

PDEs expressing the 4-index Q-functions

This appendix contains a list of PDEs, expressing all the 4-index Q -functions that were not elements of the basis for $\Gamma(J, \mathcal{O}(2\Theta^{[5]}))$ as a linear combination of basis elements. The exceptions are Q_{1112} and Q_{1111} , which have not been given since they would require the calculation of C_{55} and C_{59} respectively.

The PDEs are ordered in decreasing weight (as indicated by the number in brackets).

- (-4) $Q_{6666} = -3\wp_{55} + 4\wp_{46}$
- (-5) $Q_{5666} = -2\wp_{45}$
- (-6) $Q_{4666} = 6\lambda_4\wp_{66} - 2\wp_{44} - \frac{3}{2}Q_{5566}$
- (-7) $Q_{4566} = 2\lambda_4\wp_{56} + 2\wp_{36}$
- (-7) $Q_{5556} = 4\lambda_4\wp_{56} + 4\wp_{36}$
- (-8) $Q_{4466} = 4\lambda_4\wp_{46} + \lambda_4\wp_{55} + \wp_{35} + 6\wp_{26} - Q_{4556} + 4\lambda_3$
- (-8) $Q_{5555} = 16\lambda_4\wp_{55} + 4\wp_{35} + 24\wp_{26} - 6Q_{4556} + 16\lambda_3$
- (-9) $Q_{4456} = \frac{8}{3}\lambda_4\wp_{45} + 2\wp_{25} - \frac{4}{3}\wp_{34} - \frac{1}{6}Q_{4555}$
- (-9) $Q_{3666} = 2\lambda_4\wp_{45} - \frac{1}{2}Q_{4555}$
- (-10) $Q_{2666} = -\frac{1}{2}Q_{4455} - \frac{1}{2}Q_{3566} - \frac{1}{2}\lambda_4Q_{5566} + 4\wp_{66}\lambda_3$
- (-10) $Q_{4446} = 6\lambda_4\wp_{44} - 2\wp_{24} - 2\lambda_4^2\wp_{66}$
 $- Q_{4455} + \frac{1}{2}\lambda_4Q_{5566} - \frac{5}{2}Q_{3566} + 4\wp_{66}\lambda_3$
- (-11) $Q_{3466} = 4\wp_{36}\lambda_4 - \frac{1}{2}Q_{3566}$
- (-11) $Q_{4445} = 6\wp_{36}\lambda_4 - 2\wp_{56}\lambda_4^2 + 8\wp_{56}\lambda_3 - 3Q_{2566} - \frac{3}{2}Q_{3556}$
- (-12) $Q_{2466} = 8\wp_{16} - \wp_{33} + 2\lambda_2 - \frac{1}{2}Q_{2456} - Q_{3456} + 4\lambda_4\wp_{26} + 2\lambda_4\wp_{35}$
- (-12) $Q_{3555} = 24\wp_{16} - 8\wp_{33} + 16\lambda_4\wp_{35} - 6Q_{3456}$
- (-12) $Q_{4444} = -12\wp_{16} + 9\wp_{33} + 6\lambda_2 + 12Q_{3456} + 12\wp_{55}\lambda_3 + 4\wp_{46}\lambda_4^2$
 $- 16\wp_{46}\lambda_3 - 3\wp_{55}\lambda_4^2 + 12\lambda_4\wp_{26} - 18\lambda_4\wp_{35} - 6Q_{2556}$
- (-13) $Q_{2555} = 2\wp_{15} - 8\wp_{23} + 16\wp_{25}\lambda_4 - 6Q_{2456}$
- (-13) $Q_{3446} = 6\wp_{15} - 4\wp_{23} + 4\wp_{25}\lambda_4 + \frac{8}{3}\wp_{34}\lambda_4$
 $+ \frac{2}{3}\wp_{45}\lambda_4^2 - \frac{1}{6}Q_{4555}\lambda_4 - 2Q_{2456}$
- (-13) $Q_{3455} = -4\wp_{25}\lambda_4 + \frac{8}{3}\wp_{34}\lambda_4 - \frac{4}{3}\wp_{45}\lambda_4^2 + \frac{1}{3}Q_{4555}\lambda_4 + 2Q_{2456}$
- (-14) $Q_{1666} = -\frac{1}{2}\lambda_4Q_{3566} + Q_{3366} - \frac{1}{2}Q_{3445}$
- (-14) $Q_{2446} = \frac{8}{3}\wp_{14} - 2\wp_{22} + \frac{8}{3}\wp_{24}\lambda_4 - \frac{2}{3}\wp_{66}\lambda_4\lambda_3 + \frac{5}{6}Q_{3366} + Q_{5566}\lambda_3$
 $- \frac{1}{6}Q_{5566}\lambda_4^2 + 2\wp_{44}\lambda_3 - \frac{1}{6}\lambda_4Q_{4455} - \frac{4}{3}\lambda_4Q_{3566} - \frac{7}{6}Q_{3445}$
- (-14) $Q_{2455} = \frac{8}{3}\wp_{14} - 2\wp_{22} + \frac{8}{3}\wp_{24}\lambda_4 - \frac{2}{3}\wp_{66}\lambda_4\lambda_3 - \frac{5}{3}Q_{3366} - Q_{5566}\lambda_3$
 $+ \frac{1}{3}Q_{5566}\lambda_4^2 + 6\wp_{66}\lambda_2 - 2\wp_{44}\lambda_3 + \frac{1}{3}\lambda_4Q_{4455} + \frac{2}{3}\lambda_4Q_{3566}$
 $+ \frac{1}{3}Q_{3445}$

- (-15) $Q_{1566} = -\frac{1}{4}Q_{2445} - \frac{1}{4}Q_{2455}\lambda_4 + \frac{3}{4}\wp_{2366} - \frac{3}{2}\wp_{23}\wp_{66} - 3\wp_{26}\wp_{36}$
 $\quad - \frac{1}{2}\wp_{36}\lambda_3 + \frac{3}{2}\wp_{56}\lambda_2$
- (-15) $Q_{3356} = -\frac{1}{2}Q_{2445} + 3\wp_{36}\lambda_3 + 3\wp_{56}\lambda_2 - \frac{1}{2}Q_{2566}\lambda_4 - \frac{1}{2}Q_{2366}$
- (-15) $Q_{3444} = -\frac{3}{4}Q_{2445} + 4\wp_{36}\lambda_4^2 - \frac{3}{2}Q_{3556}\lambda_4 + \frac{13}{2}\wp_{36}\lambda_3 + \frac{9}{2}\wp_{56}\lambda_2$
 $\quad - \frac{3}{4}Q_{2566}\lambda_4 - \frac{15}{4}Q_{2366}$
- (-16) $Q_{3346} = -2Q_{1466} + 4\lambda_1 - Q_{1556} - Q_{2266} + 16\wp_{16}\lambda_4 + 3\wp_{35}\lambda_3 - \wp_{55}\lambda_2$
 $\quad + 2\wp_{26}\lambda_3 - 2Q_{2356}$
- (-16) $Q_{3355} = 8Q_{1466} - 8\lambda_1 + 6Q_{1556} - 32\wp_{16}\lambda_4 + 4\wp_{35}\lambda_3$
 $\quad - 2Q_{2356}$
- (-16) $Q_{2444} = +2\lambda_4\lambda_2 + 10\lambda_1 + 36\wp_{16}\lambda_4 + \frac{3}{2}\wp_{35}\lambda_3 + \frac{15}{2}\wp_{55}\lambda_2 - Q_{3456}\lambda_4$
