

# **OIL ANALYSIS REPORT**

Sample Rating Trend



Machine Id

78-PC-24 (S/N 60B) Component Hydraulic System Fluid

Skydrol (--- LTR)

#### DIAGNOSIS

### 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. The amount and size of particulates present in the system are acceptable.

## Fluid Condition

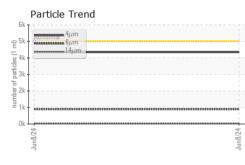
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service. Chlorine 393 ppm.

Sample NumberClient InfoWC0938113Sample DateClient Info0Machine AgehrsClient Info0Oll AgehrsClient InfoNNSample StatusClient InfoN/AWEAR METALSmethodInitroNorMALWEAR METALSMethod1NickelppmASTM 05158>200NickelppmASTM 05158>200SilverppmASTM 05158>200AluminumppmASTM 05158>200LeadppmASTM 05158>200CopperppmASTM 05158>200VanadiumppmASTM 05158>200MaganeseppmASTM 05158>200MaganeseppmASTM 05158200MaganeseppmASTM 05158200MaganeseppmASTM 0515821MaganeseppmASTM 051581022MaganeseppmASTM 051582010Magnesiumpm	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age     hrs     Client Info     0         Oil Age     hrs     Client Info     N/A         Sample Status     Imit/base     current     history!        WEAR METALS     method     Imit/base     current     history!        WEAR METALS     method     Imit/base     current     history!        Nickel     ppm     ASTM 05185m     >20     0         Nickel     ppm     ASTM 05185m     >20     0         Silver     ppm     ASTM 05185m     >20     0         Lead     ppm     ASTM 05185m     >20     0         Copper     ppm     ASTM 05185m     >20     0         Cadmium     ppm     ASTM 05185m     >20     0         Molybdenum     ppm     ASTM 05185m     21	Sample Number		Client Info		WC0938113		
Oil Age     hrs     Client Info     N/A         Sample Status     Client Info     N/A         WEAR METALS     method     limit/base     current     history1     history2       Iron     ppm     ASTM 05185m     >20     0         Nickel     ppm     ASTM 05185m     >20     <1	Sample Date		Client Info		08 Jun 2024		
Oil Changed Sample Status     Client Info     N/A         WEAR METALS     method     limit/base     current     history1     history2       Iron     ppm     ASTM D5185m     >20     0         Ohromium     ppm     ASTM D5185m     >20     0         Nickel     ppm     ASTM D5185m     >20     0         Nickel     ppm     ASTM D5185m     >20     0         Aluminum     ppm     ASTM D5185m     >20     0         Lead     ppm     ASTM D5185m     >20     0         Vanadium     ppm     ASTM D5185m     >20     0         AGMinum     ppm     ASTM D5185m     2          Vanadium     ppm     ASTM D5185m     13          Magnese     ppm     ASTM D5185m     39	Machine Age	hrs	Client Info		0		
Sample Status     method     Imit/base     current     history1     history2       Iron     ppm     ASTM D5185m     >20     0         Nickel     ppm     ASTM D5185m     >20     0         Nickel     ppm     ASTM D5185m     >20     <1	Oil Age	hrs	Client Info		0		
WEAR METALS     method     limit/base     current     history1     history2       Iron     ppm     ASTM D5185m     >20     0         Nickel     ppm     ASTM D5185m     >20     <1	Oil Changed		Client Info		N/A		
Iron     ppm     ASTM D5185m     >20     0         Nickel     ppm     ASTM D5185m     >20     <1         Nickel     ppm     ASTM D5185m     0          Aluminum     ppm     ASTM D5185m     0          Aluminum     ppm     ASTM D5185m     >20     0         Aluminum     ppm     ASTM D5185m     >20     0         Copper     ppm     ASTM D5185m     >20     0         Yanadium     ppm     ASTM D5185m     >20     0         ADDITIVES     method     imit/base     current     history1     history2       Boron     ppm     ASTM D5185m     2         Magnese     ppm     ASTM D5185m     2         Magnese     ppm     ASTM D5185m     26029 <th>Sample Status</th> <th></th> <th></th> <th></th> <th>NORMAL</th> <th></th> <th></th>	Sample Status				NORMAL		
Chromium     ppm     ASTM D5185m     >20     0         Nickel     ppm     ASTM D5185m     >20     <1         Silver     ppm     ASTM D5185m     0         Silver     ppm     ASTM D5185m     20     0         Lead     ppm     ASTM D5185m     >20     0         Lead     ppm     ASTM D5185m     >20     0         Vanadium     ppm     ASTM D5185m     >20     0         Vanadium     ppm     ASTM D5185m     >20     0         Vanadium     ppm     ASTM D5185m     >20     0         ADDITIVES     method     Imit/base     current     history1     history2       Barium     ppm     ASTM D5185m     2         Magnesium     ppm     ASTM D5185m     2 </th <th>WEAR METALS</th> <th></th> <th>method</th> <th>limit/base</th> <th>current</th> <th>history1</th> <th>history2</th>	WEAR METALS		method	limit/base	current	history1	history2
