185m         0            Molybdenum         ppm         ASTM D5185m         8            Manganese         ppm         ASTM D5185m         1            Magnesium         ppm         ASTM D5185m         731            Calcium         ppm         ASTM D5185m         1372	
ADDITIVES         method         limit/base         current         history1           Boron         ppm         ASTM D5185m         45            Barium         ppm         ASTM D5185m         0            Molybdenum         ppm         ASTM D5185m         8            Manganese         ppm         ASTM D5185m         1            Magnesium         ppm         ASTM D5185m         731            Calcium         ppm         ASTM D5185m         1372	
Boron         ppm         ASTM D5185m         45            Barium         ppm         ASTM D5185m         0            Molybdenum         ppm         ASTM D5185m         8            Manganese         ppm         ASTM D5185m         1            Magnesium         ppm         ASTM D5185m         731            Calcium         ppm         ASTM D5185m         1372	
Barium         ppm         ASTM D5185m         0            Molybdenum         ppm         ASTM D5185m         8            Manganese         ppm         ASTM D5185m         1            Magnesium         ppm         ASTM D5185m         731            Calcium         ppm         ASTM D5185m         1372	history2
Molybdenum         ppm         ASTM D5185m         8            Manganese         ppm         ASTM D5185m         1            Magnesium         ppm         ASTM D5185m         731            Calcium         ppm         ASTM D5185m         1372	
Manganese         ppm         ASTM D5185m         1            Magnesium         ppm         ASTM D5185m         731            Calcium         ppm         ASTM D5185m         1372	
Magnesium         ppm         ASTM D5185m         731            Calcium         ppm         ASTM D5185m         1372	
Calcium ppm ASTM D5185m 1372	
Dheenherus 270	
Phosphorus ppm ASTM D5185m 773	
Zinc ppm ASTM D5185m <b>795</b>	
Sulfur         ppm         ASTM D5185m         2972	
CONTAMINANTS method limit/base current history1	history2
Silicon         ppm         ASTM D5185m         >30         11	
Sodium ppm ASTM D5185m <1	
Potassium ppm ASTM D5185m >20 19	
Fuel % ASTM D3524 >5 0.1	
INFRA-RED method limit/base current history1	history2
Soot %	
Nitration   Abs/cm   *ASTM D7624   >20   <b>9.4</b>	
<b>Sulfation</b> Abs/.1mm *ASTM D7415 >30 <b>19.8</b>	



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