

PROBLEM SUMMARY

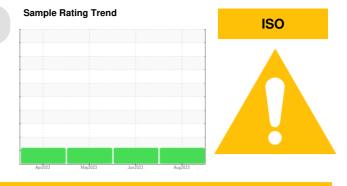
PROBLEM SUMMARY

WOOD PROCESSING EQUIPMENT Machine Id SAWMILL SORTER

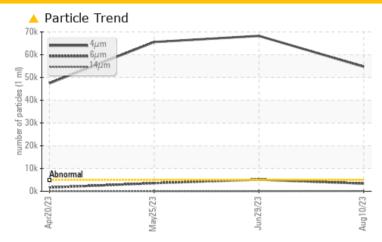
Component

Hydraulic System

SHELL AW HYDRAULIC S2 46 (--- GAL)



COMPONENT CONDITION SUMMARY



RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS								
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL			
Particles >4µm	ASTM D7647	>5000	<u> 54715</u>	△ 68268	<u>▲</u> 65547			
Particles >6µm	ASTM D7647	>1300	<u>▲</u> 3391	<u></u> 5135	<u></u> 4 3562 <u></u> 3562 <u></u> 3562 <u></u> 3562			
Oil Cleanliness	ISO 4406 (c)	>19/17/14	23/19/13	A 23/20/11	A 23/19/10			

Customer Id: WEYRAY Sample No.: PE0000633 Lab Number: 05932065 Test Package: PLANT

To manage this report scan the QR code

To discuss the diagnosis or test data:

Don Baldridge +1 don.b505@comcast.net

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.

HISTORICAL DIAGNOSIS

29 Jun 2023 Diag: Angela Borella



We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.



25 May 2023 Diag: Don Baldridge





We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

view report

20 Apr 2023 Diag: Angela Borella

ISO



We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.





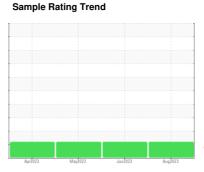
OIL ANALYSIS REPORT

WOOD PROCESSING EQUIPMENT Machine Id SAWMILL SORTER

Component

Hydraulic System

SHELL AW HYDRAULIC S2 46 (--- GAL)





DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

Sample Date Client Info 10 Aug 2023 29 Jun 2023 25 May 2023			Apr202	3 May2023	Jun2023 Ai	ug2023	
Sample Date Client Info 10 Aug 2023 29 Jun 2023 25 May 2023	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 0 0 0 Oil Age hrs Client Info 0 0 0 Oil Changed Client Info N/A N/A N/A N/A Sample Status Method limit/base current history1 history2 PQ ASTM DS185m 20 2 3 2 PQ ASTM DS185m 20 2 3 2 Chromium ppm ASTM DS185m 20 0 0 0 Nickel ppm ASTM DS185m 20 0 0 0 Niker ppm ASTM DS185m 20 0 0 0 ASIM DS185m 20 0 0 0 0 ASIM DS185m 20 0 0 0 Copper ppm ASTM DS185m 20 0 0 Vanadium ppm ASTM DS185m 20 0 0 Q	Sample Number		Client Info		PE0000633	PE0001127	PE0001139
Oil Age hrs Client Info 0	Sample Date		Client Info		10 Aug 2023	29 Jun 2023	25 May 2023
Cilient Info	Machine Age	hrs	Client Info		0	0	0
Sample Status ABNORMAL	Oil Age	hrs	Client Info		0	0	0
WEAR METALS method limit/base current history1 history2 PQ ASTM D8184 15 12 11 Iron ppm ASTM D8185m >20 2 3 2 Chromium ppm ASTM D5185m >20 0 0 0 Nikckel ppm ASTM D5185m 20 0 0 0 Silver ppm ASTM D5185m 0 0 0 0 Aluminum ppm ASTM D5185m >20 0 0 0 Aluminum ppm ASTM D5185m >20 0 0 0 Aluminum ppm ASTM D5185m >20 0 0 0 Copper ppm ASTM D5185m >20 0 0 0 Copper ppm ASTM D5185m >20 0 0 0 Cadadium ppm ASTM D5185m 0 0 0 0 Bari	Oil Changed		Client Info		N/A	N/A	N/A
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Chromium	WEAR METALS		method	limit/base	current	history1	history2
Chromium ppm ASTM D5185m >20 0 0 0 Nickel ppm ASTM D5185m >20 0 0 0 Tittanium ppm ASTM D5185m 0 0 <1 Siliver ppm ASTM D5185m 20 <1 2 <1 Lead ppm ASTM D5185m >20 <0 0 0 Copper ppm ASTM D5185m >20 <0 0 0 Vanadium ppm ASTM D5185m >20 <0 0 0 Cadmium ppm ASTM D5185m 20 <0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 0 Barium ppm ASTM D5185m 0 0 0 0	PQ		ASTM D8184		15	12	11
Nickel	Iron	ppm	ASTM D5185m	>20	2	3	2
Titanium ppm ASTM D5185m 0 0 0 1 Silver ppm ASTM D5185m 20 0 0 0 Aluminum ppm ASTM D5185m >20 <1 2 <1 Lead ppm ASTM D5185m >20 0 0 0 Copper ppm ASTM D5185m >20 0 0 0 Copper ppm ASTM D5185m >20 0 0 0 Vanadium ppm ASTM D5185m >20 0 0 0 Vanadium ppm ASTM D5185m >20 0 0 0 Vanadium ppm ASTM D5185m >20 0 0 0 Cadmium ppm ASTM D5185m >20 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 ADDITIVES method limit/base current history1 history2 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 <1 0 <1 <1 <1 <1 Manganese ppm ASTM D5185m 10 12 10 Calcium ppm ASTM D5185m 285 292 260 Zinc ppm ASTM D5185m 322 351 329 Sulfur ppm ASTM D5185m 1357 1439 1446 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Chromium	ppm	ASTM D5185m	>20	0	0	0
Silver	Nickel	ppm	ASTM D5185m	>20	0	0	0
Aluminum ppm ASTM D5185m >20 <1 2 <1 Lead ppm ASTM D5185m >20 0 0 0 0 Copper ppm ASTM D5185m >20 0 0 0 0 Copper ppm ASTM D5185m >20 0 0 0 0 Vanadium ppm ASTM D5185m >20 0 0 0 0 Vanadium ppm ASTM D5185m	Titanium	ppm	ASTM D5185m		0	0	<1
Aluminum ppm ASTM D5185m >20 <1 2 <1 Lead ppm ASTM D5185m >20 0 0 0 0 Copper ppm ASTM D5185m >20 0 0 0 Copper ppm ASTM D5185m >20 0 0 0 Vanadium ppm ASTM D5185m >20 0 0 0 Vanadium ppm ASTM D5185m >20 0 0 0 Cadmium ppm ASTM D5185m >0 0 0 Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 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 0 0 0 0 Manganese ppm ASTM D5185m 0 0 0 0 Calcium ppm ASTM D5185m 0 0 0 0 Calcium ppm ASTM D5185m 10 12 10 Calcium ppm ASTM D5185m 285 292 260 Zinc ppm ASTM D5185m 1357 1439 1446 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m 0 0 0 0 Potassium ppm ASTM D5185m 0 0 0 0 Potassium ppm ASTM D5185m 20 0 0 1 0 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >5000 54715 68268 65547 Particles >6µm ASTM D7647 >100 0 0 0 Particles >71µm ASTM D7647 >3 0 0 0 0 Oil Cleanliness ISO 4406 (c) >19/17/14 23/19/13 23/20/11 23/19/10	Silver	ppm	ASTM D5185m		0	0	0
Lead ppm ASTM D5185m >20 0 0 0 Copper ppm ASTM D5185m >20 <1	Aluminum		ASTM D5185m	>20	<1	2	<1
Copper ppm ASTM D5185m >20 <1 <1 <1 Tin ppm ASTM D5185m >20 0 0 0 Vanadium ppm ASTM D5185m <1	Lead		ASTM D5185m	>20	0	0	0
Tin	Copper		ASTM D5185m	>20	<1	<1	<1
Vanadium ppm ASTM D5185m <1 0 0 Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 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 <1 <1 <1 <1 Magnesium ppm ASTM D5185m 10 12 10 <1 Calcium ppm ASTM D5185m 60 63 58 Phosphorus ppm ASTM D5185m 285 292 260 Zinc ppm ASTM D5185m 322 351 329 Sulfur ppm ASTM D5185m 1357 1439 1446 <th< td=""><td>Tin</td><td></td><td>ASTM D5185m</td><td>>20</td><th>0</th><td>0</td><td>0</td></th<>	Tin		ASTM D5185m	>20	0	0	0
Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m <1	Vanadium		ASTM D5185m		<1	0	0
Boron ppm ASTM D5185m 0 0 0 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m <1 <1 <1 <1 Manganese ppm ASTM D5185m <10 12 10 Magnesium ppm ASTM D5185m 10 12 10 Calcium ppm ASTM D5185m 60 63 58 Phosphorus ppm ASTM D5185m 285 292 260 Zinc ppm ASTM D5185m 322 351 329 Sulfur ppm ASTM D5185m 1357 1439 1446 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1	Cadmium		ASTM D5185m		0	0	0
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Molybdenum ppm ASTM D5185m <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1<	Barium	ppm	ASTM D5185m		0	0	0
Manganese ppm ASTM D5185m <1 0 <1 Magnesium ppm ASTM D5185m 10 12 10 Calcium ppm ASTM D5185m 60 63 58 Phosphorus ppm ASTM D5185m 285 292 260 Zinc ppm ASTM D5185m 322 351 329 Sulfur ppm ASTM D5185m 1357 1439 1446 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 <1	Molybdenum		ASTM D5185m		<1	<1	<1
Magnesium ppm ASTM D5185m 10 12 10 Calcium ppm ASTM D5185m 60 63 58 Phosphorus ppm ASTM D5185m 285 292 260 Zinc ppm ASTM D5185m 322 351 329 Sulfur ppm ASTM D5185m 1357 1439 1446 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 </td <td>Manganese</td> <td>ppm</td> <td>ASTM D5185m</td> <td></td> <th><1</th> <td>0</td> <td><1</td>	Manganese	ppm	ASTM D5185m		<1	0	<1
Phosphorus ppm ASTM D5185m 285 292 260 Zinc ppm ASTM D5185m 322 351 329 Sulfur ppm ASTM D5185m 1357 1439 1446 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 <1	Magnesium	ppm	ASTM D5185m		10	12	10
Phosphorus ppm ASTM D5185m 285 292 260 Zinc ppm ASTM D5185m 322 351 329 Sulfur ppm ASTM D5185m 1357 1439 1446 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 <1	Calcium	ppm	ASTM D5185m		60	63	58
Zinc ppm ASTM D5185m 322 351 329 Sulfur ppm ASTM D5185m 1357 1439 1446 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 <1 <1 <1 Sodium ppm ASTM D5185m 0 0 0 0 Potassium ppm ASTM D5185m >20 0 <1 0 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >5000 ▲ 54715 ▲ 68268 ▲ 65547 Particles >6µm ASTM D7647 >1300 ▲ 3391 ▲ 5135 ▲ 3562 Particles >14µm ASTM D7647 >160 74 20 9 Particles >21µm ASTM D7647 >40 7 1 0 Particles >71µm ASTM D7647 >3 0 0 0	Phosphorus		ASTM D5185m		285	292	260
Sulfur ppm ASTM D5185m 1357 1439 1446 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 <1	Zinc		ASTM D5185m		322	351	329
Silicon ppm ASTM D5185m >15 <1 <1 <1 <1 <1 <1 <1 <0 0 <t< td=""><td>Sulfur</td><td></td><td>ASTM D5185m</td><td></td><th>1357</th><td>1439</td><td>1446</td></t<>	Sulfur		ASTM D5185m		1357	1439	1446
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Potassium ppm ASTM D5185m >20 0 <1 0 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 >5000 ▲ 54715 ▲ 68268 ▲ 65547 Particles >6μm ASTM D7647 >1300 ▲ 3391 ▲ 5135 ▲ 3562 Particles >14μm ASTM D7647 >160 74 20 9 Particles >21μm ASTM D7647 >40 7 1 0 Particles >38μm ASTM D7647 >10 0 0 0 Particles >71μm ASTM D7647 >3 0 0 0 Particles >71μm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >19/17/14 23/19/13 ▲ 23/20/11 ▲ 23/19/10 FLUID DEGRADATION method limit/base current history1 history2	Silicon	ppm	ASTM D5185m	>15	<1	<1	<1
FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 >5000 ▲ 54715 ▲ 68268 ▲ 65547 Particles >6μm ASTM D7647 >1300 ▲ 3391 ▲ 5135 ▲ 3562 Particles >14μm ASTM D7647 >160 74 20 9 Particles >21μm ASTM D7647 >40 7 1 0 Particles >38μm ASTM D7647 >10 0 0 0 Particles >71μm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >19/17/14 23/19/13 ▲ 23/20/11 ▲ 23/19/10 FLUID DEGRADATION method limit/base current history1 history2	Sodium	ppm	ASTM D5185m		0	0	0
Particles >4μm ASTM D7647 >5000 ▲ 54715 ▲ 68268 ▲ 65547 Particles >6μm ASTM D7647 >1300 ▲ 3391 ▲ 5135 ▲ 3562 Particles >14μm ASTM D7647 >160 74 20 9 Particles >21μm ASTM D7647 >40 7 1 0 Particles >38μm ASTM D7647 >10 0 0 0 Particles >71μm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >19/17/14 23/19/13 △ 23/20/11 △ 23/19/10 FLUID DEGRADATION method limit/base current history1 history2	Potassium	ppm	ASTM D5185m	>20	0	<1	0
Particles >6μm ASTM D7647 >1300 ▲ 3391 ▲ 5135 ▲ 3562 Particles >14μm ASTM D7647 >160 74 20 9 Particles >21μm ASTM D7647 >40 7 1 0 Particles >38μm ASTM D7647 >10 0 0 0 Particles >71μm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >19/17/14 Δ 23/19/13 Δ 23/20/11 Δ 23/19/10 FLUID DEGRADATION method limit/base current history1 history2	FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >14μm ASTM D7647 >160 74 20 9 Particles >21μm ASTM D7647 >40 7 1 0 Particles >38μm ASTM D7647 >10 0 0 0 Particles >71μm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >19/17/14 23/19/13 23/20/11 23/19/10 FLUID DEGRADATION method limit/base current history1 history2	Particles >4µm		ASTM D7647	>5000	<u> 54715</u>	△ 68268	<u></u> 65547
Particles >21μm ASTM D7647 >40 7 1 0 Particles >38μm ASTM D7647 >10 0 0 0 Particles >71μm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >19/17/14 23/19/13 23/20/11 23/19/10 FLUID DEGRADATION method limit/base current history1 history2	Particles >6µm		ASTM D7647	>1300	<u> 3391</u>	<u>▲</u> 5135	▲ 3562
Particles >38μm ASTM D7647 >10 0 0 0 Particles >71μm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >19/17/14 23/19/13 23/20/11 23/19/10 FLUID DEGRADATION method limit/base current history1 history2	Particles >14µm		ASTM D7647	>160	74	20	9
Particles >71μm ASTM D7647 >3 0 0 0 Oil Cleanliness ISO 4406 (c) >19/17/14 ▲ 23/19/13 ▲ 23/20/11 ▲ 23/19/10 FLUID DEGRADATION method limit/base current history1 history2	Particles >21µm		ASTM D7647	>40	7	1	0
Oil Cleanliness ISO 4406 (c) >19/17/14 ▲ 23/19/13 ▲ 23/20/11 ▲ 23/19/10 FLUID DEGRADATION method limit/base current history1 history2	Particles >38µm		ASTM D7647	>10	0	0	0
Oil Cleanliness ISO 4406 (c) >19/17/14 ▲ 23/19/13 ▲ 23/20/11 ▲ 23/19/10 FLUID DEGRADATION method limit/base current history1 history2	Particles >71μm		ASTM D7647	>3	0	0	0
•	Oil Cleanliness			>19/17/14	23/19/13		<u>\$\lambda\$\$ 23/19/10</u>
Acid Number (AN) mg KOH/g ASTM D8045 0.33 0.35 0.33	FLUID DEGRADA	TION	method	limit/base	current	history1	history2
	Acid Number (AN)	mg KOH/g	ASTM D8045		0.33		



OIL ANALYSIS REPORT

