$$
H_{118} = \left[\begin{array}{cccccccccccc}
2\,h-6\,\mu+U & -\left(\sqrt{\frac{6}{6+\sqrt{6}}}\,t\right)+\frac{4\,t}{\sqrt{6+\sqrt{6}}} & -\left(\sqrt{\frac{6}{6-\sqrt{6}}}\,t\right)-\frac{4\,t}{\sqrt{6-\sqrt{6}}} & 0 & 0 & 0 & 2\,t & 0 & -2\,\sqrt{2}\,t & 0 & \frac{\sqrt{\frac{4-4\,\sqrt{\frac{2}{11}}}{52-8\,\sqrt{22}}}\,t}{2}+\frac{7\,\sqrt{\frac{121-11\,\sqrt{22}}{52-8\,\sqrt{22}}}\,t}{11}-\sqrt{\frac{22-2\,\sqrt{22}}{52-8\,\sqrt{22}}}\,t & \frac{91\,\sqrt{\frac{2+2\,\sqrt{\frac{2}{11}}}{26+4\,\sqrt{22}}}\,t}{24}+\frac{5\,\sqrt{\frac{11+\sqrt{22}}{22\,(26+4\,\sqrt{22})}}\,t}{12}+\sqrt{\frac{11+\sqrt{22}}{26+4\,\sqrt{22}}}\,t \\
-\left(\sqrt{\frac{6}{6+\sqrt{6}}}\,t\right)+\frac{4\,t}{\sqrt{6+\sqrt{6}}} & 2\,h-6\,\mu & 0 & 0 & 0 & 0 & 0 & 0 & -2\,\sqrt{\frac{6}{6+\sqrt{6}}}\,t-\frac{2\,t}{\sqrt{6+\sqrt{6}}} & 0 & 0 \\
-\left(\sqrt{\frac{6}{6-\sqrt{6}}}\,t\right)-\frac{4\,t}{\sqrt{6-\sqrt{6}}} & 0 & 2\,h-6\,\mu & 0 & 0 & 0 & 0 & 0 & -2\,\sqrt{\frac{6}{6-\sqrt{6}}}\,t+\frac{2\,t}{\sqrt{6-\sqrt{6}}} & 0 & 0 \\
0 & 0 & 0 & 2\,h-6\,\mu+2\,U & 0 & -\left(\sqrt{3}\,t\right) & 0 & \sqrt{3}\,t & 0 & 0 & 0 \\
0 & 0 & 0 & 0 & 2\,h-6\,\mu+2\,U & 0 & 0 & -\left(\sqrt{6}\,t\right) & 0 & 0 & 0 \\
0 & 0 & 0 & -\left(\sqrt{3}\,t\right) & 0 & 2\,h-6\,\mu+U & t & 0 & 0 & \sqrt{2-2\,\sqrt{\frac{2}{11}}}\,t & -2\,\sqrt{\frac{2}{11\,\left(2+2\,\sqrt{\frac{2}{11}}\right)}}\,t-\frac{2\,t}{\sqrt{2+2\,\sqrt{\frac{2}{11}}}} \\
2\,t & 0 & 0 & 0 & 0 & t & 2\,h-6\,\mu+2\,U & t & 2\,t & 0 & 0 \\
0 & 0 & 0 & \sqrt{3}\,t & -\left(\sqrt{6}\,t\right) & 0 & t & 2\,h-6\,\mu+2\,U & -\left(\sqrt{2}\,t\right) & 0 & \frac{\sqrt{\frac{4-4\,\sqrt{\frac{2}{11}}}{52-8\,\sqrt{22}}}\,t}{2}+\frac{7\,\sqrt{\frac{121-11\,\sqrt{22}}{52-8\,\sqrt{22}}}\,t}{11}-\sqrt{\frac{22-2\,\sqrt{22}}{52-8\,\sqrt{22}}}\,t & \frac{91\,\sqrt{\frac{2+2\,\sqrt{\frac{2}{11}}}{26+4\,\sqrt{22}}}\,t}{24}+\frac{5\,\sqrt{\frac{11+\sqrt{22}}{22\,(26+4\,\sqrt{22})}}\,t}{12}+\sqrt{\frac{11+\sqrt{22}}{26+4\,\sqrt{22}}}\,t \\
-2\,\sqrt{2}\,t & 0 & 0 & 0 & 0 & 0 & 0 & -\left(\sqrt{2}\,t\right) & 2\,h-6\,\mu+2\,U & 0 & 0 \\
