

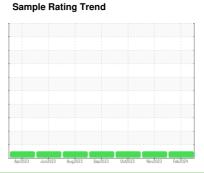
OIL ANALYSIS REPORT

WOOD PROCESSING EQUIPMENT **PLANER BANDER**

Component

Hydraulic System

SHELL AW HYDRAULIC S2 46 (--- GAL)





Recommendation

Resample at the next service interval to monitor.

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 INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PE06098280	PE0000733	PE06000384
Sample Date		Client Info		22 Feb 2024	30 Nov 2023	27 Oct 2023
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	V	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		15	13	12
Iron	ppm	ASTM D5185m	>20	1	0	0
Chromium	ppm	ASTM D5185m	>20	<1	0	0
Nickel	ppm	ASTM D5185m	>20	<1	0	0
Titanium	ppm	ASTM D5185m		1	0	0
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>20	<1	0	0
Lead	ppm	ASTM D5185m	>20	<1	0	<1
Copper	ppm	ASTM D5185m	>20	1	6	4
Tin	ppm	ASTM D5185m	>20	<1	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 8	history1	history2 0
	ppm		limit/base			
Boron		ASTM D5185m	limit/base	8	0	0
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	8 5	0	0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	8 5 1	0 0 0	0 0 0
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	8 5 1 <1	0 0 0 <1	0 0 0
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	8 5 1 <1 9	0 0 0 <1 7	0 0 0 0
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	8 5 1 <1 9 304	0 0 0 <1 7 54	0 0 0 0 0 6 56
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	8 5 1 <1 9 304 333	0 0 0 <1 7 54 311	0 0 0 0 6 56 300
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	8 5 1 <1 9 304 333 434	0 0 0 <1 7 54 311 385	0 0 0 0 6 56 300 374
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	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 D5185m		8 5 1 <1 9 304 333 434 2169	0 0 0 <1 7 54 311 385 2002	0 0 0 0 6 56 300 374 2070
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base	8 5 1 <1 9 304 333 434 2169	0 0 0 <1 7 54 311 385 2002 history1	0 0 0 0 6 56 300 374 2070
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base	8 5 1 <1 9 304 333 434 2169 current	0 0 0 <1 7 54 311 385 2002 history1	0 0 0 0 6 56 300 374 2070 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >15	8 5 1 <1 9 304 333 434 2169 current 2 5	0 0 0 <1 7 54 311 385 2002 history1	0 0 0 0 6 56 300 374 2070 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >15 >20	8 5 1 <1 9 304 333 434 2169 current 2 5 <1	0 0 0 <1 7 54 311 385 2002 history1 1 2	0 0 0 0 6 56 300 374 2070 history2 1 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >15 >20 limit/base	8 5 1 <1 9 304 333 434 2169 current 2 5 <1 current	0 0 0 <1 7 54 311 385 2002 history1 1 2 0	0 0 0 0 6 56 300 374 2070 history2 1 <1 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m	limit/base >15 >20 limit/base >5000	8 5 1 <1 9 304 333 434 2169 current 2 5 <1 current	0 0 0 <1 7 54 311 385 2002 history1 1 2 0	0 0 0 0 6 56 300 374 2070 history2 1 <1 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m	limit/base >15 >20 limit/base >5000 >1300	8 5 1 <1 9 304 333 434 2169 current 2 5 <1 current 165 46	0 0 0 <1 7 54 311 385 2002 history1 1 2 0 history1 198	0 0 0 0 6 56 300 374 2070 history2 1 <1 0 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	limit/base >15 >20 limit/base >5000 >1300 >160	8 5 1 <1 9 304 333 434 2169 current 2 5 <1 current 165 46 4	0 0 0 <1 7 54 311 385 2002 history1 1 2 0 history1 198 66 13	0 0 0 0 6 56 300 374 2070 history2 1 <1 0 history2 166 30 4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	limit/base >15 >20 limit/base >5000 >1300 >160 >40 >10	8 5 1 <1 9 304 333 434 2169 current 2 5 <1 current 165 46 4 1	0 0 0 <1 7 54 311 385 2002 history1 1 2 0 history1 198 66 13	0 0 0 0 6 56 300 374 2070 history2 1 <1 0 history2 166 30 4



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