

Figura 41– Expansão do espectro de RMN  $^1\text{H}$  à 400 MHz do composto (Z) 1,1,1-Triclorometil-4-fenilmetilamino-3-buten-2-ona **12e**

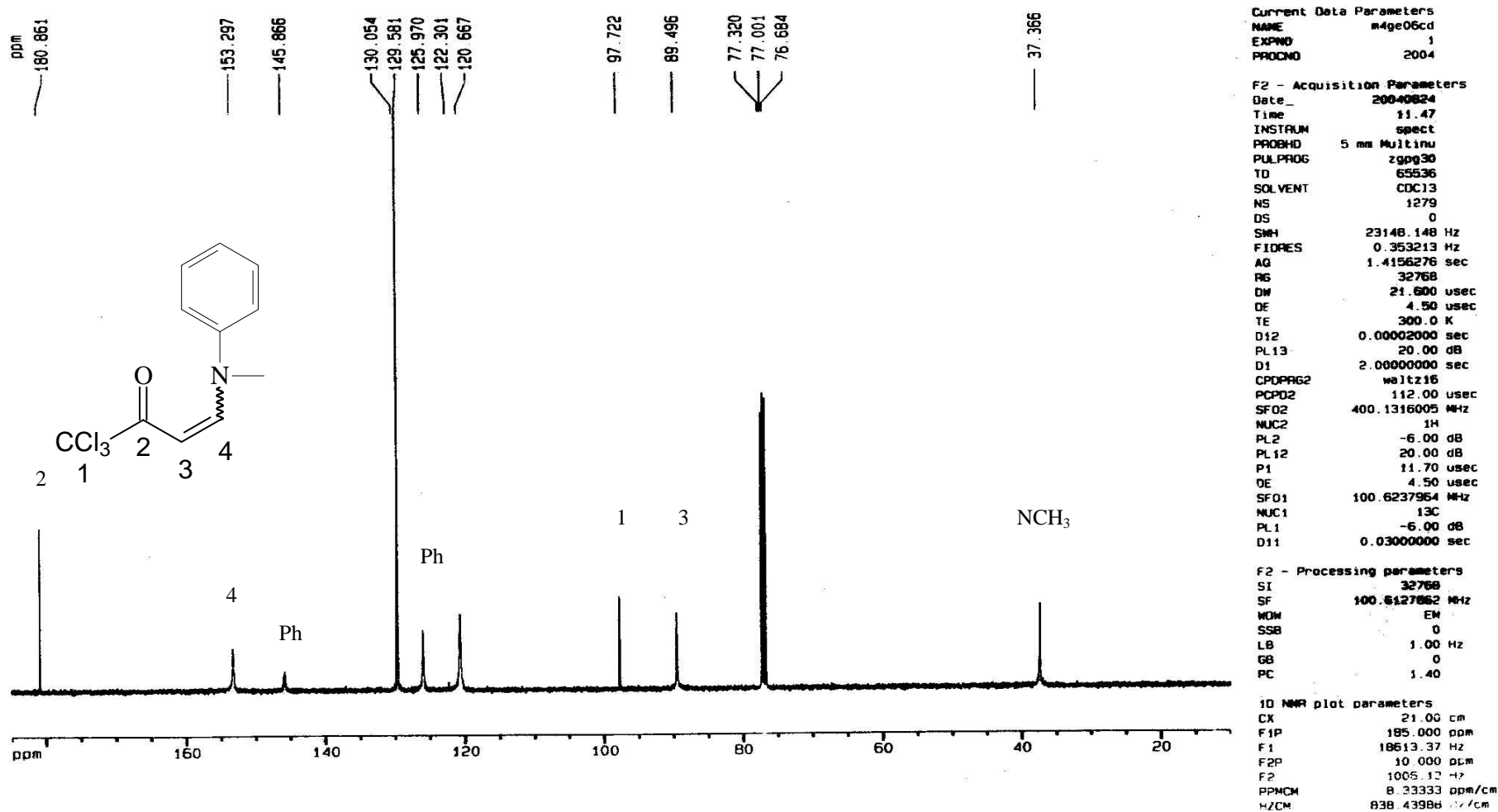


Figura 42- Expansão do espectro de RMN  $^{13}\text{C}$  a 100,6 MHz do composto (Z) 1,1,1-Triclorometil-4-fenilmetilamino-3-buten-2-ona **12e**

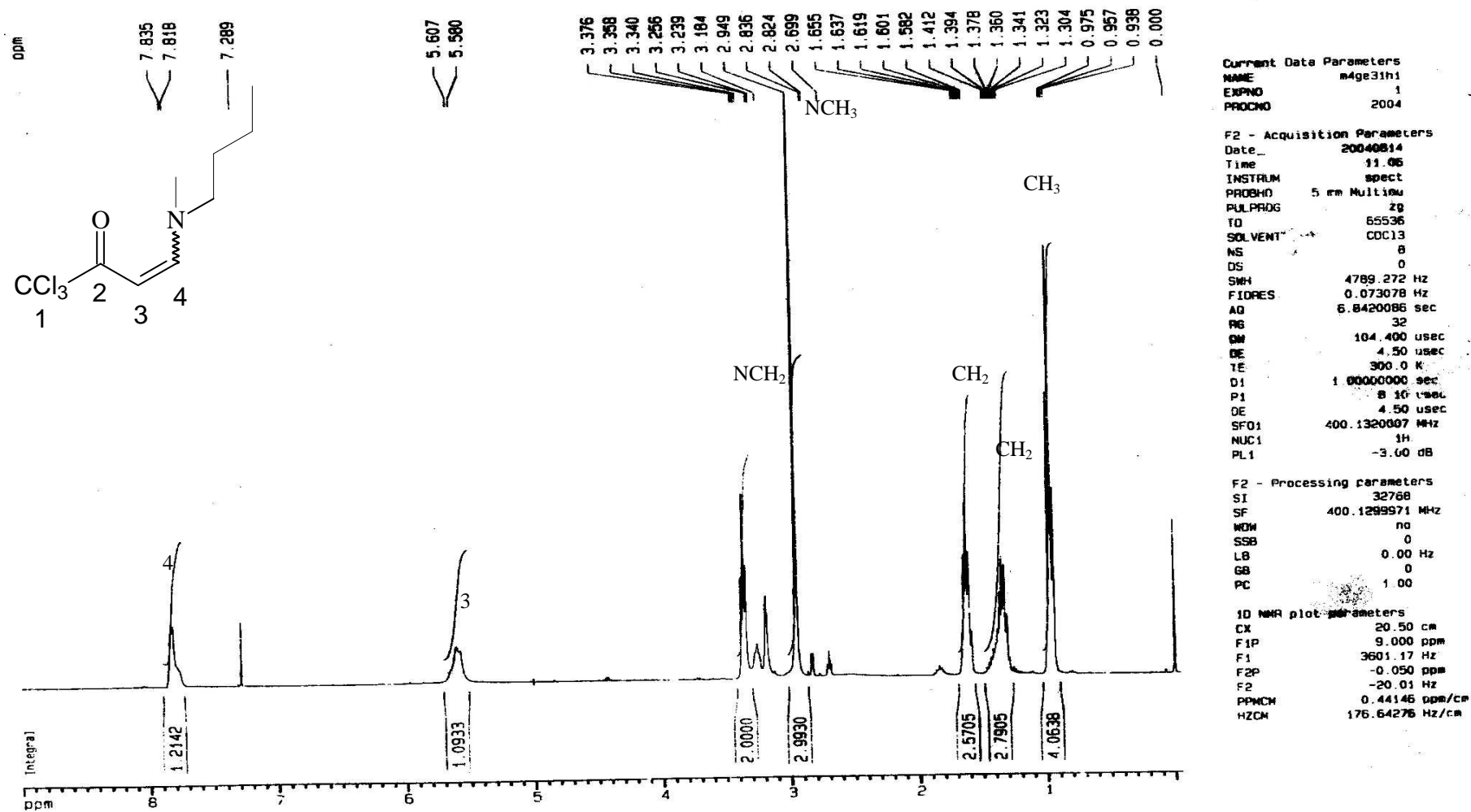


Figura 43– Expansão do espectro de RMN  $^1\text{H}$  à 400 MHz do composto (*E*)-4-Butilmetilamino-1,1,1-triclorometil-3-buten-2-ona **12f**

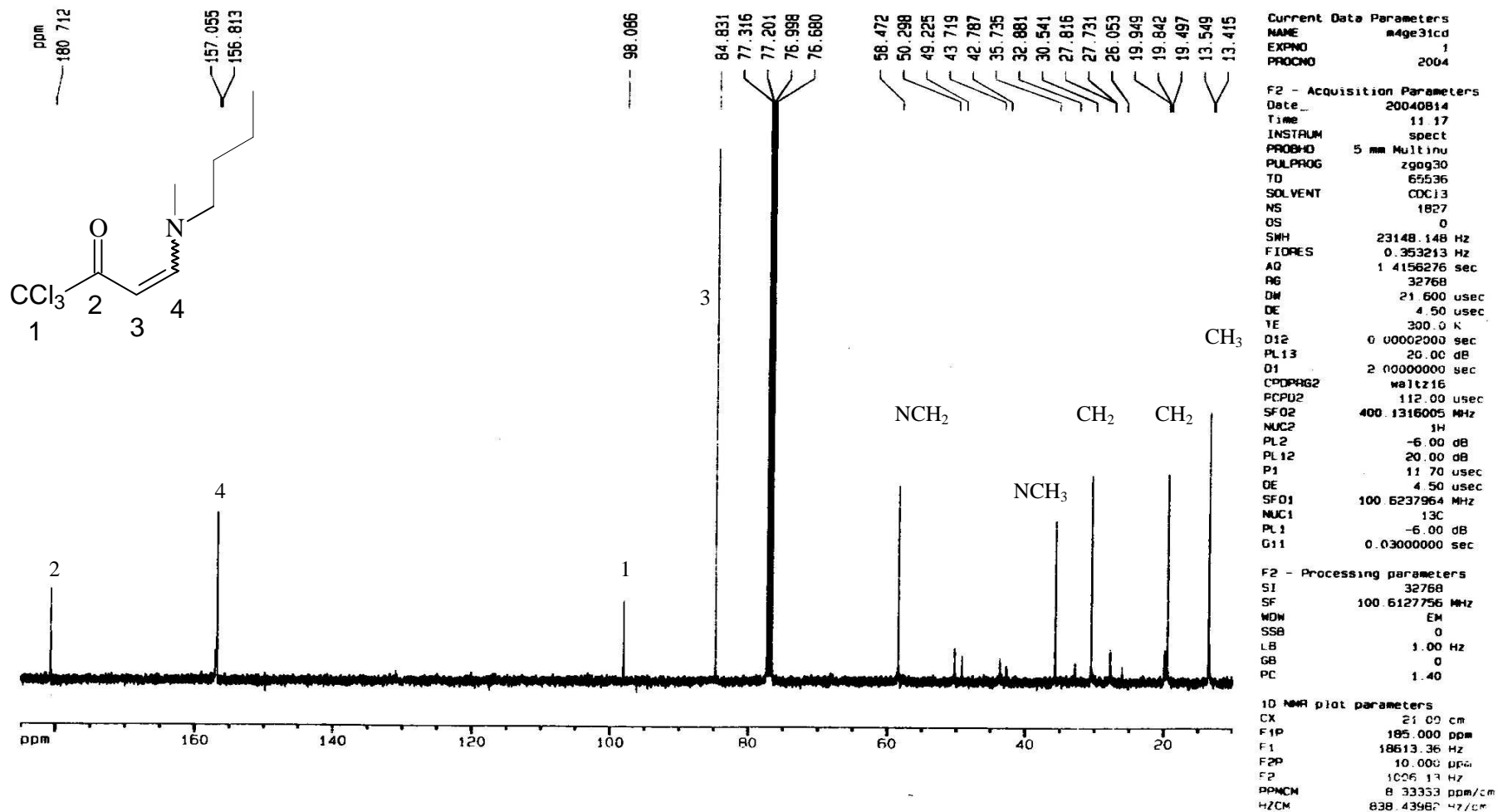


Figura 44– Expansão do espectro de RMN  $^{13}\text{C}$  a 100,6 MHz do composto (E)-4-Butilmetilamino-1,1,1-triclorometil-3-buten-2-ona **12f**



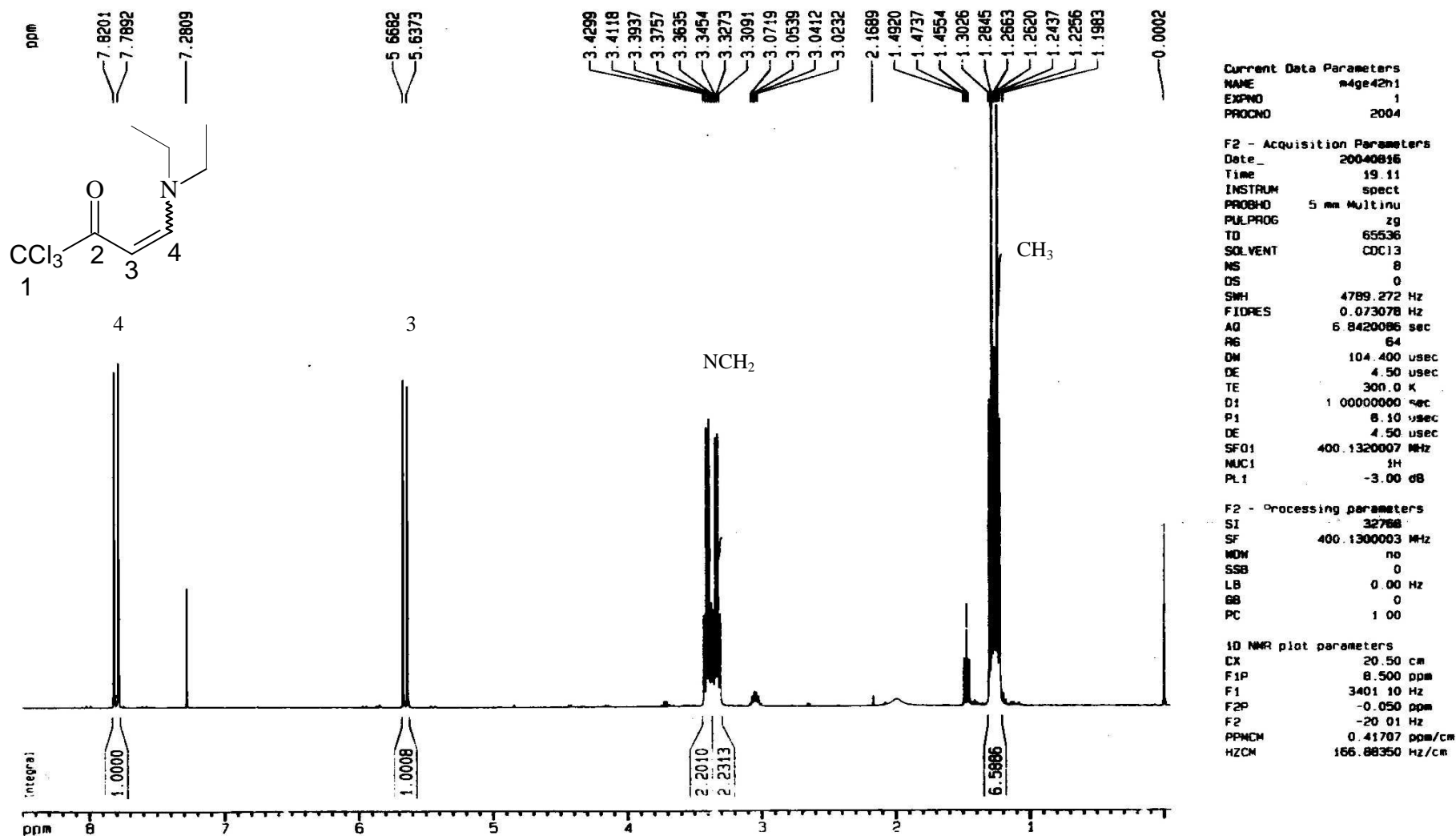


Figura 45– Espectro de RMN <sup>1</sup>H a 400 MHz do composto (*E*) 4-dietilamino-1,1,1-triclorometil-3-buten-2-ona 12g

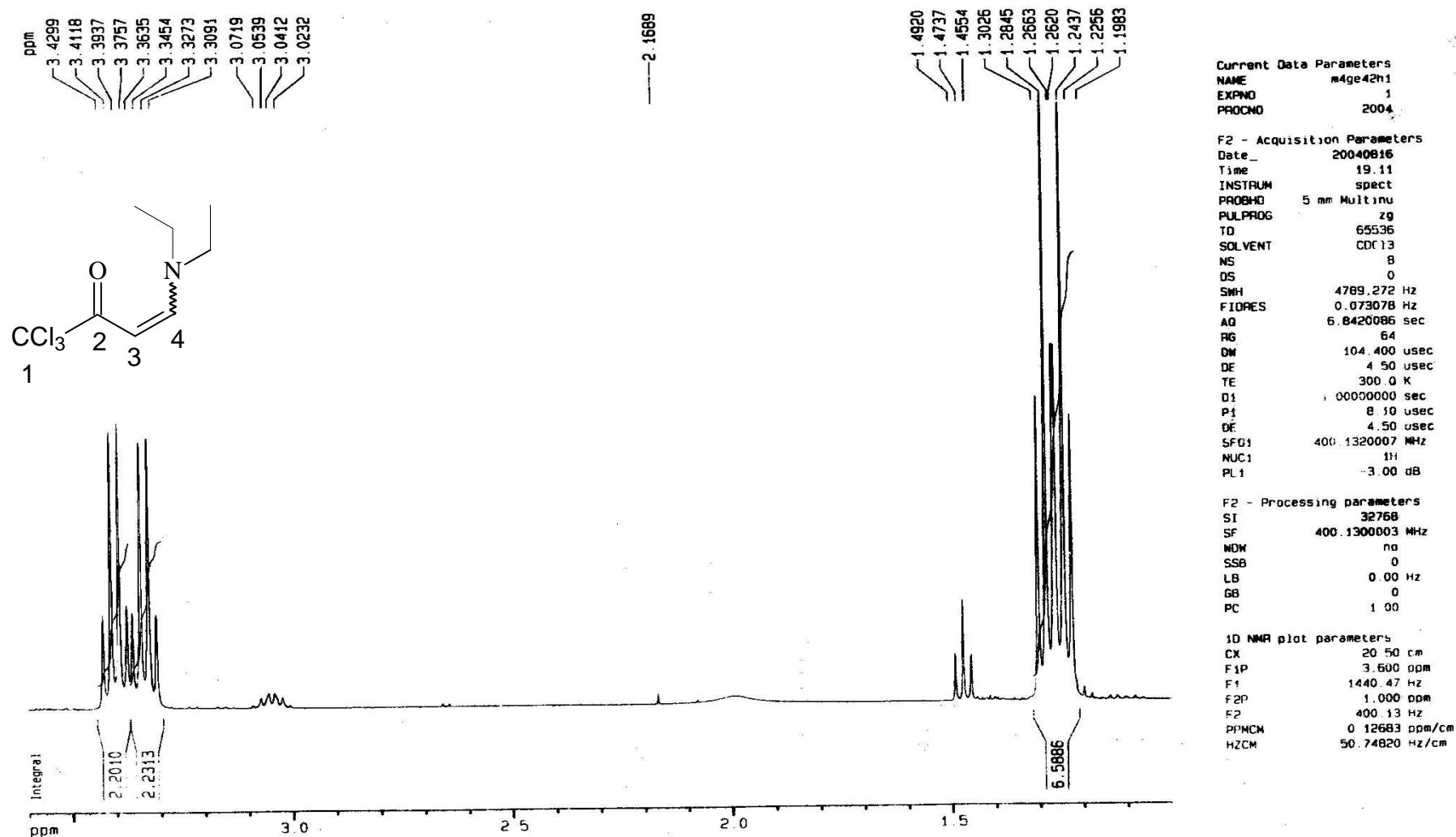


Figura 46– Expansão do espectro de RMN <sup>1</sup>H a 400 MHz do composto (*E*) 4-dietilamino-1,1,1-triclorometil-3-buten-2-ona **12g**

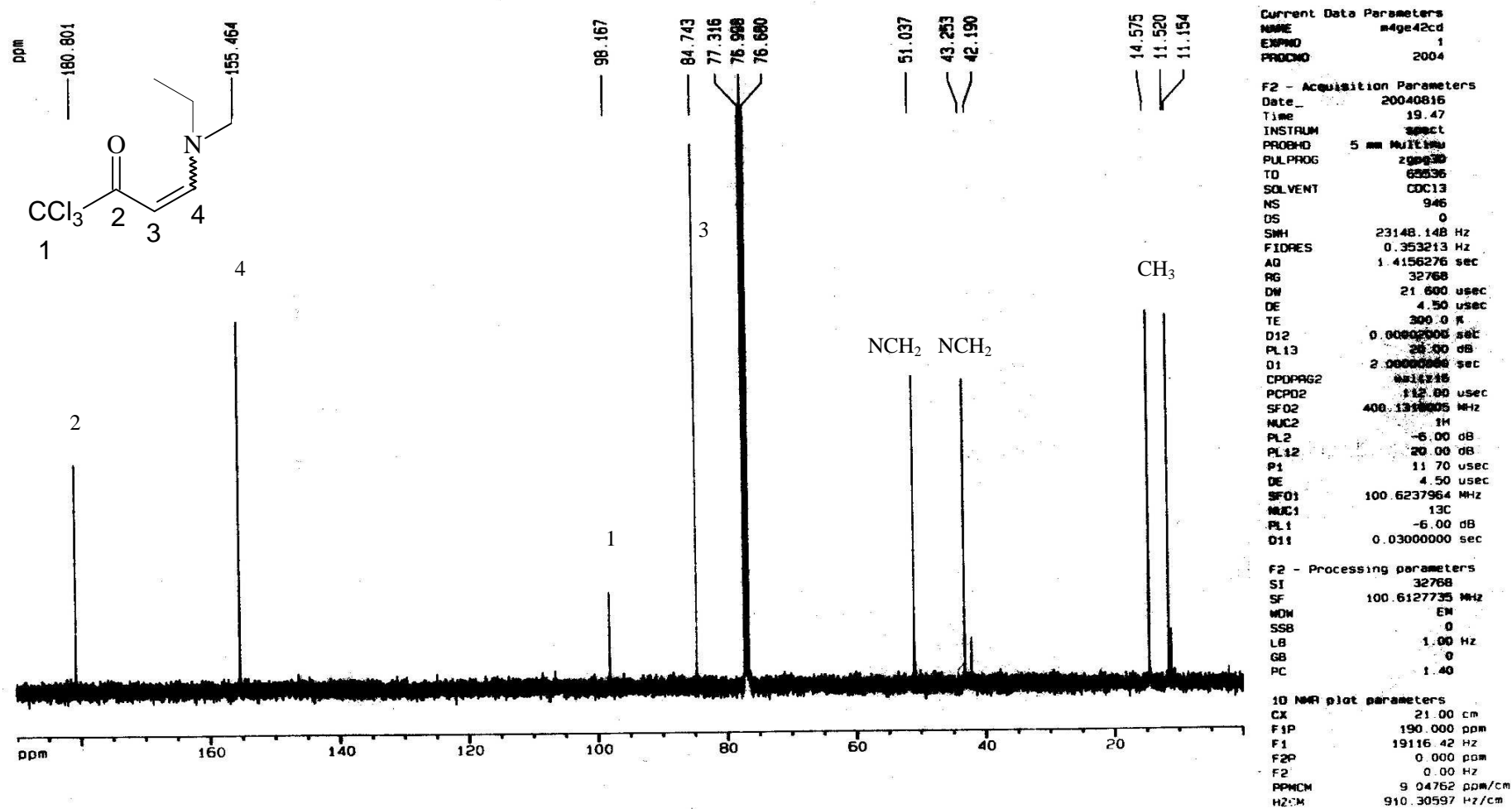


Figura 47– Espectro de RMN <sup>13</sup>C a 100,6MHz do composto (E) 4-dietilamino-1,1,1-triclorometil-3-buten-2-ona **12g**

