

#### Machine Id **13609** Component **Hydraulic System** Fluid **{not provided} (--- GAL)**

RECOMMENDATION

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

### **WEAR**

All component wear rates are normal.

## CONTAMINATION

There is a high amount of particulates present in the oil.

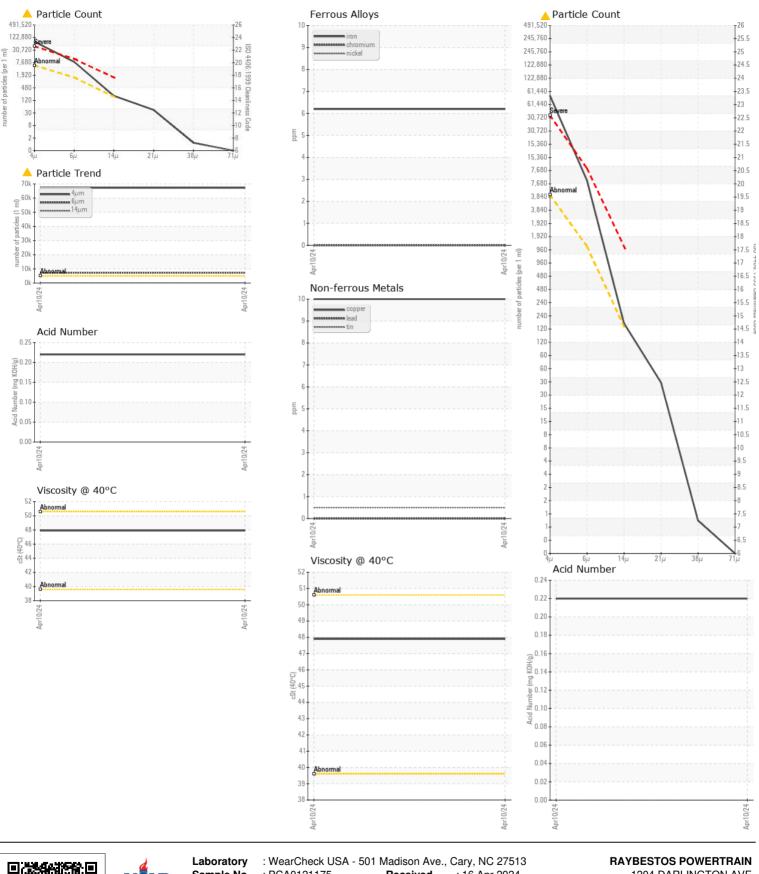
-----

### FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Test         UOM         Method         Limit/Ab         Current         History1         History1           Sample Number         Client Info         PCA0121175             Sample Date         Client Info         10 Apr 2024             Machine Age         hrs         Client Info         0             Oil Age         hrs         Client Info         0             Filter Age         hrs         Client Info         N/A             Oil Changed         Client Info         N/A              Filter Changed         Client Info         N/A              Sample Status         Client Info         N/A              Iron         ppm         ASTM D5185m<>20         6             Nickel         ppm         ASTM D5185m<>20         0             Silver         ppm         ASTM D5185m<>20         0             Aluminum         ppm         ASTM D5185m<>20	2
Sample Date         Client Info         10 Apr 2024            Machine Age         hrs         Client Info         0            Oil Age         hrs         Client Info         0            Filter Age         hrs         Client Info         0            Oil Changed         Client Info         0             Oil Changed         Client Info         N/A             Filter Changed         Client Info         N/A             Sample Status         Client Info         N/A             Iron         ppm         ASTM D5185m<>20         6             Iron         ppm         ASTM D5185m<>20         0             Nickel         ppm         ASTM D5185m<>20         0             Silver         ppm         ASTM D5185m<>20         0             Aluminum         ppm         ASTM D5185m<>20         <1             Lead         ppm         ASTM D5185m<>20         <1	
Machine Age Oil AgehrsClient Info0Oil Age Filter Age Oil ChangedhrsClient Info0Filter Age Oil ChangedClient InfoN/AGil ChangedClient InfoN/AFilter ChangedClient InfoN/ASample StatusClient InfoN/AIronppmASTM D5185m<>206ChromiumppmASTM D5185m<>200NickelppmASTM D5185m<>200NickelppmASTM D5185m<>200SilverppmASTM D5185m<>20AluminumppmASTM D5185m<>20LeadppmASTM D5185m<>20VanadiumppmASTM D5185m<>20VanadiumppmASTM D5185m<>20VanadiumppmASTM D5185m<>20VanadiumppmASTM D5185m<>20VanadiumppmASTM D5185m<>20VanadiumppmASTM D5185m<>20Vater%ASTM D5185m<>15<1Patticles >4µmASTM D5185m<>200	
Oil Age         hrs         Client Info         0             Filter Age         hrs         Client Info         N/A             Oil Changed         Client Info         N/A              Filter Changed         Client Info         N/A              Sample Status         Client Info         N/A              Iron         ppm         ASTM D5185m<>20         6             Chromium         ppm         ASTM D5185m<>20         0             Nickel         ppm         ASTM D5185m<>20         0             Titanium         ppm         ASTM D5185m<>20         0             Aluminum         ppm         ASTM D5185m<>20         <-1             Lead         ppm         ASTM D5185m<>20         <10             Vanadium         ppm         ASTM D5185m<>20         <10             Vanadium         ppm         ASTM D5185m<>20         <1	
Filter Age         hrs         Client Info         0             Oil Changed         Client Info         N/A              Filter Changed         Client Info         N/A              Sample Status         Client Info         N/A              Iron         ppm         ASTM D5185m<>20         6             Chromium         ppm         ASTM D5185m<>20         0             Nickel         ppm         ASTM D5185m<>20         0             Titanium         ppm         ASTM D5185m<>20         0             Silver         ppm         ASTM D5185m<>20         <-1             Aluminum         ppm         ASTM D5185m<>20         <1             Lead         ppm         ASTM D5185m<>20         <10             Vanadium         ppm         ASTM D5185m<>20         <10             Yellow Metal         scalar         *Visual         NONE	
Oil Changed         Client Info         N/A             Filter Changed         Client Info         N/A             Sample Status         Client Info         N/A             Iron         ppm         ASTM D5185m<>20         6             Chromium         ppm         ASTM D5185m<>20         0             Nickel         ppm         ASTM D5185m<>20         0             Titanium         ppm         ASTM D5185m<>20         0             Silver         ppm         ASTM D5185m<>20         0             Aluminum         ppm         ASTM D5185m<>20         <-1             Lead         ppm         ASTM D5185m<>20         <1             Yanadium         ppm         ASTM D5185m<>20         <10             Vanadium         ppm         ASTM D5185m<>20         <1             Yanadium         ppm         ASTM D5185m<>20         <1 <t< th=""><th></th></t<>	