Chromium     ppm     ASTM D5185m     >20     0         Nickel     ppm     ASTM D5185m     0         Silver     ppm     ASTM D5185m     0         Aluminum     ppm     ASTM D5185m     >20     0         Lead     ppm     ASTM D5185m     >20     0         Vanadium     ppm     ASTM D5185m     2          ADDITIVES     method     Imit/base     current     history1     history2       Barium     ppm     ASTM D5185m     2         Magnesium     ppm     ASTM D5185m     39      -	Iron	maa	ASTM D5185m	>20	0		
Nickel     ppm     ASTM D5185m     >20     <1         Titanium     ppm     ASTM D5185m     0         Silver     ppm     ASTM D5185m     0         Lead     ppm     ASTM D5185m     >20     0         Copper     ppm     ASTM D5185m     >20     0         Yanadium     ppm     ASTM D5185m     >20     0         Vanadium     ppm     ASTM D5185m     20     0         ADDITVES     method     imit/base     current     history1     history2       Boron     ppm     ASTM D5185m     13         Magnesium     ppm     ASTM D5185m     2         Magnesium     ppm     ASTM D5185m     39         Magnesium     ppm     ASTM D5185m     220     2094         Valor	Chromium		ASTM D5185m	>20			
Titanium     ppm     ASTM D5185m     0         Silver     ppm     ASTM D5185m     0         Aluminum     ppm     ASTM D5185m     >20     0         Lead     ppm     ASTM D5185m     >20     0         Copper     ppm     ASTM D5185m     >20     0         Vanadium     ppm     ASTM D5185m     >20     0         ADDITIVES     method     Imit/base     current     history1     history2       Boron     ppm     ASTM D5185m     13         Marganese     ppm     ASTM D5185m     13         Marganese     ppm     ASTM D5185m     2         Marganese     ppm     ASTM D5185m     110     22         Calcium     ppm     ASTM D5185m     15     -1            Sulfur							
Silver     ppm     ASTM D5185m     0         Aluminum     ppm     ASTM D5185m     >20     0         Lead     ppm     ASTM D5185m     >20     0         Copper     ppm     ASTM D5185m     >20     0         Vanadium     ppm     ASTM D5185m     >20     0         Cadmium     ppm     ASTM D5185m     2          ADDITIVES     method     imit/base     current     history1     history2       Boron     ppm     ASTM D5185m     13         Molybdenum     ppm     ASTM D5185m     12         Marganese     ppm     ASTM D5185m     10     22         Marganese     ppm     ASTM D5185m     20     2094         Phosphorus     ppm     ASTM D5185m     210      <				- 10			
Aluminum     ppm     ASTM D5185m     >20     0         Lead     ppm     ASTM D5185m     >20     0         Copper     ppm     ASTM D5185m     >20     5         Vanadium     ppm     ASTM D5185m     >20     0         Cadmium     ppm     ASTM D5185m     >20     0         ADDITVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185m     13         Molybdenum     ppm     ASTM D5185m     0         Maganese     ppm     ASTM D5185m     39         Magnesium     ppm     ASTM D5185m     37     26029         Zinc     ppm     ASTM D5185m     22     2094         Sulfur     ppm     ASTM D5185m     20     19							
Lead     ppm     ASTM D5185m     >20     0         Copper     ppm     ASTM D5185m     >20     0         Tin     ppm     ASTM D5185m     >20     0         Vanadium     ppm     ASTM D5185m     20     0         ADDITVES     method     Imit/base     current     history1     history2       Boron     ppm     ASTM D5185m     13         Molybdenum     ppm     ASTM D5185m     2         Manganese     ppm     ASTM D5185m     39         Galcium     ppm     ASTM D5185m     39         Calcium     ppm     ASTM D5185m     37     26029         Sulfur     ppm     ASTM D5185m     210     2094         Sulfur     ppm     ASTM D5185m     215     1				>20			
Copper     ppm     ASTM D5185m     >20     5         Tin     ppm     ASTM D5185m     >20     0         Vanadium     ppm     ASTM D5185m     20     0         Cadmium     ppm     ASTM D5185m     2         ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185m     13         Molybdenum     ppm     ASTM D5185m     0         Magnesium     ppm     ASTM D5185m     39         Calcium     ppm     ASTM D5185m     39         Calcium     ppm     ASTM D5185m     37     26029         Sulfur     ppm     ASTM D5185m     220     2094         Sulfur     ppm     ASTM D5185m     21         Sulfur     ppm <td></td> <td></td> <td></td> <td></td> <th>-</th> <td></td> <td></td>					-		