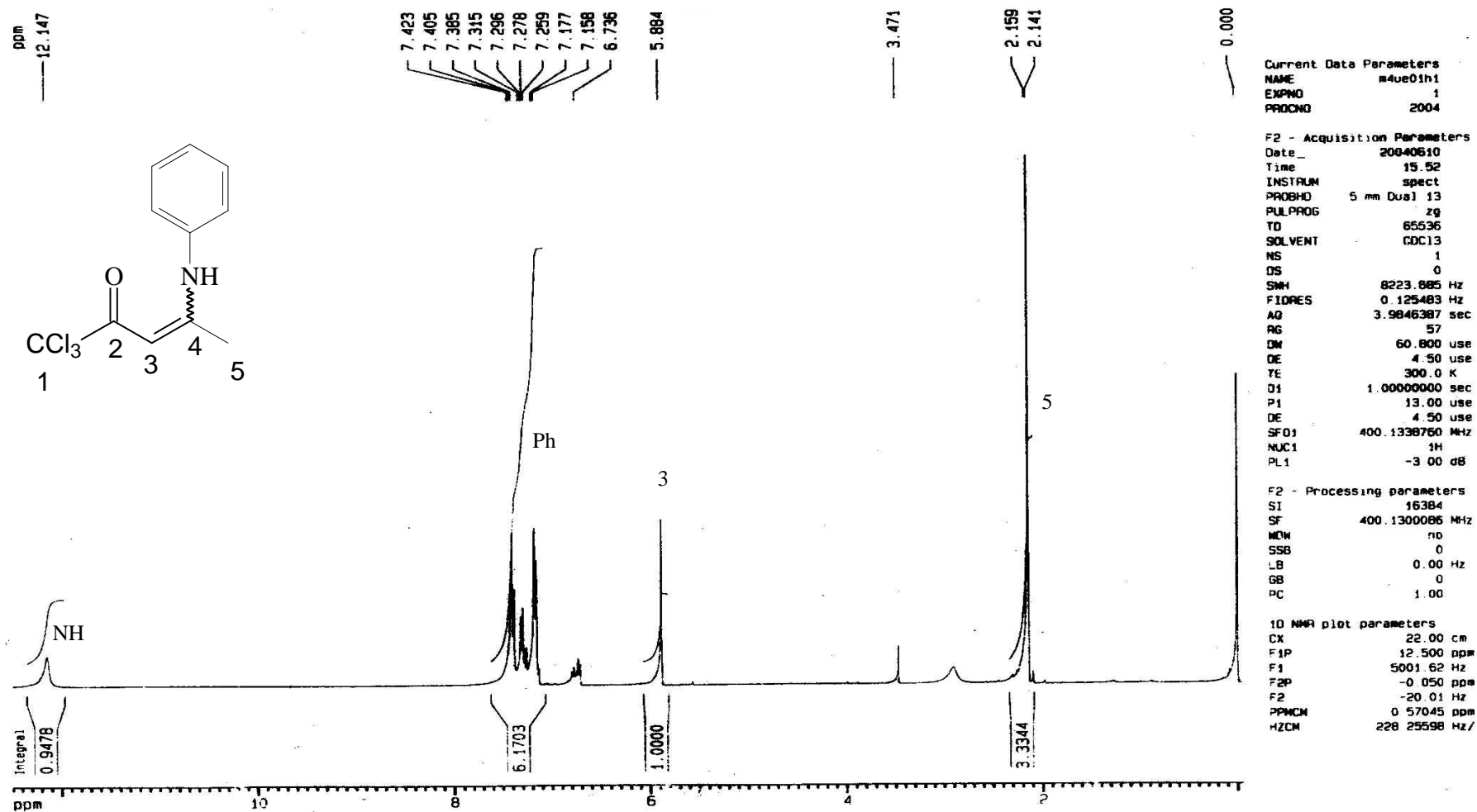


Figura 48– Espectro de RMN  $^1\text{H}$  a 400 MHz do composto (Z) 1,1,1-Triclorometil-4-fenilamino-3-penten-2-ona **13a**.

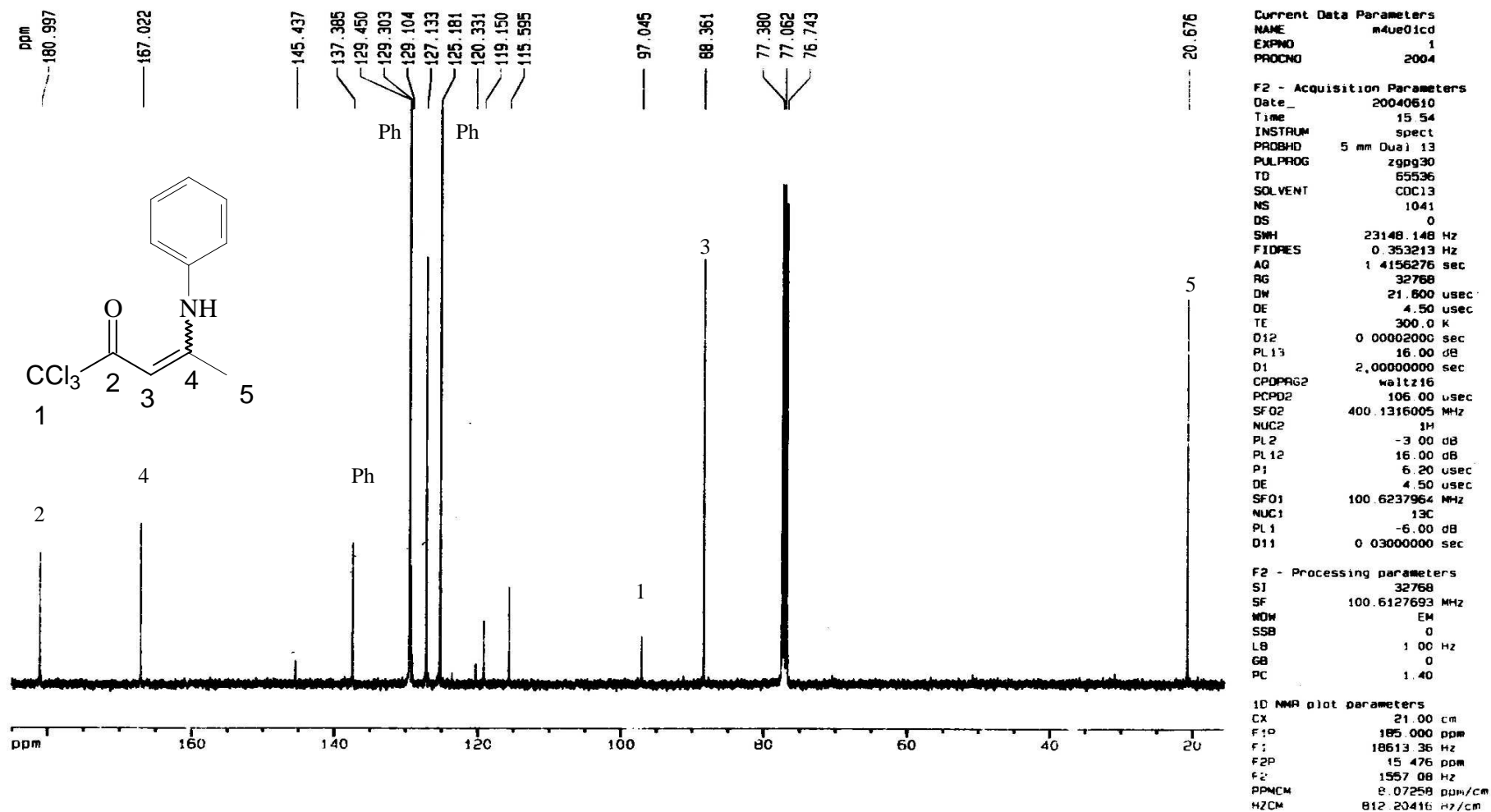


Figura 49– Espectro de RMN  $^{13}\text{C}$  a 100,6 MHz do composto (Z) 1,1,1-Triclorometil-4-fenilamino-3-penten-2-ona **13a**.

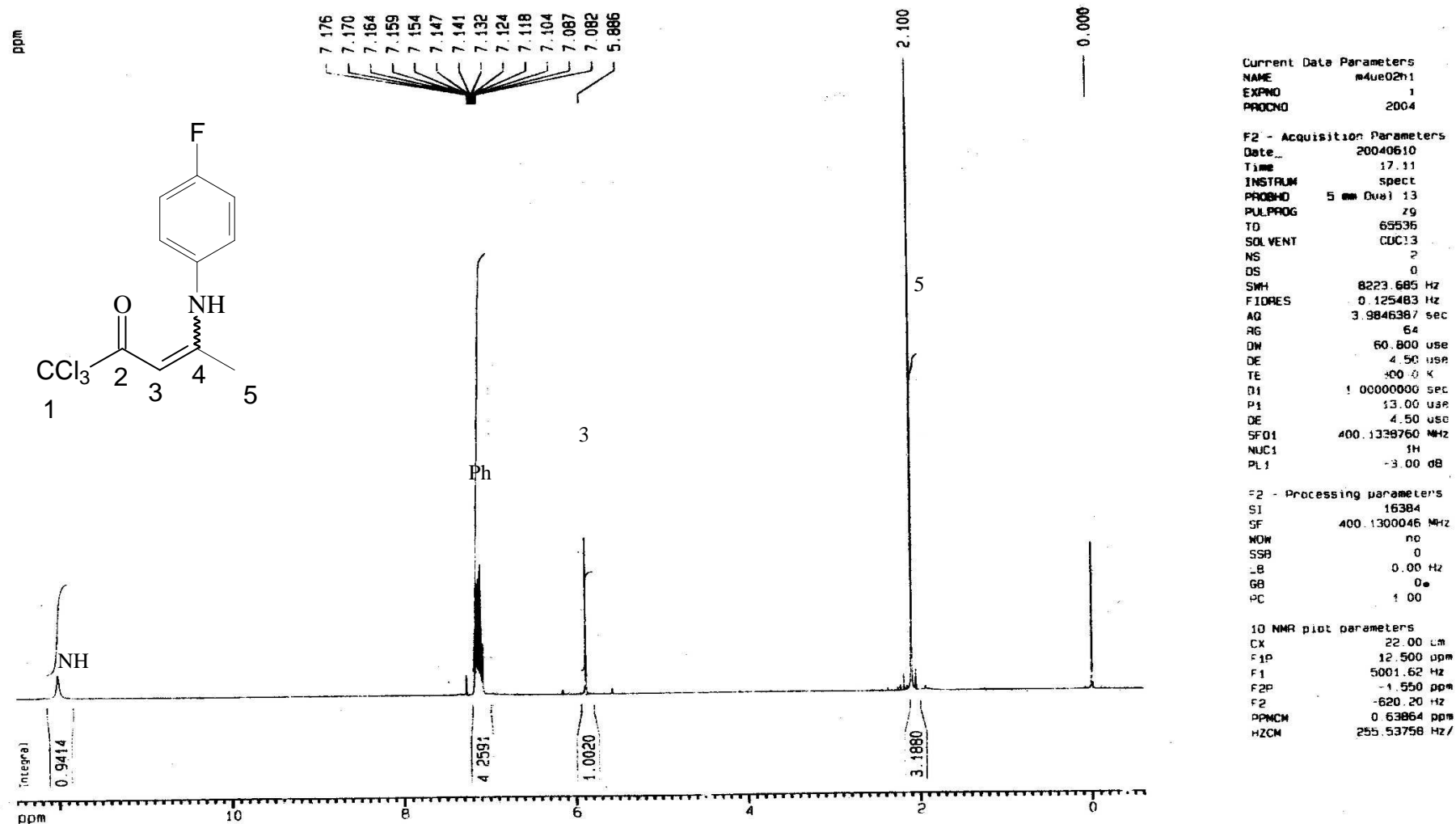


Figura 50– Espectro de RMN <sup>1</sup>H a 400 MHz do composto (Z) 1,1,1-Triclorometil-4-(4-fluorfenilamino)-3-penten-2-ona **13b**.

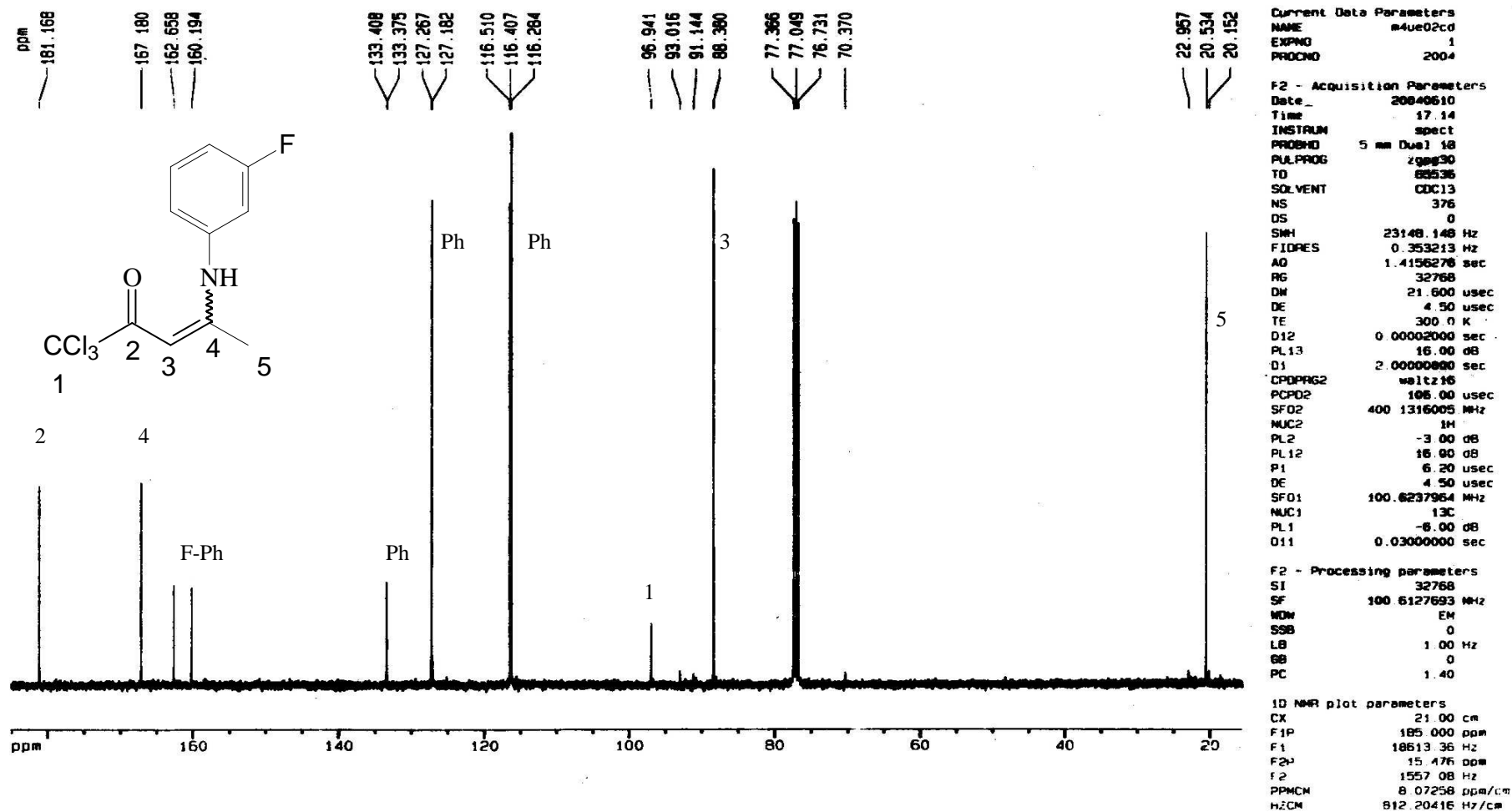


Figura 51- Espectro de RMN  $^{13}\text{C}$  a 100,6 MHz do composto (Z) 1,1,1-Triclorometil-4-(4-fluorfenilamino)-3-penten-2-ona **13b**.

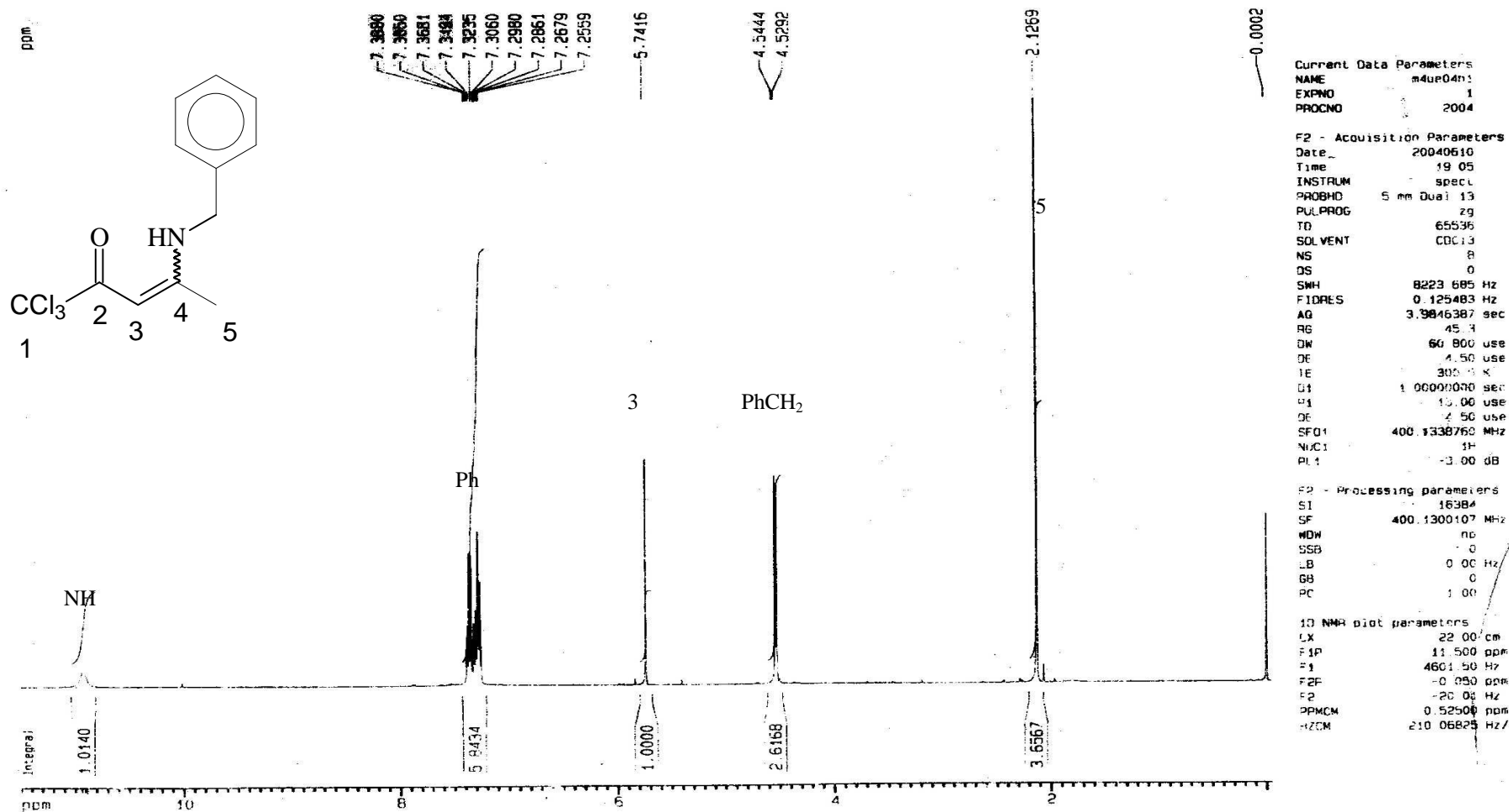


Figura 52– Espectro de RMN <sup>1</sup>H a 400 MHz do composto (Z) 4-Benzilamino-1,1,1-triclorometil-3-penten-2-ona **13c**.



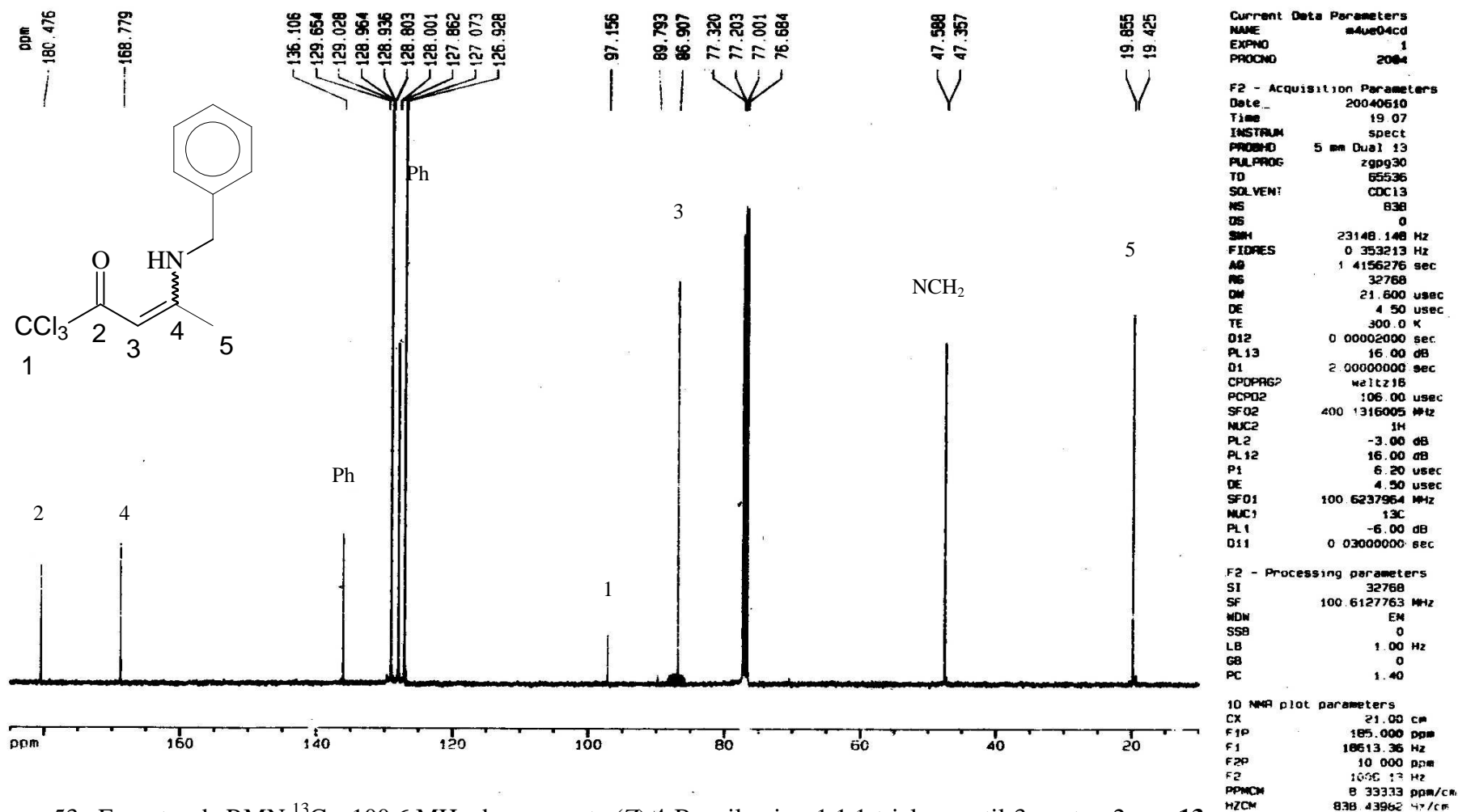


Figura 53– Espectro de RMN  $^{13}\text{C}$  a 100,6 MHz do composto (Z) 4-Benzilamino-1,1,1-triclorometil-3-penten-2-ona 13c.

