

## **OIL ANALYSIS REPORT**

Sample Rating Trend



# Area 25 Machine Id [25] A25 FAN 3 Center Gearbox GEAR LIFE 220 (5 GAL)

### Recommendation

Resample at the next service interval to monitor.

#### Wear

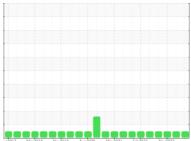
All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

## Fluid Condition

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

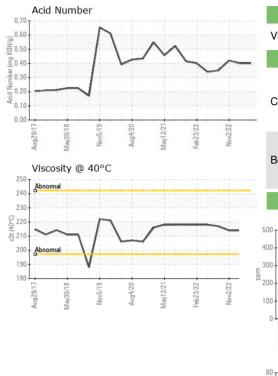


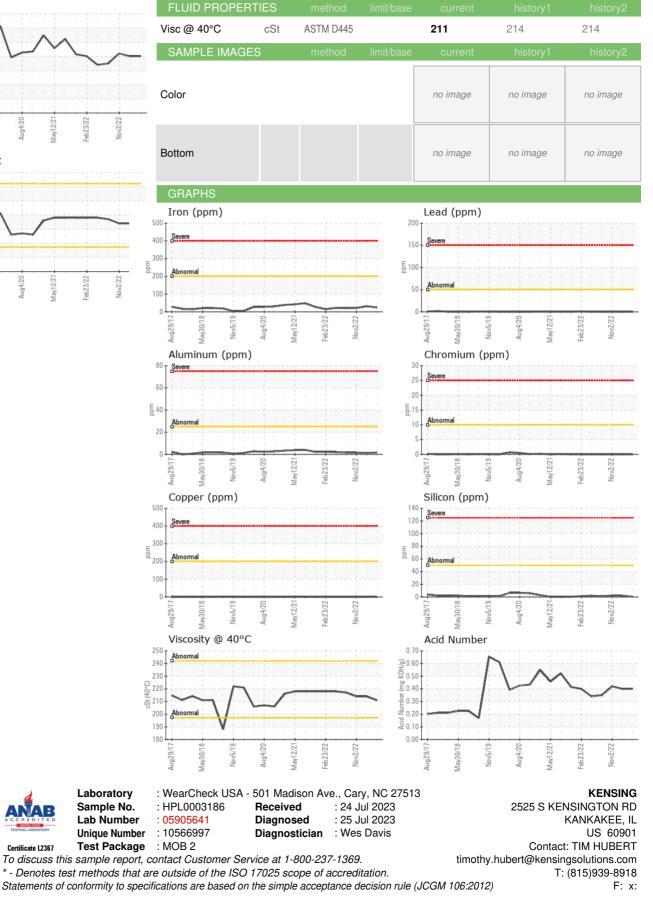


Iron     ppm     ASTM D5185m     >200     24     31     22       Chromium     ppm     ASTM D5185m     >10     0     0     0       Nickel     ppm     ASTM D5185m     >10     0     0     0       Titanium     ppm     ASTM D5185m     0     0     0     0       Silver     ppm     ASTM D5185m     <1     0     0     0       Aluminum     ppm     ASTM D5185m     >25     2     1     2       Lead     ppm     ASTM D5185m     >200     0     <1     <1     1       Tin     ppm     ASTM D5185m     >200     0     <1     <1     1       Vanadium     ppm     ASTM D5185m     0     0     0     0       Cadmium     ppm     ASTM D5185m     0     0     0     0       Boron     ppm     ASTM D5185m     0     0     0     0       Magnesium     ppm     ASTM D5185m     2     <1 <th>2022 angd</th>	2022 angd
Machine Age     hrs     Client Info     0     0     0       Oil Age     hrs     Client Info     0     5070     1830       Oil Changed     Client Info     Not Changd     Not Changd     Not Changd       Sample Status     Imit/base     current     history1     history1       Iron     ppm     ASTM D5185m     >200     24     31     22       Chromium     ppm     ASTM D5185m     >10     0     0     0       Nickel     ppm     ASTM D5185m     >10     0     0     0       Silver     ppm     ASTM D5185m     <1     0     0     0       Aluminum     ppm     ASTM D5185m     >20     0     <1     <1       Copper     ppm     ASTM D5185m     >20     0     <1     <1       Vanadium     ppm     ASTM D5185m     0     0     0     0       Cadmium     ppm     ASTM D5185m     0     0     0     0       Barium	angd AL
Oil Age     hrs     Client Info     0     5070     1830       Oil Changed     Client Info     Not Changd     Not Changd     Not Changd       Sample Status     method     limit/base     current     history1     hist       Iron     ppm     ASTM D5185m     >200     24     31     22       Chromium     ppm     ASTM D5185m     >10     0     0     0       Nickel     ppm     ASTM D5185m     >10     0     0     0       Silver     ppm     ASTM D5185m     >25     2     1     2       Lead     ppm     ASTM D5185m     >200     0     <1     2       Lead     ppm     ASTM D5185m     >200     0     <1     <1       Tin     ppm     ASTM D5185m     >200     0     <1     <1       Vanadium     ppm     ASTM D5185m     0     0     0     0       Cadmium     ppm     ASTM D5185m     0     0     0     0	AL
Oil Changed     Client Info     Not Changd     Not C	AL
Sample Status     method     limit/base     current     history1     history1       Iron     ppm     ASTM D5185m     >200     24     31     22       Chromium     ppm     ASTM D5185m     >10     0     0     0       Nickel     ppm     ASTM D5185m     >10     0     0     0       Titanium     ppm     ASTM D5185m     >10     0     0     0       Silver     ppm     ASTM D5185m     >25     2     1     2       Lead     ppm     ASTM D5185m     >25     0     0     0       Copper     ppm     ASTM D5185m     >200     0     <1     0       Tin     ppm     ASTM D5185m     >200     0     <1     1	AL
