

Supporting Information for the paper

Synthesis and Ethylene-Promoted Metathesis of Adducts of Tandem [4+2]/[4+2] Cycloaddition between *bis*-Furyl Dienes and Maleic Acid Derivatives

Elizaveta A. Kvyatkovskaya, Polina P. Epifanova, Eugeniya V. Nikitina, Aleksey A.
Senin, Victor N. Khrustalev, Kirill B. Polyanskii, Fedor I. Zubkov

e-mail: fzubkov@sci.pfu.edu.ru and 1236tgp@mail.ru

1	X-ray crystal structure determination for compounds 3f, 4e, 6b, 6f, 14c	S2
2	Experimental part	S10
3	Copies of NMR spectra	S63

1. X-ray crystal structure determination for compounds **3f**, **4e**, **6b**, **6f**, **14c**

Single crystals for X-ray crystallography were grown by slow recrystallization of samples from *i*-PrOH/DMF (for adducts **3f**, **4e**, **6b**, **6f**) or EtOAc/hexane (for compound **14c**) mixtures. Suitable single crystals were selected, immersed in an inert oil, mounted on a nylon loop and attached to a goniometer head.

X-ray diffraction data for **3f**, **6b**, **6f** and **14c** were collected on a three-circle Bruker D8 QUEST PHOTON-III CCD diffractometer (MoK α -radiation, graphite monochromator, φ and ω scan mode) and corrected for absorption using the *SADABS* program.¹ The data were indexed and integrated using the *SAINT* program.²

X-ray diffraction data for **4e** were collected at the ‘Belok’ beamline ($\lambda = 0.96990$ Å) of the Synchrotron Radiation Source at the National Research Center “Kurchatov institute”. In total, 720 frames were collected with an oscillation range of 1.0° in the φ scanning mode using two different orientations. The semi-empirical correction for absorption was applied using the *Scala* program.³ The data were indexed and integrated using the utility *iMOSFLM* from the CCP4 software suite.⁴ For details, see Table S1.

The structures were solved by intrinsic phasing modification of direct methods⁵ and refined by a full-matrix least-squares technique on F^2 with anisotropic displacement parameters for all non-hydrogen atoms. The crystals of **6f** and **14c** contained the strongly disordered hexane and ethyl acetate solvate molecules within the unit cell. All attempts to refine their positions were unsuccessful. The contribution of these molecules into the total scattering was removed by use of the *SQUEEZE* procedure⁶ implemented in PLATON software.⁷ The hydrogen atoms were placed in calculated positions and refined within the riding model with fixed isotropic displacement parameters [$U_{\text{iso}}(\text{H}) = 1.5U_{\text{eq}}(\text{C})$ for the methyl groups and $1.2U_{\text{eq}}(\text{C})$ for the other groups]. All calculations were carried out using the SHELXTL program.^{8,9}

Crystallographic data for **3f**, **4e**, **6b**, **6f** and **14c** (Fig. S1–S5) have been deposited

with the Cambridge Crystallographic Data Center, CCDC 2026167–2026171, respectively. Copies of this information may be obtained free of charge from the Director, CCDC, 12 Union Road, Cambridge CB2 1EZ, UK (fax: +44 1223 336033; e-mail: deposit@ccdc.cam.ac.uk or www.ccdc.cam.ac.uk).

References

1. L. Krause, R. Herbst-Irmer, G. M. Sheldrick, and D. Stalke, *J. Appl. Cryst.* 2015, **48**, 3–10.
2. Bruker, *SAINT*, v. 8.29A, Bruker AXS Inc., Madison, WI, 2013.
3. P. R. Evans, *Acta Crystallogr.* 2006, **D62**, 72–82.
4. T. G. G. Battye, L. Kontogiannis, O. Johnson, H. R. Powell, and A. G. W. Leslie, *Acta Crystallogr.* 2011, **D67**, 271–281.
5. M. D. Winn, C. C. Ballard, K. D. Cowtan, E. J. Dodson, P. Emsley, P. R. Evans, R. M. Keegan, E. B. Krissinel, A. G. W. Leslie, A. McCoy, S. J. McNicholas, G. N. Murshudov, N. S. Pannu, E. A. Potterton, H. R. Powell, R. J. Read, A. Vagin, and K. S. Wilson, *Acta Crystallogr.* 2011, **D67**, 235–242.
6. A. L. Spek, *Acta Crystallographica* 2015, **C71**, 9–18.
7. A. L. Spek, *J. Appl. Crystallogr.* 2003, **36**, 7–13.
8. G. M. Sheldrick, *Acta Crystallogr.* 2015, **A71**, 3–8.
9. G. M. Sheldrick, *Acta Crystallogr.* 2015, **C71**, 3–8.

Table S1. Crystal data and structure refinement for products **3f**, **4e**, **6b**, **6f** and **14c**.

Identification code	3f	4e	6b	6f	14c
Empirical formula	C ₁₄ H ₁₂ O ₆	C ₁₅ H ₁₅ NO ₅	C ₂₅ H ₂₆ N ₂ O ₆	C ₂₇ H ₂₂ N ₂ O ₅	C ₂₄ H ₂₄ N ₂ O ₆
Formula weight	276.24	289.28	450.48	454.47	436.45

Temperature, K	100(2)	100(2)	100(2)	100	100
Crystal size, mm	0.15×0.10×0.10	0.25×0.15×0.10	0.25×0.25×0.05	0.30×0.30×0.30	0.25×0.05×0.05
Wavelength, Å	0.71073	0.96990	0.71073	0.71073	0.71073
Crystal system	Monoclinic	Monoclinic	Monoclinic	Orthorhombic	Monoclinic
Space group	<i>Cc</i>	<i>Pc</i>	<i>P2₁/n</i>	<i>Pbca</i>	<i>C2/c</i>
<i>a</i> , Å	10.6953(2)	16.625(3)	8.5916(3)	9.8725(2)	32.910(4)
<i>b</i> , Å	10.0575(2)	7.2251(14)	18.4981(5)	16.5515(3)	5.5297(7)
<i>c</i> , Å	11.2520(2)	10.625(2)	13.3949(4)	29.9337(6)	26.685(4)
α , deg.	90	90	90	90	90
β , deg.	113.454(1)	92.13(3)	90.676(1)	90	106.912(3)
γ , deg.	90	90	90	90	90
<i>V</i> , Å ³	1110.36(4)	1275.4(4)	2128.68(11)	4891.31(17)	4646.2(11)
<i>Z</i>	4	4	4	8	8
Density (calc.), Mg/mm ³	1.653	1.507	1.406	1.234	1.248
μ , mm ⁻¹	0.131	0.244	0.101	0.086	0.090
<i>F</i> (000)	576	608	952	1904	1840
θ range, deg.	3.008-32.579	3.347-35.996	2.614-32.582	2.471-32.605	2.587-26.357
Index ranges	-16 ≤ <i>h</i> ≤ 16, -15 ≤ <i>k</i> ≤ 15, -17 ≤ <i>l</i> ≤ 17	-20 ≤ <i>h</i> ≤ 20, -8 ≤ <i>k</i> ≤ 8, -11 ≤ <i>l</i> ≤ 11	-13 ≤ <i>h</i> ≤ 13, -28 ≤ <i>k</i> ≤ 28, -20 ≤ <i>l</i> ≤ 20	-14 ≤ <i>h</i> ≤ 14, -25 ≤ <i>k</i> ≤ 25, -45 ≤ <i>l</i> ≤ 45	-40 ≤ <i>h</i> ≤ 40, -6 ≤ <i>k</i> ≤ 6, -33 ≤ <i>l</i> ≤ 33
Reflections collected	12197	11008	37982	118382	28546
Independent reflections	4021 (<i>R</i> _{int} = 0.0272)	4262 (<i>R</i> _{int} = 0.1056)	7728 (<i>R</i> _{int} = 0.0619)	8883 (<i>R</i> _{int} = 0.0532)	4692 (<i>R</i> _{int} = 0.1058)
Reflections observed	3854	3252	5406	7091	2547
<i>R</i> ₁ / <i>wR</i> ₂ (<i>I</i> > 2σ(<i>I</i>))	0.0295 / 0.0739	0.1082 / 0.2459	0.0489 / 0.1142	0.0433 / 0.1093	0.0628 / 0.1332
<i>R</i> ₁ / <i>wR</i> ₂ (all data)	0.0316 / 0.0752	0.1283 / 0.2632	0.0800 / 0.1335	0.0590 / 0.1206	0.1329 / 0.1667
Goodness-of-fit on <i>F</i> ²	1.039	1.026	1.014	1.024	1.000
Extinction coefficient	—	0.048(4)	—	—	—
<i>T</i> _{min} / <i>T</i> _{max}	0.979 / 0.972	0.969 / 0.927	0.990 / 0.969	0.966 / 0.966	0.990 / 0.969
$\Delta\rho_{\max} / \Delta\rho_{\min}$, eÅ ⁻³	0.352 / -0.173	1.201 / -0.511	0.413 / -0.357	0.392 / -0.248	0.218 / -0.295

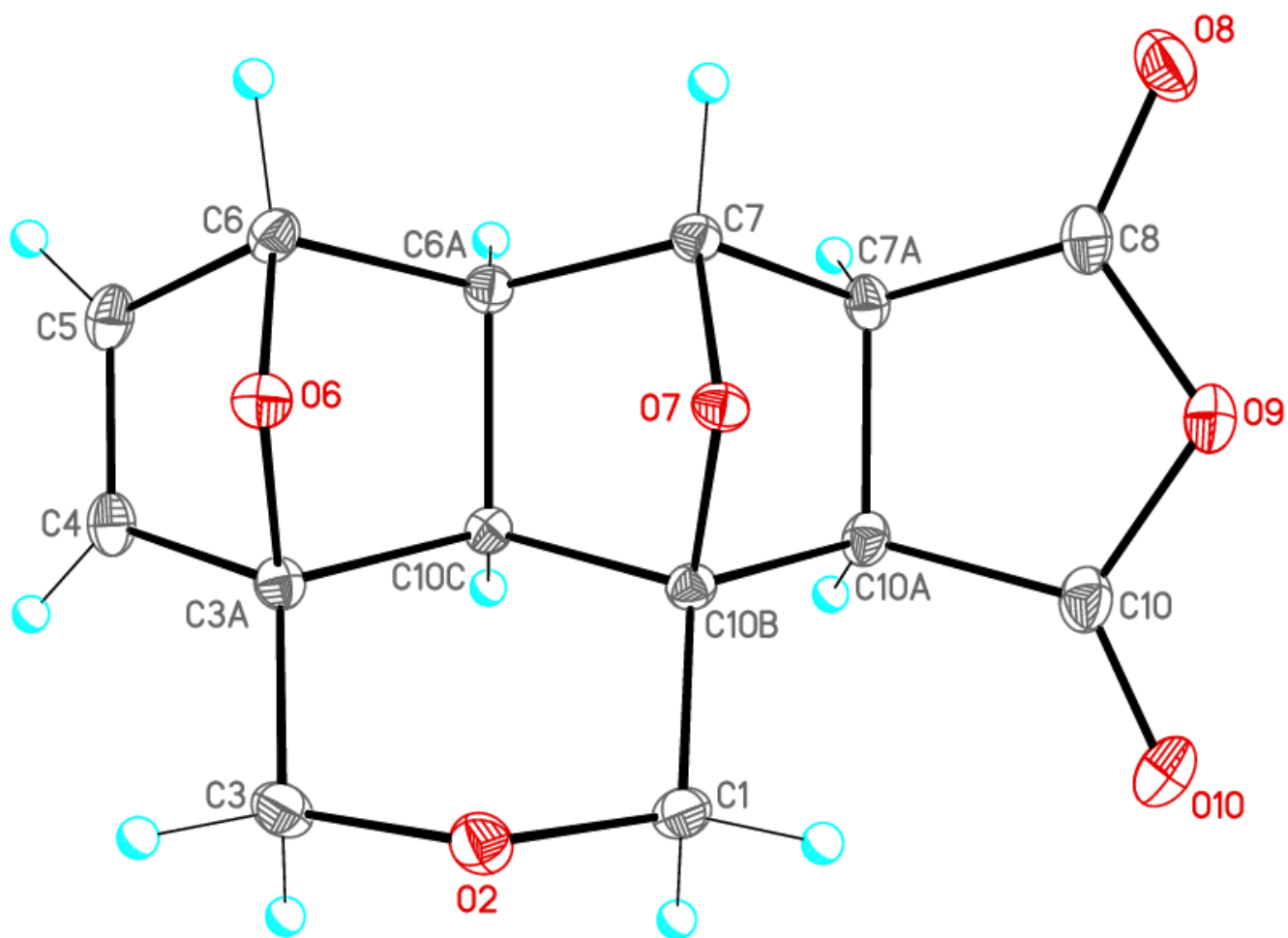
Figure S1. Molecular structure of **3f**

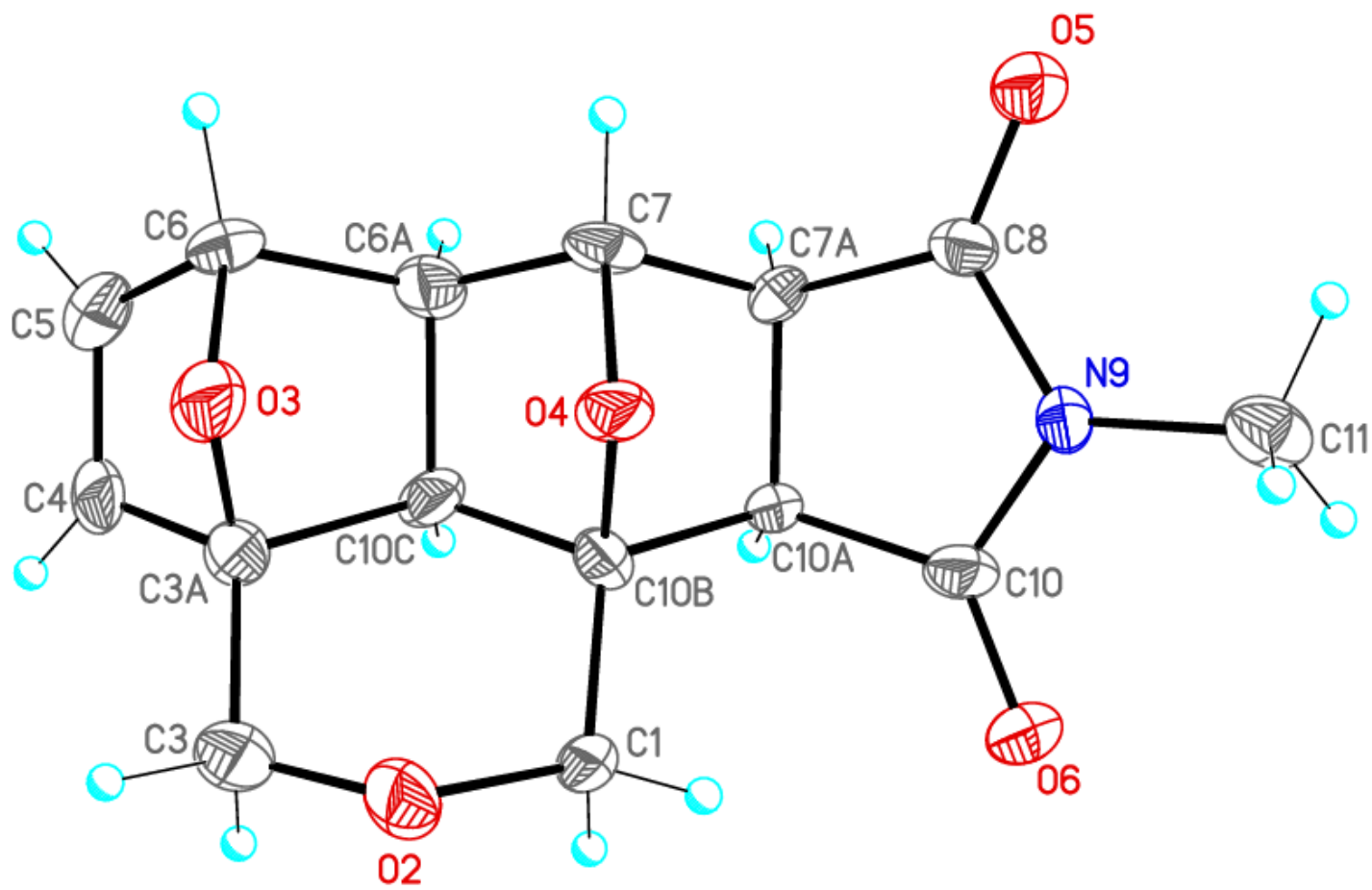
Figure S2. Molecular structure of **4e**

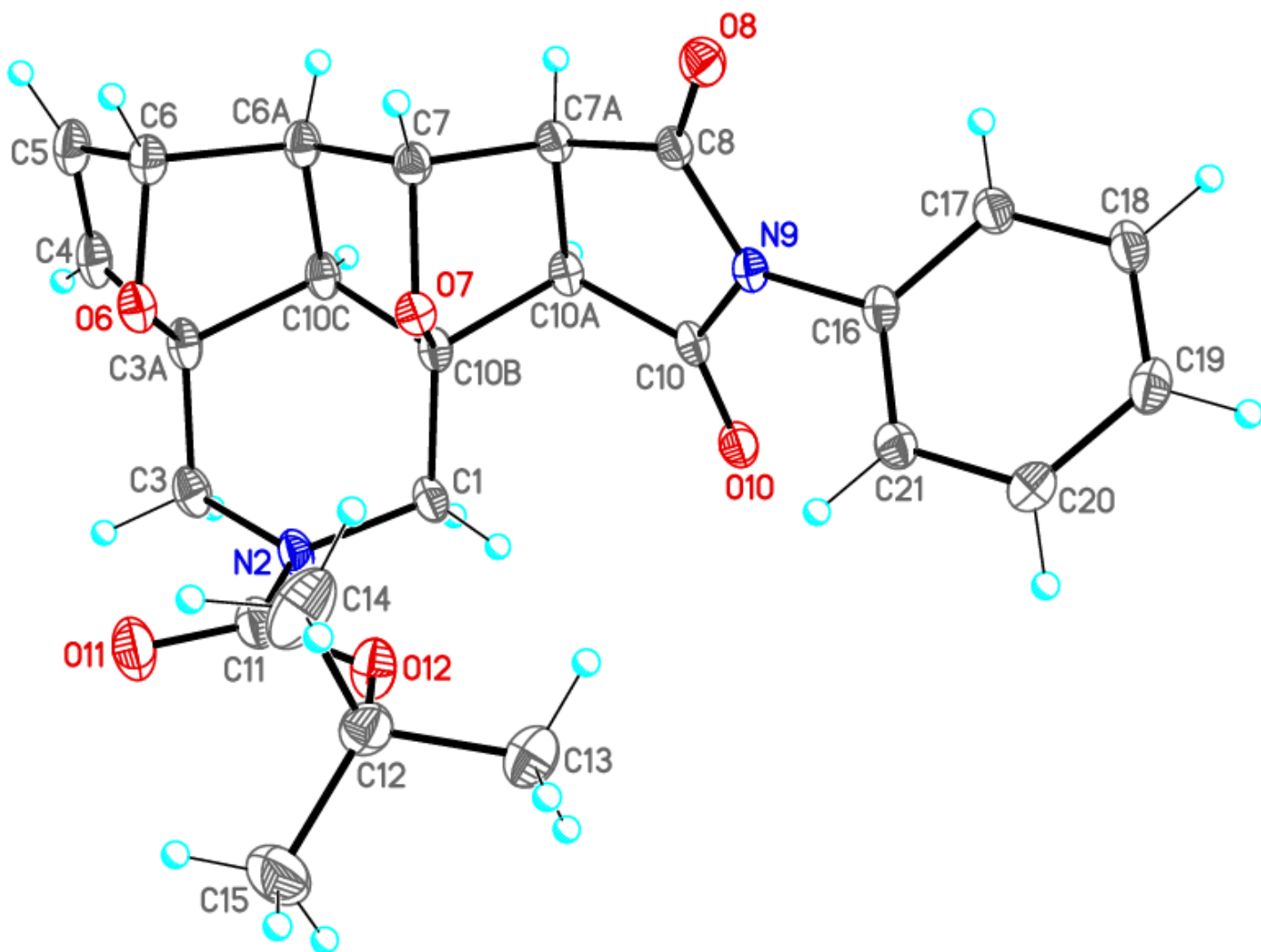
Figure S3. Molecular structure of **6b**

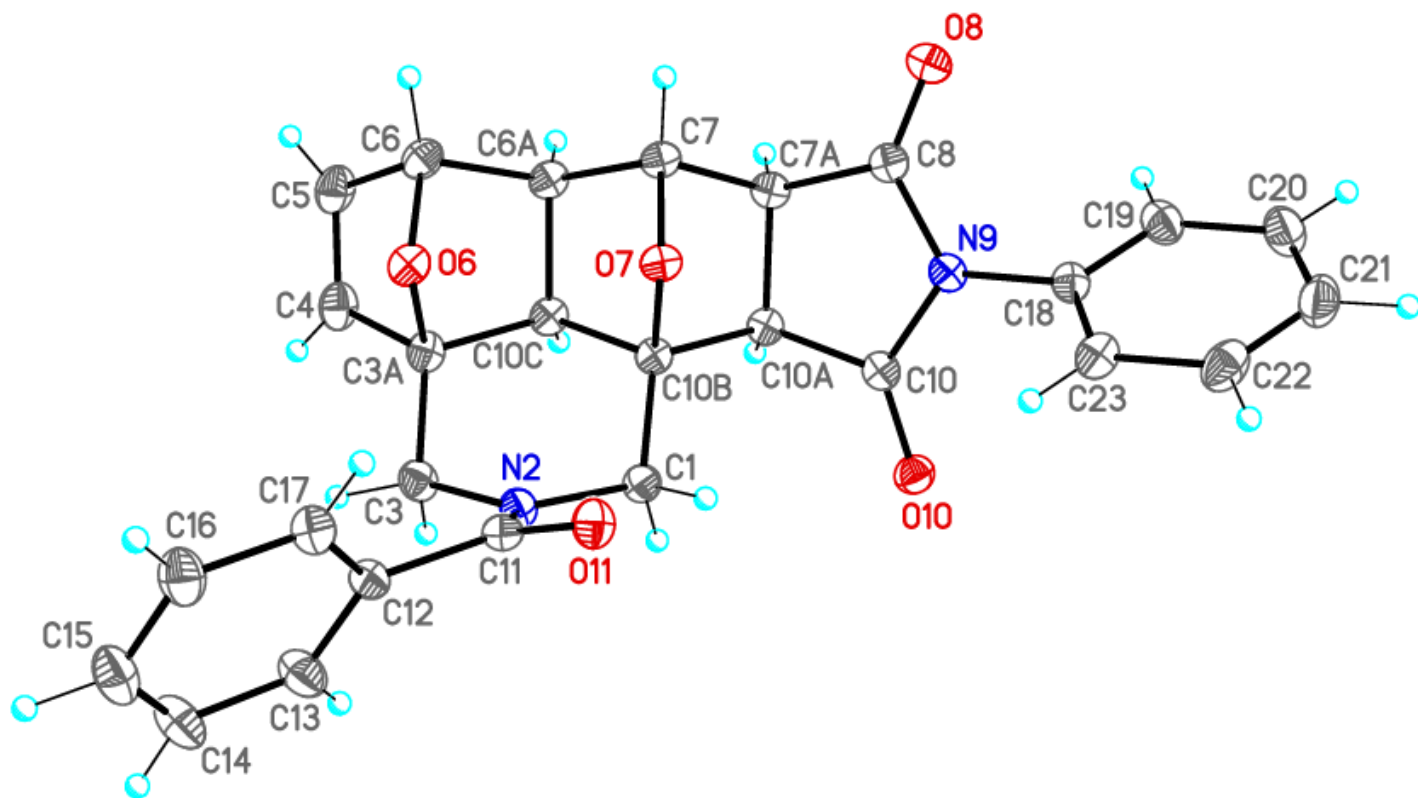
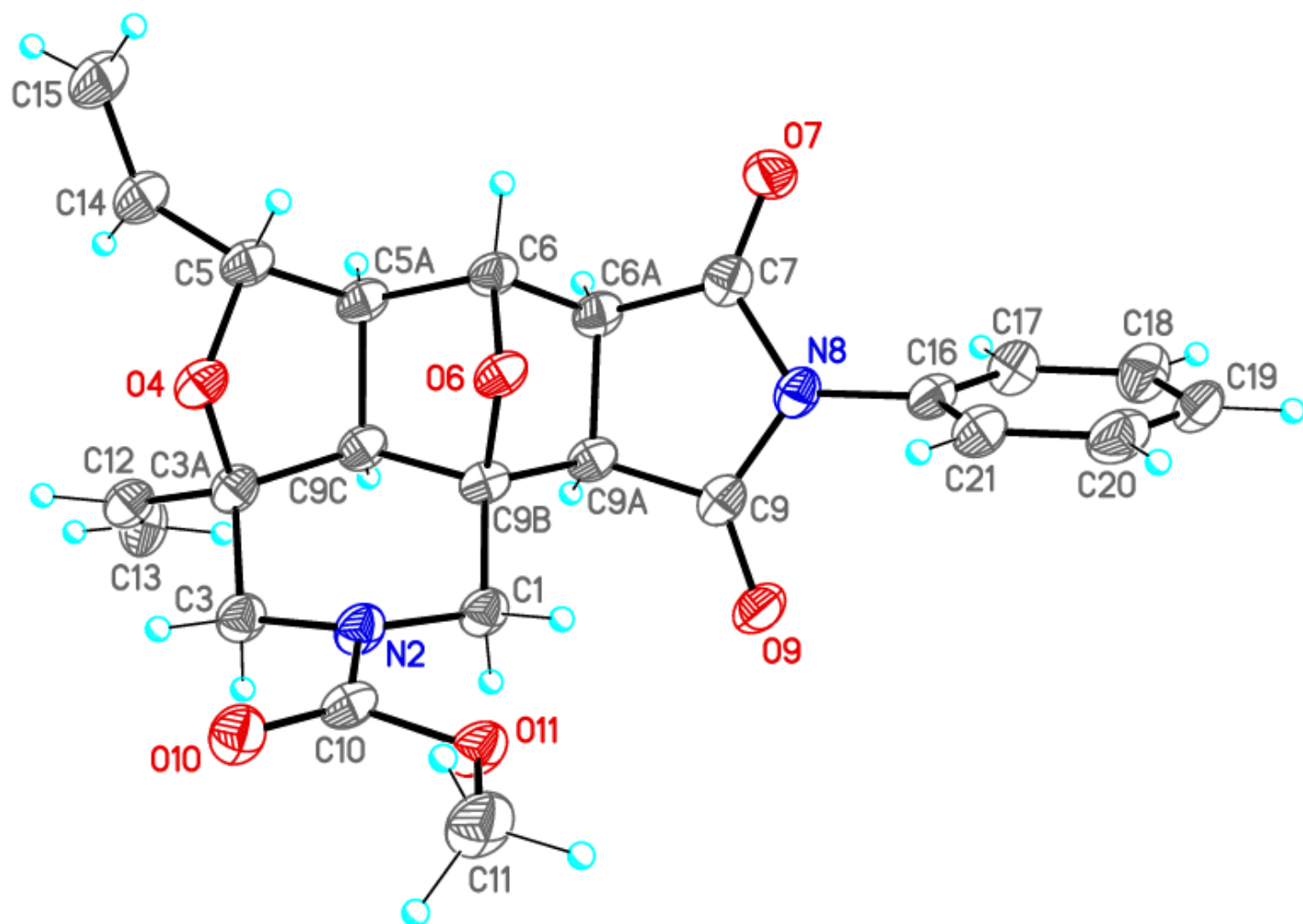
Figure S4. Molecular structure of **6f**

Figure S5. Molecular structure of **14c**

2. Experimental part

General Methods. All commercially available reagents and solvents were used without further purification (exception of ethylene and CH_2Cl_2 , see below). Melting points were measured on a capillary point apparatus equipped with a digital thermometer and were uncorrected. ^1H NMR, ^{13}C NMR and ^{19}F NMR spectra were recorded on 300, 400, 600, 700 (for ^1H), 100, 151.9, 176 (for ^{13}C) and 282 (for ^{19}F) MHz spectrometers, with TMS (^1H and ^{13}C NMR) and CCl_3F (^{19}F NMR) as the internal standard, using CDCl_3 and $\text{DMSO-}d_6$ as solvents. Data for ^1H NMR spectra are reported as follows: chemical shift δ (ppm), referenced to TMS; multiplicities are indicated as the following: s, singlet; d, doublet; t, triplet; q, quartet; m, multiplet; dd, doublet of doublets; coupling constants (Hz) and integration. Data for ^{13}C NMR spectra are reported in terms of chemical shift δ (ppm) relative to residual solvent peaks. Data for ^{19}F NMR spectra are reported as follows: chemical shift δ (ppm), referenced to CCl_3F ; multiplicities are indicated as the following: s, singlet and coupling constants (Hz). IR spectra were obtained in KBr pellets or in thin films using an Infracum FT-801 IR-Fourier spectrometer. Mass spectra were taken either on Thermo Focus DSQ II (electron ionization, 70 eV, ion source temperature 200 °C, gas chromatographic inlet with Varian FactorFour VF-5ms column) or Thermo Trace DSQ (electron ionization, 70 eV, ion source temperature was 200 °C, direct inlet probe) spectrometers. High-resolution mass spectra (HRMS) were recorded on an Agilent mass spectrometer, using ESI-TOF (electrospray ionization-time of flight). Analytical TLC was performed on silica plates Sorbfil.

Materials and equipment for metathesis reactions

It was used following solvent: CH_2Cl_2 (99.9% +, Khimmed OJSC, Russia), what was immediately passed through an alumina layer 1 cm thick even before the ethenolysis reaction.

The equipment for carrying out ethenolysis reactions was assembled on the basis of the Parr Multiple Reactor System Series 5000 (Parr), including a 75 mL autoclave with a magnetic stirrer and electric heating. For submission, temperature and pressure were monitored using electronic sensors, data from which are output to a computer monitor from which the unit is controlled.

Description and order of work at the equipment

The unit is designed to carry out the ethenolysis reaction (metathesis) at a pressure of 1 to 5 bar and a temperature of 40 to 100 °C in a batch operation in the presence of homogeneous catalysts.

The plant consists of the following units:

1. Gas purification block.
2. The reaction block.

Gas purification block

Argon purification

High purity argon (99.9% +) was used in all experiments, which was preliminarily passed through three series-connected columns filled with zeolites (3A and 13X) and CuO (reduced to Cu).

Ethylene purification

Ethylene (Linde Gas, 99.9% +) was used in all experiments, which was preliminarily passed through three series-connected columns filled with activated carbon and zeolites (3A and 13X).

Sorbent regeneration in columns

Regeneration of zeolites was carried out without unloading from the columns in a stream of argon at a temperature of 320 °C for 3–5 h. Activated carbon was regenerated in a stream of argon at a temperature of 270 °C for 3–5 h. Copper oxide was reduced in a stream of hydrogen for 20 h at temperature of 220–240 °C.

Reactor block

The reactor is an autoclave of stainless steel T316SS with a volume of 75 cm³ (Multiple Reactor System Series 5000, Parr), which allows testing at temperatures up to 225 °C and pressures up to 200 bar. Mixing is carried out by the anchor of a magnetic stirrer with a Teflon coating with a stirrer speed of up to 1200 rpm. The process is controlled from a personal computer.

Work sequence at the plant

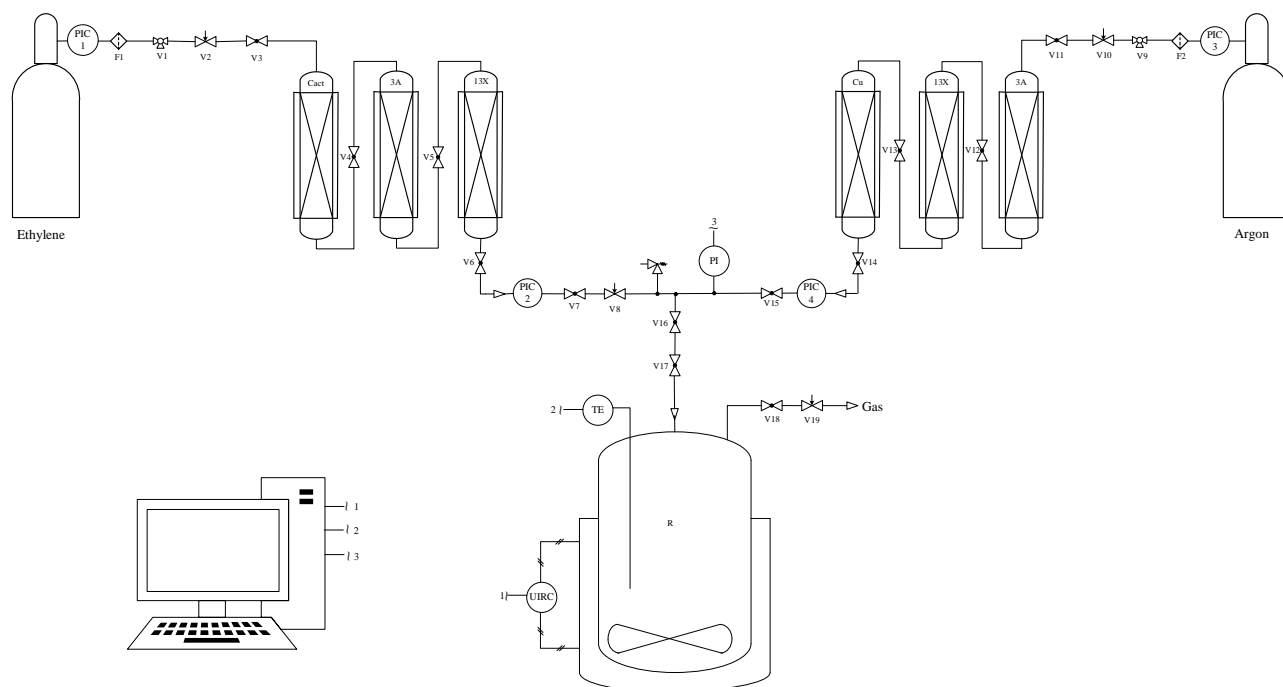
Checking for leaks in cleaning systems. Since flammable gas - ethylene is used in the experiment, it is necessary to observe fire safety measures when working with flammable gases.

After the cleaning systems are assembled, gas cylinders are connected to them. The high pressure reducers **PIC1** and **PIC2** are then purged to remove residual air from them. To do this, open the valves on the cylinder and set the minimum pressure on the gearboxes when the three-way valves V1 and V9 are in the reset position and blow the line section for 1 min. After that, the valves V1 and V9 are turned into the gas supply position to the line and the pressure reducers **PIC1** and **PIC2** are set to 5–10 bar above the working pressure. Alternately open the valves on the cleaning line to the ball valves V5 and V14 (with closed valves on the cylinders) and monitor the pressure change on the pressure gauge of the gearboxes **PIC1** and **PIC2**. If the pressure does not drop within 15–20 min, then there is no flow and you can proceed with the experiment (Fig. S6).

Experiment

The dried autoclave is charged with the starting material, solvent and catalyst solution. Close the lid of the autoclave and connect it to the gas supply line. A leak test is carried out: for this, all valves and ball valves V16 and V17 are opened on the argon line, while the ethylene supply valves V7 and V8, as well as the gas discharge valves on the autoclave V18 and V19, must be closed. On a **PIC4** gearbox, argon pressure is set to 5 bar above the working one. After the pressure has accumulated, close the ball valve V15 and monitor the performance of the electronic pressure transmitter **PI**. If the pressure in the autoclave **R** does not drop for 15 minutes, then argon pressure is slowly released by opening the ball valve V18 and the fine adjustment valve V19. Then close the relief valves and gain ethylene pressure for purging: for this, open the valves V7 and V8 and set the ethylene pressure to 2 bar on the **PIC2** gearbox, then close the ball valve V7 and open the relief valves, repeat the procedure 5 times. After that, the working pressure of ethylene is set on the **PIC2** reducer and stirring is turned on. After 5 minutes, valves V7 and V8 are turned off and the autoclave is turned on. Maintain the set reaction time. Turn off heating and stirring. Cool the reactor and relieve excess pressure by opening valves V18 and V19. Turn off valves V16 and V17 and disconnect the autoclave from the gas supply line (Fig. S6).

Figure S6. Installation scheme.



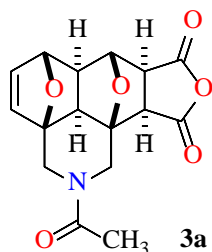
2.1. General Procedure for the synthesis of cycloadducts **3**.

Table S2. Selection of conditions for the interaction of *bis*-furan (**1f**) with maleic anhydride

Entry	Solvent	Temperature, °C	Time	Product	Yield, %
1	acetone	24	21 d	3f	21
2	benzene	80	12 h	3f	45
3	toluene	110	8 h	3f	polymerization
4	<i>o</i> -xylene	140	6 h	3f	polymerization

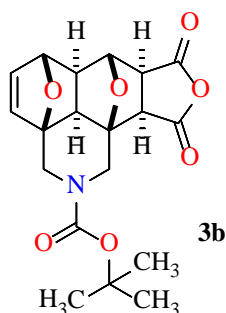
Maleic anhydride (1.6 g, 0.016 mol) was added to a solution of the appropriate *bis*-diene **1** (0.013 mol) in PhH (30 mL). The mixture was heated at reflux for 8–12 h (see Table 1). The reaction mixture was cooled and left overnight at room temperature. The precipitated crystals were filtered off and recrystallized from an *i*-PrOH/DMF mixture to give compound **3**.

(*3aSR,6RS,6aSR,7RS,7aSR,10aRS,10bSR,10cRS*)-2-Acetyl-2,3,6*a*,7*a*,10*a*,10*c*-hexahydro-1*H*,6*H*,7*H*-3*a*,6:7,10*b*-diepoxybenzo[*de*]furo[3,4-*h*]isoquinoline-8,10-dione (**3a**).



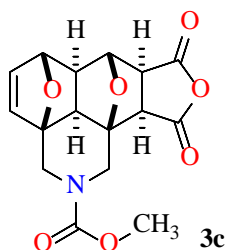
White crystals (2.6 g, 0.007 mol, 51%). R_f 0.42 (EtOH, Sorbfil); mp: 248.4–249.6 °C (from *i*-PrOH/DMF). The mixture of amide rotamers in the ratio of 66/34, ^1H NMR (600 MHz, DMSO- d_6) δ 6.45 (1H, dd, $J = 1.5$ and $J = 5.5$ Hz, H-5, **maj**), 6.42 (1H, dd, $J = 1.5$ and $J = 5.5$ Hz, H-5, **min**), 6.34 (1H, d, $J = 5.5$ Hz, H-4, **maj**), 6.31 (1H, d, $J = 5.5$ Hz, H-4, **min**), 4.91 (1H, d, $J = 1.5$ Hz, H-6, **maj**), 4.88 (1H, br d, $J = 14.6$ Hz, H-3A, **min**), 4.85 (1H, d, $J = 1.5$ Hz, H-6, **min**), 4.79 (1H, s, H-7, **min**), 4.77 (1H, br d, $J = 14.6$ Hz, H-3A, **maj**), 4.72 (1H, s, H-7, **maj**), 4.19 (1H, br d, $J = 14.6$ Hz, H-3B, **maj**), 3.96 (1H, br d, $J = 14.6$ Hz, H-3B, **min**), 3.82 (1H, d, $J = 14.6$ Hz, H-1A, **min**), 3.74 (1H, d, $J = 14.6$ Hz, H-1A, **maj**), 3.51 (1H, d, $J = 7.1$ Hz, H-10a, **min**), 3.49 (1H, d, $J = 7.1$ Hz, H-10a, **maj**), 3.40 (1H, d, $J = 7.1$ Hz, H-7a, **min**), 3.35 (1H, d, $J = 7.1$ Hz, H-7a, **maj**), 3.20 (1H, d, $J = 14.6$ Hz, H-1B, **maj**), 3.16 (1H, d, $J = 14.6$ Hz, H-1B, **min**), 2.15 (1H, d, $J = 6.5$ Hz, H-6a, **min**), 2.14 (1H, d, $J = 6.5$ Hz, H-6a, **maj**), 1.96-1.95 (1H, m, H-10c, **min**), 1.95-1.94 (1H, m, H-10c, **maj**), 1.92 (3H, br. s, Ac, **maj**), 1.89 (3H, br. s, Ac, **min**). ^{13}C NMR (150 MHz, DMSO- d_6) δ 173.0, 172.9, 171.1, 171.0, 170.0, 169.7, 139.0, 138.9, 137.8, 137.5, 84.7, 84.6, 83.8, 83.6, 82.1, 81.7, 80.9, 80.5, 53.2, 52.8, 52.9, 48.9 (2C), 47.8, 47.7, 46.5, 45.7, 41.6, 40.6, 22.2, 22.1. IR $\nu_{\text{max}}/\text{cm}^{-1}$ (tablet KBr): 3078, 3011, 1882, 1798, 1724, 1631, 1228, 1313. HRMS (ESI-TOF): calcd. for $\text{C}_{16}\text{H}_{15}\text{NO}_6$ $[\text{M} + \text{H}]^+$ 317.0899; found 317.0886.

tert-Butyl (3*aSR*,6*RS*,6*aSR*,7*RS*,7*aSR*,10*aRS*,10*bSR*,10*cRS*)-8,10-dioxo-6*a*,7*a*,8,10,10*a*,10*c*-hexahydro-1*H*,6*H*,7*H*-3*a*,6:7,10*b*-diepoxybenzo[*de*]furo[3,4-*h*]isoquinoline-2(3*H*)-carboxylate (**3b**).



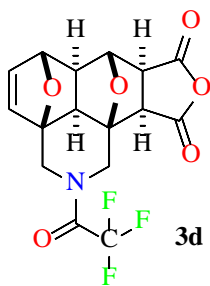
White powder (2.6 g, 0.007 mol, 51%). R_f 0.42 (EtOH, Sorbfil); mp: 248.4–249.6 °C (from *i*-PrOH/DMF). The mixture of amide rotamers in the ratio of 63/37, ^1H NMR (600 MHz, DMSO- d_6) δ 6.45 (1H, dd, $J = 1.7$ and $J = 5.8$ Hz, H-5, **maj** + **min**), 6.33 (1H, br d, $J = 5.8$ Hz, H-4, **maj** + **min**), 4.92 (1H, br s, H-6, **maj** + **min**), 4.79 (1H, d, $J = 1.7$ Hz, H-7, **maj** + **min**), 4.46 (1H, d, $J = 14.2$ Hz, H-3A, **min**), 4.41-4.36 (2H, m, H-3A and H-1A, **maj**), 4.31 (1H, d, $J = 15.1$ Hz, H-1A, **min**), 3.51 (1H, d, $J = 7.2$ Hz, H-10a, **maj** + **min**), 3.50 and 3.40 (2H and 2H, br d and br d, H-1B and H-3B, **maj** + **min**), 3.38 (1H, m, H-7a, **maj** + **min**), 2.16 (1H, d, $J = 6.3$ Hz, H-10c, **maj** + **min**), 1.92 (1H, d, $J = 6.3$ Hz, H-6a, **maj** + **min**), 1.36 (9H, br. s, *t*-Bu, **maj** + **min**). ^{13}C NMR (150.9 MHz, DMSO- d_6) δ 173.0, 171.0, 154.8, 154.7, 138.9, 138.8, 137.8, 137.7, 84.3, 83.4, 83.3, 81.9, 80.8, 79.6, 79.5, 53.0, 52.9, 49.0, 47.3, 44.2, 43.4, 43.1, 42.3, 28.6. IR $\nu_{\text{max}}/\text{cm}^{-1}$ (tablet KBr): 1839, 1775, 1689, 1145, 1097. EI-MS (70 eV) m/z (relative intensity): 377 (1) [M^+], 316 (37), 302 (61), 275 (69), 247 (75), 218 (24), 177 (33), 148 (53), 140 (47), 96 (65), 81 (100), 57 (85), 43 (30). HRMS (ESI-TOF): calcd. for $\text{C}_{19}\text{H}_{21}\text{NO}_7$ [$\text{M} + \text{H}$] $^+$ 375.1318; found 375.1329.

Methyl (3aSR,6RS,6aSR,7RS,7aSR,10aRS,10bSR,10cRS)-8,10-dioxo-6a,7a,8,10,10a,10c-hexahydro-1H,6H,7H-3a,6:7,10b-diepoxybenzo[de]furo[3,4-h]isoquinoline-2(3H)-carboxylate (3c).



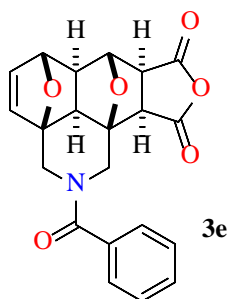
Gray crystals (1.5 g, 0.005 mol, 34%). R_f 0.34 (EtOAc, Sorbfil); mp: 226.1–227.2 °C (with decomp., from *i*-PrOH/DMF). The mixture of amide rotamers in the ratio of 55/45, ¹H NMR (600 MHz, DMSO-*d*₆) δ 6.46 (1H, dd, $J = 1.7$ and $J = 5.8$ Hz, H-5, **maj** + **min**), 6.33 (1H, br d, $J = 5.8$ Hz, H-4, **maj** + **min**), 4.91 (1H, br s, H-6, **maj**), 4.90 (1H, br s, H-6, **min**), 4.80 (1H, br s, H-7, **min**), 4.79 (1H, br s, H-7, **maj**), 4.51 (1H, d, $J = 14.5$ Hz, H-3A, **min**), 4.40 (2H, d, $J = 14.5$ Hz, H-3A and H-1A, **maj**), 4.28 (1H, d, $J = 14.5$ Hz, H-1A, **min**), 3.61 (1H, d, $J = 14.5$ Hz, H-3B, **maj**), 3.56 and 3.55 (3H, br s, CO₂CH₃, **maj** + **min**), 3.54 (1H, br dd, $J = 3.3$ and $J = 7.4$ Hz, H-10a, **maj** + **min**), 3.49–3.42 (3H, m, H-3B, **min** and H-1B, **maj** + **min**), 3.40 (1H, br d, $J = 7.4$ Hz, H-7a, **maj** + **min**), 2.17 (1H, dd, $J = 1.6$ and $J = 6.6$ Hz, H-10c, **maj** + **min**), 1.95 (1H, d, $J = 6.6$ Hz, H-6a, **maj** + **min**). ¹³C NMR (100 MHz, DMSO-*d*₆) δ 172.3, 170.4, 155.6, 155.5, 138.4, 137.0, 83.7, 82.8, 82.7, 82.4, 81.4, 80.2, 52.5, 52.4, 52.3, 48.6, 46.8, 43.5, 43.3, 42.6. IR $\nu_{\max}/\text{cm}^{-1}$ (tablet KBr): 1861, 1781, 1693, 1261, 1123, 1092. EI-MS (70 eV) m/z (relative intensity): 333 (14) [M⁺], 305 (13), 265 (15), 234 (14), 176 (23), 167 (47), 154 (89), 122 (44), 91 (38), 80 (100), 53 (72). HRMS (ESI-TOF): calcd. for C₁₆H₁₅NO₇ [M + H]⁺ 333.0849; found 333.0832.

(3*aSR*,6*RS*,6*aSR*,7*RS*,7*aSR*,10*aRS*,10*bSR*,10*cRS*)-2-(Trifluoroacetyl)-2,3,6*a*,7*a*,10*a*,10*c*-hexahydro-1*H*,6*H*,7*H*-3*a*,6:7,10*b*-diepoxybenzo[*de*]furo[3,4-*h*]isoquinoline-8,10-dione (**3d**).



White crystals (2.8 g, 0.0077 mol, 59 %). R_f 0.42 (EtOH, Sorbfil); mp: 230.2–233.5 °C (with decomp., from *i*-PrOH/DMF). The mixture of amide rotamers in the ratio of 56/44, ^1H NMR (600 MHz, DMSO- d_6) δ 6.50 (1H, br dd, $J = 1.5$ and $J = 5.6$ Hz, H-5, **maj**), 6.49 (1H, br dd, $J = 1.5$ and $J = 5.6$ Hz, H-5, **min**), 6.40 (1H, d, $J = 5.6$ Hz, H-4, **min**), 6.34 (1H, d, $J = 5.6$ Hz, H-4, **maj**), 4.98 (1H, d, $J = 1.5$ Hz, H-6, **maj**), 4.95 (1H, d, $J = 1.5$ Hz, H-6, **min**), 4.87 (1H, s, H-7, **min**), 4.84 (1H, s, H-7, **maj**), 4.80 (1H, d, $J = 14.1$ Hz, H-3A, **min**), 4.68 (1H, br dd, $J = 1.0$ and $J = 14.6$ Hz, H-3A, **maj**), 4.20 (1H, d, $J = 14.6$ Hz, H-3B, **maj**), 4.14 (1H, br d, $J = 14.6$ Hz, H-3B, **min**), 4.10 (1H, br d, $J = 14.6$ Hz, H-1A, **min**), 4.06 (1H, d, $J = 14.6$ Hz, H-1A, **maj**), 3.70 (1H, d, $J = 14.6$ Hz, H-1B, **maj**), 3.64 (1H, d, $J = 14.6$ Hz, H-1B, **min**), 3.58 (1H, br d, $J = 7.1$ Hz, H-10a, **min**), 3.58 (1H, br d, $J = 7.1$ Hz, H-10a, **maj**), 3.50 (1H and 1H, br d and br d, $J = 7.1$ Hz, H-7a, **maj** and H-7a, **min**), 2.24 (1H and 1H, br d and br d, $J = 6.6$ Hz, H-10c, **maj** and H-10c, **min**), 2.11 (1H and 1H, br d and br d, $J = 6.6$ Hz, H-6a, **maj** and H-6a, **min**). ^{13}C NMR (150.91 MHz, DMSO- d_6) δ 172.8, 172.7, 171.1, 170.9, 156.1 (q, $^2J_{CF} = 34.7$ Hz, COCF₃), 155.9 (q, $^2J_{CF} = 34.7$, COCF₃), 139.2, 139.1, 137.2, 137.1, 116.7 (q, $^1J_{CF} = 287.6$ Hz, COCF₃), 84.2, 83.9, 83.3, 82.8, 82.0, 81.9, 80.9, 80.8, 53.1, 53.0, 52.99, 52.9, 49.0, 47.5, 47.4, 45.9 (q, $^4J_{CF} = 4.3$ Hz, C-1), 44.8 (q, $^4J_{CF} = 4.3$ Hz, C-1), 43.9, 42.8. ^{19}F NMR (564.7 MHz, DMSO- d_6) δ -66.78 (3F, s, CF₃, **maj**), -66.94 (3F, s, CF₃, **min**). IR $\nu_{\text{max}}/\text{cm}^{-1}$ (tablet KBr): 1872, 1753, 1711, 1264, 1131, 1083. HRMS (ESI-TOF): calcd. for C₁₆H₁₂F₃NO₆ [M + H]⁺ 371.0617; found 371.0629.

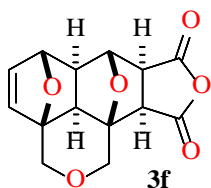
(3*aSR*,6*RS*,6*aSR*,7*RS*,7*aSR*,10*aRS*,10*bSR*,10*cRS*)-2-Benzoyl-2,3,6*a*,7*a*,10*a*,10*c*-hexahydro-1*H*,6*H*,7*H*-3*a*,6:7,10*b*-diepoxybenzo[*de*]furo[3,4-*h*]isoquinoline-8,10-dione (**3e**).



White crystals (3.0 g, 0.008 mol, 60%). R_f 0.45 (EtOAc, Sorbfil); mp: 207.4–209.0 °C (from *i*-PrOH/DMF). The mixture of amide rotamers in the ratio of 61/39, ^1H NMR (600 MHz, DMSO- d_6) δ 7.43-7.40 (5H, m, H-2-6-Ph, **maj** + **min**), 6.50-6.49 (1H, m, H-5, **min**), 6.45 (1H, br d, $J = 5.5$ Hz, H-5, **maj**), 6.43 (1H, br d, $J = 6.2$ Hz, H-4, **min**), 6.27 (1H, br d, $J = 5.5$ Hz, H-4, **maj**), 5.03-5.01 (1H, br d, $J = 14.4$ Hz, H-3A, **min**), 5.00 (1H, br s, H-6, **maj**), 4.98 (1H, br s, H-6, **min**), 4.95-4.93 (1H, br d, $J = 14.4$ Hz, H-3A, **maj**), 4.89 (1H, br s, H-7, **min**), 4.86 (1H, br s, H-7, **maj**), 4.05 (1H, br d, $J = 14.4$ Hz, H-3B, **maj**), 4.04 (1H, br d, $J = 15.1$ Hz, H-3B, **min**), 3.82 (1H, m, H-1A, **min**), 3.80-3.77 (1H, br d, $J = 14.4$ Hz, H-1A, **maj**), 3.57 (1H, br d, $J = 6.9$ Hz, H-10a, **maj**), 3.54 (1H, br d, $J = 6.9$ Hz, H-10a, **min**), 3.50 (1H, m, H-1B, **min**), 3.47 (1H, br d, $J = 7.6$ Hz, H-7a, **maj**), 3.44 (1H, br d, $J = 6.9$ Hz, H-7a, **min**), 3.37 (1H, m, H-1B, **maj**), 2.22 (1H, br d, $J = 6.9$ Hz, H-10c, **maj** + **min**), 2.05 (1H, br d, $J = 6.2$ Hz, H-6a, **maj** + **min**). ^{13}C NMR (151.9 MHz, DMSO- d_6) δ 173.0, 172.9, 171.0, 170.8, 170.5, 170.4, 139.0, 137.8, 137.4, 136.4, 130.0, 129.9, 128.8, 127.8, 127.7, 84.5, 83.6, 83.4, 82.2, 81.9, 81.1, 80.8, 53.1, 53.0, 52.9, 52.8, 49.0, 48.9, 47.8, 47.5, 46.5, 42.1, 41.2. IR $\nu_{\text{max}}/\text{cm}^{-1}$ (tablet KBr): 1734, 1593, 1571, 1279, 1227, 989. EI-MS (70 eV) m/z (relative intensity): 380 (14) [$\text{M}^+ - 1$], 379 (100), 200 (51),

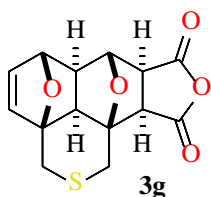
106 (38), 105 (64), 80 (46), 43 (26), 33 (53). HRMS (ESI-TOF): calcd. for $C_{21}H_{17}NO_6$ [$M + H$]⁺ 379.1056; found 379.1064.

(3*aSR*,6*RS*,6*aSR*,7*RS*,7*aSR*,10*aRS*,10*bSR*,10*cRS*)-6*a*,7*a*,10*a*,10*c*-Tetrahydro-6*H*,7*H*-3*a*,6:7,10*b*-diepoxybenzo[*de*]furo[3,4-*h*]isochromene-8,10(1*H*,3*H*)-dione (**3f**).



Light-brown crystals (1.71 g, 0.006 mol, 45%). R_f 0.53 (EtOAc, Sorbfil); mp: 248.4–249.2 °C (with decomp., from *i*-PrOH/DMF). ¹H NMR (400.1 MHz, DMSO-*d*₆) δ 6.43 (1H, dd, $J = 1.3$ and $J = 5.5$ Hz, H-5), 6.31 (1H, d, $J = 5.5$ Hz, H-4), 4.95 (1H, d, $J = 1.3$ Hz, H-6), 4.83 (1H, s, H-7), 4.09 (1H, d, $J = 12.7$ Hz, H-3A), 4.02-3.91 (3H, m, H-1A, H-3B and H-1B), 3.50 (1H, d, $J = 7.0$ Hz, H-10a), 3.38 (1H, d, $J = 7.0$ Hz, H-7a), 2.16 (1H, d, $J = 6.7$ Hz, H-10c), 1.94 (1H, d, $J = 6.7$ Hz, H-6a). ¹³C NMR (100.6 MHz, DMSO-*d*₆) δ 172.4, 170.3, 137.9, 136.7, 83.5, 82.6, 81.6, 80.3, 65.1, 64.1, 52.3, 52.0, 48.2, 45.5. IR ν_{max}/cm^{-1} (tablet KBr): 1768, 1671, 1253, 1231, 1090, 1063. EI-MS (70 eV) m/z (relative intensity): 277 (2) [M^{++4}], 276 (14), 97 (100), 81 (20), 80 (76), 53 (17). HRMS (ESI-TOF): calcd. for $C_{14}H_{12}O_6$ [$M + H$]⁺ 276.0634; found 276.0621.

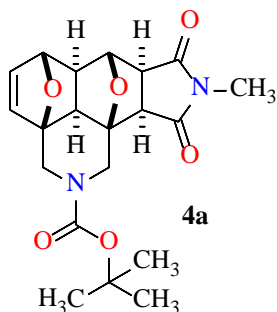
(3*aSR*,6*RS*,6*aSR*,7*RS*,7*aSR*,10*aRS*,10*bSR*,10*cRS*)-6*a*,7*a*,10*a*,10*c*-Tetrahydro-6*H*,7*H*-3*a*,6:7,10*b*-diepoxybenzo[4,5]isothiochromeno[7,8-*c*]furan-8,10(1*H*,3*H*)-dione (**3g**).



Light-yellow powder (1.2 g, 0.004 mol, 31%). R_f 0.34 (EtOH : EtOAc, 1 : 3, Sorbfil); mp: 245.1–245.7 °C (with decomp., from *i*-PrOH/DMF). ^1H NMR (400.1 MHz, DMSO- d_6) δ 6.49 (1H, dd, $J = 1.5$ and $J = 5.7$ Hz, H-5), 6.21 (1H, d, $J = 5.7$ Hz, H-4), 4.95 (1H, d, $J = 1.5$ Hz, H-6), 4.38 (1H, s, H-7), 3.54 (1H, d, $J = 7.2$ Hz, H-10a), 3.41 (1H, d, $J = 14.6$ Hz, H-3A), 3.37 (1H, d, $J = 14.6$ Hz, H-3B), 3.28 (1H, d, $J = 7.2$ Hz, H-7a), 2.90 (1H, d, $J = 14.6$ Hz, H-1A), 2.68 (1H, d, $J = 14.6$ Hz, H-1B), 2.19 (1H, d, $J = 6.4$ Hz, H-10c), 1.84 (1H, d, $J = 6.4$ Hz, H-6a). ^{13}C NMR (100.6 MHz, DMSO- d_6) δ 171.5, 169.3, 138.5, 138.1, 82.8, 82.4, 80.8, 79.7, 53.6, 52.7, 49.5, 46.9, 27.2, 26.1. IR $\nu_{\text{max}}/\text{cm}^{-1}$ (tablet KBr): 2623, 1831, 1766, 1254, 1228, 1093. EI-MS (70 eV) m/z (relative intensity): 292 (81) [M^+], 250 (32), 194 (26), 193 (100), 113 (85), 82 (40), 81 (65), 77 (31), 53 (24), 43 (35). HRMS (ESI-TOF): calcd. for $\text{C}_{14}\text{H}_{12}\text{O}_5\text{S}$ [$\text{M} + \text{H}$] $^+$ 292.0405; found 292.0411.

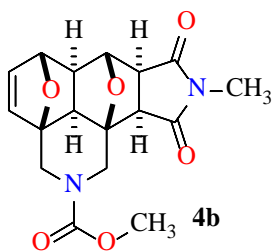
2.1. General Procedure for the synthesis of the adducts 4. *N*-Methylmaleimide (1.6 g, 0.014 mol) was added to a solution of the appropriate *bis*-diene **1** (0.013 mol) in PhMe (30 mL). The mixture was heated at reflux for 7–16 h (see Table 1). The reaction mixture was cooled and left overnight at room temperature. The precipitated crystals were filtered off and recrystallized from an *i*-PrOH/DMF mixture to give compound **4**.

tert-Butyl (3*aSR*,6*RS*,6*aSR*,7*RS*,7*aSR*,10*aRS*,10*bSR*,10*cRS*)-9-methyl-8,10-dioxo-6*a*,7,7*a*,8,9,10,10*a*,10*c*-octahydro-1*H*,6*H*-3*a*,6:7,10*b*-diepoxybenzo[*de*]pyrrolo[3,4-*h*]isoquinoline-2(3*H*)-carboxylate (**4a**).



White powder (2.7 g, 0.007 mol, 52%). R_f 0.52 (EtOAc, Sorbfil); mp: 204.9–205.7 °C (with decomp., from *i*-PrOH/DMF). Very broad signals in NMR spectrums. ^1H NMR (600 MHz, CDCl_3) δ 6.46 (1H, br s, H-5), 6.27 (1H, d, $J = 5.8$ Hz, H-4), 4.99 (1H, s, H-6), 4.84–4.53 (1H, br m, H-3 and H-1A), 3.43–3.28 (1H, br m, H-1B), 2.94 (1H, d, $J = 6.6$ Hz, H-10a), 2.95 (3H, s, N- CH_3), 2.79 (1H, d, $J = 6.6$ Hz, H-7a), 2.11 (1H, d, $J = 6.6$ Hz, H-10c), 1.76 (1H, d, $J = 6.6$ Hz, H-6a), 1.44 (9H, s, O- $\text{C}(\text{CH}_3)_3$). ^{13}C NMR (100.6 MHz, CDCl_3) δ 176.4, 174.3, 155.4, 138.5, 137.2, 84.3, 82.2, 81.1, 80.7, 80.3, 51.6, 51.5, 49.9, 48.8, 44.5, 42.9, 28.4 (3C), 25.1. IR $\nu_{\text{max}}/\text{cm}^{-1}$ (tablet KBr): 1694, 1288, 1266. EI-MS (70 eV) m/z (relative intensity): 388 (2) [M^+], 332 (29), 315 (22), 288 (32), 259 (32), 177 (73), 140 (29), 109 (34), 96 (41), 80 (76), 57 (100), 43 (42). HRMS (ESI-TOF): calcd. for $\text{C}_{20}\text{H}_{24}\text{N}_2\text{O}_6$ [$\text{M}+\text{H}$] $^+$ 388.1634; found 388.1646.

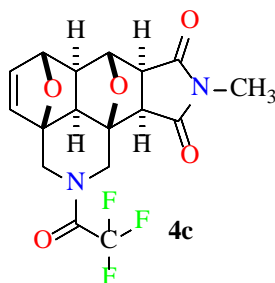
Methyl (3aSR,6RS,6aSR,7RS,7aSR,10aRS,10bSR,10cRS)-9-methyl-8,10-dioxo-6a,7,7a,8,9,10,10a,10c-octahydro-1H,6H-3a,6:7,10b-diepoxybenzo[de]pyrrolo[3,4-h]isoquinoline-2(3H)-carboxylate (4b).



White powder (3.6 g, 0.004 mol, 79%). R_f 0.50 (EtOAc, Sorbfil); mp: 232.0–233.0 °C (from *i*-PrOH/DMF). The mixture of amide rotamers in the ratio of 50/50, ^1H NMR (600 MHz, $\text{DMSO}-d_6$) δ 6.47 (1H, m, H-5, **A**), 6.42 (1H, m, H-5, **B**), 6.28 (1H, d, $J = 5.8$ Hz, H-4, **A**), 6.22 (1H, d, $J = 5.8$ Hz, H-4, **B**), 5.00 (2H, d, $J = 1.7$ Hz, $2 \times$ H-6, **A + B**), 4.84 (2H, br s, $2 \times$ H-7, **A + B**), 4.82 (1H, m, H-1A, **A**), 4.76–4.72 (1H, m, H-3A, **A**), 4.65 (2H, m, H-1A and H-3A, **B**), 3.74–3.72 (1H, m, H-7a, **A**), 3.71 (6H, br s, $2 \times$ CO_2Me , **A + B**),

3.53 (1H, d, $J = 14.9$ Hz, H-1B, **B**), 3.45 (2H, $J = 14.9$ Hz, H-1B and H-3B, **A**), 3.35 (1H, d, $J = 14.9$ Hz, H-3B, **B**), 3.20-3.13 (1H, m, H-7a, **B**), 2.98 (1H, m, H-10a, **B**), 2.97 (3H, m, CH₃, **A**), 2.94 (3H, s, CH₃, **B**), 2.81 (1H, d, $J = 6.6$ Hz, H-10a, **A**), 2.11 (1H, br d, $J = 5.0$ Hz, H-10c, **A**), 1.98 (1H, br d, $J = 5.0$ Hz, H-10c, **B**), 1.79 (1H, d, $J = 6.6$ Hz, H-6a, **A**), 1.62 (1H, d, $J = 6.6$ Hz, H-6a, **B**). ¹³C NMR (151.9 MHz, DMSO-*d*₆) δ 176.4, 175.0, 174.4, 156.7, 156.6, 138.8, 138.6, 137.0, 136.9, 84.3, 84.2, 82.3, 82.1, 81.6, 81.2, 80.8, 79.6, 53.3, 53.2, 52.7, 51.7, 51.4, 50.1, 48.9, 46.2, 44.9, 44.3, 44.2, 44.0, 43.7, 25.3, 24.9. IR $\nu_{\text{max}}/\text{cm}^{-1}$ (tablet KBr): 1769, 1708, 1468, 1273. EI-MS (70 eV) m/z (relative intensity): 346 (50) [M⁺], 318 (46), 239 (13), 176 (35), 167 (56), 154 (100), 82 (54), 81 (81), 53 (46), 45 (48). HRMS (ESI-TOF): calcd. for C₁₇H₁₈N₂O₆ [M+H]⁺ 346.1165; found 346.1152.

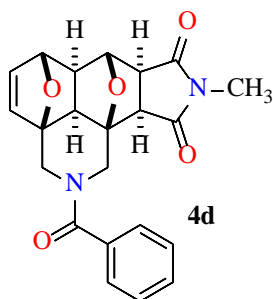
(3*aSR*,6*RS*,6*aSR*,7*RS*,7*aSR*,10*aRS*,10*bSR*,10*cRS*)-9-Methyl-2-(trifluoroacetyl)-2,3,6*a*,7*a*,10*a*,10*c*-hexahydro-1*H*,6*H*-3*a*,6:7,10*b*-diepoxybenzo[*de*]pyrrolo[3,4-*h*]isoquinoline-8,10(7*H*,9*H*)-dione (**4c**).



White powder (3.1 g, 0.008 mol, 60%). R_f 0.42 (EtOAc, Sorbfil); mp: 212.6–213.9 °C (from *i*-PrOH/DMF). The mixture of amide rotamers in the ratio of 50/50, ¹H NMR (600 MHz, CDCl₃) δ 6.52 (1H, dd, $J = 1.7$ and $J = 5.8$ Hz, H-5, **A**), 6.49 (1H, dd, $J = 1.7$ and $J = 5.8$ Hz, H-5, **B**), 6.32 (1H, d, $J = 5.8$ Hz, H-4, **A**), 6.30 (1H, d, $J = 5.8$ Hz, H-4, **B**), 5.22 (1H, dd, $J = 1.2$ and $J = 14.8$ Hz, H-1A, **B**), 5.19 (1H, dd, $J = 1.2$ and $J = 14.8$ Hz, H-1A, **A**), 5.04 (1H, d, $J = 1.7$ Hz, H-6, **A**), 5.03 (1H, d, $J = 1.7$ Hz, H-6, **B**), 4.86 (1H, s, H-7, **A**), 4.85 (1H, s, H-7, **B**), 4.56 (1H, br d, $J = 14.6$ Hz, H-3A **A**), 4.50 (1H, br d, $J = 14.6$ Hz, H-

3A **B**), 3.83 (1H, d, $J = 14.8$ Hz, H-1B, **B**), 3.79 (1H, d, $J = 14.8$ Hz, H-1B, **A**), 3.46 (1H, d, $J = 14.8$ Hz, H-3B, **A**), 3.36 (1H, d, $J = 14.8$ Hz, H-3B, **B**), 3.00 (2H, d, $J = 6.6$ Hz, H-7a, **A + B**), 2.98 (6H, s, $2 \times \text{N-CH}_3$), 2.87 (1H, d, $J = 6.6$ Hz, H-10a, **A + B**), 2.17 (1H, d, $J = 6.2$ Hz, H-6a, **B**), 2.15 (1H, d, $J = 6.2$ Hz, H-6a, **A**), 1.90 (1H, d, $J = 6.2$ Hz, H-10c, **B**), 1.89 (1H, d, $J = 6.2$ Hz, H-10c, **A**). ^{13}C NMR (151.9 MHz, $\text{DMSO-}d_6$) δ 176.0, 175.9, 174.3, 174.0, 157.2 and 156.9 (q, $^2J_{\text{CF}} = 36.1$ Hz, COCF_3), 139.3, 138.8, 136.5, 136.1, 116.3 and 116.2 (q, $^1J_{\text{CF}} = 298.0$ Hz, COCF_3), 83.9, 83.7, 81.9, 81.6, 81.3, 81.2, 80.9, 80.8, 51.6, 51.5, 51.4, 51.2, 50.0, 49.9, 49.0, 49.1, 45.8 and 45.2 (q, $^4J_{\text{CF}} = 4.4$ Hz, C-1), 43.8, 43.2, 25.3, 25.2. ^{19}F NMR (564.7 MHz, $\text{DMSO-}d_6$) δ -65.52 (3F, s, CF_3 , **A**), -67.70 (3F, s, CF_3 , **B**). IR $\nu_{\text{max}}/\text{cm}^{-1}$ (tablet KBr): 2999, 2978, 1774, 1703, 1185, 1139. HRMS (ESI-TOF): calcd. for $\text{C}_{17}\text{H}_{15}\text{F}_3\text{N}_2\text{O}_5$ $[\text{M}+\text{H}]^+$ 384.0933; found 384.0945.

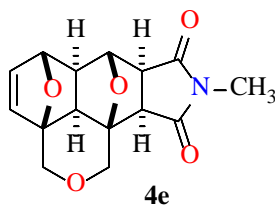
(3a*SR*,6*RS*,6a*SR*,7*RS*,7a*SR*,10a*RS*,10b*SR*,10c*RS*)-2-Benzoyl-9-methyl-2,3,6a,7a,10a,10c-hexahydro-1*H*,6*H*-3a,6:7,10*b*-diepoxybenzo[*de*]pyrrolo[3,4-*h*]isoquinoline-8,10(7*H*,9*H*)-dione (**4d**).



Light-yellow powder (3.4 g, 0.009 mol, 66%). R_f 0.32 (EtOAc, Sorbfil); mp: 243.4–244.4 °C (from *i*-PrOH/DMF). The mixture of amide rotamers in the ratio of 67/33, ^1H NMR (600 MHz, $\text{DMSO-}d_6$) δ 7.44-7.38 (4H, m, H-2,3,5,6-Ph, **maj + min**), 6.48-6.36 (2H, m, H-4-Ph and H-5, **maj + min**), 6.26 (1H, br d, $J = 5.8$ Hz, H-4, **maj**), 6.20 (1H, br d, $J = 5.8$ Hz, H-4, **min**), 5.08-4.84 (2H, m, H-6 and H-3A, **maj + min**), 4.71 (1H, s, H-7, **min**), 4.66 (1H, s, H-7, **maj**), 4.10 (1H, br d, $J = 14.1$ Hz, H-3B, **min**), 4.02 (1H, br d, $J = 14.1$ Hz, H-

3B, **maj**), 3.47 (1H, br d, $J = 14.1$ Hz, H-1A, **maj + min**), 3.18 (1H, br d, $J = 6.6$ Hz, H-10a, **maj + min**), 3.08 (1H, d, $J = 6.6$ Hz, H-7a, **maj**), 2.99 (1H, d, $J = 6.6$ Hz, H-7a, **min**), 2.89 (3H, s, N-CH₃, **min**), 2.84 (3H, s, N-CH₃, **maj**), 2.79 (1H, br d, $J = 14.1$ Hz, H-1B, **maj + min**), 2.16 (1H, br d, $J = 6.6$ Hz, H-10c, **min**), 2.00 (1H, br d, $J = 6.6$ Hz, H-6a, **maj**), 1.82 (1H, br d, $J = 6.6$ Hz, H-10c, **min**), 1.61 (1H, br d, $J = 6.6$ Hz, H-6a, **min**). ¹³C NMR (100.6 MHz, DMSO-*d*₆): δ 176.9, 175.1, 174.7, 169.9, 138.3, 138.1, 137.2, 136.8, 135.9, 129.3, 128.1 (2C), 127.2 (2C), 83.8, 82.3, 81.9, 80.5, 80.0, 78.7, 78.5, 51.2, 50.6, 48.7, 47.8, 46.9, 45.6, 44.1, 40.0, 24.5, 24.3. EI-MS (70 eV) m/z (relative intensity): 392 (32) [M⁺], 287 (27), 200 (40), 176 (19), 105 (100), 81 (42), 45 (26). IR $\nu_{\text{max}}/\text{cm}^{-1}$ (tablet KBr): 2981, 2911, 1769, 1708, 1628, 1433, 1275. HRMS (ESI-TOF): calcd. for C₂₂H₂₀N₂O₅ [M+H]⁺ 392.1372; found 392.1359.

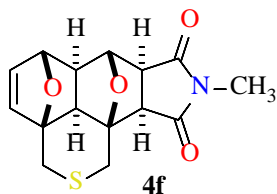
(3*aSR*,6*RS*,6*aSR*,7*RS*,7*aSR*,10*aRS*,10*bSR*,10*cRS*)-9-Methyl-6*a*,7*a*,10*a*,10*c*-tetrahydro-6*H*-3*a*,6:7,10*b*-diepoxyisochromeno[4,5-*ef*]isoindole-8,10(1*H*,3*H*,7*H*,9*H*)-dione (**4e**).



White crystals (2.3 g, 0.008 mol, 60%). R_f 0.34 (EtOAc, Sorbfil); mp: 240.0–241.5 °C (from *i*-PrOH/DMF). ¹H NMR (600.1 MHz, CDCl₃) δ 6.46 (1H, dd, $J = 1.7$ and $J = 5.8$ Hz, H-5), 6.24 (1H, d, $J = 5.8$ Hz, H-4), 5.05 (1H, d, $J = 1.7$ Hz, H-6), 4.86 (1H, s, H-7), 4.40 (1H, d, $J = 13.2$ Hz, H-1A), 4.32 (1H, d, $J = 13.2$ Hz, H-3A), 4.06 (1H, d, $J = 13.2$ Hz, H-1B), 3.99 (1H, d, $J = 13.2$ Hz, H-3B), 2.97 (1H, d, $J = 7.0$ Hz, H-7a), 2.96 (3H, s, N-Me), 2.81 (1H, d, $J = 7.0$ Hz, H-10a), 2.11 (1H, d, $J = 6.3$ Hz, H-10c), 1.81 (1H, d, $J = 6.3$ Hz, H-6a). ¹³C NMR (150.9 MHz, CDCl₃) δ 176.6, 174.6, 138.4, 136.5, 84.1, 82.1, 81.4, 81.2, 66.2, 65.6, 51.6, 51.1, 49.6, 47.4, 25.2. IR $\nu_{\text{max}}/\text{cm}^{-1}$ (tablet KBr): 1765, 1690, 1438, 1386, 1287. EI-MS (70 eV) m/z (relative intensity): 289 (14) [M⁺], 208 (46), 112

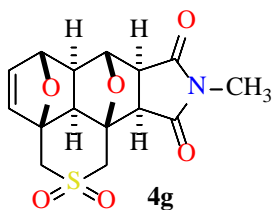
(42), 98 (37), 97 (99), 91 (39), 82 (74), 81 (100), 53 (37), 45 (45). HRMS (ESI-TOF): calcd. for C₁₅H₁₅NO₅ [M + H]⁺ 289.0950; found 289.0963.

(3*aSR*,6*RS*,6*aSR*,7*RS*,7*aSR*,10*aRS*,10*bSR*,10*cRS*)-9-Methyl-6*a*,7*a*,10*a*,10*c*-tetrahydro-6*H*-3*a*,6:7,10*b*-diepoxyisothiochromeno[4,5-*ef*]isoindole-8,10(1*H*,3*H*,7*H*,9*H*)-dione (**4f**).



White crystals (2.9 g, 0.0097 mol, 72%). *R_f* 0.45 (EtOAc, Sorbfil); mp: 229.5–230.1 °C (from *i*-PrOH/DMF). ¹H NMR (600.1 MHz, CDCl₃) δ 6.50 (1H, dd, *J* = 1.7 and *J* = 5.8 Hz, H-5), 6.19 (1H, d, *J* = 5.8 Hz, H-4), 5.04 (1H, d, *J* = 1.7 Hz, H-6), 4.89 (1H, s, H-7), 3.36 (1H, d, *J* = 14.9 Hz, H-1A), 3.33 (1H, d, *J* = 14.9 Hz, H-1A), 3.06 (1H, dd, *J* = 1.7 and *J* = 14.9 Hz, H-7a), 3.00-2.97 (2H, m, H-1B and H-3B), 2.96 (3H, s, N-Me), 2.75 (1H, d, *J* = 6.6 Hz, H-10a), 2.14 (1H, d, *J* = 6.6 Hz, H-10c), 1.71 (1H, d, *J* = 6.6 Hz, H-6a). ¹³C NMR (150.9 MHz, CDCl₃) δ 176.3, 174.5, 138.9, 138.8, 83.7, 82.1, 80.9, 80.6, 53.1, 52.2, 51.2, 49.0, 28.8, 27.8, 25.1. IR *v*_{max}/cm⁻¹ (tablet KBr): 2996, 1766, 1694, 1133, 979. EI-MS (70 eV) *m/z* (relative intensity): 305 (19) [M⁺], 263 (11), 194 (70), 113 (100), 82 (82), 81 (87), 65 (36), 53 (60), 46 (38). HRMS (ESI-TOF): calcd. for C₁₅H₁₅NO₄S [M + H]⁺ 305.0722; found 305.0710.

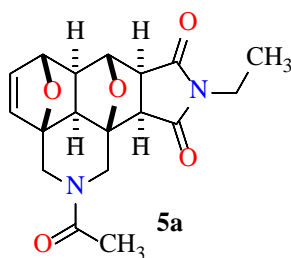
(3*aSR*,6*RS*,6*aSR*,7*RS*,7*aSR*,10*aRS*,10*bSR*,10*cRS*)-9-Methyl-6*a*,7*a*,10*a*,10*c*-tetrahydro-6*H*-3*a*,6:7,10*b*-diepoxyisothiochromeno[4,5-*ef*]isoindole-8,10(1*H*,3*H*,7*H*,9*H*)-dione 2,2-dioxide (**4g**).



White crystals (3.1 g, 0.0091 mol, 70 %). R_f 0.38 (EtOAc, Sorbfil); mp: 287.8–288.5 °C (from *i*-PrOH/DMF). ^1H NMR (600.1 MHz, CDCl_3) δ 6.52 (1H, dd, $J = 1.5$ and $J = 5.5$ Hz, H-5), 6.27 (1H, d, $J = 5.5$ Hz, H-4), 5.01 (1H, d, $J = 1.5$ Hz, H-6), 4.73 (1H, s, H-7), 4.09 (1H, d, $J = 15.1$ Hz, H-1A), 4.04 (1H, d, $J = 15.1$ Hz, H-1A), 3.72 (1H, dd, $J = 3.0$ and $J = 15.1$ Hz, H-1B), 3.24 (H, dd, $J = 3.0$ and $J = 15.1$ Hz, H-3B), 3.19 (1H, d, $J = 7.1$ Hz, H-10a), 3.05 (1H, d, $J = 6.6$ Hz, H-7a), 2.80 (3H, s, N-Me), 2.26 (1H, d, $J = 6.6$ Hz, H-6a). ^{13}C NMR (150.9 MHz, CDCl_3) δ 177.2, 175.1, 138.9, 138.7, 85.4, 83.8, 81.3, 80.9, 53.6, 51.8, 51.7, 51.3, 50.6, 47.7, 25.2. IR $\nu_{\text{max}}/\text{cm}^{-1}$ (tablet KBr): 2995, 2940, 1772, 1700, 1437, 1125. HRMS (ESI-TOF): calcd. for $\text{C}_{15}\text{H}_{15}\text{NO}_6\text{S}$ $[\text{M} + \text{H}]^+$ 337.0620; found 337.0635.

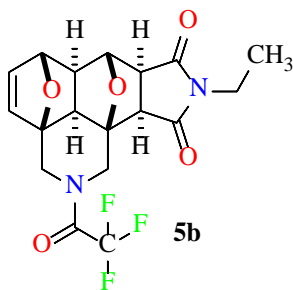
2.3. General Procedure for the synthesis of the adducts 5. *N*-Ethylmaleimide (1.8 g, 0.014 mol) was added to a solution of the appropriate *bis*-diene **1** (0.013 mol) in PhMe (30 mL). The mixture was heated at reflux for 7–16 h (see Table 1). The reaction mixture was cooled and left overnight at room temperature. The precipitated crystals were filtered off and recrystallized from an *i*-PrOH/DMF mixture to give compounds **5**.

(3*aSR*,6*RS*,6*aSR*,7*RS*,7*aSR*,10*aRS*,10*bSR*,10*cRS*)-2-Acetyl-9-ethyl-2,3,6*a*,7*a*,10*a*,10*c*-hexahydro-1*H*,6*H*-3*a*,6:7,10*b*-diepoxybenzo[*de*]pyrrolo[3,4-*h*]isoquinoline-8,10(7*H*,9*H*)-dione (**5a**).



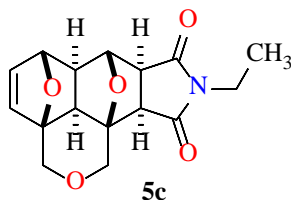
White crystals (2.9 g, 0.0077 mol, 59 %). R_f 0.29 (EtOAc, Sorbfil); mp: 215.3–225.0 °C (from *i*-PrOH/DMF). The mixture of amide rotamers in the ratio of 60/40, ^1H NMR (600 MHz, DMSO- d_6) δ 6.47 (1H, dd, $J = 1.5$ and $J = 5.6$ Hz, H-5, **maj**), 6.44 (1H, dd, $J = 1.5$ and $J = 5.6$ Hz, H-5, **min**), 6.36 (1H, d, $J = 5.6$ Hz, H-4, **maj**), 6.33 (1H, d, $J = 5.6$ Hz, H-4, **min**), 4.92 (1H, d, $J = 1.5$ Hz, H-6, **maj**), 4.90 (1H, d, $J = 14.2$ Hz, H-3A, **min**), 4.86 (1H, d, $J = 1.5$ Hz, H-6, **min**), 4.81 (1H, d, $J = 14.6$ Hz, H-3A, **maj**), 4.64 (1H, s, H-7, **min**), 4.57 (1H, s, H-7, **maj**), 4.20 (1H, d, $J = 15.1$ Hz, H-3B, **maj**), 3.98 (1H, d, $J = 15.6$ Hz, H-3B, **min**), 3.81 (1H, d, $J = 15.4$ Hz, H-1A, **min**), 3.78 (1H, d, $J = 14.6$ Hz, H-1A, **maj**), 3.40–3.36 (2H, m, N- CH_2 - CH_3 , **maj** + **min**), 3.23–3.21 (1H, d, $J = 14.1$ Hz, H-1B, **min**), 3.20–3.17 (1H, d, $J = 14.6$ Hz, H-1B, **maj**), 3.15 (1H, d, $J = 6.6$ Hz, H-7a, **min**), 3.12 (1H, d, $J = 6.6$ Hz, H-7a, **maj**), 3.02 (1H, d, $J = 6.6$ Hz, H-10a, **min**), 2.97 (1H, d, $J = 6.6$ Hz, H-10a, **maj**), 2.11 (1H, d, $J = 6.6$ Hz, H-6a, **maj** + **min**), 1.94 (3H, s, Ac, **maj**), 1.92 (1H, d, $J = 6.6$ Hz, H-10c, **maj** + **min**), 1.88 (3H, s, Ac, **min**), 1.00 (3H, br t, $J = 7.1$ Hz, N- CH_2 - CH_3 , **maj** + **min**). ^{13}C NMR (150.9 MHz, DMSO- d_6) δ 177.3, 177.2, 175.6, 175.4, 169.8, 169.6, 139.0, 138.9, 137.8, 137.5, 84.7, 84.6, 82.7, 82.6, 81.1, 80.9, 80.6, 80.5, 51.7, 51.6, 51.1, 51.4, 49.3, 49.1, 48.5, 48.4, 46.5, 46.1, 41.7, 41.0, 33.6, 33.5, 22.3, 22.0, 13.3, 13.2. IR $\nu_{\text{max}}/\text{cm}^{-1}$ (tablet KBr): 2999, 2929, 1766, 1691, 1439, 1404, 1223, 1139. HRMS (ESI-TOF): calcd. for $\text{C}_{18}\text{H}_{20}\text{N}_2\text{O}_5$ $[\text{M}+\text{H}]^+$ 344.1372; found 344.1372.

(3*a*SR,6*RS*,6*a*SR,7*RS*,7*a*SR,10*a*RS,10*b*SR,10*c*RS)-9-Ethyl-2-(trifluoroacetyl)-2,3,6*a*,7*a*,10*a*,10*c*-hexahydro-1*H*,6*H*-3*a*,6:7,10*b*-diepoxybenzo[*de*]pyrrolo[3,4-*h*]isoquinoline-8,10(7*H*,9*H*)-dione (**5b**).



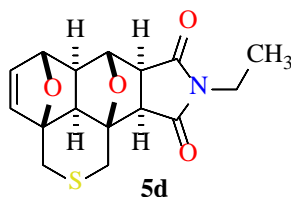
Light yellow powder (3.15 g, 0.0079 mol, 61 %). R_f 0.46 (EtOAc, Sorbfil); mp: 164.8–166.2 °C (with decomp., from *i*-PrOH/DMF). The mixture of amide rotamers in the ratio of 53/47, ^1H NMR (600 MHz, DMSO- d_6) δ 6.50–6.47 (1H, m, H-5, **maj** + **min**), 6.40 (1H, d, $J = 5.6$ Hz, H-4, **maj**), 6.38 (1H, d, $J = 5.6$ Hz, H-4, **min**), 4.95 (1H, d, $J = 1.5$ Hz, H-6, **min**), 4.93 (1H, d, $J = 1.5$ Hz, H-6, **maj**), 4.78 (1H, dd, $J = 1.5$ and $J = 14.1$ Hz, H-3A, **maj**), 4.68–4.66 (1H, dd, $J = 1.5$ and $J = 14.1$ Hz, H-3A, **min**), 4.67 (1H, s, H-7, **maj**), 4.65 (1H, s, H-7, **min**), 4.21 (1H, d, $J = 15.1$ Hz, H-3B, **min**), 4.14 (1H, d, $J = 15.1$ Hz, H-3B, **maj**), 4.07 (1H, d, $J = 15.1$ Hz, H-1A, **maj** + **min**), 3.65 (1H, d, $J = 14.1$ Hz, H-1B, **maj** + **min**), 3.40–3.55 (2H, m, N-CH₂-CH₃, **maj** + **min**), 3.17–3.16 (1H, d, $J = 6.6$ Hz, H-7a, **min**), 3.16–3.15 (1H, d, $J = 6.6$ Hz, H-7a, **maj**), 3.07 (1H, t, $J = 6.6$ Hz, H-10a, **maj** + **min**), 2.17 (1H, d, $J = 6.6$ Hz, H-6a, **min**), 2.16 (1H, d, $J = 6.6$ Hz, H-6a, **maj**), 2.05–2.04 (1H, d, $J = 6.6$ Hz, H-10c, **maj**), 2.04–2.03 (1H, d, $J = 6.6$ Hz, H-10c, **min**), 1.01 (3H, t, $J = 7.1$ Hz, N-CH₂-CH₃, **min**), 0.97 (3H, t, $J = 7.1$ Hz, N-CH₂-CH₃, **maj**). ^{13}C NMR (150.9 MHz, DMSO- d_6) δ 177.1, 175.5, 175.3, 160.0 (q, $^2J_{\text{C,F}} = 34.7$ Hz, COCF₃), 159.9 (q, $^2J_{\text{C,F}} = 34.7$ Hz, COCF₃), 139.2, 139.0, 137.3, 137.1, 116.8 (q, $^1J_{\text{C,F}} = 287.6$ Hz, COCF₃), 84.2, 83.9, 82.2, 81.9, 81.1, 81.0, 80.9, 80.8, 51.6, 51.5, 51.1, 49.4, 49.2, 48.3, 48.1, 45.8 (q, $^4J_{\text{C,F}} = 2.9$ Hz, C-1), 45.1 (q, $^4J_{\text{C,F}} = 2.9$ Hz, C-3), 43.9, 43.2, 33.6, 33.5, 13.3, 13.0. ^{19}F NMR (564.7 MHz, DMSO- d_6) δ –66.79 (3F, s, CF₃, **min**), –69.98 (3F, s, CF₃, **maj**). IR $\nu_{\text{max}}/\text{cm}^{-1}$ (tablet KBr): 2986, 2917, 1776, 1712, 1452, 1400, 1215, 1150. HRMS (ESI-TOF): calcd. for C₁₈H₁₇F₃N₂O₅ [M+H]⁺ 398.1090; found 398.1086.

(3*aSR*,5*RS*,5*aSR*,6*RS*,6*aSR*,9*aRS*,9*bSR*,9*cRS*)-3*a*,5-Diethenyl-8-ethylhexahydro-3*H*-6,9*b*-epoxy-2,4-dioxo-8-azacyclopenta[*e*]acenaphthylene-7,9(1*H*,5*H*,8*H*)-dione (**5c**).



White powder (2.36 g, 0.0078 mol, 60 %). R_f 0.36 (EtOAc, Sorbfil); mp: 218.5–219.7 °C (from *i*-PrOH/DMF). ¹H NMR (600 MHz, DMSO-*d*₆) δ 6.43 (1H, dd, $J = 1.5$ and $J = 5.5$ Hz, H-5), 6.30 (1H, d, $J = 5.5$ Hz, H-4), 4.93 (1H, d, $J = 1.5$ Hz, H-6), 4.63 (1H, s, H-7), 4.10 (1H, d, $J = 12.6$ Hz, H-3A), 3.98 (1H, d, $J = 12.6$ Hz, H-3B), 3.94 (1H, d, $J = 12.6$ Hz, H-1A), 3.91 (1H, d, $J = 12.6$ Hz, H-1B), 3.35 (2H, dq, $J = 1.0$ and $J = 7.1$ Hz, N-CH₂-CH₃), 3.11 (1H, d, $J = 7.1$ Hz, H-7a), 2.98 (1H, d, $J = 7.1$ Hz, H-10a), 2.10 (1H, d, $J = 6.3$ Hz, H-6a), 1.88 (1H, d, $J = 6.3$ Hz, H-10c), 0.99 (3H, t, $J = 7.1$ Hz, N-CH₂-CH₃). ¹³C NMR (150.9 MHz, DMSO-*d*₆) δ 177.4, 175.4, 138.5, 137.4, 84.1, 82.1, 80.9, 79.4, 65.7, 65.2, 51.4, 51.1, 49.1, 46.8, 33.5, 13.2. IR $\nu_{\max}/\text{cm}^{-1}$ (tablet KBr): 2977, 2844, 1769, 1703, 1406, 1259, 1130. HRMS (ESI-TOF): calcd. for C₁₆H₁₇NO₅ [M+H]⁺ 303.1107; found 303.1100.

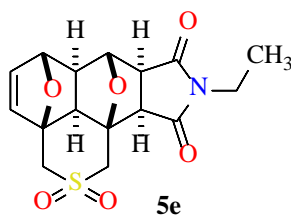
(3*aSR*,5*RS*,5*aSR*,6*RS*,6*aSR*,9*aRS*,9*bSR*,9*cRS*)-3*a*,5-Diethenyl-8-ethylhexahydro-3*H*-6,9*b*-epoxy-4-oxa-2-thia-8-azacyclopenta[*e*]acenaphthylene-7,9(1*H*,5*H*,8*H*)-dione (**5d**).



White powder (2.3 g, 0.0072 mol, 55%). R_f 0.41 (EtOAc, Sorbfil); mp: 238.2–240.1 °C (from *i*-PrOH/DMF). ¹H NMR (600 MHz, DMSO-*d*₆) δ 6.48 (1H, dd, $J = 1.5$ and $J = 5.6$

Hz, H-5), 6.22 (1H, d, $J = 5.6$ Hz, H-4), 4.92 (1H, d, $J = 2.0$ Hz, H-6), 4.64 (1H, s, H-7), 3.36 (2H, dq, $J = 1.0$ and $J = 7.1$ Hz, N-CH₂-CH₃), 3.35-3.32 (2H, m, H-3A and H-3B), 3.14 (1H, d, $J = 7.1$ Hz, H-7a), 2.88 (1H, d, $J = 7.1$ Hz, H-10a), 2.86 (1H, dd, $J = 1.5$ and $J = 14.1$ Hz, H-1A), 2.62 (1H, dd, $J = 1.5$ and $J = 15.1$ Hz, H-1B), 2.11 (1H, d, $J = 6.5$ Hz, H-6a), 1.78 (1H, d, $J = 6.5$ Hz, H-10c), 0.99 (3H, t, $J = 7.1$ Hz, N-CH₂-CH₃). ¹³C NMR (150.9 MHz, DMSO-*d*₆) δ 177.3, 175.4, 139.5, 139.2, 83.7, 82.1, 80.6, 80.4, 53.0, 52.2, 50.6, 48.2, 28.0, 27.4, 33.6, 13.2. IR $\nu_{\text{max}}/\text{cm}^{-1}$ (tablet KBr): 2993, 2944, 1762, 1688, 1442, 1375, 1225, 1133. HRMS (ESI-TOF): calcd. for C₁₆H₁₇NO₄S [M+H]⁺ 319.0878; found 319.0882.

(3*a*SR,6*RS*,6*a*SR,7*RS*,7*a*SR,10*a*RS,10*b*SR,10*c*RS)-9-Ethyl-6*a*,7*a*,10*a*,10*c*-tetrahydro-6*H*-3*a*,6:7,10*b*-diepoxyisothiochromeno[4,5-*ef*]isoindole-8,10(1*H*,3*H*,7*H*,9*H*)-dione 2,2-dioxide (**5e**).



White crystals (2.9 g, 0.0083 mol, 64 %). R_f 0.29 (EtOAc, Sorbfil); mp: 261.3–264.4 °C (with decomp., from *i*-PrOH/DMF). ¹H NMR (600 MHz, DMSO-*d*₆) δ 6.52 (1H, dd, $J = 1.5$ and $J = 5.6$ Hz, H-5), 6.27 (1H, d, $J = 5.6$ Hz, H-4), 5.00 (1H, d, $J = 1.5$ Hz, H-6), 4.74 (1H, s, H-7), 4.09-4.07 (1H, d, $J = 15.1$ Hz, H-3A), 4.07-4.04 (1H, d, $J = 15.1$ Hz, H-3B), 3.72 (1H, dd, $J = 3.0$ and $J = 14.6$ Hz, H-1A), 3.36-3.34 (2H, m, N-CH₂-CH₃), 3.22 (1H, dd, $J = 3.0$ and $J = 14.6$ Hz, H-1B), 3.17 (1H, d, $J = 6.6$ Hz, H-7a), 3.02 (1H, d, $J = 6.6$ Hz, H-10a), 2.26 (1H, d, $J = 6.6$ Hz, H-6a), 2.12 (1H, d, $J = 6.6$ Hz, H-10c), 1.01 (3H, t, $J = 7.1$ Hz, N-CH₂-CH₃). ¹³C NMR (150.9 MHz, DMSO-*d*₆) δ 176.9, 147.9, 138.8, 138.7, 85.4, 83.8, 81.3, 81.0, 53.5, 51.9, 51.7, 51.1, 47.7, 33.7, 13.3. IR $\nu_{\text{max}}/\text{cm}^{-1}$ (tablet KBr):

2989, 2956, 1772, 1696, 1448, 1371, 1234, 1125. HRMS (ESI-TOF): calcd. for $C_{16}H_{17}NO_6S$ $[M+H]^+$ 351.3730; found 351.3730.

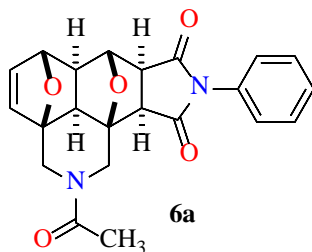
2.4. General procedure for the synthesis of the adducts **6**.

Table S3. Selection of conditions for the interaction of *bis*-furan (**1f**) with *N*-phenylmaleimide

Entry	Solvent	Temperature, °C	Time	Product	Yield, %
1	acetone	24	19 d	6g	6
2	benzene	80	20 h	6g	20
3	toluene	110	18 h	6g	75
4	<i>o</i> -xylene	140	12 h	6g	38

N-Phenylmaleimide (2.7 g, 0.015 mol) was added to a solution of the appropriate *bis*-diene **1** (0.013 mol) in PhMe (30 mL). The mixture was heated at reflux for 8–12 h (see Table 1). The reaction mixture was cooled and left overnight at room temperature. The precipitated crystals were filtered off and recrystallized from an *i*-PrOH/DMF mixture to give compounds **6**.

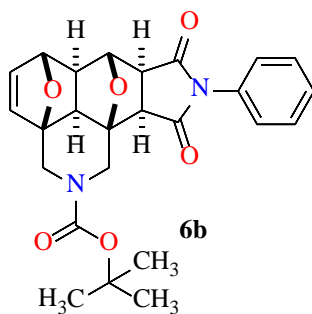
(3*aSR*,6*RS*,6*aSR*,7*RS*,7*aSR*,10*aRS*,10*bSR*,10*cRS*)-2-Acetyl-9-phenyl-2,3,6*a*,7*a*,10*a*,10*c*-hexahydro-1*H*,6*H*-3*a*,6:7,10*b*-diepoxybenzo[*de*]pyrrolo[3,4-*h*]isoquinoline-8,10(7*H*,9*H*)-dione (**6a**).



White crystals (3.3 g, 0.0083 mol, 64 %). R_f 0.36 (EtOAc, Sorbfil); mp: 278.9–279.7 °C (with decomp., from *i*-PrOH/DMF). The mixture of amide rotamers in the ratio of 60/40, 1H NMR (600 MHz, DMSO- d_6) δ 7.48 (2H, br t, J = 7.6 Hz, H-3,5-Ph, **maj** + **min**), 7.43

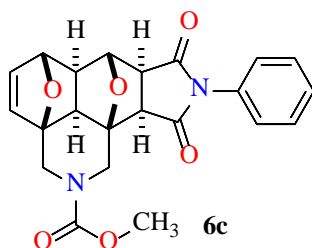
(1H, br t, $J = 7.6$ Hz, H-4-Ph, **maj** + **min**), 7.18 (1H, br. t, $J = 7.6$ Hz, H-2,6-Ph, **maj** + **min**), 6.49 (1H, dd, $J = 1.5$ and $J = 5.9$ Hz, H-5, **maj**), 6.45 (1H, dd, $J = 1.5$ and $J = 5.9$ Hz, H-5, **min**), 6.38 (1H, d, $J = 5.6$ Hz, H-4, **maj**), 6.35 (1H, d, $J = 5.6$ Hz, H-4, **min**), 4.96 (1H, d, $J = 1.5$ Hz, H-6, **maj**), 4.93 (1H, d, $J = 14.1$ Hz, H-3A, **min**), 4.90 (1H, d, $J = 1.5$ Hz, H-6, **min**), 4.88 (1H, d, $J = 14.1$ Hz, H-3A, **maj**), 4.75 (1H, s, H-7, **min**), 4.70 (1H, s, H-7, **maj**), 4.23 (1H, d, $J = 15.1$ Hz, H-3B, **maj**), 4.06 (1H, d, $J = 15.1$ Hz, H-3B, **min**), 3.86 (1H, d, $J = 15.1$ Hz, H-1A, **min**), 3.80 (1H, d, $J = 14.6$ Hz, H-1A, **maj**), 3.33-3.32 (1H, d, $J = 7.1$ Hz, H-7a, **min**), 3.29 (1H, d, $J = 6.6$ Hz, H-7a, **maj**), 3.25-3.23 (1H, d, $J = 14.6$ Hz, H-1A, **min**), 3.25-3.23 (1H, d, $J = 14.6$ Hz, H-1B, **maj**), 3.20 (1H, d, $J = 7.1$ Hz, H-10a, **min**), 3.16 (1H, d, $J = 6.6$ Hz, H-10a, **maj**), 2.19 (1H, d, $J = 6.6$ Hz, H-6a, **maj** + **min**), 2.02 (1H, d, $J = 6.6$ Hz, H-10c, **min**), 2.00 (1H, d, $J = 6.6$ Hz, H-10c, **maj**), 1.96 (3H, s, COMe, **maj**), 1.94 (3H, s, COMe, **min**). ^{13}C NMR (151.9 MHz, DMSO- d_6) δ 176.8, 175.1, 174.9, 169.9, 169.8, 139.0, 138.8, 137.8, 137.6, 132.7, 132.6, 129.6 (2C), 129.5 (2C), 129.1, 128.9, 127.4 (2C), 127.2 (2C), 84.7, 84.6, 83.0, 82.9, 81.5, 81.0 (2C), 80.6, 52.1, 51.9, 51.7, 51.5, 49.3, 49.2, 48.5, 48.4, 46.6, 46.1, 41.7, 41.1, 22.3, 22.2. IR $\nu_{\text{max}}/\text{cm}^{-1}$ (tablet KBr): 3009, 2982, 1704, 1645, 1503, 1388, 1195. HRMS (ESI-TOF): calcd. for $\text{C}_{22}\text{H}_{20}\text{N}_2\text{O}_5$ $[\text{M} + \text{H}]^+$ 392.1372; found 392.1379.

tert-Butyl (3*aSR*,6*RS*,6*aSR*,7*RS*,7*aSR*,10*aRS*,10*bSR*,10*cRS*)-8,10-dioxo-9-phenyl-6*a*,7,7*a*,8,9,10,10*a*,10*c*-octahydro-1*H*,6*H*-3*a*,6:7,10*b*-diepoxybenzo[*de*]pyrrolo[3,4-*h*]isoquinoline-2(3*H*)-carboxylate (**6b**).



White powder (4.1 g, 0.009 mol, 68%). R_f 0.34 (EtOH : EtOAc, 1 : 8, Sorbfil); mp: 229.2–229.6 °C (with decomp., from *i*-PrOH/DMF). ^1H NMR (600 MHz, CDCl_3) δ 7.45 (2H, t, $J = 7.6$ Hz, H-3, 5-Ph), 7.39 (1H, t, $J = 7.6$ Hz, H-4-Ph), 7.23 (2H, d, $J = 7.6$ Hz, H-2,6-Ph), 6.46 (1H, br d, $J = 6.2$ Hz, H-5), 6.28 (1H, d, $J = 6.2$ Hz, H-4), 5.03 (1H, s, H-7), 4.95 (1H, br s, H-6), 4.83 (2H, m, H-1A and H-3A), 3.45 (2H, m, H-1B and H-3B), 3.13 (1H, br d, $J = 6.9$ Hz, H-10a), 2.93 (1H, d, $J = 6.9$ Hz, H-7a), 2.17 (1H, br d, $J = 6.2$ Hz, H-10c), 1.80 (1H, d, $J = 6.2$ Hz, H-6a), 1.45 (9H, s, *t*-Bu). ^{13}C NMR (150.9 MHz, CDCl_3) δ 177.5, 175.7, 153.9, 138.6, 137.3, 131.8, 129.3, 128.9, 126.6 (2C), 84.5, 82.9, 81.4, 81.3, 80.5, 51.7, 51.5, 49.9, 49.0, 44.2, 43.7, 28.4 (3C). IR $\nu_{\text{max}}/\text{cm}^{-1}$ (tablet KBr): 1776, 1712, 1195, 1157. EI-MS (70 eV) m/z (relative intensity): 450 (1) $[\text{M}^+]$, 349 (6), 194 (9), 157 (36), 138 (24), 128 (15), 96 (20), 81 (21), 57 (100), 43 (31). HRMS (ESI-TOF): calcd. for $\text{C}_{25}\text{H}_{26}\text{N}_2\text{O}_6$ $[\text{M} + \text{H}]^+$ 450.1791; found 450.1778.

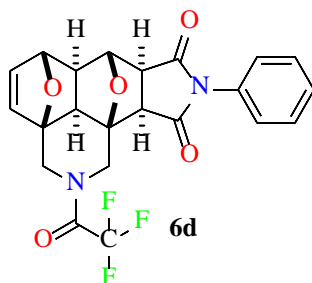
Methyl (3*aSR*,6*RS*,6*aSR*,7*RS*,7*aSR*,10*aRS*,10*bSR*,10*cRS*)-8,10-dioxo-9-phenyl-6*a*,7,7*a*,8,9,10,10*a*,10*c*-octahydro-1*H*,6*H*-3*a*,6:7,10*b*-diepoxybenzo[*de*]pyrrolo[3,4-*h*]isoquinoline-2(3*H*)-carboxylate (**6c**).



White crystals (2.7 g, 0.006 mol, 49%). R_f 0.35 (EtOAc, Sorbfil); mp: 248.0–249.0 °C (with decomp., from *i*-PrOH/DMF). ^1H NMR (600 MHz, CDCl_3) δ 7.50–7.41 (2H, m, H-2,6-Ph), 7.27–7.24 (3H, m, H-3-5-Ph), 6.48 (1H, br s, H-5), 6.29 (1H, d, $J = 5.4$ Hz, H-4), 5.04 (1H, s, H-6), 4.98 (1H, s, H-7), 4.76 (1H, d, $J = 14.6$ Hz, H-1A), 4.67 (1H, d, $J = 14.6$ Hz, H-3A), 3.71 (3H, s, CO_2Me), 3.56–3.35 (2H, m, H-1B and H-3B), 3.13 (1H, d, $J = 6.8$

Hz, H-7a), 2.97 (2H, d, $J = 6.8$ Hz, H-10a), 2.18 (1H, br d, $J = 6.2$ Hz, H-10c), 1.85 (1H, d, $J = 6.2$ Hz, H-6a). ^{13}C NMR (151.9 MHz, CDCl_3) δ 175.5 (2C), 156.7, 138.6, 137.1, 131.7, 129.3 (2C), 129.0, 126.7, 126.6, 84.3, 82.9, 82.7, 81.4, 53.2, 51.7, 51.4, 50.0, 48.9, 48.7, 44.4, 43.8. IR $\nu_{\text{max}}/\text{cm}^{-1}$ (tablet KBr): 1704, 1253, 1196. EI-MS (70 eV) m/z (relative intensity): 408 (40) $[\text{M}^+]$, 235 (30), 176 (27), 154 (95), 105 (42), 91 (31), 81 (100), 59 (62), 45 (42), 43 (64). HRMS (ESI-TOF): calcd. for $\text{C}_{22}\text{H}_{20}\text{N}_2\text{O}_6$ $[\text{M} + \text{H}]^+$ 408.1321; found 408.1335.

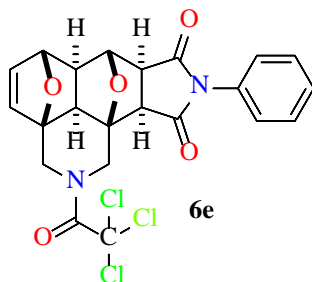
(3aSR,6RS,6aSR,7RS,7aSR,10aRS,10bSR,10cRS)-9-Phenyl-2-(trifluoroacetyl)-2,3,6a,7a,10a,10c-hexahydro-1H,6H-3a,6:7,10b-diepoxybenzo[de]pyrrolo[3,4-h]isoquinoline-8,10(7H,9H)-dione (**6d**).



White crystals (5.4 g, 0.012 mol, 90%). R_f 0.39 (EtOAc, Sorbfil); mp: 260.8–262.0 °C (from *i*-PrOH/DMF). The mixture of amide rotamers in the ratio of 50/50, ^1H NMR (600 MHz, $\text{DMSO}-d_6$) δ 7.54–7.50 (2H, m, H-3,5-Ph, **A+B**), 7.45–7.42 (1H, m, H-4-Ph, **A+B**), 7.19 (1H, br d, $J = 7.4$ Hz, H-2-Ph, **A+B**), 7.13 (1H, br d, $J = 7.4$ Hz, H-6-Ph, **A+B**), 6.52 (1H, dd, $J = 1.6$ and $J = 5.8$ Hz, H-5, **A**), 6.51 (1H, dd, $J = 1.6$ and $J = 5.8$ Hz, H-5, **B**), 6.42 (1H, d, $J = 5.8$ Hz H-4, **A**), 6.41 (1H, d, $J = 5.8$ Hz H-4, **B**), 4.99 (1H, br s, H-6, **A**), 4.97 (1H, br s, H-6, **B**), 4.81 (1H, m, H-3A, **A**), 4.79 (1H, br s, H-7, **A**), 4.77 (1H, br s, H-7, **B**), 4.74 (1H, br d, $J = 14.1$ Hz, H-3A, **B**), 4.24 (1H, br d, $J = 14.9$ Hz, H-3B, **A**), 4.20 (1H, br d, $J = 14.9$ Hz, H-3B, **B**), 4.12 (1H, br d, $J = 14.9$ Hz, H-1A, **A**), 4.09 (1H, br d, $J = 14.9$ Hz, H-1A, **B**), 3.70 (1H, br d, $J = 14.1$ Hz, H-1B, **A**), 3.68 (1H, br d, $J = 14.1$ Hz,

H-1B, **B**), 3.36 (1H, m, H-7a, **A**), 3.33 (1H, m, H-7a, **B**), 3.26 (1H, d, $J = 7.4$ Hz, H-10a, **A**), 3.25 (1H, d, $J = 7.4$ Hz, H-10a, **B**), 2.25 (1H, d, $J = 6.6$ Hz, H-6a, **A**), 2.24 (1H, d, $J = 6.6$ Hz, H-6a, **B**), 2.13 (1H, d, $J = 6.2$ Hz, H-10c, **A**), 2.12 (1H, d, $J = 6.2$ Hz, H-10c, **B**). ^{13}C NMR (151.9 MHz, DMSO- d_6) δ 176.7, 176.6, 175.0, 174.8, 156.0 (q, $^2J_{\text{CF}} = 34.7$ Hz, COCF $_3$), 155.9 (q, $^2J_{\text{CF}} = 34.7$ Hz, COCF $_3$), 139.2, 139.1, 137.3, 137.1, 132.7, 132.6, 129.7, 129.6, 129.2, 129.1, 127.3, 136.8 (q, $^1J_{\text{CF}} = 289.0$ Hz, COCF $_3$), 84.3, 84.0, 82.6, 82.2, 81.5, 81.3, 81.1, 80.9, 52.0, 51.9, 51.8, 51.5, 49.5, 49.2, 48.3, 48.1, 45.9 (q, $^4J_{\text{CF}} = 4.3$ Hz, C-1), 45.2 (q, $^4J_{\text{CF}} = 4.3$ Hz, C-3), 44.0, 43.2. ^{19}F NMR (564.7 MHz, DMSO- d_6) δ -66.76 (3F, s, CF $_3$, **min**), -66.86 (3F, s, CF $_3$, **maj**). IR $\nu_{\text{max}}/\text{cm}^{-1}$ (tablet KBr): 2985, 1774, 1707, 1253, 1196. HRMS (ESI-TOF): calcd. for C $_{22}$ H $_{17}$ F $_3$ N $_2$ O $_5$ [M + H] $^+$ 446.1090; found 446.1078.

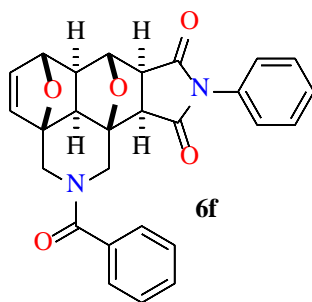
(3*aSR*,6*RS*,6*aSR*,7*RS*,7*aSR*,10*aRS*,10*bSR*,10*cRS*)-9-Phenyl-2-(trichloroacetyl)-2,3,6*a*,7*a*,10*a*,10*c*-hexahydro-1*H*,6*H*-3*a*,6:7,10*b*-diepoxybenzo[*de*]pyrrolo[3,4-*h*]isoquinoline-8,10(7*H*,9*H*)-dione (**6e**).



White crystals (4.0 g, 0.0082 mol, 63%). R_f 0.25 (EtOAc : Hexane, 1 : 5, Sorbfil); mp: 170.9–173.2 °C (from *i*-PrOH/DMF). ^1H NMR (600 MHz, CDCl $_3$) δ 7.49 (2H, br t, $J = 7.6$ Hz, H-3,5-Ph), 7.42 (1H, t, $J = 7.4$ Hz, H-4-Ph), 7.20 (2H, m, H-2,6-Ph), 6.51 (1H, dd, $J = 1.0$ and $J = 5.5$ Hz, H-5), 6.35 (1H, d, $J = 5.5$ Hz, H-4), 5.28 (1H, br s, H-3A), 5.28 (1H, d, $J = 14.1$ Hz, H-1A), 5.09 (1H, s, H-7), 5.00 (1H, br s, H-6), 3.81 (1H, br s, H-1B), 3.52 (1H, br s, H-3B), 3.18 (1H, d, $J = 6.7$ Hz, H-7a), 3.03 (1H, d, $J = 6.7$ Hz, H-10a), 2.22

(1H, d, $J = 6.1$ Hz, H-6a), 1.93 (1H, d, $J = 6.1$ Hz, H-10c). ^{13}C NMR (151.9 MHz, CDCl_3) δ 175.4, 173.6, 160.9, 138.8, 138.0, 136.9, 131.6, 129.4, 129.1, 128.3, 126.5, 125.4, 92.9, 84.2, 82.7, 81.7, 81.4, 51.6, 51.4, 49.6, 48.9, 21.6. IR $\nu_{\text{max}}/\text{cm}^{-1}$ (tablet KBr): 2991, 1781, 1723, 1249, 1170. HRMS (ESI-TOF): calcd. for $\text{C}_{22}\text{H}_{17}\text{Cl}_3\text{N}_2\text{O}_5$ $[\text{M} + \text{H}]^+$ 494.0302; found 494.0308.

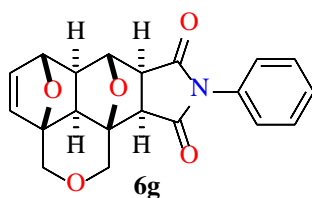
(3aSR,6RS,6aSR,7RS,7aSR,10aRS,10bSR,10cRS)-2-Benzoyl-9-phenyl-2,3,6a,7a,10a,10c-hexahydro-1H,6H-3a,6:7,10b-diepoxybenzo[de]pyrrolo[3,4-h]isoquinoline-8,10(7H,9H)-dione (**6f**).



White crystals (4.9 g, 0.011 mol, 81%). R_f 0.43 (EtOH : EtOAc, 1 : 4, Sorbfil); mp: 233.6–134.3 °C (from *i*-PrOH/DMF). The mixture of amide rotamers in the ratio of 56/44, ^1H NMR (600 MHz, CDCl_3) δ 7.52-7.38 (8H, m, H-Ph, **maj** + **min**), 7.23 (1H, d, $J = 7.6$ Hz, H-Ph, **maj** + **min**), 6.99 (1H, d, $J = 7.6$ Hz, H-Ph, **maj** + **min**), 6.49 (1H, d, $J = 5.6$ Hz, H-5, **maj**), 6.45 (1H, d, $J = 5.6$ Hz, H-5, **min**), 6.43 (1H, d, $J = 5.6$ Hz, H-4, **maj**), 6.26 (1H, d, $J = 5.6$ Hz, H-4, **min**), 5.07 (1H, br s, H-6, **min**), 5.05 (1H, br s, H-7, **min**), 5.01 (1H, br s, H-6, **maj**), 4.99 (1H, br s, H-7, **maj**), 4.80 (1H, d, $J = 14.1$ Hz, H-3A, **maj** + **min**), 4.08 (1H, d, $J = 14.6$ Hz, H-3B, **maj** + **min**), 3.81 (1H, t, $J = 14.1$ Hz, H-1A, **maj** + **min**), 3.51-3.49 (1H, d, $J = 14.1$ Hz, H-1B, **min**), 3.50-3.47 (1H, d, $J = 14.1$ Hz, H-1B, **maj**), 3.32 (1H, d, $J = 7.1$ Hz, H-7a, **maj** + **min**), 3.25 (1H, d, $J = 6.6$ Hz, H-10a, **min**), 3.12 (1H, d, $J = 6.6$ Hz, H-10a, **maj**), 2.21 (1H, d, $J = 6.6$ Hz, H-10c, **maj** + **min**), 2.05 (1H, br d, $J = 6.6$ Hz, H-6a, **maj** + **min**). ^{13}C NMR (150.9 MHz, $\text{DMSO}-d_6$) δ 176.1, 174.3,

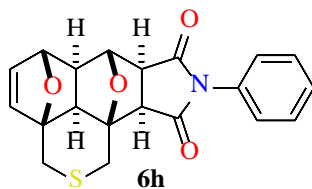
174.2, 169.9, 169.8, 138.4, 138.2, 137.3, 136.7, 136.0, 135.9, 132.1, 132.0, 129.2, 129.1, 128.9 (2C), 128.5, 128.3, 128.1 (2C), 127.9 (2C), 127.2 (2C), 126.7 (2C), 126.6 (2C), 84.0, 83.8, 82.3, 82.2, 81.1 (2C), 80.6, 80.3, 51.4, 51.2, 50.6, 48.8, 48.4, 48.1, 47.8, 46.9, 46.3, 41.7, 40.9. IR $\nu_{\text{max}}/\text{cm}^{-1}$ (tablet KBr): 1712, 1617, 1273, 1197. EI-MS (70 eV) m/z (relative intensity): 454 (35) $[\text{M}^+]$, 349 (22), 200 (48), 173 (36), 106 (35), 105 (100), 81 (83), 45 (52). HRMS (ESI-TOF): calcd. for $\text{C}_{27}\text{H}_{22}\text{N}_2\text{O}_5$ $[\text{M} + \text{H}]^+$ 454.1529; found 454.1537.

(3*aSR*,6*RS*,6*aSR*,7*RS*,7*aSR*,10*aRS*,10*bSR*,10*cRS*)-9-Phenyl-6*a*,7*a*,10*a*,10*c*-tetrahydro-6*H*-3*a*,6:7,10*b*-diepoxyisochromeno[4,5-*ef*]isoindole-8,10(1*H*,3*H*,7*H*,9*H*)-dione (**6g**).



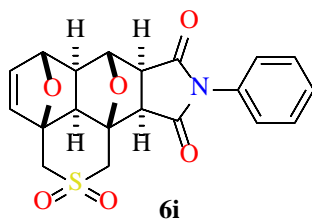
White crystals (3.5 g, 0.01 mol, 75%). R_f 0.43 (EtOAc, Sorbfil); mp: 261.5–262.5 °C (with decomp., from *i*-PrOH/DMF). ^1H NMR (400 MHz, $\text{DMSO-}d_6$) δ 7.49 (3H, m, H-3-5-Ph), 7.20 (2H, d, $J = 7.0$ Hz, H-2,6-Ph), 6.45 (1H, dd, $J = 1.7$ and $J = 5.7$ Hz, H-5), 6.33 (1H, d, $J = 5.7$ Hz, H-4), 4.97 (1H, d, $J = 1.7$ Hz, H-6), 4.75 (1H, s, H-7), 4.14 (1H, d, $J = 12.7$ Hz, H-1A), 4.01 (2H, d, $J = 14.0$ Hz, H-3A and H-3B), 3.97 (1H, d, $J = 12.7$ Hz, H-1B), 3.28 (1H, d, $J = 7.0$ Hz, H-10a), 3.15 (1H, d, $J = 7.0$ Hz, H-7a), 2.17 (1H, d, $J = 6.7$ Hz, H-6a), 1.95 (1H, d, $J = 6.7$ Hz, H-10c). ^{13}C NMR (100.6 MHz, $\text{DMSO-}d_6$) δ 175.9, 173.8, 137.5, 136.3, 131.7, 128.4 (2C), 127.9 (2C), 126.3 (2C), 83.2, 81.5, 80.5, 80.0, 64.7, 64.2, 50.8, 50.4, 48.1, 45.8. IR $\nu_{\text{max}}/\text{cm}^{-1}$ (tablet KBr): 3067, 2991, 1772, 1714, 1595, 1493, 1378. EI-MS (70 eV) m/z (relative intensity): 351 (40) $[\text{M}^+]$, 258 (14), 231 (16), 178 (66), 173 (100), 131 (19), 117 (63), 82 (28), 54 (41), 50 (41). HRMS (ESI-TOF): calcd. for $\text{C}_{20}\text{H}_{17}\text{NO}_5$ $[\text{M} + \text{H}]^+$ 351.1107; found 351.1120.

(3*aSR*,6*RS*,6*aSR*,7*RS*,7*aSR*,10*aRS*,10*bSR*,10*cRS*)-9-Phenyl-6*a*,7*a*,10*a*,10*c*-tetrahydro-6*H*-3*a*,6:7,10*b*-diepoxyisothiochromeno[4,5-*ef*]isoindole-8,10(1*H*,3*H*,7*H*,9*H*)-dione (**6h**).



Light-yellow crystals (3.2 g, 0.009 mol, 65%). R_f 0.46 (EtOAc, Sorbfil); mp: 248.0-249.0 °C (from *i*-PrOH/DMF). $^1\text{H NMR}$ (600 MHz, DMSO- d_6) δ 7.48 (2H, br t, $J = 7.5$ Hz, H-3,5-Ph), 7.41 (1H, dt, $J = 1.6$ and $J = 7.5$ Hz, H-4-Ph), 7.21 (2H, br d, $J = 7.5$ Hz, H-2,6-Ph), 6.51 (1H, dd, $J = 1.7$ and $J = 5.8$ Hz, H-5), 6.24 (1H, d, $J = 5.8$ Hz, H-4), 4.97 (1H, d, $J = 1.7$ Hz, H-6), 4.76 (1H, s, H-7), 3.40 (1H, d, $J = 14.6$ Hz, H-3A), 3.38 (1H, d, $J = 14.6$ Hz, H-1A), 3.33 (1H, d, $J = 6.6$ Hz, H-10a), 3.06 (1H, d, $J = 6.6$ Hz, H-7a), 2.87 (1H, d, $J = 14.6$ Hz, H-3B), 2.75 (1H, d, $J = 6.6$ Hz, H-1B), 2.20 (1H, d, $J = 6.6$ Hz, H-10c), 1.86 (1H, d, $J = 6.6$ Hz, H-6a). $^{13}\text{C NMR}$ (151.9 MHz, DMSO- d_6) δ 175.6, 173.7, 139.0, 138.8, 131.7, 129.4 (2C), 129.0, 126.6 (2C), 83.9, 82.7, 81.3, 81.1, 53.1, 52.2, 51.2, 49.0, 28.8, 27.9. IR $\nu_{\text{max}}/\text{cm}^{-1}$ (tablet KBr): 2574, 1774, 1710, 1389, 1198. EI-MS (70 eV) m/z (relative intensity): 367 (26) [M^+], 235 (15), 194 (37), 174 (37), 173 (50), 113 (100), 81 (28), 80 (66), 43 (17). HRMS (ESI-TOF): calcd. for $\text{C}_{20}\text{H}_{17}\text{NO}_4\text{S}$ [$\text{M} + \text{H}$] $^+$ 367.0878; found 367.0890.

(3*aSR*,6*RS*,6*aSR*,7*RS*,7*aSR*,10*aRS*,10*bSR*,10*cRS*)-9-Phenyl-6*a*,7*a*,10*a*,10*c*-tetrahydro-6*H*-3*a*,6:7,10*b*-diepoxyisothiochromeno[4,5-*ef*]isoindole-8,10(1*H*,3*H*,7*H*,9*H*)-dione 2,2-dioxide (**6i**).

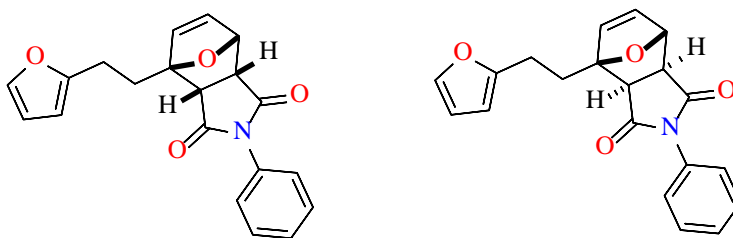


White crystals (3.5 g, 0.0087 mol, 67 %). R_f 0.41 (EtOAc, Sorbfil); mp: 287.4–288.1 °C (with decomp., from *i*-PrOH/DMF). ¹H NMR (600 MHz, DMSO-*d*₆) δ 7.49 (2H, br t, $J = 7.6$ Hz, H-3,5-Ph), 7.42 (1H, br t, $J = 7.6$ Hz, H-4-Ph), 7.27 (2H, dd, $J = 1.1$ and $J = 7.6$ Hz, H-2,6-Ph), 6.54 (1H, dd, $J = 1.5$ and $J = 5.5$ Hz, H-5), 6.29 (1H, d, $J = 5.5$ Hz, H-4), 5.04 (1H, d, $J = 1.5$ Hz, H-6), 4.86 (1H, s, H-7), 4.13 (1H, d, $J = 14.6$ Hz, H-3A), 4.09 (1H, d, $J = 14.6$ Hz, H-1A), 3.75 (1H, dd, $J = 3.0$ and $J = 14.6$ Hz, H-1B), 3.42 (1H, dd, $J = 3.0$ and $J = 14.6$ Hz, H-3B), 3.35 (1H, d, $J = 6.6$ Hz, H-7a), 3.32 (1H, d, $J = 6.6$ Hz, H-10a), 2.34 (1H, d, $J = 6.6$ Hz, H-10c), 2.20 (1H, d, $J = 6.6$ Hz, H-6a). ¹³C NMR (151.9 MHz, DMSO-*d*₆) δ 176.4, 174.3, 138.9, 138.8, 132.5, 129.5 (2C), 129.0, 127.4 (2C), 85.5, 84.3, 81.4, 81.3, 53.9, 51.8, 51.7, 51.5, 50.6, 47.9. IR ν_{max} /cm⁻¹ (tablet KBr): 3097, 2990, 1775, 1712, 1389, 1125. HRMS (ESI-TOF): calcd. for C₂₀H₁₇NO₆S [M + H]⁺ 399.0777; found 399.0786.

2.5. General procedure for the synthesis of the adducts 8a and 9a.

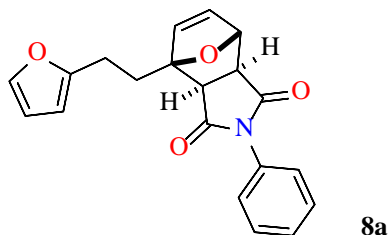
N-Phenylmaleimide (0.30 g, 0.0017 mol) was added to a solution of *bis*-diene **7a** (0.11 g, 0.0009 mol) in PhMe (12 mL). The mixture was heated at reflux for 8–12 h (see Table 3) until no changes were observed according to ¹H NMR. The yellow color of *N*-phenylmaleimide does not disappear by the end of the reaction. The reaction mixture was cooled and left overnight at room temperature. The precipitated crystals were filtered off. The resulting solution was evaporated under reduced pressure. The residue (yellow oil) was purified by column chromatography on silica gel using a mixture of hexane and AcOEt as an eluent.

(3*aRS*,4*RS*,7*SR*,7*aSR*)-4-[2-(Furan-2-yl)ethyl]-2-phenyl-3*a*,4,7,7*a*-tetrahydro-1*H*-4,7-epoxyisoindole-1,3(2*H*)-dione and (3*aSR*,4*RS*,7*SR*,7*aRS*)-4-[2-(furan-2-yl)ethyl]-2-phenyl-3*a*,4,7,7*a*-tetrahydro-1*H*-4,7-epoxyisoindole-1,3(2*H*)-dione (**8a**)



The precipitated white crystals contained the mixture of isomers **8aA** and **8aB** in the ratio of 60:40 (0.06 g, 0.18 mmol, 20 %). R_f 0.20 (EtOAc, Sorbfil). $^1\text{H NMR}$ (600 MHz, $\text{DMSO-}d_6$) δ 7.44–7.39, 7.34 and 7.23–7.21 (6H, m, H-3-5-Ph and H-5-furyl, **maj+min**), 6.63 (1H, m, H-6, **maj+min**), 6.60 (1H, br d, $J = 6.1$ Hz, H-5, **maj**), 6.49 (1H, d, $J = 5.6$ Hz, H-5, **min**), 6.36 (1H, br dd, $J = 1.5$ and $J = 3.0$ Hz, H-4-furyl, **min**), 6.34 (1H, br dd, $J = 1.5$ and $J = 3.0$ Hz, H-4-furyl, **maj**), 6.15 (1H, br d, $J = 3.0$ Hz, H-3-furyl, **min**), 6.11 (1H, br d, $J = 3.0$ Hz, H-3-furyl, **maj**), 5.19 (1H, br d, $J = 1.5$ Hz, H-7, **maj+min**), 3.34 (4H, s, H-1 and H-2, **maj+min**), 3.23 (1H, br d, $J = 6.1$ Hz, H-7*a*, **maj+min**), 3.06 (1H, br d, $J = 6.1$ Hz, H-3*a*, **min**), 3.02 (1H, br d, $J = 6.1$ Hz, H-3*a*, **maj**).

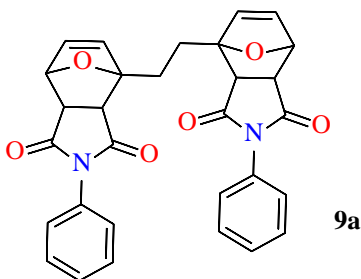
(3*aRS*,4*SR*,7*RS*,7*aSR*)-4-[2-(Furan-2-yl)ethyl]-2-phenyl-3*a*,4,7,7*a*-tetrahydro-1*H*-4,7-epoxyisoindole-1,3(2*H*)-dione (**8a**)



Column chromatography on silica gel (hexane/EtOAc = 1/1) of the residue yielded **8a** as white powder (0.036 g, 0.11 mmol, 12 %). R_f 0.25 (hexane/EtOAc = 1/1, Sorbfil); mp:

125.3–126.6 °C (from hexane/EtOAc = 1/1, SiO₂). ¹H NMR (300 MHz, DMSO-*d*₆) δ 7.50–7.39 and 7.23–7.20 (6H, m, H-3-5-Ph and H-5-furyl), 6.64 (1H, br dd, *J* = 1.8 and *J* = 5.9 Hz, H-6), 6.49 (1H, d, *J* = 5.9 Hz, H-5), 6.36 (1H, dd, *J* = 2.2 and *J* = 3.3 Hz, H-4-furyl), 6.14 (1H, dd, *J* = 1.0 and *J* = 3.3 Hz, H-3-furyl), 5.18 (1H, d, *J* = 1.8 Hz, H-7), 3.23 (1H, d, *J* = 6.6 Hz, H-7a), 3.06 (1H, d, *J* = 6.6 Hz, H-3a), 2.92–2.78 (2H, m, H-1), 2.44–2.33 (1H, m, H-2A), 2.23–2.13 (1H, m, H-2B). ¹³C NMR (75.5 MHz, DMSO-*d*₆) δ 176.0, 174.7, 155.3, 141.8, 138.8, 137.8, 132.6, 129.4, 128.9, 127.3, 110.9, 105.7, 91.3, 80.9, 50.9, 49.4, 28.6, 23.8. HRMS (ESI-TOF): calcd. for C₂₀H₁₇NO₄ [M + H]⁺ 335.1158; found 335.1152.

4,4'-Ethane-1,2-diylbis(2-phenyl-3a,4,7,7a-tetrahydro-1H-4,7-epoxyisoindole-1,3(2H)-dione) (**9a**)

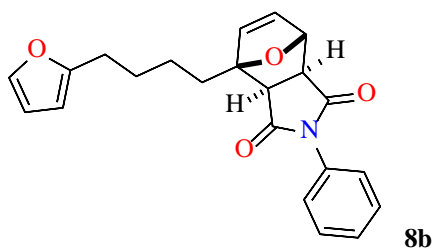


Column chromatography on silica gel (hexane/EtOAc = 1/2) of the residue yielded **9a** as white powder (0.11 g, 0.21 mmol, 23 %). *R_f* 0.20 (hexane/EtOAc = 1/1, Sorbfil); mp: 136.5–137.1 °C (from EtOAc, SiO₂). ¹H NMR (300 MHz, DMSO-*d*₆) δ 7.50–7.40 and 7.22–7.19 (10H, m, H-3-5-Ph and H-3'-5'-Ph), 6.63 (2H, br dd, *J* = 1.0 and *J* = 5.5 Hz, H-6, H-6'), 6.58 (2H, br d, *J* = 6.0 Hz, H-5, H-5'), 5.18 (2H, s, H-7, H-7'), 3.23 (2H, d, *J* = 6.6 Hz, H-7a, H-7a'), 3.01 (2H, d, *J* = 6.3 Hz, H-3a, H-3a'), 2.37–2.23 (2H, m, H-1), 2.08–2.00 (2H, m, H-2). ¹³C NMR (75.5 MHz, DMSO-*d*₆) δ 176.0, 174.6, 139.1, 137.9, 129.4, 128.8, 127.3, 91.6, 80.9, 50.9, 49.7, 25.6. HRMS (ESI-TOF): calcd. for C₃₀H₂₄N₂O₆ [M + H]⁺ 508.1634; found 508.1638.

2.6. General procedure for the synthesis of the adducts **8b** and **9b**.

N-Phenylmaleimide (0.36 g, 0.002 mol) was added to a solution of *bis*-diene **7b** (0.20 g, 0.001 mol) in PhMe (15 mL). The mixture was heated at reflux for 8–12 h (see Table 3) until no changes were observed according to ¹H NMR. The yellow color of *N*-phenylmaleimide does not disappear by the end of the reaction. The reaction mixture was cooled and left overnight at room temperature. The resulting solution was evaporated under reduced pressure. The residue (yellow oil) was purified by column chromatography on silica gel using a mixture of hexane and AcOEt as an eluent.

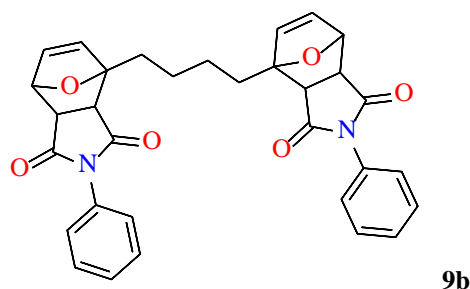
(3*a**R**S*,4*S**R*,7*R**S*,7*a**S**R*)-4-[4-(Furan-2-yl)butyl]-3*a*,7*a*-dimethyl-2-phenyl-3*a*,4,7,7*a*-tetrahydro-1*H*-4,7-epoxyisoindole-1,3(2*H*)-dione (**8b**)



Column chromatography on silica gel (hexane/EtOAc = 1/2) of the residue yielded **8b** as white powder (0.054 g, 0.15 mmol, 15 %). *R*_f 0.15 (EtOAc, Sorbfil); mp: 146.1–147.3 °C (from hexane/EtOAc = 1/2, SiO₂). ¹H NMR (700 MHz, CDCl₃) δ 7.48–7.45, 7.40–7.38 and 7.29–7.26 (6H, m, H-3-5-Ph and H-5-furyl), 6.55 (1H, br dd, *J* = 1.5 and *J* = 5.5 Hz, H-6), 6.42 (1H, d, *J* = 5.7 Hz, H-5), 6.27 (1H, dd, *J* = 1.9 and *J* = 3.2 Hz, H-4-furyl), 5.98 (1H, dd, *J* = 1.0 and *J* = 4.2 Hz, H-3-furyl), 5.32 (1H, d, *J* = 1.7 Hz, H-7), 3.11 (1H, d, *J* = 6.4 Hz, H-7*a*), 2.91 (1H, d, *J* = 6.6 Hz, H-3*a*), 2.68-2.62 (2H, m, -CH₂-), 2.19-2.15 and 2.07–2.03 (2H, m, -CH₂-), 1.78-1.69 and 1.59-1.55 (4H, m, -CH₂-CH₂-). ¹³C NMR (176.1 MHz, CDCl₃) δ 175.3, 174.0, 156.0, 140.7, 139.0, 137.1, 131.7, 129.1, 128.7, 126.6, 110.1,

104.8, 92.1, 80.9, 50.5, 49.1, 29.4, 28.2, 27.8, 24.8. HRMS (ESI-TOF): calcd. for $C_{22}H_{21}NO_4$ $[M+H]^+$ 363.1471; found 363.1471.

4,4'-Butane-1,4-diylbis(2-phenyl-3a,4,7,7a-tetrahydro-1H-4,7-epoxyisoindole-1,3(2H)-dione) (**9b**)



Column chromatography on silica gel (EtOAc) of the residue yielded **9b** as white powder (0.13 g, 0.25 mmol, 25 %). R_f 0.10 (EtOAc, Sorbfil); mp: 154.8–153.3 °C (from EtOAc, SiO_2). 1H NMR (300 MHz, $CDCl_3$) δ 7.48–7.28 (10H, m, H-3-5-Ph and H-3'-5'-Ph), 6.54 (2H, br dd, $J = 1.1$ and $J = 5.9$ Hz, H-6, H-6'), 6.42 (2H, br d, $J = 5.9$ Hz, H-5, H-5'), 5.31 (2H, d, $J = 1.5$ Hz, H-7, H-7'), 3.10 (2H, d, $J = 6.6$ Hz, H-7a, H-7a'), 2.90 (2H, d, $J = 6.6$ Hz, H-3a, H-3a'), 2.21-2.04 (4H, m, $-CH_2-CH_2-$), 1.79-1.60 (4H, m, $-CH_2-CH_2-$). ^{13}C NMR (75.5 MHz, $CDCl_3$) δ 175.3, 174.0, 139.0, 137.1, 129.1, 128.7, 126.6, 92.1, 81.0, 50.5, 49.1, 49.0, 29.6, 29.5, 25.6. HRMS (ESI-TOF): calcd. for $C_{32}H_{28}N_2O_6$ $[M + H]^+$ 536.1947; found 536.1941.

2.7. General procedure for the preparation of metathesis products 11–14.

Table S4. Selected experiments on variation of conditions of the ROCM reaction of **6g** leading to **14f**

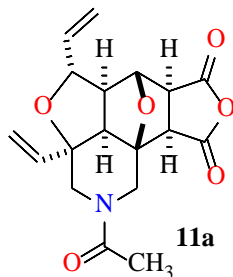
Entry	Conc. of "RuNMe ₂ "	Temperature, °C	Press. of CH ₂ =CH ₂ , bar	Solvent	Time, h	Conversion of 6g, % ^a
1	5 mol %	100	1	CH ₂ Cl ₂	6	83
2	5 mol %	100	2	CH ₂ Cl ₂	6	100
3	5 mol %	100	5	CH ₂ Cl ₂	6	100

4	5 mol %	60	2	CH ₂ Cl ₂	6	48
5	5 mol %	80	2	CH ₂ Cl ₂	6	59
6	5 mol %	100	2	CH ₂ Cl ₂	6	100
7	5 mol %	100	2	CH ₂ Cl ₂	4	97
8	5 mol %	100	2	CH ₂ Cl ₂	2	92
9	1 mol %	100	2	CH ₂ Cl ₂	6	53
10	3 mol %	100	2	CH ₂ Cl ₂	6	76
11	5 mol %	100	2	CH ₂ Cl ₂	6	100
12	10 mol %	100	2	CH ₂ Cl ₂	6	100
13	5 mol %	100	2	CHCl ₃	6	98
14	5 mol %	100	2	PhH	6	83
15	HG-II (5 mol %)	100	2	CH ₂ Cl ₂	6	100

^a Conversion of **6g** into **14f** was established by ¹H NMR analysis of the crude reaction mixtures after separation of the catalyst and by-products and evaporation of the solvent.

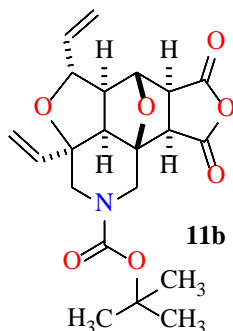
A solution of the starting compound **3–6** (100 mg) in dichloromethane (20 mL, previously passed through an alumina layer of ~ 1 cm thickness) was loaded into a steel autoclave (75 mL) with a magnetic stirrer (see Fig. S6). A portion of the ruthenium catalyst (5 mol %) in dichloromethane (5 mL) was injected inside using a syringe. The flask was purged with ethylene (pressurized up to 2 bar, 5 times), a stirring was turned on (500 rpm) and the initial ethylene pressure was set at room temperature (20–25 °C). After the ethylene pressure was set constant, the ethylene supply valve was shut off and the heating was turned on to the experimental temperature of 100 °C. During heating, the pressure in the system increased to the working one (6 bar) and slightly changed during the experiment. The reaction mixture was held at 100 °C for 6 h, after that the reactor was cooled to room temperature. After cooling the reactor, ethylene pressure began to gradually decrease. The resulting solution was transferred into a glass flask and evaporated under reduced pressure. The residue (dark brown oil) was purified by column chromatography on silica gel.

(3aSR,5RS,5aSR,6RS,6aSR,9aRS,9bSR,9cRS)-2-Acetyl-3a,5-diethenyloctahydro-1H,5H-6,9b-epoxydifuro[2,3,4-de:3',4'-h]isoquinoline-7,9-dione (11a).



Column chromatography on silica gel (EtOAc) of the residue yielded **11a** as light-yellow powder (0.063 g, 0.18 mmol, 58 %). R_f 0.10 (EtOAc, Sorbfil); mp: 199.3–203.6 °C (with decamp., from EtOAc, SiO₂). The mixture of amide rotamers in the ratio of 67/33, ¹H NMR (600.17 MHz, CDCl₃) δ 5.96–5.85 (2H, m, H-1-Vinyl-5 and H-1-Vinyl-3a, **maj** + **min**), 5.34 (1H, d, J = 17.6 Hz, H-2-Vinyl-5-*trans*, **maj** + **min**), 5.29-5.26 (1H, br d, J = 17.2 Hz, H-2-Vinyl-3a-*trans*, **maj** + **min**), 5.23 (1H, br d, J = 11.1 Hz, H-2-Vinyl-5-*cis*, **maj**), 5.20-5.18 (1H, br d, J = 10.1 Hz, H-2-Vinyl-3a-*cis*, **maj**), 5.19-5.18 (1H, br d, J = 10.6 Hz, H-2-Vinyl-3a-*cis*, **min**), 5.16 (1H, br d, J = 10.1 Hz, H-2-Vinyl-5-*cis*, **min**), 4.86 (1H, s, H-6, **min**), 4.84 (1H, s, H-6, **maj**), 4.62 (1H, d, J = 13.6 Hz, H-3A, **maj**), 4.34-4.31 (1H, m, H-5, **maj** + **min**), 4.17 (2H, d, J = 14.6 Hz, H-3A and H-3B, **min**), 3.87 (1H, d, J = 15.1 Hz, H-1A, **min**), 3.79 (1H, d, J = 14.1 Hz, H-3B, **maj**), 3.68 (1H, d, J = 15.6 Hz, H-1A, **maj**), 3.42 (1H, d, J = 7.6 Hz, H-6a, **min**), 3.37 (1H, d, J = 7.6 Hz, H-6a, **maj**), 3.32 (1H, d, J = 13.6 Hz, H-1B, **min**), 3.27 (1H, d, J = 14.6 Hz, H-1B, **maj**), 3.23 (1H, m, H-9a, **min**), 3.21 (1H, d, J = 7.1 Hz, H-9a, **maj**), 2.69-2.65 (1H, m, H-5a, **maj** + **min**), 2.43-2.40 (1H, m, H-9c, **maj** + **min**), 2.13 (3H, s, NCOCH₃, **min**), 2.11 (3H, s, NCOCH₃, **maj**). ¹³C NMR (150.9 MHz, CDCl₃) δ 170.9, 170.5, 170.4, 170.2, 168.7, 168.2, 140.8, 140.5, 138.1, 137.9, 117.7, 117.4, 115.8, 115.5, 85.6, 85.5, 85.3, 85.2, 83.5, 82.8, 82.3, 56.1, 53.4, 53.2, 52.3, 50.6, 50.5, 50.2, 45.5, 44.9, 41.7, 21.8, 21.6. IR $\nu_{\max}/\text{cm}^{-1}$ (tablet KBr): 3054, 3029, 2971, 1857, 1789, 1724, 1441, 1232, 1066. HRMS (ESI-TOF): calcd. for C₁₈H₁₉NO₆ [M + H]⁺ 345.1212; found 345.1216.

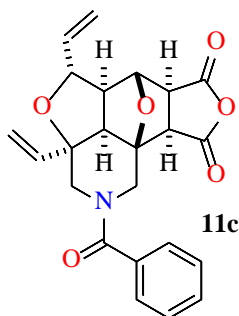
tert-Butyl (3*aSR*,5*RS*,5*aSR*,6*RS*,6*aSR*,9*aRS*,9*bSR*,9*cRS*)-3*a*,5-diethenyl-7,9-dioxooctahydro-1*H*,5*H*-6,9*b*-epoxydifuro[2,3,4-*de*:3',4'-*h*]isoquinoline-2(3*H*)-carboxylate (**11b**).



Column chromatography on silica gel (Hexane/EtOAc = 2/1) of the residue yielded **11b** as yellow oil (0.065 g, 0.16 mmol, 61 %). R_f 0.10 (EtOAc : Hexane, 1:1, Sorbfil); mp: 200.6–203.4 °C (with decomp., from Hexane/EtOAc = 2/1, SiO₂). The mixture of amide rotamers in the ratio of 54/46, ¹H NMR (600.17 MHz, CDCl₃) δ 5.96-5.88 (2H, m, H-1-Vinyl-5 and H-1-Vinyl-3a, **maj** + **min**), 5.33-5.30 (2H, br d, $J = 17.2$ Hz, H-2-Vinyl-5-*trans* and H-2-Vinyl-3a-*trans*, **maj**), 5.32-5.29 (2H, br d, $J = 17.2$ Hz, H-2-Vinyl-5-*trans* and H-2-Vinyl-3a-*trans*, **min**), 5.21-5.20 (2H, br d, $J = 10.1$ Hz, H-2-Vinyl-5-*cis* and H-2-Vinyl-3a-*cis*, **min**), 5.17-5.16 (2H, br d, $J = 10.1$ Hz, H-2-Vinyl-5-*cis* and H-2-Vinyl-3a-*cis*, **maj**), 4.82 (1H, s, H-6, **maj** + **min**), 4.25 (1H, m, H-5, **maj** + **min**), 4.07 (1H, t, $J = 15.6$ Hz, H-3A, **maj** + **min**), 3.93 (1H, d, $J = 15.1$ Hz, H-3B, **maj**), 3.87 (1H, d, $J = 15.1$ Hz, H-3B, **min**), 3.59-3.57 (2H, m, H-1B, **min** and H-1A, **maj** + **min**), 3.51 (1H, d, $J = 13.6$ Hz, H-1B, **maj**), 3.37 (1H, br t, $J = 8.1$ Hz, H-6a, **maj** + **min**), 3.19-3.18 (1H, br d, $J = 7.1$ Hz, H-9a, **maj** + **min**), 2.66 (1H, br t, $J = 7.6$ Hz, H-5a, **maj** + **min**), 2.37 (1H, d, $J = 8.1$ Hz, H-9c, **maj** + **min**), 1.47 (9H, s, NCO(CH₃)₃, **min**), 1.45 (9H, s, NCO(CH₃)₃, **maj**). ¹³C NMR (150.91 MHz, CDCl₃) δ 171.2, 170.3, 168.2, 168.0, 155.0, 154.9, 140.3, 140.2, 137.2, 117.7, 114.6, 114.5, 86.0, 84.3, 84.2, 83.1, 81.7, 80.6, 80.5, 56.7, 53.9, 53.7, 52.2, 50.5, 50.4, 46.2, 44.6, 42.9, 42.3, 28.3. IR ν_{max}/cm^{-1} (tablet KBr): 3069, 3028, 2987,

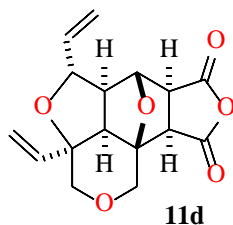
1856, 1779, 1717, 1439, 1232, 1082. HRMS (ESI-TOF): calcd. for $C_{21}H_{25}NO_7$ $[M + H]^+$ 403.4310; found 403.4304.

(3*aSR*,5*RS*,5*aSR*,6*RS*,6*aSR*,9*aRS*,9*bSR*,9*cRS*)-2-Benzoyl-3*a*,5-diethenyloctahydro-1*H*,5*H*-6,9*b*-epoxydifuro[2,3,4-*de*:3',4'-*h*]isoquinoline-7,9-dione (**11c**).



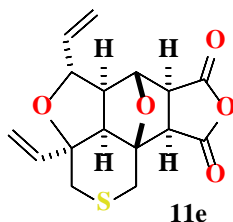
Column chromatography on silica gel (EtOAc) of the residue yielded **11c** as brown oil (0.038 g, 0.095 mmol, 36 %). R_f 0.10 (EtOAc, Sorbfil). The mixture of amide rotamers in the ratio of 80/20, 1H NMR (600.17 MHz, $CDCl_3$) δ 7.42–7.37 (5H, m, H-Ph, **maj** + **min**), 5.88–5.76 (2H, m, H-1-Vinyl-5 and H-1-Vinyl-3*a*, **maj** + **min**), 5.26–5.14 (4H, m, H-2-Vinyl-5 and H-2-Vinyl-3*a*, **maj** + **min**), 4.85 (1H, s, H-6, **maj** + **min**), 4.66 (1H, d, $J = 15.1$ Hz, H-3*A*, **maj**), 4.55 (1H, m, H-3*A*, **min**), 4.40 (1H, m, H-5, **min**), 4.31 (1H, m, H-5, **maj**), 4.24 (1H, m, H-3*B*, **min**), 3.91 (1H, d, $J = 15.1$ Hz, H-3*B*, **maj**), 3.80 (1H, d, $J = 13.6$ Hz, H-1*A*, **maj** + **min**), 3.41–3.55 (2H, m, H-9*a* and H-6*a*, **maj** + **min**), 3.27 (1H, d, $J = 13.6$ Hz, H-1*B*, **maj** + **min**), 2.67–2.65 (1H, m, H-5*a*, **maj** + **min**), 2.50 (1H, d, $J = 8.1$ Hz, H-9*c*, **maj** + **min**). ^{13}C NMR (150.91 MHz, $CDCl_3$) δ 171.9, 171.2, 170.6, 168.5, 140.1, 137.7, 135.3, 135.1, 129.9, 129.8, 128.5, 128.4, 127.5, 117.5, 115.6, 85.4, 85.0, 83.3, 83.2, 82.4, 56.1, 53.0, 52.4, 50.5, 50.3, 41.9. IR ν_{max}/cm^{-1} (tablet KBr): 3077, 3015, 2991, 1842, 1781, 1719, 1450, 1241, 1094. HRMS (ESI-TOF): calcd. for $C_{23}H_{21}O_6$ $[M + H]^+$ 407.1369; found 407.1365.

(3*aSR*,5*RS*,5*aSR*,6*RS*,6*aSR*,9*aRS*,9*bSR*,9*cRS*)-3*a*,5-Diethenylhexahydro-3*H*,5*H*-6,9*b*-epoxydifuro[2,3,4-*de*:3',4'-*h*]isochromene-7,9(1*H*)-dione (**11d**).



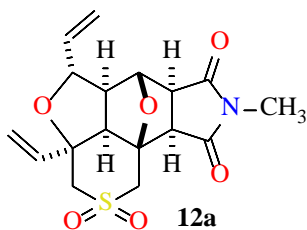
Column chromatography on silica gel (hexane/EtOAc = 2/1) of the residue yielded **11d** as grey powder (0.055 g, 0.18 mmol, 50 %). R_f 0.10 (EtOAc : Hexane, 1:1, Sorbfil); mp: 201.4–205.2 °C (with decomp., from Hexane/EtOAc = 2/1, SiO₂). ¹H NMR (600.17 MHz, CDCl₃, 23.8 °C) δ 5.95 (1H, ddd, $J = 8.3$, $J = 10.6$ and $J = 17.2$ Hz, H-1-Vinyl-5), 5.86 (1H, dd, $J = 10.6$ and $J = 17.2$ Hz, H-1-Vinyl-3*a*), 5.36 (1H, d, $J = 17.2$ Hz, H-2-Vinyl-5-*trans*), 5.24 (2H, m, H-2-Vinyl), 5.15 (1H, br d, $J = 10.6$ Hz, H-2-Vinyl-5-*cis*), 4.91 (1H, s, H-6), 4.49 (1H, dd, $J = 4.0$ and $J = 8.3$ Hz, H-5), 4.40 (1H, d, $J = 13.6$ Hz, H-3*A*), 4.03 (1H, d, $J = 13.6$ Hz, H-3*B*), 3.94 (1H, d, $J = 12.6$ Hz, H-1*A*), 3.36 (1H, d, $J = 7.3$ Hz, H-6*a*), 3.34 (1H, d, $J = 12.6$ Hz, H-1*B*), 3.15 (1H, d, $J = 7.3$ Hz, H-9*a*), 2.71 (1H, dd, $J = 4.0$ and $J = 7.6$ Hz, H-5*a*), 2.38 (1H, d, $J = 7.6$ Hz, H-9*c*). ¹³C NMR (150.91 MHz, CDCl₃, 24.0 °C) δ 170.1, 140.7, 138.8, 117.2, 116.4, 86.7, 83.3, 82.5, 70.7, 65.6, 55.5, 51.7, 51.3, 50.2, 29.7. IR $\nu_{\max}/\text{cm}^{-1}$ (tablet KBr): 3083, 3012, 2985, 1865, 1779, 1711, 1448, 1237, 1099. HRMS (ESI-TOF): calcd. for C₁₆H₁₆O₆ [M + H]⁺ 304.0947; found 304.0952.

(3*aSR*,5*RS*,5*aSR*,6*RS*,6*aSR*,9*aRS*,9*bSR*,9*cRS*)-3*a*,5-Diethenylhexahydro-3*H*,5*H*-6,9*b*-epoxyisothiochromeno[4,5-*bc*:7,8-*c'*]difuran-7,9(1*H*)-dione (**11e**).



