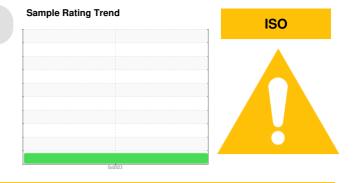


PROBLEM SUMMARY

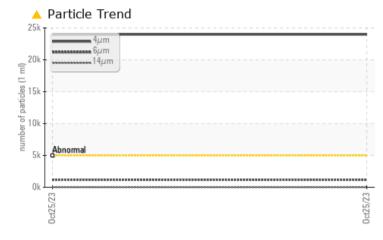


PALFINGER Poulin lumber WB4

2 Hydraulic System

AW HYDRAULIC OIL ISO 32 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.

PROBLEMATIC TEST RESULTS						
Sample Status			ABNORMAL			
Particles >4µm	ASTM D7647	>5000	<u> </u>			
Oil Cleanliness	ISO 4406 (c)	>19/17/14	22/17/11			

Customer Id: PALJACNJ Sample No.: WC0839788 Lab Number: 06006277 Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data: Wes Davis +1 905-569-8600 x223 wesd@wearcheck.ca

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

RECOMMENDED ACTIONS					
Action	Status	Date	Done By	Description	
Change Filter			?	We recommend you service the filters on this component.	
Resample			?	We recommend an early resample to monitor this condition.	
Information Required			?	Please specify the brand, type, and viscosity of the oil on your next sample.	

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT

Sample Rating Trend

ISO

PALFINGER Poulin lumber WB4

2 Hydraulic System

AW HYDRAULIC OIL ISO 32 (--- GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. 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 moderate amount of silt (particulates < 14 microns in size) present in the oil.

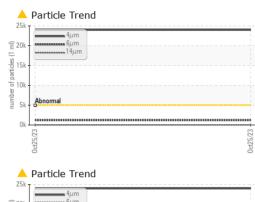
Fluid Condition

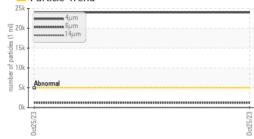
The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