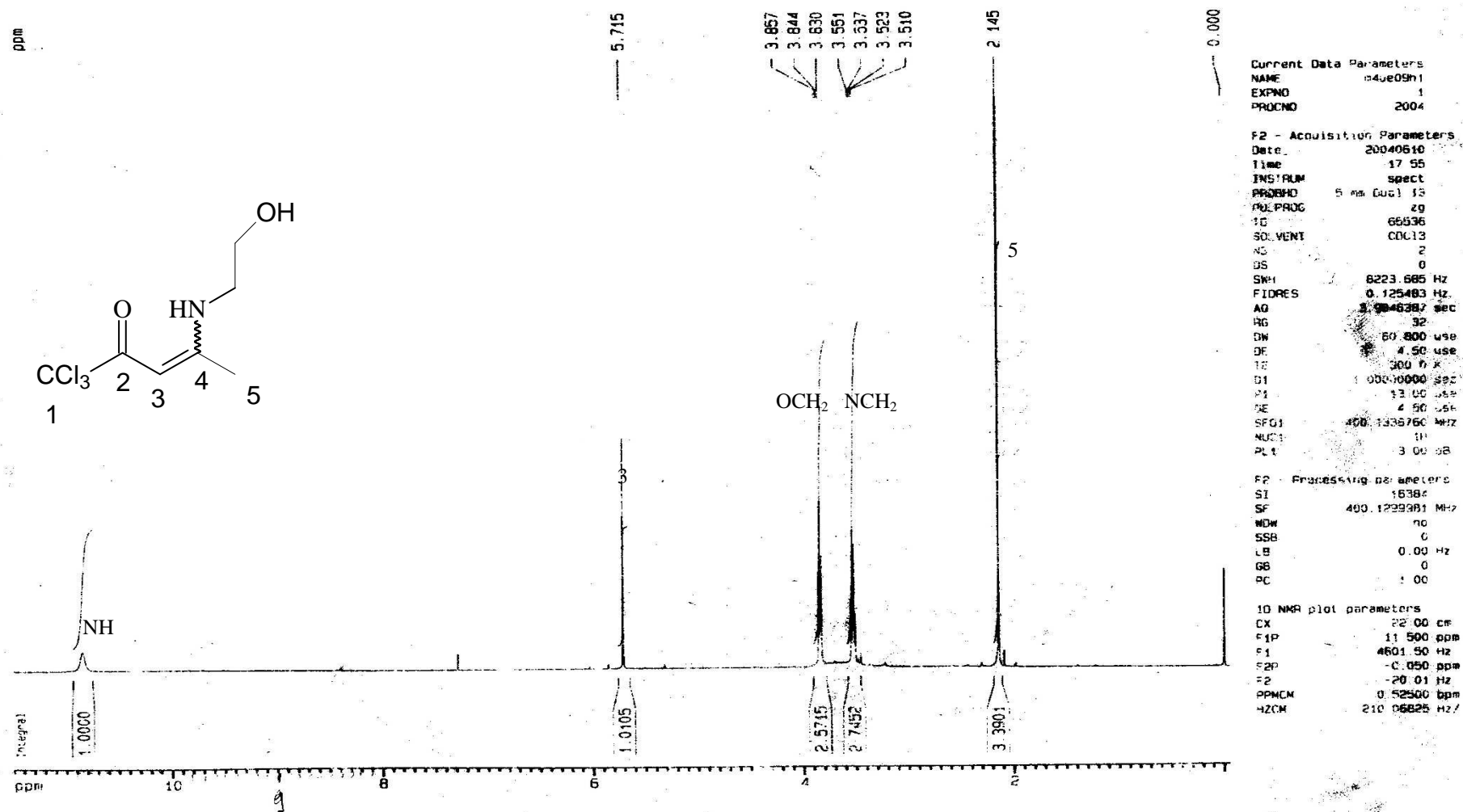


Figura 54– Espectro de RMN  $^1\text{H}$  a 400 MHz do composto (*E*) 1,1,1-Triclorometil-4-etanolamino-3-penten-2-ona **13d**

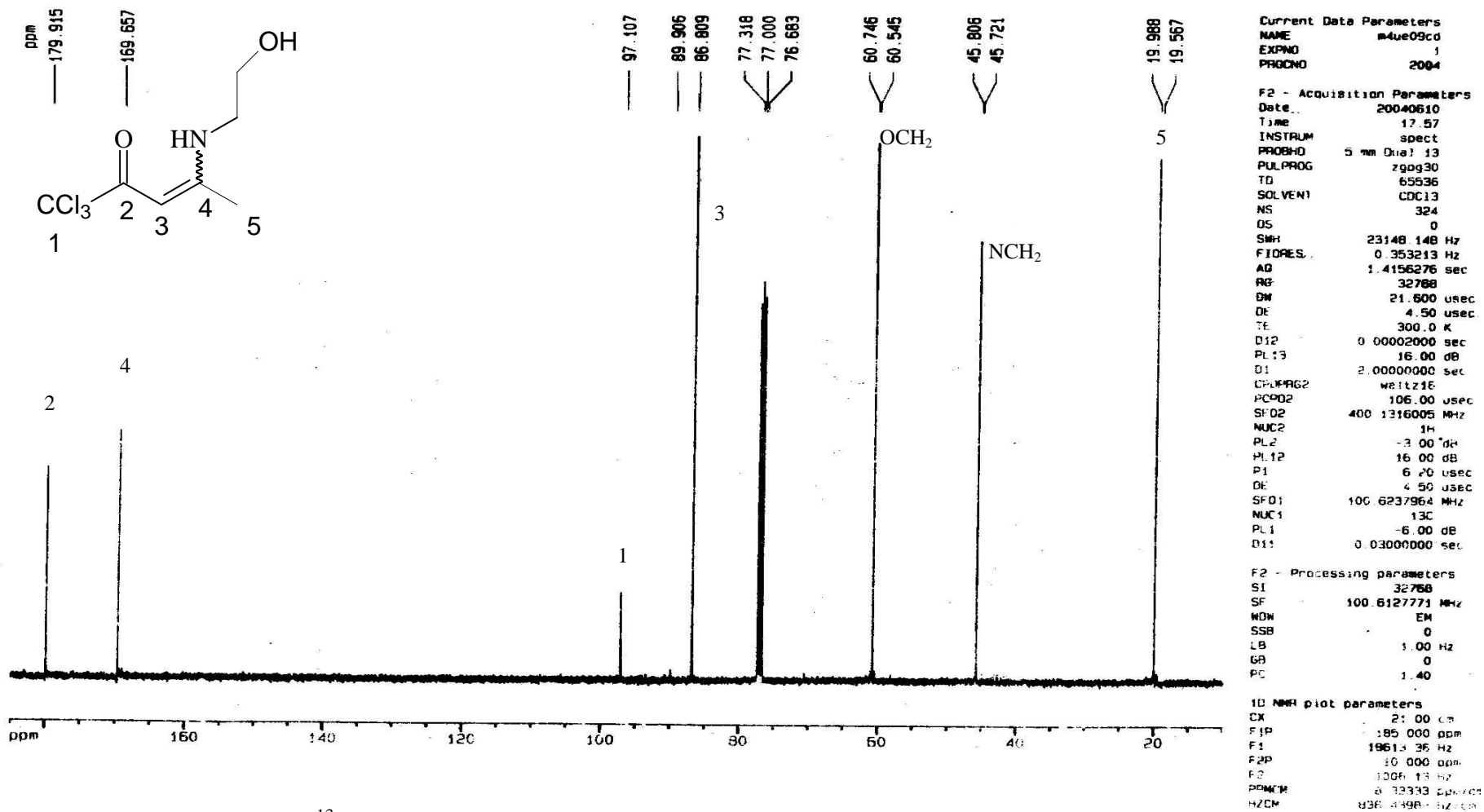


Figura 55– Espectro de RMN <sup>13</sup>C a 100,6 MHz do composto (*E*) 1,1,1-Triclorometil-4-etanolamino-3-penten-2-ona **13d**

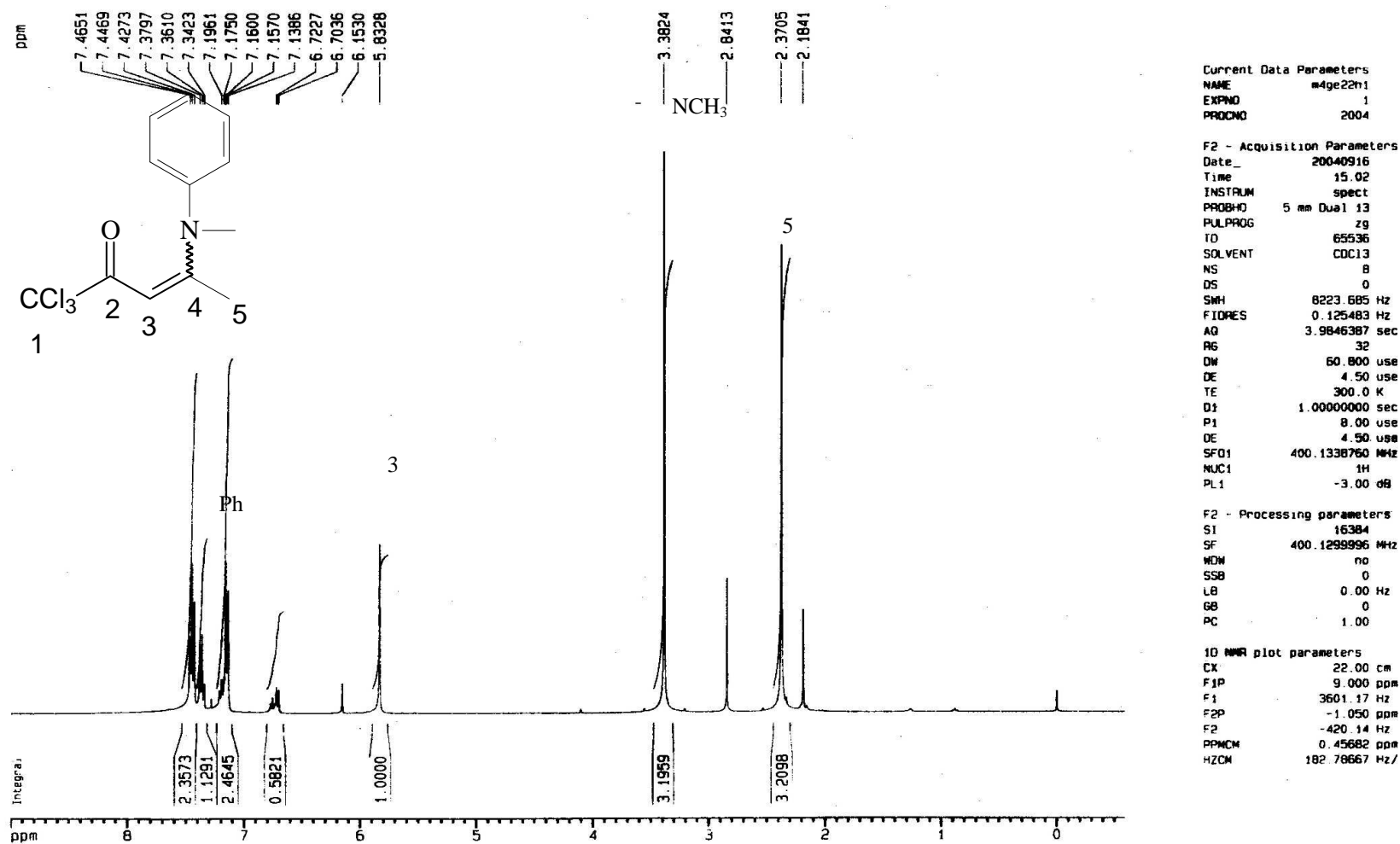


Figura 56– Espectro de RMN  $^1\text{H}$  a 400 MHz do composto (Z) 1,1,1-Triclorometil-4-fenilmetilamino-3-penten-2-ona **13e**

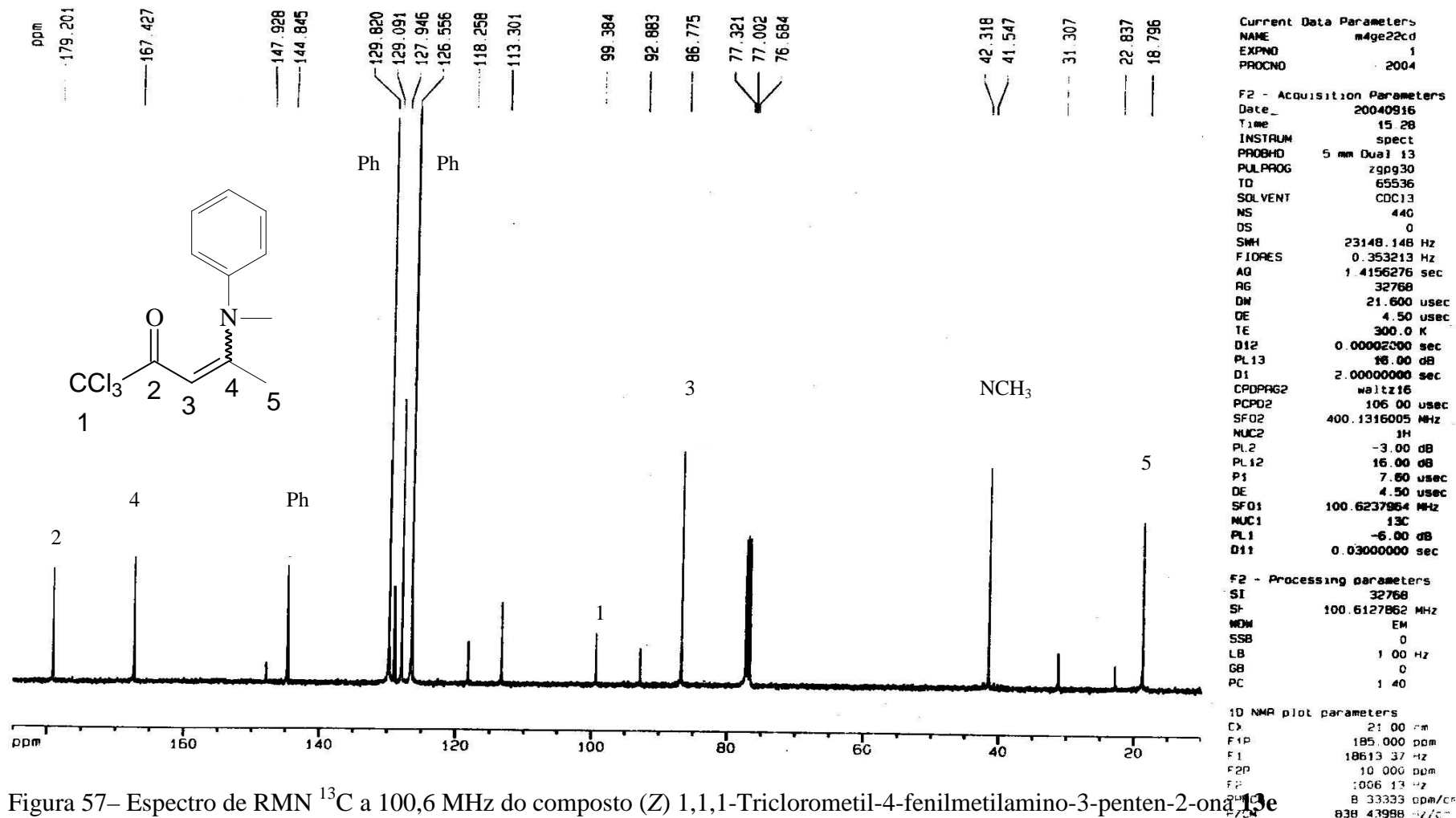


Figura 57- Espectro de RMN <sup>13</sup>C a 100,6 MHz do composto (Z) 1,1,1-Triclorometil-4-fenilmetilamino-3-penten-2-ona

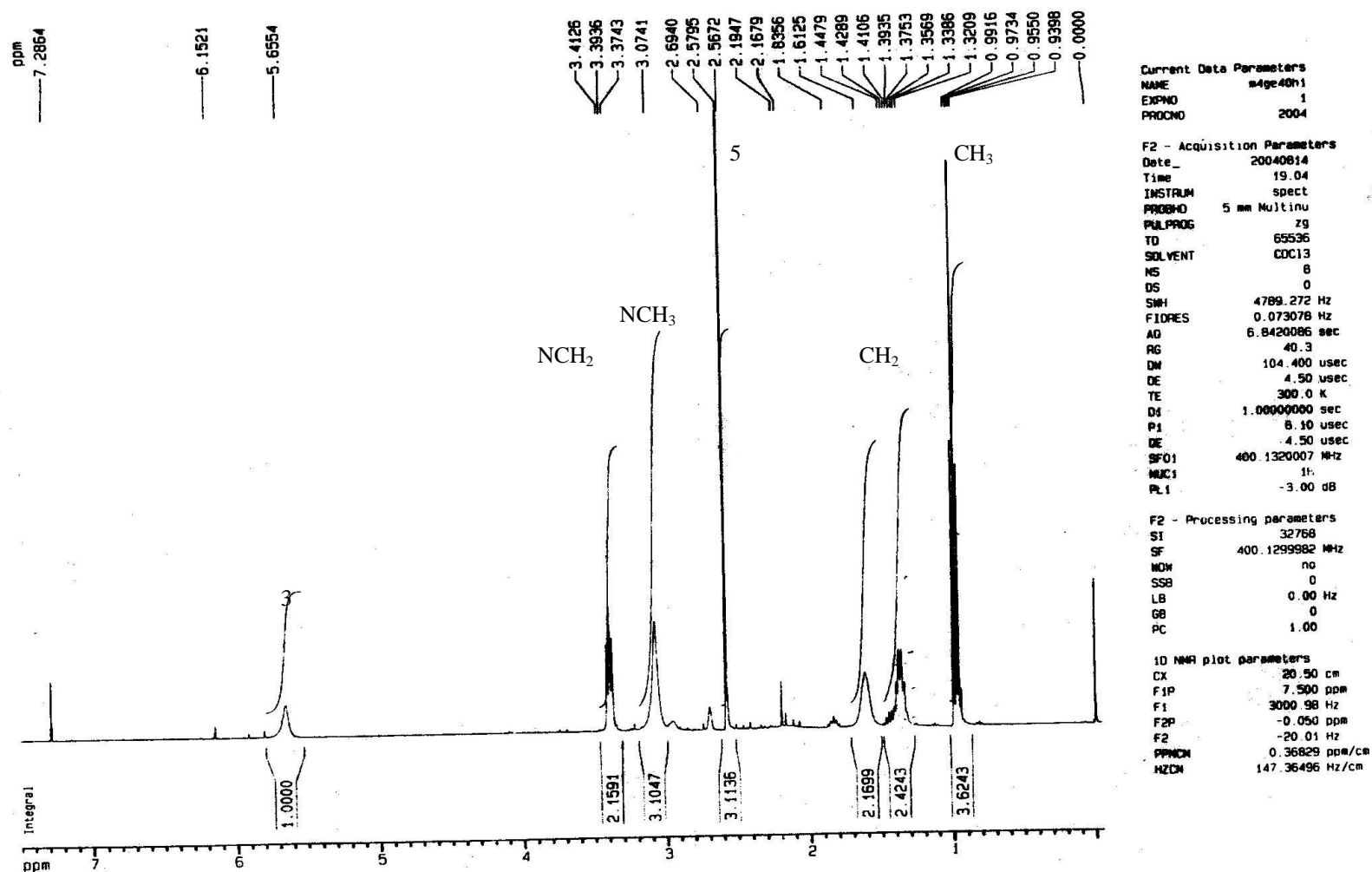


Figura 58– Espectro de RMN <sup>1</sup>H a 400 MHz do composto (*E*) 4-Butilmetilamino-1,1,1-triclorometil-3-penten-2-ona 13f

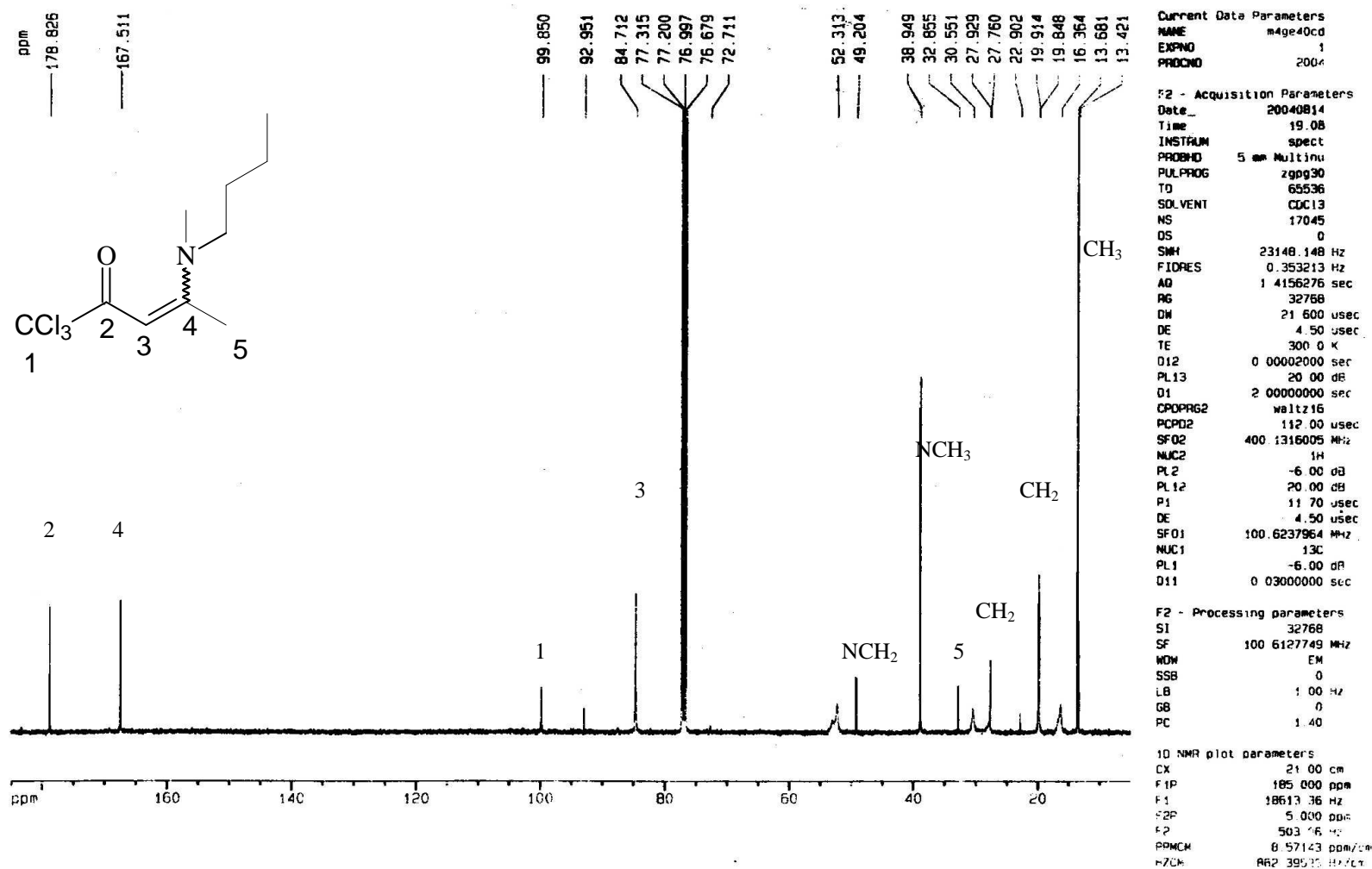


Figura 59– Espectro de RMN <sup>13</sup>C a 100,6 MHz do composto (*E*)-4-Butilmetilamino-1,1,1-triclorometil-3-penten-2-ona **13f**