Column chromatography on silica gel (Hexane/EtOAc = 1/1) of the residue yielded **11e** as grey powder (0.0036 g, 0.11 mmol, 33%). R_f 0.15 (EtOAc : Hexane, 1:1, Sorbfil); mp: 129.2–130.9 °C (with decomp., from Hexane/EtOAc = 1/1, SiO₂). ¹H NMR (600.17 MHz, CDCl₃) δ 6.15 (1H, dd, $J = 10.6$ and $J = 17.2$ Hz, H-1-Vinyl-3a), 5.96 (1H, ddd, $J = 8.1$, $J = 10.1$ and $J = 17.6$ Hz, H-1-Vinyl-5), 5.37 (1H, d, $J = 17.7$ Hz, H-2-Vinyl-5-*trans*), 5.33 (1H, dd, $J = 1.0$ and $J = 16.6$ Hz, H-2-Vinyl-3a-*trans*), 5.21-5.20 (1H, br d, $J = 10.6$ Hz, H-2-Vinyl-5-*cis*), 5.20-5.18 (1H, br d, $J = 11.1$ Hz, H-2-Vinyl-3a-*cis*), 4.86 (1H, s, H-6), 4.39 (1H, t, $J = 7.1$ Hz, H-5), 3.36 (1H, d, $J = 7.6$ Hz, H-6a), 3.24 (1H, d, $J = 14.6$ Hz, H-3A), 3.17 (1H, d, $J = 14.6$ Hz, H-3B), 3.08 (1H, d, $J = 7.1$ Hz, H-9a), 2.98 (1H, d, $J = 14.1$ Hz, H-1A), 2.66 (1H, dd, $J = 6.1$ and $J = 8.1$ Hz, H-5a), 2.54 (1H, d, $J = 14.1$ Hz, H-1B), 2.30 (1H, d, $J = 8.6$ Hz, H-9c). ¹³C NMR (150.91 MHz, CDCl₃) δ 170.2, 168.2, 142.2, 137.8, 118.0, 114.6, 85.8, 84.8, 82.7, 82.0, 56.5, 54.4, 54.1, 51.0, 32.7, 26.1. IR $\nu_{\max}/\text{cm}^{-1}$ (tablet KBr): 3088, 3016, 2991, 1860, 1770, 1700, 1443, 1246, 1083. HRMS (ESI-TOF): calcd. for C₁₆H₁₆O₅S [M + H]⁺ 320.0718; found 320.0722.

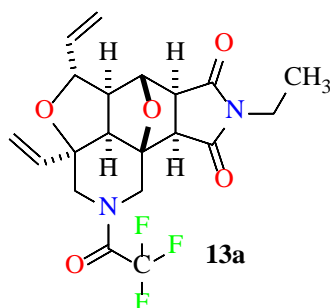
(3*aSR*,5*RS*,5*aSR*,6*RS*,6*aSR*,9*aRS*,9*bSR*,9*cRS*)-3*a*,5-Diethenyl-8-methylhexahydro-3*H*-6,9*b*-epoxy-4-oxa-2-thia-8-azacyclopenta[*e*]acenaphthylene-7,9(1*H*,5*H*,8*H*)-dione 2,2-dioxide (**12a**).



Obtained crystals recrystallized from an EtOH/DMF (20 ml) to give the pure **12a** as white crystals (0.034 g, 0.09 mmol, 32%). R_f 0.54 (EtOAc : Hexane, 1:2, Sorbfil); mp: 246.9–254.6 °C (with decomp., from EtOH/DMF). ¹H NMR (600.17 MHz, CDCl₃, 22.4 °C) δ 6.34 (1H, dd, $J = 10.6$ and $J = 17.2$ Hz, H-1-Vinyl-3a), 5.95 (1H, ddd, $J = 7.6$, $J =$

10.1 and $J = 17.2$ Hz, H-1-Vinyl-5), 5.53 (1H, d, $J = 17.2$ Hz, H-2-Vinyl-3a-*trans*), 5.42 (1H, d, $J = 17.2$ Hz, H-2-Vinyl-5-*trans*), 5.31 (1H, d, $J = 10.1$ Hz, H-2-Vinyl-5-*cis*), 5.27 (1H, d, $J = 10.6$ Hz, H-2-Vinyl-3a-*cis*), 4.81 (1H, s, H-6), 4.22 (1H, t, H-5), 3.85 (1H, d, $J = 15.6$ Hz, H-3), 3.79 (1H, d, $J = 15.6$ Hz, H-3), 3.62 (1H, d, $J = 14.1$ Hz, H-1A), 3.22 (1H, d, $J = 14.1$ Hz, H-1B), 3.07 (1H, d, $J = 6.6$ Hz, H-6a), 2.99 (3H, s, N-*Me*), 2.94 (1H, d, $J = 6.6$ Hz, H-9a), 2.71 (1H, dd, $J = 7.8$ and $J = 9.1$ Hz, H-5a), 2.60 (1H, d, $J = 9.1$ Hz, H-9c). ^{13}C NMR (150.91 MHz, CDCl_3 , 23.8 °C) δ 175.2, 173.3, 138.8, 135.6, 119.0, 115.3, 85.0, 83.4, 83.1, 80.7, 57.4, 56.3, 54.9, 52.6, 52.5, 49.7, 25.5. IR $\nu_{\text{max}}/\text{cm}^{-1}$ (tablet KBr): 3079, 2992, 1775, 1692, 1440, 1294, 1131. HRMS (ESI-TOF): calcd. for $\text{C}_{17}\text{H}_{19}\text{NO}_6\text{S}$ [$\text{M} + \text{H}$] $^+$ 365.0933; found 365.0920.

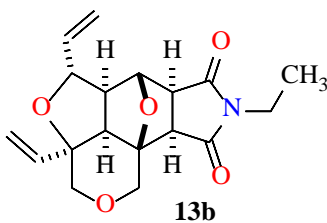
(3*aSR*,5*RS*,5*aSR*,6*RS*,6*aSR*,9*aRS*,9*bSR*,9*cRS*)-3*a*,5-Diethenyl-8-ethyl-2-(trifluoroacetyl)octahydro-1*H*-6,9*b*-epoxyfuro[2,3,4-*de*]pyrrolo[3,4-*h*]isoquinoline-7,9(5*H*,8*H*)-dione (**13a**).



Column chromatography on silica gel (hexane/EtOAc = 4/1) of the residue yielded **13a** as light-yellow oil (0.05 g, 0.12 mmol, 47 %). R_f 0.15 (EtOAc : Hexane, 1:2, Sorbfil). The mixture of amide rotamers in the ratio of 62/38, ^1H NMR (600.17 MHz, CDCl_3 , 23.2 °C) δ 5.97–5.87 (2H, m, H-1-Vinyl-3a, H-1-Vinyl-5, **maj+min**), 5.34-5.15 (4H, m, H-2-Vinyl-3a, H-2-Vinyl-5, **maj+min**), 4.73 (1H, s, H-6, **maj**), 4.73 (1H, s, H-6, **min**), 4.32-4.25 (2H, m, H-5, H-1A, **maj + min**), 4.09 (1H, d, $J = 14.6$ Hz, H-1B, **min**), 4.06 (1H, d, $J = 14.6$ Hz, H-3B, **min**), 3.91 (1H, d, $J = 14.6$ Hz, H-1B, **maj**), 3.85 (1H, d, $J = 14.6$ Hz, H-3B,

maj), 3.57-3.53 (2H, m, N-CH₂-CH₃, **maj** + **min**), 3.48 (1H, dd, $J = 3.0$ and $J = 14.6$ Hz, H-3A, **maj** + **min**), 3.07 (1H, d, $J = 7.1$ Hz, H-6a, **min**), 3.04 (1H, d, $J = 7.1$ Hz, H-6a, **maj**), 2.91 (1H, d, $J = 7.1$ Hz, H-9a, **maj**), 2.89 (1H, d, $J = 7.1$ Hz, H-9a, **maj**), 2.69-2.66 (1H, m, H-5a, **maj** + **min**), 2.47 (1H, d, $J = 9.1$ Hz, H-9c, **maj** + **min**), 1.17-1.14 (3H, m, N-CH₂-CH₃, **maj** + **min**). ¹³C NMR (150.91 MHz, CDCl₃, 23.6 °C) δ 175.6, 173.8, 173.4, 157.0 (1C, q, $^2J_{CF} = 37.6$ Hz, COCF₃), 157.1 (1C, q, $^2J_{CF} = 37.6$ Hz, COCF₃), 140.1, 139.3, 137.8, 137.1, 117.8, 117.4, 116.1 (1C, q, $^1J_{CF} = 287.6$ Hz, COCF₃), 116.3 (1C, q, $^1J_{CF} = 287.6$ Hz, COCF₃), 115.7, 115.4, 85.2, 84.6, 84.0, 83.7, 82.8, 82.5, 81.8, 81.2, 56.9, 56.5, 54.0, 53.7, 51.2, 51.0, 49.5, 49.4, 47.4 (1C, q, $^4J_{CF} = 4.3$ Hz, C-1), 46.1, 44.4 (1C, q, $^4J_{CF} = 4.3$ Hz, C-1), 43.4, 34.3, 12.9, 12.8. ¹⁹F NMR (564.7 MHz, CDCl₃, 22.5 °C) δ -68.02 (3F, s, CF₃, **maj**), -68.99 (3F, s, CF₃, **min**). IR ν_{max}/cm^{-1} (tablet KBr): 2987, 2944, 2877, 1772, 1693, 1452, 1411, 1348, 1195, 1148. HRMS (ESI-TOF): calcd. for C₂₀H₂₁F₃N₂O₅ [M + H]⁺ 426.1403; found 426.1411.

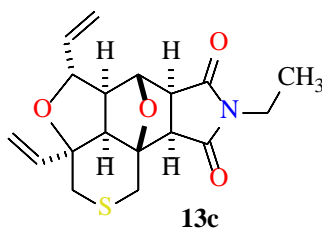
(3*aSR*,5*RS*,5*aSR*,6*RS*,6*aSR*,9*aRS*,9*bSR*,9*cRS*)-3*a*,5-Diethenyl-8-ethylhexahydro-3*H*-6,9*b*-epoxy-2,4-dioxo-8-azacyclopenta[*e*]acenaphthylene-7,9(1*H*,5*H*,8*H*)-dione (**13b**).



Column chromatography on silica gel (Hexane/EtOAc = 3/1) of the residue yielded **13b** as grey powder (0.06 g, 0.17 mmol, 52%). R_f 0.63 (EtOAc : Hexane, 1:2, Sorbfil); mp: 183.4–193.8 °C (with decomp., from Hexane/EtOAc = 3/1, SiO₂). ¹H NMR (600.17 MHz, CDCl₃, 24.4 °C) δ 5.96 (1H, ddd, $J = 8.1$, $J = 10.1$ and $J = 16.7$ Hz, H-1-Vinyl-5), 5.87 (1H, dd, $J = 11.1$ and $J = 17.7$ Hz, H-1-Vinyl-3a), 5.35 (1H, dd, $J = 1.0$ and $J = 17.2$ Hz, H-2-Vinyl-5-*trans*), 5.22 (2H, m, H-2-Vinyl), 5.12 (1H, dd, $J = 1.0$ and $J = 11.1$ Hz, H-2-

Vinyl-*cis*), 4.74 (1H, s, H-6), 4.47 (1H, dd, $J = 4.3$ and $J = 8.1$ Hz, H-5), 4.33 (1H, d, $J = 13.1$ Hz, H-3A), 4.04 (1H, d, $J = 13.1$ Hz, H-3B), 3.93 (1H, d, $J = 12.6$ Hz, H-7A), 3.55 (2H, q, $J = 7.1$ Hz, N-CH₂-CH₃), 3.32 (1H, d, $J = 12.6$ Hz, H-1B), 3.03 (1H, d, $J = 6.7$ Hz, H-6a), 2.80 (1H, d, $J = 6.7$ Hz, H-9a), 2.68 (1H, dd, $J = 4.3$ and $J = 7.6$ Hz, H-5a), 2.37 (1H, d, $J = 7.6$ Hz, H-9c), 1.14 (3H, t, $J = 7.1$ Hz, N-CH₂-CH₃). ¹³C NMR (150.9 MHz, CDCl₃, 24.1 °C) δ 176.2, 174.2, 141.2, 139.4, 116.8, 116.1, 86.9, 82.7, 82.6, 70.8, 66.2, 55.8, 51.9, 50.9, 49.3, 34.2, 13.0. IR $\nu_{\text{max}}/\text{cm}^{-1}$ (tablet KBr): 3083, 3006, 1773, 1702, 1445, 1403, 1226, 1147. HRMS (ESI-TOF): calcd. for C₁₈H₂₁NO₅ [M + H]⁺ 331.1420; found 331.1432.

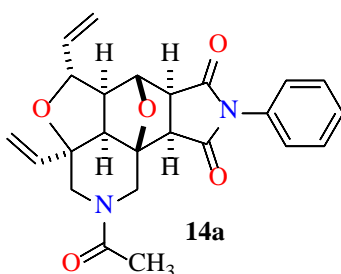
(3*aSR*,5*RS*,5*aSR*,6*RS*,6*aSR*,9*aRS*,9*bSR*,9*cRS*)-3*a*,5-Diethenyl-8-ethyl-5*a*,6*a*,9*a*,9*c*-tetramethylhexahydro-3*H*-6,9*b*-epoxy-4-oxa-2-thia-8-azacyclopenta[*e*]acenaphthylene-7,9(1*H*,5*H*,8*H*)-dione (**13c**).



Column chromatography on silica gel (Hexane/EtOAc = 3/1) of the residue yielded **13c** as white crystals (0.016 g, 0.047 mmol, 15%). R_f 0.79 (EtOAc : Hexane, 1:2, Sorbfil); m.p.: 214.9–219.3 °C (with decomp., from hexane/EtOAc = 3/1, SiO₂). ¹H NMR (600.17 MHz, CDCl₃) δ 6.15 (1H, dd, $J = 10.6$ and $J = 17.2$ Hz, H-1-Vinyl-3a), 5.96 (1H, ddd, $J = 7.6$, $J = 10.1$ and $J = 17.2$ Hz, H-1-Vinyl-5), 5.37 (1H, br d, $J = 1.0$ and $J = 17.2$ Hz, H-2-Vinyl-5-*trans*), 5.31 (1H, d, $J = 17.2$ Hz, H-2-Vinyl-3a-*trans*), 5.19 (1H, br d, $J = 10.6$ Hz, H-2-Vinyl-5-*cis*), 5.18 (1H, br d, $J = 10.6$ Hz, H-2-Vinyl-3a-*cis*), 4.71 (1H, s, H-6), 4.38 (1H, t, $J = 6.6$ Hz, H-5), 3.55 (2H, q, $J = 7.1$ Hz, N-CH₂-CH₃), 3.26 (1H, d, $J = 14.6$ Hz, H-3A, -CH₂-), 3.10 (1H, d, $J = 14.6$ Hz, H-1A, -CH₂-), 3.03 (1H, d, $J = 7.1$ Hz, H-6a), 2.98 (1H,

br dd, $J = 1.0$ and $J = 14.1$ Hz, H-3B), 2.75 (1H, d, $J = 7.1$ Hz, H-9a), 2.63 (1H, dd, $J = 6.1$ and $J = 8.1$ Hz, H-5a) 2.54 (1H, d, $J = 13.6$ Hz, H-1B), 2.30 (1H, d, $J = 8.1$ Hz, H-9c), 1.16 (3H, t, $J = 7.1$ Hz, N-CH₂-CH₃). ¹³C NMR (150.91 MHz, CDCl₃) δ 176.0, 174.1, 142.5, 138.1, 117.4, 114.2, 84.8, 84.5, 82.6, 81.1, 56.8, 54.8, 53.1, 50.1, 34.2, 32.6, 26.3, 13.0. IR $\nu_{\text{max}}/\text{cm}^{-1}$ (tablet KBr): 2976, 2930, 1769, 1692, 1444, 1406, 1352, 1224, 1146, 1056. HRMS (ESI-TOF): calcd. for C₁₈H₂₁NO₆S [M + H]⁺ 347.1191; found 347.1186.

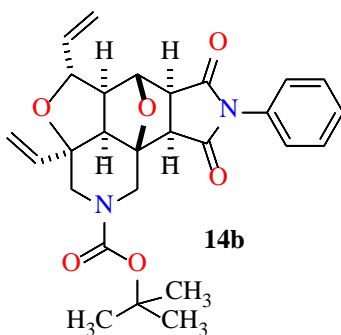
(3*aSR*,5*RS*,5*aSR*,6*RS*,6*aSR*,9*aRS*,9*bSR*,9*cRS*)-2-Acetyl-3*a*,5-diethenyl-8-phenyloctahydro-1*H*-6,9*b*-epoxyfuro[2,3,4-*de*]pyrrolo[3,4-*h*]isoquinoline-7,9(5*H*,8*H*)-dione (**14a**).



Column chromatography on silica gel (EtOAc) of the residue yielded **14a** as light-yellow oil (0.05 g, 0.11 mmol, 46%). R_f 0.48 (EtOAc : Hexane, 1:3, Sorbfil). The mixture of amide rotamers in the ratio of 67/33, ¹H NMR (600.17 MHz, CDCl₃, 22.8 °C) δ 7.50 (3H, m, H-3-5-Ph, **maj** + **min**), 7.27 (2H, m, H-2,6-Ph, **maj** + **min**), 5.96-5.92 (1H, m, H-1-Vinyl-3a, **maj** + **min**), 5.90-5.88 (1H, m, H-1-Vinyl-5, **maj** + **min**), 5.34-5.25 (2H, m, H-2-Vinyl-3a, **maj** + **min**), 5.21-5.14 (2H, m, H-2-Vinyl-5, **maj** + **min**), 4.81 (1H, s, H-6, **min**), 4.80 (1H, s, H-6, **maj**), 4.61 (1H, d, $J = 15.1$ Hz, H-1A, **maj**), 4.36-4.31 (1H, m, H-5, **maj** + **min**), 4.10 (1H, d, $J = 14.1$ Hz, H-1A, **min**), 3.98 (1H, d, $J = 14.1$ Hz, H-1B, **min**), 3.93 (1H, d, $J = 14.1$ Hz, H-3A, **min**), 3.80 (1H, d, $J = 14.1$ Hz, H-3A, **maj**), 3.74 (1H, d, $J = 15.1$ Hz, H-1B, **maj**), 3.53 (1H, d, $J = 14.1$ Hz, H-3B, **min**), 3.26 (1H, d, $J = 14.1$ Hz, H-3B, **maj**), 3.20 (1H, d, $J = 7.1$ Hz, H-9c, **min**), 3.19 (1H, d, $J = 7.1$ Hz, H-9c, **maj**), 3.07 (1H, d, $J = 6.6$ Hz, H-9a, **min**), 3.04 (1H, d, $J = 6.6$ Hz, H-9a, **maj**), 2.71-2.67 (1H, m, H-

5a, **maj** + **min**), 2.47 (1H, d, $J = 6.6$ Hz, H-6a, **min**), 2.46 (1H, d, $J = 6.6$ Hz, H-6a, **maj**), 2.11 (3H, s, MeCO, **maj** + **min**). ^{13}C NMR (150.91 MHz, CDCl_3 , 23.3 °C) δ 175.3, 175.2, 173.6, 173.1, 170.6, 170.4, 140.7, 138.0, 138.0, 131.5, 129.3, 129.2 (2C), 128.9, 126.5, 126.4, 117.3, 117.1, 115.4, 114.9, 85.5, 84.8, 84.7, 83.5, 82.0, 81.8, 56.7, 56.4, 54.0, 51.3, 51.2, 50.0, 49.6, 45.5, 44.1, 42.0 (2C), 21.8, 21.6. IR $\nu_{\text{max}}/\text{cm}^{-1}$ (tablet KBr): 3064, 2982, 2922, 1777, 1710, 1643, 1424, 1386, 1264, 1192, 1090. HRMS (ESI-TOF): calcd. for $\text{C}_{24}\text{H}_{24}\text{N}_2\text{O}_5$ $[\text{M} + \text{H}]^+$ 420.1685; found 420.1693.

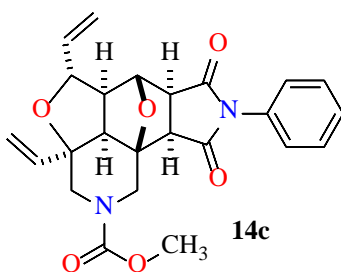
tert-Butyl (3*aSR*,5*RS*,5*aSR*,6*RS*,6*aSR*,9*aRS*,9*bSR*,9*cRS*)-3*a*,5-diethenyl-7,9-dioxo-8-phenyldecahydro-1*H*-6,9*b*-epoxyfuro[2,3,4-*de*]pyrrolo[3,4-*h*]isoquinoline-2(3*H*)-carboxylate (**14b**).



Column chromatography on silica gel (hexane/EtOAc = 4/1) of the residue yielded **14b** as light-yellow oil (0.04 g, 0.08 mmol, 36 %). R_f 0.92 (EtOAc : Hexane, 1:2, Sorbfil). The mixture of amide rotamers in the ratio of 50/50, ^1H NMR (600.17 MHz, CDCl_3 , 22.6 °C) δ 7.48-7.39 (3H, m, H-3-5-Ph, **A** + **B**), 7.26-7.24 (2H, m, H-2,6-Ph, **A** + **B**), 5.99-5.89 (2H, m, H-1-Vinyl-3a, H-1-Vinyl-5, **A** + **B**), 5.33 (2H, br d, $J = 17.2$ Hz, H-2-Vinyl-3a-*trans*, H-2-Vinyl-5-*trans*, **A** + **B**), 5.21 (1H, br d, $J = 10.9$ Hz, H-2-Vinyl-3a-*cis*, **A** + **B**), 5.17 (1H, br d, $J = 11.1$ Hz, H-2-Vinyl-5-*cis*, **A** + **B**), 4.80 (1H, s, H-6, **A** + **B**), 4.28 (1H, t, $J = 6.1$ Hz, H-5, **A** + **B**), 4.08 (1H, br d, $J = 15.1$ Hz, H-1A, **A**), 4.00 (2H, br d, $J = 14.1$ Hz, H-1A and H-3A, **B**), 3.96 (1H, br d, $J = 15.1$ Hz, H-3A, **A**), 3.69 (1H, br d, $J = 13.1$ Hz,

H-1B, **A**), 3.59 (1H, br d, $J = 13.1$ Hz, H-3B, **A**), 3.53 (2H, br d, $J = 14.1$ Hz, H-1B and H-3B, **B**), 3.19 (1H, m, H-6a, **A + B**), 3.00 (1H, m, H-9a, **A + B**), 2.69 (1H, t, $J = 7.1$ Hz, H-5a, **A + B**), 2.40 (1H, m, H-9c, **A + B**), 1.46 (9H, s, *-t*-Bu, **A + B**). ^{13}C NMR (150.91 MHz, CDCl_3 , 28.6 °C) δ 163.7, 163.6, 162.2, 162.0, 155.2, 155.1, 147.4, 146.5, 144.3, 143.3, 141.4, 141.1, 138.5, 138.0, 117.0, 116.8, 114.6, 114.2, 89.3, 88.7, 83.9, 83.5, 82.4, 82.0, 81.5, 80.3, 55.3, 54.6, 53.3, 53.0, 52.7, 52.5, 46.6, 46.1, 42.6, 41.7, 28.3. IR $\nu_{\text{max}}/\text{cm}^{-1}$ (tablet KBr): 2978, 2928, 1778, 1713, 1598, 1500, 1454, 1386, 1255, 1193, 1155. HRMS (ESI-TOF): calcd. for $\text{C}_{27}\text{H}_{30}\text{N}_2\text{O}_6$ $[\text{M} + \text{H}]^+$ 478.5450; found 478.5444.

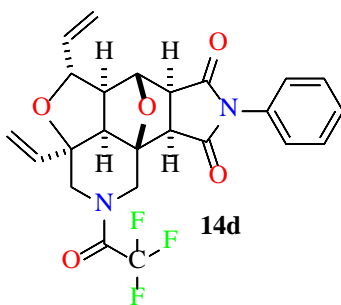
Methyl (3aSR,5RS,5aSR,6RS,6aSR,9aRS,9bSR,9cRS)-3a,5-diethenyl-7,9-dioxo-8-phenyldecahydro-1H-6,9b-epoxyfuro[2,3,4-de]pyrrolo[3,4-h]isoquinoline-2(3H)-carboxylate (14c).



Column chromatography on silica gel (Hexane/EtOAc = 4/1) of the residue yielded **14c** as gray powder (0.062 g, 0.14 mmol, 58 %). R_f 0.11 (EtOAc : hexane, 1:2, Sorbfil); m.p. = 165.6–171.2 °C (from Hexane/EtOAc = 4/1, SiO_2). The mixture of amide rotamers in the ratio of 60/40, ^1H NMR (600.17 MHz, CDCl_3 , 22.4 °C) δ 7.50-7.41 (3H, m, H-3-5-Ph, **maj** + **min**), 7.27 (2H, m, H-2,6-Ph, **maj** + **min**), 5.93 (2H, ddd, $J = 7.6$, $J = 10.1$ and $J = 17.2$ Hz, H-1-Vinyl-3a, H-1-Vinyl-5, **maj** + **min**), 5.35-5.17 (4H, m, H-2-Vinyl-3a-*trans*, H-2-Vinyl-5-*trans*, H-2-Vinyl-3a-*cis*, H-2-Vinyl-5-*cis*, **maj** + **min**), 4.82 (1H, br s, H-6, **maj** + **min**), 4.42 (1H, br d, $J = 14.1$ Hz, H-1A, **maj**), 4.35 (1H, br t, $J = 6.1$ Hz, H-5, **min**), 4.30 (1H, br t, $J = 6.1$ Hz, H-5, **maj**), 4.09 (1H, br d, $J = 15.1$ Hz, H-3A, **maj**), 3.96 (1H, br d, $J = 15.1$ Hz, H-1B, **maj**), 3.89 (1H, br d, $J = 13.1$ Hz, H-1A, **min**), 3.79 (1H, br d, $J = 15.1$

Hz, H-3B, **maj**), 3.72 (3H, br s, CO₂Me, **maj** + **min**), 3.66 (1H, br d, $J = 13.1$ Hz, H-3A, **min**), 3.62 (1H, br d, $J = 13.1$ Hz, H-1B, **min**), 3.29 (1H, br d, $J = 13.1$ Hz, H-3B, **min**), 3.21 (1H, d, $J = 7.1$ Hz, H-6a, **maj** + **min**), 3.00 (1H, d, $J = 7.1$ Hz, H-9a, **maj** + **min**), 2.70 (1H, dd, $J = 6.0$ and $J = 8.1$ Hz, H-5a, **maj** + **min**), 2.42 (1H, d, $J = 8.1$ Hz, H-9c, **maj** + **min**). ¹³C NMR (150.91 MHz, CDCl₃) δ 175.3, 175.2, 173.3, 173.1, 156.4, 141.0, 140.3, 138.1, 137.4, 131.4, 129.3, 129.0, 126.5, 126.4, 117.5, 117.3, 114.9, 114.6, 85.4, 85.2, 84.6, 84.3, 83.1, 83.0, 81.9, 81.4, 57.0, 56.5, 54.4, 53.9, 53.0, 51.3, 51.2, 49.6, 47.2, 45.3, 43.5, 43.0. IR $\nu_{\text{max}}/\text{cm}^{-1}$ (tablet KBr): 2956, 1778, 1710, 1598, 1501, 1468, 1385, 1265, 1194. HRMS (ESI-TOF): calcd. for C₂₄H₂₄N₂O₆ [M + H]⁺ 436.1634; found 436.1639.

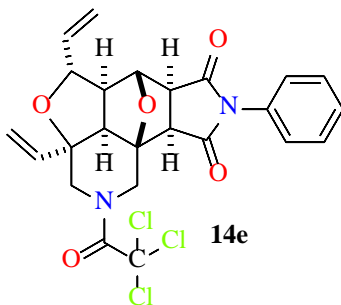
(3*aSR*,5*RS*,5*aSR*,6*RS*,6*aSR*,9*aRS*,9*bSR*,9*cRS*)-3*a*,5-Diethenyl-8-phenyl-2-(trifluoroacetyl)octahydro-1*H*-6,9*b*-epoxyfuro[2,3,4-*de*]pyrrolo[3,4-*h*]isoquinoline-7,9(5*H*,8*H*)-dione (**14d**).



Column chromatography on silica gel (hexane/EtOAc = 4/1) of the residue yielded **14d** as grey powder crystals (0.05 g, 0.11 mmol, 47%). R_f 0.70 (EtOAc : Hexane, 1:2, Sorbfil); mp: 123.7–143.9 °C (from Hexane/EtOAc = 4/1, SiO₂). The mixture of amide rotamers in the ratio of 66/34, ¹H NMR (600.17 MHz, CDCl₃, 22.9 °C) δ 7.51 (2H, m, H-3,5-Ph, **maj** + **min**), 7.44 (1H, m, H-4-Ph, **maj** + **min**), 7.27 (2H, m, H-2,6, **maj** + **min**), 5.97 (1H, dd, $J = 11.1$ and $J = 17.2$ Hz, H-1-Vinyl-3a, **maj** + **min**), 5.92 (1H, ddd, $J = 2.0$, $J = 9.1$ and $J = 17.2$ Hz, H-1-Vinyl-5, **maj** + **min**), 5.36 (4H, m, H-2-Vinyl-3a and H-2-Vinyl-5, **maj** + **min**), 4.84 (1H, br s, H-6, **maj** + **min**), 4.37 (1H, d, H-1A, **min**), 4.35 (1H, d, H-1A, **maj**),

4.36-4.29 (1H, m, H-5, **maj** + **min**), 4.14 (1H, d, $J = 14.1$ Hz, H-3A, **min**), 4.10 (1H, d, $J = 14.1$ Hz, H-3B, **min**), 3.97 (1H, d, $J = 14.1$ Hz, H-3A, **maj**), 3.87 (1H, d, $J = 14.1$ Hz, H-3B, **maj**), 3.49 (1H, d, $J = 14.1$ Hz, H-1B, **min**), 3.47 (1H, d, $J = 14.1$ Hz, H-1B, **maj**), 3.25 (1H, d, $J = 9.1$ Hz, H-9a, **min**), 3.24 (1H, d, $J = 9.1$ Hz, H-6a, **maj**), 3.11 (1H, d, $J = 9.1$ Hz, H-9a, **min**), 3.10 (1H, d, $J = 9.1$ Hz, H-6a, **maj**), 2.75 (1H, m, H-5a, **maj** + **min**), 2.54 (1H, d, $J = 8.1$ Hz, H-9c, **min**), 2.53 (1H, d, $J = 8.1$ Hz, H-9c, **maj**). ^{13}C NMR (CDCl_3 , 150.91 MHz, 23.7 °C) δ 175.2, 175.1, 173.3, 173.0, 157.09 (q, $^2J_{\text{C,F}} = 36.1$ Hz, COCF_3), 157.12 (q, $^2J_{\text{C,F}} = 36.1$ Hz, COCF_3), 140.2, 138.3, 137.9, 137.1, 131.4, 129.5, 129.4 (2C, **maj** + **min**), 129.2, 128.7, 126.4 (2C), 126.5 (2C), 117.9, 117.5, 116.4 (q, $^1J_{\text{C,F}} = 258.7$ Hz, CF_3), 116.2 (q, $^1J_{\text{C,F}} = 258.7$ Hz, CF_3), 115.8, 115.5, 85.4, 84.7, 84.4, 84.1, 82.9, 82.7, 82.3, 81.8, 57.0, 56.5, 54.0, 53.7, 51.4, 51.2, 49.6, 49.5, 47.5-46.3 (q, $^5J_{\text{C,F}} = 2.9$ Hz, C-1, **maj** + **min**), 44.6-43.5 (q, $^5J_{\text{C,F}} = 2.9$ Hz, C-3, **maj** + **min**). ^{19}F NMR (564.7 MHz, CDCl_3) δ -68.00 (3F, s, CF_3 , **maj**), -68.89 (3F, s, CF_3 , **min**). IR $\nu_{\text{max}}/\text{cm}^{-1}$ (tablet KBr): 3079, 2960, 2928, 1779, 1709, 1500, 1454, 1389, 1196, 1149. HRMS (ESI-TOF): calcd. for $\text{C}_{24}\text{H}_{21}\text{F}_3\text{N}_2\text{O}_5$ $[\text{M} + \text{H}]^+$ 474.1403; found 474.1417.

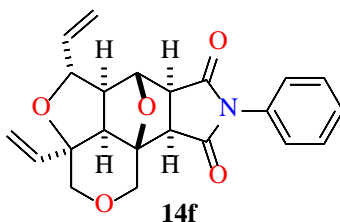
(3*a*SR,5*RS*,5*a*SR,6*RS*,6*a*SR,9*a*RS,9*b*SR,9*c*RS)-3*a*,5-Diethenyl-8-phenyl-2-(trichloroacetyl)octahydro-1*H*-6,9*b*-epoxyfuro[2,3,4-*de*]pyrrolo[3,4-*h*]isoquinoline-7,9(5*H*,8*H*)-dione (**14e**).



Column chromatography on silica gel (hexane/EtOAc = 2/1) of the residue yielded **14e** as grey powder (0.043 g, 0.083 mmol, 41%). R_f 0.43 (EtOAc : Hexane, 1:2, Sorbfil); mp:

203.5–205.7 °C (with decomp., from Hexane/EtOAc = 2/1, SiO₂). Very broad signals in NMR spectrums. ¹H NMR (600.17 MHz, CDCl₃) δ 7.48 (2H, t, *J* = 7.6 Hz, H-3,5-Ph), 7.42 (1H, br t, *J* = 7.6 Hz, H-4-Ph), 7.25 (2H, br d, *J* = 7.6 Hz, H-2,6-Ph), 6.06–5.97 (1H, m, H-1-Vinyl-3a), 5.93 (1H, ddd, *J* = 7.6, *J* = 10.1 and *J* = 17.2 Hz, H-1-Vinyl-5), 5.35 (2H, d, *J* = 17.2 Hz, H-2-Vinyl-*trans*), 5.23–5.19 (2H, m, H-2-Vinyl-*cis*), 4.85 (1H, s, H-6), 4.61 (1H, br m, H-3A), 4.31 (1H, m, H-5), 4.09–3.93 (3H, br m, H-3B and H-1), 3.25 (1H, d, *J* = 7.1 Hz, H-6a), 3.10 (1H, m, H-9a), 2.74 (1H, br dd, *J* = 7.1 and *J* = 8.6 Hz, H-5a), 2.52 (1H, d, *J* = 8.6 Hz, H-9c). ¹³C NMR (CDCl₃, 150.91 MHz) δ 175.1, 172.7, 171.2, 138.9, 136.6, 131.3, 129.3, 129.1, 126.4, 117.9, 114.5, 85.0, 83.9, 83.1, 81.5, 57.2, 54.3, 51.4, 49.6, 48.8, 45.1. IR ν_{max}/cm⁻¹ (tablet KBr): 2987, 2928, 1775, 1707, 1447, 1383, 1189. HRMS (ESI-TOF): calcd. for C₂₄H₂₁Cl₃N₂O₅ [M + H]⁺ 522.0516; found 522.0520.

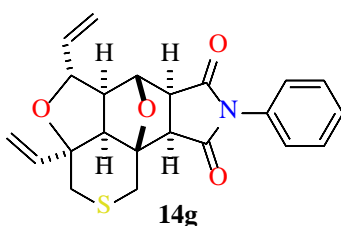
(3*aSR*,5*RS*,5*aSR*,6*RS*,6*aSR*,9*aRS*,9*bSR*,9*cRS*)-3*a*,5-Diethenyl-8-phenylhexahydro-3*H*-6,9*b*-epoxy-2,4-dioxa-8-azacyclopenta[*e*]acenaphthylene-7,9(1*H*,5*H*,8*H*)-dione (**14f**).



Column chromatography on silica gel (hexane/EtOAc = 3/1) of the residue yielded **14f** as white powder (0.07 g, 0.18 mmol, 64 %). *R_f* 0.59 (EtOAc : Hexane, 1:1, Sorbfil); mp: 236.6–243 °C (with decomp., from Hexane/EtOAc = 3/1, SiO₂). ¹H NMR (600.17 MHz, CDCl₃, 23.0 °C) δ 7.49 (2H, t, *J* = 7.6 Hz, H-3,5-Ph), 7.42 (1H, br t, *J* = 7.6 Hz, H-4-Ph), 7.26 (2H, br t, *J* = 7.6 Hz, H-2,6-Ph), 5.98 (1H, ddd, *J* = 8.1, *J* = 10.1 and *J* = 17.2 Hz, H-1-Vinyl-5), 5.88 (1H, dd, *J* = 10.6 and *J* = 17.2 Hz, H-1-Vinyl-3a), 5.37 (1H, d, *J* = 17.2 Hz, H-2-Vinyl-3a-*trans*), 5.23 (2H, m, H-2-Vinyl), 5.13 (1H, d, *J* = 10.1 Hz, H-2-Vinyl-5-*cis*), 4.87 (1H, s, H-6), 4.52 (1H, dd, *J* = 4.0 and *J* = 8.1 Hz, H-5), 4.41 (1H, d, *J* = 13.6

Hz, H-3A), 4.08 (1H, d, $J = 13.6$ Hz, H-3B), 3.95 (1H, d, $J = 12.6$ Hz, H-1A), 3.35 (1H, d, $J = 12.6$ Hz, H-1B), 3.23 (1H, d, $J = 7.1$ Hz, H-6a), 3.00 (1H, d, $J = 7.1$ Hz, H-9a), 2.74 (1H, dd, $J = 4.0$ and $J = 7.6$ Hz, H-5a), 2.44 (1H, d, $J = 7.6$ Hz, H-9c). ^{13}C NMR (150.91 MHz, CDCl_3 , 24.4 °C) δ 176.3, 174.3, 142.0, 140.5, 132.0, 128.9, 128.4, 126.8, 115.2, 115.1, 85.6, 82.3, 81.9, 69.9, 65.3, 54.4, 50.5, 50.0, 49.0. IR $\nu_{\text{max}}/\text{cm}^{-1}$ (tablet KBr): 3066, 2983, 1777, 1713, 1499, 1390, 1197. HRMS (ESI-TOF): calcd. for $\text{C}_{22}\text{H}_{21}\text{NO}_5$ $[\text{M} + \text{H}]^+$ 379.1420; found 379.1434.

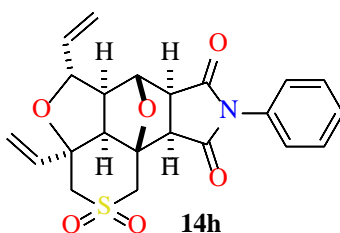
(3*aSR*,5*RS*,5*aSR*,6*RS*,6*aSR*,9*aRS*,9*bSR*,9*cRS*)-3*a*,5-Diethenyl-8-phenylhexahydro-3*H*-6,9*b*-epoxy-4-oxa-2-thia-8-azacyclopenta[*e*]acenaphthylene-7,9(1*H*,5*H*,8*H*)-dione (**14g**).



Column chromatography on silica gel (hexane/EtOAc = 1/1) of the residue yielded **14g** as white powder (0.05 g, 0.13 mmol, 48 %). R_f 0.67 (EtOAc : Hexane, 1:1, Sorbfil); mp: 241.3–245.5 °C (with decomp., Hexane/EtOAc = 1/1, SiO_2). ^1H NMR (600.17 MHz, CDCl_3) δ 7.49–7.47 (2H, m, H-3,5-Ph), 7.43–7.40 (1H, m, H-4-Ph), 7.25–7.23 (2H, m, H-2,6-Ph), 6.17 (1H, dd, $J = 10.6$ and $J = 17.2$ Hz, H-1-Vinyl-3a), 5.95 (1H, ddd, $J = 7.6$, $J = 10.1$ and $J = 17.7$ Hz, H-1-Vinyl-5), 5.39 (1H, br dd, $J = 1.0$ and $J = 17.7$ Hz, H-2-Vinyl-3a-*trans*), 5.33 (1H, br dd, $J = 1.0$ and $J = 17.2$ Hz, H-2-Vinyl-5-*trans*), 5.21–5.19 (1H, br dd, $J = 1.0$ and $J = 10.1$ Hz, H-2-Vinyl-3a-*cis*), 5.20–5.18 (1H, br dd, $J = 1.0$ and $J = 10.6$ Hz, H-2-Vinyl-5-*cis*), 4.85 (1H, s, H-6), 4.43 (1H, t, $J = 7.1$ Hz, H-5), 3.31 (1H, d, $J = 14.6$ Hz, H-3A), 3.23 (1H, d, $J = 7.1$ Hz, H-6a), 3.18 (1H, br d, $J = 15.1$ Hz, H-3B), 3.01 (1H, dd, $J = 1.0$ and $J = 14.1$ Hz, H-1A), 2.94 (1H, d, $J = 7.1$ Hz, H-9a), 2.70 (1H, dd, $J = 6.6$ and $J = 8.1$ Hz, H-5a), 2.57 (1H, d, $J = 13.2$ Hz, H-1B), 2.36 (1H, d, $J = 8.1$ Hz, H-9c). ^{13}C

NMR (150.91 MHz, CDCl₃) δ 175.4, 173.4, 142.5, 138.0, 131.4, 129.3 (2C), 129.0, 126.5 (2C), 117.5, 114.3, 84.9, 84.8, 82.6, 81.6, 56.8, 54.9, 53.2, 50.2, 32.7, 26.4. IR $\nu_{\text{max}}/\text{cm}^{-1}$ (tablet KBr): 2993, 2936, 1775, 1713, 1486, 1381, 1265, 1190. HRMS (ESI-TOF): calcd. for C₂₂H₂₁NO₄S [M + H]⁺ 395.1191; found 395.1195.

(3*aSR*,5*RS*,5*aSR*,6*RS*,6*aSR*,9*aRS*,9*bSR*,9*cRS*)-3*a*,5-Diethenyl-8-phenylhexahydro-3*H*-6,9*b*-epoxy-4-oxa-2-thia-8-azacyclopenta[*e*]acenaphthylene-7,9(1*H*,5*H*,8*H*)-dione 2,2-dioxide (**14h**).



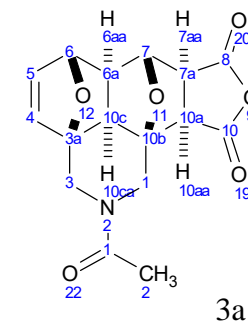
Column chromatography on silica gel (EtOAc) of the residue yielded **14h** as white powder (0.064 g, 0.15 mmol, 60 %). R_f 0.15 (EtOAc : hexane, 1:2, Sorbfil); mp: 248.3–257.4 °C (from EtOAc, SiO₂). ¹H NMR (600.2 MHz, CDCl₃) δ 7.49 (2H, br t, H-3,5-Ph), 7.43 (1H, br t, $J = 7.6$ Hz, H-4-Ph), 7.25 (2H, br t, $J = 7.6$ Hz, H-2,6-Ph), 6.37 (1H, dd, $J = 10.6$ and $J = 17.2$ Hz, H-1-Vinyl-3*a*), 5.94 (1H, ddd, $J = 7.6$, $J = 10.6$ and $J = 17.7$ Hz, H-1-Vinyl-5), 5.55 (1H, br dd, $J = 1.0$ and $J = 17.2$ Hz, H-2-Vinyl-3*a-trans*), 5.44 (1H, br d, $J = 17.2$ Hz, H-2-Vinyl-5-*trans*), 5.32 (1H, br d, $J = 10.6$ Hz, H-2-Vinyl-3*a-cis*), 5.28 (1H, br d, $J = 10.6$ Hz, H-2-Vinyl-5-*cis*), 4.93 (1H, s, H-6), 4.28 (1H, t, $J = 7.6$ Hz, H-5), 3.93 (1H, d, $J = 15.6$ Hz, H-3A), 3.84 (1H, d, $J = 15.6$ Hz, H-3B), 3.65 (1H, d, $J = 14.1$ Hz, H-1A), 3.24-3.23 (1H, d, $J = 7.1$ Hz, H-6*a*), 3.24-3.21 (1H, d, $J = 14.1$ Hz, H-1B), 3.10 (1H, d, $J = 7.1$ Hz, H-9*a*), 2.78 (1H, br t, $J = 8.1$ Hz, H-5*a*), 2.67 (1H, d, $J = 9.1$ Hz, H-9*c*). ¹³C NMR (150.91 MHz, CDCl₃) δ 172.5, 171.2, 138.9, 135.5, 131.1, 129.4 (2C), 129.3, 126.3 (2C), 118.9, 115.2, 85.4, 83.4, 83.2, 81.1, 57.4, 56.1, 54.8, 52.7, 52.5, 49.6. IR $\nu_{\text{max}}/\text{cm}^{-1}$ (tablet

KBr): 2991, 2941, 1778, 1709, 1499, 1386, 1270, 1192. HRMS (ESI-TOF): calcd. for $C_{22}H_{21}NO_6S$ $[M + H]^+$ 427.1090; found 427.1084.

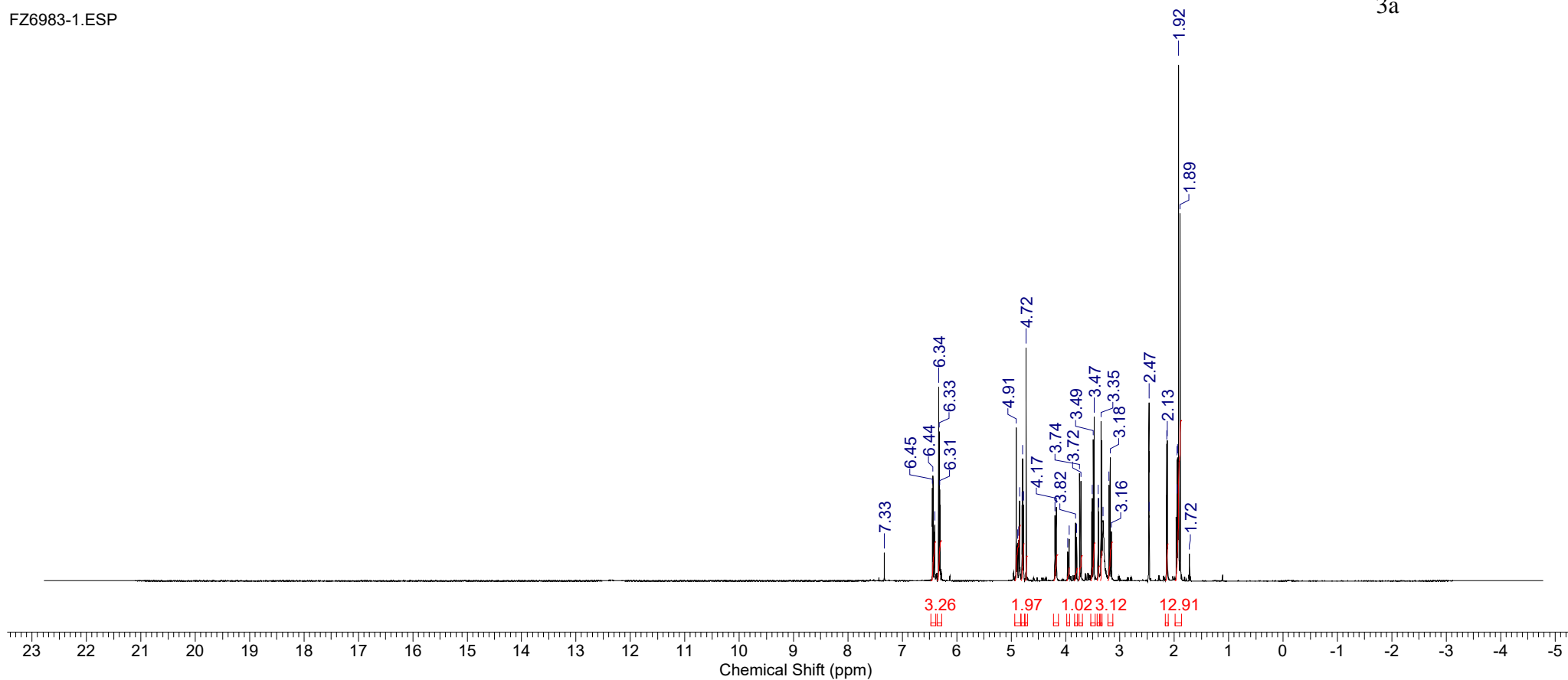
3. Copies of NMR spectra

Formula C ₁₆ H ₁₅ NO ₆	FW 317.2934
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 02 Feb 1990 15:50:52	Date Stamp 21 Nov 2018 11:39:32
File Name C:\Users\Fedor\Desktop\20.11.18\FZ6983-1.jdf	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner delta	Pulse Sequence single_pulse.ex2
Receiver Gain 34.00	Solvent DMSO-d6	Spectrum Offset (Hz) 5401.5503	Sweep Width (Hz) 16534.39

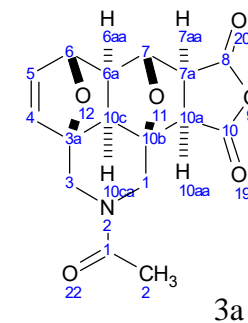


FZ6983-1.ESP

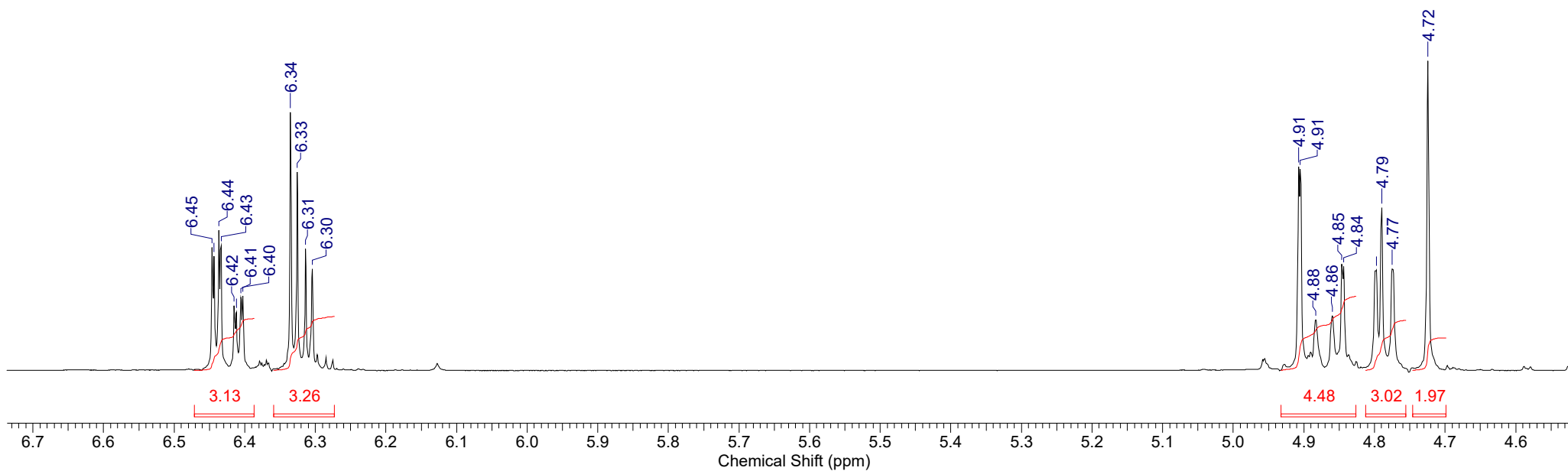


Formula C ₁₆ H ₁₅ NO ₆	FW 317.2934
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 02 Feb 1990 15:50:52	Date Stamp 21 Nov 2018 11:39:32
File Name C:\Users\Fedor\Desktop\20.11.18\FZ6983-1.jdf	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner delta	Points Count 32768
Receiver Gain 34.00	Solvent DMSO-d6	Spectrum Offset (Hz) 5401.5503	Sweep Width (Hz) 16534.39
		Pulse Sequence single_pulse.ex2	

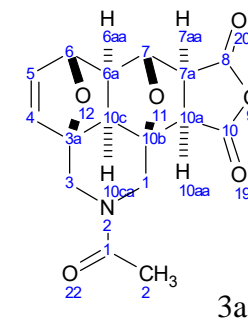


FZ6983-1.ESP

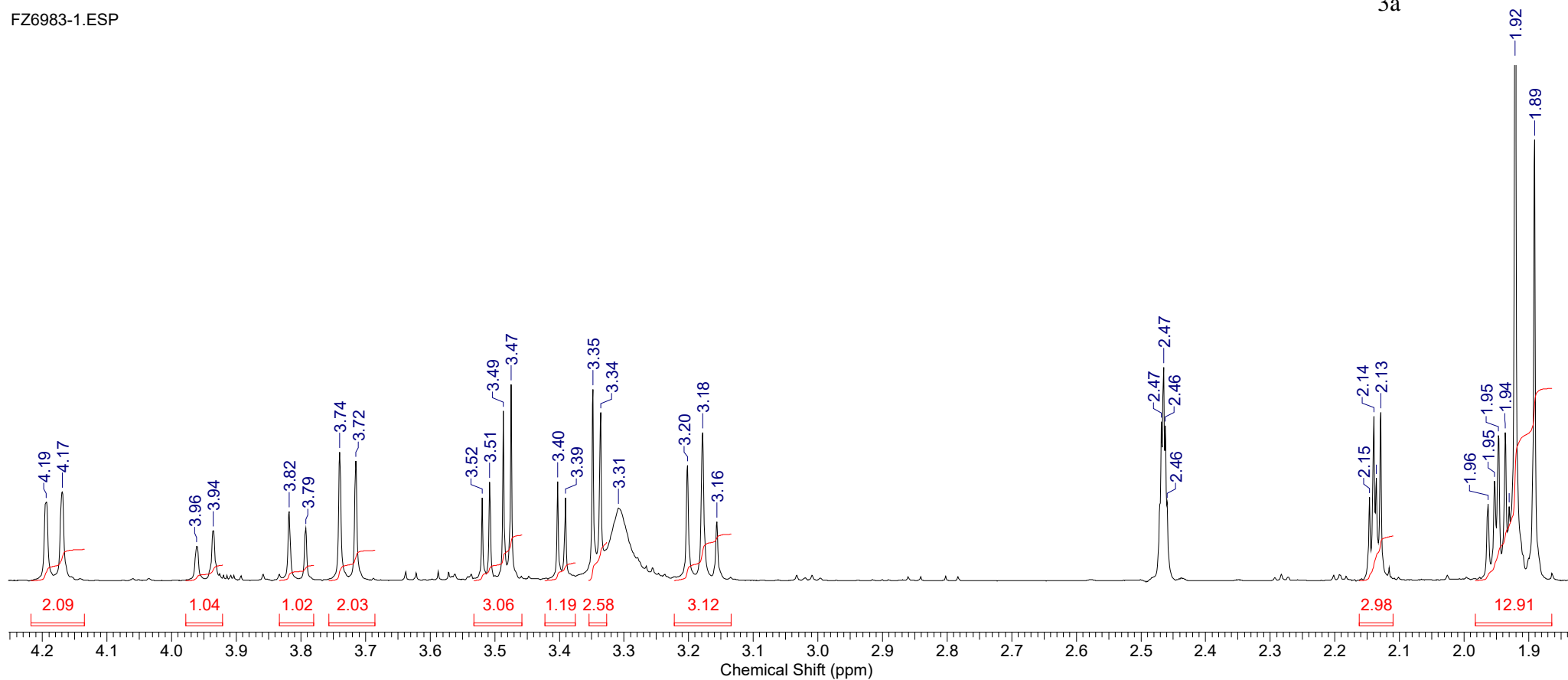


Formula C ₁₆ H ₁₅ NO ₆	FW 317.2934
--	--------------------

Acquisition Time (sec) 1.9818	Comment single pulse	Date 02 Feb 1990 15:50:52	Date Stamp 21 Nov 2018 11:39:32
File Name C:\Users\Fedor\Desktop\20.11.18\FZ6983-1.jdf	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner delta	Pulse Sequence single_pulse.ex2
Receiver Gain 34.00	Solvent DMSO-d6	Spectrum Offset (Hz) 5401.5503	Sweep Width (Hz) 16534.39

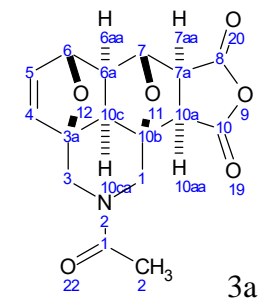


FZ6983-1.ESP

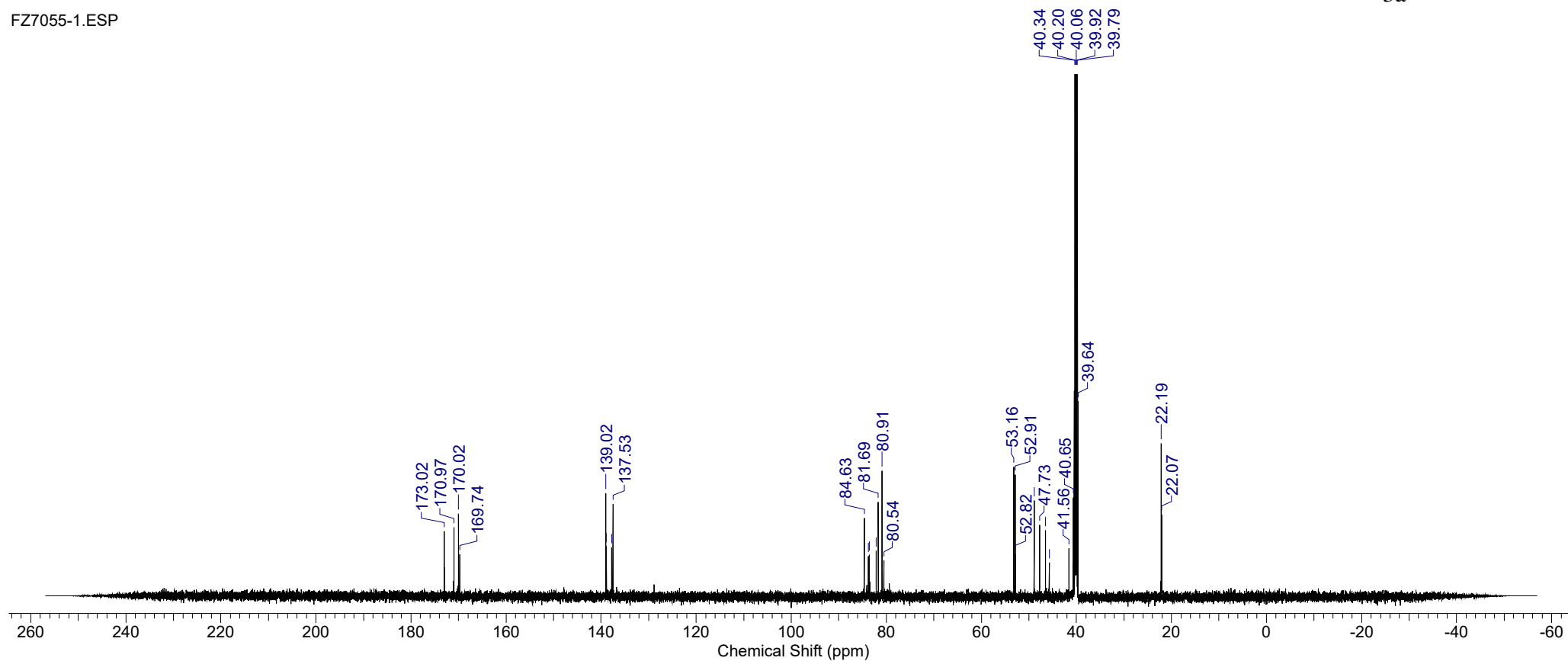


Formula C ₁₆ H ₁₅ NO ₆	FW 317.2934
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 11 Jan 1990 03:20:08
Date Stamp 13 Dec 2018 17:15:47	File Name E:\ЯМР для Лизы\FZ7055-1.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 1000	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49	Receiver Gain 56.00
		Owner delta
		Solvent DMSO-d6

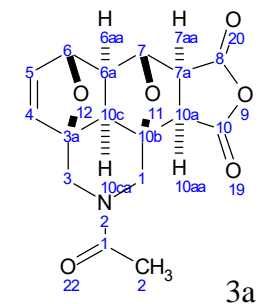


FZ7055-1.ESP

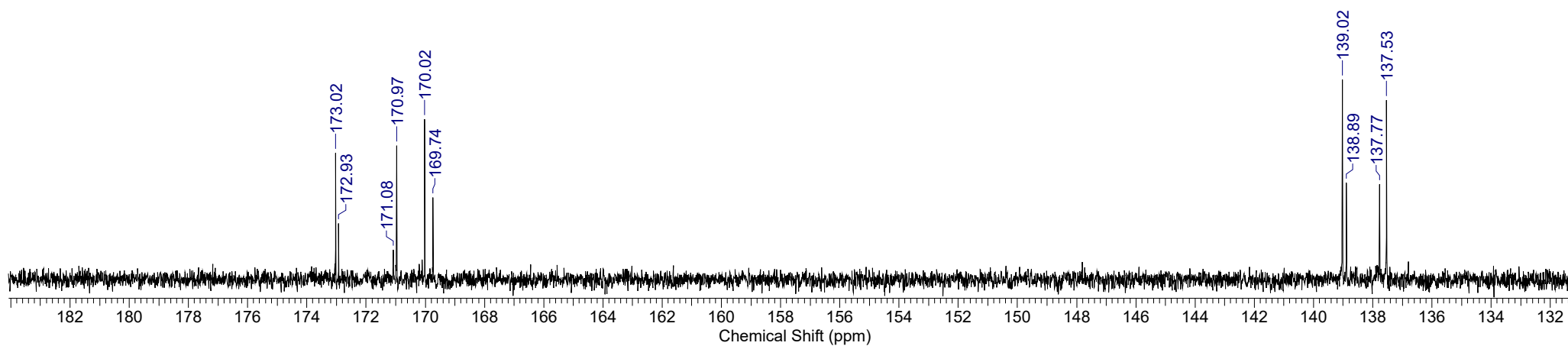


Formula C ₁₆ H ₁₅ NO ₆	FW 317.2934
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 11 Jan 1990 03:20:08
Date Stamp 13 Dec 2018 17:15:47	File Name E:\ЯМР для Лизы\FZ7055-1.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 1000	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49	Receiver Gain 56.00
		Owner delta
		Solvent DMSO-d6

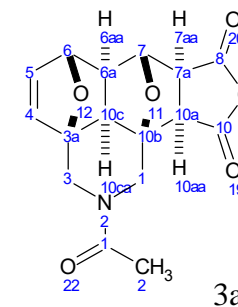


FZ7055-1.ESP

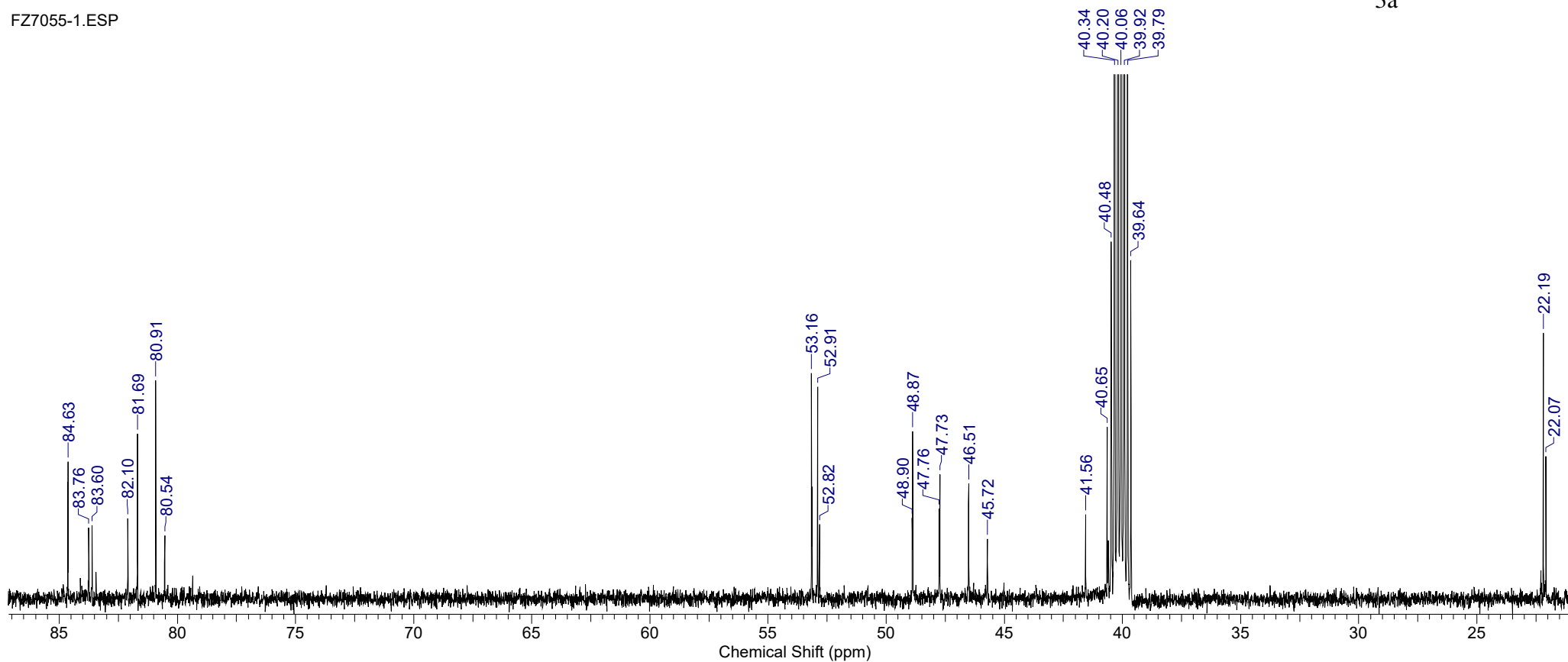


Formula C ₁₆ H ₁₅ NO ₆	FW 317.2934
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 11 Jan 1990 03:20:08
Date Stamp 13 Dec 2018 17:15:47	File Name E:\ЯМР для Лизы\FZ7055-1.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 1000	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49	Receiver Gain 56.00
		Owner delta
		Solvent DMSO-d6

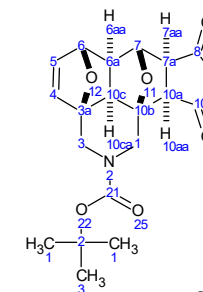


FZ7055-1.ESP



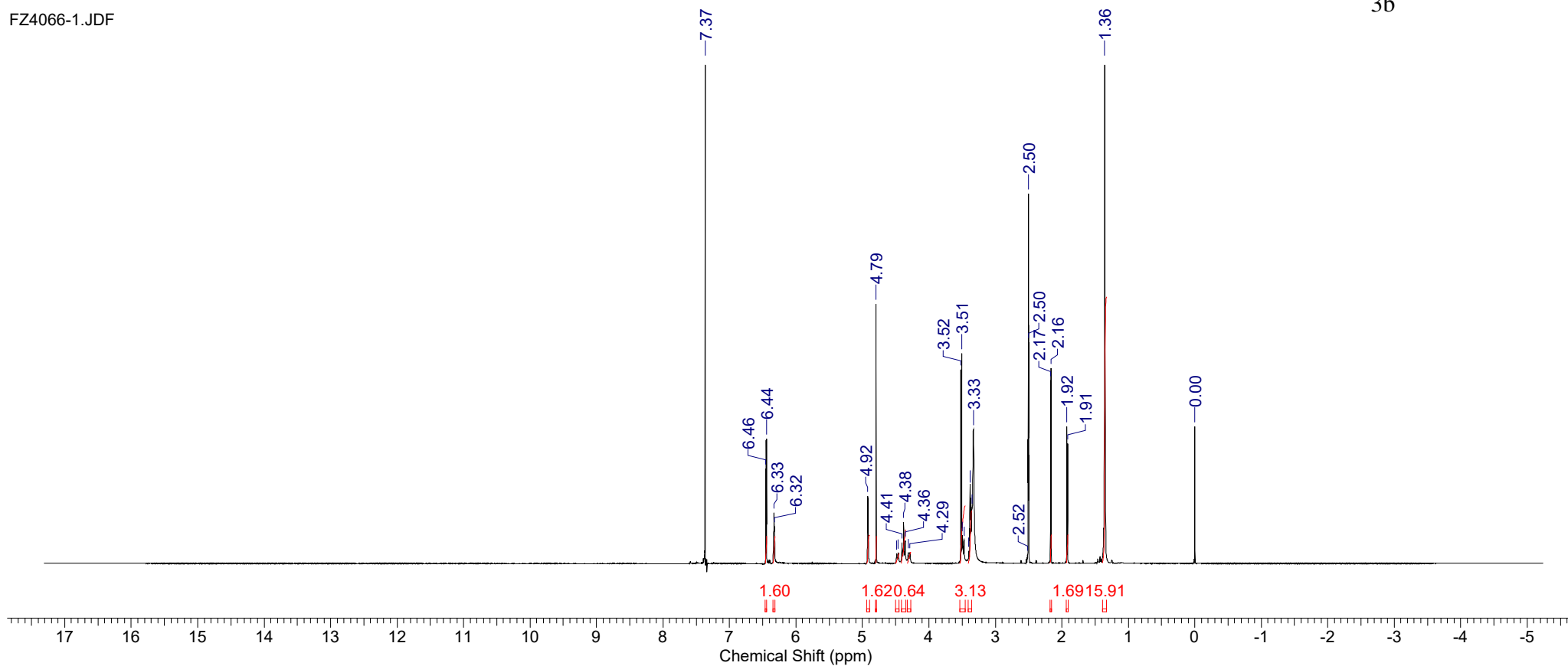
Formula C ₁₉ H ₂₁ NO ₇	FW 375.3725
--	--------------------

Acquisition Time (sec) 2.4222	Comment single_pulse	Date 12 Feb 2015 13:05:20	Date Stamp 12 Feb 2015 12:11:54
File Name C:\USERS\laba534\DOWNLOADS\FZ4066-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner delta	Points Count 32768
Receiver Gain 36.00	Solvent DMSO-d6	Spectrum Offset (Hz) 3622.6279	Sweep Width (Hz) 13528.14
			Temperature (degree C) 22.900



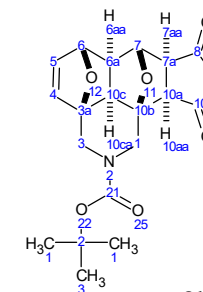
3b

FZ4066-1.JDF



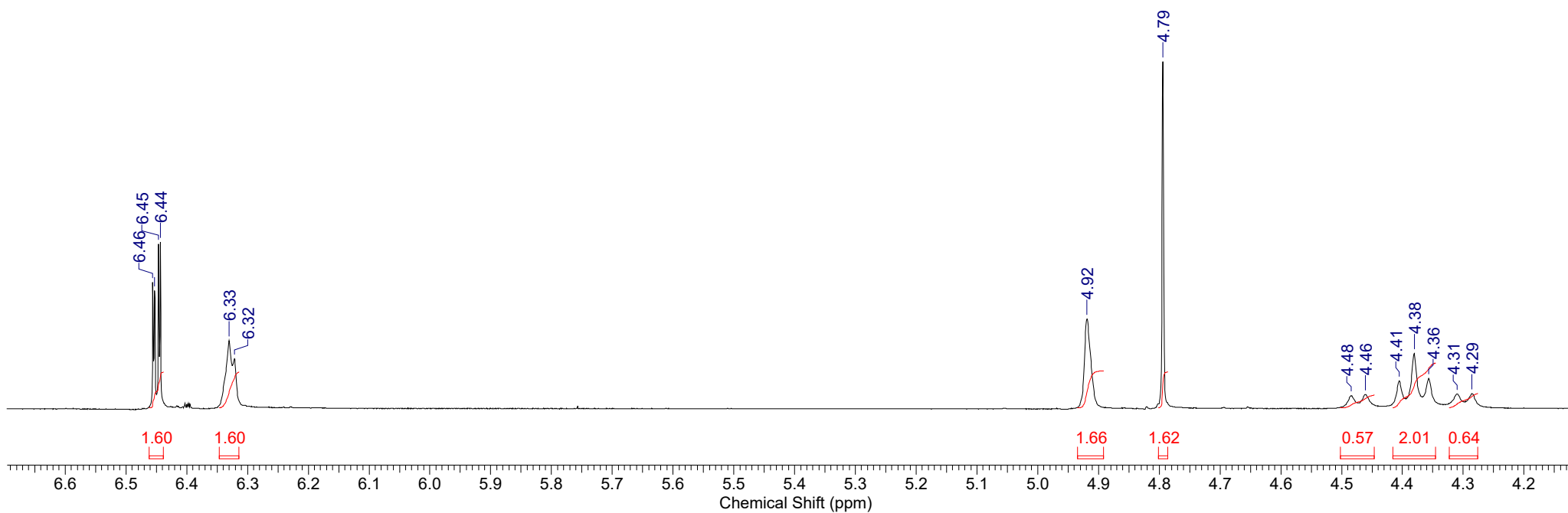
Formula C ₁₉ H ₂₁ NO ₇	FW 375.3725
--	--------------------

Acquisition Time (sec) 2.4222	Comment single_pulse	Date 12 Feb 2015 13:05:20	Date Stamp 12 Feb 2015 12:11:54
File Name C:\USERS\laba534\DOWNLOADS\FZ4066-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner delta	Points Count 32768
Receiver Gain 36.00	Solvent DMSO-d6	Spectrum Offset (Hz) 3622.6279	Sweep Width (Hz) 13528.14
			Temperature (degree C) 22.900



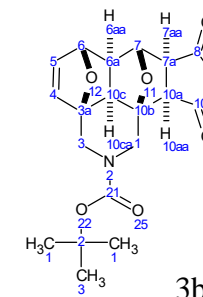
3b

FZ4066-1.JDF

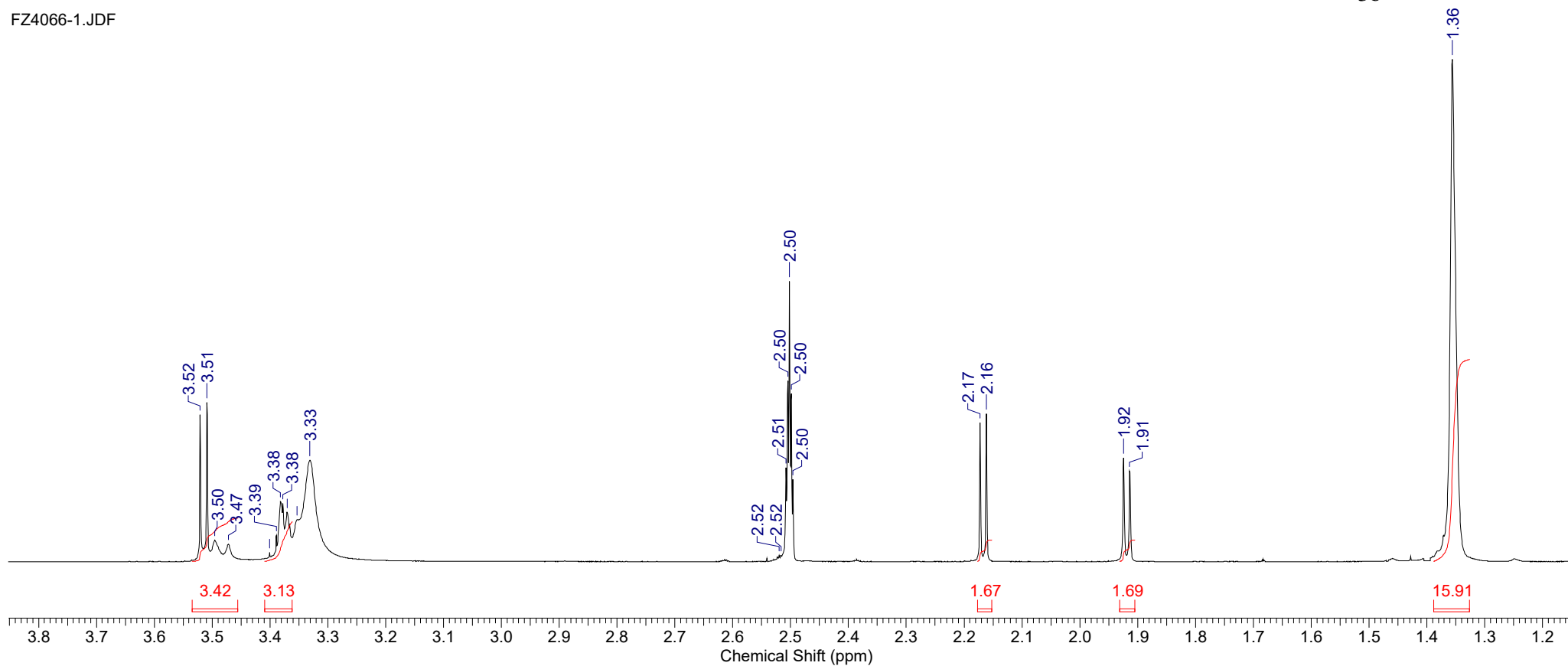


Formula C ₁₉ H ₂₁ NO ₇	FW 375.3725
--	--------------------

Acquisition Time (sec) 2.4222	Comment single_pulse	Date 12 Feb 2015 13:05:20	Date Stamp 12 Feb 2015 12:11:54
File Name C:\USERS\Ia6a534\DOWNLOADS\FZ4066-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner delta	Points Count 32768
Receiver Gain 36.00	Solvent DMSO-d6	Spectrum Offset (Hz) 3622.6279	Sweep Width (Hz) 13528.14
		Temperature (degree C) 22.900	

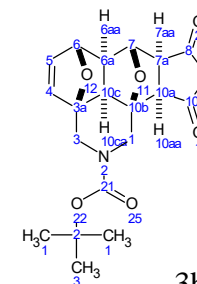


FZ4066-1.JDF

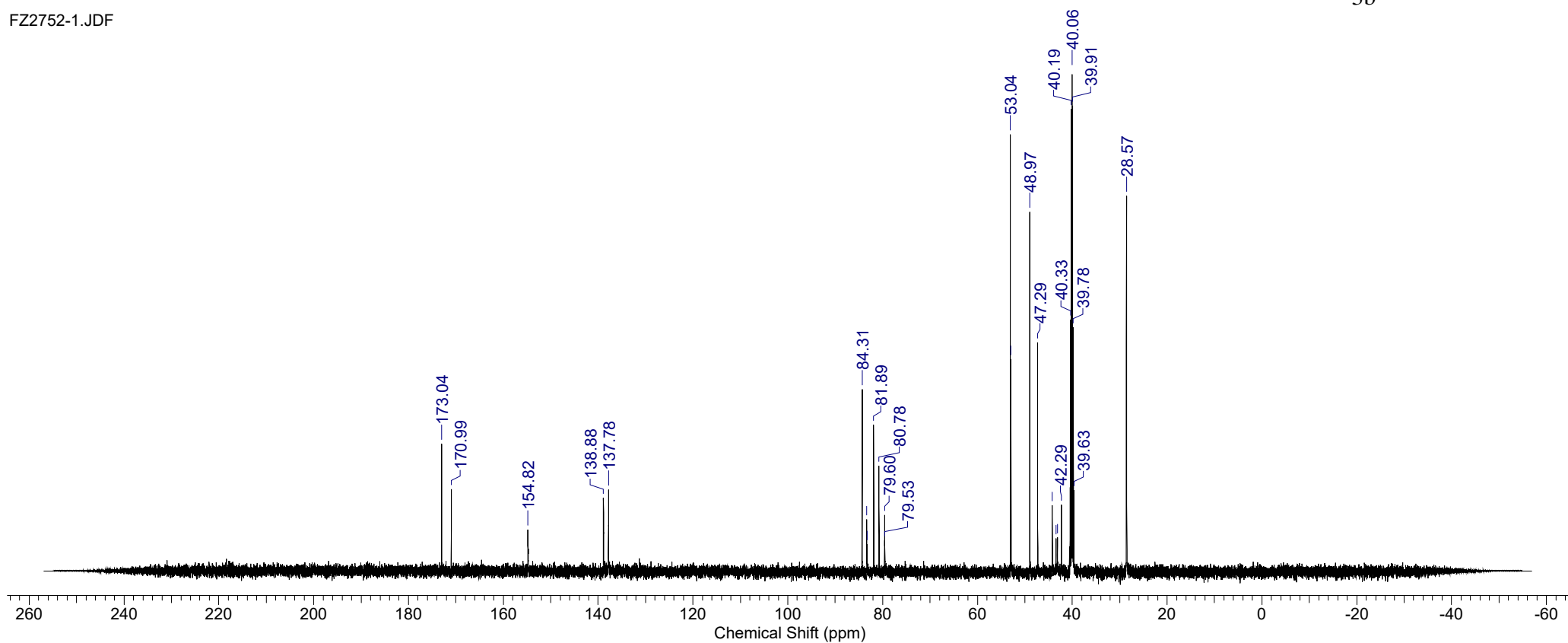


Formula C ₁₉ H ₂₁ NO ₇	FW 375.3725
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 15 Feb 2013 09:18:01
Date Stamp 15 Feb 2013 08:31:23	File Name C:\USERS\Jla6a534\DOWNLOADS\FZ2752-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 156
Original Points Count 32768	Owner delta	Points Count 32768
Receiver Gain 54.00	Solvent DMSO-d6	Pulse Sequence single pulse dec
Temperature (degree C) 22.700	Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49

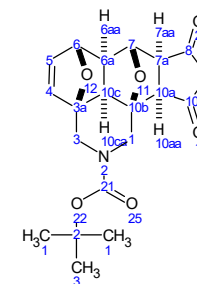


FZ2752-1.JDF



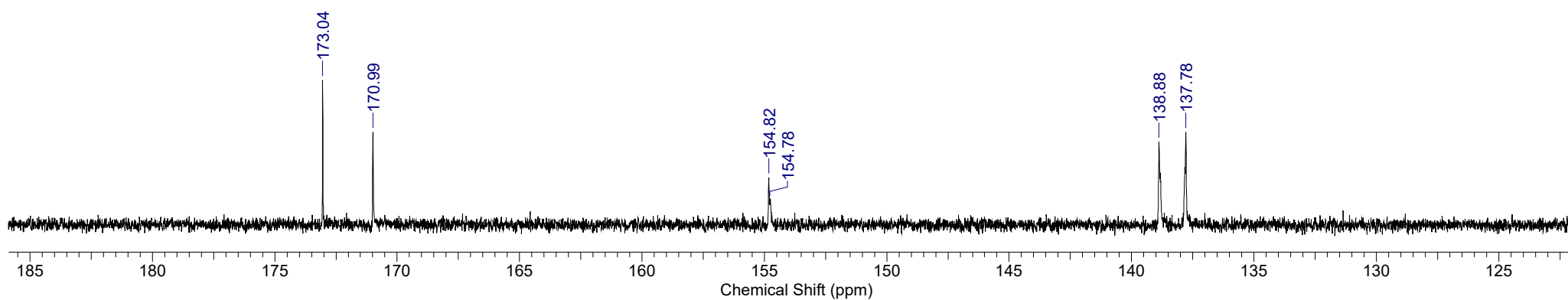
Formula C ₁₉ H ₂₁ NO ₇	FW 375.3725
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 15 Feb 2013 09:18:01
Date Stamp 15 Feb 2013 08:31:23	File Name C:\USERS\Jla6a534\DOWNLOADS\FZ2752-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 156
Original Points Count 32768	Owner delta	Points Count 32768
Receiver Gain 54.00	Solvent DMSO-d6	Pulse Sequence single pulse dec
Temperature (degree C) 22.700	Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49



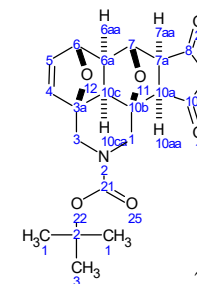
3b

FZ2752-1.JDF



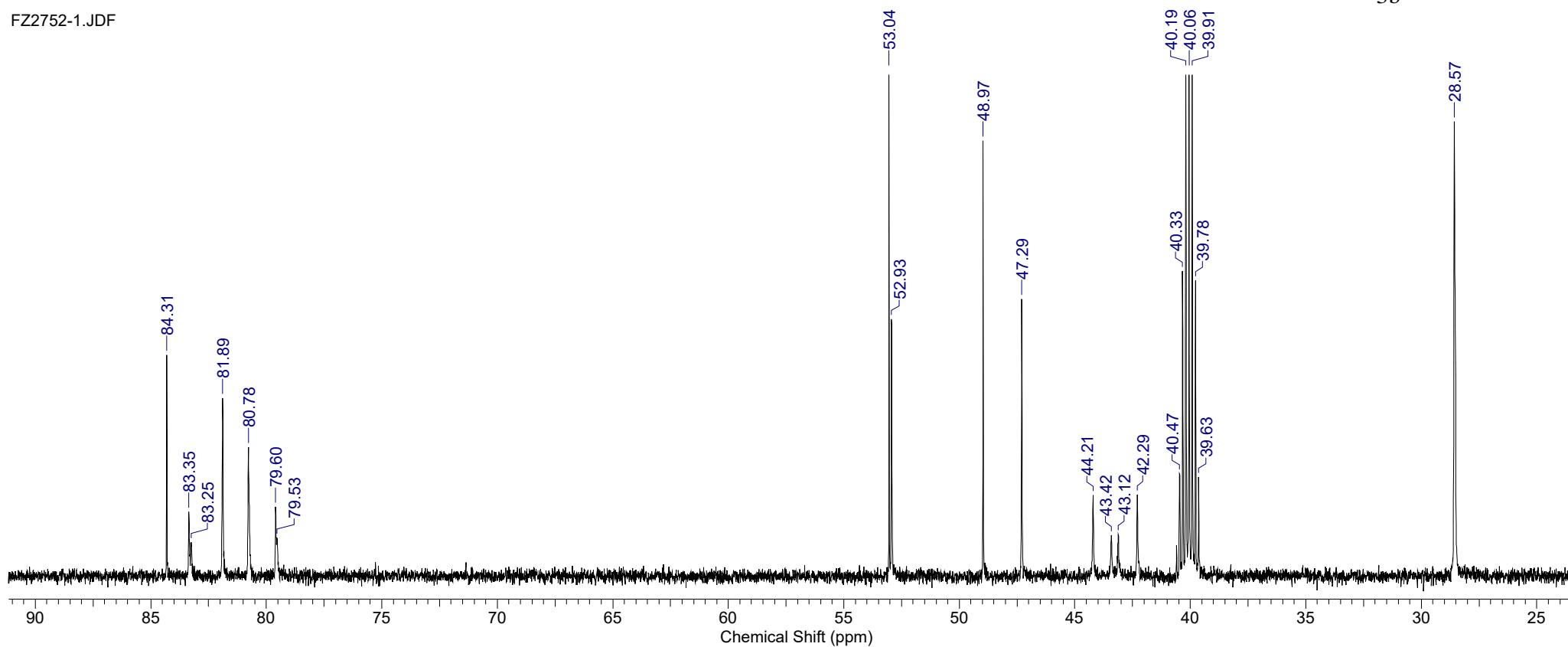
Formula C ₁₉ H ₂₁ NO ₇	FW 375.3725
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 15 Feb 2013 09:18:01
Date Stamp 15 Feb 2013 08:31:23	File Name C:\USERS\Jla6a534\DOWNLOADS\FZ2752-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 156
Original Points Count 32768	Owner delta	Points Count 32768
Receiver Gain 54.00	Solvent DMSO-d6	Pulse Sequence single pulse dec
Temperature (degree C) 22.700	Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49



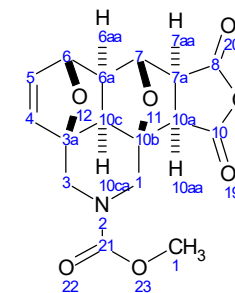
3b

FZ2752-1.JDF



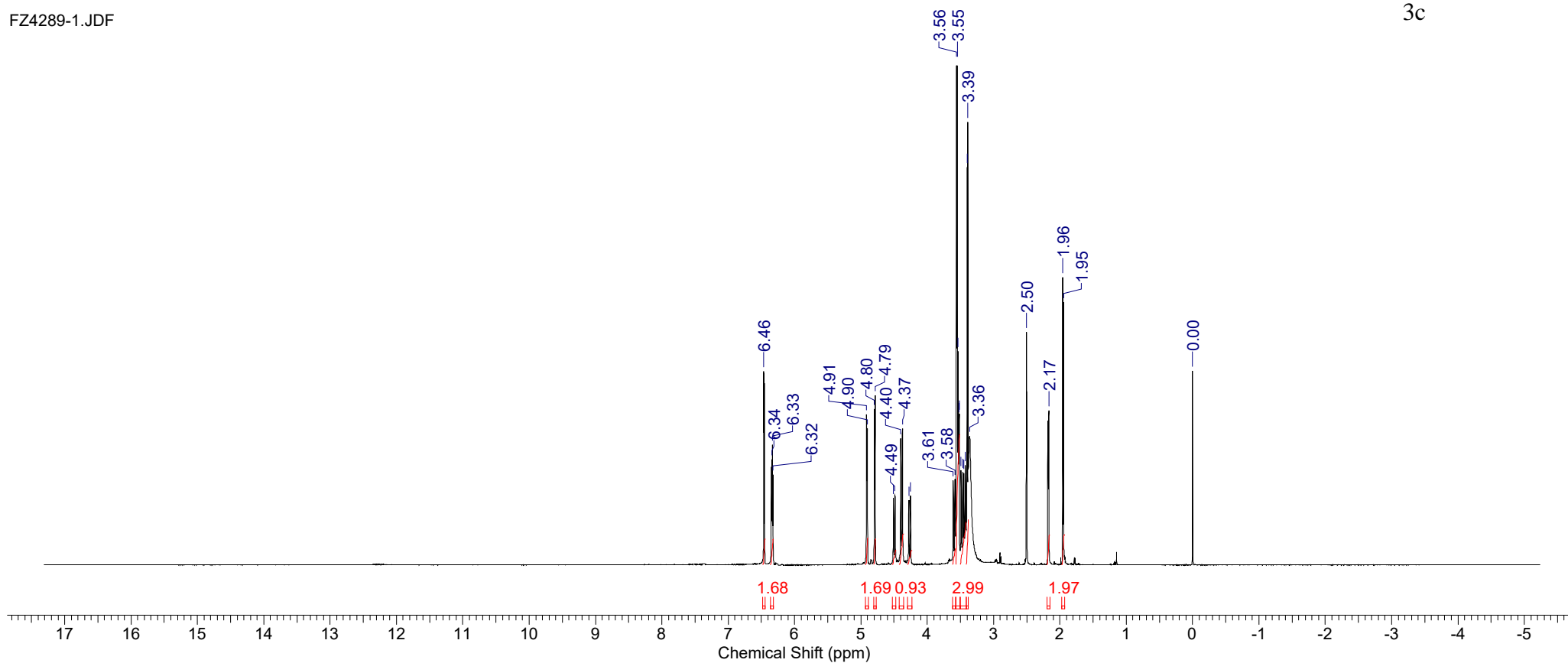
Formula C ₁₆ H ₁₅ NO ₇	FW 333.2928
--	--------------------

Acquisition Time (sec) 1.2111	Comment single pulse	Date 19 May 2015 09:52:26	
Date Stamp 19 May 2015 08:59:05		File Name C:\USERS\lta6a534\DOWNLOADS\FZ4289-1.JDF	Frequency (MHz) 600.17
Nucleus 1H	Number of Transients 8	Origin ECA 600	Original Points Count 16384
Points Count 16384	Pulse Sequence single_pulse.ex2	Receiver Gain 38.00	Owner delta
Spectrum Offset (Hz) 3623.7708	Sweep Width (Hz) 13528.14	Temperature (degree C) 20.100	Solvent DMSO-d6



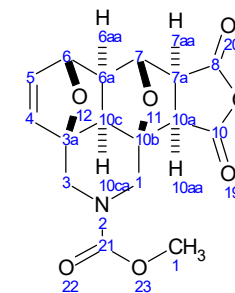
3c

FZ4289-1.JDF



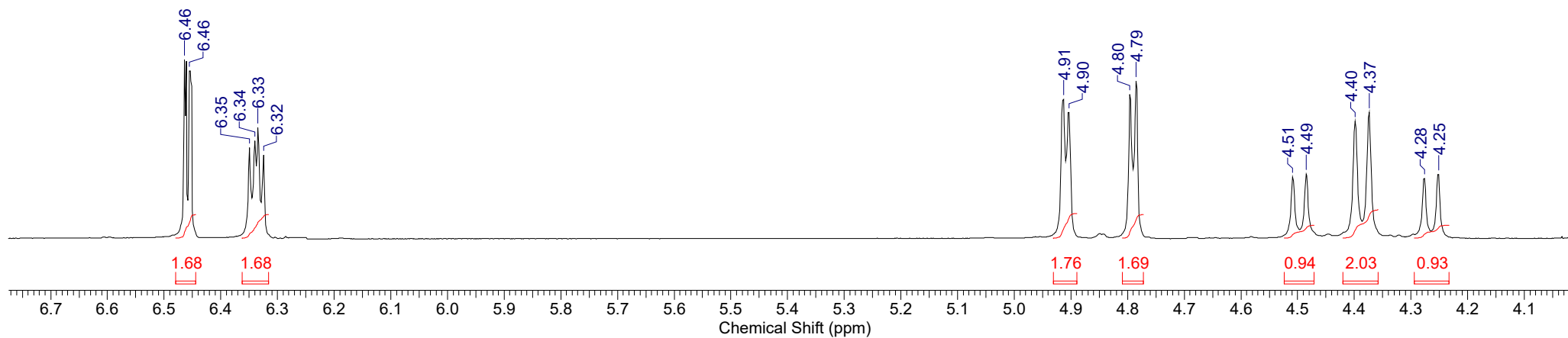
Formula C ₁₆ H ₁₅ NO ₇	FW 333.2928
--	--------------------

Acquisition Time (sec) 1.2111	Comment single pulse	Date 19 May 2015 09:52:26	Frequency (MHz) 600.17
Date Stamp 19 May 2015 08:59:05	File Name C:\USERS\Л1а6а534\DOWNLOADS\FZ4289-1.JDF	Original Points Count 16384	Owner delta
Nucleus 1H	Number of Transients 8	Origin ECA 600	Receiver Gain 38.00
Points Count 16384	Pulse Sequence single_pulse.ex2	Solvent DMSO-d6	
Spectrum Offset (Hz) 3623.7708	Sweep Width (Hz) 13528.14	Temperature (degree C) 20.100	



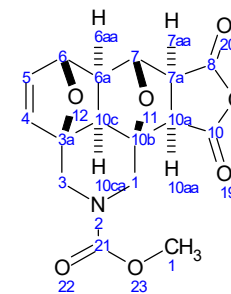
3c

FZ4289-1.JDF



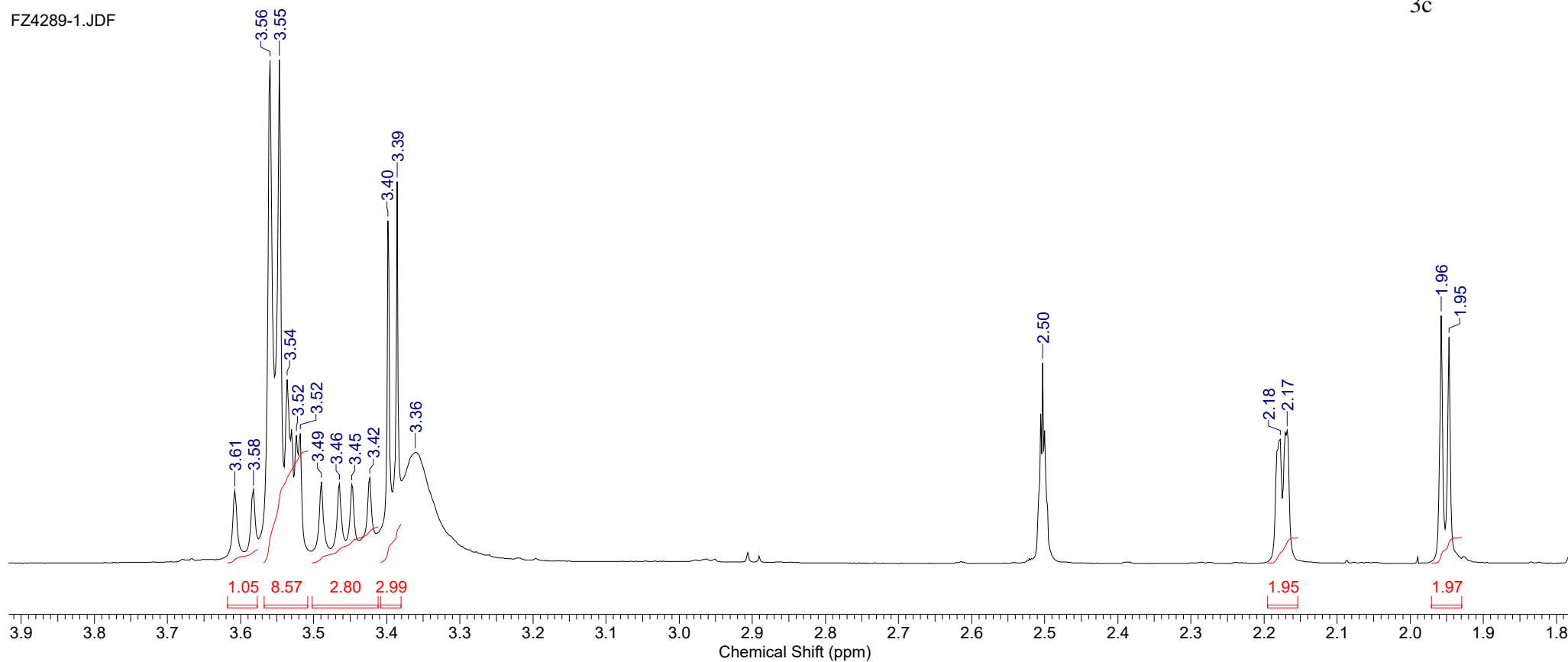
Formula C ₁₆ H ₁₅ NO ₇	FW 333.2928
--	--------------------

Acquisition Time (sec) 1.2111	Comment single pulse	Date 19 May 2015 09:52:26	
Date Stamp 19 May 2015 08:59:05		File Name C:\USERS\lta6a534\DOWNLOADS\FZ4289-1.JDF	Frequency (MHz) 600.17
Nucleus 1H	Number of Transients 8	Origin ECA 600	Original Points Count 16384
Points Count 16384	Pulse Sequence single_pulse.ex2	Receiver Gain 38.00	Owner delta
Spectrum Offset (Hz) 3623.7708	Sweep Width (Hz) 13528.14	Temperature (degree C) 20.100	Solvent DMSO-d6



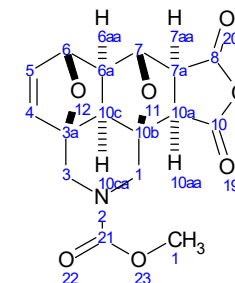
3c

FZ4289-1.JDF

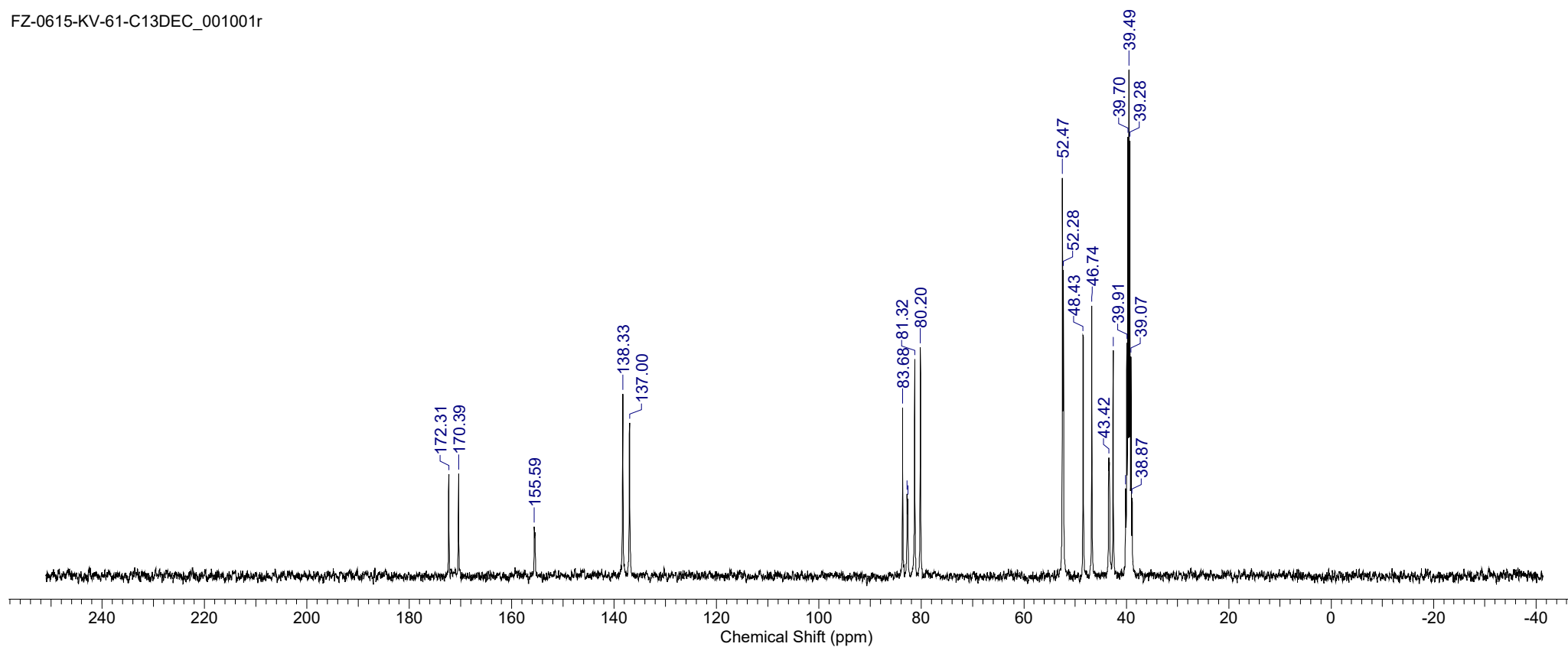


Formula C ₁₆ H ₁₅ NO ₇	FW 333.2928
--	--------------------

Acquisition Time (sec) 0.5571	Comment 5 mm QNP 1H/15N/13C/31P Z3379/0400	Date 18 Jun 2015 09:31:44
Date Stamp 18 Jun 2015 09:31:44	File Name C:\USERS\Лаб6а534\DESKTOP\FZ-0615-KV-61-C13DEC_001001r	
Frequency (MHz) 100.61	Nucleus 13C	Number of Transients 767
Original Points Count 16384	Owner root	Origin spect
Receiver Gain 32768.00	SW(cyclical) (Hz) 29411.77	Points Count 65536
Sweep Width (Hz) 29411.32	Temperature (degree C) 27.000	Pulse Sequence zgpg
	Solvent DMSO-d6	Spectrum Offset (Hz) 10547.2158

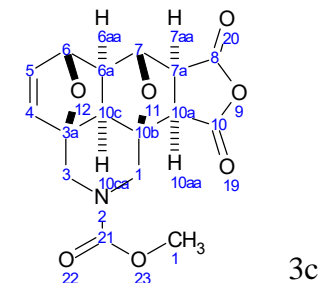


FZ-0615-KV-61-C13DEC_001001r

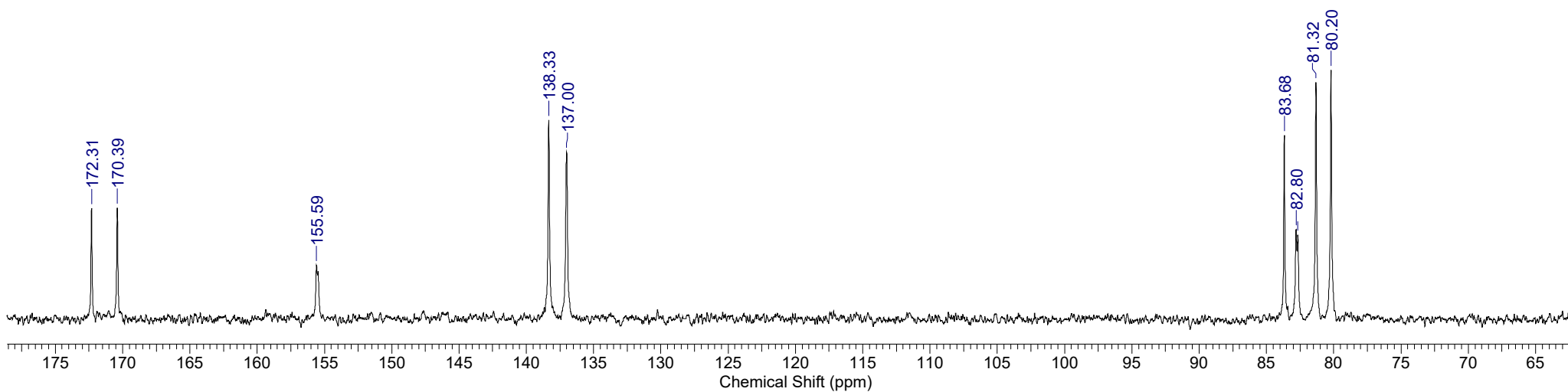


Formula C ₁₆ H ₁₅ NO ₇	FW 333.2928
--	--------------------

Acquisition Time (sec) 0.5571	Comment 5 mm QNP 1H/15N/13C/31P Z3379/0400	Date 18 Jun 2015 09:31:44
Date Stamp 18 Jun 2015 09:31:44	File Name C:\USERS\Лабa534\DESKTOP\FZ-0615-KV-61-C13DEC_001001r	
Frequency (MHz) 100.61	Nucleus 13C	Number of Transients 767
Original Points Count 16384	Owner root	Origin spect
Receiver Gain 32768.00	SW(cyclical) (Hz) 29411.77	Points Count 65536
Sweep Width (Hz) 29411.32	Temperature (degree C) 27.000	Pulse Sequence zgpg
	Solvent DMSO-d6	Spectrum Offset (Hz) 10547.2158

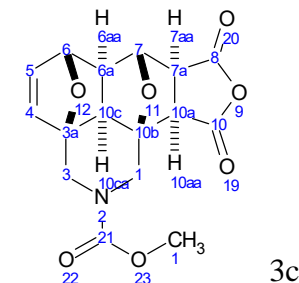


FZ-0615-KV-61-C13DEC_001001r

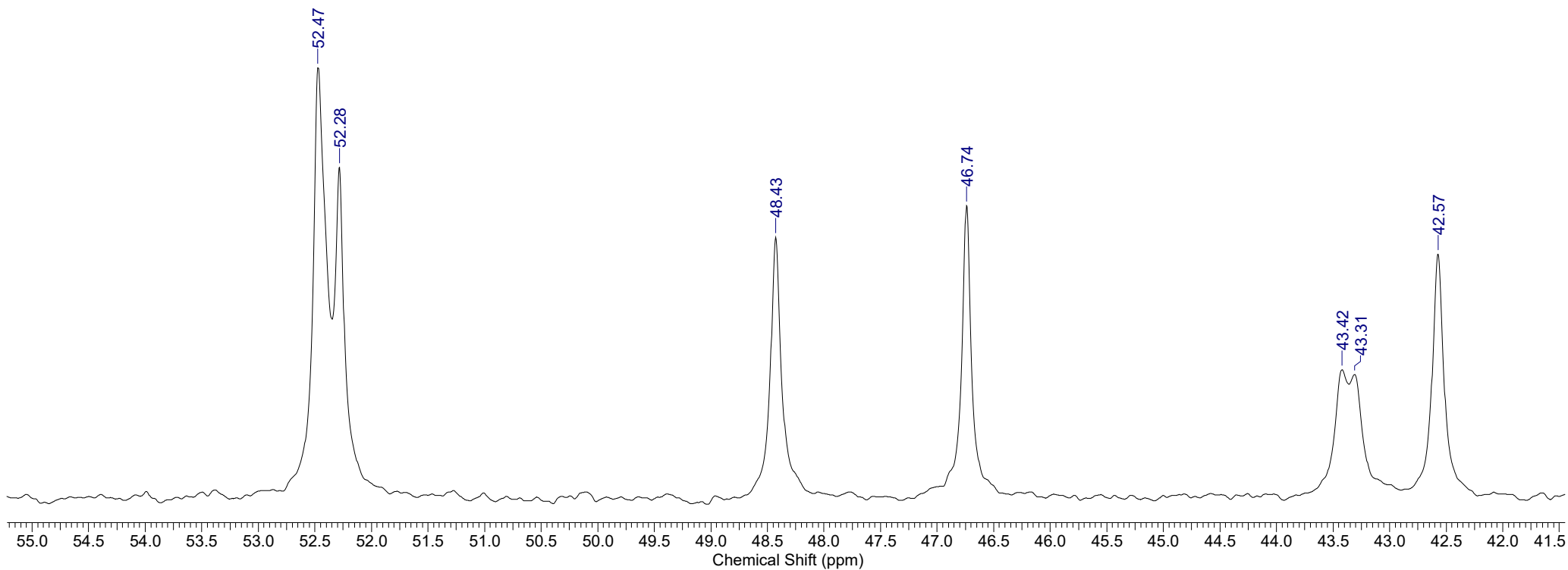


Formula C ₁₆ H ₁₅ NO ₇	FW 333.2928
--	--------------------

Acquisition Time (sec) 0.5571	Comment 5 mm QNP 1H/15N/13C/31P Z3379/0400	Date 18 Jun 2015 09:31:44
Date Stamp 18 Jun 2015 09:31:44	File Name C:\USERS\Лабa534\DESKTOP\FZ-0615-KV-61-C13DEC_001001r	
Frequency (MHz) 100.61	Nucleus 13C	Number of Transients 767
Original Points Count 16384	Owner root	Origin spect
Receiver Gain 32768.00	SW(cyclical) (Hz) 29411.77	Points Count 65536
Sweep Width (Hz) 29411.32	Temperature (degree C) 27.000	Pulse Sequence zgpg
	Solvent DMSO-d6	Spectrum Offset (Hz) 10547.2158

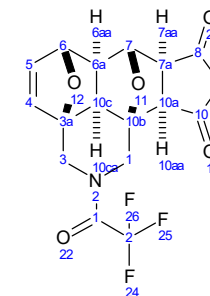


FZ-0615-KV-61-C13DEC_001001r



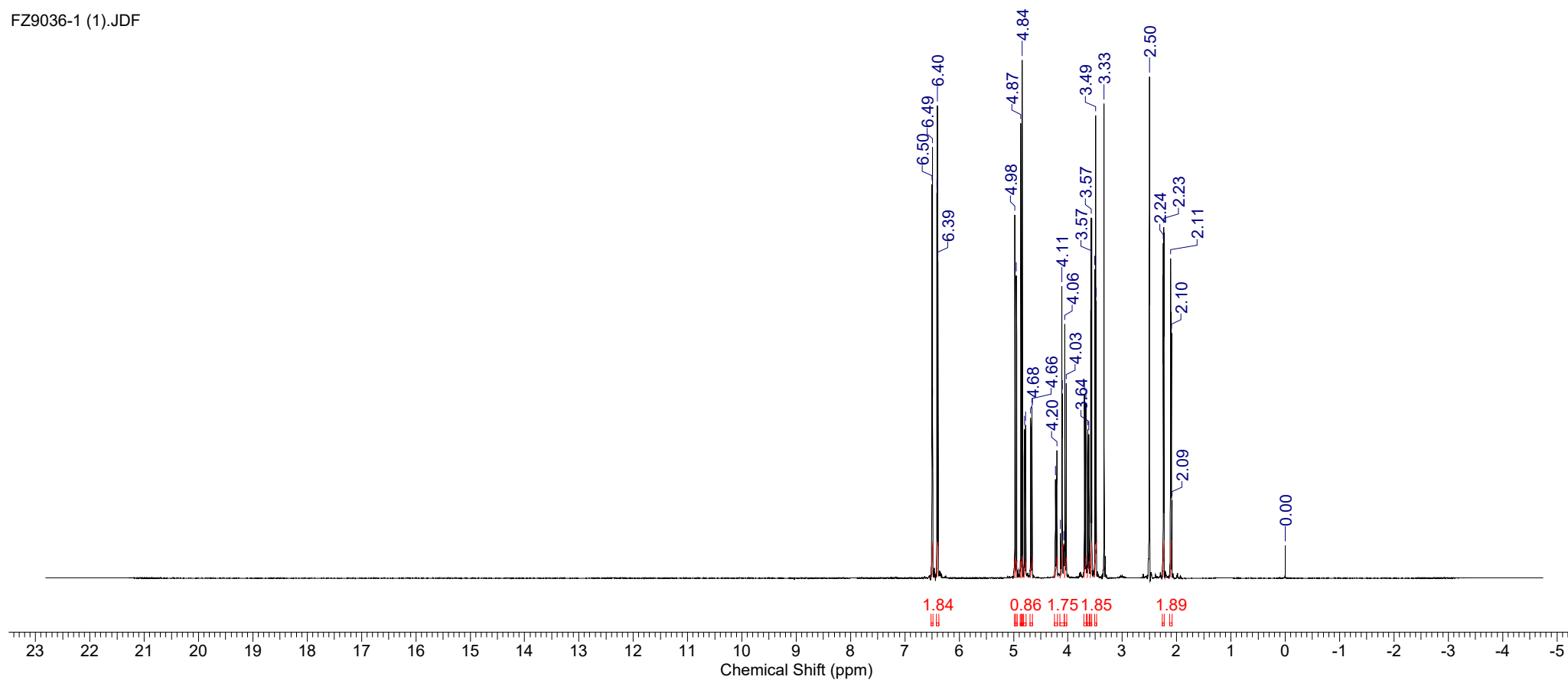
Formula C ₁₆ H ₁₂ F ₃ NO ₆	FW 371.2648
---	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 25 Aug 2020 09:36:41	Date Stamp 25 Aug 2020 09:37:56
File Name C:\USERS\Лабa534\DOWNLOADS\FZ9036-1 (1).JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 38.00	Solvent DMSO-d6	Spectrum Offset (Hz) 5422.7378	Sweep Width (Hz) 16534.39



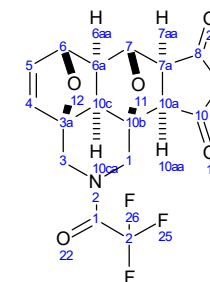
3d

FZ9036-1 (1).JDF



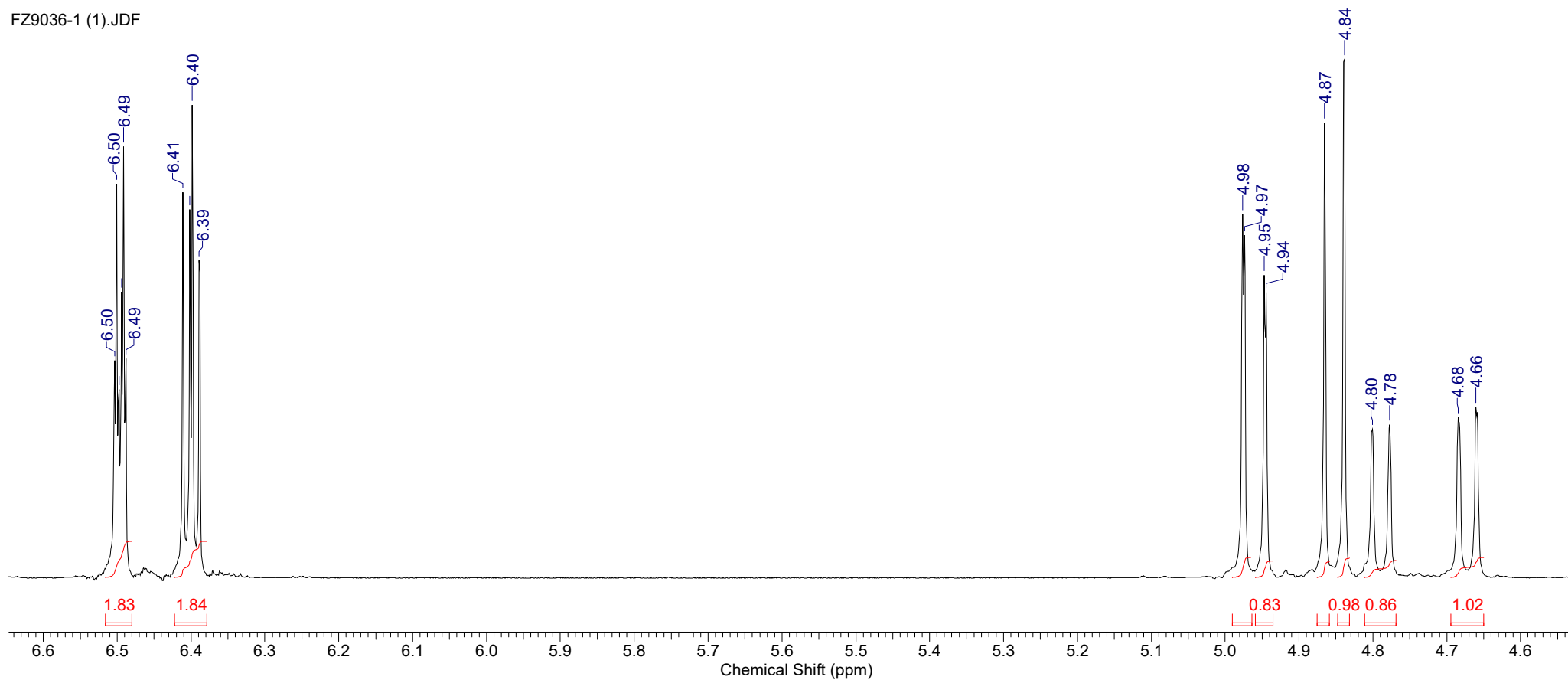
Formula C₁₆H₁₂F₃NO₆ FW 371.2648

Acquisition Time (sec)	1.9818	Comment	single_pulse	Date	25 Aug 2020 09:36:41	Date Stamp	25 Aug 2020 09:37:56
File Name	C:\USERS\Лабa534\DOWNLOADS\FZ9036-1 (1).JDF	Frequency (MHz)	600.17	Nucleus	1H	Number of Transients	8
Origin	ECA 600	Original Points Count	32768	Owner	CKP	Points Count	32768
Receiver Gain	38.00	Solvent	DMSO-d6	Spectrum Offset (Hz)	5422.7378	Sweep Width (Hz)	16534.39
						Pulse Sequence	single_pulse.ex2



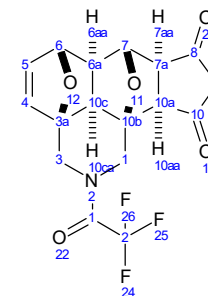
3d

FZ9036-1 (1).JDF

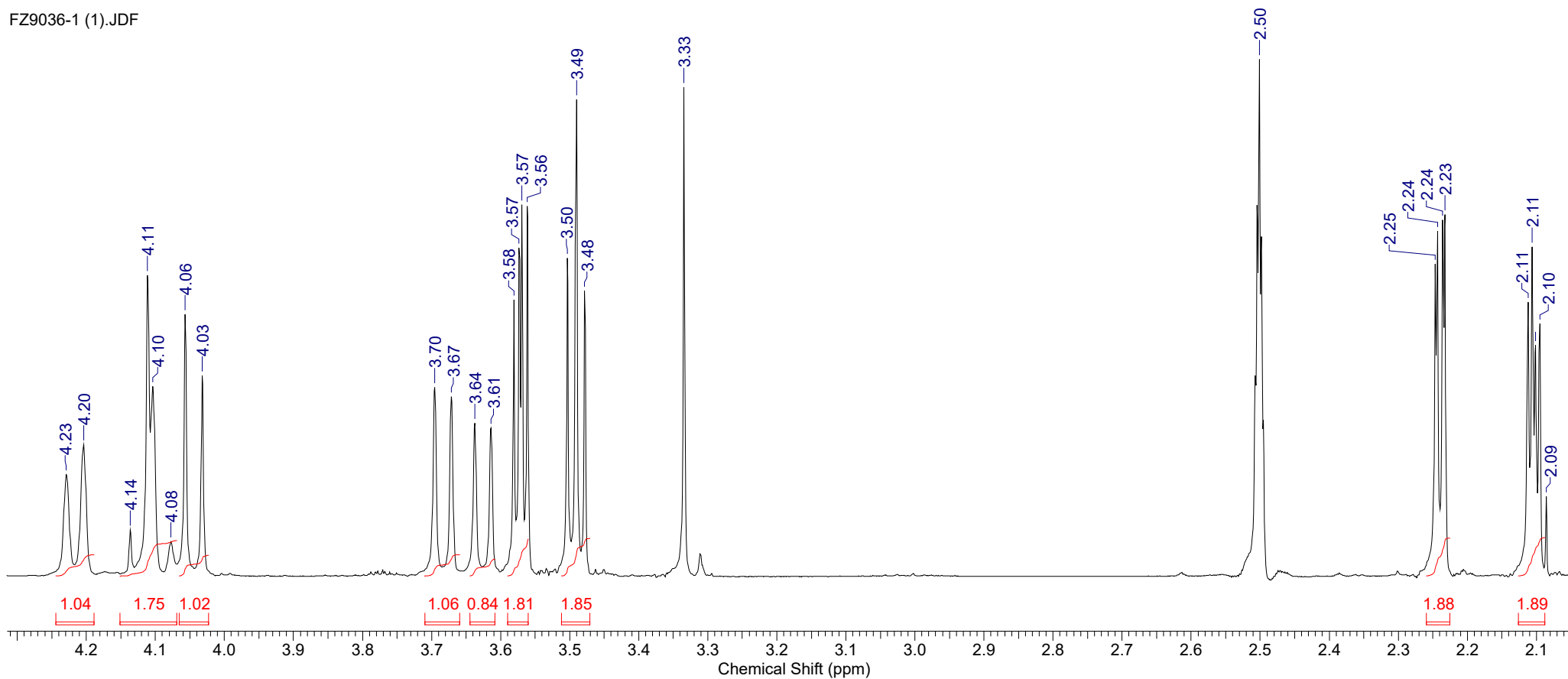


Formula C₁₆H₁₂F₃NO₆ **FW** 371.2648

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 25 Aug 2020 09:36:41	Date Stamp 25 Aug 2020 09:37:56
File Name C:\USERS\Лабa534\DOWNLOADS\FZ9036-1 (1).JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 38.00	Solvent DMSO-d6	Spectrum Offset (Hz) 5422.7378	Sweep Width (Hz) 16534.39

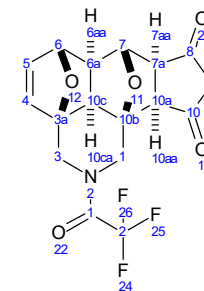


FZ9036-1 (1).JDF



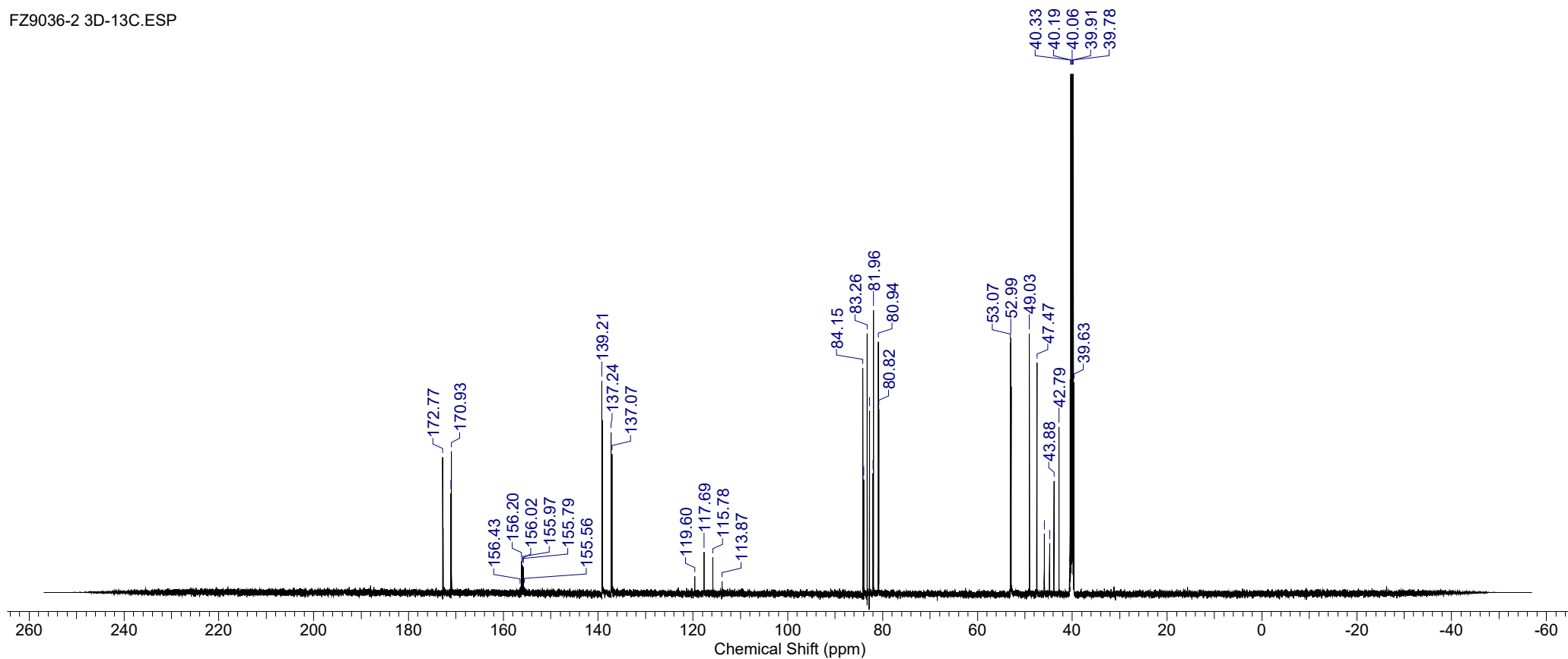
Formula C ₁₆ H ₁₂ F ₃ NO ₆	FW 371.2648
---	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 25 Aug 2020 10:22:15
Date Stamp 25 Aug 2020 10:23:30	File Name C:\USERS\lpa6a534\DOWNLOADS\FZ9036-2.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 2744	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49	Receiver Gain 58.00
		Solvent DMSO-d6



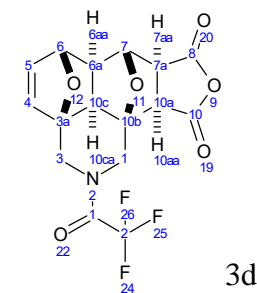
3d

FZ9036-2 3D-13C.ESP

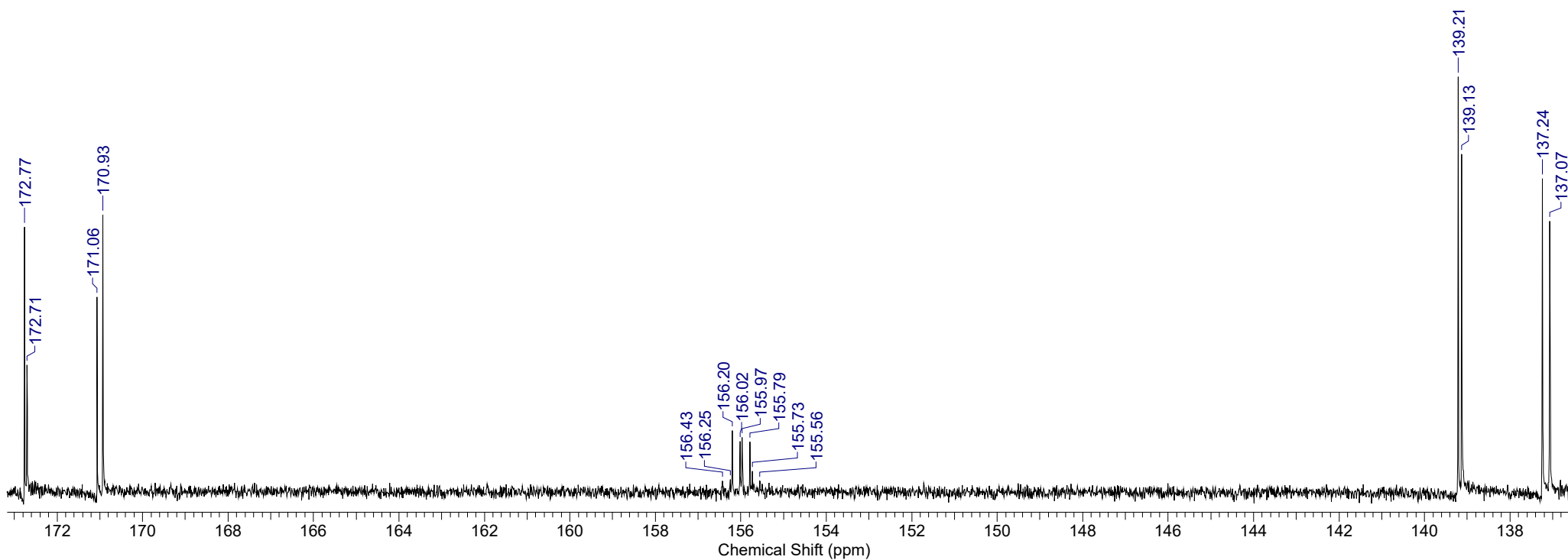


Formula C ₁₆ H ₁₂ F ₃ NO ₆	FW 371.2648
---	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 25 Aug 2020 10:22:15
Date Stamp 25 Aug 2020 10:23:30	File Name C:\USERS\lta6a534\DOWNLOADS\FZ9036-2.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 2744	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49	Receiver Gain 58.00
		Solvent DMSO-d6

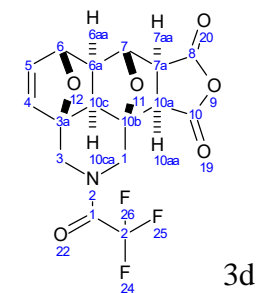


FZ9036-2 3D-13C.ESP

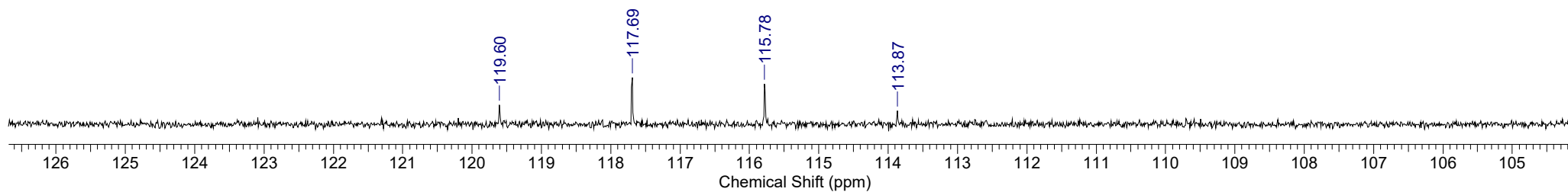


Formula C ₁₆ H ₁₂ F ₃ NO ₆	FW 371.2648
---	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 25 Aug 2020 10:22:15
Date Stamp 25 Aug 2020 10:23:30	File Name C:\USERS\lpa6a534\DOWNLOADS\FZ9036-2.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 2744	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49	Receiver Gain 58.00
		Solvent DMSO-d6

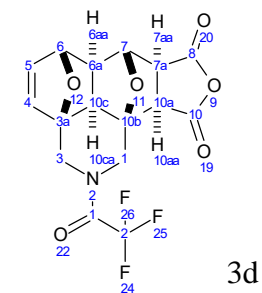


FZ9036-2 3D-13C.ESP

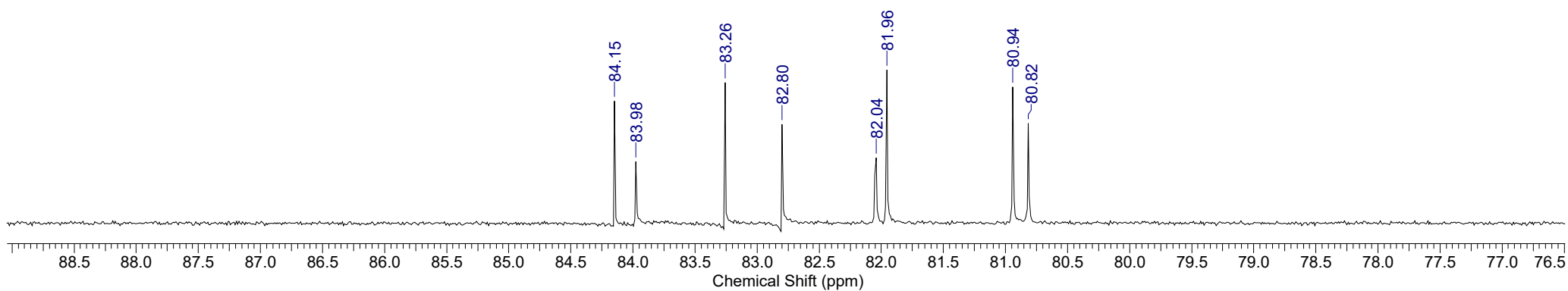


Formula C ₁₆ H ₁₂ F ₃ NO ₆	FW 371.2648
---	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 25 Aug 2020 10:22:15
Date Stamp 25 Aug 2020 10:23:30	File Name C:\USERS\lta6a534\DOWNLOADS\FZ9036-2.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 2744	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49	Receiver Gain 58.00
		Owner CKP
		Solvent DMSO-d6

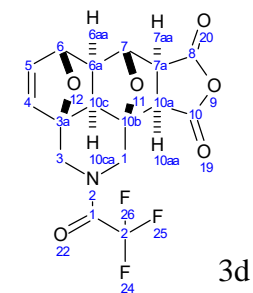


FZ9036-2 3D-13C.ESP

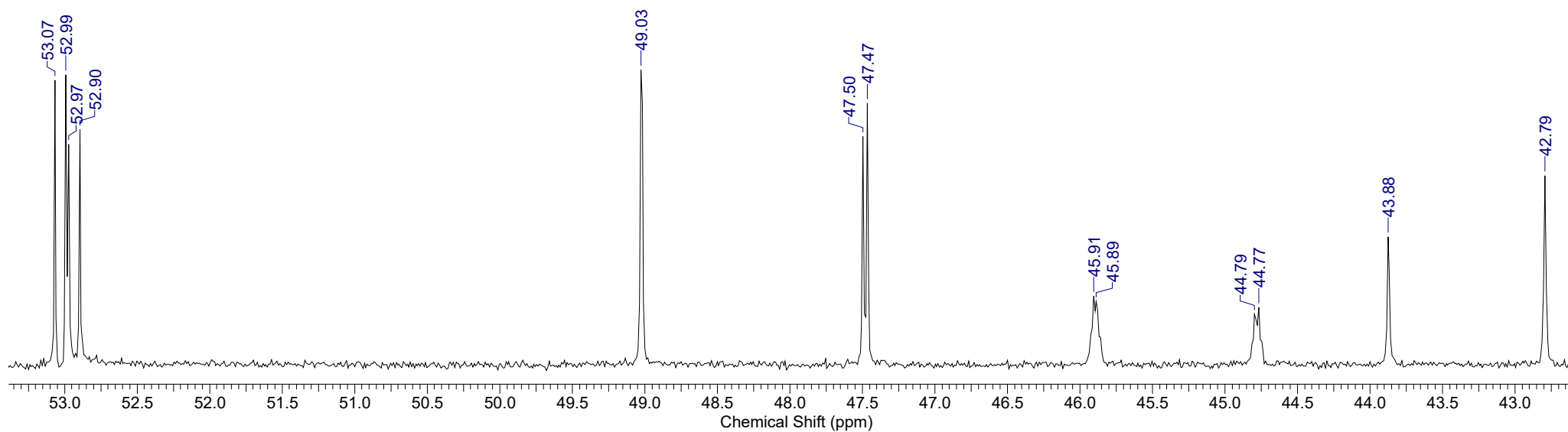


Formula C ₁₆ H ₁₂ F ₃ NO ₆	FW 371.2648
---	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 25 Aug 2020 10:22:15
Date Stamp 25 Aug 2020 10:23:30	File Name C:\USERS\lta6a534\DOWNLOADS\FZ9036-2.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 2744	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49	Receiver Gain 58.00
		Solvent DMSO-d6

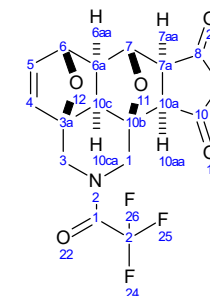


FZ9036-2 3D-13C.ESP



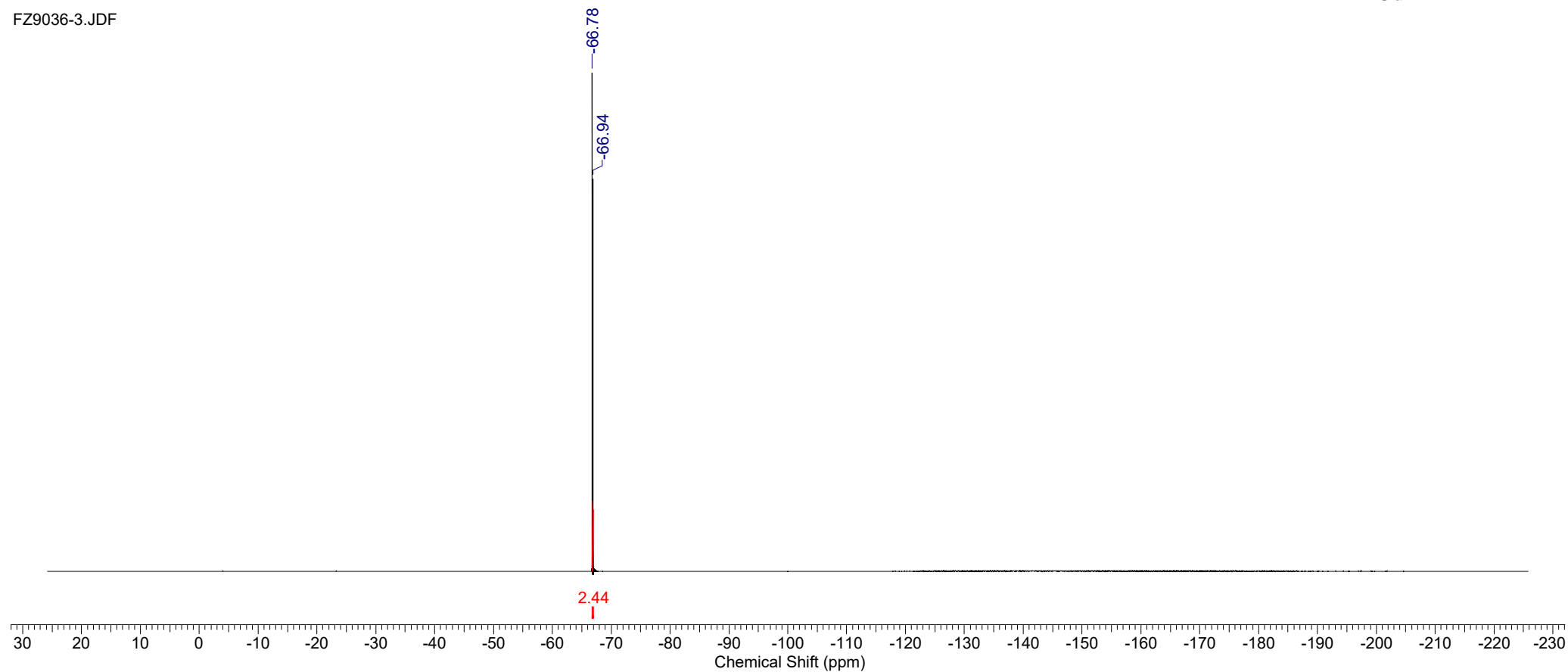
Formula C ₁₆ H ₁₂ F ₃ NO ₆	FW 371.2648
---	--------------------

Acquisition Time (sec) 0.4614	Comment single_pulse	Date 25 Aug 2020 10:24:17	Date Stamp 25 Aug 2020 10:25:32
File Name C:\USERS\Лабa534\DOWNLOADS\FZ9036-3.JDF	Frequency (MHz) 564.73	Nucleus 19F	Number of Transients 8
Origin ECA 600	Original Points Count 65536	Owner CKP	Points Count 65536
Receiver Gain 44.00	Solvent DMSO-d6	Spectrum Offset (Hz) -56472.6094	Sweep Width (Hz) 142045.45



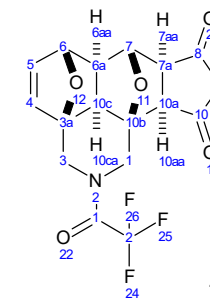
3d

FZ9036-3.JDF

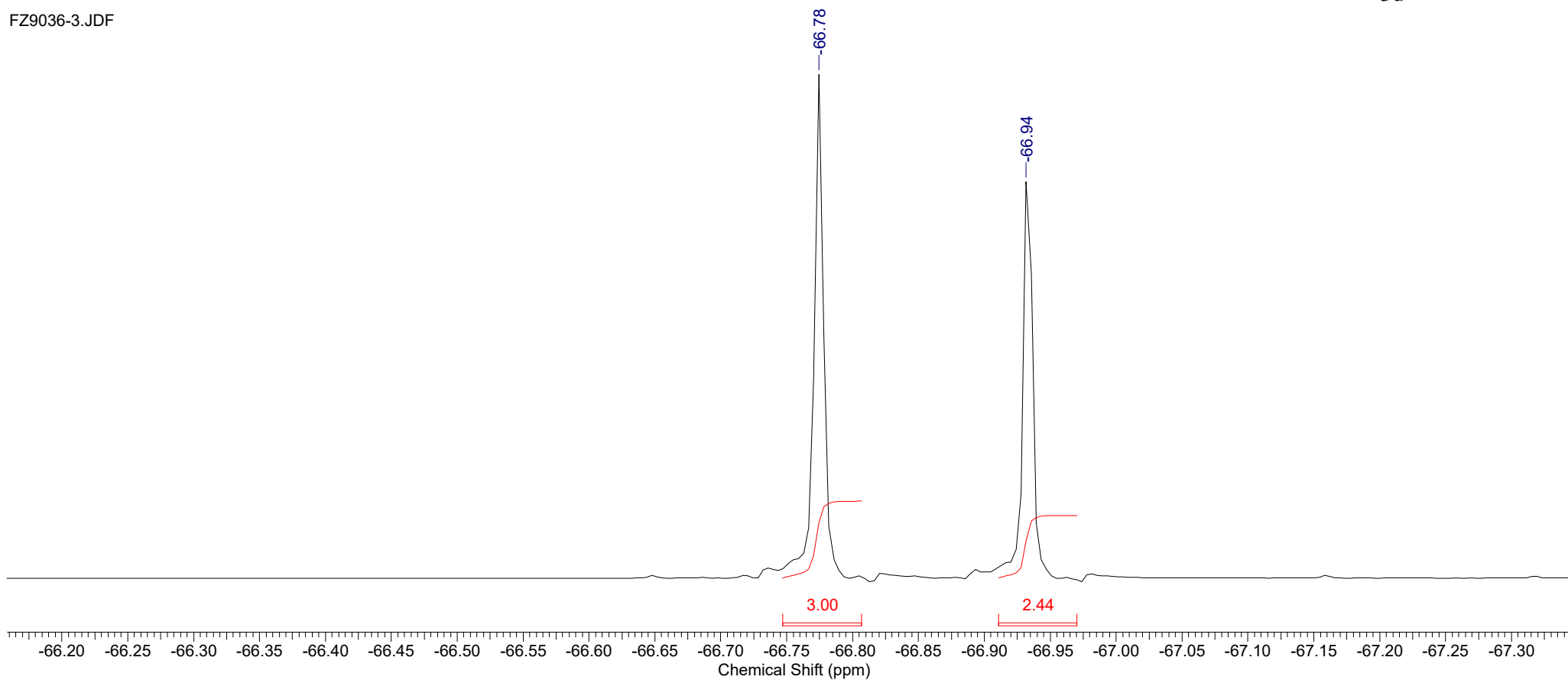


Formula C ₁₆ H ₁₂ F ₃ NO ₆	FW 371.2648
---	--------------------

Acquisition Time (sec) 0.4614	Comment single_pulse	Date 25 Aug 2020 10:24:17	Date Stamp 25 Aug 2020 10:25:32
File Name C:\USERS\Лабa534\DOWNLOADS\FZ9036-3.JDF	Frequency (MHz) 564.73	Nucleus 19F	Number of Transients 8
Origin ECA 600	Original Points Count 65536	Owner CKP	Points Count 65536
Receiver Gain 44.00	Solvent DMSO-d6	Spectrum Offset (Hz) -56472.6094	Sweep Width (Hz) 142045.45
			Pulse Sequence single_pulse.ex2

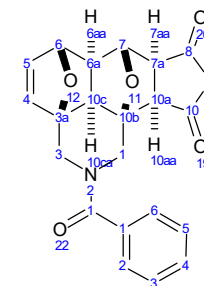


FZ9036-3.JDF



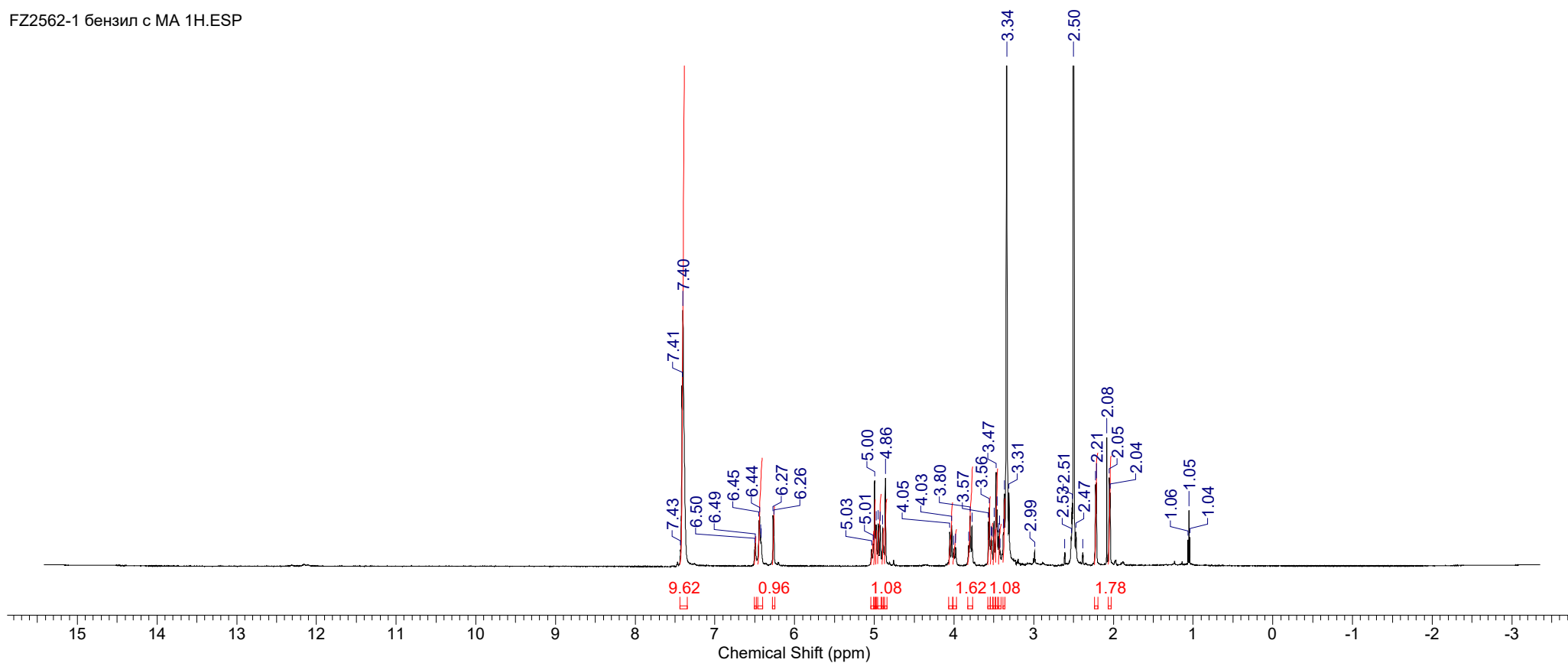
Formula C ₂₁ H ₁₇ NO ₆	FW 379.3628
--	--------------------

Acquisition Time (sec) 1.4549	Comment single pulse	Date 01 Nov 2012 13:57:59	Frequency (MHz) 600.17
Date Stamp 01 Nov 2012 13:10:57	File Name C:\USERS\Лаб6а534\DOWNLOADS\FZ2562-1.JDF	Original Points Count 16384	Owner delta
Nucleus 1H	Number of Transients 16	Origin ECA 600	Receiver Gain 42.00
Points Count 16384	Pulse Sequence single_pulse.ex2	Temperature (degree C) 21.100	Solvent DMSO-d6
Spectrum Offset (Hz) 3620.6384	Sweep Width (Hz) 11261.26		



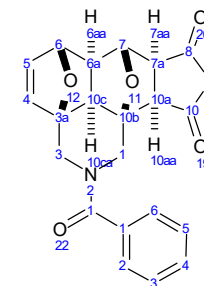
3e

FZ2562-1 бензил с МА 1Н.ESP



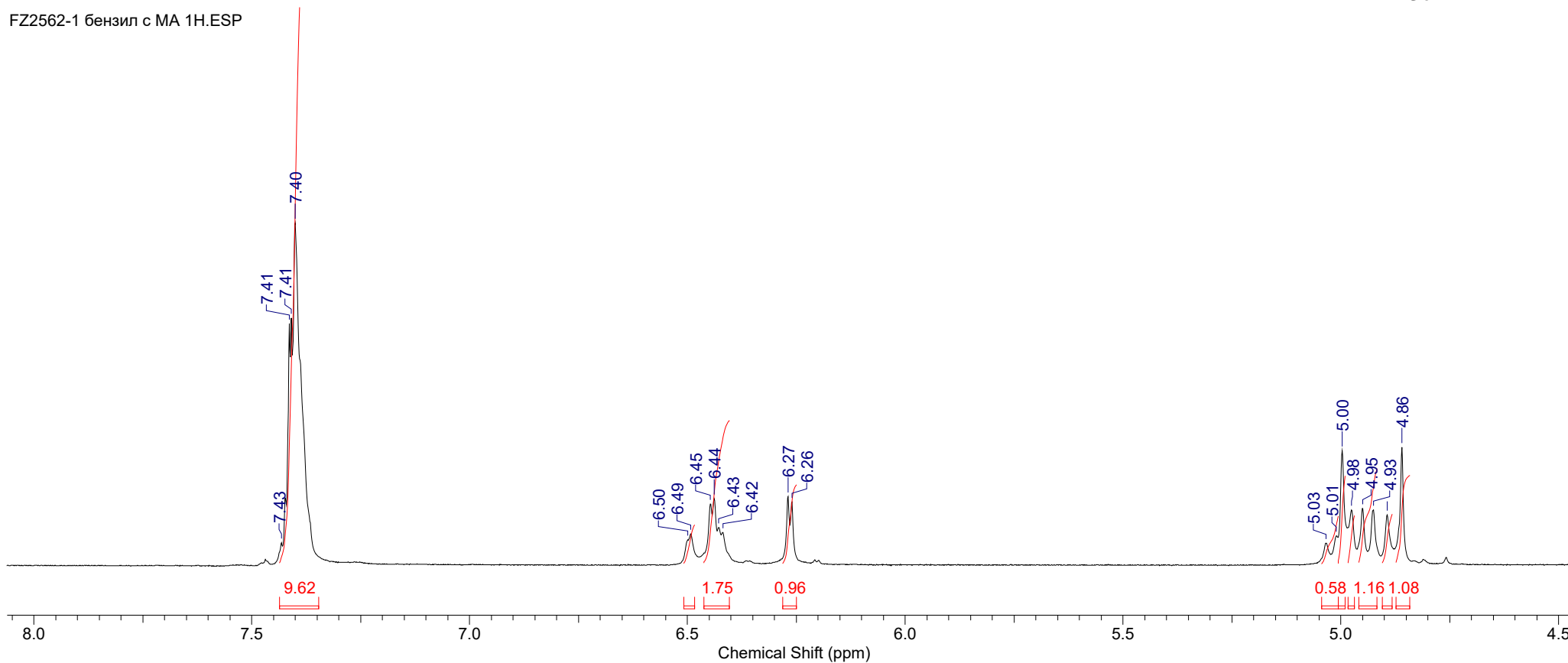
Formula C ₂₁ H ₁₇ NO ₆	FW 379.3628
--	--------------------

Acquisition Time (sec) 1.4549	Comment single pulse	Date 01 Nov 2012 13:57:59	Frequency (MHz) 600.17
Date Stamp 01 Nov 2012 13:10:57	File Name C:\USERS\Л\а6а534\DOWNLOADS\FZ2562-1.JDF	Original Points Count 16384	Owner delta
Nucleus 1H	Number of Transients 16	Origin ECA 600	Receiver Gain 42.00
Points Count 16384	Pulse Sequence single_pulse.ex2	Temperature (degree C) 21.100	Solvent DMSO-d6
Spectrum Offset (Hz) 3620.6384	Sweep Width (Hz) 11261.26		



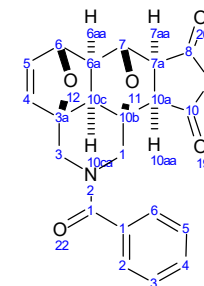
3e

FZ2562-1 бензил с МА 1H.ESP



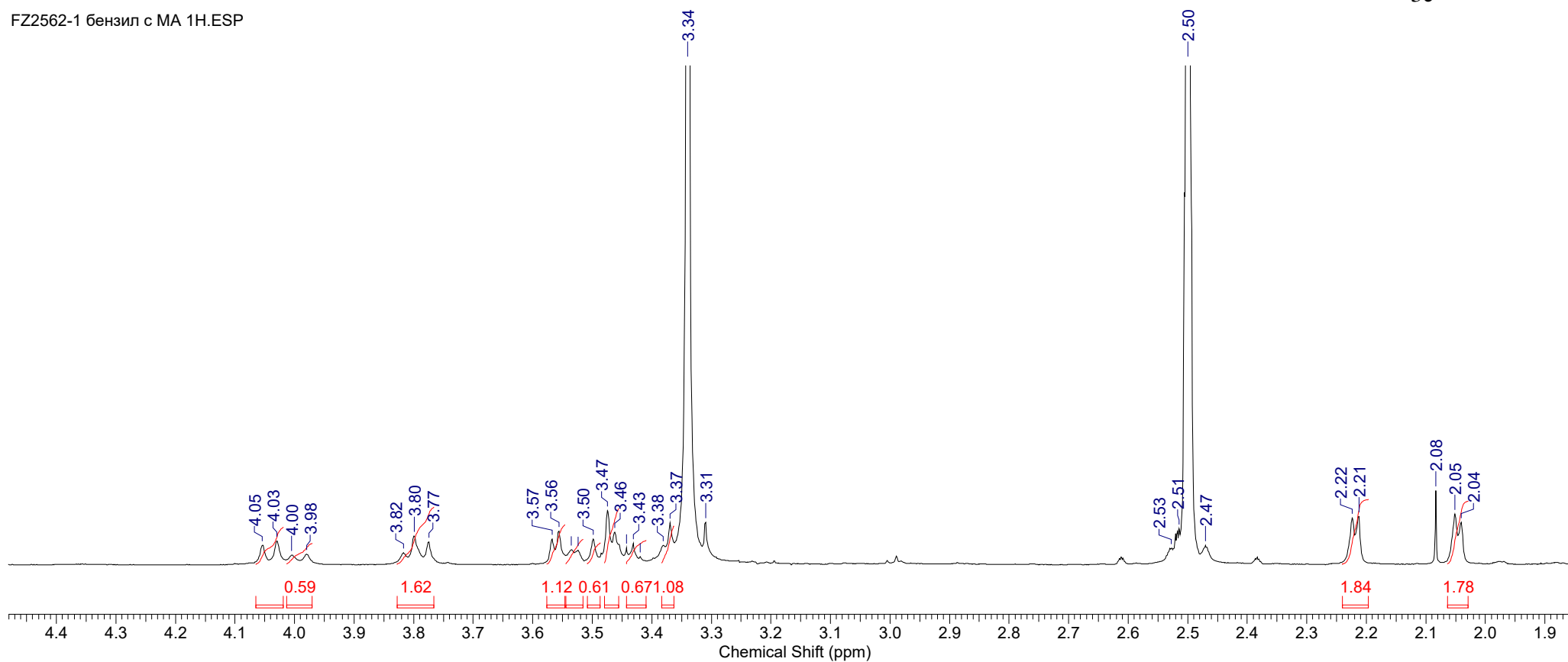
Formula C ₂₁ H ₁₇ NO ₆	FW 379.3628
--	--------------------