 $\quad - \frac{3}{2}Q_{2556}\lambda_4 - 7\wp_{26}\lambda_3 - 6\wp_{46}\lambda_2 + 3\wp_{33}\lambda_4 + 6\lambda_4\wp_{3456}$
 $\quad - 12\lambda_4\wp_{34}\wp_{56} - 12\lambda_4\wp_{35}\wp_{46} - 12\lambda_4\wp_{36}\wp_{45} + 4\wp_{26}\lambda_4^2 - 6\wp_{35}\lambda_4^2$
 $\quad - 9Q_{1466} - 9Q_{1556} + \frac{3}{2}Q_{2266} + 3Q_{2356}$
- (-17) $Q_{1456} = -2\wp_{13} - \wp_{45}\lambda_2 + 2\wp_{25}\wp_{26} + \wp_{22}\wp_{56} + 4\wp_{15}\lambda_4 - Q_{2346}$
 $\quad - \frac{1}{12}Q_{4555}\lambda_3 - \frac{1}{2}\wp_{2256} + \wp_{25}\lambda_3 + \frac{1}{3}\wp_{45}\lambda_4\lambda_3 + \frac{4}{3}\wp_{34}\lambda_3$
- (-17) $Q_{1555} = 4\wp_{13} + 6\wp_{45}\lambda_2 + 3Q_{2256} - 8\wp_{15}\lambda_4 + 6Q_{2346} + \frac{1}{2}Q_{4555}\lambda_3$
 $\quad - 6\wp_{25}\lambda_3 - 2\wp_{45}\lambda_4\lambda_3 - 8\wp_{34}\lambda_3$
- (-17) $Q_{2355} = -4\wp_{13} - 4\wp_{45}\lambda_2 - 2Q_{2256} + 8\wp_{15}\lambda_4 - 2Q_{2346}$
 $\quad + 4\wp_{25}\lambda_3 + 4\wp_{34}\lambda_3$
- (-17) $Q_{3345} = -2\wp_{25}\lambda_3 + \frac{4}{3}\wp_{34}\lambda_3 - \frac{2}{3}\wp_{45}\lambda_4\lambda_3 + 2\wp_{45}\lambda_2 + Q_{2256} + \frac{1}{6}Q_{4555}\lambda_3$
- (-18) $Q_{1446} = -6\wp_{12} + 6\wp_{66}\lambda_1 + \frac{1}{2}Q_{3566}\lambda_4^2 - Q_{1455} + 8\wp_{14}\lambda_4 - Q_{3566}\lambda_3$
 $\quad - Q_{2345} - \frac{1}{2}Q_{3344} - \frac{1}{2}Q_{3366}\lambda_4 + \frac{1}{2}Q_{3445}\lambda_4$
- (-18) $Q_{2246} = 2\wp_{44}\lambda_2 - 4\wp_{66}\lambda_1 - 2\wp_{66}\lambda_4\lambda_2 + \frac{1}{2}Q_{3566}\lambda_3 + Q_{3366}\lambda_4$
 $\quad - Q_{3445}\lambda_4 - Q_{3566}\lambda_4^2 + 2\wp_{24}\lambda_3 + \frac{3}{2}Q_{5566}\lambda_2 + Q_{1455}$
- (-18) $Q_{2255} = -8\wp_{12} - 8\wp_{44}\lambda_2 + 16\wp_{66}\lambda_1 + \frac{32}{3}\wp_{14}\lambda_4 + 8\wp_{66}\lambda_4\lambda_2 - 2\wp_{2345}$
 $\quad - \frac{2}{3}Q_{3566}\lambda_3 - \frac{8}{3}Q_{3366}\lambda_4 + \frac{4}{3}Q_{3445}\lambda_4 + \frac{4}{3}Q_{3566}\lambda_4^2 + \frac{1}{3}Q_{4455}\lambda_3$
 $\quad + \frac{1}{3}\lambda_4\lambda_3\wp_{5566} - \frac{2}{3}\lambda_4\lambda_3\wp_{55}\wp_{66} - \frac{4}{3}\lambda_4\lambda_3\wp_{56}^2 - \frac{8}{3}\wp_{66}\lambda_3^2 + \frac{8}{3}\wp_{24}\lambda_3$
 $\quad + 4\wp_{23}\wp_{45} + 4\wp_{24}\wp_{35} + 4\wp_{25}\wp_{34} - 3Q_{5566}\lambda_2 - 2Q_{1455}$
- (-19) $Q_{1366} = -\frac{3}{10}Q_{2245} - \frac{2}{5}Q_{2344} - \frac{3}{10}Q_{2566}\lambda_3 - \frac{1}{4}Q_{2366}\lambda_4 + \frac{3}{20}Q_{2455}\lambda_4$
 $\quad + \frac{3}{20}Q_{2566}\lambda_4^2 + \frac{12}{5}\wp_{56}\lambda_1 - \frac{3}{10}\wp_{56}\lambda_4\lambda_2 + \frac{7}{10}\wp_{36}\lambda_4\lambda_3$
 $\quad + \frac{9}{5}\wp_{36}\lambda_2 - \frac{1}{4}Q_{3556}\lambda_3$
- (-19) $Q_{3336} = -\frac{3}{5}Q_{2245} + \frac{6}{5}Q_{2344} - \frac{3}{5}Q_{2566}\lambda_3 + \frac{3}{2}Q_{2366}\lambda_4 + \frac{3}{10}Q_{2455}\lambda_4$
 $\quad + \frac{3}{10}Q_{2566}\lambda_4^2 + \frac{38}{5}\wp_{36}\lambda_2 - \frac{16}{5}\wp_{56}\lambda_1 - \frac{3}{5}\wp_{56}\lambda_4\lambda_2$
 $\quad - \frac{33}{5}\wp_{36}\lambda_4\lambda_3 + \frac{3}{2}Q_{3556}\lambda_3$

- (-19)
$$Q_{1445} = -\frac{1}{2}Q_{2245} - Q_{2344} - \frac{1}{2}Q_{2566}\lambda_3 - \frac{3}{2}Q_{2366}\lambda_4 + 8\wp_{56}\lambda_1 + 3\wp_{36}\lambda_2 + \frac{1}{2}Q_{2566}\lambda_4^2 + \frac{1}{2}Q_{2455}\lambda_4 - 2\wp_{56}\lambda_4\lambda_2 + 3\wp_{36}\lambda_4\lambda_3 - \frac{3}{4}Q_{3556}\lambda_3$$
- (-20)
$$Q_{2244} = +2\lambda_3\lambda_2 + 28\lambda_4\lambda_1 + 2\wp_{55}\lambda_4\lambda_2 - 6\wp_{35}\lambda_4\lambda_3 + 3\wp_{33}\lambda_3 - 24\wp_{46}\lambda_1 + 112\wp_{16}\lambda_4^2 - 44\wp_{16}\lambda_3 + 28\wp_{55}\lambda_1 + 9\wp_{35}\lambda_2 + 20Q_{1356} - 6Q_{1444} + 10Q_{1266} - 22Q_{1466}\lambda_4 + Q_{2266}\lambda_4 + 2Q_{2356}\lambda_4 + 2Q_{3456}\lambda_3 - 22Q_{1556}\lambda_4 - Q_{2556}\lambda_3 - 6\wp_{26}\lambda_2$$
- (-20)
$$Q_{2336} = 8\wp_{16}\lambda_3 - 2\wp_{55}\lambda_1 + 2\wp_{35}\lambda_2 - 2Q_{1356} - 2Q_{1266}$$
- (-20)
$$Q_{3335} = -32\lambda_4\lambda_1 + 24\wp_{46}\lambda_1 - 128\wp_{16}\lambda_4^2 + 56\wp_{16}\lambda_3 - 32\wp_{55}\lambda_1 - 30Q_{1356} + 8Q_{1444} - 12Q_{1266} + 24Q_{1466}\lambda_4 + 24Q_{1556}\lambda_4 + 4\wp_{35}\lambda_2$$
- (-21)
$$Q_{1256} = -\frac{1}{2}Q_{2236} - Q_{1346} - \frac{1}{12}Q_{4555}\lambda_2 + \frac{1}{3}\wp_{45}\lambda_4\lambda_2 + 3\wp_{15}\lambda_3 + \frac{4}{3}\wp_{34}\lambda_2 - 2\wp_{45}\lambda_1$$
- (-21)
$$Q_{1355} = \frac{1}{2}Q_{2236} + Q_{1346} + \frac{1}{4}Q_{4555}\lambda_2 - \frac{1}{2}Q_{2335} - \wp_{45}\lambda_4\lambda_2 + \wp_{15}\lambda_3$$
- (-21)
$$Q_{3334} = -\frac{3}{2}Q_{2236} - 3Q_{1346} + \frac{1}{4}Q_{4555}\lambda_2 + \frac{3}{2}Q_{2335} - \wp_{45}\lambda_4\lambda_2 + 9\wp_{15}\lambda_3 + 12\wp_{34}\lambda_2 - 8\wp_{45}\lambda_1$$
- (-22)
$$Q_{1345} = 5\wp_{66}\lambda_0 - \wp_{11} + \frac{16}{15}\wp_{14}\lambda_4^2 + \frac{11}{5}\wp_{66}\lambda_4\lambda_1 - \frac{7}{30}Q_{3566}\lambda_4\lambda_3 - \frac{1}{5}Q_{3344}\lambda_4 - \frac{1}{2}Q_{1255} + \frac{10}{3}\wp_{14}\lambda_3 - \wp_{44}\lambda_1 - Q_{1246} + \frac{2}{15}Q_{3566}\lambda_4^3 - \frac{1}{15}Q_{3366}\lambda_4^2 - \frac{1}{3}Q_{3366}\lambda_3 + \frac{1}{6}Q_{3445}\lambda_3 - \frac{2}{5}Q_{2345}\lambda_4 - \frac{4}{5}\wp_{12}\lambda_4 + \frac{2}{15}Q_{3445}\lambda_4^2$$
- (-22)
$$Q_{2226} = -6\wp_{11} + \frac{7}{2}Q_{3566}\lambda_2 + \frac{1}{2}Q_{4455}\lambda_2 + 6Q_{5566}\lambda_1 + \frac{32}{5}\wp_{14}\lambda_4^2 - \frac{14}{5}\wp_{66}\lambda_4\lambda_1 - \frac{39}{10}Q_{3566}\lambda_4\lambda_3 - \frac{24}{5}\wp_{12}\lambda_4 + 4\wp_{24}\lambda_2 - 10\wp_{66}\lambda_0 + 12\wp_{14}\lambda_3 + 6\wp_{44}\lambda_1 - 2\wp_{66}\lambda_3\lambda_2 - 6Q_{1246} + \frac{4}{5}Q_{3445}\lambda_4^2 - \frac{6}{5}Q_{3344}\lambda_4 - \frac{2}{5}Q_{3366}\lambda_4^2 + \frac{3}{2}Q_{3366}\lambda_3 - \frac{3}{2}Q_{3445}\lambda_3 - \frac{12}{5}Q_{2345}\lambda_4 + \frac{4}{5}Q_{3566}\lambda_4^3 + \frac{1}{2}Q_{5566}\lambda_4\lambda_2$$
- (-22)
$$Q_{2235} = -2\wp_{11} - Q_{3566}\lambda_2 - 4Q_{5566}\lambda_1 - \frac{32}{15}\wp_{14}\lambda_4^2 + \frac{38}{5}\wp_{66}\lambda_4\lambda_1 + \frac{22}{15}Q_{3566}\lambda_4\lambda_3 + \frac{8}{5}\wp_{12}\lambda_4 + 10\wp_{66}\lambda_0 - Q_{1255} + \frac{4}{3}\wp_{14}\lambda_3 - 10\wp_{44}\lambda_1 + 2Q_{1246} - \frac{4}{15}Q_{3445}\lambda_4^2 + \frac{2}{5}Q_{3344}\lambda_4 + \frac{2}{15}Q_{3366}\lambda_4^2 - \frac{4}{3}Q_{3366}\lambda_3 + \frac{2}{3}Q_{3445}\lambda_3 + \frac{4}{5}Q_{2345}\lambda_4 - \frac{4}{15}Q_{3566}\lambda_4^3$$
- (-22)
$$Q_{2334} = -4\wp_{11} - Q_{3566}\lambda_2 + 2Q_{5566}\lambda_1 - \frac{32}{15}\wp_{14}\lambda_4^2 - \frac{32}{5}\wp_{66}\lambda_4\lambda_1 + \frac{7}{15}Q_{3566}\lambda_4\lambda_3 + \frac{8}{5}\wp_{12}\lambda_4 + Q_{1255} + \frac{4}{3}\wp_{14}\lambda_3 + 4\wp_{44}\lambda_1 - \frac{4}{15}Q_{3445}\lambda_4^2 + \frac{2}{5}Q_{3344}\lambda_4 + \frac{2}{15}Q_{3366}\lambda_4^2 + \frac{2}{3}Q_{3366}\lambda_3 - \frac{1}{3}Q_{3445}\lambda_3 + \frac{4}{5}Q_{2345}\lambda_4 - \frac{4}{15}Q_{3566}\lambda_4^3$$

- (-23)
$$\begin{aligned} Q_{1344} = & 6\wp_{36}\lambda_1 + \frac{3}{5}\wp_{36}\lambda_4\lambda_2 - \frac{1}{10}\wp_{56}\lambda_4^2\lambda_2 + \frac{24}{5}\wp_{56}\lambda_4\lambda_1 - 3\wp_{56}\lambda_3\lambda_2 \\ & + \frac{29}{10}\wp_{36}\lambda_4^2\lambda_3 + \wp_{36}\lambda_3^2 + \frac{2}{5}Q_{2566}\lambda_4\lambda_3 - \frac{3}{4}Q_{3556}\lambda_4\lambda_3 - 2Q_{1246} \\ & + 10\wp_{56}\lambda_0 + \frac{1}{20}Q_{2566}\lambda_4^3 + \frac{1}{2}Q_{2445}\lambda_3 - \frac{3}{2}Q_{2366}\lambda_3 \\ & - \frac{3}{4}Q_{2366}\lambda_4^2 - \frac{4}{5}Q_{2344}\lambda_4 - \frac{1}{10}Q_{2245}\lambda_4 + \frac{1}{20}Q_{2445}\lambda_4^2 \end{aligned}$$
- (-23)
$$\begin{aligned} Q_{2225} = & 24\wp_{36}\lambda_1 - \frac{36}{5}\wp_{36}\lambda_4\lambda_2 + \frac{6}{5}\wp_{56}\lambda_4^2\lambda_2 + \frac{52}{5}\wp_{56}\lambda_4\lambda_1 - 7\wp_{56}\lambda_3\lambda_2 \\ & + 3Q_{3556}\lambda_2 - 3\wp_{36}\lambda_3^2 + \frac{27}{10}Q_{2566}\lambda_4\lambda_3 - 3Q_{3556}\lambda_4\lambda_3 \\ & + \frac{66}{5}\wp_{36}\lambda_4^2\lambda_3 - 6Q_{1246} + 20\wp_{56}\lambda_0 - \frac{3}{5}Q_{2566}\lambda_4^3 + \frac{3}{2}Q_{2445}\lambda_3 \\ & - \frac{3}{5}Q_{2445}\lambda_4^2 - 3Q_{2366}\lambda_4^2 - \frac{3}{2}Q_{2366}\lambda_3 - \frac{12}{5}Q_{2344}\lambda_4 \\ & - 3Q_{2566}\lambda_2 + \frac{6}{5}Q_{2245}\lambda_4 \end{aligned}$$
- (-23)
$$\begin{aligned} Q_{2234} = & -4\wp_{36}\lambda_1 + \frac{14}{5}\wp_{36}\lambda_4\lambda_2 + \frac{8}{5}\wp_{56}\lambda_4^2\lambda_2 - \frac{28}{5}\wp_{56}\lambda_4\lambda_1 + \frac{3}{2}\wp_{56}\lambda_3\lambda_2 \\ & - \frac{29}{5}\wp_{36}\lambda_4^2\lambda_3 - \frac{1}{2}\wp_{36}\lambda_3^2 - \frac{1}{20}Q_{2566}\lambda_4\lambda_3 + \frac{3}{2}Q_{3556}\lambda_4\lambda_3 \\ & + 2Q_{1246} - \frac{1}{10}Q_{2566}\lambda_4^3 - \frac{1}{4}Q_{2445}\lambda_3 + \frac{3}{4}Q_{2366}\lambda_3 - \frac{1}{10}Q_{2445}\lambda_4^2 \\ & + \frac{3}{2}Q_{2366}\lambda_4^2 + \frac{8}{5}Q_{2344}\lambda_4 + \frac{8}{5}Q_{2245}\lambda_4 - \frac{3}{2}Q_{3556}\lambda_2 \end{aligned}$$
- (-24)
$$Q_{1336} = \wp_{35}\lambda_1 - 2\wp_{26}\lambda_1 + 4\wp_{46}\lambda_0 - 3\wp_{55}\lambda_0 + 4\wp_{16}\lambda_2 - Q_{1166}$$
- (-24)
$$\begin{aligned} Q_{3333} = & -256\wp_{16}\lambda_4^3 - 50\wp_{35}\lambda_1 + 16\wp_{16}\lambda_4\lambda_3 - 72\wp_{55}\lambda_4\lambda_1 - 32\lambda_3\lambda_1 \\ & + 4\wp_{33}\lambda_2 + 48\wp_{46}\lambda_4\lambda_1 - 64\lambda_4^2\lambda_1 + 6Q_{1166} - 36Q_{1266}\lambda_4 \\ & + 72\wp_{46}\lambda_0 - 72Q_{1356}\lambda_4 - 54\wp_{55}\lambda_0 + 16Q_{1444}\lambda_4 + 48Q_{1556}\lambda_4^2 \\ & + 24Q_{1466}\lambda_3 + 12Q_{1244} + 36\wp_{26}\lambda_1 + 48Q_{1466}\lambda_4^2 + 24Q_{1556}\lambda_3 \end{aligned}$$
- (-24)
$$\begin{aligned} Q_{2224} = & 6\lambda_2^2 - 6Q_{1244} - 3\wp_{26}\lambda_3^2 - 40\wp_{46}\lambda_0 + 9\wp_{33}\lambda_2 + 18\lambda_3\lambda_1 \\ & + 48\lambda_4^2\lambda_1 + 192\wp_{16}\lambda_4^3 - \frac{9}{2}\wp_{35}\lambda_3^2 + 3Q_{2356}\lambda_3 + 24Q_{1266}\lambda_4 \\ & - 24\wp_{26}\lambda_1 + 48Q_{1356}\lambda_4 - 12Q_{1444}\lambda_4 - 12\wp_{16}\lambda_2 - 36Q_{1556}\lambda_4^2 \\ & - 15Q_{1466}\lambda_3 + 36\wp_{35}\lambda_1 - 36Q_{1466}\lambda_4^2 + 3Q_{3456}\lambda_2 + \frac{3}{2}Q_{2266}\lambda_3 \\ & - 15Q_{1556}\lambda_3 + \frac{3}{2}Q_{2556}\lambda_2 + 30\wp_{55}\lambda_0 + 54\wp_{55}\lambda_4\lambda_1 - 24\wp_{16}\lambda_4\lambda_3 \\ & + 2\wp_{46}\lambda_3\lambda_2 + \frac{3}{2}\wp_{55}\lambda_3\lambda_2 - 40\wp_{46}\lambda_4\lambda_1 \end{aligned}$$
- (-25)
$$\begin{aligned} Q_{1236} = & 2\wp_{15}\lambda_2 + \frac{4}{3}\wp_{34}\lambda_1 - 3\wp_{45}\lambda_0 - \wp_{25}\lambda_1 + \frac{1}{3}\wp_{45}\lambda_4\lambda_1 \\ & - \frac{1}{2}Q_{1156} - \frac{1}{12}Q_{4555}\lambda_1 \end{aligned}$$
- (-25)
$$\begin{aligned} Q_{1335} = & 4\wp_{15}\lambda_2 + \frac{4}{3}\wp_{34}\lambda_1 - 2\wp_{45}\lambda_0 - 2\wp_{25}\lambda_1 - \frac{2}{3}\wp_{45}\lambda_4\lambda_1 \\ & - Q_{1156} + \frac{1}{6}Q_{4555}\lambda_1 \end{aligned}$$
- (-25)
$$\begin{aligned} Q_{2333} = & 4\wp_{34}\lambda_1 + 4\wp_{23}\lambda_2 - 6\wp_{45}\lambda_0 - 2\wp_{25}\lambda_1 - 2\wp_{45}\lambda_4\lambda_1 \\ & + 3Q_{1156} + \frac{1}{2}Q_{4555}\lambda_1 \end{aligned}$$

- (-26)
$$\begin{aligned} Q_{1235} = & \frac{4}{3}\wp_{66}\lambda_3\lambda_1 + 8\wp_{66}\lambda_4\lambda_0 - \frac{4}{3}\wp_{24}\lambda_1 - 8\wp_{44}\lambda_0 - \frac{1}{2}Q_{1155} \\ & - \frac{1}{6}Q_{5566}\lambda_4\lambda_1 + \frac{1}{3}Q_{3566}\lambda_4\lambda_2 - \frac{5}{2}Q_{5566}\lambda_0 + \frac{8}{3}\wp_{14}\lambda_2 \\ & - \frac{2}{3}Q_{3366}\lambda_2 - \frac{2}{3}Q_{3566}\lambda_1 + \frac{1}{3}Q_{3445}\lambda_2 - \frac{1}{6}Q_{4455}\lambda_1 \end{aligned}$$
- (-26)
$$\begin{aligned} Q_{1226} = & \frac{8}{5}\wp_{14}\lambda_4\lambda_3 + \frac{2}{15}\wp_{66}\lambda_3\lambda_1 - 6\wp_{66}\lambda_4\lambda_0 + \frac{2}{3}\wp_{24}\lambda_1 + 2\wp_{44}\lambda_0 \\ & + \frac{1}{3}Q_{5566}\lambda_4\lambda_1 - \frac{1}{10}Q_{3366}\lambda_4\lambda_3 + \frac{1}{5}Q_{3445}\lambda_4\lambda_3 + \frac{1}{5}Q_{3566}\lambda_4^2\lambda_3 \\ & - \frac{1}{6}Q_{3566}\lambda_4\lambda_2 + \frac{5}{2}Q_{5566}\lambda_0 + \frac{8}{3}\wp_{14}\lambda_2 - \frac{6}{5}\wp_{12}\lambda_3 - \frac{3}{10}Q_{3344}\lambda_3 \\ & + \frac{1}{3}Q_{4455}\lambda_1 + \frac{1}{3}Q_{3366}\lambda_2 + \frac{11}{6}Q_{3566}\lambda_1 - \frac{1}{6}Q_{3445}\lambda_2 - Q_{1146} \\ & - \frac{3}{5}Q_{3566}\lambda_3^2 - \frac{3}{5}Q_{2345}\lambda_3 \end{aligned}$$
- (-26)
$$\begin{aligned} Q_{2233} = & -\frac{16}{5}\wp_{14}\lambda_4\lambda_3 - \frac{64}{15}\wp_{66}\lambda_3\lambda_1 + 4\wp_{66}\lambda_4\lambda_0 - \frac{4}{3}\wp_{24}\lambda_1 - 4\wp_{44}\lambda_0 \\ & + Q_{1155} + \frac{1}{3}Q_{5566}\lambda_4\lambda_1 + \frac{1}{5}Q_{3366}\lambda_4\lambda_3 - \frac{2}{5}Q_{3445}\lambda_4\lambda_3 \\ & - \frac{2}{5}Q_{3566}\lambda_4^2\lambda_3 - \frac{2}{3}Q_{3566}\lambda_4\lambda_2 + \frac{8}{3}\wp_{14}\lambda_2 - 8\wp_{11}\lambda_4 + \frac{32}{5}\wp_{12}\lambda_3 \\ & + \frac{3}{5}Q_{3344}\lambda_3 + \frac{1}{3}Q_{4455}\lambda_1 + \frac{1}{3}Q_{3366}\lambda_2 - \frac{5}{3}Q_{3566}\lambda_1 - \frac{2}{3}Q_{3445}\lambda_2 \\ & + 2Q_{1146} + \frac{6}{5}Q_{3566}\lambda_3^2 + \frac{6}{5}Q_{2345}\lambda_3 \end{aligned}$$
- (-26)
$$\begin{aligned} Q_{1334} = & -2\wp_{66}\lambda_4\lambda_0 - 2\wp_{24}\lambda_1 + 6\wp_{44}\lambda_0 + 4\wp_{14}\lambda_2 - Q_{1146} \\ & - \frac{1}{2}Q_{3566}\lambda_1 + \frac{5}{2}Q_{5566}\lambda_0 \end{aligned}$$
- (-27)
$$\begin{aligned} Q_{1225} = & -\frac{13}{10}\wp_{36}\lambda_3\lambda_2 + \frac{33}{10}\wp_{36}\lambda_4\lambda_3^2 + 2\wp_{56}\lambda_4\lambda_0 + \frac{8}{5}\wp_{56}\lambda_3\lambda_1 - \frac{3}{2}\wp_{56}\lambda_2^2 \\ & + \frac{1}{4}Q_{2566}\lambda_4\lambda_2 - \frac{3}{20}Q_{2445}\lambda_4\lambda_3 - \frac{3}{20}Q_{2566}\lambda_4^2\lambda_3 - \frac{3}{4}Q_{2366}\lambda_4\lambda_3 \\ & - Q_{1145} + \frac{3}{2}Q_{3556}\lambda_1 - \frac{3}{4}Q_{2366}\lambda_2 - \frac{3}{5}Q_{2344}\lambda_3 + \frac{1}{4}Q_{2445}\lambda_2 \\ & + \frac{3}{10}Q_{2245}\lambda_3 - \frac{3}{4}Q_{3556}\lambda_3^2 - Q_{2566}\lambda_1 + \frac{3}{10}Q_{2566}\lambda_3^2 \\ & + \frac{3}{10}\wp_{56}\lambda_4\lambda_3\lambda_2 + 10\wp_{36}\lambda_0 \end{aligned}$$
- (-27)
$$\begin{aligned} Q_{1234} = & \frac{1}{2}\wp_{36}\lambda_3\lambda_2 + 3\wp_{56}\lambda_4\lambda_0 + \frac{1}{4}Q_{2566}\lambda_4\lambda_2 - \frac{1}{2}Q_{1145} - \frac{3}{4}Q_{3556}\lambda_1 \\ & - \frac{3}{4}Q_{2366}\lambda_2 + \frac{1}{4}Q_{2445}\lambda_2 + 2\wp_{36}\lambda_4\lambda_1 + \frac{1}{2}Q_{2566}\lambda_1 - \frac{3}{2}\wp_{56}\lambda_2^2 \\ & + 5\wp_{36}\lambda_0 \end{aligned}$$
- (-27)
$$\begin{aligned} Q_{2223} = & -\frac{38}{5}\wp_{36}\lambda_3\lambda_2 - \frac{27}{5}\wp_{36}\lambda_4\lambda_3^2 + 6\wp_{56}\lambda_4\lambda_0 - \frac{24}{5}\wp_{56}\lambda_3\lambda_1 \\ & + \frac{3}{5}\wp_{56}\lambda_4\lambda_3\lambda_2 - \frac{3}{10}Q_{2445}\lambda_4\lambda_3 - \frac{3}{10}Q_{2566}\lambda_4^2\lambda_3 + \frac{3}{2}Q_{2366}\lambda_4\lambda_3 \\ & + 3Q_{1145} - \frac{3}{2}Q_{3556}\lambda_1 + 3Q_{2366}\lambda_2 + \frac{9}{5}Q_{2344}\lambda_3 + \frac{3}{5}Q_{2566}\lambda_3^2 \\ & + \frac{3}{5}Q_{2245}\lambda_3 + 8\wp_{36}\lambda_4\lambda_1 + \frac{3}{2}Q_{3556}\lambda_3^2 - 3Q_{2566}\lambda_1 - 10\wp_{36}\lambda_0 \end{aligned}$$
- (-28)
$$\begin{aligned} Q_{1224} = & 12\lambda_4\lambda_3\lambda_1 - 3Q_{1444}\lambda_3 - 8\wp_{46}\lambda_3\lambda_1 + 48\wp_{16}\lambda_4^2\lambda_3 + 16\wp_{16}\lambda_4\lambda_2 \\ & + 3\wp_{35}\lambda_4\lambda_1 - 2\wp_{26}\lambda_4\lambda_1 + 3\wp_{55}\lambda_4\lambda_0 - 4\wp_{46}\lambda_4\lambda_0 + 12\wp_{55}\lambda_3\lambda_1 \\ & - 3Q_{1466}\lambda_2 + 6Q_{1266}\lambda_3 + 6\lambda_2\lambda_1 - 9Q_{1556}\lambda_4\lambda_3 - 9Q_{1466}\lambda_4\lambda_3 \\ & - 24\wp_{16}\lambda_3^2 + 3\wp_{33}\lambda_1 + 15\wp_{35}\lambda_0 + 12Q_{1356}\lambda_3 - 10\wp_{26}\lambda_0 \\ & - 4\wp_{16}\lambda_1 - Q_{1155} - 3Q_{1556}\lambda_2 \end{aligned}$$

- (-28)
$$\begin{aligned} Q_{2222} = & +6Q_{2266}\lambda_2 + 16\lambda_4\lambda_3\lambda_1 + 42\wp_{35}\lambda_4\lambda_1 + 12\wp_{33}\lambda_4\lambda_2 - 30\wp_{35}\lambda_0 \\ & - 72\wp_{46}\lambda_4\lambda_0 - 48\wp_{16}\lambda_4\lambda_2 - 12Q_{1556}\lambda_4\lambda_3 + 72\wp_{55}\lambda_4^2\lambda_1 \\ & - 16\wp_{26}\lambda_3\lambda_2 - 28\wp_{26}\lambda_4\lambda_1 - 12Q_{1466}\lambda_4\lambda_3 - 48\wp_{46}\lambda_4^2\lambda_1 \\ & - 12\wp_{35}\lambda_3\lambda_2 - 80\wp_{16}\lambda_4^2\lambda_3 - 12Q_{1244}\lambda_4 + 6Q_{1144} - 3\wp_{33}\lambda_3^2 \\ & + 64\lambda_4^3\lambda_1 + 256\wp_{16}\lambda_4^4 + 3\wp_{55}\lambda_2^2 + 8\lambda_4\lambda_2^2 + 36Q_{1266}\lambda_4^2 \\ & - 12\wp_{55}\lambda_3\lambda_1 + 12Q_{2356}\lambda_2 - 48Q_{1466}\lambda_4^3 - 16Q_{1444}\lambda_4^2 \\ & + 72Q_{1356}\lambda_4^2 - 48Q_{1556}\lambda_4^3 - 6Q_{2556}\lambda_1 + 12\wp_{46}\lambda_2^2 - 2\lambda_3^2\lambda_2 \\ & - 12Q_{1266}\lambda_3 + 4\lambda_2\lambda_1 + 52\wp_{16}\lambda_3^2 + 18\wp_{33}\lambda_1 + 54\wp_{55}\lambda_4\lambda_0 \\ & - 24Q_{1356}\lambda_3 + 20\wp_{26}\lambda_0 - 24\wp_{16}\lambda_1 + 4Q_{1444}\lambda_3 + 12Q_{3456}\lambda_1 \end{aligned}$$
- (-29)
$$Q_{1136} = -4\wp_{25}\lambda_0 + \frac{2}{3}\wp_{45}\lambda_4\lambda_0 + 2\wp_{15}\lambda_1 + \frac{8}{3}\wp_{34}\lambda_0 - \frac{1}{6}Q_{4555}\lambda_0$$
- (-29)
$$Q_{1333} = 4\wp_{13}\lambda_2 - 12\wp_{25}\lambda_0 - 4\wp_{45}\lambda_4\lambda_0 + 4\wp_{15}\lambda_1 + 8\wp_{34}\lambda_0 + Q_{4555}\lambda_0$$
- (-30)
$$\begin{aligned} Q_{1126} = & \frac{16}{15}\wp_{14}\lambda_4\lambda_2 + \frac{6}{5}\wp_{66}\lambda_2\lambda_1 - 4\wp_{66}\lambda_3\lambda_0 + \frac{1}{2}Q_{5566}\lambda_4\lambda_0 \\ & + \frac{1}{6}Q_{3566}\lambda_4\lambda_1 + \frac{2}{15}Q_{3445}\lambda_4\lambda_2 + \frac{2}{15}Q_{3566}\lambda_4^2\lambda_2 - \frac{2}{5}Q_{3566}\lambda_3\lambda_2 \\ & + \frac{1}{6}Q_{3445}\lambda_1 + \frac{4}{3}\wp_{14}\lambda_1 - \frac{4}{5}\wp_{12}\lambda_2 + \frac{1}{2}Q_{4455}\lambda_0 - \frac{1}{5}Q_{3344}\lambda_2 \\ & - \frac{3}{5}Q_{3566}\lambda_0 + \frac{1}{6}Q_{3366}\lambda_1 - \frac{2}{5}Q_{2345}\lambda_2 - \frac{1}{15}Q_{3366}\lambda_4\lambda_2 \end{aligned}$$
- (-30)
$$\begin{aligned} Q_{1135} = & \frac{16}{3}\wp_{66}\lambda_3\lambda_0 - \frac{16}{3}\wp_{24}\lambda_0 - \frac{2}{3}Q_{5566}\lambda_4\lambda_0 + \frac{1}{3}Q_{3566}\lambda_4\lambda_1 \\ & + \frac{8}{3}\wp_{14}\lambda_1 + \frac{1}{3}Q_{3445}\lambda_1 - \frac{2}{3}Q_{4455}\lambda_0 - \frac{5}{3}Q_{3566}\lambda_0 - \frac{2}{3}Q_{3366}\lambda_1 \end{aligned}$$
- (-30)
$$\begin{aligned} Q_{1233} = & -\frac{16}{15}\wp_{14}\lambda_4\lambda_2 - \frac{6}{5}\wp_{66}\lambda_2\lambda_1 + \frac{10}{3}\wp_{66}\lambda_3\lambda_0 - \frac{16}{3}\wp_{24}\lambda_0 + \frac{16}{3}\wp_{14}\lambda_1 \\ & + \frac{1}{15}Q_{3366}\lambda_4\lambda_2 - \frac{1}{3}Q_{3566}\lambda_4\lambda_1 - \frac{2}{15}Q_{3445}\lambda_4\lambda_2 - \frac{2}{15}Q_{3566}\lambda_4^2\lambda_2 \\ & + \frac{2}{5}Q_{2345}\lambda_2 - 2\wp_{11}\lambda_3 + \frac{24}{5}\wp_{12}\lambda_2 - 2\wp_{22}\lambda_1 - \frac{1}{3}Q_{3445}\lambda_1 \\ & + \frac{2}{5}Q_{3566}\lambda_3\lambda_2 + \frac{1}{3}Q_{4455}\lambda_0 + \frac{1}{5}Q_{3344}\lambda_2 - \frac{5}{3}Q_{3566}\lambda_0 \\ & - \frac{1}{3}Q_{3366}\lambda_1 + \frac{1}{3}Q_{5566}\lambda_4\lambda_0 \end{aligned}$$
- (-31)
$$\begin{aligned} Q_{1125} = & 2\wp_{36}\lambda_3\lambda_1 + \frac{11}{5}\wp_{36}\lambda_4\lambda_3\lambda_2 - \frac{1}{2}Q_{2366}\lambda_4\lambda_2 + \frac{1}{5}Q_{2566}\lambda_3\lambda_2 \\ & - \frac{1}{2}Q_{3556}\lambda_3\lambda_2 - \frac{1}{10}Q_{2566}\lambda_4^2\lambda_2 - \frac{1}{10}Q_{2445}\lambda_4\lambda_2 + 2Q_{3556}\lambda_0 \\ & + \frac{1}{5}Q_{2245}\lambda_2 + \frac{1}{5}\wp_{56}\lambda_4\lambda_2^2 - Q_{2366}\lambda_1 - Q_{2566}\lambda_0 - \frac{2}{5}Q_{2344}\lambda_2 \\ & + \frac{2}{5}\wp_{56}\lambda_2\lambda_1 - \frac{6}{5}\wp_{36}\lambda_2^2 \end{aligned}$$
- (-31)
$$\begin{aligned} Q_{1223} = & \frac{1}{2}Q_{2445}\lambda_1 - \frac{9}{5}\wp_{36}\lambda_2^2 - \frac{3}{20}Q_{2566}\lambda_4^2\lambda_2 + \frac{1}{4}Q_{2366}\lambda_4\lambda_2 \\ & + \frac{1}{4}Q_{3556}\lambda_3\lambda_2 + \frac{3}{10}Q_{2566}\lambda_3\lambda_2 - \frac{7}{10}\wp_{36}\lambda_4\lambda_3\lambda_2 + \frac{3}{10}Q_{2245}\lambda_2 \\ & + \frac{1}{2}Q_{2366}\lambda_1 + 6\wp_{56}\lambda_3\lambda_0 - Q_{3556}\lambda_0 - \frac{3}{20}Q_{2445}\lambda_4\lambda_2 \\ & + \frac{1}{2}Q_{2566}\lambda_4\lambda_1 - 2Q_{2566}\lambda_0 + \frac{2}{5}Q_{2344}\lambda_2 - \frac{27}{5}\wp_{56}\lambda_2\lambda_1 \\ & + 8\wp_{36}\lambda_4\lambda_0 - \wp_{36}\lambda_3\lambda_1 + \frac{3}{10}\wp_{56}\lambda_4\lambda_2^2 \end{aligned}$$

$$\begin{aligned}
(-31) \quad Q_{1134} &= \frac{1}{4}\lambda_4\lambda_1\wp_{2566} + 4\wp_{36}\lambda_4\lambda_0 - \frac{3}{4}Q_{2366}\lambda_1 - \frac{3}{2}\wp_{56}\lambda_2\lambda_1 + 2Q_{2566}\lambda_0 \\
&\quad + \frac{1}{2}\wp_{36}\lambda_3\lambda_1 - \frac{1}{2}\lambda_4\lambda_1\wp_{25}\wp_{66} + \frac{1}{4}Q_{2445}\lambda_1 - \frac{3}{2}Q_{3556}\lambda_0 \\
&\quad - \lambda_4\lambda_1\wp_{26}\wp_{56} \\
(-32) \quad Q_{1124} &= 2\lambda_1^2 + \wp_{26}\lambda_3\lambda_1 - 6Q_{1466}\lambda_4\lambda_2 - 6Q_{1556}\lambda_4\lambda_2 + 6\wp_{35}\lambda_4\lambda_0 \\
&\quad + \frac{15}{2}\wp_{55}\lambda_2\lambda_1 + 8\lambda_4\lambda_2\lambda_1 - 16\wp_{16}\lambda_3\lambda_2 + 32\wp_{16}\lambda_4^2\lambda_2 - 4\wp_{16}\lambda_0 \\
&\quad + \frac{3}{2}\wp_{35}\lambda_3\lambda_1 - 6\wp_{46}\lambda_2\lambda_1 - 4\wp_{26}\lambda_4\lambda_0 + \frac{1}{2}Q_{2556}\lambda_0 + 8\wp_{16}\lambda_4\lambda_1 \\
&\quad - Q_{1556}\lambda_1 - Q_{2356}\lambda_1 - Q_{3456}\lambda_0 + 2\lambda_2\lambda_0 + 4Q_{1266}\lambda_2 \\
&\quad + 8Q_{1356}\lambda_2 - \frac{1}{2}Q_{2266}\lambda_1 + 3\wp_{33}\lambda_0 - Q_{1466}\lambda_1 - 2Q_{1444}\lambda_2 \\
(-32) \quad Q_{1222} &= 4\lambda_1^2 - 18\wp_{26}\lambda_3\lambda_1 - 6Q_{1466}\lambda_4\lambda_2 - 6Q_{1556}\lambda_4\lambda_2 + 9\wp_{55}\lambda_2\lambda_1 \\
&\quad + 12\lambda_4\lambda_2\lambda_1 - 12\wp_{16}\lambda_3\lambda_2 + 32\wp_{16}\lambda_4^2\lambda_2 + 8\wp_{16}\lambda_4\lambda_1 \\
&\quad + 64\wp_{16}\lambda_4^3\lambda_3 - 4\wp_{16}\lambda_4\lambda_3^2 + 18Q_{1356}\lambda_4\lambda_3 + 9Q_{1266}\lambda_4\lambda_3 \\
&\quad - 24\wp_{46}\lambda_3\lambda_0 + 18\wp_{55}\lambda_3\lambda_0 + 16\lambda_4^2\lambda_3\lambda_1 - 4Q_{1444}\lambda_4\lambda_3 \\
&\quad - 12Q_{1466}\lambda_4^2\lambda_3 - 12Q_{1556}\lambda_4^2\lambda_3 + 6\wp_{33}\lambda_4\lambda_1 - 12\wp_{46}\lambda_4\lambda_3\lambda_1 \\
&\quad + 18\wp_{55}\lambda_4\lambda_3\lambda_1 - 3Q_{2556}\lambda_0 - 16\wp_{16}\lambda_0 + 8\lambda_3^2\lambda_1 - 6Q_{1556}\lambda_3^2 \\
&\quad - 3Q_{1244}\lambda_3 - 6Q_{1466}\lambda_3^2 - 6Q_{1556}\lambda_1 + 6Q_{2356}\lambda_1 + 6Q_{3456}\lambda_0 \\
&\quad + 8\lambda_2\lambda_0 + 3Q_{1266}\lambda_2 - 2Q_{1444}\lambda_2 + 6Q_{1356}\lambda_2 + 3Q_{2266}\lambda_1 \\
&\quad + 12\wp_{33}\lambda_0 - 6Q_{1466}\lambda_1 + 9\wp_{35}\lambda_3\lambda_1 \\
(-34) \quad Q_{1116} &= -4\wp_{66}\lambda_2\lambda_0 - \frac{3}{5}Q_{3566}\lambda_3\lambda_1 + \frac{3}{2}Q_{3566}\lambda_4\lambda_0 - \frac{1}{10}Q_{3366}\lambda_4\lambda_1 \\
&\quad + \frac{1}{5}Q_{3445}\lambda_4\lambda_1 + \frac{1}{5}Q_{3566}\lambda_4^2\lambda_1 - \frac{3}{5}Q_{2345}\lambda_1 + \frac{14}{5}\wp_{66}\lambda_1^2 \\
&\quad + \frac{3}{2}Q_{3445}\lambda_0 - \frac{3}{10}Q_{3344}\lambda_1 - \frac{6}{5}\wp_{12}\lambda_1 + \frac{8}{5}\wp_{14}\lambda_4\lambda_1 \\
(-34) \quad Q_{1133} &= 8\wp_{66}\lambda_2\lambda_0 + \frac{2}{5}Q_{3566}\lambda_3\lambda_1 - \frac{2}{3}Q_{3566}\lambda_4\lambda_0 + \frac{1}{15}Q_{3366}\lambda_4\lambda_1 \\
&\quad - \frac{2}{15}Q_{3566}\lambda_4^2\lambda_1 + \frac{2}{5}Q_{2345}\lambda_1 + \frac{32}{3}\wp_{14}\lambda_0 - 8\wp_{22}\lambda_0 - \frac{5}{3}Q_{3366}\lambda_0 \\
&\quad - \frac{16}{5}\wp_{66}\lambda_1^2 - \frac{16}{15}\wp_{14}\lambda_4\lambda_1 - \frac{2}{3}Q_{3445}\lambda_0 + \frac{1}{5}Q_{3344}\lambda_1 + \frac{24}{5}\wp_{12}\lambda_1 \\
&\quad - \frac{2}{15}Q_{3445}\lambda_4\lambda_1 \\
(-35) \quad Q_{1115} &= -\frac{3}{4}Q_{2445}\lambda_0 + \frac{33}{10}\wp_{36}\lambda_4\lambda_3\lambda_1 + \frac{3}{10}\wp_{56}\lambda_4\lambda_2\lambda_1 + \frac{3}{10}Q_{2566}\lambda_3\lambda_1 \\
&\quad - \frac{3}{20}Q_{2566}\lambda_4^2\lambda_1 - \frac{3}{20}Q_{2445}\lambda_4\lambda_1 - \frac{3}{4}Q_{2366}\lambda_4\lambda_1 - \frac{3}{4}Q_{3556}\lambda_3\lambda_1 \\
&\quad + \frac{3}{4}Q_{2566}\lambda_4\lambda_0 + 2\frac{1}{2}\wp_{36}\lambda_3\lambda_0 + \frac{1}{2}\wp_{56}\lambda_2\lambda_0 - \frac{3}{5}Q_{2344}\lambda_1 \\
&\quad - \frac{15}{4}Q_{2366}\lambda_0 + \frac{8}{5}\wp_{56}\lambda_1^2 - \frac{9}{5}\wp_{36}\lambda_2\lambda_1 + \frac{3}{10}Q_{2245}\lambda_1 \\
(-35) \quad Q_{1123} &= Q_{2445}\lambda_0 + \frac{2}{5}\wp_{36}\lambda_4\lambda_3\lambda_1 + \frac{2}{5}\wp_{56}\lambda_4\lambda_2\lambda_1 + \frac{2}{5}Q_{2566}\lambda_3\lambda_1 \\
&\quad + \frac{3}{10}Q_{2245}\lambda_1 - \frac{1}{5}Q_{2566}\lambda_4^2\lambda_1 - \frac{1}{5}Q_{2445}\lambda_4\lambda_1 + Q_{2566}\lambda_4\lambda_0 \\
&\quad + 2\wp_{36}\lambda_3\lambda_0 - 2\wp_{56}\lambda_2\lambda_0 + \frac{1}{5}Q_{2344}\lambda_1 + \frac{2}{5}Q_{2245}\lambda_1 - \frac{16}{5}\wp_{56}\lambda_1^2 \\
&\quad - \frac{12}{5}\wp_{36}\lambda_2\lambda_1
\end{aligned}$$

$$\begin{aligned}
(-36) \quad Q_{1114} &= 6\wp_{26}\lambda_3\lambda_0 - 3\wp_{55}\lambda_2\lambda_0 - 4\wp_{46}\lambda_2\lambda_0 + 48\wp_{16}\lambda_4^2\lambda_1 - 24\wp_{16}\lambda_3\lambda_1 \\
&\quad + 3Q_{2266}\lambda_0 + 12Q_{1356}\lambda_1 + 9\wp_{35}\lambda_3\lambda_0 + 3Q_{1466}\lambda_0 + 3Q_{1556}\lambda_0 \\
&\quad + 6Q_{1266}\lambda_1 - 3Q_{1444}\lambda_1 - 6Q_{2356}\lambda_0 - 9Q_{1466}\lambda_4\lambda_1 \\
&\quad + 12\lambda_4\lambda_1^2 - 8\wp_{46}\lambda_1^2 + 12\wp_{55}\lambda_1^2 - 6\lambda_0\wp_{2266} + 12\lambda_0\wp_{22}\wp_{66} \\
&\quad + 24\lambda_0\wp_{26}^2 - 9Q_{1556}\lambda_4\lambda_1 \\
(-36) \quad Q_{1122} &= -2Q_{1244}\lambda_2 + \frac{40}{3}\lambda_4\lambda_1^2 - 8Q_{1556}\lambda_0 + 3Q_{2266}\lambda_0 + 12Q_{1356}\lambda_1 \\
&\quad - 8\wp_{46}\lambda_1^2 - 8Q_{1466}\lambda_0 + 12\wp_{55}\lambda_1^2 - \frac{10}{3}Q_{1444}\lambda_1 + 6Q_{1266}\lambda_1 \\
&\quad + 6Q_{2356}\lambda_0 + \wp_{33}\lambda_3\lambda_1 + \frac{20}{3}\lambda_1\lambda_0 - \frac{8}{3}\wp_{16}\lambda_4\lambda_3\lambda_2 + \frac{32}{3}\lambda_4^2\lambda_2\lambda_1 \\
&\quad + \frac{16}{3}\lambda_4\lambda_2\lambda_0 + 6\lambda_3\lambda_2\lambda_1 + 9\wp_{35}\lambda_2\lambda_1 - \frac{8}{3}Q_{1444}\lambda_4\lambda_2 \\
&\quad + 8\wp_{33}\lambda_4\lambda_0 + \frac{128}{3}\wp_{16}\lambda_4^3\lambda_2 - 6\wp_{26}\lambda_2\lambda_1 - 8Q_{1556}\lambda_4^2\lambda_2 \\
&\quad - 8Q_{1466}\lambda_4^2\lambda_2 + 6Q_{1266}\lambda_4\lambda_2 - 4Q_{1466}\lambda_3\lambda_2 + 12Q_{1356}\lambda_4\lambda_2 \\
&\quad - 4Q_{1556}\lambda_3\lambda_2 - 8\wp_{46}\lambda_4\lambda_2\lambda_1 + 12\wp_{55}\lambda_4\lambda_2\lambda_1 - 10Q_{1556}\lambda_4\lambda_1 \\
&\quad - 10Q_{1466}\lambda_4\lambda_1 - \frac{76}{3}\wp_{16}\lambda_3\lambda_1 - 8\wp_{46}\lambda_2\lambda_0 + \frac{160}{3}\wp_{16}\lambda_4^2\lambda_1 \\
&\quad - 12\wp_{26}\lambda_3\lambda_0 + 12\wp_{55}\lambda_2\lambda_0 + 16\wp_{16}\lambda_4\lambda_0 \\
(-39) \quad Q_{1113} &= -2\wp_{36}\lambda_1^2 - \wp_{36}\lambda_2\lambda_0 - \frac{3}{4}Q_{3556}\lambda_3\lambda_0 + \frac{3}{2}Q_{2566}\lambda_3\lambda_0 \\
&\quad - \frac{3}{4}Q_{2366}\lambda_4\lambda_0 - \frac{3}{4}Q_{2445}\lambda_4\lambda_0 - 6\wp_{56}\lambda_1\lambda_0 - \frac{3}{4}Q_{2566}\lambda_4^2\lambda_0 \\
&\quad + \frac{3}{2}Q_{2245}\lambda_0 + \frac{9}{2}\wp_{36}\lambda_4\lambda_3\lambda_0 + \frac{3}{2}\wp_{56}\lambda_4\lambda_2\lambda_0 \\
(-40) \quad Q_{1112} &= 8\lambda_3\lambda_1^2 + 4\lambda_3\lambda_2\lambda_0 + 32\lambda_4\lambda_1\lambda_0 + 6\wp_{33}\lambda_3\lambda_0 - 68\wp_{16}\lambda_3\lambda_0 \\
&\quad + 6\wp_{35}\lambda_2\lambda_0 + 64\wp_{16}\lambda_4^3\lambda_1 + 128\wp_{16}\lambda_4^2\lambda_0 - 12\wp_{46}\lambda_4\lambda_1^2 \\
&\quad + 42\wp_{55}\lambda_1\lambda_0 - 36\wp_{46}\lambda_1\lambda_0 + 18\wp_{55}\lambda_4\lambda_1^2 - 4\wp_{26}\lambda_2\lambda_0 \\
&\quad + 18Q_{1356}\lambda_1\lambda_4 - 4Q_{1444}\lambda_1\lambda_4 - 12Q_{1556}\lambda_4^2\lambda_1 - 6Q_{1466}\lambda_3\lambda_1 \\
&\quad - 24Q_{1556}\lambda_0\lambda_4 - 24Q_{1466}\lambda_0\lambda_4 + 9Q_{1266}\lambda_1\lambda_4 - 6Q_{1556}\lambda_3\lambda_1 \\
&\quad - 12Q_{1466}\lambda_4^2\lambda_1 - 4\wp_{16}\lambda_4\lambda_3\lambda_1 + 16\lambda_4^2\lambda_1^2 + 30Q_{1356}\lambda_0 \\
&\quad - 8Q_{1444}\lambda_0 + 15Q_{1266}\lambda_0 - 3Q_{1244}\lambda_1 - 8\wp_{26}\lambda_1^2 + 12\wp_{35}\lambda_1^2
\end{aligned}$$