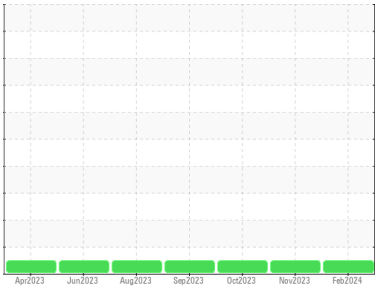
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Area
WOOD PROCESSING EQUIPMENT
Machine Id
PLANER SORTER
Component
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 INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PE06098277**	PE0000659	PE06000383
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		method	limit/base	current	history1	history2
Water		WC Method	>0.05	**NEG**	NEG	NEG

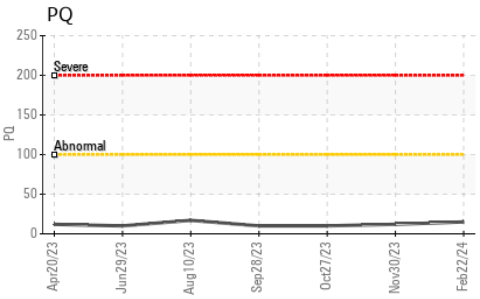
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		**15**	12	10
Iron	ppm	ASTM D5185m	>20	**1**	0	0
Chromium	ppm	ASTM D5185m	>20	**<1**	0	0
Nickel	ppm	ASTM D5185m	>20	**<1**	0	0
Titanium	ppm	ASTM D5185m		**<1**	0	0
Silver	ppm	ASTM D5185m		**<1**	0	<1
Aluminum	ppm	ASTM D5185m	>20	**<1**	0	0
Lead	ppm	ASTM D5185m	>20	**1**	0	<1
Copper	ppm	ASTM D5185m	>20	**8**	4	3
Tin	ppm	ASTM D5185m	>20	**1**	0	0
Vanadium	ppm	ASTM D5185m		**<1**	0	0
Cadmium	ppm	ASTM D5185m		**<1**	0	0

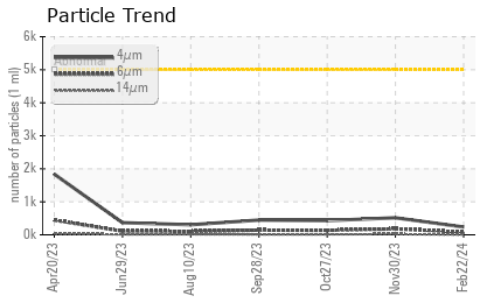
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**<1**	0	0
Barium	ppm	ASTM D5185m		**5**	0	0
Molybdenum	ppm	ASTM D5185m		**1**	0	0
Manganese	ppm	ASTM D5185m		**<1**	<1	0
Magnesium	ppm	ASTM D5185m		**13**	8	7
Calcium	ppm	ASTM D5185m		**77**	57	58
Phosphorus	ppm	ASTM D5185m		**427**	277	268
Zinc	ppm	ASTM D5185m		**553**	312	293
Sulfur	ppm	ASTM D5185m		**3226**	1013	1041

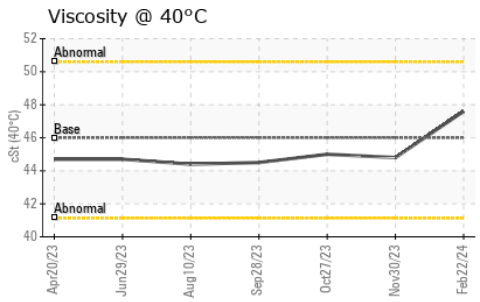
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**4**	0	0
Sodium	ppm	ASTM D5185m		**0**	2	<1
Potassium	ppm	ASTM D5185m	>20	**<1**	0	0

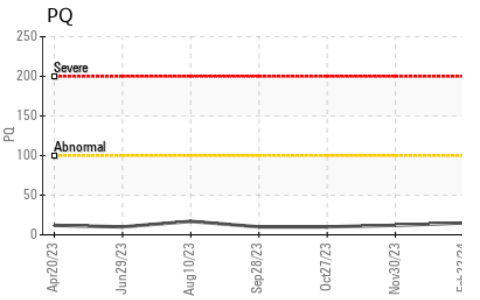
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	**236**	516	430
Particles >6µm		ASTM D7647	>1300	**77**	181	134
Particles >14µm		ASTM D7647	>160	**6**	20	13
Particles >21µm		ASTM D7647	>40	**1**	5	5
Particles >38µm		ASTM D7647	>10	**0**	1	0
Particles >71µm		ASTM D7647	>3	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	**15/13/10**	16/15/11	16/14/11

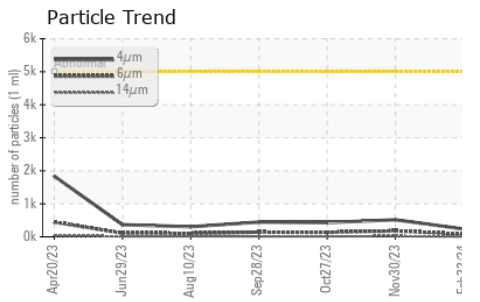
OIL ANALYSIS REPORT











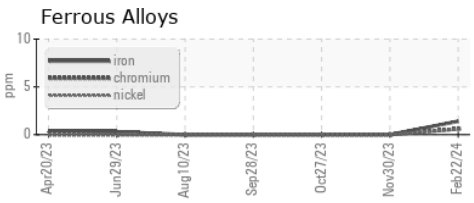
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.09**	0.23	0.26

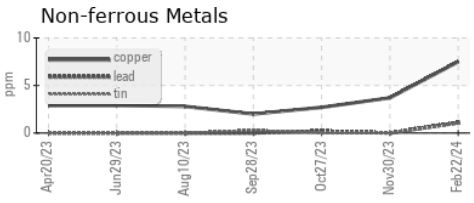
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	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

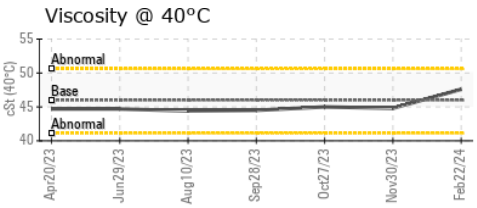
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	**47.6**	44.8	45.0

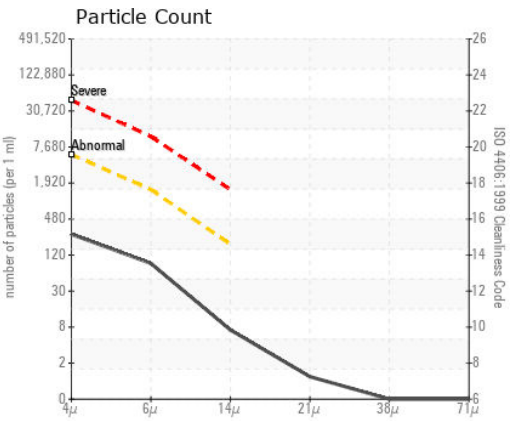
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			*no image*		
Bottom			*no image*		

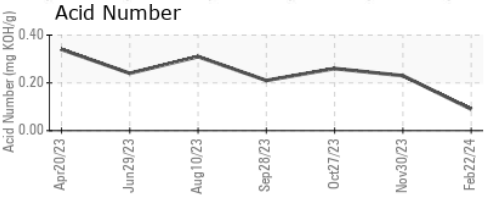
GRAPHS











Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PE06098277
Lab Number : 06098277
Unique Number : 10896507
Test Package : IND 2 (Additional Tests: PQ)

Received : 23 Feb 2024
Tested : 28 Feb 2024
Diagnosed : 28 Feb 2024 - Jonathan Hester

WEYERHAEUSER - RAYMOND LUMBER
1740 51 ELLIS ST
RAYMOND, WA
US 98577
Contact: JOHNNY DOMINGUEZ
johnny.dominguez@weyerhaeuser.com
T:
F:

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)