Filter Changed         Client Info         N/A             Sample Status         ABNORMAL          ABNORMAL            Iron         ppm         ASTM D5185m<>20         6             Chromium         ppm         ASTM D5185m<>20         0             Nickel         ppm         ASTM D5185m         >20         0             Titanium         ppm         ASTM D5185m         >20         0             Silver         ppm         ASTM D5185m         >20         0             Aluminum         ppm         ASTM D5185m         >20         0             Copper         ppm         ASTM D5185m         >20         10             Vanadium         ppm         ASTM D5185m         >20         10	
Sample Status         ABNORMAL            Iron         ppm         ASTM D5185m         >20         6            Chromium         ppm         ASTM D5185m         >20         0            Nickel         ppm         ASTM D5185m         >20         0            Nickel         ppm         ASTM D5185m         >20         0            Titanium         ppm         ASTM D5185m         >20         0            Silver         ppm         ASTM D5185m         >20         0            Aluminum         ppm         ASTM D5185m         >20         <1            Lead         ppm         ASTM D5185m         >20         <1            Copper         ppm         ASTM D5185m         >20         10            Tin         ppm         ASTM D5185m         >20         10            Vanadium         ppm         ASTM D5185m         >20         <1            Yellow Metal         scalar         *Visual         NONE         NONE            Yellow Metal         scalar	
Iron         ppm         ASTM D5185m         >20         6             Chromium         ppm         ASTM D5185m         >20         0             Nickel         ppm         ASTM D5185m         >20         0             Titanium         ppm         ASTM D5185m         >20         0             Silver         ppm         ASTM D5185m         0              Aluminum         ppm         ASTM D5185m         >20         <1             Lead         ppm         ASTM D5185m         >20         <10             Copper         ppm         ASTM D5185m         >20         10             Tin         ppm         ASTM D5185m         >20         <1             Vanadium         ppm         ASTM D5185m         >20         <10             Vanadium         ppm         ASTM D5185m         >20         <1             Yellow Metal         scalar         *Visua	
Chromium         ppm         ASTM D5185m         >20         0            Nickel         ppm         ASTM D5185m         >20         0             Titanium         ppm         ASTM D5185m         >20         0             Silver         ppm         ASTM D5185m         0             Aluminum         ppm         ASTM D5185m         >20         <1             Lead         ppm         ASTM D5185m         >20         <1             Copper         ppm         ASTM D5185m         >20         0             Vanadium         ppm         ASTM D5185m         >20         10             Vanadium         ppm         ASTM D5185m         >20         <1             Vanadium         ppm         ASTM D5185m         >20         <1             Vanadium         ppm         ASTM D5185m         >20         <1             Yellow Metal         scalar         *Visual         NONE         <	
Chromium         ppm         ASTM D5185m         >20         0            Nickel         ppm         ASTM D5185m         >20         0             Titanium         ppm         ASTM D5185m         >20         0             Silver         ppm         ASTM D5185m         0             Aluminum         ppm         ASTM D5185m         >20         <1             Lead         ppm         ASTM D5185m         >20         <1             Copper         ppm         ASTM D5185m         >20         0             Vanadium         ppm         ASTM D5185m         >20         10             Vanadium         ppm         ASTM D5185m         >20         <1             Vanadium         ppm         ASTM D5185m         >20         <1             Vanadium         ppm         ASTM D5185m         >20         <1             Yellow Metal         scalar         *Visual         NONE         <	
Nickel         ppm         ASTM D5185m         >20         0            Titanium         ppm         ASTM D5185m         0             Silver         ppm         ASTM D5185m         0             Aluminum         ppm         ASTM D5185m         >20         <1	
Titanium         ppm         ASTM D5185m         O            Silver         ppm         ASTM D5185m         O            Aluminum         ppm         ASTM D5185m         >20         <1	