Tin     ppm     ASTM D5185m     >20     0         Vanadium     ppm     ASTM D5185m     <1							
Vanadium     ppm     ASTM D5185m           Cadmium     ppm     ASTM D5185m     2         ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185m     13         Barium     ppm     ASTM D5185m     0         Manganese     ppm     ASTM D5185m     0         Manganese     ppm     ASTM D5185m     39         Calcium     ppm     ASTM D5185m     10     22         Magnesium     ppm     ASTM D5185m     37     26029         Calcium     ppm     ASTM D5185m     220     2094         Sulfur     ppm     ASTM D5185m     220     2094         Sulfur     ppm     ASTM D5185m     25         Sulfur     ppm <td></td> <td></td> <td></td> <td></td> <th></th> <td></td> <td></td>							
Cadmium     ppm     ASTM D5185m     2        ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185m     13         Barium     ppm     ASTM D5185m     2         Molybdenum     ppm     ASTM D5185m     0         Magnesium     ppm     ASTM D5185m     39         Magnesium     ppm     ASTM D5185m     39         Calcium     ppm     ASTM D5185m     37     26029         Zinc     ppm     ASTM D5185m     22.0     2094         Sulfur     ppm     ASTM D5185m     22.0     2094         Solicon     ppm     ASTM D5185m     22.0     2094         Solicon     ppm     ASTM D5185m     20     19         Solicon				>20	-		
ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185m     13         Barium     ppm     ASTM D5185m     2         Molybdenum     ppm     ASTM D5185m     0         Magnesium     ppm     ASTM D5185m     39         Magnesium     ppm     ASTM D5185m     39         Calcium     ppm     ASTM D5185m     110     22         Phosphorus     ppm     ASTM D5185m     37     26029         Sulfur     ppm     ASTM D5185m     220     2094         Sulfur     ppm     ASTM D5185m     220     2094         Solicon     ppm     ASTM D5185m     220     19         Solicon     ppm     ASTM D5185m     20     19 <t< td=""><td></td><td></td><td></td><td></td><th></th><td></td><td></td></t<>							
Boron     ppm     ASTM D5185m     13         Barium     ppm     ASTM D5185m     2         Molybdenum     ppm     ASTM D5185m     0         Manganese     ppm     ASTM D5185m     39         Magnesium     ppm     ASTM D5185m     39         Calcium     ppm     ASTM D5185m     37     26029         Calcium     ppm     ASTM D5185m     37     26029         Zinc     ppm     ASTM D5185m     37     26029         Sulfur     ppm     ASTM D5185m     220     2094         Sulfur     ppm     ASTM D5185m     215     <1         Sodium     ppm     ASTM D5185m     >20     19         Potassium     ppm     ASTM D5185m     20     19 <t< th=""><th></th><th>pp</th><th></th><th>limit/base</th><th></th><th>history1</th><th>history?</th></t<>		pp		limit/base		history1	history?
Barium     ppm     ASTM D5185m     2         Molybdenum     ppm     ASTM D5185m     0         Magnesium     ppm     ASTM D5185m     39         Magnesium     ppm     ASTM D5185m     39         Calcium     ppm     ASTM D5185m     39         Calcium     ppm     ASTM D5185m     37     26029         Phosphorus     ppm     ASTM D5185m     37     26029         Sulfur     ppm     ASTM D5185m     37     26029         Sulfur     ppm     ASTM D5185m     220     2094         Sulfur     ppm     ASTM D5185m     >15     <1				mmubase			, , , , , , , , , , , , , , , , , , ,
Molybdenum     ppm     ASTM D5185m     0         Manganese     ppm     ASTM D5185m     2         Magnesium     ppm     ASTM D5185m     39         Calcium     ppm     ASTM D5185m     110     22         Calcium     ppm     ASTM D5185m     37     26029         Zinc     ppm     ASTM D5185m     220     2094         Sulfur     ppm     ASTM D5185m     220     2094         Sulfur     ppm     ASTM D5185m     220     2094         Sulfur     ppm     ASTM D5185m     220     194         Sodium     ppm     ASTM D5185m     >20     19         Potassium     ppm     ASTM D5185m     393          Vater     %     ASTM D5185m     >20     19					_		
Manganese     ppm     ASTM D5185m     2         Magnesium     ppm     ASTM D5185m     39         Calcium     ppm     ASTM D5185m     110     22         Phosphorus     ppm     ASTM D5185m     37     26029         Zinc     ppm     ASTM D5185m     37     26029         Sulfur     ppm     ASTM D5185m     220     2094         Sulfur     ppm     ASTM D5185m     220     2094         CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >15     <1							
Magnesium     ppm     ASTM D5185m     39         Calcium     ppm     ASTM D5185m     110     22         Phosphorus     ppm     ASTM D5185m     37     26029         Zinc     ppm     ASTM D5185m     37     26029         Sulfur     ppm     ASTM D5185m     220     2094         Solium     ppm     ASTM D5185m     >15     <1							
Calcium     ppm     ASTM D5185m     110     22         Phosphorus     ppm     ASTM D5185m     37     26029         Zinc     ppm     ASTM D5185m     37     26029         Sulfur     ppm     ASTM D5185m     220     2094         CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >15     <1	•				_		
Phosphorus     ppm     ASTM D5185m     37     26029         Zinc     ppm     ASTM D5185m     220     2094         Sulfur     ppm     ASTM D5185m     220     2094         CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >15     <1	0						
Zinc     ppm     ASTM D5185m     52         Sulfur     ppm     ASTM D5185m     220     2094         CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >15     <1		ppm	ASTM D5185m	110	22		
Sulfur     ppm     ASTM D5185m     220     2094         CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >15     <1	Phosphorus	ppm	ASTM D5185m	37	26029		
CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>15<1	Zinc	ppm	ASTM D5185m		52		
Silicon   ppm   ASTM D5185m   >15   <1       Sodium   ppm   ASTM D5185m   >20   19       Potassium   ppm   ASTM D5185m   >20   19       Chlorine Content   ppm   ASTM D5185m   >20   19       Water   %   ASTM D6304   >0.750   NEG       Particles >4µm   %   ASTM D7647   >5000   4343       Particles >6µm   ASTM D7647   >1300   893        Particles >6µm   ASTM D7647   >160   43        Particles >14µm   ASTM D7647   >10   1        Particles >21µm   ASTM D7647   >10   1        Particles >38µm   ASTM D7647   >3   0        Particles >71µm   ASTM D7647   3   0        Oi	Sulfur	ppm	ASTM D5185m	220	2094		
Sodium     ppm     ASTM D5185m     5         Potassium     ppm     ASTM D5185m     >20     19         Chlorine Content     ppm     ASTM D5185m     >20     19         Water     %     ASTM D5185m     393          FLUID CLEANLINESS     method     limit/base     current     history1     history2       Particles >4µm     ASTM D7647     >5000     4343          Particles >6µm     ASTM D7647     >1300     893          Particles >6µm     ASTM D7647     >160     43          Particles >14µm     ASTM D7647     >10     1          Particles >38µm     ASTM D7647     >3     0          Particles >71µm     ASTM D7647     >3     0          Oil Cleanliness <t< th=""><th>CONTAMINANTS</th><th>\$</th><th>method</th><th>limit/base</th><th>current</th><th>history1</th><th>history2</th></t<>	CONTAMINANTS	\$	method	limit/base	current	history1	history2
Potassium     ppm     ASTM D5185m     >20     19         Chlorine Content     ppm     ASTM D5185m     393          Water     %     ASTM D6304     >0.750     NEG         FLUID CLEANLINESS     method     limit/base     current     history1     history2       Particles >4µm     ASTM D7647     >5000     4343         Particles >6µm     ASTM D7647     >1300     893         Particles >6µm     ASTM D7647     >160     43         Particles >14µm     ASTM D7647     >160     43         Particles >21µm     ASTM D7647     >10     1         Particles >38µm     ASTM D7647     >3     0         Particles >71µm     ASTM D7647     >3     0         Oil Cleanliness     ISO 4406 (c)     >19/17/14     19/17/13 </td <td>Silicon</td> <td>ppm</td> <td>ASTM D5185m</td> <td>&gt;15</td> <th>&lt;1</th> <td></td> <td></td>	Silicon	ppm	ASTM D5185m	>15	<1		
Chlorine Content     ppm     ASTM D5185m     393         Water     %     ASTM D6304     >0.750     NEG         FLUID CLEANLINESS     method     limit/base     current     history1     history2       Particles >4µm     ASTM D7647     >5000     4343         Particles >6µm     ASTM D7647     >1300     893         Particles >6µm     ASTM D7647     >160     43         Particles >14µm     ASTM D7647     >160     43         Particles >21µm     ASTM D7647     >10     1         Particles >38µm     ASTM D7647     >10     1         Particles >71µm     ASTM D7647     >3     0         Oil Cleanliness     ISO 4406 (c)     >19/17/14     19/17/13         FLUID DEGRADATION     method     limit/base     current     history1     history2 <td>Sodium</td> <td>ppm</td> <td>ASTM D5185m</td> <td></td> <th>5</th> <td></td> <td></td>	Sodium	ppm	ASTM D5185m		5		