Acquisition Time (sec) 1.4549	Comment single pulse	Date 01 Nov 2012 13:57:59	
Date Stamp 01 Nov 2012 13:10:57		File Name C:\USERS\Лга6а534\DOWNLOADS\FZ2562-1.JDF	Frequency (MHz) 600.17
Nucleus 1H	Number of Transients 16	Origin ECA 600	Original Points Count 16384
Points Count 16384	Pulse Sequence single_pulse.ex2		Receiver Gain 42.00
Spectrum Offset (Hz) 3620.6384	Sweep Width (Hz) 11261.26	Temperature (degree C) 21.100	Owner delta
			Solvent DMSO-d6



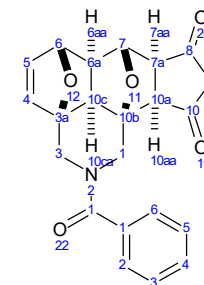
3e

FZ2562-1 бензил с МА 1H.ESP



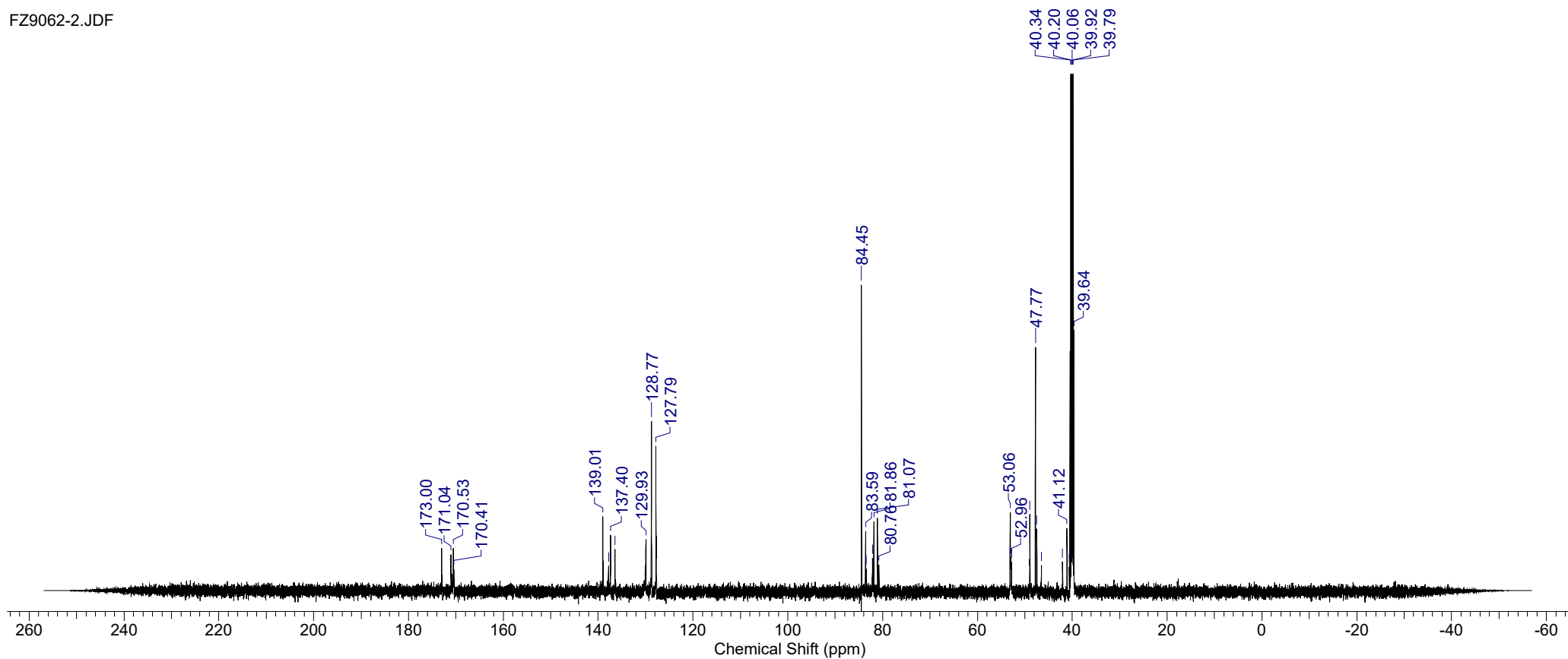
Formula C ₂₁ H ₁₇ NO ₆	FW 379.3628
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 28 Aug 2020 12:38:22
Date Stamp 28 Aug 2020 12:39:42	File Name C:\USERS\lta6a534\DOWNLOADS\FZ9062-2.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 1000	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49	Receiver Gain 58.00
		Solvent DMSO-d6



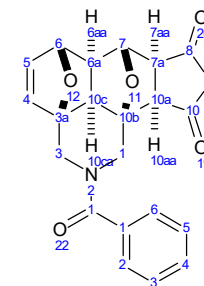
3e

FZ9062-2.JDF



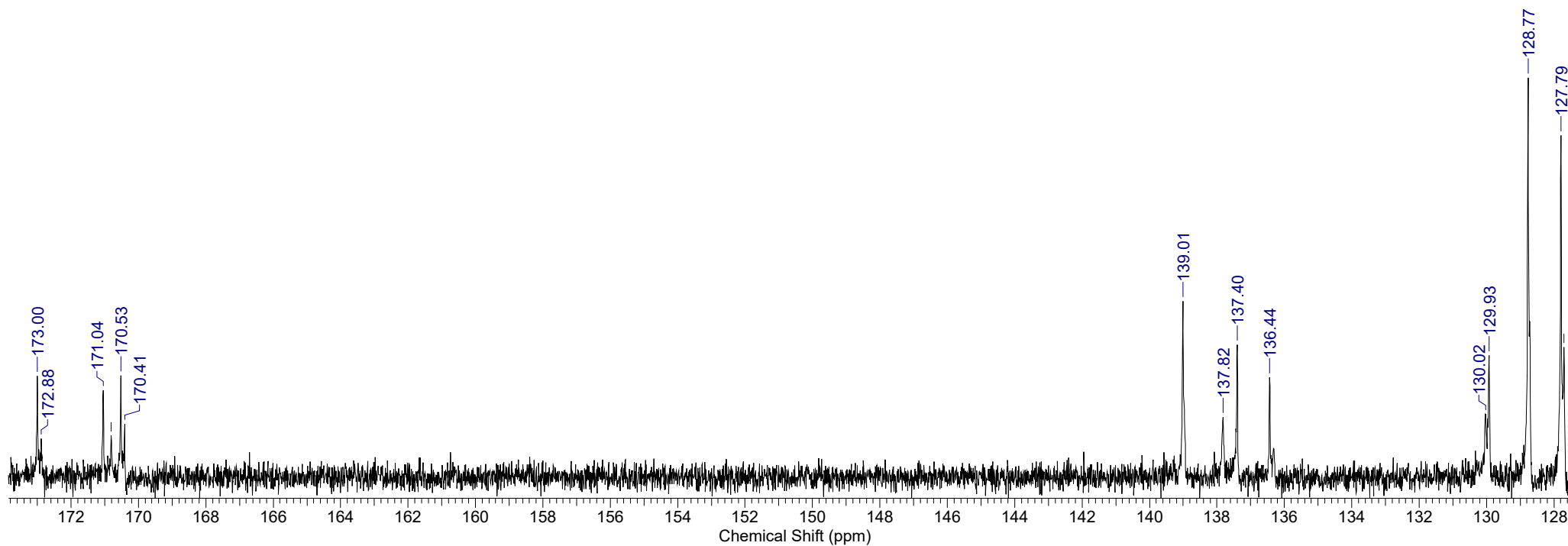
Formula C ₂₁ H ₁₇ NO ₆	FW 379.3628
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 28 Aug 2020 12:38:22
Date Stamp 28 Aug 2020 12:39:42	File Name C:\USERS\lta6a534\DOWNLOADS\FZ9062-2.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 1000	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49	Receiver Gain 58.00
		Solvent DMSO-d6



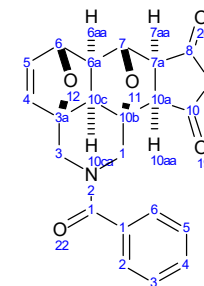
3e

FZ9062-2.JDF



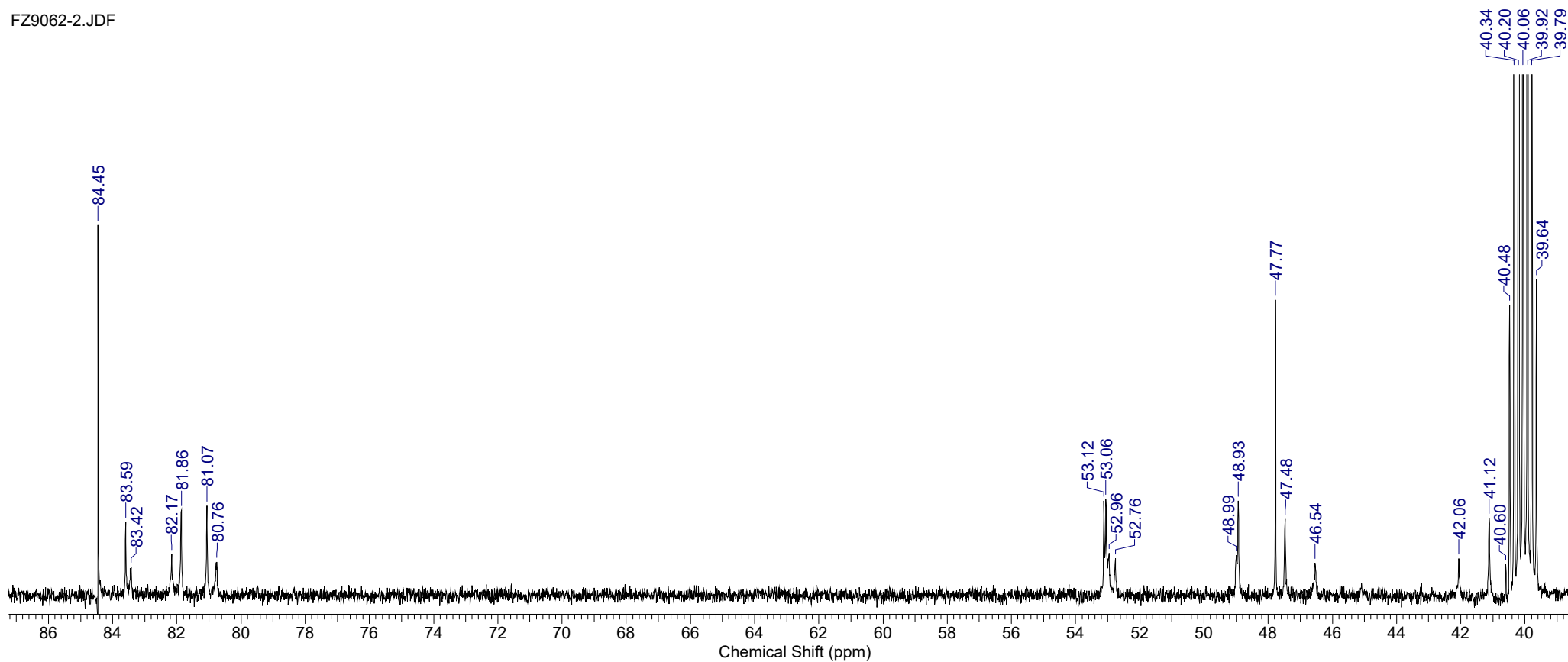
Formula C ₂₁ H ₁₇ NO ₆	FW 379.3628
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 28 Aug 2020 12:38:22
Date Stamp 28 Aug 2020 12:39:42	File Name C:\USERS\lta6a534\DOWNLOADS\FZ9062-2.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 1000	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49	Receiver Gain 58.00
		Solvent DMSO-d6



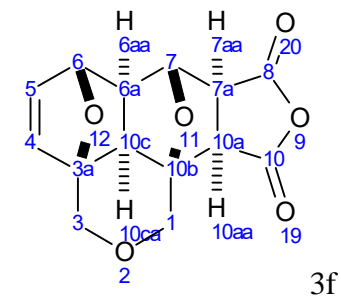
3e

FZ9062-2.JDF

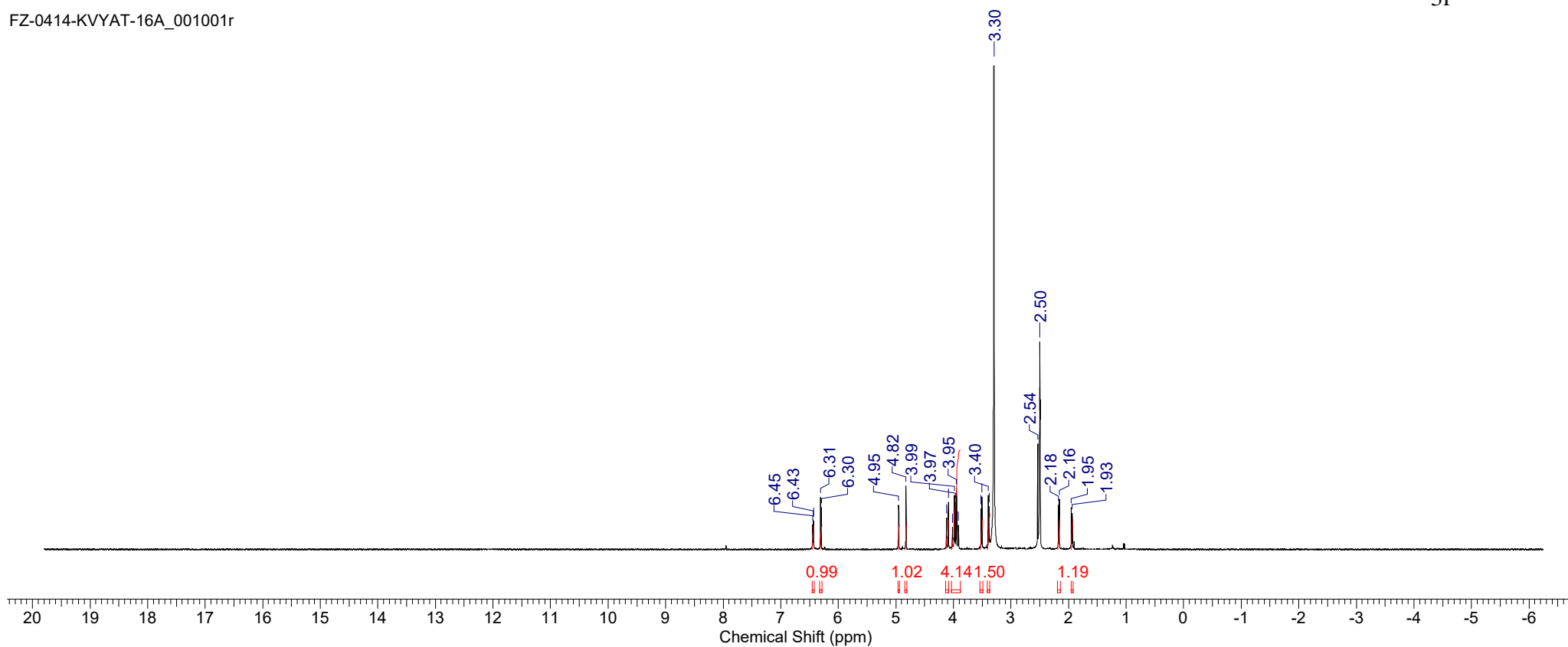


Formula C ₁₄ H ₁₂ O ₆	FW 276.2415
---	--------------------

Acquisition Time (sec) 1.5729	Comment 5 mm QNP 1H/15N/13C/31P Z3379/0400	Date 07 May 2014 15:49:20
Date Stamp 07 May 2014 15:49:20	File Name C:\USERS\laba534\DESKTOP\FZ-0414-KVYAT-16A_001001r	
Frequency (MHz) 400.14	Nucleus 1H	Number of Transients 64
Original Points Count 16384	Owner root	Origin spect
Receiver Gain 1024.00	SW(cyclical) (Hz) 10416.67	Points Count 65536
Sweep Width (Hz) 10416.51	Temperature (degree C) 90.000	Pulse Sequence zg
	Solvent DMSO-d6	Spectrum Offset (Hz) 2712.0005

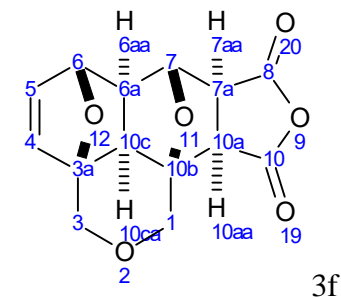


FZ-0414-KVYAT-16A_001001r

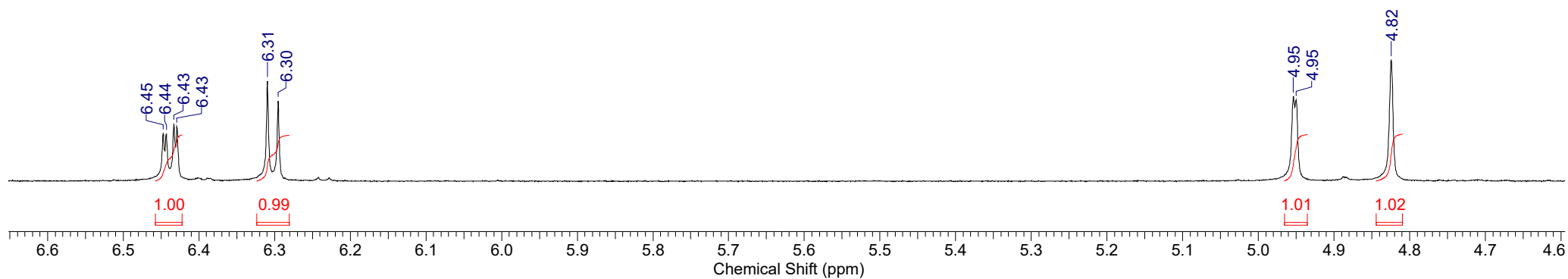


Formula C ₁₄ H ₁₂ O ₆	FW 276.2415
---	--------------------

Acquisition Time (sec)	1.5729	Comment	5 mm QNP 1H/15N/13C/31P Z3379/0400	Date	07 May 2014 15:49:20
Date Stamp	07 May 2014 15:49:20	File Name	C:\USERS\laba534\DESKTOP\FZ-0414-KVYAT-16A_001001r		
Frequency (MHz)	400.14	Nucleus	1H	Number of Transients	64
Original Points Count	16384	Owner	root	Origin	spect
Receiver Gain	1024.00	SW(cyclical) (Hz)	10416.67	Points Count	65536
Sweep Width (Hz)	10416.51	Temperature (degree C)	90.000	Pulse Sequence	zg
				Solvent	DMSO-d6
				Spectrum Offset (Hz)	2712.0005

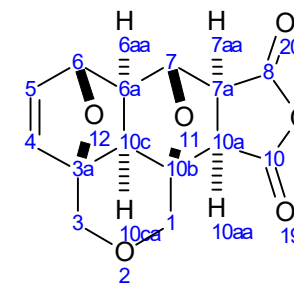


FZ-0414-KVYAT-16A_001001r



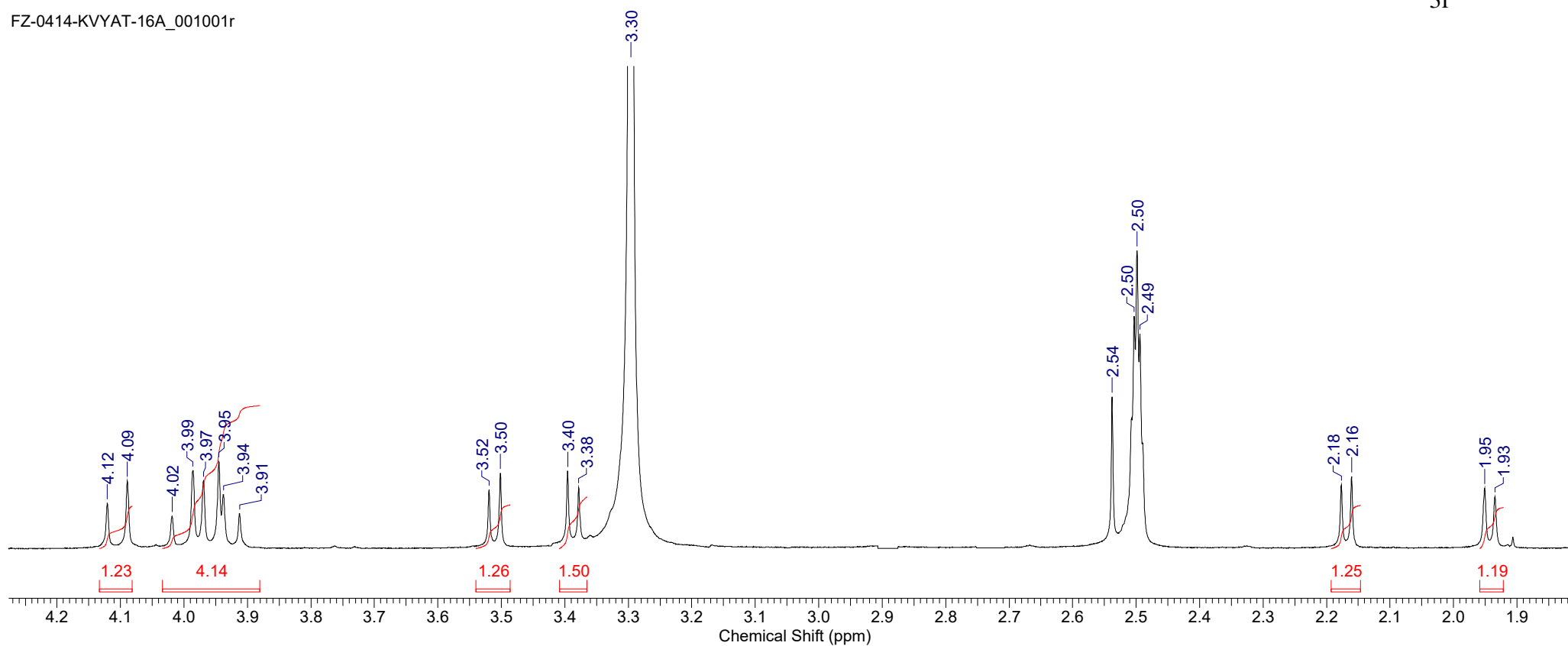
Formula C ₁₄ H ₁₂ O ₆	FW 276.2415
---	--------------------

Acquisition Time (sec) 1.5729	Comment 5 mm QNP 1H/15N/13C/31P Z3379/0400	Date 07 May 2014 15:49:20
Date Stamp 07 May 2014 15:49:20	File Name C:\USERS\Ia6a534\DESKTOP\FZ-0414-KVYAT-16A_001001r	
Frequency (MHz) 400.14	Nucleus 1H	Number of Transients 64
Original Points Count 16384	Owner root	Points Count 65536
Receiver Gain 1024.00	SW(cyclical) (Hz) 10416.67	Origin spect
Sweep Width (Hz) 10416.51	Temperature (degree C) 90.000	Pulse Sequence zg
	Solvent DMSO-d6	Spectrum Offset (Hz) 2712.0005



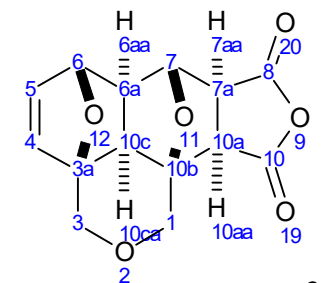
3f

FZ-0414-KVYAT-16A_001001r



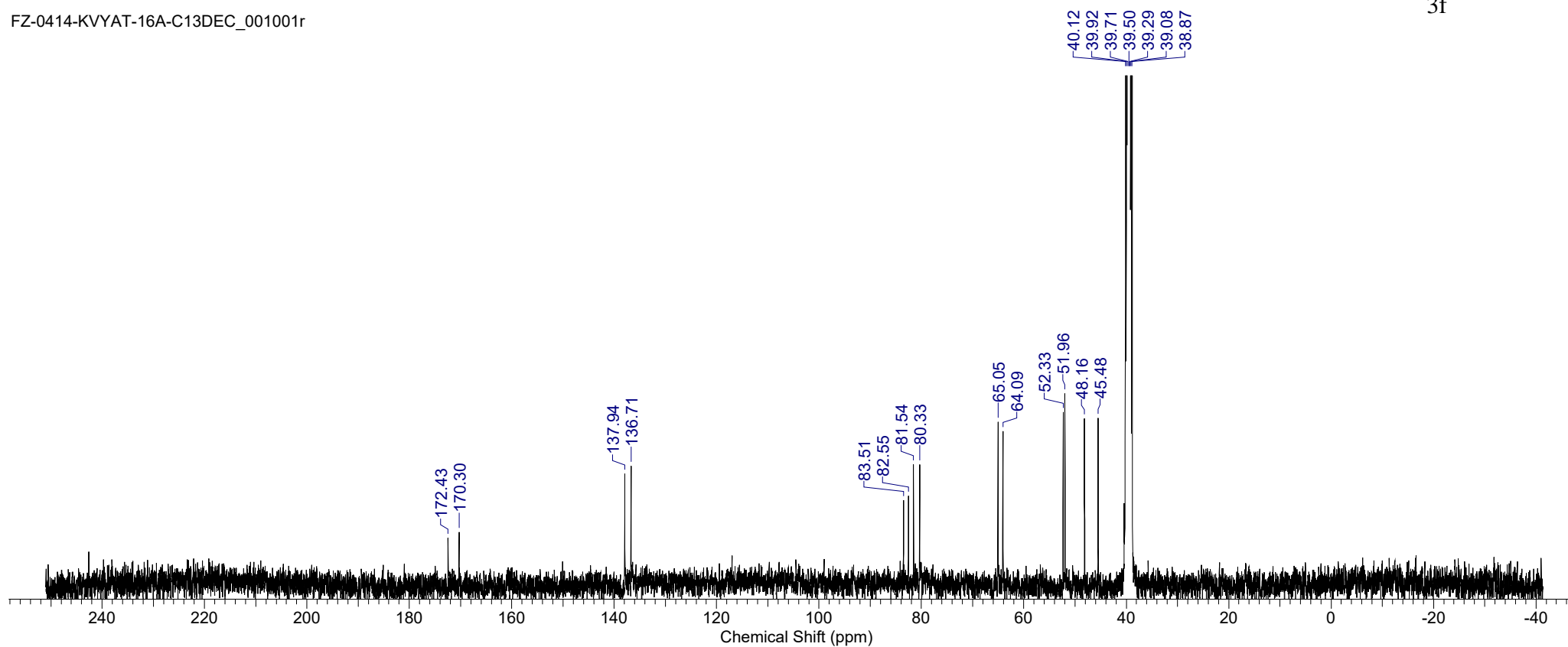
Formula C ₁₄ H ₁₂ O ₆	FW 276.2415
---	--------------------

Acquisition Time (sec) 0.5571	Comment 5 mm QNP 1H/15N/13C/31P Z3379/0400	Date 07 May 2014 15:49:20
Date Stamp 07 May 2014 15:49:20	File Name C:\USERS\lta6a534\DESKTOP\FZ-0414-KVYAT-16A-C13DEC_001001r	
Frequency (MHz) 100.61	Nucleus 13C	Number of Transients 29986
Original Points Count 16384	Owner root	Origin spect
Receiver Gain 32768.00	SW(cyclical) (Hz) 29411.77	Points Count 65536
Sweep Width (Hz) 29411.32	Solvent DMSO-d6	Pulse Sequence zgpg
	Temperature (degree C) 90.000	Spectrum Offset (Hz) 10546.7725



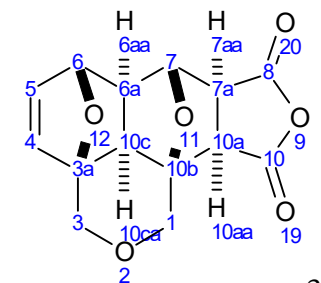
3f

FZ-0414-KVYAT-16A-C13DEC_001001r



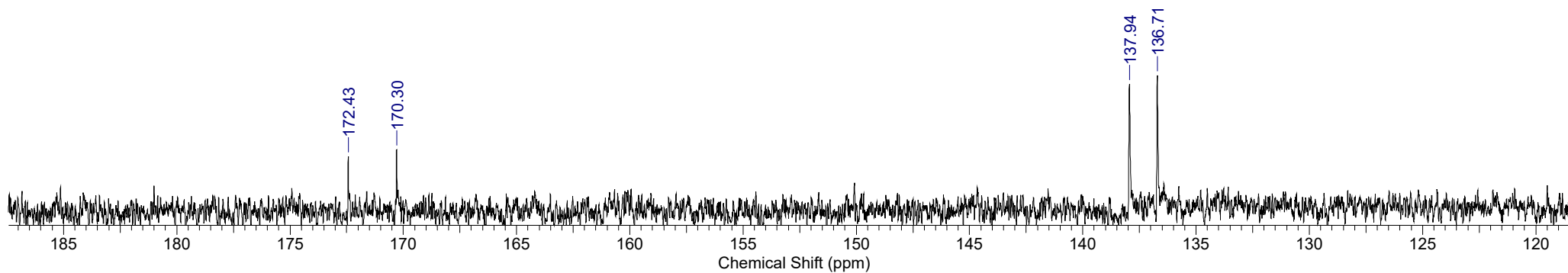
Formula C ₁₄ H ₁₂ O ₆	FW 276.2415
---	--------------------

Acquisition Time (sec)	0.5571	Comment	5 mm QNP 1H/15N/13C/31P Z3379/0400	Date	07 May 2014 15:49:20
Date Stamp	07 May 2014 15:49:20	File Name	C:\USERS\la6a534\DESKTOP\FZ-0414-KVYAT-16A-C13DEC_001001r		
Frequency (MHz)	100.61	Nucleus	13C	Number of Transients	29986
Original Points Count	16384	Owner	root	Points Count	65536
Receiver Gain	32768.00	SW(cyclical) (Hz)	29411.77	Pulse Sequence	zgpg
Sweep Width (Hz)	29411.32	Solvent	DMSO-d6	Spectrum Offset (Hz)	10546.7725
Temperature (degree C)	90.000				



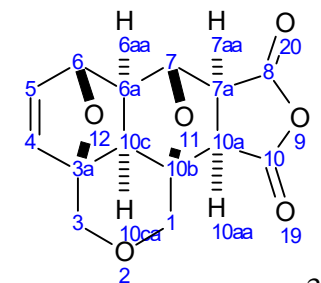
3f

FZ-0414-KVYAT-16A-C13DEC_001001r



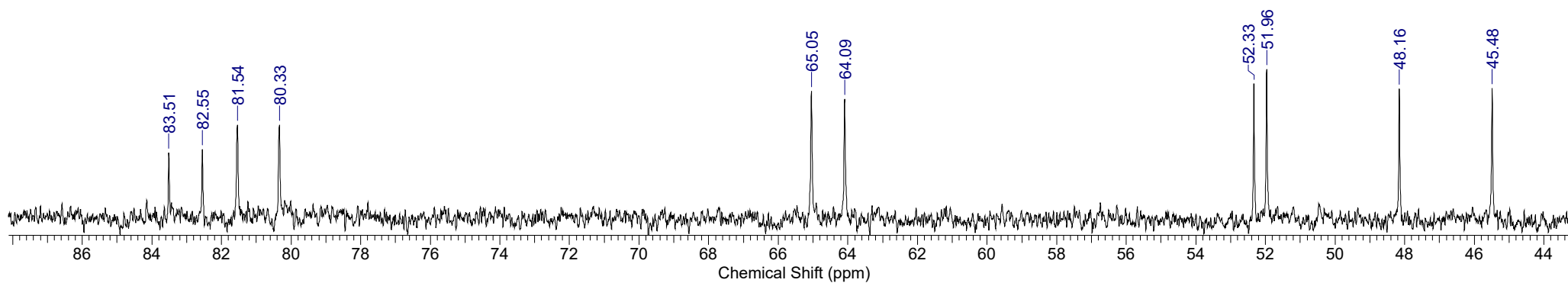
Formula C ₁₄ H ₁₂ O ₆	FW 276.2415
---	--------------------

Acquisition Time (sec)	0.5571	Comment	5 mm QNP 1H/15N/13C/31P Z3379/0400	Date	07 May 2014 15:49:20
Date Stamp	07 May 2014 15:49:20	File Name	C:\USERS\la6a534\DESKTOP\FZ-0414-KVYAT-16A-C13DEC_001001r		
Frequency (MHz)	100.61	Nucleus	13C	Number of Transients	29986
Original Points Count	16384	Owner	root	Points Count	65536
Receiver Gain	32768.00	SW(cyclical) (Hz)	29411.77	Pulse Sequence	zgpg
Sweep Width (Hz)	29411.32	Temperature (degree C)	90.000	Solvent	DMSO-d6
				Spectrum Offset (Hz)	10546.7725



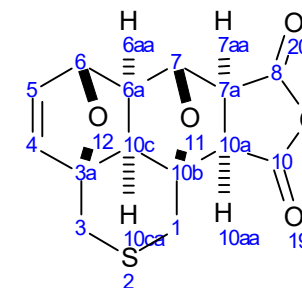
3f

FZ-0414-KVYAT-16A-C13DEC_001001r



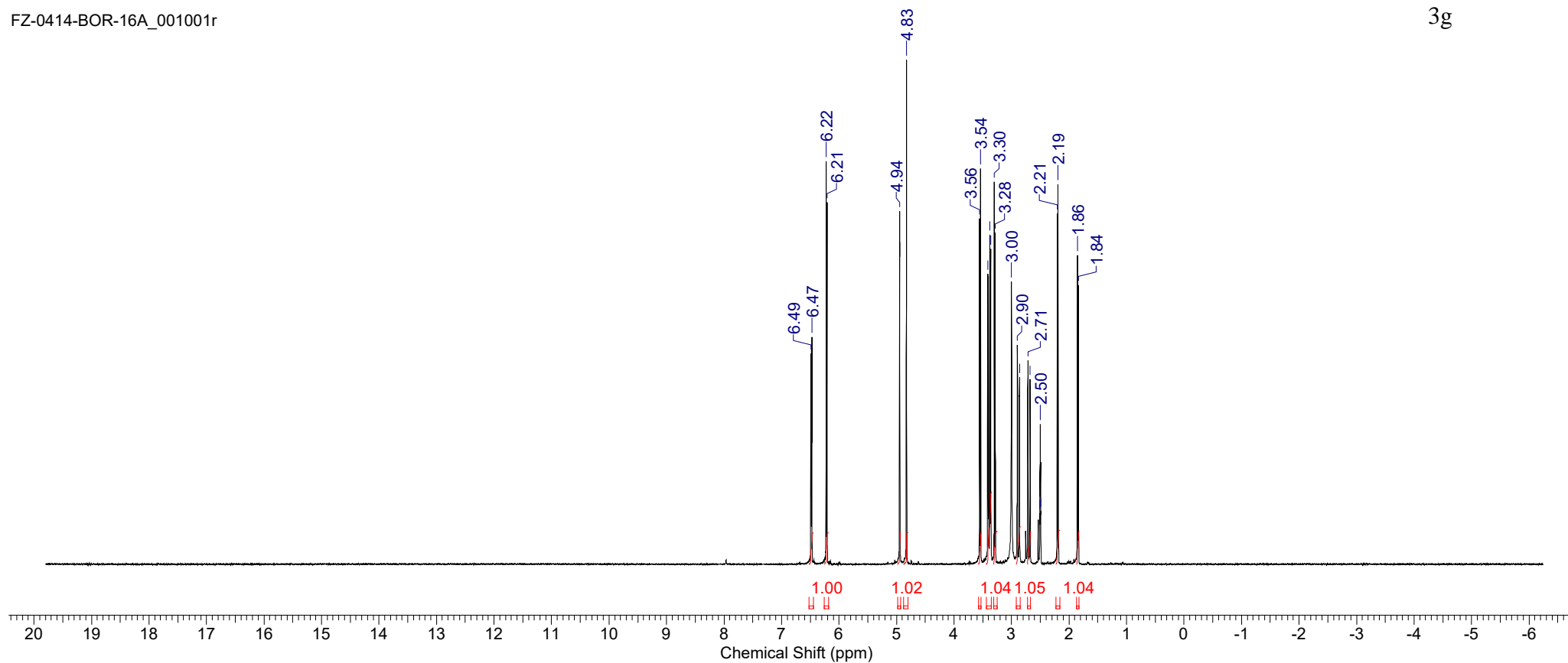
Formula C₁₄H₁₂O₅S **FW** 292.3071

Acquisition Time (sec)	1.5729	Comment	5 mm QNP 1H/15N/13C/31P Z3379/0400	Date	06 May 2014 11:24:48				
Date Stamp	06 May 2014 11:24:48	File Name	C:\USERS\Лабa534\DESKTOP\FZ-0414-BOR-16A_001001r						
Frequency (MHz)	400.14	Nucleus	1H	Number of Transients	16	Origin	spect	Original Points Count	16384
Owner	root	Points Count	65536	Pulse Sequence	zg	Receiver Gain	512.00	SW(cyclical) (Hz)	10416.67
Solvent	DMSO-d6	Spectrum Offset (Hz)	2712.0005	Sweep Width (Hz)	10416.51	Temperature (degree C)	32.000		



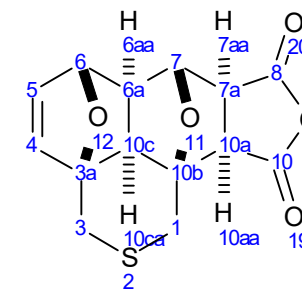
FZ-0414-BOR-16A_001001r

3g

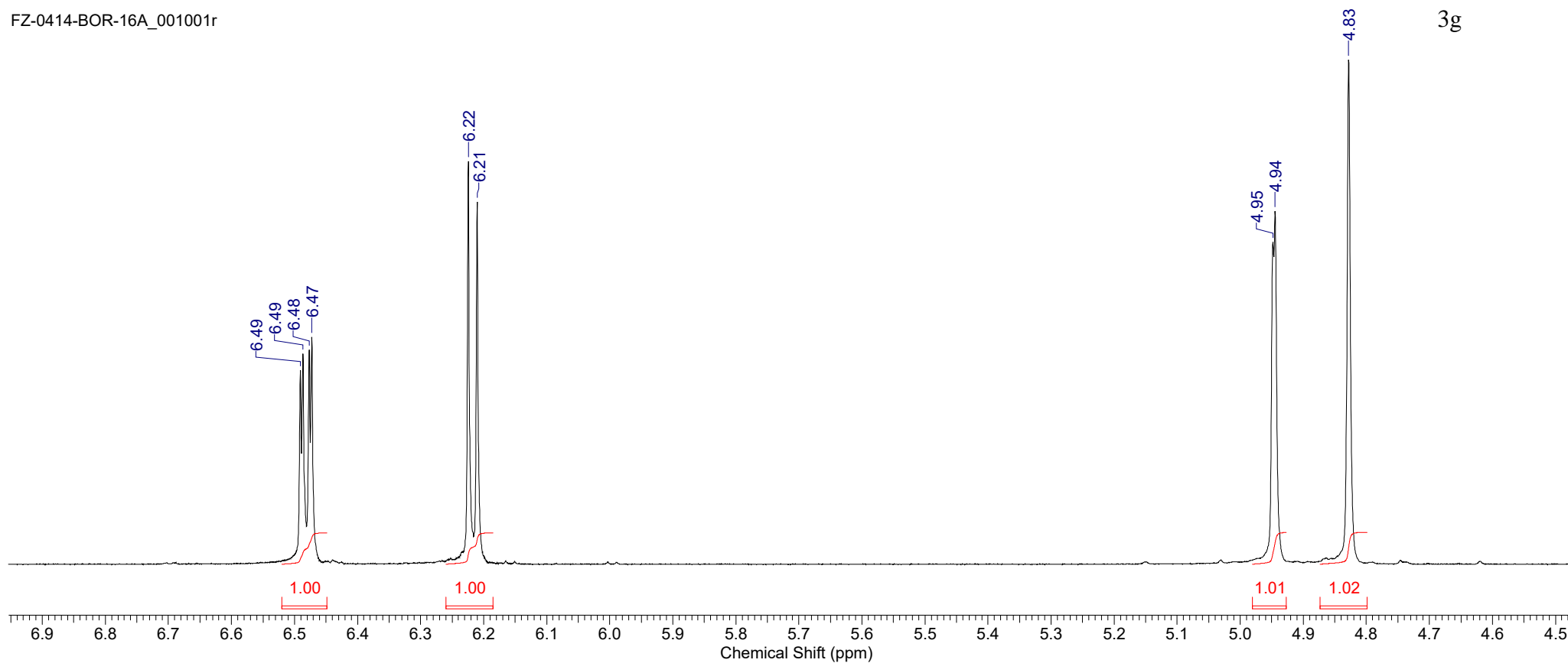


Formula C₁₄H₁₂O₅S FW 292.3071

Acquisition Time (sec)	1.5729	Comment	5 mm QNP 1H/15N/13C/31P Z3379/0400	Date	06 May 2014 11:24:48
Date Stamp	06 May 2014 11:24:48	File Name	C:\USERS\Лабa534\DESKTOP\FZ-0414-BOR-16A_001001r	Original Points Count	16384
Frequency (MHz)	400.14	Nucleus	1H	Number of Transients	16
Owner	root	Points Count	65536	Pulse Sequence	zg
Solvent	DMSO-d6	Spectrum Offset (Hz)	2712.0005	Receiver Gain	512.00
		Sweep Width (Hz)	10416.51	SW(cyclical) (Hz)	10416.67
				Temperature (degree C)	32.000

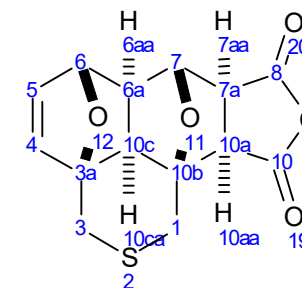


FZ-0414-BOR-16A_001001r



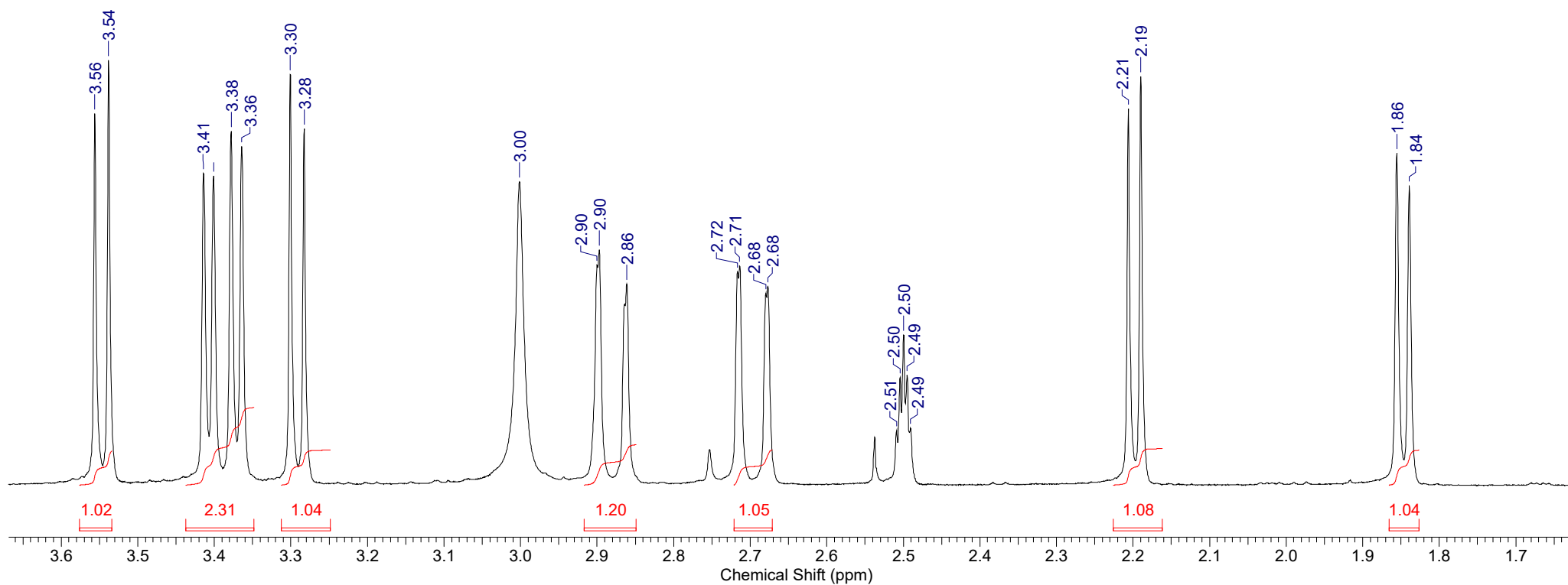
Formula C₁₄H₁₂O₅S FW 292.3071

Acquisition Time (sec)	1.5729	Comment	5 mm QNP 1H/15N/13C/31P Z3379/0400	Date	06 May 2014 11:24:48				
Date Stamp	06 May 2014 11:24:48	File Name	C:\USERS\Лабa534\DESKTOP\FZ-0414-BOR-16A_001001r						
Frequency (MHz)	400.14	Nucleus	1H	Number of Transients	16	Origin	spect	Original Points Count	16384
Owner	root	Points Count	65536	Pulse Sequence	zg	Receiver Gain	512.00	SW(cyclical) (Hz)	10416.67
Solvent	DMSO-d6	Spectrum Offset (Hz)	2712.0005	Sweep Width (Hz)	10416.51	Temperature (degree C)	32.000		



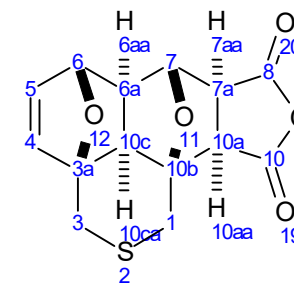
FZ-0414-BOR-16A_001001r

3g



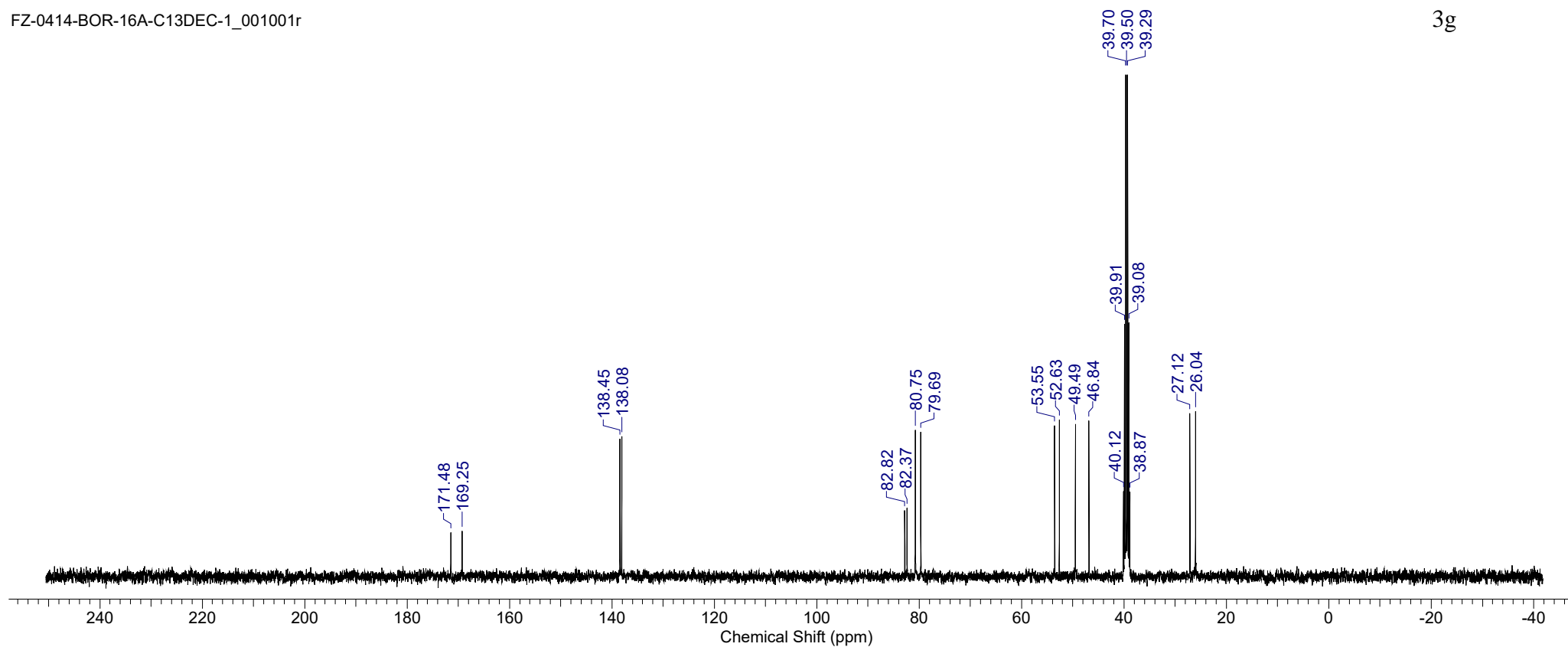
Formula C ₁₄ H ₁₂ O ₅ S	FW 292.3071
---	--------------------

Acquisition Time (sec) 0.5571	Comment 5 mm QNP 1H/15N/13C/31P Z3379/0400	Date 06 May 2014 12:24:32
Date Stamp 06 May 2014 12:24:32	File Name C:\USERS\Ja6a534\DESKTOP\FZ-0414-BOR-16A-C13DEC-1_001001r	
Frequency (MHz) 100.61	Nucleus 13C	Number of Transients 1072
Original Points Count 16384	Owner root	Points Count 65536
Receiver Gain 32768.00	SW(cyclical) (Hz) 29411.77	Solvent DMSO-d6
Sweep Width (Hz) 29411.32	Temperature (degree C) 90.000	Pulse Sequence zgpg
		Spectrum Offset (Hz) 10502.3320



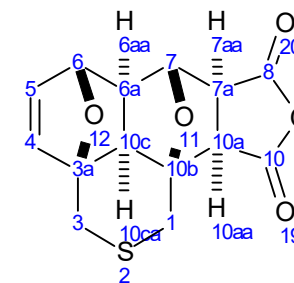
3g

FZ-0414-BOR-16A-C13DEC-1_001001r



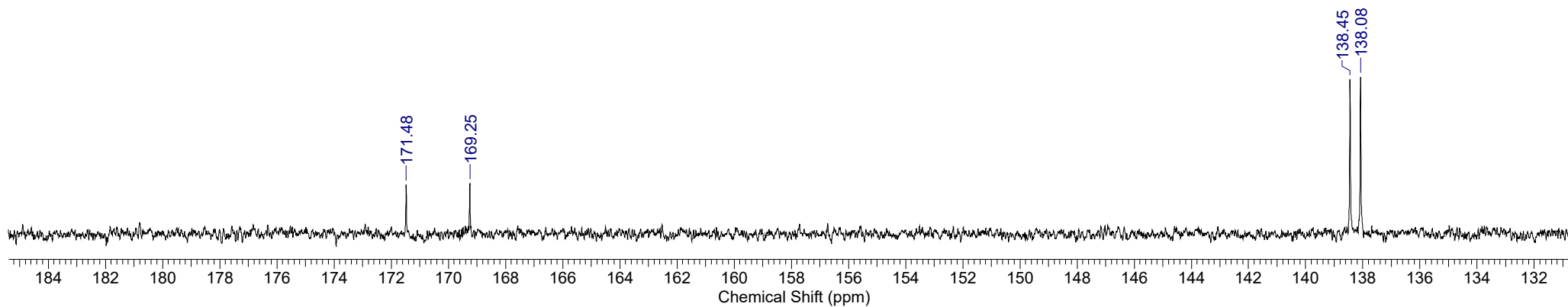
Formula C ₁₄ H ₁₂ O ₅ S	FW 292.3071
---	--------------------

Acquisition Time (sec)	0.5571	Comment	5 mm QNP 1H/15N/13C/31P Z3379/0400	Date	06 May 2014 12:24:32
Date Stamp	06 May 2014 12:24:32	File Name	C:\USERS\Ja6a534\DESKTOP\FZ-0414-BOR-16A-C13DEC-1_001001r		
Frequency (MHz)	100.61	Nucleus	13C	Number of Transients	1072
Original Points Count	16384	Owner	root	Points Count	65536
Receiver Gain	32768.00	SW(cyclical) (Hz)	29411.77	Solvent	DMSO-d6
Sweep Width (Hz)	29411.32	Temperature (degree C)	90.000	Pulse Sequence	zgpg
				Spectrum Offset (Hz)	10502.3320



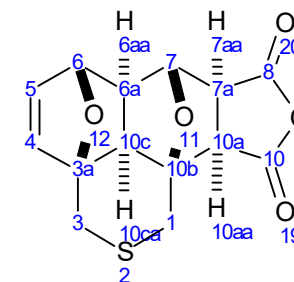
3g

FZ-0414-BOR-16A-C13DEC-1_001001r

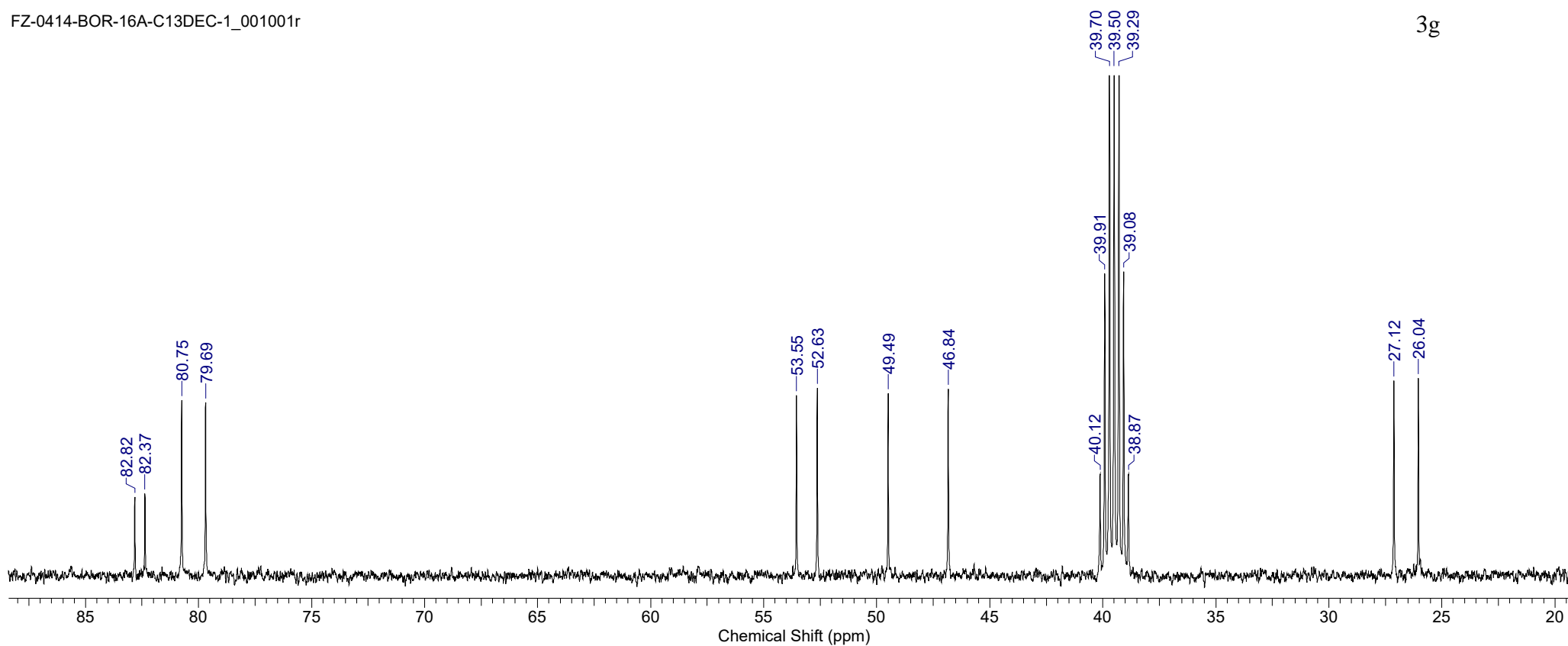


Formula C₁₄H₁₂O₅S FW 292.3071

Acquisition Time (sec)	0.5571	Comment	5 mm QNP 1H/15N/13C/31P Z3379/0400	Date	06 May 2014 12:24:32
Date Stamp	06 May 2014 12:24:32	File Name	C:\USERS\Jla6a534\DESKTOP\FZ-0414-BOR-16A-C13DEC-1_001001r		
Frequency (MHz)	100.61	Nucleus	13C	Number of Transients	1072
Original Points Count	16384	Owner	root	Points Count	65536
Receiver Gain	32768.00	SW(cyclical) (Hz)	29411.77	Solvent	DMSO-d6
Sweep Width (Hz)	29411.32	Temperature (degree C)	90.000	Pulse Sequence	zgpg
				Spectrum Offset (Hz)	10502.3320

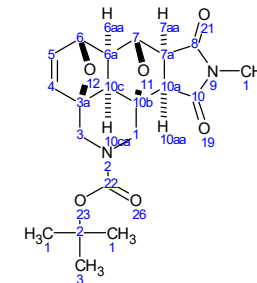


FZ-0414-BOR-16A-C13DEC-1_001001r



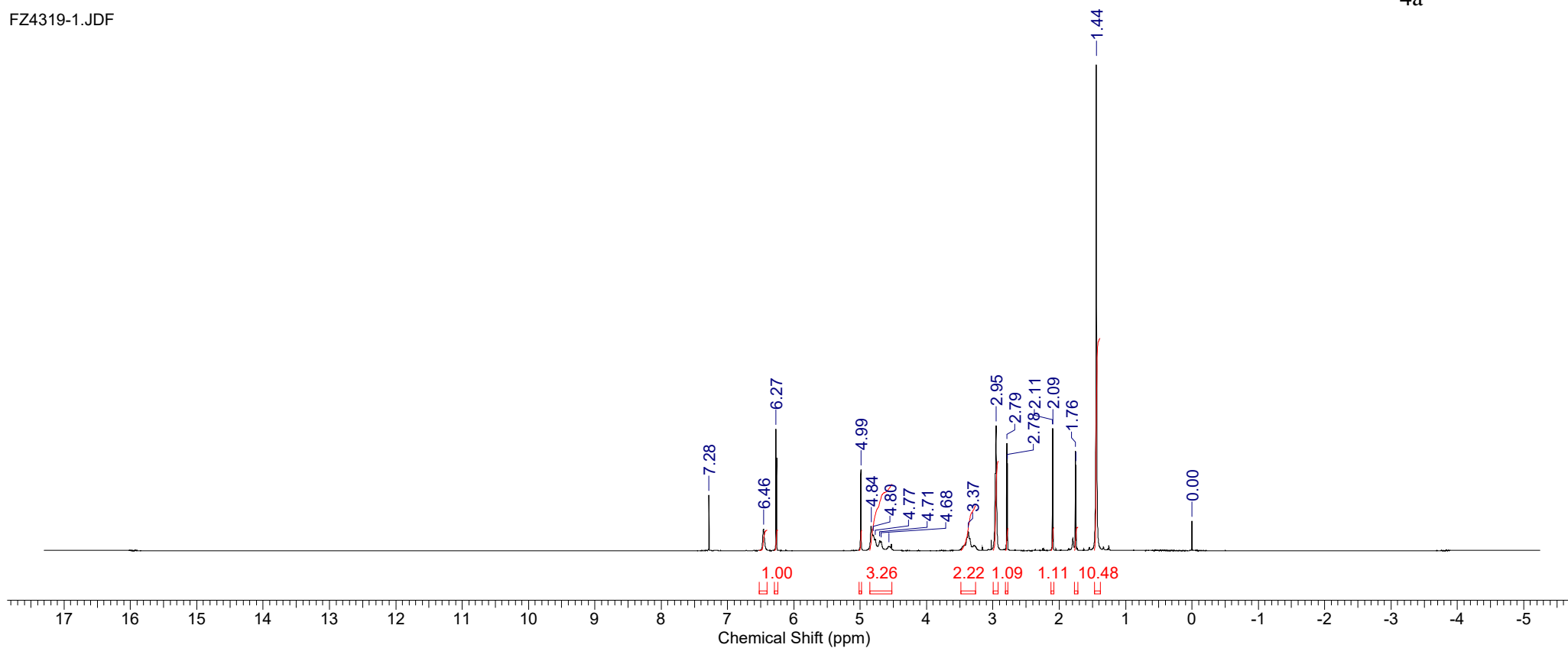
Formula C ₂₀ H ₂₄ N ₂ O ₆	FW 388.4144
--	--------------------

Acquisition Time (sec) 1.2111	Comment single_pulse	Date 22 May 2015 10:01:46	Frequency (MHz) 600.17
Date Stamp 22 May 2015 09:08:29	File Name C:\USERS\I\аба534\DOWNLOADS\FZ4319-1.JDF	Original Points Count 16384	Owner delta
Nucleus 1H	Number of Transients 8	Origin ECA 600	Solvent CHLOROFORM-d
Points Count 16384	Pulse Sequence single_pulse.ex2	Receiver Gain 30.00	
Spectrum Offset (Hz) 3617.9905	Sweep Width (Hz) 13528.14	Temperature (degree C) 19.200	



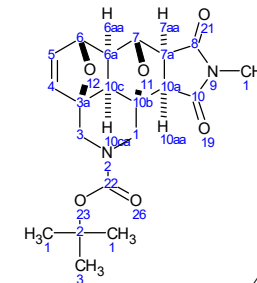
4a

FZ4319-1.JDF

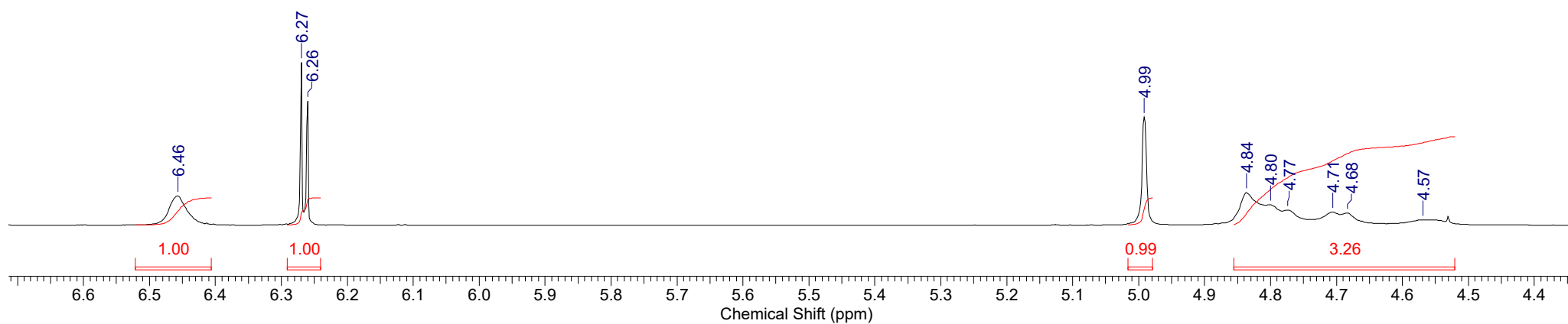


Formula C ₂₀ H ₂₄ N ₂ O ₆	FW 388.4144
--	--------------------

Acquisition Time (sec) 1.2111	Comment single_pulse	Date 22 May 2015 10:01:46	
Date Stamp 22 May 2015 09:08:29		File Name C:\USERS\Лабa534\DOWNLOADS\FZ4319-1.JDF	Frequency (MHz) 600.17
Nucleus 1H	Number of Transients 8	Origin ECA 600	Owner delta
Points Count 16384	Pulse Sequence single_pulse.ex2	Original Points Count 16384	Receiver Gain 30.00
Spectrum Offset (Hz) 3617.9905	Sweep Width (Hz) 13528.14	Temperature (degree C) 19.200	Solvent CHLOROFORM-d

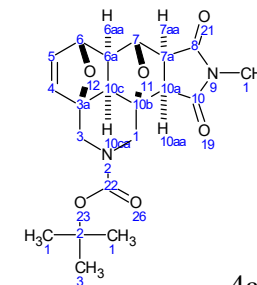


FZ4319-1.JDF

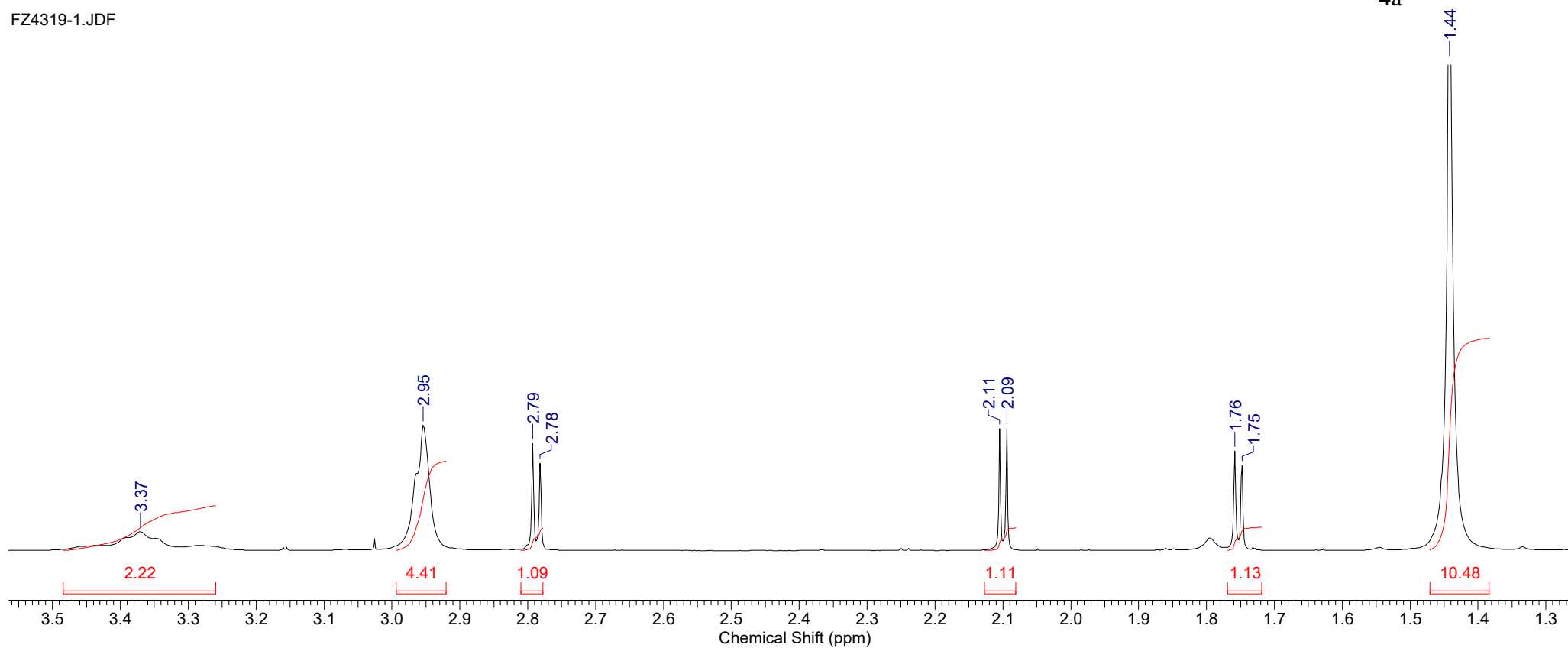


Formula C ₂₀ H ₂₄ N ₂ O ₆	FW 388.4144
--	--------------------

Acquisition Time (sec) 1.2111	Comment single_pulse	Date 22 May 2015 10:01:46		
Date Stamp 22 May 2015 09:08:29		File Name C:\USERS\Лабa534\DOWNLOADS\FZ4319-1.JDF	Frequency (MHz) 600.17	
Nucleus 1H	Number of Transients 8	Origin ECA 600	Original Points Count 16384	Owner delta
Points Count 16384	Pulse Sequence single_pulse.ex2	Receiver Gain 30.00	Solvent CHLOROFORM-d	
Spectrum Offset (Hz) 3617.9905	Sweep Width (Hz) 13528.14	Temperature (degree C) 19.200		

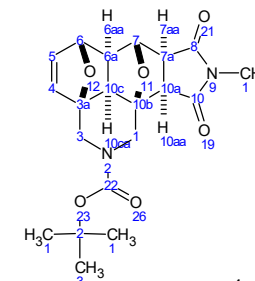


FZ4319-1.JDF



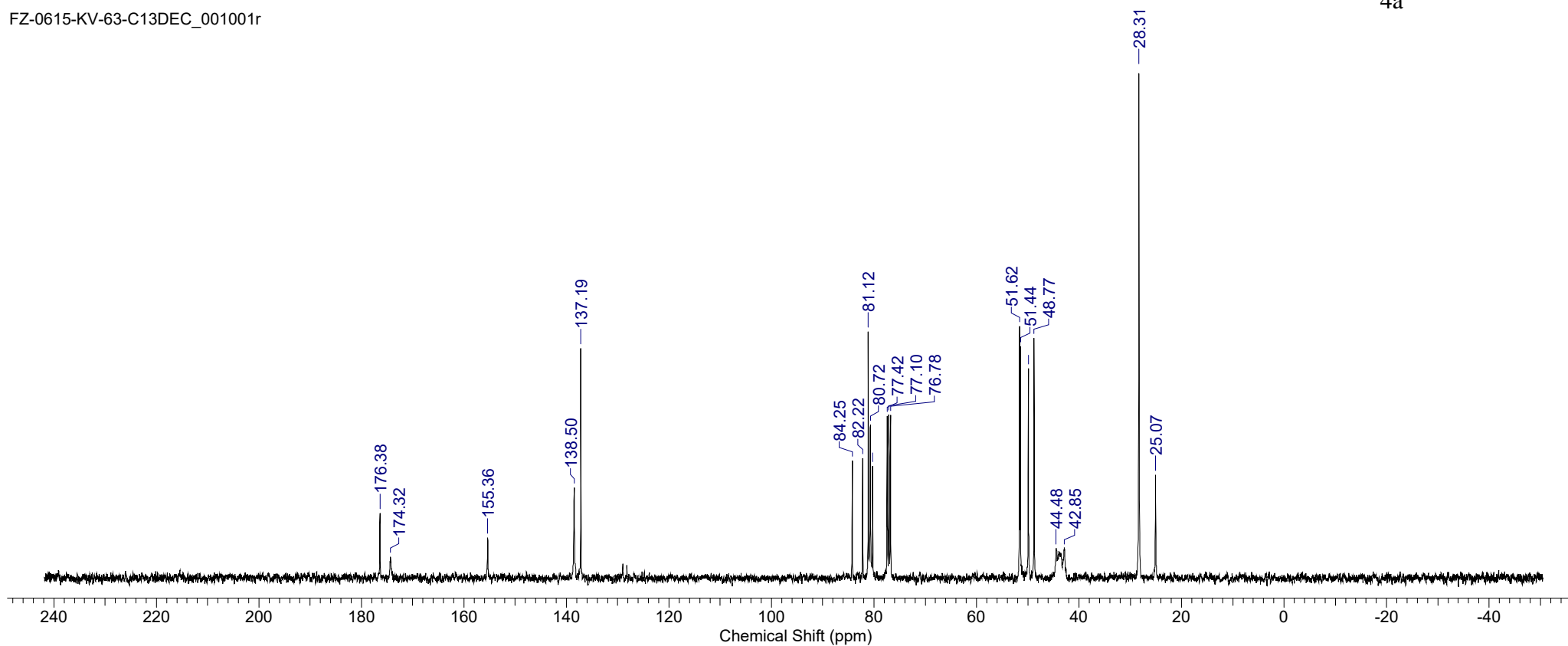
Formula C ₂₀ H ₂₄ N ₂ O ₆	FW 388.4144
--	--------------------

Acquisition Time (sec) 0.5571	Comment 5 mm QNP 1H/15N/13C/31P Z3379/0400	Date 18 Jun 2015 10:08:00
Date Stamp 18 Jun 2015 10:08:00	File Name C:\USERS\Jla6a534\DESKTOP\FZ-0615-KV-63-C13DEC_001001r	
Frequency (MHz) 100.61	Nucleus 13C	Number of Transients 837
Original Points Count 16384	Owner root	Points Count 65536
Receiver Gain 32768.00	SW(cyclical) (Hz) 29411.77	Solvent CHLOROFORM-d
Spectrum Offset (Hz) 9627.8740	Sweep Width (Hz) 29411.32	Temperature (degree C) 27.000



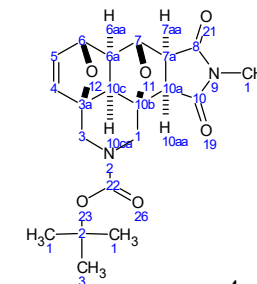
4a

FZ-0615-KV-63-C13DEC_001001r



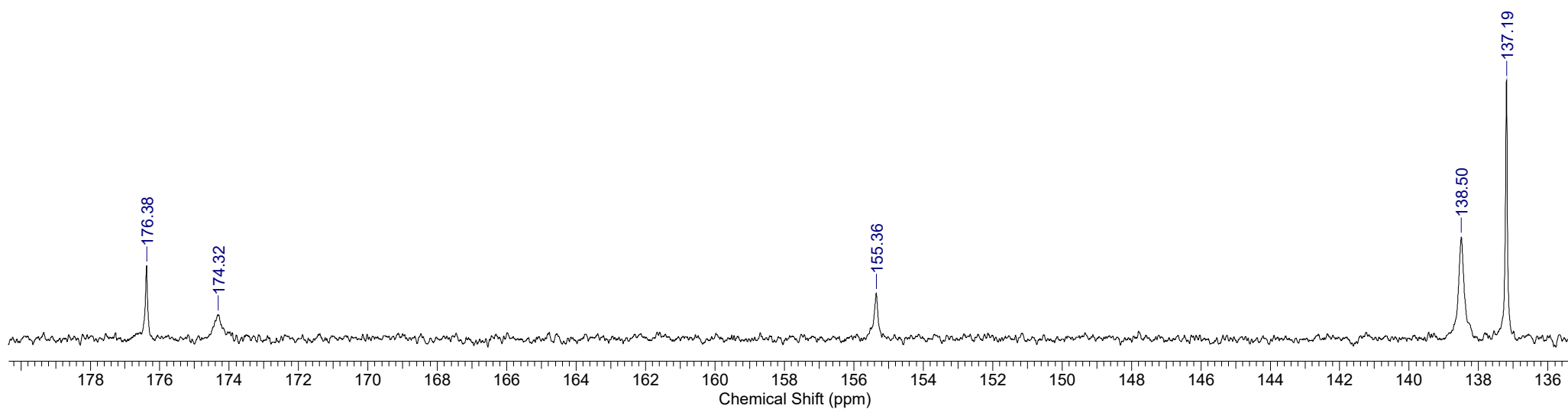
Formula C ₂₀ H ₂₄ N ₂ O ₆	FW 388.4144
--	--------------------

Acquisition Time (sec) 0.5571	Comment 5 mm QNP 1H/15N/13C/31P Z3379/0400	Date 18 Jun 2015 10:08:00
Date Stamp 18 Jun 2015 10:08:00	File Name C:\USERS\Ja6a534\DESKTOP\FZ-0615-KV-63-C13DEC_001001r	
Frequency (MHz) 100.61	Nucleus 13C	Number of Transients 837
Original Points Count 16384	Owner root	Points Count 65536
Receiver Gain 32768.00	SW(cyclical) (Hz) 29411.77	Solvent CHLOROFORM-d
Spectrum Offset (Hz) 9627.8740	Sweep Width (Hz) 29411.32	Temperature (degree C) 27.000



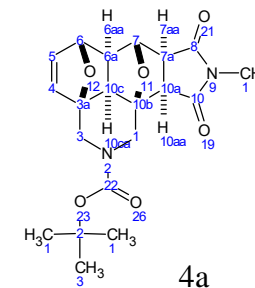
4a

FZ-0615-KV-63-C13DEC_001001r

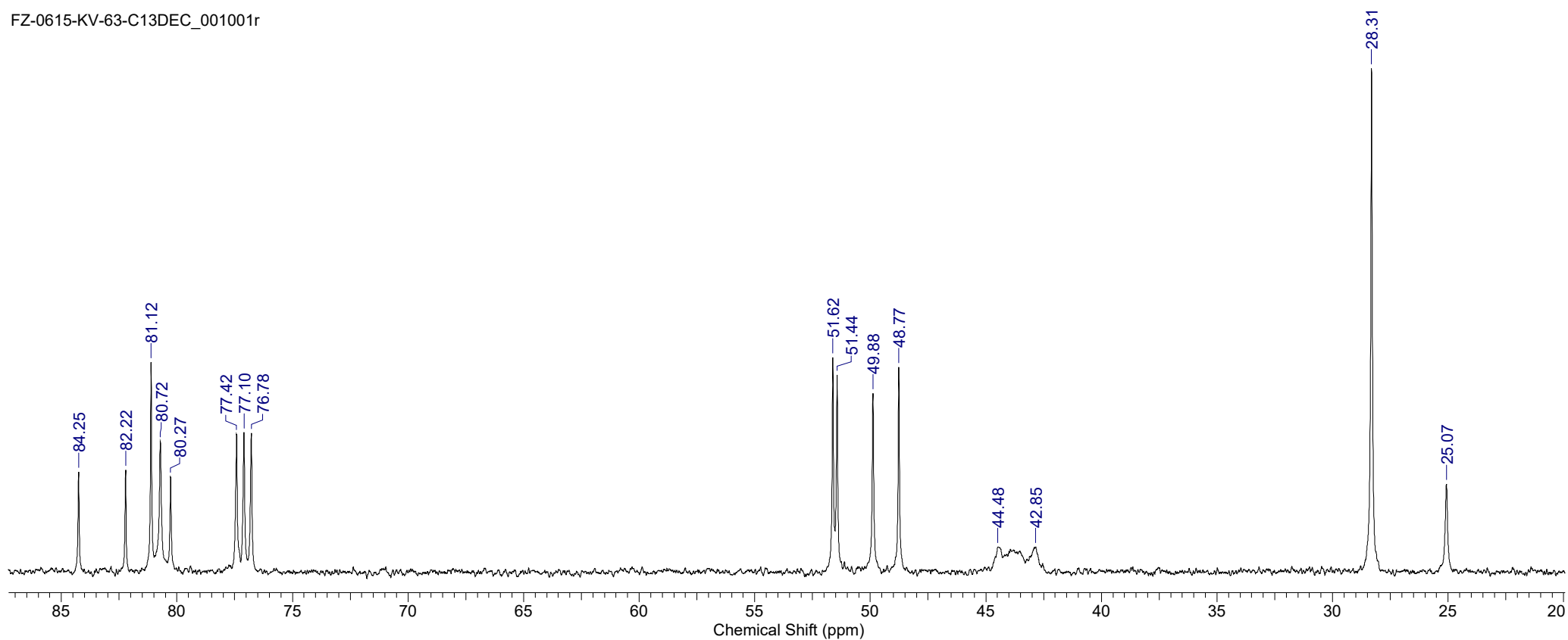


Formula C ₂₀ H ₂₄ N ₂ O ₆	FW 388.4144
--	--------------------

Acquisition Time (sec)	0.5571	Comment	5 mm QNP 1H/15N/13C/31P Z3379/0400	Date	18 Jun 2015 10:08:00
Date Stamp	18 Jun 2015 10:08:00	File Name	C:\USERS\Ja6a534\DESKTOP\FZ-0615-KV-63-C13DEC_001001r		
Frequency (MHz)	100.61	Nucleus	13C	Number of Transients	837
Original Points Count	16384	Owner	root	Points Count	65536
Receiver Gain	32768.00	SW(cyclical) (Hz)	29411.77	Solvent	CHLOROFORM-d
Spectrum Offset (Hz)	9627.8740	Sweep Width (Hz)	29411.32	Temperature (degree C)	27.000

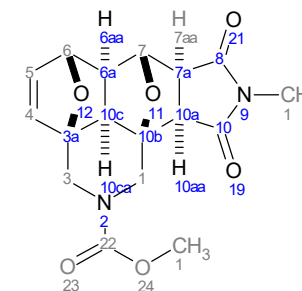


FZ-0615-KV-63-C13DEC_001001r



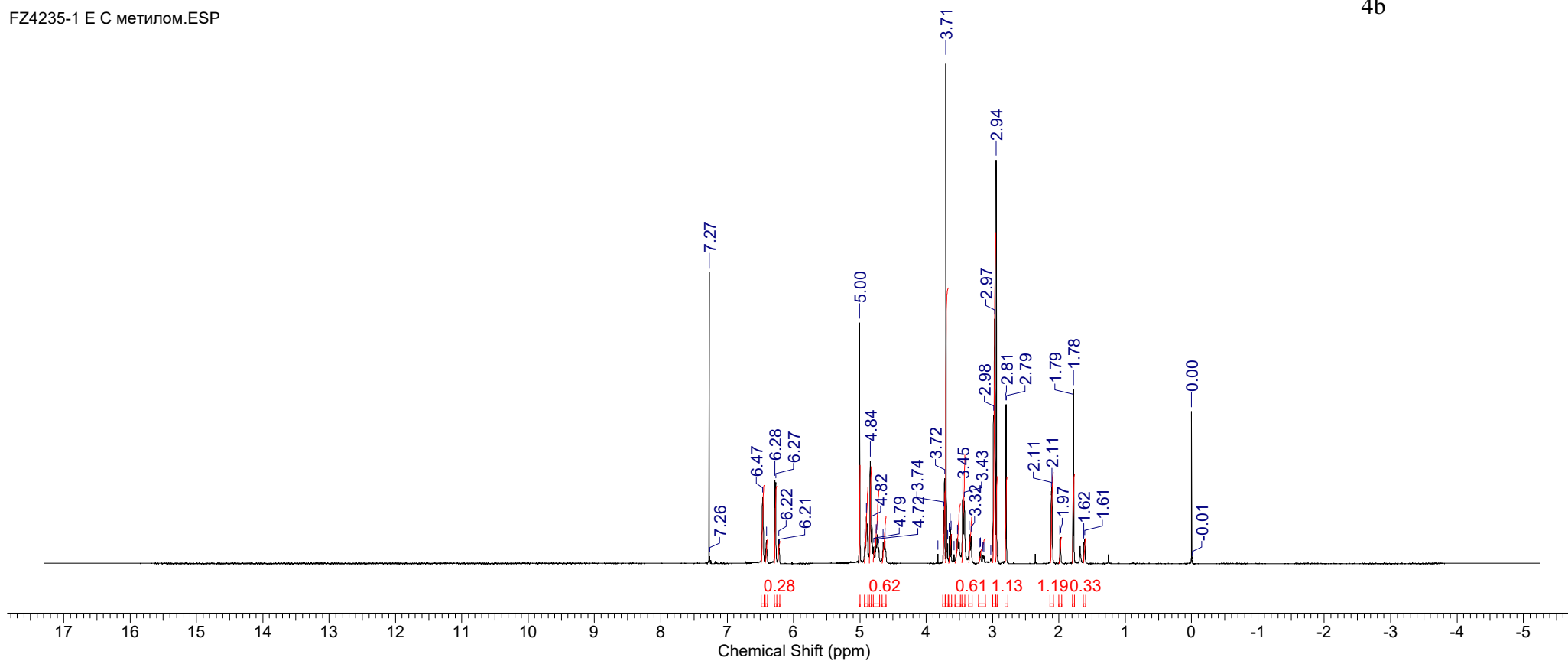
Formula C ₁₇ H ₁₈ N ₂ O ₆	FW 346.3346
--	--------------------

Acquisition Time (sec) 1.2111	Comment single pulse	Date 22 Apr 2015 10:55:24	
Date Stamp 22 Apr 2015 10:01:42		File Name C:\USERS\Лаб6а534\DOWNLOADS\FZ4235-1.JDF	Frequency (MHz) 600.17
Nucleus 1H	Number of Transients 8	Origin ECA 600	Original Points Count 16384
Points Count 16384	Pulse Sequence single_pulse.ex2	Receiver Gain 38.00	Owner delta
Spectrum Offset (Hz) 3614.6875	Sweep Width (Hz) 13528.14	Temperature (degree C) 21.000	Solvent CHLOROFORM-d



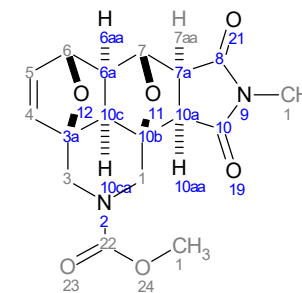
4b

FZ4235-1 E C метилом.ESP



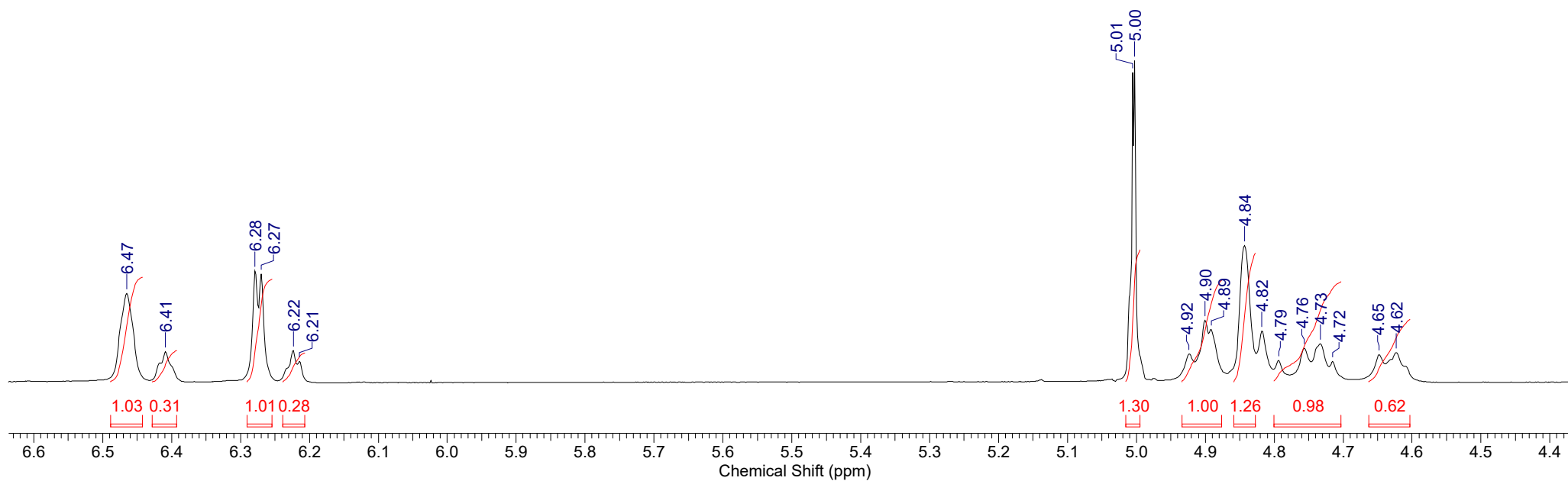
Formula C₁₇H₁₈N₂O₆ FW 346.3346

Acquisition Time (sec)	1.2111	Comment	single pulse	Date	22 Apr 2015 10:55:24	Frequency (MHz)	600.17
Date Stamp	22 Apr 2015 10:01:42	File Name	C:\USERS\Лабa534\DOWNLOADS\FZ4235-1.JDF			Owner	delta
Nucleus	1H	Number of Transients	8	Origin	ECA 600	Original Points Count	16384
Points Count	16384	Pulse Sequence	single_pulse.ex2	Receiver Gain	38.00	Solvent	CHLOROFORM-d
Spectrum Offset (Hz)	3614.6875	Sweep Width (Hz)	13528.14	Temperature (degree C)	21.000		



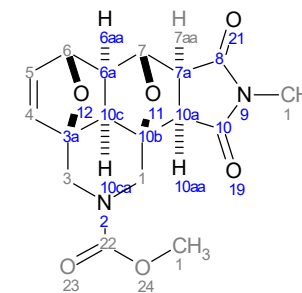
4b

FZ4235-1 E C метилом.ESP



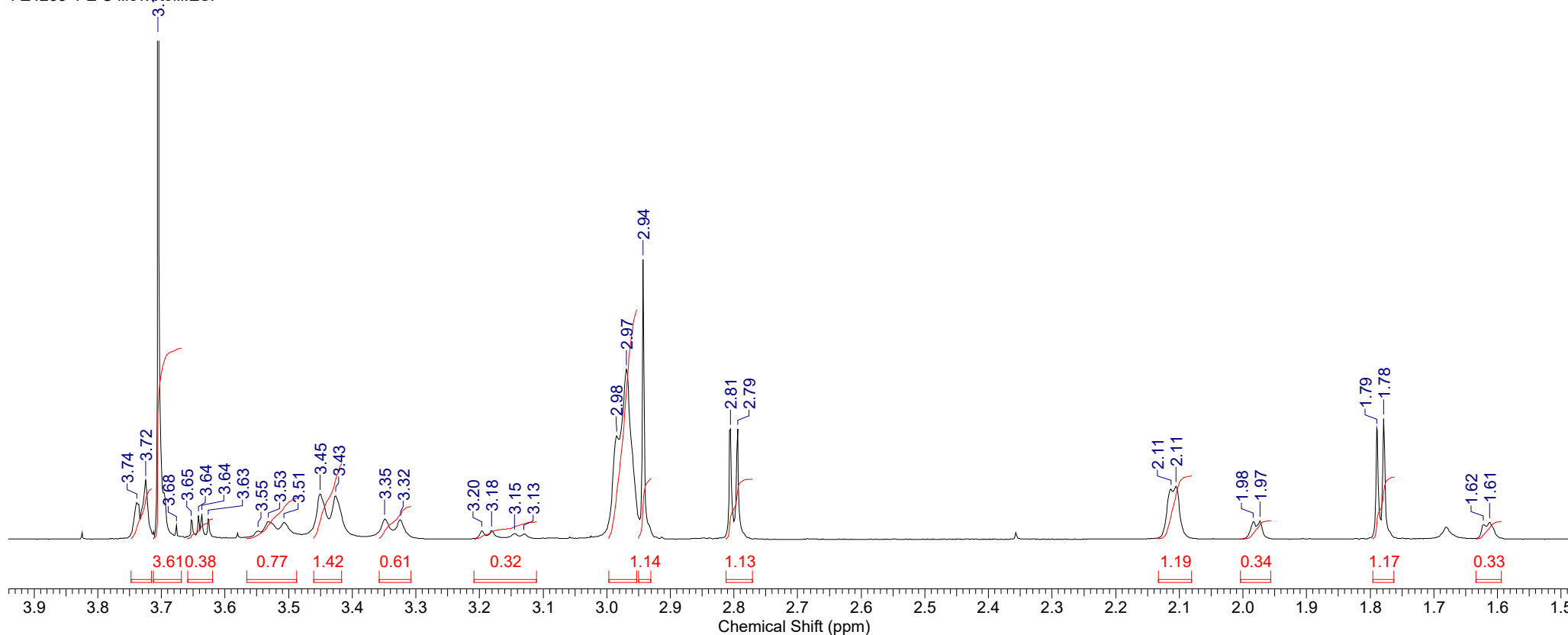
Formula C ₁₇ H ₁₈ N ₂ O ₆	FW 346.3346
--	--------------------

Acquisition Time (sec) 1.2111	Comment single pulse	Date 22 Apr 2015 10:55:24	
Date Stamp 22 Apr 2015 10:01:42		File Name C:\USERS\Лаб6а534\DOWNLOADS\FZ4235-1.JDF	Frequency (MHz) 600.17
Nucleus 1H	Number of Transients 8	Origin ECA 600	Owner delta
Points Count 16384	Pulse Sequence single_pulse.ex2	Original Points Count 16384	Receiver Gain 38.00
Spectrum Offset (Hz) 3614.6875	Sweep Width (Hz) 13528.14	Temperature (degree C) 21.000	Solvent CHLOROFORM-d



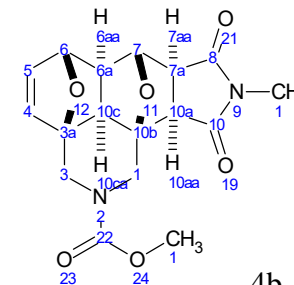
4b

FZ4235-1 E C мети.ESP

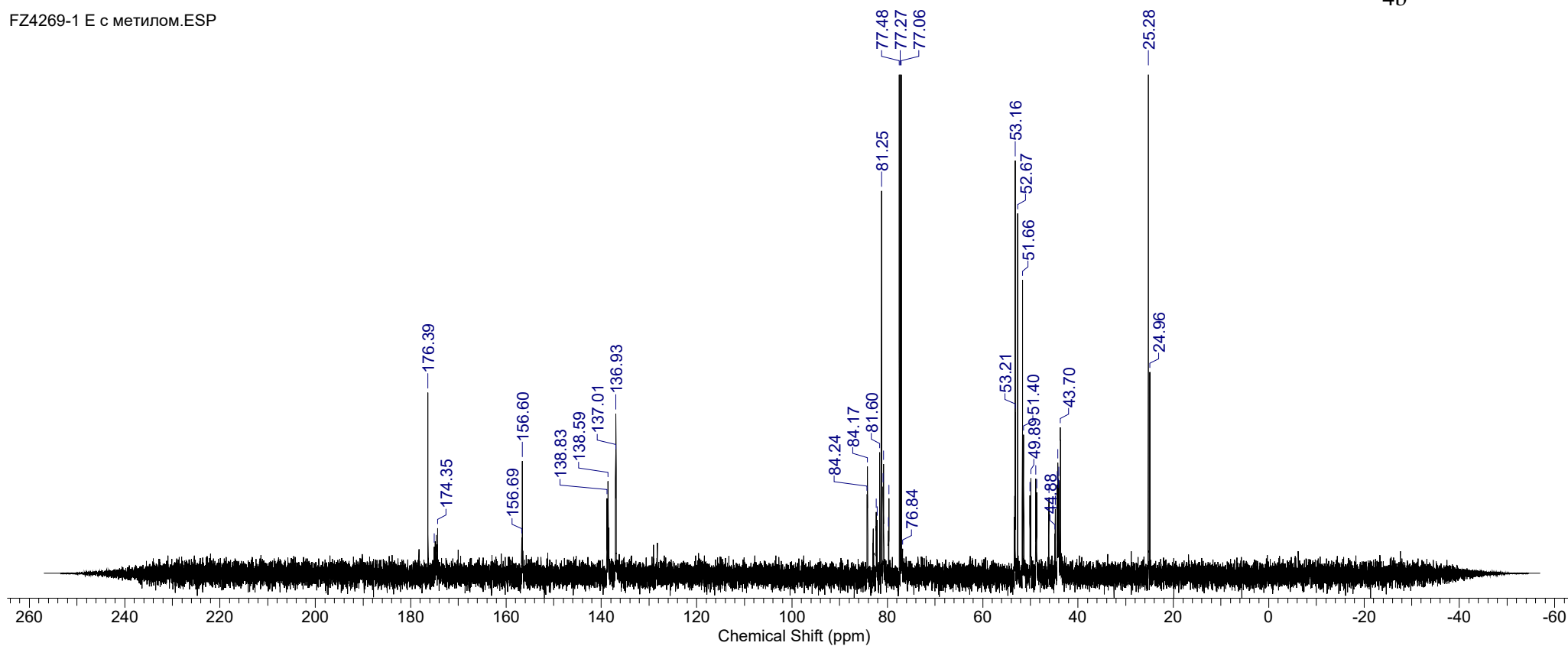


Formula C ₁₇ H ₁₈ N ₂ O ₆	FW 346.3346
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 05 May 2015 11:08:04
Date Stamp 05 May 2015 10:14:33	File Name C:\USERS\Лабa534\DOWNLOADS\FZ4269-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 100
Original Points Count 32768	Owner delta	Points Count 32768
Receiver Gain 52.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49	Temperature (degree C) 21.100	Spectrum Offset (Hz) 15091.3428

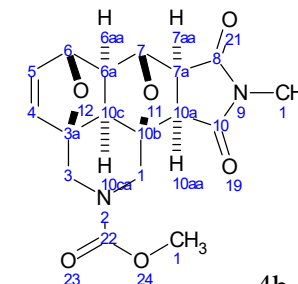


FZ4269-1 E с метилом.ESP

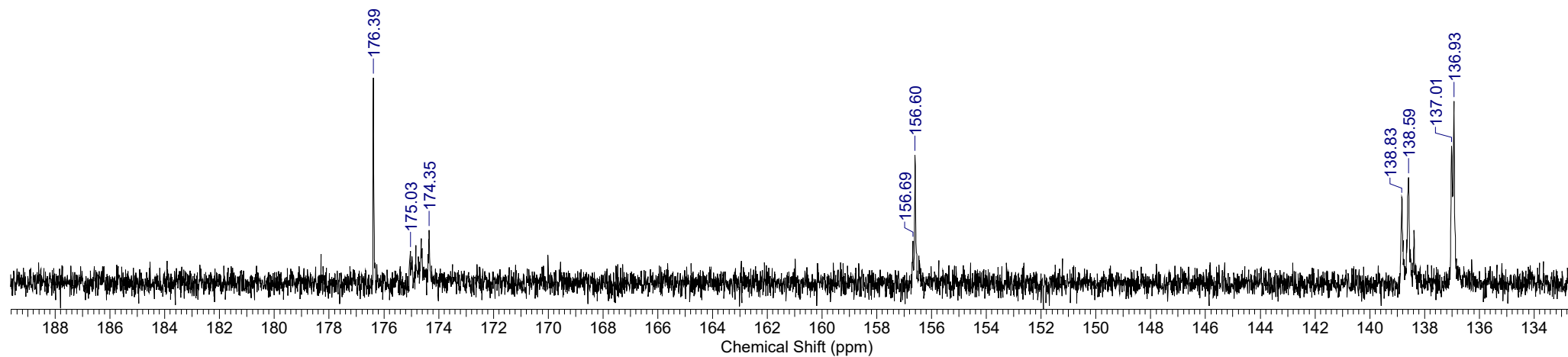


Formula C ₁₇ H ₁₈ N ₂ O ₆	FW 346.3346
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 05 May 2015 11:08:04
Date Stamp 05 May 2015 10:14:33	File Name C:\USERS\Лабa534\DOWNLOADS\FZ4269-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 100
Original Points Count 32768	Owner delta	Points Count 32768
Receiver Gain 52.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49	Temperature (degree C) 21.100	Spectrum Offset (Hz) 15091.3428

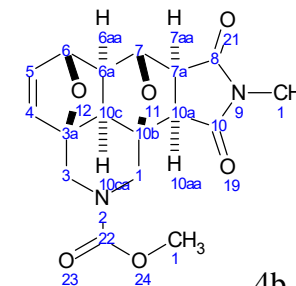


FZ4269-1 E с метилом.ESP

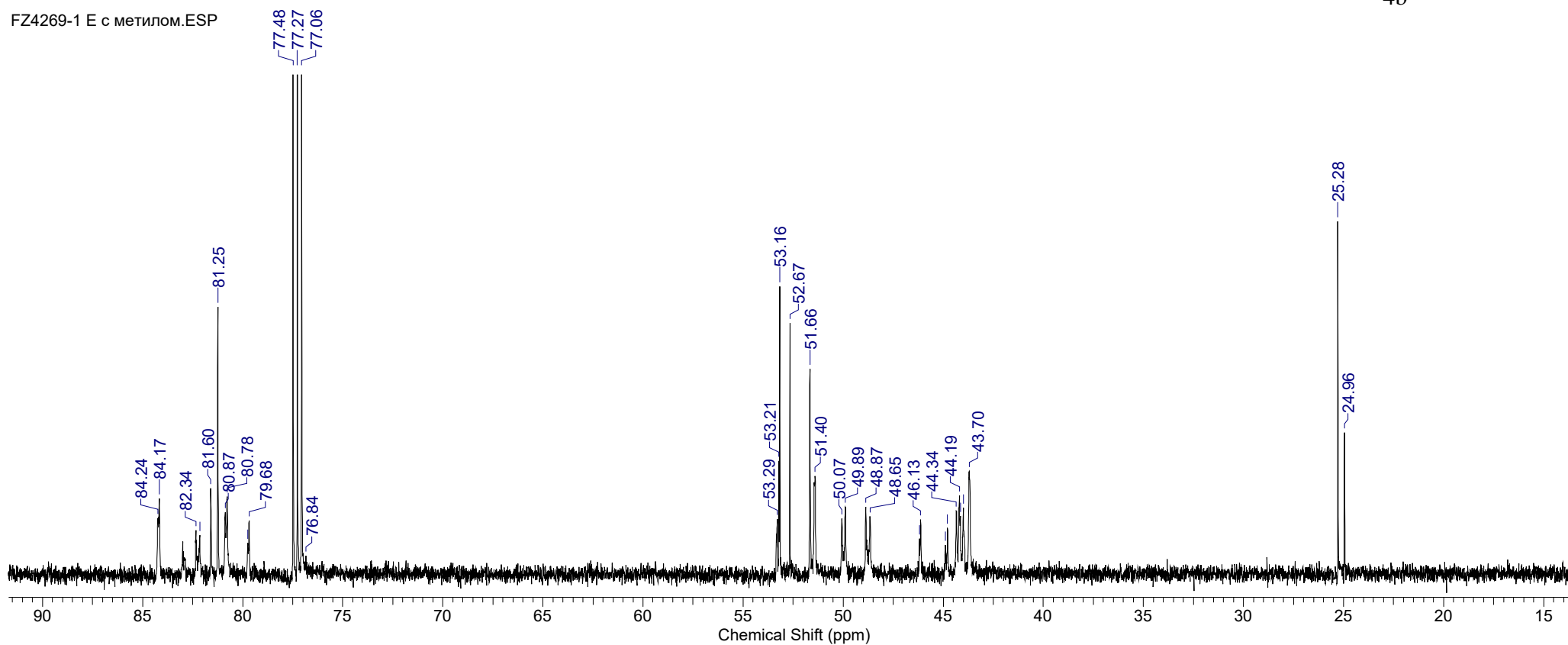


Formula C₁₇H₁₈N₂O₆ FW 346.3346

Acquisition Time (sec)	0.6921	Comment	single pulse decoupled gated NOE	Date	05 May 2015 11:08:04
Date Stamp	05 May 2015 10:14:33	File Name	C:\USERS\Лаба534\DOWNLOADS\FZ4269-1.JDF		
Frequency (MHz)	150.91	Nucleus	13C	Origin	ECA 600
Original Points Count	32768	Owner	delta	Points Count	32768
Receiver Gain	52.00	Solvent	CHLOROFORM-d	Pulse Sequence	single pulse dec
Sweep Width (Hz)	47348.49	Temperature (degree C)	21.100	Spectrum Offset (Hz)	15091.3428

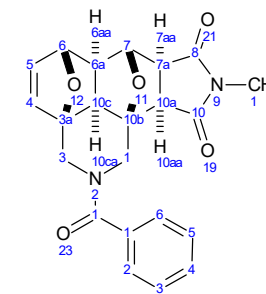


FZ4269-1 E с метилом.ESP



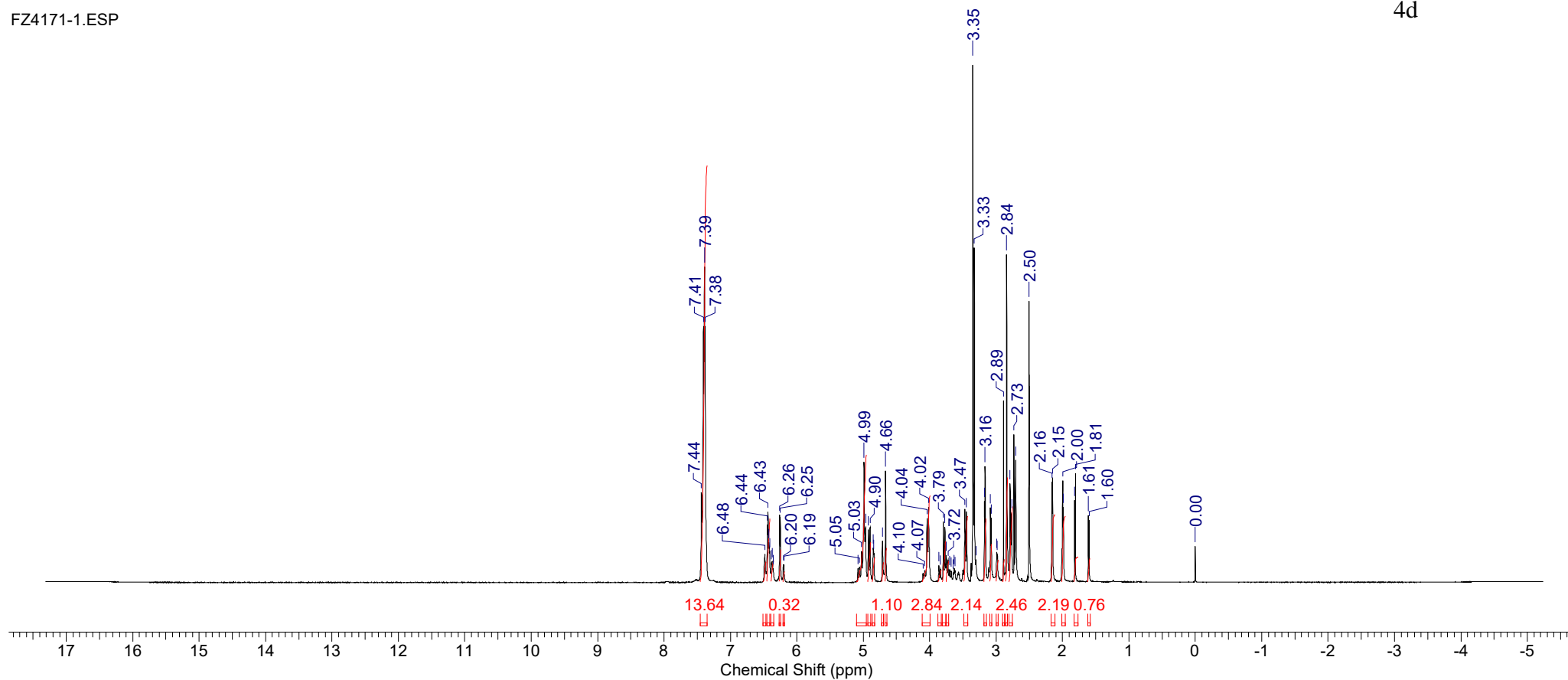
Formula C ₂₂ H ₂₀ N ₂ O ₅	FW 392.4046
--	--------------------

Acquisition Time (sec) 1.2111	Comment single_pulse	Date 02 Apr 2015 12:21:25	Date Stamp 02 Apr 2015 11:27:26
File Name C:\USERS\Лабa534\DOWNLOADS\FZ4171-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 16384	Owner delta	Points Count 16384
Receiver Gain 38.00	Solvent DMSO-d6	Spectrum Offset (Hz) 3623.7708	Sweep Width (Hz) 13528.14
			Pulse Sequence single_pulse.ex2



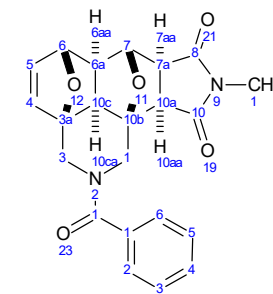
FZ4171-1.ESP

4d



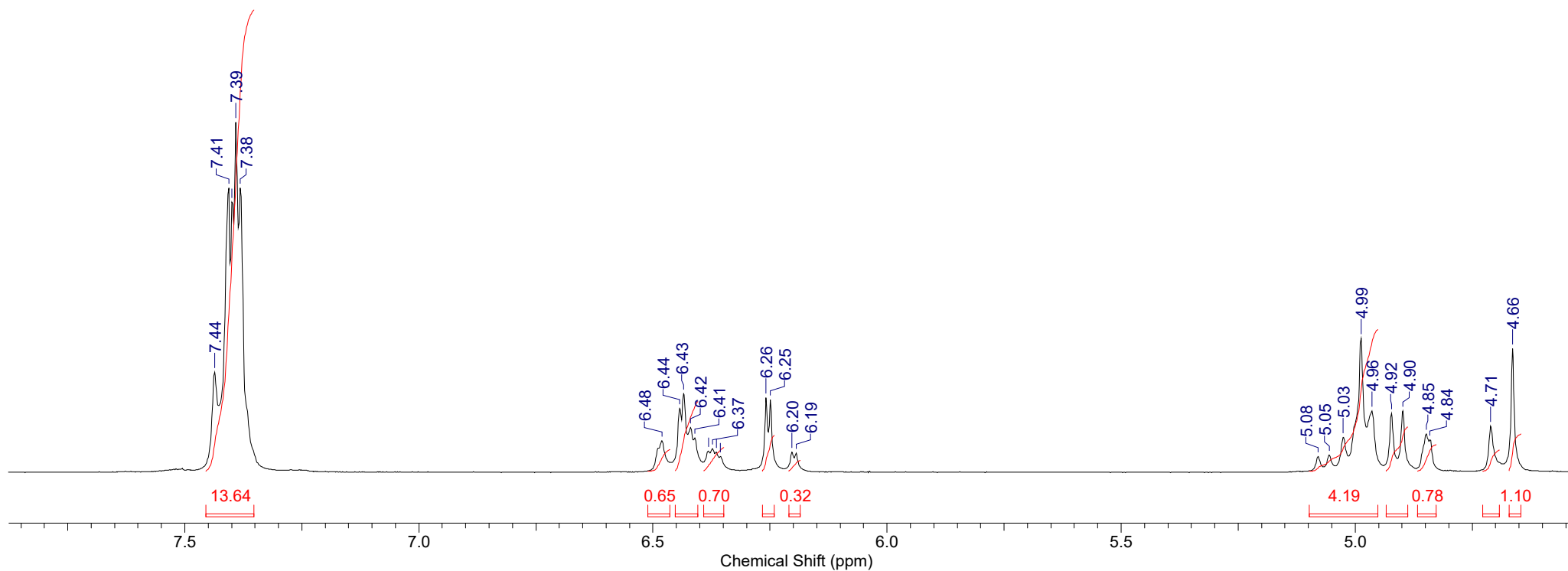
Formula $C_{22}H_{20}N_2O_5$ FW 392.4046

Acquisition Time (sec)	1.2111	Comment	single_pulse	Date	02 Apr 2015 12:21:25	Date Stamp	02 Apr 2015 11:27:26
File Name	C:\USERS\Лабa534\DOWNLOADS\FZ4171-1.JDF	Frequency (MHz)	600.17	Nucleus	1H	Number of Transients	8
Origin	ECA 600	Original Points Count	16384	Owner	delta	Points Count	16384
Receiver Gain	38.00	Solvent	DMSO-d6	Spectrum Offset (Hz)	3623.7708	Sweep Width (Hz)	13528.14



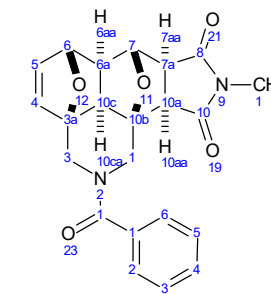
4d

FZ4171-1.ESP



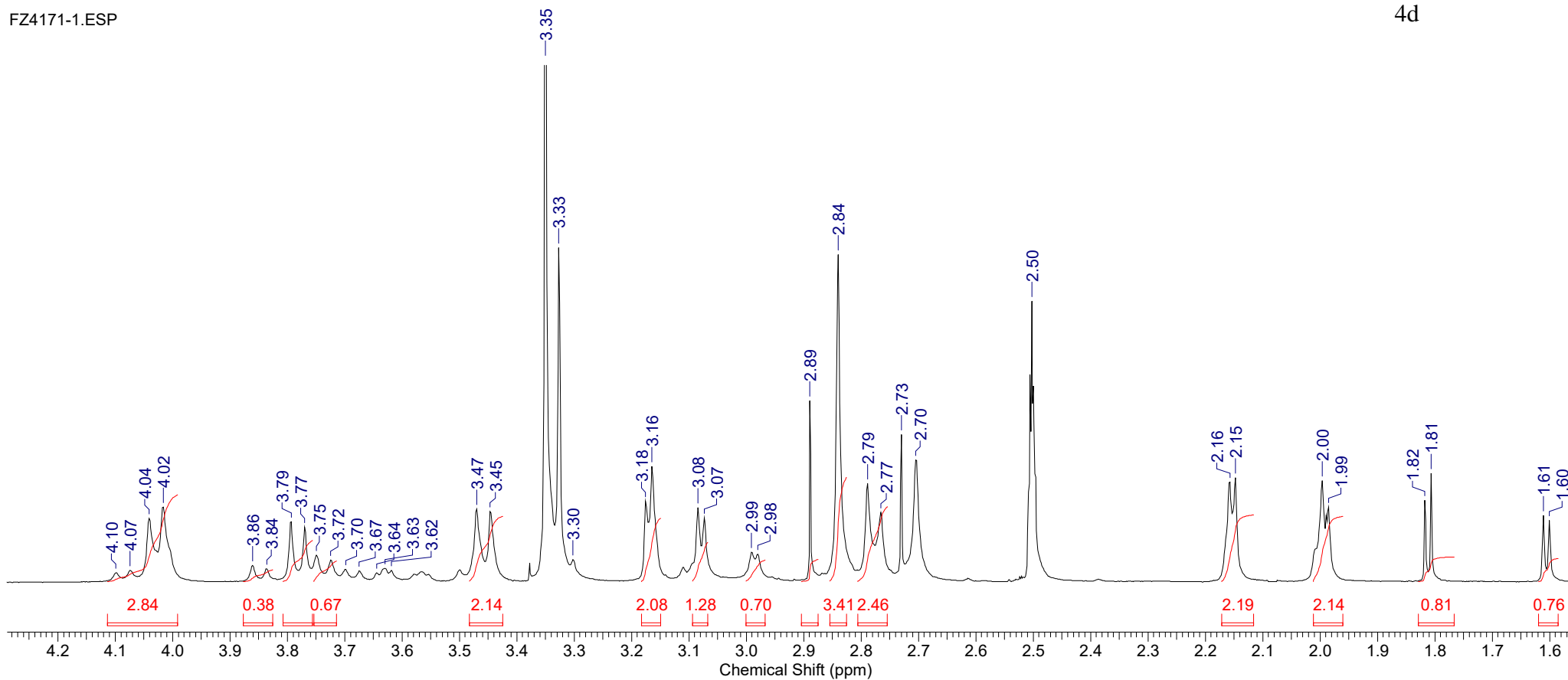
Formula C ₂₂ H ₂₀ N ₂ O ₅	FW 392.4046
--	--------------------

Acquisition Time (sec) 1.2111	Comment single_pulse	Date 02 Apr 2015 12:21:25	Date Stamp 02 Apr 2015 11:27:26
File Name C:\USERS\Лабa534\DOWNLOADS\FZ4171-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 16384	Owner delta	Points Count 16384
Receiver Gain 38.00	Solvent DMSO-d6	Spectrum Offset (Hz) 3623.7708	Sweep Width (Hz) 13528.14



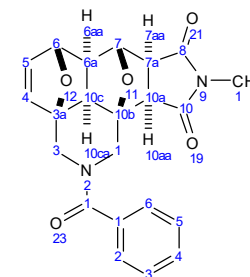
4d

FZ4171-1.ESP



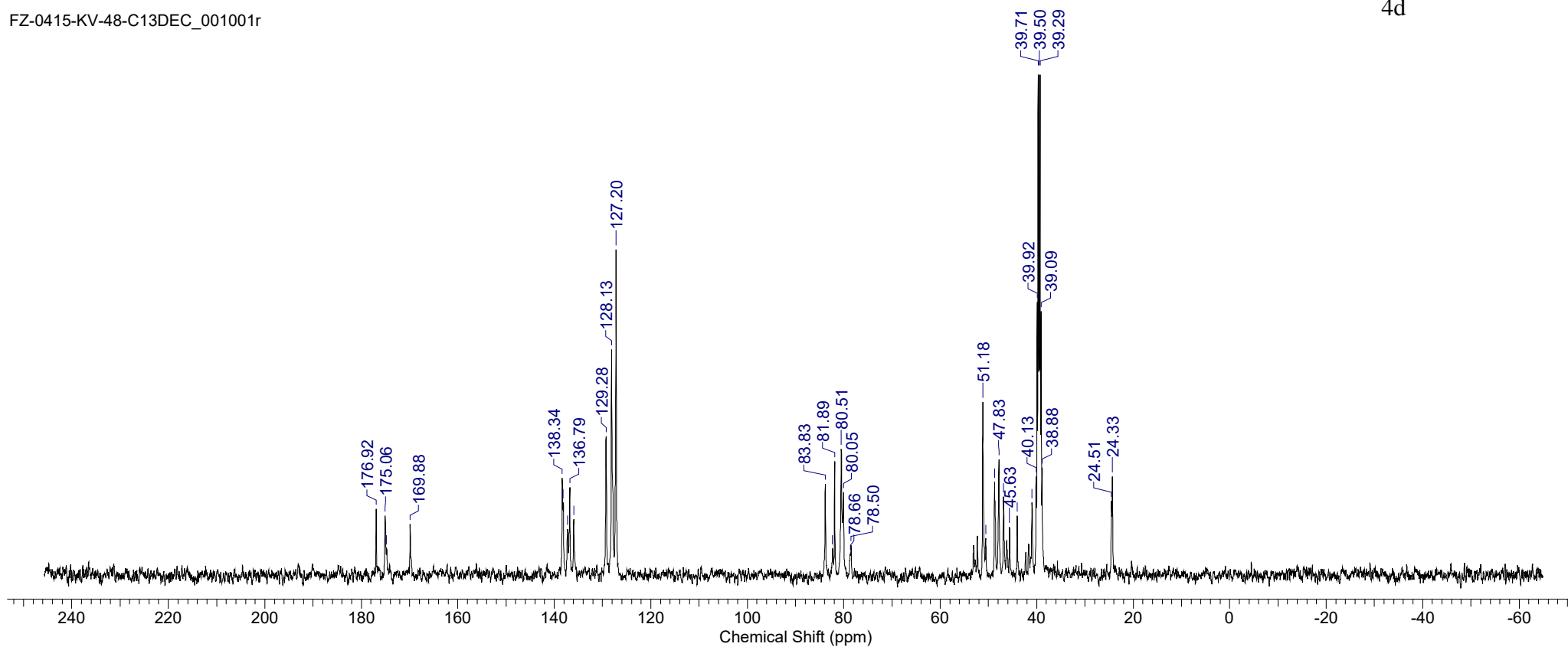
Formula $C_{22}H_{20}N_2O_5$ FW 392.4046

Acquisition Time (sec)	0.5243	Comment	5 mm QNP 1H/15N/13C/31P Z3379/0400	Date	30 Apr 2015 14:00:32
Date Stamp	30 Apr 2015 14:00:32	File Name	C:\USERS\Лабa534\DESKTOP\FZ-0415-KV-48-C13DEC_001001r		
Frequency (MHz)	100.61	Nucleus	13C	Number of Transients	722
Original Points Count	16384	Owner	root	Points Count	65536
Receiver Gain	32768.00	SW(cyclical) (Hz)	31250.00	Solvent	DMSO-d6
Sweep Width (Hz)	31249.52	Temperature (degree C)	27.000	Pulse Sequence	zgpg
				Spectrum Offset (Hz)	9095.9688



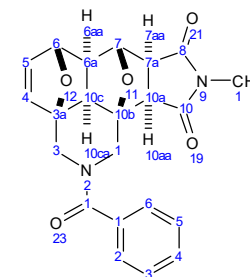
4d

FZ-0415-KV-48-C13DEC_001001r



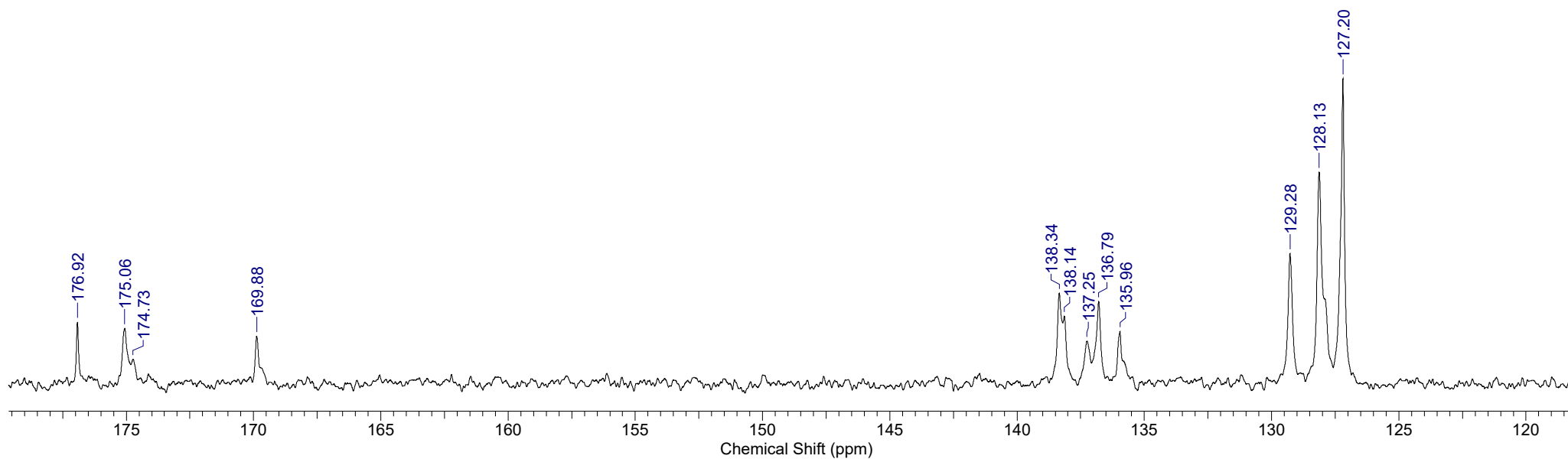
Formula C ₂₂ H ₂₀ N ₂ O ₅	FW 392.4046
--	--------------------

Acquisition Time (sec)	0.5243	Comment	5 mm QNP 1H/15N/13C/31P Z3379/0400	Date	30 Apr 2015 14:00:32
Date Stamp	30 Apr 2015 14:00:32	File Name	C:\USERS\Лабa534\DESKTOP\FZ-0415-KV-48-C13DEC_001001r		
Frequency (MHz)	100.61	Nucleus	13C	Number of Transients	722
Original Points Count	16384	Owner	root	Origin	spect
Receiver Gain	32768.00	SW(cyclical) (Hz)	31250.00	Points Count	65536
Sweep Width (Hz)	31249.52	Solvent	DMSO-d6	Pulse Sequence	zgpg
		Temperature (degree C)	27.000	Spectrum Offset (Hz)	9095.9688



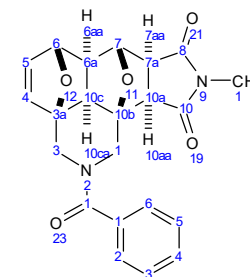
4d

FZ-0415-KV-48-C13DEC_001001r



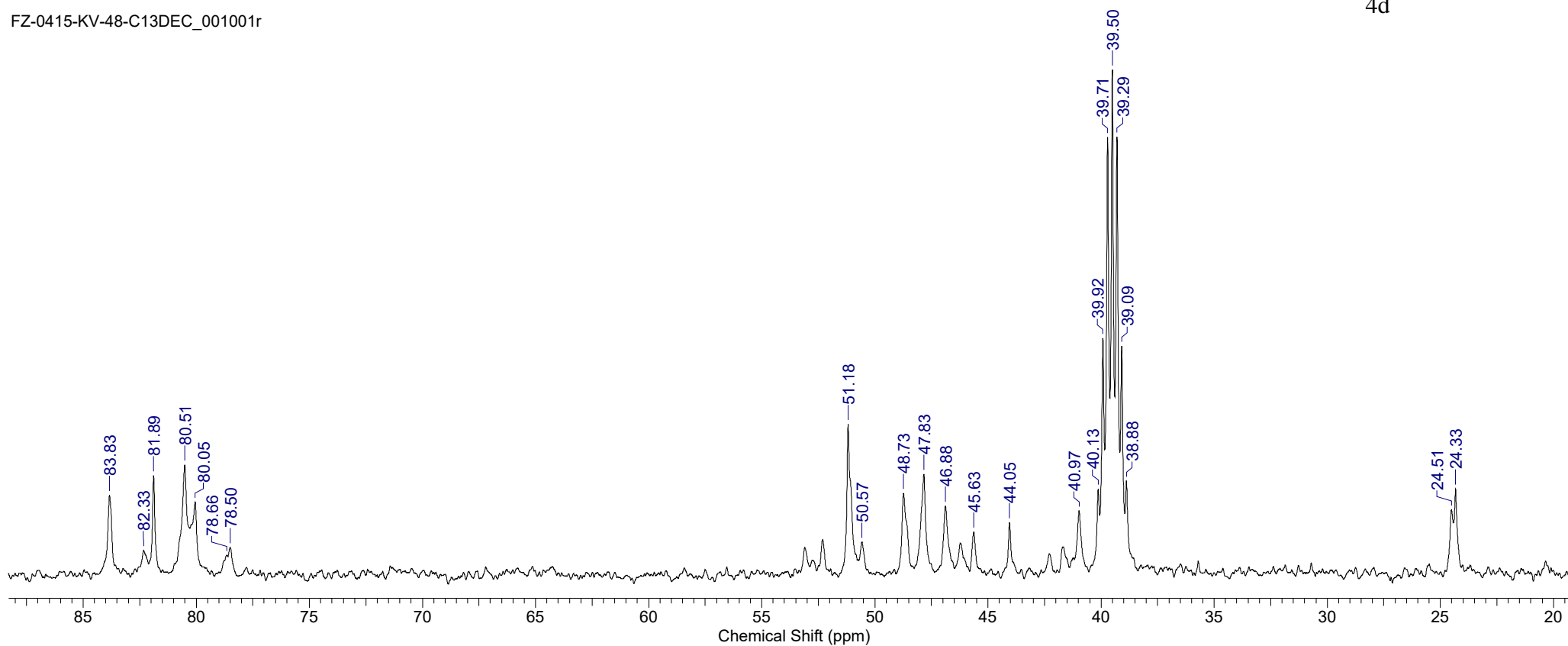
Formula C ₂₂ H ₂₀ N ₂ O ₅	FW 392.4046
--	--------------------

Acquisition Time (sec) 0.5243	Comment 5 mm QNP 1H/15N/13C/31P Z3379/0400	Date 30 Apr 2015 14:00:32
Date Stamp 30 Apr 2015 14:00:32	File Name C:\USERS\Лабa534\DESKTOP\FZ-0415-KV-48-C13DEC_001001r	
Frequency (MHz) 100.61	Nucleus 13C	Number of Transients 722
Original Points Count 16384	Owner root	Origin spect
Receiver Gain 32768.00	SW(cyclical) (Hz) 31250.00	Points Count 65536
Sweep Width (Hz) 31249.52	Temperature (degree C) 27.000	Pulse Sequence zgpg
	Solvent DMSO-d6	Spectrum Offset (Hz) 9095.9688



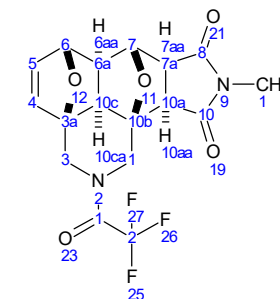
4d

FZ-0415-KV-48-C13DEC_001001r



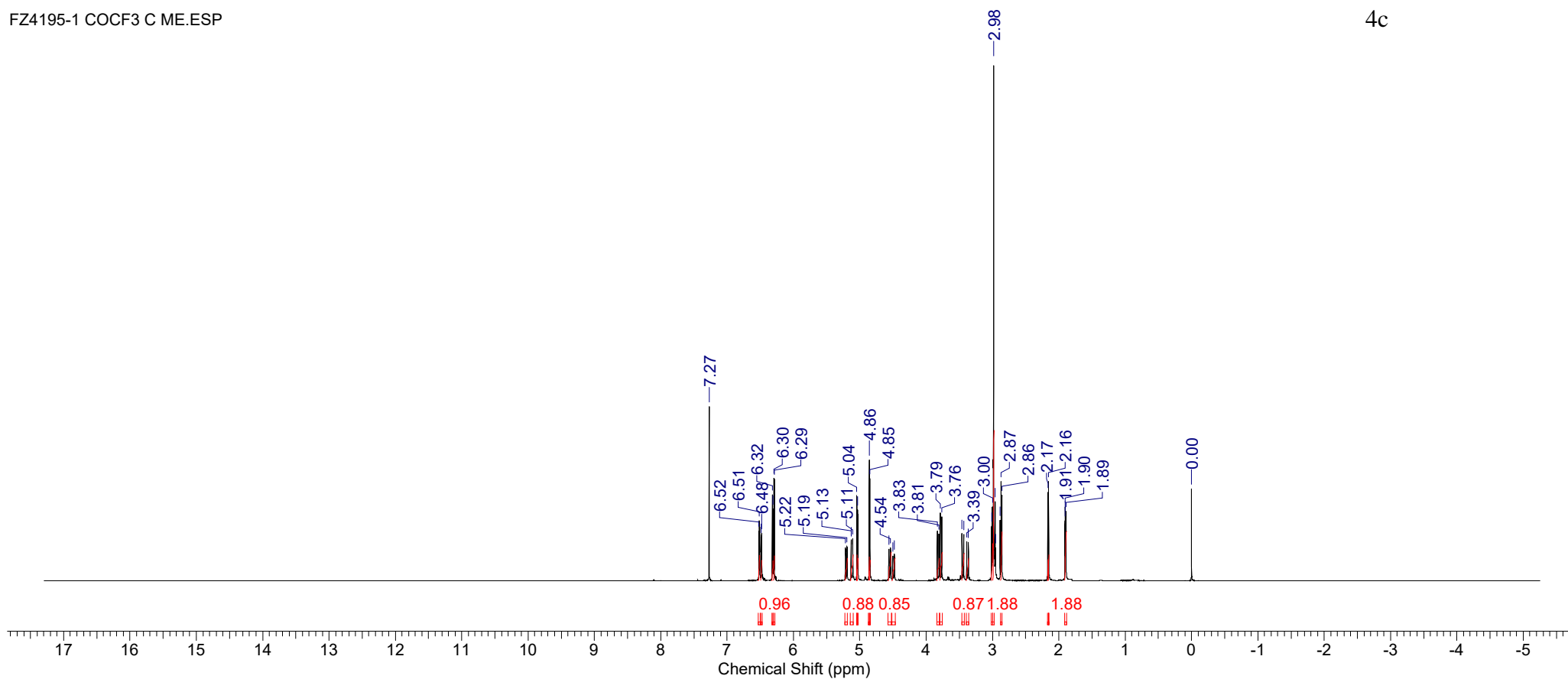
Formula C ₁₇ H ₁₅ F ₃ N ₂ O ₅	FW 384.3066
---	--------------------

Acquisition Time (sec) 2.4222	Comment single_pulse	Date 10 Apr 2015 12:28:39	Date Stamp 10 Apr 2015 11:34:47
File Name C:\USERS\Лаб6а534\DOWNLOADS\FZ4195-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner delta	Pulse Sequence single_pulse.ex2
Receiver Gain 40.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 3613.9580	Sweep Width (Hz) 13528.14



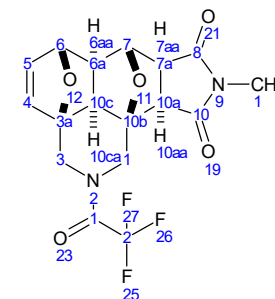
4c

FZ4195-1 COCF3 C ME.ESP



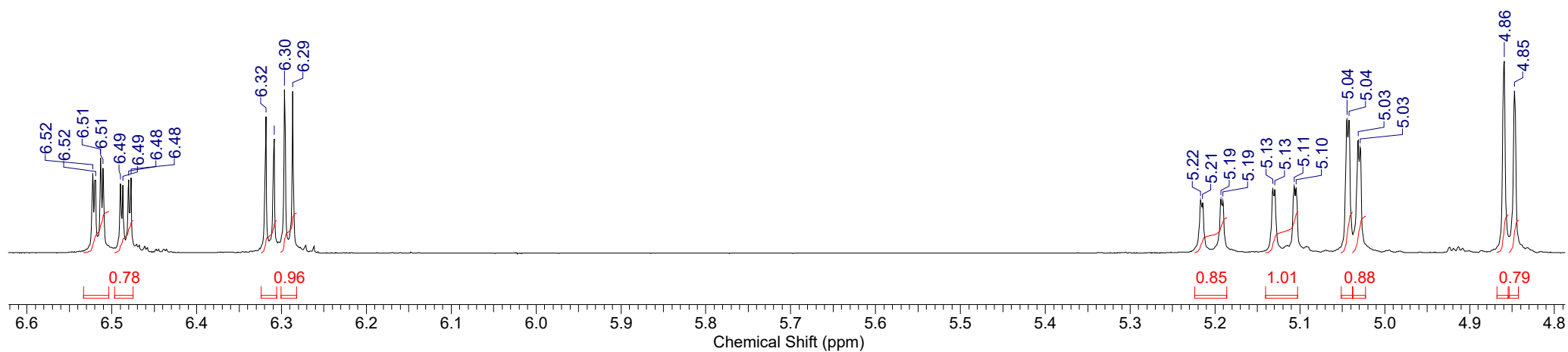
Formula C ₁₇ H ₁₅ F ₃ N ₃ O ₅	FW 384.3066
---	--------------------

Acquisition Time (sec) 2.4222	Comment single_pulse	Date 10 Apr 2015 12:28:39	Date Stamp 10 Apr 2015 11:34:47
File Name C:\USERS\Лабa534\DOWNLOADS\FZ4195-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner delta	Pulse Sequence single_pulse.ex2
Receiver Gain 40.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 3613.9580	Sweep Width (Hz) 13528.14



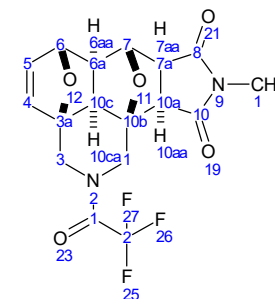
4c

FZ4195-1 COCF3 C ME.ESP



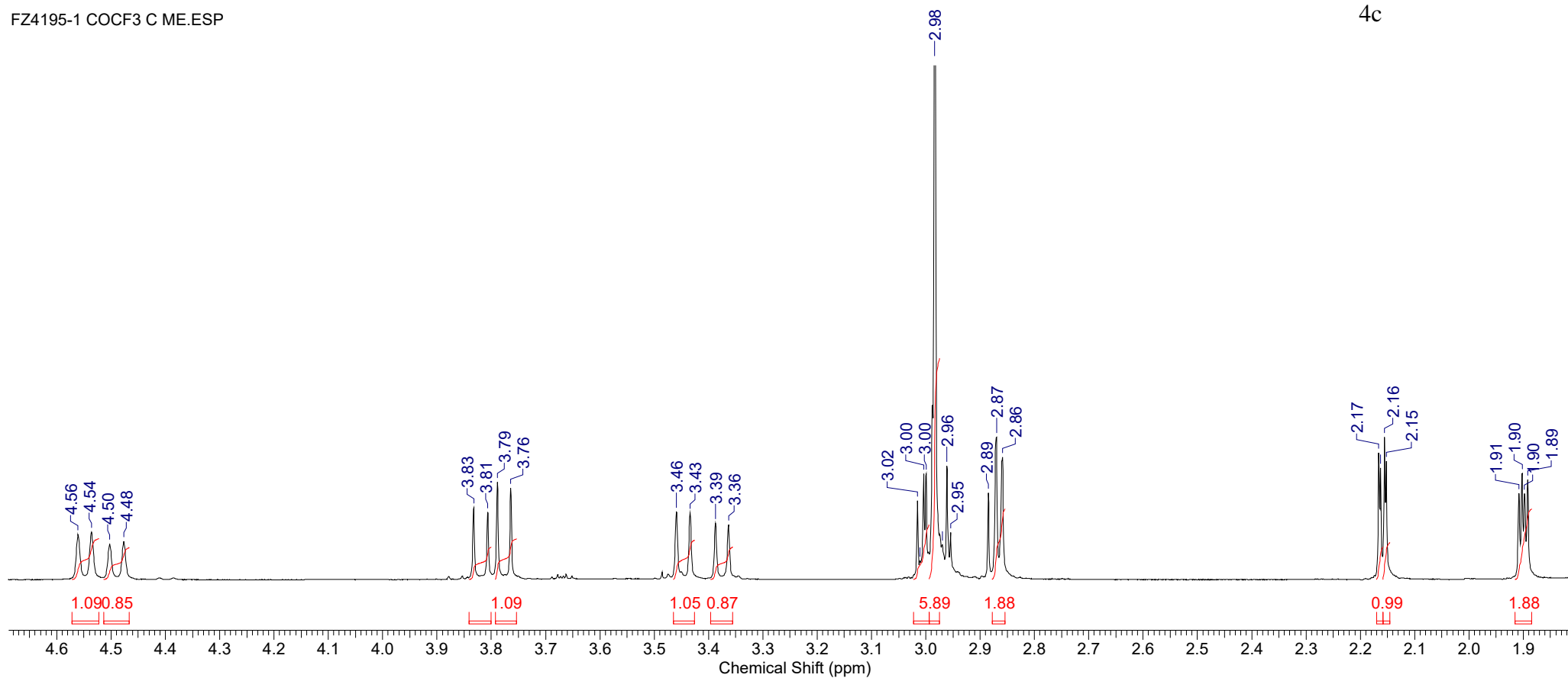
Formula C ₁₇ H ₁₅ F ₃ N ₂ O ₅	FW 384.3066
---	--------------------

Acquisition Time (sec) 2.4222	Comment single_pulse	Date 10 Apr 2015 12:28:39	Date Stamp 10 Apr 2015 11:34:47
File Name C:\USERS\Лабa534\DOWNLOADS\FZ4195-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner delta	Pulse Sequence single_pulse.ex2
Receiver Gain 40.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 3613.9580	Sweep Width (Hz) 13528.14



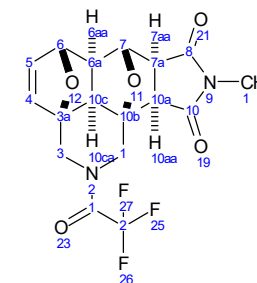
4c

FZ4195-1 COCF3 C ME.ESP



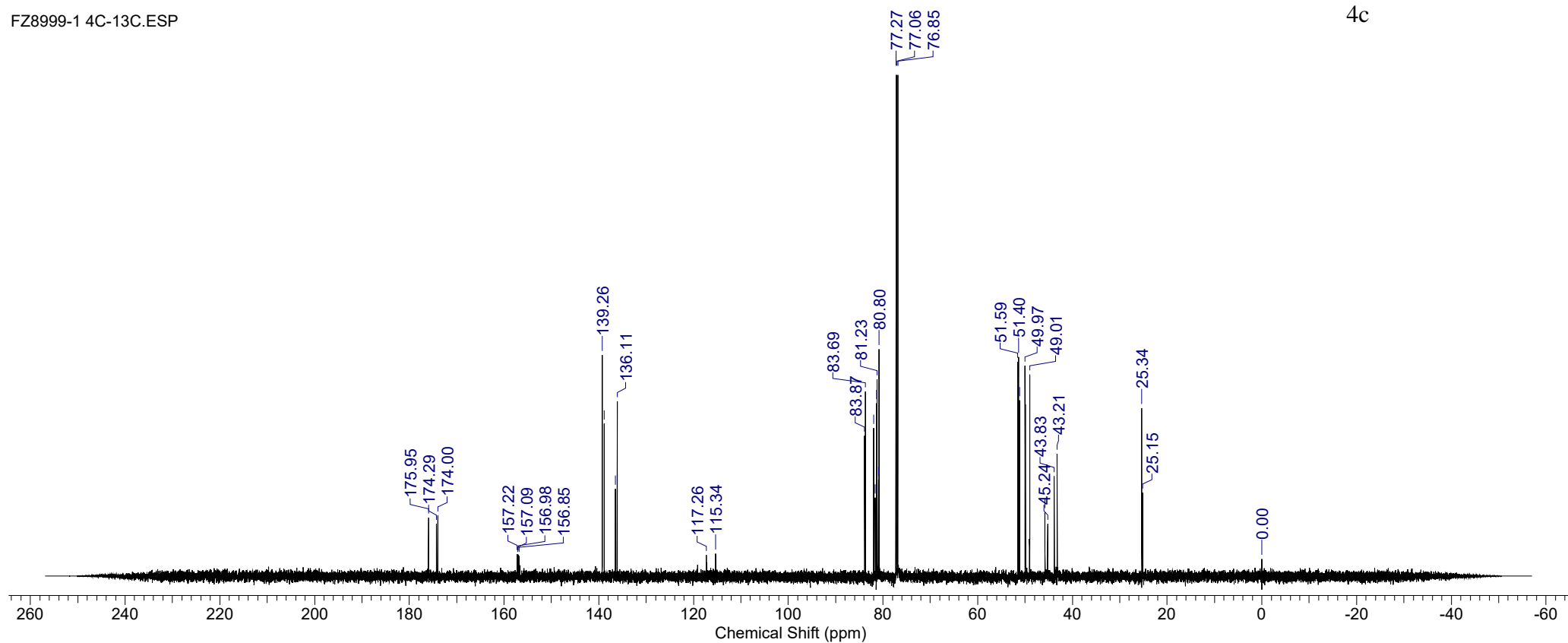
Formula C ₁₇ H ₁₅ F ₃ N ₂ O ₅	FW 384.3066
---	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 20 Aug 2020 08:59:36
Date Stamp 20 Aug 2020 09:00:43	File Name C:\USERS\la6a534\DOWNLOADS\FZ8999-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 1096
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 56.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15080.7979



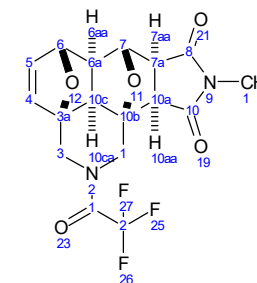
4c

FZ8999-1 4C-13C.ESP



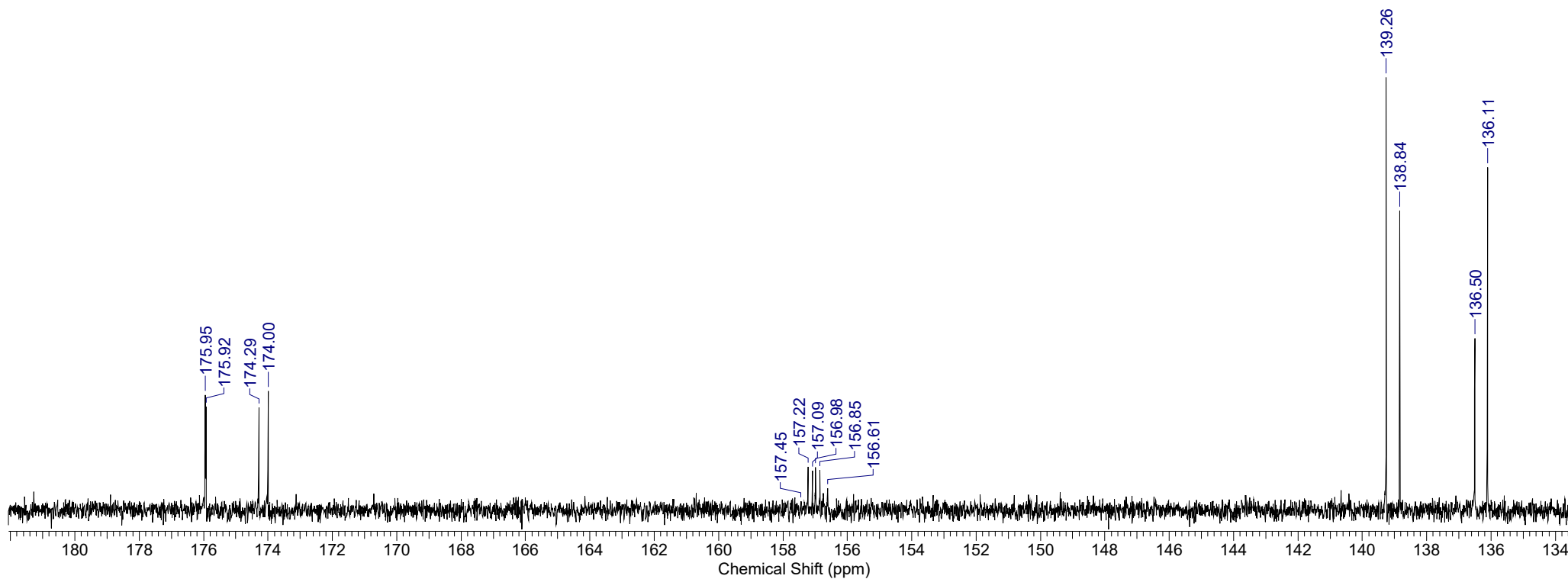
Formula C ₁₇ H ₁₅ F ₃ N ₂ O ₅	FW 384.3066
---	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 20 Aug 2020 08:59:36
Date Stamp 20 Aug 2020 09:00:43	File Name C:\USERS\l1a6a534\DOWNLOADS\FZ8999-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 1096
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 56.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15080.7979



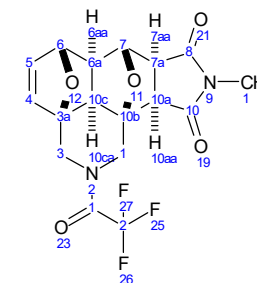
4c

FZ8999-1 4C-13C.ESP



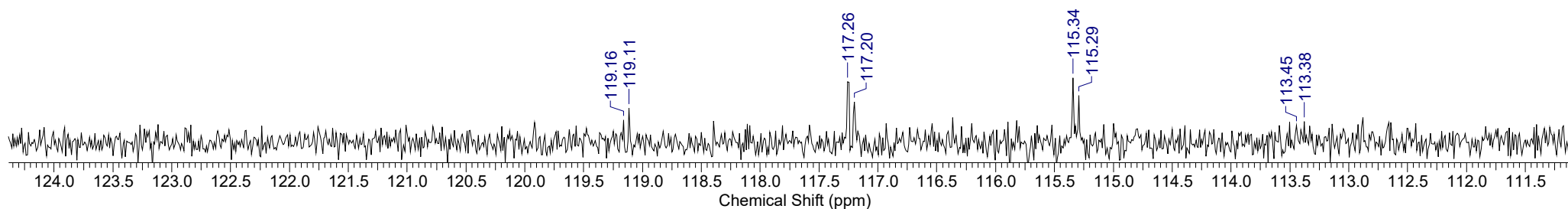
Formula C ₁₇ H ₁₅ F ₃ N ₂ O ₅	FW 384.3066
---	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 20 Aug 2020 08:59:36
Date Stamp 20 Aug 2020 09:00:43	File Name C:\USERS\l1a6a534\DOWNLOADS\FZ8999-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 1096
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 56.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15080.7979



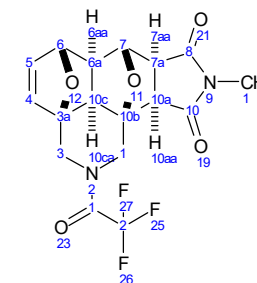
4c

FZ8999-1 4C-13C.ESP



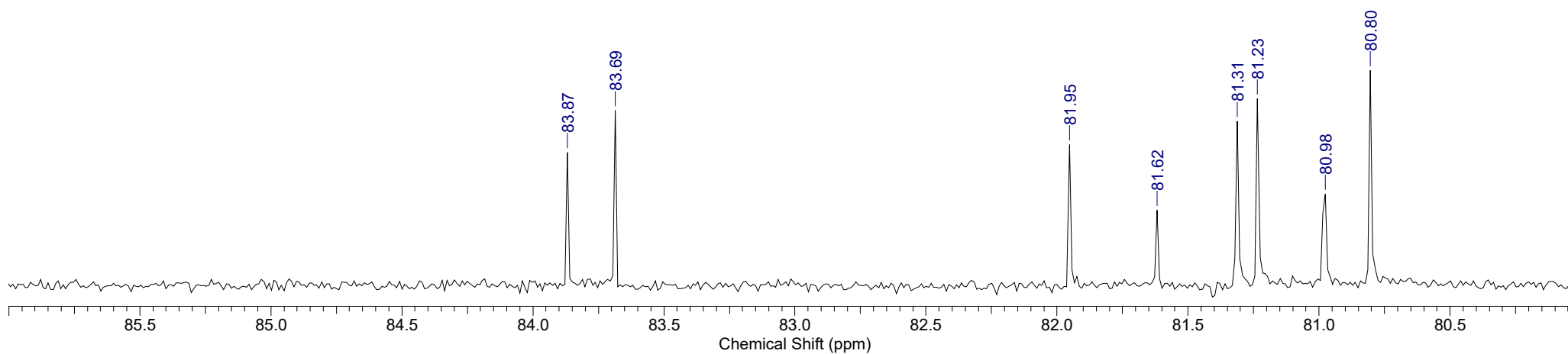
Formula C ₁₇ H ₁₅ F ₃ N ₂ O ₅	FW 384.3066
---	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 20 Aug 2020 08:59:36
Date Stamp 20 Aug 2020 09:00:43	File Name C:\USERS\la6a534\DOWNLOADS\FZ8999-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 1096
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 56.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15080.7979



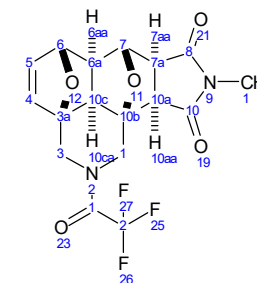
4c

FZ8999-1 4C-13C.ESP



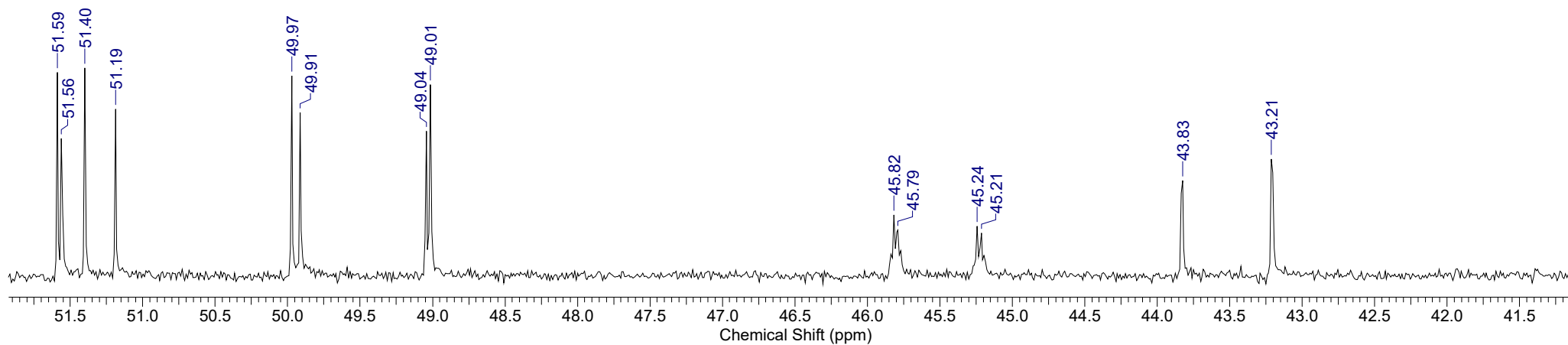
Formula C ₁₇ H ₁₅ F ₃ N ₂ O ₅	FW 384.3066
---	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 20 Aug 2020 08:59:36
Date Stamp 20 Aug 2020 09:00:43	File Name C:\USERS\la6a534\DOWNLOADS\FZ8999-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 1096
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 56.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15080.7979