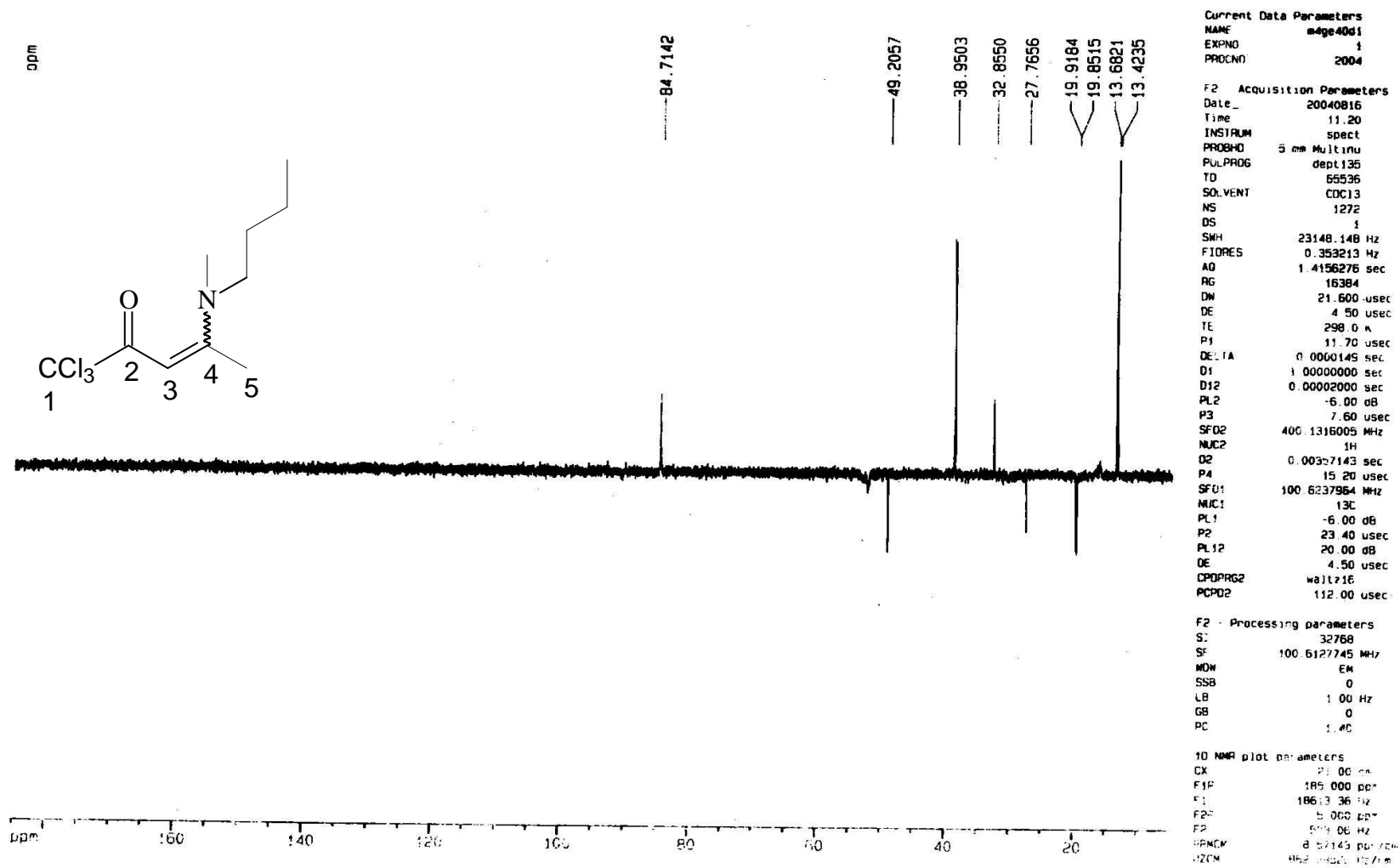


Figura 60– Espectro de RMN DEPT135 a 100,6 MHz do composto (*E*) 4-Butilmetilamino-1,1,1-triclorometil-3-penten-2-ona **13f**



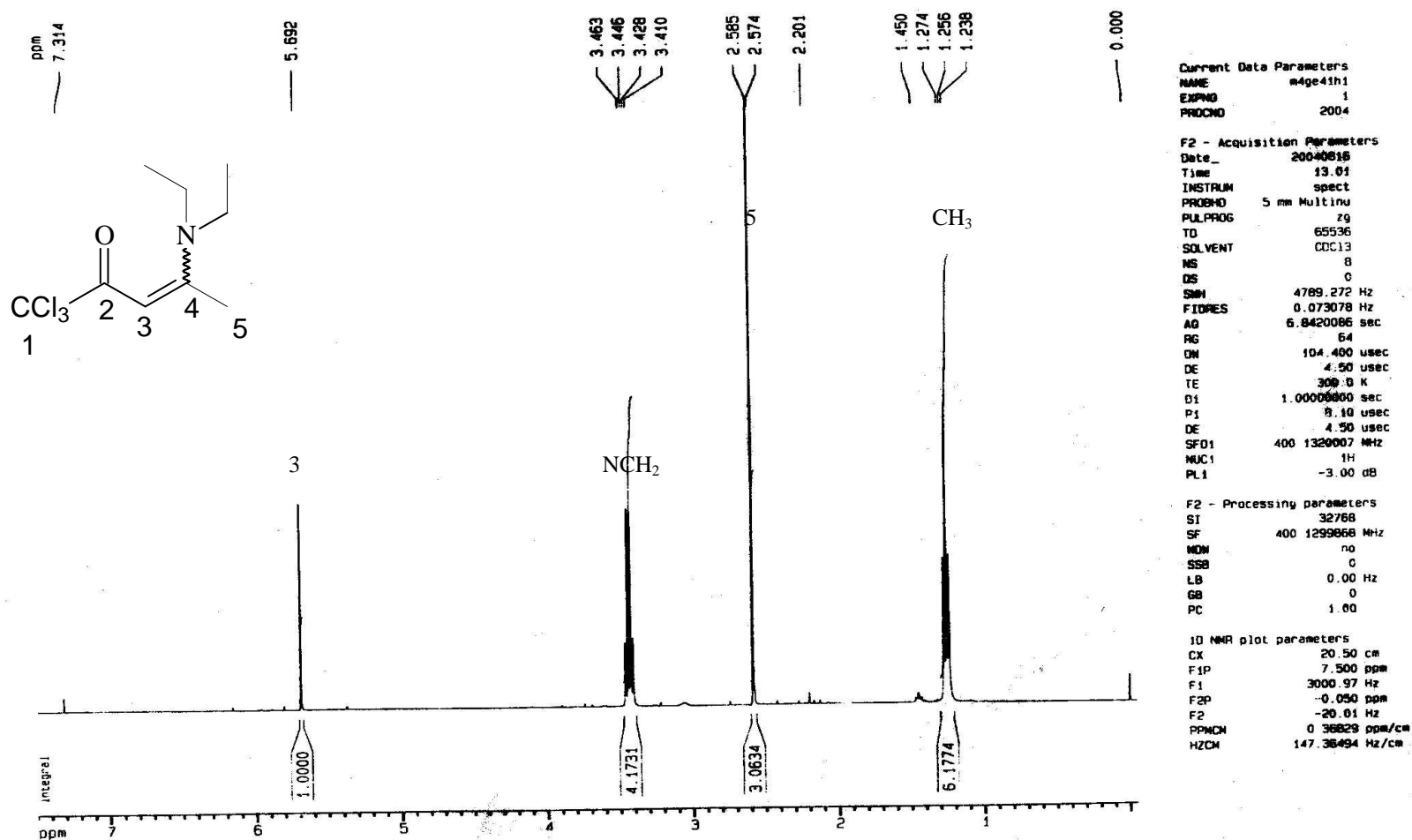


Figura 61– Espectro de RMN  $^1\text{H}$  a 400 MHz do composto (*E*) 1,1,1-Triclorometil-4-dietilamino-3-penten-2-ona **13g**

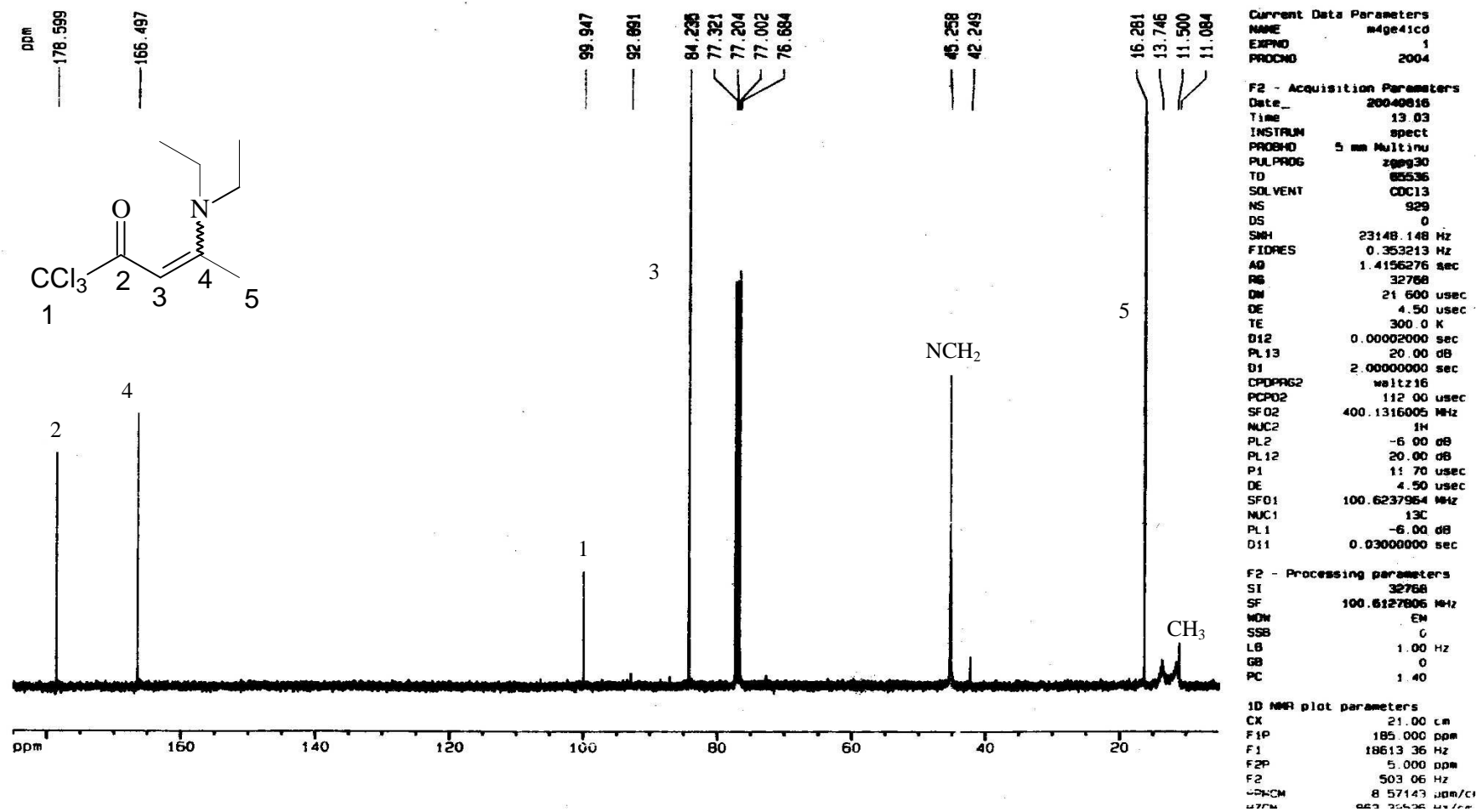


Figura 62– Espectro de RMN  $^{13}\text{C}$  a 100,6 MHz do composto (*E*) 1,1,1-Triclorometil-4-dietilamino-3-penten-2-ona **13g**

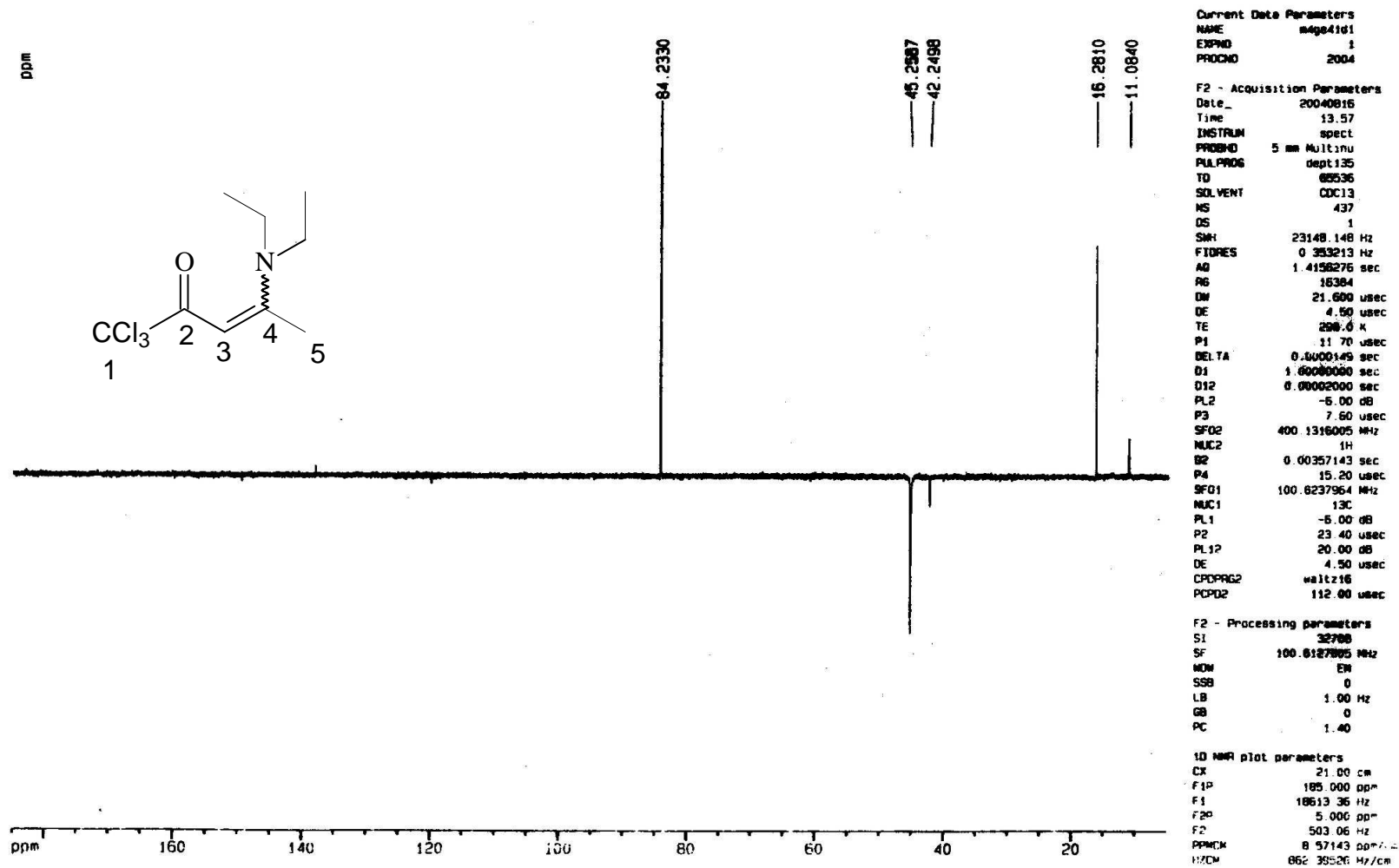


Figura 63– Espectro de RMN DEPT135 a 100,6 MHz do composto (*E*) 1,1,1-Triclorometil-4-dietilamino-3-penten-2-ona **13g**

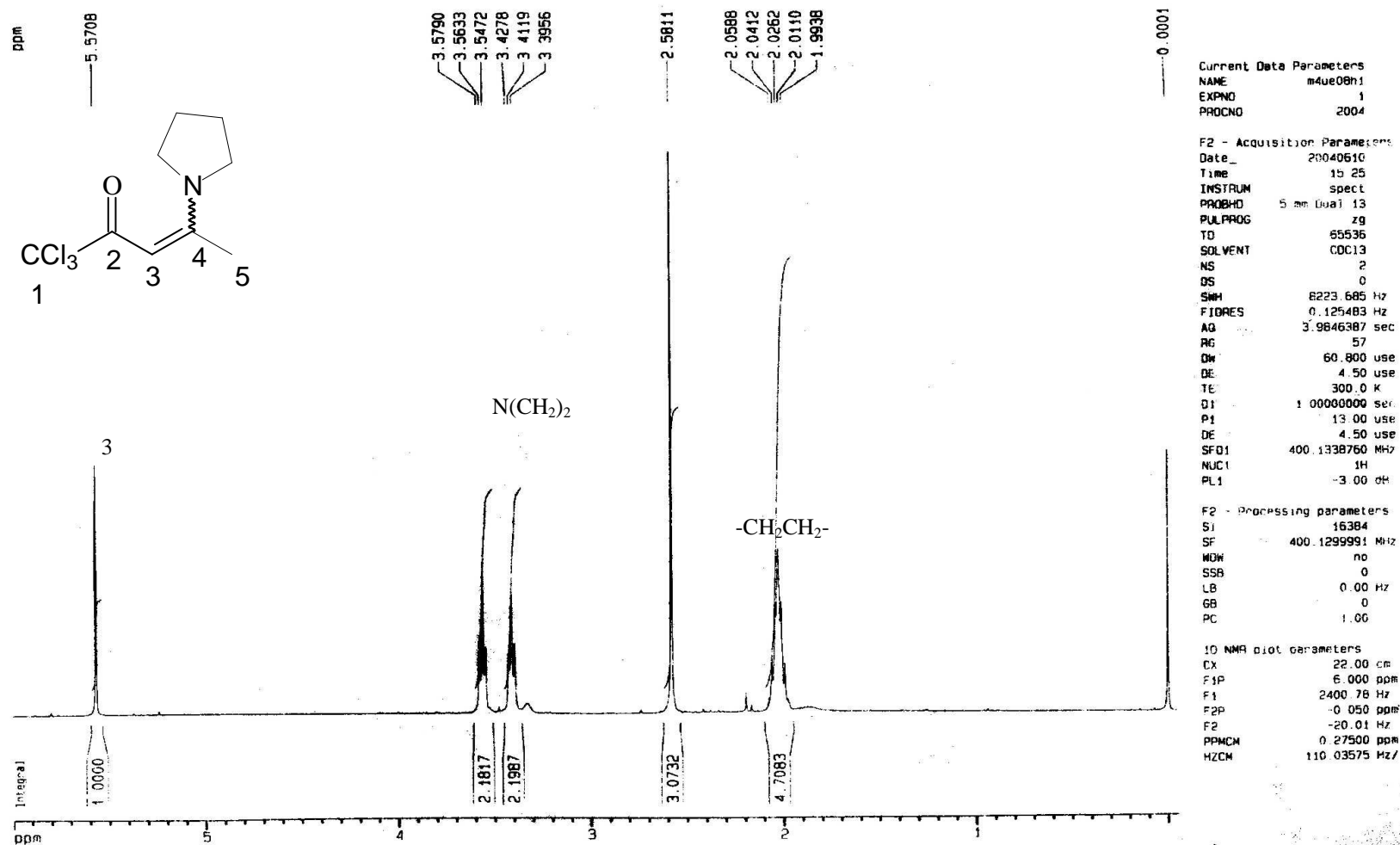


Figura 64– Espectro de RMN <sup>1</sup>H a 400 MHz do composto (*E*)-1,1,1-Triclorometil-4-(pirrolidin-1-il)-3-penten-2-ona **13h**

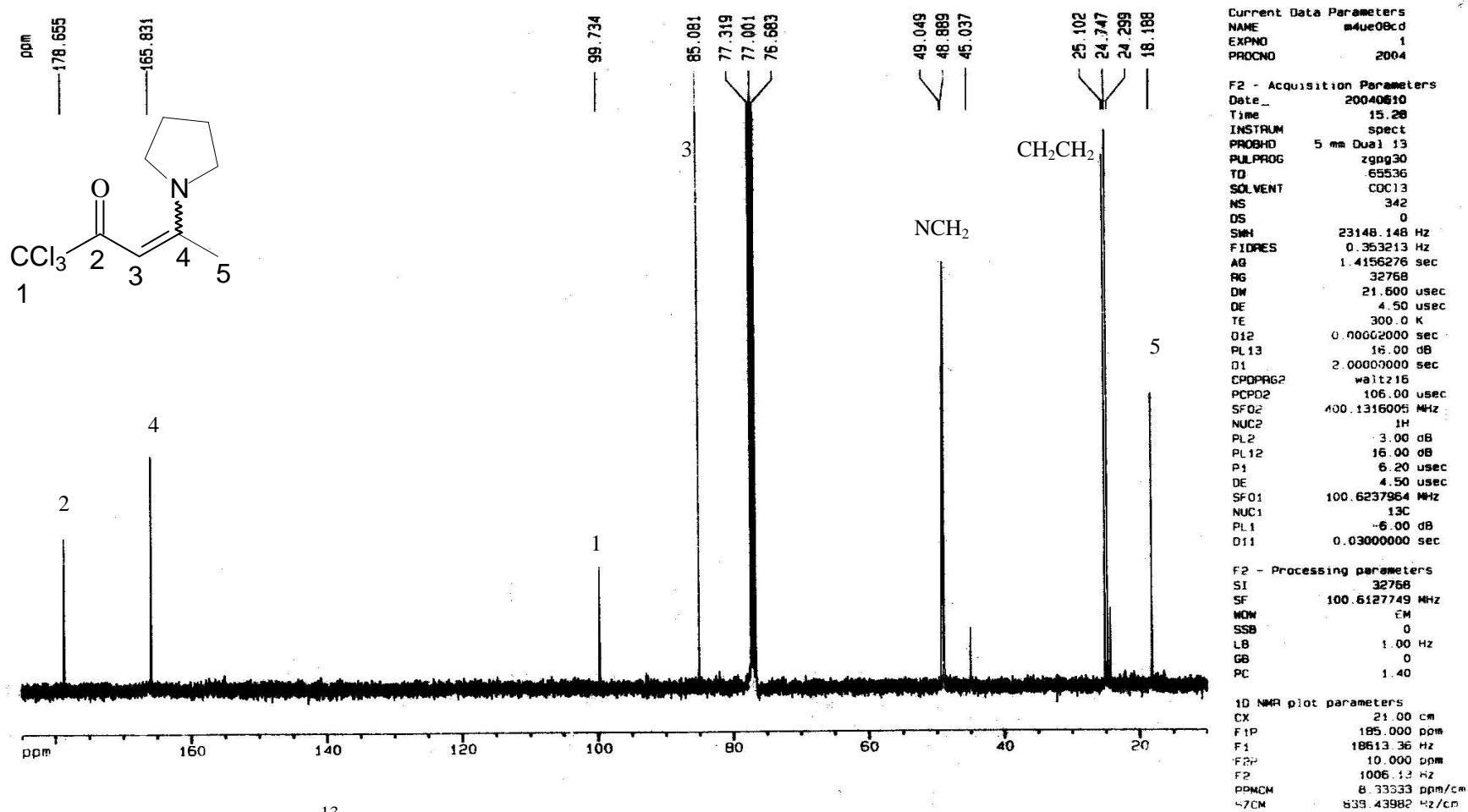


Figura 65– Espectro de RMN <sup>13</sup>C a 100,6 MHz do composto *(E)* 1,1,1-Triclorometil-4-(pirrolidin-1-il)-3-penten-2-ona **13h**

