

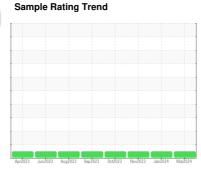
# **OIL ANALYSIS REPORT**

# WOOD PROCESSING EQUIPMENT PLANER MAIN

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		PE0000695	PE0000735	PE0000657
Sample Date		Client Info		15 Mar 2024	25 Jan 2024	30 Nov 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		14	12	12
Iron	ppm	ASTM D5185m	>20	0	0	0
Chromium	ppm	ASTM D5185m	>20	<1	0	0
Nickel	ppm	ASTM D5185m	>20	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	0	0
Lead	ppm	ASTM D5185m	>20	<1	0	0
Copper	ppm	ASTM D5185m	>20	1	<1	2
Tin	ppm	ASTM D5185m	>20	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	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 0	history1 2	history2 0
	ppm		limit/base			· · · · · · · · · · · · · · · · · · ·
Boron		ASTM D5185m	limit/base	0 <1 0	2 0 0	0
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	0 <1	2 0 0	0 0 0 0 <1
Boron Barium Molybdenum Manganese Magnesium	ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 <1 0	2 0 0 0 10	0 0 0 <1 8
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 <1 0 0 10 90	2 0 0 0 10 121	0 0 0 <1 8 76
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 <1 0 0 10 90 270	2 0 0 0 10 121 293	0 0 0 <1 8 76 273
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 <1 0 0 10 90 270 313	2 0 0 0 10 121 293 345	0 0 0 <1 8 76 273 314
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	limit/base	0 <1 0 0 10 90 270	2 0 0 0 10 121 293	0 0 0 <1 8 76 273
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	0 <1 0 0 10 90 270 313	2 0 0 0 10 121 293 345	0 0 0 <1 8 76 273 314
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	limit/base	0 <1 0 0 10 90 270 313 932	2 0 0 0 10 121 293 345 1064	0 0 0 <1 8 76 273 314 893 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >15	0 <1 0 0 10 90 270 313 932 current	2 0 0 0 10 121 293 345 1064 history1	0 0 0 <1 8 76 273 314 893 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	0 <1 0 0 10 90 270 313 932 current <1	2 0 0 0 10 121 293 345 1064 history1	0 0 0 <1 8 76 273 314 893 history2
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	0 <1 0 0 0 10 90 270 313 932 current <1 <1	2 0 0 0 10 121 293 345 1064 history1 <1 1	0 0 0 <1 8 76 273 314 893 history2 0 2 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	limit/base >15 >20 limit/base >5000	0 <1 0 0 10 90 270 313 932 current <1 1 current 549	2 0 0 0 10 121 293 345 1064 history1 <1 1 1	0 0 0 <1 8 76 273 314 893 history2 0 2 0 history2 284
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	0 <1 0 0 10 90 270 313 932 current <1 <1 1 current 549 172	2 0 0 10 121 293 345 1064 history1 <1 <1 1 history1 708 268	0 0 0 <1 8 76 273 314 893 history2 0 2 0 history2 284 103
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method ASTM D5185m ASTM D7647 ASTM D7647	limit/base >15 >20 limit/base >5000 >1300 >160	0 <1 0 0 10 90 270 313 932 current <1 <1 1 current 549 172 18	2 0 0 10 121 293 345 1064 history1 <1 <1 1 history1 708 268 30	0 0 0 <1 8 76 273 314 893 history2 0 2 0 history2 284 103 15
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 D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	limit/base >15 >20 limit/base >5000 >1300 >160 >40	0 <1 0 0 10 90 270 313 932 current <1 <1 1 current 549 172 18 4	2 0 0 10 121 293 345 1064 history1 <1 <1 1 history1 708 268 30 8	0 0 0 <1 8 76 273 314 893 history2 0 2 0 history2 284 103 15
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  Method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	limit/base >15 >20 limit/base >5000 >1300 >160 >40 >10	0	2 0 0 10 121 293 345 1064 history1 <1 <1 1 history1 708 268 30 8 0	0 0 0 0 <1 8 76 273 314 893 history2 0 2 0 history2 284 103 15 5 0
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 D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	limit/base >15 >20 limit/base >5000 >1300 >160 >40 >10	0 <1 0 0 10 90 270 313 932 current <1 <1 1 current 549 172 18 4	2 0 0 10 121 293 345 1064 history1 <1 <1 1 history1 708 268 30 8	0 0 0 <1 8 76 273 314 893 history2 0 2 0 history2 284 103 15 5



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