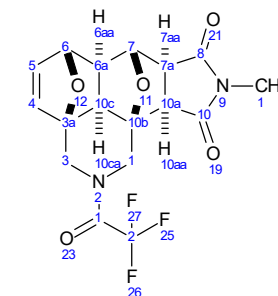
4c

FZ8999-1 4C-13C.ESP



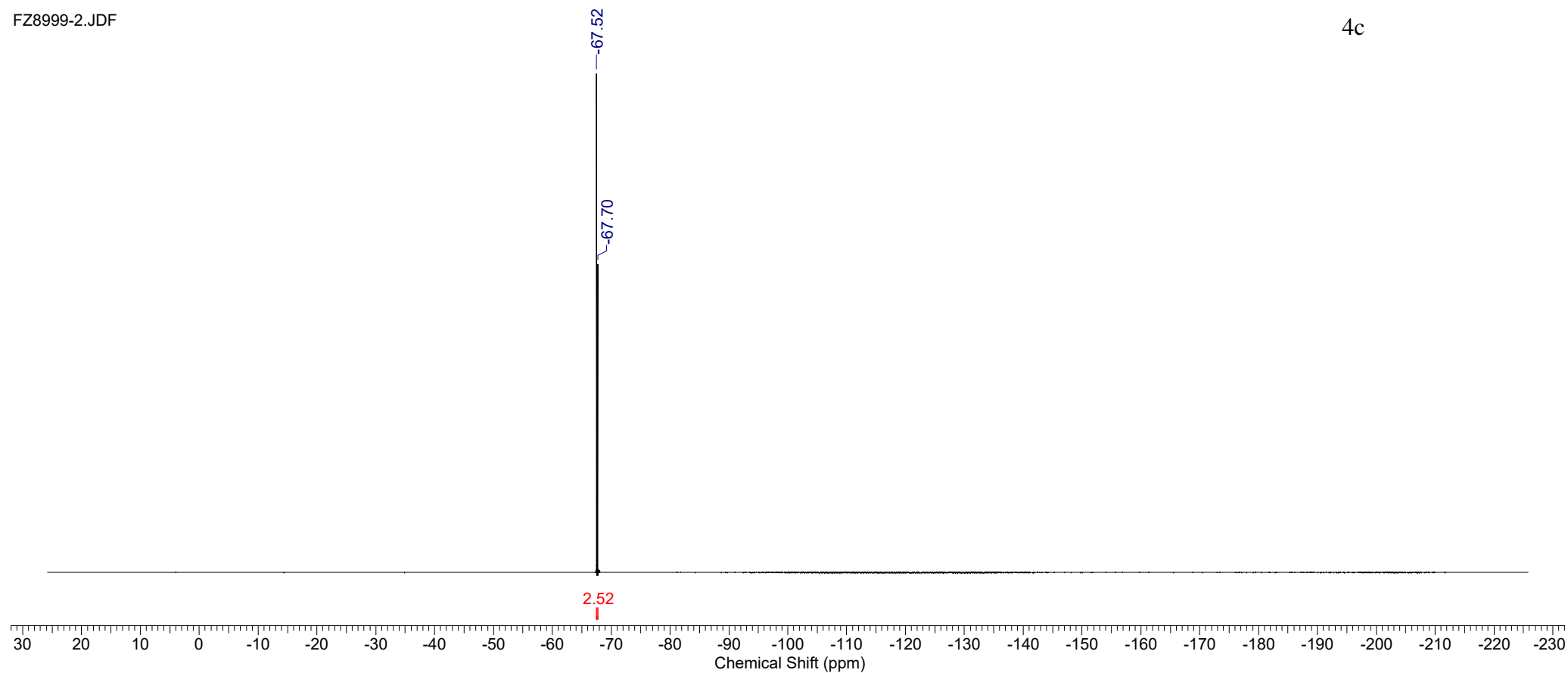
Formula C ₁₇ H ₁₅ F ₃ N ₂ O ₅	FW 384.3066
---	--------------------

Acquisition Time (sec) 0.4614	Comment single_pulse	Date 20 Aug 2020 09:01:25	Date Stamp 20 Aug 2020 09:02:31
File Name C:\USERS\Лабa534\DOWNLOADS\FZ8999-2.JDF	Frequency (MHz) 564.73	Nucleus 19F	Number of Transients 16
Origin ECA 600	Original Points Count 65536	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 40.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) -56472.6094	Sweep Width (Hz) 142045.45



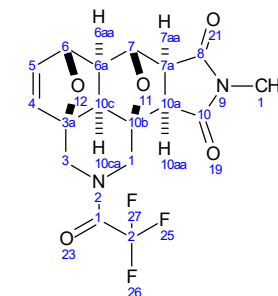
4c

FZ8999-2.JDF



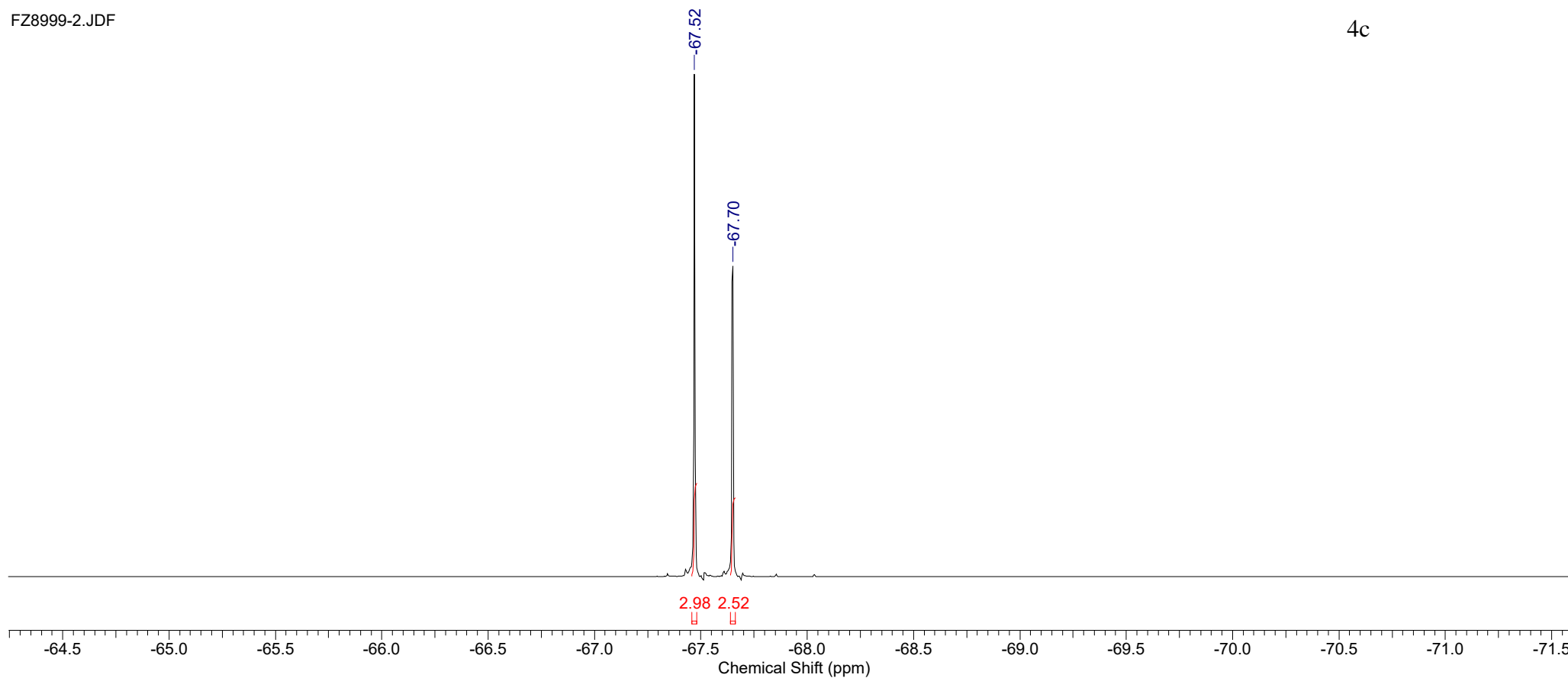
Formula C ₁₇ H ₁₅ F ₃ N ₂ O ₅	FW 384.3066
---	--------------------

Acquisition Time (sec) 0.4614	Comment single_pulse	Date 20 Aug 2020 09:01:25	Date Stamp 20 Aug 2020 09:02:31
File Name C:\USERS\Лабa534\DOWNLOADS\FZ8999-2.JDF	Frequency (MHz) 564.73	Nucleus 19F	Number of Transients 16
Origin ECA 600	Original Points Count 65536	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 40.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) -56472.6094	Sweep Width (Hz) 142045.45



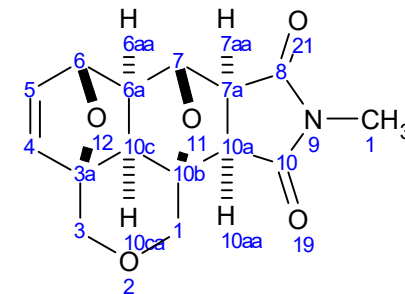
4c

FZ8999-2.JDF



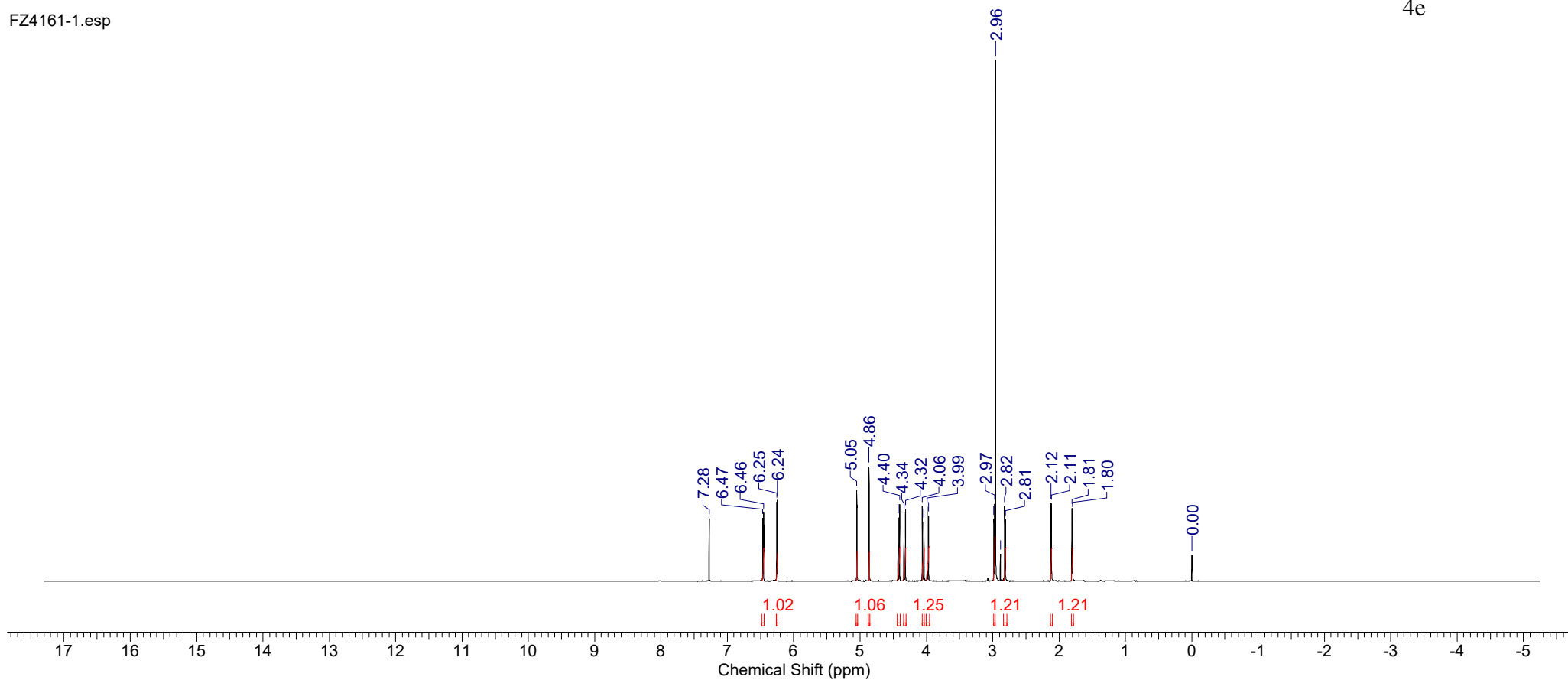
Formula C ₁₅ H ₁₅ NO ₅	FW 289.2833
--	--------------------

Acquisition Time (sec) 1.2111	Comment single_pulse	Date 25 Mar 2015 13:19:23	Date Stamp 25 Mar 2015 12:25:17
File Name C:\USERS\Лабa534\DOWNLOADS\FZ4161-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 16384	Owner delta	Pulse Sequence single_pulse.ex2
Receiver Gain 38.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 3616.3391	Sweep Width (Hz) 13528.14



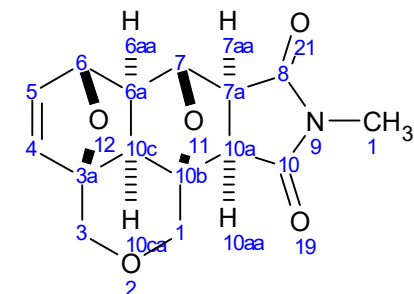
4e

FZ4161-1.esp



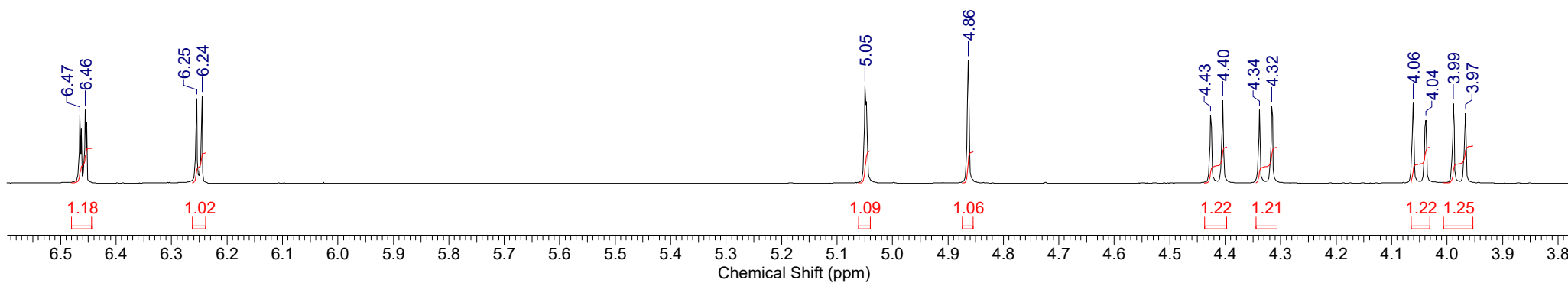
Formula C ₁₅ H ₁₅ NO ₅	FW 289.2833
--	--------------------

Acquisition Time (sec) 1.2111	Comment single_pulse	Date 25 Mar 2015 13:19:23	Date Stamp 25 Mar 2015 12:25:17
File Name C:\USERS\Лаб6a534\DOWNLOADS\FZ4161-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 16384	Owner delta	Pulse Sequence single_pulse.ex2
Receiver Gain 38.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 3616.3391	Sweep Width (Hz) 13528.14



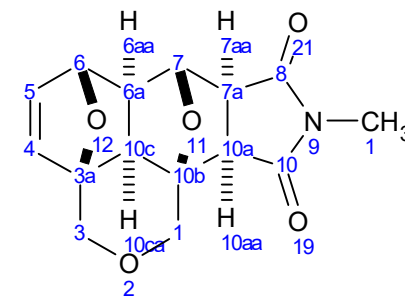
4e

FZ4161-1.esp

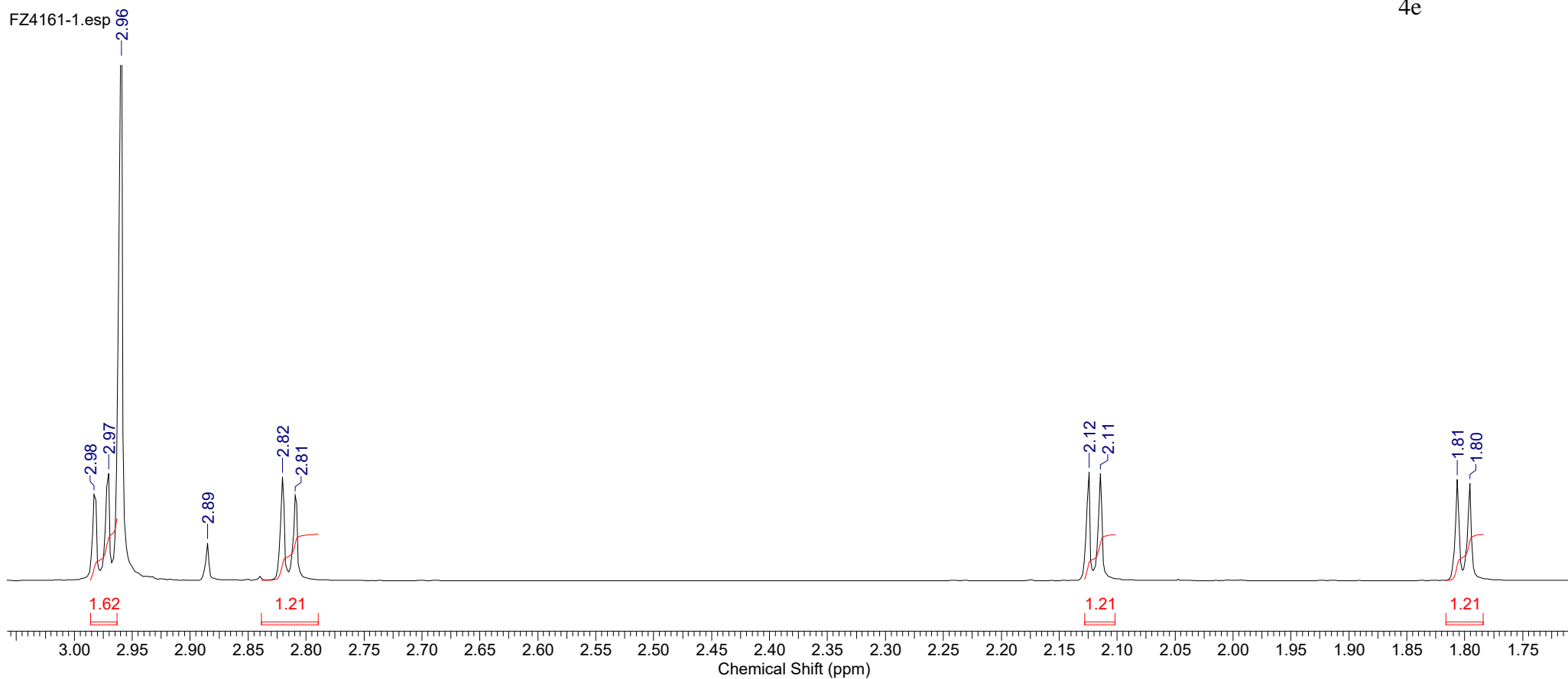


Formula C ₁₅ H ₁₅ NO ₅	FW 289.2833
--	--------------------

Acquisition Time (sec) 1.2111	Comment single_pulse	Date 25 Mar 2015 13:19:23	Date Stamp 25 Mar 2015 12:25:17
File Name C:\USERS\Лабa534\DOWNLOADS\FZ4161-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 16384	Owner delta	Pulse Sequence single_pulse.ex2
Receiver Gain 38.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 3616.3391	Sweep Width (Hz) 13528.14

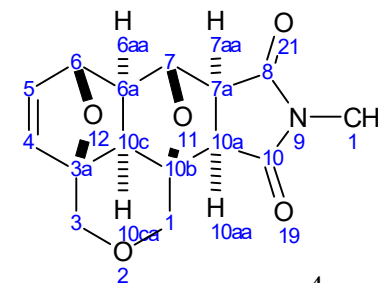


4e

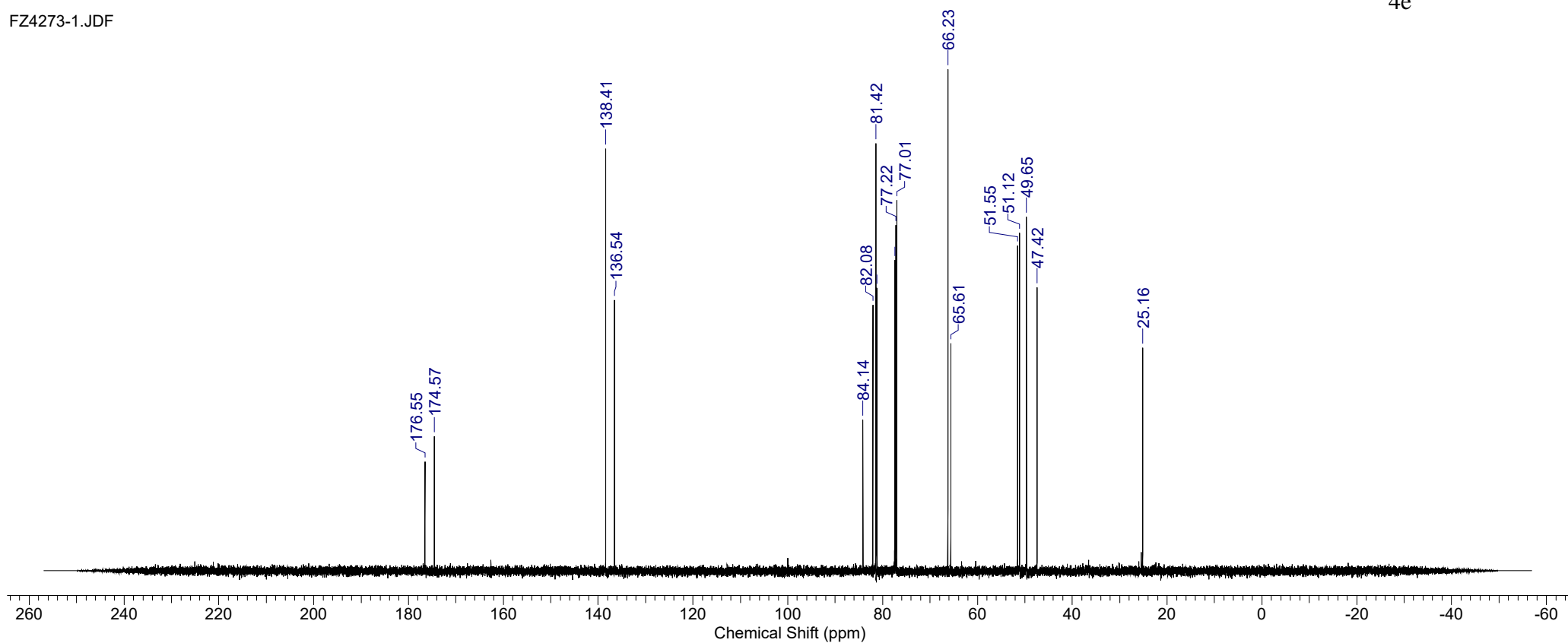


Formula C ₁₅ H ₁₅ NO ₅	FW 289.2833
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 05 May 2015 10:23:47
Date Stamp 05 May 2015 09:30:16	File Name C:\USERS\Лабa534\DOWNLOADS\FZ4273-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 100
Original Points Count 32768	Owner delta	Points Count 32768
Receiver Gain 52.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49	Temperature (degree C) 20.700	Spectrum Offset (Hz) 15091.3428

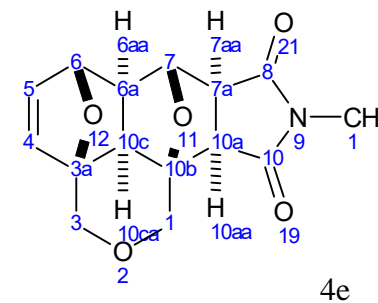


FZ4273-1.JDF

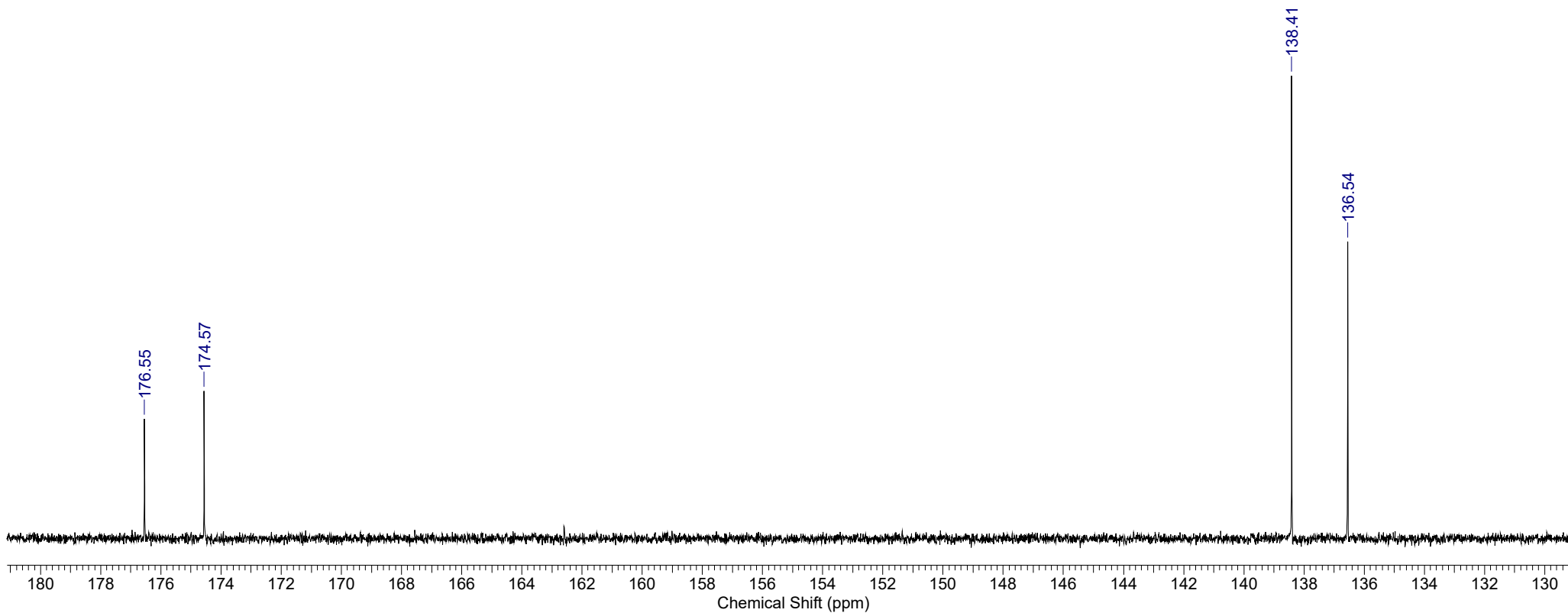


Formula C ₁₅ H ₁₅ NO ₅	FW 289.2833
--	--------------------

Acquisition Time (sec)	0.6921	Comment	single pulse decoupled gated NOE	Date	05 May 2015 10:23:47
Date Stamp	05 May 2015 09:30:16	File Name	C:\USERS\Лабa534\DOWNLOADS\FZ4273-1.JDF		
Frequency (MHz)	150.91	Nucleus	13C	Number of Transients	100
Original Points Count	32768	Owner	delta	Points Count	32768
Receiver Gain	52.00	Solvent	CHLOROFORM-d	Pulse Sequence	single pulse dec
Sweep Width (Hz)	47348.49	Temperature (degree C)	20.700	Spectrum Offset (Hz)	15091.3428

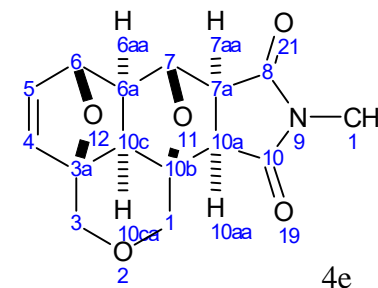


FZ4273-1.JDF

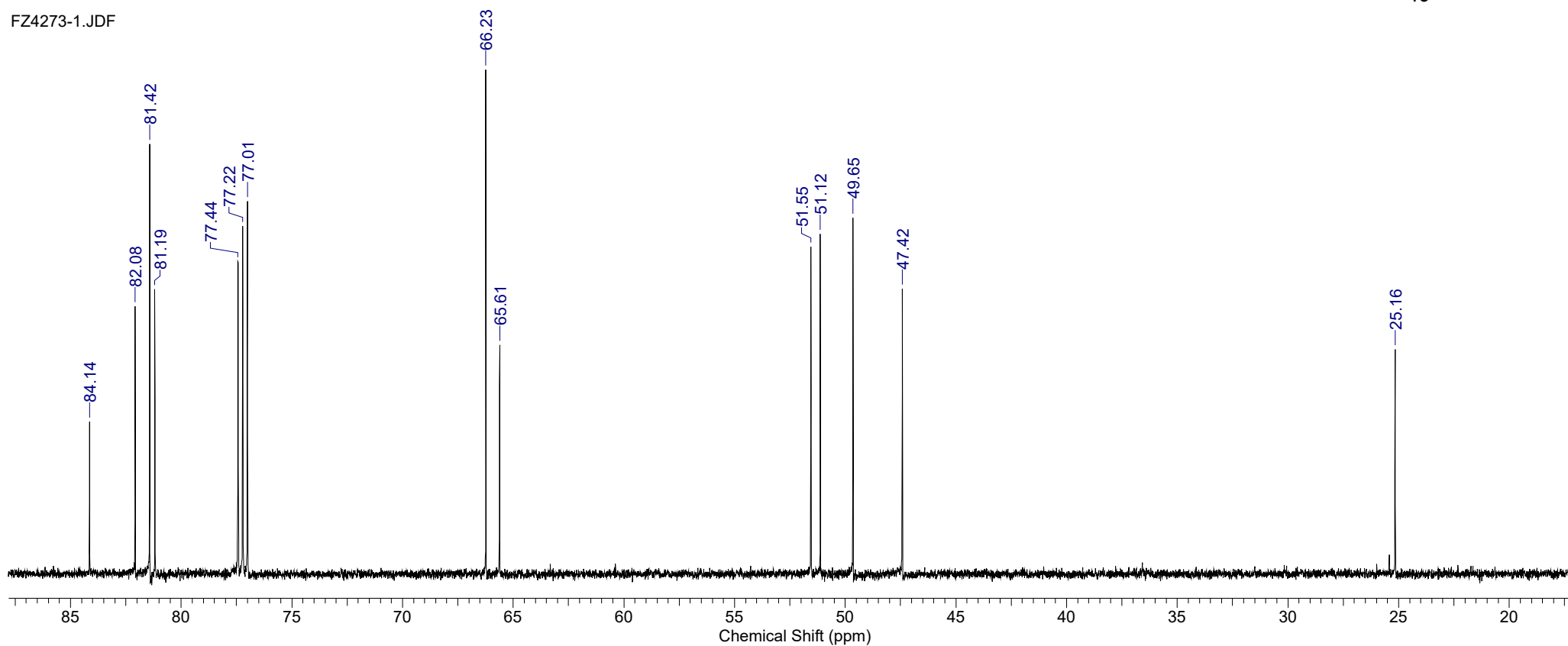


Formula C ₁₅ H ₁₅ NO ₅	FW 289.2833
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 05 May 2015 10:23:47
Date Stamp 05 May 2015 09:30:16	File Name C:\USERS\Лабa534\DOWNLOADS\FZ4273-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 100
Original Points Count 32768	Owner delta	Points Count 32768
Receiver Gain 52.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49	Temperature (degree C) 20.700	Spectrum Offset (Hz) 15091.3428

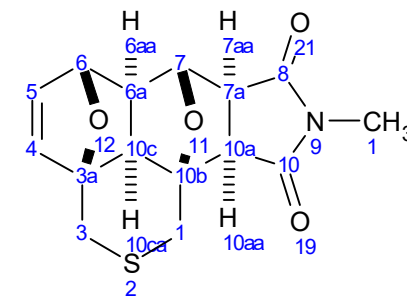


FZ4273-1.JDF



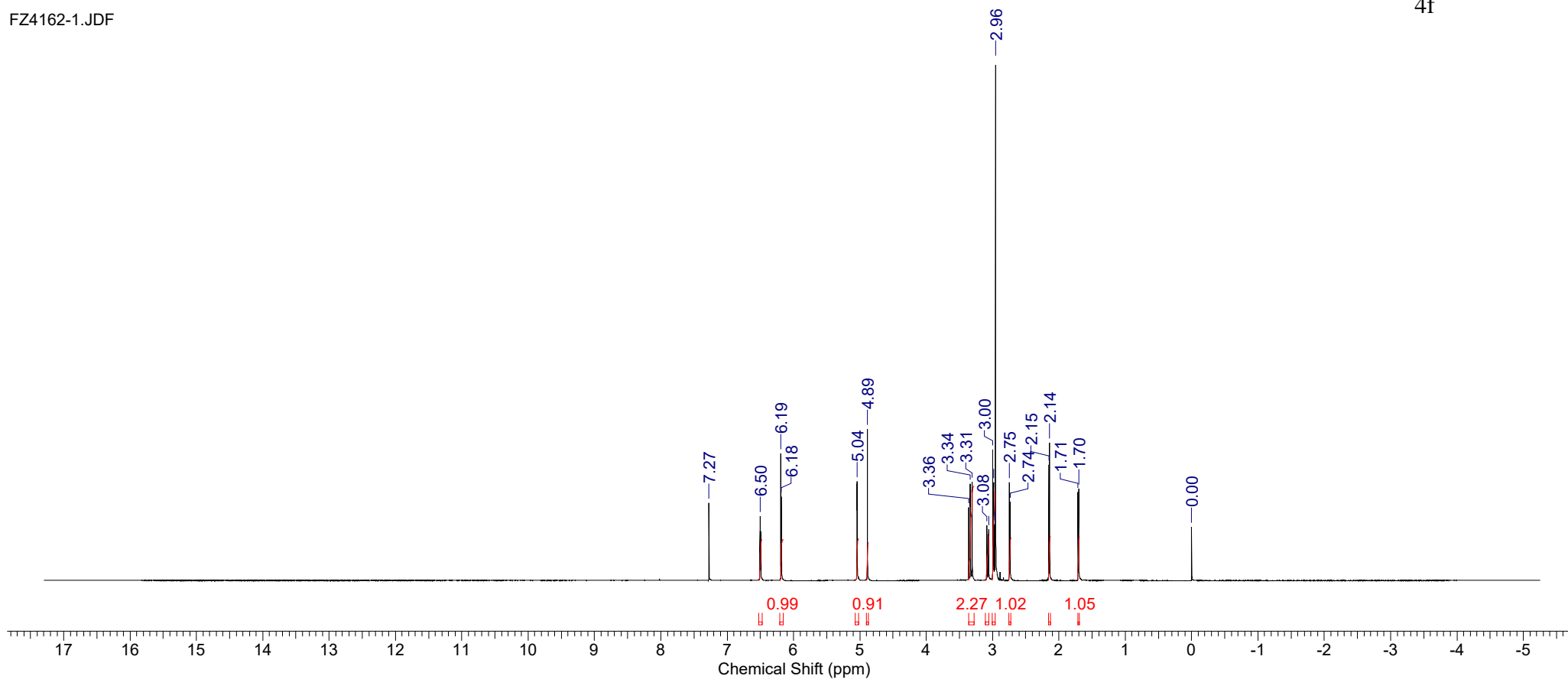
Formula C ₁₅ H ₁₅ NO ₄ S	FW 305.3489
--	--------------------

Acquisition Time (sec) 1.2111	Comment single_pulse	Date 25 Mar 2015 12:57:37	Date Stamp 25 Mar 2015 12:03:31
File Name C:\USERS\Лаб6а534\DOWNLOADS\FZ4162-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 16384	Owner delta	Pulse Sequence single_pulse.ex2
Receiver Gain 40.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 3614.6875	Sweep Width (Hz) 13528.14



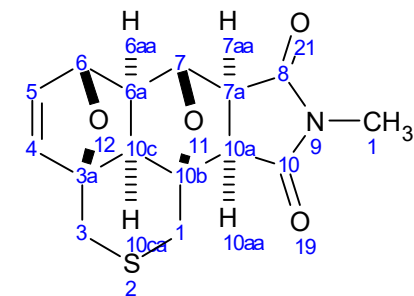
4f

FZ4162-1.JDF



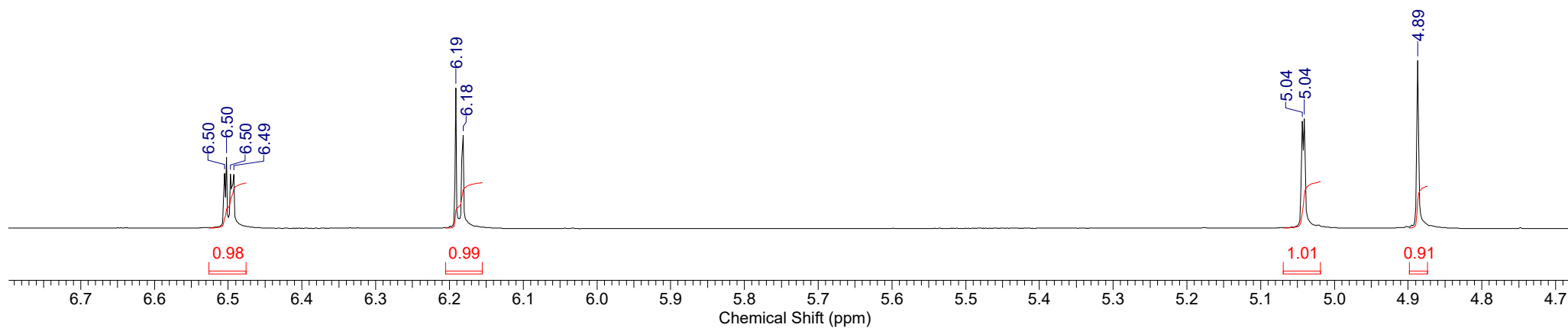
Formula C ₁₅ H ₁₅ NO ₄ S	FW 305.3489
--	--------------------

Acquisition Time (sec) 1.2111	Comment single_pulse	Date 25 Mar 2015 12:57:37	Date Stamp 25 Mar 2015 12:03:31
File Name C:\USERS\Лабa534\DOWNLOADS\FZ4162-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 16384	Owner delta	Pulse Sequence single_pulse.ex2
Receiver Gain 40.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 3614.6875	Sweep Width (Hz) 13528.14



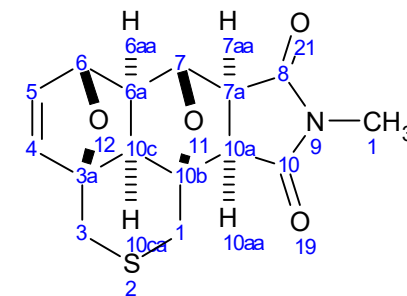
4f

FZ4162-1.JDF



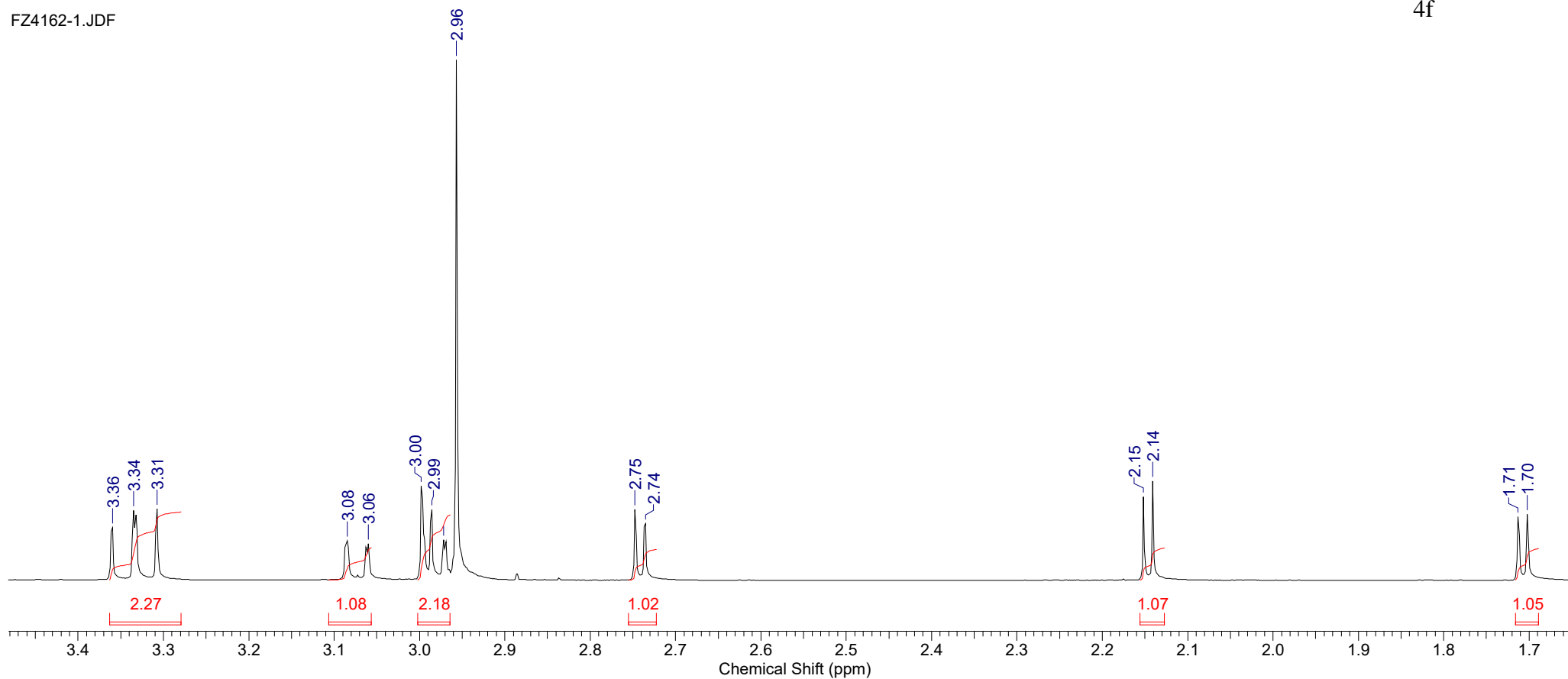
Formula C ₁₅ H ₁₅ NO ₄ S	FW 305.3489
--	--------------------

Acquisition Time (sec) 1.2111	Comment single_pulse	Date 25 Mar 2015 12:57:37	Date Stamp 25 Mar 2015 12:03:31
File Name C:\USERS\Лабa534\DOWNLOADS\FZ4162-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 16384	Owner delta	Pulse Sequence single_pulse.ex2
Receiver Gain 40.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 3614.6875	Sweep Width (Hz) 13528.14



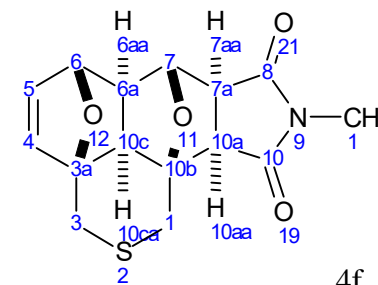
4f

FZ4162-1.JDF

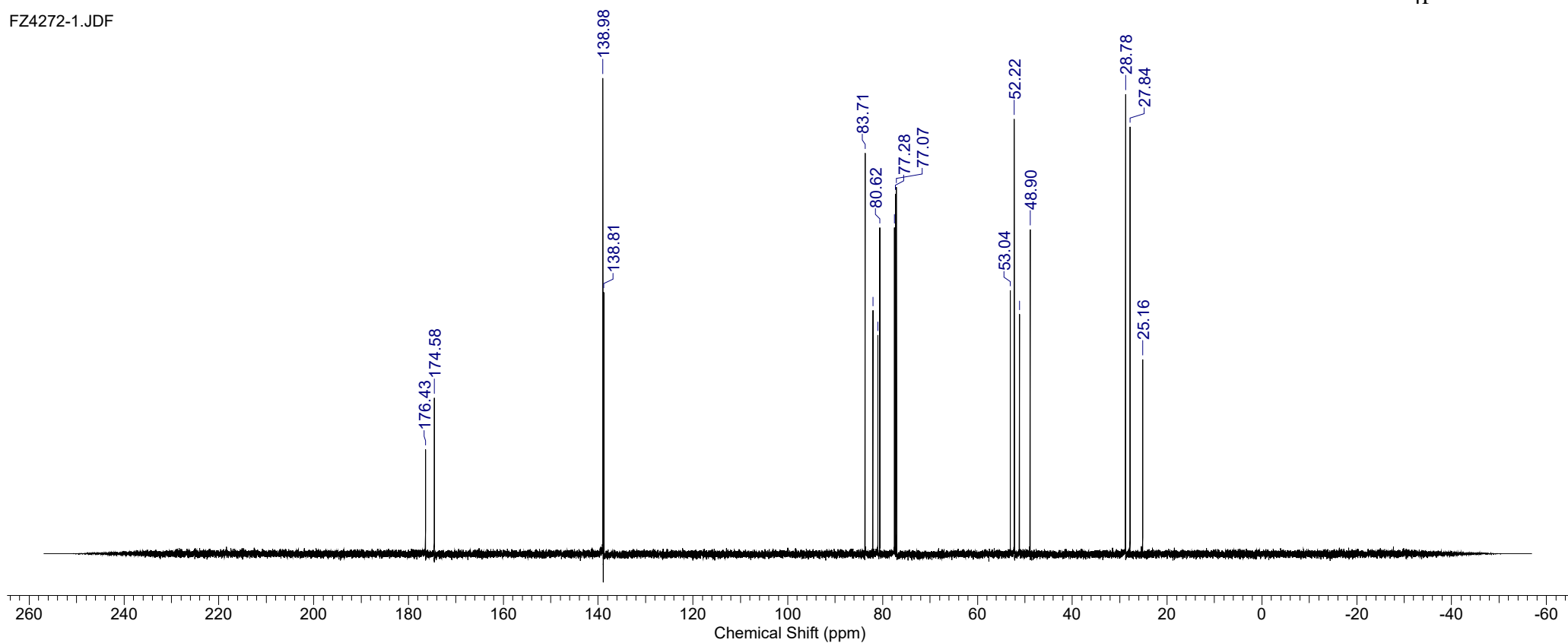


Formula C ₁₅ H ₁₅ NO ₄ S	FW 305.3489
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 05 May 2015 10:38:15
Date Stamp 05 May 2015 09:44:44	File Name C:\USERS\Лабa534\DOWNLOADS\FZ4272-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 100
Original Points Count 32768	Owner delta	Points Count 32768
Receiver Gain 52.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49	Temperature (degree C) 20.800	Spectrum Offset (Hz) 15091.3428

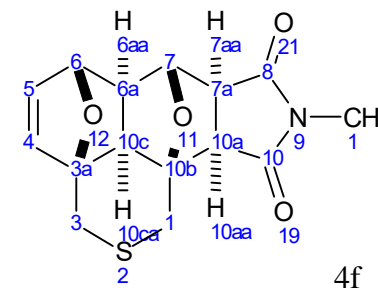


FZ4272-1.JDF

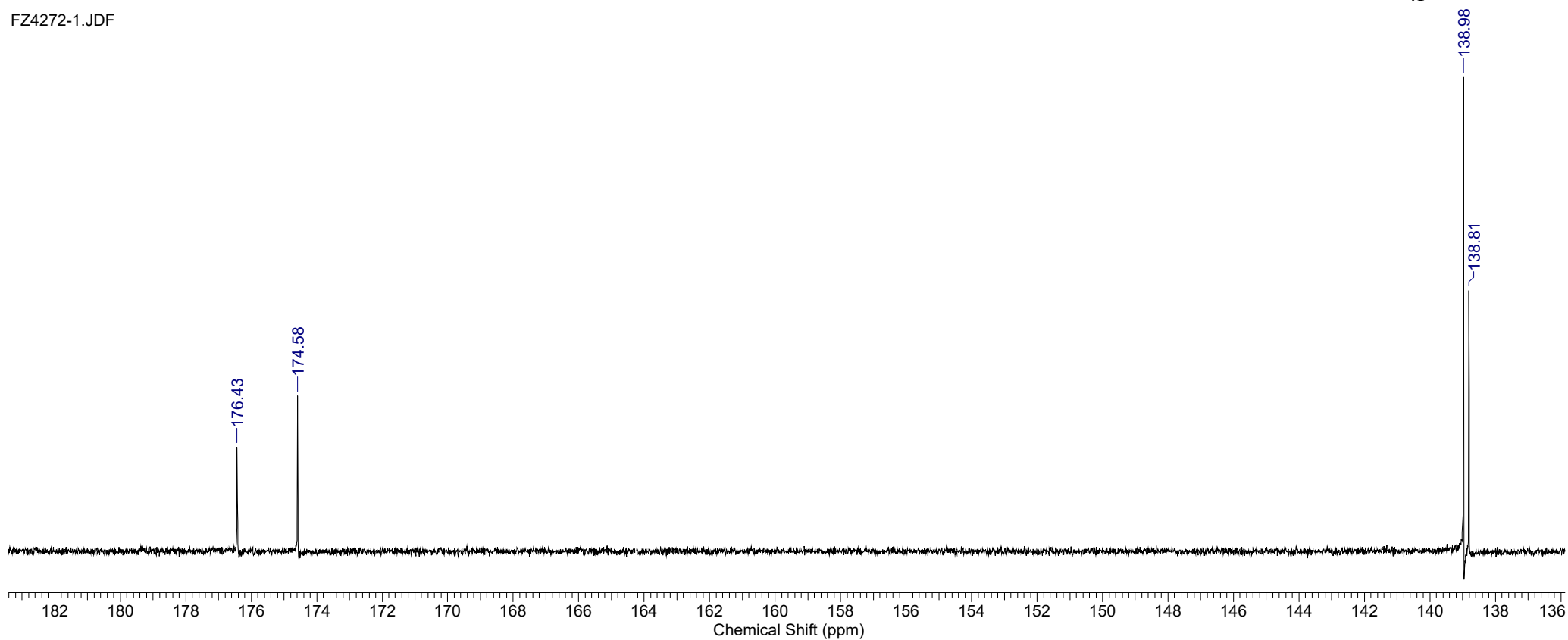


Formula C ₁₅ H ₁₅ NO ₄ S	FW 305.3489
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 05 May 2015 10:38:15
Date Stamp 05 May 2015 09:44:44	File Name C:\USERS\Лабa534\DOWNLOADS\FZ4272-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 100
Original Points Count 32768	Owner delta	Points Count 32768
Receiver Gain 52.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49	Temperature (degree C) 20.800	Spectrum Offset (Hz) 15091.3428

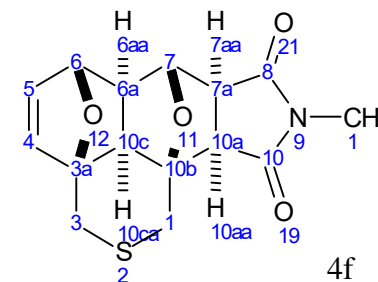


FZ4272-1.JDF

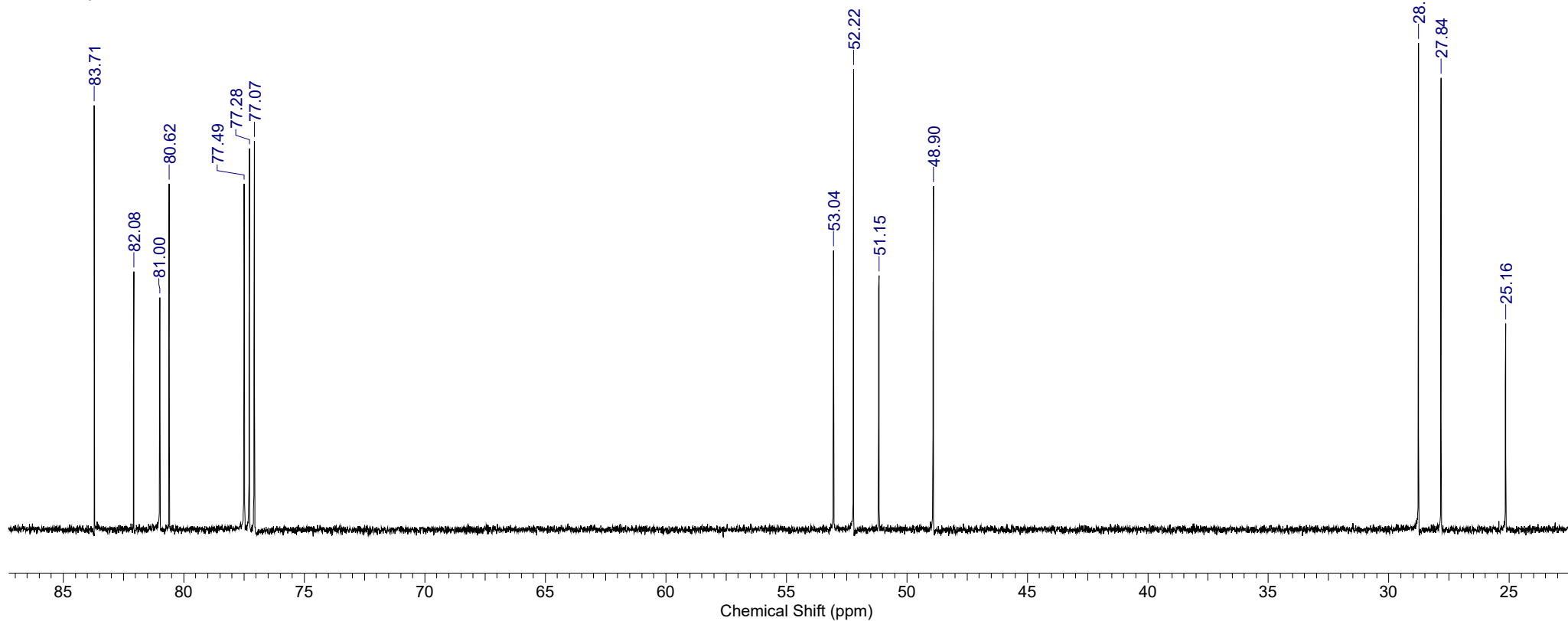


Formula C ₁₅ H ₁₅ NO ₄ S	FW 305.3489
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 05 May 2015 10:38:15
Date Stamp 05 May 2015 09:44:44	File Name C:\USERS\Лабa534\DOWNLOADS\FZ4272-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 100
Original Points Count 32768	Owner delta	Points Count 32768
Receiver Gain 52.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49	Temperature (degree C) 20.800	Spectrum Offset (Hz) 15091.3428

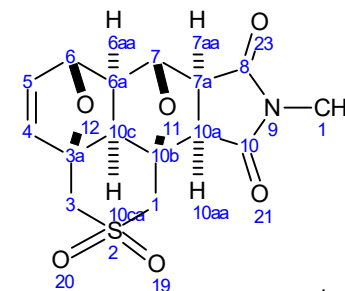


FZ4272-1.JDF

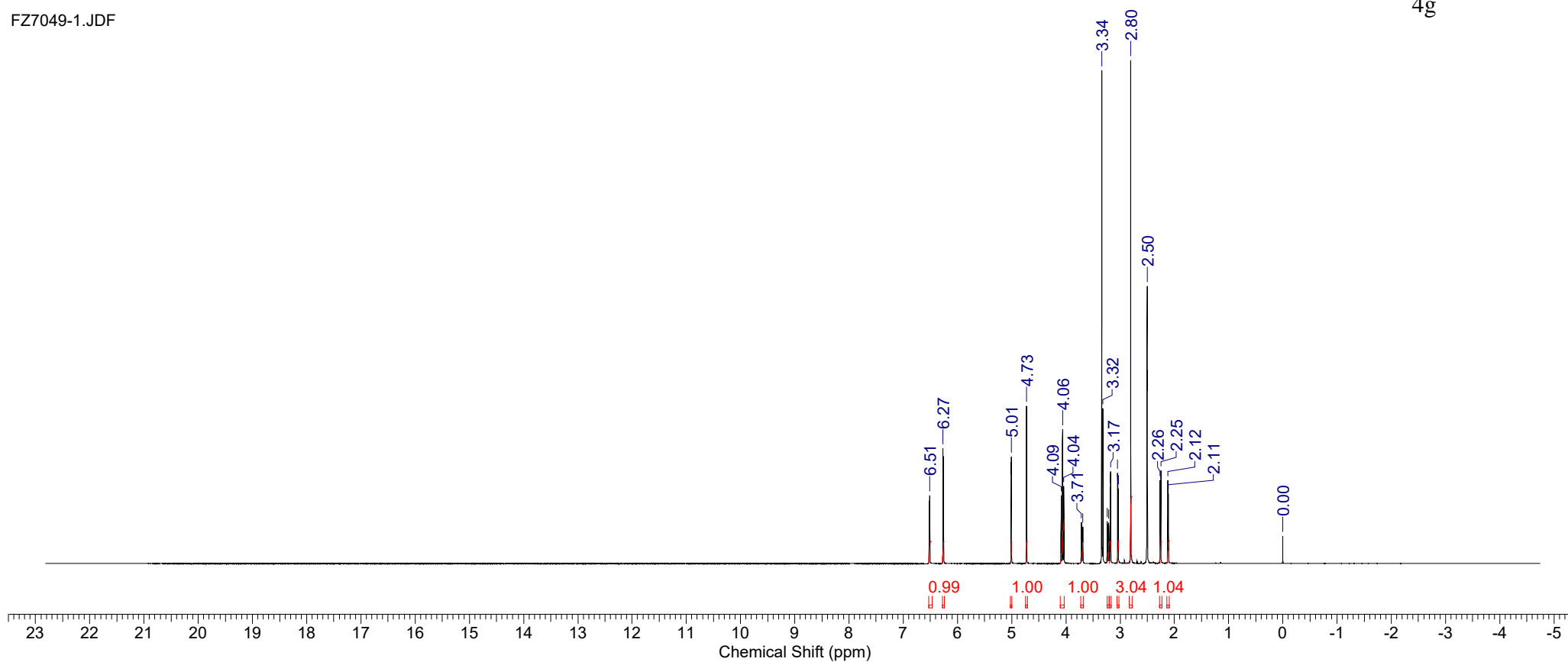


Formula C ₁₅ H ₁₅ NO ₆ S	FW 337.3477
--	--------------------

Acquisition Time (sec) 1.9818	Comment single pulse	Date 09 Jan 1990 17:39:27	Date Stamp 12 Dec 2018 13:23:03
File Name C:\USERS\534~1\APPDATA\LOCAL\TEMP\FZ7049-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	
Number of Transients 8	Origin ECA 600	Original Points Count 32768	Owner delta
Pulse Sequence single_pulse.ex2	Receiver Gain 44.00	Solvent DMSO-d6	Points Count 32768
Sweep Width (Hz) 16534.39			Spectrum Offset (Hz) 5423.7471

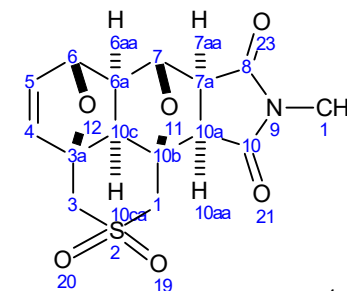


FZ7049-1.JDF



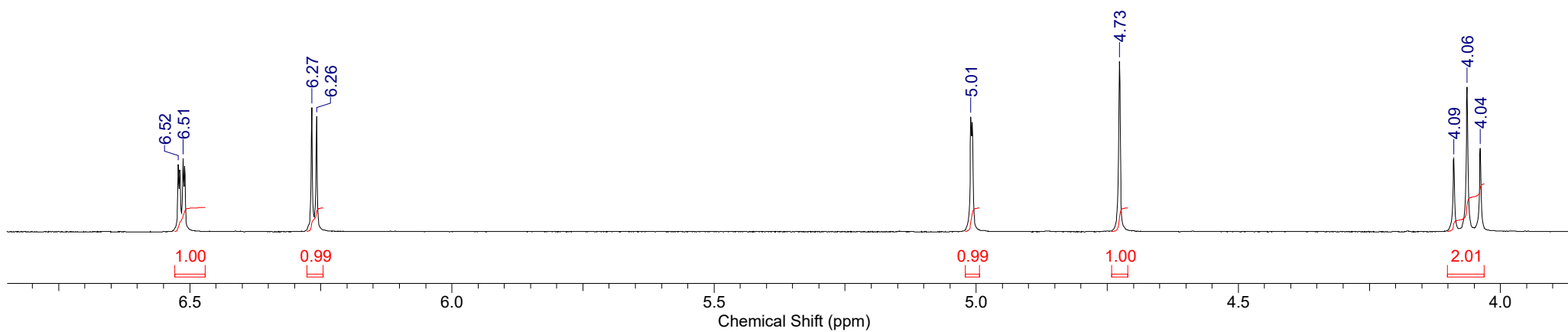
Formula C ₁₅ H ₁₅ NO ₆ S	FW 337.3477
--	--------------------

Acquisition Time (sec) 1.9818	Comment single pulse	Date 09 Jan 1990 17:39:27	Date Stamp 12 Dec 2018 13:23:03
File Name C:\USERS\534~1\APPDATA\LOCAL\TEMP\FZ7049-1.JDF		Frequency (MHz) 600.17	Nucleus 1H
Number of Transients 8	Origin ECA 600	Original Points Count 32768	Points Count 32768
Pulse Sequence single_pulse.ex2		Receiver Gain 44.00	Solvent DMSO-d6
Sweep Width (Hz) 16534.39			Spectrum Offset (Hz) 5423.7471



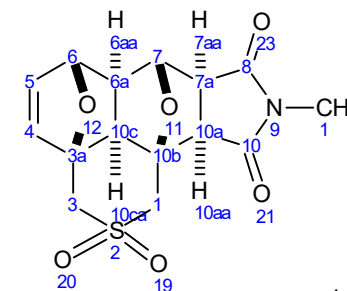
4g

FZ7049-1.JDF



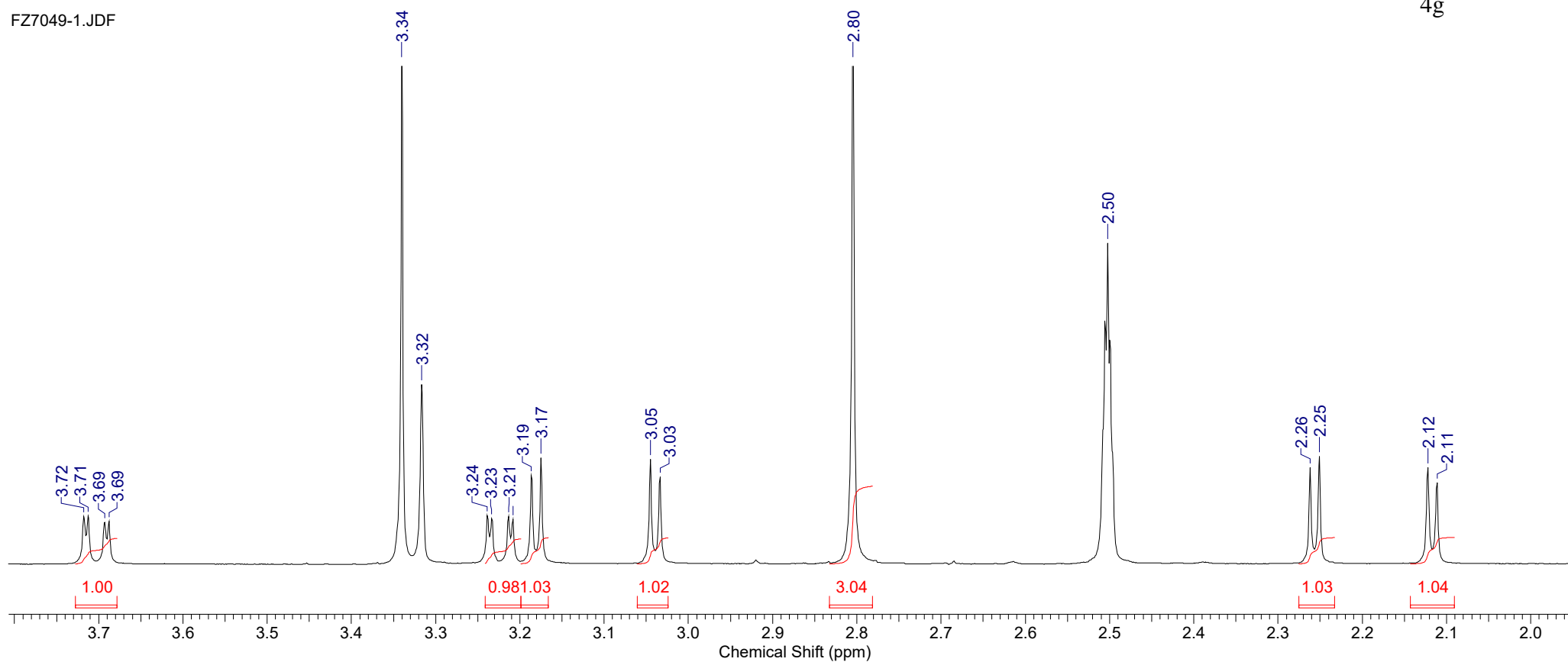
Formula C ₁₅ H ₁₅ NO ₆ S	FW 337.3477
--	--------------------

Acquisition Time (sec) 1.9818	Comment single pulse	Date 09 Jan 1990 17:39:27	Date Stamp 12 Dec 2018 13:23:03
File Name C:\USERS\534~1\APPDATA\LOCAL\TEMP\FZ7049-1.JDF		Frequency (MHz) 600.17	Nucleus 1H
Number of Transients 8	Origin ECA 600	Original Points Count 32768	Points Count 32768
Pulse Sequence single_pulse.ex2		Receiver Gain 44.00	Solvent DMSO-d6
Sweep Width (Hz) 16534.39			Spectrum Offset (Hz) 5423.7471



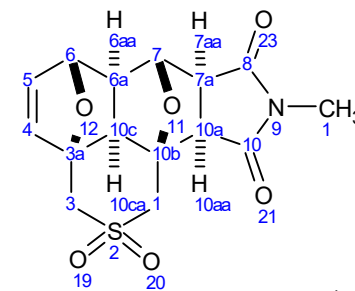
4g

FZ7049-1.JDF



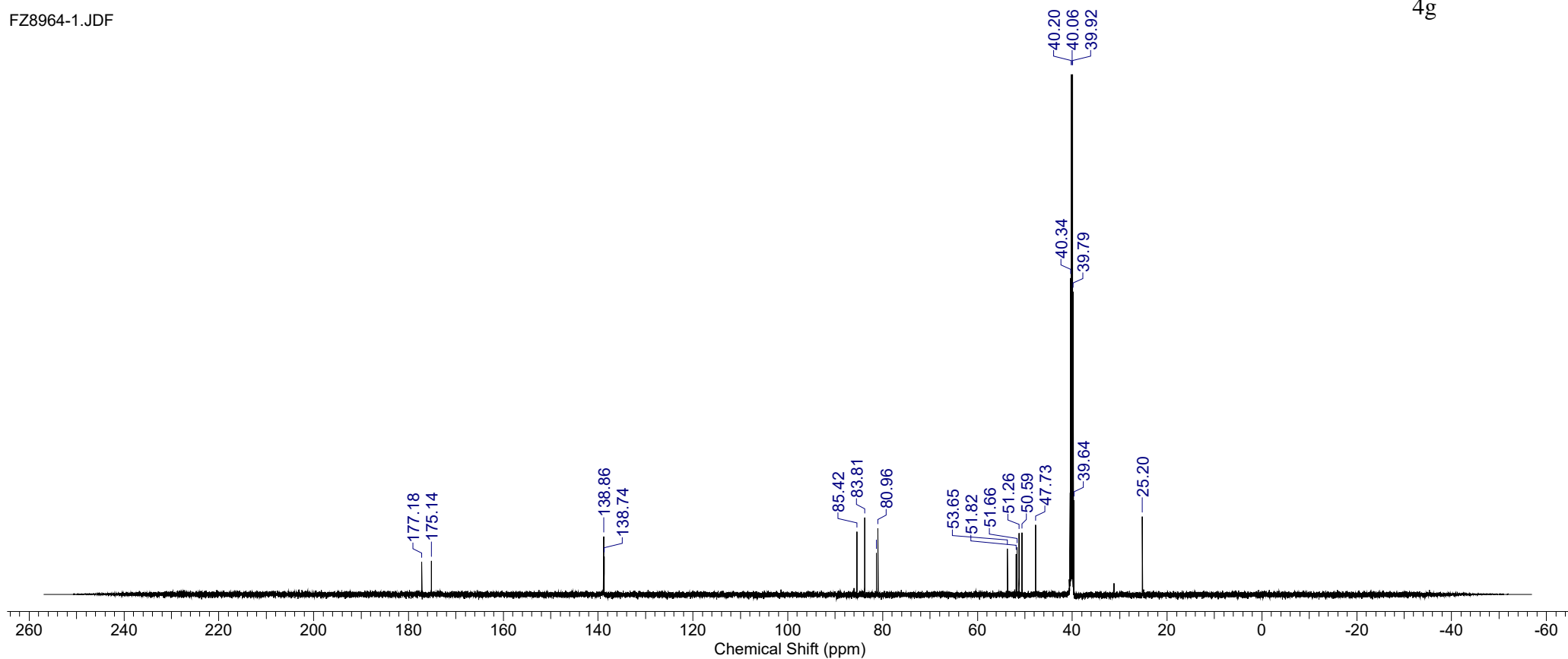
Formula C ₁₅ H ₁₅ NO ₆ S	FW 337.3477
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 07 Aug 2020 14:02:26
Date Stamp 07 Aug 2020 14:03:11	File Name C:\USERS\Jla6a534\DOWNLOADS\FZ8964-1.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 802	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49	Receiver Gain 58.00
		Solvent DMSO-d6



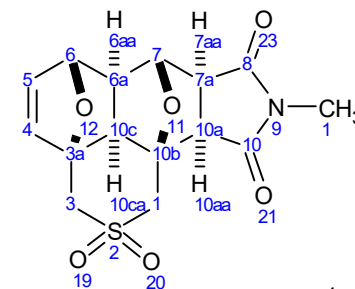
4g

FZ8964-1.JDF



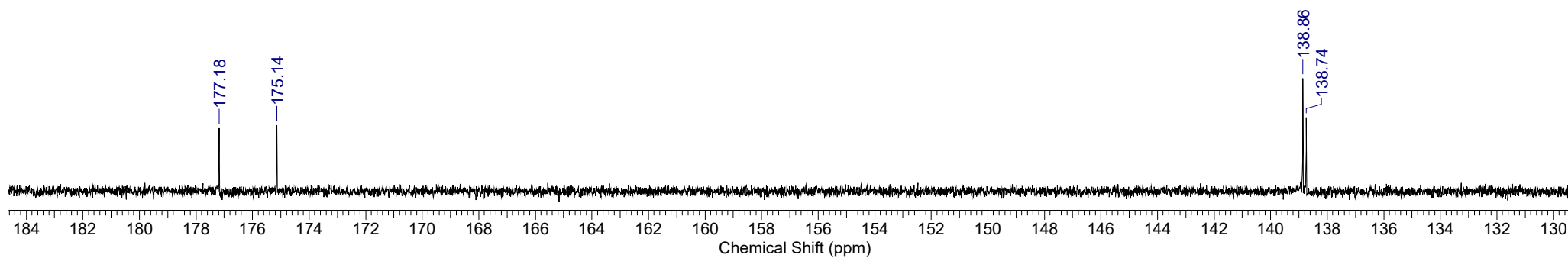
Formula C ₁₅ H ₁₅ NO ₆ S	FW 337.3477
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 07 Aug 2020 14:02:26
Date Stamp 07 Aug 2020 14:03:11	File Name C:\USERS\Jla6a534\DOWNLOADS\FZ8964-1.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 802	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49	Receiver Gain 58.00
		Solvent DMSO-d6



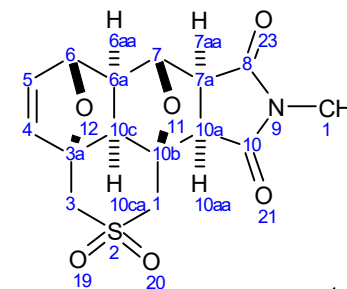
4g

FZ8964-1.JDF



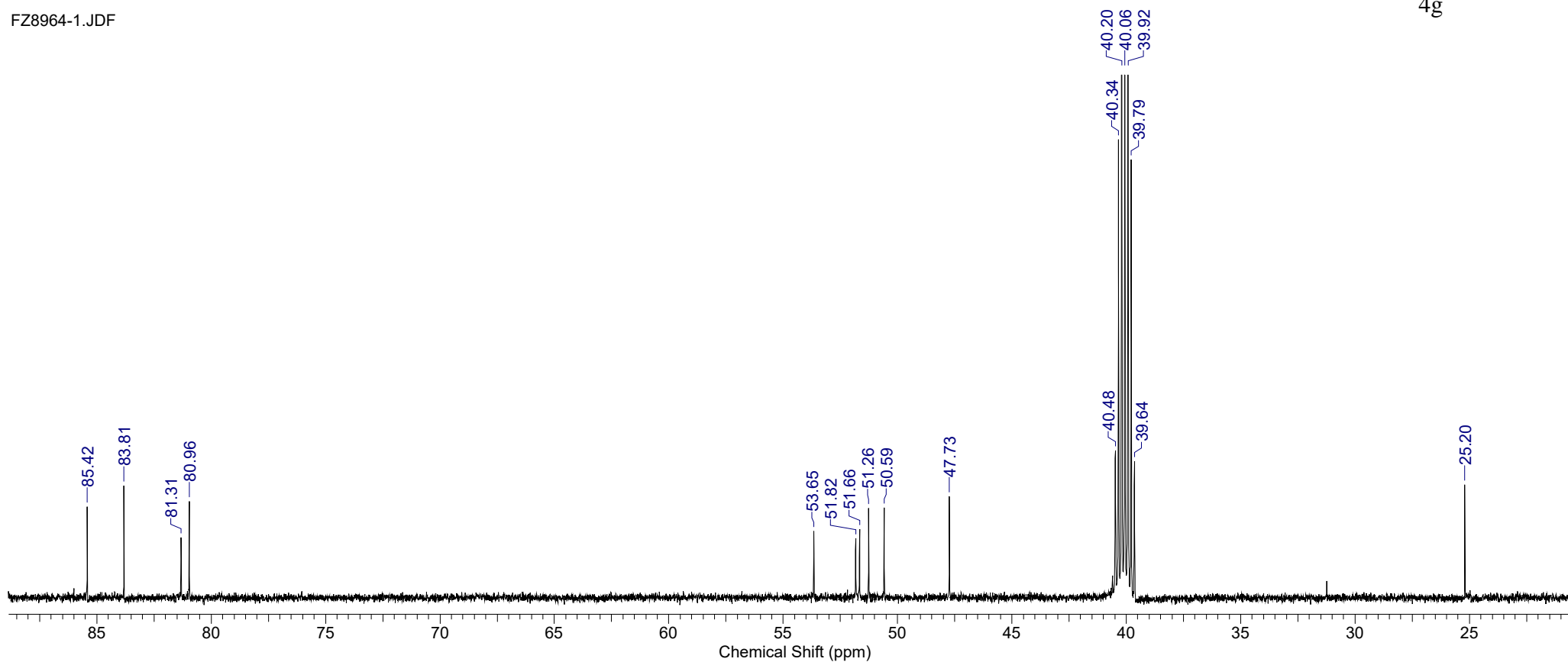
Formula C ₁₅ H ₁₅ NO ₆ S	FW 337.3477
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 07 Aug 2020 14:02:26
Date Stamp 07 Aug 2020 14:03:11	File Name C:\USERS\lta6a534\DOWNLOADS\FZ8964-1.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 802	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49	Receiver Gain 58.00
		Solvent DMSO-d6



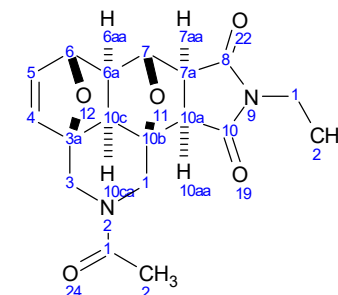
4g

FZ8964-1.JDF



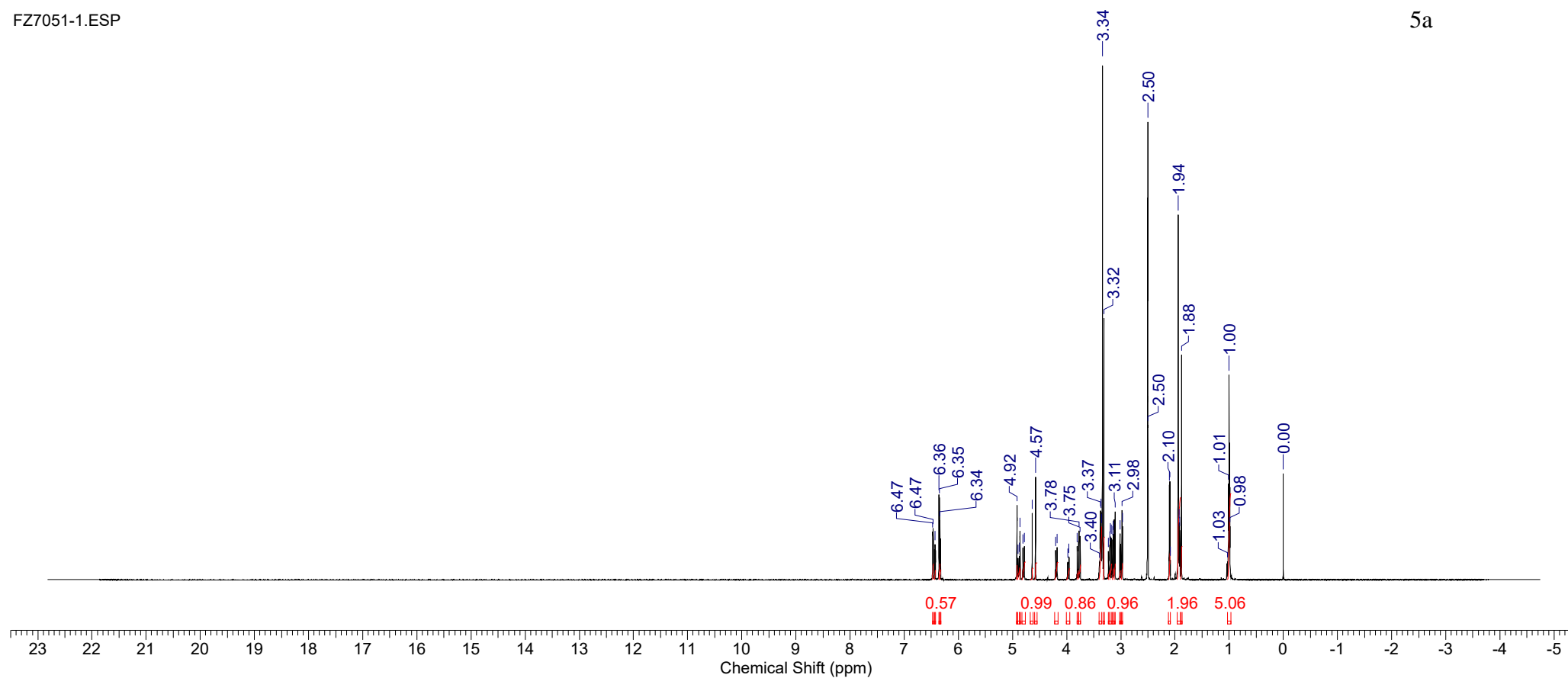
Formula C ₁₈ H ₂₀ N ₂ O ₅	FW 344.3618
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 09 Jan 1990 17:21:24	Date Stamp 12 Dec 2018 13:05:00
File Name C:\Users\Fedor\Desktop\11.12.18\FZ7051-1.jdf	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner delta	Points Count 32768
Receiver Gain 40.00	Solvent DMSO-d6	Spectrum Offset (Hz) 5424.2515	Sweep Width (Hz) 16534.39
			Pulse Sequence single_pulse.ex2



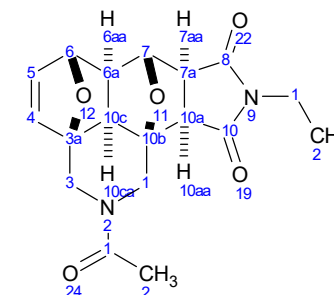
5a

FZ7051-1.ESP



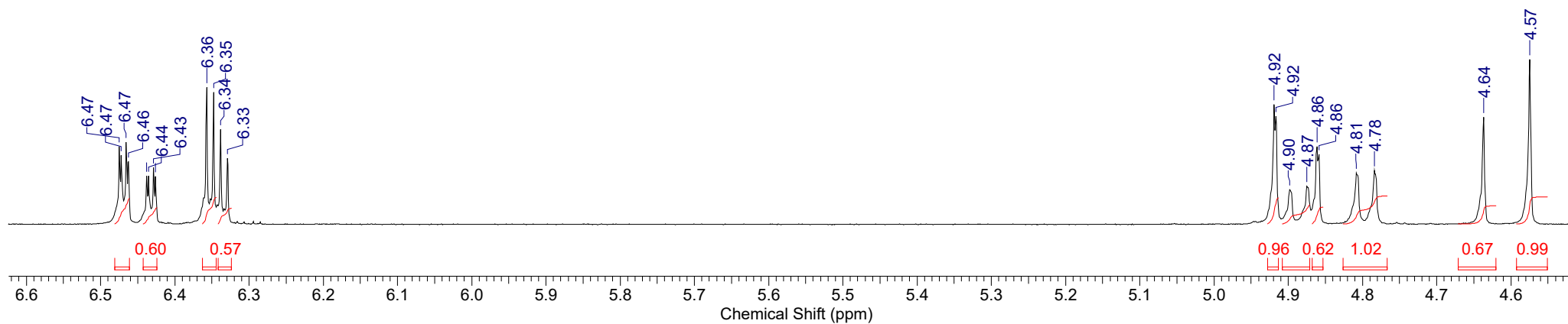
Formula C ₁₈ H ₂₀ N ₂ O ₅	FW 344.3618
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 09 Jan 1990 17:21:24	Date Stamp 12 Dec 2018 13:05:00
File Name C:\Users\Fedor\Desktop\11.12.18\FZ7051-1.jdf	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner delta	Points Count 32768
Receiver Gain 40.00	Solvent DMSO-d6	Spectrum Offset (Hz) 5424.2515	Sweep Width (Hz) 16534.39
			Pulse Sequence single_pulse.ex2



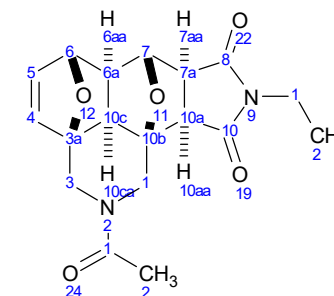
5a

FZ7051-1.ESP

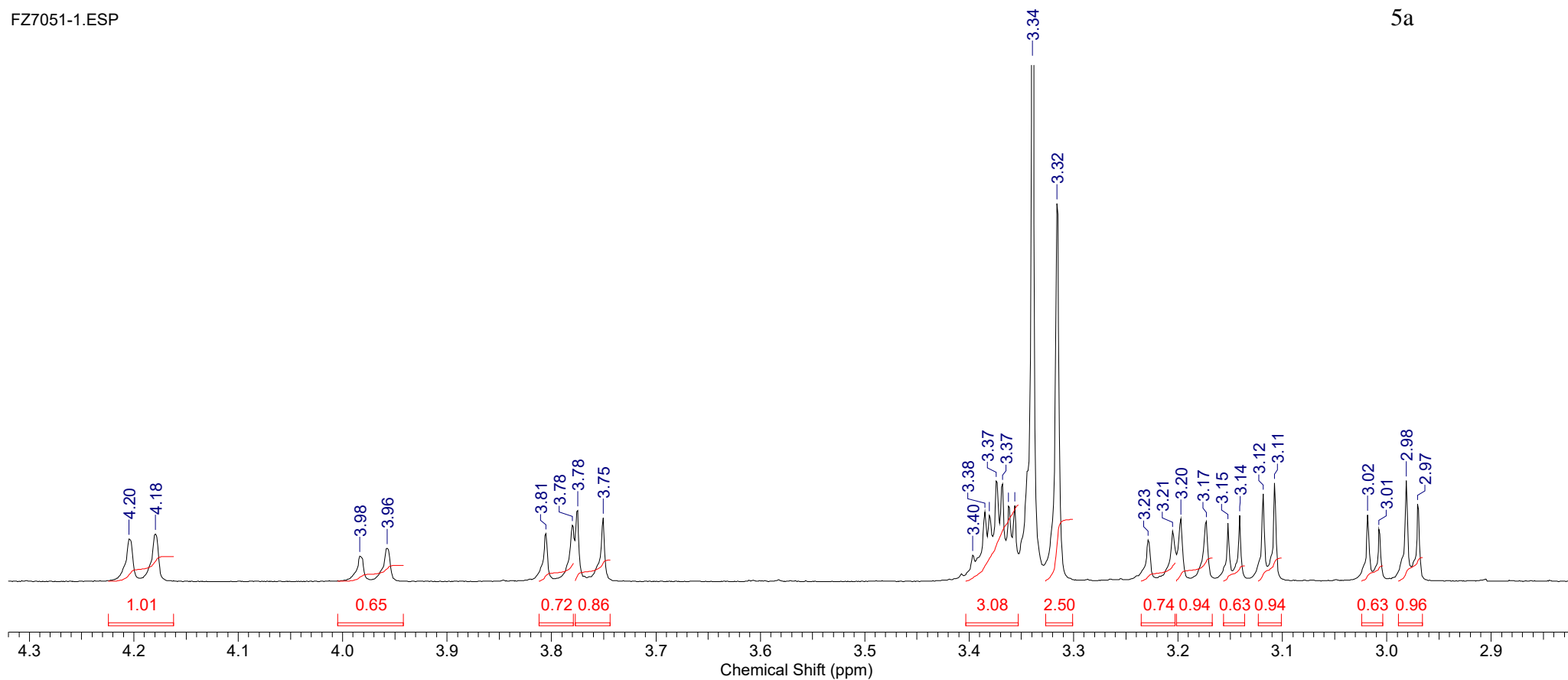


Formula C ₁₈ H ₂₀ N ₂ O ₅	FW 344.3618
--	--------------------

Acquisition Time (sec) 1.9818	Comment single pulse	Date 09 Jan 1990 17:21:24	Date Stamp 12 Dec 2018 13:05:00
File Name C:\Users\Fedor\Desktop\11.12.18\FZ7051-1.jdf	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner delta	Points Count 32768
Receiver Gain 40.00	Solvent DMSO-d6	Spectrum Offset (Hz) 5424.2515	Sweep Width (Hz) 16534.39

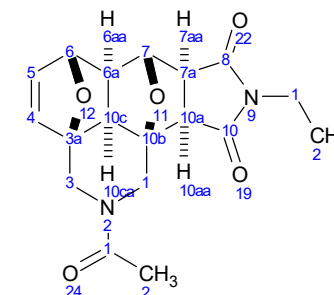


FZ7051-1.ESP



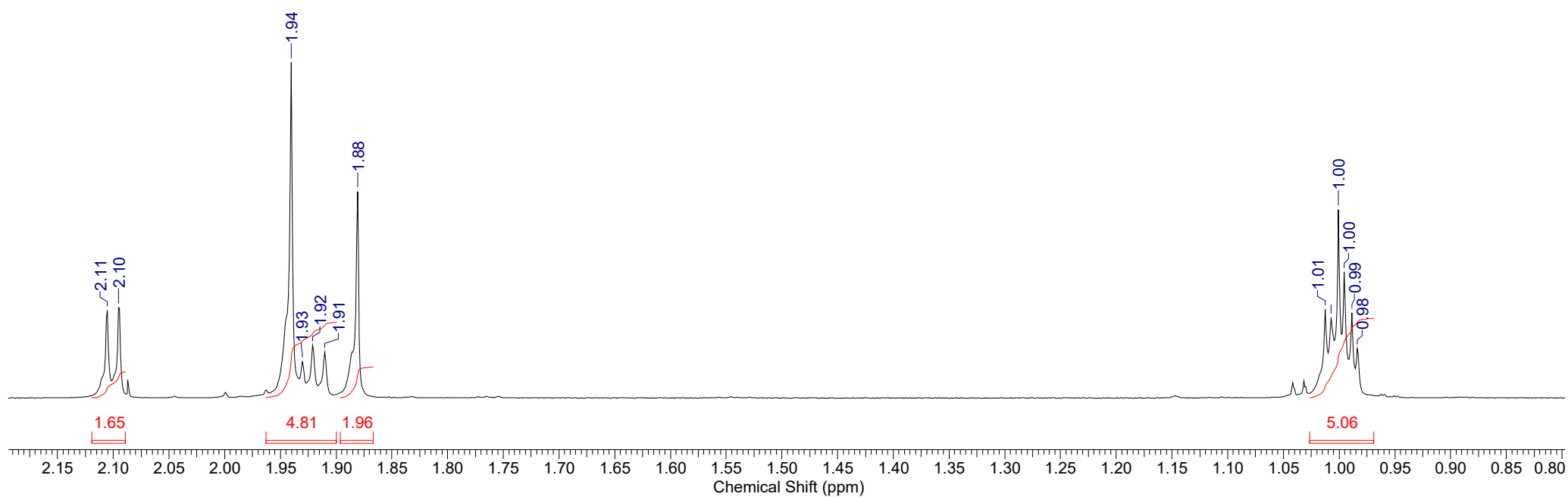
Formula C ₁₈ H ₂₀ N ₂ O ₅	FW 344.3618
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 09 Jan 1990 17:21:24	Date Stamp 12 Dec 2018 13:05:00
File Name C:\Users\Fedor\Desktop\11.12.18\FZ7051-1.jdf	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner delta	Points Count 32768
Receiver Gain 40.00	Solvent DMSO-d6	Spectrum Offset (Hz) 5424.2515	Sweep Width (Hz) 16534.39
			Pulse Sequence single_pulse.ex2



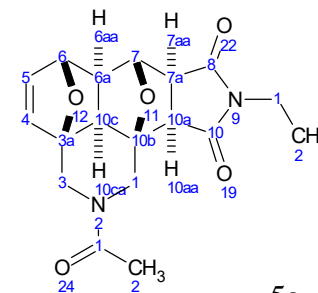
5a

FZ7051-1.ESP



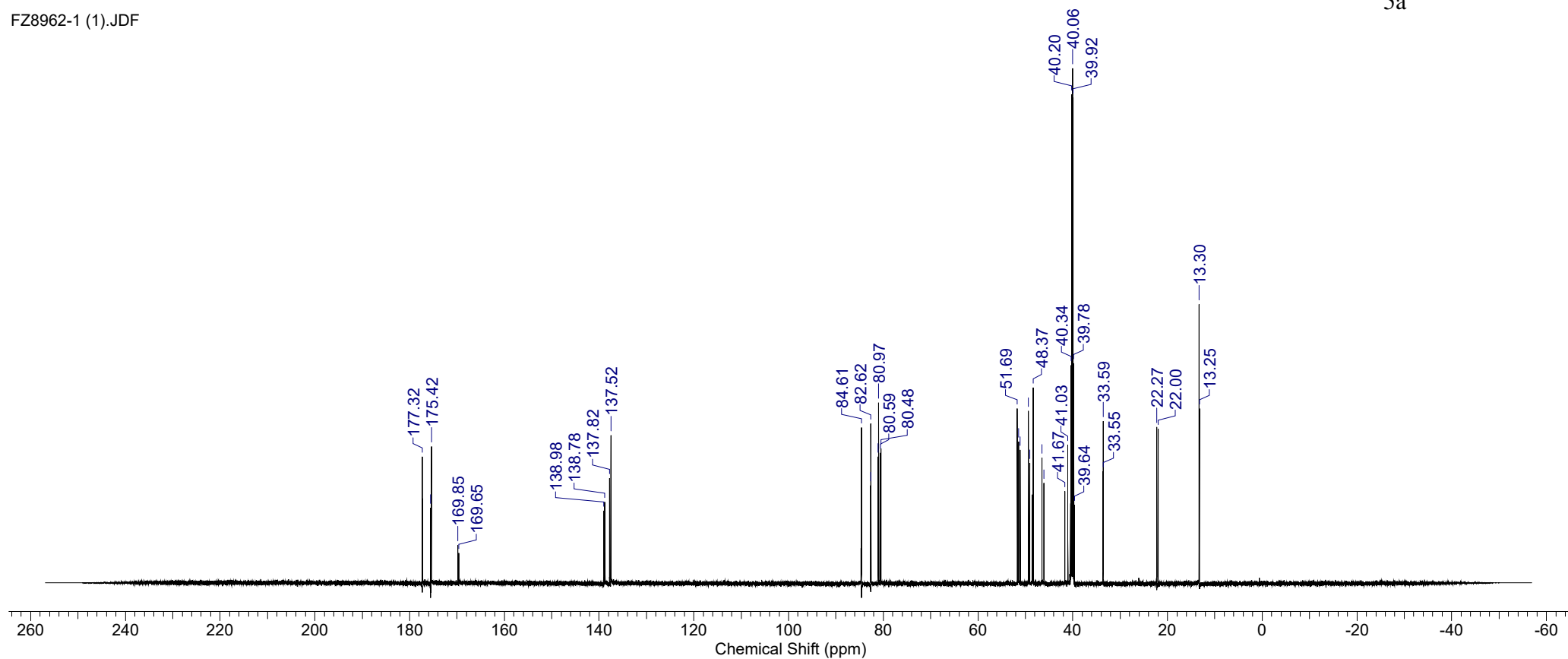
Formula C ₁₈ H ₂₀ N ₂ O ₅	FW 344.3618
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 10 Aug 2020 09:41:00
Date Stamp 10 Aug 2020 09:41:49	File Name C:\USERS\Лабa534\DOWNLOADS\FZ8962-1 (1).JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 1001	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49	Receiver Gain 52.00
		Owner CKP
		Solvent DMSO-d6



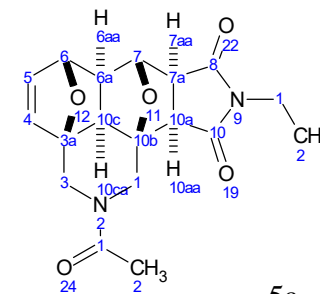
5a

FZ8962-1 (1).JDF



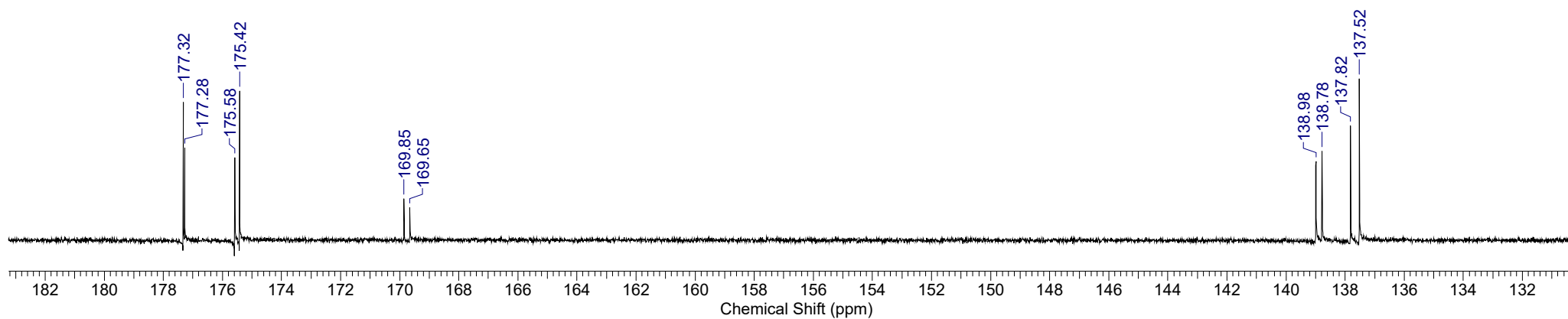
Formula C ₁₈ H ₂₀ N ₂ O ₅	FW 344.3618
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 10 Aug 2020 09:41:00
Date Stamp 10 Aug 2020 09:41:49	File Name C:\USERS\Лабa534\DOWNLOADS\FZ8962-1 (1).JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 1001	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49	Receiver Gain 52.00
		Owner CKP
		Solvent DMSO-d6



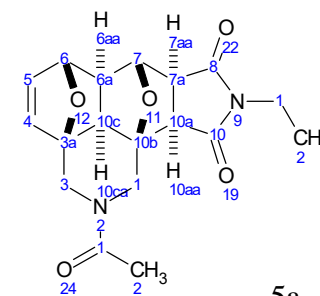
5a

FZ8962-1 (1).JDF

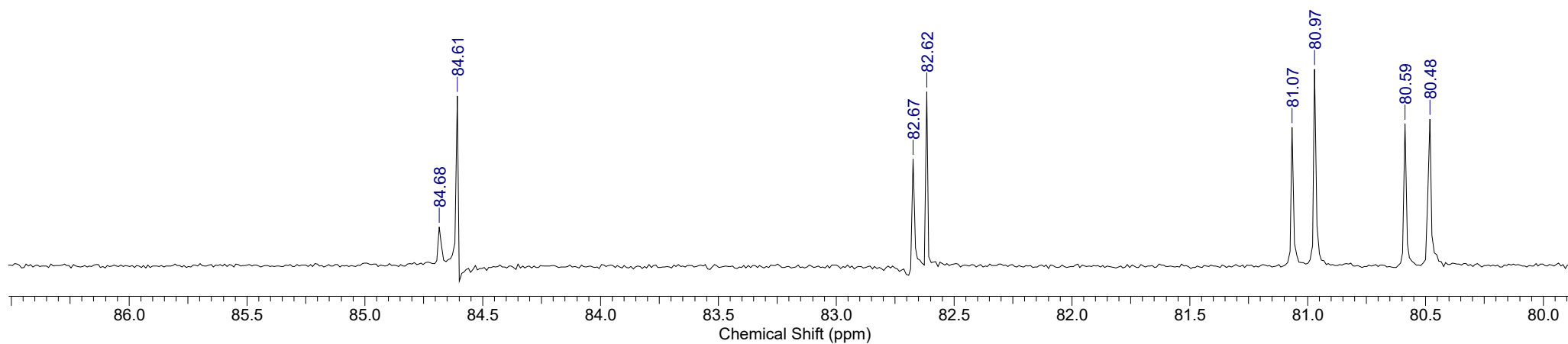


Formula C ₁₈ H ₂₀ N ₂ O ₅	FW 344.3618
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 10 Aug 2020 09:41:00		
Date Stamp 10 Aug 2020 09:41:49	File Name C:\USERS\Лаб6а534\DOWNLOADS\FZ8962-1 (1).JDF	Frequency (MHz) 150.91		
Nucleus 13C	Number of Transients 1001	Origin ECA 600	Original Points Count 32768	Owner CKP
Points Count 32768	Pulse Sequence single pulse dec	Receiver Gain 52.00	Solvent DMSO-d6	
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49			

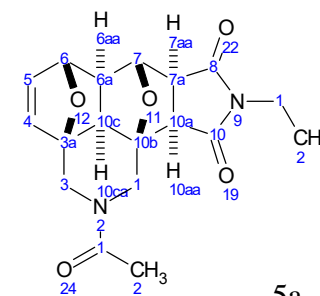


FZ8962-1 (1).JDF



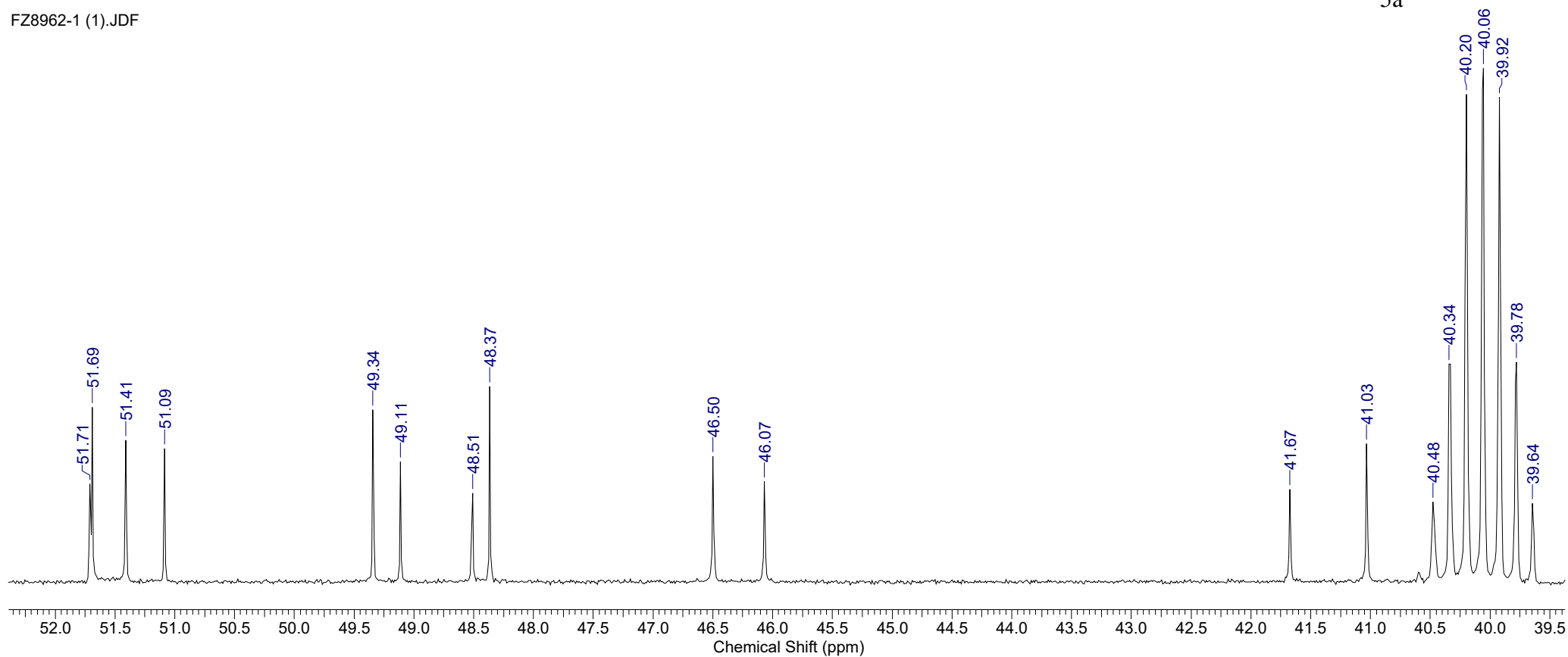
Formula C ₁₈ H ₂₀ N ₂ O ₅	FW 344.3618
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 10 Aug 2020 09:41:00
Date Stamp 10 Aug 2020 09:41:49	File Name C:\USERS\Лабa534\DOWNLOADS\FZ8962-1 (1).JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 1001	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49	Receiver Gain 52.00
		Owner CKP
		Solvent DMSO-d6



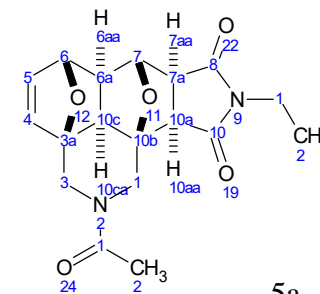
5a

FZ8962-1 (1).JDF

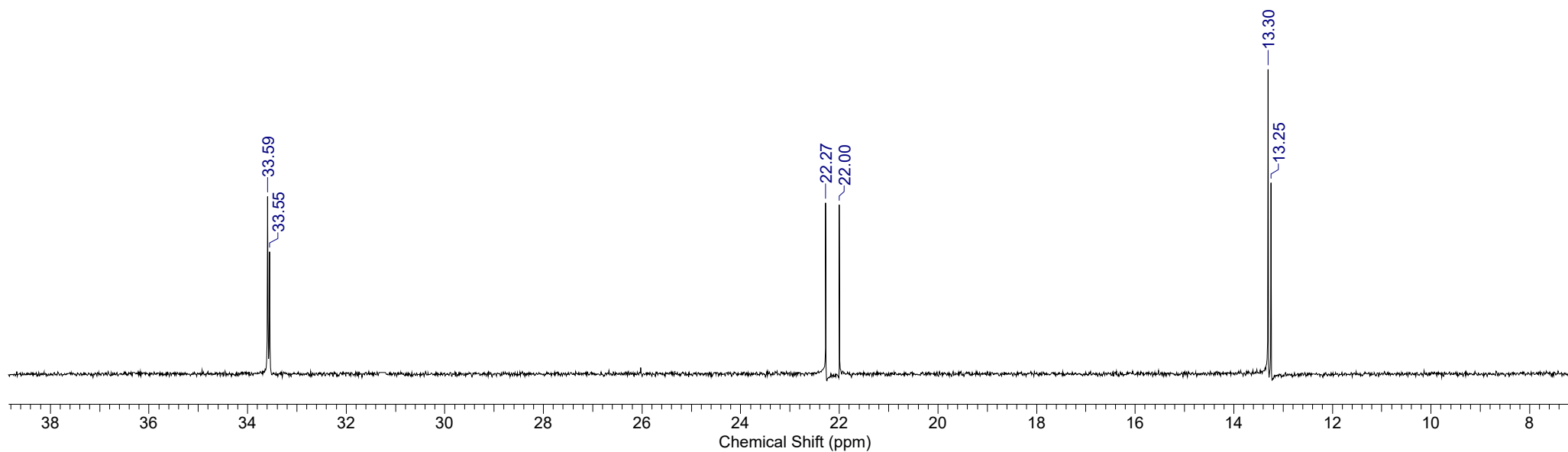


Formula C ₁₈ H ₂₀ N ₂ O ₅	FW 344.3618
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 10 Aug 2020 09:41:00
Date Stamp 10 Aug 2020 09:41:49	File Name C:\USERS\Лабa534\DOWNLOADS\FZ8962-1 (1).JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 1001	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49	Receiver Gain 52.00
		Owner CKP
		Solvent DMSO-d6

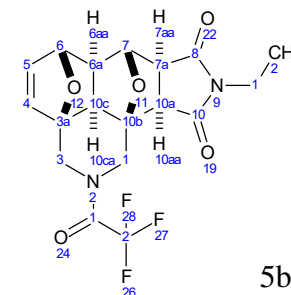


FZ8962-1 (1).JDF

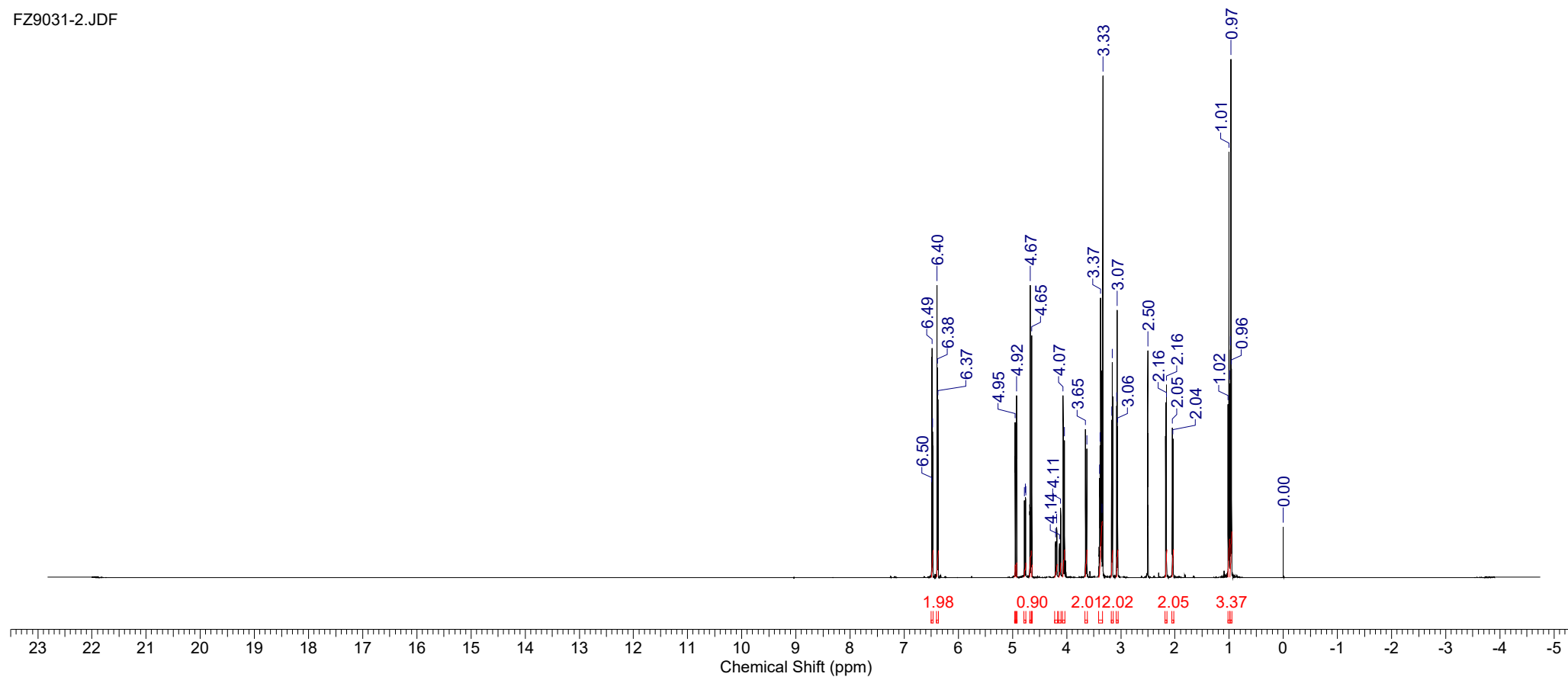


Formula C ₁₈ H ₁₇ F ₃ N ₂ O ₅	FW 398.3332
---	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 21 Aug 2020 12:25:09	Date Stamp 21 Aug 2020 12:26:17
File Name C:\USERS\Лабa534\DOWNLOADS\FZ9031-2.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 36.00	Solvent DMSO-d6	Spectrum Offset (Hz) 5424.2515	Sweep Width (Hz) 16534.39
		Pulse Sequence single_pulse.ex2	

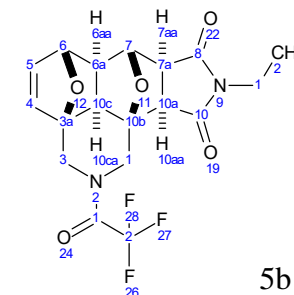


FZ9031-2.JDF

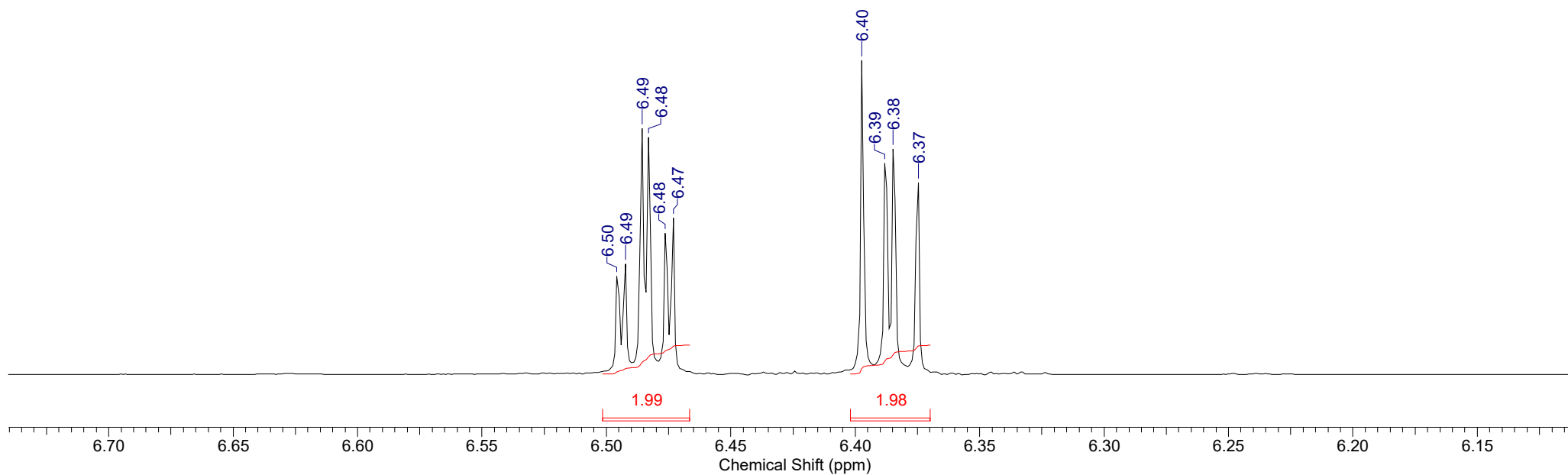


Formula C ₁₈ H ₁₇ F ₃ N ₂ O ₅	FW 398.3332
---	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 21 Aug 2020 12:25:09	Date Stamp 21 Aug 2020 12:26:17
File Name C:\USERS\Лабa534\DOWNLOADS\FZ9031-2.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 36.00	Solvent DMSO-d6	Spectrum Offset (Hz) 5424.2515	Sweep Width (Hz) 16534.39
			Pulse Sequence single_pulse.ex2

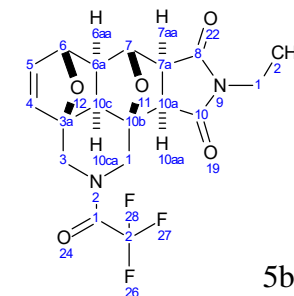


FZ9031-2.JDF

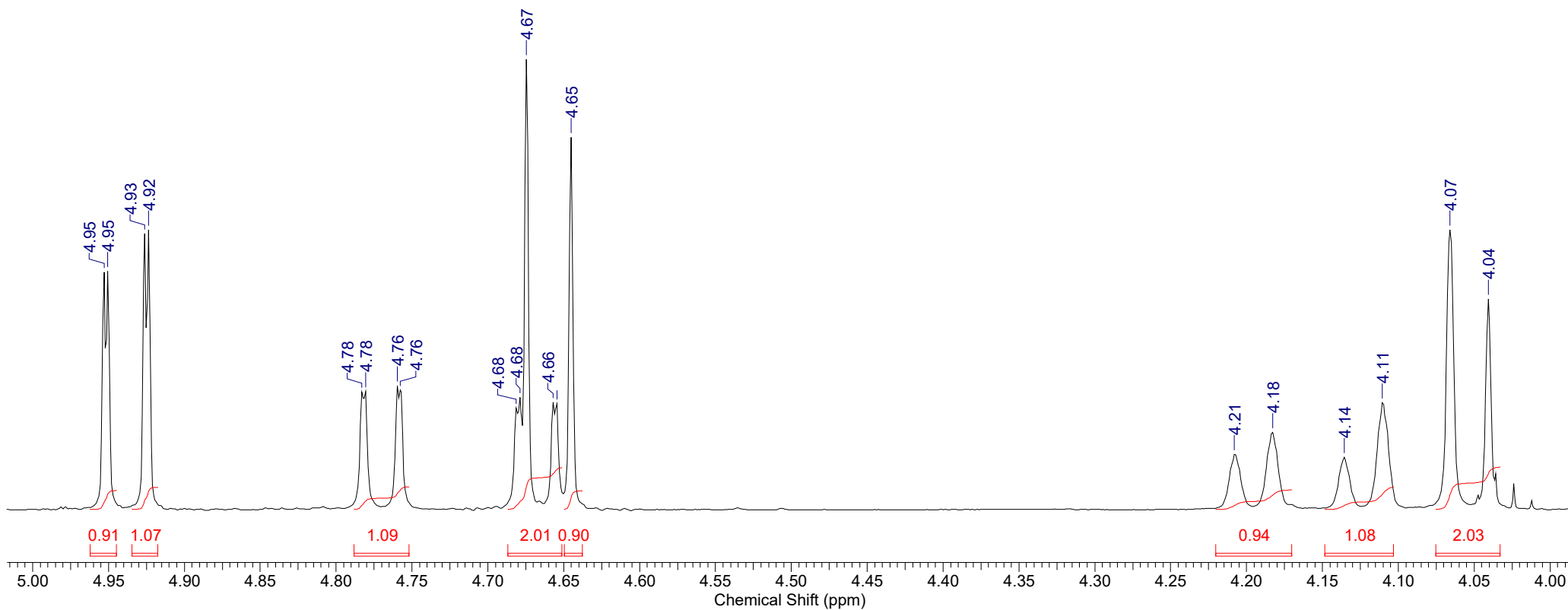


Formula C ₁₈ H ₁₇ F ₃ N ₂ O ₅	FW 398.3332
---	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 21 Aug 2020 12:25:09	Date Stamp 21 Aug 2020 12:26:17
File Name C:\USERS\Лабa534\DOWNLOADS\FZ9031-2.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 36.00	Solvent DMSO-d6	Spectrum Offset (Hz) 5424.2515	Sweep Width (Hz) 16534.39

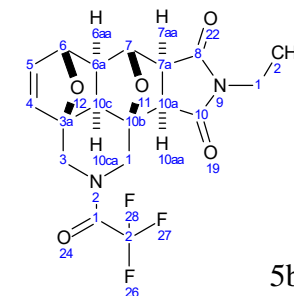


FZ9031-2.JDF

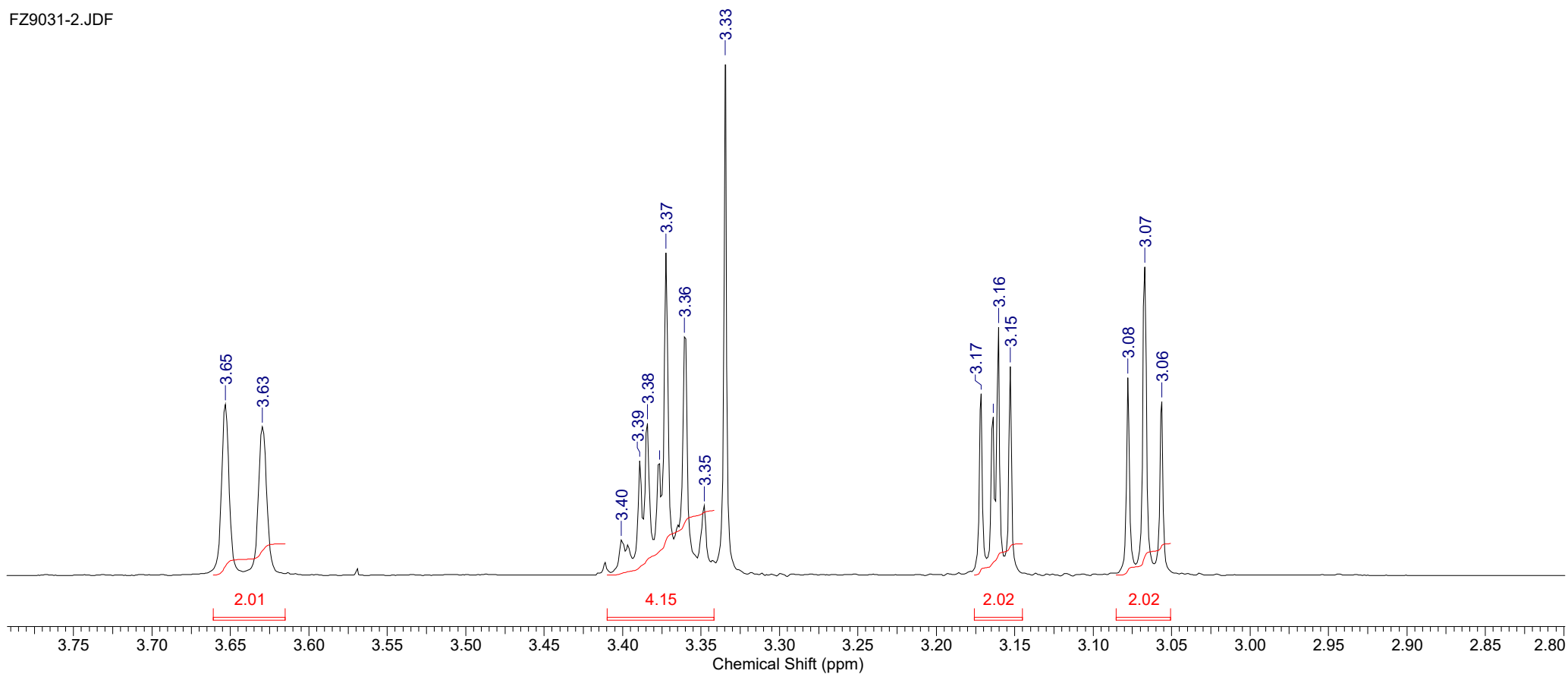


Formula C ₁₈ H ₁₇ F ₃ N ₂ O ₅	FW 398.3332
---	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 21 Aug 2020 12:25:09	Date Stamp 21 Aug 2020 12:26:17
File Name C:\USERS\Лабa534\DOWNLOADS\FZ9031-2.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 36.00	Solvent DMSO-d6	Spectrum Offset (Hz) 5424.2515	Sweep Width (Hz) 16534.39
			Pulse Sequence single_pulse.ex2

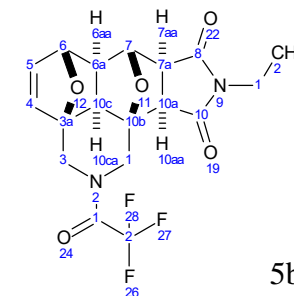


FZ9031-2.JDF

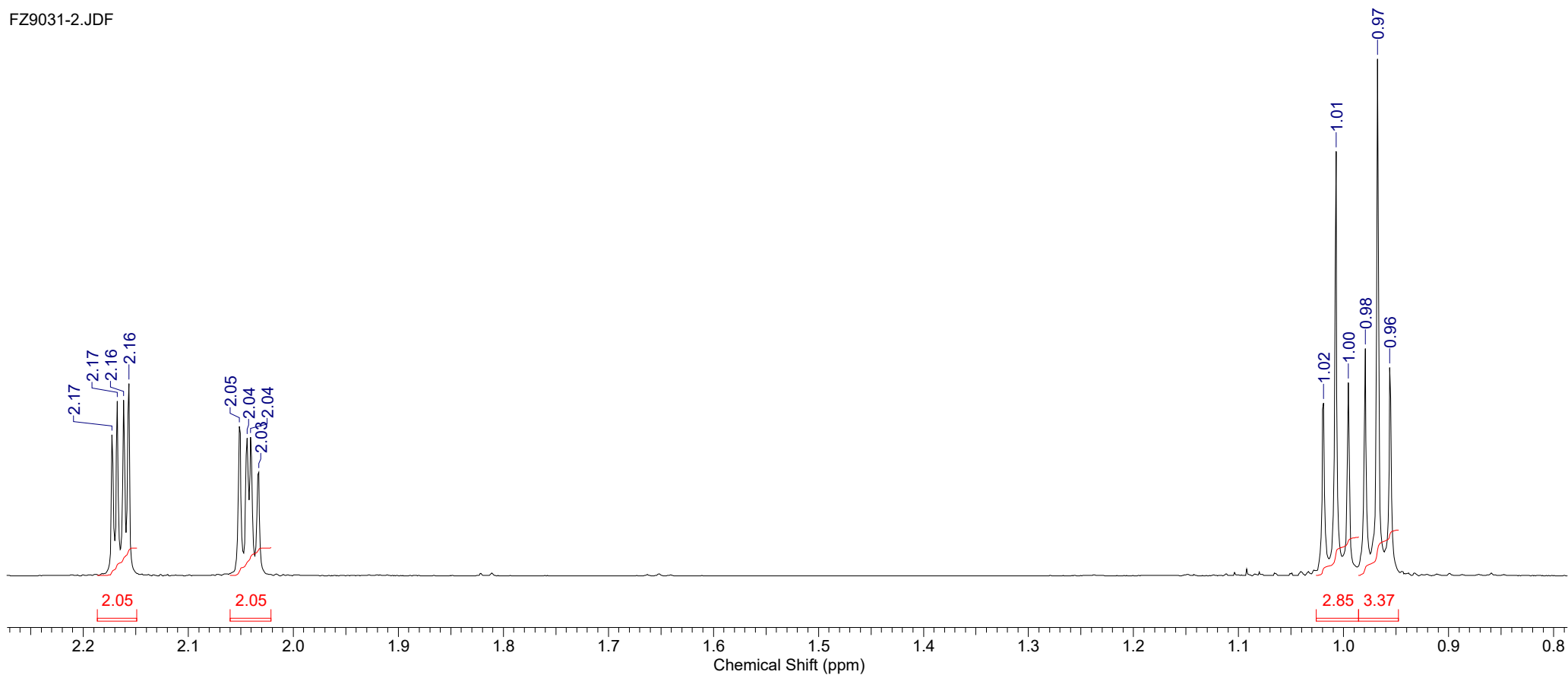


Formula C ₁₈ H ₁₇ F ₃ N ₂ O ₅	FW 398.3332
---	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 21 Aug 2020 12:25:09	Date Stamp 21 Aug 2020 12:26:17
File Name C:\USERS\Лабa534\DOWNLOADS\FZ9031-2.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 36.00	Solvent DMSO-d6	Spectrum Offset (Hz) 5424.2515	Sweep Width (Hz) 16534.39
		Pulse Sequence single_pulse.ex2	

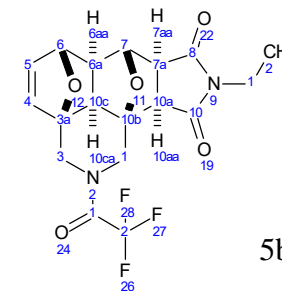


FZ9031-2.JDF

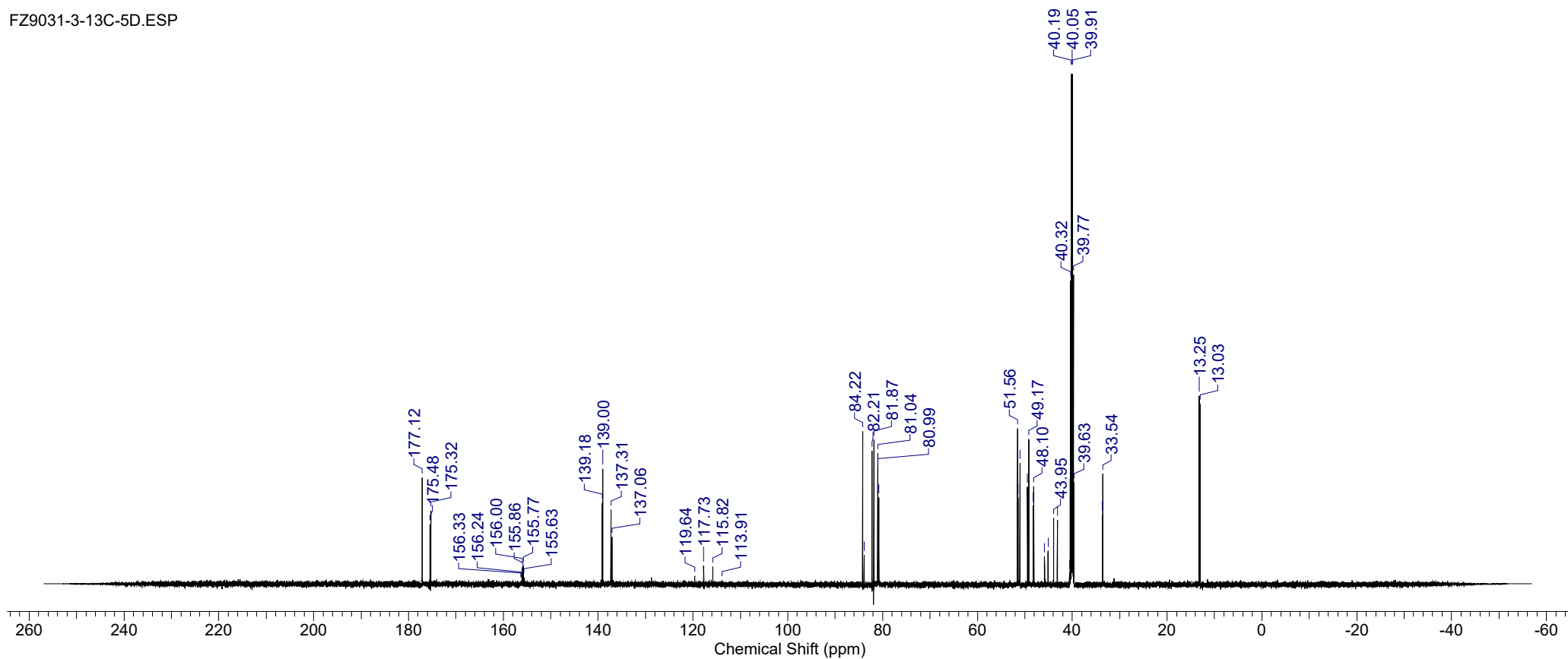


Formula C ₁₈ H ₁₇ F ₃ N ₂ O ₅	FW 398.3332
---	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 21 Aug 2020 12:41:55
Date Stamp 21 Aug 2020 12:43:04	File Name C:\USERS\l1a6a534\DOWNLOADS\FZ9031-3.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 1000	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49	Receiver Gain 56.00
		Solvent DMSO-d6

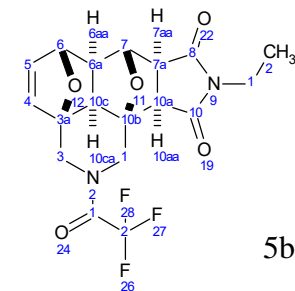


FZ9031-3-13C-5D.ESP

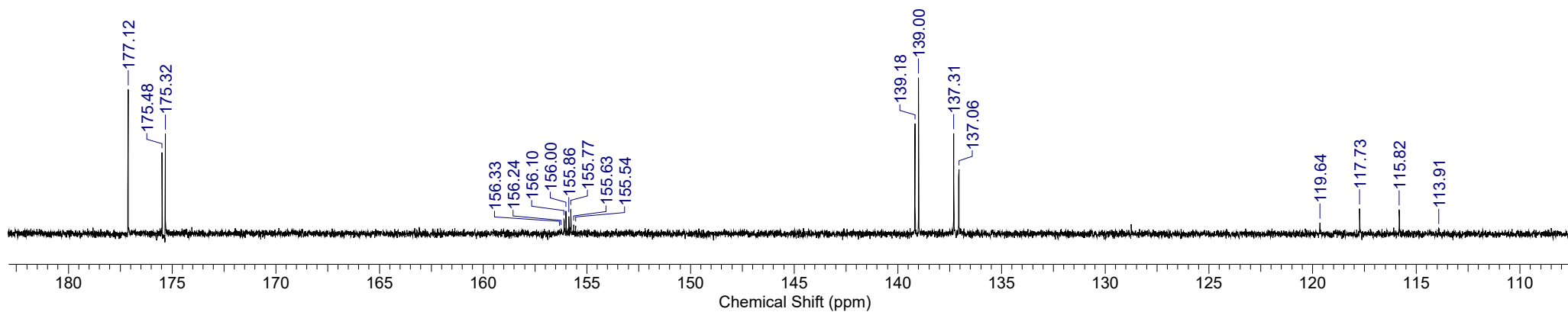


Formula C ₁₈ H ₁₇ F ₃ N ₂ O ₅	FW 398.3332
---	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 21 Aug 2020 12:41:55
Date Stamp 21 Aug 2020 12:43:04	File Name C:\USERS\lta6a534\DOWNLOADS\FZ9031-3.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 1000	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49	Receiver Gain 56.00
		Solvent DMSO-d6

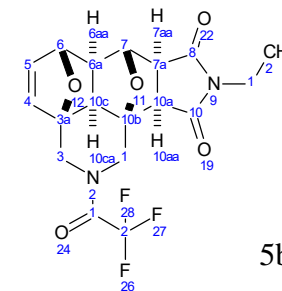


FZ9031-3-13C-5D.ESP

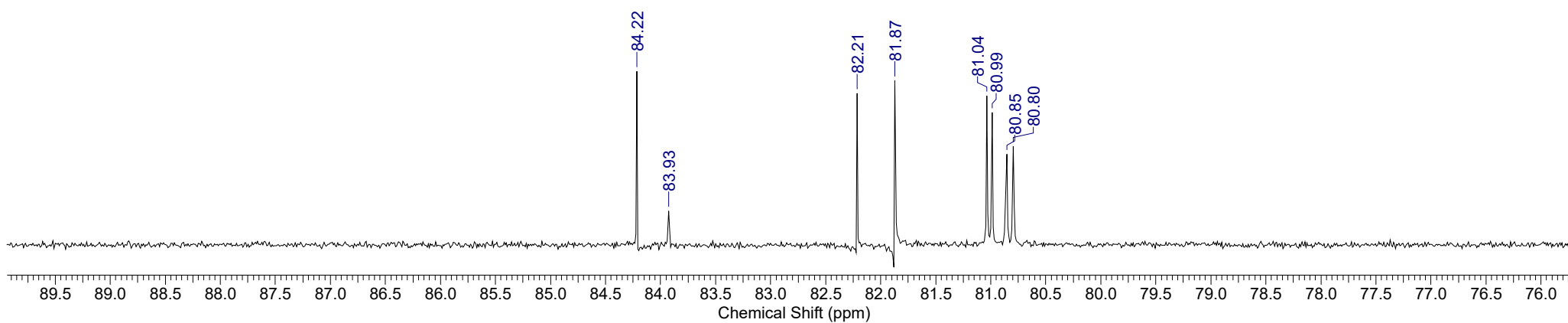


Formula C ₁₈ H ₁₇ F ₃ N ₂ O ₅	FW 398.3332
---	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 21 Aug 2020 12:41:55
Date Stamp 21 Aug 2020 12:43:04	File Name C:\USERS\lta6a534\DOWNLOADS\FZ9031-3.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 1000	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49	Receiver Gain 56.00
		Solvent DMSO-d6

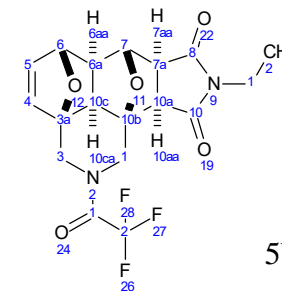


FZ9031-3-13C-5D.ESP

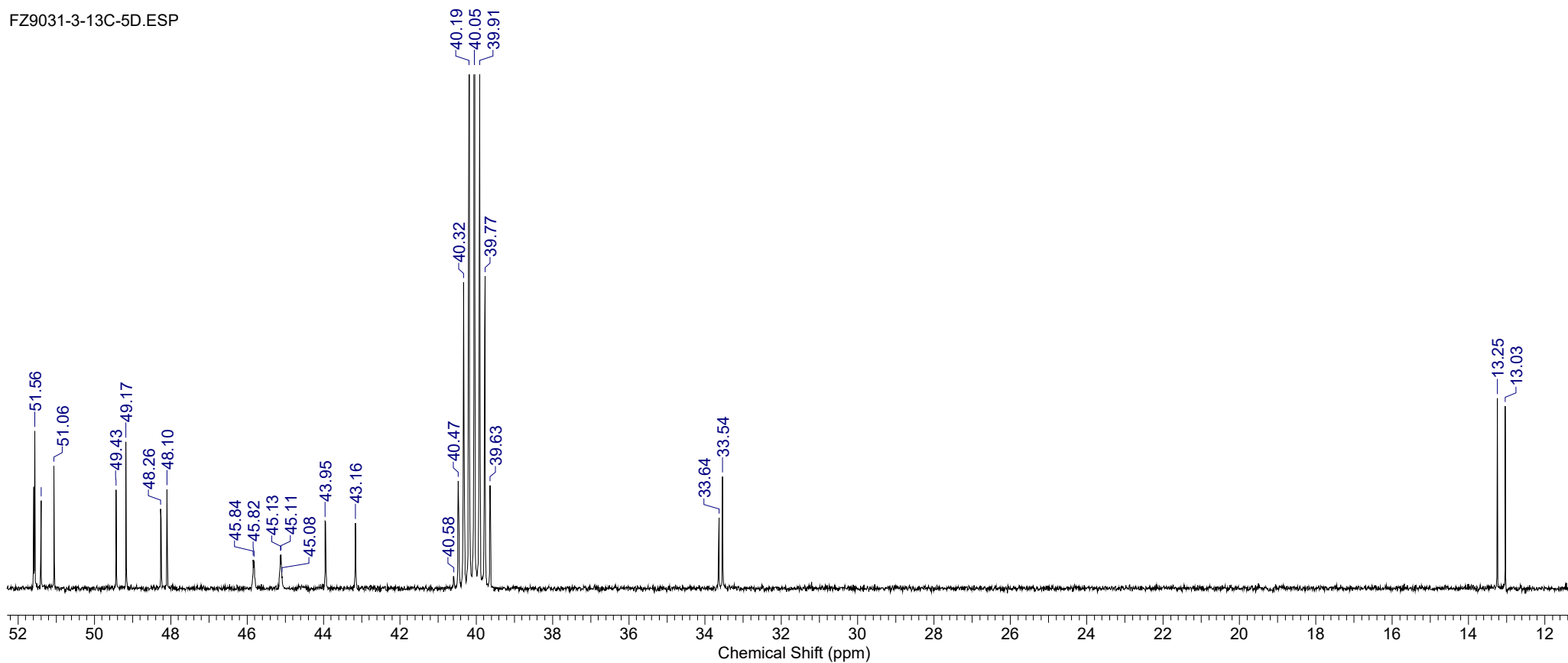


Formula C ₁₈ H ₁₇ F ₃ N ₂ O ₅	FW 398.3332
---	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 21 Aug 2020 12:41:55
Date Stamp 21 Aug 2020 12:43:04	File Name C:\USERS\lta6a534\DOWNLOADS\FZ9031-3.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 1000	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49	Receiver Gain 56.00
		Owner CKP
		Solvent DMSO-d6

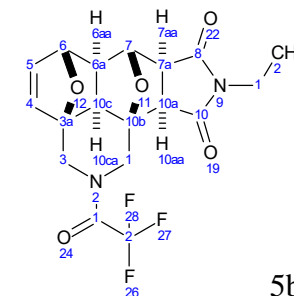


FZ9031-3-13C-5D.ESP

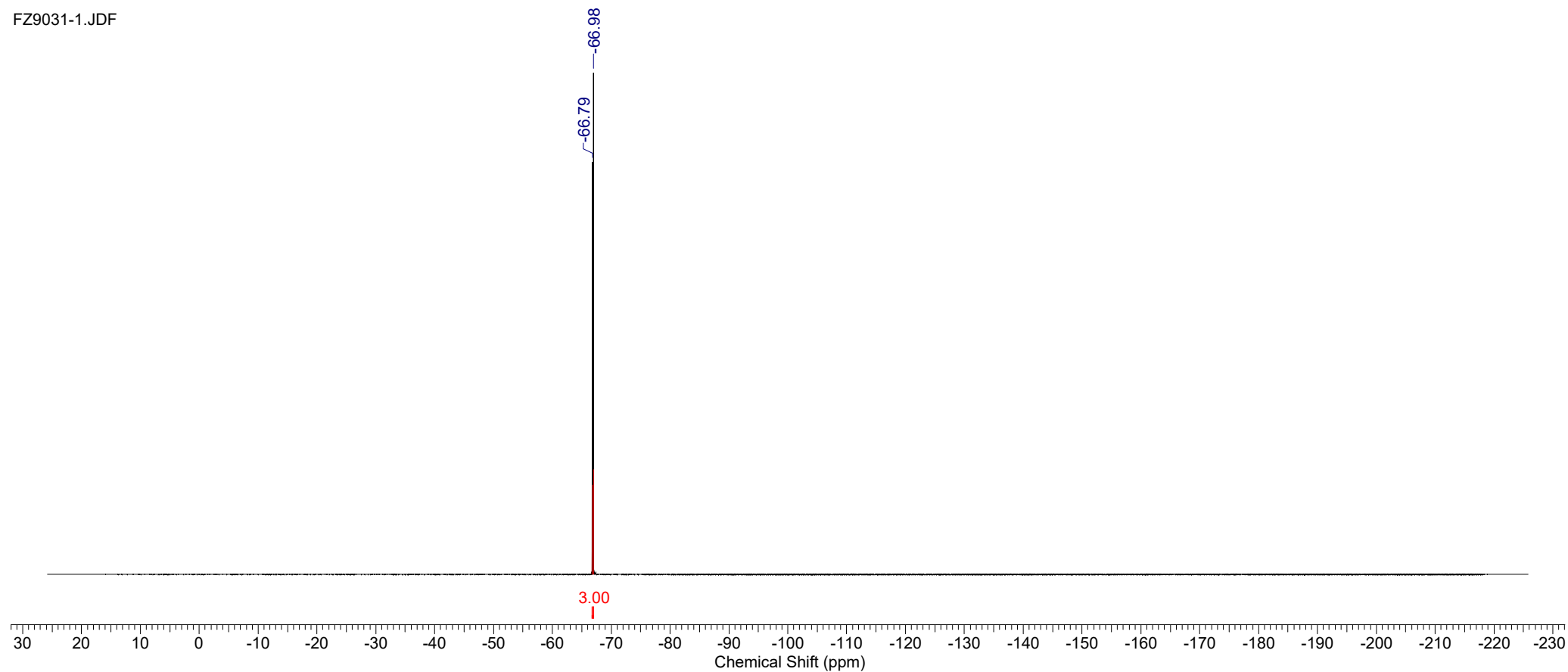


Formula C ₁₈ H ₁₇ F ₃ N ₂ O ₅	FW 398.3332
---	--------------------

Acquisition Time (sec) 0.4614	Comment single_pulse	Date 21 Aug 2020 12:23:32	Date Stamp 21 Aug 2020 12:24:41
File Name C:\USERS\Лабa534\DOWNLOADS\FZ9031-1.JDF	Frequency (MHz) 564.73	Nucleus 19F	Number of Transients 8
Origin ECA 600	Original Points Count 65536	Owner CKP	Points Count 65536
Receiver Gain 40.00	Solvent DMSO-d6	Spectrum Offset (Hz) -56472.6094	Sweep Width (Hz) 142045.45
			Pulse Sequence single_pulse.ex2

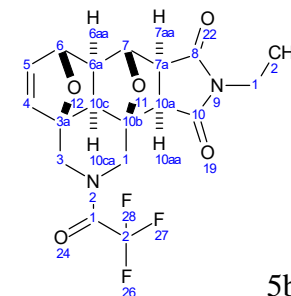


FZ9031-1.JDF

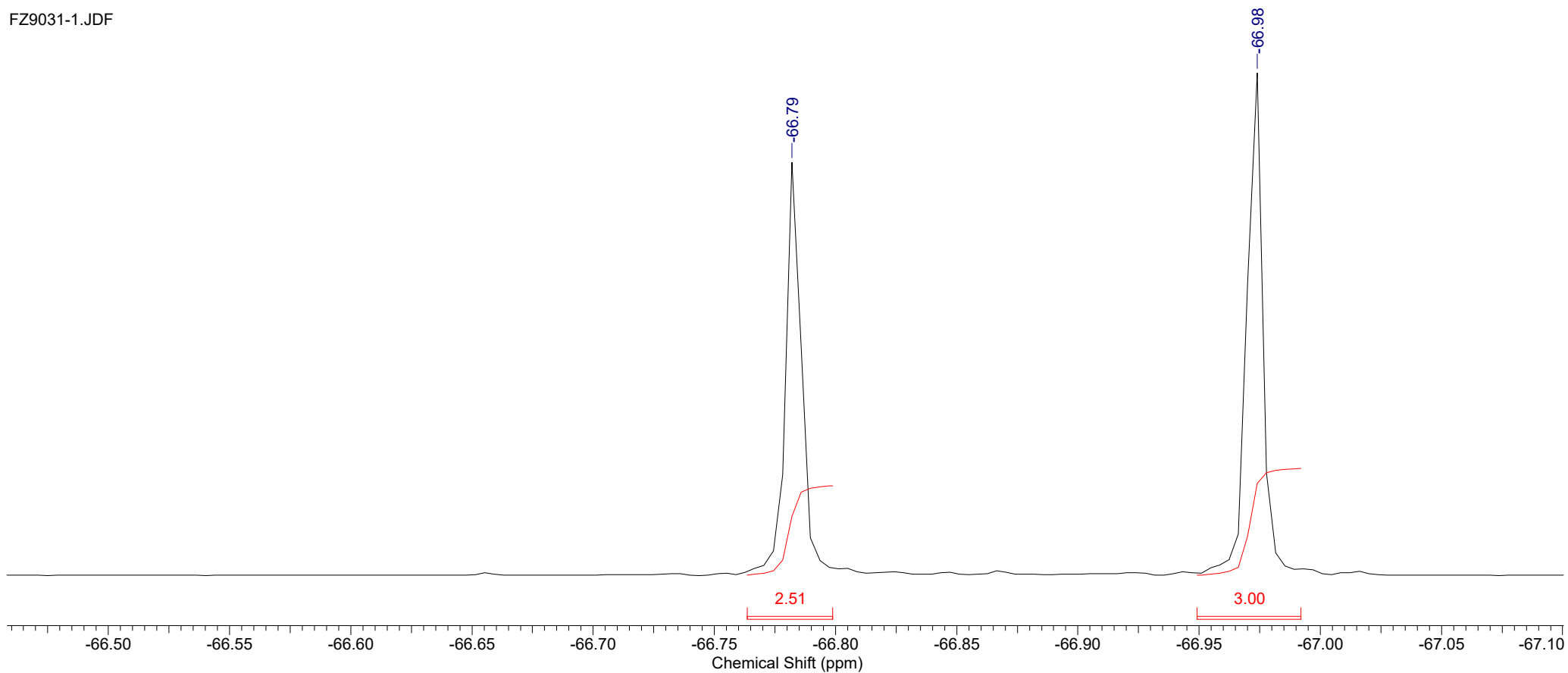


Formula C ₁₈ H ₁₇ F ₃ N ₂ O ₅	FW 398.3332
---	--------------------

Acquisition Time (sec) 0.4614	Comment single_pulse	Date 21 Aug 2020 12:23:32	Date Stamp 21 Aug 2020 12:24:41
File Name C:\USERS\Лабa534\DOWNLOADS\FZ9031-1.JDF	Frequency (MHz) 564.73	Nucleus 19F	Number of Transients 8
Origin ECA 600	Original Points Count 65536	Owner CKP	Points Count 65536
Receiver Gain 40.00	Solvent DMSO-d6	Spectrum Offset (Hz) -56472.6094	Sweep Width (Hz) 142045.45
			Pulse Sequence single_pulse.ex2

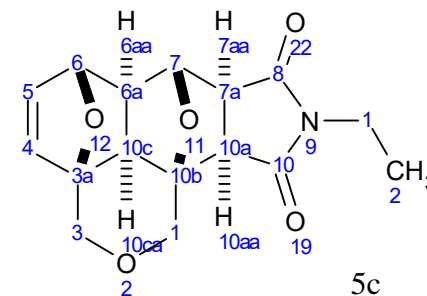


FZ9031-1.JDF

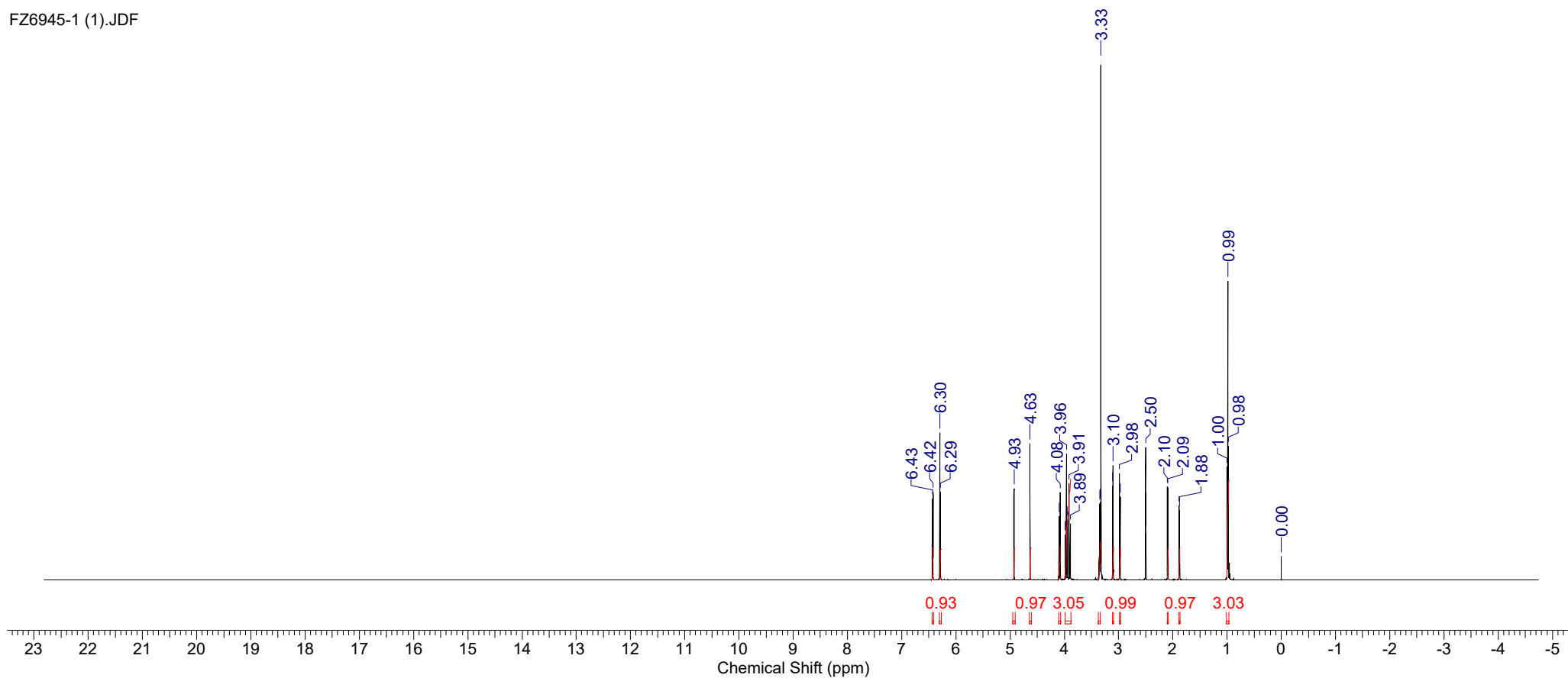


Formula C ₁₆ H ₁₇ NO ₅	FW 303.3099
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 19 Jan 1990 16:32:39	Date Stamp 07 Nov 2018 12:21:33
File Name C:\USERS\Лабa534\DOWNLOADS\FZ6945-1 (1).JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner delta	Points Count 32768
Receiver Gain 38.00	Solvent DMSO-d6	Spectrum Offset (Hz) 5423.2422	Sweep Width (Hz) 16534.39
			Pulse Sequence single_pulse.ex2

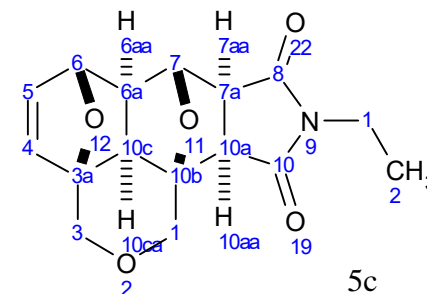


FZ6945-1 (1).JDF

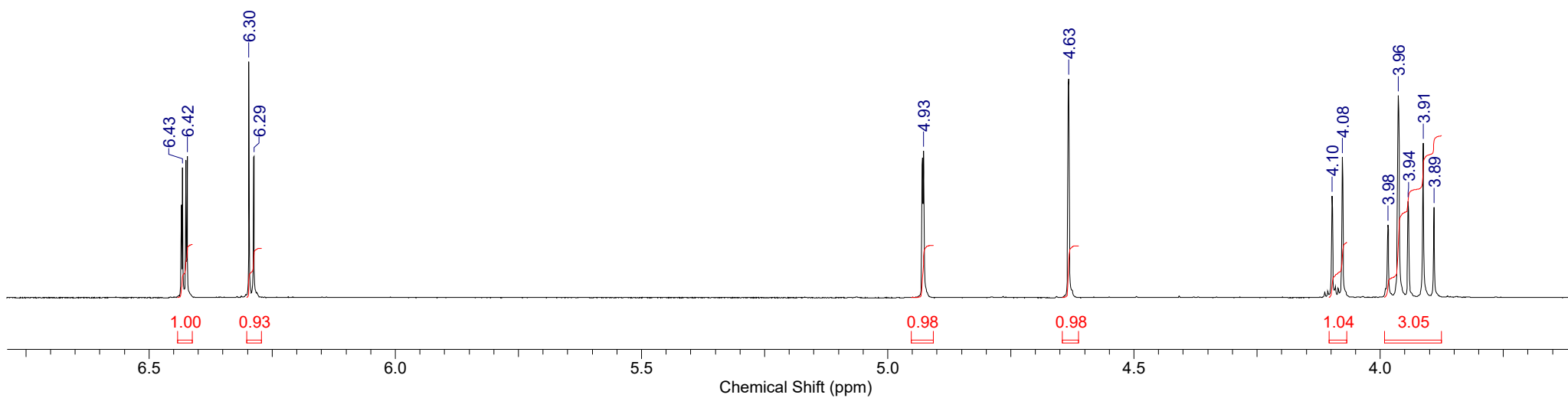


Formula C ₁₆ H ₁₇ NO ₅	FW 303.3099
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 19 Jan 1990 16:32:39	Date Stamp 07 Nov 2018 12:21:33
File Name C:\USERS\Лабa534\DOWNLOADS\FZ6945-1 (1).JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner delta	Points Count 32768
Receiver Gain 38.00	Solvent DMSO-d6	Spectrum Offset (Hz) 5423.2422	Sweep Width (Hz) 16534.39
			Pulse Sequence single_pulse.ex2

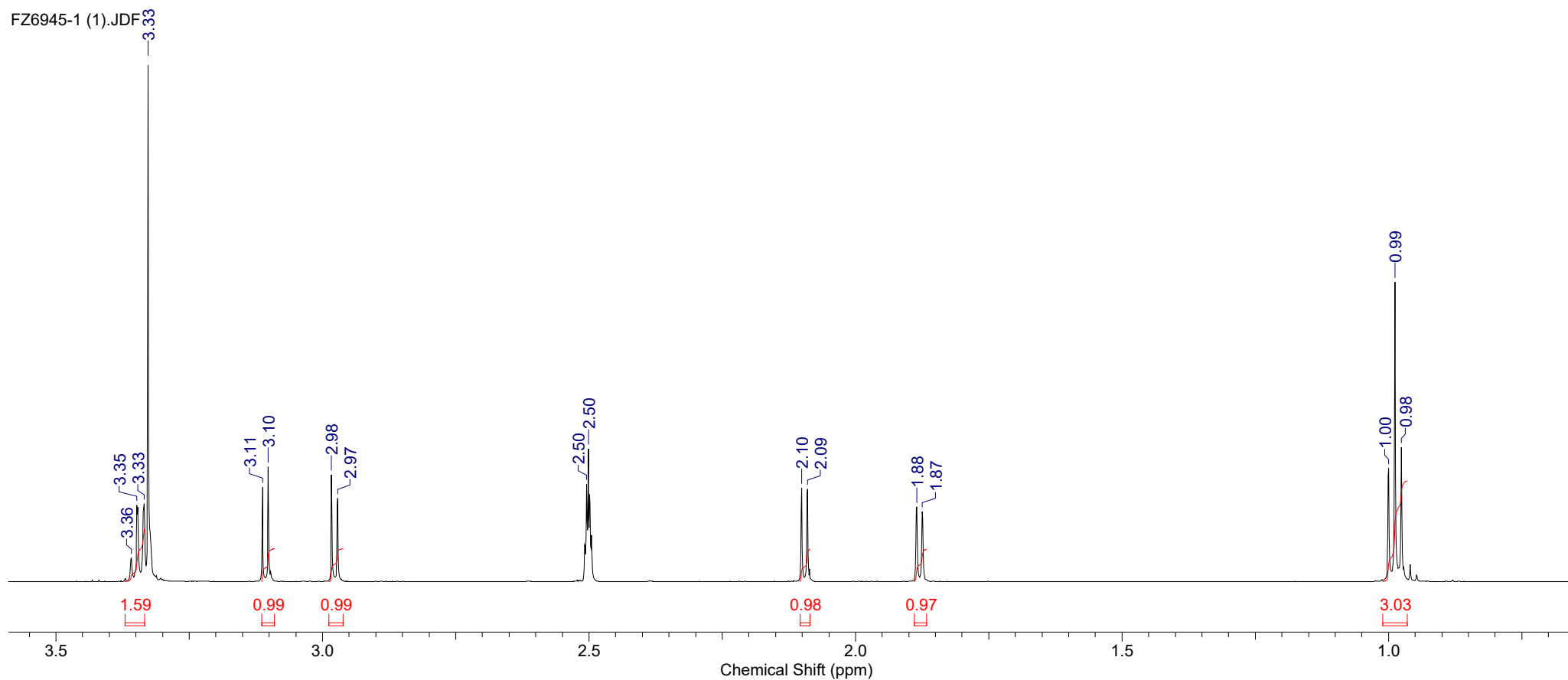
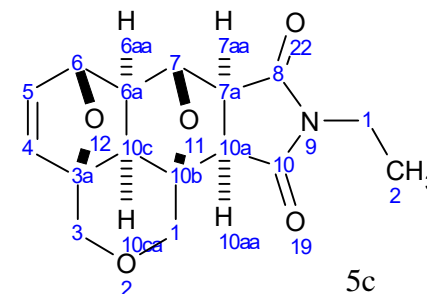