0 & -2\,\sqrt{\frac{6}{6+\sqrt{6}}}\,t-\frac{2\,t}{\sqrt{6+\sqrt{6}}} & -2\,\sqrt{\frac{6}{6-\sqrt{6}}}\,t+\frac{2\,t}{\sqrt{6-\sqrt{6}}} & 0 & 0 & 0 & 2\,t & 0 & 0 & 2\,h-6\,\mu+U & \frac{\sqrt{\frac{4-4\,\sqrt{\frac{2}{11}}}{52-8\,\sqrt{22}}}\,t}{2}+\frac{\sqrt{\frac{484-44\,\sqrt{22}}{52-8\,\sqrt{22}}}\,t}{264}+\frac{35\,\sqrt{\frac{121-11\,\sqrt{22}}{52-8\,\sqrt{22}}}\,t}{132}+\sqrt{\frac{22-2\,\sqrt{22}}{52-8\,\sqrt{22}}}\,t & \frac{47\,\sqrt{\frac{2+2\,\sqrt{\frac{2}{11}}}{26+4\,\sqrt{22}}}\,t}{24}+\frac{\sqrt{\frac{11+\sqrt{22}}{22\,(26+4\,\sqrt{22})}}\,t}{12}-\sqrt{\frac{11+\sqrt{22}}{26+4\,\sqrt{22}}}\,t \\
\frac{\sqrt{\frac{4-4\,\sqrt{\frac{2}{11}}}{52-8\,\sqrt{22}}}\,t}{2}+\frac{7\,\sqrt{\frac{121-11\,\sqrt{22}}{52-8\,\sqrt{22}}}\,t}{11}-\sqrt{\frac{22-2\,\sqrt{22}}{52-8\,\sqrt{22}}}\,t & 0 & 0 & 0 & \sqrt{2-2\,\sqrt{\frac{2}{11}}}\,t & 0 & \frac{\sqrt{\frac{4-4\,\sqrt{\frac{2}{11}}}{52-8\,\sqrt{22}}}\,t}{2}+\frac{7\,\sqrt{\frac{121-11\,\sqrt{22}}{52-8\,\sqrt{22}}}\,t}{11}-\sqrt{\frac{22-2\,\sqrt{22}}{52-8\,\sqrt{22}}}\,t & 0 & \frac{\sqrt{\frac{4-4\,\sqrt{\frac{2}{11}}}{52-8\,\sqrt{22}}}\,t}{2}+\frac{\sqrt{\frac{484-44\,\sqrt{22}}{52-8\,\sqrt{22}}}\,t}{264}+\frac{35\,\sqrt{\frac{121-11\,\sqrt{22}}{52-8\,\sqrt{22}}}\,t}{132}+\sqrt{\frac{22-2\,\sqrt{22}}{52-8\,\sqrt{22}}}\,t & \frac{286\,h}{\left(-11+\sqrt{22}\right)^2}-\frac{44\,\sqrt{22}\,h}{\left(-11+\sqrt{22}\right)^2}-\frac{858\,\mu}{\left(-11+\sqrt{22}\right)^2}+\frac{132\,\sqrt{22}\,\mu}{\left(-11+\sqrt{22}\right)^2}+\frac{143\,U}{\left(-11+\sqrt{22}\right)^2}-\frac{22\,\sqrt{22}\,U}{\left(-11+\sqrt{22}\right)^2} & 0 \\
\frac{91\,\sqrt{\frac{2+2\,\sqrt{\frac{2}{11}}}{26+4\,\sqrt{22}}}\,t}{24}+\frac{5\,\sqrt{\frac{11+\sqrt{22}}{22\,(26+4\,\sqrt{22})}}\,t}{12}+\sqrt{\frac{11+\sqrt{22}}{26+4\,\sqrt{22}}}\,t & 0 & 0 & 0 & -2\,\sqrt{\frac{2}{11\,\left(2+2\,\sqrt{\frac{2}{11}}\right)}}\,t-\frac{2\,t}{\sqrt{2+2\,\sqrt{\frac{2}{11}}}} & 0 & \frac{91\,\sqrt{\frac{2+2\,\sqrt{\frac{2}{11}}}{26+4\,\sqrt{22}}}\,t}{24}+\frac{5\,\sqrt{\frac{11+\sqrt{22}}{22\,(26+4\,\sqrt{22})}}\,t}{12}+\sqrt{\frac{11+\sqrt{22}}{26+4\,\sqrt{22}}}\,t & 0 & \frac{47\,\sqrt{\frac{2+2\,\sqrt{\frac{2}{11}}}{26+4\,\sqrt{22}}}\,t}{24}+\frac{\sqrt{\frac{11+\sqrt{22}}{22\,(26+4\,\sqrt{22})}}\,t}{12}-\sqrt{\frac{11+\sqrt{22}}{26+4\,\sqrt{22}}}\,t & 0 & 2\,h-6\,\mu+U
\end{array}\right]
$$