Silver         ppm         ASTM D5185m         0            Aluminum         ppm         ASTM D5185m         >20         <1	
Aluminum         ppm         ASTM D5185m         >20         <1	
Lead         ppm         ASTM D5185m         >20         0            Copper         ppm         ASTM D5185m         >20         10             Tin         ppm         ASTM D5185m         >20         10             Vanadium         ppm         ASTM D5185m         >20         <1	
Copper         ppm         ASTM D5185m         >20         10             Tin         ppm         ASTM D5185m         >20         <1             Vanadium         ppm         ASTM D5185m         >20         <1             White Metal         scalar         *Visual         NONE         NONE             Yellow Metal         scalar         *Visual         NONE         NONE             Silicon         ppm         ASTM D5185m         >15         <1             Potassium         ppm         ASTM D5185m         >20         0             Water         %         ASTM D5185m         >20         0             Particles >4µm         ASTM D7647         >0.05         NEG             Particles >6µm         ASTM D7647         >1300         A 7291	
Tin         ppm         ASTM D5185m         >20         <1	
Vanadium         ppm         ASTM D5185m         0             White Metal         scalar         *Visual         NONE         NONE             Yellow Metal         scalar         *Visual         NONE         NONE             Silicon         ppm         ASTM D5185m         >15         <1             Potassium         ppm         ASTM D5185m         >20         0             Water         %         ASTM D6304         >0.05         NEG             Particles >4μm         ASTM D7647         >5000 <b>A 7291</b>	
White Metal         scalar         *Visual         NONE         NONE             Yellow Metal         scalar         *Visual         NONE         NONE         NONE             Silicon         ppm         ASTM D5185m         >15         <1	
Yellow Metal         scalar         *Visual         NONE         NONE             Silicon         ppm         ASTM D5185m         >15         <1             Potassium         ppm         ASTM D5185m         >20         0             Water         %         ASTM D5040         >0.05         NEG             Particles >4μm         ASTM D7647         >5000         ▲ 67245             Particles >6μm         ASTM D7647         >1300         ▲ 7291	
Silicon         ppm         ASTM D5185m         >15         <1	
Potassium         ppm         ASTM D5185m         >20         0             Water         %         ASTM D6304         >0.05         NEG             Particles >4µm         ASTM D7647         >5000 <b>A 67245</b> Particles >6µm         ASTM D7647         >1300 <b>A 7291</b>	
Potassium         ppm         ASTM D5185m         >20         0             Water         %         ASTM D6304         >0.05         NEG             Particles >4µm         ASTM D7647         >5000 <b>A 67245</b> Particles >6µm         ASTM D7647         >1300 <b>A 7291</b>	
Water         %         ASTM D6304         >0.05         NEG             Particles >4μm         ASTM D7647         >5000         ▲ 67245             Particles >6μm         ASTM D7647         >1300         ▲ 7291	
Particles >4μm         ASTM D7647         >5000         ▲ 67245             Particles >6μm         ASTM D7647         >1300         ▲ 7291	
Particles >6μm         ASTM D7647         >1300         4 7291	
and the second	
Particles >14μm         ASTM D7647         >160         Δ         174	
Particles >21μm         ASTM D7647         >40         37	
Particles >38μm         ASTM D7647         >10         1	
Particles >71μm         ASTM D7647         >3         0	
Oil Cleanliness ISO 4406 (c) >19/17/14 🔺 23/20/15	
Silt scalar *Visual NONE NONE	
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 >0.05 NEG	
Sodium ppm ASTM D5185m 3	
Boron ppm ASTM D5185m 0	
Barium ppm ASTM D5185m <1	
Molybdenum         ppm         ASTM D5185m         O	
Manganese ppm ASTM D5185m 0	
Magnesium         ppm         ASTM D5185m         23	
Calcium ppm ASTM D5185m 52	
Phosphorus         ppm         ASTM D5185m         272	
Zinc ppm ASTM D5185m 279	
Sulfur         ppm         ASTM D5185m         1699	
Acid Number (AN) mg KOH/g ASTM D8045 0.22	
Visc @ 40°C cSt ASTM D445 47.9	

# WEAR NORMAL CONTAMINATION ABNORMAL FLUID CONDITION NORMAL



Sample No. : PCA0121175 Received 1204 DARLINGTON AVE : 16 Apr 2024 Lab Number : 06150290 Tested : 18 Apr 2024 CRAWFORDSVILLE, IN Diagnosed Unique Number : 10980368 : 18 Apr 2024 - Don Baldridge US 47933 Test Package : PLANT Contact: DON B. Certificate L2367 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. T: F: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Ē

Contact/Location: DON B. - RAYCRAIN Page 2 of 2