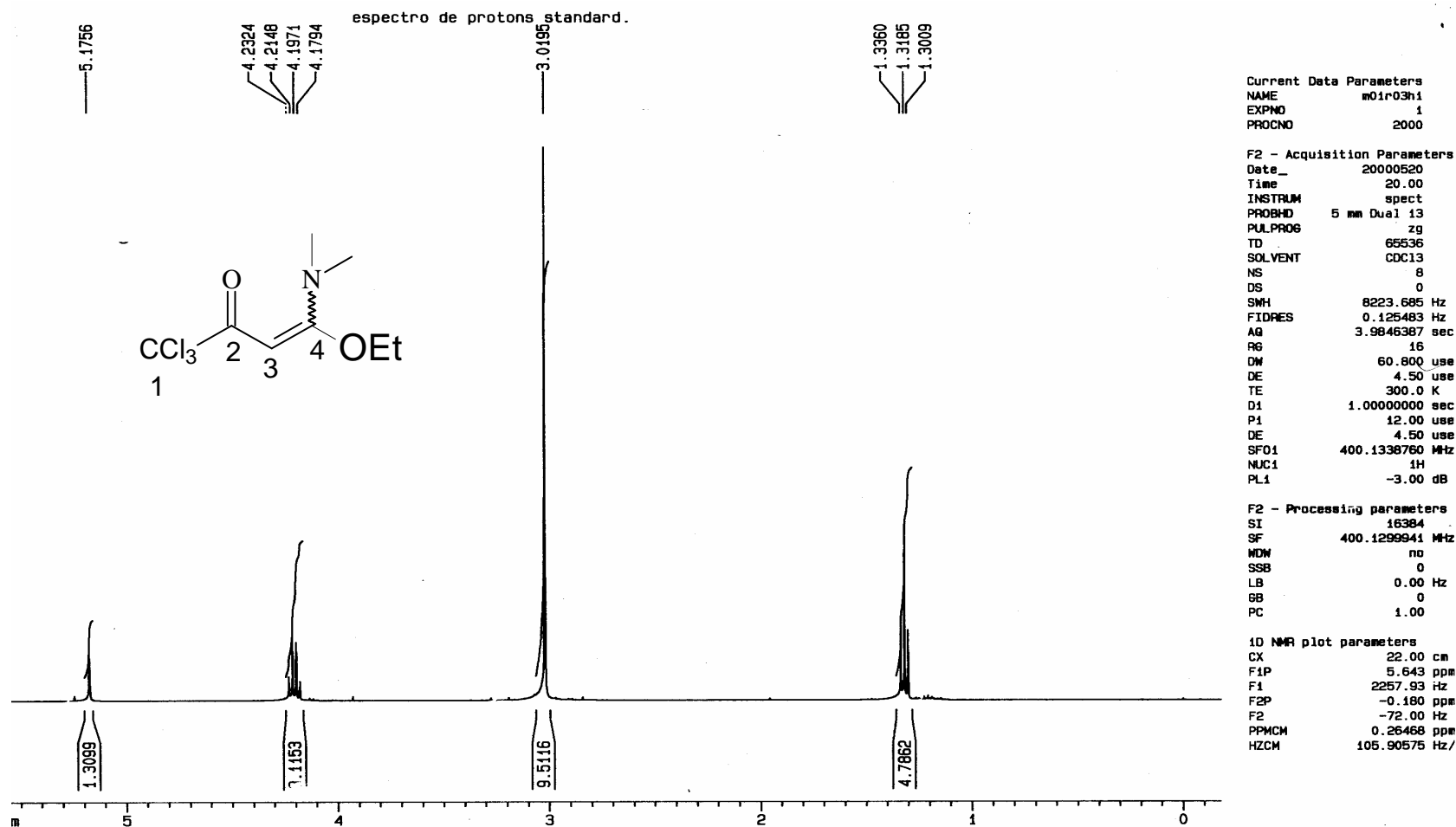


Figura 62– Espectro de RMN  $^1\text{H}$  a 400 MHz do composto (*E*) 1,1,1-Triclorometil-4-dimetilamino-4-etoxi-3-buten-2-ona **14i**

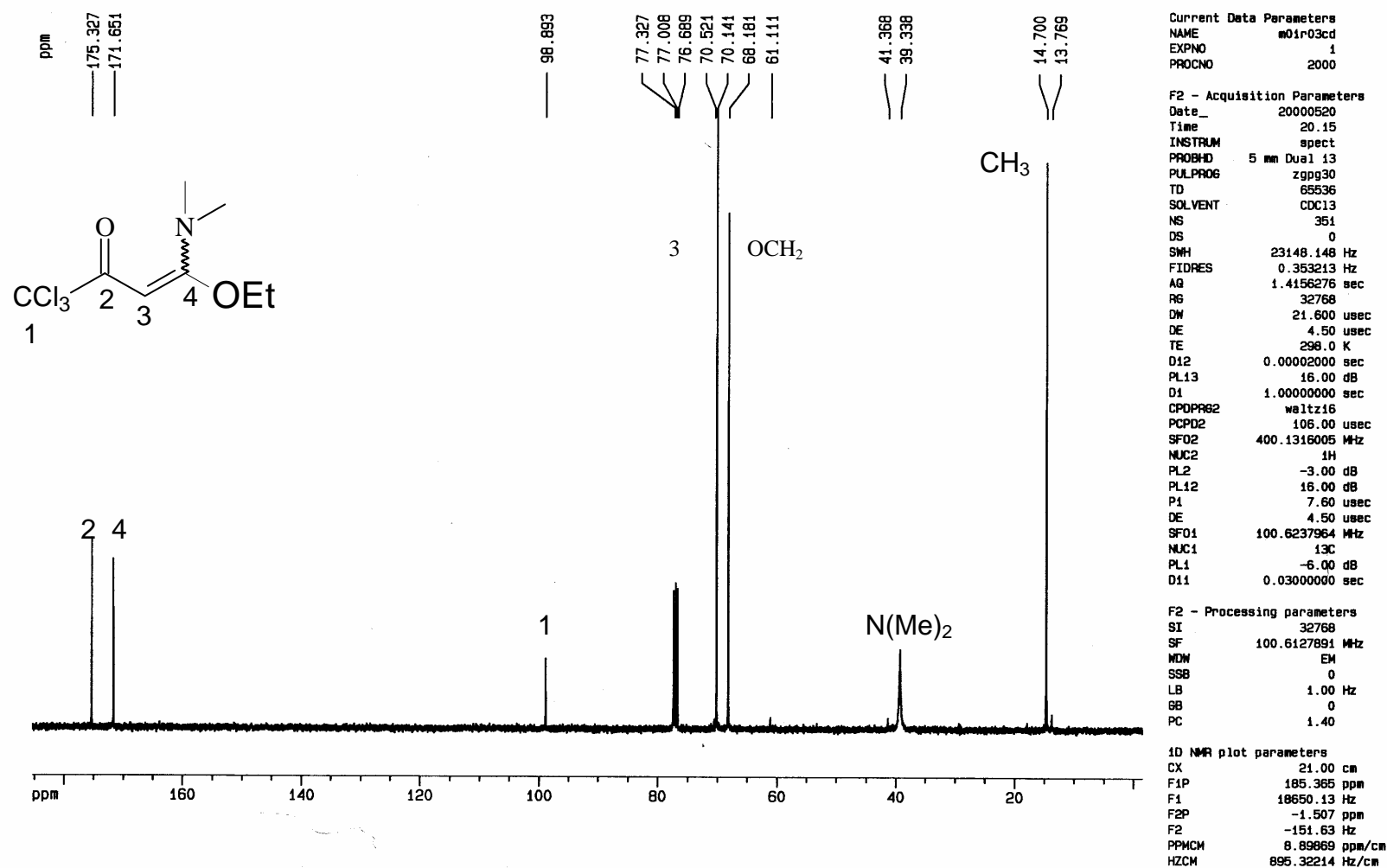


Figura 62– Espectro de RMN  $^{13}\text{C}$  a 100,6 MHz do composto (*E*) 1,1,1-Triclorometil-4-dimetilamino-4-etoxi-3-buten-2-ona **14i**

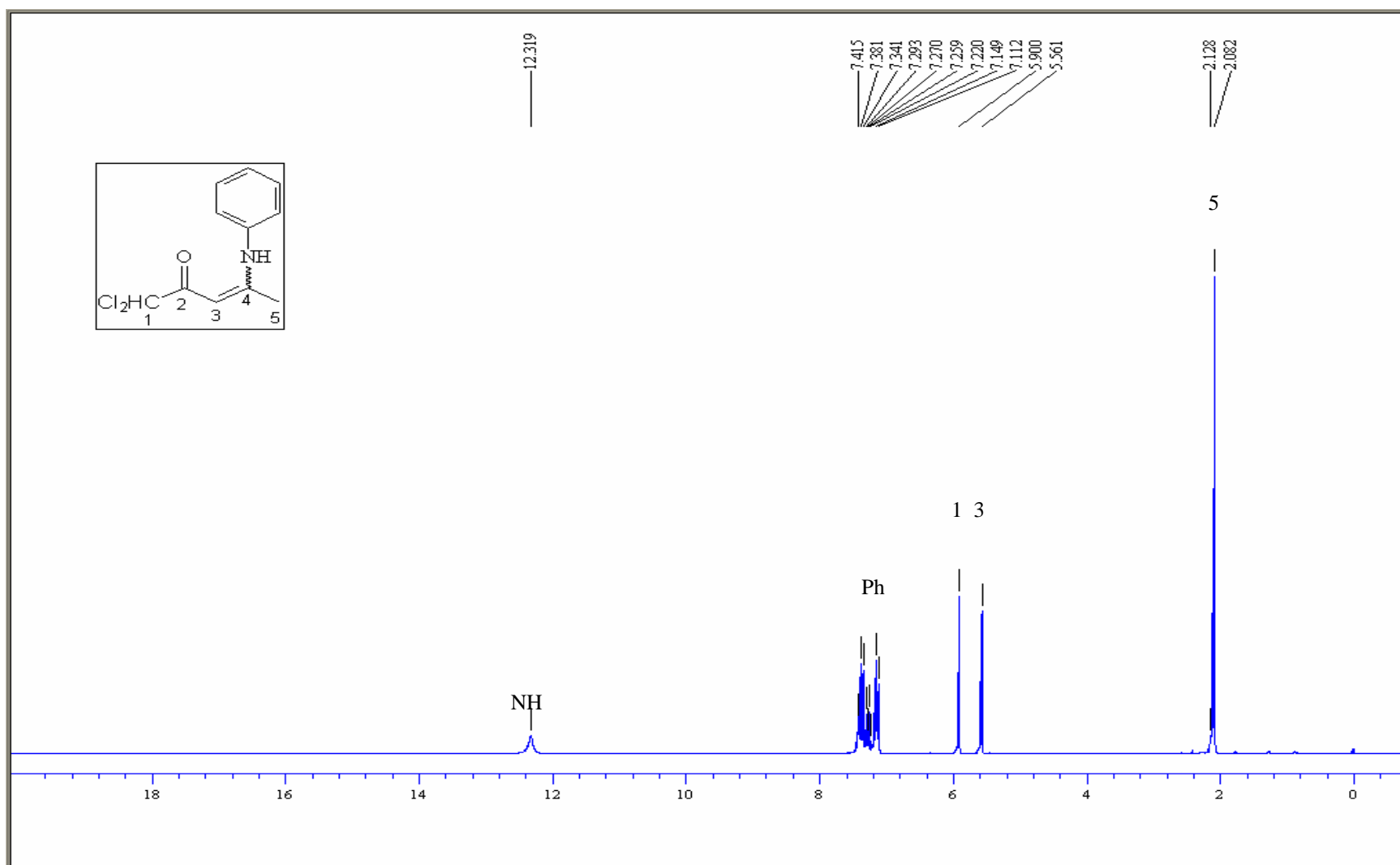


Figura 66 – Espectro de RMN a 400 MHz do composto (Z)-1,1-Diclorometil 4-fenililamino-3-penten-2-ona **15a**.



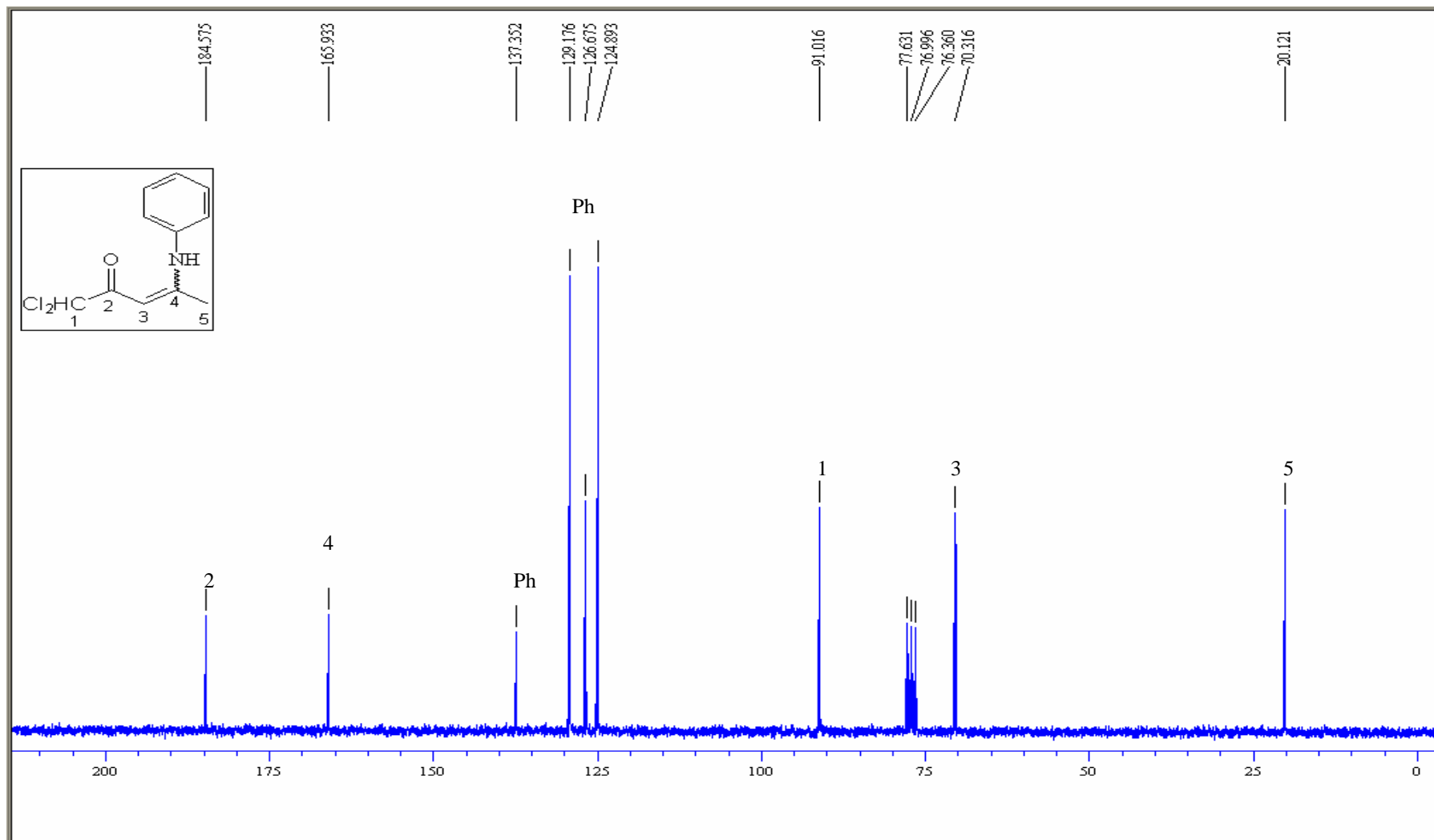


Figura 67 – Espectro de RMN de  $^{13}\text{C}$  a 400 MHz do composto (Z)1,1-Diclorometil 4-fenililamino-3-penten-2-ona **15a**.

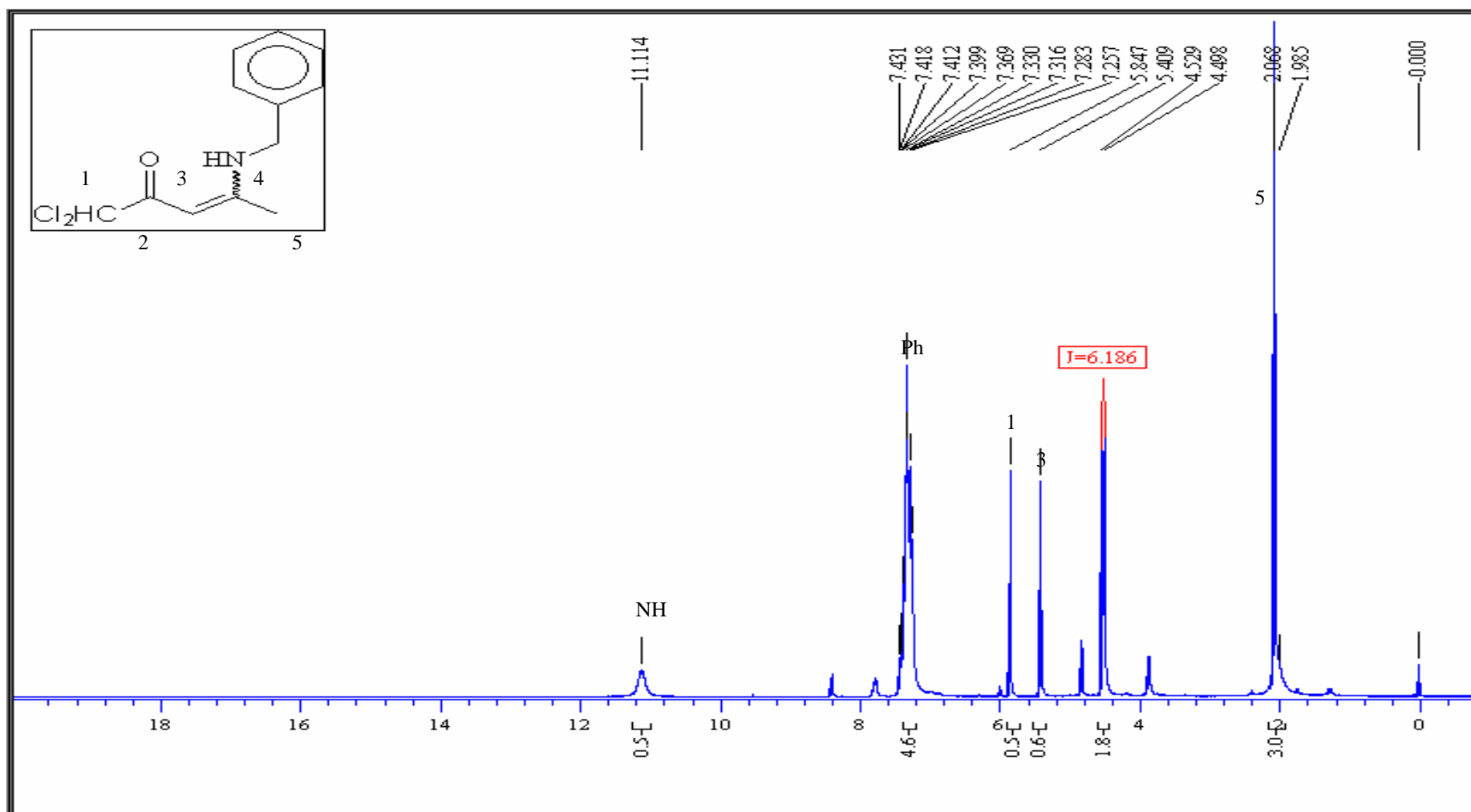


Figura 68 – Espectro de RMN a 400 MHz do composto (Z) 4-Benzilamino-1,1-diclorometil-3-penten-2-ona **15c**

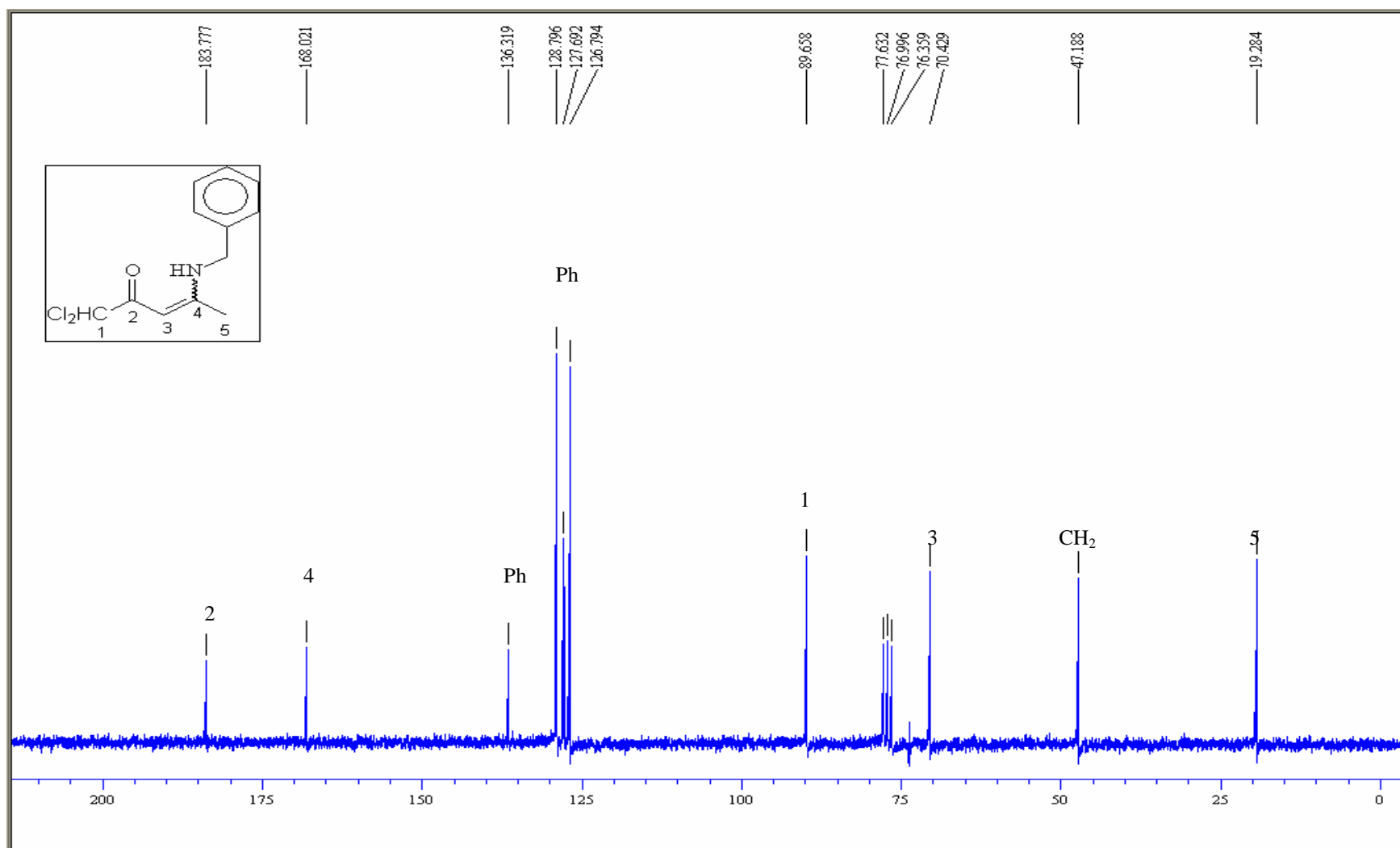


Figura 69 – Espectro de  $^{13}\text{C}$  RMN a 100 MHz do composto (Z) 4-Benzilamino-1,1-diclorometil-3-penten-2-ona **15c**