WEAR METALS     method     limit/base     current     history1     history1       Iron     ppm     ASTM D5185m     >200     24     31     22       Chromium     ppm     ASTM D5185m     >10     0     0     0       Nickel     ppm     ASTM D5185m     >10     0     0     0       Titanium     ppm     ASTM D5185m     0     0     0     0       Aluminum     ppm     ASTM D5185m     >25     2     1     2       Lead     ppm     ASTM D5185m     >25     0     0     0       Copper     ppm     ASTM D5185m     >200     0     <1     <1       Tin     ppm     ASTM D5185m     >0     0     0     0       Cadmium     ppm     ASTM D5185m     0     0     0     0       ADDITIVES     method     limit/base     current     history1     history1       Boron     ppm     ASTM D5185m     0     0     0	
Iron     ppm     ASTM D5185m     >200     24     31     22       Chromium     ppm     ASTM D5185m     >10     0     0     0     0       Nickel     ppm     ASTM D5185m     >10     0     0     0     0       Titanium     ppm     ASTM D5185m     0     0     0     0     0       Silver     ppm     ASTM D5185m     <2     1     0     0     0       Aluminum     ppm     ASTM D5185m     >25     2     1     2     1     2     1 <th>story2</th>	story2
Ppm     ASTM D5185m     >10     0     0     0       Nickel     ppm     ASTM D5185m     >10     0     0     0       Titanium     ppm     ASTM D5185m     >10     0     0     0       Silver     ppm     ASTM D5185m     <10	
Nickel     ppm     ASTM D5185m     >10     0     0     0       Titanium     ppm     ASTM D5185m      0     0     0       Silver     ppm     ASTM D5185m     <21     0     0     0       Aluminum     ppm     ASTM D5185m     >25     2     1     2       Lead     ppm     ASTM D5185m     >50     0     0     0       Copper     ppm     ASTM D5185m     >200     0     <1     1       Tin     ppm     ASTM D5185m     >10     <1     0     <1     1       Vanadium     ppm     ASTM D5185m     >10     <1     0     0     0     0       Cadmium     ppm     ASTM D5185m     0	
Titanium     ppm     ASTM D5185m     0     0     0       Silver     ppm     ASTM D5185m     <1     0     0       Aluminum     ppm     ASTM D5185m<>25     2     1     2       Lead     ppm     ASTM D5185m<>50     0     0     0       Copper     ppm     ASTM D5185m<>200     0     <1     <1       Tin     ppm     ASTM D5185m<>200     0     <1     <1       Vanadium     ppm     ASTM D5185m<>10     <1     0     <1       Vanadium     ppm     ASTM D5185m     0     0     0     0       Cadmium     ppm     ASTM D5185m     0     0     0     0       ASTM D5185m     0     0     0     0     0     0       Boron     ppm     ASTM D5185m     0     0     0     0     0       Barium     ppm     ASTM D5185m     2     <1     <1     1     1     1     1     1     1     1	
Silver     ppm     ASTM D5185m     <1	
