

## **OIL ANALYSIS REPORT**

Sample Rating Trend







Machine Id **113023 S-24** Component

Fluid Fluid NOT GIVEN (--- GAL)

## DIAGNOSIS

Recommendation

This is a baseline read-out on the submitted sample.

Sample Number     Client Info     WC06030113         Sample Date     Client Info     0         Machine Age     hrs     Client Info     0         Oil Age     hrs     Client Info     N         Oil Changed     Client Info     N/A         Sample Status     Imitibas     current     History1     History2       Water     WC Method     NEG         Inn     ppm     ASTM 05165m     0         Nickel     ppm     ASTM 05165m     0         Nickel     ppm     ASTM 05165m     0         Auminum     ppm     ASTM 05165m <t< th=""><th>SAMPLE INFORM</th><th>IATION</th><th>method</th><th>limit/base</th><th>current</th><th>history1</th><th>history2</th></t<>	SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Machine Age     hrs     Client Info     0         Oil Age     hrs     Client Info     N/A         Sample Status     Imit/base     current     history1        CONTAMINATION     method     Imit/base     current     history1     history2       Water     WC Method     NEG         WEAR METALS     method     Imit/base     current     history1     history2       Iron     ppm     ASTM D5185m     8         Nickel     ppm     ASTM D5185m     0         Nickel     ppm     ASTM D5185m     0         Aluminum     ppm     ASTM D5185m     0         Age     ppm     ASTM D5185m     0         Age     ppm     ASTM D5185m     0         Age     ppm     ASTM D5185m     0	Sample Number		Client Info		WC06030113		
Oil Age     hrs     Client Info     0         Oil Changed     Client Info     N/A         Sample Status     Imit/base     current     history1     history2       Water     WC Method     NEG         WEAR METALS     method     Imit/base     current     history1     history2       Iron     ppm     ASTM D5185m     8         Nickel     ppm     ASTM D5185m     0         Nickel     ppm     ASTM D5185m     0         Silver     ppm     ASTM D5185m     0         Lead     ppm     ASTM D5185m     0         Copper     ppm     ASTM D5185m     0         Cadmium     ppm     ASTM D5185m     0         Cadmium     ppm     ASTM D5185m     0         Vanadium     ppm <th>Sample Date</th> <th></th> <th>Client Info</th> <th></th> <th>10 Dec 2023</th> <th></th> <th></th>	Sample Date		Client Info		10 Dec 2023		
Oil Changed Sample Status Client Info N/A     CONTAMINATION method limit/base current history1 history2   Water WC Method NEG     WEAR METALS method limit/base current history1 history2   Iron ppm ASTM D5185n 8     Nickel ppm ASTM D5185n 0     Nickel ppm ASTM D5185n 0     Silver ppm ASTM D5185n 0     Gopper ppm ASTM D5185n 0     Lead ppm ASTM D5185n 0     Cadmium ppm ASTM D5185n 0     ADDITVES method limit/base current history1 history2   Boron ppm ASTM D5185n 0     ADDITVES method limit/base current history1 history2   Boron ppm ASTM D5185n 0     ADDITVES method limit/base curr	Machine Age	hrs	Client Info		0		
Sample Status     NORMAL         CONTAMINATION     method     limit/base     current     history1     history2       Water     WC Method     NEG         WEAR METALS     method     limit/base     current     history1     history2       Iron     ppm     ASTM D5185m     8         Nickel     ppm     ASTM D5185m     0         Silver     ppm     ASTM D5185m     0         Aluminum     ppm     ASTM D5185m     0         Lead     ppm     ASTM D5185m     0         Vanadium     ppm     ASTM D5185m     0         Vanadium     ppm     ASTM D5185m     0         ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185m     0         Malydo	-	hrs	Client Info		0		
