

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

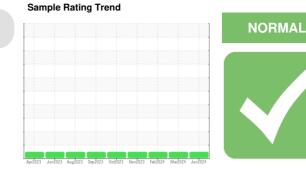
All component wear rates are normal.

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 method 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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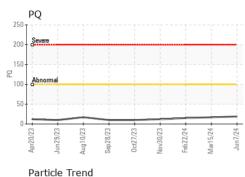
Oil Cleanliness

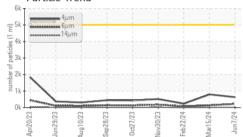
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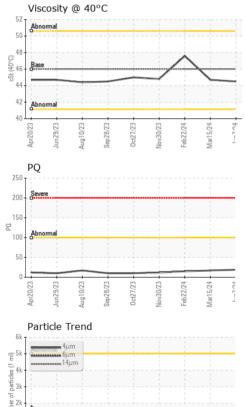
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OIL ANALYSIS REPORT





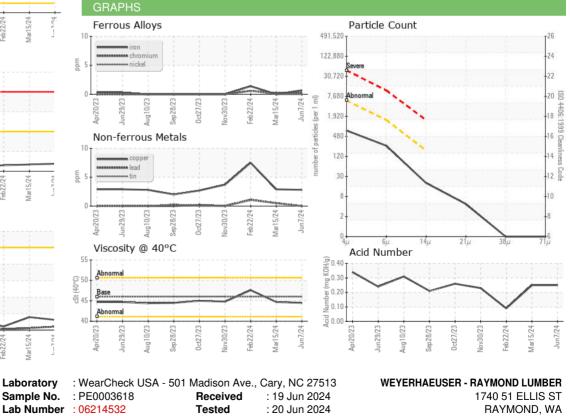


FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.25	0.25	0.09
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	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



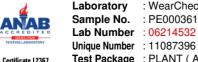
: 21 Jun 2024 - Don Baldridge



Aug 10/23

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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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