



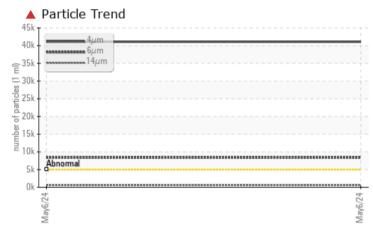
PROBLEM SUMMARY

PALFINGER 1100098174 - GRAHAMS TREE SERVICE

Hydraulic System

AW HYDRAULIC OIL ISO 32 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) AW HYDRAULIC OIL ISO 32. Please confirm.

PROBLEMATIC TEST RESULTS

Sample Status			SEVERE	
Particles >4µm	ASTM D7647	>5000	41081	
Particles >6µm	ASTM D7647	>1300	A 8379	
Particles >14µm	ASTM D7647	>160	6 2	
Particles >21µm	ASTM D7647	>40	A 111	
Oil Cleanliness	ISO 4406 (c)	>19/17/14	23/20/16	

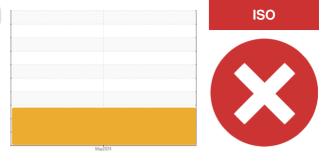
Customer Id: PALTIF Sample No.: WC0911895 Lab Number: 06235876 Test Package: CONST



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 A	CTIONS			
Action	Status	Date	Done By	Description
Change Filter			?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.
Resample			?	Resample in 30-45 days to monitor this situation.
Alert			?	The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) AW HYDRAULIC OIL ISO 32. Please confirm.
Information Required			?	The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) AW HYDRAULIC OIL ISO 32. Please confirm.
Check Breathers			?	The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather.
Check Dirt Access			?	We advise that you check all areas where contaminants can enter the system.
Filter Fluid			?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT

Machine Id PALFINGER 1100098174 - GRAHAMS TREE SERVICE

Hydraulic System

AW HYDRAULIC OIL ISO 32 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) AW HYDRAULIC OIL ISO 32. Please confirm.

Wear

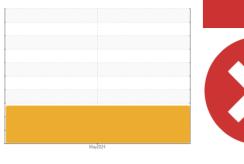
All component wear rates are normal.

Contamination

There is a high amount of particulates (2 to 100 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 Rating Trend



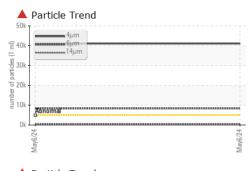
Sample Number Client Info WC0911895 Sample Date Client Info 0 Machine Age hrs Client Info 0 Oil Age hrs Client Info N/A Oil Changed Client Info N/A CONTAMINATION method Init/base current history1 history2 Water WC Method >0.1 NEG CONTAMINATION method Init/base current history1 history2 Contamum ppm ASTM 05185m >20 2 Chromium ppm ASTM 05185m >10 <1 Nickel ppm ASTM 05185m >10 <1 Auminum ppm ASTM 05185m >10 Macadium ppm <th>SAMPLE INFORM</th> <th>MATION</th> <th>method</th> <th>limit/base</th> <th>current</th> <th>history1</th> <th>history2</th>	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 0 Oil Age hrs Client Info N/A Sample Status Client Info N/A CONTAMINATION method Imit/base current history1 history2 Water WC Method >0.1 NEG WEAR METALS method Imit/base current history1 history2 Iron ppm ASTM 05185n >20 2 Tranum ppm ASTM 05185n >10 <1	Sample Number		Client Info		WC0911895		
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	Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	25 200 300 2500 2500 2500 >20 20 20 20 20 20 20 20 20 20 20 20 20 2	0 15 60 332 450 1110 Current 1 0 1 Current ↓ 41081 ▲ 8379 ▲ 562 ↓ 111 2	 history1 history1 	 history2 history2
	Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >4µm Particles >4µm Particles >21µm Particles >38µm Particles >71µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	25 200 300 2500 2500 2500 >20 20 20 20 20 20 20 20 20 20 20 20 20 2	0 15 60 332 450 1110 Current 1 0 1 Current ↓ 41081 ▲ 8379 ▲ 562 ▲ 111 2 0	 history1 history1 -	 history2
	Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >38µm Particles >38µm Particles >71µm Oil Cleanliness	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	25 200 300 2500 2500 2500 >20 20 20 20 20 20 20 20 20 20 20 20 20 2	0 15 60 332 450 1110 Current 1 0 1 Current 4 41081 ▲ 8379 ▲ 562 ▲ 111 2 0 ▲ 23/20/16	 history1 history1 	 history2

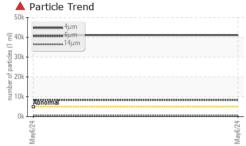
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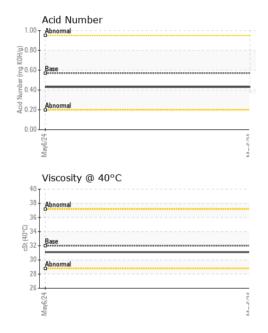
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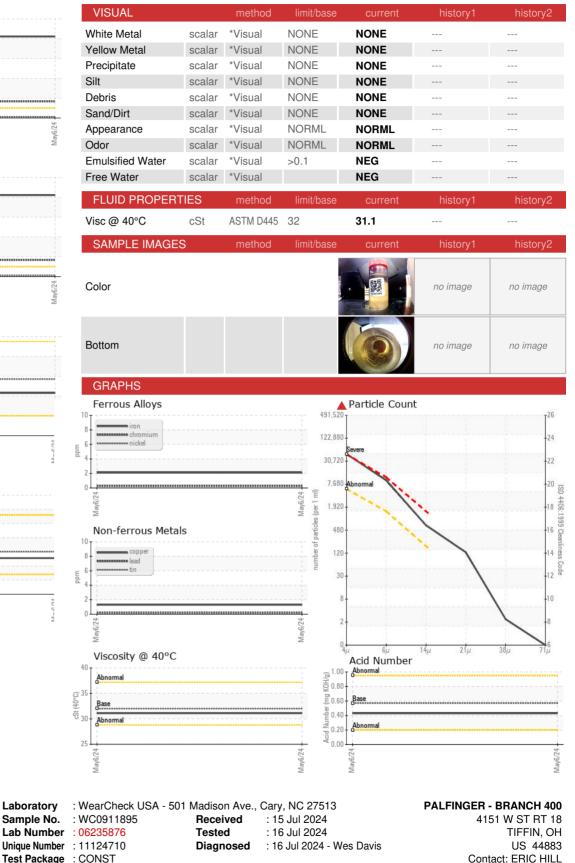


OIL ANALYSIS REPORT









Test Package : CONST Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369.

Laboratory

Sample No.

* - 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)

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