

Machine Id VIBRO CAT 177 4850008 Component Diesel Engine Fluid

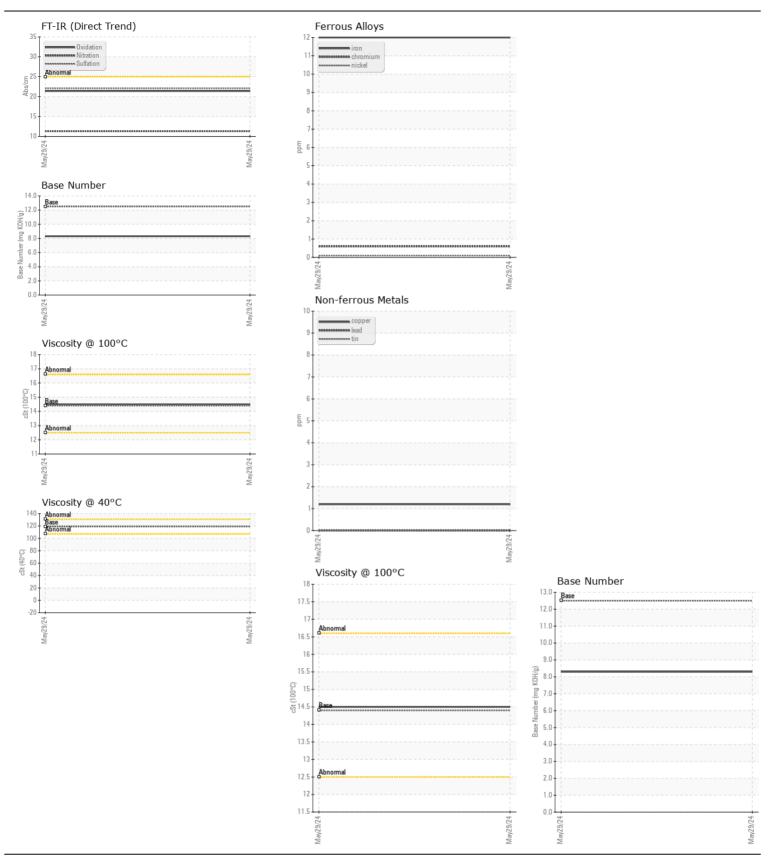
CHEVRON DELO 400 MULTIGRADE 15W40 (--- QTS)