Aluminum     ppm     ASTM D5185m     >25     2     1     2       Lead     ppm     ASTM D5185m     >50     0     0     0       Copper     ppm     ASTM D5185m     >200     0     <1     <1       Tin     ppm     ASTM D5185m     >10     <1     0     <1       Vanadium     ppm     ASTM D5185m     >10     <1     0     0       Cadmium     ppm     ASTM D5185m     0     0     0     0       Cadmium     ppm     ASTM D5185m     0     0     0     0       Boron     ppm     ASTM D5185m     0     0     0     0       Barium     ppm     ASTM D5185m     0     0     0     0       Magnesium     ppm     ASTM D5185m     2     <1     <1     <1       Magnesium     ppm     ASTM D5185m     28     34     22        Phosphorus     ppm     ASTM D5185m     125     127     161 <th></th>	
Lead     ppm     ASTM D5185m     >50     0     0     0       Copper     ppm     ASTM D5185m     >200     0     <1	
Copper     ppm     ASTM D5185m     >200     0     <1	
Tin     ppm     ASTM D5185m     >10     <1	
Vanadium     ppm     ASTM D5185m     0     0     0       Cadmium     ppm     ASTM D5185m     0     0     0     0       ADDITIVES     method     limit/base     current     history1     hist       Boron     ppm     ASTM D5185m     0     0     0     0       Barium     ppm     ASTM D5185m     0     0     0     0       Barium     ppm     ASTM D5185m     0     0     0     0       Molybdenum     ppm     ASTM D5185m     3     0     0     0       Magnesium     ppm     ASTM D5185m     2     <1	
Cadmium     ppm     ASTM D5185m     0     0     0       ADDITIVES     method     limit/base     current     history1     history1       Boron     ppm     ASTM D5185m     0     0     0     0       Barium     ppm     ASTM D5185m     0     0     0     0       Molybdenum     ppm     ASTM D5185m     0     0     0     0       Manganese     ppm     ASTM D5185m     2     <1     <1     <1       Magnesium     ppm     ASTM D5185m     28     34     22        Phosphorus     ppm     ASTM D5185m     125     127     161     <1       Zinc     ppm     ASTM D5185m     8     17     6      <24     <1     <24     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1     <1	
ADDITIVESmethodlimit/basecurrenthistory1history1BoronppmASTM D5185m000BariumppmASTM D5185m300MolybdenumppmASTM D5185m000ManganeseppmASTM D5185m000ManganeseppmASTM D5185m<1<1<1MagnesiumppmASTM D5185m2<1<1CalciumppmASTM D5185m283422PhosphorusppmASTM D5185m125127161ZincppmASTM D5185m8176SulfurppmASTM D5185m2154019443224CONTAMINANTSmethodlimit/basecurrenthistory1history1SiliconppmASTM D5185m>50<122	
Boron     ppm     ASTM D5185m     0     0     0     0       Barium     ppm     ASTM D5185m     3     0     0     0       Molybdenum     ppm     ASTM D5185m     0     0     0     0       Manganese     ppm     ASTM D5185m     0     0     0     0       Magnesium     ppm     ASTM D5185m     2     <1     <1     <1       Calcium     ppm     ASTM D5185m     28     34     22        Phosphorus     ppm     ASTM D5185m     125     127     161     <1       Zinc     ppm     ASTM D5185m     8     17     6        Sulfur     ppm     ASTM D5185m     21540     19443     2247       CONTAMINANTS     method     limit/base     current     history1     history1	