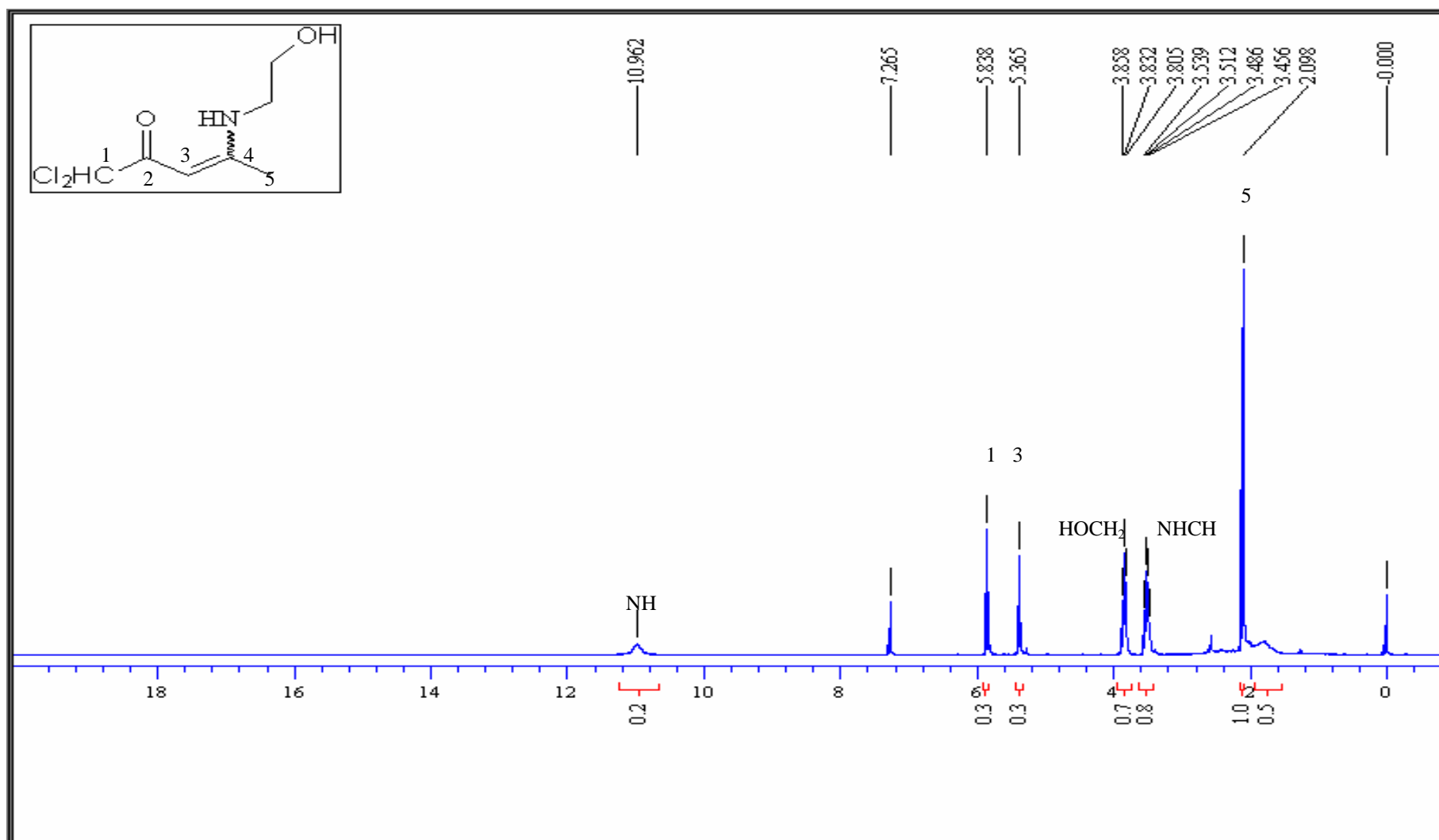


Figura 70 – Espectro de RMN a 400 MHz do composto (*E*) 1,1-Diclorometil-4-etanolamino-3-penten-2-ona **15d**.

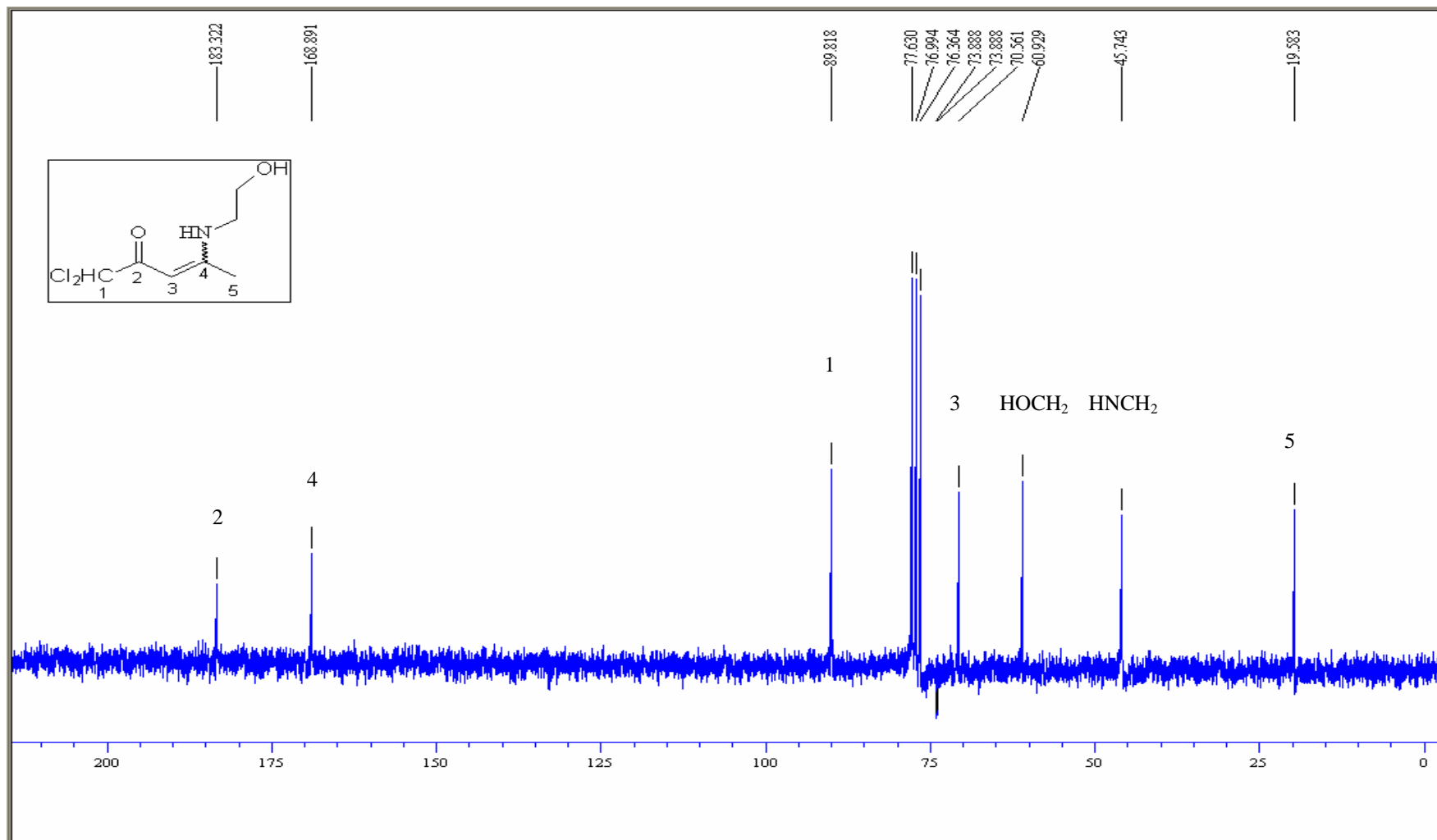


Figura 71 – Espectro de RMN  $^{13}\text{C}$  a 100 MHz do composto (E) 1,1-Diclorometil-4-etanolamino-3-penten-2-ona **15d**.

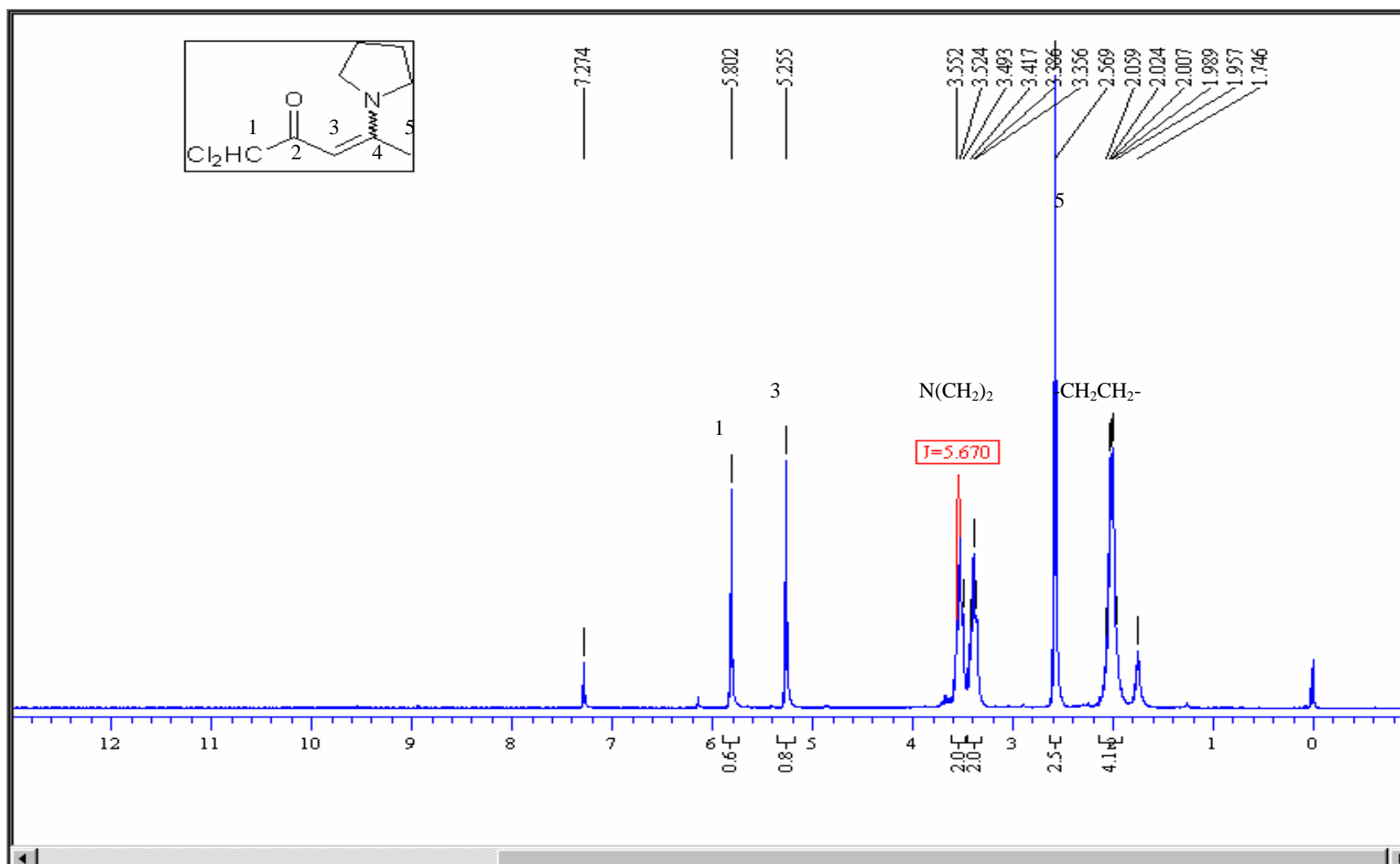


Figura 72 – Espectro de RMN a 400 MHz do composto (*E*) 1,1-Diclorometil-4-(pirrolidin-1-il)-3-penten-2-ona **15h**.

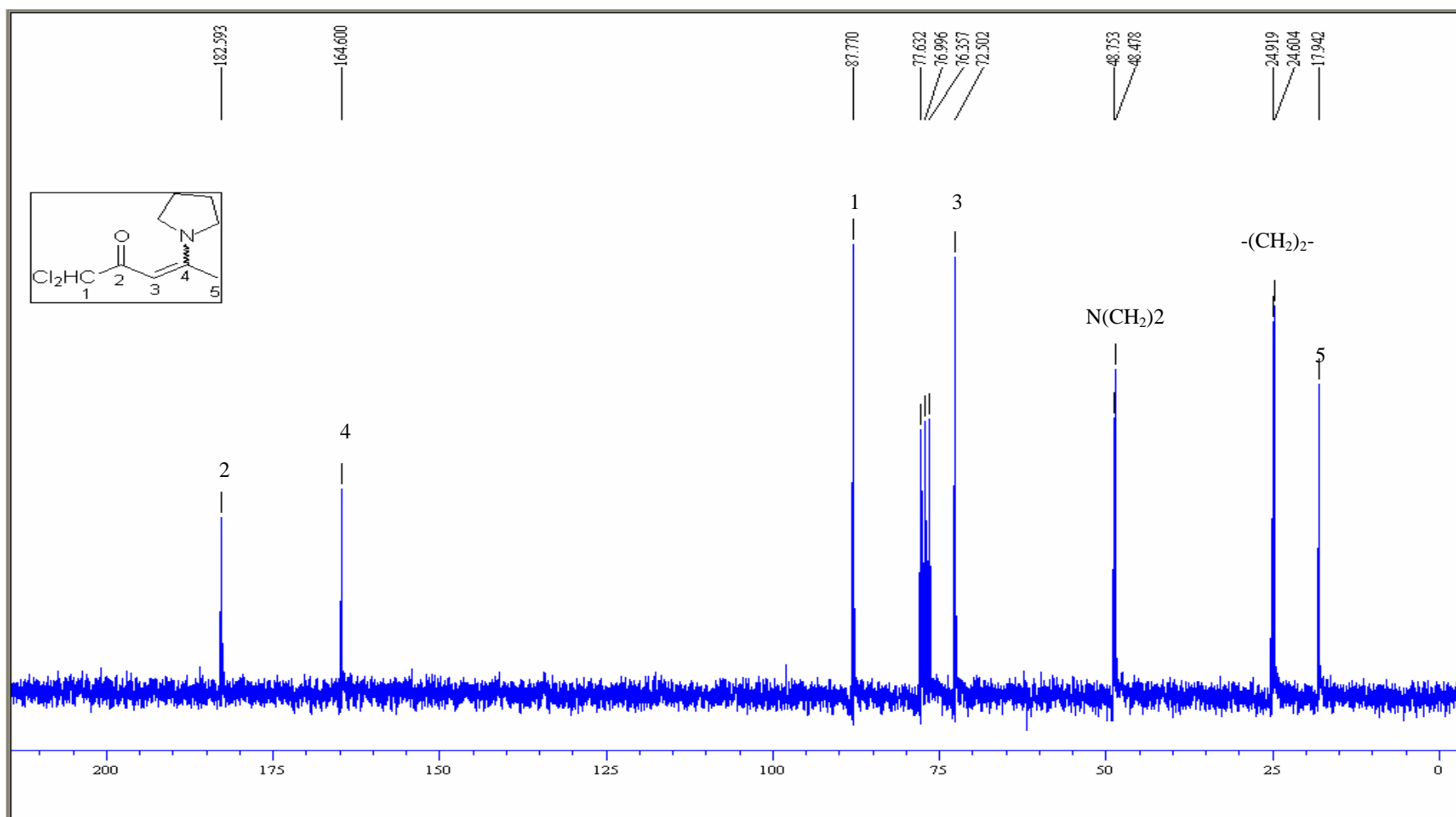


Figura 73 – Espectro de RMN  $^{13}\text{C}$  a 100 MHz do composto (E) 1,1-Diclorometil-4-(pirrolidin-1-il)-3-penten-2-ona **15h**.

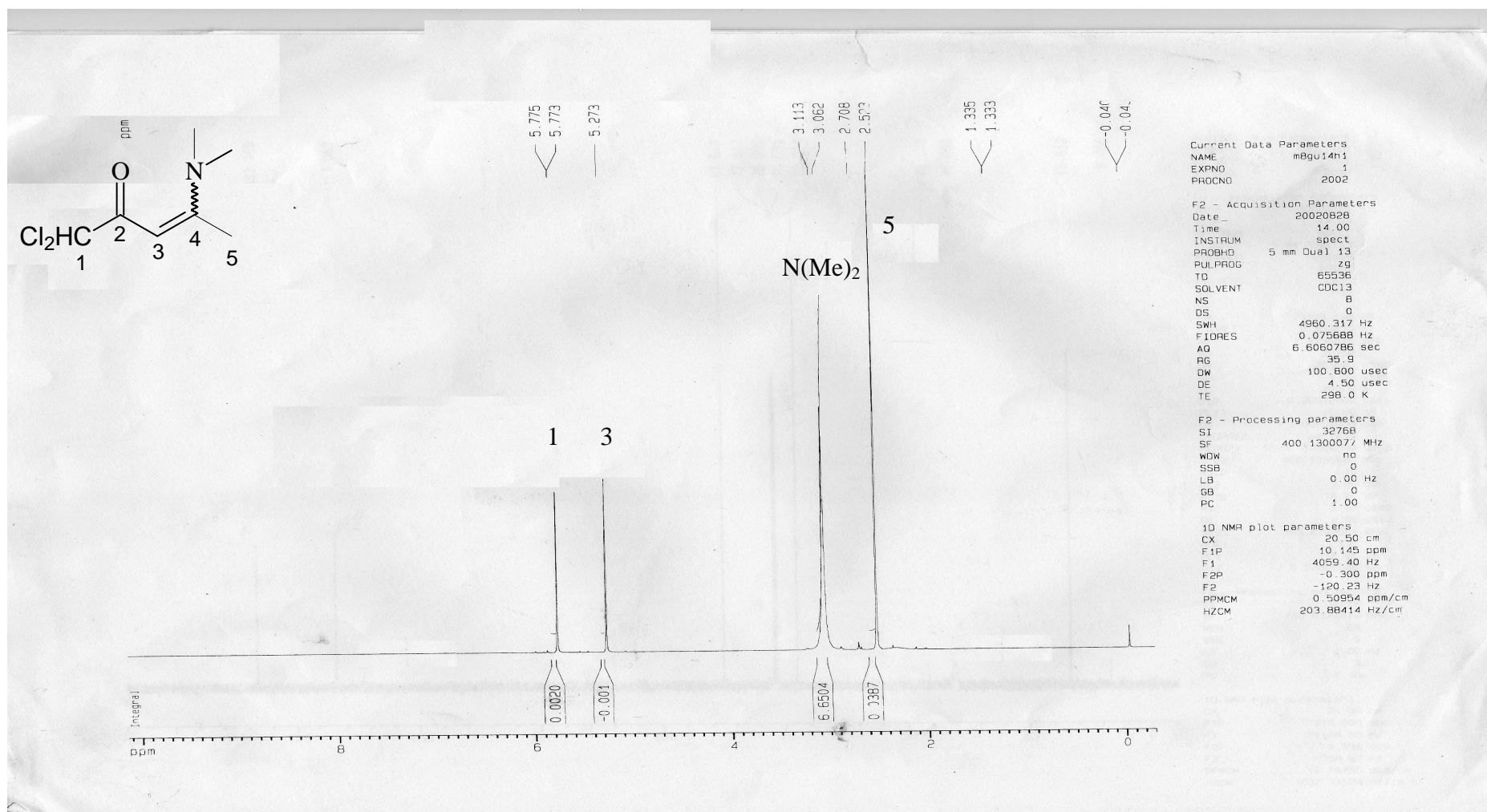


Figura 48– Espectro de RMN  $^1\text{H}$  a 100,6MHz do composto (*E*) 4-dimetilamino-1,1,1-triclorometil-3-buten-2-ona **15i**



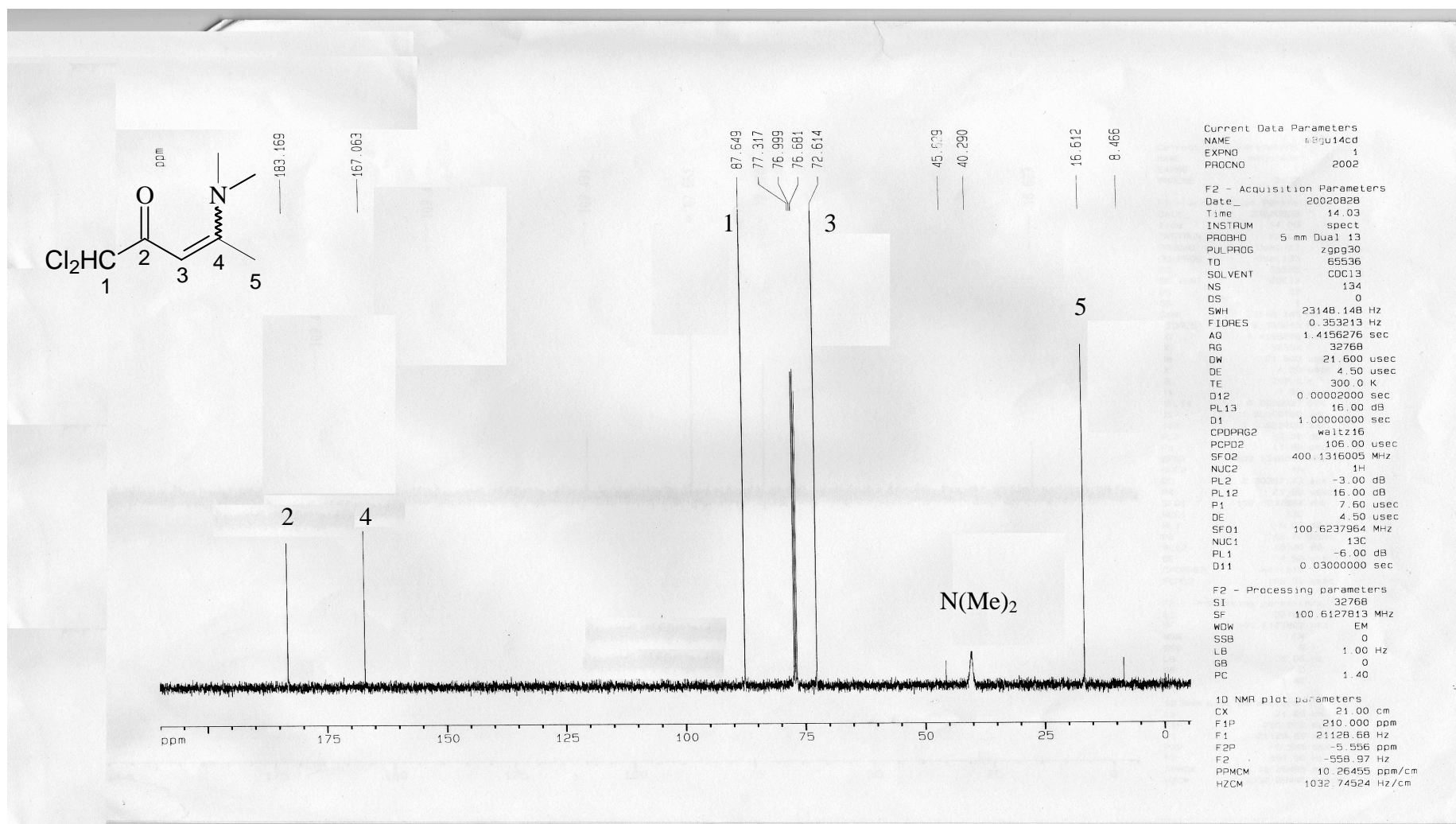


Figura 49– Espectro de RMN <sup>13</sup>C a 100,6MHz do composto (*E*) 4-dimetilamino-1,1,1-triclorometil-3-buten-2-ona **15i**