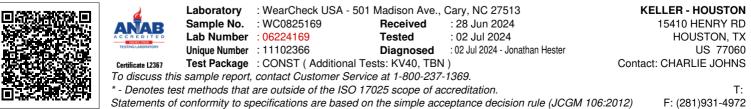
Sample at the next service interval to monitor. Sample Date Sample Date Client Info WC0825169 Machine Age hrs Client Info 29 May 202 Machine Age hrs Client Info 0 Oil Age hrs Client Info 0 Oil Age hrs Client Info 0 <th></th>	
Sample Number Client Info WC0225169	
Sampe bar Sampe bar <t< th=""><th></th></t<>	
Oil Age hrs Client Info 0 Filter Age hrs Client Info 0 <th></th>	
Filter Age hrs Client Info 0 Oil Changed Client Info Changed <	
Oil Changed Client Info Changed <td></td>	
Filter Changed Sample Status Client Info Changed NORMAL WEAR Iron pp ASTM D5185m >100 12 Icon All component wear rates are normal. Iron pp ASTM D5185m >20 <1 Icon <	
WEAR Iron pm ASTM D51850 >100 12 All component wear rates are normal. Iron pm ASTM D51850 >20 <1 <	
WEAR Iron ppm ASTM D5185m >100 12 All component wear rates are normal. Inckel ppm ASTM D5185m >20 <1 I Nickel ppm ASTM D5185m >4 <1 I <td< th=""><th> </th></td<>	
All component wear rates are normal. Chromium ppm ASTM D5185m >20 <1	
All component wear rates are normal. Chromium ppm ASTM D5185m >20 <1	
All component wear rates are normal. Nickel ppm ASTM D5185m >4 <1 Titanium ppm ASTM D5185m >3 1 Silver ppm ASTM D5185m >3 1 Aluminum ppm ASTM D5185m >20 6 Lead ppm ASTM D5185m >40 0	
Titanium ppm ASTM D5185m <1	
Silver ppm ASTM D5185m >3 1 Aluminum ppm ASTM D5185m >20 6 1 Lead ppm ASTM D5185m >40 00 1 1 1 1 1 1 1 1	
Aluminum ppm ASTM D5185m >20 6 Lead ppm ASTM D5185m >40 0 Copper ppm ASTM D5185m >330 1 1 Tin ppm ASTM D5185m >15 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <th> </th>	
LeadppmASTM D5185m>400CopperppmASTM D5185m>3301TinppmASTM D5185m>150VanadiumppmASTM D5185m>150White Metalscalar*VisualNONENONEYellow Metalscalar*VisualNONENONEPotassiumppmASTM D5185m>2014FuelWC Method>5<1.0WaterUW C Method>0.2NEEGGlycolWC Method>0.2NEEGSolt %%*ASTM D7844>30.1SulfationAbs/tm*ASTM D7844>322.1SulfationAbs/tm*ASTM D7844>322.1SulfationAbs/tm*ASTM D7845>3022.1SulfationAbs/tm*ASTM D7845>3022.1SulfationAbs/tm*ASTM D7845>3022.1SulfationAbs/tm*ASTM D7845>3022.1Debrisscalar*VisualNONENONENONENONENONENONENONESulfationAbs/tm	
Copper ppm ASTM D5185m >330 1 Tin ppm ASTM D5185m >15 0 Vanadium ppm ASTM D5185m < <1 White Metal scalar *Visual NONE NONE Yellow Metal scalar *Visual NONE NONE There is no indication of any contamination in the oil. Silicon ppm ASTM D5185m >20 14 Water WC Method >5 <1.0 Glycol WC Method >0.2 NEG Soot % % *ASTM D7844 >3 0.1 Soot % % *ASTM D7415 >30 22.1 Sulfation Abs/cm *ASTM D7415 >30 22.1 Silt scalar *Visual NONE NONE	
TinppmASTM D5185m>150VanadiumppmASTM D5185mI<1IWhite Metalscalar*VisualNONENONEIII	
White Metal Yellow Metalscalar*VisualNONENONEYellow Metalscalar*VisualNONENONE14	
Yellow Metalscalar*VisualNONENONECONTAMINATIONSiliconppmASTM D5185m>2514PotassiumppmASTM D5185m>20141FuelWC Method>5<1.01WaterWC Method>0.2NEG1GlycolWC Method>0.2NEG1Soot %%*ASTM D7844>30.11NitrationAbs/cm*ASTM D7624>2011.31SulfationAbs/tm*ASTM D7644>3022.11Siltscalar*VisualNONENONE1Debrisscalar*VisualNONENONE1	
Silicon ppm ASTM D5185m >25 14 Potassium ppm ASTM D5185m >20 14 15 14 14 14 14 14 14 14 14 14 14 14 14 14 14 16 </th <th></th>	
Potassium ppm ASTM D5185m >20 14 There is no indication of any contamination in the oil. Fuel WC Method >5 <1.0 Water WC Method >0.2 NEG Image: Soot % %C Method >0.2 NEG Image: Soot % %C Method >0.1 Image: Soot % %C Method >30 0.1 Image: Soot % Soot % *ASTM D7844 >30 0.1 Image: Soot % Soot % *ASTM D7644 >20 11.3 Image: Soot % Soo	
Potassium ppm ASTM D5185m >20 14 There is no indication of any contamination in the oil. Fuel WC Method >5 <1.0 Water WC Method >0.2 NEG Image: Soot % %C Method >0.2 NEG Image: Soot % %C Method >0.1 Image: Soot % %C Method >30 0.1 Image: Soot % Soot % %ASTM D7844 >30 0.1 Image: Soot % %Sitt %ASTM D7844 >30 0.1 Image: Soot % %Sitt %ASTM D7844 >30 0.1 Image: Soot % %Sitt %Sitt Soot % %Sitt %Sitt Soot % Soot % Soot % <td< th=""><th></th></td<>	
Fuel WC Method >5 <1.0	
WaterWC Method>0.2NEGGlycolWC MethodWC MethodNEGSoot %%*ASTM D7844>30.1NitrationAbs/cm*ASTM D7624>2011.3SulfationAbs/lmm*ASTM D7415>3022.1Siltscalar*VisualNONENONEDebrisscalar*VisualNONENONE	
GlycolWC MethodNEGSoot %%*ASTM D7844>30.1NitrationAbs/cm*ASTM D7624>2011.3SulfationAbs/1mm*ASTM D7415>3022.1Siltscalar*VisualNONENONEDebrisscalar*VisualNONENONE	
Soot % *ASTM D7844 >3 0.1 Nitration Abs/cm *ASTM D7624 >20 11.3 Sulfation Abs/1mm *ASTM D7415 >30 22.1 Silt scalar *Visual NONE NONE Debris scalar *Visual NONE NONE	
NitrationAbs/cm*ASTM D7624>2011.3SulfationAbs/.1mm*ASTM D7415>3022.1Siltscalar*VisualNONENONEDebrisscalar*VisualNONENONE	
Siltscalar*VisualNONENONEDebrisscalar*VisualNONENONE	
Debris scalar *Visual NONE NONE	
Sand/Dirt scalar *Visual NONE NONE	
Appearance scalar *Visual NORML NORML	
Odor scalar *Visual NORML NORML	
Emulsified Water scalar *Visual >0.2 NEG	
FLUID CONDITION Sodium ppm ASTM D5185m 5	
Boron ppm ASTM D5185m 151 84	
The BN result indicates that there is suitable alkalinity remaining in the Barium prom ASTM 05185m 0.4	
oil. The condition of the oil is suitable for further service. Molybdenum ppm ASTM D5185m 250 65	
Manganese ppm ASTM D5185m <1	
Magnesium ppm ASTM D5185m 0 864	
Calcium ppm ASTM D5185m 2046 1412	
Phosphorus ppm ASTM D5185m 1043 863	
Zinc ppm ASTM D5185m 943 1052	
Sulfur ppm ASTM D5185m 5012 2462	
Oxidation Abs/.1mm *ASTM D7414 >25 21.4	
Base Number (BN) mg KOH/g ASTM D2896 12.5 8.3	

14.5

ASTM D445 14.4

Visc @ 100°C cSt





Contact/Location: CHARLIE JOHNS - HAYHOUTX Page 2 of 2