FZ6945-1 (1).JDF



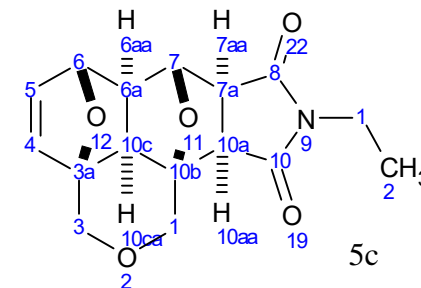
Formula C ₁₆ H ₁₇ NO ₅	FW 303.3099
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 19 Jan 1990 16:32:39	Date Stamp 07 Nov 2018 12:21:33
File Name C:\USERS\Лабa534\DOWNLOADS\FZ6945-1 (1).JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner delta	Points Count 32768
Receiver Gain 38.00	Solvent DMSO-d6	Spectrum Offset (Hz) 5423.2422	Sweep Width (Hz) 16534.39

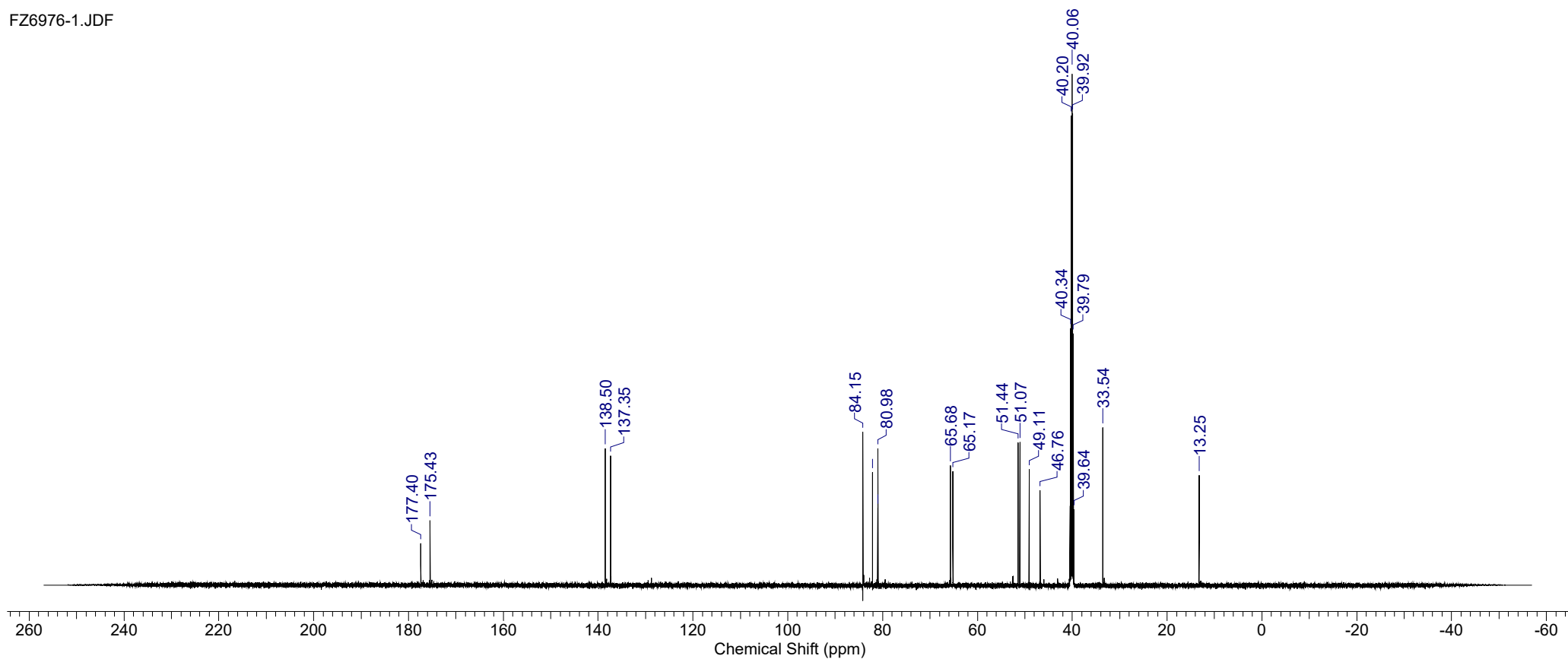


Formula C ₁₆ H ₁₇ NO ₅	FW 303.3099
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 03 Feb 1990 16:11:49
Date Stamp 22 Nov 2018 12:00:29	File Name C:\USERS\534~1\APPPDATA\LOCAL\TEMP\FZ6976-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 400
Original Points Count 32768	Owner delta	Points Count 32768
Receiver Gain 56.00	Solvent DMSO-d6	Pulse Sequence single pulse dec
	Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49

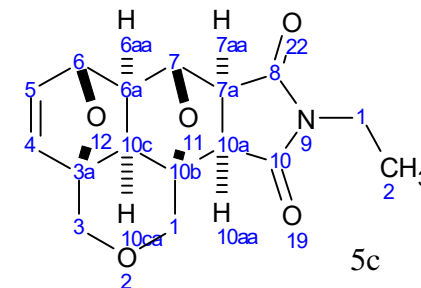


FZ6976-1.JDF

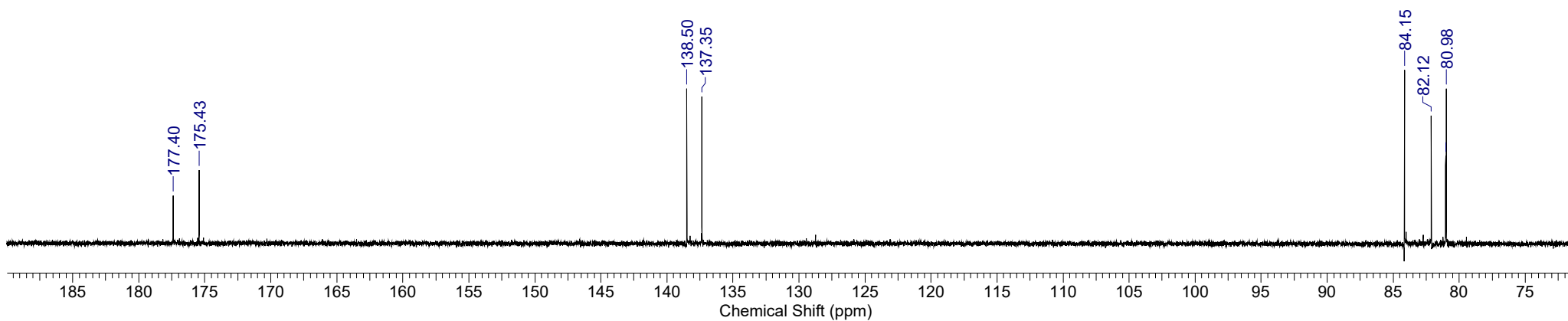


Formula C ₁₆ H ₁₇ NO ₅	FW 303.3099
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 03 Feb 1990 16:11:49
Date Stamp 22 Nov 2018 12:00:29	File Name C:\USERS\534~1\APPDATA\LOCAL\TEMP\FZ6976-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 400
Original Points Count 32768	Owner delta	Points Count 32768
Receiver Gain 56.00	Solvent DMSO-d6	Points Count 32768
	Spectrum Offset (Hz) 15091.3428	Pulse Sequence single pulse dec
		Sweep Width (Hz) 47348.49

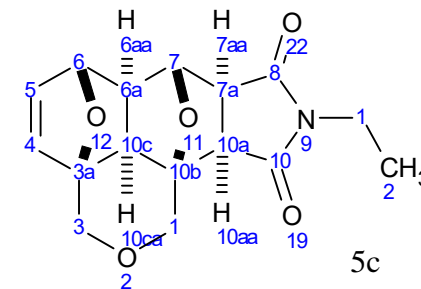


FZ6976-1.JDF

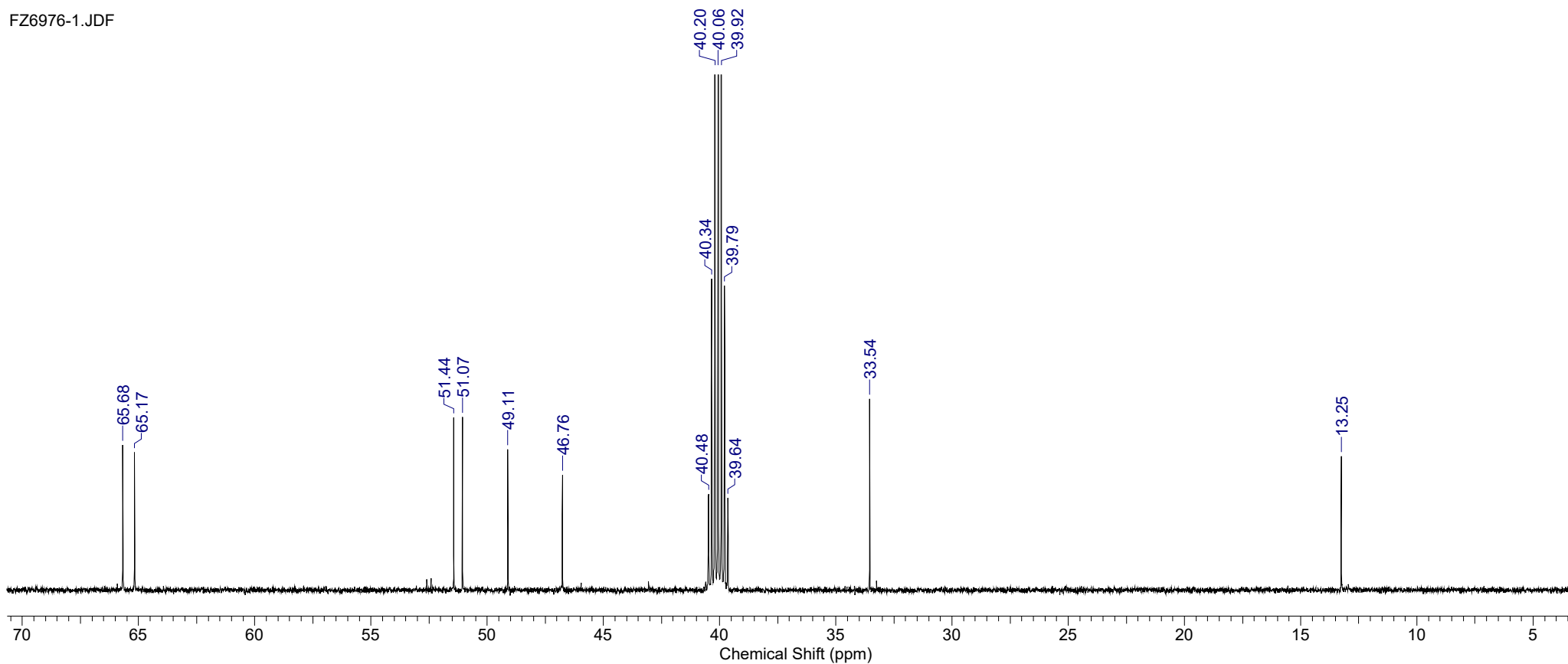


Formula C ₁₆ H ₁₇ NO ₅	FW 303.3099
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 03 Feb 1990 16:11:49
Date Stamp 22 Nov 2018 12:00:29	File Name C:\USERS\534~1\APPPDATA\LOCAL\TEMP\FZ6976-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 400
Original Points Count 32768	Owner delta	Points Count 32768
Receiver Gain 56.00	Solvent DMSO-d6	Spectrum Offset (Hz) 15091.3428
		Sweep Width (Hz) 47348.49

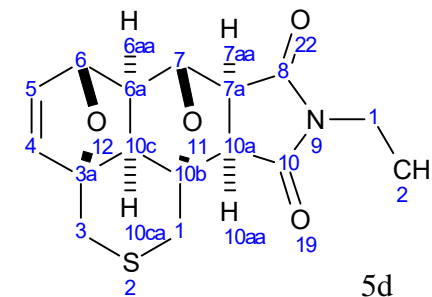


FZ6976-1.JDF

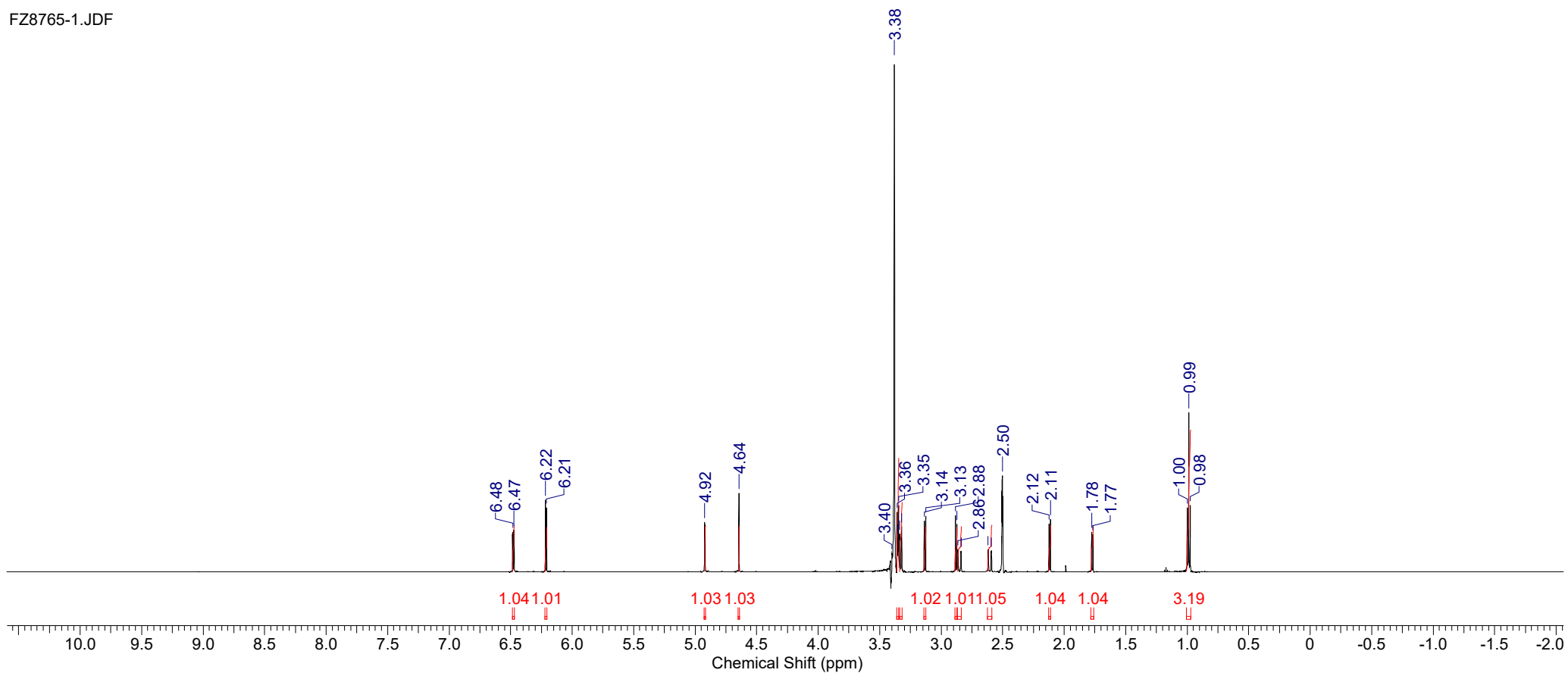


Formula C ₁₆ H ₁₇ NO ₄ S	FW 319.3755
--	--------------------

Acquisition Time (sec) 1.9818	Comment single pulse	Date 11 Jul 2020 09:37:16	Date Stamp 11 Jul 2020 09:38:54
File Name C:\USERS\Лабa534\DOWNLOADS\FZ8765-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 36.00	Solvent DMSO-d6	Spectrum Offset (Hz) 5423.9868	Sweep Width (Hz) 16534.39
		Temperature (degree C) 28.200	

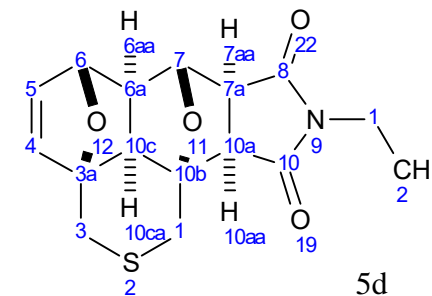


FZ8765-1.JDF

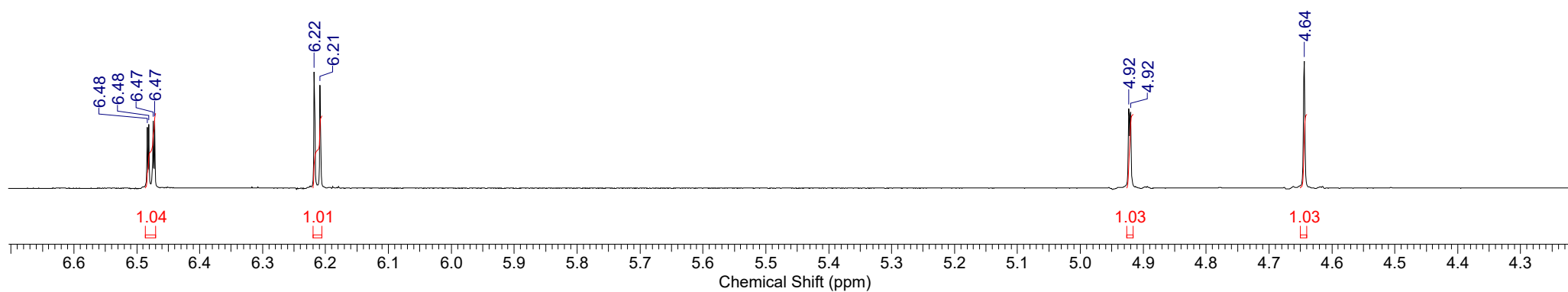


Formula C ₁₆ H ₁₇ NO ₄ S	FW 319.3755
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 11 Jul 2020 09:37:16	Date Stamp 11 Jul 2020 09:38:54
File Name C:\USERS\Лабa534\DOWNLOADS\FZ8765-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 36.00	Solvent DMSO-d6	Spectrum Offset (Hz) 5423.9868	Sweep Width (Hz) 16534.39
			Temperature (degree C) 28.200

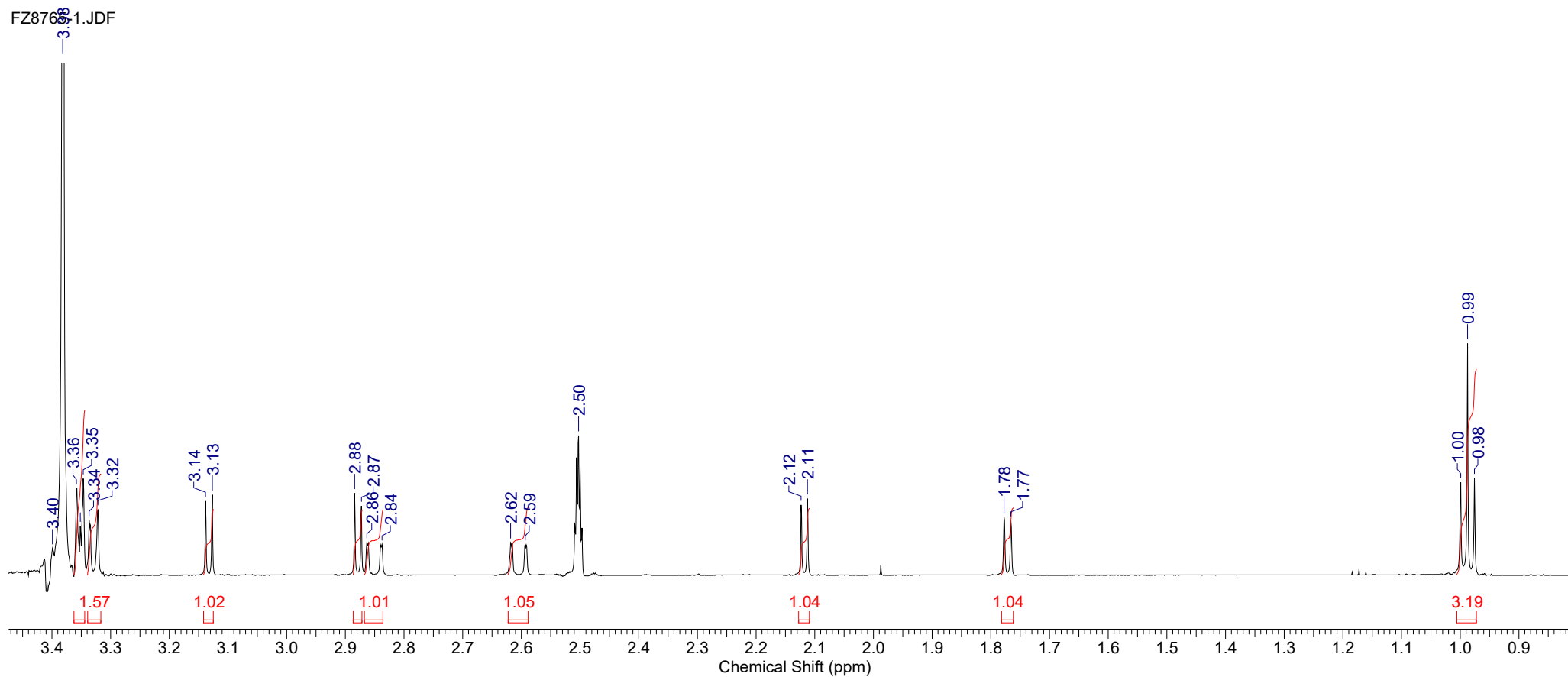
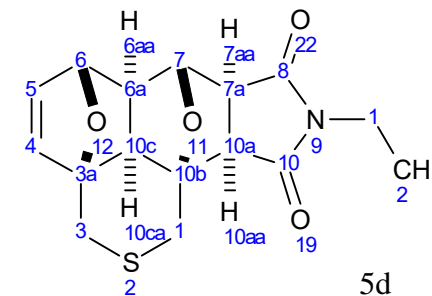


FZ8765-1.JDF



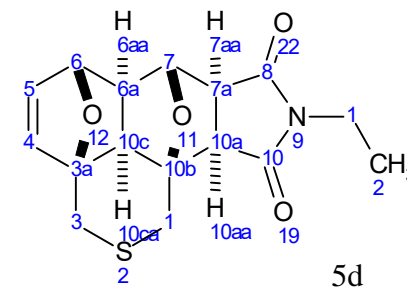
Formula C ₁₆ H ₁₇ NO ₄ S	FW 319.3755
--	--------------------

Acquisition Time (sec) 1.9818	Comment single pulse	Date 11 Jul 2020 09:37:16	Date Stamp 11 Jul 2020 09:38:54
File Name C:\USERS\Лабa534\DOWNLOADS\FZ8765-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 36.00	Solvent DMSO-d6	Spectrum Offset (Hz) 5423.9868	Sweep Width (Hz) 16534.39
			Temperature (degree C) 28.200

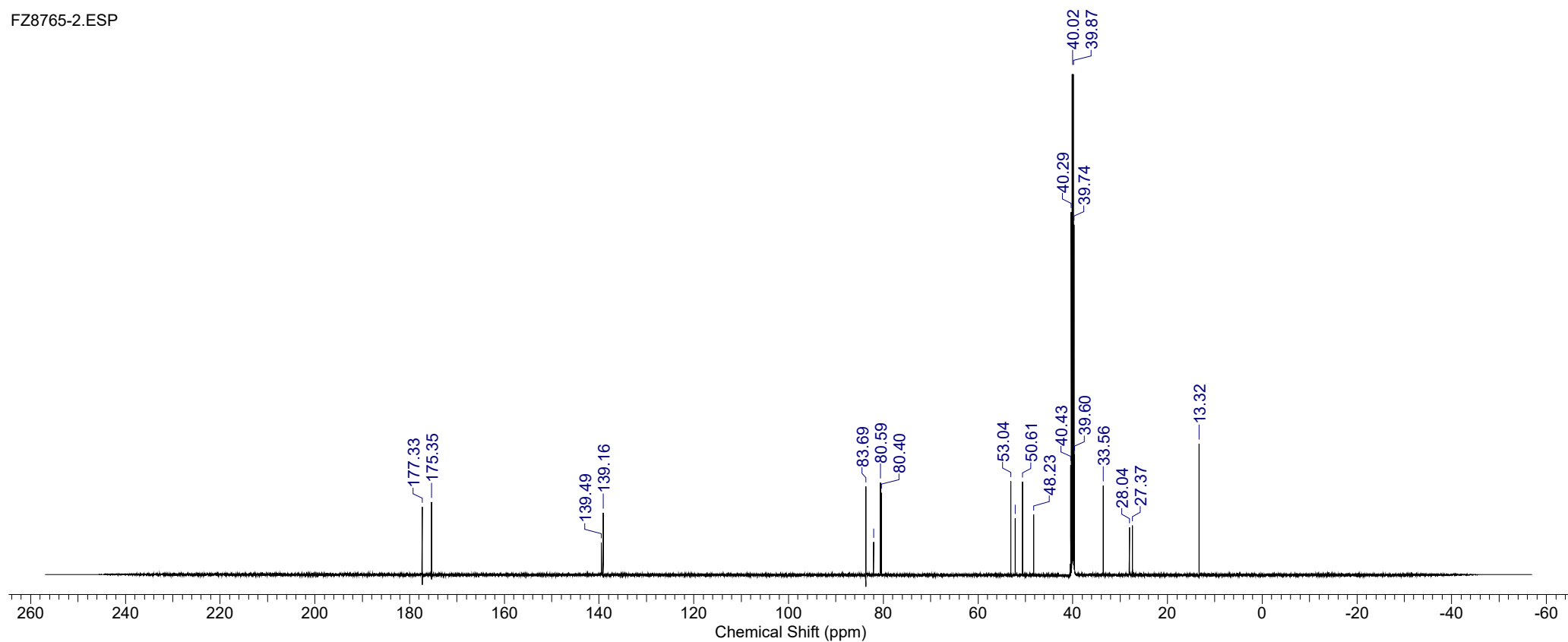


Formula C ₁₆ H ₁₇ NO ₄ S	FW 319.3755
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 15 Jul 2020 04:52:03
Date Stamp 15 Jul 2020 04:53:48	File Name C:\USERS\Jla6a534\DOWNLOADS\FZ8765-2.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 4000
Original Points Count 32768	Owner CKP	Origin ECA 600
Receiver Gain 58.00	Solvent DMSO-d6	Points Count 32768
Temperature (degree C) 48.800	Spectrum Offset (Hz) 15091.3428	Pulse Sequence single pulse dec
		Sweep Width (Hz) 47348.49

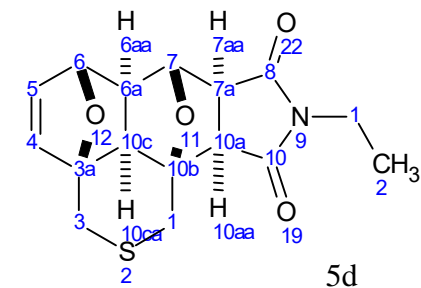


FZ8765-2.ESP

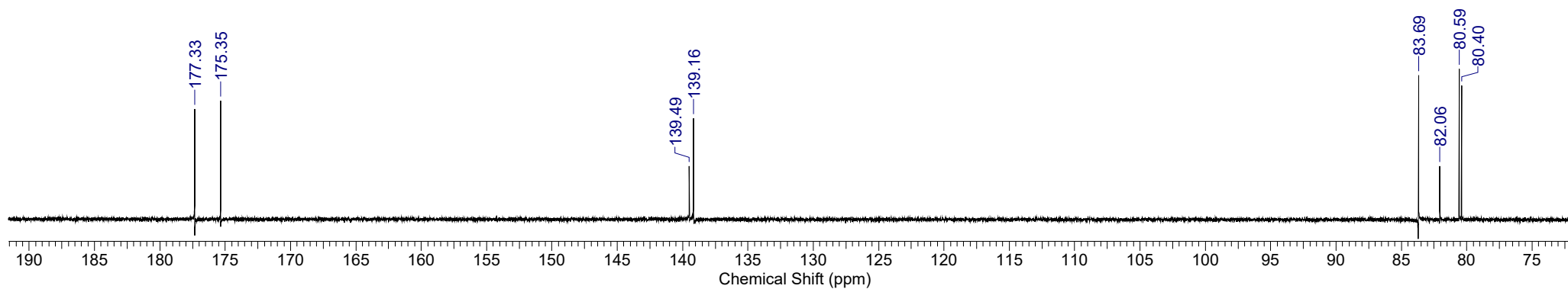


Formula C ₁₆ H ₁₇ NO ₄ S	FW 319.3755
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 15 Jul 2020 04:52:03
Date Stamp 15 Jul 2020 04:53:48	File Name C:\USERS\lta6a534\DOWNLOADS\FZ8765-2.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 4000
Original Points Count 32768	Owner CKP	Origin ECA 600
Receiver Gain 58.00	Solvent DMSO-d6	Points Count 32768
Temperature (degree C) 48.800	Spectrum Offset (Hz) 15091.3428	Pulse Sequence single pulse dec
		Sweep Width (Hz) 47348.49

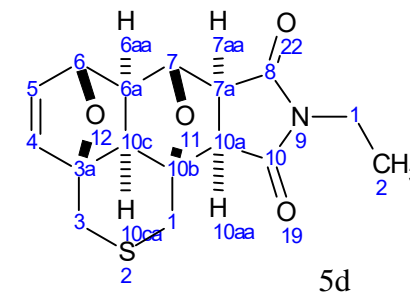


FZ8765-2.ESP

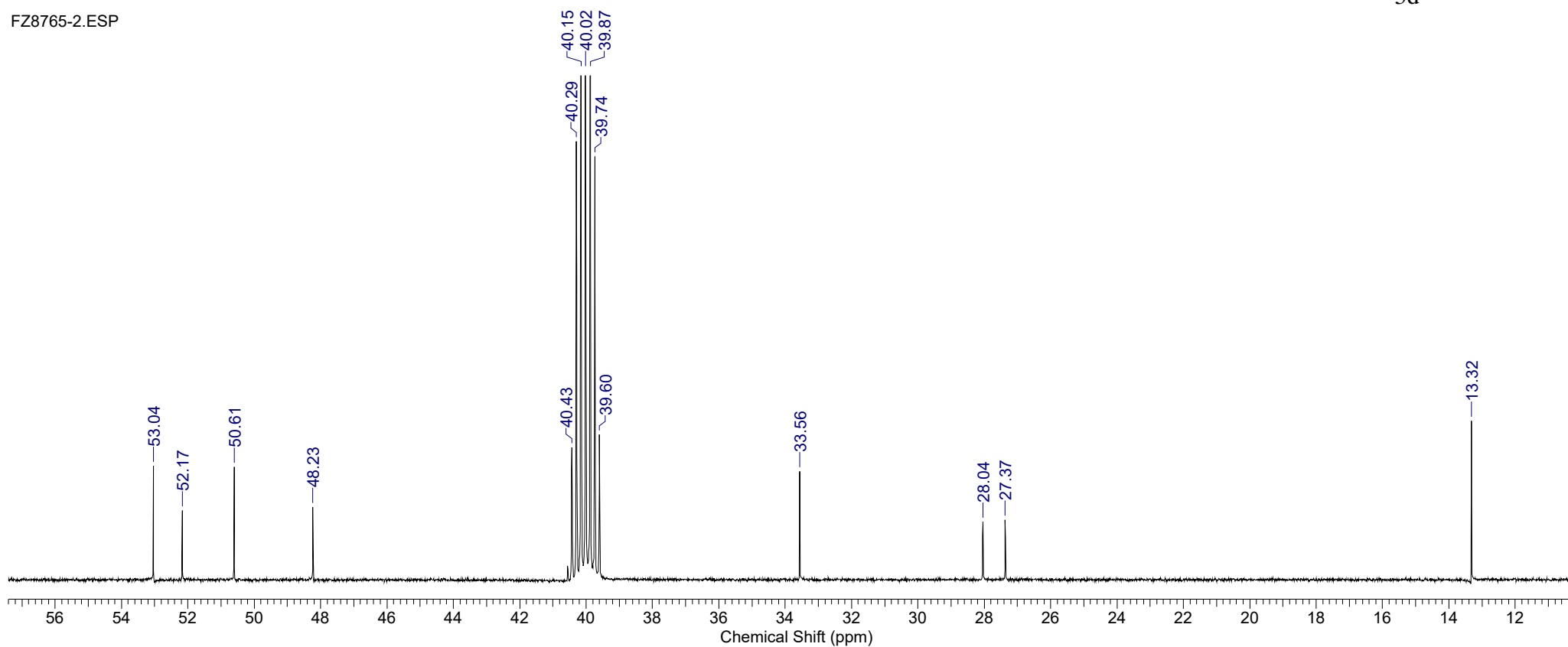


Formula C ₁₆ H ₁₇ NO ₄ S	FW 319.3755
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 15 Jul 2020 04:52:03
Date Stamp 15 Jul 2020 04:53:48	File Name C:\USERS\Jla6a534\DOWNLOADS\FZ8765-2.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 4000
Original Points Count 32768	Owner CKP	Origin ECA 600
Receiver Gain 58.00	Solvent DMSO-d6	Points Count 32768
Temperature (degree C) 48.800	Spectrum Offset (Hz) 15091.3428	Pulse Sequence single pulse dec
		Sweep Width (Hz) 47348.49

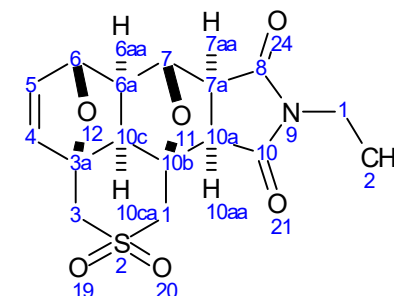


FZ8765-2.ESP



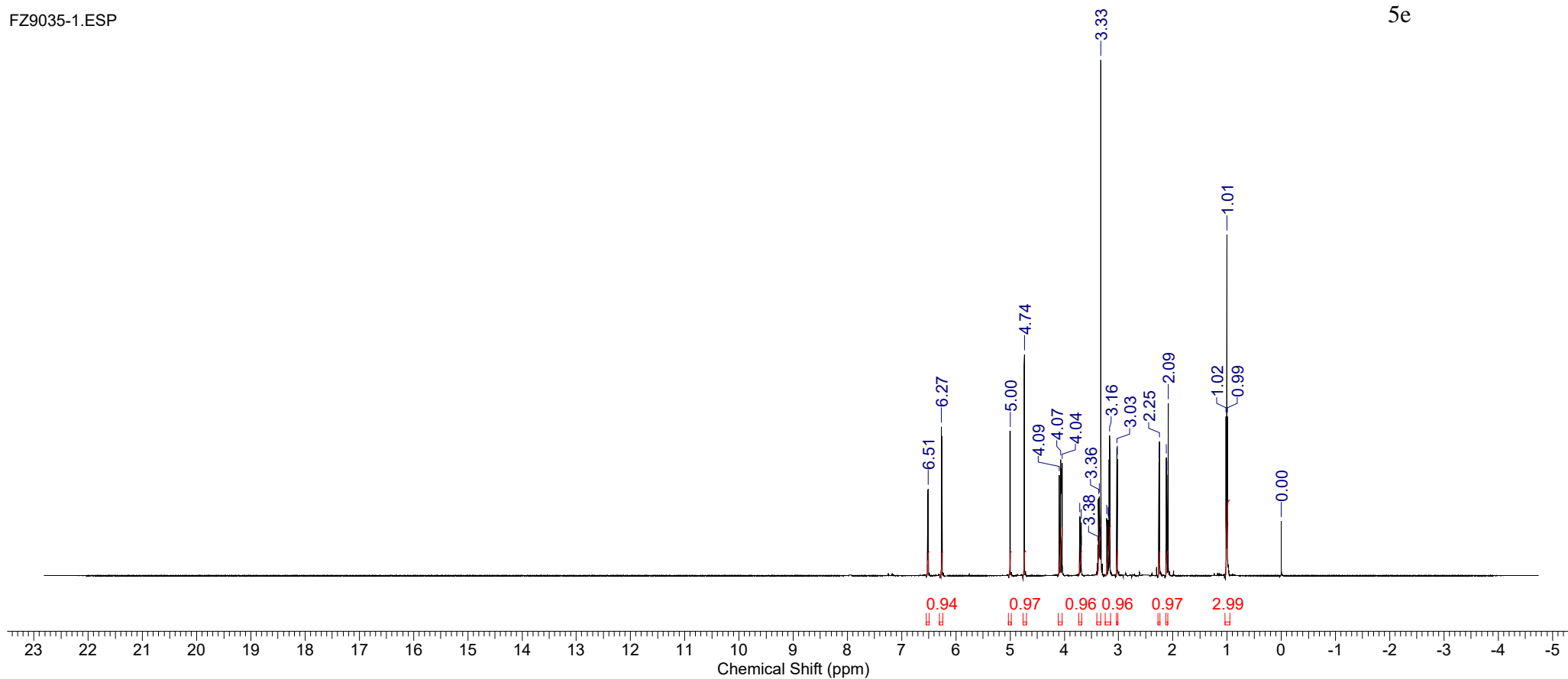
Formula C ₁₆ H ₁₇ NO ₆ S	FW 351.3743
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 21 Aug 2020 12:46:12	Date Stamp 21 Aug 2020 12:47:20
File Name C:\USERS\Лабa534\DOWNLOADS\FZ9035-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 44.00	Solvent DMSO-d6	Spectrum Offset (Hz) 5423.2422	Sweep Width (Hz) 16534.39
		Points Count 32768	Pulse Sequence single_pulse.ex2



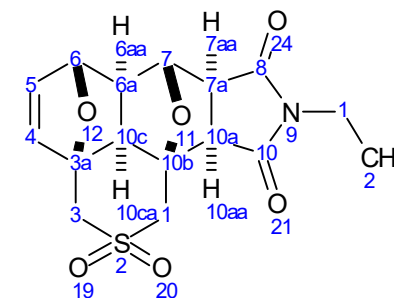
5e

FZ9035-1.ESP



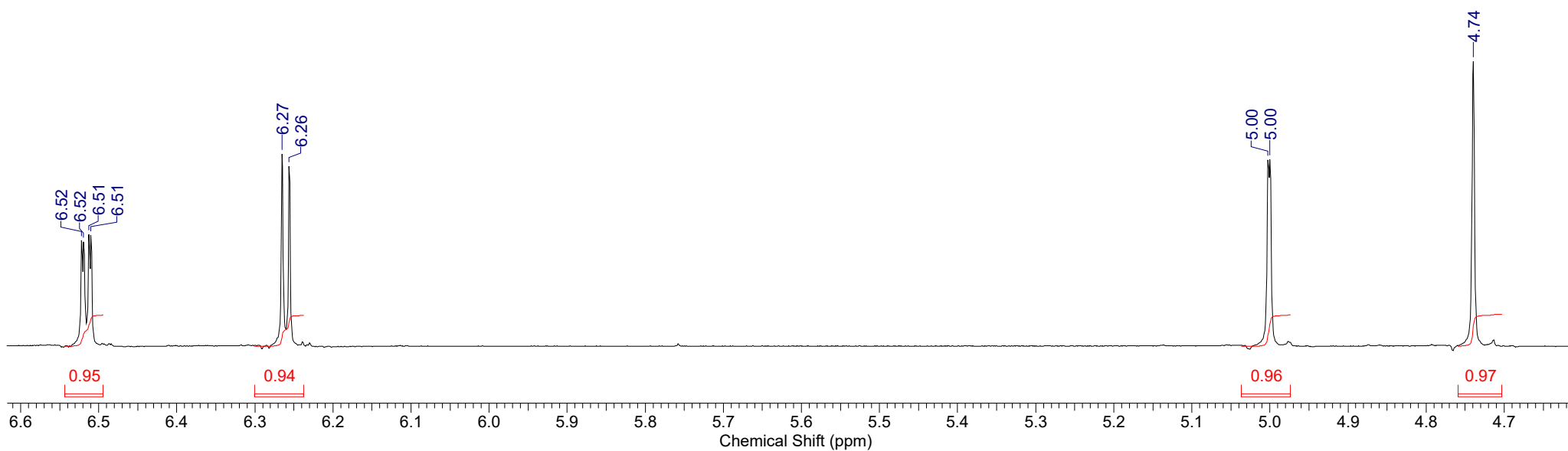
Formula C ₁₆ H ₁₇ NO ₆ S	FW 351.3743
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 21 Aug 2020 12:46:12	Date Stamp 21 Aug 2020 12:47:20
File Name C:\USERS\Лабa534\DOWNLOADS\FZ9035-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 44.00	Solvent DMSO-d6	Spectrum Offset (Hz) 5423.2422	Sweep Width (Hz) 16534.39
		Points Count 32768	Pulse Sequence single_pulse.ex2



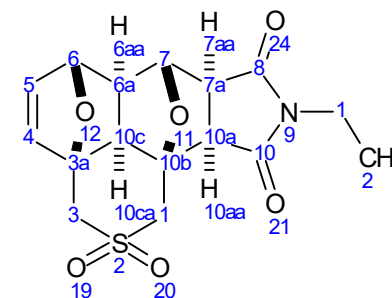
5e

FZ9035-1.ESP



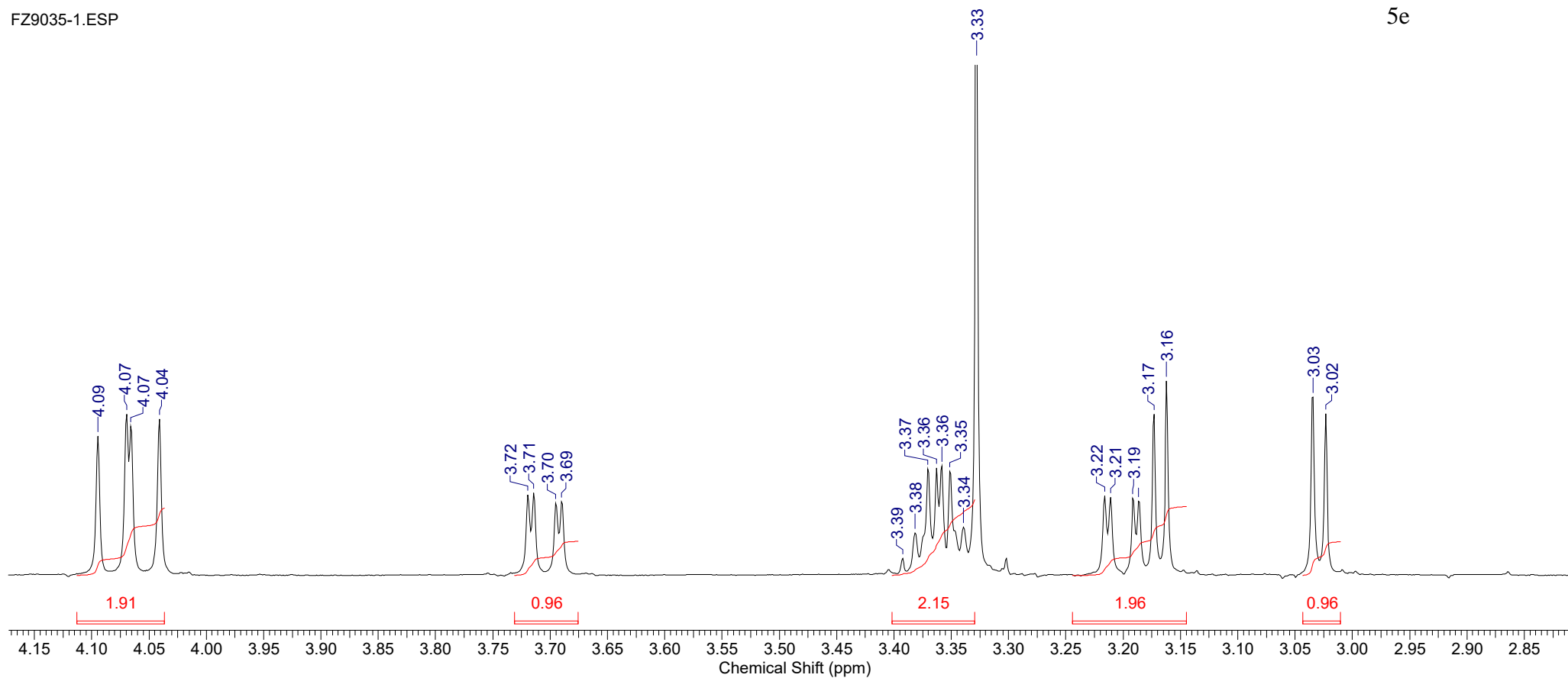
Formula C₁₆H₁₇NO₆S **FW** 351.3743

Acquisition Time (sec)	1.9818	Comment	single_pulse	Date	21 Aug 2020 12:46:12	Date Stamp	21 Aug 2020 12:47:20
File Name	C:\USERS\Лабa534\DOWNLOADS\FZ9035-1.JDF	Frequency (MHz)	600.17	Nucleus	1H	Number of Transients	8
Origin	ECA 600	Original Points Count	32768	Owner	CKP	Points Count	32768
Receiver Gain	44.00	Solvent	DMSO-d6	Spectrum Offset (Hz)	5423.2422	Sweep Width (Hz)	16534.39



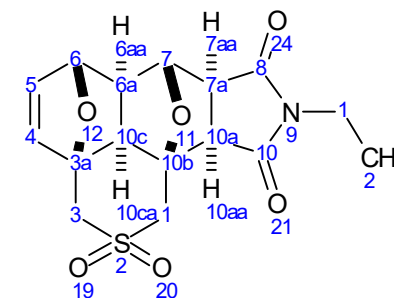
5e

FZ9035-1.ESP



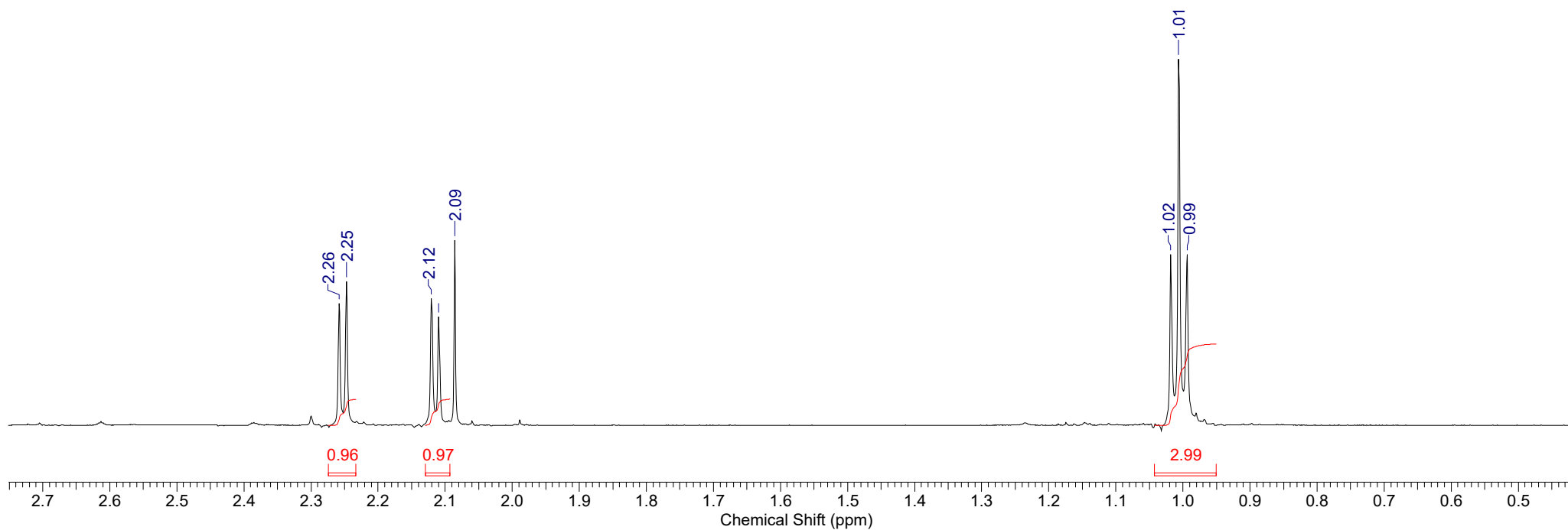
Formula C ₁₆ H ₁₇ NO ₆ S	FW 351.3743
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 21 Aug 2020 12:46:12	Date Stamp 21 Aug 2020 12:47:20
File Name C:\USERS\Лабa534\DOWNLOADS\FZ9035-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 44.00	Solvent DMSO-d6	Spectrum Offset (Hz) 5423.2422	Sweep Width (Hz) 16534.39



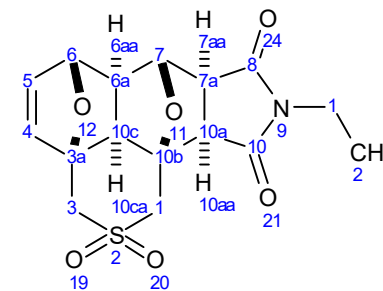
5e

FZ9035-1.ESP

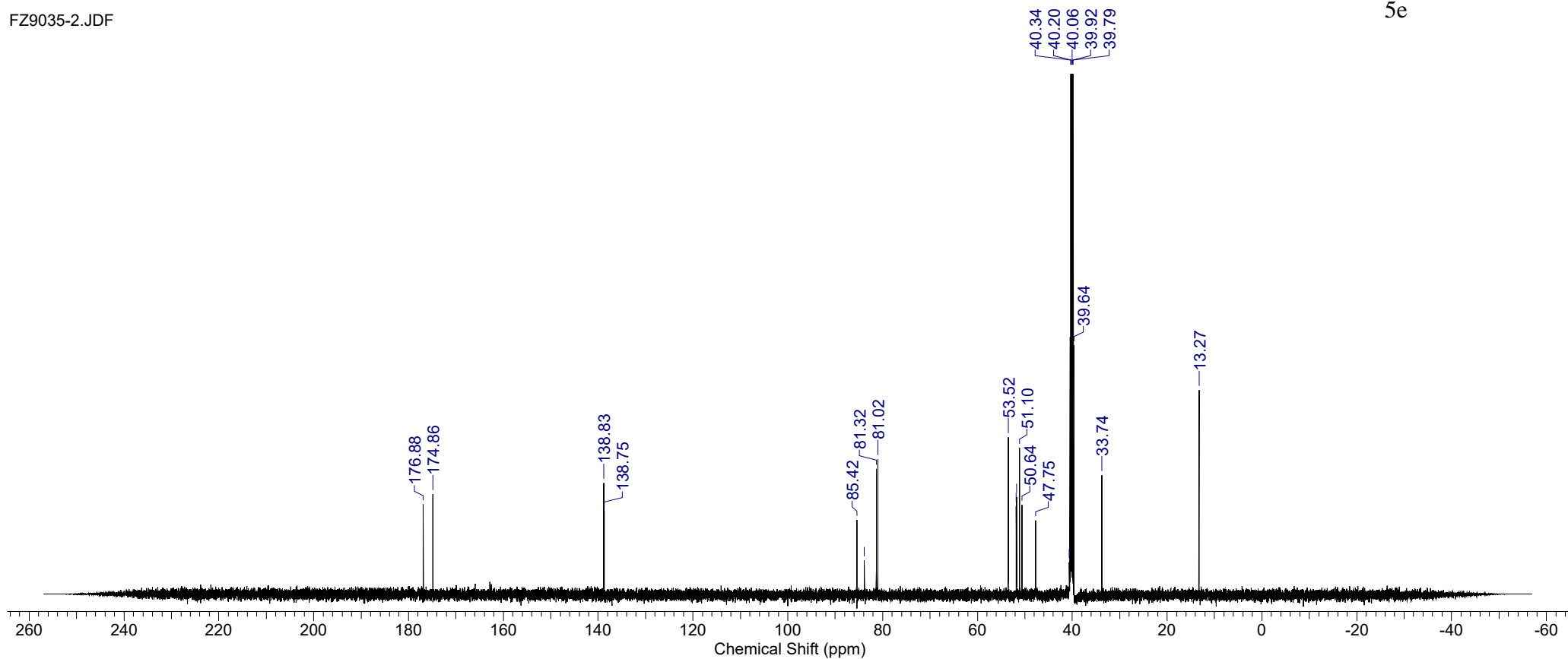


Formula C ₁₆ H ₁₇ NO ₆ S	FW 351.3743
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 21 Aug 2020 13:03:02
Date Stamp 21 Aug 2020 13:04:10	File Name C:\USERS\lpa6a534\DOWNLOADS\FZ9035-2.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 1000	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49	Receiver Gain 56.00
		Solvent DMSO-d6

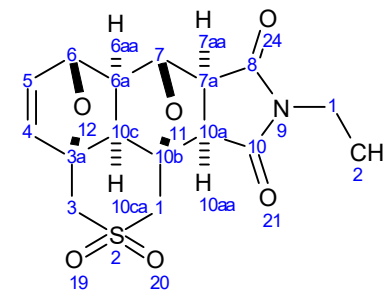


FZ9035-2.JDF

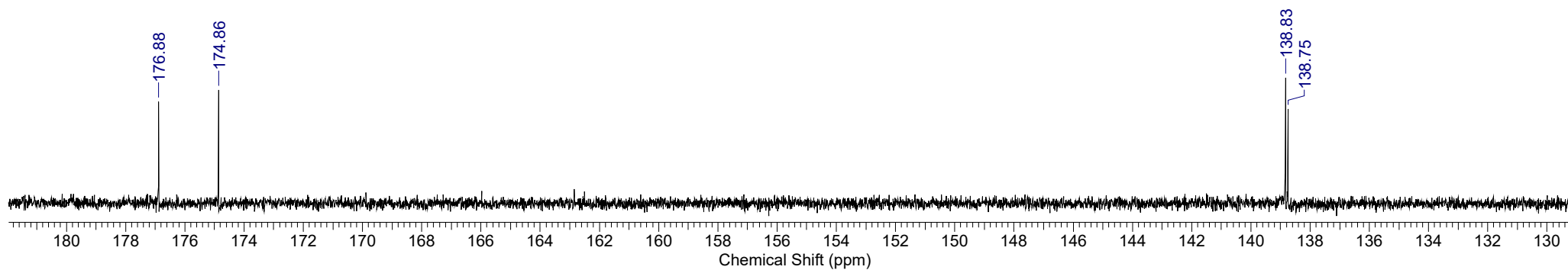


Formula C ₁₆ H ₁₇ NO ₆ S	FW 351.3743
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 21 Aug 2020 13:03:02
Date Stamp 21 Aug 2020 13:04:10	File Name C:\USERS\Ia6a534\DOWNLOADS\FZ9035-2.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 1000	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49	Receiver Gain 56.00
		Solvent DMSO-d6

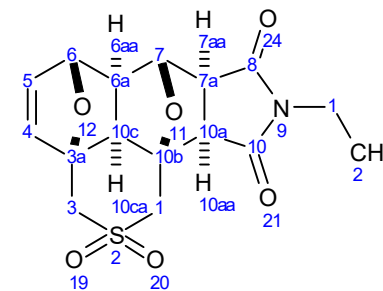


FZ9035-2.JDF



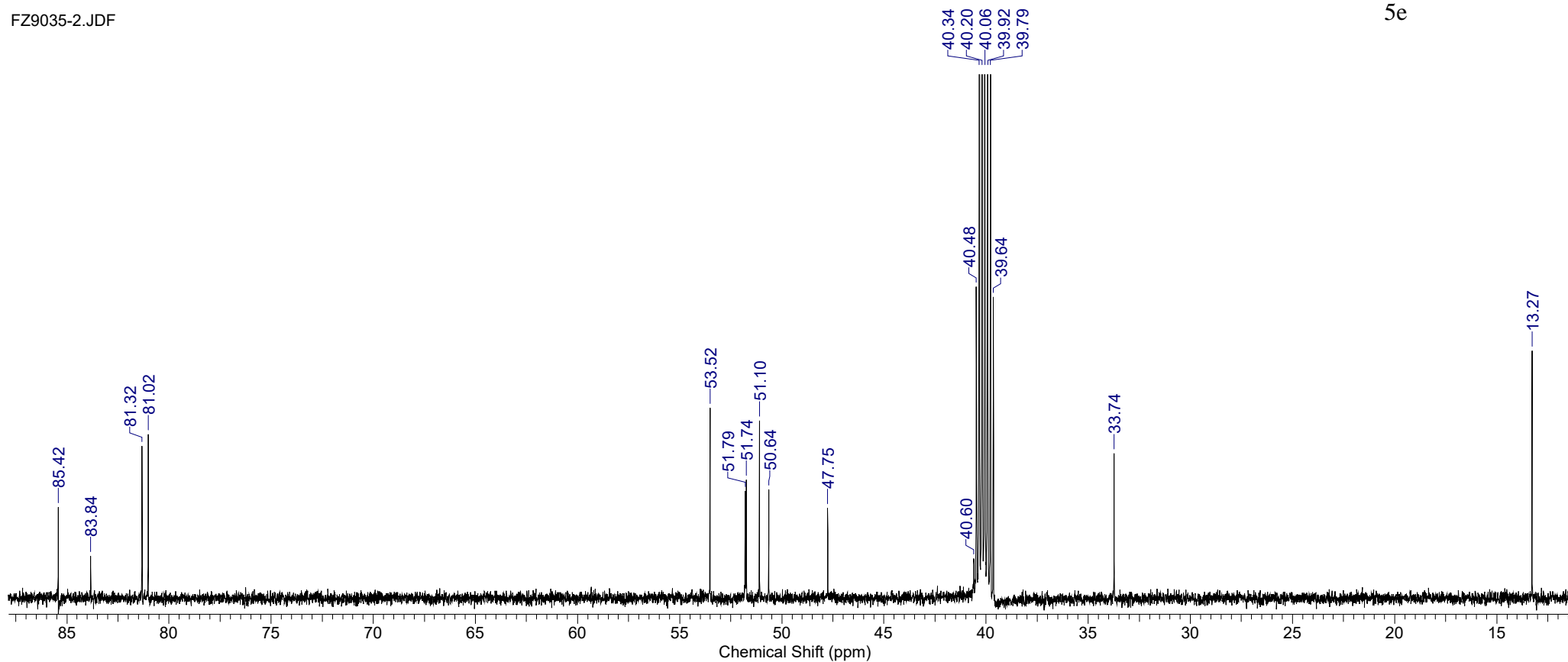
Formula C ₁₆ H ₁₇ NO ₆ S	FW 351.3743
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 21 Aug 2020 13:03:02
Date Stamp 21 Aug 2020 13:04:10	File Name C:\USERS\lta6a534\DOWNLOADS\FZ9035-2.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 1000	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49	Receiver Gain 56.00
		Solvent DMSO-d6



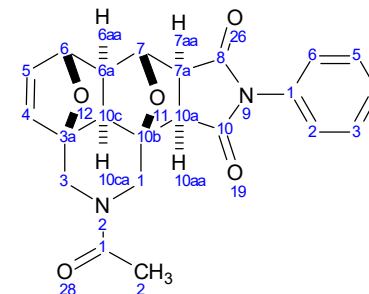
5e

FZ9035-2.JDF



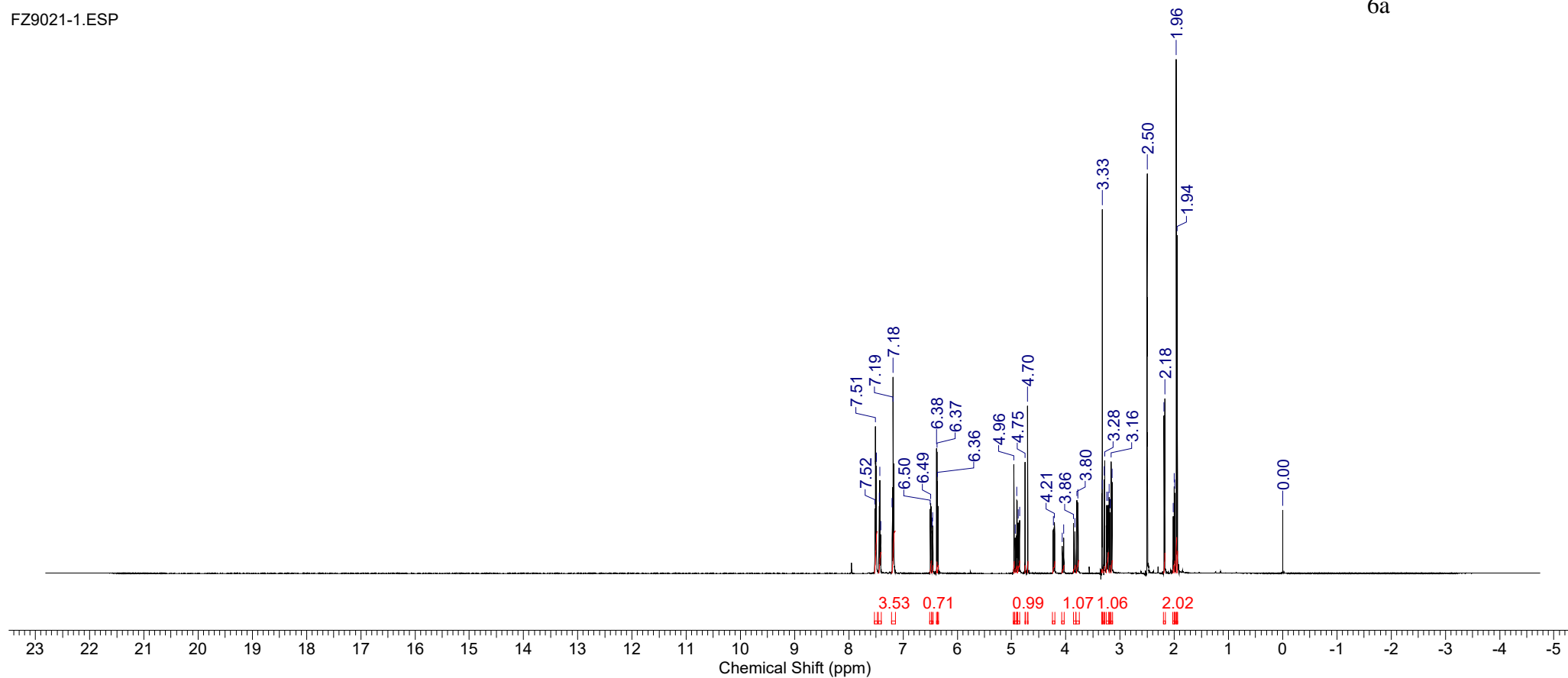
Formula C ₂₂ H ₂₀ N ₂ O ₅	FW 392.4046
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 20 Aug 2020 12:45:12	Date Stamp 20 Aug 2020 12:46:18
File Name C:\USERS\Лаб6а534\DOWNLOADS\FZ9021-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 42.00	Solvent DMSO-d6	Spectrum Offset (Hz) 5422.2334	Sweep Width (Hz) 16534.39
		Pulse Sequence single_pulse.ex2	



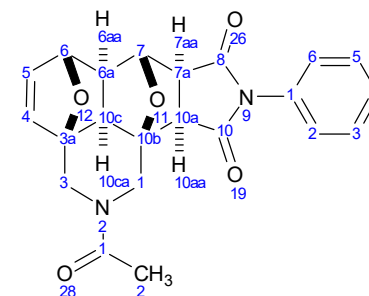
6a

FZ9021-1.ESP



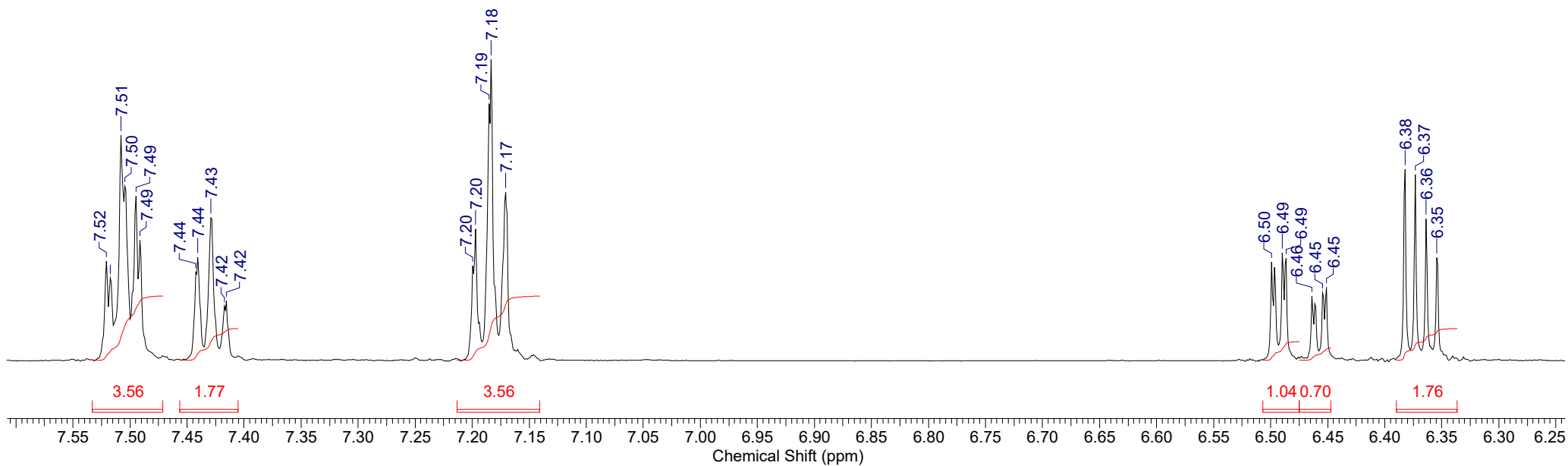
Formula $C_{22}H_{20}N_2O_5$ FW 392.4046

Acquisition Time (sec)	1.9818	Comment	single_pulse	Date	20 Aug 2020 12:45:12	Date Stamp	20 Aug 2020 12:46:18
File Name	C:\USERS\Лабa534\DOWNLOADS\FZ9021-1.JDF	Frequency (MHz)	600.17	Nucleus	1H	Number of Transients	8
Origin	ECA 600	Original Points Count	32768	Owner	CKP	Points Count	32768
Receiver Gain	42.00	Solvent	DMSO-d6	Spectrum Offset (Hz)	5422.2334	Sweep Width (Hz)	16534.39
						Pulse Sequence	single_pulse.ex2



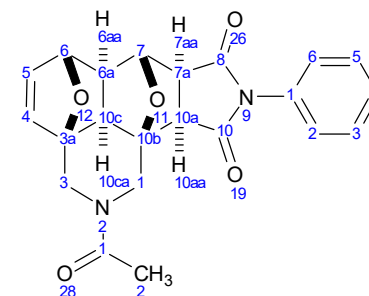
6a

FZ9021-1.JDF



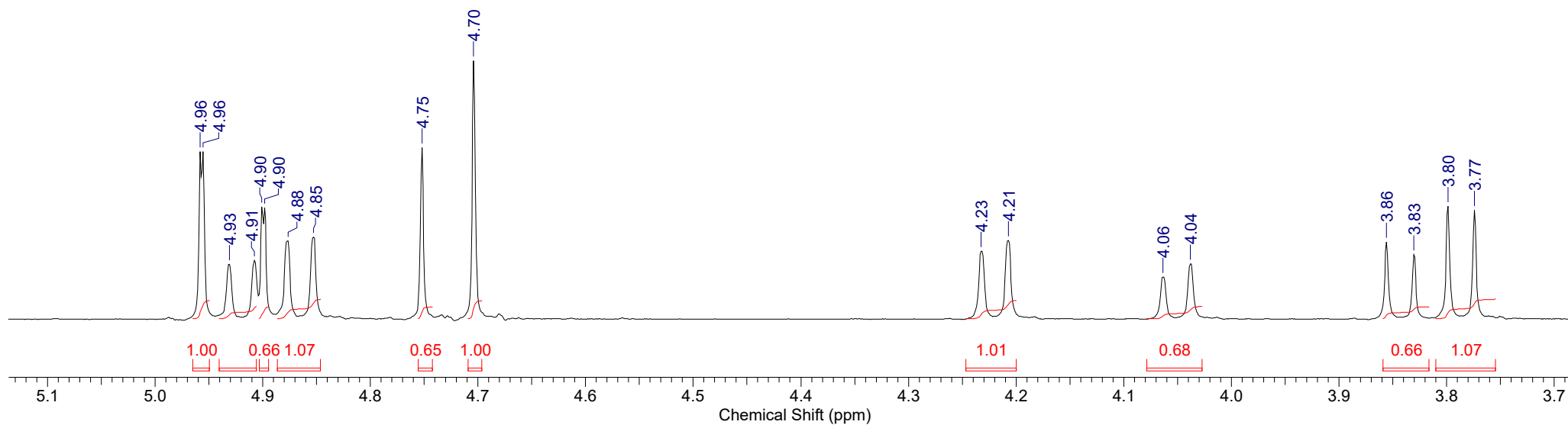
Formula C ₂₂ H ₂₀ N ₂ O ₅	FW 392.4046
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 20 Aug 2020 12:45:12	Date Stamp 20 Aug 2020 12:46:18
File Name C:\USERS\Лабa534\DOWNLOADS\FZ9021-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 42.00	Solvent DMSO-d6	Spectrum Offset (Hz) 5422.2334	Sweep Width (Hz) 16534.39
		Pulse Sequence single_pulse.ex2	



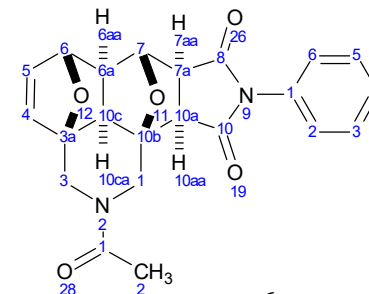
6a

FZ9021-1.JDF

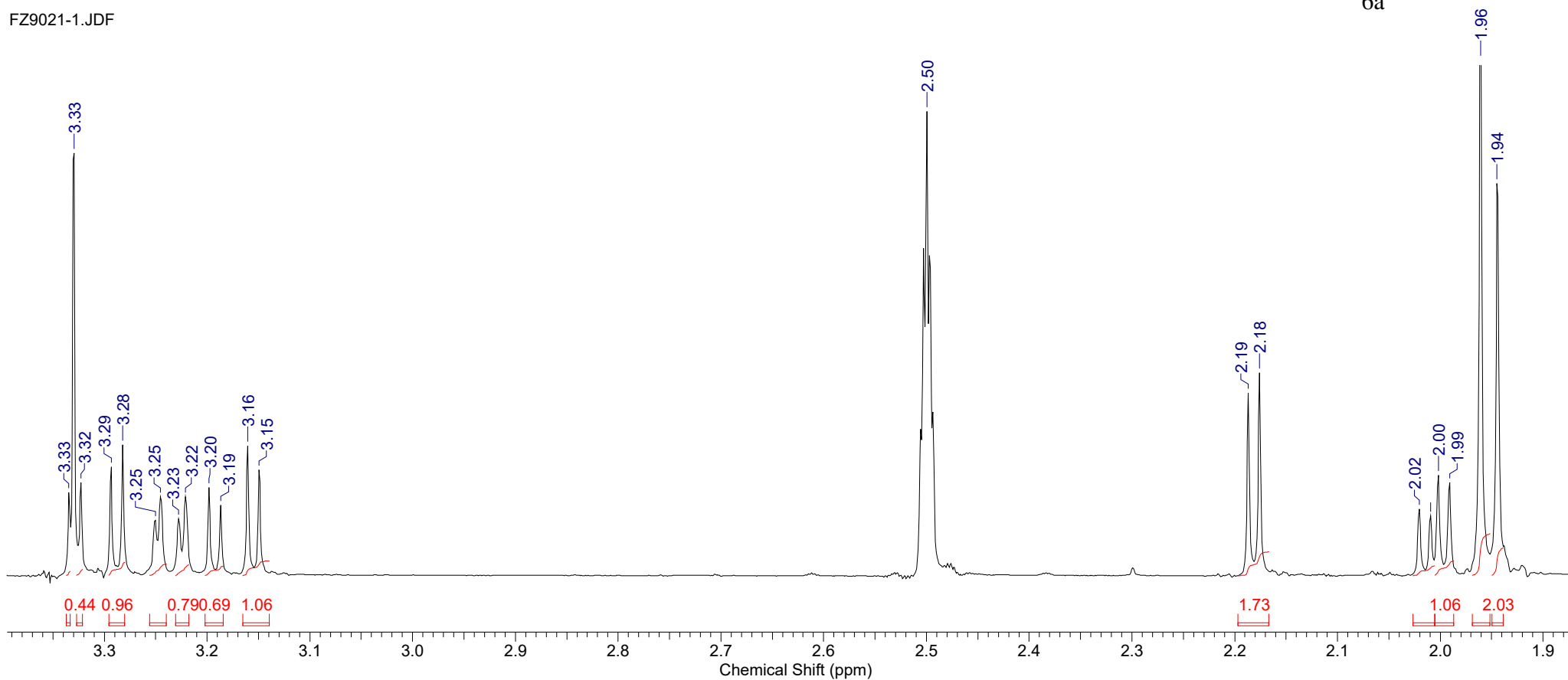


Formula C₂₂H₂₀N₂O₅ FW 392.4046

Acquisition Time (sec)	1.9818	Comment	single_pulse	Date	20 Aug 2020 12:45:12	Date Stamp	20 Aug 2020 12:46:18
File Name	C:\USERS\Лабa534\DOWNLOADS\FZ9021-1.JDF	Frequency (MHz)	600.17	Nucleus	1H	Number of Transients	8
Origin	ECA 600	Original Points Count	32768	Owner	CKP	Points Count	32768
Receiver Gain	42.00	Solvent	DMSO-d6	Spectrum Offset (Hz)	5422.2334	Sweep Width (Hz)	16534.39
						Pulse Sequence	single_pulse.ex2

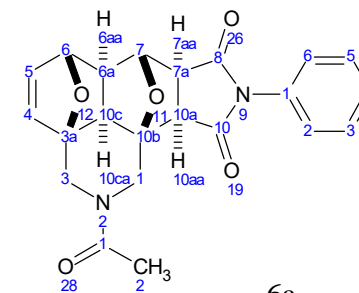


FZ9021-1.JDF

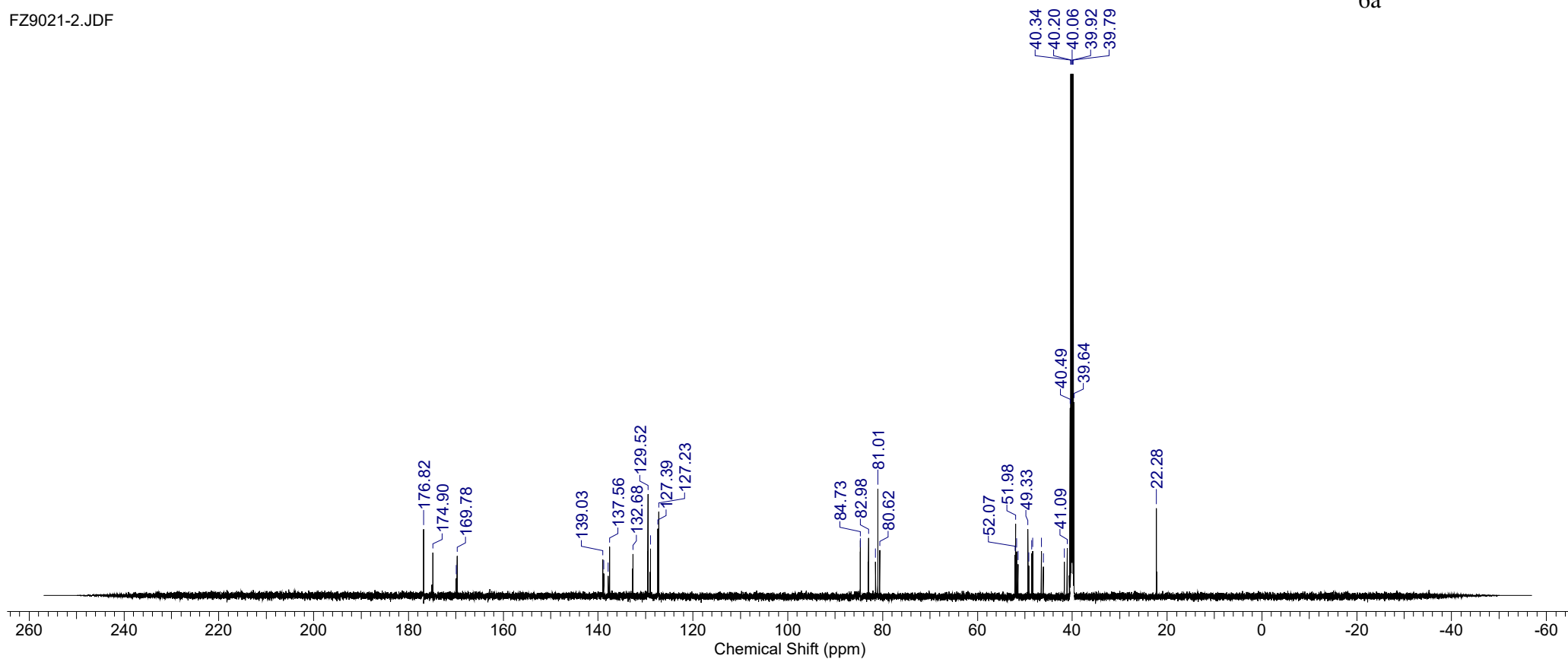


Formula C ₂₂ H ₂₀ N ₂ O ₅	FW 392.4046
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 20 Aug 2020 13:18:21
Date Stamp 20 Aug 2020 13:19:28	File Name C:\USERS\lpa6a534\DOWNLOADS\FZ9021-2.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 2000	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49	Receiver Gain 56.00
		Solvent DMSO-d6

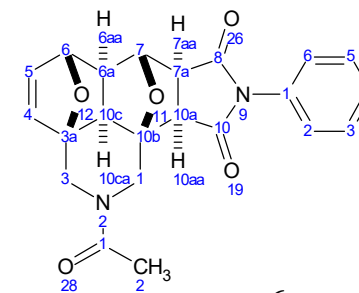


FZ9021-2.JDF



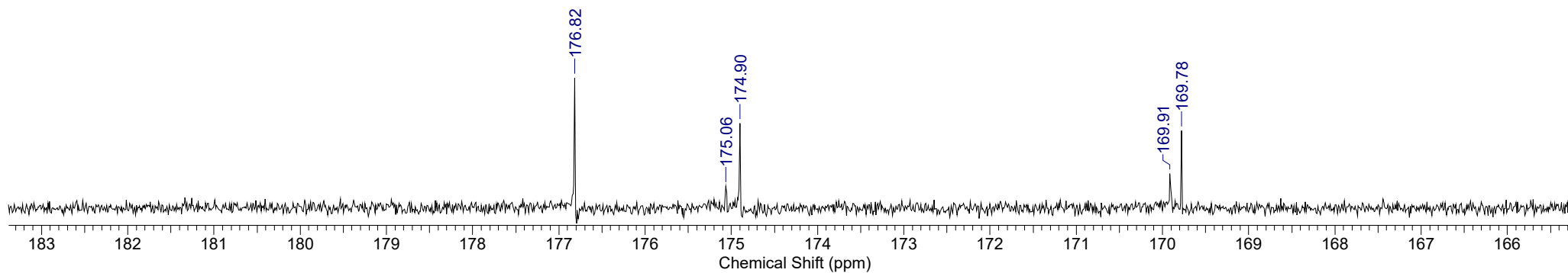
Formula C ₂₂ H ₂₀ N ₂ O ₅	FW 392.4046
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 20 Aug 2020 13:18:21
Date Stamp 20 Aug 2020 13:19:28	File Name C:\USERS\l1a6a534\DOWNLOADS\FZ9021-2.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 2000	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49	Receiver Gain 56.00
		Solvent DMSO-d6



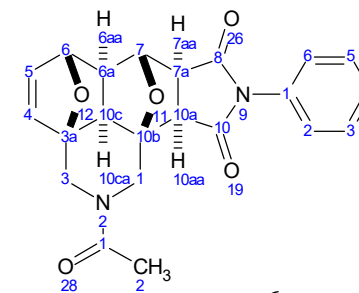
6a

FZ9021-2.JDF



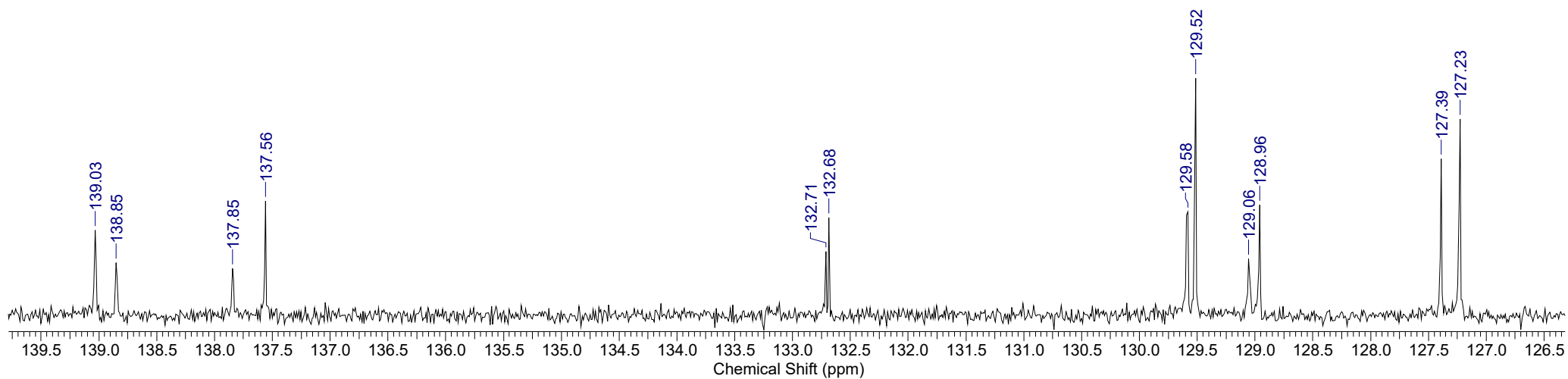
Formula C ₂₂ H ₂₀ N ₂ O ₅	FW 392.4046
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 20 Aug 2020 13:18:21
Date Stamp 20 Aug 2020 13:19:28	File Name C:\USERS\lta6a534\DOWNLOADS\FZ9021-2.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 2000	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49	Receiver Gain 56.00
		Solvent DMSO-d6



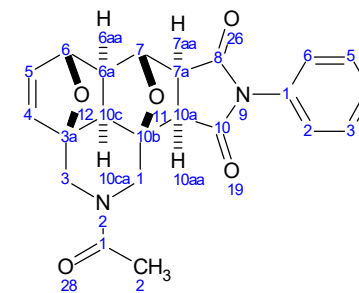
6a

FZ9021-2.JDF



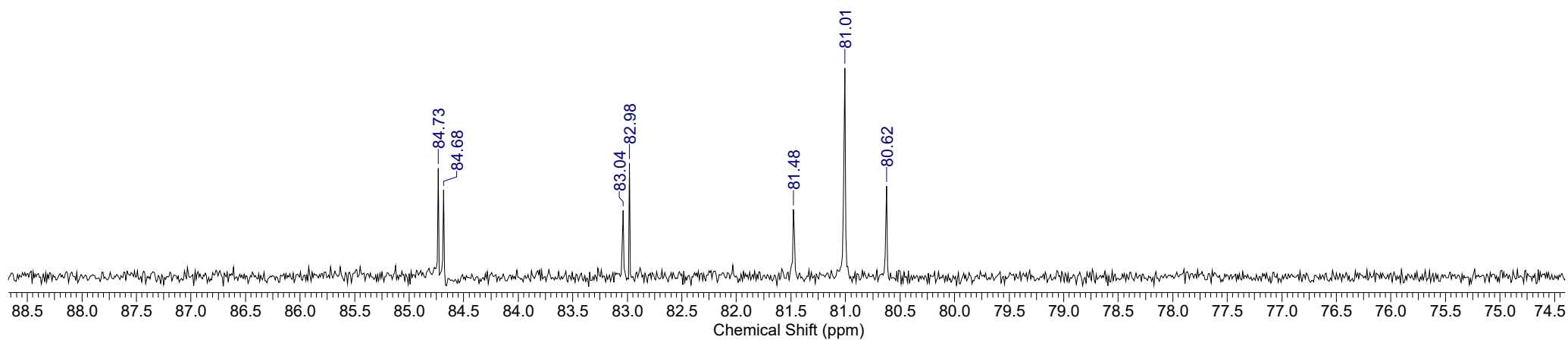
Formula C ₂₂ H ₂₀ N ₂ O ₅	FW 392.4046
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 20 Aug 2020 13:18:21
Date Stamp 20 Aug 2020 13:19:28	File Name C:\USERS\l1a6a534\DOWNLOADS\FZ9021-2.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 2000	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49	Receiver Gain 56.00
		Solvent DMSO-d6



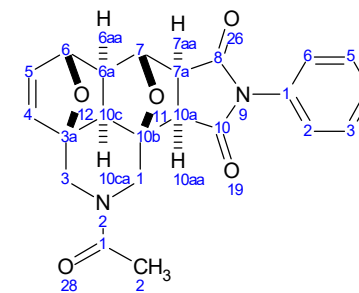
6a

FZ9021-2.JDF



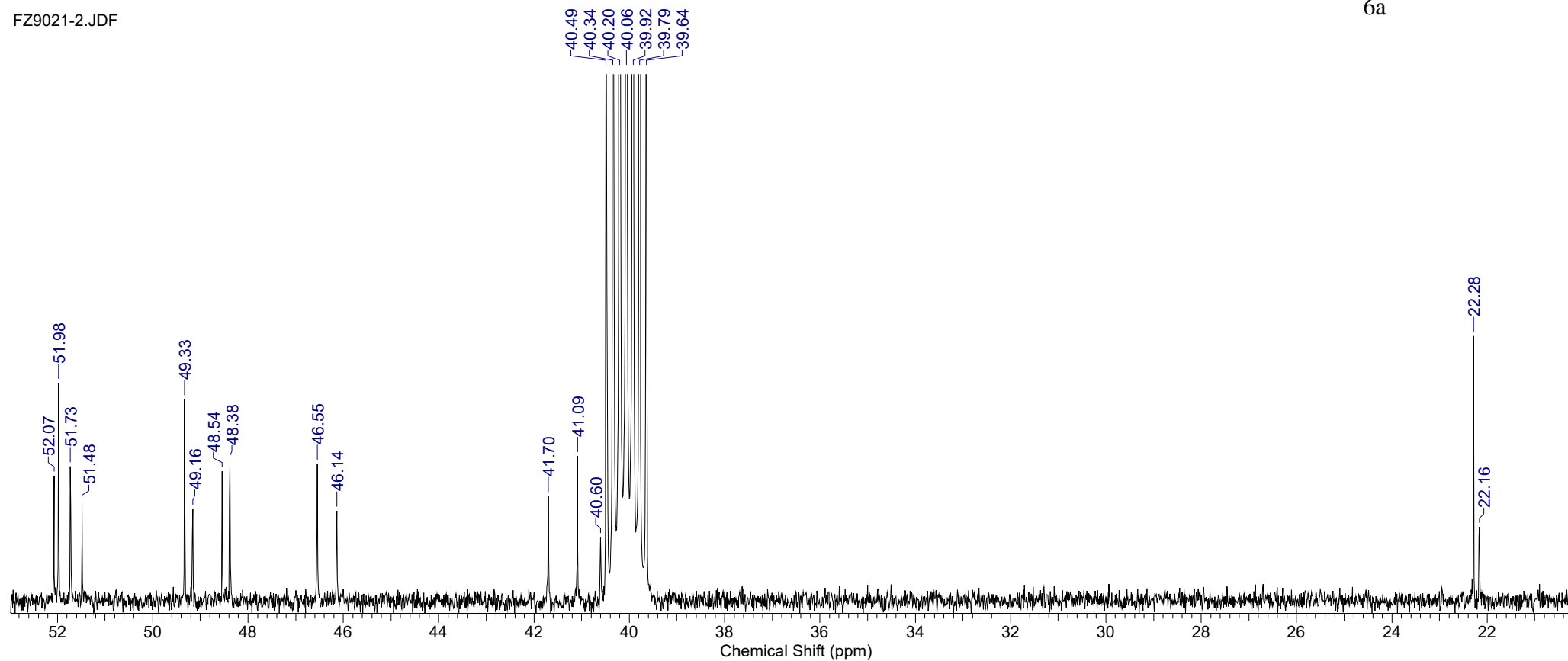
Formula C ₂₂ H ₂₀ N ₂ O ₅	FW 392.4046
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 20 Aug 2020 13:18:21
Date Stamp 20 Aug 2020 13:19:28	File Name C:\USERS\lpa6a534\DOWNLOADS\FZ9021-2.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 2000	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49	Receiver Gain 56.00
		Solvent DMSO-d6



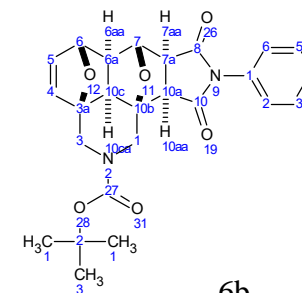
6a

FZ9021-2.JDF

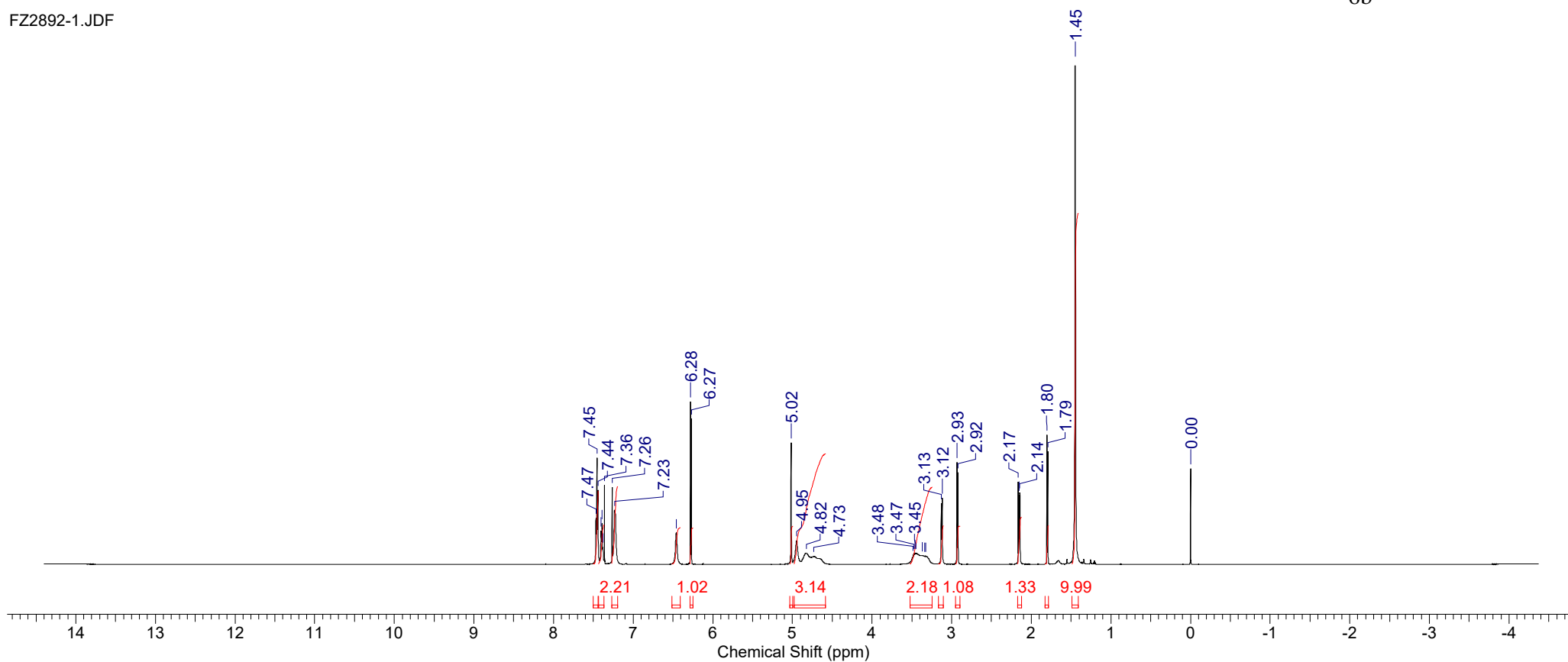


Formula C ₂₅ H ₂₆ N ₂ O ₆	FW 450.4837
--	--------------------

Acquisition Time (sec) 1.4549	Comment single_pulse	Date 28 Mar 2013 09:31:44	
Date Stamp 28 Mar 2013 08:43:48		File Name C:\USERS\I\Ia6a534\DOWNLOADS\FZ2892-1.JDF	Frequency (MHz) 600.17
Nucleus 1H	Number of Transients 8	Origin ECA 600	Original Points Count 16384
Points Count 16384	Pulse Sequence single_pulse.ex2		Receiver Gain 30.00
Spectrum Offset (Hz) 3009.6707	Sweep Width (Hz) 11261.26	Temperature (degree C) 26.600	Solvent CHLOROFORM-d

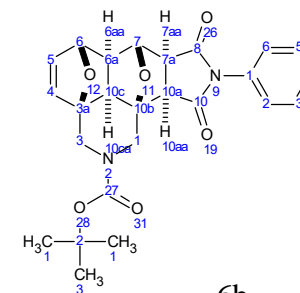


FZ2892-1.JDF



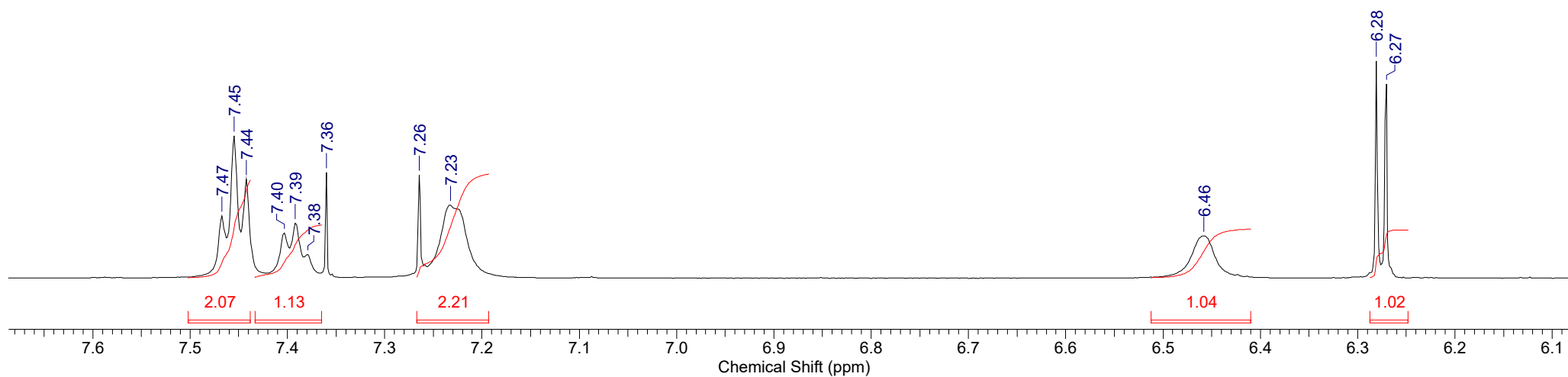
Formula C ₂₅ H ₂₆ N ₂ O ₆	FW 450.4837
--	--------------------

Acquisition Time (sec)	1.4549	Comment	single pulse	Date	28 Mar 2013 09:31:44
Date Stamp	28 Mar 2013 08:43:48	File Name	C:\USERS\Лабa534\DOWNLOADS\FZ2892-1.JDF		
Nucleus	1H	Number of Transients	8	Origin	ECA 600
Points Count	16384	Pulse Sequence	single_pulse.ex2	Original Points Count	16384
Spectrum Offset (Hz)	3009.6707	Sweep Width (Hz)	11261.26	Receiver Gain	30.00
		Temperature (degree C)	26.600		
				Frequency (MHz)	600.17
				Owner	delta
				Solvent	CHLOROFORM-d



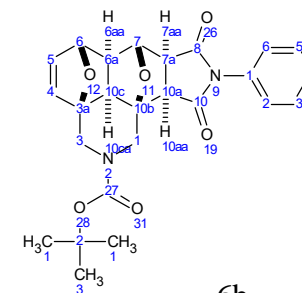
6b

FZ2892-1.JDF

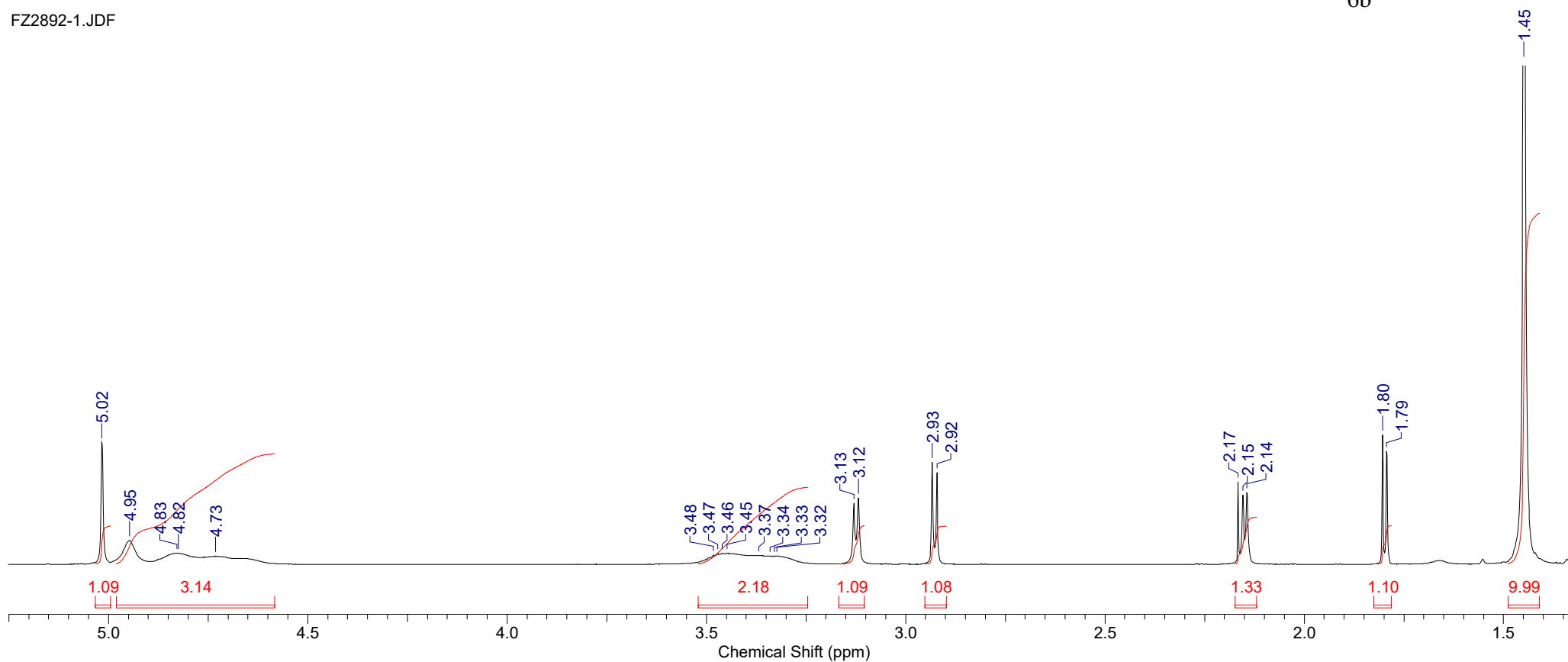


Formula C ₂₅ H ₂₆ N ₂ O ₆	FW 450.4837
--	--------------------

Acquisition Time (sec) 1.4549	Comment single_pulse	Date 28 Mar 2013 09:31:44	
Date Stamp 28 Mar 2013 08:43:48		File Name C:\USERS\Лаб534\DOWNLOADS\FZ2892-1.JDF	Frequency (MHz) 600.17
Nucleus 1H	Number of Transients 8	Origin ECA 600	Owner delta
Points Count 16384	Pulse Sequence single_pulse.ex2	Original Points Count 16384	Receiver Gain 30.00
Spectrum Offset (Hz) 3009.6707	Sweep Width (Hz) 11261.26	Temperature (degree C) 26.600	Solvent CHLOROFORM-d

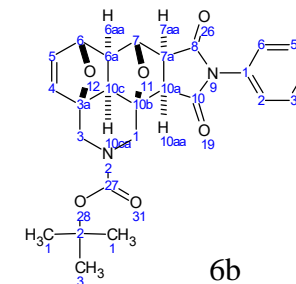


FZ2892-1.JDF

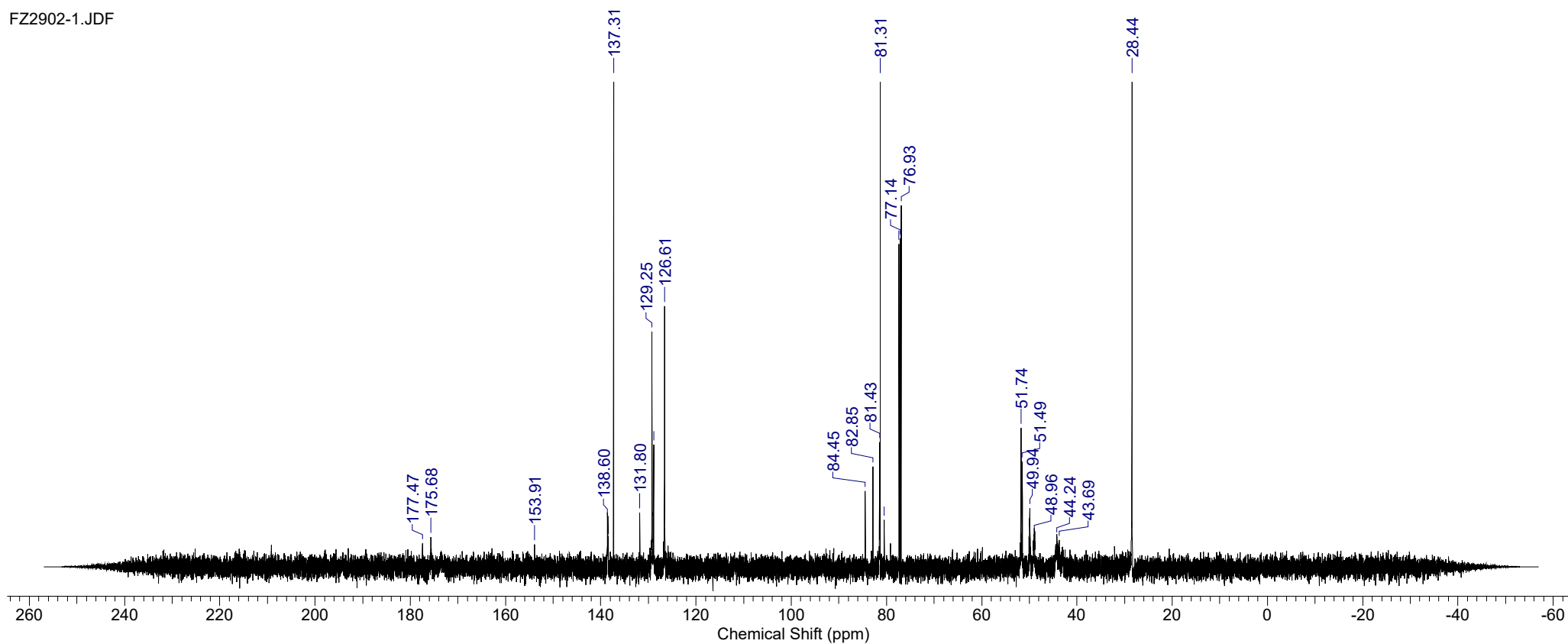


Formula $C_{25}H_{26}N_2O_6$ FW 450.4837

Acquisition Time (sec)	0.6921	Comment	single pulse decoupled gated NOE	Date	28 Mar 2013 14:22:11
Date Stamp	28 Mar 2013 13:34:11	File Name	C:\USERS\Лабa534\DOWNLOADS\FZ2902-1.JDF		
Frequency (MHz)	150.91	Nucleus	13C	Number of Transients	100
Original Points Count	32768	Owner	delta	Points Count	32768
Receiver Gain	56.00	Solvent	CHLOROFORM-d	Pulse Sequence	single pulse dec
Sweep Width (Hz)	47348.49	Temperature (degree C)	27.000	Spectrum Offset (Hz)	15091.3428

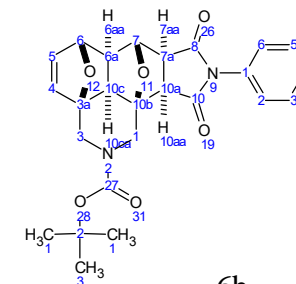


FZ2902-1.JDF

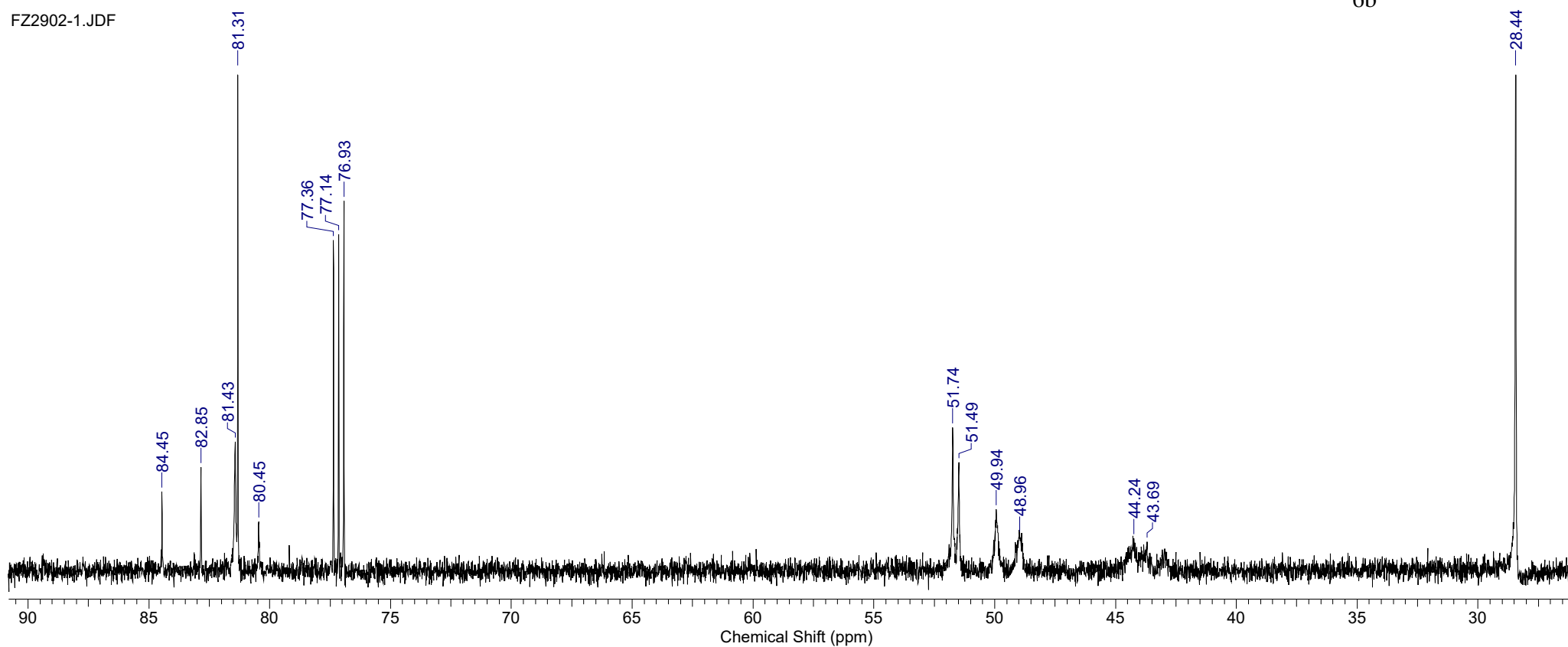


Formula C₂₅H₂₆N₂O₆ FW 450.4837

Acquisition Time (sec)	0.6921	Comment	single pulse decoupled gated NOE	Date	28 Mar 2013 14:22:11
Date Stamp	28 Mar 2013 13:34:11	File Name	C:\USERS\Лабa534\DOWNLOADS\FZ2902-1.JDF		
Frequency (MHz)	150.91	Nucleus	13C	Number of Transients	100
Original Points Count	32768	Owner	delta	Points Count	32768
Receiver Gain	56.00	Solvent	CHLOROFORM-d	Pulse Sequence	single pulse dec
Sweep Width (Hz)	47348.49	Temperature (degree C)	27.000	Spectrum Offset (Hz)	15091.3428

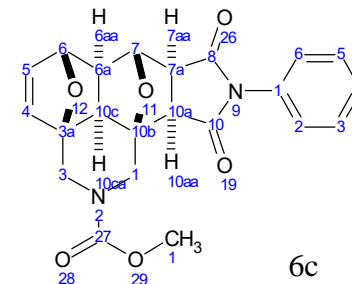


FZ2902-1.JDF

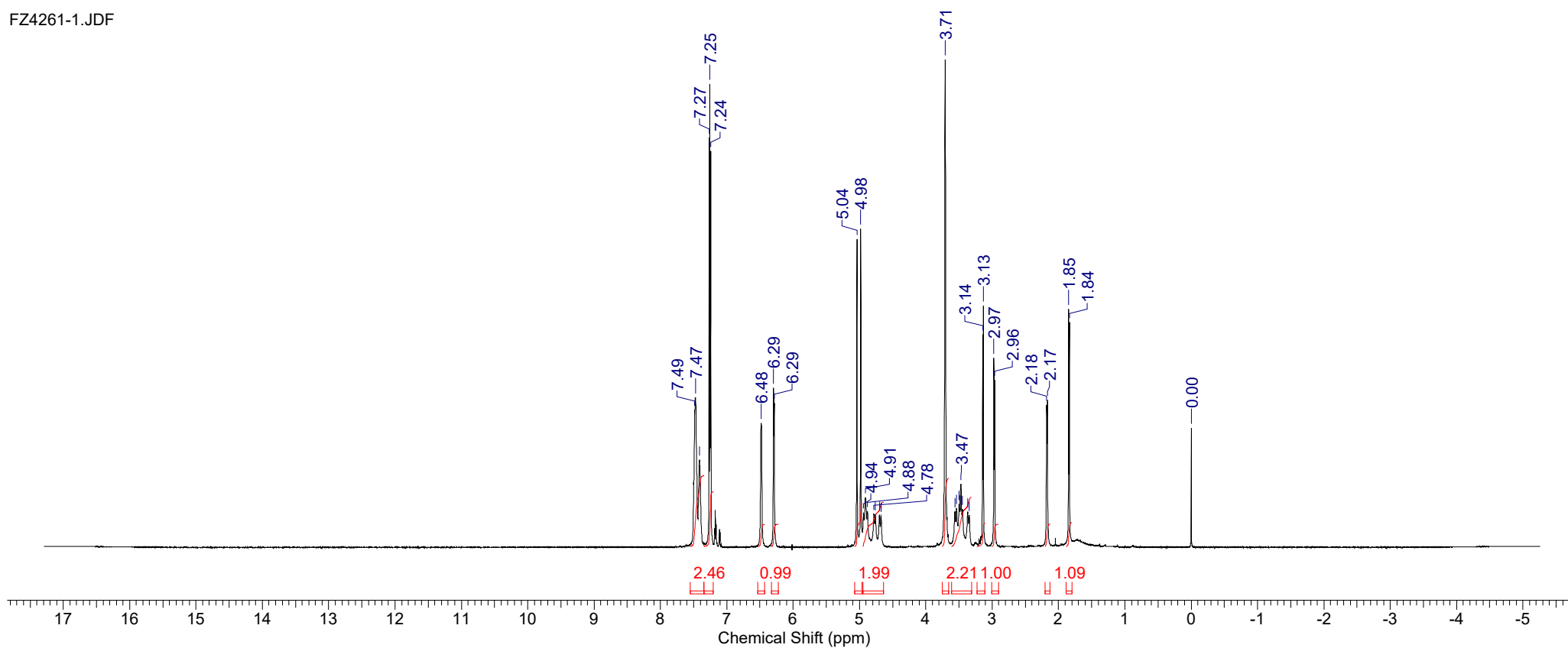


Formula C ₂₂ H ₂₀ N ₂ O ₆	FW 408.4040
--	--------------------

Acquisition Time (sec) 2.4222	Comment single_pulse	Date 05 May 2015 13:00:09		
Date Stamp 05 May 2015 12:06:38		File Name C:\USERS\jta6a534\DOWNLOADS\FZ4261-1.JDF	Frequency (MHz) 600.17	
Nucleus 1H	Number of Transients 8	Origin ECA 600	Original Points Count 32768	Owner delta
Points Count 32768	Pulse Sequence single_pulse.ex2		Receiver Gain 34.00	Solvent CHLOROFORM-d
Spectrum Offset (Hz) 3611.0679	Sweep Width (Hz) 13528.14	Temperature (degree C) 20.700		

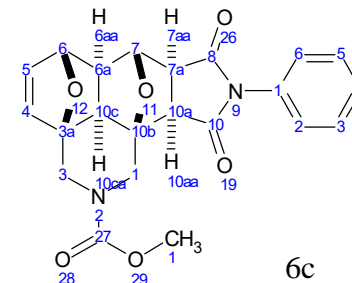


FZ4261-1.JDF

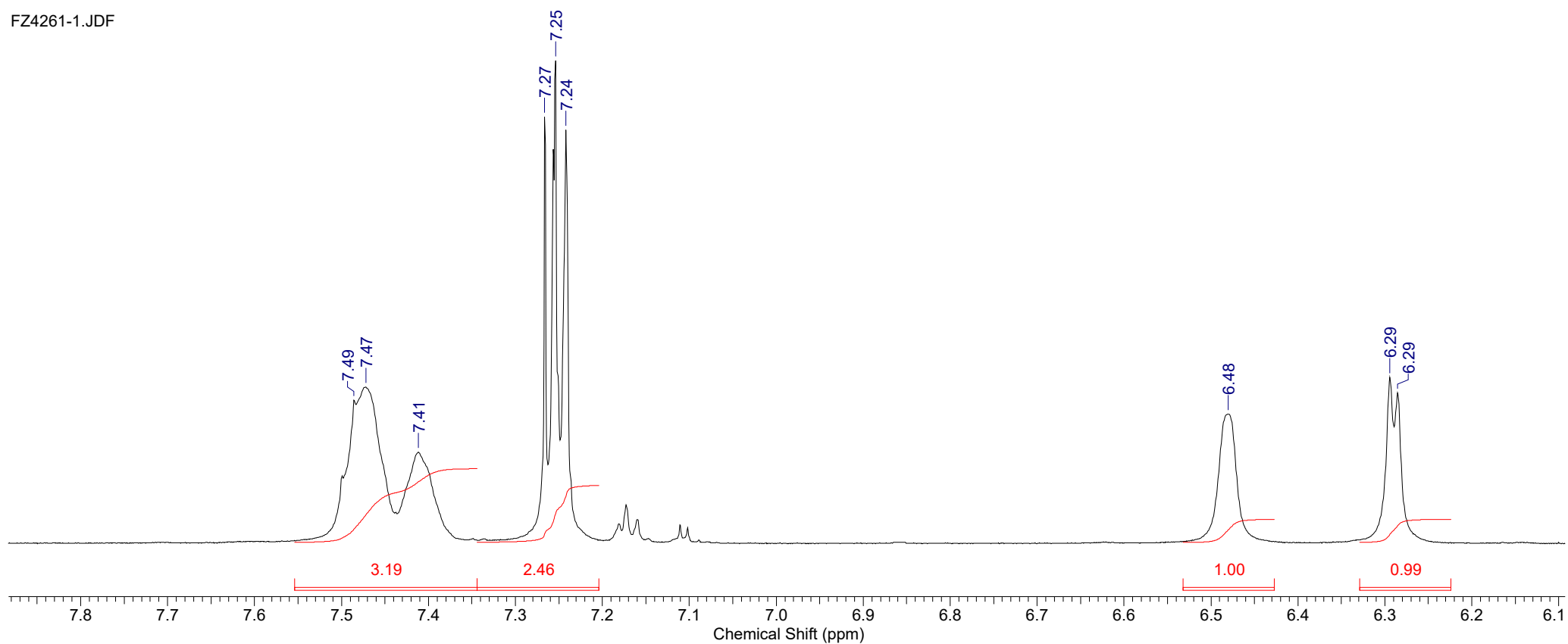


Formula C ₂₂ H ₂₀ N ₂ O ₆	FW 408.4040
--	--------------------

Acquisition Time (sec) 2.4222	Comment single_pulse	Date 05 May 2015 13:00:09	Frequency (MHz) 600.17
Date Stamp 05 May 2015 12:06:38	File Name C:\USERS\I\аба534\DOWNLOADS\FZ4261-1.JDF	Original Points Count 32768	Owner delta
Nucleus 1H	Number of Transients 8	Origin ECA 600	Solvent CHLOROFORM-d
Points Count 32768	Pulse Sequence single_pulse.ex2	Receiver Gain 34.00	
Spectrum Offset (Hz) 3611.0679	Sweep Width (Hz) 13528.14	Temperature (degree C) 20.700	

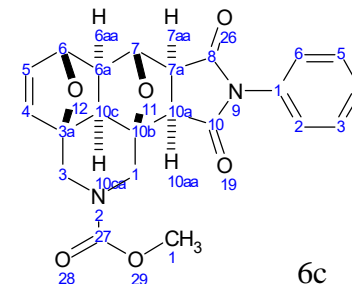


FZ4261-1.JDF

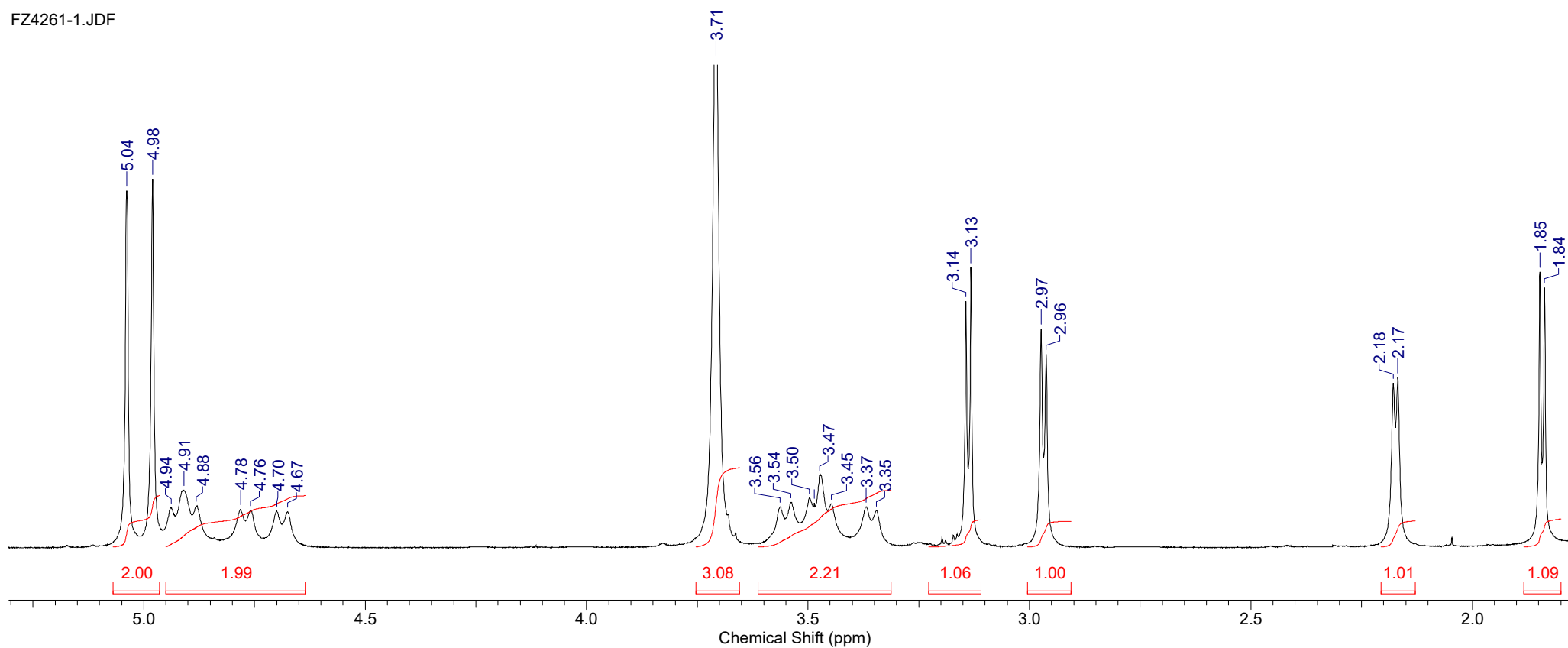


Formula C₂₂H₂₀N₂O₆ FW 408.4040

Acquisition Time (sec)	2.4222	Comment	single_pulse	Date	05 May 2015 13:00:09	Frequency (MHz)	600.17
Date Stamp	05 May 2015 12:06:38	File Name	C:\USERS\Лабa534\DOWNLOADS\FZ4261-1.JDF			Owner	delta
Nucleus	1H	Number of Transients	8	Origin	ECA 600	Original Points Count	32768
Points Count	32768	Pulse Sequence	single_pulse.ex2	Receiver Gain	34.00	Solvent	CHLOROFORM-d
Spectrum Offset (Hz)	3611.0679	Sweep Width (Hz)	13528.14	Temperature (degree C)	20.700		

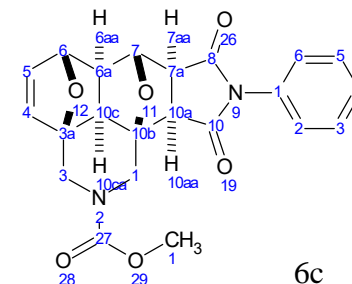


FZ4261-1.JDF

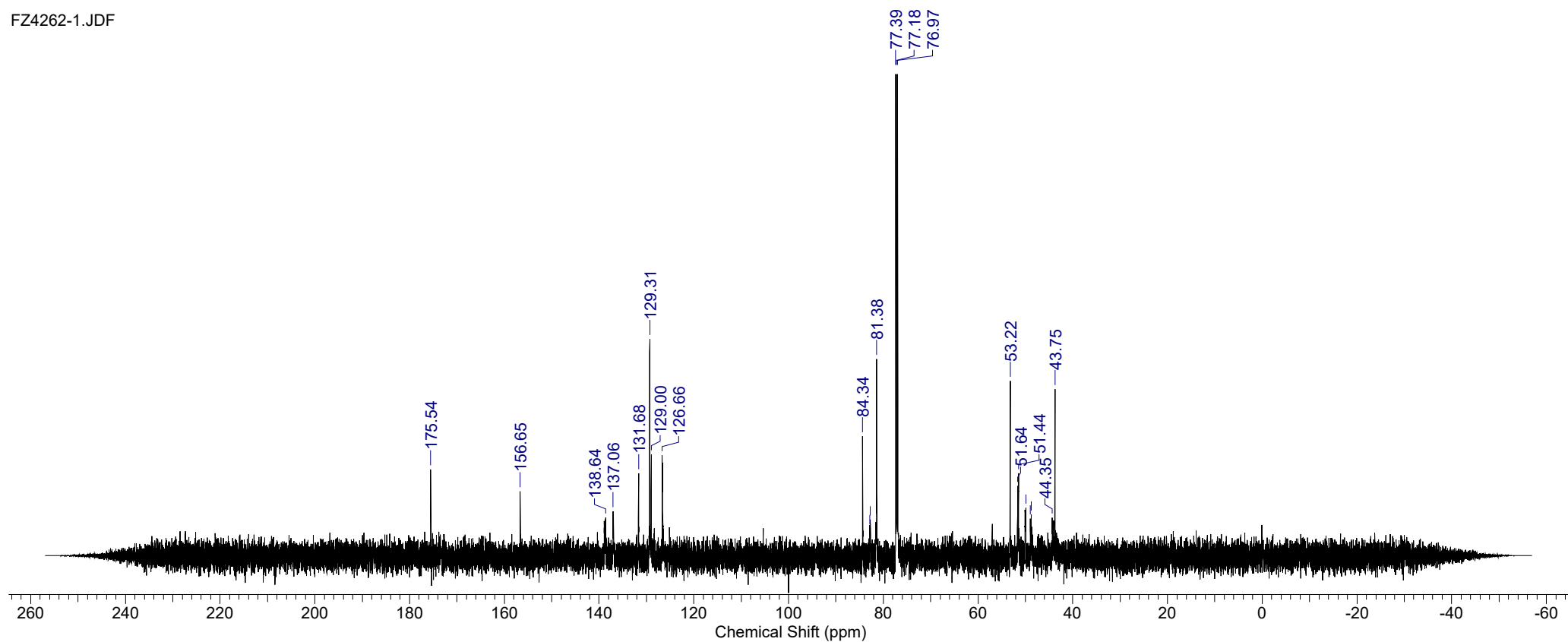


Formula C ₂₂ H ₂₀ N ₂ O ₆	FW 408.4040
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 05 May 2015 10:45:38
Date Stamp 05 May 2015 09:52:07	File Name C:\USERS\Лабa534\DOWNLOADS\FZ4262-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 100
Original Points Count 32768	Owner delta	Points Count 32768
Receiver Gain 52.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49	Temperature (degree C) 20.900	Spectrum Offset (Hz) 15091.3428

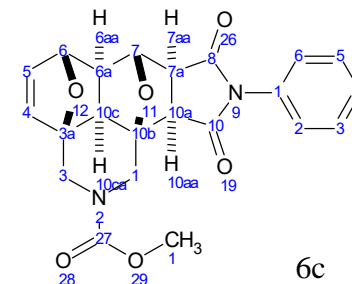


FZ4262-1.JDF

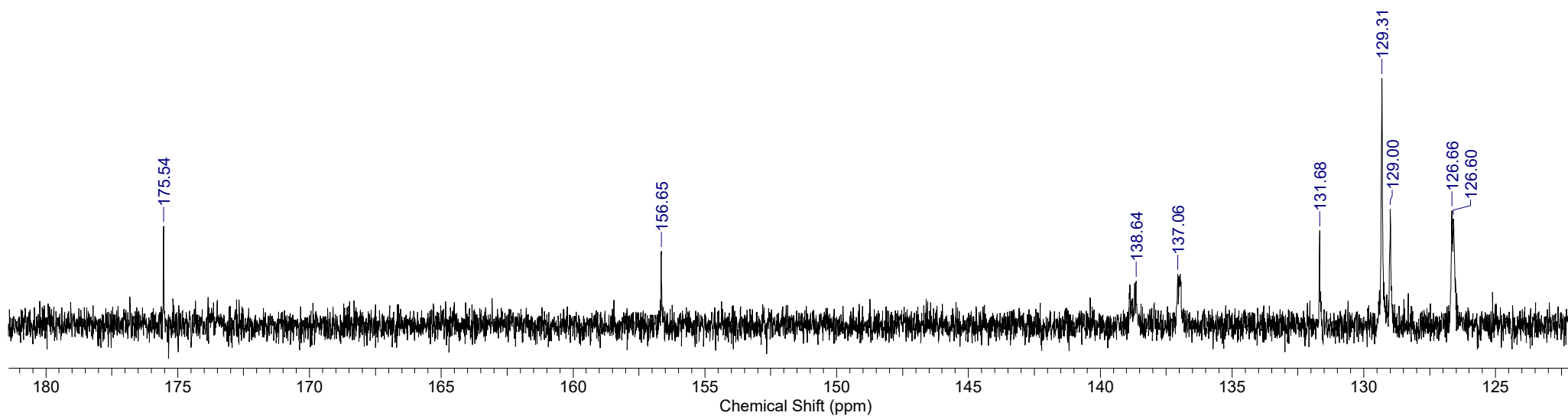


Formula C ₂₂ H ₂₀ N ₂ O ₆	FW 408.4040
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 05 May 2015 10:45:38
Date Stamp 05 May 2015 09:52:07	File Name C:\USERS\Лабa534\DOWNLOADS\FZ4262-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 100
Original Points Count 32768	Owner delta	Points Count 32768
Receiver Gain 52.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49	Temperature (degree C) 20.900	Spectrum Offset (Hz) 15091.3428

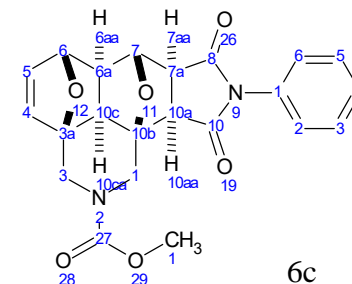


FZ4262-1.JDF

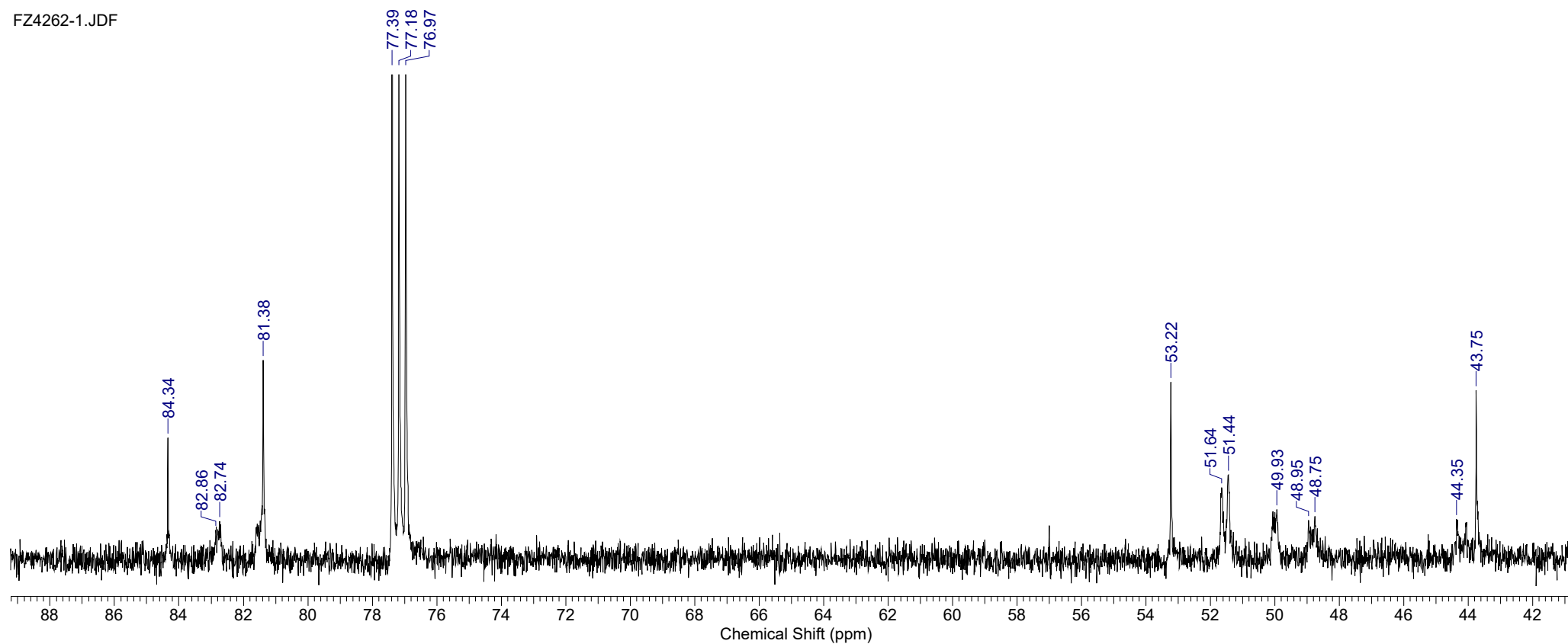


Formula C ₂₂ H ₂₀ N ₂ O ₆	FW 408.4040
--	--------------------

Acquisition Time (sec)	0.6921	Comment	single pulse decoupled gated NOE	Date	05 May 2015 10:45:38
Date Stamp	05 May 2015 09:52:07	File Name	C:\USERS\Лабa534\DOWNLOADS\FZ4262-1.JDF		
Frequency (MHz)	150.91	Nucleus	13C	Number of Transients	100
Original Points Count	32768	Owner	delta	Points Count	32768
Receiver Gain	52.00	Solvent	CHLOROFORM-d	Pulse Sequence	single pulse dec
Sweep Width (Hz)	47348.49	Temperature (degree C)	20.900	Spectrum Offset (Hz)	15091.3428

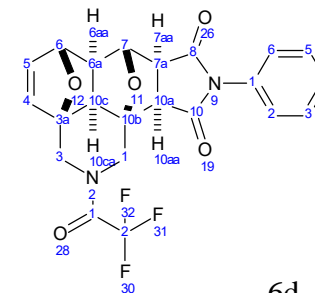


FZ4262-1.JDF

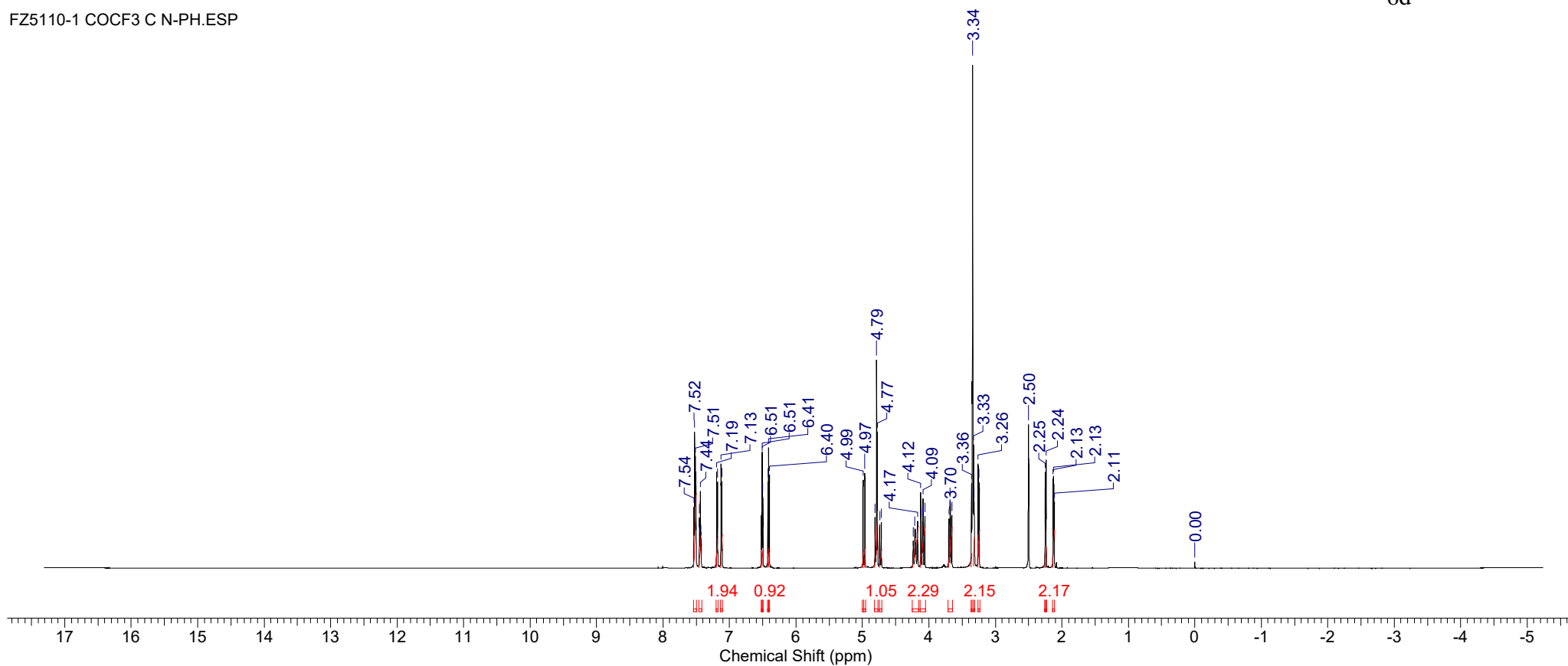


Formula C ₂₂ H ₁₇ F ₃ N ₂ O ₅	FW 446.3760
---	--------------------

Acquisition Time (sec) 1.2111	Comment single_pulse	Date 22 Jan 1990 12:02:12	Date Stamp 31 Mar 2016 08:06:13
File Name C:\USERS\laba534\DOWNLOADS\FZ5110-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 16384	Owner delta	Points Count 16384
Receiver Gain 38.00	Solvent DMSO-d6	Spectrum Offset (Hz) 3622.9451	Sweep Width (Hz) 13528.14
			Temperature (degree C) 22.400

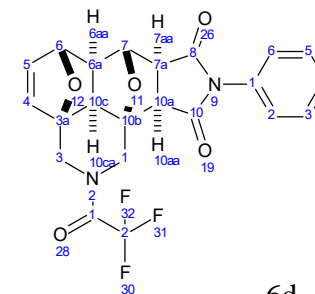


FZ5110-1 COCF3 C N-PH.ESP

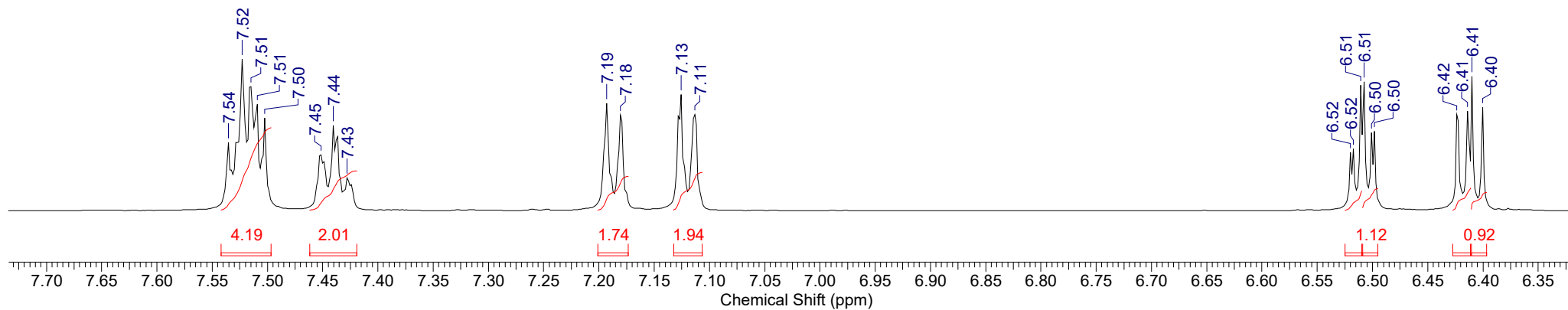


Formula C ₂₂ H ₁₇ F ₃ N ₃ O ₅	FW 446.3760
---	--------------------

Acquisition Time (sec) 1.2111	Comment single_pulse	Date 22 Jan 1990 12:02:12	Date Stamp 31 Mar 2016 08:06:13
File Name C:\USERS\laba534\DOWNLOADS\FZ5110-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 16384	Owner delta	Points Count 16384
Receiver Gain 38.00	Solvent DMSO-d6	Spectrum Offset (Hz) 3622.9451	Sweep Width (Hz) 13528.14
		Temperature (degree C) 22.400	

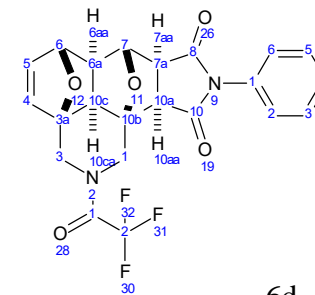


FZ5110-1 COCF3 C N-PH.ESP

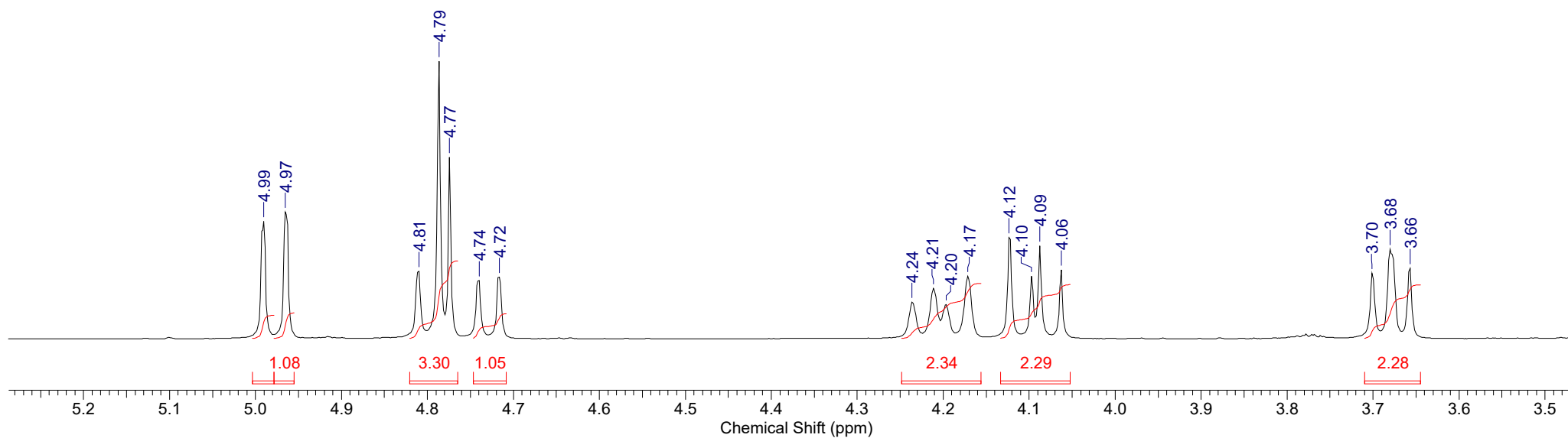


Formula C ₂₂ H ₁₇ F ₃ N ₂ O ₅	FW 446.3760
---	--------------------

Acquisition Time (sec) 1.2111	Comment single_pulse	Date 22 Jan 1990 12:02:12	Date Stamp 31 Mar 2016 08:06:13
File Name C:\USERS\Лабa534\DOWNLOADS\FZ5110-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 16384	Owner delta	Points Count 16384
Receiver Gain 38.00	Solvent DMSO-d6	Spectrum Offset (Hz) 3622.9451	Sweep Width (Hz) 13528.14
			Temperature (degree C) 22.400

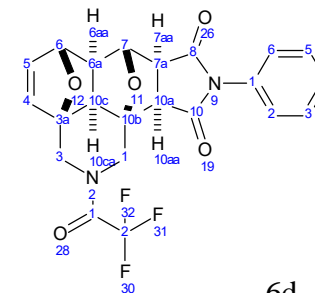


FZ5110-1 COCF3 C N-PH.ESP

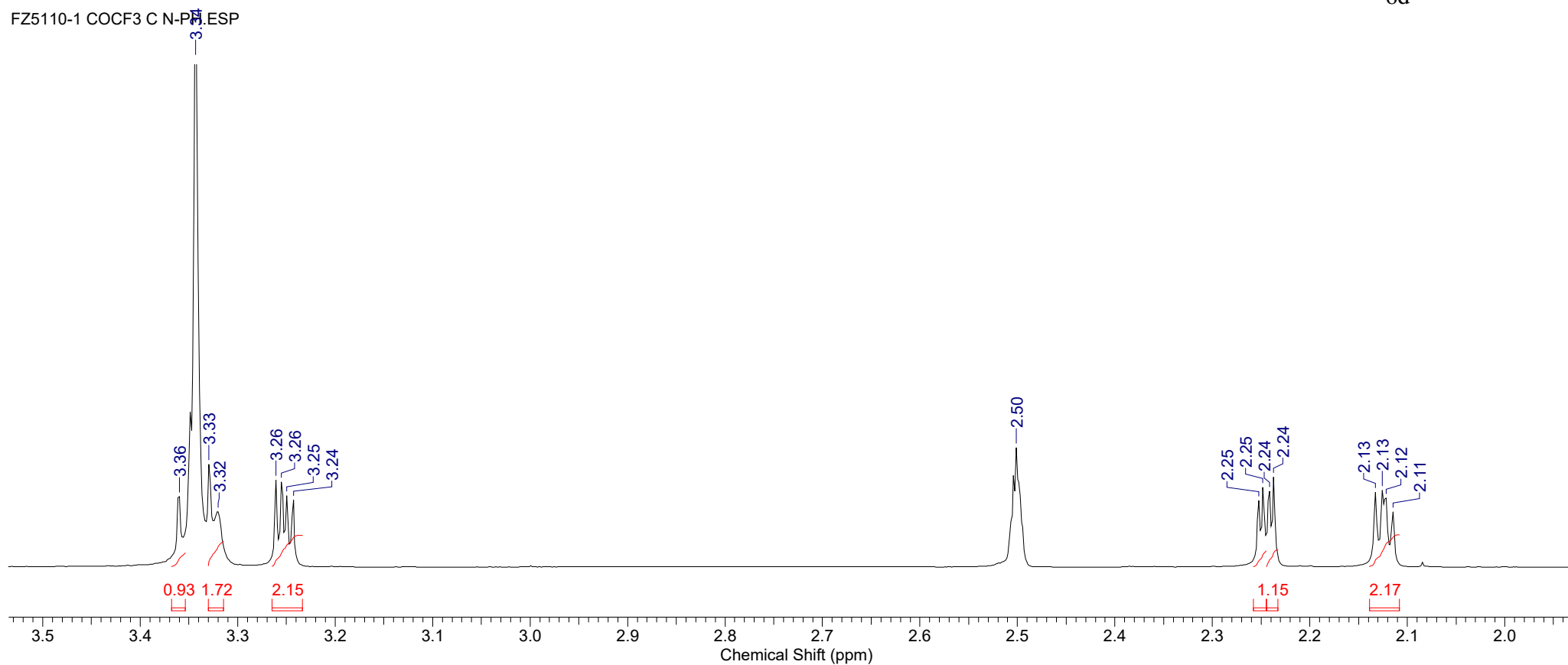


Formula C ₂₂ H ₁₇ F ₃ N ₂ O ₅	FW 446.3760
---	--------------------

Acquisition Time (sec) 1.2111	Comment single_pulse	Date 22 Jan 1990 12:02:12	Date Stamp 31 Mar 2016 08:06:13
File Name C:\USERS\laba534\DOWNLOADS\FZ5110-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 16384	Owner delta	Points Count 16384
Receiver Gain 38.00	Solvent DMSO-d6	Spectrum Offset (Hz) 3622.9451	Sweep Width (Hz) 13528.14
			Temperature (degree C) 22.400

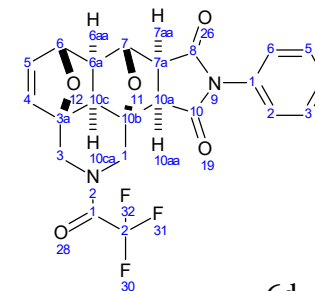


FZ5110-1 COCF3 C N-PM1.ESP



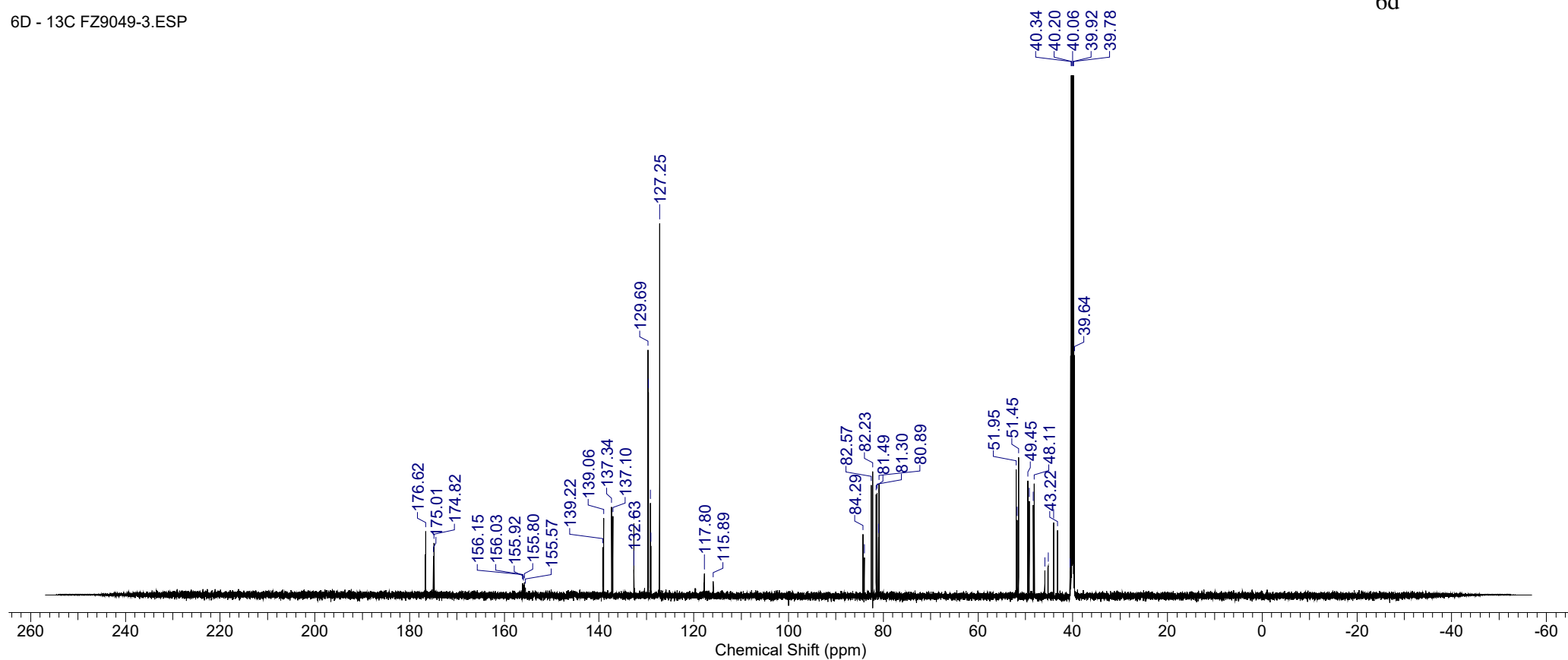
Formula C ₂₂ H ₁₇ F ₃ N ₂ O ₅	FW 446.3760
---	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 25 Aug 2020 11:04:52
Date Stamp 25 Aug 2020 11:06:08	File Name C:\USERS\lpa6a534\DOWNLOADS\FZ9049-3.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 2038	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49	Receiver Gain 58.00
		Solvent DMSO-d6



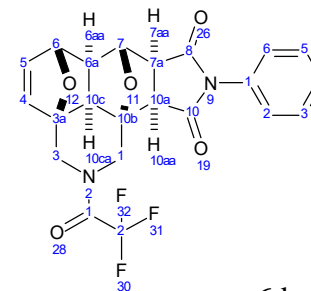
6d

6D - 13C FZ9049-3.ESP



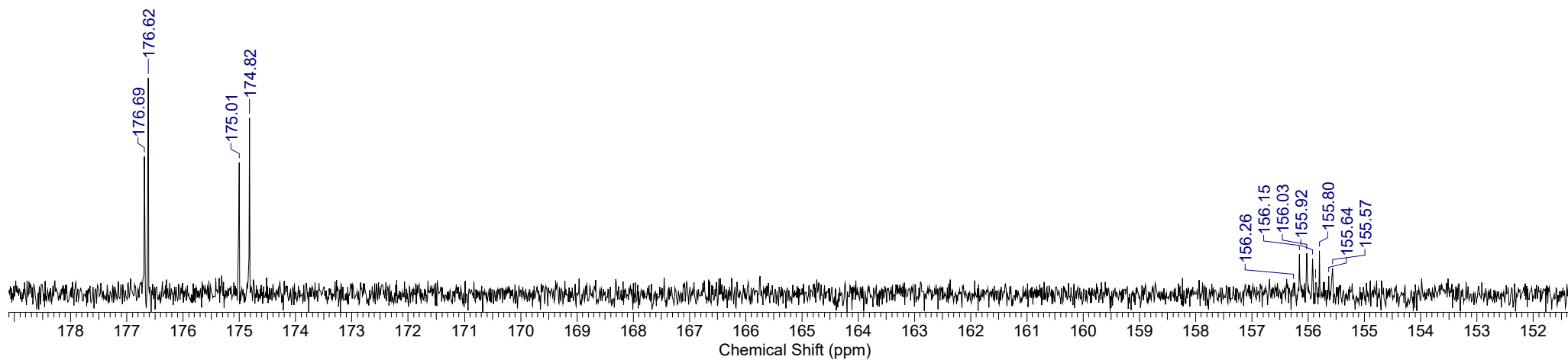
Formula C ₂₂ H ₁₇ F ₃ N ₂ O ₅	FW 446.3760
---	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 25 Aug 2020 11:04:52
Date Stamp 25 Aug 2020 11:06:08	File Name C:\USERS\lpa6a534\DOWNLOADS\FZ9049-3.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 2038	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49	Receiver Gain 58.00
		Solvent DMSO-d6



