

OIL ANALYSIS REPORT

Area WOOD PROCESSING EQUIPMENT PLANER STACKER

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

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

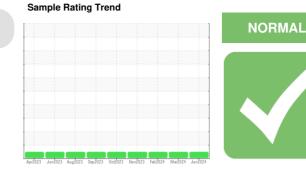
All component wear rates are normal.

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 Date Client Info 07 Jun 2024 15 Mar 2024 22 Feb 2024 Machine Age hrs Client Info 0 0 0 0 Oil Age hrs Client Info 0 1 15 13 3 1	SAMPLE INFORMA	TION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 0 0 0 0 Oil Age hrs Client Info N/A N/A N/A Sample Status Client Info N/A N/A N/A N/A CONTAMINATION method Imit/base current history1 history2 Water WC Method >0.05 NEG NEG NEG WEAR METALS method Imit/base current history1 history2 PQ ASTM 05185n >20 <1	Sample Number		Client Info		PE0003595	PE0000700	PE06098278
Oil Age Ints Client Info 0 0 0 Oil Changed Client Info N/A N/A N/A N/A Sample Status Imit/Lass Current History1 History2 Water WC Method >0.05 NEG NEG NEG Water WC Method >0.05 NEG NEG NEG VEAR METALS method limit/base current history1 history2 PQ ASTM D5185m >20 <1	Sample Date		Client Info		07 Jun 2024	15 Mar 2024	22 Feb 2024
Oil Changed Client Info N/A N/A N/A N/A Sample Status Image: Contramination of the status Image: Contramination of the status Normal Normal	Machine Age	nrs	Client Info		0	0	0
Sample Status NORMAL 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 D6184 19 15 13 Iron ppm ASTM D6185m >20 <1	Oil Age	nrs	Client Info		0	0	0
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 D6184 19 15 13 Iron ppm ASTM D6185m >20 <1	Oil Changed		Client Info		N/A	N/A	N/A
Water WC Method >0.05 NEG NEG NEG WEAR METALS method limit/base current history1 history2 PQ ASTM D8184 19 15 13 Iron ppm ASTM D8185m >20 <1	Sample Status				NORMAL	NORMAL	NORMAL
WEAR METALS method limit/base current history1 history2 PQ ASTM D8184 19 15 13 Iron ppm ASTM D5185m >20 <1 0 2 Chromium ppm ASTM D5185m >20 <1 <1 <1 <1 Nickel ppm ASTM D5185m >20 0 0 <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	CONTAMINATION		method	limit/base	current	history1	history2
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Nickel ppm ASTM D5185m >20 0 0 <1 Titanium ppm ASTM D5185m <1	Iron p	opm	ASTM D5185m	>20	<1	0	2
Titanium ppm ASTM D5185m <1 <1 <1 <1 Silver ppm ASTM D5185m 20 2 3 <1	Chromium p	opm	ASTM D5185m	>20	<1	<1	<1
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Lead ppm ASTM D5185m >20 0 <1 <1 Copper ppm ASTM D5185m >20 <1	Silver	opm	ASTM D5185m		0	0	
Copper ppm ASTM D5185m >20 <1 4 2 Tin ppm ASTM D5185m >20 0 <1	Aluminum p	opm	ASTM D5185m	>20	2	3	<1
Tim ppm ASTM D5185m >20 0 <1 <1 Vanadium ppm ASTM D5185m 0 <1	Lead p	opm	ASTM D5185m	>20	0	<1	<1
Vanadium ppm ASTM D5185m 0 <1 0 Cadmium ppm ASTM D5185m 0 <1 <1 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 7 0 0 Barium ppm ASTM D5185m 0 <1 5 Molybdenum ppm ASTM D5185m 0 <1 1 Manganese ppm ASTM D5185m 0 <1 1 Manganesum ppm ASTM D5185m 0 <1 1 Magnesium ppm ASTM D5185m 10 9 7 Calcium ppm ASTM D5185m 378 302 259 Zinc ppm ASTM D5185m 2037 2013 1811 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 2 2 <t< td=""><td>Copper p</td><td>opm</td><td>ASTM D5185m</td><td>>20</td><th><1</th><td>4</td><td>2</td></t<>	Copper p	opm	ASTM D5185m	>20	<1	4	2
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Boron ppm ASTM D5185m 7 0 0 Barium ppm ASTM D5185m 0 <1	Cadmium p	opm	ASTM D5185m		0	<1	<1
Barium ppm ASTM D5185m 0 <1	ADDITIVES		method	limit/base	current	history1	history2
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Manganese ppm ASTM D5185m 0 0 <1 Magnesium ppm ASTM D5185m 10 9 7 Calcium ppm ASTM D5185m 298 59 51 Phosphorus ppm ASTM D5185m 378 302 259 Zinc ppm ASTM D5185m 378 302 259 Zinc ppm ASTM D5185m 456 375 334 Sulfur ppm ASTM D5185m 2037 2013 1811 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 2 2 2 Sodium ppm ASTM D5185m >20 1 <1	Barium p	opm	ASTM D5185m		0	<1	5
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Calcium ppm ASTM D5185m 298 59 51 Phosphorus ppm ASTM D5185m 378 302 259 Zinc ppm ASTM D5185m 456 375 334 Sulfur ppm ASTM D5185m 2037 2013 1811 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 2 2 2 Sodium ppm ASTM D5185m >15 2 2 2 Sodium ppm ASTM D5185m >20 1 <1	Manganese p	opm	ASTM D5185m		0	0	<1
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Zinc ppm ASTM D5185m 456 375 334 Sulfur ppm ASTM D5185m 2037 2013 1811 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 2 2 2 Sodium ppm ASTM D5185m >15 2 2 2 2 Sodium ppm ASTM D5185m >15 2 1 2 1 2 1 2 2 2 2	Calcium p	opm	ASTM D5185m		298	59	51
Sulfur ppm ASTM D5185m 2037 2013 1811 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >15 2 2 2 Sodium ppm ASTM D5185m >15 2 2 2 Sodium ppm ASTM D5185m >20 1 <1 <1 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >5000 100 473 196 Particles >6µm ASTM D7647 >1300 46 59 62 Particles >14µm ASTM D7647 >160 4 5 6 Particles >21µm ASTM D7647 >10 0 0 0	Phosphorus p	opm	ASTM D5185m				
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Sodium ppm ASTM D5185m 7 0 0 Potassium ppm ASTM D5185m >20 1 <1	CONTAMINANTS		method	limit/base	current	history1	history2
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FLUID CLEANLINESS method limit/base current history1 history2 Particles >4μm ASTM D7647 >5000 100 473 196 Particles >6μm ASTM D7647 >1300 46 59 62 Particles >14μm ASTM D7647 >160 4 5 6 Particles >21μm ASTM D7647 >40 0 2 1 Particles >38μm ASTM D7647 >10 0 0 0	Sodium p	opm	ASTM D5185m		7	0	0
Particles >4μm ASTM D7647 >5000 100 473 196 Particles >6μm ASTM D7647 >1300 46 59 62 Particles >14μm ASTM D7647 >160 4 5 6 Particles >14μm ASTM D7647 >40 0 2 1 Particles >21μm ASTM D7647 >10 0 0 0	Potassium p	opm	ASTM D5185m	>20	1	<1	<1
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Particles >14μm ASTM D7647 >160 4 5 6 Particles >21μm ASTM D7647 >40 0 2 1 Particles >38μm ASTM D7647 >10 0 0 0	Particles >4µm		ASTM D7647	>5000	100	473	196
Particles >14μm ASTM D7647 >160 4 5 6 Particles >21μm ASTM D7647 >40 0 2 1 Particles >38μm ASTM D7647 >10 0 0 0	Particles >6µm		ASTM D7647	>1300	46	59	62
Particles >21μm ASTM D7647 >40 0 2 1 Particles >38μm ASTM D7647 >10 0 0 0			ASTM D7647	>160		5	6
Particles >38μm ASTM D7647 >10 0 0 0							
	Particles >21µm		ASTM D7647	>40	0	2	1