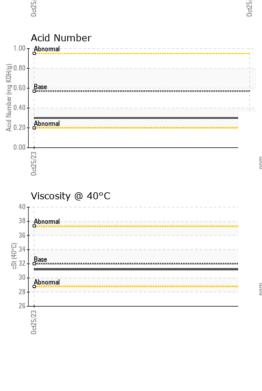
Sample Number Client Info WC0839788 Sample Date Ins Client Info 0 Machine Age hrs Client Info 0 Oil Age hrs Client Info N/A Sample Status Ins Client Info N/A WEAR METALS method Imit/base current history1 history1 Iron ppm ASTM D5185m >10 0 Nickel ppm ASTM D5185m >10 0 Silver ppm ASTM D5185m >10 <1 Copper ppm ASTM D5185m >10 <1 Vanadium ppm ASTM D5185m >10 <1 Copper ppm ASTM D5185m >10 <1 Addium<					Oct2023		
Sample Date Client Info 25 Oct 2023 Machine Age hrs Client Info 0 Oil Age hrs Client Info 0 Sample Status Client Info N/A WEAR METALS method Imit/base current history1 history1 Iron ppm ASTM 05185m >20 3 MEAR METALS method Imit/base current history1 history1 Iron ppm ASTM 05185m >10 0 Silver ppm ASTM 05185m >10 0 Copper ppm ASTM 05185m >10 <1 Adminum ppm ASTM 05185m >10 <1 Copper ppm ASTM 05185m 5 0 Adminum	SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 0 Qil Age hrs Client Info N/A Qil Age Client Info N/A Sample Status Imit Mash ABNORMAL WEAR METALS method limit/base current historyl WEAR METALS method limit/base current historyl WEAR METALS method limit/base current historyl Chromium ppm ASTM D5185m >10 0 Silver ppm ASTM D5185m >10 c1 Auminum ppm ASTM D5185m >10 c1 Auminum ppm ASTM D5185m >10 Auminum ppm ASTM D5185m 5 0 Aumadium pp	Sample Number		Client Info		WC0839788		
Oil Age Ins Client Info 0 Sample Status Image Client Info N/A WEAR METALS method limit/base current history1 history1 Iron ppm ASTM D5185m >20 3 Ohromium ppm ASTM D5185m >10 0 Nickel ppm ASTM D5185m >10 0 Silver ppm ASTM D5185m >10 0 Capper ppm ASTM D5185m >10 <-1	Sample Date		Client Info		25 Oct 2023		
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WEAR METALS method limit/base current history1 history1 Iron ppm ASTM D5185m >20 3 Nickel ppm ASTM D5185m >10 0 Titanium ppm ASTM D5185m 10 0 Silver ppm ASTM D5185m 10 0 Aluminum ppm ASTM D5185m >10 <1	Oil Changed		Client Info				
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Chromium ppm ASTM D5185m >10 0 Nickel ppm ASTM D5185m >10 0 Silver ppm ASTM D5185m 0 Aluminum ppm ASTM D5185m >10 0 Aluminum ppm ASTM D5185m >10 <1 Copper ppm ASTM D5185m >10 <1 Cadmium ppm ASTM D5185m >10 <1 ADDITIVES method limit/base current history1 history1 Boron ppm ASTM D5185m 5 0 Maganese ppm ASTM D5185m 5 0 Maganese ppm ASTM D5185m 200 59 Calcium ppm ASTM D5185m 200 1028	WEAR METALS		method	limit/base	current	history1	history2
Nickel ppm ASTM D5185m >10 0 Titanium ppm ASTM D5185m 0 Silver ppm ASTM D5185m 10 0 Aluminum ppm ASTM D5185m >10 <1	Iron	ppm	ASTM D5185m	>20	3		
Titanium ppm ASTM D5185m 0 Silver ppm ASTM D5185m >10 0 Aluminum ppm ASTM D5185m >10 <1	Chromium	ppm	ASTM D5185m	>10	0		
Silver ppm ASTM D5185m 0 Aluminum ppm ASTM D5185m >10 0 Aluminum ppm ASTM D5185m >10 <1	Nickel	ppm	ASTM D5185m	>10	0		
Aluminum ppm ASTM D5185m >10 0 Lead ppm ASTM D5185m >10 <1	Titanium	ppm	ASTM D5185m		0		
Lead ppm ASTM D5185m >10 <1 Copper ppm ASTM D5185m >75 0 Vanadium ppm ASTM D5185m >10 <1	Silver	ppm	ASTM D5185m		0		
Copper ppm ASTM D5185m >75 0 Tin ppm ASTM D5185m >10 <1	Aluminum	ppm	ASTM D5185m	>10	0		
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Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history Boron ppm ASTM D5185m 5 0 Barium ppm ASTM D5185m 5 0 Maganese ppm ASTM D5185m 5 0 Magnesium ppm ASTM D5185m 25 2 Magnesium ppm ASTM D5185m 200 59 Calcium ppm ASTM D5185m 200 326 Sulfur ppm ASTM D5185m 300 326 Solicon ppm ASTM D5185m 2500 1028 Solicon ppm ASTM D5185m >20 <1 Solicon ppm ASTM D5185m >20 0	Tin	ppm	ASTM D5185m	>10	<1		
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Barium ppm ASTM D5185m 5 0 Molybdenum ppm ASTM D5185m 5 0 Manganese ppm ASTM D5185m 25 2 Magnesium ppm ASTM D5185m 25 2 Calcium ppm ASTM D5185m 200 59 Phosphorus ppm ASTM D5185m 300 326 Sulfur ppm ASTM D5185m 2500 1028 CONTAMINANTS method limit/base current history1 history1 Silicon ppm ASTM D5185m >20 <1 Sodium ppm ASTM D5185m >20 0 FLUID CLEANLINESS method limit/base current history1 history1 Particles >4µm ASTM D7647	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 5 0 Manganese ppm ASTM D5185m 25 2 Magnesium ppm ASTM D5185m 200 59 Calcium ppm ASTM D5185m 200 59 Calcium ppm ASTM D5185m 300 326 Zinc ppm ASTM D5185m 370 419 Sulfur ppm ASTM D5185m 2500 1028 CONTAMINANTS method limit/base current history1 history1 Silicon ppm ASTM D5185m 20 0 Sodium ppm ASTM D5185m >20 0 Potassium ppm ASTM D5185m >20 0 FLUID CLEANLINESS method	Boron	ppm	ASTM D5185m	5	0		