Water     %     ASTM D6304     >0.750     NEG         FLUID CLEANLINESS     method     limit/base     current     history1     history2       Particles >4µm     ASTM D7647     >5000     4343         Particles >6µm     ASTM D7647     >1300     893         Particles >6µm     ASTM D7647     >160     43         Particles >14µm     ASTM D7647     >160     43         Particles >21µm     ASTM D7647     >10     12         Particles >38µm     ASTM D7647     >10     1         Particles >71µm     ASTM D7647     >3     0         Oil Cleanliness     ISO 4406 (c)     >19/17/14     19/17/13         FLUID DEGRADATION     method     limit/base     current     history1     history2	Potassium	ppm	ASTM D5185m	>20	19		
FLUID CLEANLINESS     method     limit/base     current     history1     history2       Particles >4µm     ASTM D7647     >5000     4343         Particles >6µm     ASTM D7647     >1300     893         Particles >6µm     ASTM D7647     >160     43         Particles >14µm     ASTM D7647     >160     43         Particles >21µm     ASTM D7647     >40     12         Particles >38µm     ASTM D7647     >10     1         Particles >71µm     ASTM D7647     >3     0         Oil Cleanliness     ISO 4406 (c)     >19/17/14     19/17/13         FLUID DEGRADATION     method     limit/base     current     history1     history2	Chlorine Content	ppm	ASTM D5185m		393		
Particles >4μm   ASTM D7647   >5000   4343       Particles >6μm   ASTM D7647   >1300   893       Particles >14μm   ASTM D7647   >160   43       Particles >14μm   ASTM D7647   >160   43       Particles >21μm   ASTM D7647   >40   12       Particles >23μm   ASTM D7647   >10   1       Particles >38μm   ASTM D7647   >3   0       Particles >71μm   ASTM D7647   >3   0       Oil Cleanliness   ISO 4406 (c)   >19/17/14   19/17/13       FLUID DEGRADATION   method   limit/base   current   history1   history2	Water	%	ASTM D6304	>0.750	NEG		
Particles >6µm   ASTM D7647   >1300   893       Particles >14µm   ASTM D7647   >160   43       Particles >21µm   ASTM D7647   >40   12       Particles >21µm   ASTM D7647   >40   12       Particles >38µm   ASTM D7647   >10   1       Particles >71µm   ASTM D7647   >3   0       Oil Cleanliness   ISO 4406 (c)   >19/17/14   19/17/13       FLUID DEGRADATION   method   limit/base   current   history1   history2	FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >14μm   ASTM D7647   >160   43       Particles >21μm   ASTM D7647   >40   12       Particles >38μm   ASTM D7647   >10   1       Particles >38μm   ASTM D7647   >10   1       Particles >71μm   ASTM D7647   >3   0       Oil Cleanliness   ISO 4406 (c)   >19/17/14   19/17/13       FLUID DEGRADATION   method   limit/base   current   history1   history2	Particles >4µm		ASTM D7647	>5000	4343		
Particles >21μm     ASTM D7647     >40     12         Particles >38μm     ASTM D7647     >10     1         Particles >38μm     ASTM D7647     >3     0         Particles >71μm     ASTM D7647     >3     0         Oil Cleanliness     ISO 4406 (c)     >19/17/14     19/17/13         FLUID DEGRADATION     method     limit/base     current     history1     history2	Particles >6µm		ASTM D7647	>1300	893		
Particles >38μm     ASTM D7647     >10     1         Particles >71μm     ASTM D7647     >3     0         Oil Cleanliness     ISO 4406 (c)     >19/17/14     19/17/13         FLUID DEGRADATION     method     limit/base     current     history1     history2	Particles >14µm		ASTM D7647	>160	43		
Particles >71μm     ASTM D7647     >3     0         Oil Cleanliness     ISO 4406 (c)     >19/17/14     19/17/13         FLUID DEGRADATION     method     limit/base     current     history1     history2	Particles >21µm		ASTM D7647	>40	12		
Oil Cleanliness   ISO 4406 (c) >19/17/14   19/17/13       FLUID DEGRADATION   method   limit/base   current   history1   history2	Particles >38µm		ASTM D7647	>10	1		
FLUID DEGRADATION method limit/base current history1 history2	Particles >71µm		ASTM D7647	>3	0		
	Oil Cleanliness		ISO 4406 (c)	>19/17/14	19/17/13		
Acid Number (AN) mg KOH/g ASTM D8045 0.04 1.148	FLUID DEGRADA		method	limit/base	current	history1	history2
	Acid Number (AN)	mg KOH/g	ASTM D8045	0.04	1.148		