CONTAMINATION     method     limit/base     current     history1     history2       Water     WC Method     NEG         WEAR METALS     method     limit/base     current     history1     history2       Iron     ppm     ASTM D5165m     0         Chromium     ppm     ASTM D5165m     0         Nickel     ppm     ASTM D5165m     0         Silver     ppm     ASTM D5165m     0         Lead     ppm     ASTM D5165m     0         Copper     ppm     ASTM D5165m     0         Cadmium     ppm     ASTM D5165m     0         Cadmium     ppm     ASTM D5165m     0         Cadmium     ppm     ASTM D5165m     0         ADDTIVES     method     Imit/base     current     history1     history2 </th <th>Oil Changed</th> <th></th> <th>Client Info</th> <th></th> <th>N/A</th> <th></th> <th></th>	Oil Changed		Client Info		N/A		
Water     WC Method     NEG         WEAR METALS     method     limit/base     current     history1     history2       Iron     ppm     ASTM D5185m     0         Ohromium     ppm     ASTM D5185m     0         Nickel     ppm     ASTM D5185m     0         Silver     ppm     ASTM D5185m     0         Aluminum     ppm     ASTM D5185m     0         Lead     ppm     ASTM D5185m     0         Copper     ppm     ASTM D5185m     0         Vanadium     ppm     ASTM D5185m     0         Cadmium     ppm     ASTM D5185m     0         ADDTIVES     method     imit/base     current     history1     history2       Boron     ppm     ASTM D5185m     0 <td< th=""><th>Sample Status</th><th></th><th></th><th></th><th>NORMAL</th><th></th><th></th></td<>	Sample Status				NORMAL		
WEAR METALS     method     limit/base     current     history1     history2       Iron     ppm     ASTM 05185m     8         Chromium     ppm     ASTM 05185m     0         Nickel     ppm     ASTM 05185m     0         Titanium     ppm     ASTM 05185m     0         Silver     ppm     ASTM 05185m     0         Aluminum     ppm     ASTM 05185m     0         Qopper     ppm     ASTM 05185m     0         Copper     ppm     ASTM 05185m     0         Vanadium     ppm     ASTM 05185m     0         Cadmium     ppm     ASTM 05185m     0         ADDITIVES     method     imit/base     current     history1     history2       Boron     ppm     ASTM 05185m     0	CONTAMINATION	J	method	limit/base	current	history1	history2
Iron     ppm     ASTM D5185m     8         Chromium     ppm     ASTM D5185m     0         Nickel     ppm     ASTM D5185m     0         Titanium     ppm     ASTM D5185m     0         Silver     ppm     ASTM D5185m     0         Aluminum     ppm     ASTM D5185m     0         Lead     ppm     ASTM D5185m     0         Copper     ppm     ASTM D5185m     0         Cadmium     ppm     ASTM D5185m     0         ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185m     0         Malganesium     ppm     ASTM D5185m     0         Magnesium     ppm     ASTM D5185m     1	Water		WC Method		NEG		
Chromium     ppm     ASTM D5185m     0         Nickel     ppm     ASTM D5185m     0         Silver     ppm     ASTM D5185m     0         Aluminum     ppm     ASTM D5185m     0         Aluminum     ppm     ASTM D5185m     0         Lead     ppm     ASTM D5185m     0         Copper     ppm     ASTM D5185m     0         Yanadium     ppm     ASTM D5185m     0         Cadmium     ppm     ASTM D5185m     0         ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185m     0         Malybdenum     ppm     ASTM D5185m     0         Magnesium     ppm     ASTM D5185m     1	WEAR METALS		method	limit/base	current	history1	history2
Nickel     ppm     ASTM D5185m     0         Titanium     ppm     ASTM D5185m     0         Silver     ppm     ASTM D5185m     0         Aluminum     ppm     ASTM D5185m     0         Lead     ppm     ASTM D5185m     0         Copper     ppm     ASTM D5185m     0         Vanadium     ppm     ASTM D5185m     0         Vanadium     ppm     ASTM D5185m     0         Cadmium     ppm     ASTM D5185m     0         ADDITIVES     method     Imit/base     current     history1     history2       Boron     ppm     ASTM D5185m     0         Magnaese     ppm     ASTM D5185m     0         Magnaese     ppm     ASTM D5185m     0	Iron	ppm	ASTM D5185m		8		