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Magnesium ppm ASTM D5185m 25 2 Calcium ppm ASTM D5185m 200 59 Phosphorus ppm ASTM D5185m 300 326 Zinc ppm ASTM D5185m 370 419 Sulfur ppm ASTM D5185m 2500 1028 CONTAMINANTS method limit/base current history1 history Silicon ppm ASTM D5185m >20 <1	Molybdenum	ppm	ASTM D5185m	5	0		
Calcium ppm ASTM D5185m 200 59 Phosphorus ppm ASTM D5185m 300 326 Zinc ppm ASTM D5185m 370 419 Sulfur ppm ASTM D5185m 2500 1028 CONTAMINANTS method limit/base current history1 history Silicon ppm ASTM D5185m >20 <1	Manganese	ppm	ASTM D5185m		0		
Phosphorus ppm ASTM D5185m 300 326 Zinc ppm ASTM D5185m 370 419 Sulfur ppm ASTM D5185m 2500 1028 CONTAMINANTS method limit/base current history1 history Silicon ppm ASTM D5185m >20 <1	Magnesium	ppm	ASTM D5185m	25	2		
Zinc ppm ASTM D5185m 370 419 Sulfur ppm ASTM D5185m 2500 1028 CONTAMINANTS method limit/base current history1 history Silicon ppm ASTM D5185m >20 <1	Calcium	ppm	ASTM D5185m	200	59		
SulfurppmASTM D5185m25001028CONTAMINANTSmethodlimit/basecurrenthistory1historySiliconppmASTM D5185m>20<1	Phosphorus	ppm	ASTM D5185m	300	326		
CONTAMINANTSmethodlimit/basecurrenthistory1historySiliconppmASTM D5185m>20<1	Zinc	ppm	ASTM D5185m	370	419		
Silicon ppm ASTM D5185m >20 <1 Sodium ppm ASTM D5185m 0 Potassium ppm ASTM D5185m >20 0 FLUID CLEANLINESS method limit/base current history1 history Particles >4µm ASTM D7647 >5000 ▲ 23971 Particles >6µm ASTM D7647 >1300 1184 Particles >14µm ASTM D7647 >160 18 Particles >21µm ASTM D7647 >10 0 Particles >38µm ASTM D7647 >3 0 Particles >71µm ASTM D7647 >3 0 Oil Cleanliness ISO 4406 (c) >19/17/14 22/17/11 FLUID DEGRADATION method limit/base current history1 history1	Sulfur	ppm	ASTM D5185m	2500	1028		
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FLUID CLEANLINESS method limit/base current history1 history1 Particles >4µm ASTM D7647 >5000 ▲ 23971 Particles >6µm ASTM D7647 >1300 1184 Particles >6µm ASTM D7647 >160 18 Particles >14µm ASTM D7647 >40 5 Particles >21µm ASTM D7647 >40 5 Particles >38µm ASTM D7647 >10 0 Particles >71µm ASTM D7647 >3 0 Oil Cleanliness ISO 4406 (c) >19/17/14 22/17/11 FLUID DEGRADATION method limit/base current history1 history1	Sodium	ppm	ASTM D5185m		0		
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Particles >6μm ASTM D7647 >1300 1184 Particles >14μm ASTM D7647 >160 18 Particles >21μm ASTM D7647 >40 5 Particles >21μm ASTM D7647 >10 0 Particles >38μm ASTM D7647 >10 0 Particles >71μm ASTM D7647 >3 0 Oil Cleanliness ISO 4406 (c) >19/17/14 22/17/11 FLUID DEGRADATION method limit/base current history1 history1	FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >14µm ASTM D7647 >160 18 Particles >21µm ASTM D7647 >40 5 Particles >38µm ASTM D7647 >10 0 Particles >38µm ASTM D7647 >10 0 Particles >71µm ASTM D7647 >3 0 Oil Cleanliness ISO 4406 (c) >19/17/14 ▲ 22/17/11 FLUID DEGRADATION method limit/base current history1 history1	Particles >4µm		ASTM D7647	>5000	A 23971		
Particles >21μm ASTM D7647 >40 5 Particles >38μm ASTM D7647 >10 0 Particles >37μm ASTM D7647 >3 0 Particles >71μm ASTM D7647 >3 0 Oil Cleanliness ISO 4406 (c) >19/17/14 22/17/11 FLUID DEGRADATION method limit/base current history1 history1	Particles >6µm		ASTM D7647	>1300	1184		
Particles >38μm ASTM D7647 >10 0 Particles >71μm ASTM D7647 >3 0 Oil Cleanliness ISO 4406 (c) >19/17/14 22/17/11 FLUID DEGRADATION method limit/base current history1 history	Particles >14µm		ASTM D7647	>160	18		
Particles >71μm ASTM D7647 >3 0 Oil Cleanliness ISO 4406 (c) >19/17/14 ▲ 22/17/11 FLUID DEGRADATION method limit/base current history1 history1	Particles >21µm		ASTM D7647	>40	5		
Oil Cleanliness ISO 4406 (c) >19/17/14 ▲ 22/17/11 FLUID DEGRADATION method limit/base current history1 history1	Particles >38µm		ASTM D7647	>10	0		
FLUID DEGRADATION method limit/base current history1 history	Particles >71µm		ASTM D7647	>3	0		
	Oil Cleanliness		ISO 4406 (c)	>19/17/14	A 22/17/11		
	FLUID DEGRADA		method	limit/base	current	history1	history2
Acid Number (AN) mg KOH/g ASTM D8045 0.57 0.30	Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.30		