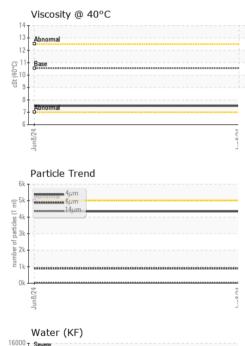
Contact/Location: REYNARD GOLDMAN - WOOSANCA Page 1 of 2



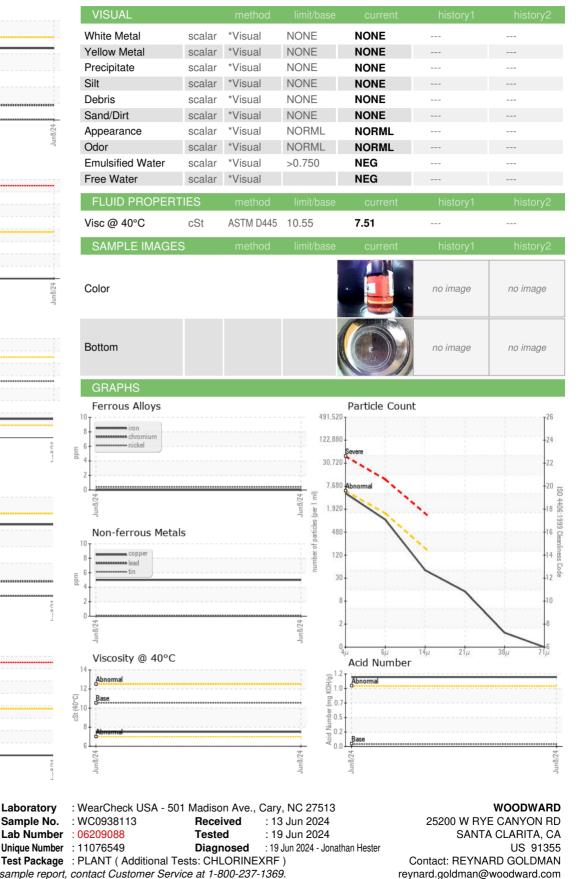
# **OIL ANALYSIS REPORT**











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.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Certificate 12367

Laboratory

Sample No.

Contact/Location: REYNARD GOLDMAN - WOOSANCA

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E:

T: (661)702-5991