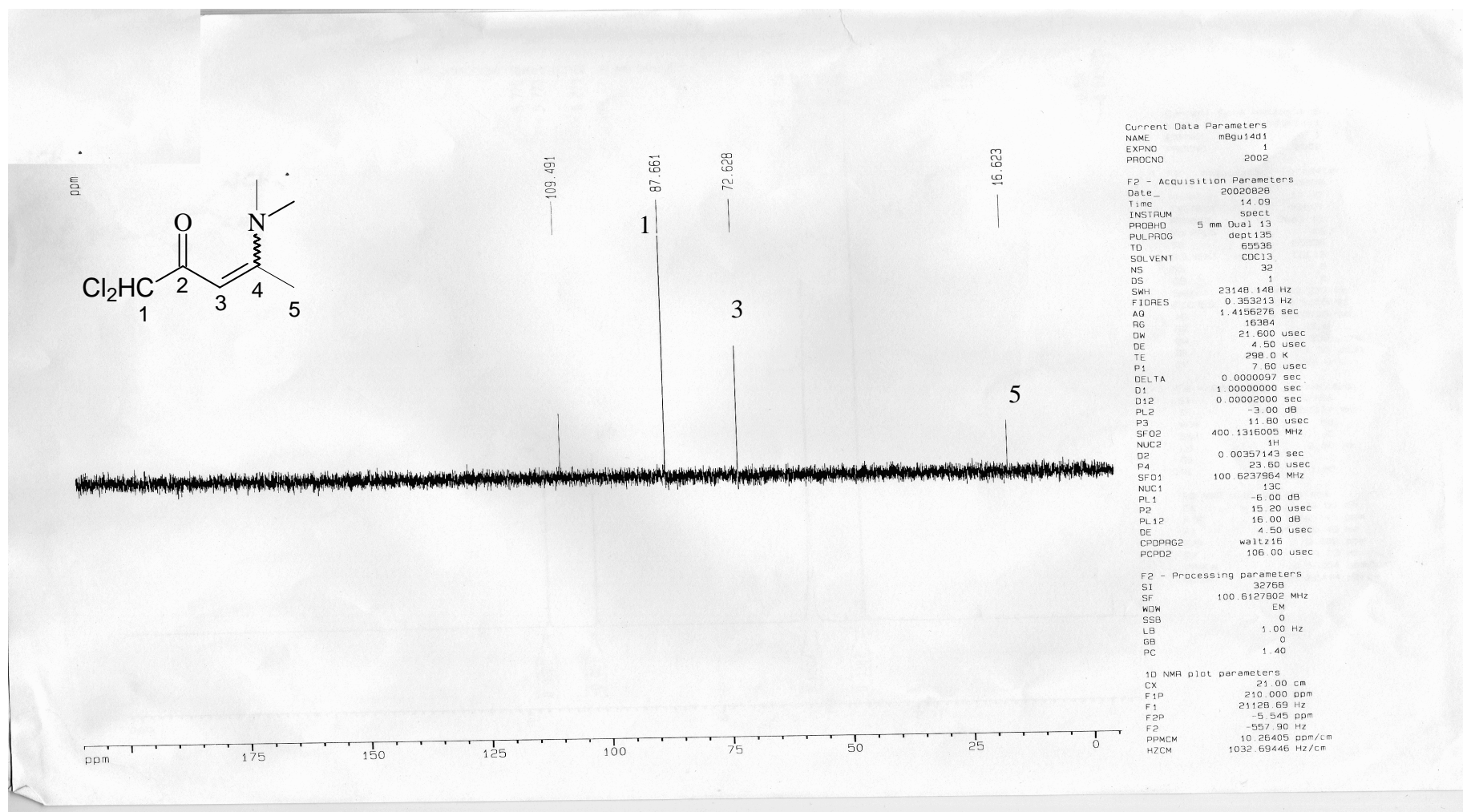


Figura 49– Espectro de RMN DEPT135 a 100,6MHz do composto (E) 4-dimetilamino-1,1,1-triclorometil-3-buten-2-ona **15i**

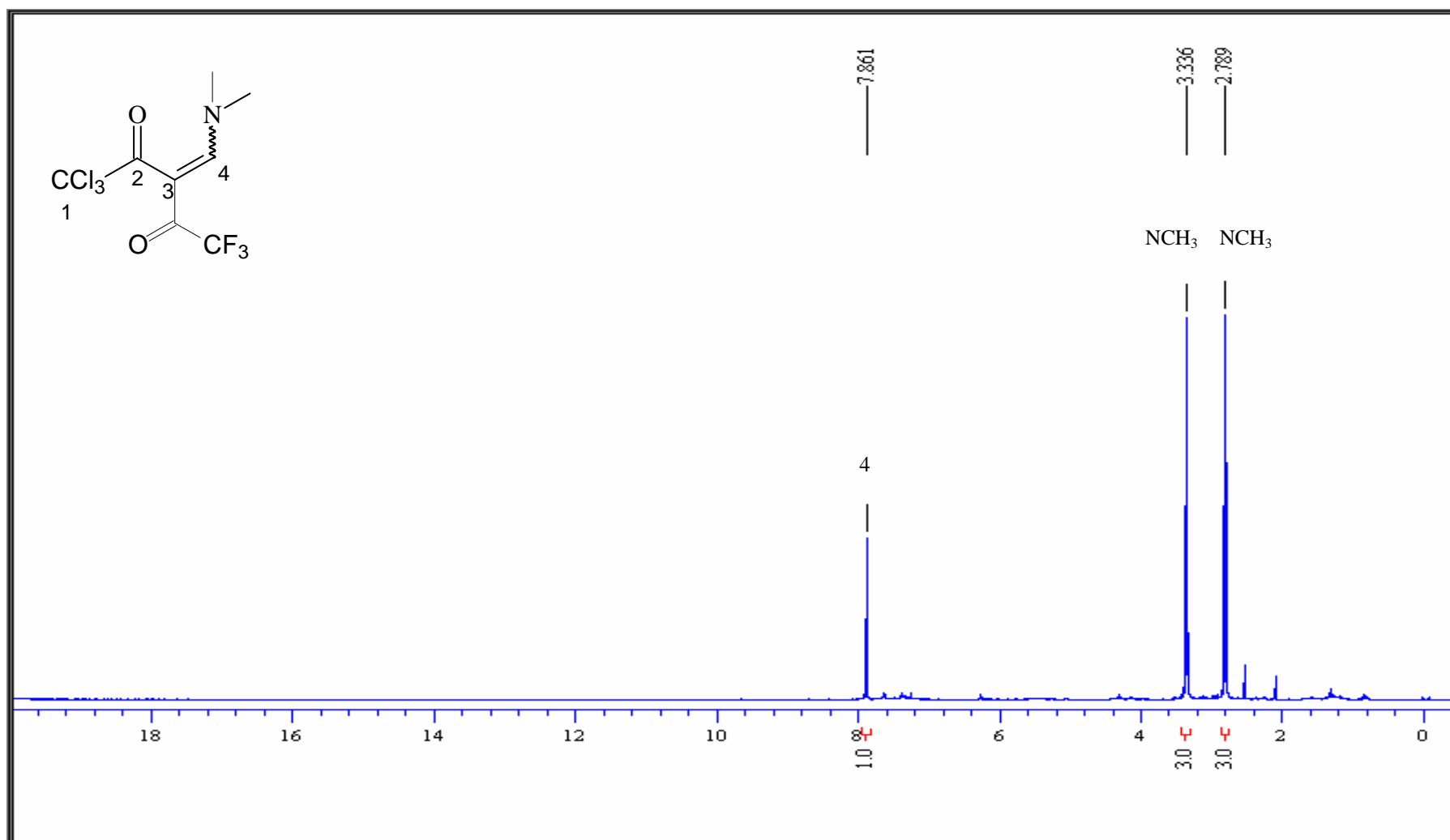


Figura 74 – Espectro de RMN de  $^1\text{H}$  a 400 MHz do composto 1,1,1-Triclorometil-4-dimetilamino-2-trifluoroacetil-3-buten-2-ona **16i**

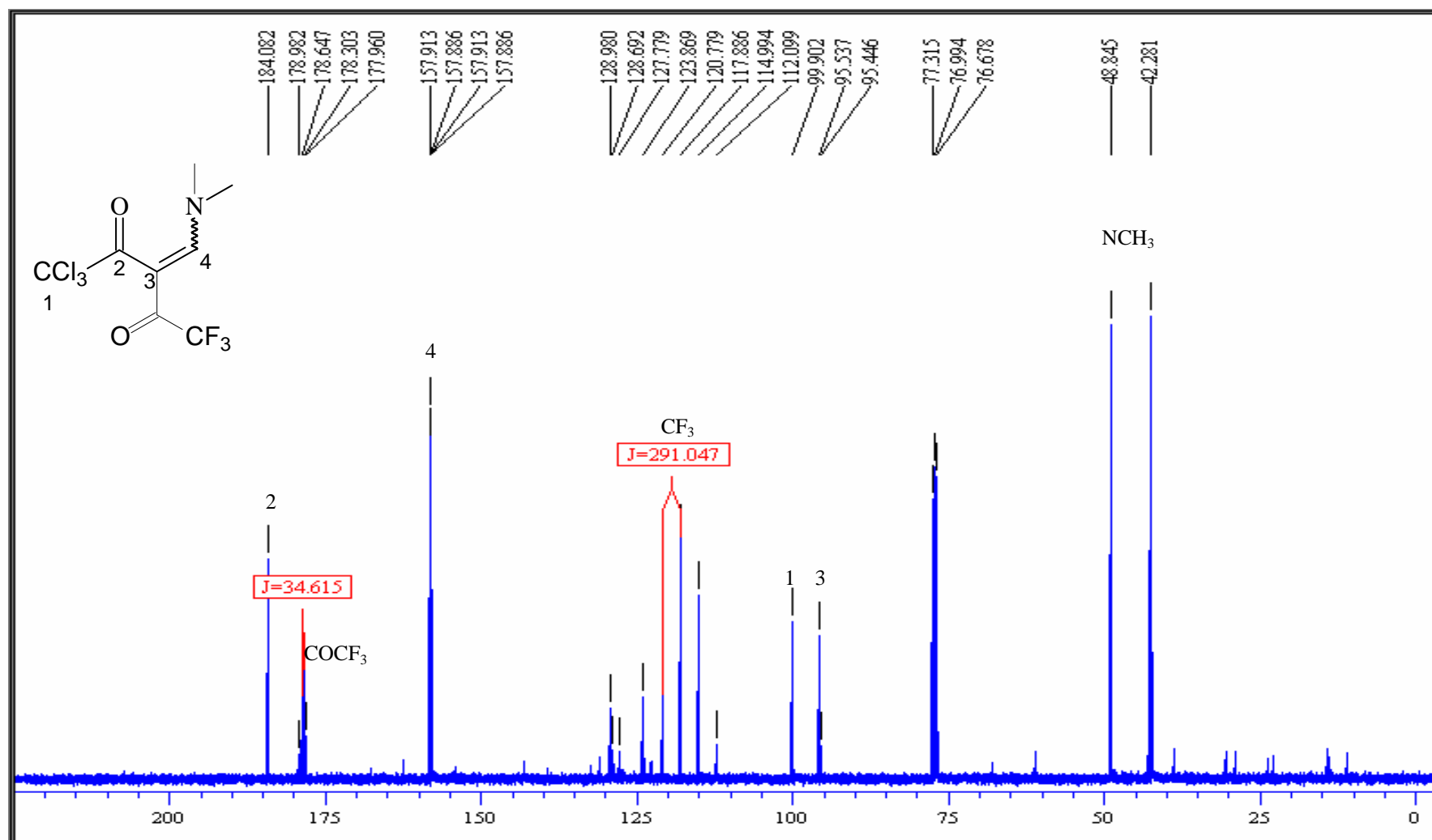


Figura 75 – Espectro de RMN  $^{13}\text{C}$  100,6 MHz do composto 1,1,1-Triclorometil-4-dimetilamino-2-trifluoracetil-3-buten-2-ona **16i**

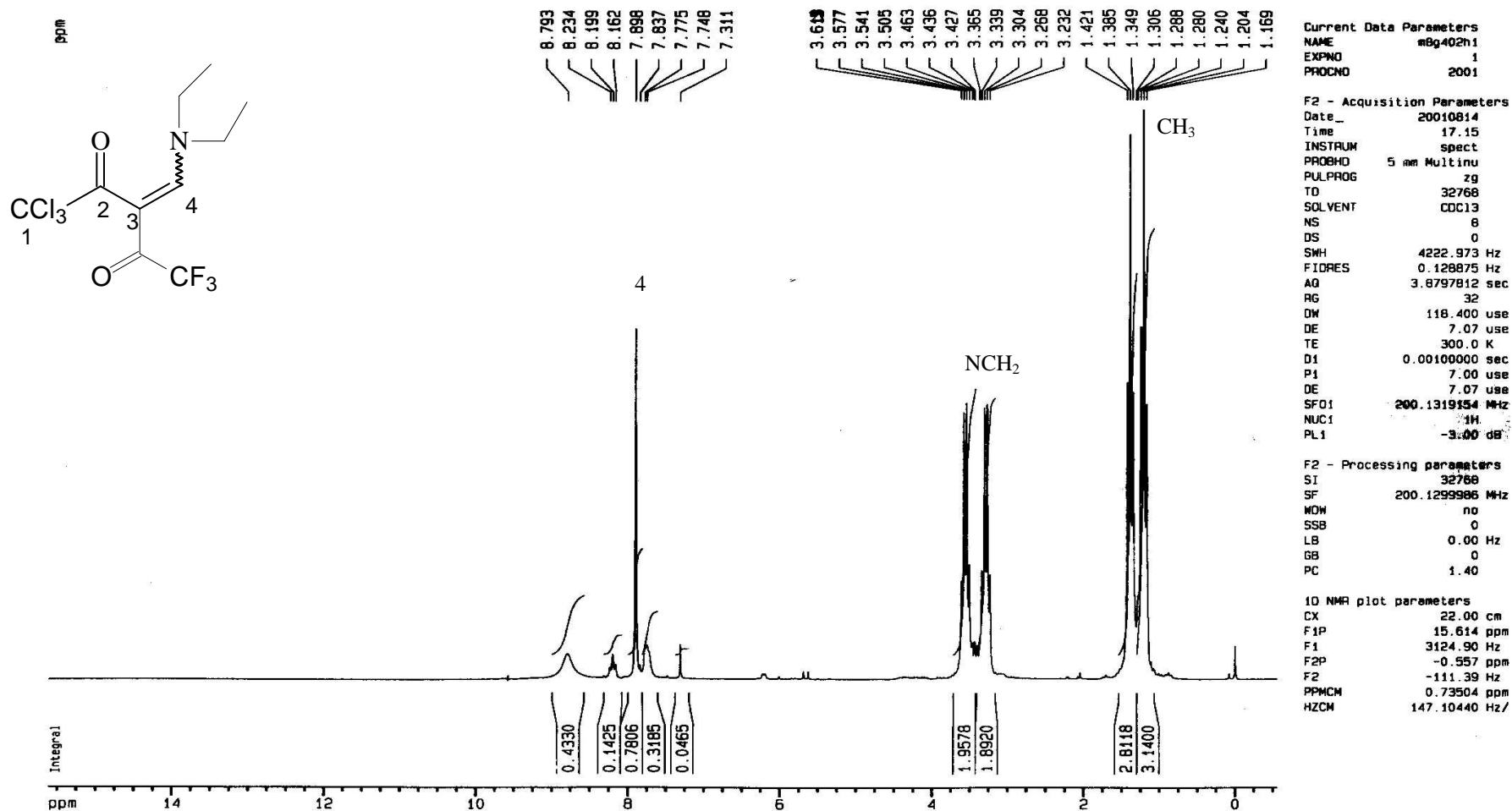


Figura 76 – Espectro de RMN de  $^1\text{H}$  a 400 MHz do composto 1,1,1-Triclorometil-4-dietilamino-2-trifluoracetil-3-buten-2-ona **16g**

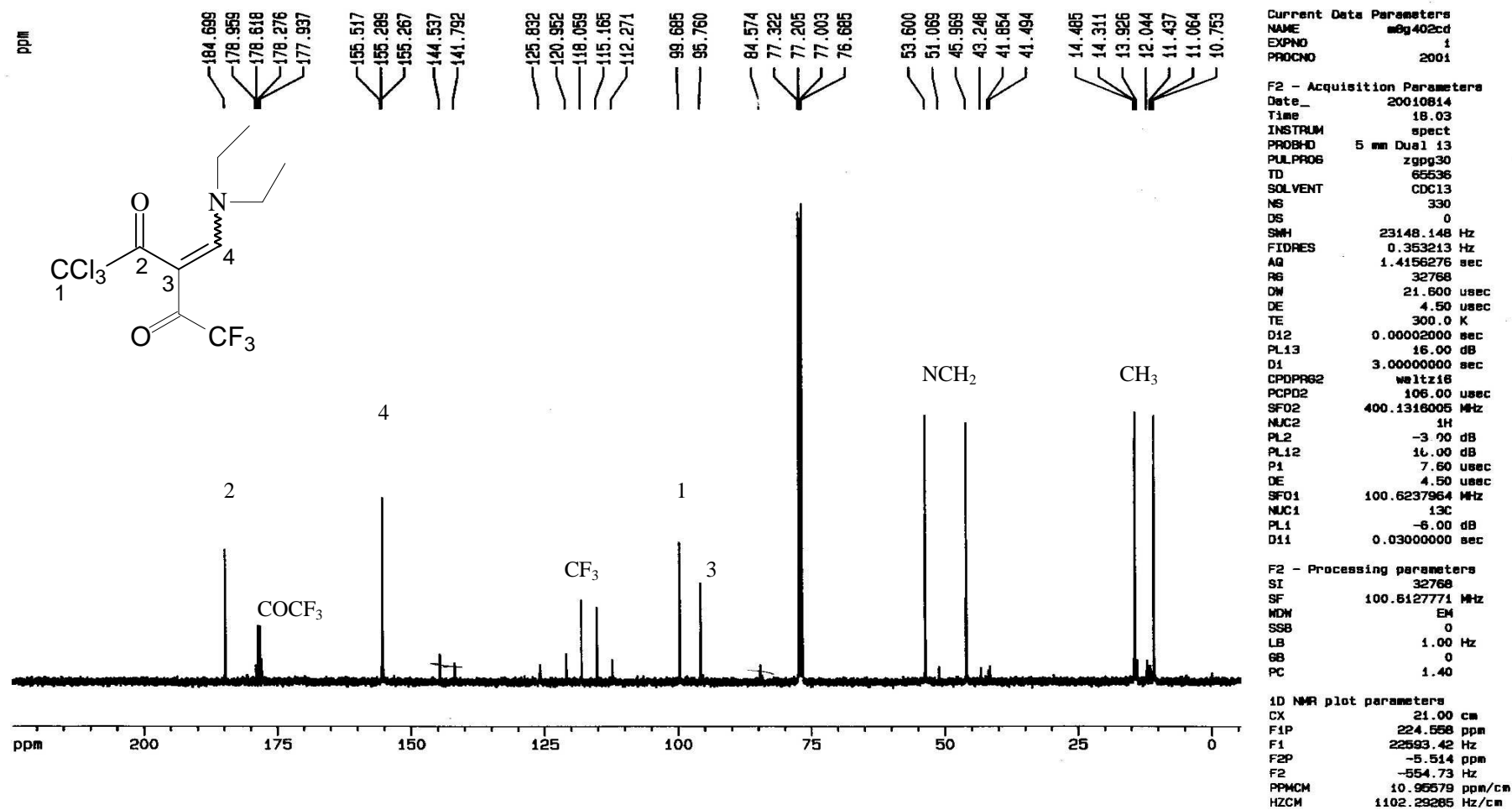


Figura 77 – Espectro de RMN de  $^{13}\text{C}$  a 100,6 MHz do composto 1,1,1-Triclorometil-4-dietilamino-2-trifluoracetil-3-buten-2-ona **16g**

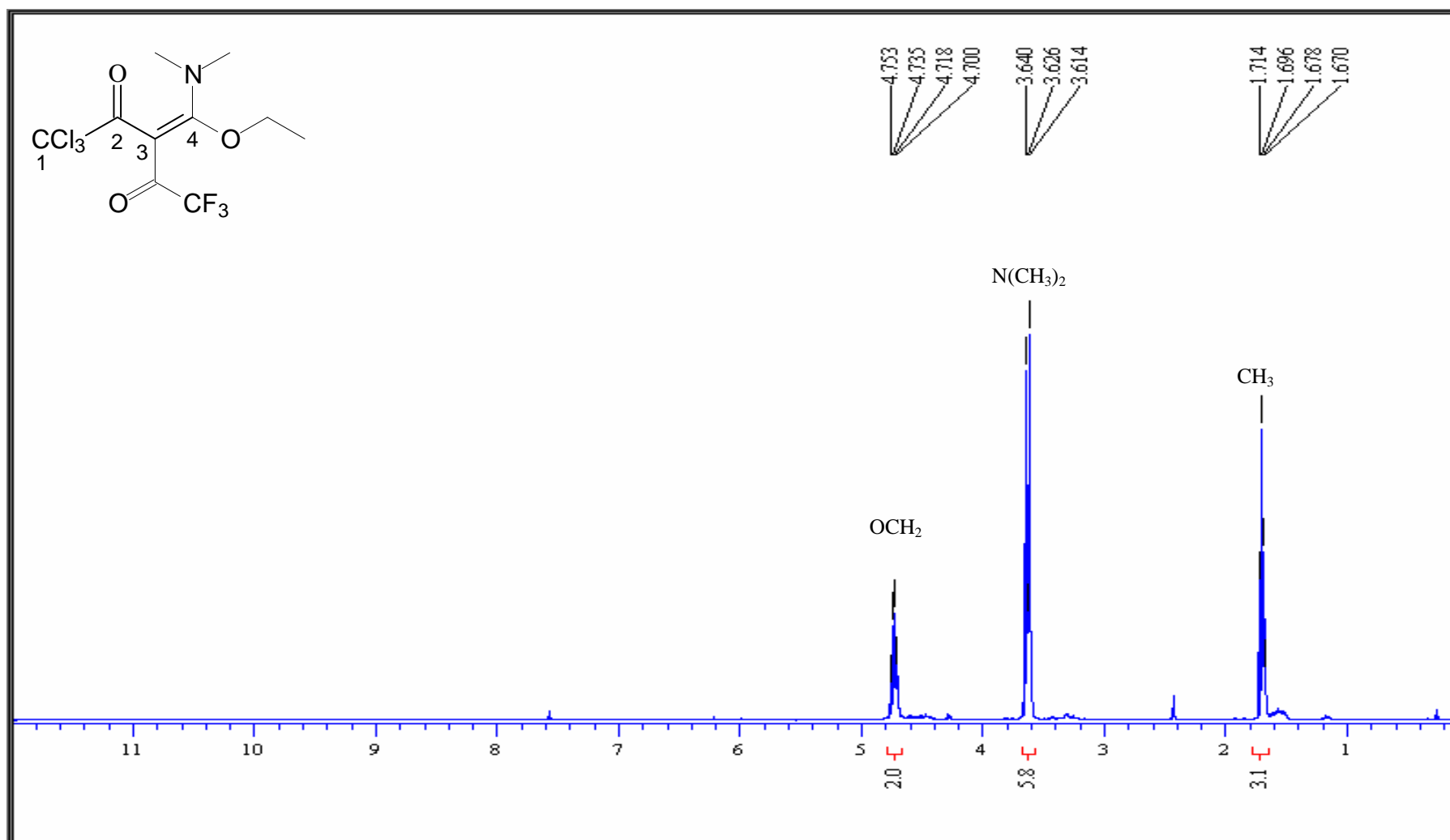


Figura 78 – Espectro de RMN de  $^1\text{H}$  a 400 MHz do composto 1,1,1-Triclorometil-4-etoxi-4-dimetilamino-2-trifluoracetil-3-buten-2-ona **17i**