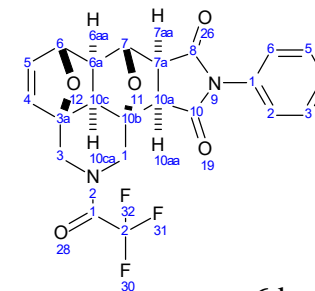
6d

6D - 13C FZ9049-3.ESP



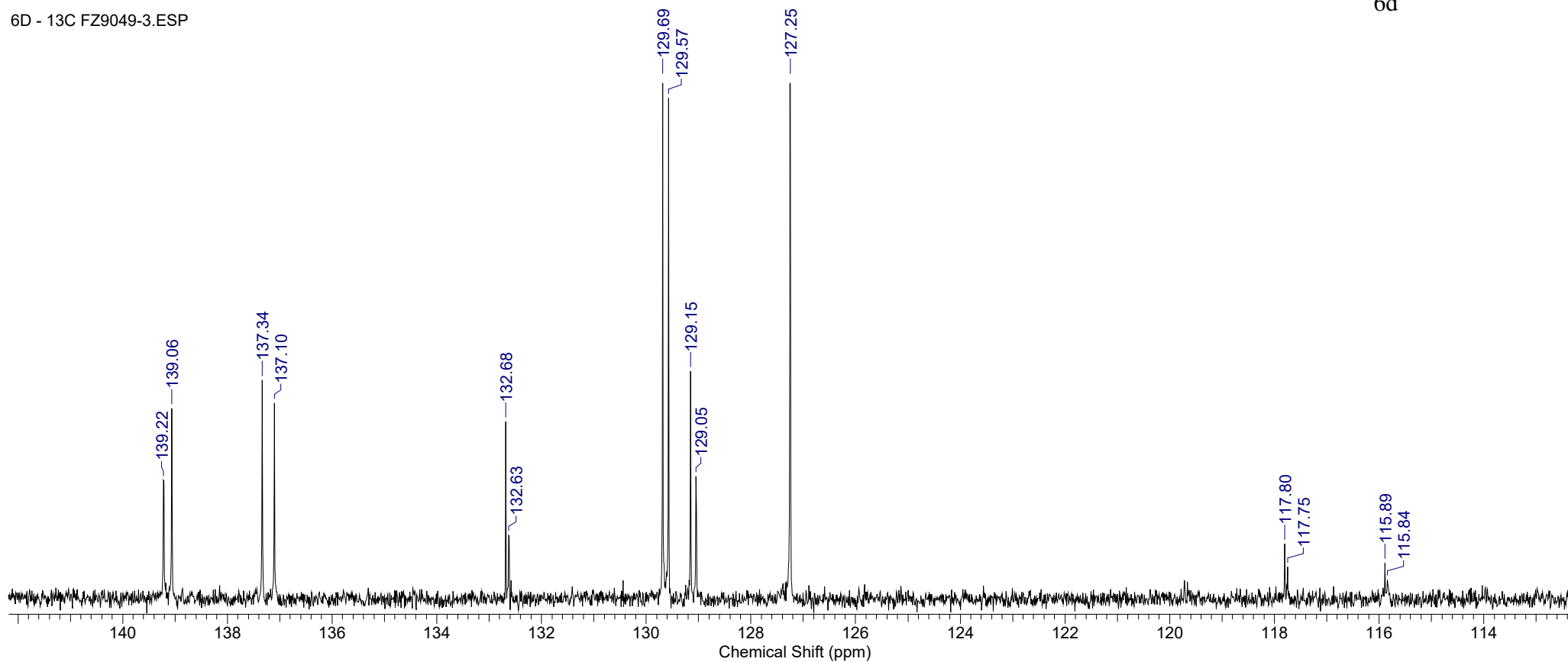
Formula C ₂₂ H ₁₇ F ₃ N ₂ O ₅	FW 446.3760
---	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 25 Aug 2020 11:04:52
Date Stamp 25 Aug 2020 11:06:08	File Name C:\USERS\Pa6a534\DOWNLOADS\FZ9049-3.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 2038	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49	Receiver Gain 58.00
		Solvent DMSO-d6



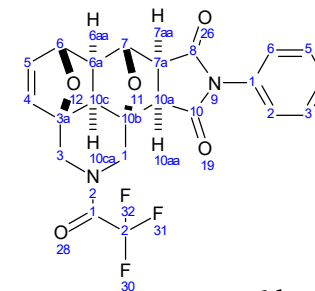
6d

6D - 13C FZ9049-3.ESP



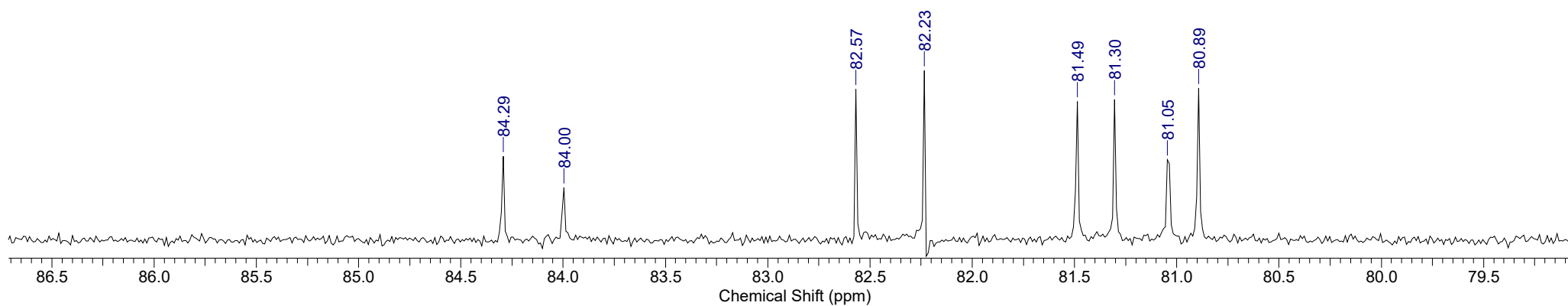
Formula C ₂₂ H ₁₇ F ₃ N ₃ O ₅	FW 446.3760
---	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 25 Aug 2020 11:04:52
Date Stamp 25 Aug 2020 11:06:08	File Name C:\USERS\lta6a534\DOWNLOADS\FZ9049-3.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 2038	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49	Receiver Gain 58.00
		Solvent DMSO-d6



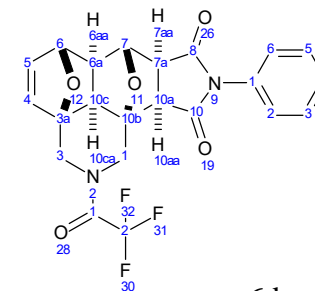
6d

6D - 13C FZ9049-3.ESP



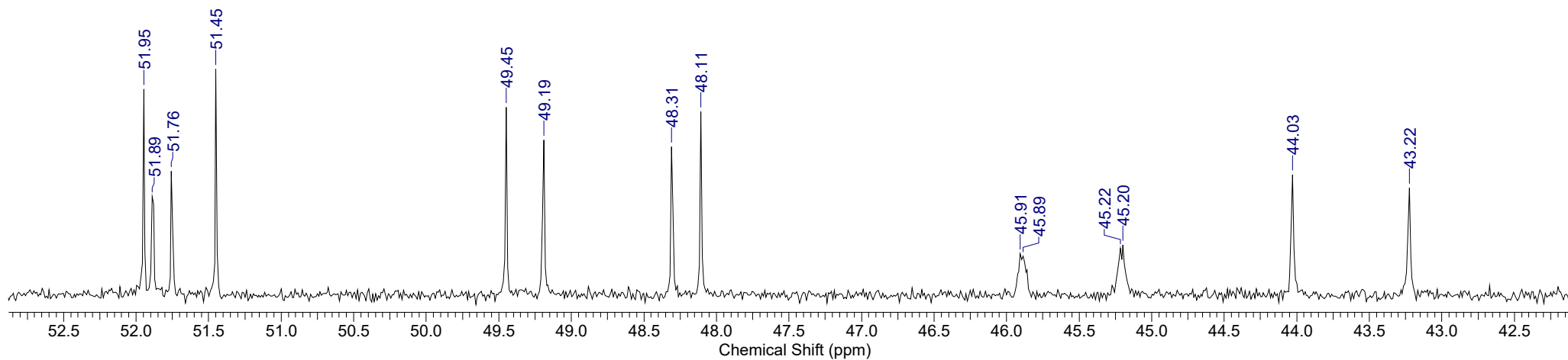
Formula C ₂₂ H ₁₇ F ₃ N ₃ O ₅	FW 446.3760
---	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 25 Aug 2020 11:04:52
Date Stamp 25 Aug 2020 11:06:08	File Name C:\USERS\lta6a534\DOWNLOADS\FZ9049-3.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 2038	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49	Receiver Gain 58.00
		Solvent DMSO-d6



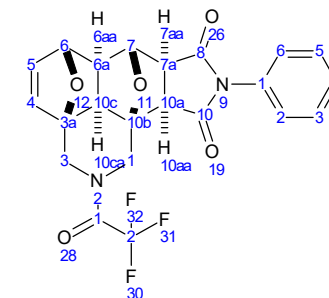
6d

6D - 13C FZ9049-3.ESP



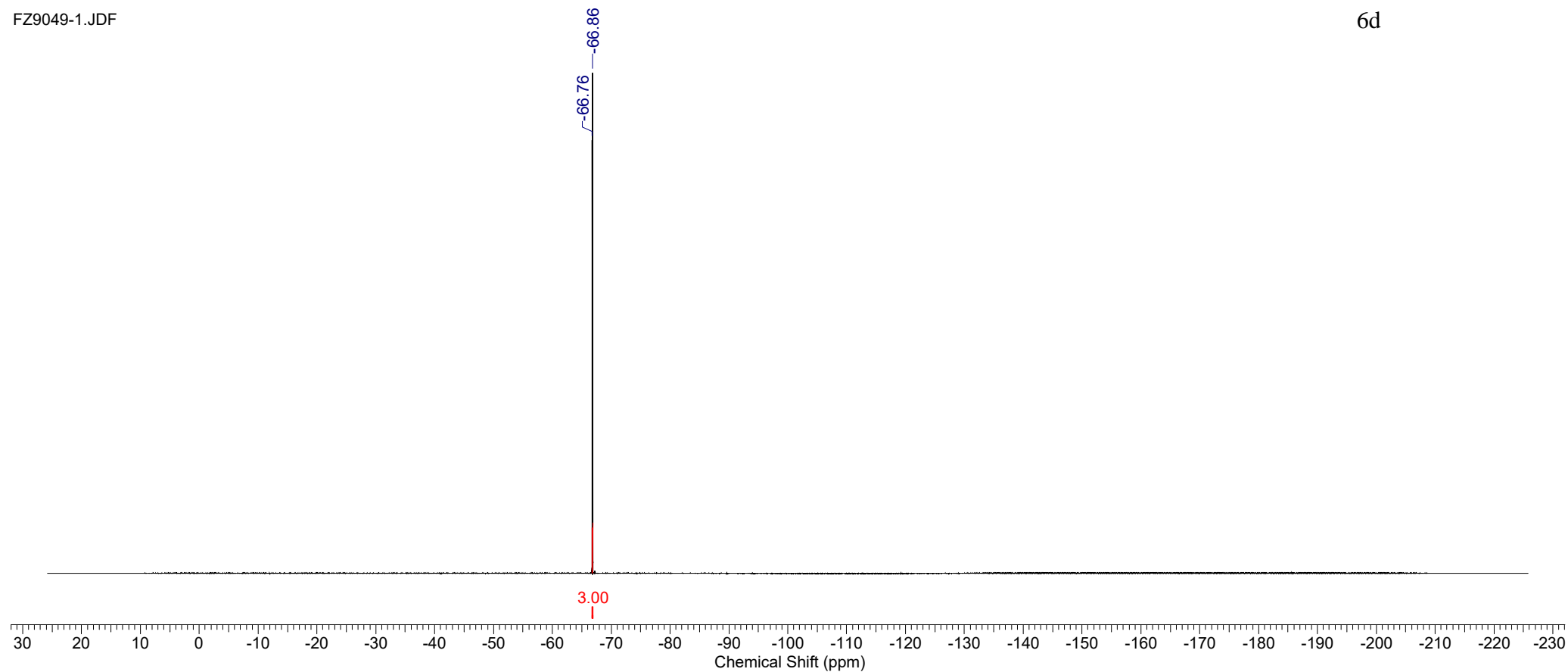
Formula C ₂₂ H ₁₇ F ₃ N ₂ O ₅	FW 446.3760
---	--------------------

Acquisition Time (sec) 0.4614	Comment single_pulse	Date 25 Aug 2020 10:28:48	Date Stamp 25 Aug 2020 10:30:03
File Name C:\USERS\Лабa534\DOWNLOADS\FZ9049-1.JDF	Frequency (MHz) 564.73	Nucleus 19F	Number of Transients 8
Origin ECA 600	Original Points Count 65536	Owner CKP	Points Count 65536
Receiver Gain 44.00	Solvent DMSO-d6	Spectrum Offset (Hz) -56472.6094	Sweep Width (Hz) 142045.45
			Pulse Sequence single_pulse.ex2



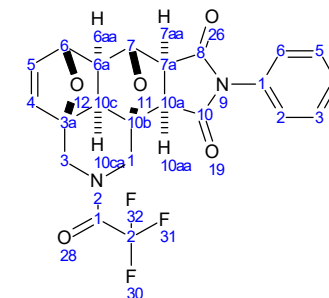
6d

FZ9049-1.JDF



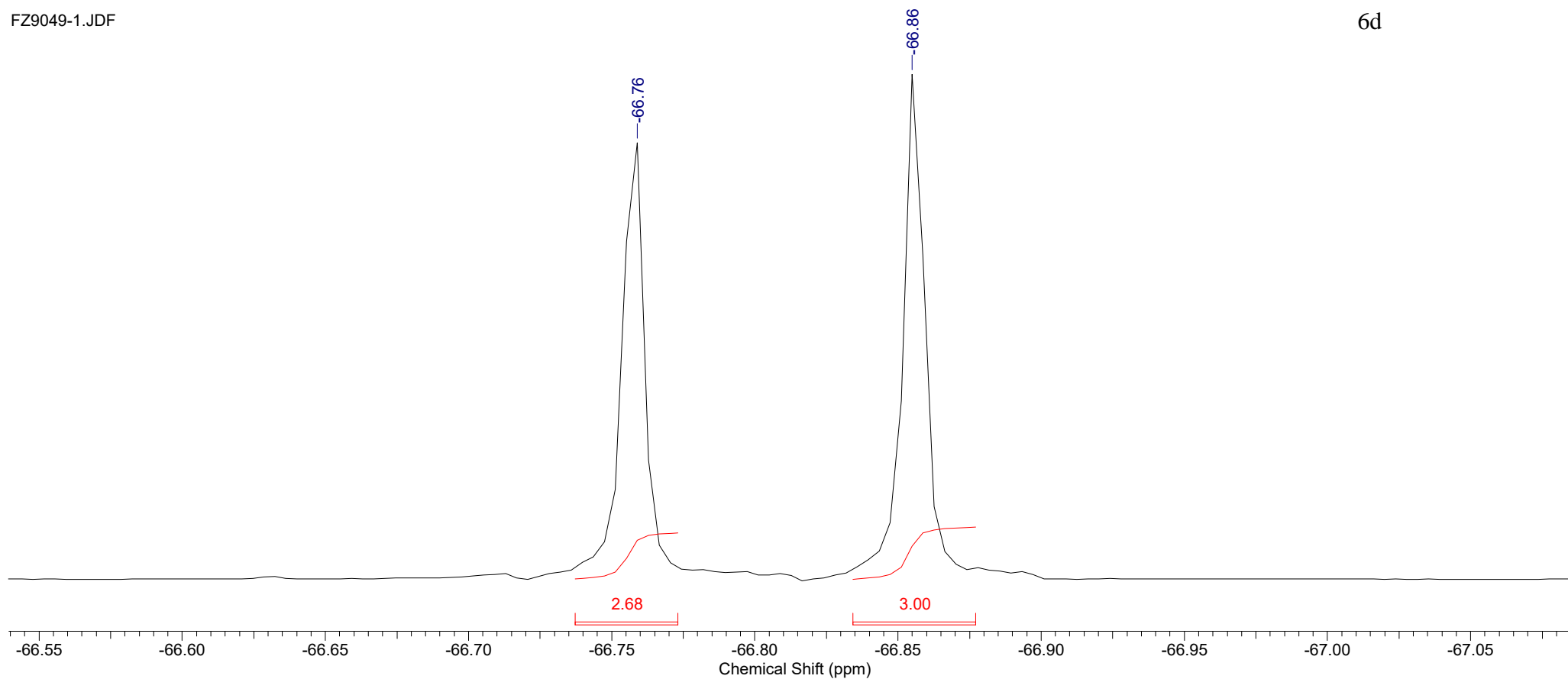
Formula C ₂₂ H ₁₇ F ₃ N ₂ O ₅	FW 446.3760
---	--------------------

Acquisition Time (sec) 0.4614	Comment single_pulse	Date 25 Aug 2020 10:28:48	Date Stamp 25 Aug 2020 10:30:03
File Name C:\USERS\Лабa534\DOWNLOADS\FZ9049-1.JDF	Frequency (MHz) 564.73	Nucleus 19F	Number of Transients 8
Origin ECA 600	Original Points Count 65536	Owner CKP	Points Count 65536
Receiver Gain 44.00	Solvent DMSO-d6	Spectrum Offset (Hz) -56472.6094	Sweep Width (Hz) 142045.45
			Pulse Sequence single_pulse.ex2



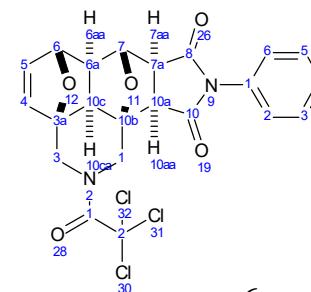
6d

FZ9049-1.JDF



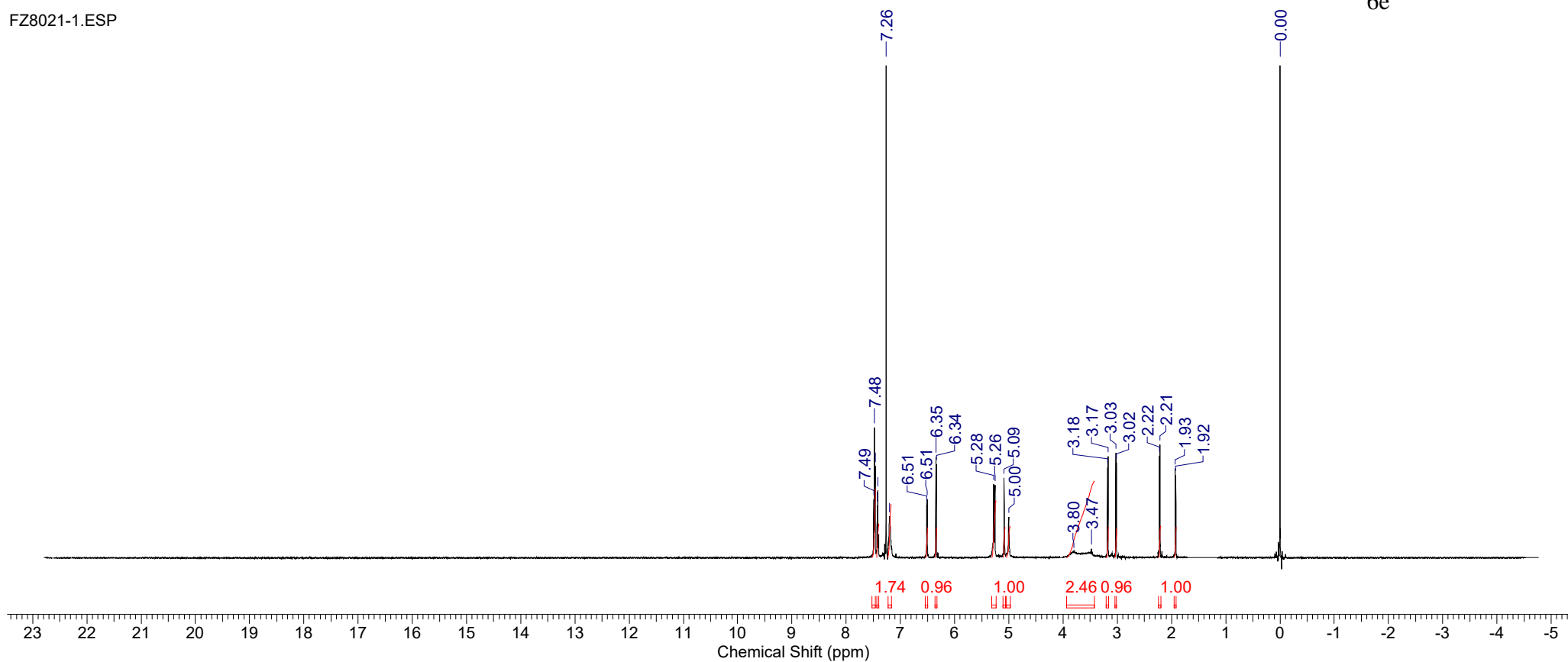
Formula C ₂₂ H ₁₇ Cl ₃ N ₂ O ₅	FW 495.7398
--	--------------------

Acquisition Time (sec) 1.9818	Comment single pulse	Date 12 Aug 1990 07:12:25	Frequency (MHz) 600.17
Date Stamp 22 Oct 2019 13:15:34	File Name C:\USERS\I\Ia6a534\DOWNLOADS\FZ8021-1.JDF	Original Points Count 32768	Owner delta
Nucleus 1H	Number of Transients 8	Origin ECA 600	Receiver Gain 50.00
Points Count 32768	Pulse Sequence single_pulse.ex2	Temperature (degree C) 23.600	Solvent CHLOROFORM-d
Spectrum Offset (Hz) 5409.1133	Sweep Width (Hz) 16534.39		



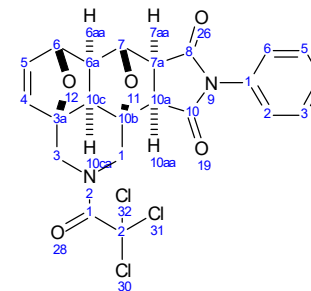
6e

FZ8021-1.ESP

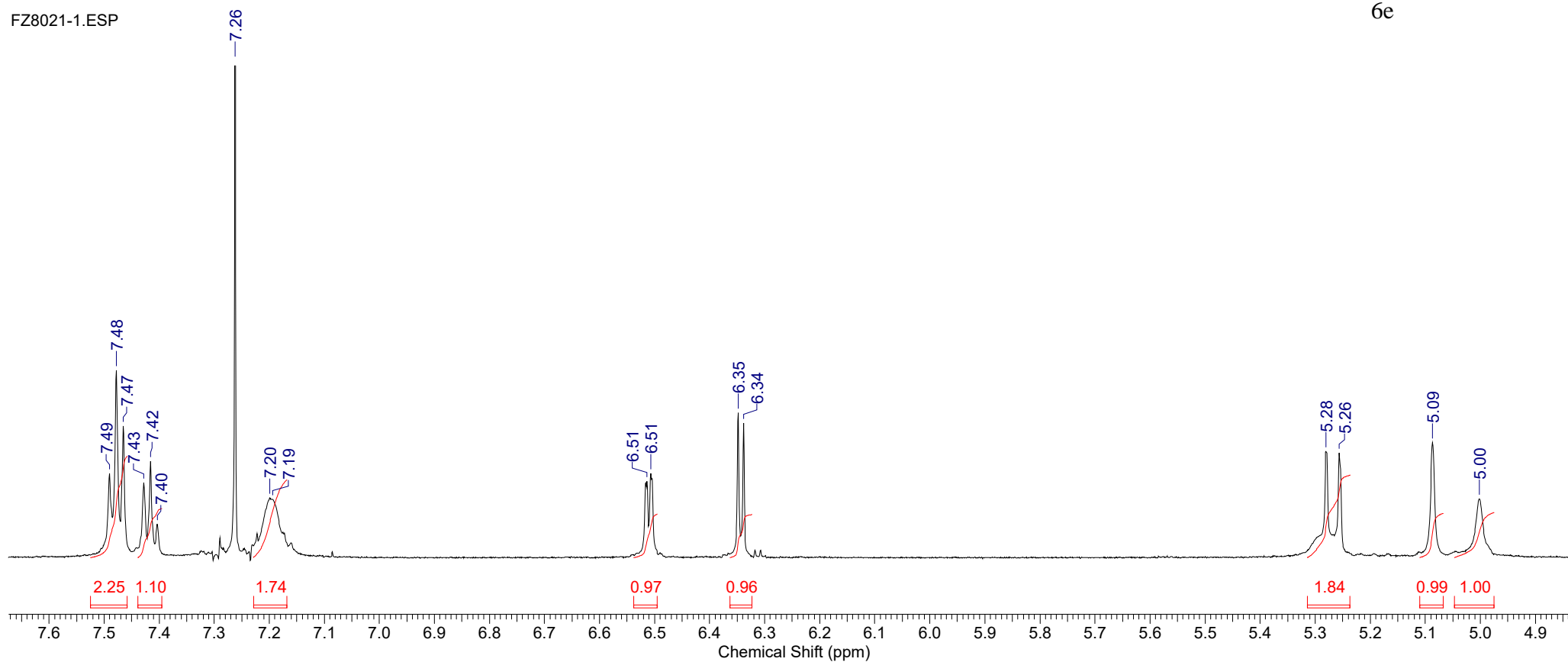


Formula C₂₂H₁₇Cl₃N₃O₅ FW 495.7398

Acquisition Time (sec)	1.9818	Comment	single pulse	Date	12 Aug 1990 07:12:25	Frequency (MHz)	600.17
Date Stamp	22 Oct 2019 13:15:34	File Name	C:\USERS\Лабa534\DOWNLOADS\FZ8021-1.JDF			Owner	delta
Nucleus	1H	Number of Transients	8	Origin	ECA 600	Original Points Count	32768
Points Count	32768	Pulse Sequence	single_pulse.ex2	Receiver Gain	50.00	Solvent	CHLOROFORM-d
Spectrum Offset (Hz)	5409.1133	Sweep Width (Hz)	16534.39	Temperature (degree C)	23.600		

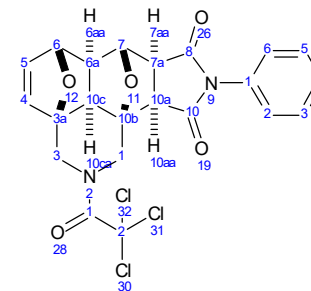


FZ8021-1.ESP



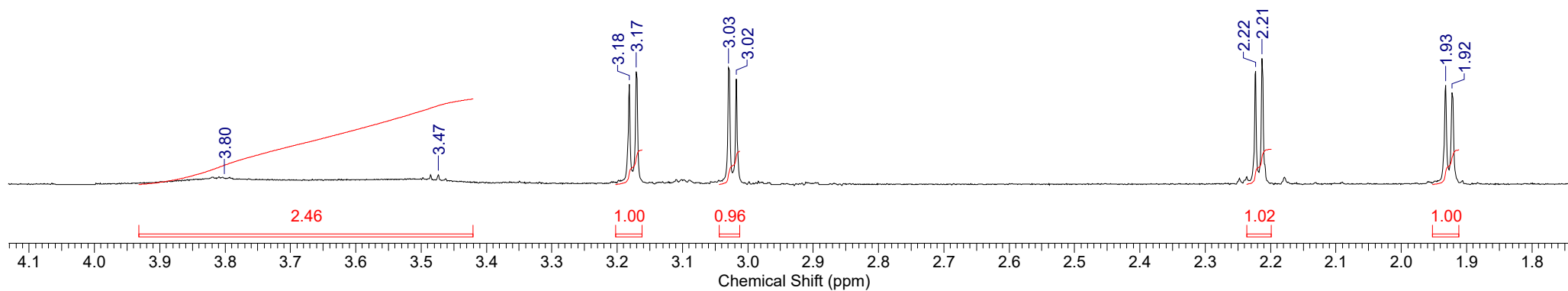
Formula C₂₂H₁₇Cl₃N₃O₅ **FW** 495.7398

Acquisition Time (sec)	1.9818	Comment	single pulse	Date	12 Aug 1990 07:12:25	Frequency (MHz)	600.17
Date Stamp	22 Oct 2019 13:15:34	File Name	C:\USERS\Лабa534\DOWNLOADS\FZ8021-1.JDF			Owner	delta
Nucleus	1H	Number of Transients	8	Origin	ECA 600	Original Points Count	32768
Points Count	32768	Pulse Sequence	single_pulse.ex2	Receiver Gain	50.00	Solvent	CHLOROFORM-d
Spectrum Offset (Hz)	5409.1133	Sweep Width (Hz)	16534.39	Temperature (degree C)	23.600		



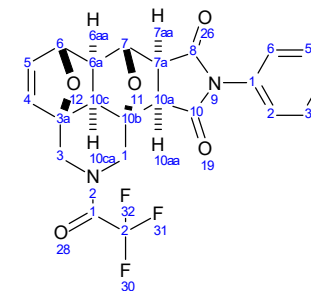
6e

FZ8021-1.ESP

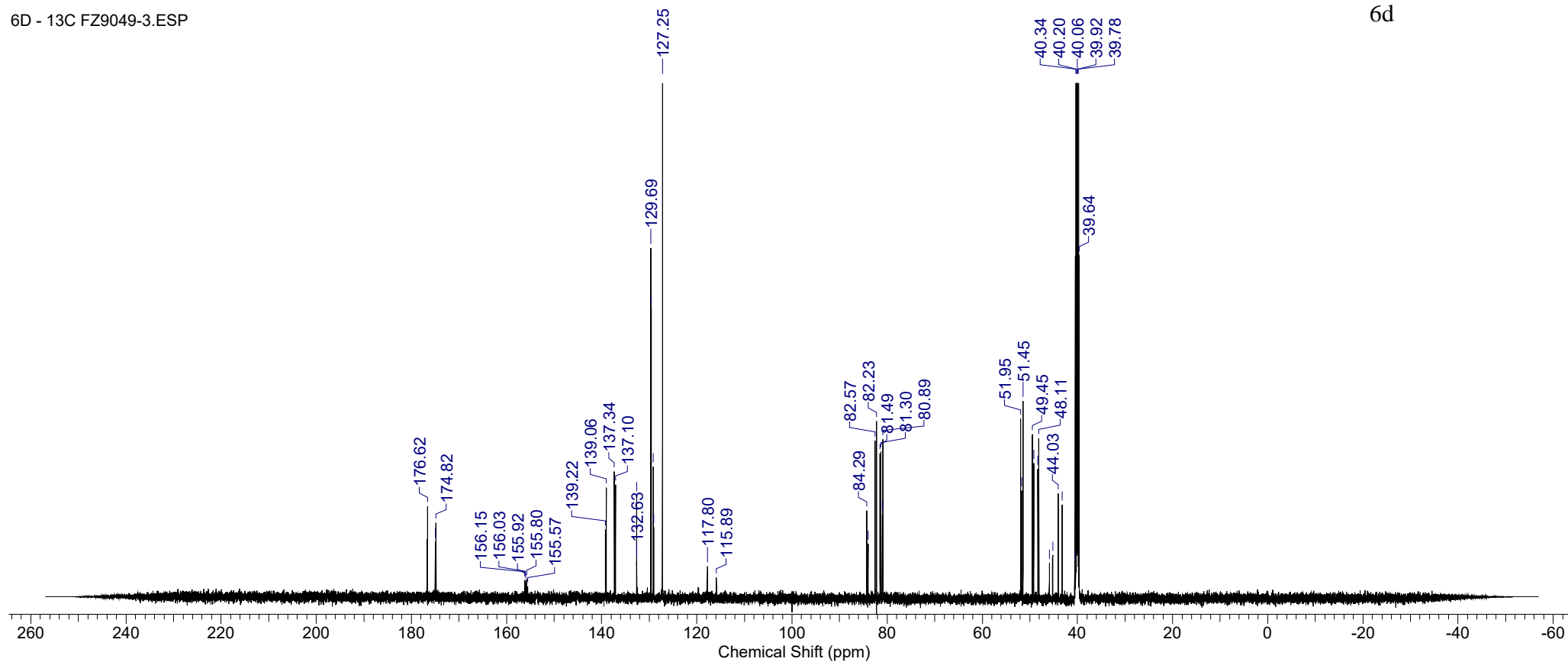


Formula C ₂₂ H ₁₇ F ₃ N ₂ O ₅	FW 446.3760
---	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 25 Aug 2020 11:04:52
Date Stamp 25 Aug 2020 11:06:08	File Name C:\USERS\lta6a534\DOWNLOADS\FZ9049-3.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 2038	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49	Receiver Gain 58.00
		Solvent DMSO-d6

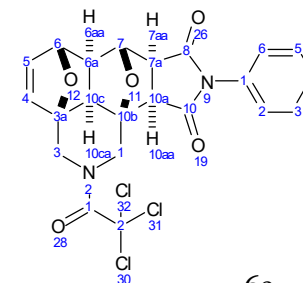


6D - 13C FZ9049-3.ESP

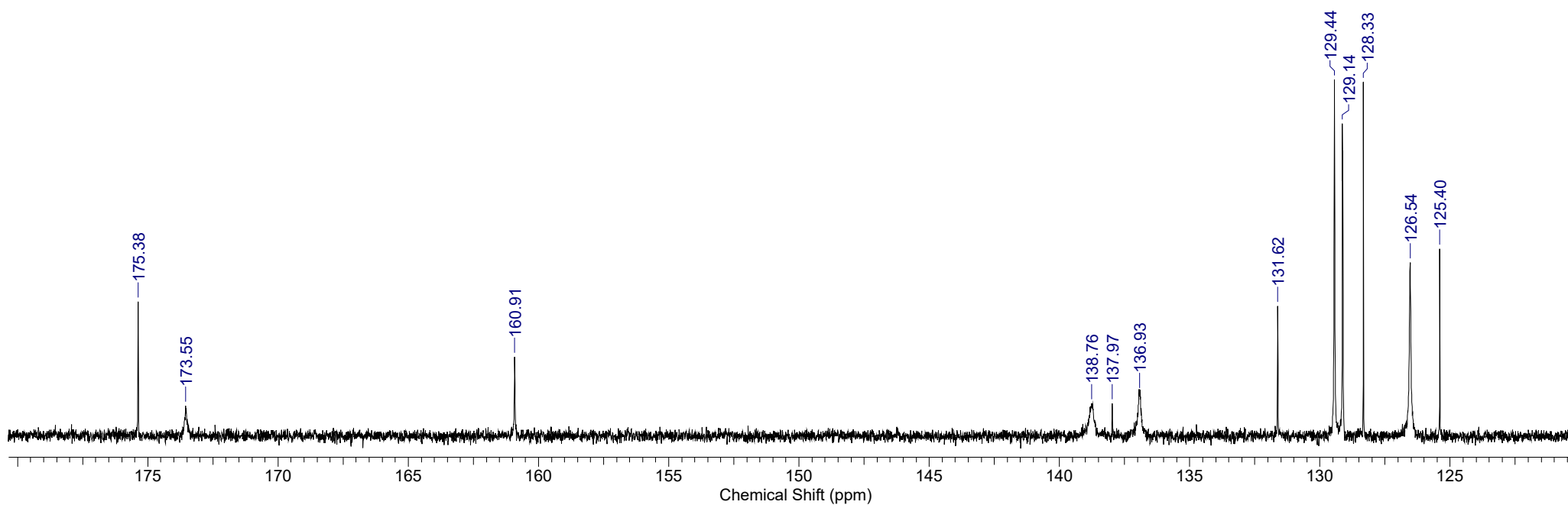


Formula C ₂₂ H ₁₇ Cl ₃ N ₂ O ₅	FW 495.7398
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 25 Aug 2020 11:44:30
Date Stamp 25 Aug 2020 11:45:45	File Name C:\USERS\la6a534\DOWNLOADS\FZ9039-2.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 2084
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 58.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15091.3428

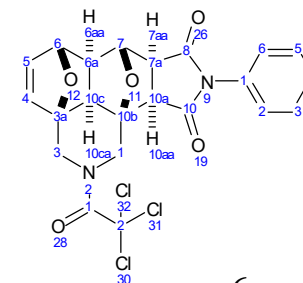


FZ9039-2.JDF

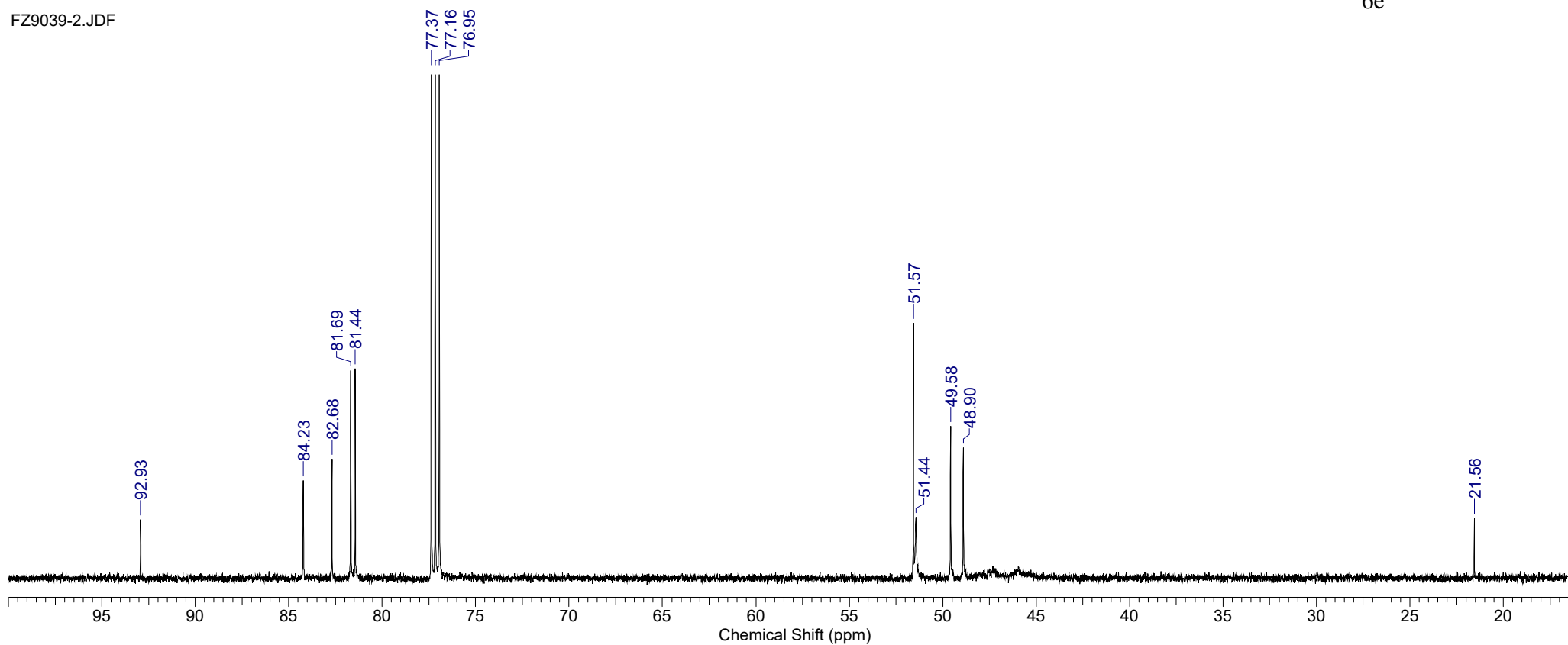


Formula C ₂₂ H ₁₇ Cl ₃ N ₂ O ₅	FW 495.7398
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 25 Aug 2020 11:44:30
Date Stamp 25 Aug 2020 11:45:45	File Name C:\USERS\la6a534\DOWNLOADS\FZ9039-2.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 2084
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 58.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15091.3428

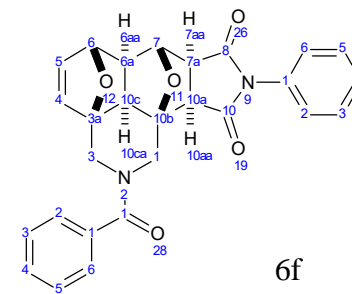


FZ9039-2.JDF

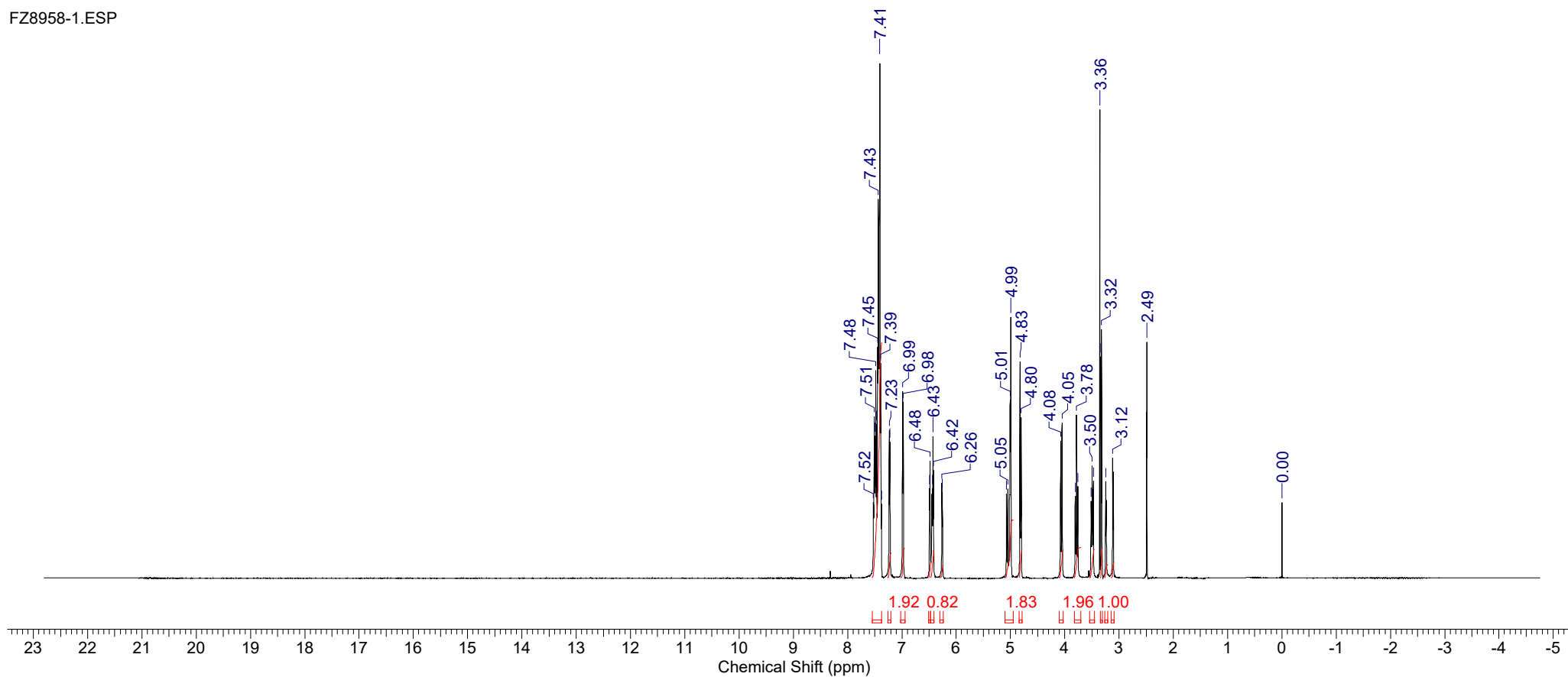


Formula C ₂₇ H ₂₂ N ₂ O ₅	FW 454.4740
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 07 Aug 2020 11:09:45	Date Stamp 07 Aug 2020 11:10:30
File Name C:\USERS\Лабa534\DOWNLOADS\FZ8958-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 28.00	Solvent DMSO-d6	Spectrum Offset (Hz) 5416.1777	Sweep Width (Hz) 16534.39
		Points Count 32768	Pulse Sequence single_pulse.ex2

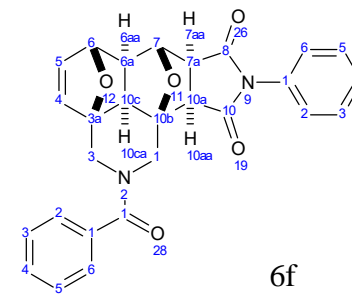


FZ8958-1.ESP

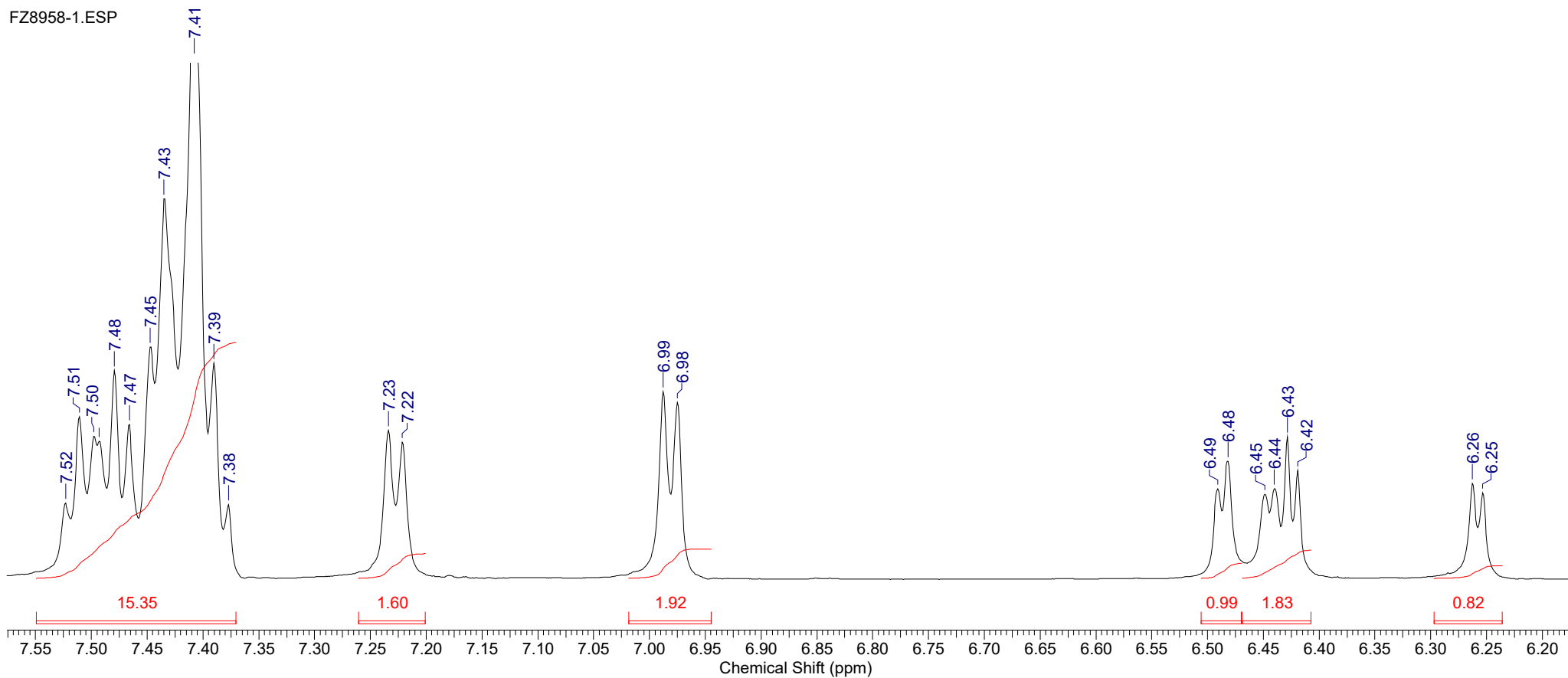


Formula C ₂₇ H ₂₂ N ₂ O ₅	FW 454.4740
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 07 Aug 2020 11:09:45	Date Stamp 07 Aug 2020 11:10:30
File Name C:\USERS\Лабa534\DOWNLOADS\FZ8958-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 28.00	Solvent DMSO-d6	Spectrum Offset (Hz) 5416.1777	Sweep Width (Hz) 16534.39

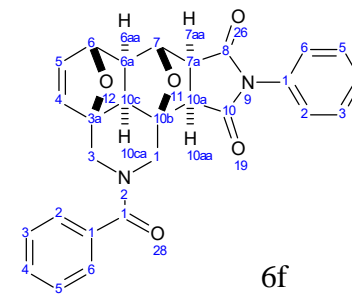


FZ8958-1.ESP

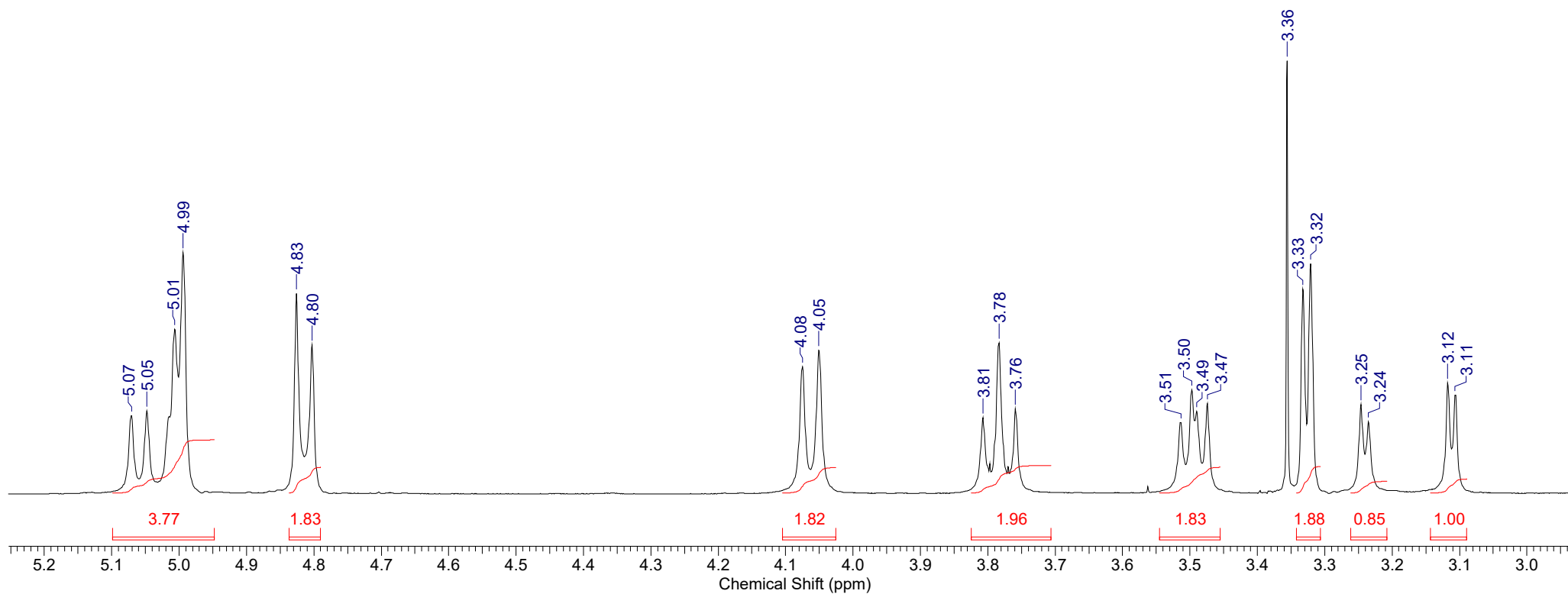


Formula C ₂₇ H ₂₂ N ₂ O ₅	FW 454.4740
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 07 Aug 2020 11:09:45	Date Stamp 07 Aug 2020 11:10:30
File Name C:\USERS\Лабa534\DOWNLOADS\FZ8958-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 28.00	Solvent DMSO-d6	Spectrum Offset (Hz) 5416.1777	Sweep Width (Hz) 16534.39
		Pulse Sequence single_pulse.ex2	

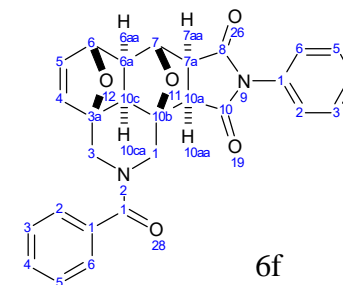


FZ8958-1.ESP

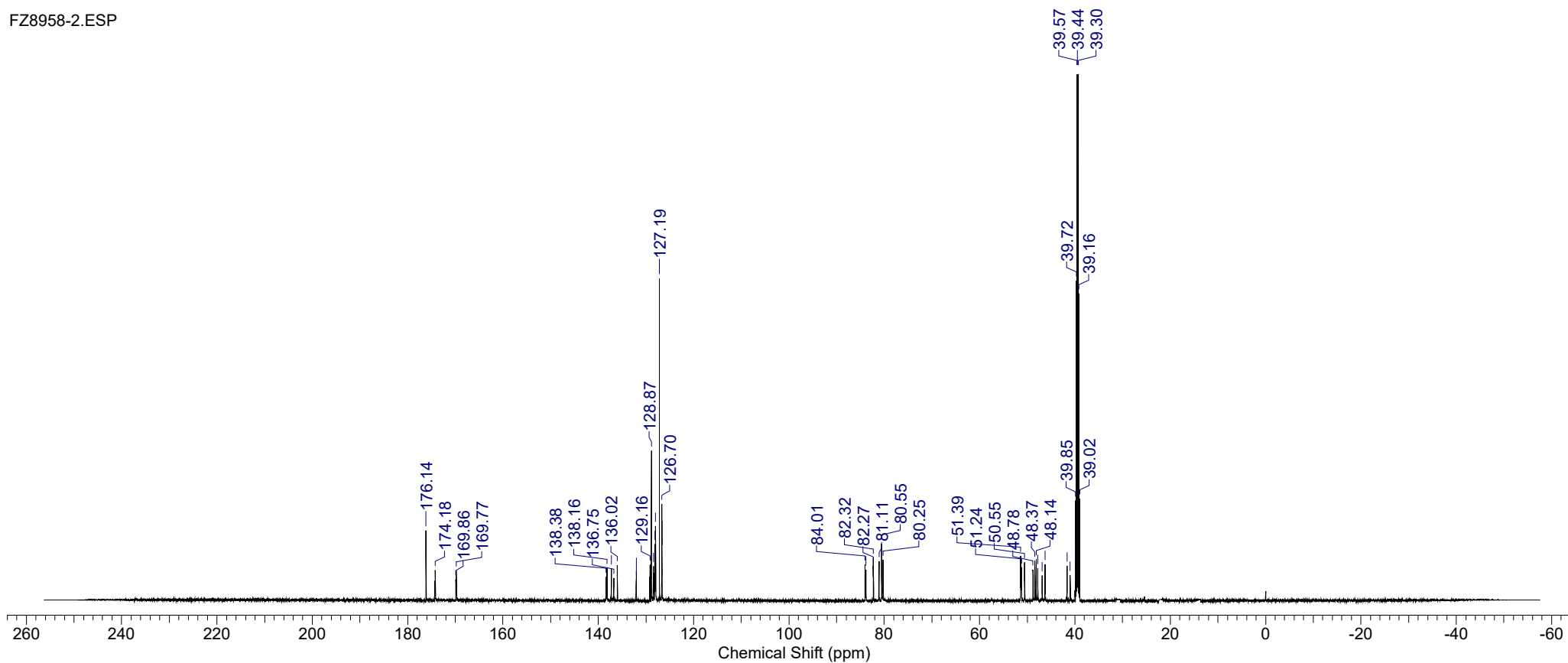


Formula C ₂₇ H ₂₂ N ₂ O ₅	FW 454.4740
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 07 Aug 2020 12:41:16
Date Stamp 07 Aug 2020 12:42:01	File Name C:\USERS\lta6a534\DOWNLOADS\FZ8958-2.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 5176	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 14994.0977	Sweep Width (Hz) 47348.49	Receiver Gain 58.00
		Solvent DMSO-d6

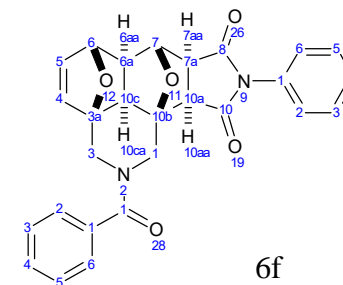


FZ8958-2.ESP

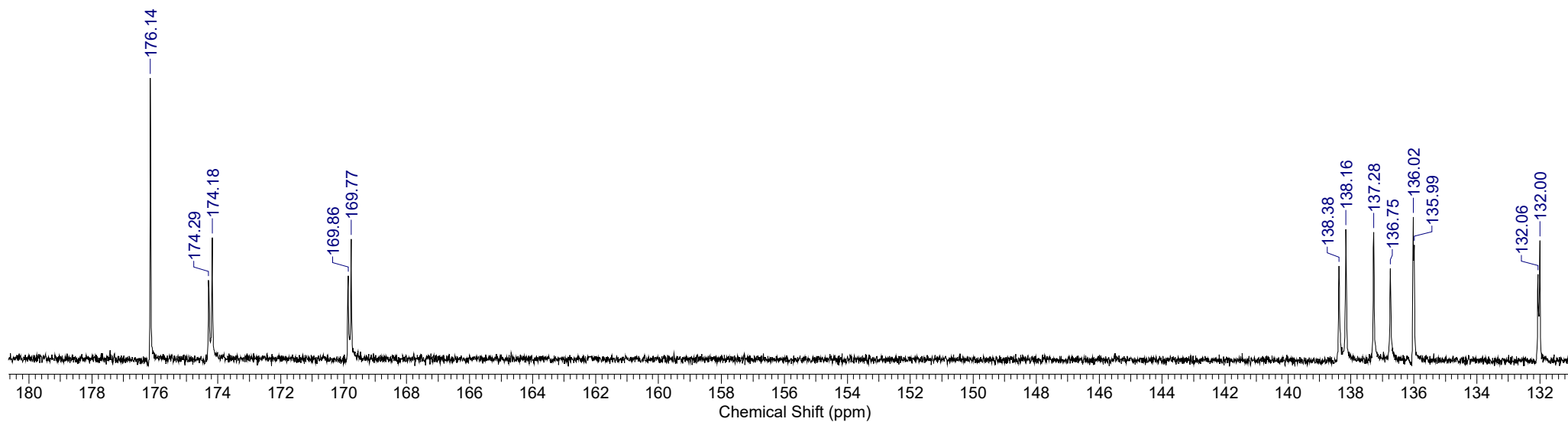


Formula C ₂₇ H ₂₂ N ₂ O ₅	FW 454.4740
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 07 Aug 2020 12:41:16
Date Stamp 07 Aug 2020 12:42:01	File Name C:\USERS\lta6a534\DOWNLOADS\FZ8958-2.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 5176	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 14994.0977	Sweep Width (Hz) 47348.49	Receiver Gain 58.00
		Solvent DMSO-d6

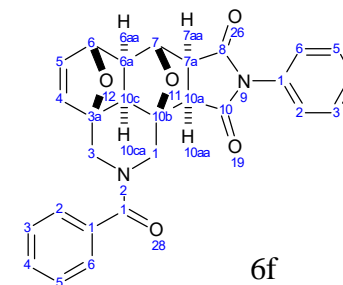


FZ8958-2.ESP

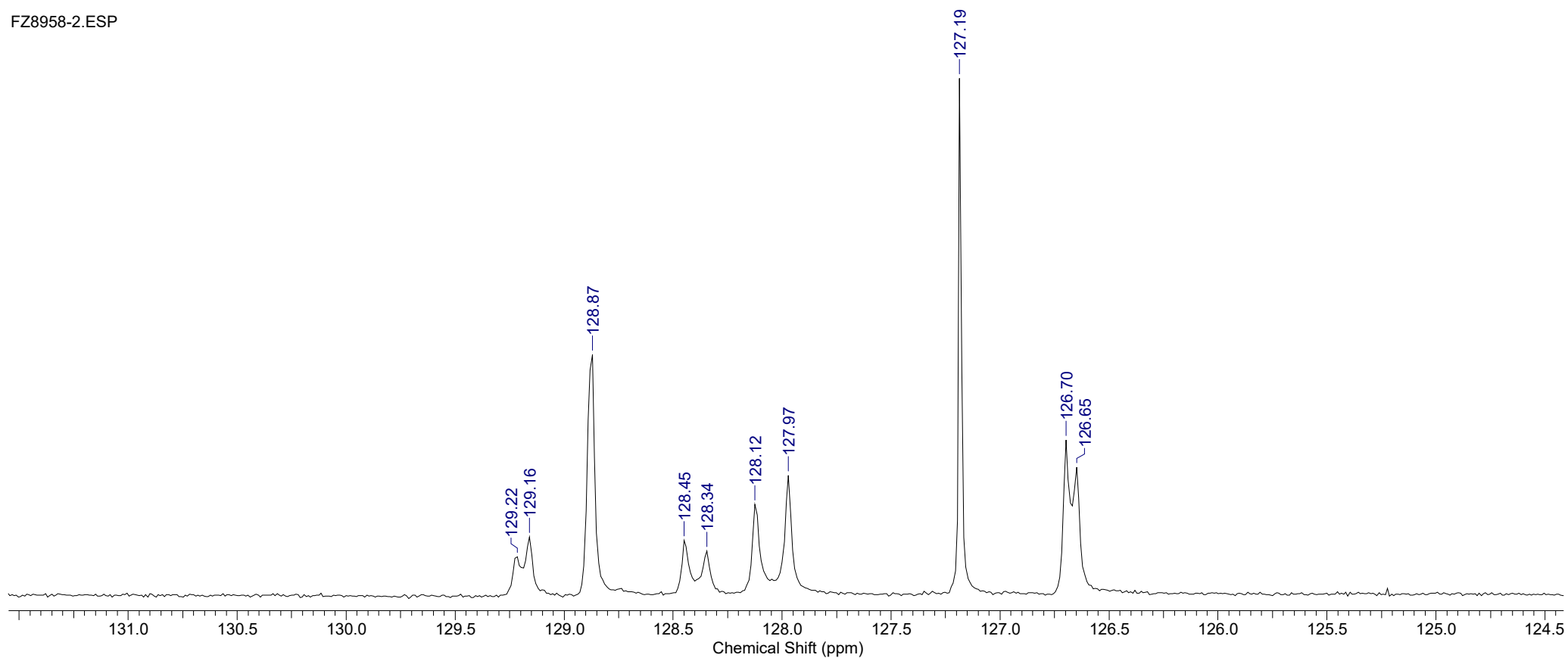


Formula C ₂₇ H ₂₂ N ₂ O ₅	FW 454.4740
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 07 Aug 2020 12:41:16		
Date Stamp 07 Aug 2020 12:42:01	File Name C:\USERS\l1a6a534\DOWNLOADS\FZ8958-2.JDF	Frequency (MHz) 150.91		
Nucleus 13C	Number of Transients 5176	Origin ECA 600	Original Points Count 32768	Owner CKP
Points Count 32768	Pulse Sequence single pulse dec	Receiver Gain 58.00	Solvent DMSO-d6	
Spectrum Offset (Hz) 14994.0977	Sweep Width (Hz) 47348.49			

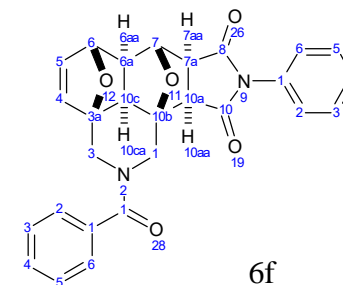


FZ8958-2.ESP

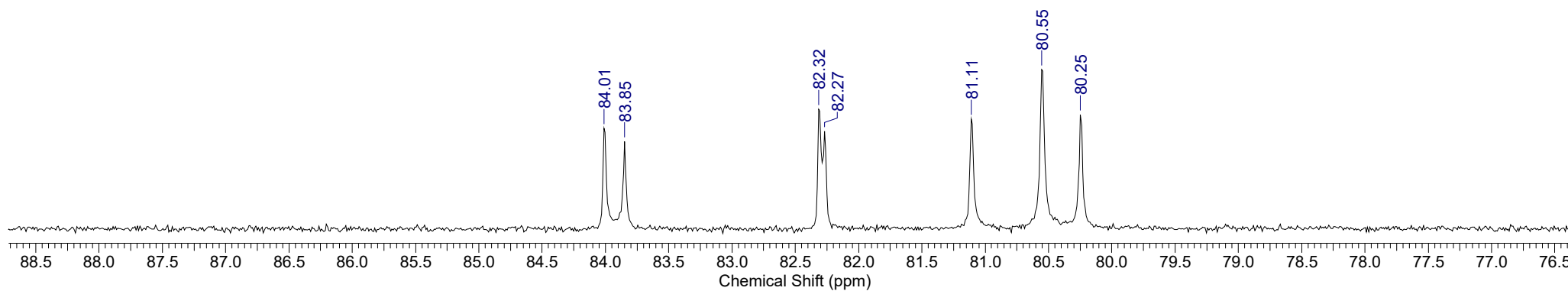


Formula C ₂₇ H ₂₂ N ₂ O ₅	FW 454.4740
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 07 Aug 2020 12:41:16
Date Stamp 07 Aug 2020 12:42:01	File Name C:\USERS\lta6a534\DOWNLOADS\FZ8958-2.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 5176	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 14994.0977	Sweep Width (Hz) 47348.49	Receiver Gain 58.00
		Solvent DMSO-d6

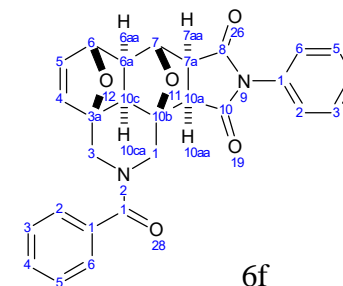


FZ8958-2.ESP

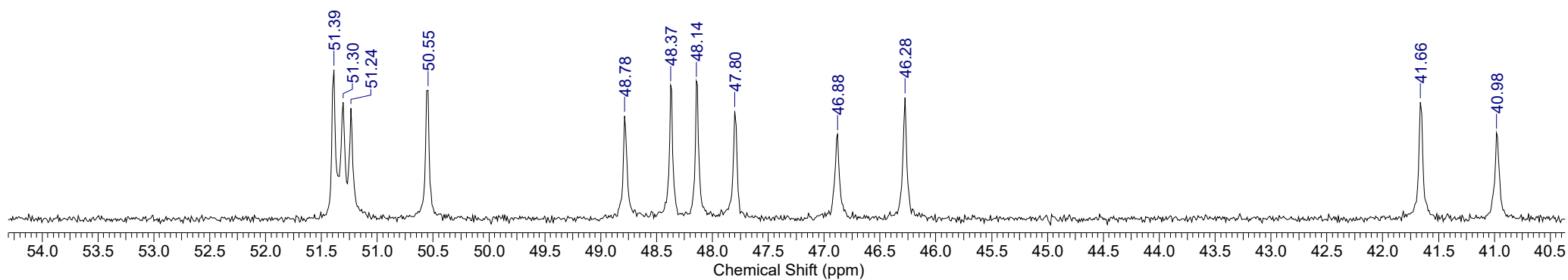


Formula C ₂₇ H ₂₂ N ₂ O ₅	FW 454.4740
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 07 Aug 2020 12:41:16
Date Stamp 07 Aug 2020 12:42:01	File Name C:\USERS\Ia6a534\DOWNLOADS\FZ8958-2.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 5176	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 14994.0977	Sweep Width (Hz) 47348.49	Receiver Gain 58.00
		Solvent DMSO-d6

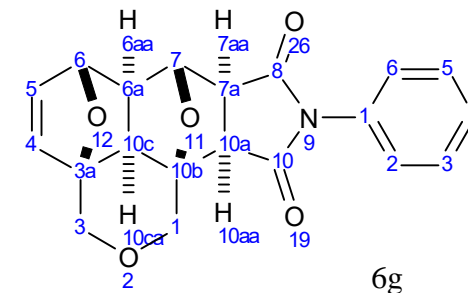


FZ8958-2.ESP

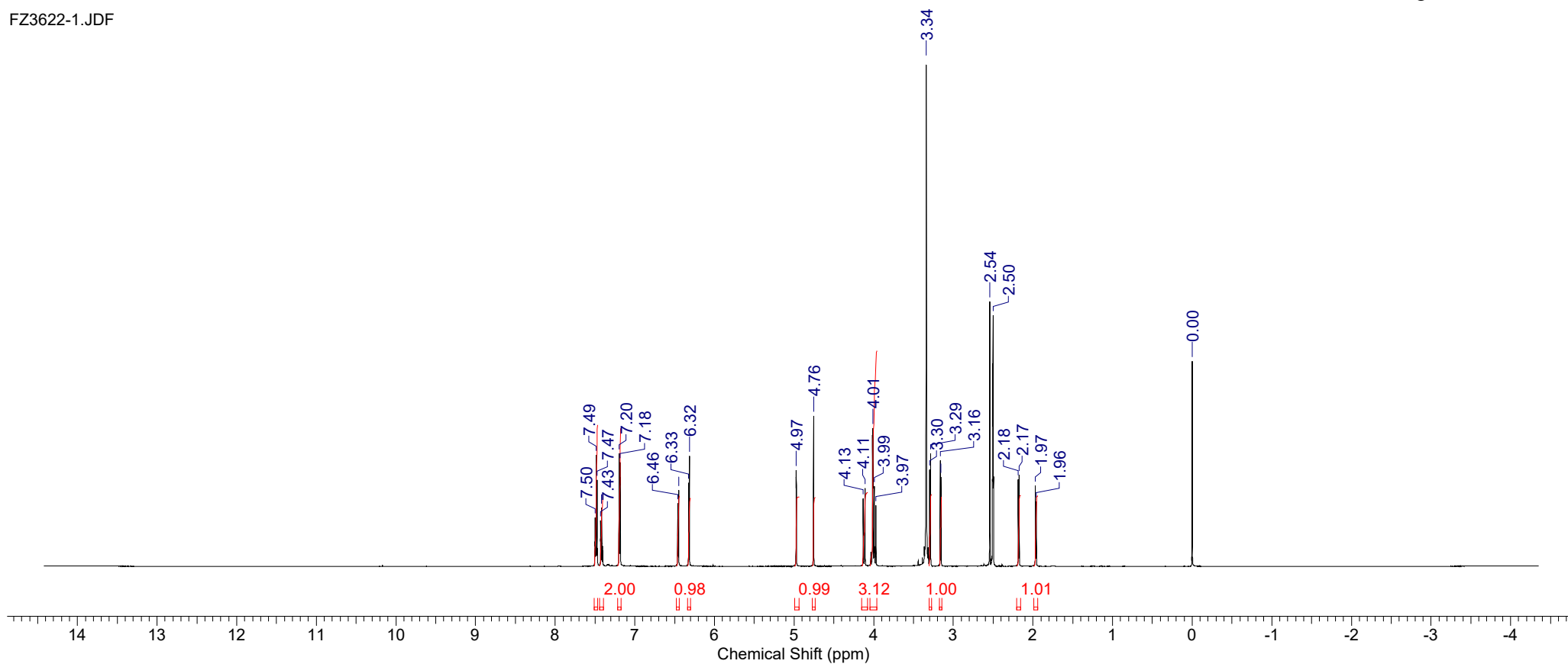


Formula C ₂₀ H ₁₇ NO ₅	FW 351.3527
--	--------------------

Acquisition Time (sec) 1.4549	Comment single_pulse	Date 19 Feb 2014 11:08:20	Date Stamp 19 Feb 2014 10:18:13
File Name C:\USERS\laba534\DOWNLOADS\FZ3622-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 16384	Owner delta	Points Count 16384
Receiver Gain 40.00	Solvent DMSO-d6	Spectrum Offset (Hz) 3022.0435	Sweep Width (Hz) 11261.26
			Temperature (degree C) 24.400

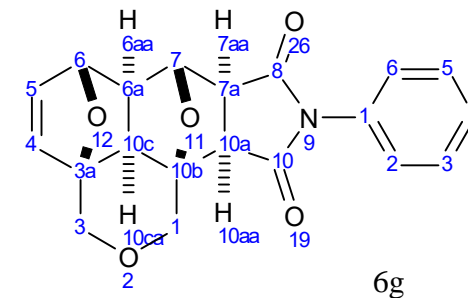


FZ3622-1.JDF

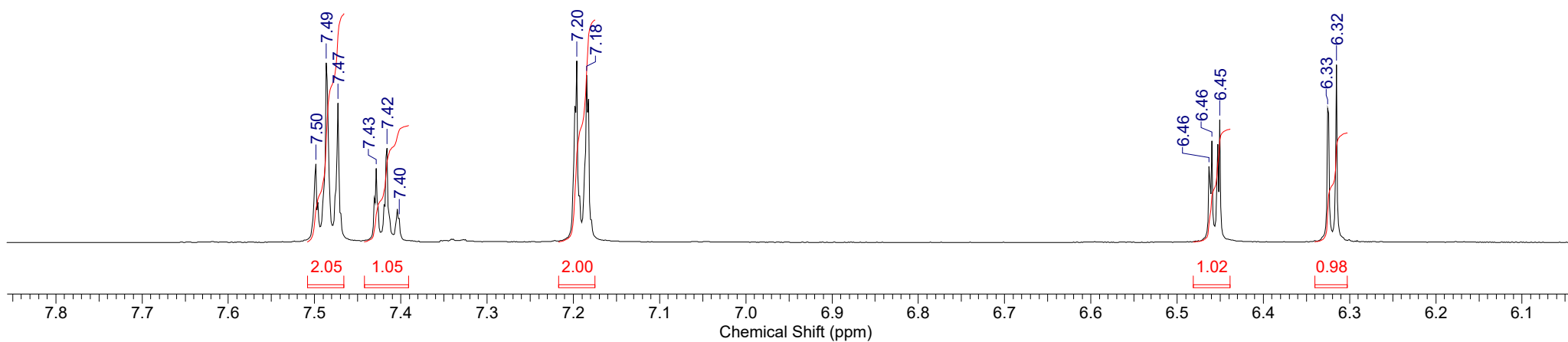


Formula C ₂₀ H ₁₇ NO ₅	FW 351.3527
--	--------------------

Acquisition Time (sec) 1.4549	Comment single_pulse	Date 19 Feb 2014 11:08:20	Date Stamp 19 Feb 2014 10:18:13
File Name C:\USERS\Лаба534\DOWNLOADS\FZ3622-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 16384	Owner delta	Points Count 16384
Receiver Gain 40.00	Solvent DMSO-d6	Spectrum Offset (Hz) 3022.0435	Sweep Width (Hz) 11261.26
		Temperature (degree C) 24.400	

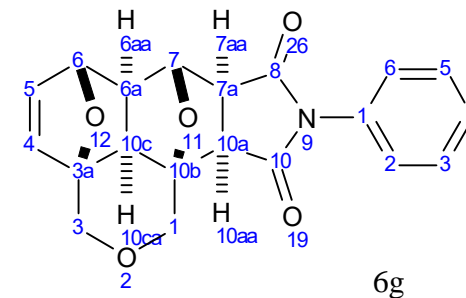


FZ3622-1.JDF

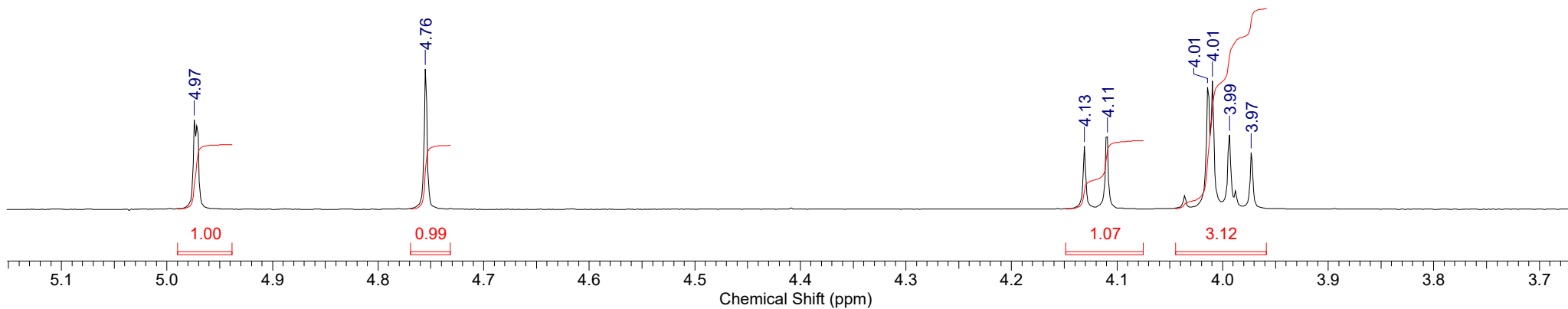


Formula C ₂₀ H ₁₇ NO ₅	FW 351.3527
--	--------------------

Acquisition Time (sec) 1.4549	Comment single_pulse	Date 19 Feb 2014 11:08:20	Date Stamp 19 Feb 2014 10:18:13
File Name C:\USERS\laba534\DOWNLOADS\FZ3622-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 16384	Owner delta	Points Count 16384
Receiver Gain 40.00	Solvent DMSO-d6	Spectrum Offset (Hz) 3022.0435	Sweep Width (Hz) 11261.26
			Temperature (degree C) 24.400

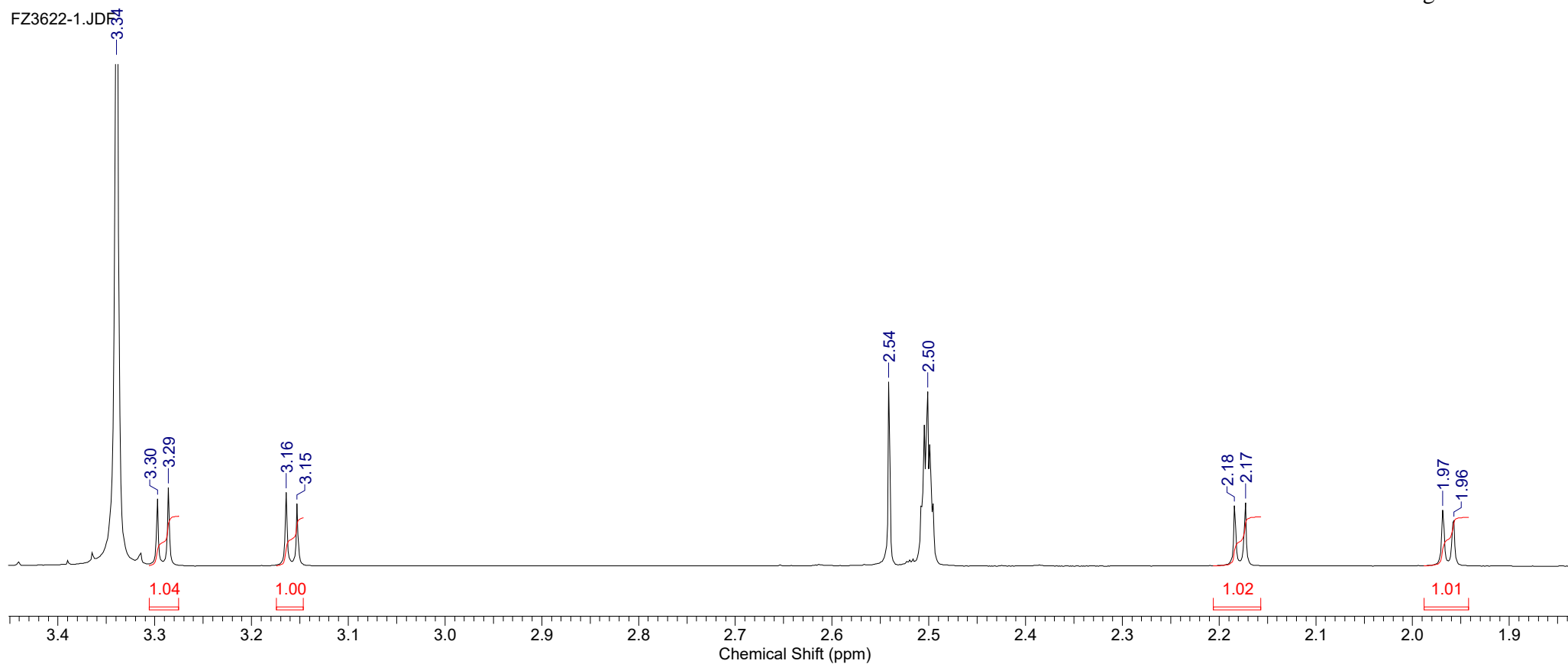
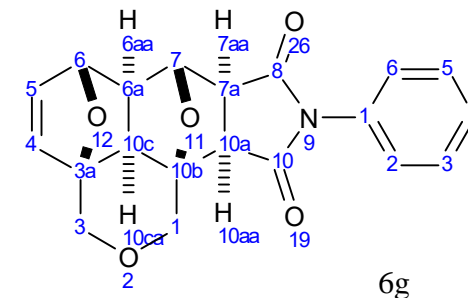


FZ3622-1.JDF



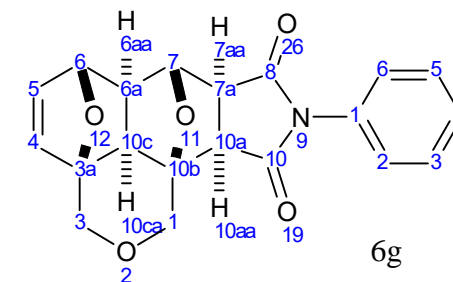
Formula C ₂₀ H ₁₇ NO ₅	FW 351.3527
--	--------------------

Acquisition Time (sec) 1.4549	Comment single_pulse	Date 19 Feb 2014 11:08:20	Date Stamp 19 Feb 2014 10:18:13
File Name C:\USERS\lab6a534\DOWNLOADS\FZ3622-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 16384	Owner delta	Points Count 16384
Receiver Gain 40.00	Solvent DMSO-d6	Spectrum Offset (Hz) 3022.0435	Sweep Width (Hz) 11261.26
			Temperature (degree C) 24.400

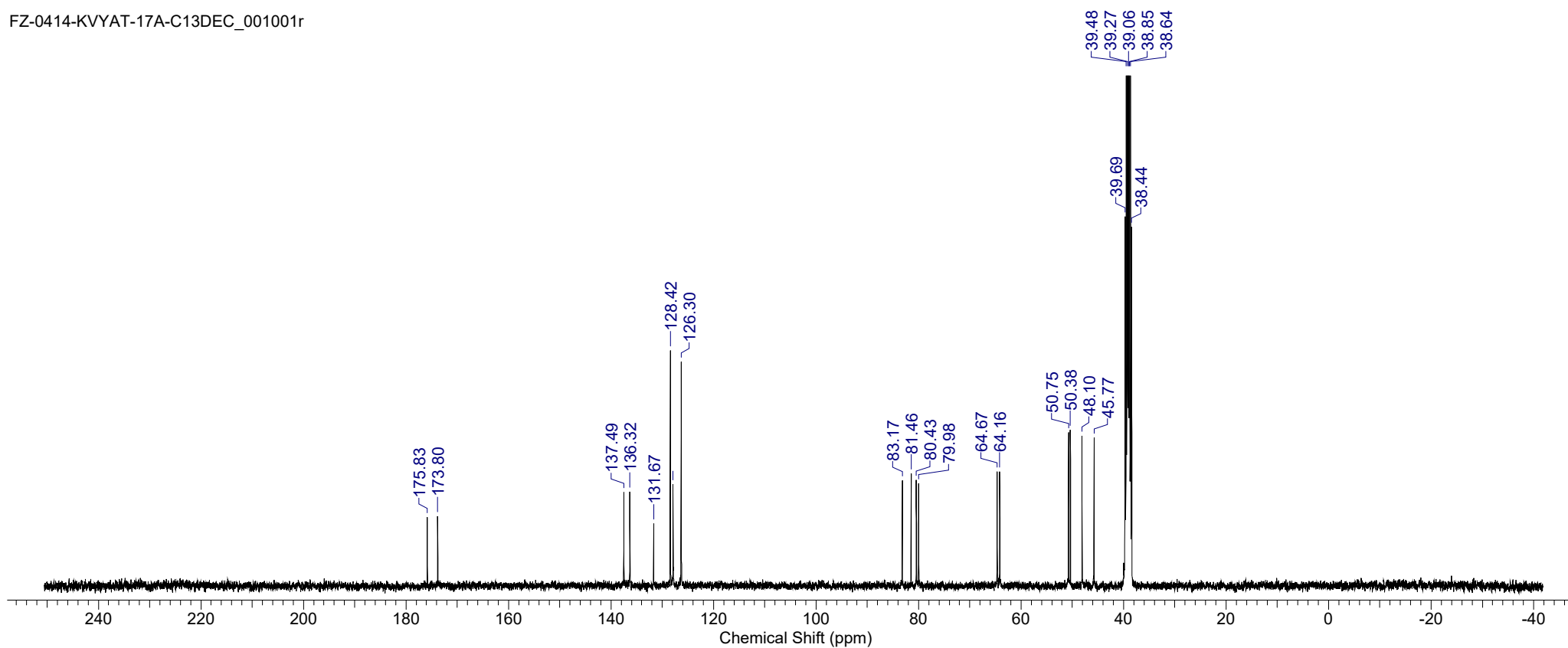


Formula C ₂₀ H ₁₇ NO ₅	FW 351.3527
--	--------------------

Acquisition Time (sec) 0.5571	Comment 5 mm QNP 1H/15N/13C/31P Z3379/0400	Date 06 May 2014 22:38:56
Date Stamp 06 May 2014 22:38:56	File Name C:\USERS\lta6a534\DESKTOP\FZ-0414-KVYAT-17A-C13DEC_001001r	
Frequency (MHz) 100.61	Nucleus 13C	Number of Transients 25464
Original Points Count 16384	Owner root	Origin spect
Receiver Gain 32768.00	SW(cyclical) (Hz) 29411.77	Points Count 65536
Sweep Width (Hz) 29411.32	Temperature (degree C) 90.000	Pulse Sequence zgpg
	Solvent DMSO-d6	Spectrum Offset (Hz) 10502.3320

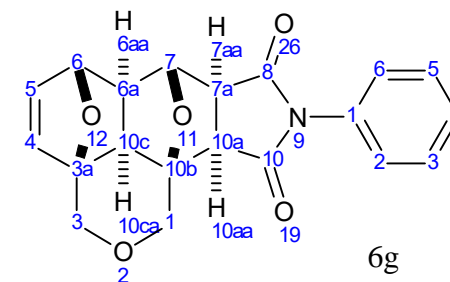


FZ-0414-KVYAT-17A-C13DEC_001001r

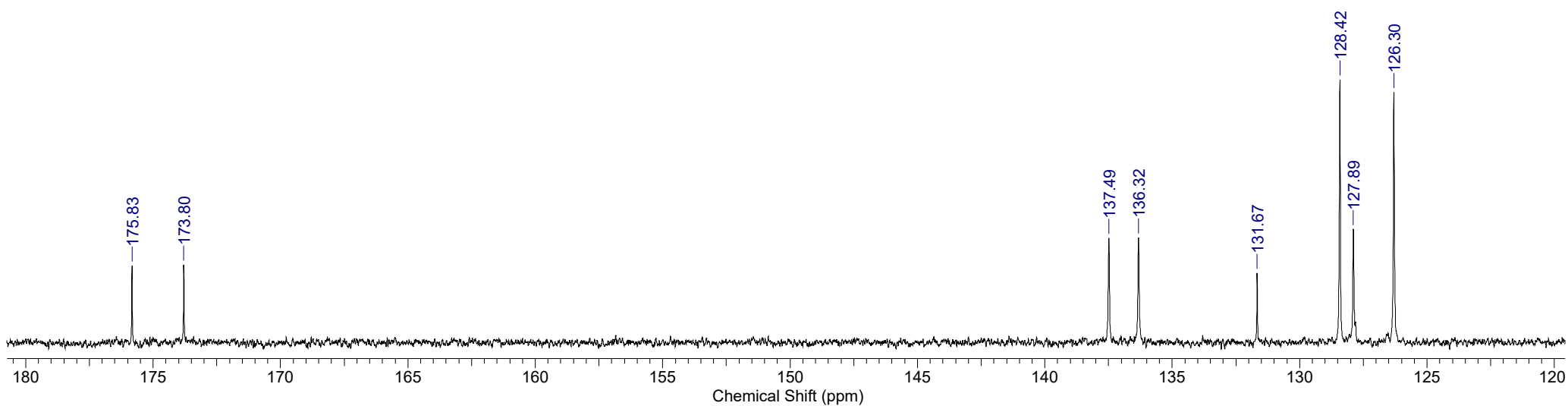


Formula C ₂₀ H ₁₇ NO ₅	FW 351.3527
--	--------------------

Acquisition Time (sec) 0.5571	Comment 5 mm QNP 1H/15N/13C/31P Z3379/0400	Date 06 May 2014 22:38:56
Date Stamp 06 May 2014 22:38:56	File Name C:\USERS\lta6a534\DESKTOP\FZ-0414-KVYAT-17A-C13DEC_001001r	
Frequency (MHz) 100.61	Nucleus 13C	Number of Transients 25464
Original Points Count 16384	Owner root	Origin spect
Receiver Gain 32768.00	SW(cyclical) (Hz) 29411.77	Points Count 65536
Sweep Width (Hz) 29411.32	Temperature (degree C) 90.000	Pulse Sequence zgpg
	Solvent DMSO-d6	Spectrum Offset (Hz) 10502.3320

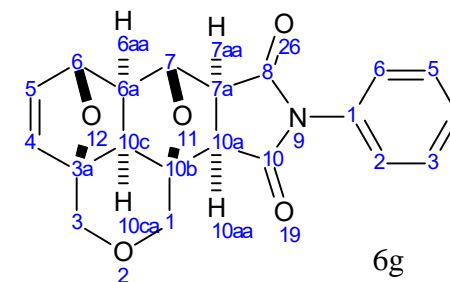


FZ-0414-KVYAT-17A-C13DEC_001001r

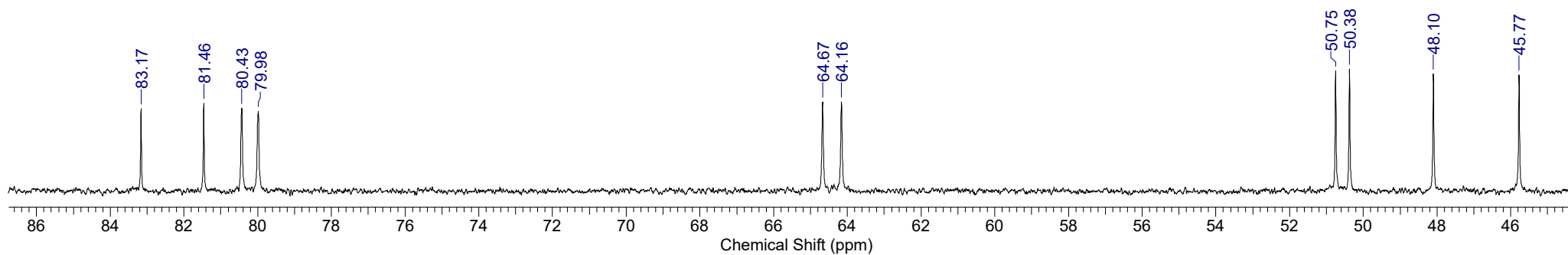


Formula C ₂₀ H ₁₇ NO ₅	FW 351.3527
--	--------------------

Acquisition Time (sec) 0.5571	Comment 5 mm QNP 1H/15N/13C/31P Z3379/0400	Date 06 May 2014 22:38:56
Date Stamp 06 May 2014 22:38:56	File Name C:\USERS\lta6a534\DESKTOP\FZ-0414-KVYAT-17A-C13DEC_001001r	
Frequency (MHz) 100.61	Nucleus 13C	Number of Transients 25464
Original Points Count 16384	Owner root	Points Count 65536
Receiver Gain 32768.00	SW(cyclical) (Hz) 29411.77	Pulse Sequence zgpg
Sweep Width (Hz) 29411.32	Solvent DMSO-d6	Spectrum Offset (Hz) 10502.3320
	Temperature (degree C) 90.000	

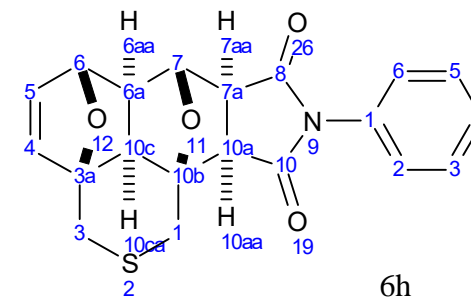


FZ-0414-KVYAT-17A-C13DEC_001001r

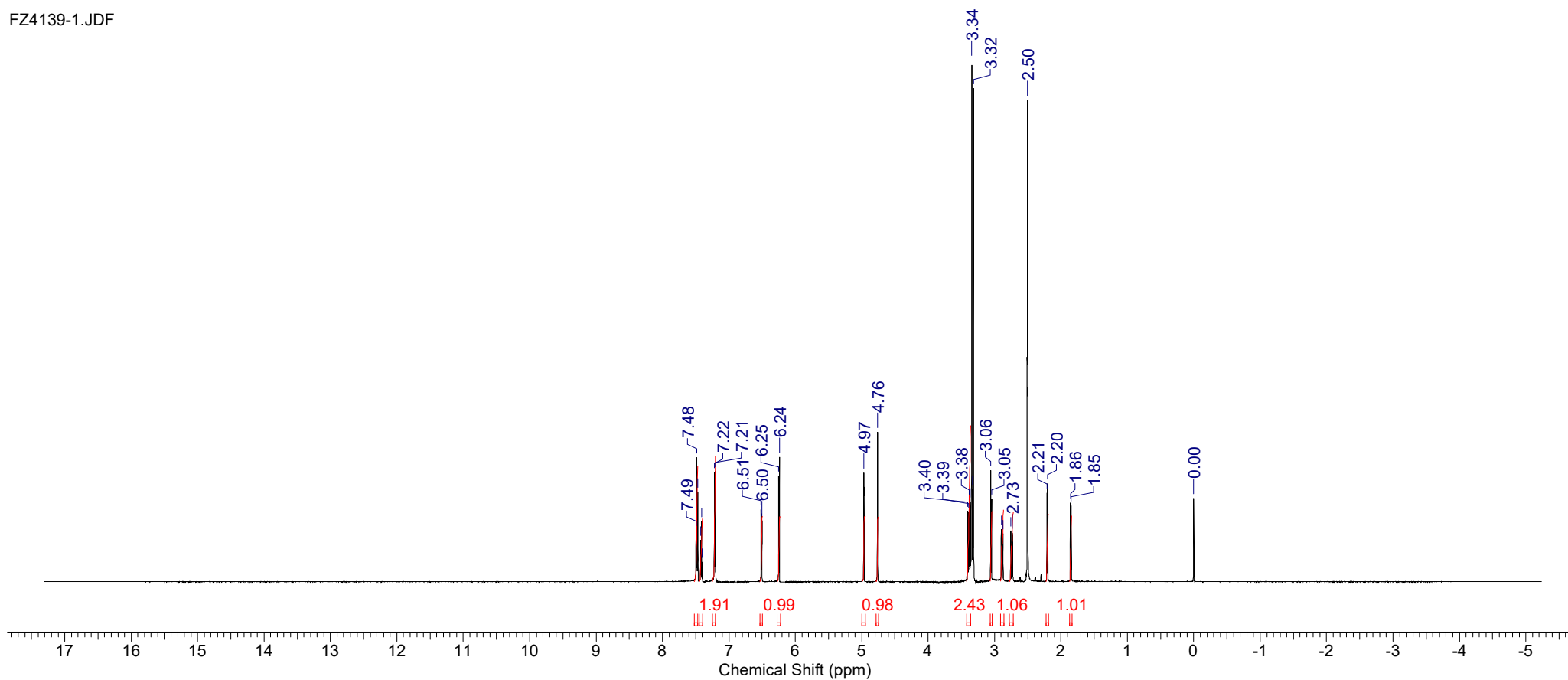


Formula C ₂₀ H ₁₇ NO ₄ S	FW 367.4183
--	--------------------

Acquisition Time (sec) 1.2111	Comment single_pulse	Date 18 Mar 2015 13:24:26	Date Stamp 18 Mar 2015 12:30:13
File Name C:\USERS\Лабa534\DOWNLOADS\FZ4139-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 16384	Owner delta	Points Count 16384
Receiver Gain 46.00	Solvent DMSO-d6	Spectrum Offset (Hz) 3623.7708	Sweep Width (Hz) 13528.14
		Pulse Sequence single_pulse.ex2	

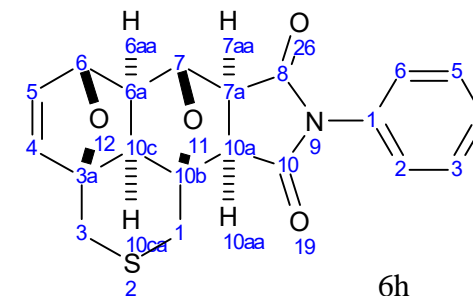


FZ4139-1.JDF

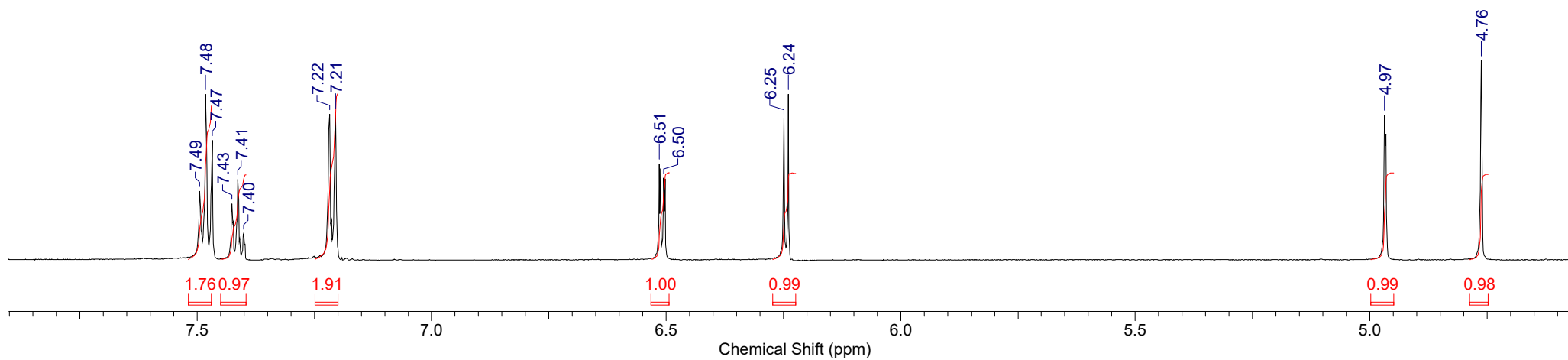


Formula C ₂₀ H ₁₇ NO ₄ S	FW 367.4183
--	--------------------

Acquisition Time (sec) 1.2111	Comment single_pulse	Date 18 Mar 2015 13:24:26	Date Stamp 18 Mar 2015 12:30:13
File Name C:\USERS\Лабa534\DOWNLOADS\FZ4139-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 16384	Owner delta	Points Count 16384
Receiver Gain 46.00	Solvent DMSO-d6	Spectrum Offset (Hz) 3623.7708	Sweep Width (Hz) 13528.14
			Pulse Sequence single_pulse.ex2

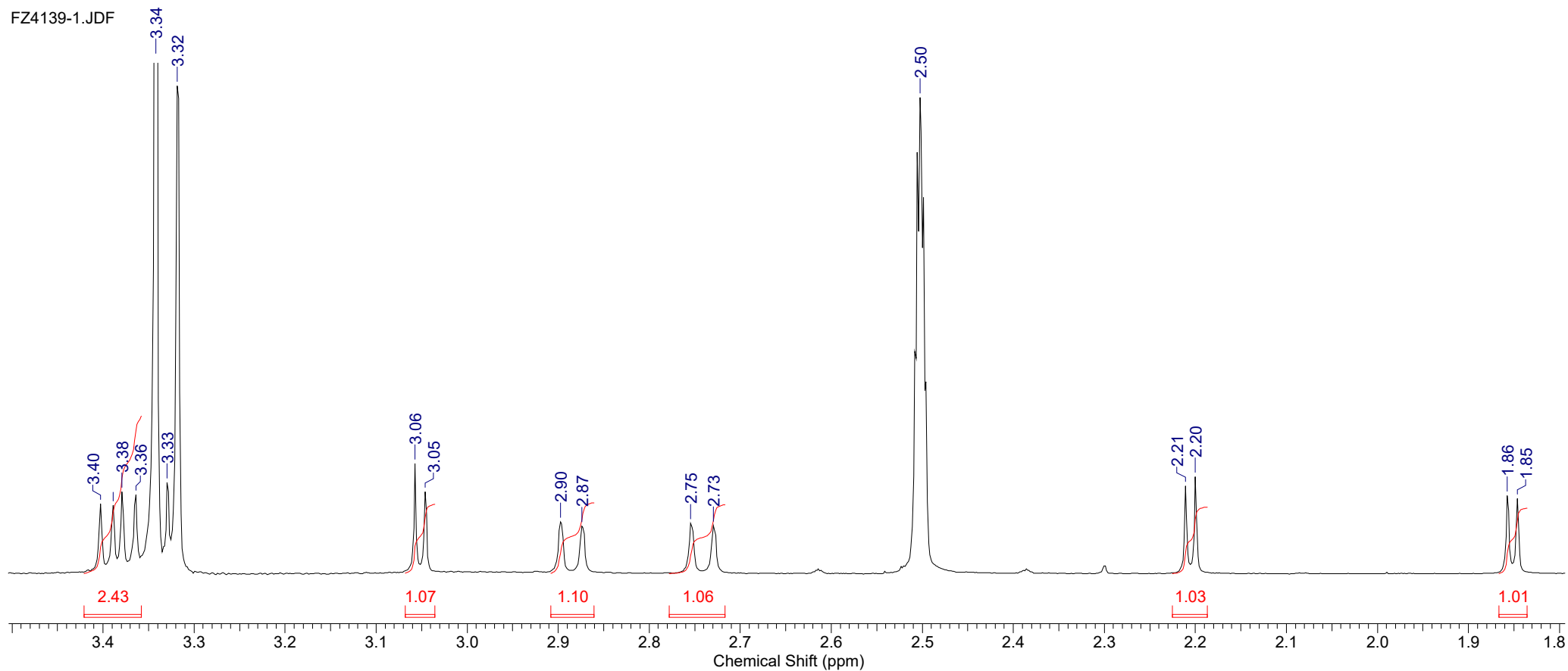
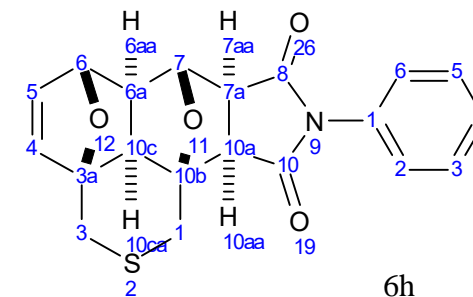


FZ4139-1.JDF



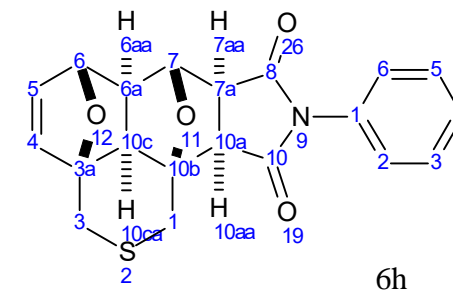
Formula C₂₀H₁₇NO₄S FW 367.4183

Acquisition Time (sec)	1.2111	Comment	single_pulse	Date	18 Mar 2015 13:24:26	Date Stamp	18 Mar 2015 12:30:13
File Name	C:\USERS\Лабa534\DOWNLOADS\FZ4139-1.JDF	Frequency (MHz)	600.17	Nucleus	1H	Number of Transients	8
Origin	ECA 600	Original Points Count	16384	Owner	delta	Points Count	16384
Receiver Gain	46.00	Solvent	DMSO-d6	Spectrum Offset (Hz)	3623.7708	Sweep Width (Hz)	13528.14
						Pulse Sequence	single_pulse.ex2

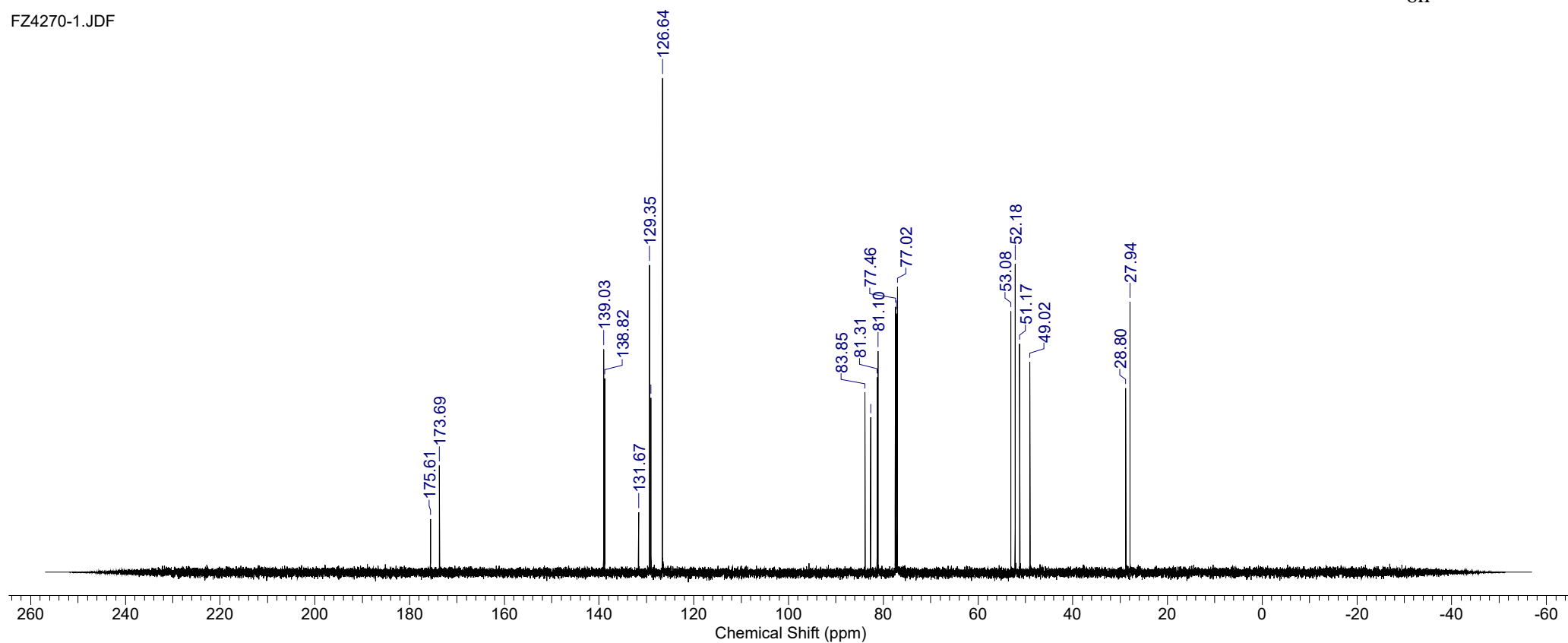


Formula C₂₀H₁₇NO₄S FW 367.4183

Acquisition Time (sec)	0.6921	Comment	single pulse decoupled gated NOE	Date	06 May 2015 10:46:46
Date Stamp	06 May 2015 09:53:16	File Name	C:\USERS\Лабa534\DOWNLOADS\FZ4270-1.JDF		
Frequency (MHz)	150.91	Nucleus	13C	Number of Transients	100
Original Points Count	32768	Owner	delta	Points Count	32768
Receiver Gain	52.00	Solvent	CHLOROFORM-d	Pulse Sequence	single pulse dec
Sweep Width (Hz)	47348.49	Temperature (degree C)	21.000	Spectrum Offset (Hz)	15091.3428

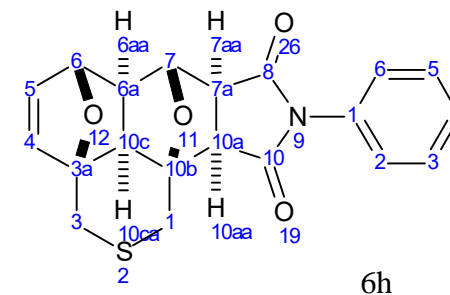


FZ4270-1.JDF

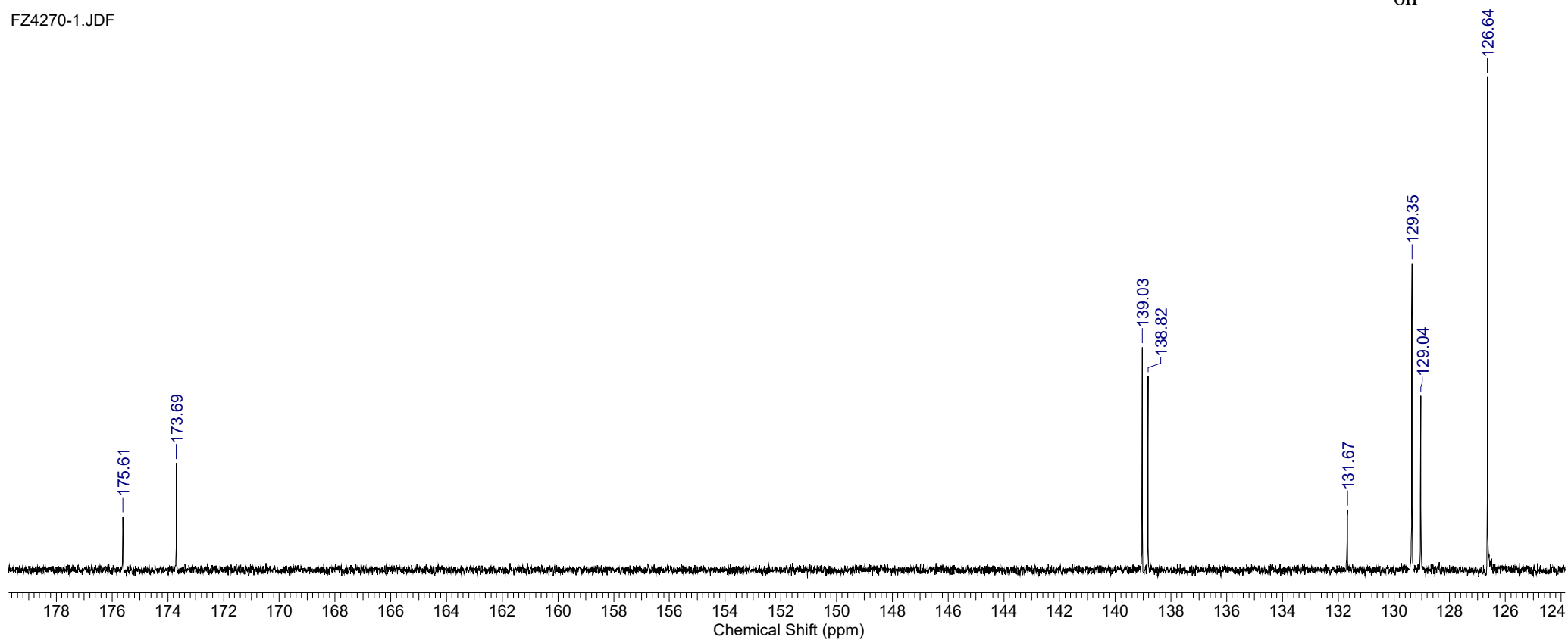


Formula C ₂₀ H ₁₇ NO ₄ S	FW 367.4183
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 06 May 2015 10:46:46
Date Stamp 06 May 2015 09:53:16	File Name C:\USERS\Лабa534\DOWNLOADS\FZ4270-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 100
Original Points Count 32768	Owner delta	Points Count 32768
Receiver Gain 52.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49	Temperature (degree C) 21.000	Spectrum Offset (Hz) 15091.3428

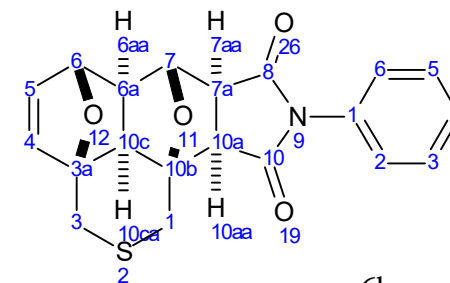


FZ4270-1.JDF

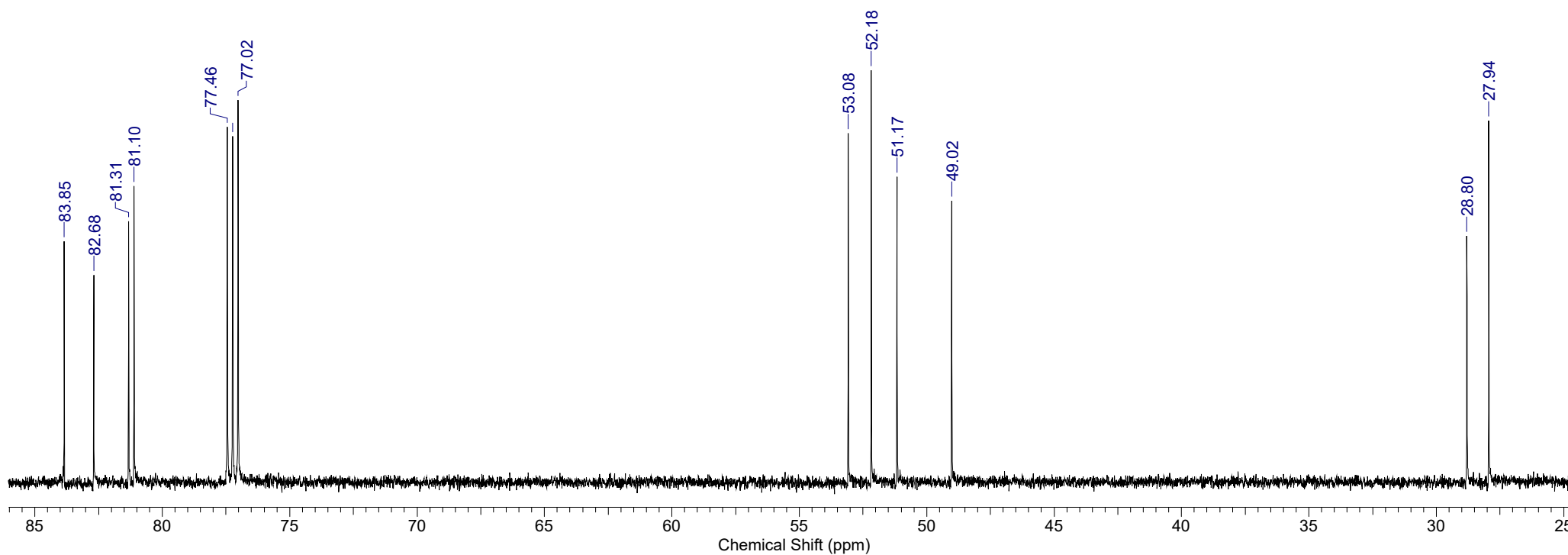


Formula C ₂₀ H ₁₇ NO ₄ S	FW 367.4183
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 06 May 2015 10:46:46
Date Stamp 06 May 2015 09:53:16	File Name C:\USERS\Лабa534\DOWNLOADS\FZ4270-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 100
Original Points Count 32768	Owner delta	Points Count 32768
Receiver Gain 52.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49	Temperature (degree C) 21.000	Spectrum Offset (Hz) 15091.3428

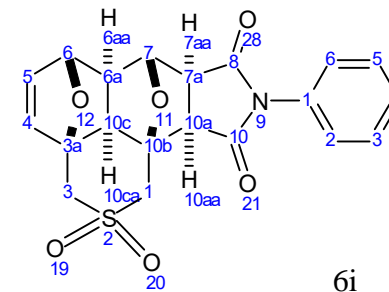


FZ4270-1.JDF

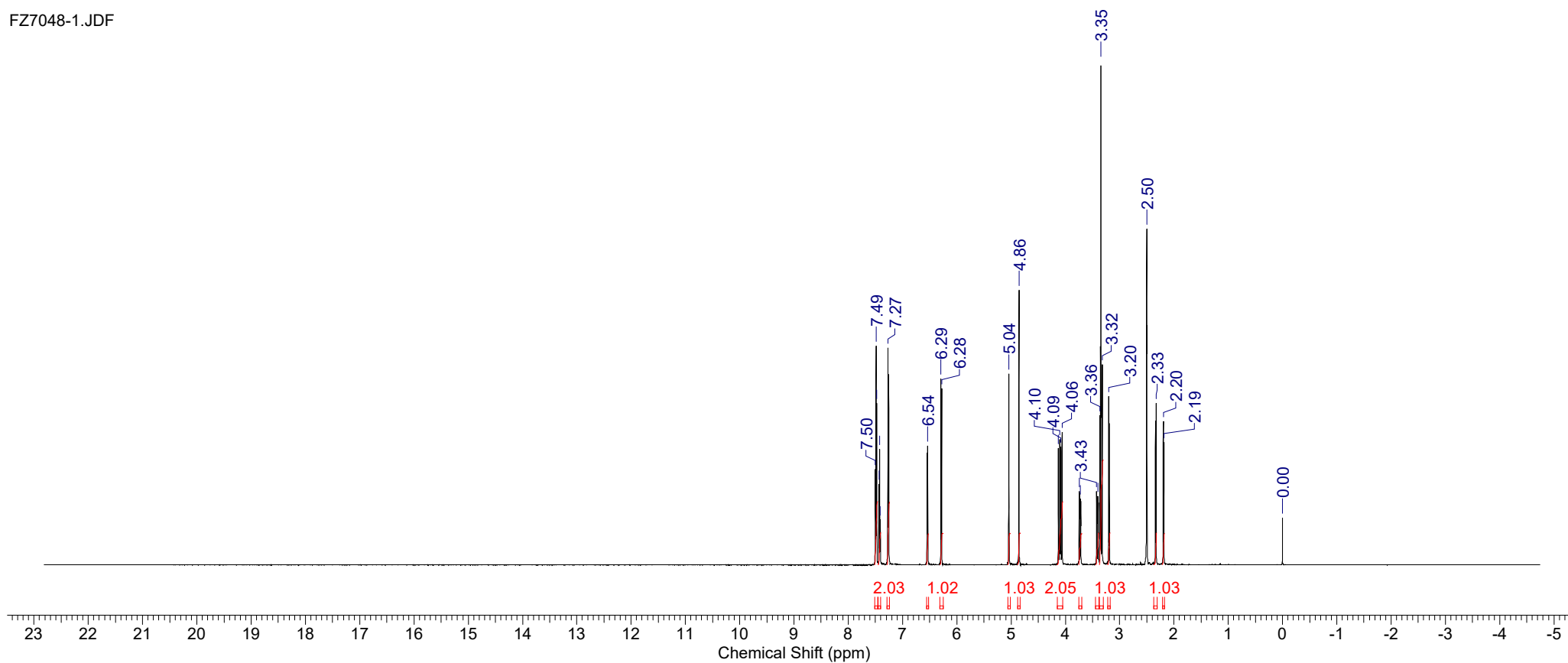


Formula C ₂₀ H ₁₇ NO ₆ S	FW 399.4171
--	--------------------

Acquisition Time (sec) 1.9818	Comment single pulse	Date 09 Jan 1990 17:33:58	Date Stamp 12 Dec 2018 13:17:34
File Name C:\USERS\534~1\APPDATA\LOCAL\TEMP\FZ7048-1.JDF		Frequency (MHz) 600.17	Nucleus 1H
Number of Transients 8	Origin ECA 600	Original Points Count 32768	Owner delta
Pulse Sequence single_pulse.ex2		Receiver Gain 40.00	Points Count 32768
Sweep Width (Hz) 16534.39		Solvent DMSO-d6	Spectrum Offset (Hz) 5423.2422

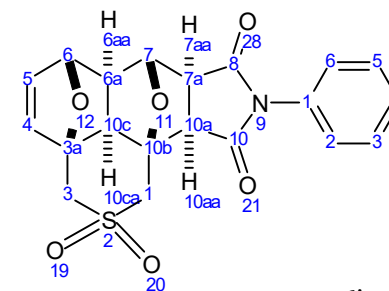


FZ7048-1.JDF



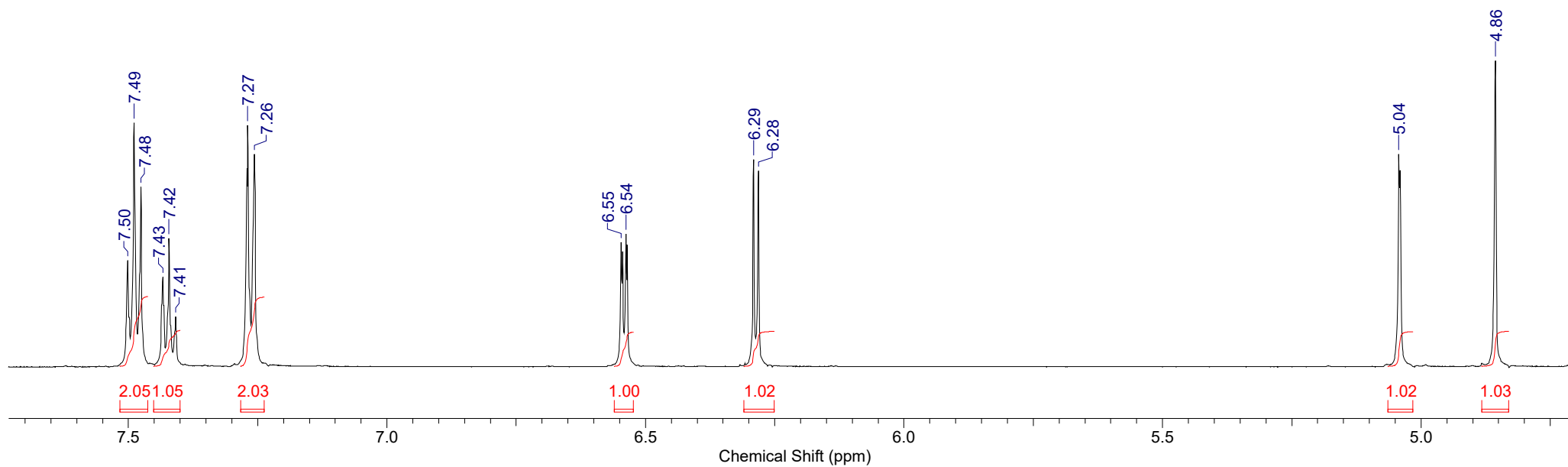
Formula C ₂₀ H ₁₇ NO ₆ S	FW 399.4171
--	--------------------

Acquisition Time (sec) 1.9818	Comment single pulse	Date 09 Jan 1990 17:33:58	Date Stamp 12 Dec 2018 13:17:34
File Name C:\USERS\534~1\APPDATA\LOCAL\TEMP\FZ7048-1.JDF		Frequency (MHz) 600.17	Nucleus 1H
Number of Transients 8	Origin ECA 600	Original Points Count 32768	Points Count 32768
Pulse Sequence single_pulse.ex2	Receiver Gain 40.00	Solvent DMSO-d6	Spectrum Offset (Hz) 5423.2422
Sweep Width (Hz) 16534.39			



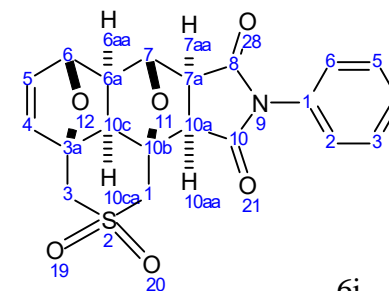
6i

FZ7048-1.JDF

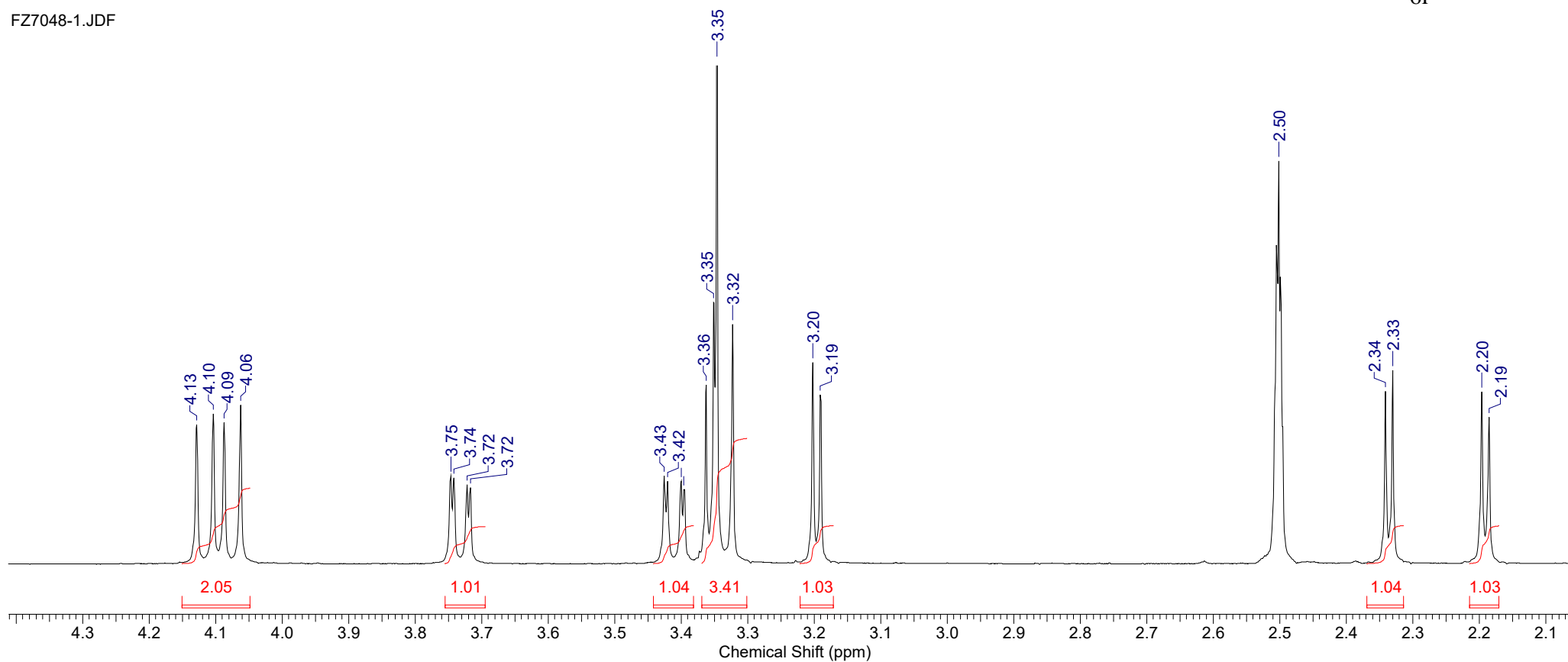


Formula $C_{20}H_{17}NO_6S$ FW 399.4171

Acquisition Time (sec)	1.9818	Comment	single pulse	Date	09 Jan 1990 17:33:58	Date Stamp	12 Dec 2018 13:17:34
File Name	C:\USERS\534~1\APPDATA\LOCAL\TEMP\FZ7048-1.JDF			Frequency (MHz)	600.17	Nucleus	1H
Number of Transients	8	Origin	ECA 600	Original Points Count	32768	Owner	delta
Pulse Sequence	single_pulse.ex2	Receiver Gain	40.00	Solvent	DMSO-d6	Points Count	32768
Sweep Width (Hz)	16534.39	Spectrum Offset (Hz)	5423.2422				

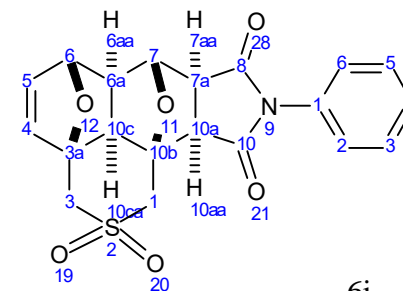


FZ7048-1.JDF



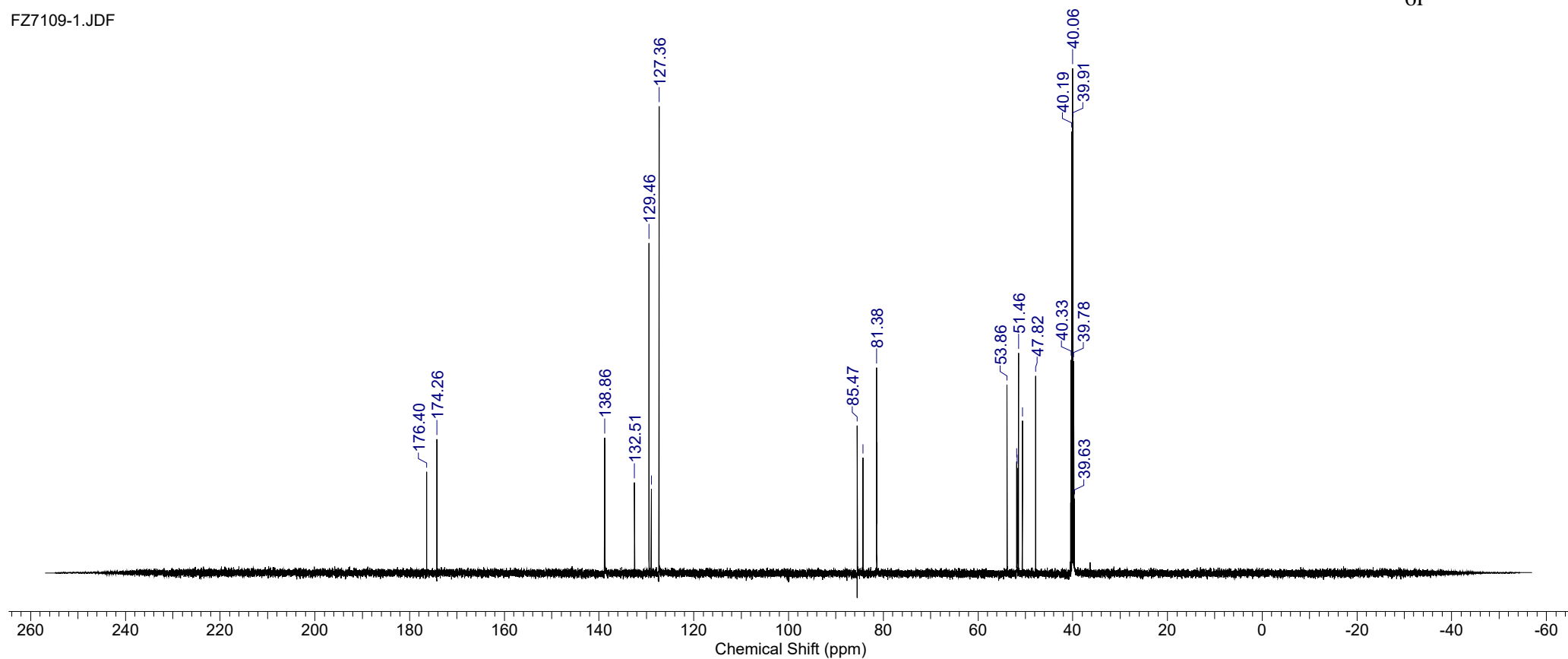
Formula C ₂₀ H ₁₇ NO ₆ S	FW 399.4171
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 13 Feb 1990 15:34:08
Date Stamp 16 Jan 2019 11:17:13	File Name C:\USERS\Jla6a534\DOWNLOADS\FZ7109-1.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 301	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49	Receiver Gain 56.00
		Owner delta
		Solvent DMSO-d6



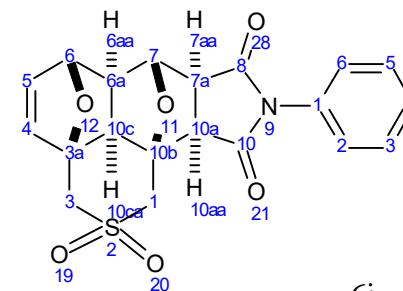
6i

FZ7109-1.JDF



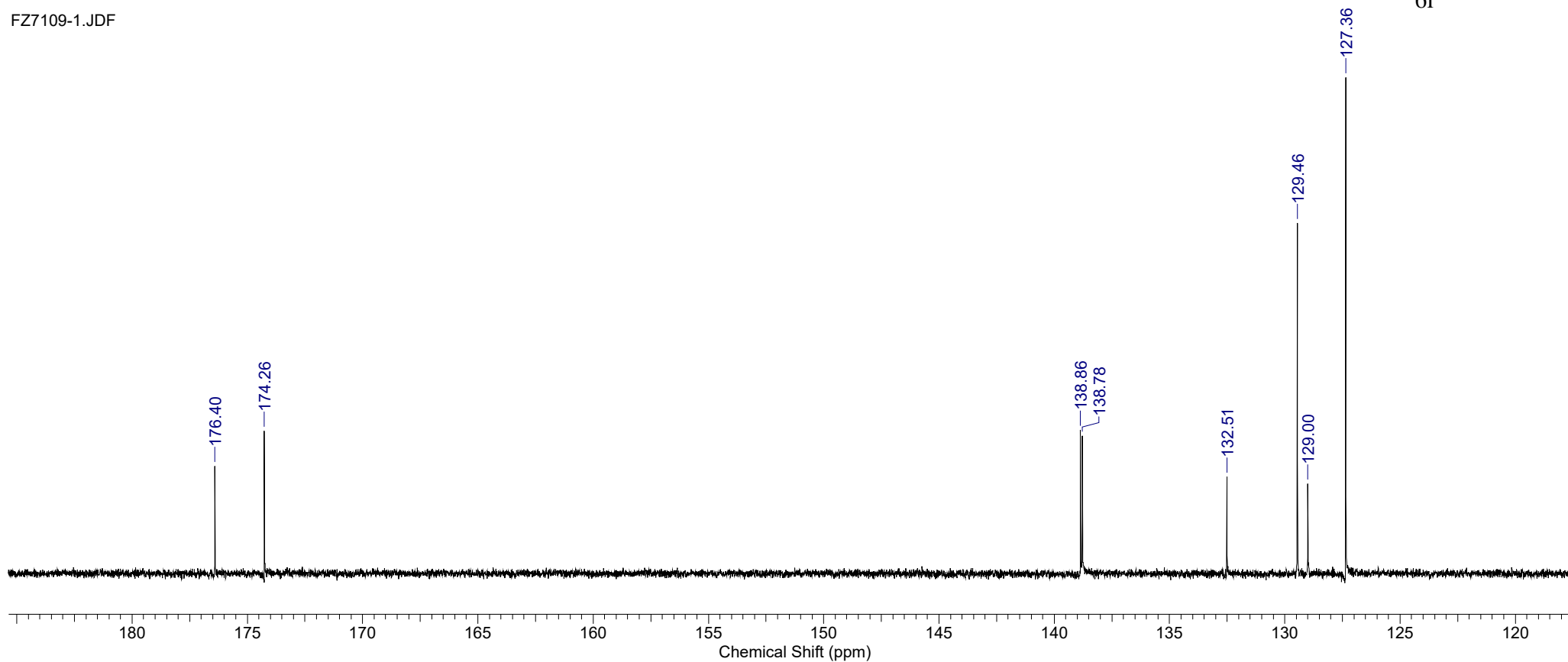
Formula C₂₀H₁₇NO₆S FW 399.4171

Acquisition Time (sec)	0.6921	Comment	single pulse decoupled gated NOE	Date	13 Feb 1990 15:34:08
Date Stamp	16 Jan 2019 11:17:13	File Name	C:\USERS\Jla6a534\DOWNLOADS\FZ7109-1.JDF	Frequency (MHz)	150.91
Nucleus	13C	Number of Transients	301	Origin	ECA 600
Points Count	32768	Pulse Sequence	single pulse dec	Original Points Count	32768
Spectrum Offset (Hz)	15091.3428	Sweep Width (Hz)	47348.49	Receiver Gain	56.00
				Solvent	DMSO-d6



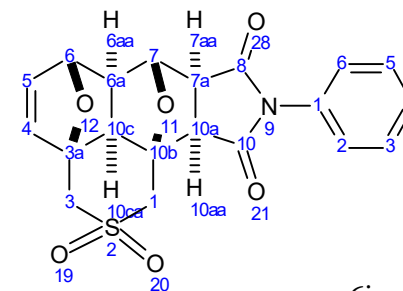
6i

FZ7109-1.JDF



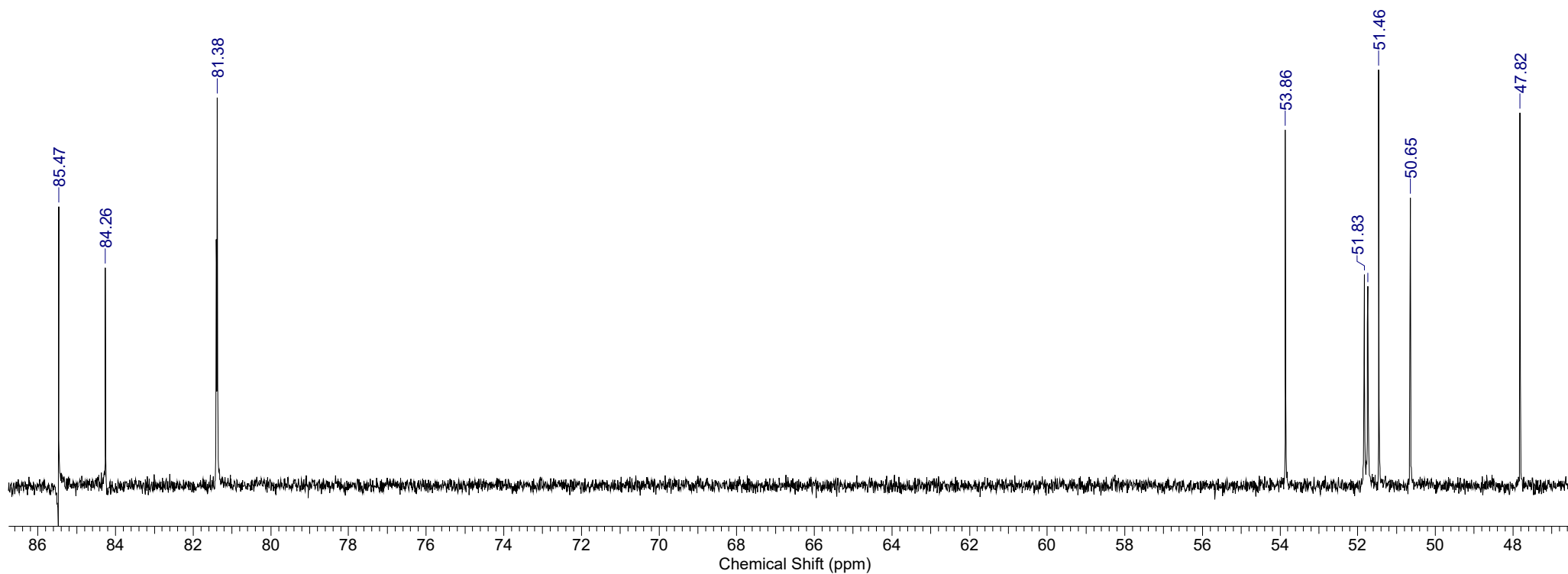
Formula C ₂₀ H ₁₇ NO ₆ S	FW 399.4171
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 13 Feb 1990 15:34:08
Date Stamp 16 Jan 2019 11:17:13	File Name C:\USERS\Jla6a534\DOWNLOADS\FZ7109-1.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 301	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Spectrum Offset (Hz) 15091.3428	Sweep Width (Hz) 47348.49	Receiver Gain 56.00
		Owner delta
		Solvent DMSO-d6

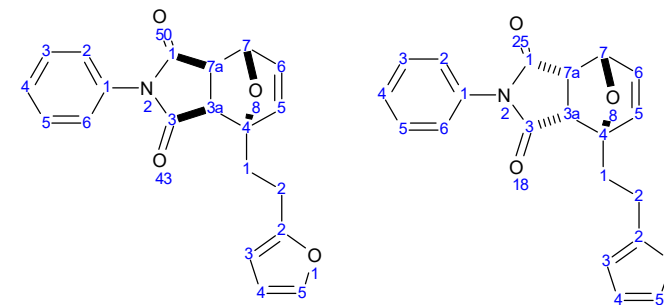


6i

FZ7109-1.JDF

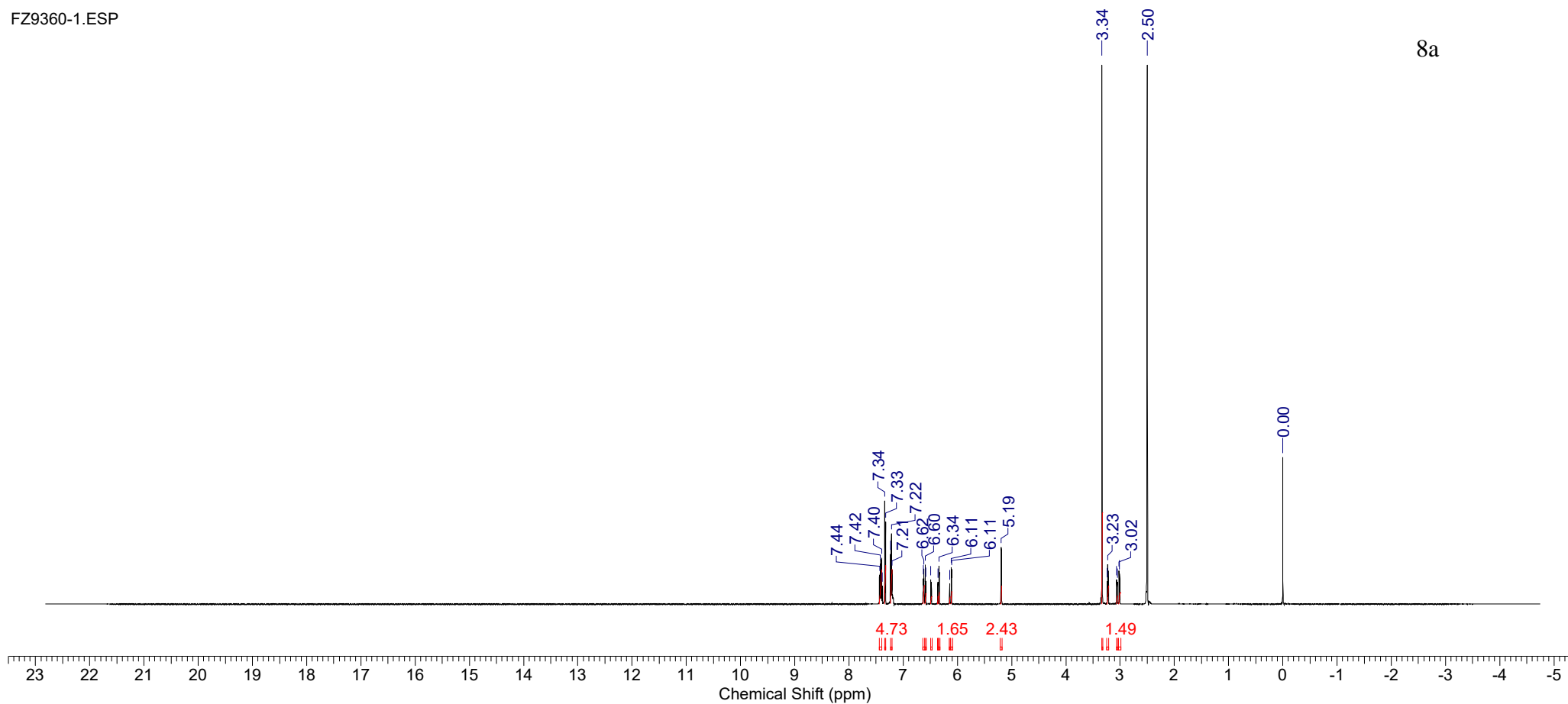


Acquisition Time (sec)	1.9818	Comment	single_pulse	Date	10 Dec 2020 11:52:23	Date Stamp	10 Dec 2020 11:05:30
File Name	H:\DOWNLOADS\FZ9360-1.JDF	Frequency (MHz)	600.17	Nucleus	1H	Number of Transients	8
Origin	ECA 600	Original Points Count	32768	Owner	CKP	Points Count	32768
Receiver Gain	46.00	Solvent	DMSO-d6	Spectrum Offset (Hz)	5423.7471	Sweep Width (Hz)	16534.39

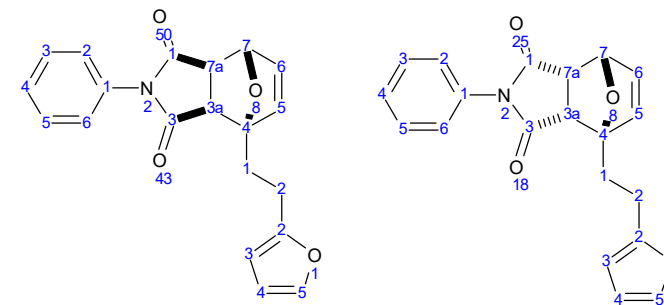


8a

FZ9360-1.ESP

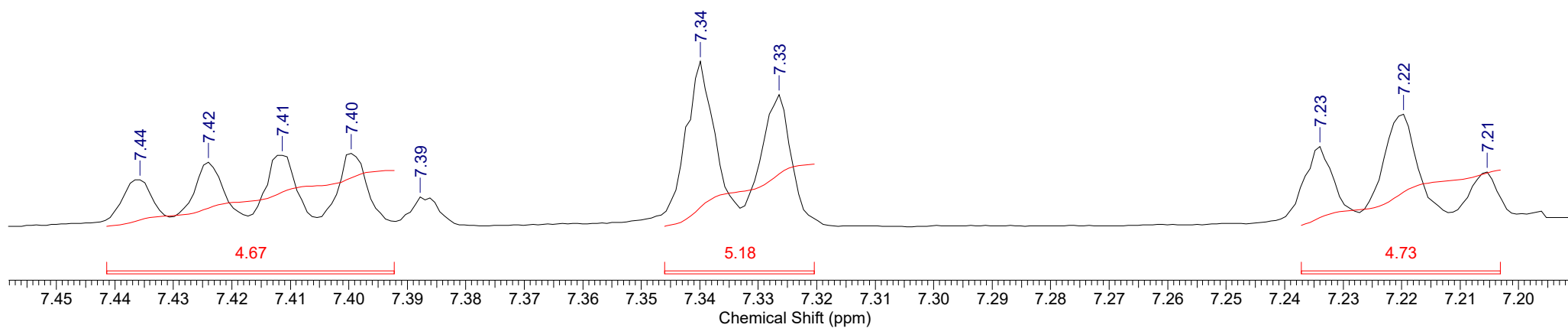


Acquisition Time (sec)	1.9818	Comment	single_pulse	Date	10 Dec 2020 11:52:23	Date Stamp	10 Dec 2020 11:05:30
File Name	H:\DOWNLOADS\FZ9360-1.JDF	Frequency (MHz)	600.17	Nucleus	1H	Number of Transients	8
Origin	ECA 600	Original Points Count	32768	Owner	CKP	Points Count	32768
Receiver Gain	46.00	Solvent	DMSO-d6	Spectrum Offset (Hz)	5423.7471	Sweep Width (Hz)	16534.39

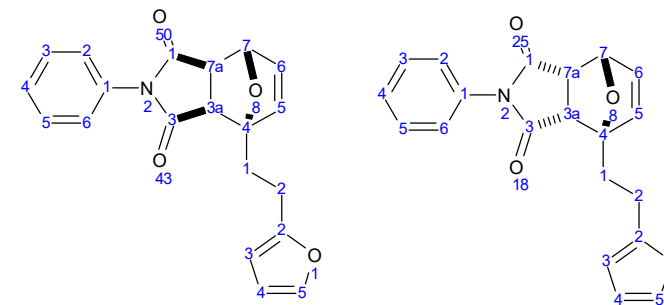


8a

FZ9360-1.ESP

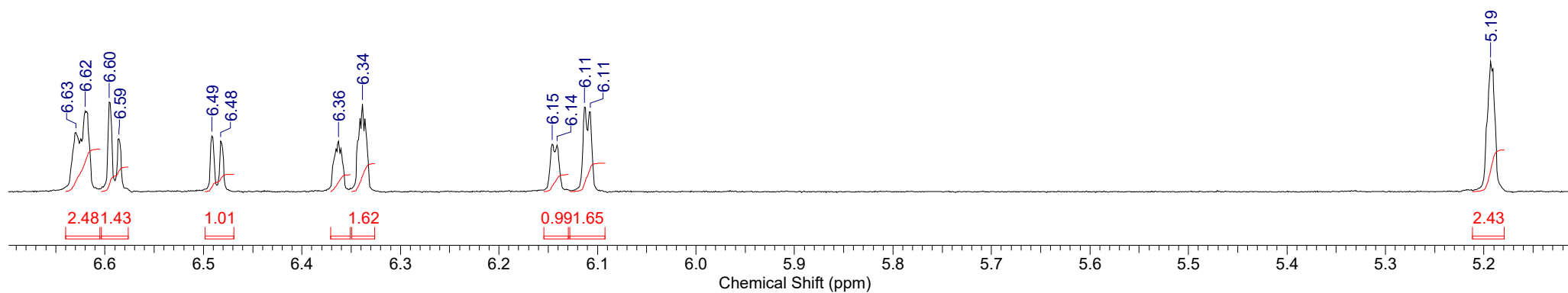


Acquisition Time (sec)	1.9818	Comment	single_pulse	Date	10 Dec 2020 11:52:23	Date Stamp	10 Dec 2020 11:05:30
File Name	H:\DOWNLOADS\FZ9360-1.JDF	Frequency (MHz)	600.17	Nucleus	1H	Number of Transients	8
Origin	ECA 600	Original Points Count	32768	Owner	CKP	Points Count	32768
Receiver Gain	46.00	Solvent	DMSO-d6	Spectrum Offset (Hz)	5423.7471	Sweep Width (Hz)	16534.39

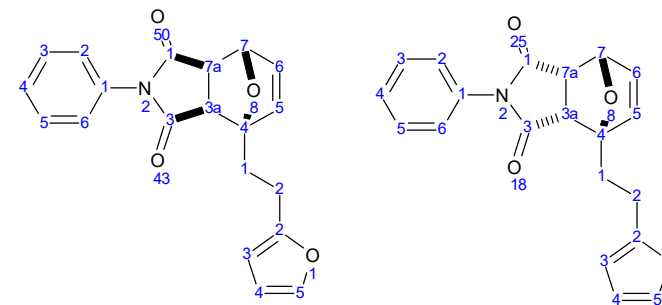


8a

FZ9360-1.ESP

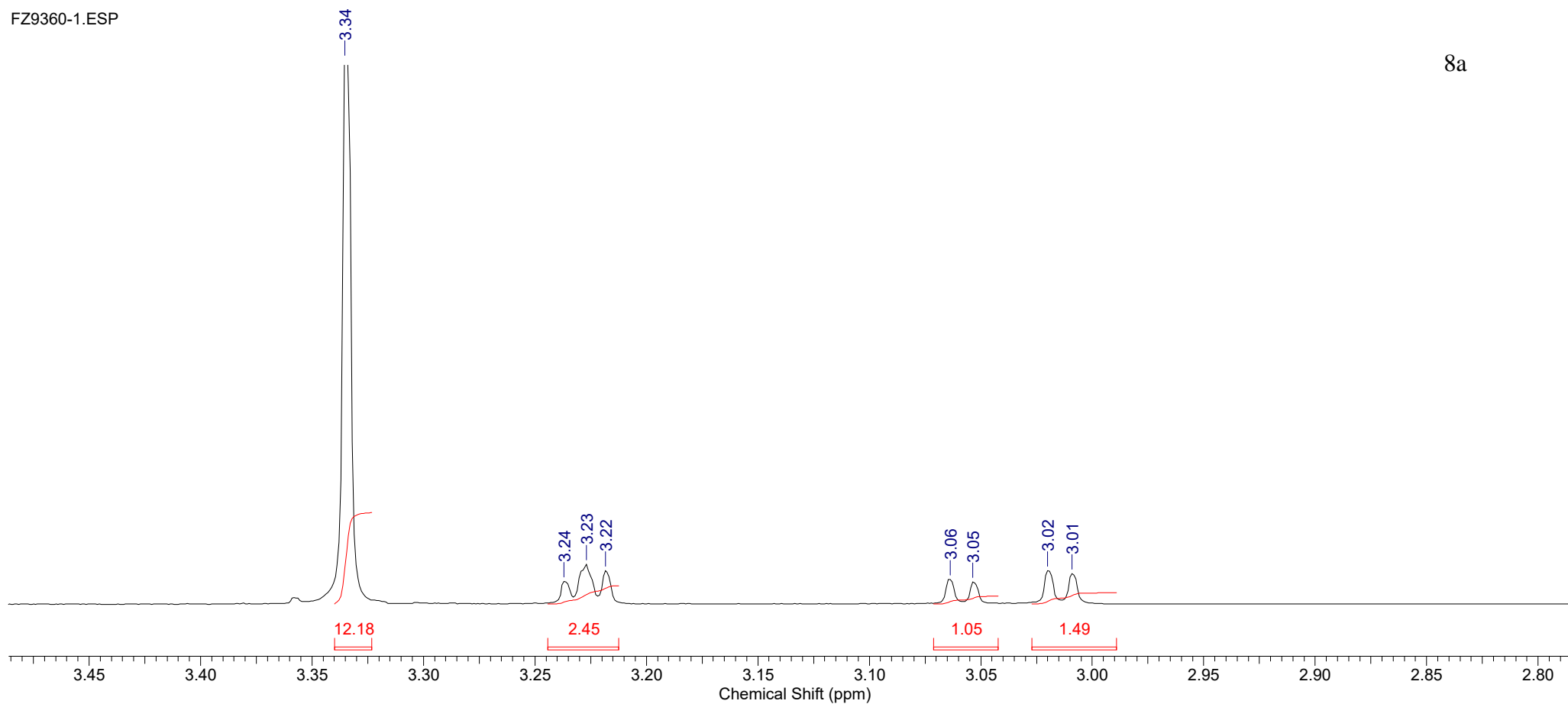


Acquisition Time (sec)	1.9818	Comment	single_pulse	Date	10 Dec 2020 11:52:23	Date Stamp	10 Dec 2020 11:05:30
File Name	H:\DOWNLOADS\FZ9360-1.JDF	Frequency (MHz)	600.17	Nucleus	1H	Number of Transients	8
Origin	ECA 600	Original Points Count	32768	Owner	CKP	Points Count	32768
Receiver Gain	46.00	Solvent	DMSO-d6	Spectrum Offset (Hz)	5423.7471	Sweep Width (Hz)	16534.39