Titanium     ppm     ASTM D5185m     0         Silver     ppm     ASTM D5185m     0         Aluminum     ppm     ASTM D5185m     0         Lead     ppm     ASTM D5185m     0         Copper     ppm     ASTM D5185m     0         Tin     ppm     ASTM D5185m     0         Vanadium     ppm     ASTM D5185m     0         Cadmium     ppm     ASTM D5185m     0         ADDITIVES     method     imil/base     current     history1     history2       Boron     ppm     ASTM D5185m     0         Molybdenum     ppm     ASTM D5185m     0         Manganese     ppm     ASTM D5185m     1         Magnesium     ppm     ASTM D5185m     6	Chromium	ppm	ASTM D5185m		0		
Silver     ppm     ASTM D5185m     0         Aluminum     ppm     ASTM D5185m     0         Lead     ppm     ASTM D5185m     0         Copper     ppm     ASTM D5185m     0         Copper     ppm     ASTM D5185m     0         Vanadium     ppm     ASTM D5185m     0         Vanadium     ppm     ASTM D5185m     0         Cadmium     ppm     ASTM D5185m     0         ADDITIVES     method     imil/base     current     history1     history2       Boron     ppm     ASTM D5185m     0         Molybdenum     ppm     ASTM D5185m     0         Manganese     ppm     ASTM D5185m     1         Magnesium     ppm     ASTM D5185m     6    <	Nickel	ppm	ASTM D5185m		0		
Aluminum     ppm     ASTM D5185m     0         Lead     ppm     ASTM D5185m     0         Copper     ppm     ASTM D5185m     2         Tin     ppm     ASTM D5185m     0         Vanadium     ppm     ASTM D5185m     0         Cadmium     ppm     ASTM D5185m     0         ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185m     0         Maganese     ppm     ASTM D5185m     0         Magnesium     ppm     ASTM D5185m     0         Magnesium     ppm     ASTM D5185m     0         Magnesium     ppm     ASTM D5185m     6         Sulfur     ppm     ASTM D5185m     6	Titanium	ppm	ASTM D5185m		0		
Lead     ppm     ASTM D5185m     0         Copper     ppm     ASTM D5185m     2         Tin     ppm     ASTM D5185m     0         Vanadium     ppm     ASTM D5185m     0         Vanadium     ppm     ASTM D5185m     0         Cadmium     ppm     ASTM D5185m     0         ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185m     0         Magnaese     ppm     ASTM D5185m     0         Magnesium     ppm     ASTM D5185m     6         Calcium     ppm     ASTM D5185m     6         Magnesium     ppm     ASTM D5185m     6         Sulfur     ppm     ASTM D5185m     6	Silver	ppm	ASTM D5185m		0		
Copper     ppm     ASTM D5185m     2         Tin     ppm     ASTM D5185m     0         Vanadium     ppm     ASTM D5185m     0         Cadmium     ppm     ASTM D5185m     0         Cadmium     ppm     ASTM D5185m     0         ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185m     0         Maganese     ppm     ASTM D5185m     0         Magnesium     ppm     ASTM D5185m     0         Magnesium     ppm     ASTM D5185m     0         Viac     ppm     ASTM D5185m     0         Sulfur     ppm     ASTM D5185m     6         Sulfur     ppm     ASTM D5185m     6	Aluminum	ppm	ASTM D5185m		0		
Tin     ppm     ASTM D5188m     0         Vanadium     ppm     ASTM D5185m     0         Cadmium     ppm     ASTM D5185m     0         ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185m     0         Manganese     ppm     ASTM D5185m     0         Magnesium     ppm     ASTM D5185m     0         Magnesium     ppm     ASTM D5185m     0         Magnesium     ppm     ASTM D5185m     0         Calcium     ppm     ASTM D5185m     6         Sulfur     ppm     ASTM D5185m     6         Sulfur     ppm     ASTM D5185m     6         Sodium     ppm     ASTM D5185m     >20     0 <th>Lead</th> <th>ppm</th> <th>ASTM D5185m</th> <th></th> <th>0</th> <th></th> <th></th>	Lead	ppm	ASTM D5185m		0		