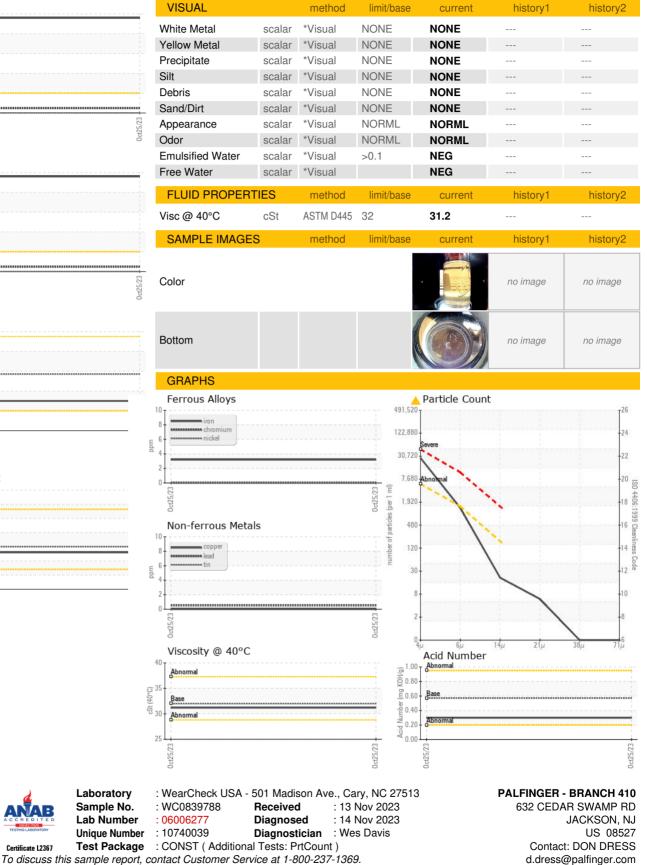


OIL ANALYSIS REPORT









* - 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 L2367

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Laboratory

Sample No.

Lab Number

Unique Number

Submitted By: TECHNICIAN ACCOUNT

T:

F: