

# **OIL ANALYSIS REPORT**

# Area WOOD PROCESSING EQUIPMENT Machine for PLANER SORTER

Hydraulic System Fluid SHELL AW HYDRAULIC S2 46 (--- GAL)

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

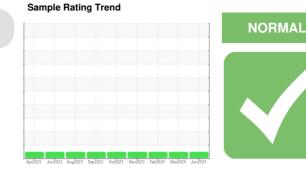
All component wear rates are normal.

#### 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.



SAMPLE INFORMA	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PE0003618	PE0000697	PE06098277
Sample Date		Client Info		07 Jun 2024	15 Mar 2024	22 Feb 2024
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
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		19	17	15
Iron p	ppm	ASTM D5185m	>20	<1	0	1
Chromium p	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>20	0	0	<1
Titanium ß	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum p	ppm	ASTM D5185m	>20	2	3	<1
Lead	ppm	ASTM D5185m	>20	0	<1	1
Copper p	ppm	ASTM D5185m	>20	3	3	8
Tin 🛛	ppm	ASTM D5185m	>20	0	<1	1
Vanadium p	ppm	ASTM D5185m		0	<1	<1
Cadmium F	ppm	ASTM D5185m		0	<1	<1
ADDITIVES		method	limit/base	current	history1	history2
Boron ß	ppm	ASTM D5185m		<1	0	<1
Barium ß	ppm	ASTM D5185m		0	<1	5
Molybdenum p	ppm	ASTM D5185m		0	<1	1
Manganese p	ppm	ASTM D5185m		0	0	<1
Magnesium p	ppm	ASTM D5185m		10	10	13
Calcium					10	10
	ppm	ASTM D5185m		49	62	77
Phosphorus p	ppm ppm	ASTM D5185m ASTM D5185m				
				49	62	77
Zinc	ppm	ASTM D5185m		49 276	62 272	77 427
Zinc	opm opm	ASTM D5185m ASTM D5185m	limit/base	49 276 312	62 272 307	77 427 553
Zinc p Sulfur p CONTAMINANTS	opm opm	ASTM D5185m ASTM D5185m ASTM D5185m		49 276 312 1027	62 272 307 1037	77 427 553 3226
Zinc p Sulfur p CONTAMINANTS Silicon p	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method		49 276 312 1027 current	62 272 307 1037 history1	77 427 553 3226 history2
Zinc p Sulfur p CONTAMINANTS Silicon p Sodium p	opm opm opm	ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m	>15	49 276 312 1027 current 0	62 272 307 1037 history1 <1	77 427 553 3226 history2 4
Zinc p Sulfur p CONTAMINANTS Silicon p Sodium p	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>15	49 276 312 1027 current 0 0	62 272 307 1037 history1 <1 <1	77 427 553 3226 history2 4 0
Zinc p Sulfur p CONTAMINANTS Silicon p Sodium p Potassium p	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m	>15 >20	49 276 312 1027 current 0 0 <1	62 272 307 1037 history1 <1 <1 <1 <1	77 427 553 3226 history2 4 0 <1
Zinc p Sulfur p CONTAMINANTS Silicon p Sodium p Potassium p FLUID CLEANLINE	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>15 >20 limit/base >5000	49 276 312 1027 current 0 0 <1 current	62 272 307 1037 history1 <1 <1 <1 <1 <1 history1	77 427 553 3226 history2 4 0 <1 history2
Zinc p Sulfur p CONTAMINANTS Silicon p Sodium p Potassium p FLUID CLEANLINE Particles >4µm	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>15 >20 limit/base >5000	49 276 312 1027 current 0 0 <1 <1 current 632	62 272 307 1037 history1 <1 <1 <1 <1 history1 795	77 427 553 3226 history2 4 0 <1 history2 236
Zinc p Sulfur p CONTAMINANTS Silicon p Sodium p Potassium p FLUID CLEANLINE Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D7647 ASTM D7647	>15 >20 limit/base >5000 >1300 >160	49 276 312 1027 current 0 0 <1 current 632 222	62 272 307 1037 history1 <1 <1 <1 <1 <1 <1 history1 795 136	777 427 553 3226 history2 4 0 <1 <1 history2 236 77
Zinc p Sulfur p CONTAMINANTS Silicon p Sodium p Potassium p FLUID CLEANLINE Particles >4µm Particles >6µm p Articles >14µm	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	>15 >20 limit/base >5000 >1300 >160	49 276 312 1027 current 0 0 <1 <1 632 222 17	62 272 307 1037 history1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 3 5 5 136 13	777 427 553 3226 history2 4 0 <1 c1 history2 236 777 6
Zinc p Sulfur p CONTAMINANTS Silicon p Sodium p Potassium p FLUID CLEANLINE Particles >4µm Particles >6µm p Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>15 >20 limit/base >5000 >1300 >160 >40 >10	49 276 312 1027 current 0 0 <1 current 632 222 17 4	62 272 307 1037 <1 <1 <1 <1 <1 <1 <1 history1 795 136 13 3	777 427 553 3226 history2 4 0 <1 * 1 * 236 777 6 1

ISO 4406 (c) >19/17/14

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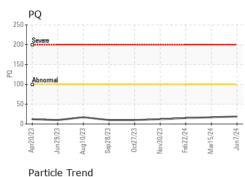
**Oil Cleanliness** 

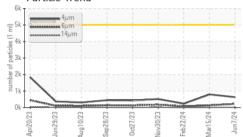
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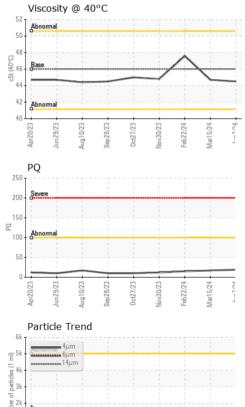
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# **OIL ANALYSIS REPORT**





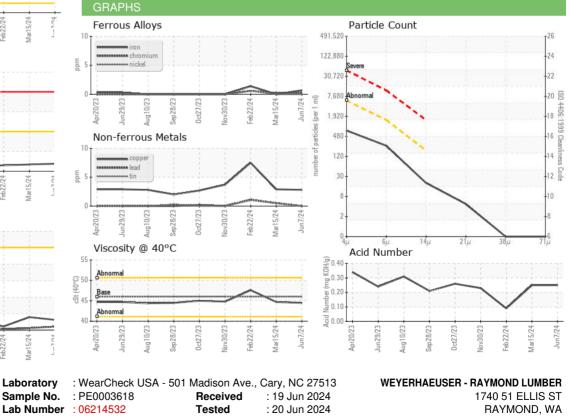


FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.25	0.25	0.09
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	ΓIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	44.5	44.7	47.6
SAMPLE IMAGE	S	method	limit/base	current	history1	history2

Color



Bottom



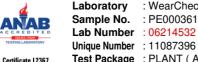
: 21 Jun 2024 - Don Baldridge



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Test Package : PLANT ( Additional Tests: ICP, KV40, PQ, PrtCount, SCREEN ) 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)

Diagnosed

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