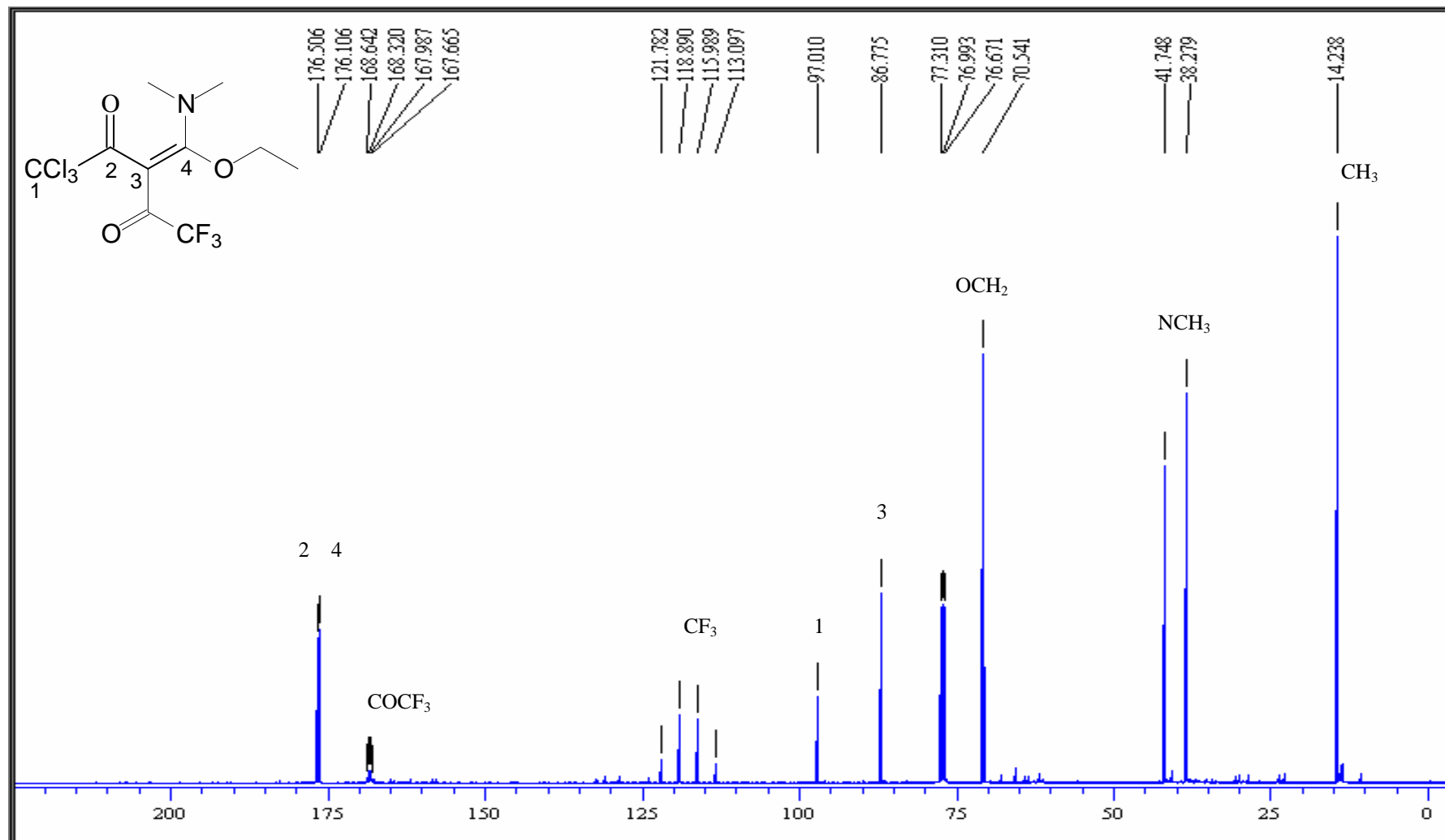


Figura 79 – Espectro de RMN de <sup>13</sup>C a 100,6 MHz do composto 1,1,1-Triclorometil-4-etoxi-4-dimetilamino-2-trifluoracetil-3-buten-2-ona **17i**



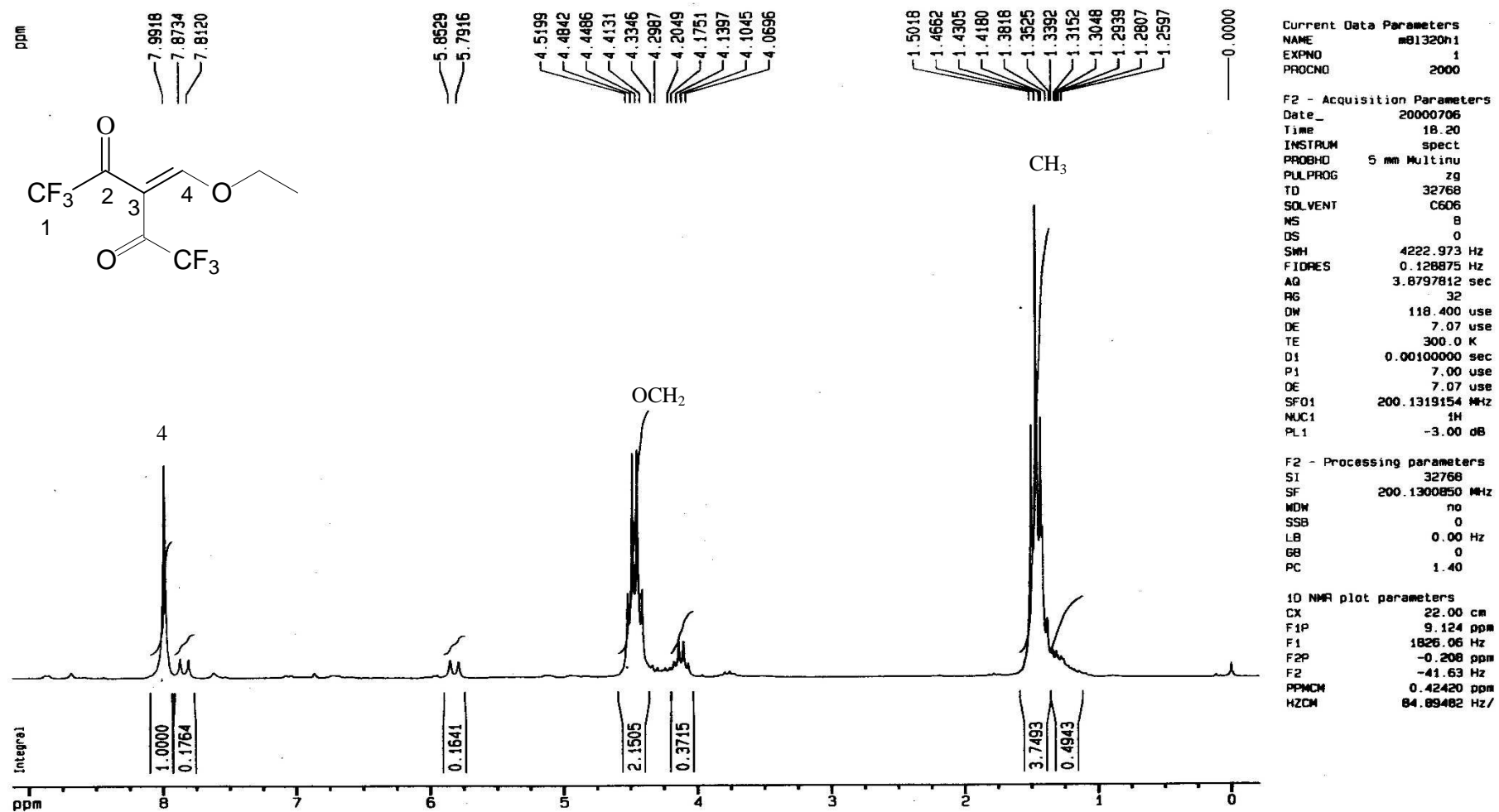


Figura 80 – Espectro de RMN de  $^1\text{H}$  a 200 MHz do composto 4-Etoxi-1,1,1-trifluormetil-2-trifluoracetil-3-buten-2-ona **18**.

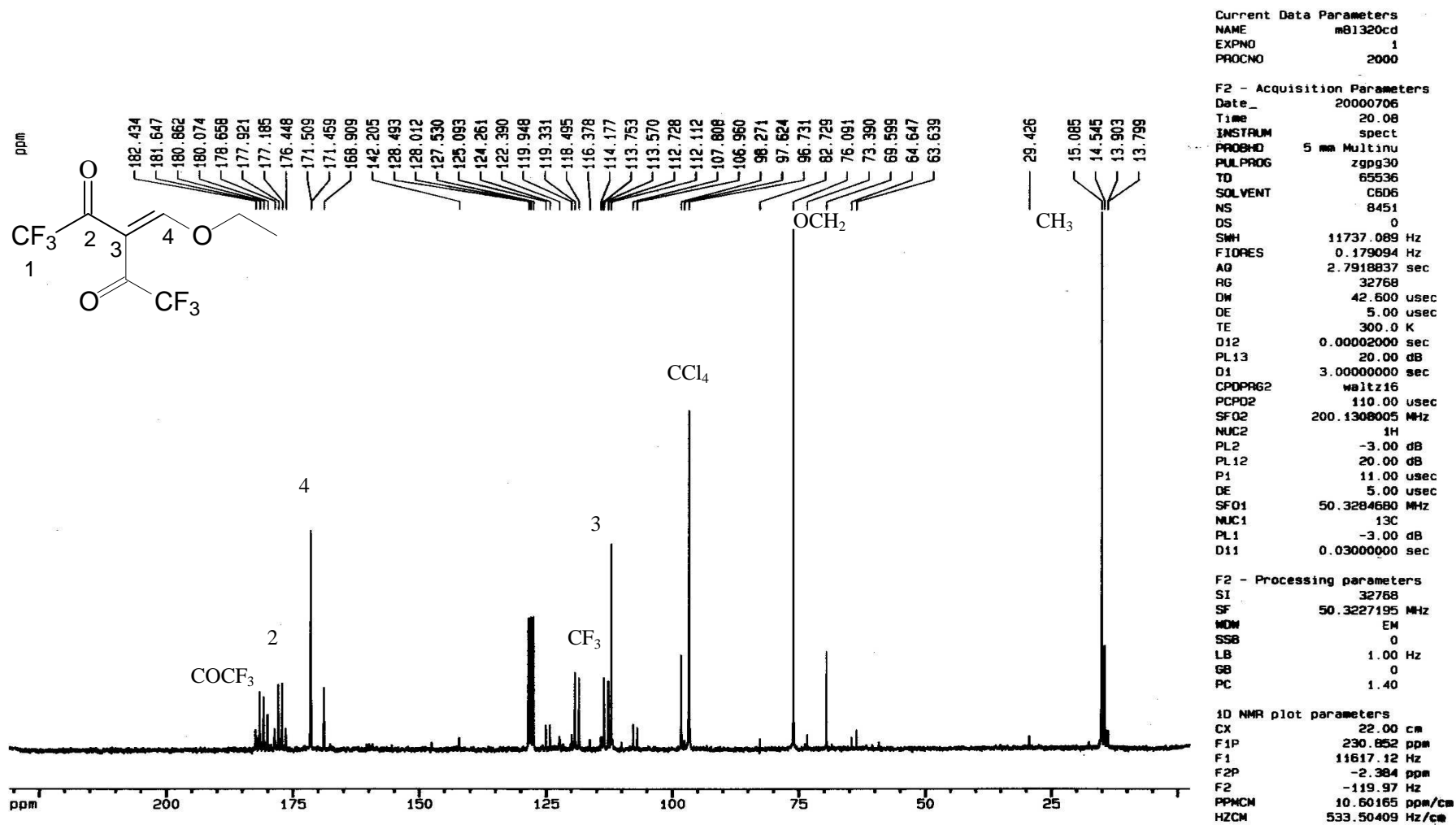


Figura 81 – Espectro de RMN de  $^{13}\text{C}$  a 50,32 MHz do composto 4-Etoxi-1,1,1-trifluormetil-2-trifluoracetil-3-buten-2-ona 18.

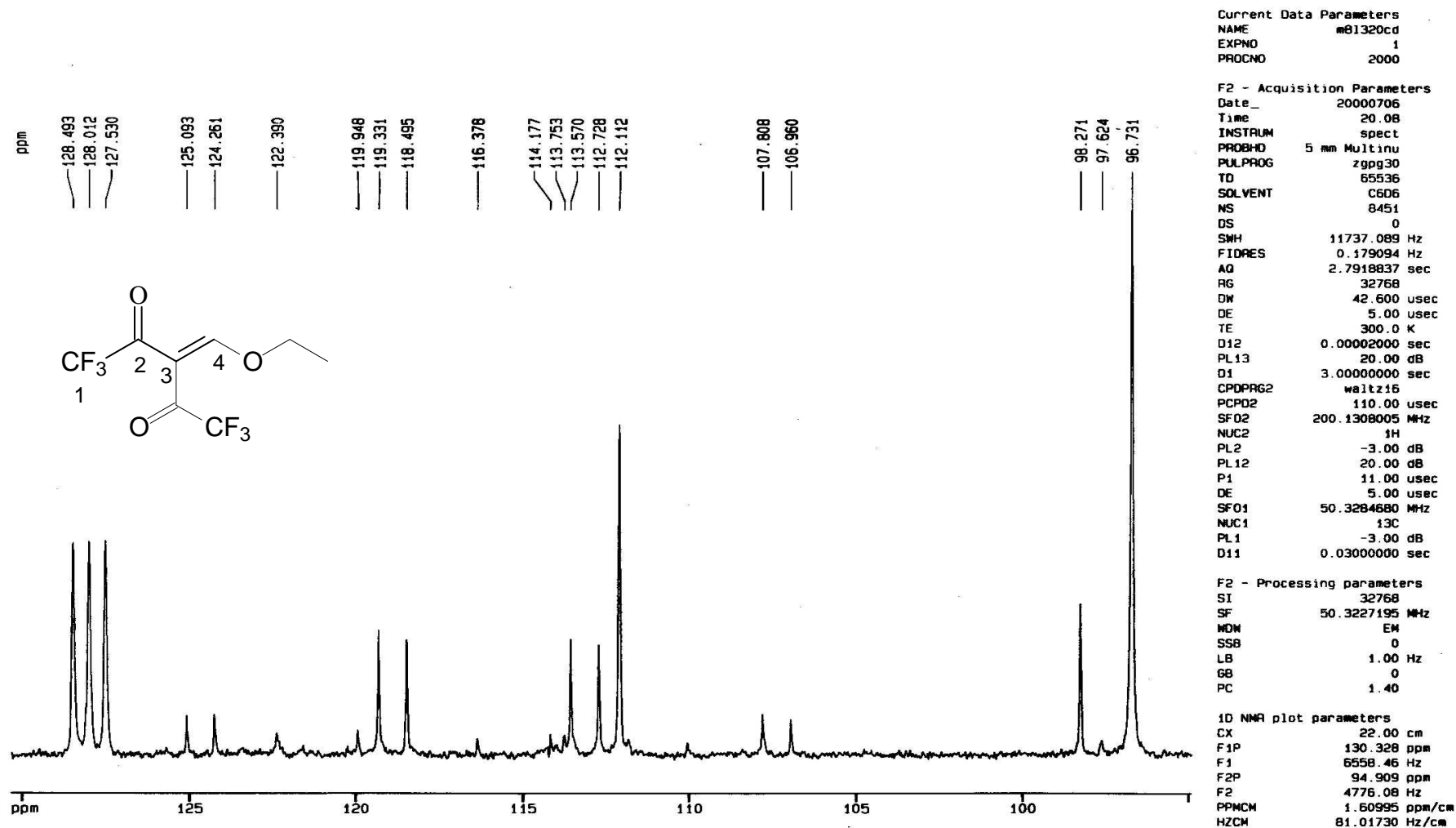


Figura 82 – Expansão do espectro de RMN de  $^{13}\text{C}$  a 50,32 MHz do composto 4-Etoxi-1,1,1-trifluorometil-2-trifluoracetil-3-buten-2-ona **18**.

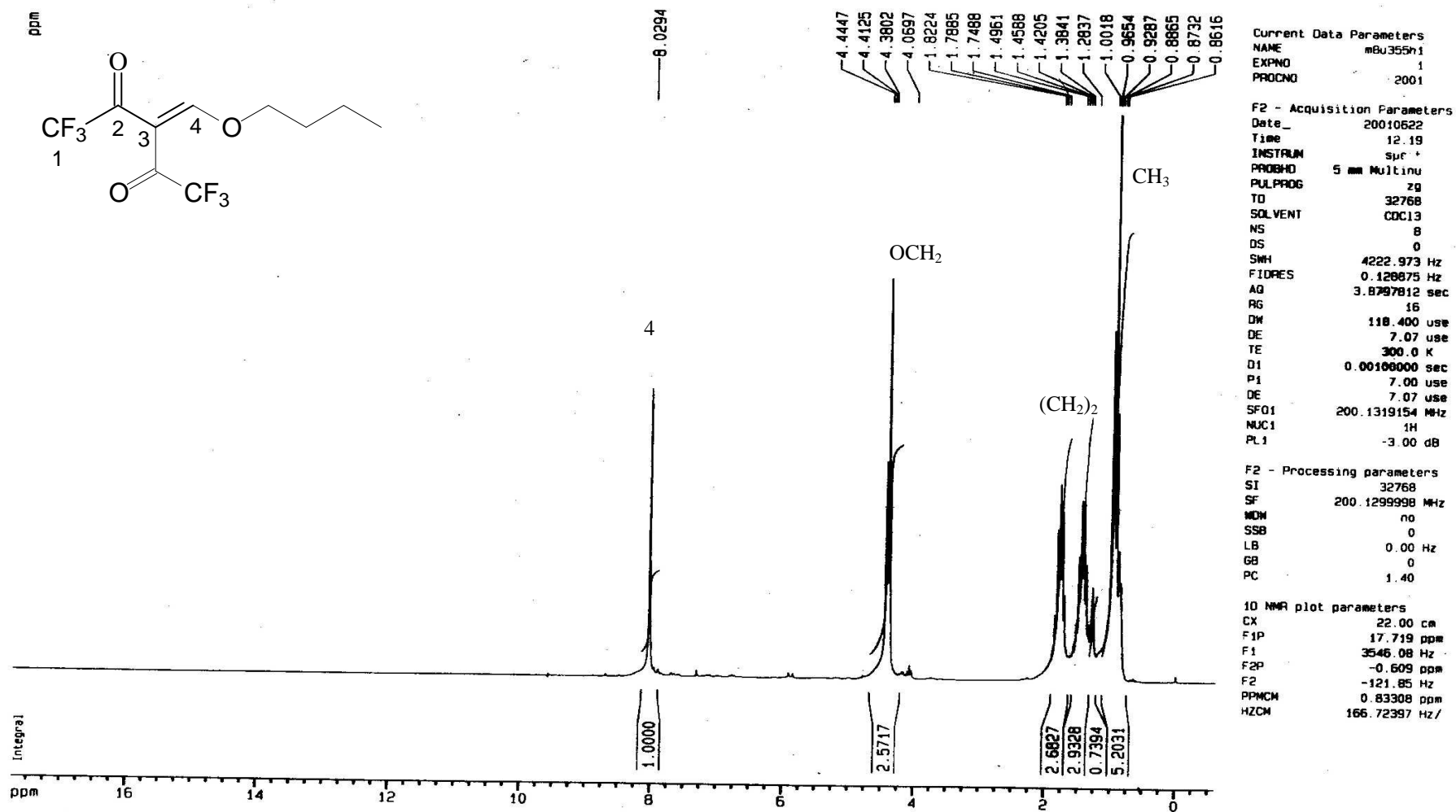


Figura 83 – Espectro de RMN de  $^1\text{H}$  a 200 MHz do composto 4-*n*-Butoxi-1,1,1-trifluorometil-2-trifluoracetil-3-buten-2-ona **19**.



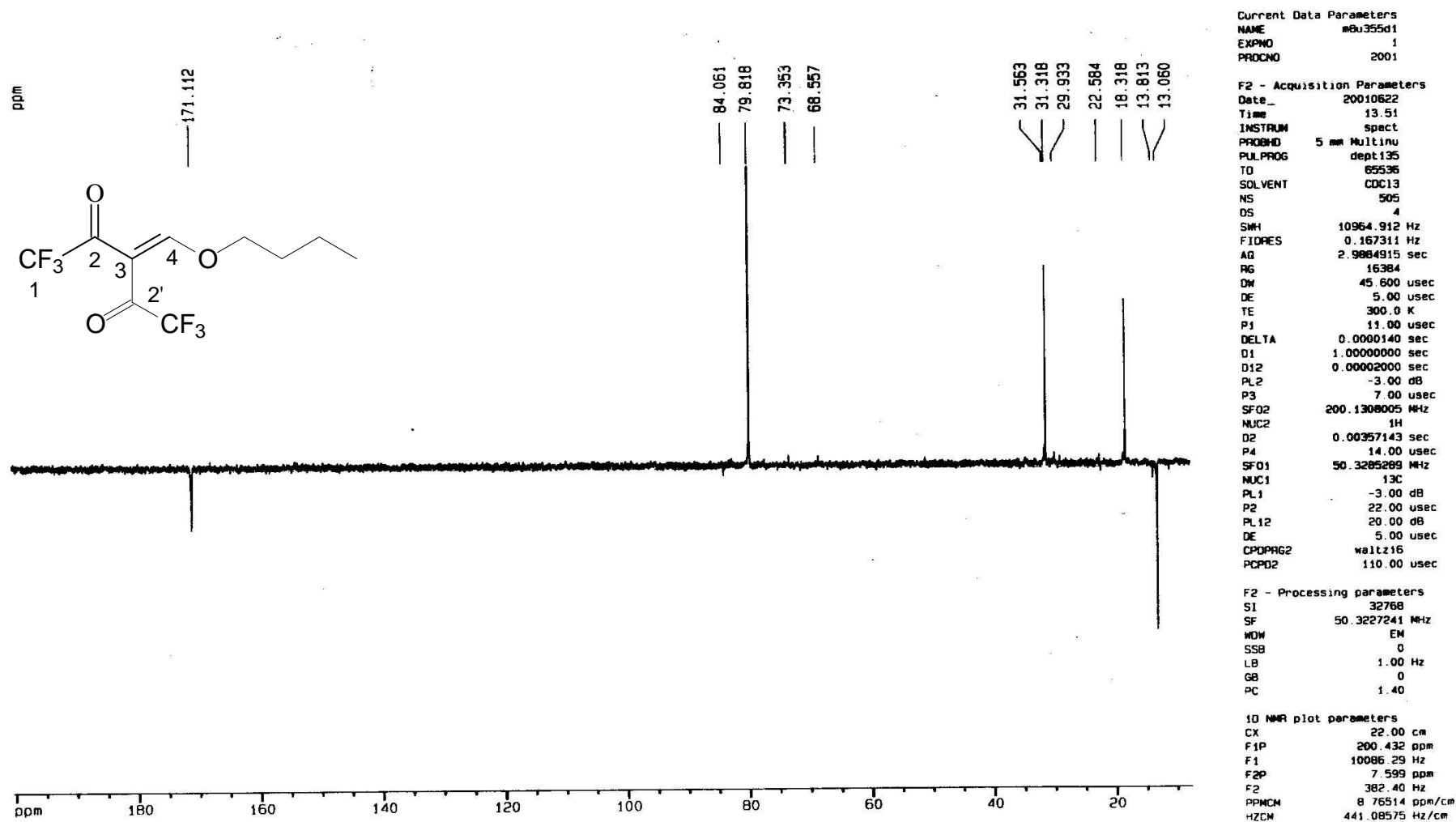


Figura 85 – Espectro de RMN DEPT135 a 50,32 MHz do composto 4-*n*-Butoxi-1,1,1-trifluorometil-2-trifluoracetil-3-buten-2-ona **19**.