Tin     ppm     ASTM D5185m     0         Vanadium     ppm     ASTM D5185m     0         Cadmium     ppm     ASTM D5185m     0         ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185m     0         Molybdenum     ppm     ASTM D5185m     0         Manganese     ppm     ASTM D5185m     0         Calcium     ppm     ASTM D5185m     0         Manganese     ppm     ASTM D5185m     0         Calcium     ppm     ASTM D5185m     0         Sulfur     ppm     ASTM D5185m     0         Sulfur     ppm     ASTM D5185m     6         Sulfur     ppm     ASTM D5185m     <0    S	Copper	ppm	ASTM D5185m		2		
CadmiumppmASTM D5185m0ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m0BariumppmASTM D5185m0MolybdenumppmASTM D5185m0ManganeseppmASTM D5185m0MagnesiumppmASTM D5185m0CalciumppmASTM D5185m6PhosphorusppmASTM D5185m12SulfurppmASTM D5185m6SulfurppmASTM D5185m6SodiumppmASTM D5185m<1PotassiumppmASTM D5185m<200SodiumppmASTM D5185m>200SAMPLE IMAGESmethodlimit/basecurrenthistory1history2Colorno imageno image	Tin	ppm	ASTM D5185m		0		
ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m0BariumppmASTM D5185m0MolybdenumppmASTM D5185m0ManganeseppmASTM D5185m0MagnesiumppmASTM D5185m0CalciumppmASTM D5185m6PhosphorusppmASTM D5185m12ZincppmASTM D5185m0SulfurppmASTM D5185m6SulfurppmASTM D5185m6SulfurppmASTM D5185m<1SodiumppmASTM D5185m<1SodiumppmASTM D5185m<200SAMPLE IMAGESmethodlimit/basecurrenthistory1history2Colorno imageno imageno image	Vanadium	ppm	ASTM D5185m		0		
Boron     ppm     ASTM D5185m     0         Barium     ppm     ASTM D5185m     0         Molybdenum     ppm     ASTM D5185m     0         Manganese     ppm     ASTM D5185m     0         Magnesium     ppm     ASTM D5185m     0         Calcium     ppm     ASTM D5185m     0         Calcium     ppm     ASTM D5185m     6         Zinc     ppm     ASTM D5185m     0         Sulfur     ppm     ASTM D5185m     0         Sulfur     ppm     ASTM D5185m     6         Sulfur     ppm     ASTM D5185m     <1         Sodium     ppm     ASTM D5185m     <20     0         SAMPLE IMAGES     method     limit/base     current     history1 <th>Cadmium</th> <th>ppm</th> <th>ASTM D5185m</th> <th></th> <th>0</th> <th></th> <th></th>	Cadmium	ppm	ASTM D5185m		0		
Barium     ppm     ASTM D5185m     0         Molybdenum     ppm     ASTM D5185m     0         Manganese     ppm     ASTM D5185m     0         Magnesium     ppm     ASTM D5185m     0         Calcium     ppm     ASTM D5185m     6         Calcium     ppm     ASTM D5185m     0         Calcium     ppm     ASTM D5185m     6         Zinc     ppm     ASTM D5185m     0         Sulfur     ppm     ASTM D5185m     6         Sulfur     ppm     ASTM D5185m     <1         Sodium     ppm     ASTM D5185m     <1         Potassium     ppm     ASTM D5185m<>20     0         SAMPLE IMAGES     method     limit/base     current     history1     <	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum     ppm     ASTM D5185m     0         Manganese     ppm     ASTM D5185m     0          Magnesium     ppm     ASTM D5185m     0          Calcium     ppm     ASTM D5185m     6          Calcium     ppm     ASTM D5185m     6          Phosphorus     ppm     ASTM D5185m     0          Zinc     ppm     ASTM D5185m     0          Sulfur     ppm     ASTM D5185m     6          Sulfur     ppm     ASTM D5185m     <1          Solicon     ppm     ASTM D5185m     <20     0         Sodium     ppm     ASTM D5185m<>20     0          Sodium     ppm     ASTM D5185m<>20     0	Boron	ppm	ASTM D5185m		0		