Barium     ppm     ASTM D5185m     3     0     0       Molybdenum     ppm     ASTM D5185m     0     0     0     0       Manganese     ppm     ASTM D5185m      <1     <1     <1     <1       Magnesium     ppm     ASTM D5185m     2     <1     <1     <1       Calcium     ppm     ASTM D5185m     28     34     22        Phosphorus     ppm     ASTM D5185m     125     127     161       Zinc     ppm     ASTM D5185m     8     17     6       Sulfur     ppm     ASTM D5185m     21540     19443     2247       CONTAMINANTS     method     limit/base     current     history1     history1       Silicon     ppm     ASTM D5185m >50     <1     2     2	story2
Molybdenum     ppm     ASTM D5185m     0     0     0       Manganese     ppm     ASTM D5185m     <1     <1     <1       Magnesium     ppm     ASTM D5185m     2     <1     <1       Calcium     ppm     ASTM D5185m     28     34     22       Phosphorus     ppm     ASTM D5185m     125     127     161       Zinc     ppm     ASTM D5185m     8     17     6       Sulfur     ppm     ASTM D5185m     21540     19443     2247       CONTAMINANTS     method     limit/base     current     history1     hist       Silicon     ppm     ASTM D5185m     >50     <1     2     2	
Manganese     ppm     ASTM D5185m     <1	
Magnesium     ppm     ASTM D5185m     2     <1	
Calcium     ppm     ASTM D5185m     28     34     22       Phosphorus     ppm     ASTM D5185m     125     127     161       Zinc     ppm     ASTM D5185m     8     17     6       Sulfur     ppm     ASTM D5185m     21540     19443     2247       CONTAMINANTS     method     limit/base     current     history1     his       Silicon     ppm     ASTM D5185m     >50     <1     2     2	
Phosphorus     ppm     ASTM D5185m     125     127     161       Zinc     ppm     ASTM D5185m     8     17     6       Sulfur     ppm     ASTM D5185m     21540     19443     2247       CONTAMINANTS     method     limit/base     current     history1     hist       Silicon     ppm     ASTM D5185m     >50     <1	
Zinc     ppm     ASTM D5185m     8     17     6       Sulfur     ppm     ASTM D5185m     21540     19443     2247       CONTAMINANTS     method     limit/base     current     history1     hist       Silicon     ppm     ASTM D5185m     >50     <1     2     2	
Sulfur     ppm     ASTM D5185m     21540     19443     2247       CONTAMINANTS     method     limit/base     current     history1     hist       Silicon     ppm     ASTM D5185m     >50     <1	
CONTAMINANTSmethodlimit/basecurrenthistory1hisSiliconppmASTM D5185m>50<1	
Silicon     ppm     ASTM D5185m     >50     <1	75
	tory2
Sodium nom ASTM D5195m -1 0 -1	
Sodium     ppm     ASTM D5185m     <1	
Potassium     ppm     ASTM D5185m     >20     <1	
FLUID DEGRADATION method limit/base current history1 his	tory2
Acid Number (AN)     mg KOH/g     ASTM D8045     0.40     0.42	
VISUAL method limit/base current history1 his	story2
White Metal     scalar     *Visual     NONE     NONE     NONE     NONE	
Yellow Metal scalar *Visual NONE NONE NONE NONE	
Precipitate scalar *Visual NONE NONE NONE NON	
Silt scalar *Visual NONE NONE NONE NONE	
Debris scalar *Visual NONE NONE NONE NON	
Sand/Dirt scalar *Visual NONE NONE NONE NONE	1E
Appearance scalar *Visual NORML NORML NORML NOR	
Odor scalar *Visual NORML NORML NORML NOR	
Emulsified Water scalar *Visual >0.2 NEG NEG NEG	RML
Free Water     scalar     *Visual     NEG     NEG       1:52:26) Payr 1     Submitted Payr TIM HI	RML à



# **OIL ANALYSIS REPORT**





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