ISO 4406 (c) >19/17/14

14/13/9

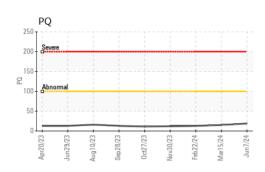
Oil Cleanliness

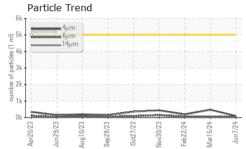
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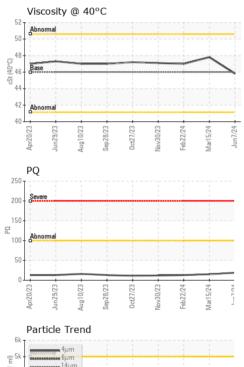
16/13/10

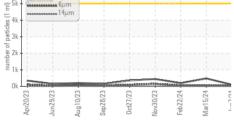


OIL ANALYSIS REPORT









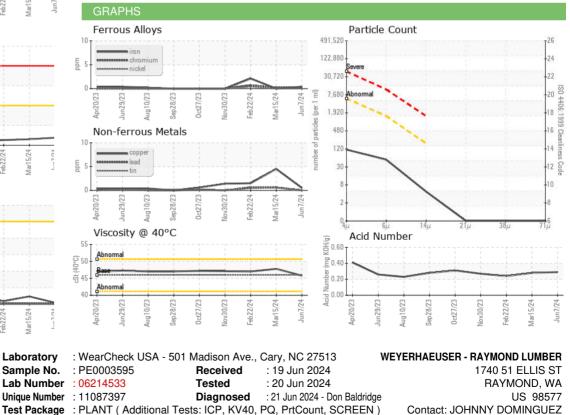


FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.29	0.28	0.24
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	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	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	45.8	47.8	47.0
SAMPLE IMAGES	6	method	limit/base	current	history1	history2

Color



Bottom



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)

Report Id: WEYRAY [WUSCAR] 06214533 (Generated: 06/21/2024 14:08:51) Rev: 1

Certificate 12367

Laboratory

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