Manganese     ppm     ASTM D5185m     1         Magnesium     ppm     ASTM D5185m     0         Calcium     ppm     ASTM D5185m     6         Phosphorus     ppm     ASTM D5185m     6         Zinc     ppm     ASTM D5185m     12         Sulfur     ppm     ASTM D5185m     0         Sulfur     ppm     ASTM D5185m     6         Sulfur     ppm     ASTM D5185m     6         Solicon     ppm     ASTM D5185m     6         Sodium     ppm     ASTM D5185m     6         Potassium     ppm     ASTM D5185m     6         SAMPLE IMAGES     method     limit/base     current     history1     history2       Color       no image     no image     no image	Barium	ppm	ASTM D5185m		0		
Magnesium   ppm   ASTM D5185m   0       Calcium   ppm   ASTM D5185m   6       Phosphorus   ppm   ASTM D5185m   12       Zinc   ppm   ASTM D5185m   0       Sulfur   ppm   ASTM D5185m   0       Sulfur   ppm   ASTM D5185m   6       CONTAMINANTS   method   limit/base   current   history1   history2     Silicon   ppm   ASTM D5185m   <1       Sodium   ppm   ASTM D5185m   <1       Potassium   ppm   ASTM D5185m   >20   0       SAMPLE IMAGES   method   limit/base   current   history1   history2     Color     no image   no image   no image	Molybdenum	ppm			0		
Calcium     ppm     ASTM D5185m     6         Phosphorus     ppm     ASTM D5185m     12         Zinc     ppm     ASTM D5185m     0         Sulfur     ppm     ASTM D5185m     6         Sulfur     ppm     ASTM D5185m     6         CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     <1         Sodium     ppm     ASTM D5185m     <6         Potassium     ppm     ASTM D5185m     >20     0         SAMPLE IMAGES     method     limit/base     current     history1     history2       Color	Manganese	ppm	ASTM D5185m				
PhosphorusppmASTM D5185m12ZincppmASTM D5185m0SulfurppmASTM D5185m6CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m<1SodiumppmASTM D5185m<1SodiumppmASTM D5185m>200SAMPLE IMAGESmethodlimit/basecurrenthistory1history2Colorno imageno imageno image	Magnesium	ppm	ASTM D5185m		0		
ZincppmASTM D5185m0SulfurppmASTM D5185m6CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m<1SodiumppmASTM D5185m6PotassiumppmASTM D5185m>200SAMPLE IMAGESmethodlimit/basecurrenthistory1history2Colorno imageno image		ppm	ASTM D5185m		6		
SulfurppmASTM D5185m6CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m<1SodiumppmASTM D5185m6PotassiumppmASTM D5185m>200SAMPLE IMAGESmethodlimit/basecurrenthistory1history2Colorno imageno imageno image	Phosphorus	ppm					
CONTAMINANTS   method   limit/base   current   history1   history2     Silicon   ppm   ASTM D5185m   <1       Sodium   ppm   ASTM D5185m   6       Potassium   ppm   ASTM D5185m   >20   0       SAMPLE IMAGES   method   limit/base   current   history1   history2     Color     no image   no image   no image	Zinc	ppm	ASTM D5185m		0		
Silicon     ppm     ASTM D5185m     <1	Sulfur	ppm	ASTM D5185m		6		
Sodium ppm ASTM D5185m 6     Potassium ppm ASTM D5185m<>20 0     SAMPLE IMAGES method limit/base current history1 history2   Color Image no image no image no image	CONTAMINANTS		method	limit/base	current	history1	history2
Potassium   ppm   ASTM D5185m   >20   0       SAMPLE IMAGES   method   limit/base   current   history1   history2     Color   Image   no image   no image   no image   no image   no image	Silicon	ppm	ASTM D5185m		<1		
SAMPLE IMAGES   method   limit/base   current   history1   history2     Color   no image   no image   no image   no image	Sodium	ppm	ASTM D5185m		6		
Color no image no image no image	Potassium	ppm	ASTM D5185m	>20	0		
	SAMPLE IMAGES	;	method	limit/base	current	history1	history2
Bottom no image no image no image	Color				no image	no image	no image
	Bottom				no image	no image	no image



## **OIL ANALYSIS REPORT**



T:

F: