$$\frac{m_t^2(\langle 2|\mathbf{3}|1+2|\mathbf{4}|1]-\langle 2|\mathbf{4}|1+2|\mathbf{3}|1])\Delta_{12|\mathbf{34}|\mathbf{5}}\mathrm{tr}(1+2|\mathbf{3}+\mathbf{4})(3/8\langle 2\mathbf{4}\rangle\langle \mathbf{3}|\mathbf{4}|2]\ldots\langle\langle 3\text{ terms}\rangle\rangle\ldots-3/8\langle \mathbf{34}\rangle\langle 2|\mathbf{4}|2])}{\langle 12\rangle[12]\Delta^2_{12|\mathbf{3}|\mathbf{4}|\mathbf{5}}}+$$

$$\frac{m_t^2(\langle 2|\mathbf{3}|1+2|\mathbf{4}|1]-\langle 2|\mathbf{4}|1+2|\mathbf{3}|1])\mathrm{tr}(1+2|\mathbf{3}-\mathbf{4})\mathrm{tr}(1+2|\mathbf{3}+\mathbf{4})(-9/32\langle \mathbf{34}\rangle\langle 1|\mathbf{4}|2]\langle 2|\mathbf{4}|1]\ldots\langle\langle 14\text{ terms}\rangle\rangle\ldots+3/32\langle 1\mathbf{4}\rangle\langle \mathbf{31}\rangle[1|\mathbf{3}|\mathbf{4}|1])}{\langle 12\rangle[12]\Delta^2_{12|\mathbf{3}|\mathbf{4}|\mathbf{5}}}+$$

$$\frac{m_t^3[12]^2\langle 12\rangle^2\langle 2|\mathbf{3}|1](9/8\langle \mathbf{32}\rangle[2\mathbf{4}]+9/16\langle \mathbf{31}\rangle[1\mathbf{4}])}{(s_{\mathbf{123}}-m_t^2)\Delta^2_{12|\mathbf{3}|\mathbf{45}}}+$$

$$\frac{m_t^2[12]^2\langle 12\rangle^2\langle 2|\mathbf{3}|1](-9/16\langle \mathbf{32}\rangle[2|\mathbf{3}|\mathbf{4}\rangle-9/16\langle 1|\mathbf{3}|1\rangle\langle \mathbf{34}\rangle)}{(s_{\mathbf{123}}-m_t^2)\Delta^2_{12|\mathbf{3}|\mathbf{45}}}+$$

$$\frac{m_t\langle 2|\mathbf{3}|\mathbf{4}|2\rangle(-3/8\langle 1|\mathbf{3}|1][2\mathbf{4}]\langle \mathbf{32}\rangle\ldots\langle\langle 7\text{ terms}\rangle\rangle\ldots+9/8\langle 2|\mathbf{4}|2][1\mathbf{4}]\langle \mathbf{31}\rangle)}{\langle 12\rangle\Delta_{12|\mathbf{3}|\mathbf{4}|\mathbf{5}}}+$$

$$\frac{m_t\langle 2|\mathbf{3}|\mathbf{4}|2\rangle(3/4\langle 2\mathbf{4}\rangle\langle 1|\mathbf{3}|1][\mathbf{32}]+3/8\langle 2|\mathbf{3}|2\rangle[\mathbf{24}\rangle[\mathbf{32}]-3/8\langle 2|\mathbf{4}|2\rangle\langle 2\mathbf{4}\rangle[\mathbf{32}]+3/8\langle 1\mathbf{4}\rangle\langle 1|\mathbf{3}|1][\mathbf{31}])}{\langle 12\rangle\Delta_{12|\mathbf{3}|\mathbf{4}|\mathbf{5}}}+$$

$$\frac{\langle 2|\mathbf{3}|\mathbf{4}|2\rangle(3/8\langle 1|\mathbf{3}|\mathbf{4}|2\rangle\langle \mathbf{34}\rangle[12]\ldots\langle\langle 7\text{ terms}\rangle\rangle\ldots-3/4\langle \mathbf{34}\rangle\langle 2|\mathbf{3}|2]\langle 1|\mathbf{3}|1])}{\langle 12\rangle\Delta_{12|\mathbf{3}|\mathbf{4}|\mathbf{5}}}+$$

$$\frac{\mathrm{tr}(\mathbf{3}|\mathbf{4})\langle 2|\mathbf{3}|\mathbf{4}|2\rangle(-3/8\langle 2|\mathbf{3}|\mathbf{4}][\mathbf{32}]-3/8[\mathbf{34}]\langle 1|\mathbf{3}|1])}{\langle 12\rangle\Delta_{12|\mathbf{3}|\mathbf{4}|\mathbf{5}}}+$$

$$\frac{\langle 2|\mathbf{3}|\mathbf{4}]m_t(-3/4\langle 1|\mathbf{4}|1]^2\langle \mathbf{32}\rangle\ldots\langle\langle 4\text{ terms}\rangle\rangle\ldots-3/4\langle 2|\mathbf{4}|2]^2\langle \mathbf{32}\rangle)}{\langle 12\rangle\Delta_{12|\mathbf{3}|\mathbf{4}|\mathbf{5}}}+$$

$$(12345\to\overline{21345})+$$

$$\frac{\langle \mathbf{31}\rangle m_t(s_{\mathbf{13}}-s_{\mathbf{23}})(-1/3\langle 2|\mathbf{3}|2][2\mathbf{4}]+7/6\langle 1|\mathbf{3}|\mathbf{4}][12]+7/6\langle 1|\mathbf{4}|1][2\mathbf{4}]-7/6[1\mathbf{4}]\langle 1|\mathbf{4}|2])}{(s_{\mathbf{123}}-m_t^2)\langle 1|\mathbf{3}|2]^2}+$$

$$\frac{1/3\langle 12\rangle[2|\mathbf{3}|\mathbf{4}\rangle[\mathbf{32}]m_t(s_{\mathbf{13}}-s_{\mathbf{23}})}{(s_{\mathbf{123}}-m_t^2)\langle 1|\mathbf{3}|2]^2}+$$

$$\frac{7/6\langle 1\mathbf{4}\rangle\langle \mathbf{31}\rangle[12]\langle 1|\mathbf{3}|1](s_{\mathbf{13}}-s_{\mathbf{23}})}{(s_{\mathbf{123}}-m_t^2)\langle 1|\mathbf{3}|2]^2}+$$

$$\frac{1/3\langle 12\rangle\langle 2|\mathbf{3}|2][2\mathbf{4}][\mathbf{32}](s_{\mathbf{13}}-s_{\mathbf{23}})}{(s_{\mathbf{123}}-m_t^2)\langle 1|\mathbf{3}|2]^2}+$$

$$\frac{m_t(1/2\langle 1|\mathbf{3}|1][2\mathbf{4}]\langle \mathbf{32}\rangle\ldots\langle\langle 9\text{ terms}\rangle\rangle\ldots+1\langle 2|\mathbf{4}|2][1\mathbf{4}]\langle \mathbf{31}\rangle)}{\langle 1|\mathbf{3}|2](s_{\mathbf{123}}-m_t^2)}+$$

$$\frac{m_t(7/6\langle 12\rangle\langle 2\mathbf{4}\rangle[12][\mathbf{32}]\ldots\langle\langle 4\text{ terms}\rangle\rangle\ldots+5/3\mathrm{tr}(\mathbf{3}|\mathbf{4})\langle 1\mathbf{4}\rangle[\mathbf{31}])}{\langle 1|\mathbf{3}|2](s_{\mathbf{123}}-m_t^2)}+$$

$$\frac{(-5/3\langle 1|\mathbf{4}|1]\langle \mathbf{34}\rangle m_t^2\ldots\langle\langle 3\text{ terms}\rangle\rangle\ldots+11/6\langle 2|\mathbf{3}|2]\langle \mathbf{31}\rangle\langle 2\mathbf{4}\rangle[12])}{\langle 1|\mathbf{3}|2](s_{\mathbf{123}}-m_t^2)}+$$

$$\frac{(8/3\langle 2|\mathbf{3}|\mathbf{4}]\langle 1|\mathbf{3}|1][\mathbf{32}]-1/3\langle 2|\mathbf{3}|\mathbf{4}]\langle 2|\mathbf{3}|2][\mathbf{32}]-8/3\langle 12\rangle[1\mathbf{4}\rangle\langle 1|\mathbf{3}|2][\mathbf{31}]-1/3\langle 12\rangle\langle 2|\mathbf{3}|2][2\mathbf{4}][\mathbf{31}])}{\langle 1|\mathbf{3}|2](s_{\mathbf{123}}-m_t^2)}+$$

$$\frac{m_t(-5/3\langle 2|\mathbf{4}|2][1\mathbf{4}]m_t^2\langle \mathbf{32}\rangle\ldots\langle\langle 22\text{ terms}\rangle\rangle\ldots-7/3\langle 2|\mathbf{3}|\mathbf{4}]\langle \mathbf{31}\rangle[12]\langle 2|\mathbf{3}|1])}{\Delta_{12|\mathbf{3}|\mathbf{45}}(s_{\mathbf{123}}-m_t^2)}+$$

$$\frac{\langle \mathbf{31}\rangle m_t(s_{\mathbf{13}}-s_{\mathbf{23}})(-5/6\langle 1|\mathbf{4}|1][1\mathbf{4}]m_t^2\ldots\langle\langle 4\text{ terms}\rangle\rangle\ldots+5/12\langle 2|\mathbf{3}|2][12]\langle 2|\mathbf{3}|\mathbf{4}])}{\Delta_{12|\mathbf{3}|\mathbf{45}}\langle 1|\mathbf{3}|2](s_{\mathbf{123}}-m_t^2)}+$$

$$\frac{m_t(3/2[12]\langle \mathbf{32}\rangle\langle 2|\mathbf{3}|\mathbf{4}]\ldots\langle\langle 5\text{ terms}\rangle\rangle\ldots-11/6\langle 2|\mathbf{3}|1]\langle \mathbf{31}\rangle[1\mathbf{4}])}{\Delta_{12|\mathbf{3}|\mathbf{45}}}+$$

$$\frac{m_t(-3/4\langle 2\mathbf{4}\rangle\langle 2|\mathbf{3}|2][\mathbf{31}]\ldots\langle\langle 4\text{ terms}\rangle\rangle\ldots+5/6\langle 2\mathbf{4}\rangle m_t^2[\mathbf{31}])}{\Delta_{12|\mathbf{3}|\mathbf{45}}}+$$

$$\frac{m_t(s_{\mathbf{13}}-s_{\mathbf{23}})(7/12\langle 1|\mathbf{4}|1][2\mathbf{4}]\langle \mathbf{32}\rangle\ldots\langle\langle 4\text{ terms}\rangle\rangle\ldots-7/12\langle \mathbf{31}\rangle\langle 2|\mathbf{4}|2][1\mathbf{4}])}{\langle 1|\mathbf{3}|2]\Delta_{12|\mathbf{3}|\mathbf{45}}}+$$

$$\frac{m_t(s_{\mathbf{13}}-s_{\mathbf{23}})(-5/12\langle 2\mathbf{4}\rangle[\mathbf{32}]m_t^2+7/12\langle 12\rangle[2|\mathbf{3}|\mathbf{4}\rangle[\mathbf{31}]-5/12\langle 1\mathbf{4}\rangle m_t^2[\mathbf{31}])}{\langle 1|\mathbf{3}|2]\Delta_{12|\mathbf{3}|\mathbf{45}}}+$$

$$\frac{m_t(\mathrm{tr}(\mathbf{3}|\mathbf{4})\mathrm{tr}(1+2|\mathbf{3})-2m_t^2\mathrm{tr}(1+2|\mathbf{4}))(3/16\langle 1|\mathbf{3}|1]\langle 2|\mathbf{4}|1][2\mathbf{4}]\langle \mathbf{32}\rangle\ldots\langle\langle 12\text{ terms}\rangle\rangle\ldots+3/8\langle 2|\mathbf{3}|1]\langle \mathbf{31}\rangle[12]\langle 2|\mathbf{3}|\mathbf{4}])}{\Delta_{12|\mathbf{3}|\mathbf{45}}\Delta_{12|\mathbf{3}|\mathbf{4}|\mathbf{5}}}+$$

$$\frac{[\mathbf{31}]m_t(\mathrm{tr}(\mathbf{3}|\mathbf{4})\mathrm{tr}(1+2|\mathbf{3})-2m_t^2\mathrm{tr}(1+2|\mathbf{4}))(-3/32\langle 2\mathbf{4}\rangle\langle 2|\mathbf{3}|2]^2+3/32\langle 2\mathbf{4}\rangle\langle 1|\mathbf{3}|1]^2-3/16\langle 2|\mathbf{3}|1]\langle 1\mathbf{4}\rangle\langle 2|\mathbf{3}|2]-3/16\langle 2|\mathbf{3}|1]\langle 1\mathbf{4}\rangle\langle 1|\mathbf{3}|1])}{\Delta_{12|\mathbf{3}|\mathbf{45}}\Delta_{12|\mathbf{3}|\mathbf{4}|\mathbf{5}}}+$$

$$\frac{\langle \mathbf{34}\rangle m_t^2(-19/6\langle 2|\mathbf{3}|1]-3/2\langle 2|\mathbf{4}|1])}{\Delta_{12|\mathbf{3}|\mathbf{45}}}+$$

$$\frac{5/12\langle \mathbf{34}\rangle\langle 2|\mathbf{3}|2]m_t^2(s_{\mathbf{13}}-s_{\mathbf{23}})}{\langle 1|\mathbf{3}|2]\Delta_{12|\mathbf{3}|\mathbf{45}}}+$$

$$\frac{m_t(-1/3[2\mathbf{4}]\langle \mathbf{32}\rangle+2\langle \mathbf{31}\rangle[1\mathbf{4}])}{\langle 1|\mathbf{3}|2]}+$$

$$\frac{m_t(1/2[2|\mathbf{3}|2\rangle\langle 2\mathbf{4}\rangle+7/6\langle 1\mathbf{4}\rangle[\mathbf{31}])}{\langle 1|\mathbf{3}|2]}+$$

$$\frac{m_t(53/24m_t^2[1\mathbf{4}]\langle 2|\mathbf{4}|2]\langle \mathbf{32}\rangle\ldots\langle\langle 28\text{ terms}\rangle\rangle\ldots+9/8\langle 2|\mathbf{3}|\mathbf{4}]\langle \mathbf{3}|\mathbf{4}|2]\langle 2|\mathbf{3}|1])}{\Delta_{12|\mathbf{3}|\mathbf{4}|\mathbf{5}}}+$$

$$\frac{m_t(-5/12[\mathbf{3}|\mathbf{4}|1\rangle[1|\mathbf{3}|\mathbf{4}\rangle\langle 2|\mathbf{4}|1]\ldots\langle\langle 12\text{ terms}\rangle\rangle\ldots-3/4\langle 1|\mathbf{3}|1]\mathrm{tr}(\mathbf{3}|\mathbf{4})[\mathbf{31}\rangle\langle 2\mathbf{4}\rangle)}{\Delta_{12|\mathbf{3}|\mathbf{4}|\mathbf{5}}}+$$

$$\frac{m_t(\langle \mathbf{3}|@([1|2|\mathbf{3}|\mathbf{4}|\mathbf{3}|-|1|\mathbf{3}|1|\mathbf{4}|\mathbf{3}|+|1|\mathbf{3}|\mathbf{3}|\mathbf{4}|1+2|-|\mathbf{3}|2|\mathbf{3}|\mathbf{4}|1+2|)@|\mathbf{4}])(7/12\langle 1|\mathbf{3}|1]-7/12\langle 2|\mathbf{3}|2]-1/6\langle 1|\mathbf{4}|1])}{\langle 1|\mathbf{3}|2]\Delta_{12|\mathbf{3}|\mathbf{4}|\mathbf{5}}}+$$

$$\frac{1/6\langle 2|\mathbf{3}|2]m_t(\langle \mathbf{4}|@([1|2|\mathbf{3}|\mathbf{4}|\mathbf{3}|-|1|\mathbf{3}|1|\mathbf{4}|\mathbf{3}|+|1|\mathbf{3}|\mathbf{3}|\mathbf{4}|1+2|-|\mathbf{3}|2|\mathbf{3}|\mathbf{4}|1+2|)@|\mathbf{3}])}{\langle 1|\mathbf{3}|2]\Delta_{12|\mathbf{3}|\mathbf{4}|\mathbf{5}}}+$$

$$\frac{\langle \mathbf{34}\rangle(-7/6\langle 1|\mathbf{3}|1]+5/2m_t^2)}{\langle 1|\mathbf{3}|2]}+$$

$$\frac{[\mathbf{34}](-1/3\langle 2|\mathbf{3}|2]+5/6m_t^2)}{\langle 1|\mathbf{3}|2]}+$$

$$\frac{\mathrm{tr}(\mathbf{3}|\mathbf{4})(-3/4[12]\langle 2|\mathbf{3}|\mathbf{4}|2\rangle\langle \mathbf{34}\rangle\ldots\langle\langle 5\text{ terms}\rangle\rangle\ldots+3/8\langle 1|\mathbf{3}|1]\langle \mathbf{34}\rangle\langle 2|\mathbf{3}|1])}{\Delta_{12|\mathbf{3}|\mathbf{4}|\mathbf{5}}}+$$

$$\frac{(3/8[12]\langle 2|\mathbf{3}|\mathbf{4}|2\rangle\mathrm{tr}(\mathbf{3}|\mathbf{4})[\mathbf{34}]\ldots\langle\langle 4\text{ terms}\rangle\rangle\ldots+3/8\langle 1|\mathbf{3}|1]\mathrm{tr}(\mathbf{3}|\mathbf{4})[\mathbf{31}\rangle\langle 2|\mathbf{3}|\mathbf{4}])}{\Delta_{12|\mathbf{3}|\mathbf{4}|\mathbf{5}}}$$