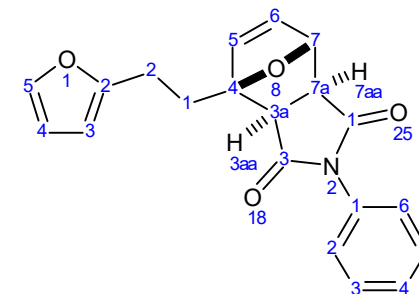


8a

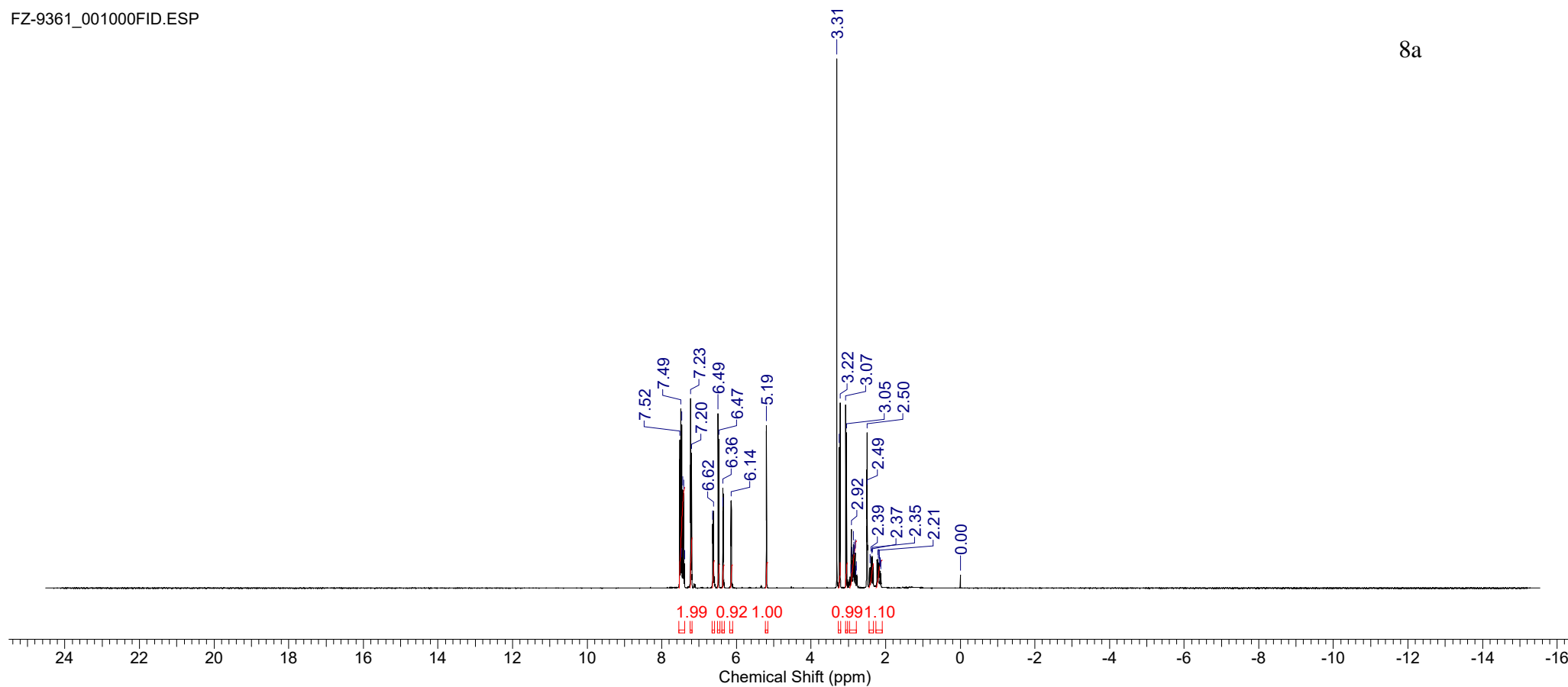
FZ9360-1.ESP



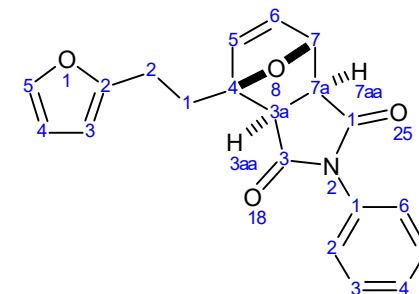
Acquisition Time (sec)	2.7263	Comment	FZ-9361	Date	21 Dec 2020 17:21:04				
Date Stamp	21 Dec 2020 17:21:04	File Name	C:\Users\User\Desktop\Poma 21.12.20\FZ-9361\FZ-9361_001000fid						
Frequency (MHz)	300.13	Nucleus	1H	Number of Transients	24	Origin	spect	Original Points Count	32768
Owner	nmr	Points Count	32768	Pulse Sequence	zg	Receiver Gain	202.48	SW(cyclical) (Hz)	12019.23
Solvent	DMSO-d6	Spectrum Offset (Hz)	1347.4315	Sweep Width (Hz)	12018.86	Temperature (degree C)	28.995		



FZ-9361_001000FID.ESP

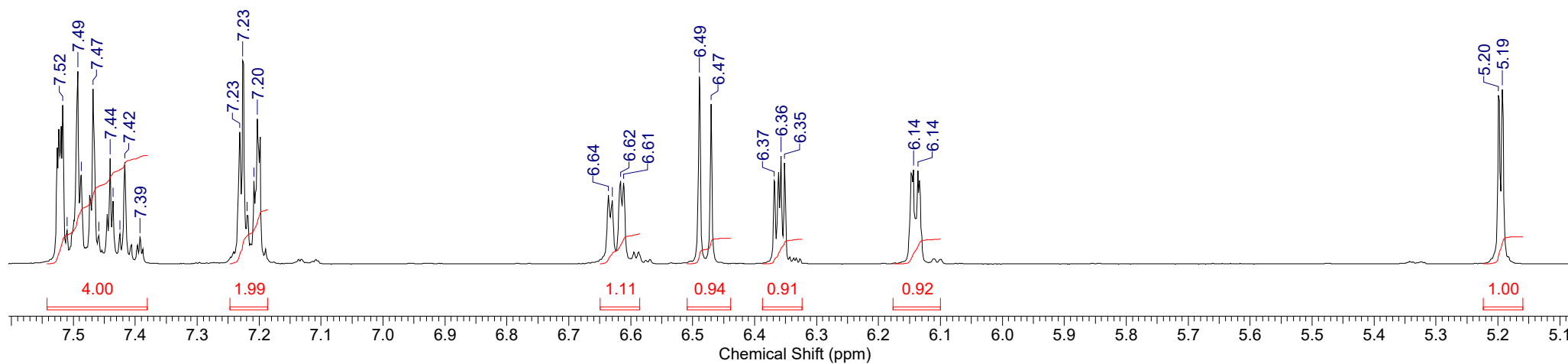


Acquisition Time (sec)	2.7263	Comment	FZ-9361	Date	21 Dec 2020 17:21:04				
Date Stamp	21 Dec 2020 17:21:04	File Name	C:\Users\User\Desktop\Poma 21.12.20\FZ-9361\FZ-9361_001000fid						
Frequency (MHz)	300.13	Nucleus	1H	Number of Transients	24	Origin	spect	Original Points Count	32768
Owner	nmr	Points Count	32768	Pulse Sequence	zg	Receiver Gain	202.48	SW(cyclical) (Hz)	12019.23
Solvent	DMSO-d6	Spectrum Offset (Hz)	1347.4315	Sweep Width (Hz)	12018.86	Temperature (degree C)	28.995		

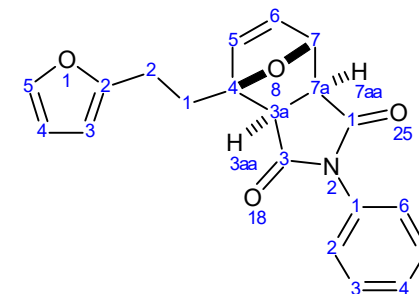


8a

FZ-9361_001000FID.ESP

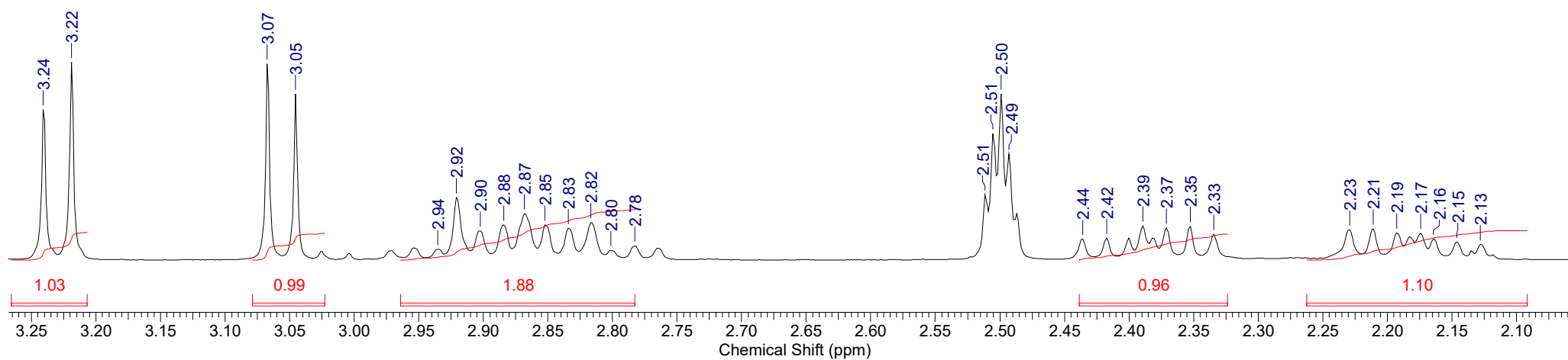


Acquisition Time (sec)	2.7263	Comment	FZ-9361	Date	21 Dec 2020 17:21:04				
Date Stamp	21 Dec 2020 17:21:04			File Name	C:\Users\User\Desktop\Poma 21.12.20\FZ-9361\FZ-9361_001000fid				
Frequency (MHz)	300.13	Nucleus	1H	Number of Transients	24	Origin	spect	Original Points Count	32768
Owner	nmr	Points Count	32768	Pulse Sequence	zg	Receiver Gain	202.48	SW(cyclical) (Hz)	12019.23
Solvent	DMSO-d6	Spectrum Offset (Hz)	1347.4315	Sweep Width (Hz)	12018.86	Temperature (degree C)	28.995		

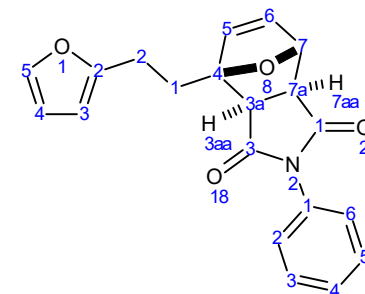


FZ-9361_001000FID.ESP

8a

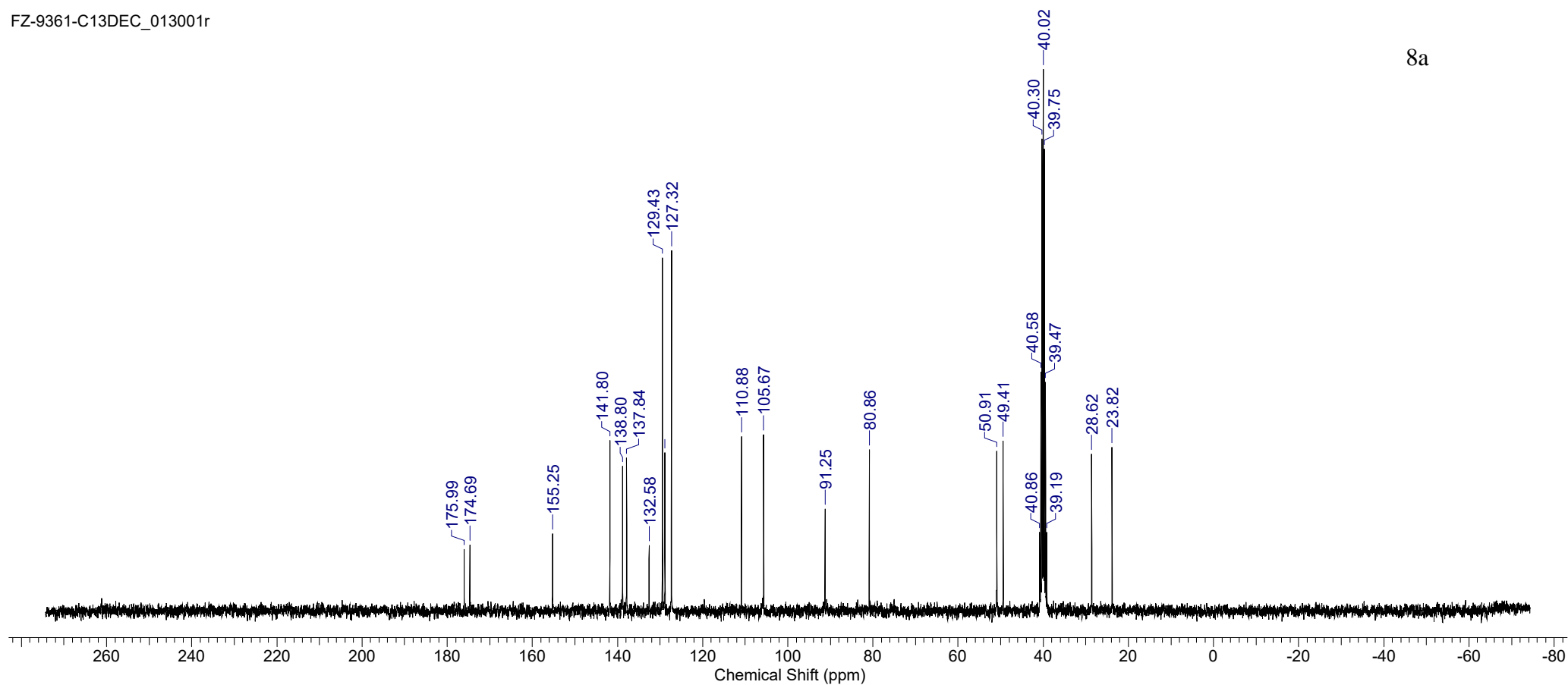


Acquisition Time (sec)	0.9339	Comment	FZ-9361-C13dec		Date	23 Dec 2020 17:50:56			
Date Stamp	23 Dec 2020 17:50:56	File Name	C:\USERS\LIZA\DESKTOP\FZ-9361-C13DEC_013001r						
Frequency (MHz)	75.47	Nucleus	13C	Number of Transients	432	Origin	spect	Original Points Count	24576
Owner	nmr	Points Count	131072	Pulse Sequence	zgpg	Receiver Gain	202.48	SW(cyclical) (Hz)	26315.79
Solvent	DMSO-d6	Spectrum Offset (Hz)	7546.7729	Sweep Width (Hz)	26315.59	Temperature (degree C)	29.042		

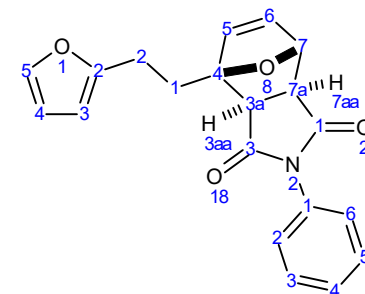


8a

FZ-9361-C13DEC_013001r

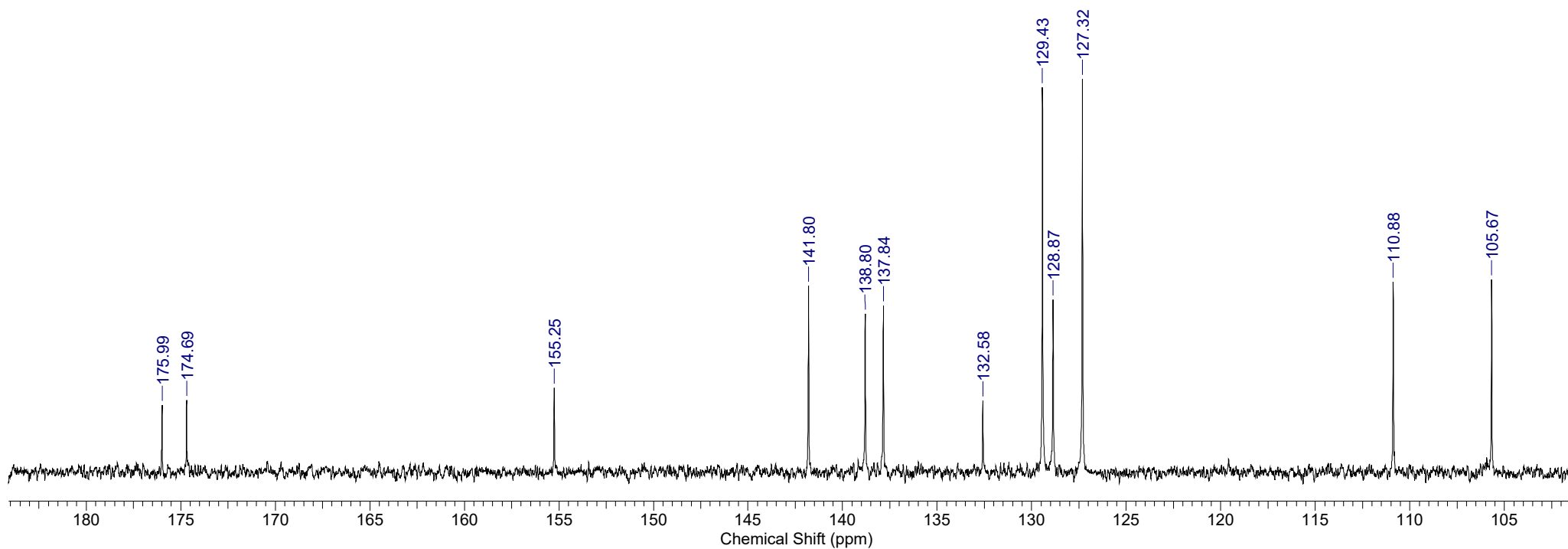


Acquisition Time (sec)	0.9339	Comment	FZ-9361-C13dec	Date	23 Dec 2020 17:50:56				
Date Stamp	23 Dec 2020 17:50:56	File Name	C:\USERS\LIZA \DESKTOP\FZ-9361-C13DEC_013001r						
Frequency (MHz)	75.47	Nucleus	13C	Number of Transients	432	Origin	spect	Original Points Count	24576
Owner	nmr	Points Count	131072	Pulse Sequence	zgpgg	Receiver Gain	202.48	SW(cyclical) (Hz)	26315.79
Solvent	DMSO-d6	Spectrum Offset (Hz)	7546.7729	Sweep Width (Hz)	26315.59	Temperature (degree C)	29.042		



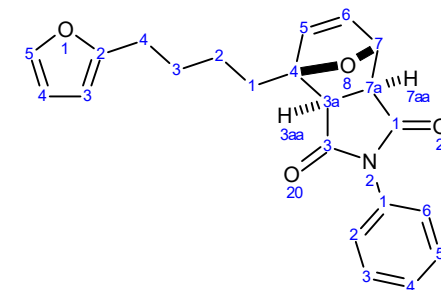
FZ-9361-C13DEC_013001r

8a



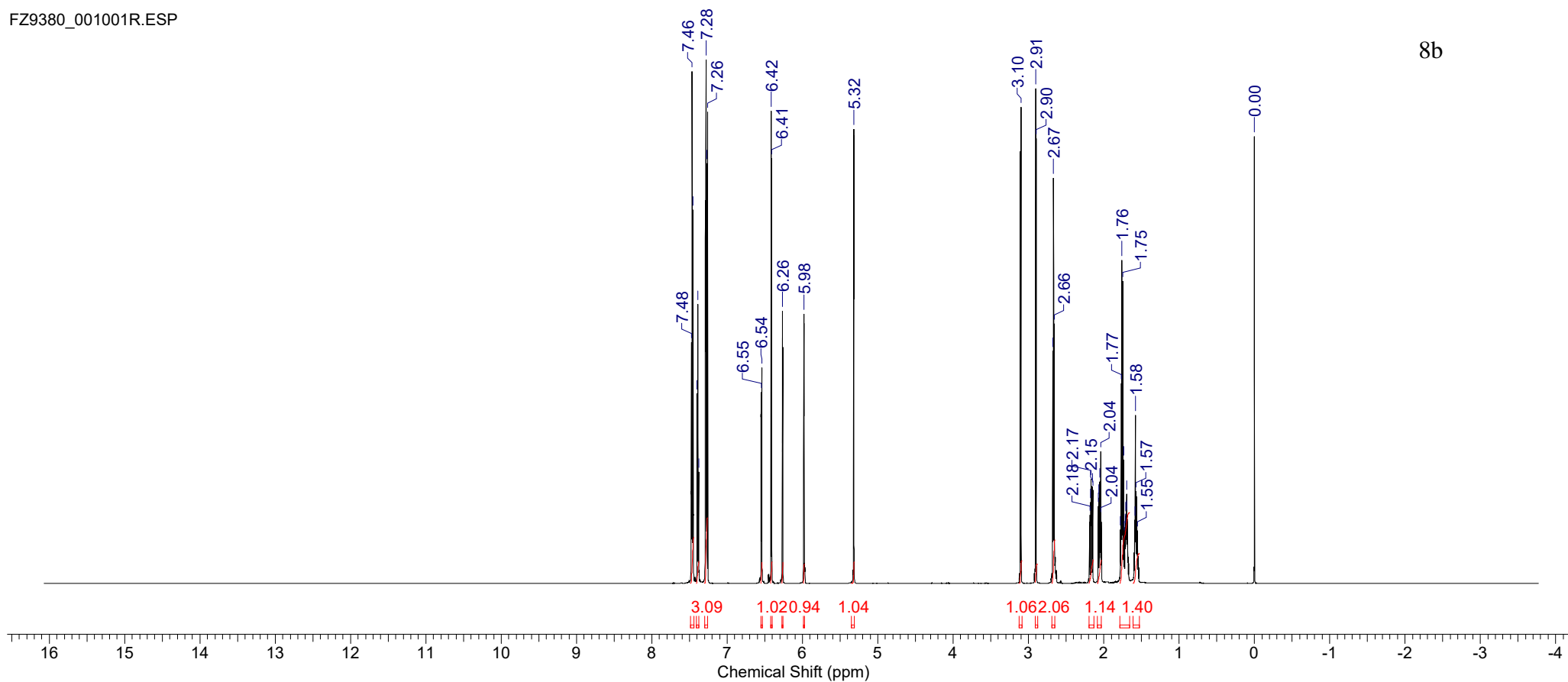
Formula C ₂₂ H ₂₁ NO ₄	FW 363.4064
--	--------------------

Acquisition Time (sec) 2.3593	Date 27 Jan 2021 09:21:04	Date Stamp 27 Jan 2021 09:21:04
File Name C:\Users\User\Desktop\27.01.21\FZ9380_001001r	Frequency (MHz) 700.17	Nucleus 1H
Origin Avance	Original Points Count 32768	Owner nmr
Receiver Gain 32.00	SW(cyclical) (Hz) 13888.89	Points Count 65536
Sweep Width (Hz) 13888.68	Temperature (degree C) 25.007	Solvent CHLOROFORM-d
		Number of Transients 8
		Pulse Sequence zg30
		Spectrum Offset (Hz) 4305.6274



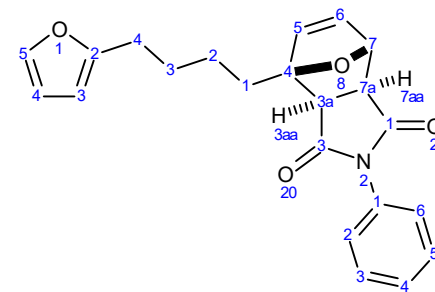
8b

FZ9380_001001R.ESP

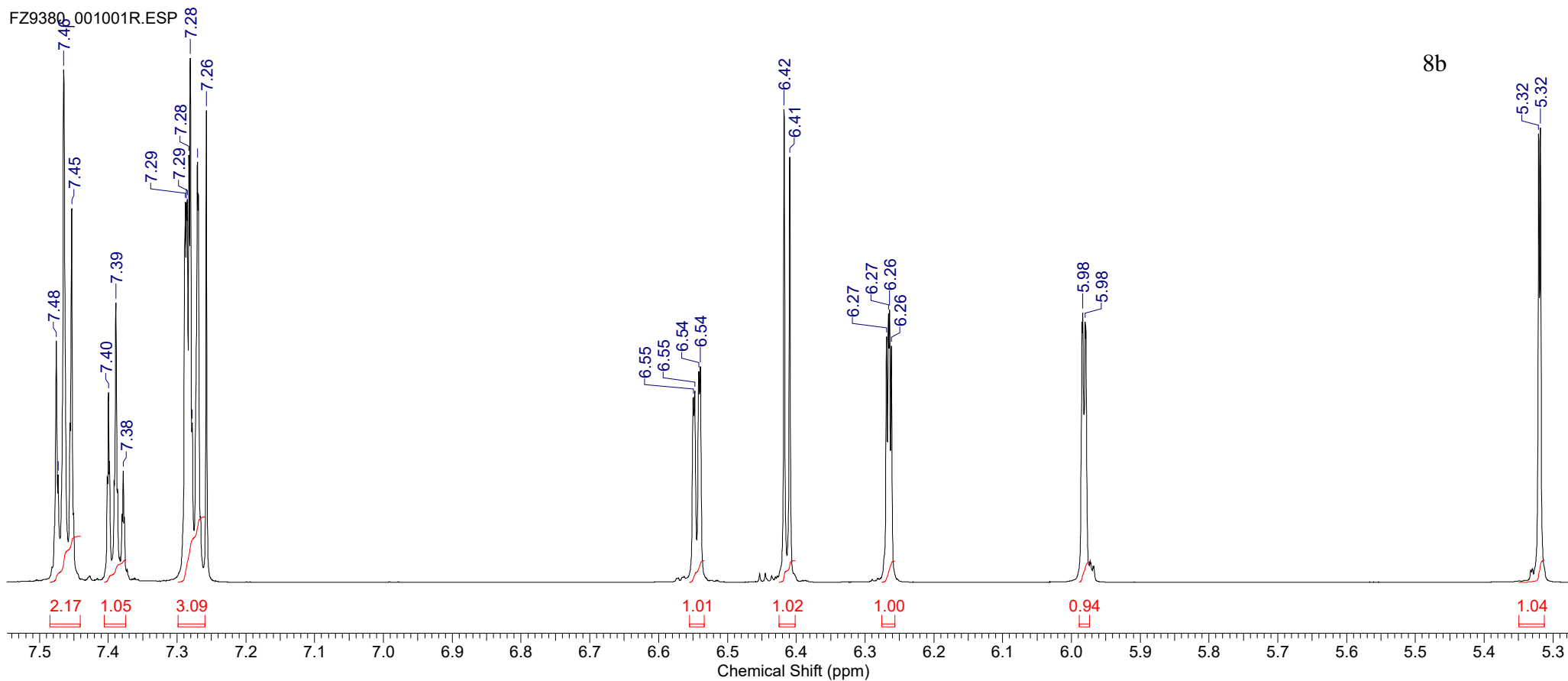


Formula C ₂₂ H ₂₁ NO ₄	FW 363.4064
--	--------------------

Acquisition Time (sec) 2.3593	Date 27 Jan 2021 09:21:04	Date Stamp 27 Jan 2021 09:21:04
File Name C:\Users\User\Desktop\27.01.21\FZ9380_001001r	Frequency (MHz) 700.17	Nucleus 1H
Origin Avance	Original Points Count 32768	Owner nmr
Receiver Gain 32.00	SW(cyclical) (Hz) 13888.89	Solvent CHLOROFORM-d
Sweep Width (Hz) 13888.68	Temperature (degree C) 25.007	Number of Transients 8
		Pulse Sequence zg30
		Spectrum Offset (Hz) 4305.6274

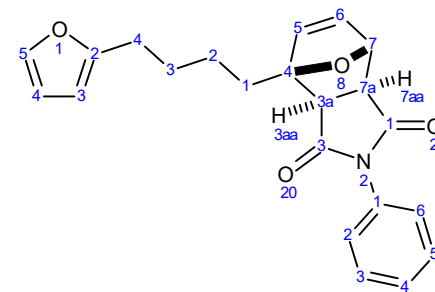


8b

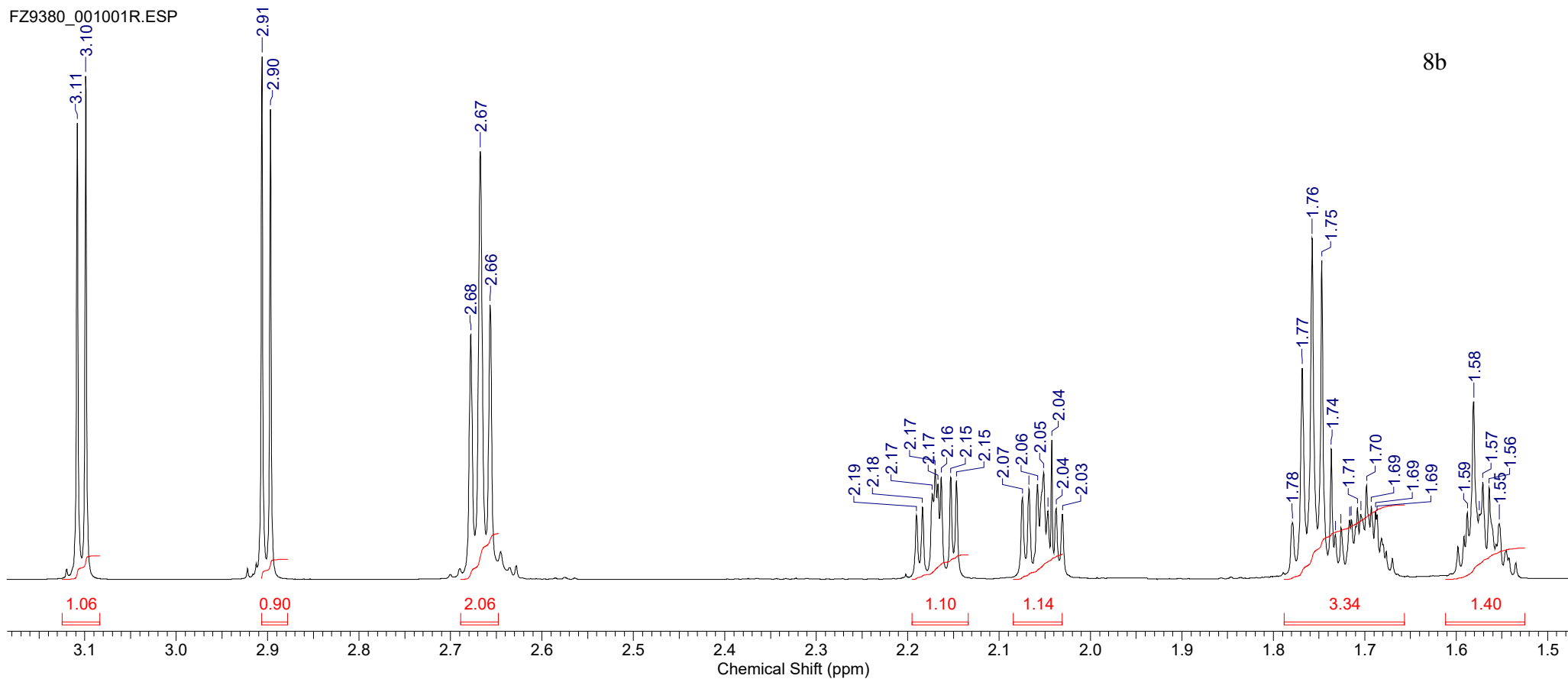


Formula C₂₂H₂₁NO₄ FW 363.4064

Acquisition Time (sec)	2.3593	Date	27 Jan 2021 09:21:04	Date Stamp	27 Jan 2021 09:21:04
File Name	C:\Users\User\Desktop\27.01.21\FZ9380_001001r	Frequency (MHz)	700.17	Nucleus	1H
Origin	Avance	Original Points Count	32768	Points Count	65536
Receiver Gain	32.00	SW(cyclical) (Hz)	13888.89	Solvent	CHLOROFORM-d
Sweep Width (Hz)	13888.68	Temperature (degree C)	25.007	Number of Transients	8
				Pulse Sequence	zg30
				Spectrum Offset (Hz)	4305.6274

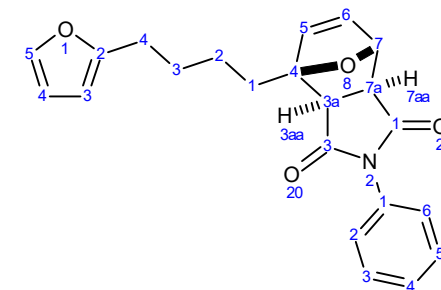


8b



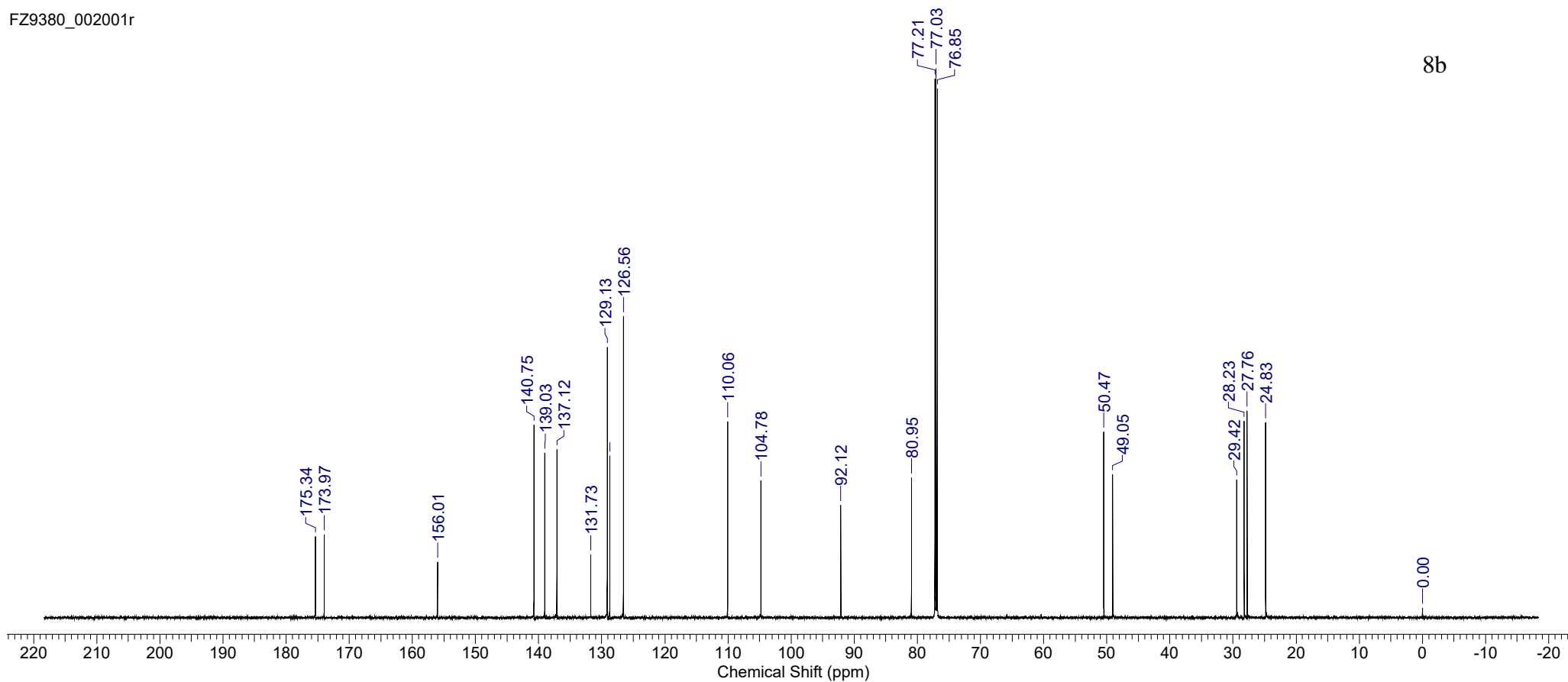
Formula C ₂₂ H ₂₁ NO ₄	FW 363.4064
--	--------------------

Acquisition Time (sec) 0.7864	Date 27 Jan 2021 11:41:52	Date Stamp 27 Jan 2021 11:41:52
File Name H:\DESKTOP\FZ9380_002001r	Frequency (MHz) 176.06	Nucleus 13C
Origin Avance	Original Points Count 32768	Points Count 32768
Receiver Gain 101.00	SW(cyclical) (Hz) 41666.67	Solvent CHLOROFORM-d
Sweep Width (Hz) 41665.39	Temperature (degree C) 25.005	Number of Transients 512
		Pulse Sequence zgpg30
		Spectrum Offset (Hz) 17602.9199



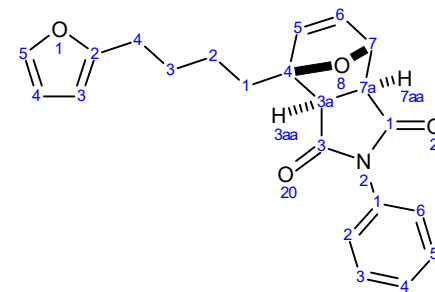
8b

FZ9380_002001r



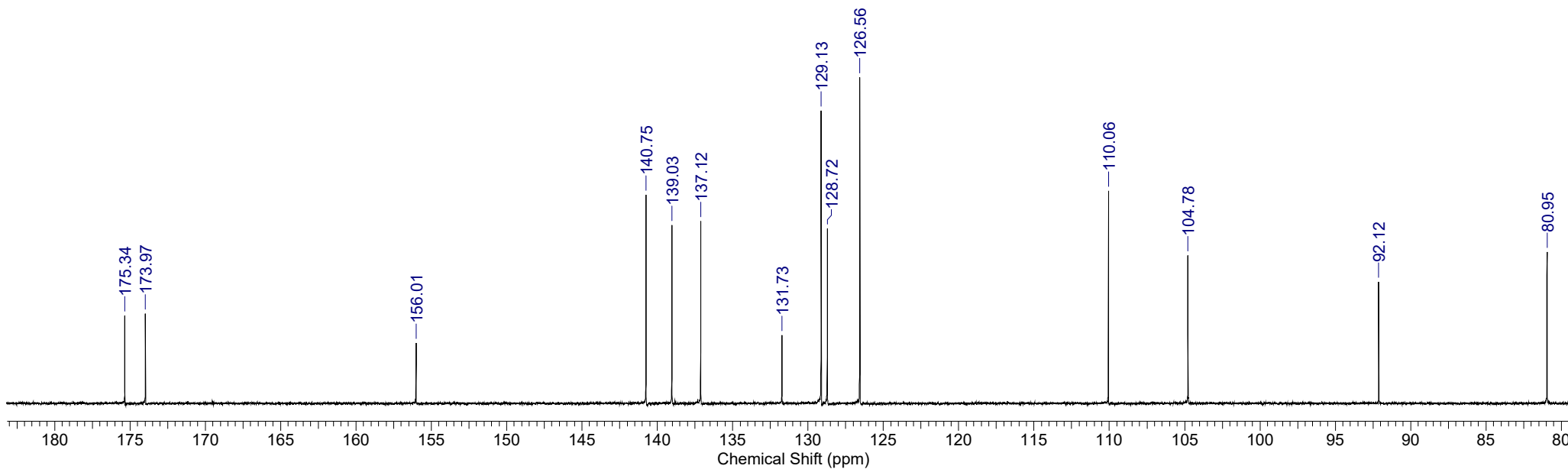
Formula C ₂₂ H ₂₁ NO ₄	FW 363.4064
--	--------------------

Acquisition Time (sec) 0.7864	Date 27 Jan 2021 11:41:52	Date Stamp 27 Jan 2021 11:41:52
File Name H:\DESKTOP\FZ9380_002001r	Frequency (MHz) 176.06	Nucleus 13C
Origin Avance	Original Points Count 32768	Points Count 32768
Receiver Gain 101.00	SW(cyclical) (Hz) 41666.67	Solvent CHLOROFORM-d
Sweep Width (Hz) 41665.39	Temperature (degree C) 25.005	Number of Transients 512
		Pulse Sequence zgpg30
		Spectrum Offset (Hz) 17602.9199



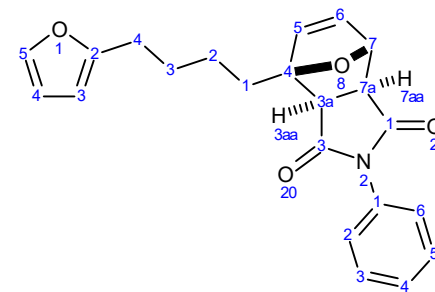
FZ9380_002001r

8b



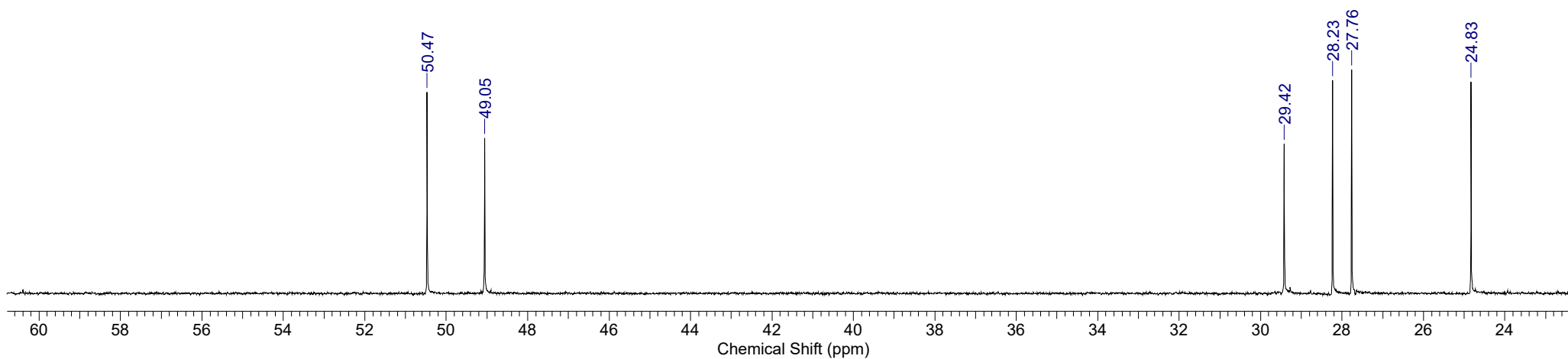
Formula C₂₂H₂₁NO₄ FW 363.4064

Acquisition Time (sec)	0.7864	Date	27 Jan 2021 11:41:52		Date Stamp	27 Jan 2021 11:41:52			
File Name	H:\DESKTOP\FZ9380_002001r		Frequency (MHz)	176.06	Nucleus	13C	Number of Transients	512	
Origin	Avance	Original Points Count	32768	Owner	nmr	Points Count	32768	Pulse Sequence	zgpg30
Receiver Gain	101.00	SW(cyclical) (Hz)	41666.67	Solvent	CHLOROFORM-d		Spectrum Offset (Hz)	17602.9199	
Sweep Width (Hz)	41665.39	Temperature (degree C)	25.005						

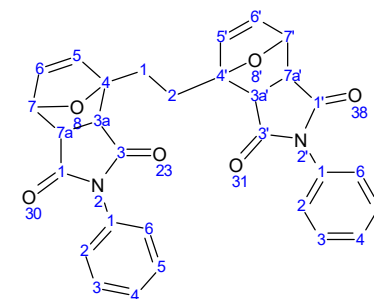


8b

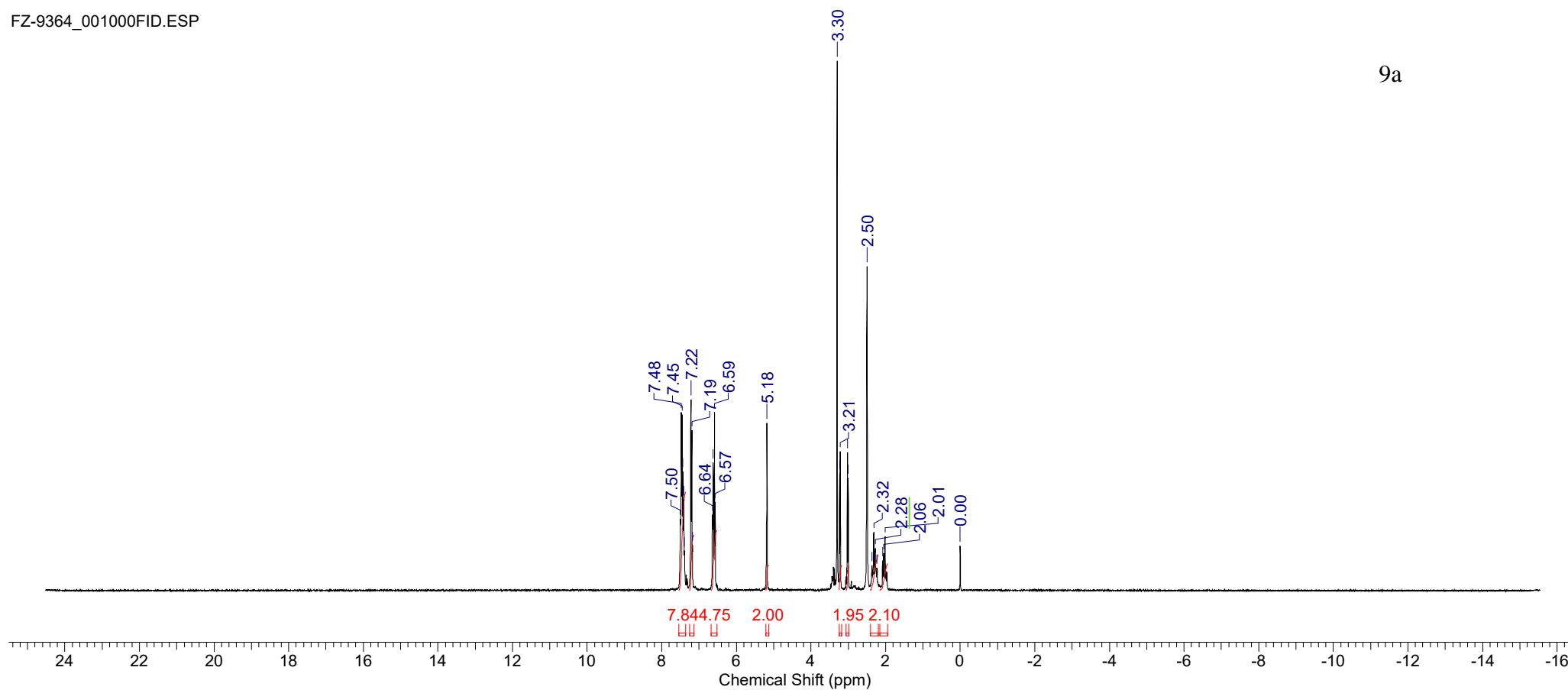
FZ9380_002001r



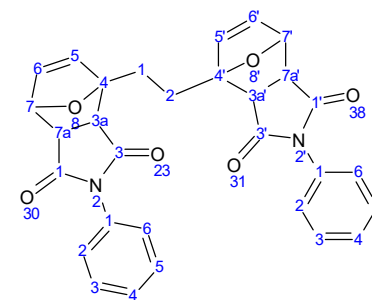
Acquisition Time (sec)	2.7263	Comment	FZ-9364	Date	21 Dec 2020 17:04:00				
Date Stamp	21 Dec 2020 17:04:00			File Name	C:\Users\User\Desktop\Poma 21.12.20\FZ-9364\FZ-9364_001000fid				
Frequency (MHz)	300.13	Nucleus	1H	Number of Transients	24	Origin	spect	Original Points Count	32768
Owner	nmr	Points Count	32768	Pulse Sequence	zg	Receiver Gain	202.48	SW(cyclical) (Hz)	12019.23
Solvent	DMSO-d6	Spectrum Offset (Hz)	1347.0648	Sweep Width (Hz)	12018.86	Temperature (degree C)	28.989		



FZ-9364_001000FID.ESP

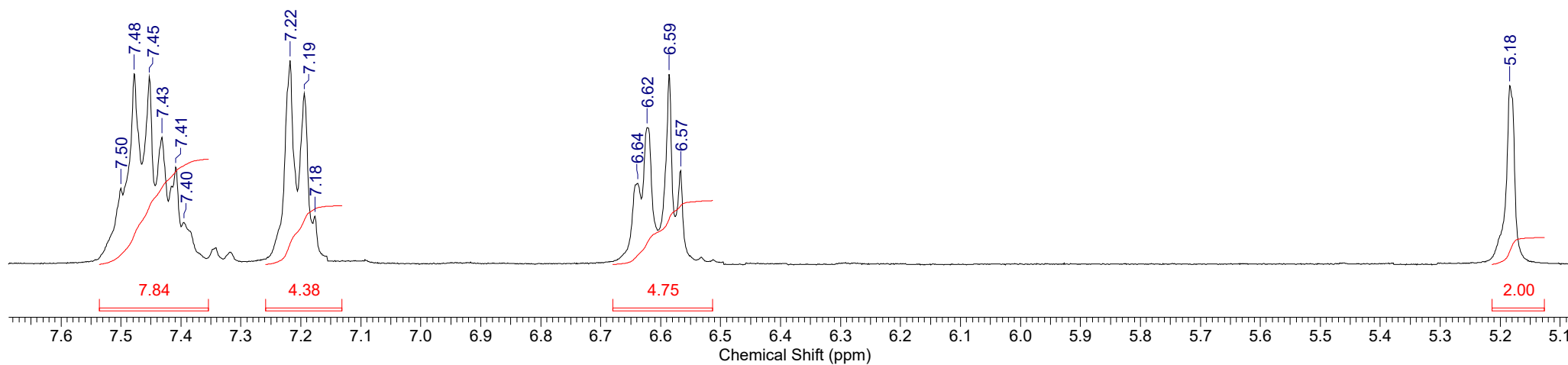


Acquisition Time (sec)	2.7263	Comment	FZ-9364	Date	21 Dec 2020 17:04:00				
Date Stamp	21 Dec 2020 17:04:00			File Name	C:\Users\User\Desktop\Poma 21.12.20\FZ-9364\FZ-9364_001000fid				
Frequency (MHz)	300.13	Nucleus	1H	Number of Transients	24	Origin	spect	Original Points Count	32768
Owner	nmr	Points Count	32768	Pulse Sequence	zg	Receiver Gain	202.48	SW(cyclical) (Hz)	12019.23
Solvent	DMSO-d6	Spectrum Offset (Hz)	1347.0648	Sweep Width (Hz)	12018.86	Temperature (degree C)	28.989		

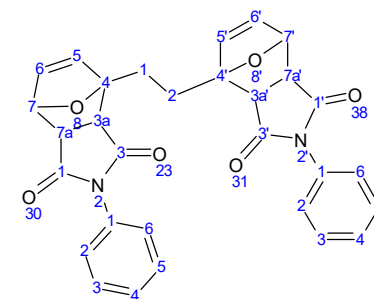


FZ-9364_001000FID.ESP

9a

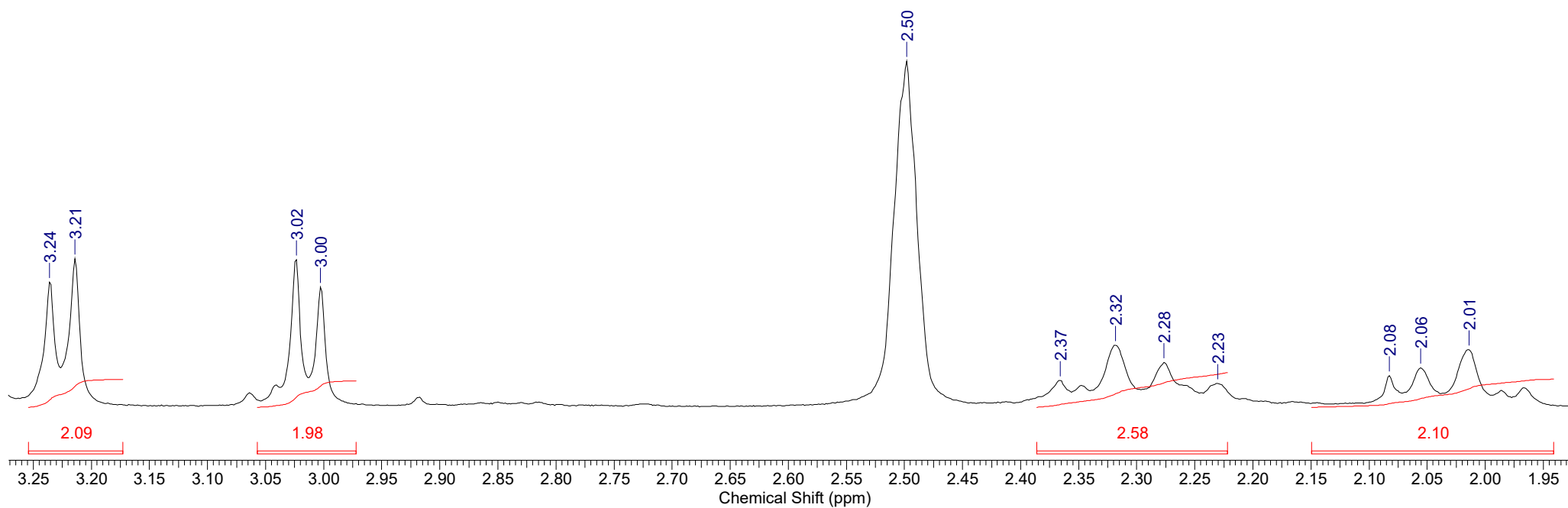


Acquisition Time (sec)	2.7263	Comment	FZ-9364	Date	21 Dec 2020 17:04:00				
Date Stamp	21 Dec 2020 17:04:00		File Name	C:\Users\User\Desktop\Poma 21.12.20\FZ-9364\FZ-9364_001000fid					
Frequency (MHz)	300.13	Nucleus	1H	Number of Transients	24	Origin	spect	Original Points Count	32768
Owner	nmr	Points Count	32768	Pulse Sequence	zg	Receiver Gain	202.48	SW(cyclical) (Hz)	12019.23
Solvent	DMSO-d6	Spectrum Offset (Hz)	1347.0648	Sweep Width (Hz)	12018.86	Temperature (degree C)	28.989		

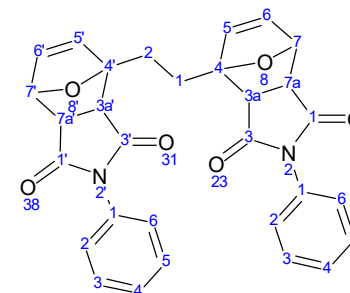


FZ-9364_001000FID.ESP

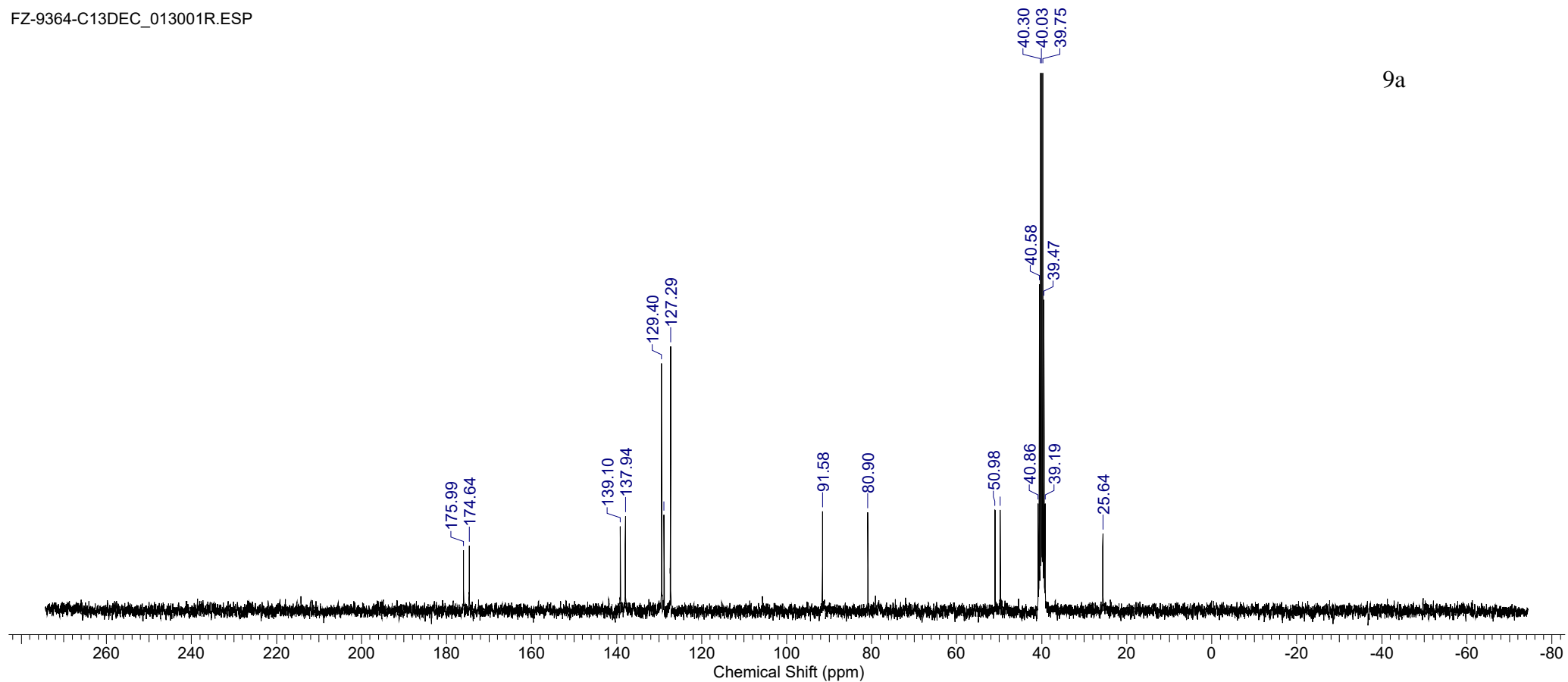
9a



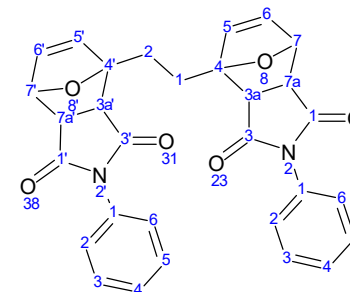
Acquisition Time (sec)	0.9339	Comment	FZ-9364-C13dec		Date	23 Dec 2020 18:01:36			
Date Stamp	23 Dec 2020 18:01:36		File Name	C:\USERS\LIZA\DESKTOP\FZ-9364-C13DEC_013001r					
Frequency (MHz)	75.47	Nucleus	13C	Number of Transients	728	Origin	spect	Original Points Count	24576
Owner	nmr	Points Count	131072	Pulse Sequence	zgpgg	Receiver Gain	202.48	SW(cyclical) (Hz)	26315.79
Solvent	DMSO-d6	Spectrum Offset (Hz)	7546.7729	Sweep Width (Hz)	26315.59	Temperature (degree C)	29.171		



FZ-9364-C13DEC_013001R.ESP

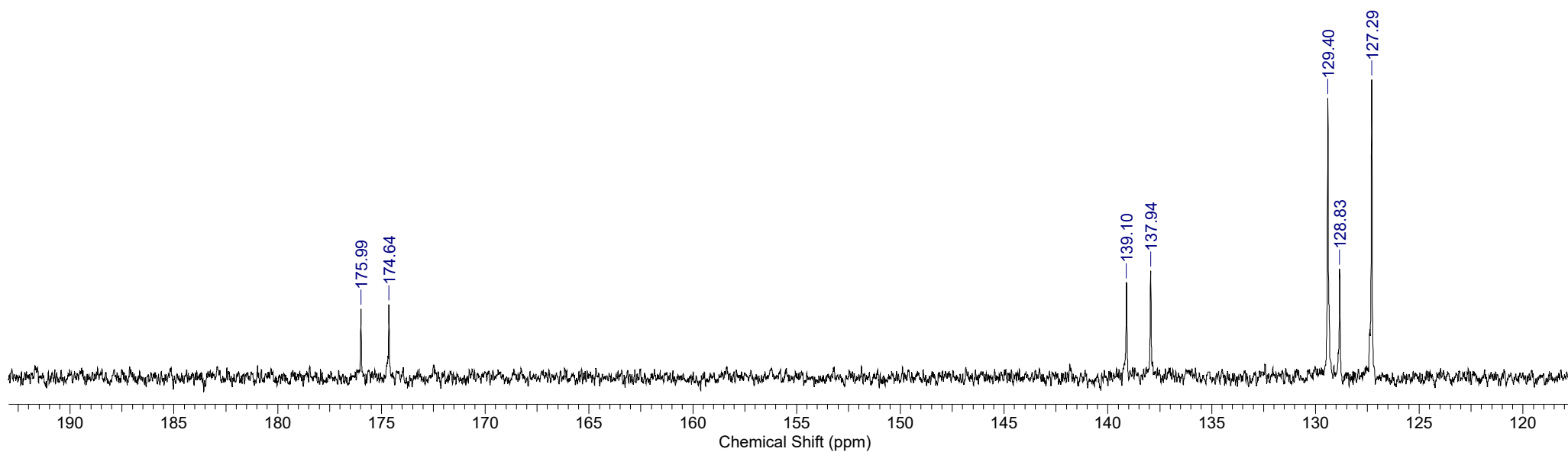


Acquisition Time (sec)	0.9339	Comment	FZ-9364-C13dec		Date	23 Dec 2020 18:01:36			
Date Stamp	23 Dec 2020 18:01:36		File Name	C:\USERS\LIZA\DESKTOP\FZ-9364-C13DEC_013001r					
Frequency (MHz)	75.47	Nucleus	13C	Number of Transients	728	Origin	spect	Original Points Count	24576
Owner	nmr	Points Count	131072	Pulse Sequence	zgpg	Receiver Gain	202.48	SW(cyclical) (Hz)	26315.79
Solvent	DMSO-d6	Spectrum Offset (Hz)	7546.7729	Sweep Width (Hz)	26315.59	Temperature (degree C)	29.171		

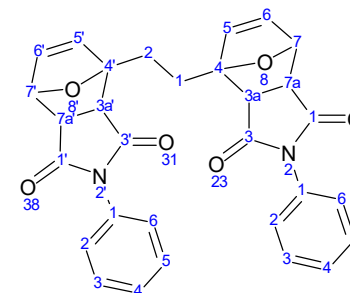


FZ-9364-C13DEC_013001R.ESP

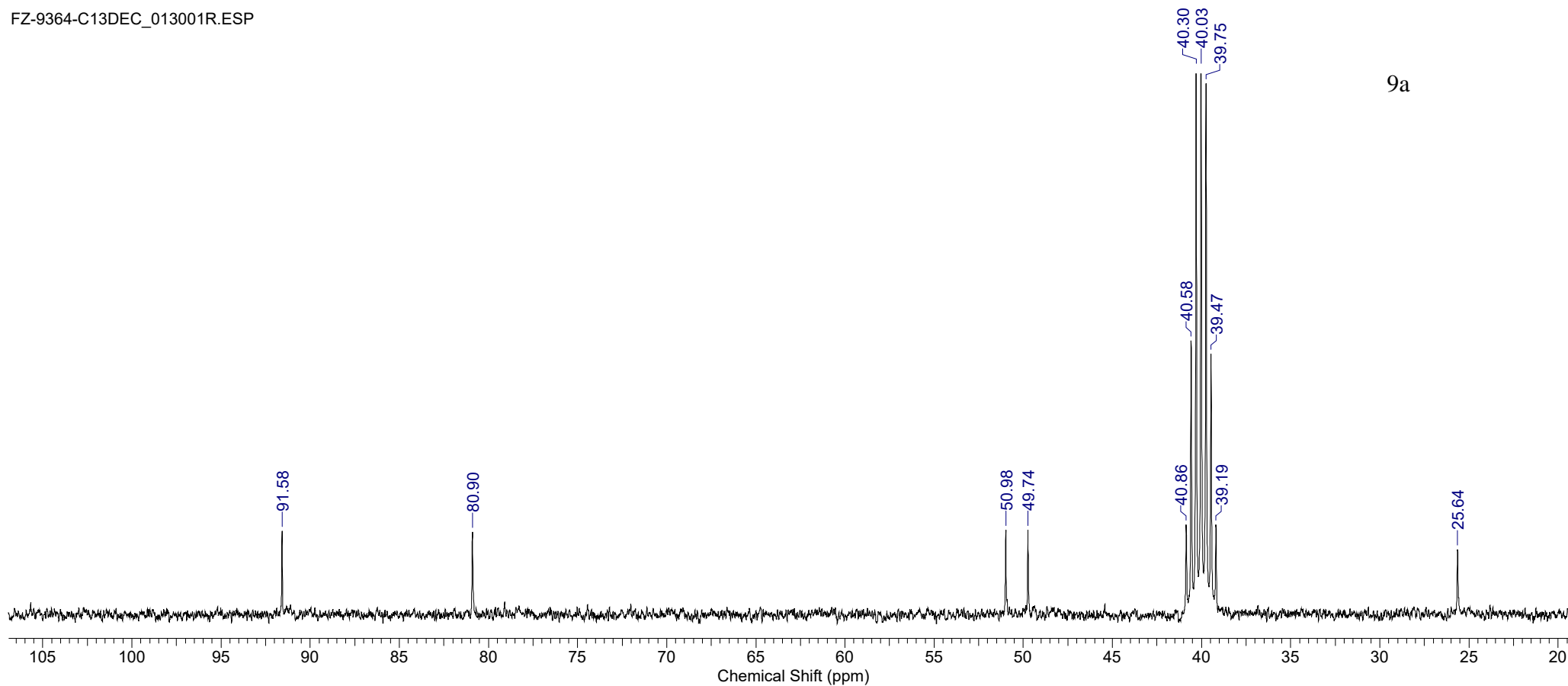
9a



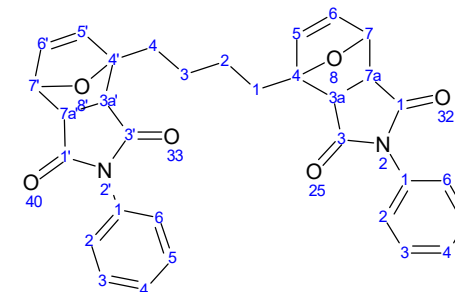
Acquisition Time (sec)	0.9339	Comment	FZ-9364-C13dec		Date	23 Dec 2020 18:01:36			
Date Stamp	23 Dec 2020 18:01:36	File Name	C:\USERS\LIZA\DESKTOP\FZ-9364-C13DEC_013001r						
Frequency (MHz)	75.47	Nucleus	13C	Number of Transients	728	Origin	spect	Original Points Count	24576
Owner	nmr	Points Count	131072	Pulse Sequence	zgpg	Receiver Gain	202.48	SW(cyclical) (Hz)	26315.79
Solvent	DMSO-d6	Spectrum Offset (Hz)	7546.7729	Sweep Width (Hz)	26315.59	Temperature (degree C)	29.171		



FZ-9364-C13DEC_013001R.ESP

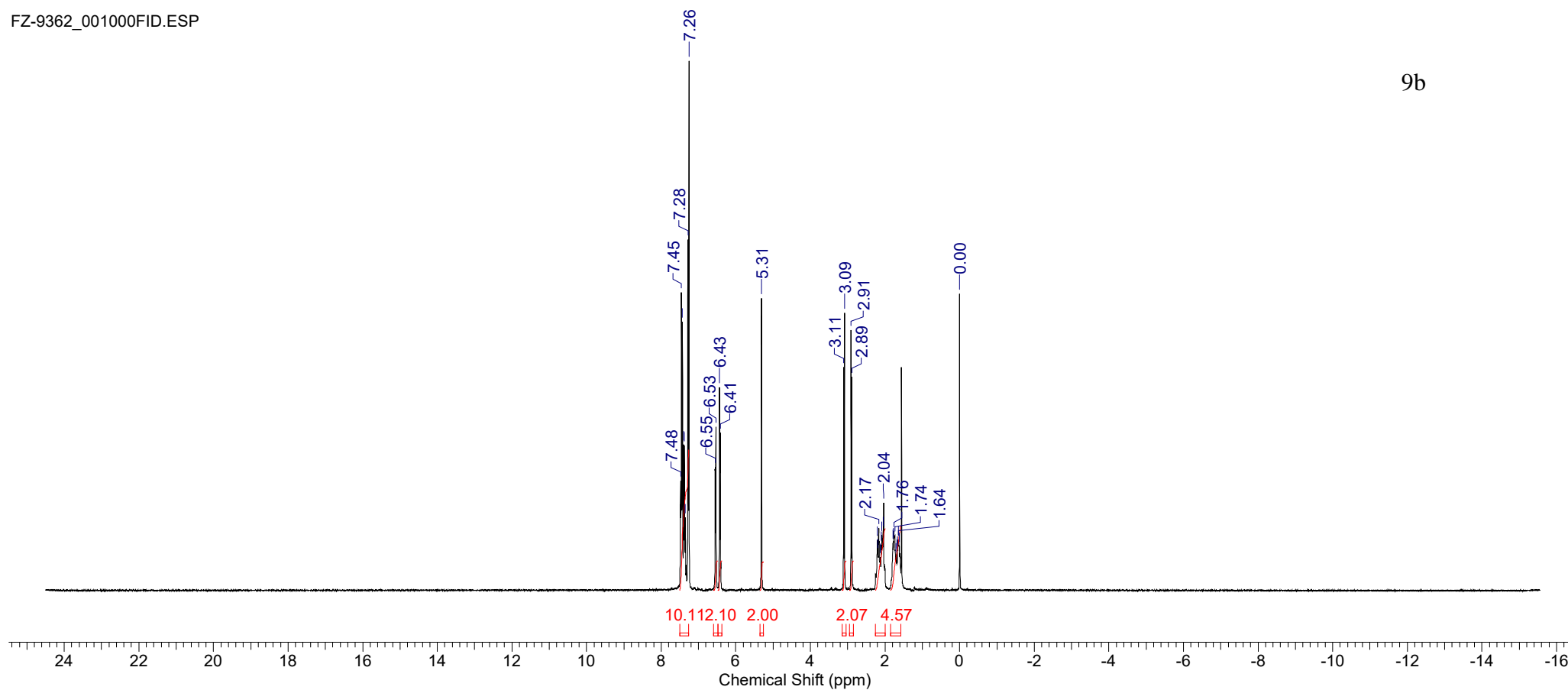


Acquisition Time (sec)	2.7263	Comment	FZ-9362	Date	21 Dec 2020 16:51:12				
Date Stamp	21 Dec 2020 16:51:12		File Name	C:\Users\User\Desktop\Poma 21.12.20\FZ-9362\FZ-9362_001000fid					
Frequency (MHz)	300.13	Nucleus	1H	Number of Transients	24	Origin	spect	Original Points Count	32768
Owner	nmr	Points Count	32768	Pulse Sequence	zg	Receiver Gain	202.48	SW(cyclical) (Hz)	12019.23
Solvent	CHLOROFORM-d		Spectrum Offset (Hz)	1342.2964	Sweep Width (Hz)	12018.86	Temperature (degree C)	28.998	

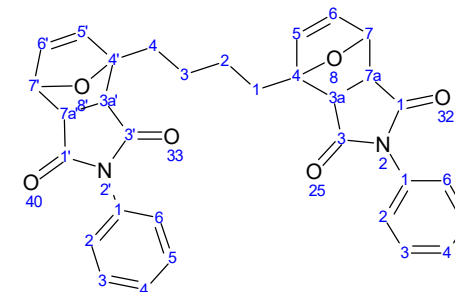


FZ-9362_001000FID.ESP

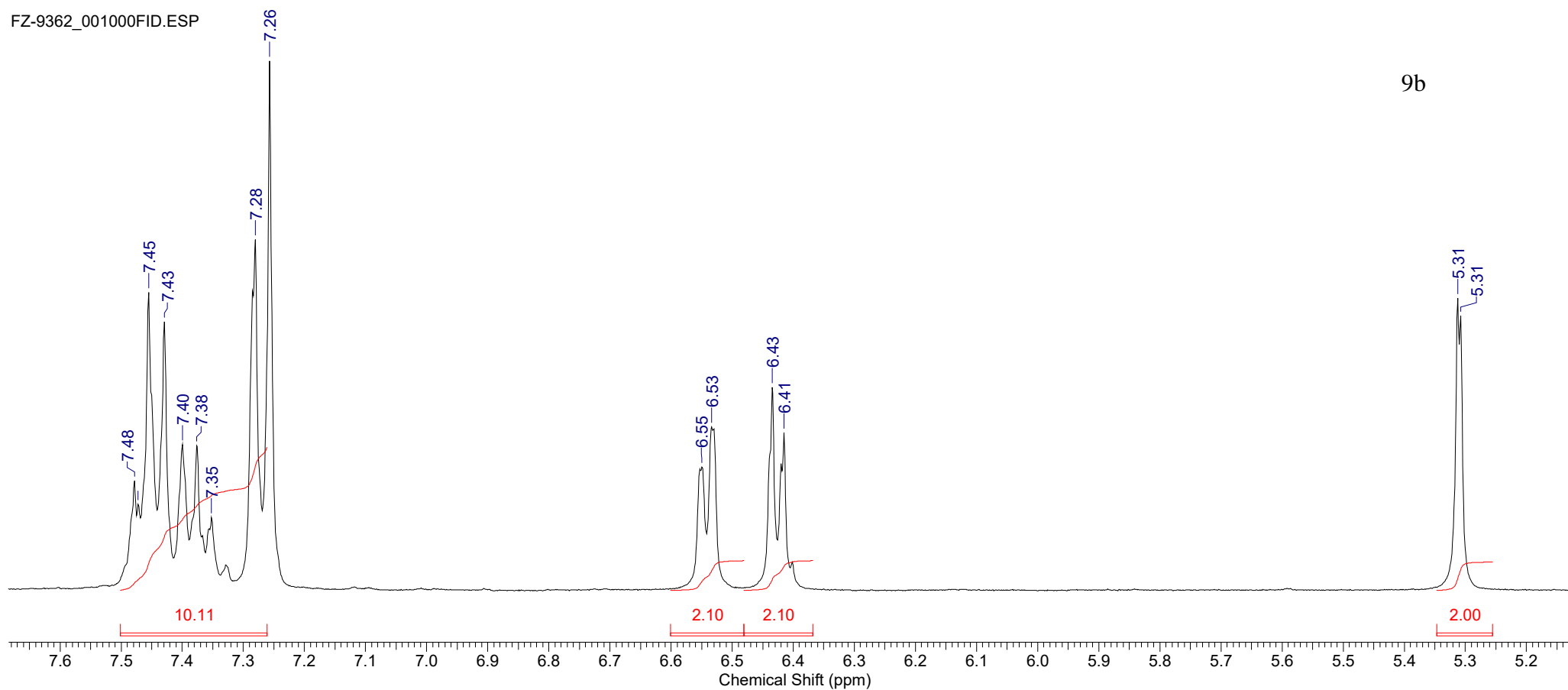
9b



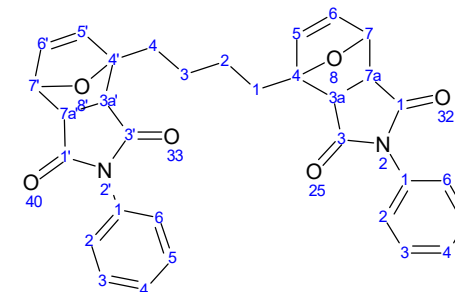
Acquisition Time (sec)	2.7263	Comment	FZ-9362	Date	21 Dec 2020 16:51:12				
Date Stamp	21 Dec 2020 16:51:12	File Name	C:\Users\User\Desktop\Poma 21.12.20\FZ-9362\FZ-9362 001000fid						
Frequency (MHz)	300.13	Nucleus	1H	Number of Transients	24	Origin	spect	Original Points Count	32768
Owner	nmr	Points Count	32768	Pulse Sequence	zg	Receiver Gain	202.48	SW(cyclical) (Hz)	12019.23
Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	1342.2964	Sweep Width (Hz)	12018.86	Temperature (degree C)	28.998		



FZ-9362_001000FID.ESP

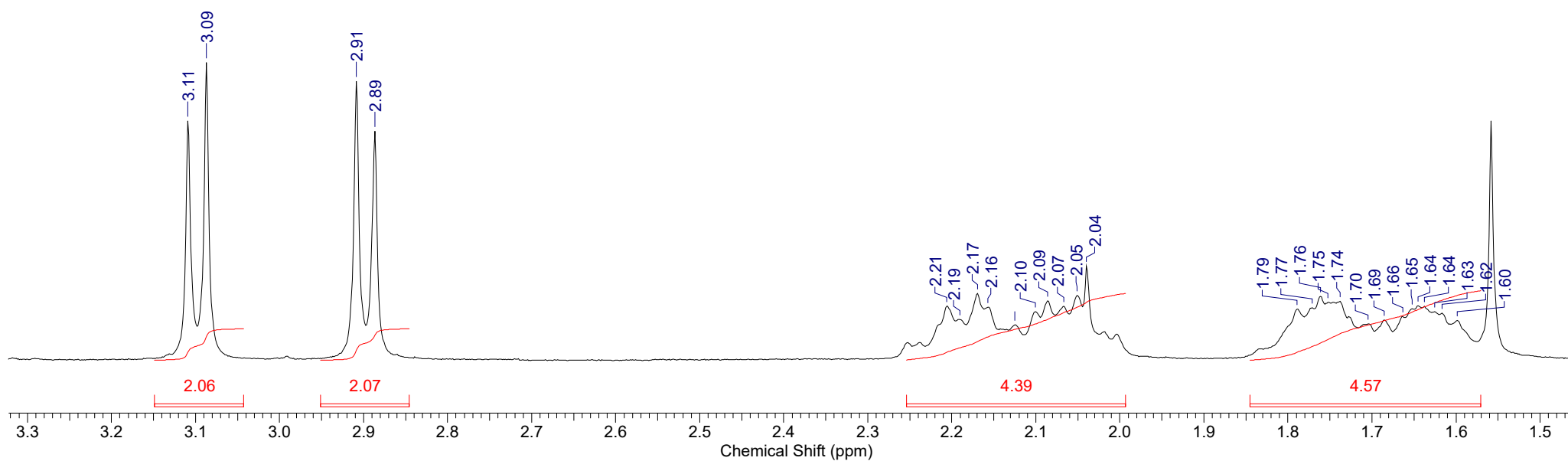


Acquisition Time (sec)	2.7263	Comment	FZ-9362	Date	21 Dec 2020 16:51:12				
Date Stamp	21 Dec 2020 16:51:12		File Name	C:\Users\User\Desktop\Poma 21.12.20\FZ-9362\FZ-9362_001000fid					
Frequency (MHz)	300.13	Nucleus	1H	Number of Transients	24	Origin	spect	Original Points Count	32768
Owner	nmr	Points Count	32768	Pulse Sequence	zg	Receiver Gain	202.48	SW(cyclical) (Hz)	12019.23
Solvent	CHLOROFORM-d		Spectrum Offset (Hz)	1342.2964	Sweep Width (Hz)	12018.86	Temperature (degree C)	28.998	

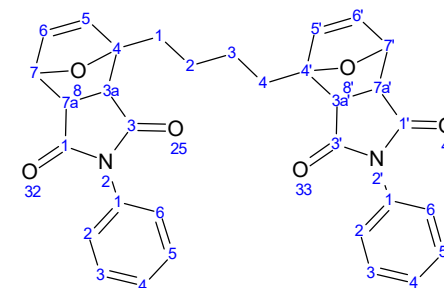


FZ-9362_001000FID.ESP

9b

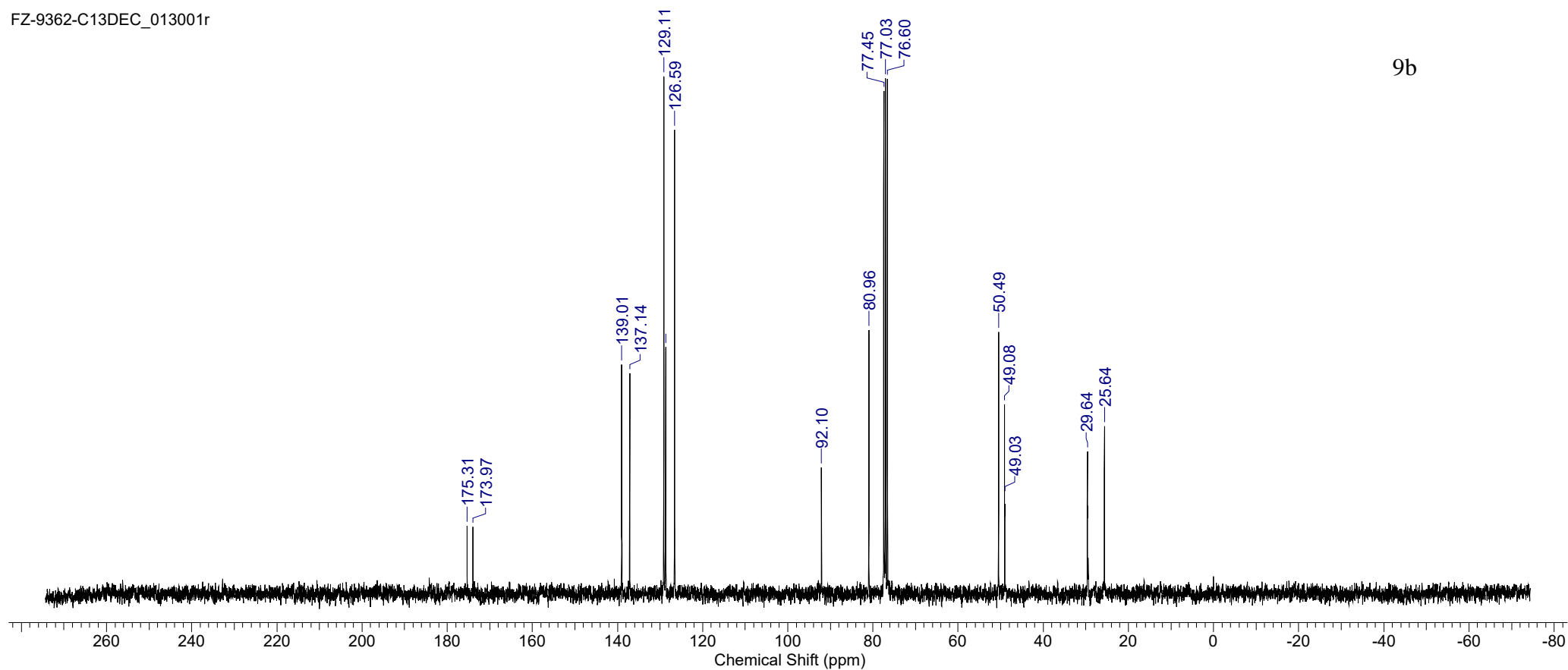


Acquisition Time (sec)	0.9339	Comment	FZ-9362-C13dec	Date	24 Dec 2020 11:07:44		
Date Stamp	24 Dec 2020 11:07:44	File Name	C:\USERS\LIZA \DESKTOP\FZ-9362-C13DEC_013001r	Frequency (MHz)	75.47		
Nucleus	13C	Number of Transients	648	Origin	spect	Owner	nmr
Points Count	131072	Pulse Sequence	zgpg	Receiver Gain	202.48	SW(cyclical) (Hz)	26315.79
Spectrum Offset (Hz)	7546.7729	Sweep Width (Hz)	26315.59	Temperature (degree C)	29.020		
						Solvent	CHLOROFORM-d

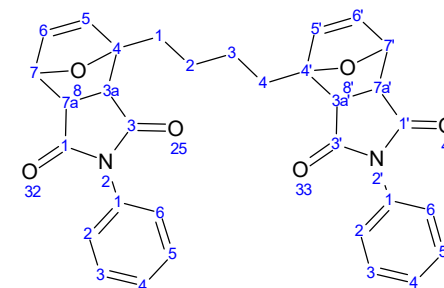


9b

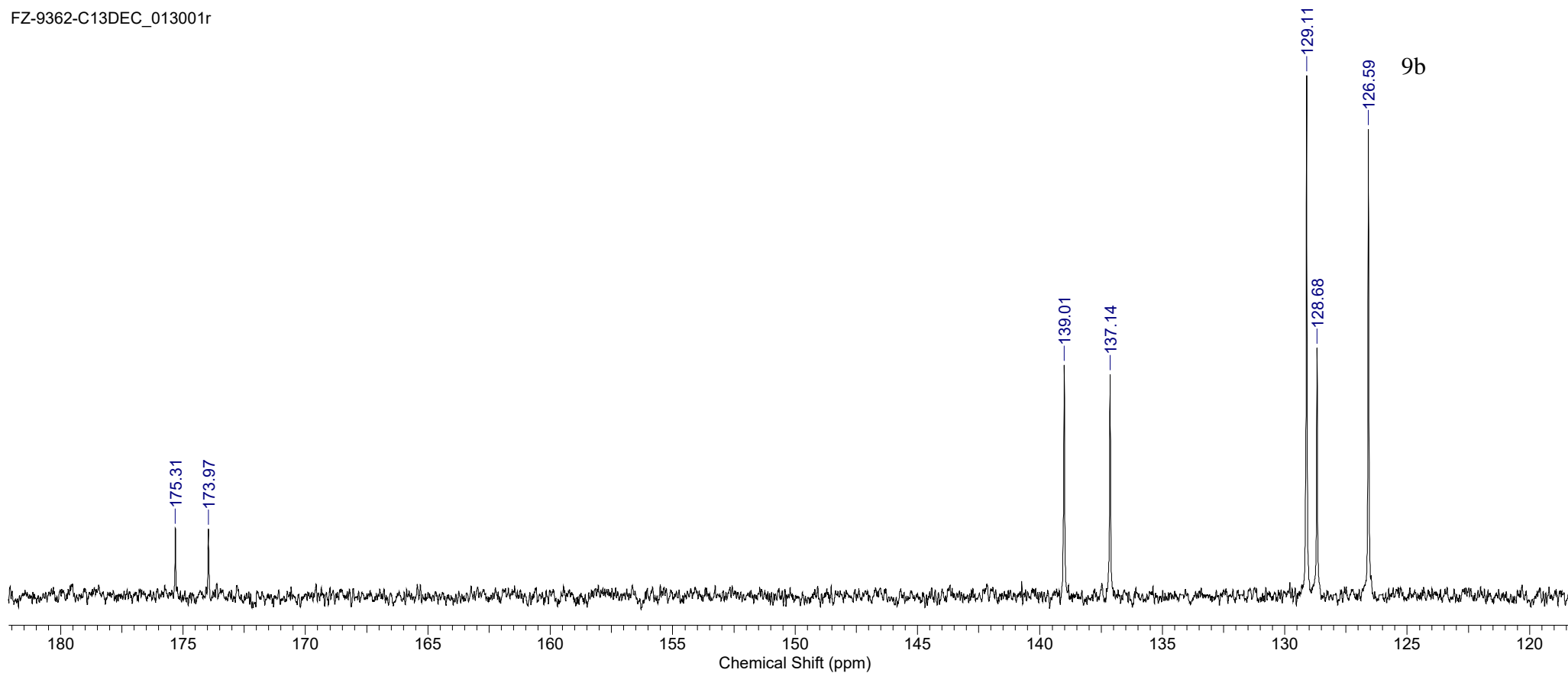
FZ-9362-C13DEC_013001r



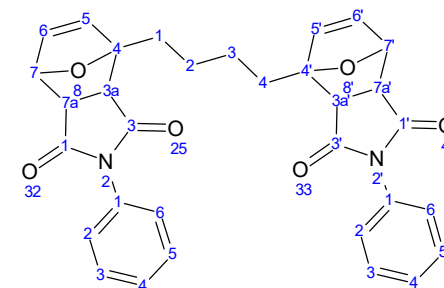
Acquisition Time (sec)	0.9339	Comment	FZ-9362-C13dec	Date	24 Dec 2020 11:07:44				
Date Stamp	24 Dec 2020 11:07:44	File Name	C:\USERS\LIZA \DESKTOP\FZ-9362-C13DEC_013001r	Frequency (MHz)	75.47				
Nucleus	13C	Number of Transients	648	Origin	spect	Original Points Count	24576	Owner	nmr
Points Count	131072	Pulse Sequence	zgpg	Receiver Gain	202.48	SW(cyclical) (Hz)	26315.79	Solvent	CHLOROFORM-d
Spectrum Offset (Hz)	7546.7729	Sweep Width (Hz)	26315.59	Temperature (degree C)	29.020				



FZ-9362-C13DEC_013001r

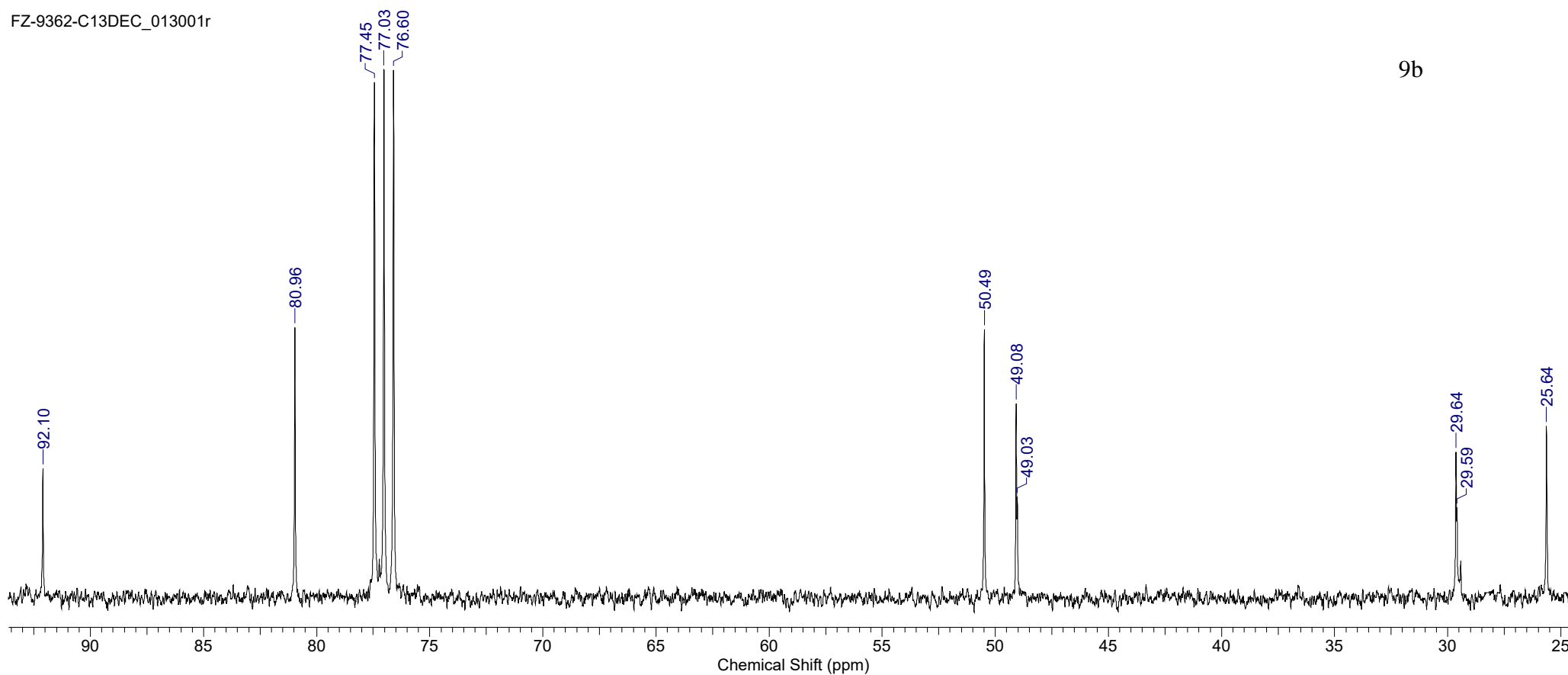


Acquisition Time (sec)	0.9339	Comment	FZ-9362-C13dec	Date	24 Dec 2020 11:07:44		
Date Stamp	24 Dec 2020 11:07:44	File Name	C:\USERS\LIZA \DESKTOP\FZ-9362-C13DEC_013001r	Frequency (MHz)	75.47		
Nucleus	13C	Number of Transients	648	Origin	spect	Owner	nmr
Points Count	131072	Pulse Sequence	zgpg	Receiver Gain	202.48	SW(cyclical) (Hz)	26315.79
Spectrum Offset (Hz)	7546.7729	Sweep Width (Hz)	26315.59	Temperature (degree C)	29.020		



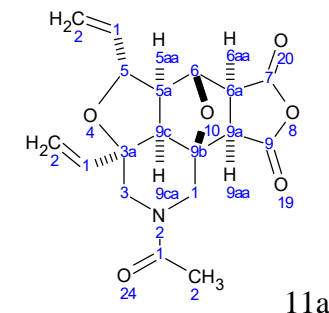
9b

FZ-9362-C13DEC_013001r

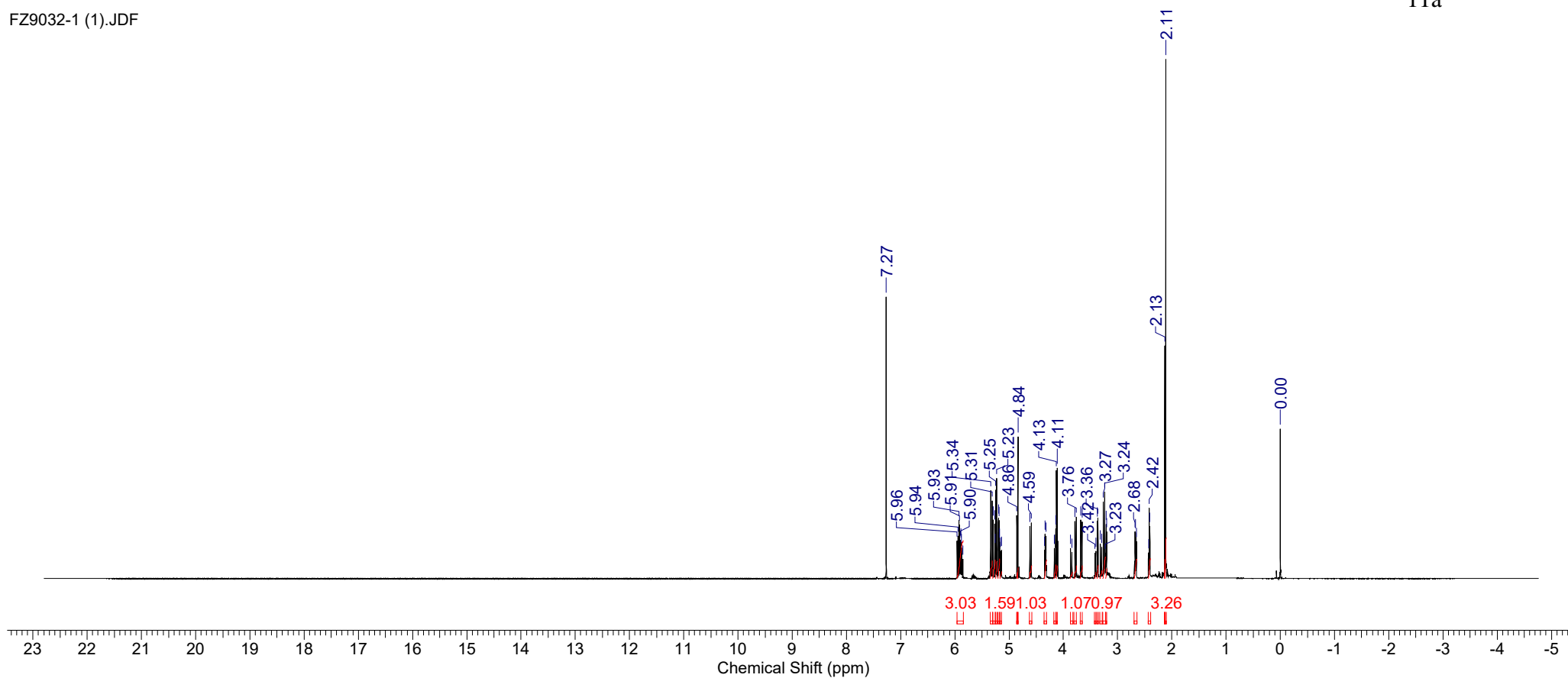


Formula C ₁₈ H ₁₉ NO ₆	FW 345.3466
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 21 Aug 2020 09:52:57	Date Stamp 21 Aug 2020 09:54:05
File Name C:\USERS\Лабa534\DOWNLOADS\FZ9032-1 (1).JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 44.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 5412.1411	Sweep Width (Hz) 16534.39

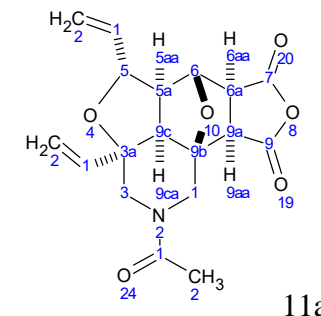


FZ9032-1 (1).JDF

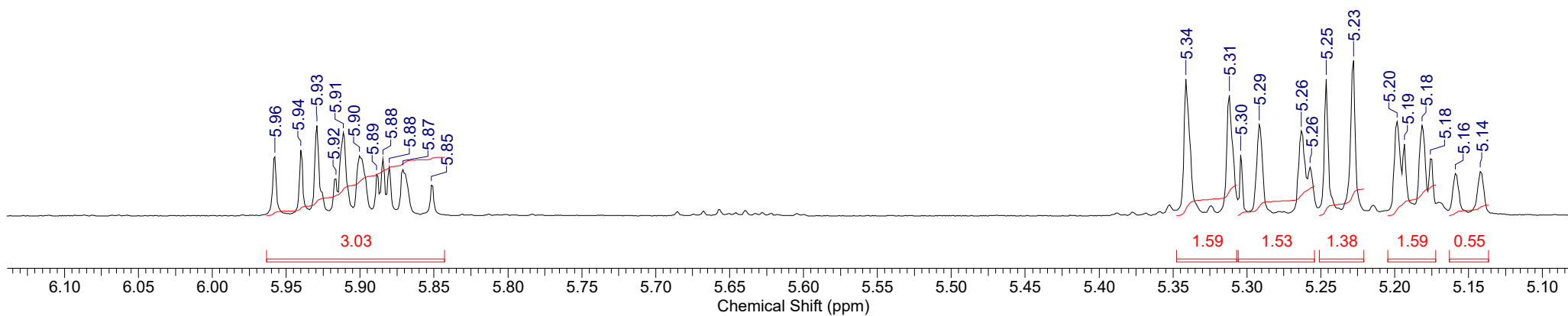


Formula C ₁₈ H ₁₉ NO ₆	FW 345.3466
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 21 Aug 2020 09:52:57	Date Stamp 21 Aug 2020 09:54:05
File Name C:\USERS\Лабa534\DOWNLOADS\FZ9032-1 (1).JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 44.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 5412.1411	Sweep Width (Hz) 16534.39

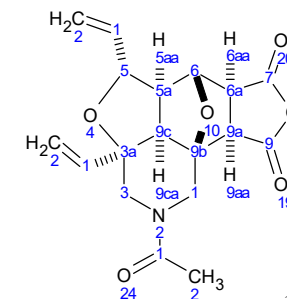


FZ9032-1 (1).JDF



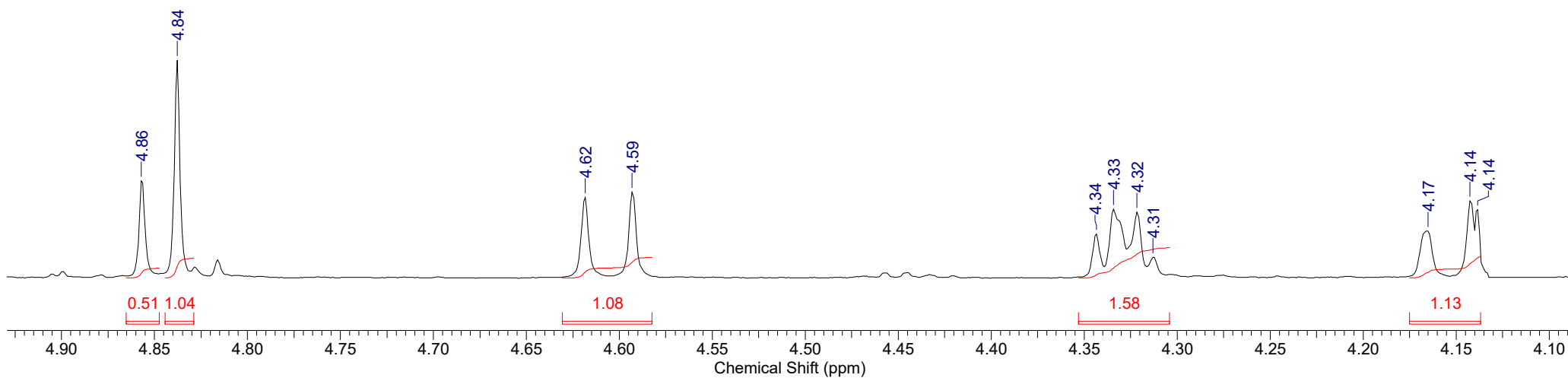
Formula C ₁₈ H ₁₉ NO ₆	FW 345.3466
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 21 Aug 2020 09:52:57	Date Stamp 21 Aug 2020 09:54:05
File Name C:\USERS\Лабa534\DOWNLOADS\FZ9032-1 (1).JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 44.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 5412.1411	Sweep Width (Hz) 16534.39



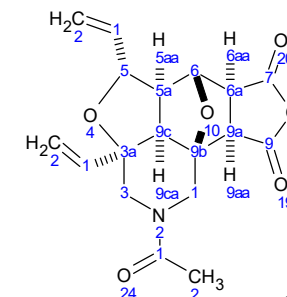
11a

FZ9032-1 (1).JDF



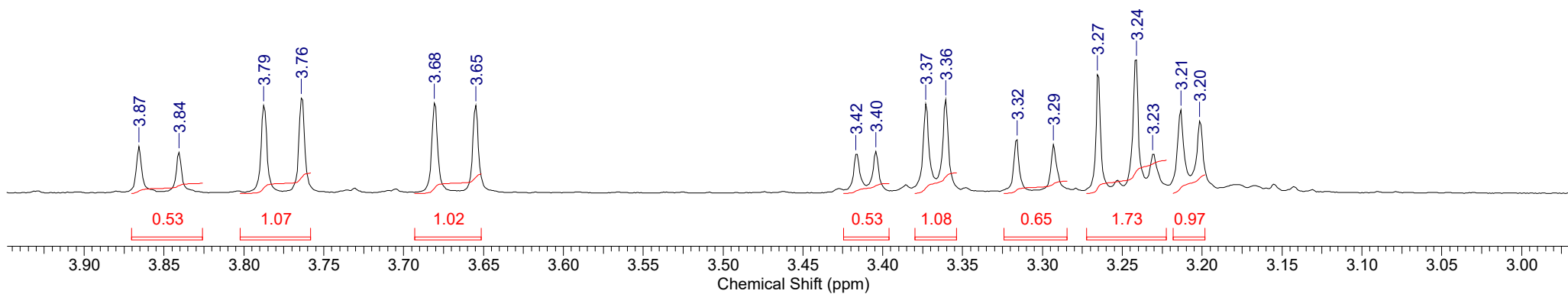
Formula C ₁₈ H ₁₉ NO ₆	FW 345.3466
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 21 Aug 2020 09:52:57	Date Stamp 21 Aug 2020 09:54:05
File Name C:\USERS\Лабa534\DOWNLOADS\FZ9032-1 (1).JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 44.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 5412.1411	Sweep Width (Hz) 16534.39



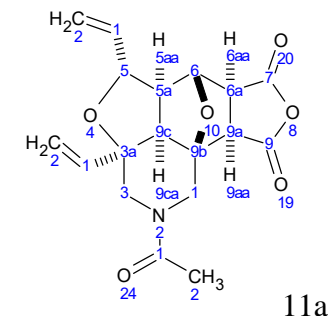
11a

FZ9032-1 (1).JDF

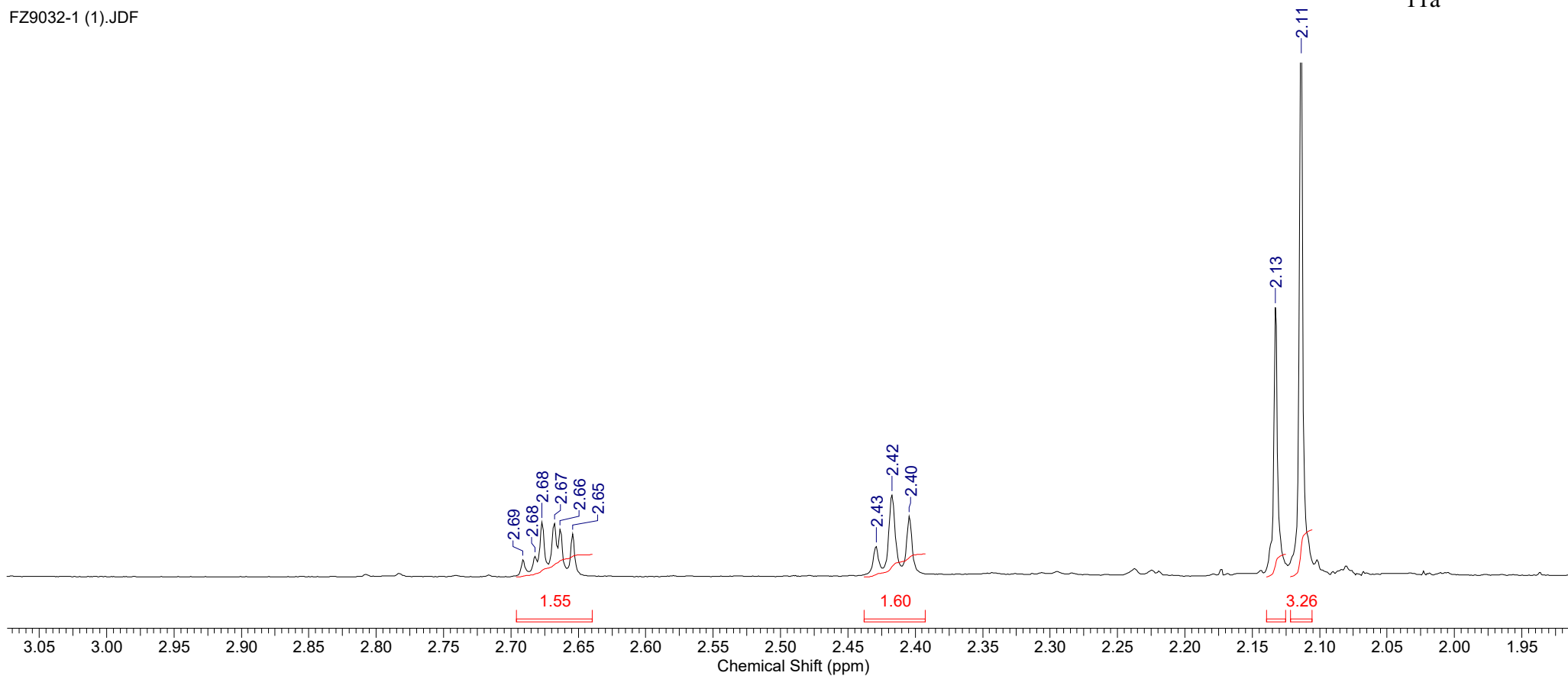


Formula C ₁₈ H ₁₉ NO ₆	FW 345.3466
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 21 Aug 2020 09:52:57	Date Stamp 21 Aug 2020 09:54:05
File Name C:\USERS\Лабa534\DOWNLOADS\FZ9032-1 (1).JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 44.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 5412.1411	Sweep Width (Hz) 16534.39

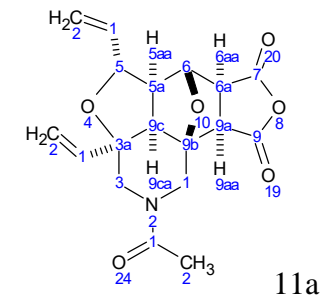


FZ9032-1 (1).JDF

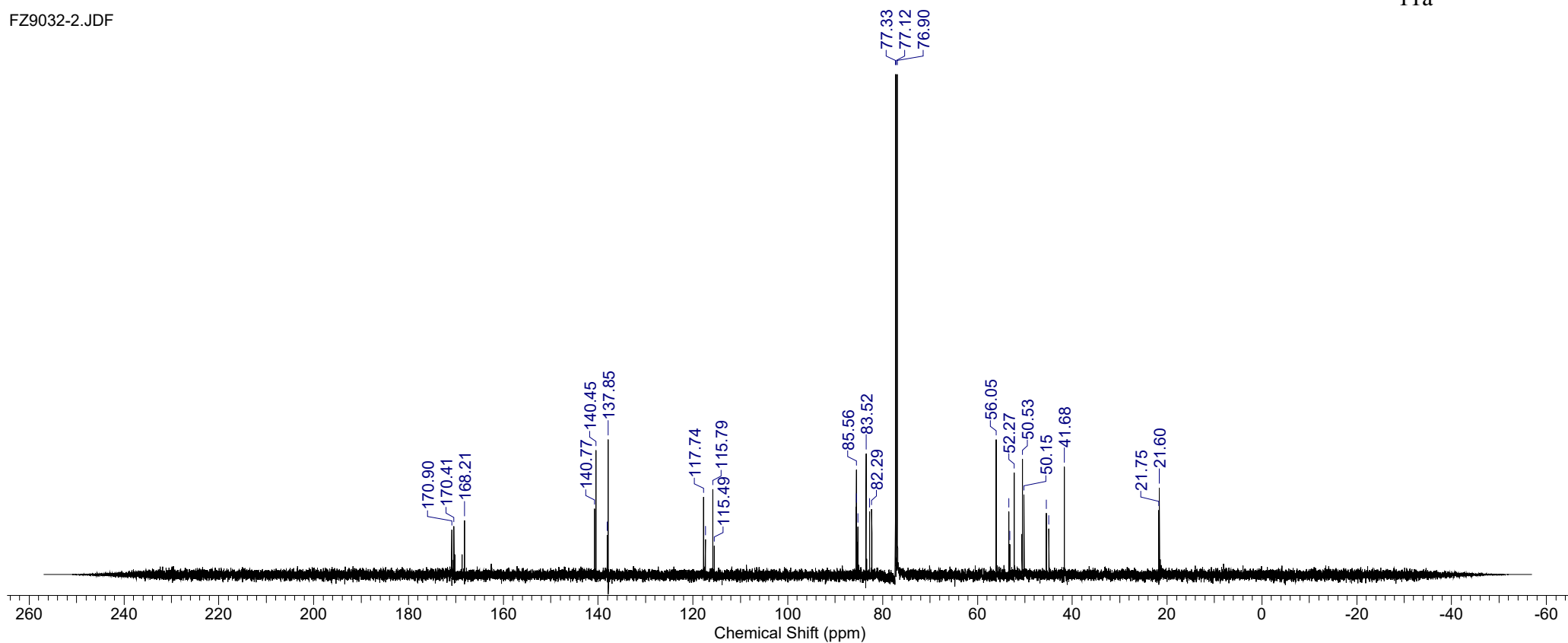


Formula C ₁₈ H ₁₉ NO ₆	FW 345.3466
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 24 Aug 2020 10:25:24
Date Stamp 24 Aug 2020 10:26:38	File Name C:\USERS\la6a534\DOWNLOADS\FZ9032-2.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 2000
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 58.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15091.3428

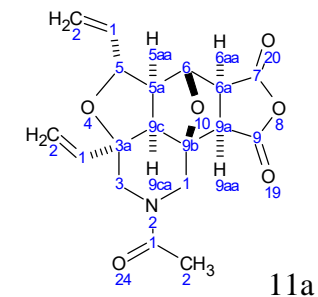


FZ9032-2.JDF

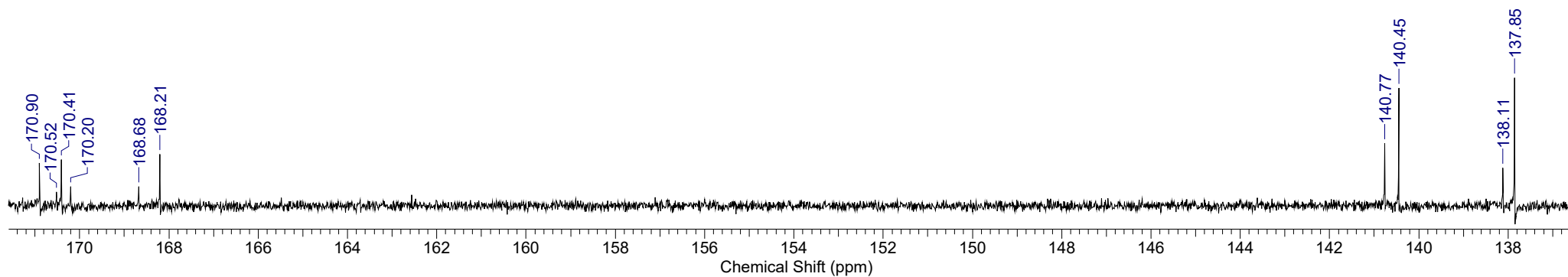


Formula C ₁₈ H ₁₉ NO ₆	FW 345.3466
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 24 Aug 2020 10:25:24
Date Stamp 24 Aug 2020 10:26:38	File Name C:\USERS\l1a6a534\DOWNLOADS\FZ9032-2.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 2000
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 58.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15091.3428

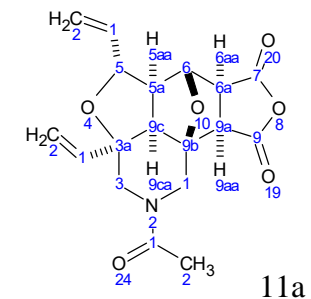


FZ9032-2.JDF

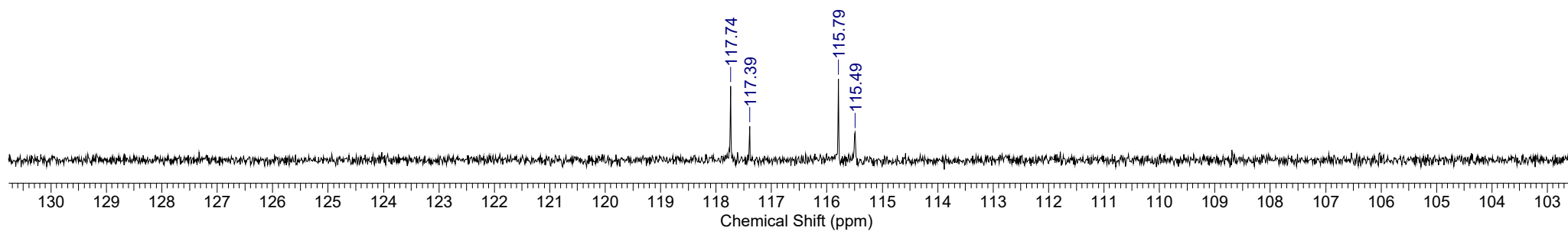


Formula C ₁₈ H ₁₉ NO ₆	FW 345.3466
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 24 Aug 2020 10:25:24
Date Stamp 24 Aug 2020 10:26:38	File Name C:\USERS\l1a6a534\DOWNLOADS\FZ9032-2.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 2000
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 58.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15091.3428

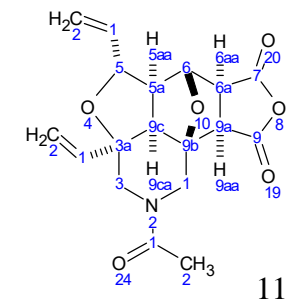


FZ9032-2.JDF

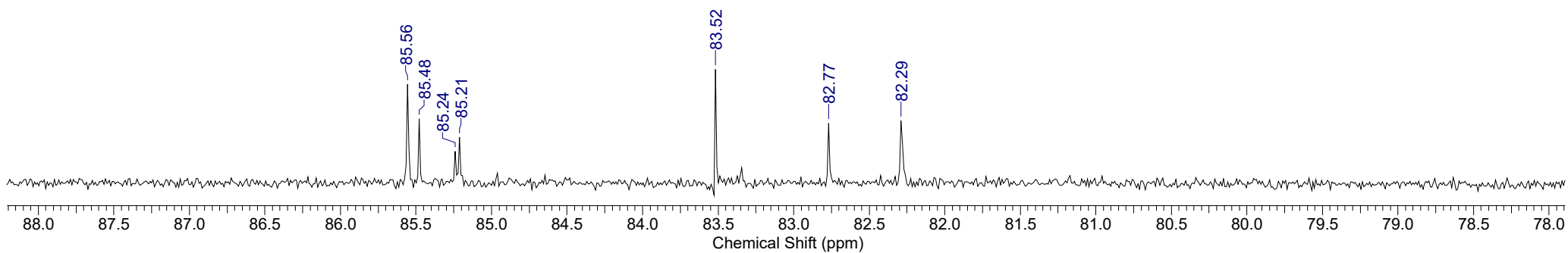


Formula C ₁₈ H ₁₉ NO ₆	FW 345.3466
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 24 Aug 2020 10:25:24
Date Stamp 24 Aug 2020 10:26:38	File Name C:\USERS\la6a534\DOWNLOADS\FZ9032-2.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 2000
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 58.00	Solvent CHLOROFORM-d	Pulse Sequence single_pulse_dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15091.3428

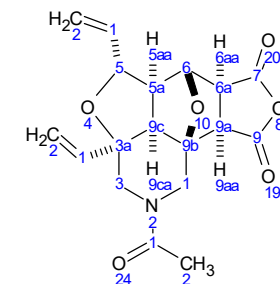


FZ9032-2.JDF



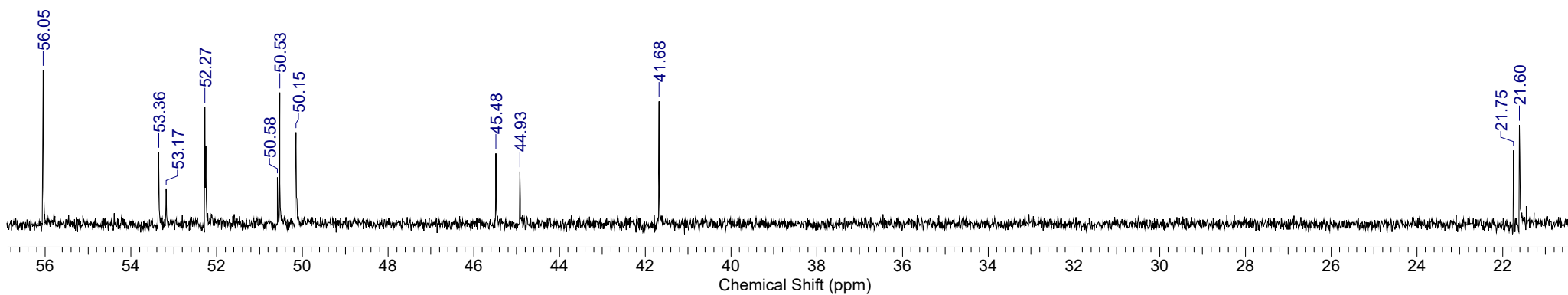
Formula C ₁₈ H ₁₉ NO ₆	FW 345.3466
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 24 Aug 2020 10:25:24
Date Stamp 24 Aug 2020 10:26:38	File Name C:\USERS\1a6a534\DOWNLOADS\FZ9032-2.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 2000
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 58.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15091.3428



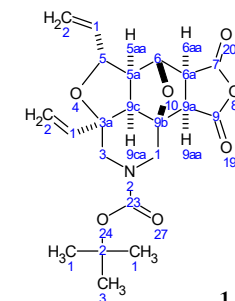
11a

FZ9032-2.JDF



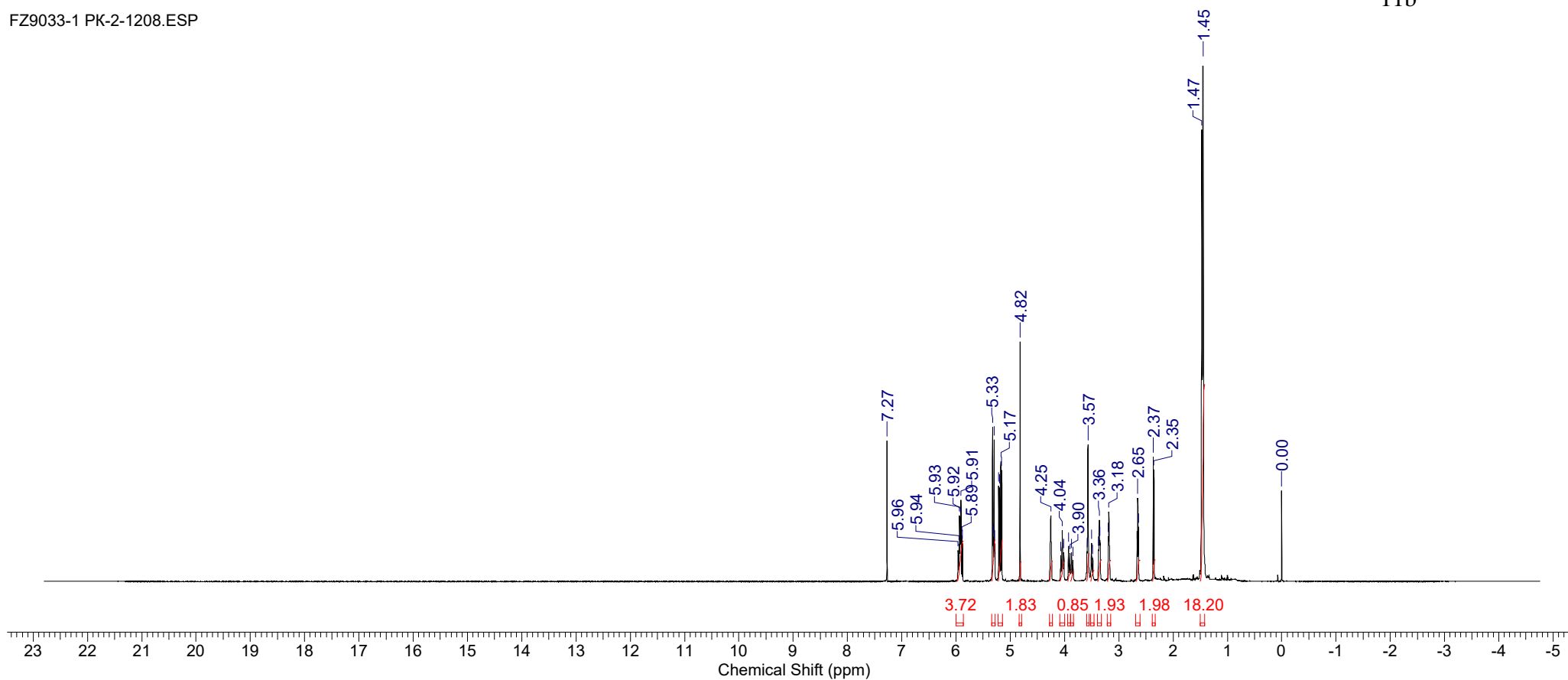
Formula C ₂₁ H ₂₅ NO ₇	FW 403.4257
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 21 Aug 2020 09:57:26	Date Stamp 21 Aug 2020 09:58:34
File Name C:\USERS\Лабa534\DOWNLOADS\FZ9033-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 38.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 5414.1597	Sweep Width (Hz) 16534.39



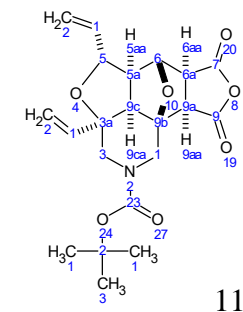
11b

FZ9033-1 PK-2-1208.ESP

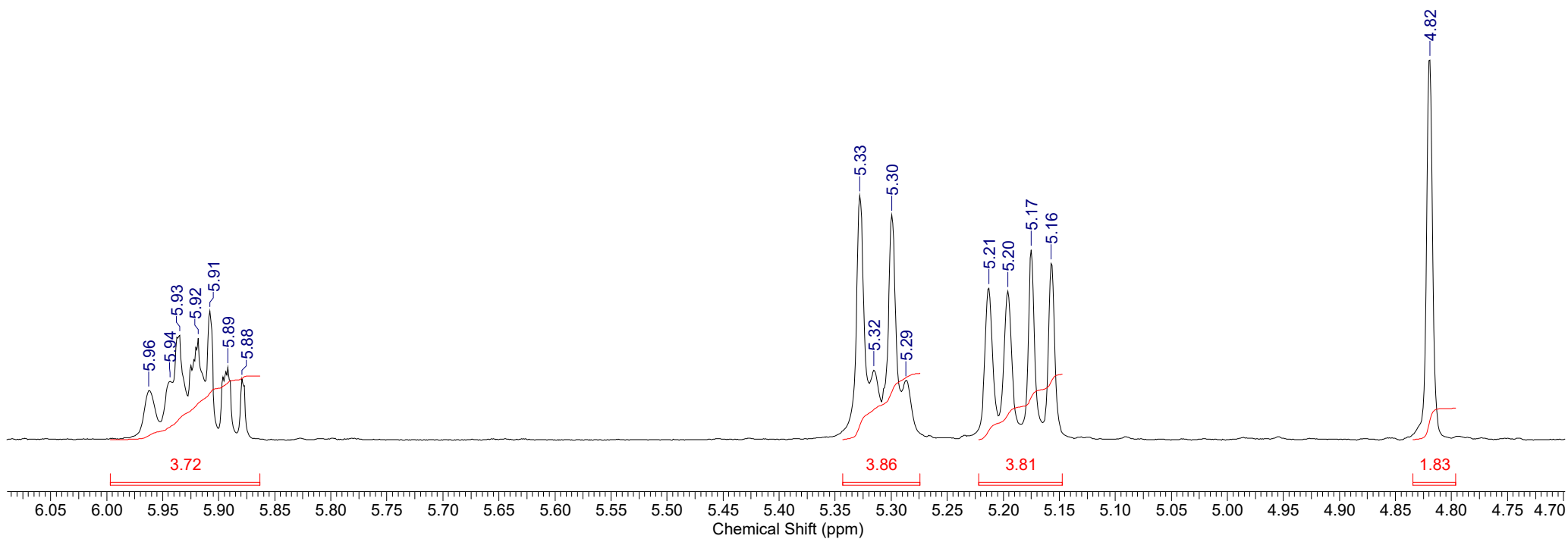


Formula C ₂₁ H ₂₅ NO ₇	FW 403.4257
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 21 Aug 2020 09:57:26	Date Stamp 21 Aug 2020 09:58:34
File Name C:\USERS\Лабa534\DOWNLOADS\FZ9033-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 38.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 5414.1597	Sweep Width (Hz) 16534.39

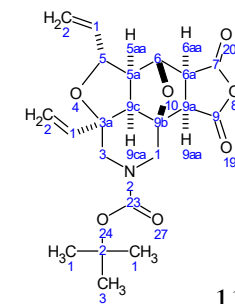


FZ9033-1 PK-2-1208.ESP

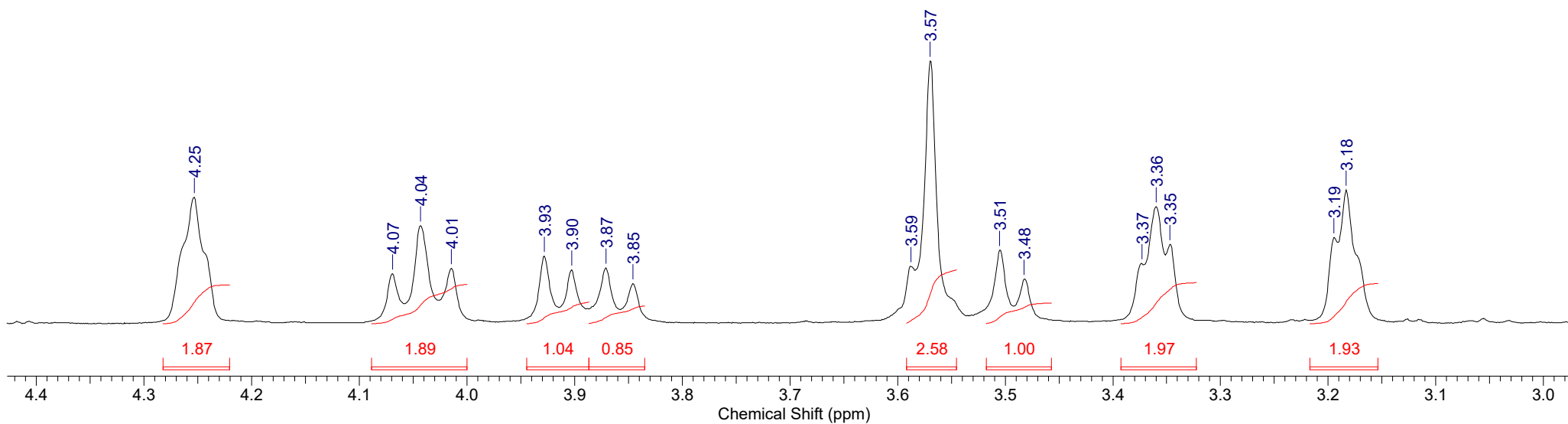


Formula C ₂₁ H ₂₅ NO ₇	FW 403.4257
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 21 Aug 2020 09:57:26	Date Stamp 21 Aug 2020 09:58:34
File Name C:\USERS\Лабa534\DOWNLOADS\FZ9033-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 38.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 5414.1597	Sweep Width (Hz) 16534.39

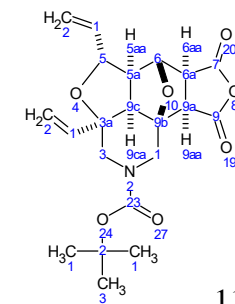


FZ9033-1 PK-2-1208.ESP

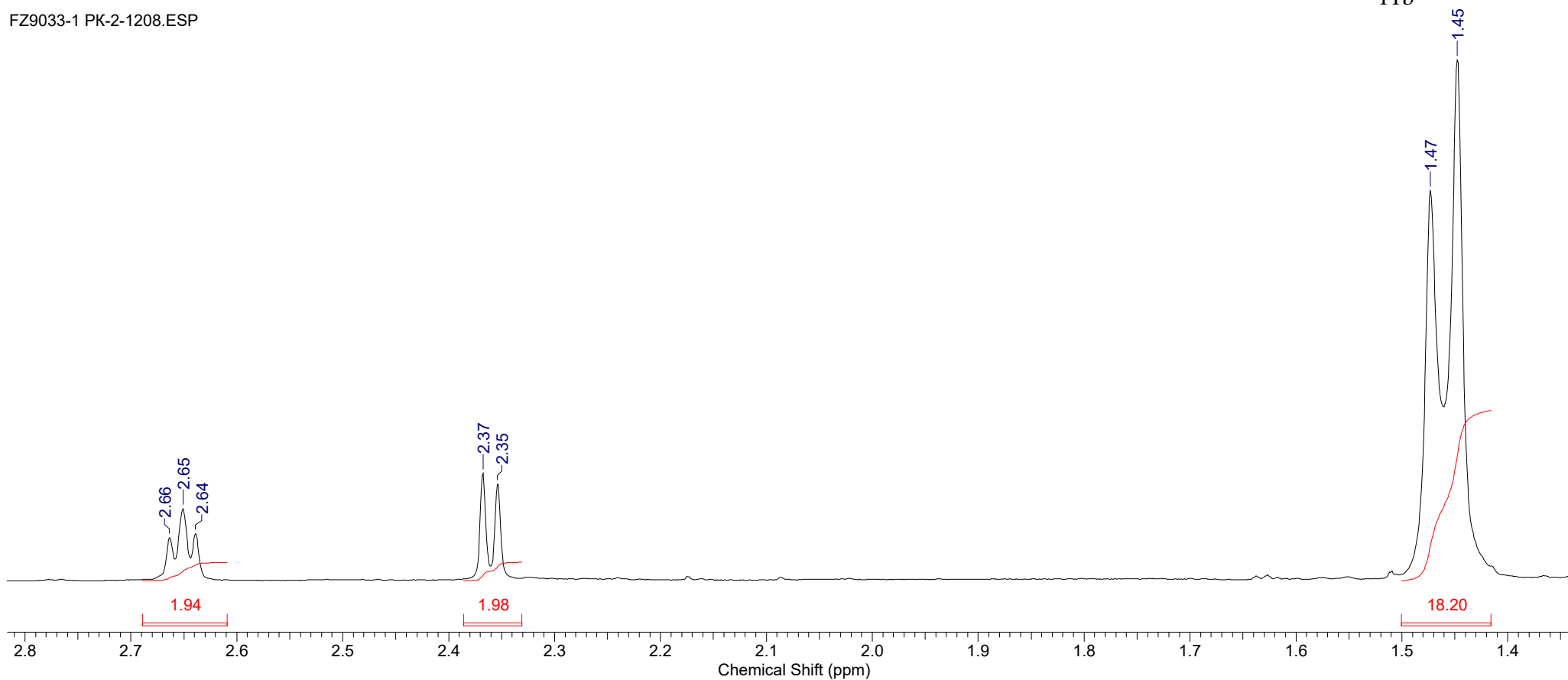


Formula C ₂₁ H ₂₅ NO ₇	FW 403.4257
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 21 Aug 2020 09:57:26	Date Stamp 21 Aug 2020 09:58:34
File Name C:\USERS\Лабa534\DOWNLOADS\FZ9033-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 38.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 5414.1597	Sweep Width (Hz) 16534.39

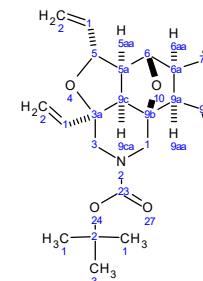


FZ9033-1 PK-2-1208.ESP



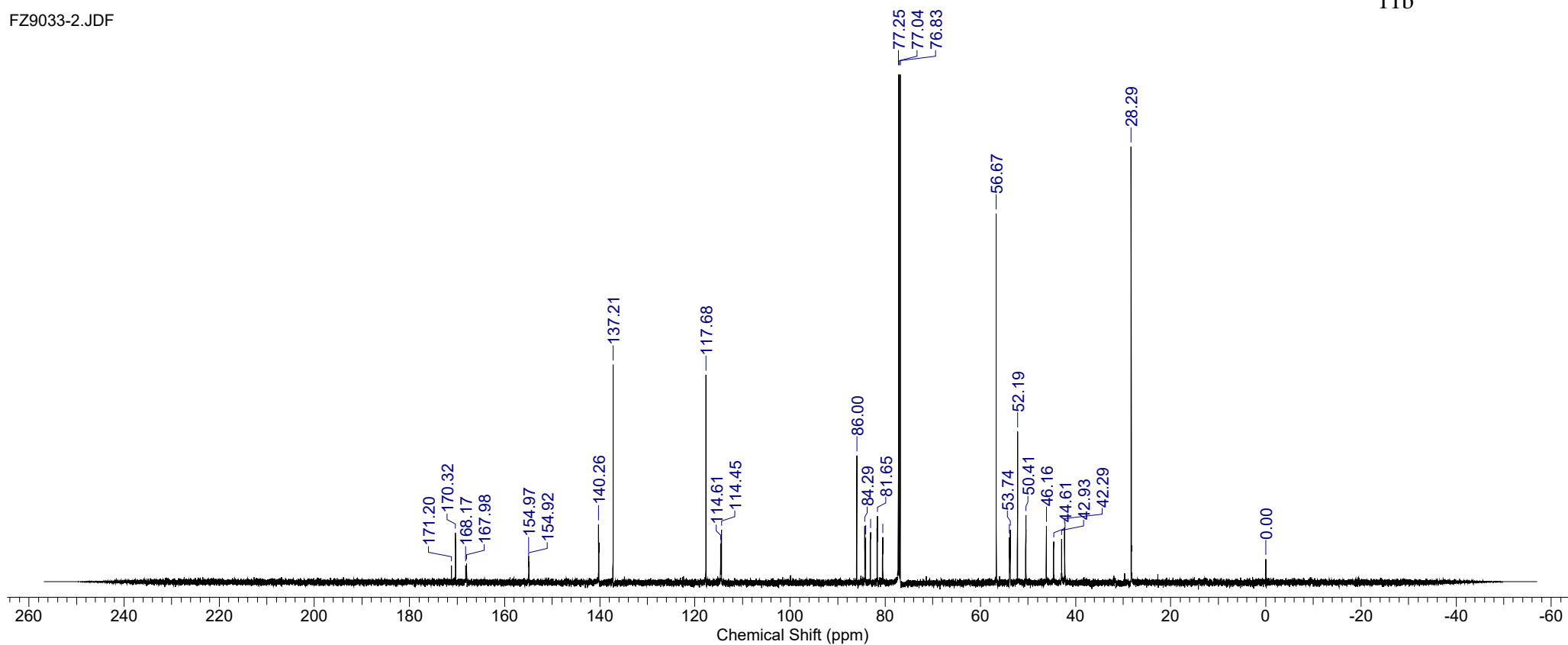
Formula C ₂₁ H ₂₅ NO ₇	FW 403.4257
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 24 Aug 2020 16:46:32
Date Stamp 24 Aug 2020 16:47:46	File Name C:\USERS\la6a534\DOWNLOADS\FZ9033-2.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 8000
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 58.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15079.3525



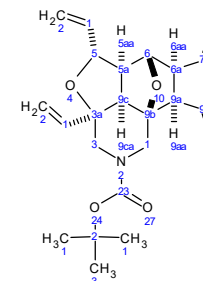
11b

FZ9033-2.JDF



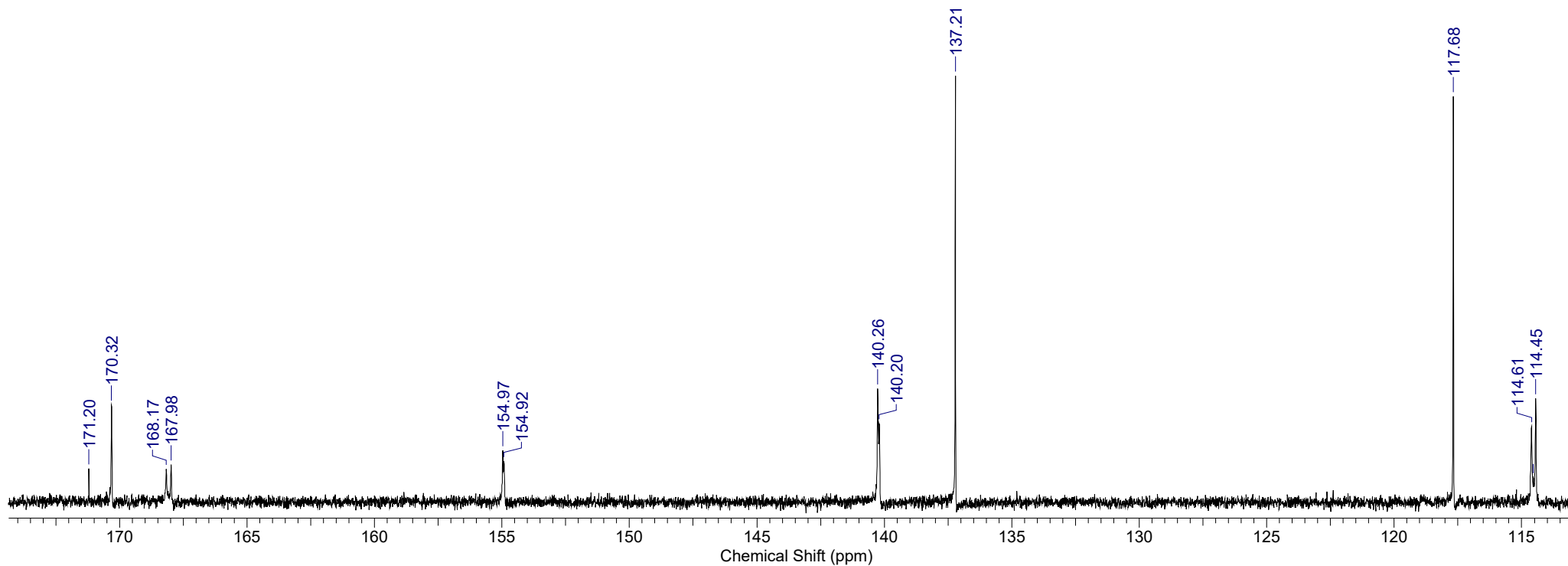
Formula C ₂₁ H ₂₅ NO ₇	FW 403.4257
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 24 Aug 2020 16:46:32
Date Stamp 24 Aug 2020 16:47:46	File Name C:\USERS\la6a534\DOWNLOADS\FZ9033-2.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 8000
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 58.00	Solvent CHLOROFORM-d	Pulse Sequence single_pulse_dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15079.3525



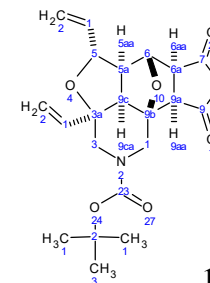
11b

FZ9033-2.JDF

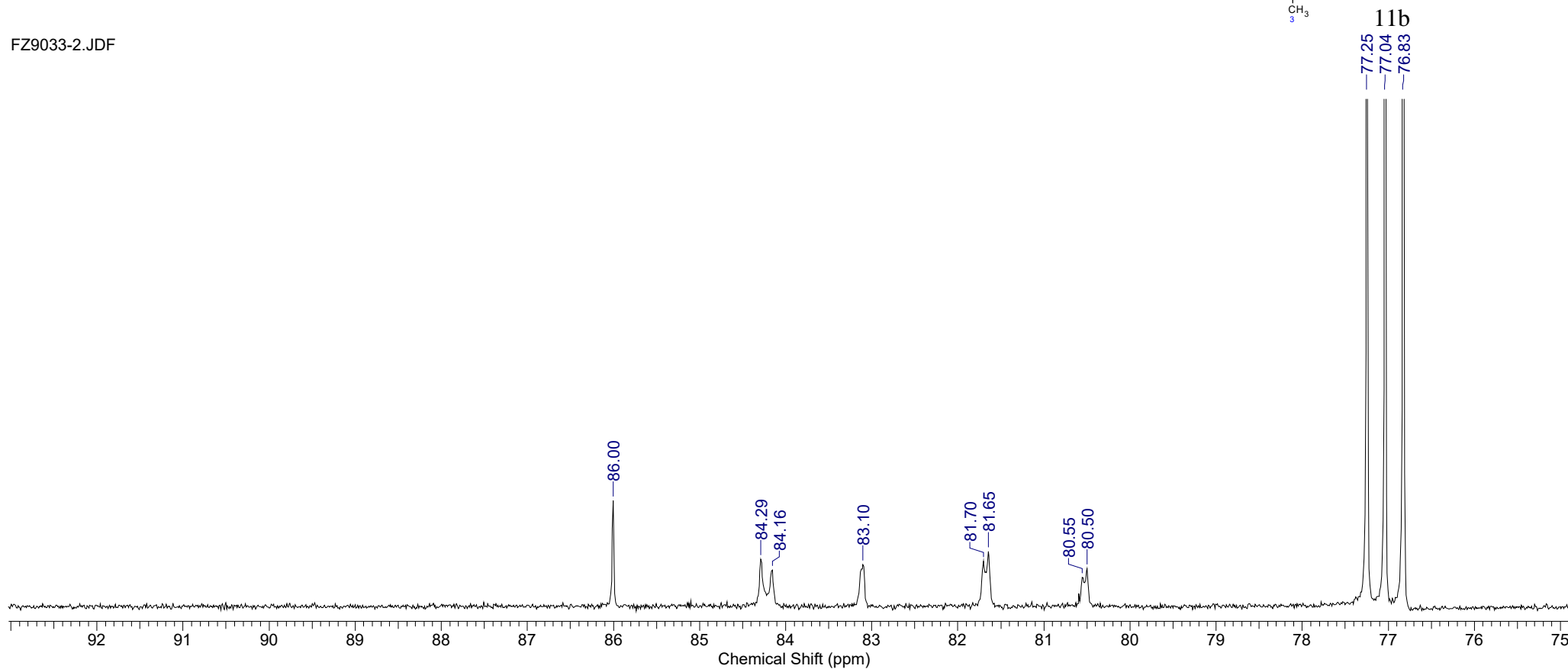


Formula C ₂₁ H ₂₅ NO ₇	FW 403.4257
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 24 Aug 2020 16:46:32
Date Stamp 24 Aug 2020 16:47:46	File Name C:\USERS\la6a534\DOWNLOADS\FZ9033-2.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 8000
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 58.00	Solvent CHLOROFORM-d	Pulse Sequence single_pulse_dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15079.3525

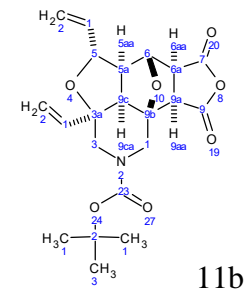


FZ9033-2.JDF

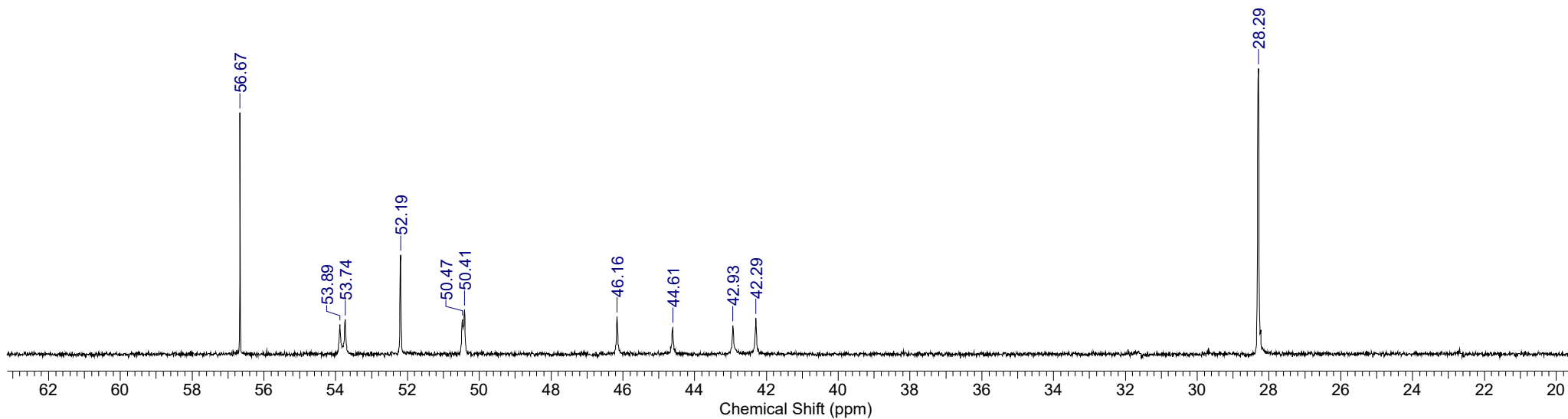


Formula C ₂₁ H ₂₅ NO ₇	FW 403.4257
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 24 Aug 2020 16:46:32
Date Stamp 24 Aug 2020 16:47:46	File Name C:\USERS\la6a534\DOWNLOADS\FZ9033-2.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 8000
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 58.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15079.3525

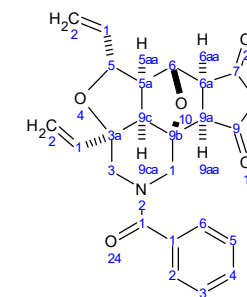


FZ9033-2.JDF



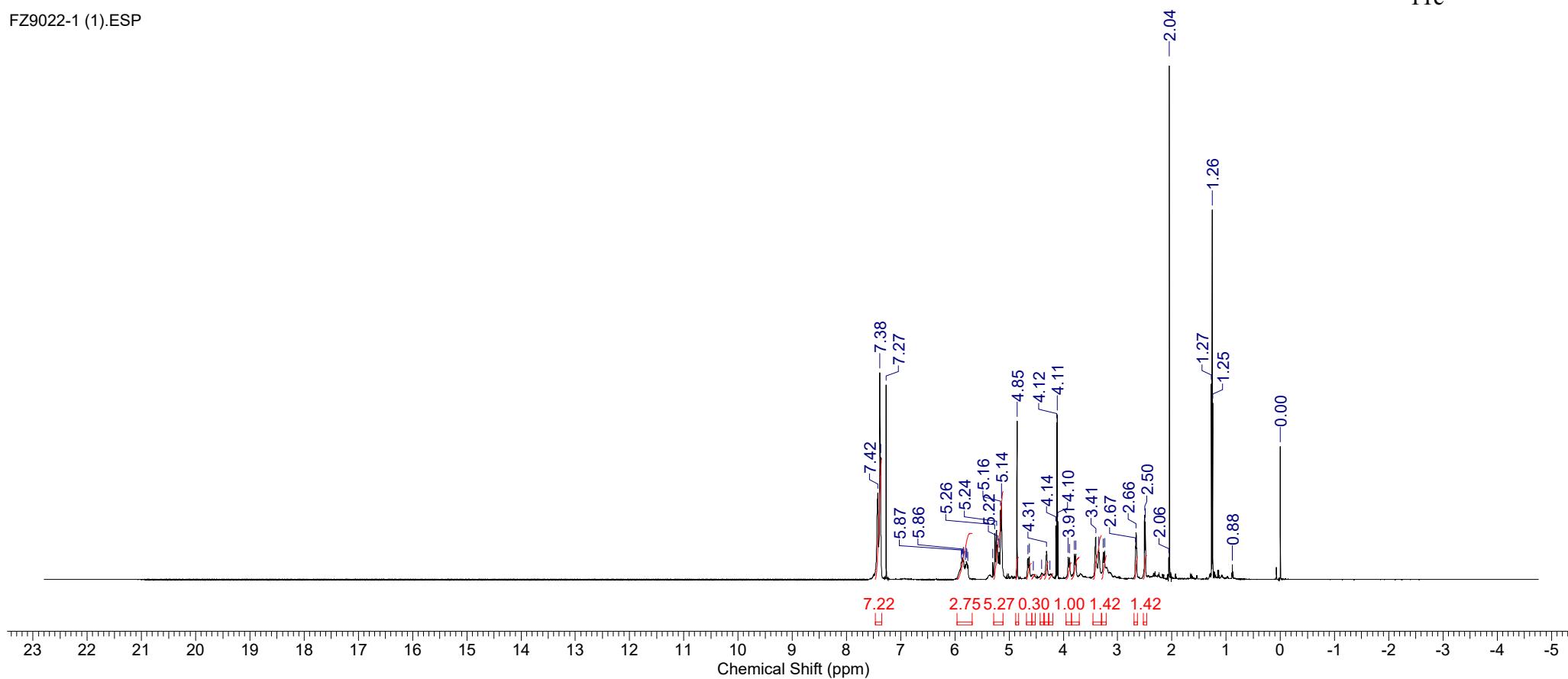
Formula C ₂₃ H ₂₁ NO ₆	FW 407.4159
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 20 Aug 2020 11:19:33	Date Stamp 20 Aug 2020 11:20:40
File Name C:\USERS\Лабa534\DOWNLOADS\FZ9022-1 (1).JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 38.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 5412.6455	Sweep Width (Hz) 16534.39



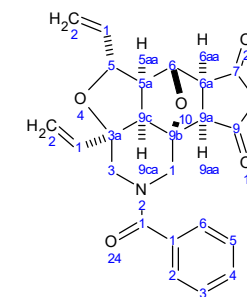
11c

FZ9022-1 (1).ESP



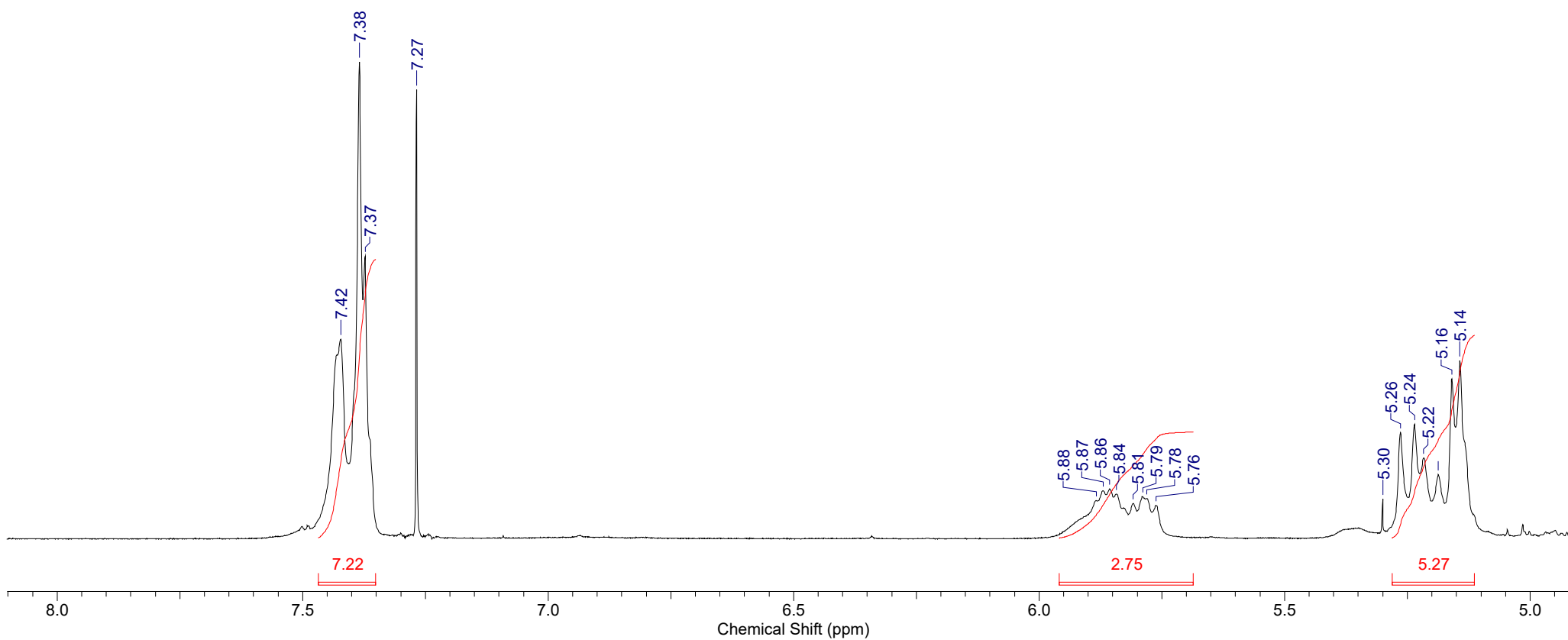
Formula C ₂₃ H ₂₁ NO ₆	FW 407.4159
--	--------------------

Acquisition Time (sec) 1.9818	Comment single pulse	Date 20 Aug 2020 11:19:33	Date Stamp 20 Aug 2020 11:20:40
File Name C:\USERS\Лабa534\DOWNLOADS\FZ9022-1 (1).JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 38.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 5412.6455	Sweep Width (Hz) 16534.39



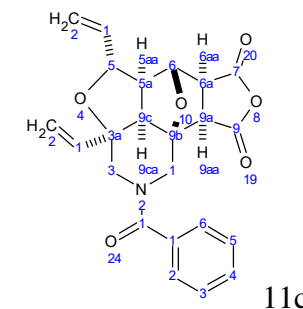
11c

FZ9022-1 (1).ESP

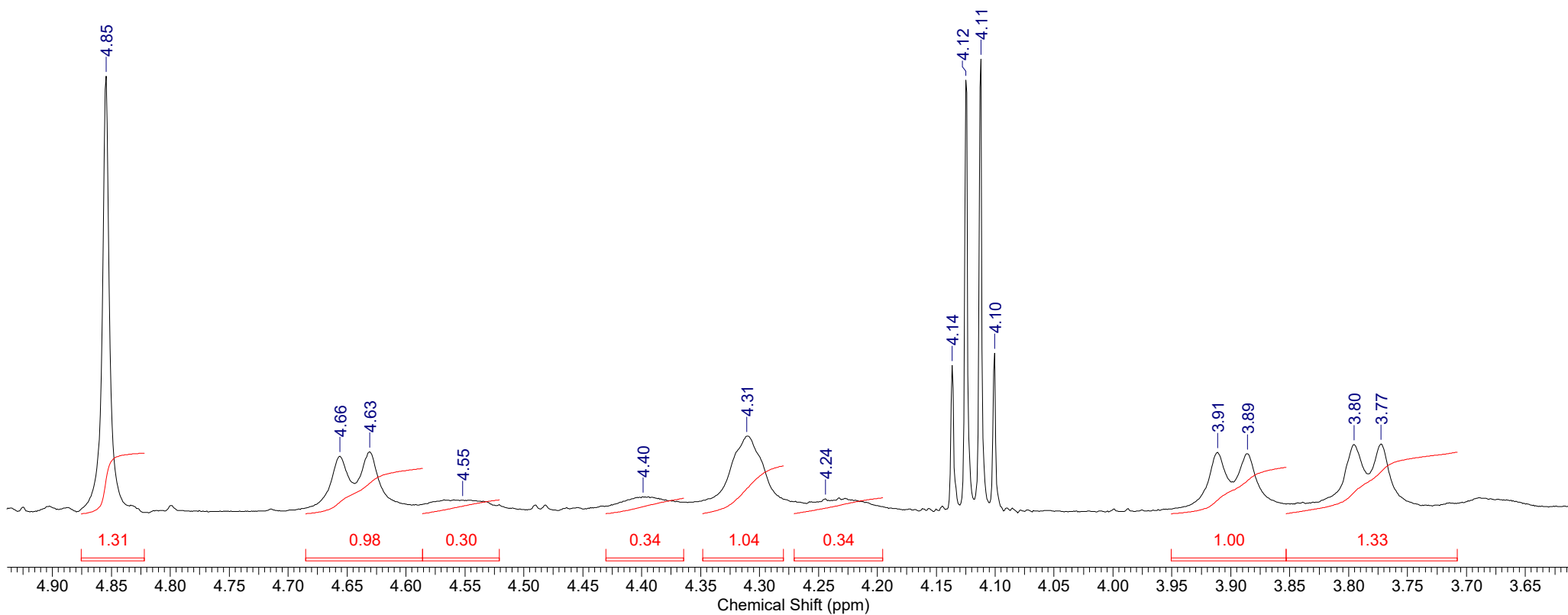


Formula C ₂₃ H ₂₁ NO ₆	FW 407.4159
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 20 Aug 2020 11:19:33	Date Stamp 20 Aug 2020 11:20:40
File Name C:\USERS\Лабa534\DOWNLOADS\FZ9022-1 (1).JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 38.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 5412.6455	Sweep Width (Hz) 16534.39

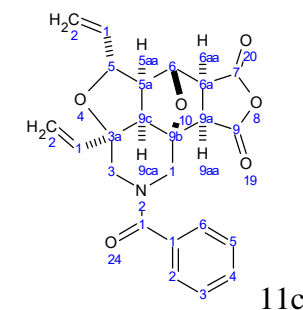


FZ9022-1 (1).ESP

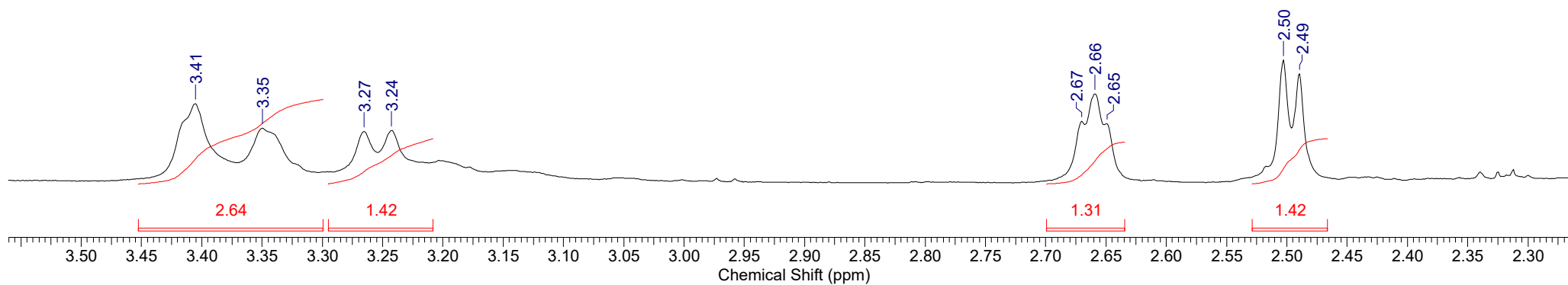


Formula C ₂₃ H ₂₁ NO ₆	FW 407.4159
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 20 Aug 2020 11:19:33	Date Stamp 20 Aug 2020 11:20:40
File Name C:\USERS\Лабa534\DOWNLOADS\FZ9022-1 (1).JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 38.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 5412.6455	Sweep Width (Hz) 16534.39

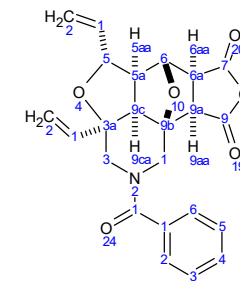


FZ9022-1 (1).ESP



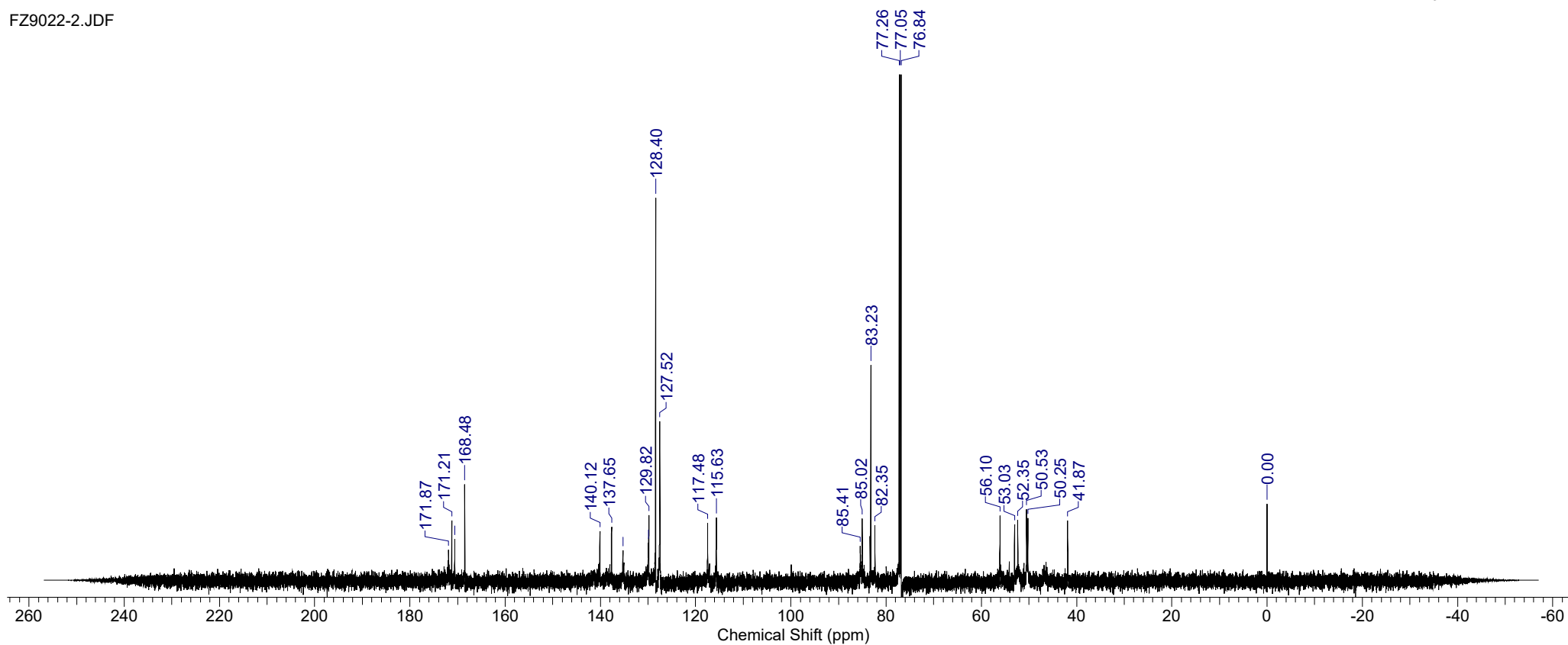
Formula C ₂₃ H ₂₁ NO ₆	FW 407.4159
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 22 Aug 2020 10:08:55
Date Stamp 22 Aug 2020 10:10:04	File Name C:\USERS\Ia6a534\DOWNLOADS\FZ9022-2.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 3201
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 56.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15079.3525



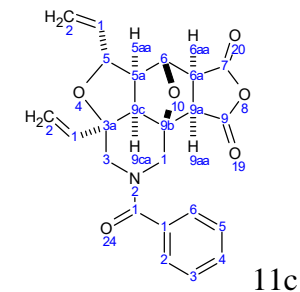
11c

FZ9022-2.JDF

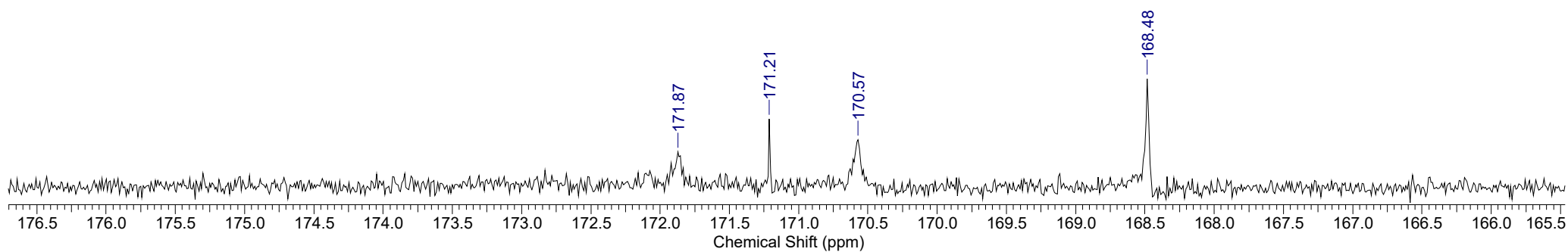


Formula C ₂₃ H ₂₁ NO ₆	FW 407.4159
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 22 Aug 2020 10:08:55
Date Stamp 22 Aug 2020 10:10:04	File Name C:\USERS\l\l\Downloads\FZ9022-2.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 3201
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 56.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15079.3525

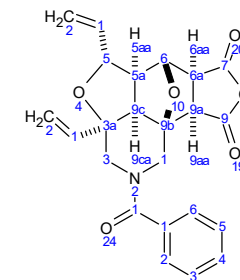


FZ9022-2.JDF



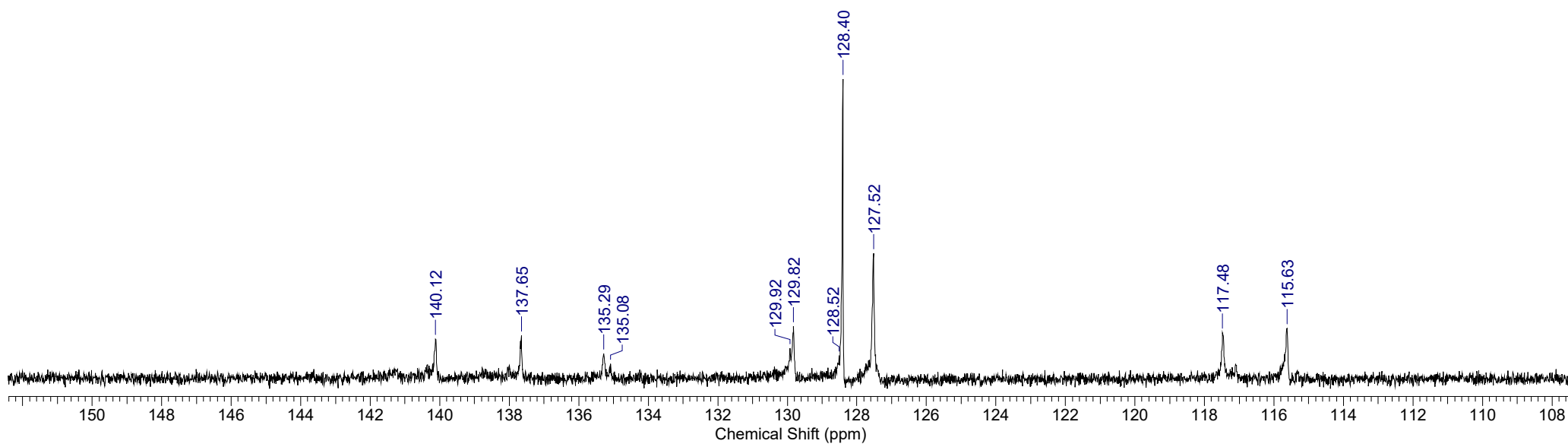
Formula C ₂₃ H ₂₁ NO ₆	FW 407.4159
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 22 Aug 2020 10:08:55
Date Stamp 22 Aug 2020 10:10:04	File Name C:\USERS\la6a534\DOWNLOADS\FZ9022-2.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 3201
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 56.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15079.3525



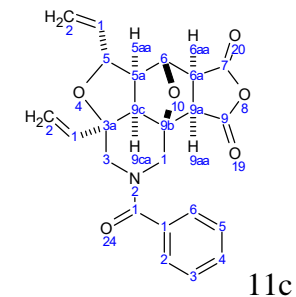
11c

FZ9022-2.JDF

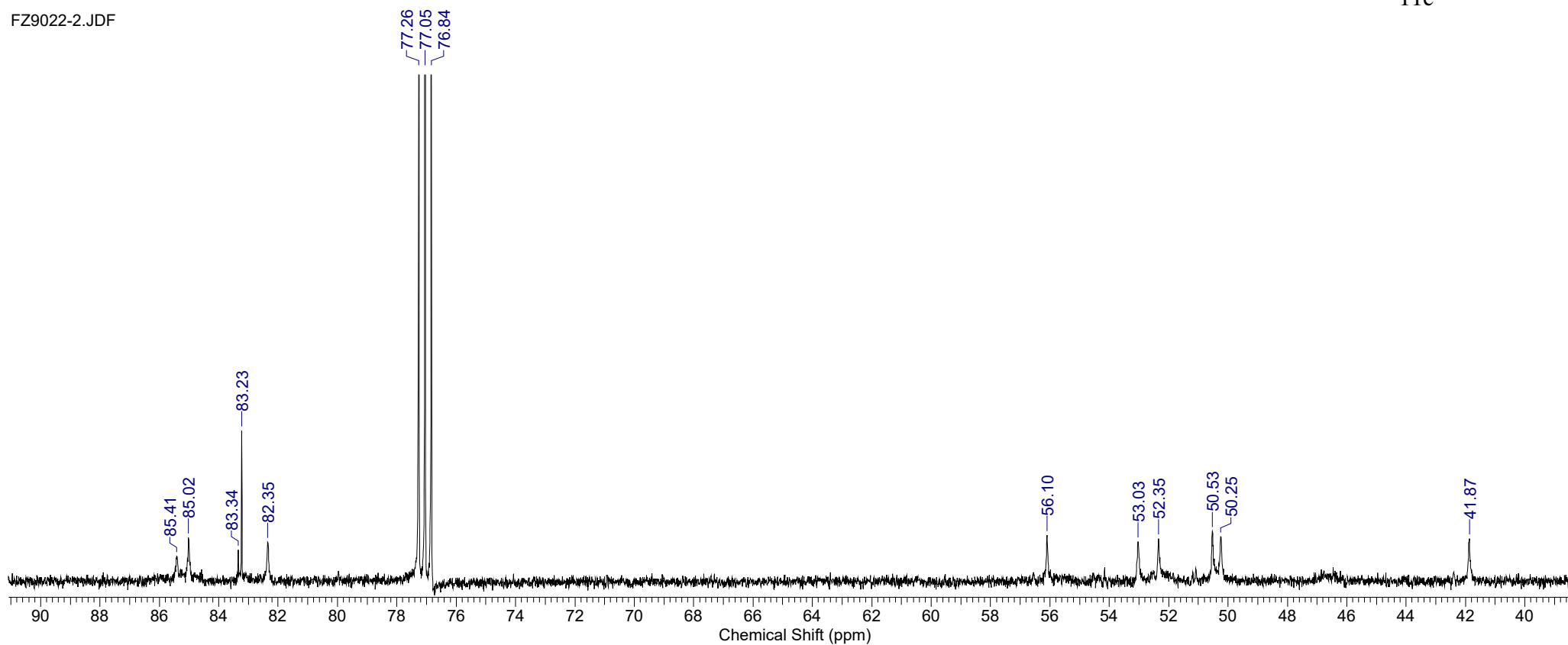


Formula C ₂₃ H ₂₁ NO ₆	FW 407.4159
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 22 Aug 2020 10:08:55
Date Stamp 22 Aug 2020 10:10:04	File Name C:\USERS\l1a6a534\DOWNLOADS\FZ9022-2.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 3201
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 56.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15079.3525

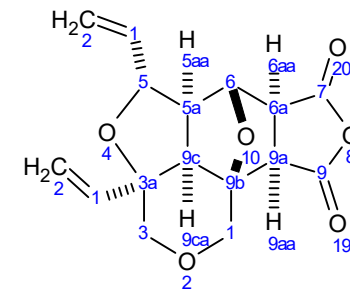


FZ9022-2.JDF



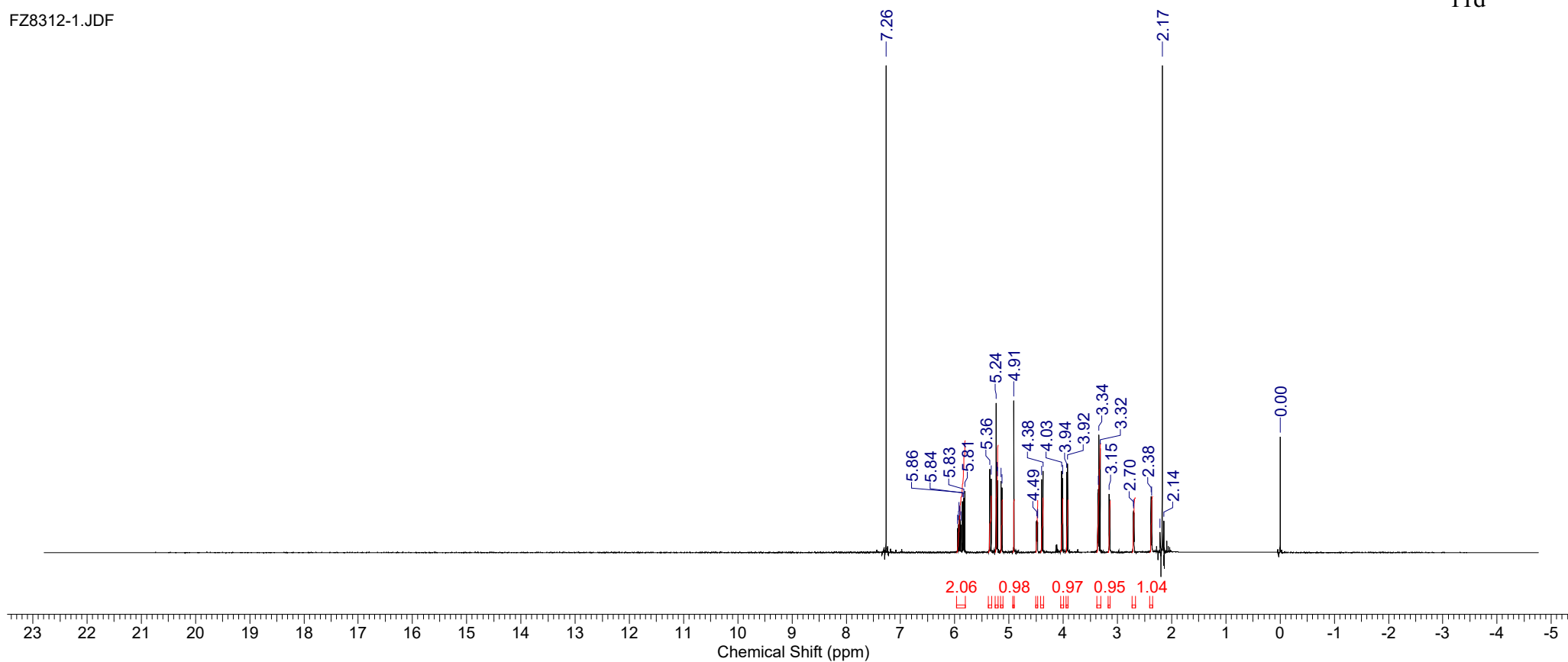
Formula C ₁₆ H ₁₆ O ₆	FW 304.2946
---	--------------------

Acquisition Time (sec) 1.9818	Comment single pulse	Date 10 Oct 1990 17:21:36	
Date Stamp 21 Dec 2019 04:26:16		File Name C:\USERS\Jla6a534\DOWNLOADS\FZ8312-1.JDF	Frequency (MHz) 600.17
Nucleus 1H	Number of Transients 8	Origin ECA 600	Original Points Count 32768
Points Count 32768	Pulse Sequence single_pulse.ex2	Receiver Gain 48.00	Owner delta
Spectrum Offset (Hz) 5410.6274	Sweep Width (Hz) 16534.39	Temperature (degree C) 23.800	Solvent CHLOROFORM-d



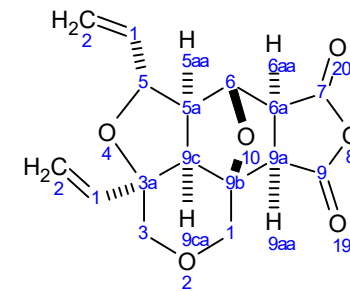
11d

FZ8312-1.JDF



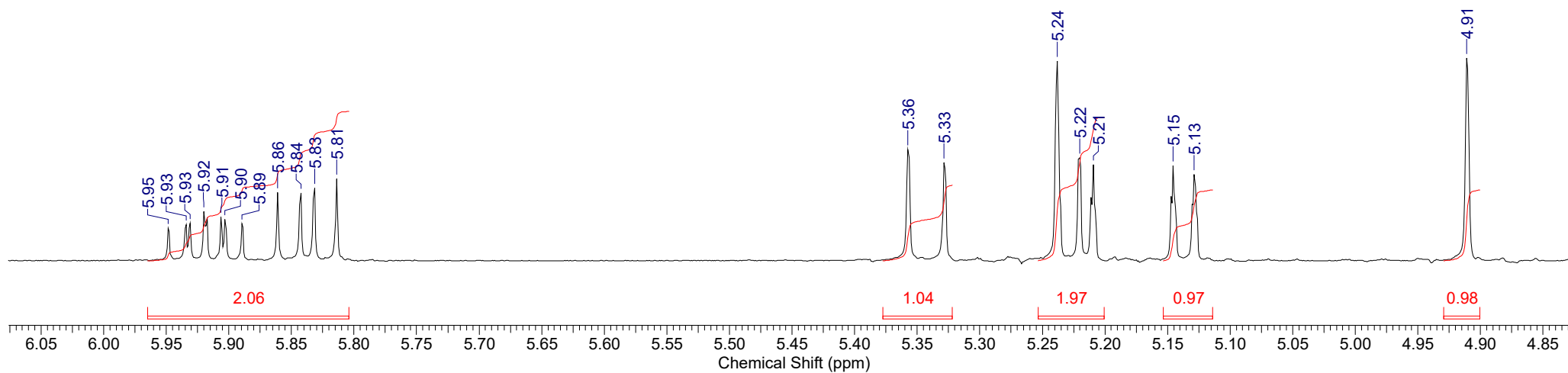
Formula C ₁₆ H ₁₆ O ₆	FW 304.2946
---	--------------------

Acquisition Time (sec) 1.9818	Comment single pulse	Date 10 Oct 1990 17:21:36	
Date Stamp 21 Dec 2019 04:26:16		File Name C:\USERS\Лабa534\DOWNLOADS\FZ8312-1.JDF	Frequency (MHz) 600.17
Nucleus 1H	Number of Transients 8	Origin ECA 600	Original Points Count 32768
Points Count 32768	Pulse Sequence single_pulse.ex2	Receiver Gain 48.00	Owner delta
Spectrum Offset (Hz) 5410.6274	Sweep Width (Hz) 16534.39	Temperature (degree C) 23.800	Solvent CHLOROFORM-d



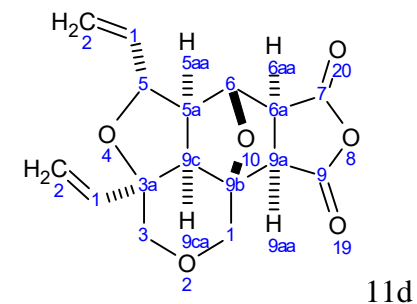
11d

FZ8312-1.JDF

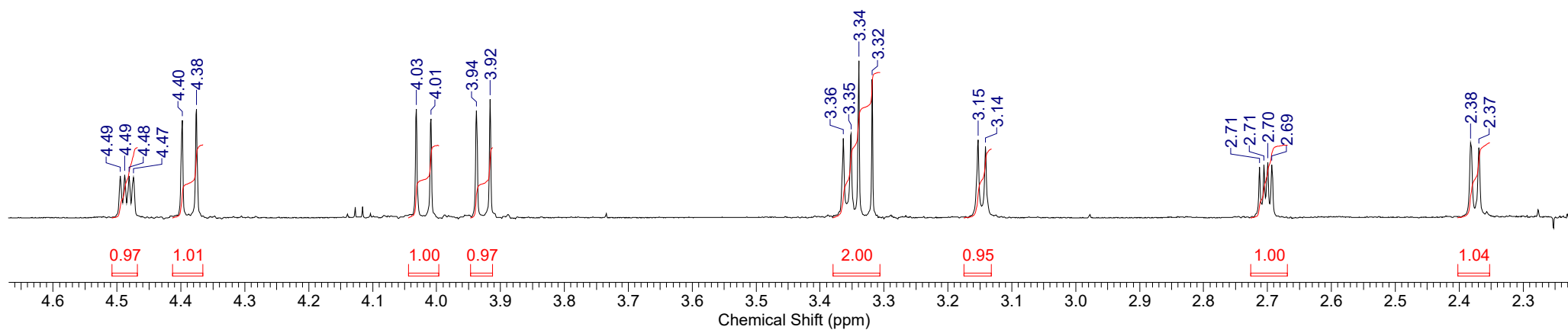


Formula C ₁₆ H ₁₆ O ₆	FW 304.2946
---	--------------------

Acquisition Time (sec) 1.9818	Comment single pulse	Date 10 Oct 1990 17:21:36	
Date Stamp 21 Dec 2019 04:26:16		File Name C:\USERS\Лабa534\DOWNLOADS\FZ8312-1.JDF	Frequency (MHz) 600.17
Nucleus 1H	Number of Transients 8	Origin ECA 600	Owner delta
Points Count 32768	Pulse Sequence single_pulse.ex2	Receiver Gain 48.00	Solvent CHLOROFORM-d
Spectrum Offset (Hz) 5410.6274	Sweep Width (Hz) 16534.39	Temperature (degree C) 23.800	

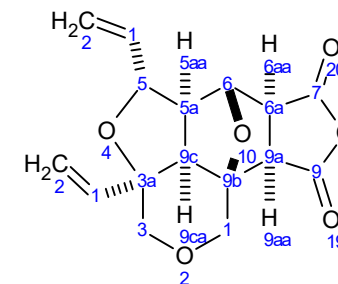


FZ8312-1.JDF



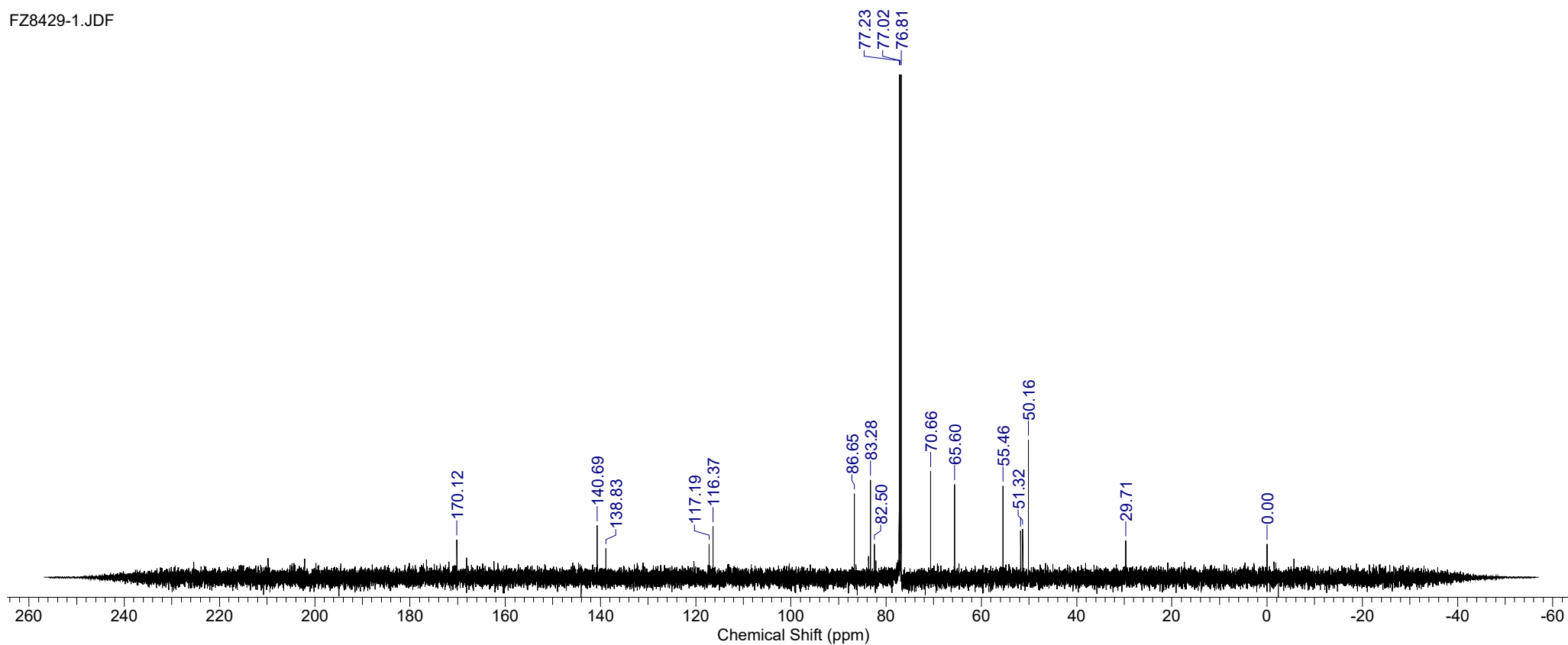
Formula C ₁₆ H ₁₆ O ₆	FW 304.2946
---	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 12 Feb 2020 04:03:18
Date Stamp 12 Feb 2020 03:25:06	File Name C:\USERS\Лa6a534\DOWNLOADS\FZ8429-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 1000
Original Points Count 32768	Owner Mass	Origin ECA 600
Receiver Gain 56.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49	Temperature (degree C) 24.000	Spectrum Offset (Hz) 15080.7979



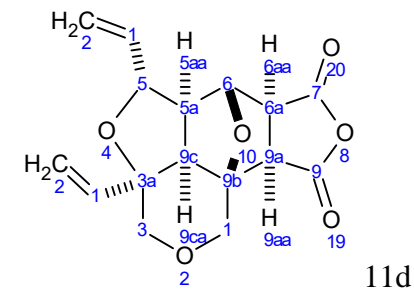
11d

FZ8429-1.JDF

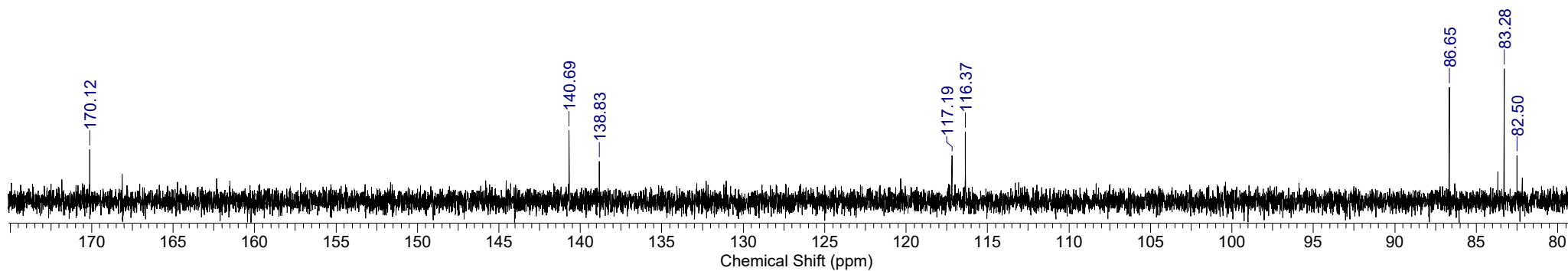


Formula C ₁₆ H ₁₆ O ₆	FW 304.2946
---	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 12 Feb 2020 04:03:18
Date Stamp 12 Feb 2020 03:25:06	File Name C:\USERS\Лa6a534\DOWNLOADS\FZ8429-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 1000
Original Points Count 32768	Owner Mass	Points Count 32768
Receiver Gain 56.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49	Temperature (degree C) 24.000	Spectrum Offset (Hz) 15080.7979

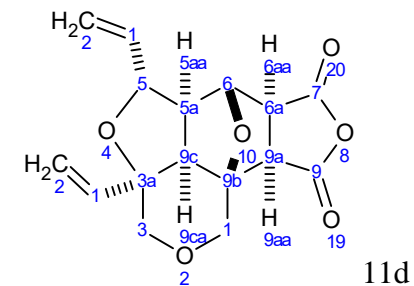


FZ8429-1.JDF

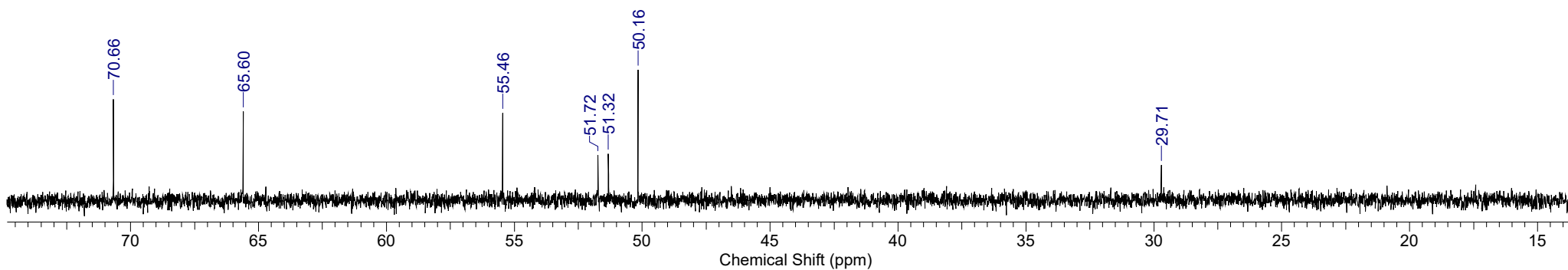


Formula C ₁₆ H ₁₆ O ₆	FW 304.2946
---	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 12 Feb 2020 04:03:18
Date Stamp 12 Feb 2020 03:25:06	File Name C:\USERS\Лабa534\DOWNLOADS\FZ8429-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Origin ECA 600
Original Points Count 32768	Owner Mass	Pulse Sequence single pulse dec
Receiver Gain 56.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 15080.7979
Sweep Width (Hz) 47348.49	Temperature (degree C) 24.000	

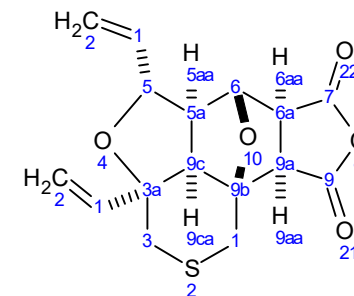


FZ8429-1.JDF



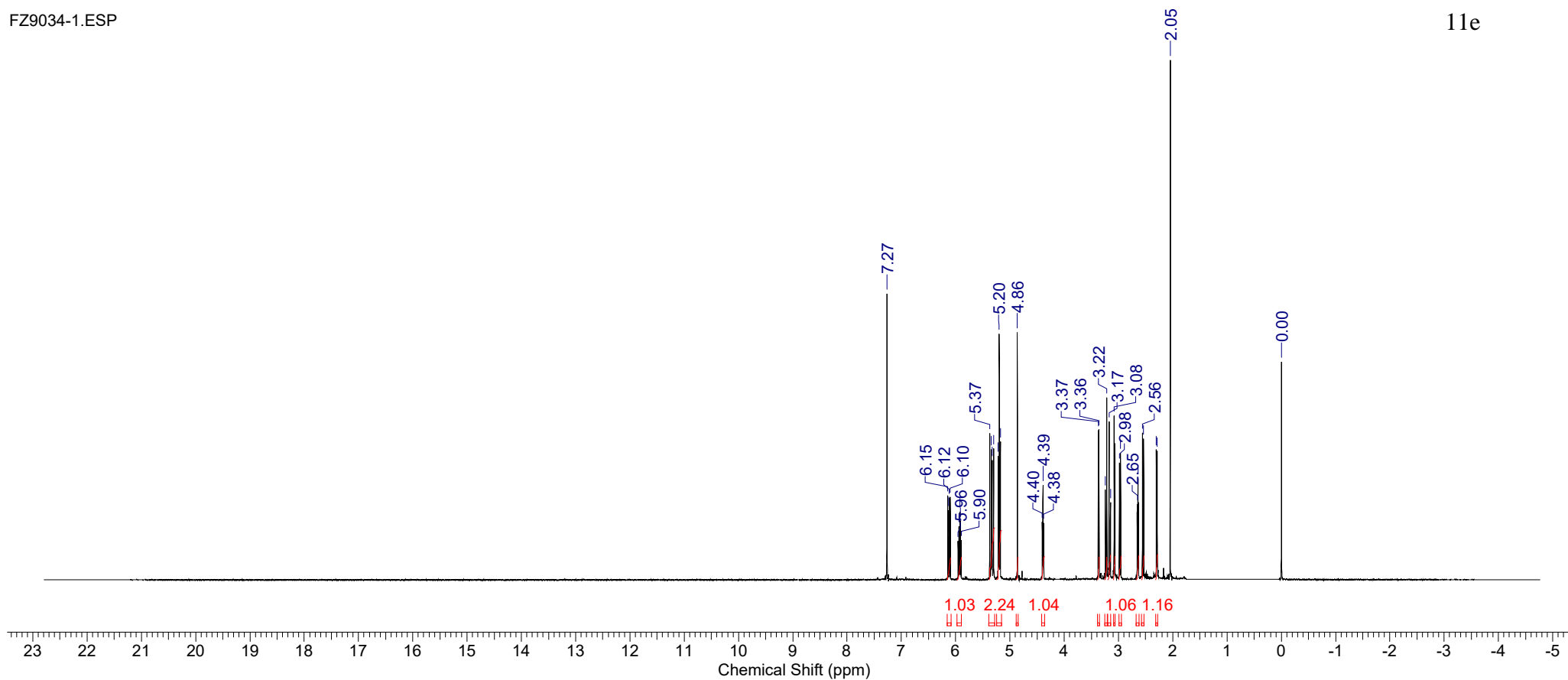
Formula C ₁₆ H ₁₆ O ₅ S	FW 320.3602
---	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 21 Aug 2020 10:06:23	Date Stamp 21 Aug 2020 10:07:31
File Name C:\USERS\Лабa534\DOWNLOADS\FZ9034-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 46.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 5410.1226	Sweep Width (Hz) 16534.39



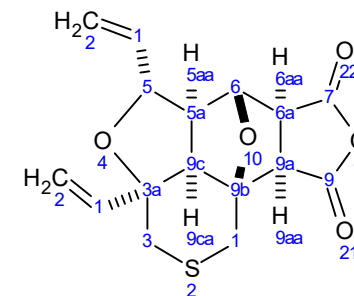
11e

FZ9034-1.ESP



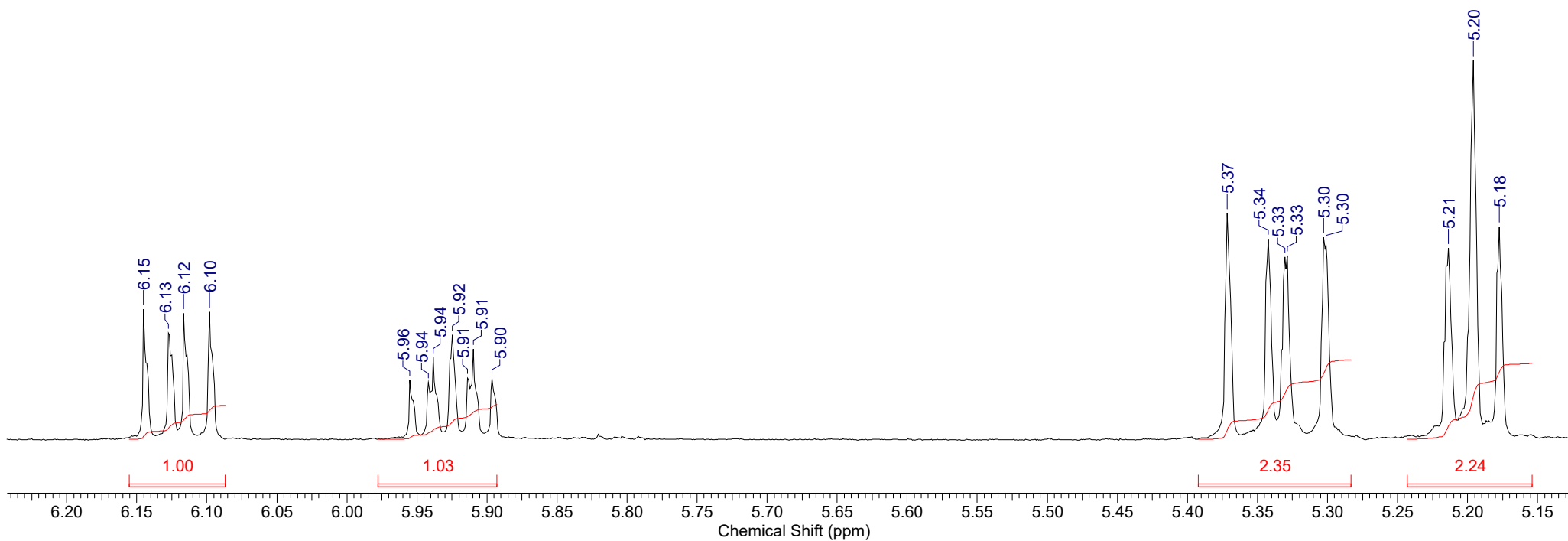
Formula C ₁₆ H ₁₆ O ₅ S	FW 320.3602
---	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 21 Aug 2020 10:06:23	Date Stamp 21 Aug 2020 10:07:31
File Name C:\USERS\Лабa534\DOWNLOADS\FZ9034-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 46.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 5410.1226	Sweep Width (Hz) 16534.39



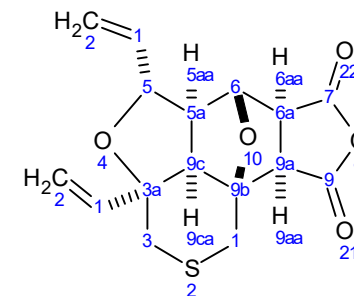
11e

FZ9034-1.ESP



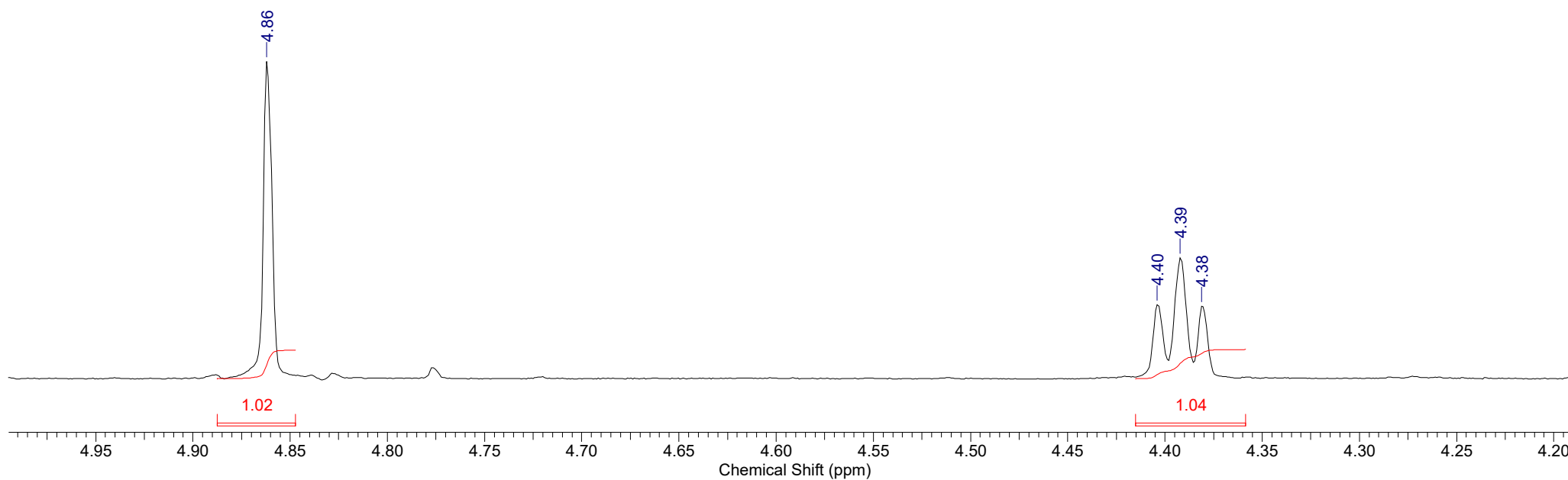
Formula C ₁₆ H ₁₆ O ₅ S	FW 320.3602
---	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 21 Aug 2020 10:06:23	Date Stamp 21 Aug 2020 10:07:31
File Name C:\USERS\Лабa534\DOWNLOADS\FZ9034-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 46.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 5410.1226	Sweep Width (Hz) 16534.39



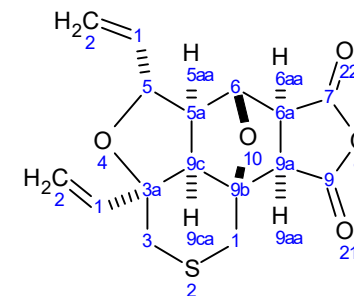
11e

FZ9034-1.ESP



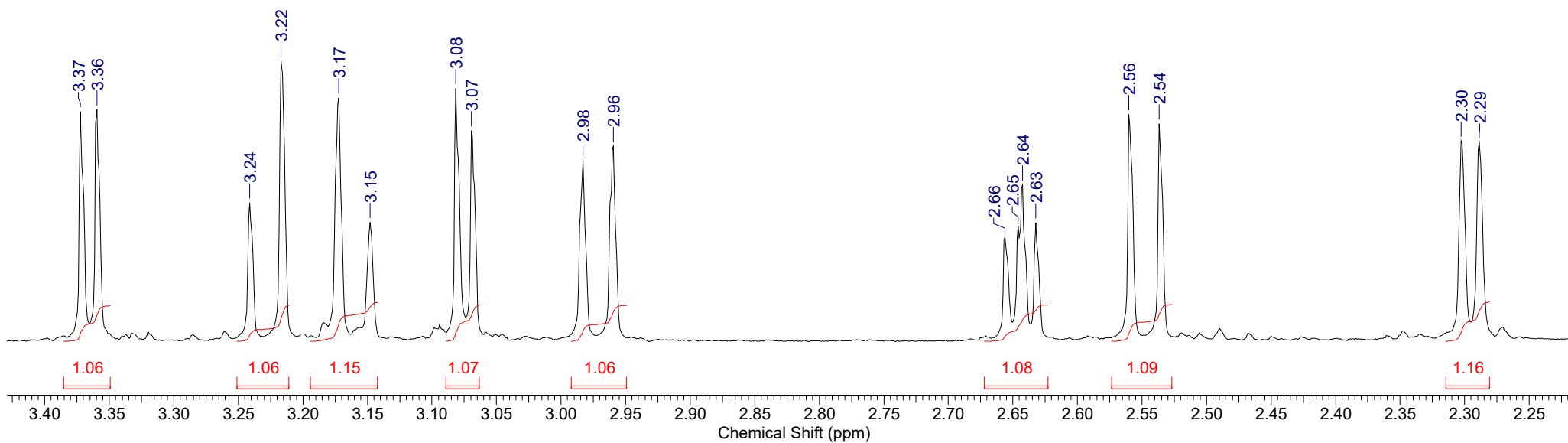
Formula C ₁₆ H ₁₆ O ₅ S	FW 320.3602
---	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 21 Aug 2020 10:06:23	Date Stamp 21 Aug 2020 10:07:31
File Name C:\USERS\Лабa534\DOWNLOADS\FZ9034-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 46.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 5410.1226	Sweep Width (Hz) 16534.39



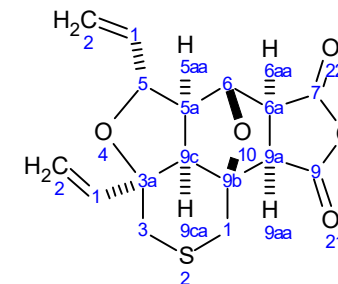
11e

FZ9034-1.ESP



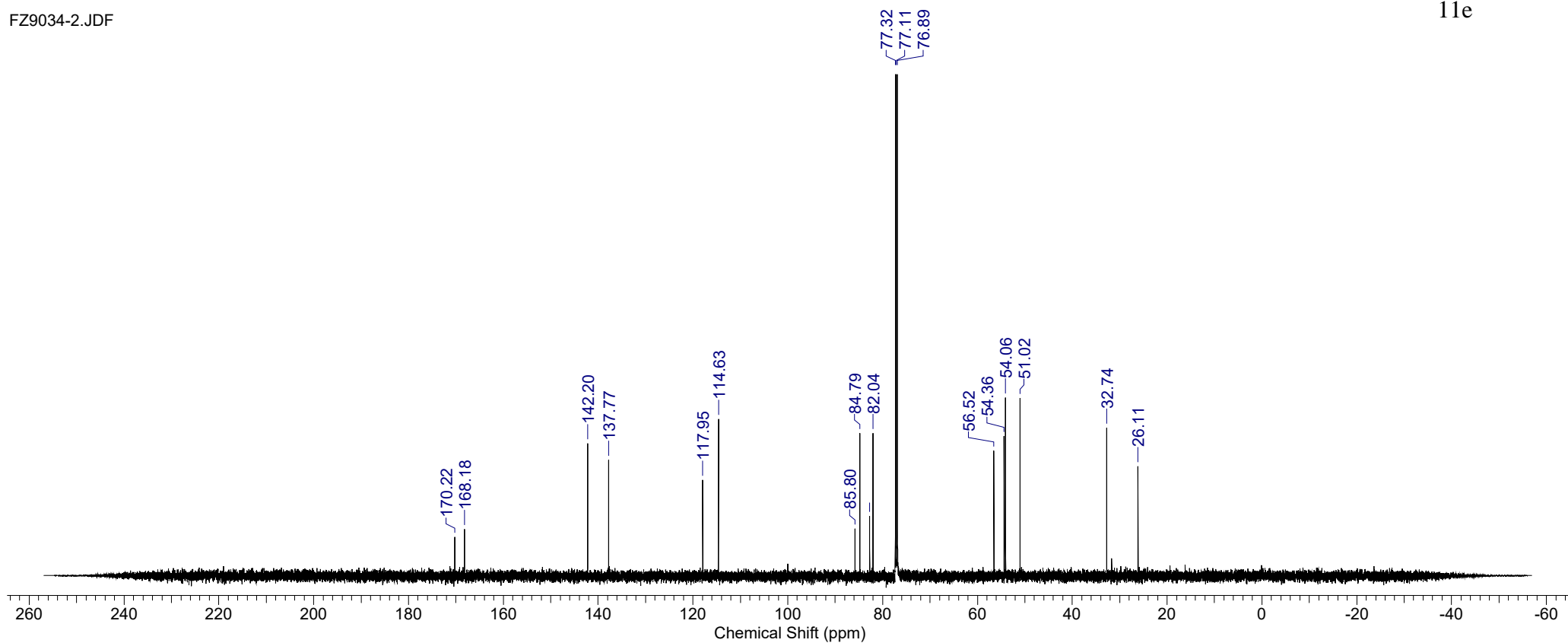
Formula C ₁₆ H ₁₆ O ₅ S	FW 320.3602
---	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 24 Aug 2020 09:48:48
Date Stamp 24 Aug 2020 09:50:01	File Name C:\USERS\la6a534\DOWNLOADS\FZ9034-2.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 2001
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 58.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15091.3428



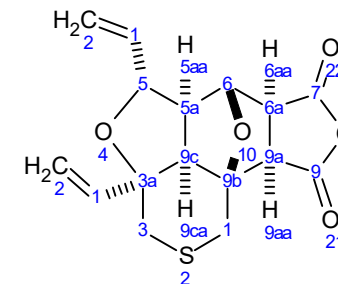
11e

FZ9034-2.JDF



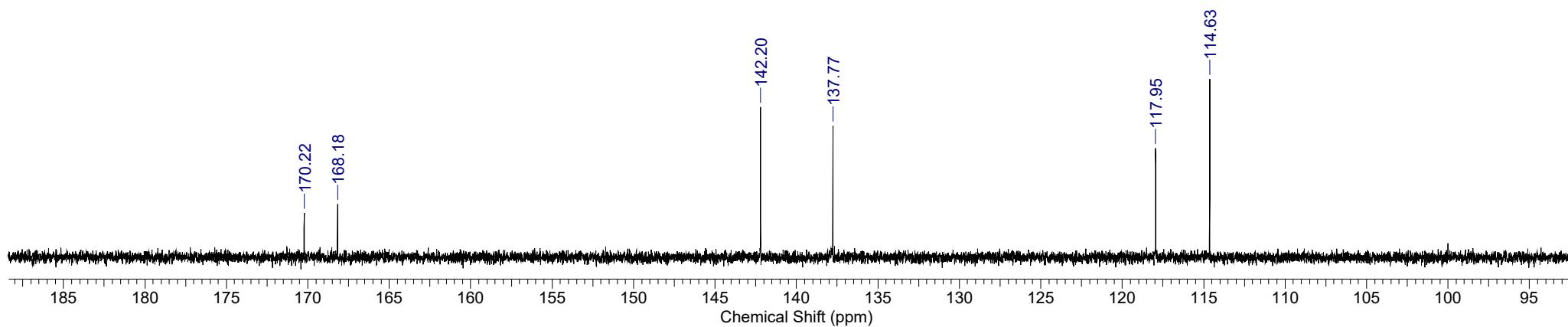
Formula C ₁₆ H ₁₆ O ₅ S	FW 320.3602
---	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 24 Aug 2020 09:48:48
Date Stamp 24 Aug 2020 09:50:01	File Name C:\USERS\лa6a534\DOWNLOADS\FZ9034-2.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 2001
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 58.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15091.3428



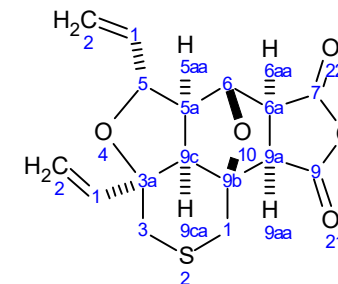
11e

FZ9034-2.JDF



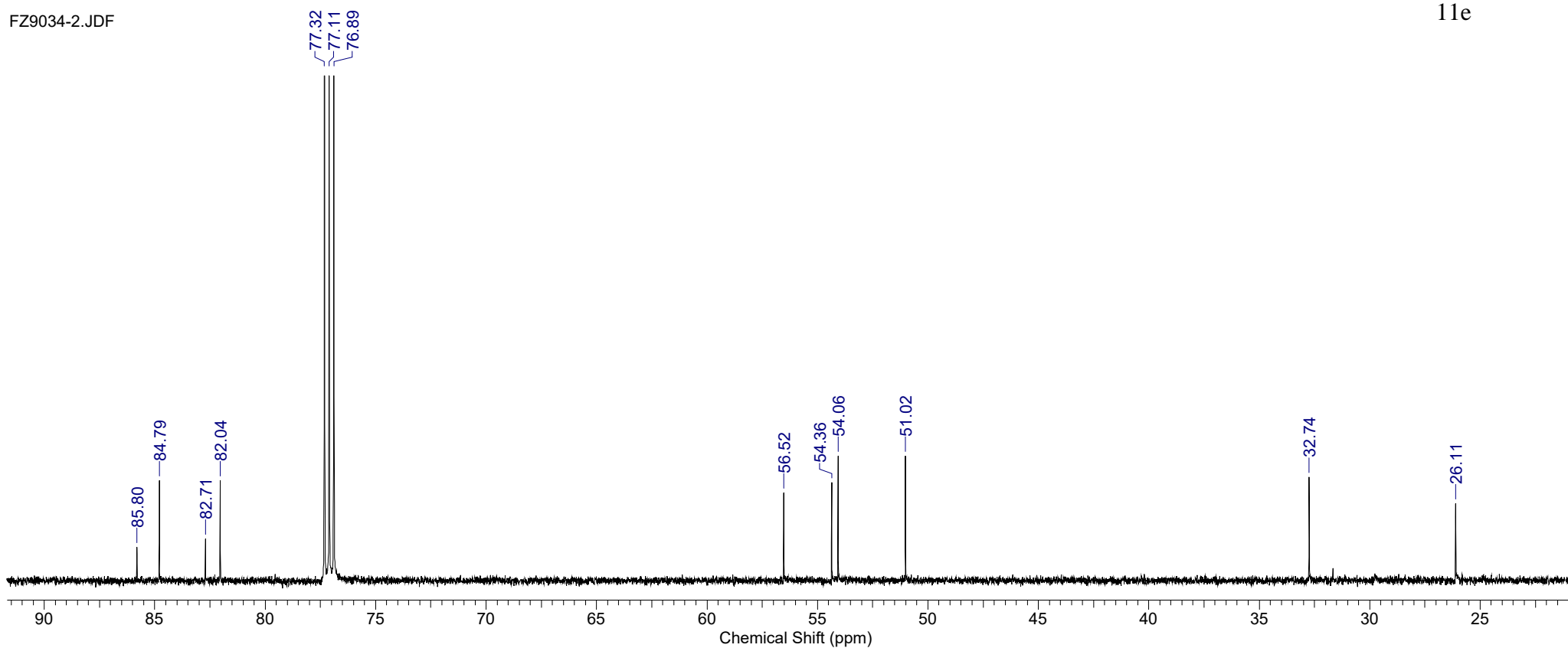
Formula C ₁₆ H ₁₆ O ₅ S	FW 320.3602
---	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 24 Aug 2020 09:48:48
Date Stamp 24 Aug 2020 09:50:01	File Name C:\USERS\la6a534\DOWNLOADS\FZ9034-2.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 2001
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 58.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15091.3428



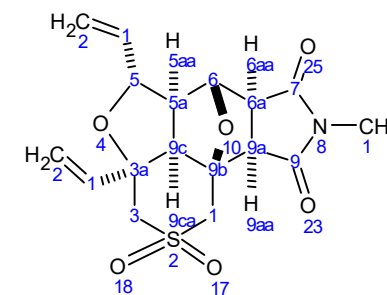
11e

FZ9034-2.JDF



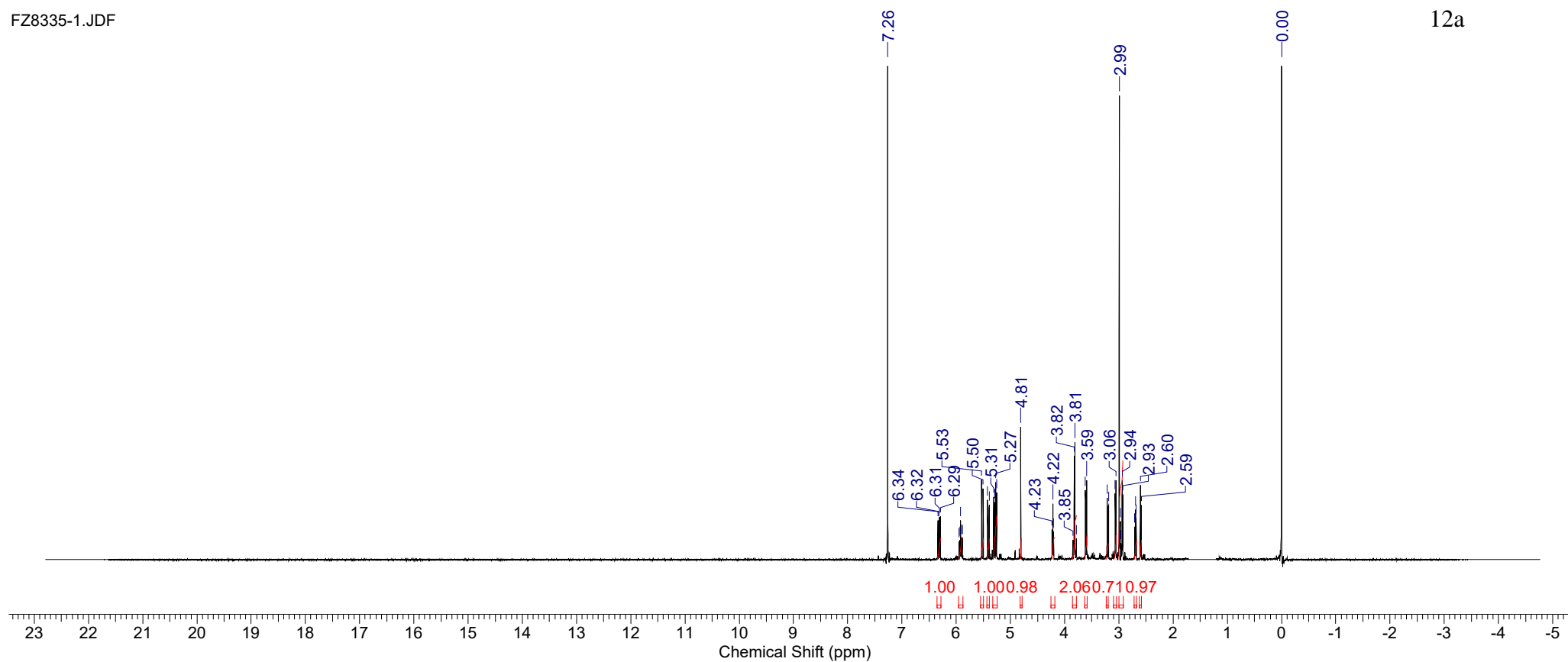
Formula C₁₇H₁₉NO₆S FW 365.4009

Acquisition Time (sec)	1.9818	Comment	single pulse	Date	14 Jan 2020 12:32:45	Frequency (MHz)	600.17
Date Stamp	14 Jan 2020 11:52:03	File Name	C:\USERS\П1а6а534\DOWNLOADS\FZ8335-1.JDF			Owner	delta
Nucleus	1H	Number of Transients	8	Origin	ECA 600	Original Points Count	32768
Points Count	32768	Pulse Sequence	single_pulse.ex2	Receiver Gain	52.00	Solvent	CHLOROFORM-d
Spectrum Offset (Hz)	5409.6182	Sweep Width (Hz)	16534.39	Temperature (degree C)	22.400		



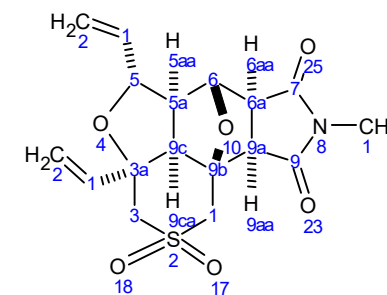
FZ8335-1.JDF

12a



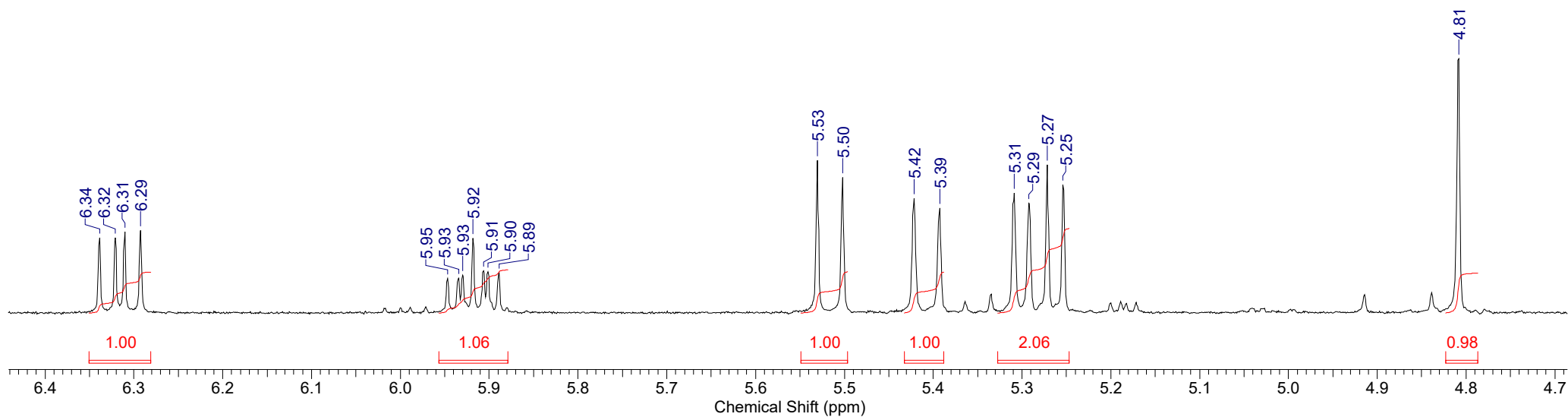
Formula C₁₇H₁₉NO₆S **FW** 365.4009

Acquisition Time (sec)	1.9818	Comment	single pulse	Date	14 Jan 2020 12:32:45	Frequency (MHz)	600.17
Date Stamp	14 Jan 2020 11:52:03	File Name	C:\USERS\Лаб6а534\DOWNLOADS\FZ8335-1.JDF			Owner	delta
Nucleus	1H	Number of Transients	8	Origin	ECA 600	Original Points Count	32768
Points Count	32768	Pulse Sequence	single_pulse.ex2	Receiver Gain	52.00	Solvent	CHLOROFORM-d
Spectrum Offset (Hz)	5409.6182	Sweep Width (Hz)	16534.39	Temperature (degree C)	22.400		



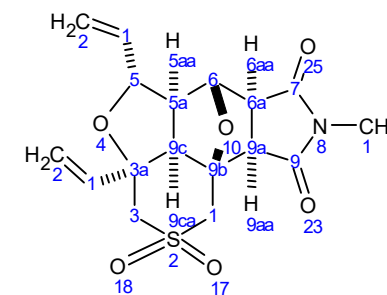
12a

FZ8335-1.JDF



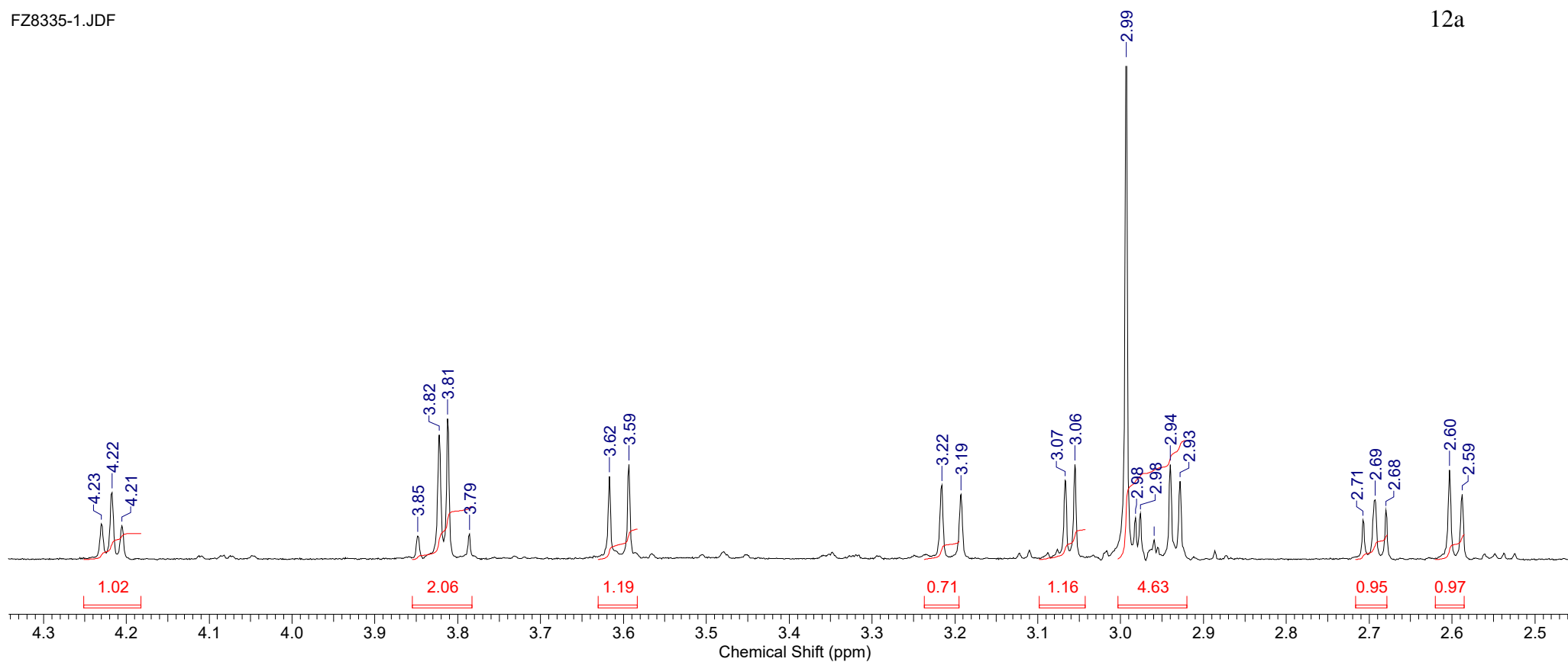
Formula C₁₇H₁₉NO₆S FW 365.4009

Acquisition Time (sec)	1.9818	Comment	single pulse	Date	14 Jan 2020 12:32:45	Frequency (MHz)	600.17
Date Stamp	14 Jan 2020 11:52:03	File Name	C:\USERS\Лабa534\DOWNLOADS\FZ8335-1.JDF			Owner	delta
Nucleus	1H	Number of Transients	8	Origin	ECA 600	Original Points Count	32768
Points Count	32768	Pulse Sequence	single_pulse.ex2	Receiver Gain	52.00	Solvent	CHLOROFORM-d
Spectrum Offset (Hz)	5409.6182	Sweep Width (Hz)	16534.39	Temperature (degree C)	22.400		



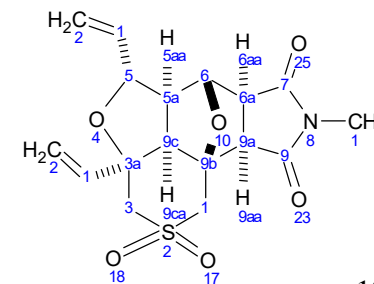
12a

FZ8335-1.JDF



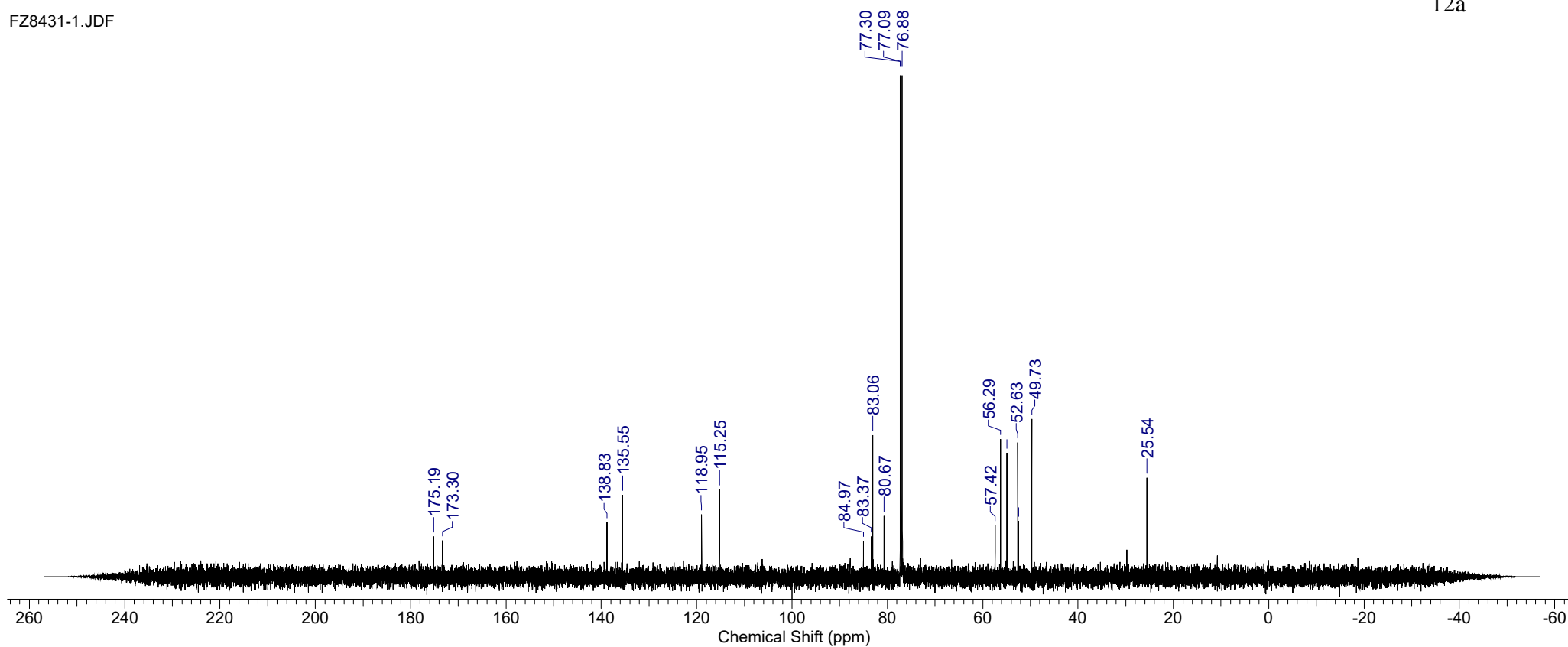
Formula C ₁₇ H ₁₉ NO ₆ S	FW 365.4009
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 12 Feb 2020 04:29:43
Date Stamp 12 Feb 2020 03:51:31	File Name C:\USERS\Лa6a534\DOWNLOADS\FZ8431-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 1000
Original Points Count 32768	Owner Mass	Points Count 32768
Receiver Gain 54.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49	Temperature (degree C) 23.800	Spectrum Offset (Hz) 15091.3428



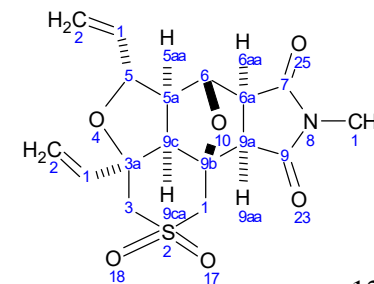
12a

FZ8431-1.JDF



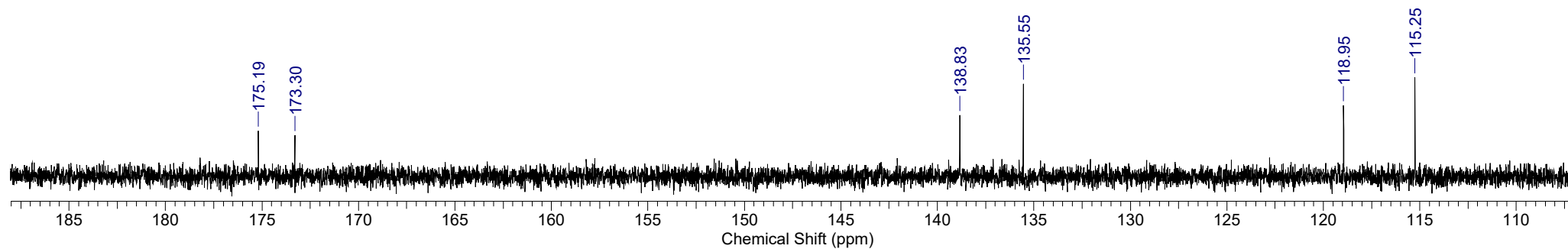
Formula C ₁₇ H ₁₉ NO ₆ S	FW 365.4009
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 12 Feb 2020 04:29:43
Date Stamp 12 Feb 2020 03:51:31	File Name C:\USERS\Лабa534\DOWNLOADS\FZ8431-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 1000
Original Points Count 32768	Owner Mass	Points Count 32768
Receiver Gain 54.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49	Temperature (degree C) 23.800	Spectrum Offset (Hz) 15091.3428



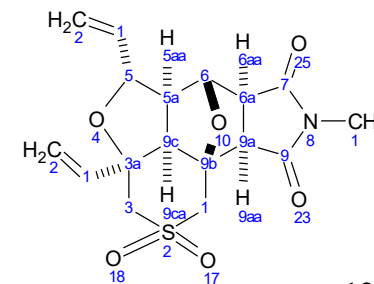
12a

FZ8431-1.JDF



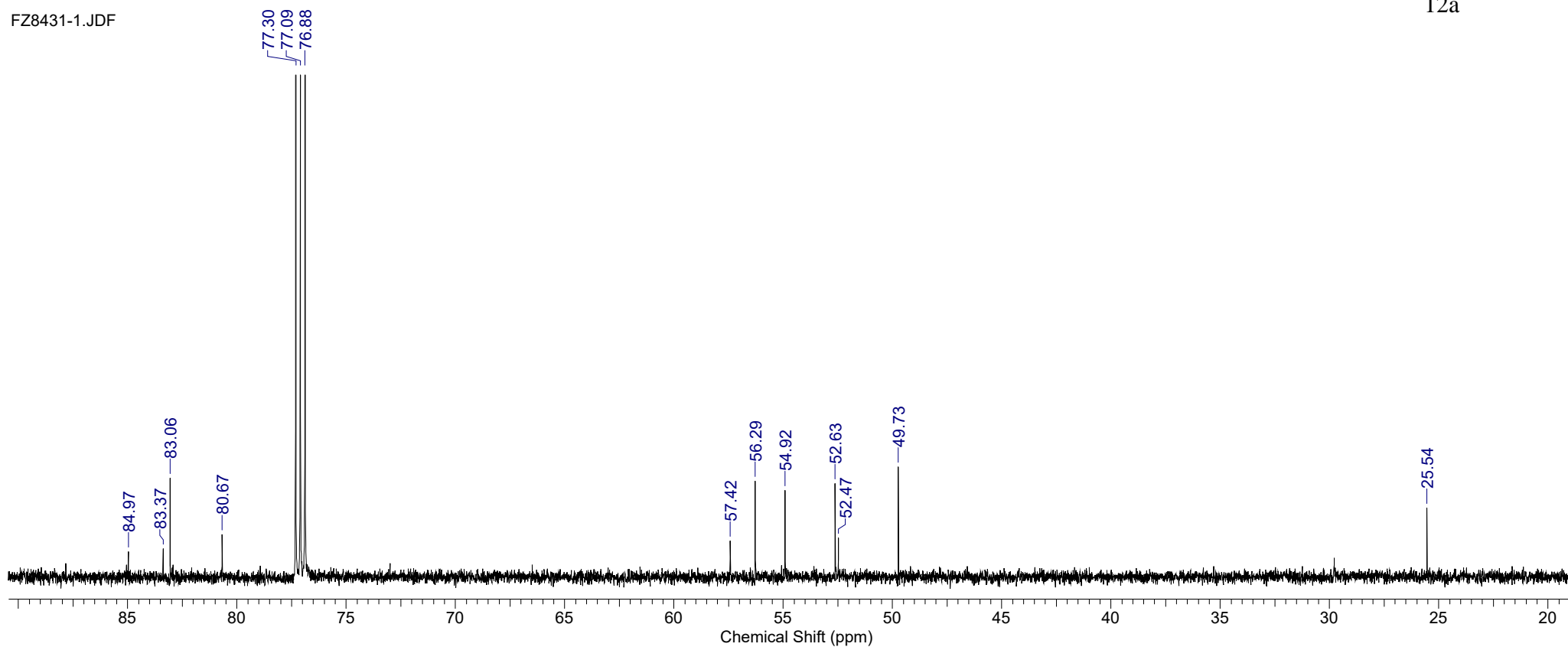
Formula C ₁₇ H ₁₉ NO ₆ S	FW 365.4009
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 12 Feb 2020 04:29:43
Date Stamp 12 Feb 2020 03:51:31	File Name C:\USERS\Лa6a534\DOWNLOADS\FZ8431-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 1000
Original Points Count 32768	Owner Mass	Points Count 32768
Receiver Gain 54.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49	Temperature (degree C) 23.800	Spectrum Offset (Hz) 15091.3428



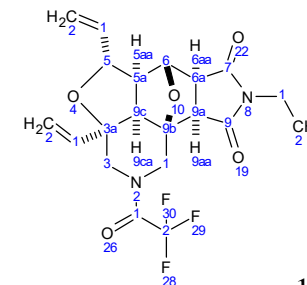
12a

FZ8431-1.JDF



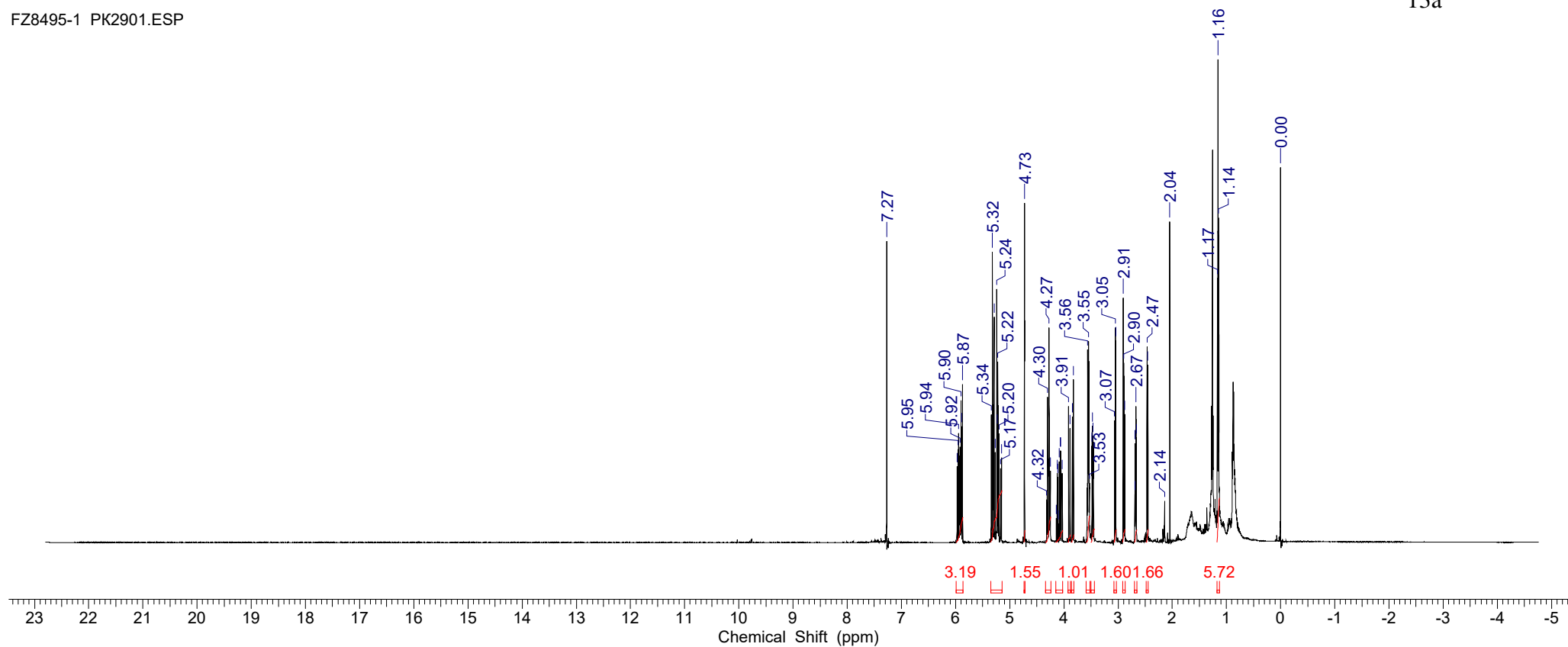
Formula C ₂₀ H ₂₁ F ₃ N ₃ O ₅	FW 426.3863
---	--------------------

Acquisition Time (sec) 0.9909	Comment single_pulse	Date 09 Feb 2020 07:40:15	Frequency (MHz) 600.17
Date Stamp 21 Feb 2020 09:25:57	File Name C:\USERS\Лa6a534\DOWNLOADS\FZ8495-1 (1).JDF	Original Points Count 16384	Owner CKP
Nucleus 1H	Number of Transients 8	Origin ECA 600	Receiver Gain 38.00
Points Count 16384	Pulse Sequence single_pulse.ex2	Solvent CHLOROFORM-d	
Spectrum Offset (Hz) 5413.0630	Sweep Width (Hz) 16534.39	Temperature (degree C) 23.200	



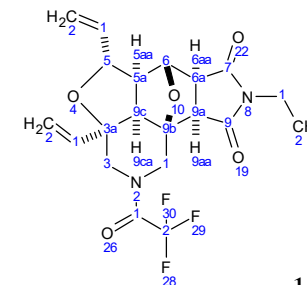
13a

FZ8495-1 PK2901.ESP



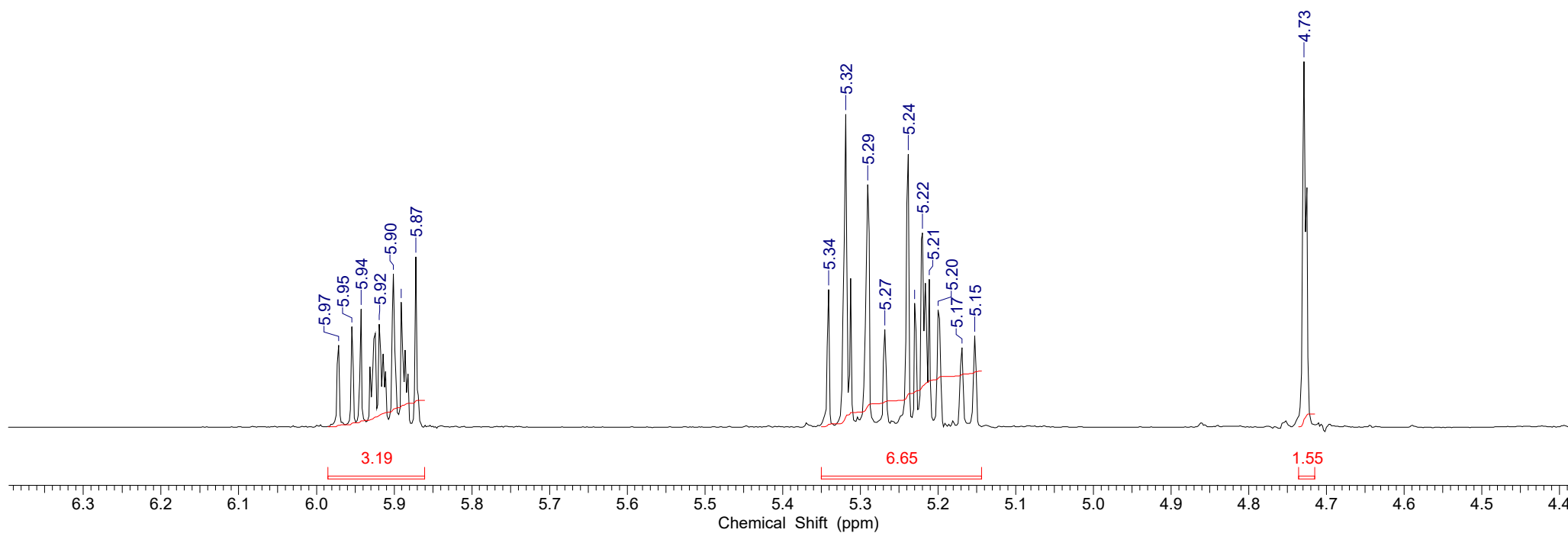
Formula C ₂₀ H ₂₁ F ₃ N ₃ O ₅	FW 426.3863
---	--------------------

Acquisition Time (sec) 0.9909	Comment single_pulse	Date 09 Feb 2020 07:40:15	Frequency (MHz) 600.17
Date Stamp 21 Feb 2020 09:25:57		File Name C:\USERS\Лаб6а534\DOWNLOADS\FZ8495-1 (1).JDF	Owner CKP
Nucleus 1H	Number of Transients 8	Origin ECA 600	Solvent CHLOROFORM-d
Points Count 16384	Pulse Sequence single_pulse.ex2	Original Points Count 16384	
Spectrum Offset (Hz) 5413.0630	Sweep Width (Hz) 16534.39	Receiver Gain 38.00	
	Temperature (degree C) 23.200		



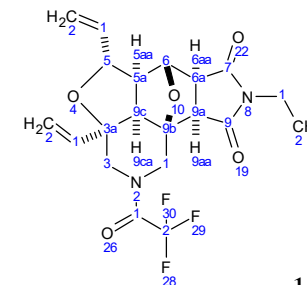
13a

FZ8495-1 PK2901.ESP

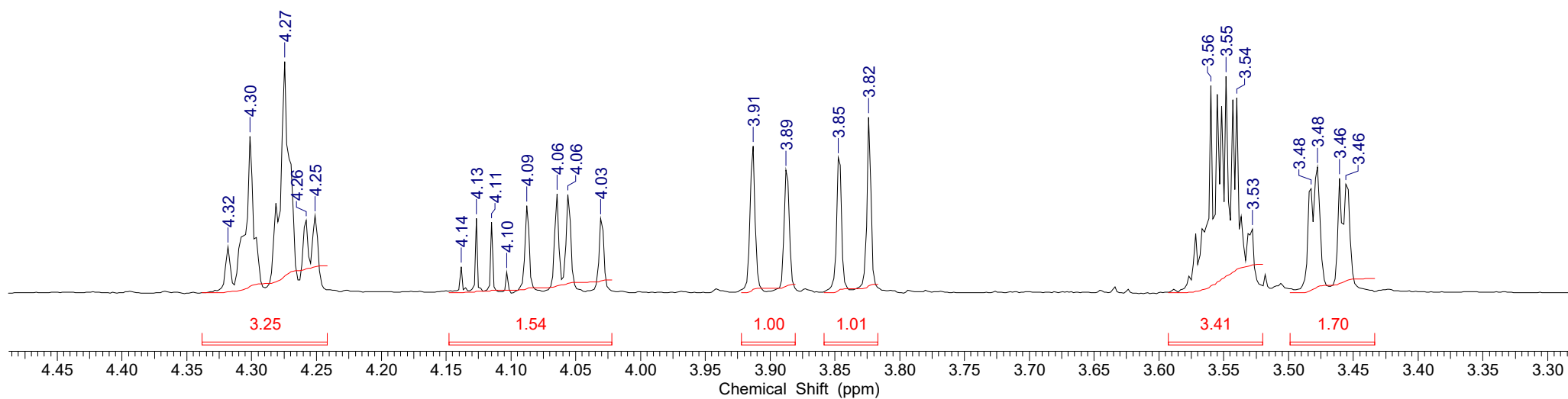


Formula C ₂₀ H ₂₁ F ₃ N ₃ O ₅	FW 426.3863
---	--------------------

Acquisition Time (sec) 0.9909	Comment single_pulse	Date 09 Feb 2020 07:40:15	Frequency (MHz) 600.17
Date Stamp 21 Feb 2020 09:25:57		File Name C:\USERS\Лa6a534\DOWNLOADS\FZ8495-1 (1).JDF	Owner CKP
Nucleus 1H	Number of Transients 8	Origin ECA 600	Solvent CHLOROFORM-d
Points Count 16384	Pulse Sequence single_pulse.ex2	Original Points Count 16384	Receiver Gain 38.00
Spectrum Offset (Hz) 5413.0630	Sweep Width (Hz) 16534.39	Temperature (degree C) 23.200	

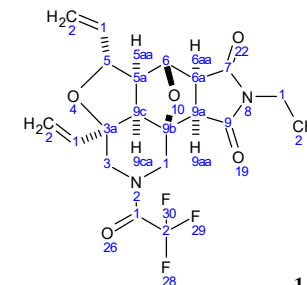


FZ8495-1 PK2901.ESP



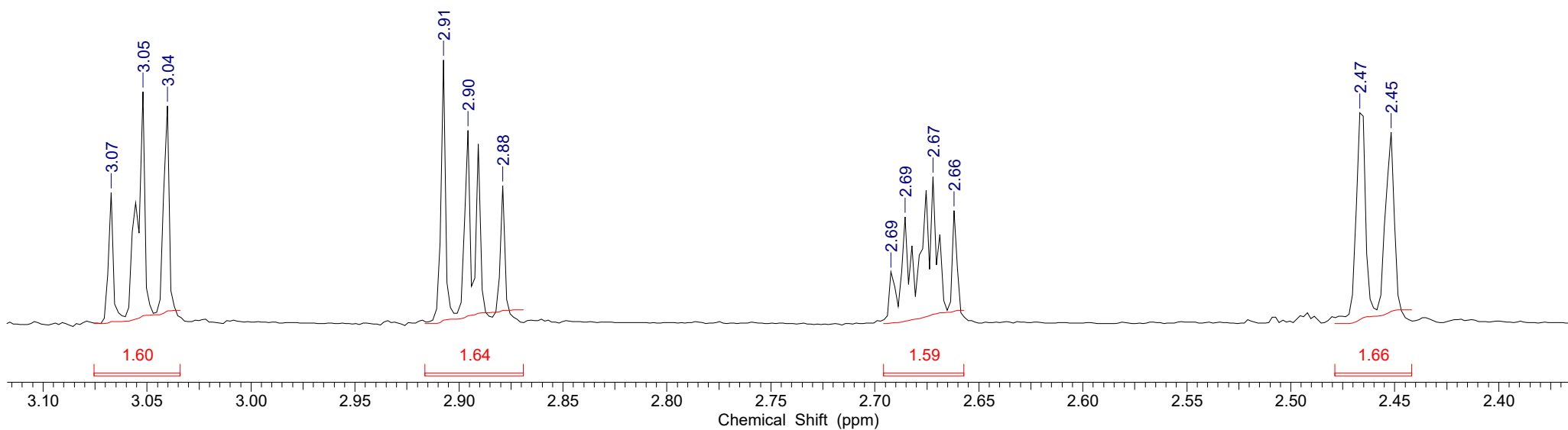
Formula C ₂₀ H ₂₁ F ₃ N ₃ O ₅	FW 426.3863
---	--------------------

Acquisition Time (sec) 0.9909	Comment single_pulse	Date 09 Feb 2020 07:40:15	Frequency (MHz) 600.17
Date Stamp 21 Feb 2020 09:25:57	File Name C:\USERS\Лаб6a534\DOWNLOADS\FZ8495-1 (1).JDF	Original Points Count 16384	Owner CKP
Nucleus 1H	Number of Transients 8	Origin ECA 600	Solvent CHLOROFORM-d
Points Count 16384	Pulse Sequence single_pulse.ex2	Receiver Gain 38.00	
Spectrum Offset (Hz) 5413.0630	Sweep Width (Hz) 16534.39	Temperature (degree C) 23.200	



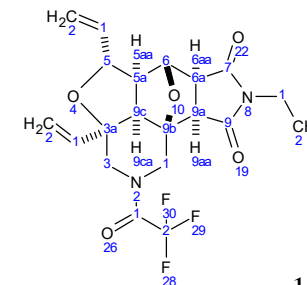
13a

FZ8495-1 PK2901.ESP



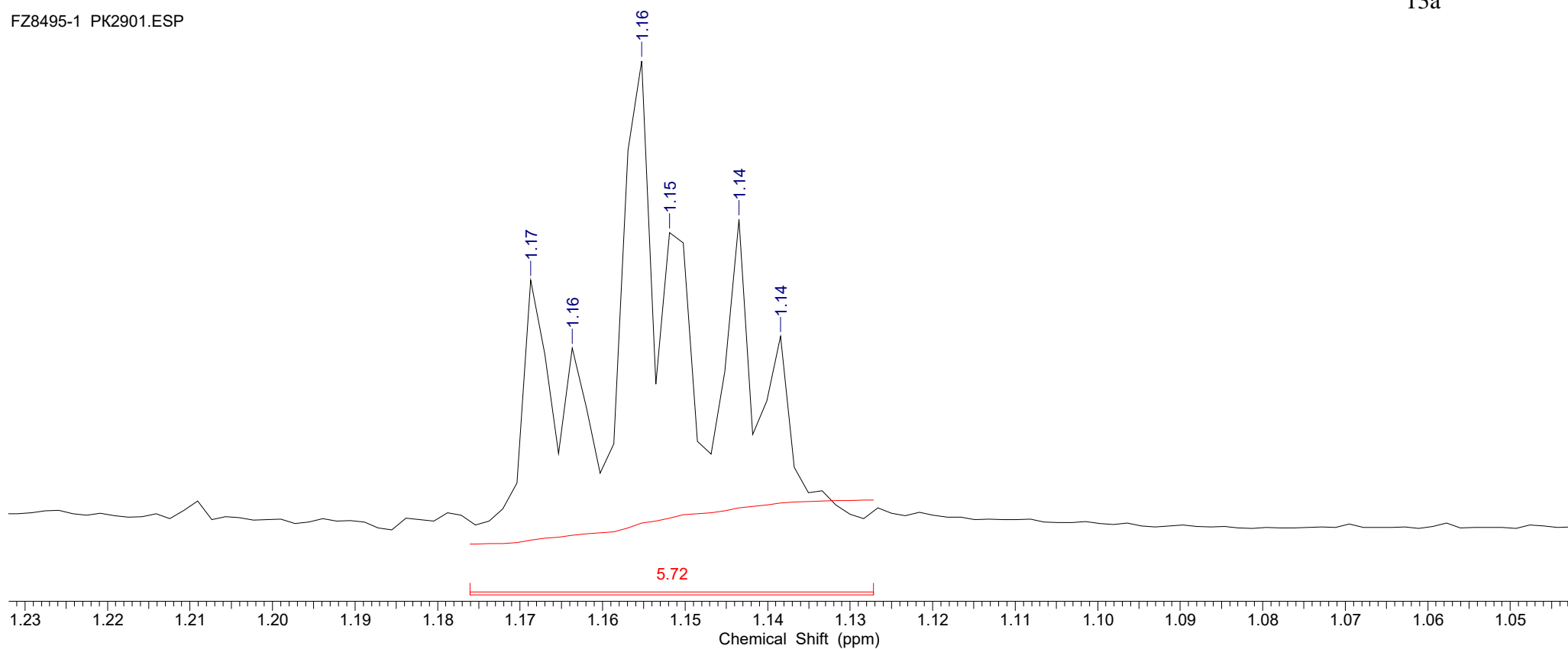
Formula C ₂₀ H ₂₁ F ₃ N ₃ O ₅	FW 426.3863
---	--------------------

Acquisition Time (sec) 0.9909	Comment single_pulse	Date 09 Feb 2020 07:40:15	Frequency (MHz) 600.17
Date Stamp 21 Feb 2020 09:25:57	File Name C:\USERS\Лa6a534\DOWNLOADS\FZ8495-1 (1).JDF	Original Points Count 16384	Owner CKP
Nucleus 1H	Number of Transients 8	Origin ECA 600	Solvent CHLOROFORM-d
Points Count 16384	Pulse Sequence single_pulse.ex2	Receiver Gain 38.00	
Spectrum Offset (Hz) 5413.0630	Sweep Width (Hz) 16534.39	Temperature (degree C) 23.200	



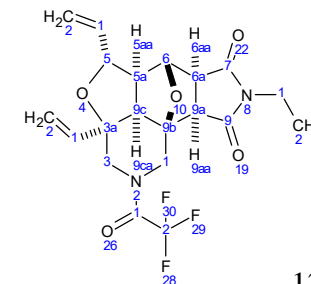
13a

FZ8495-1 PK2901.ESP



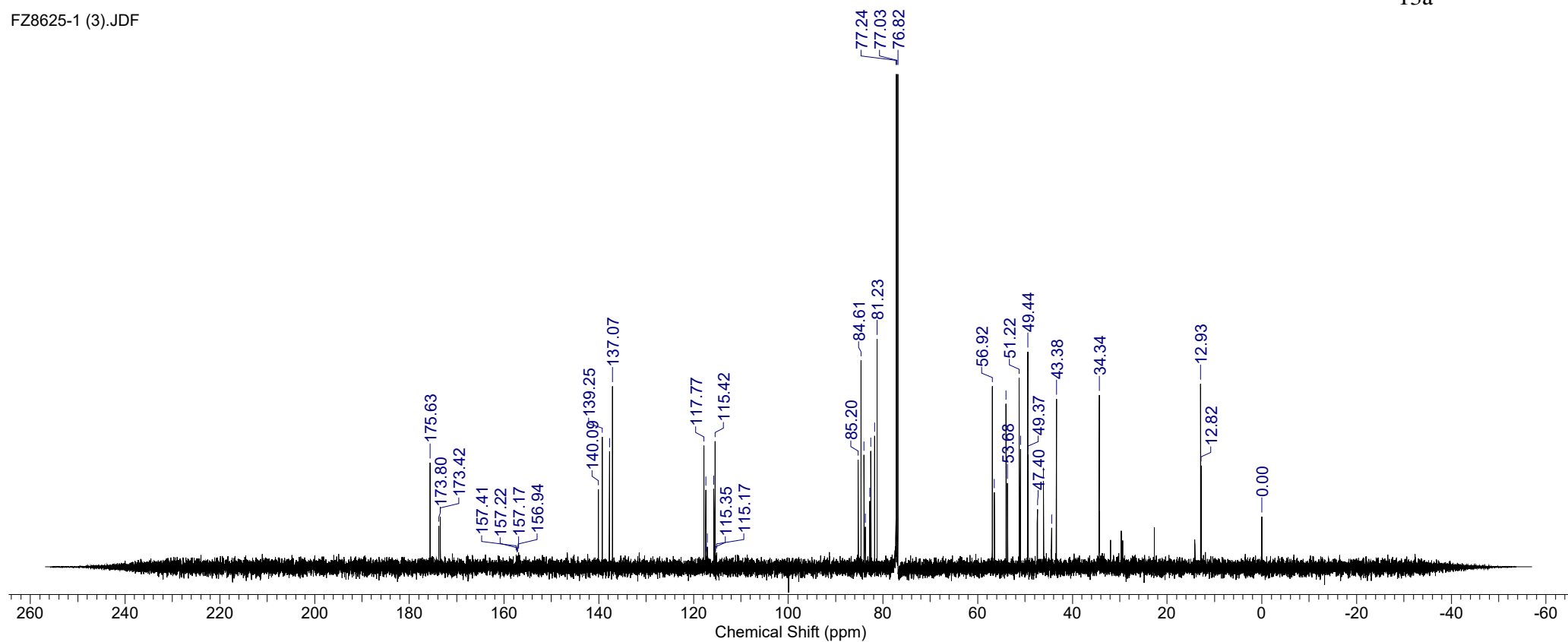
Formula C ₂₀ H ₂₁ F ₃ N ₂ O ₅	FW 426.3863
---	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 18 Mar 2020 11:04:50
Date Stamp 18 Mar 2020 10:23:02	File Name C:\USERS\Л1а6а534\DOWNLOADS\FZ8625-1 (3).JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 800
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 58.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49	Temperature (degree C) 23.600	Spectrum Offset (Hz) 15080.7979



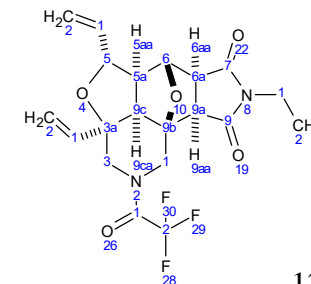
13a

FZ8625-1 (3).JDF

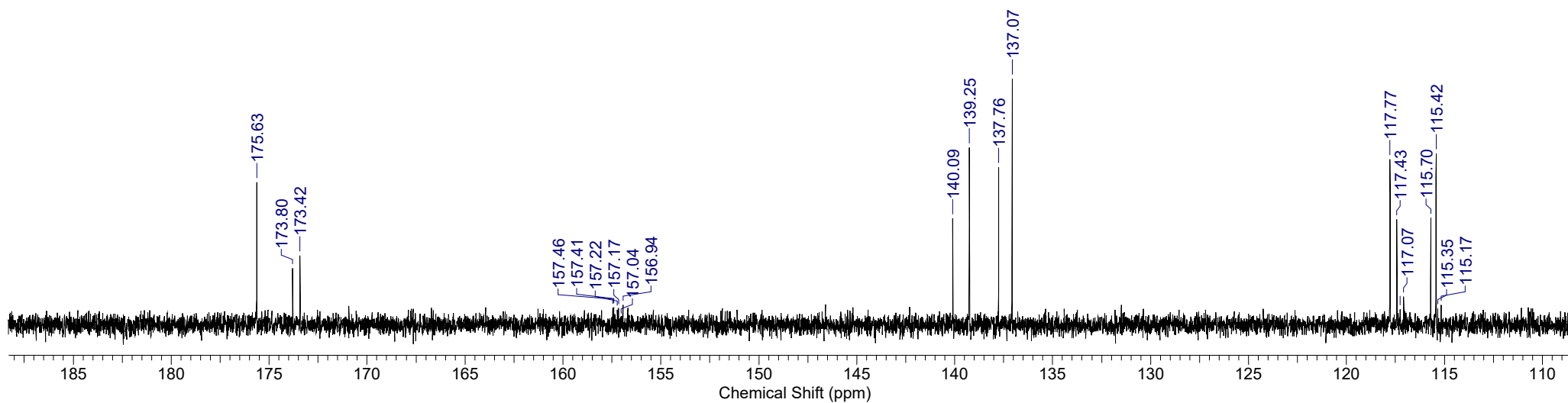


Formula C ₂₀ H ₂₁ F ₃ N ₃ O ₅	FW 426.3863
---	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 18 Mar 2020 11:04:50
Date Stamp 18 Mar 2020 10:23:02	File Name C:\USERS\Лабa534\DOWNLOADS\FZ8625-1 (3).JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 800
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 58.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49	Temperature (degree C) 23.600	Spectrum Offset (Hz) 15080.7979

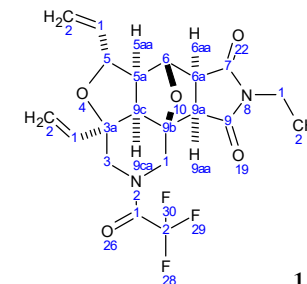


FZ8625-1 (3).JDF



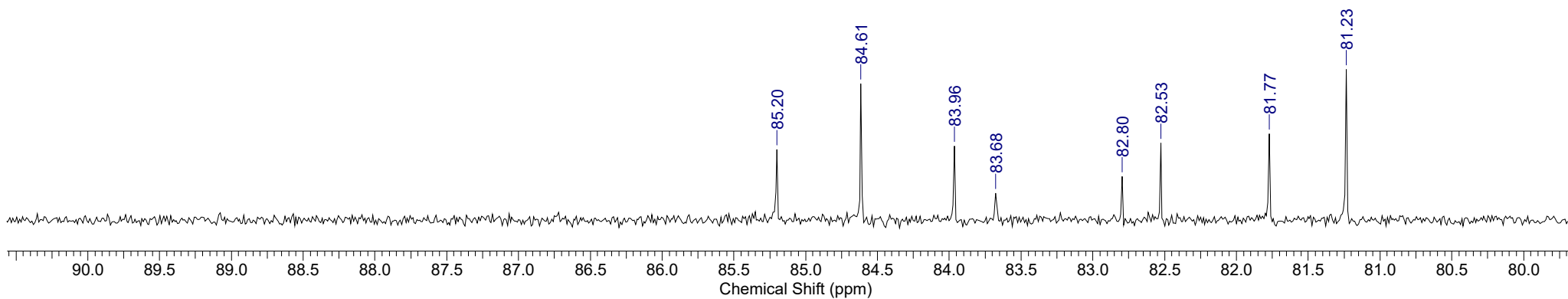
Formula C ₂₀ H ₂₁ F ₃ N ₂ O ₅	FW 426.3863
---	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 18 Mar 2020 11:04:50
Date Stamp 18 Mar 2020 10:23:02	File Name C:\USERS\Лаб6a534\DOWNLOADS\FZ8625-1 (3).JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 800
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 58.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49	Temperature (degree C) 23.600	Spectrum Offset (Hz) 15080.7979



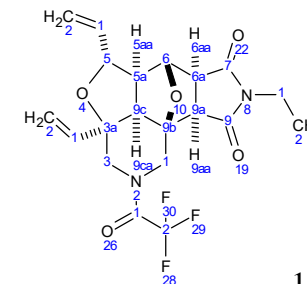
13a

FZ8625-1 (3).JDF



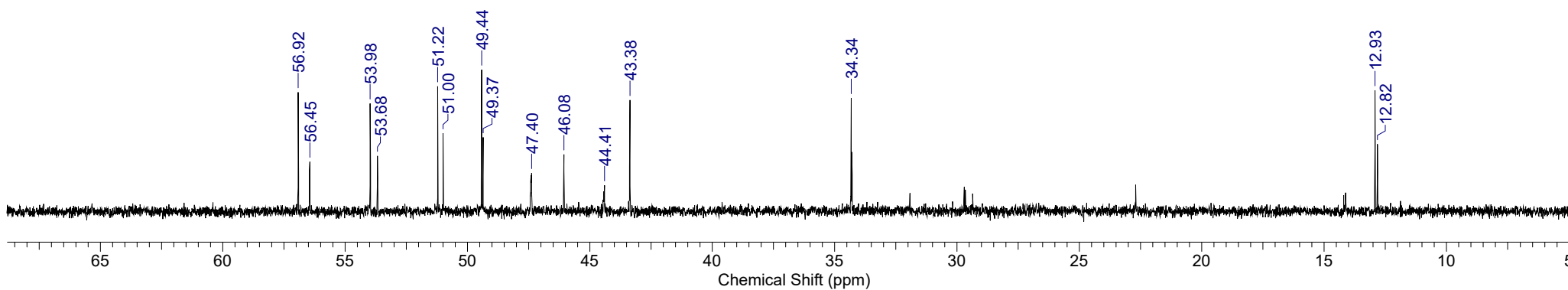
Formula C ₂₀ H ₂₁ F ₃ N ₃ O ₅	FW 426.3863
---	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 18 Mar 2020 11:04:50
Date Stamp 18 Mar 2020 10:23:02	File Name C:\USERS\Л1а6а534\DOWNLOADS\FZ8625-1 (3).JDF	
Frequency (MHz) 150.91	Nucleus 13C	Origin ECA 600
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 58.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49	Temperature (degree C) 23.600	Spectrum Offset (Hz) 15080.7979



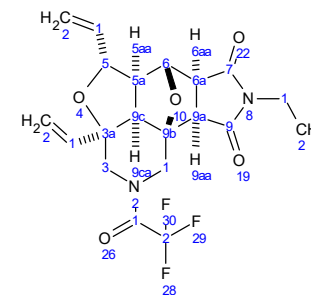
13a

FZ8625-1 (3).JDF



Formula C ₂₀ H ₂₁ F ₃ N ₃ O ₅	FW 426.3863
---	--------------------

Acquisition Time (sec) 0.4614	Comment single_pulse	Date 26 Mar 2020 08:37:51	Frequency (MHz) 564.73
Date Stamp 26 Mar 2020 07:55:29	File Name C:\USERS\la6a534\DOWNLOADS\FZ8671-1.JDF	Original Points Count 65536	Owner CKP
Nucleus 19F	Number of Transients 8	Receiver Gain 44.00	
Points Count 65536	Pulse Sequence single_pulse.ex2	Spectrum Offset (Hz) -56472.6094	Temperature (degree C) 22.500
Solvent CHLOROFORM-d		Sweep Width (Hz) 142045.45	

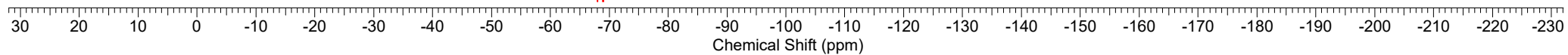


13a

FZ8671-1.JDF

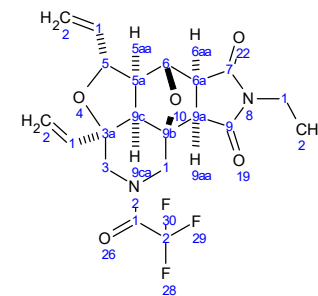
-68.02

-68.99

1.70
II

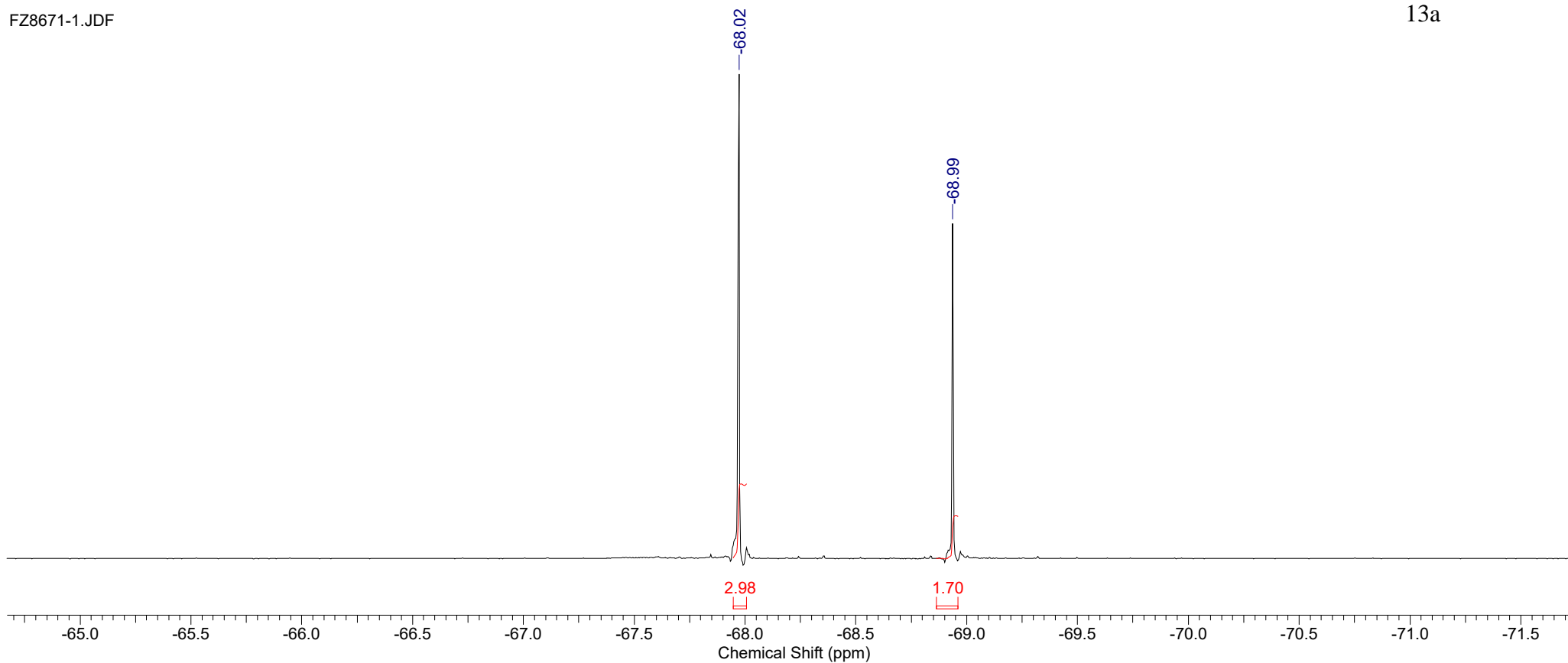
Formula C ₂₀ H ₂₁ F ₃ N ₃ O ₅	FW 426.3863
---	--------------------

Acquisition Time (sec) 0.4614	Comment single_pulse	Date 26 Mar 2020 08:37:51	Frequency (MHz) 564.73
Date Stamp 26 Mar 2020 07:55:29	File Name C:\USERS\la6a534\DOWNLOADS\FZ8671-1.JDF	Original Points Count 65536	Owner CKP
Nucleus 19F	Number of Transients 8	Origin ECA 600	Receiver Gain 44.00
Points Count 65536	Pulse Sequence single_pulse.ex2	Spectrum Offset (Hz) -56472.6094	Sweep Width (Hz) 142045.45
Solvent CHLOROFORM-d			Temperature (degree C) 22.500



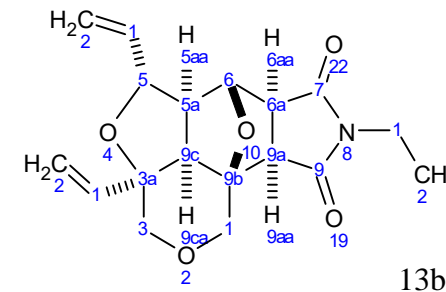
13a

FZ8671-1.JDF

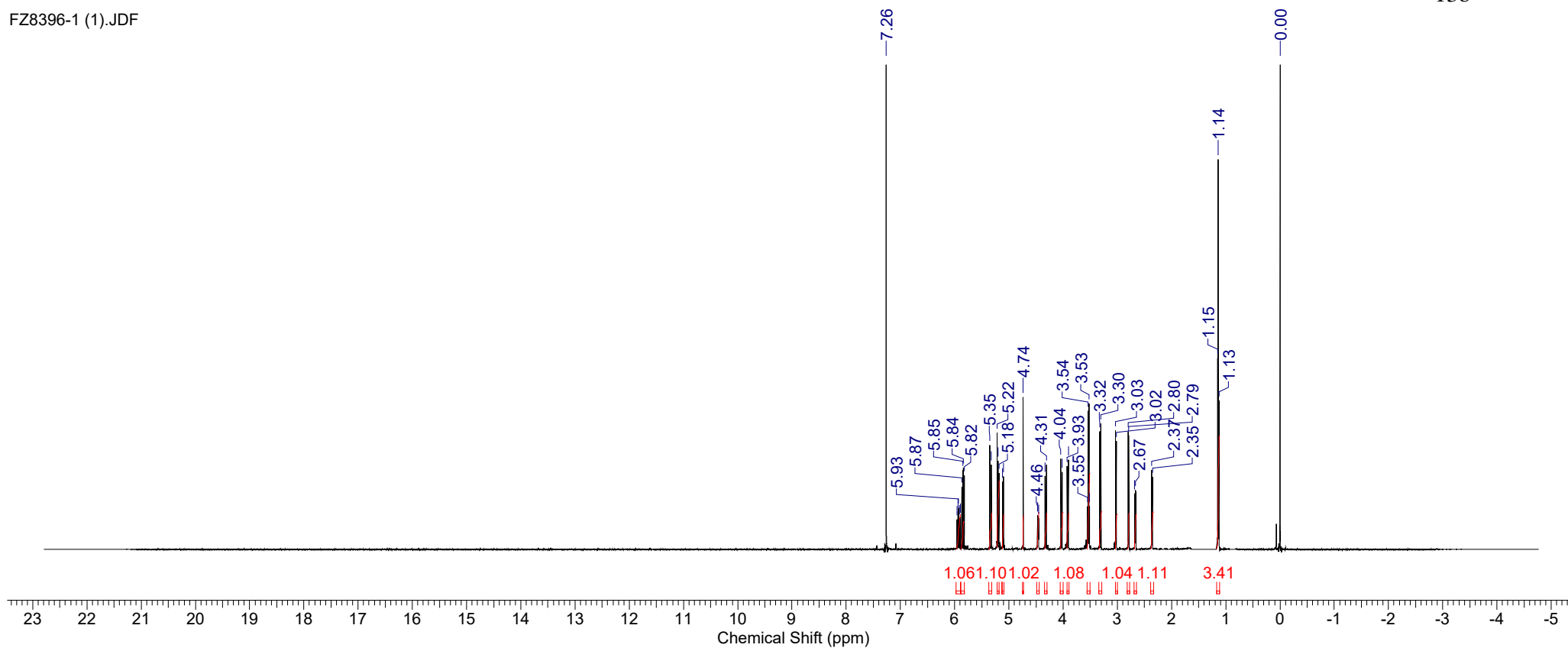


Formula C ₁₈ H ₂₁ NO ₅	FW 331.3630
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 03 Feb 2020 12:14:42	Frequency (MHz) 600.17
Date Stamp 03 Feb 2020 11:36:20	File Name C:\USERS\la6a534\DOWNLOADS\FZ8396-1 (1).JDF	Original Points Count 32768	Owner Mass
Nucleus 1H	Number of Transients 8	Origin ECA 600	Solvent CHLOROFORM-d
Points Count 32768	Pulse Sequence single_pulse.ex2	Receiver Gain 56.00	
Spectrum Offset (Hz) 5409.6182	Sweep Width (Hz) 16534.39	Temperature (degree C) 24.400	

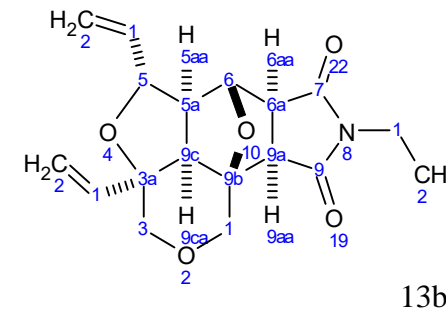


FZ8396-1 (1).JDF

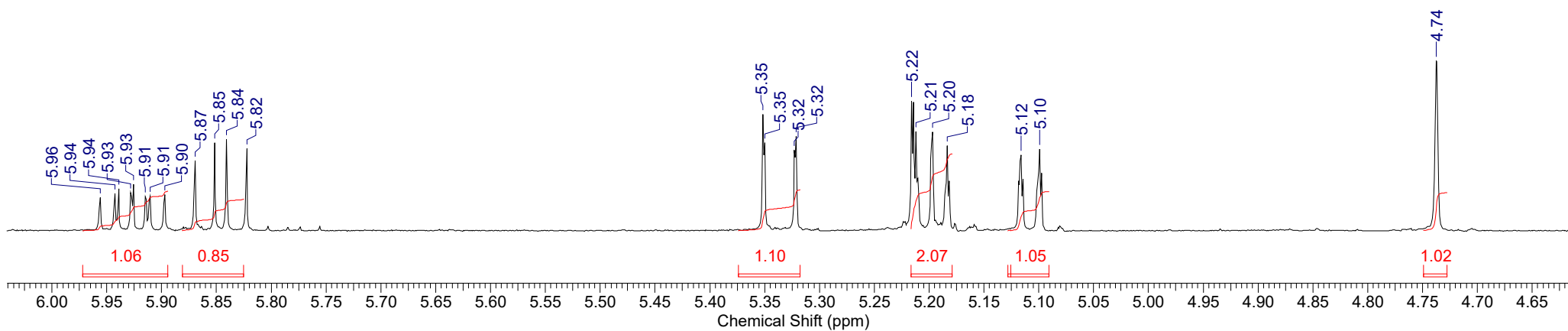


Formula C ₁₈ H ₂₁ NO ₅	FW 331.3630
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 03 Feb 2020 12:14:42	Frequency (MHz) 600.17
Date Stamp 03 Feb 2020 11:36:20		File Name C:\USERS\la6a534\DOWNLOADS\FZ8396-1 (1).JDF	Owner Mass
Nucleus 1H	Number of Transients 8	Origin ECA 600	Solvent CHLOROFORM-d
Points Count 32768	Pulse Sequence single_pulse.ex2	Original Points Count 32768	
		Receiver Gain 56.00	
Spectrum Offset (Hz) 5409.6182	Sweep Width (Hz) 16534.39	Temperature (degree C) 24.400	

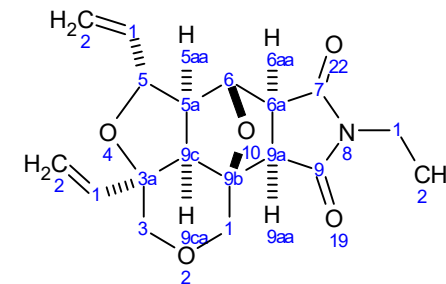


FZ8396-1 (1).JDF



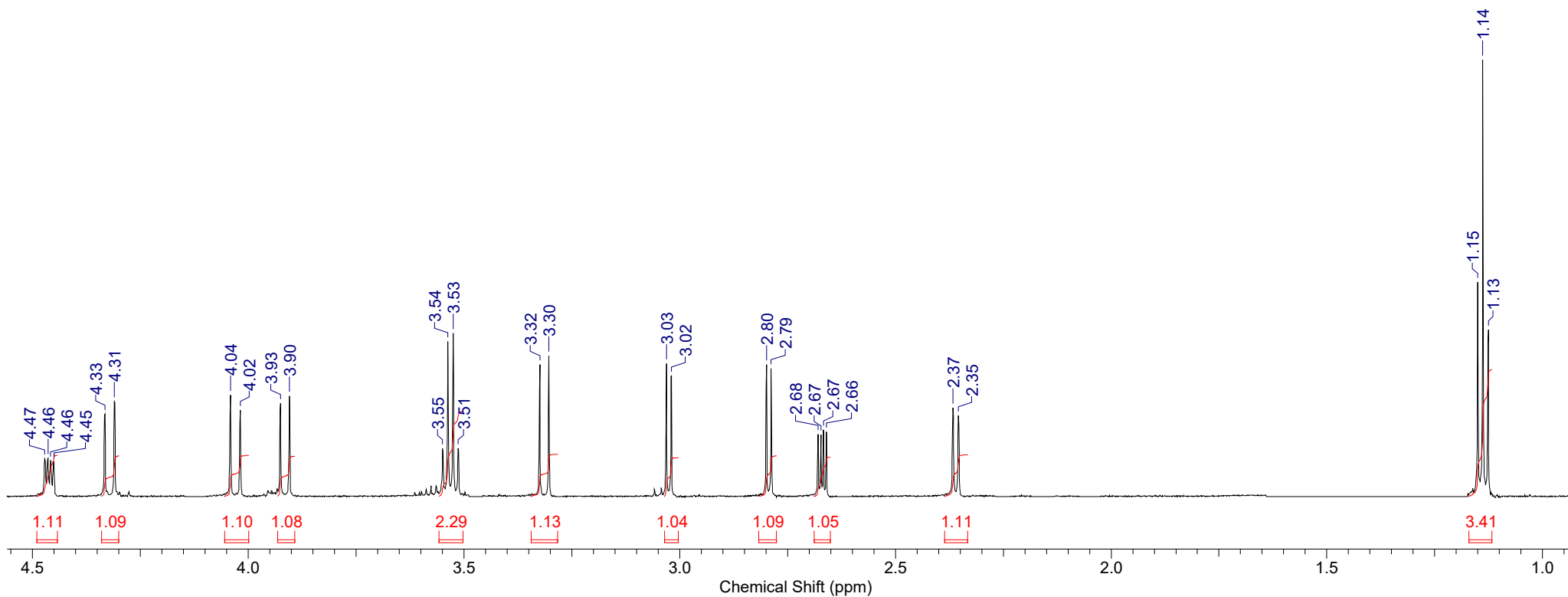
Formula C ₁₈ H ₂₁ NO ₅	FW 331.3630
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 03 Feb 2020 12:14:42	Frequency (MHz) 600.17
Date Stamp 03 Feb 2020 11:36:20	File Name C:\USERS\la6a534\DOWNLOADS\FZ8396-1 (1).JDF	Original Points Count 32768	Owner Mass
Nucleus 1H	Number of Transients 8	Origin ECA 600	Solvent CHLOROFORM-d
Points Count 32768	Pulse Sequence single_pulse.ex2	Receiver Gain 56.00	
Spectrum Offset (Hz) 5409.6182	Sweep Width (Hz) 16534.39	Temperature (degree C) 24.400	



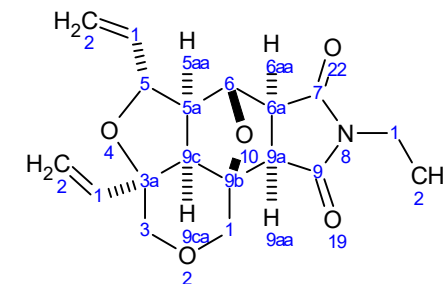
13b

FZ8396-1 (1).JDF



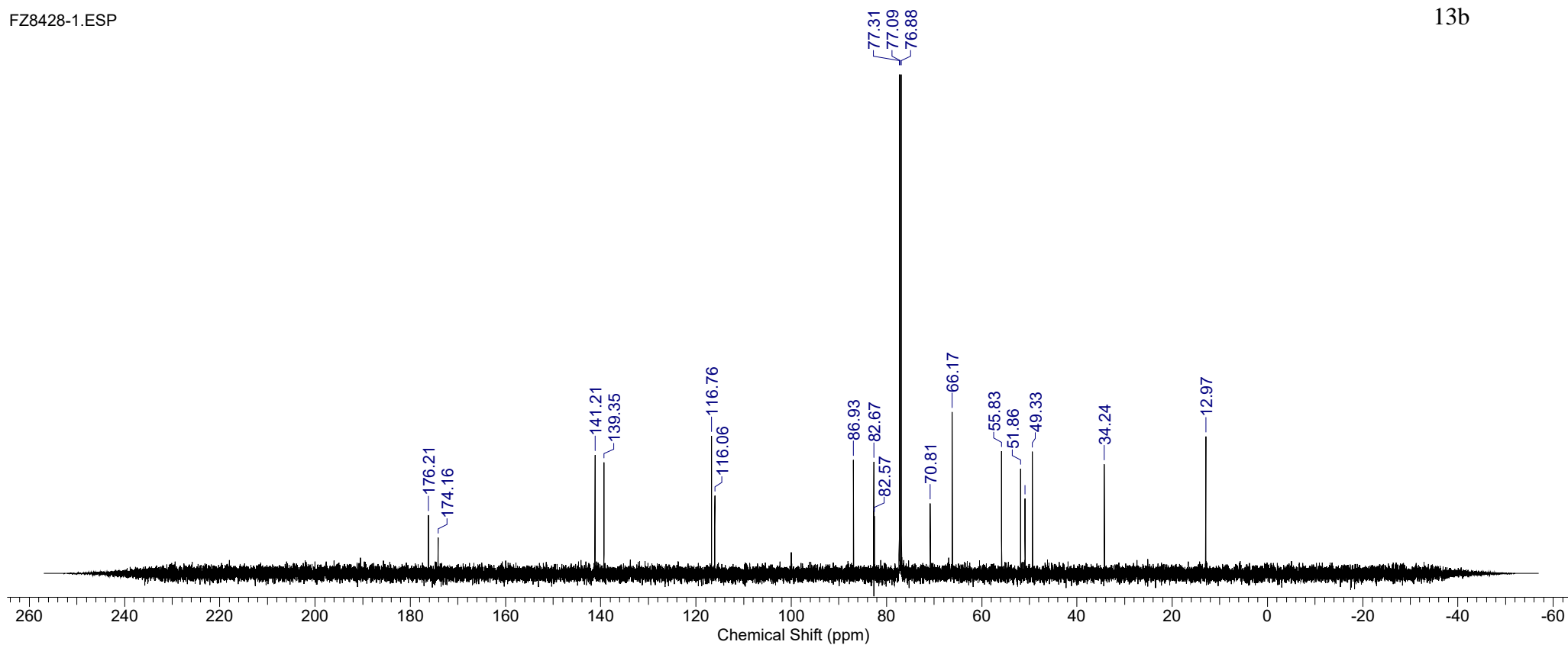
Formula C ₁₈ H ₂₁ NO ₅	FW 331.3630
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 12 Feb 2020 03:36:55
Date Stamp 12 Feb 2020 02:58:43	File Name C:\USERS\Лa6a534\DOWNLOADS\FZ8428-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 1000
Original Points Count 32768	Owner Mass	Points Count 32768
Receiver Gain 54.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49	Temperature (degree C) 24.100	Spectrum Offset (Hz) 15091.3428



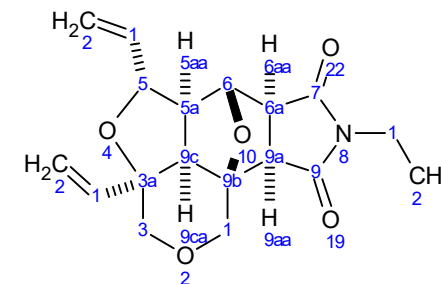
13b

FZ8428-1.ESP



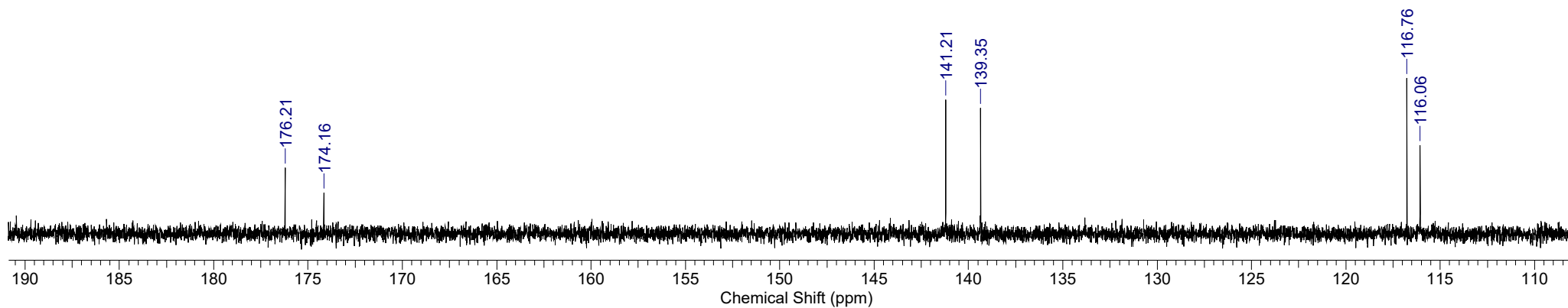
Formula C ₁₈ H ₂₁ NO ₅	FW 331.3630
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 12 Feb 2020 03:36:55
Date Stamp 12 Feb 2020 02:58:43	File Name C:\USERS\Лабa534\DOWNLOADS\FZ8428-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 1000
Original Points Count 32768	Owner Mass	Points Count 32768
Receiver Gain 54.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49	Temperature (degree C) 24.100	Spectrum Offset (Hz) 15091.3428



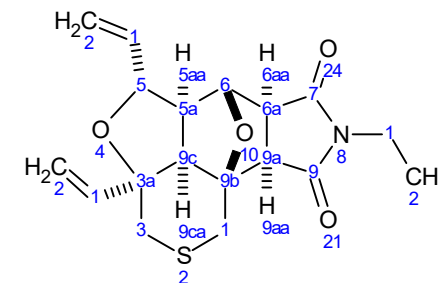
13b

FZ8428-1.JDF



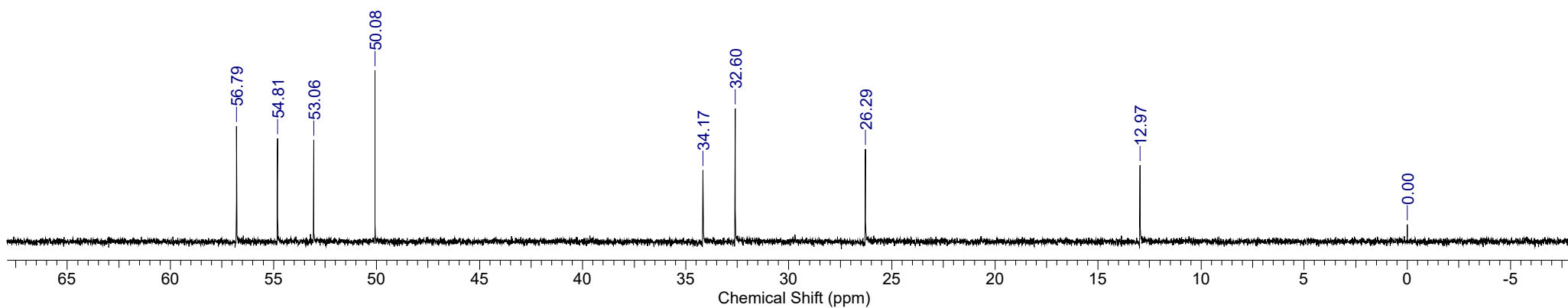
Formula C ₁₈ H ₂₁ NO ₄ S	FW 347.4286
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 16 Jul 2020 11:01:22
Date Stamp 16 Jul 2020 11:03:09	File Name C:\USERS\Лабa534\DOWNLOADS\FZ8785-2.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 4000
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 56.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15079.3525



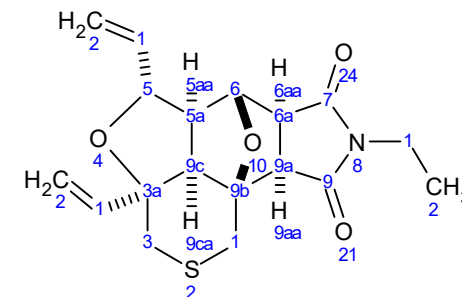
13c

FZ8785-2.JDF



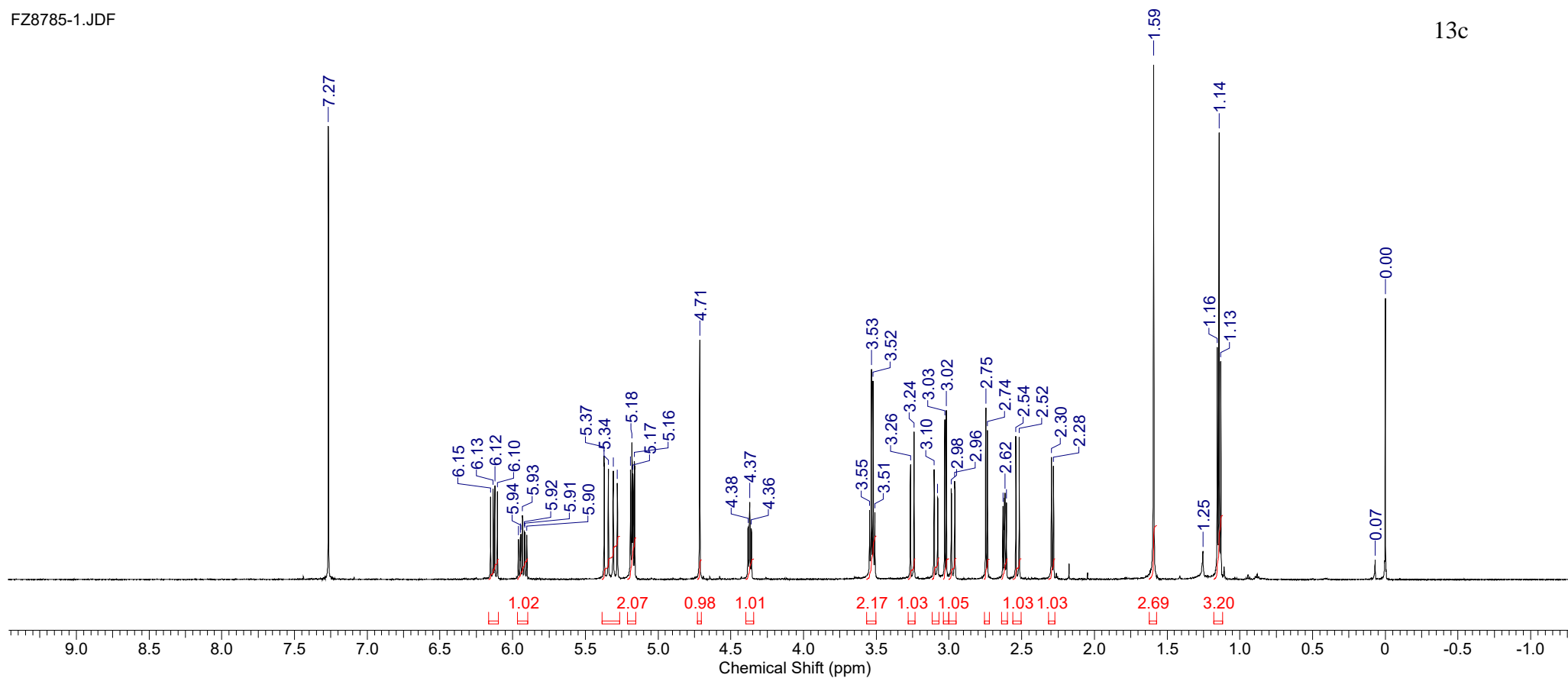
Formula C ₁₈ H ₂₁ NO ₄ S	FW 347.4286
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 15 Jul 2020 09:30:10	Date Stamp 15 Jul 2020 09:31:55
File Name C:\USERS\Лаб6а534\DOWNLOADS\FZ8785-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 48.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 5411.6367	Sweep Width (Hz) 16534.39



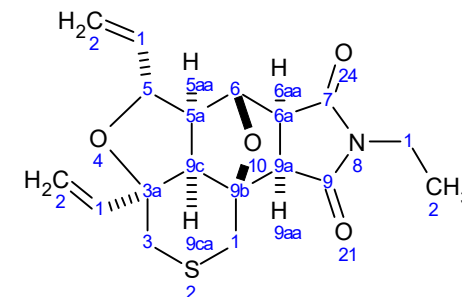
FZ8785-1.JDF

13c



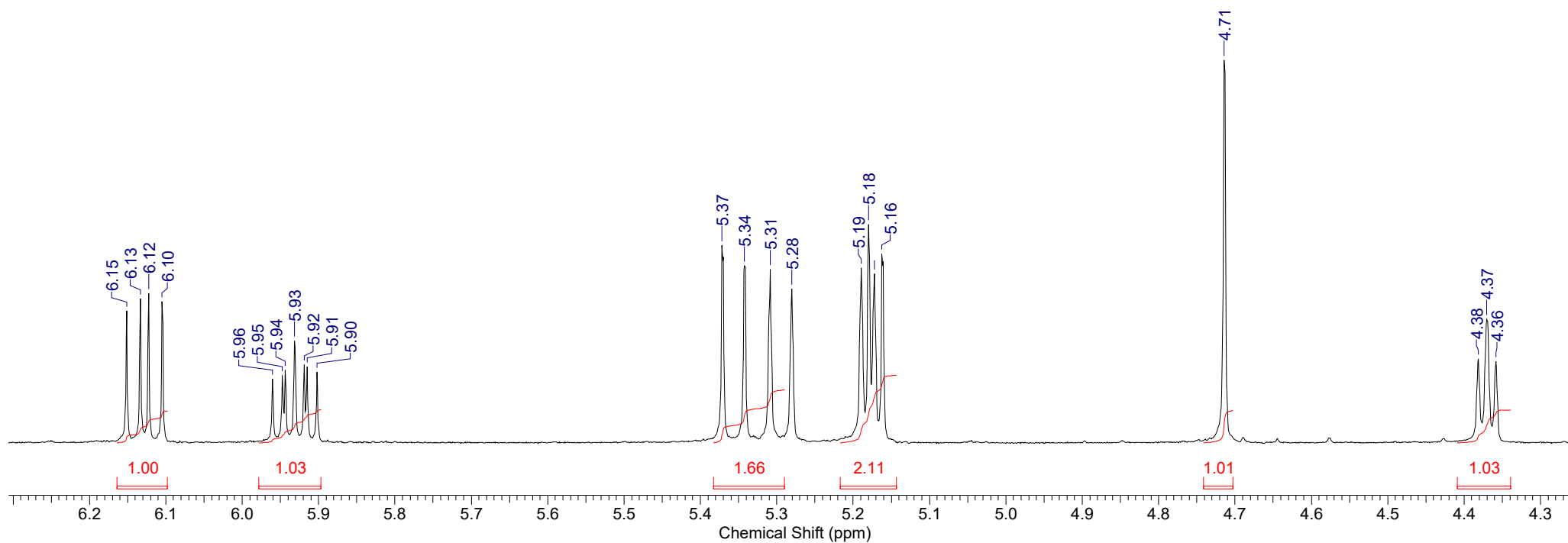
Formula C ₁₈ H ₂₁ NO ₄ S	FW 347.4286
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 15 Jul 2020 09:30:10	Date Stamp 15 Jul 2020 09:31:55
File Name C:\USERS\Лабa534\DOWNLOADS\FZ8785-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 48.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 5411.6367	Sweep Width (Hz) 16534.39



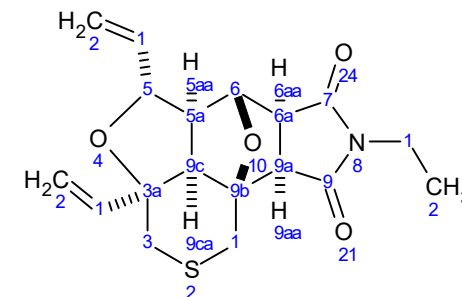
13c

FZ8785-1.JDF

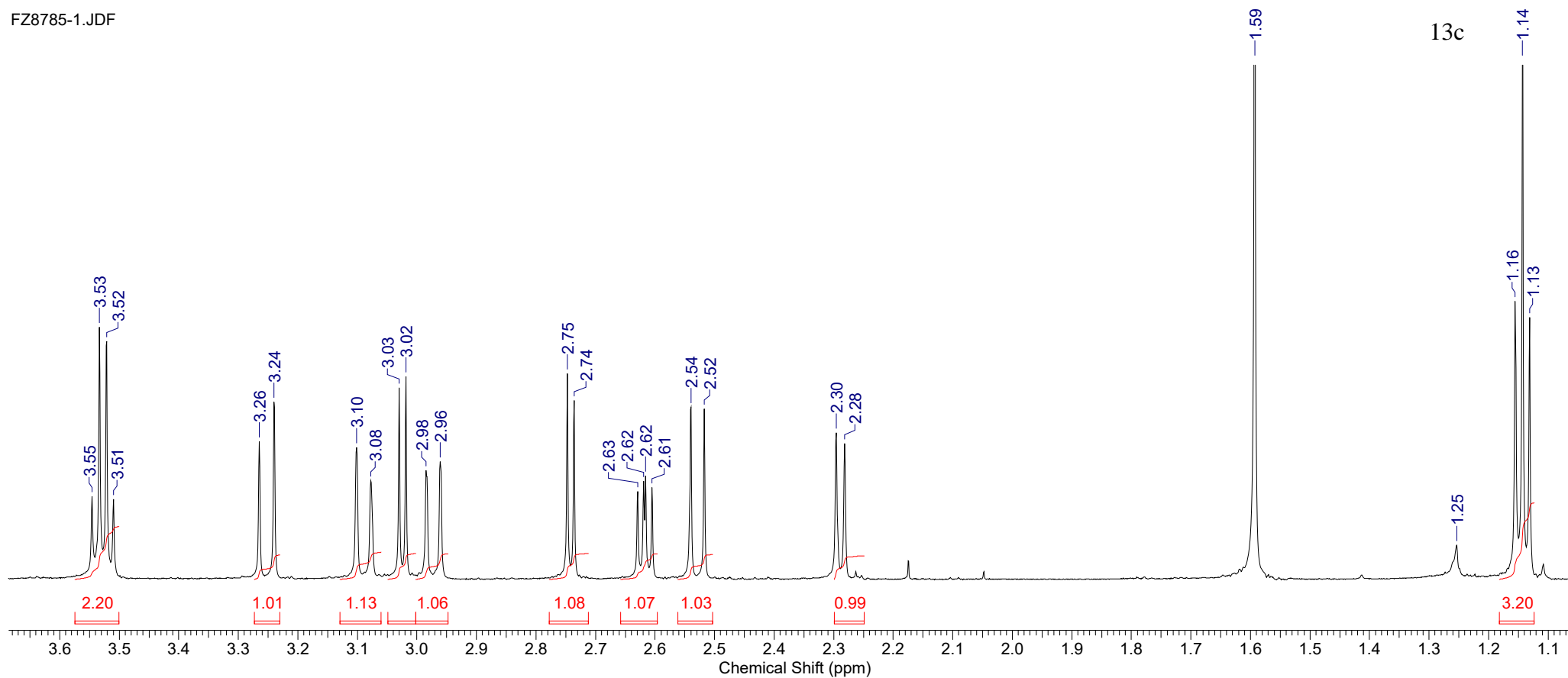


Formula C₁₈H₂₁NO₄S **FW** 347.4286

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 15 Jul 2020 09:30:10	Date Stamp 15 Jul 2020 09:31:55
File Name C:\USERS\Лаб6а534\DOWNLOADS\FZ8785-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 48.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 5411.6367	Sweep Width (Hz) 16534.39

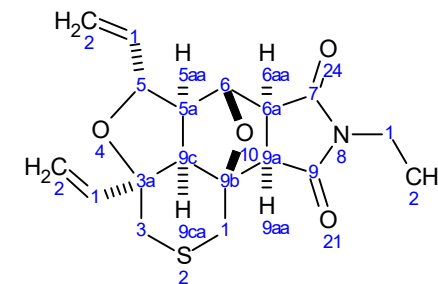


FZ8785-1.JDF



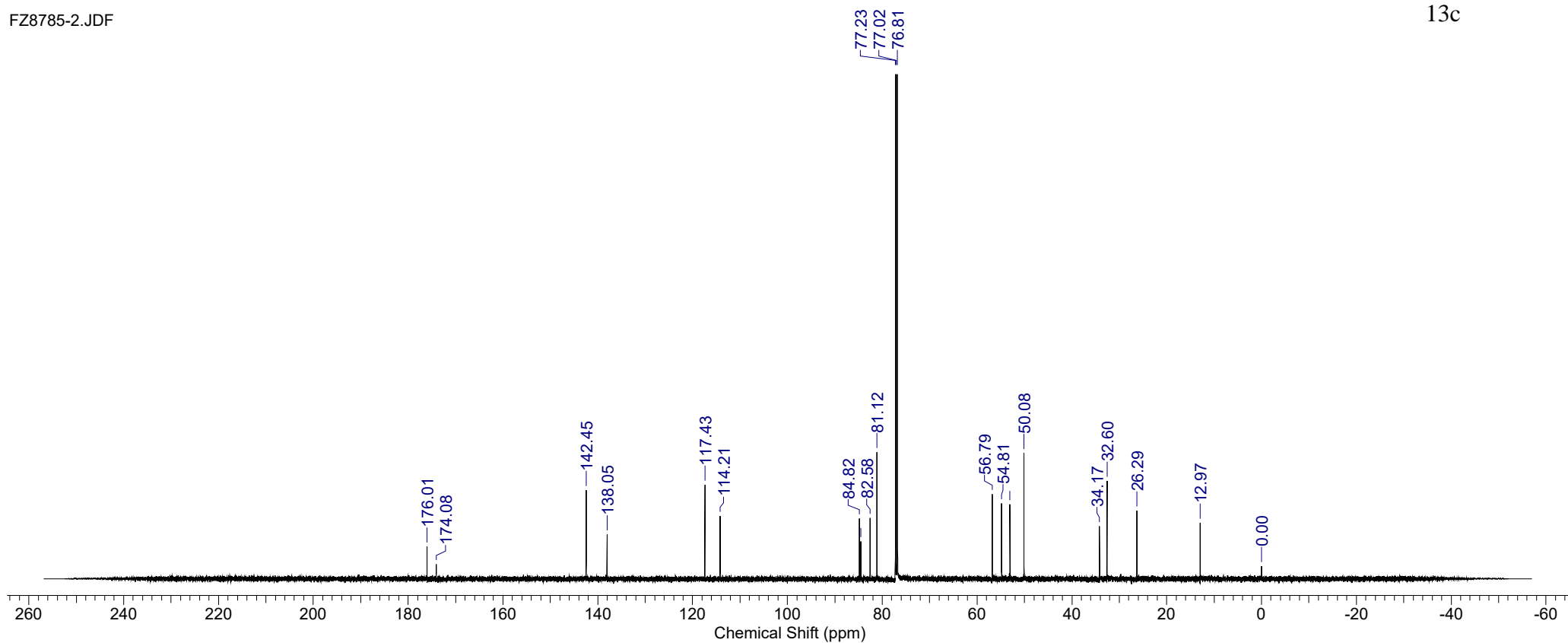
Formula C ₁₈ H ₂₁ NO ₄ S	FW 347.4286
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 16 Jul 2020 11:01:22
Date Stamp 16 Jul 2020 11:03:09	File Name C:\USERS\Лабa534\DOWNLOADS\FZ8785-2.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 4000
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 56.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15079.3525



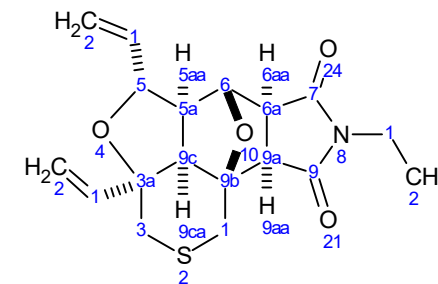
13c

FZ8785-2.JDF

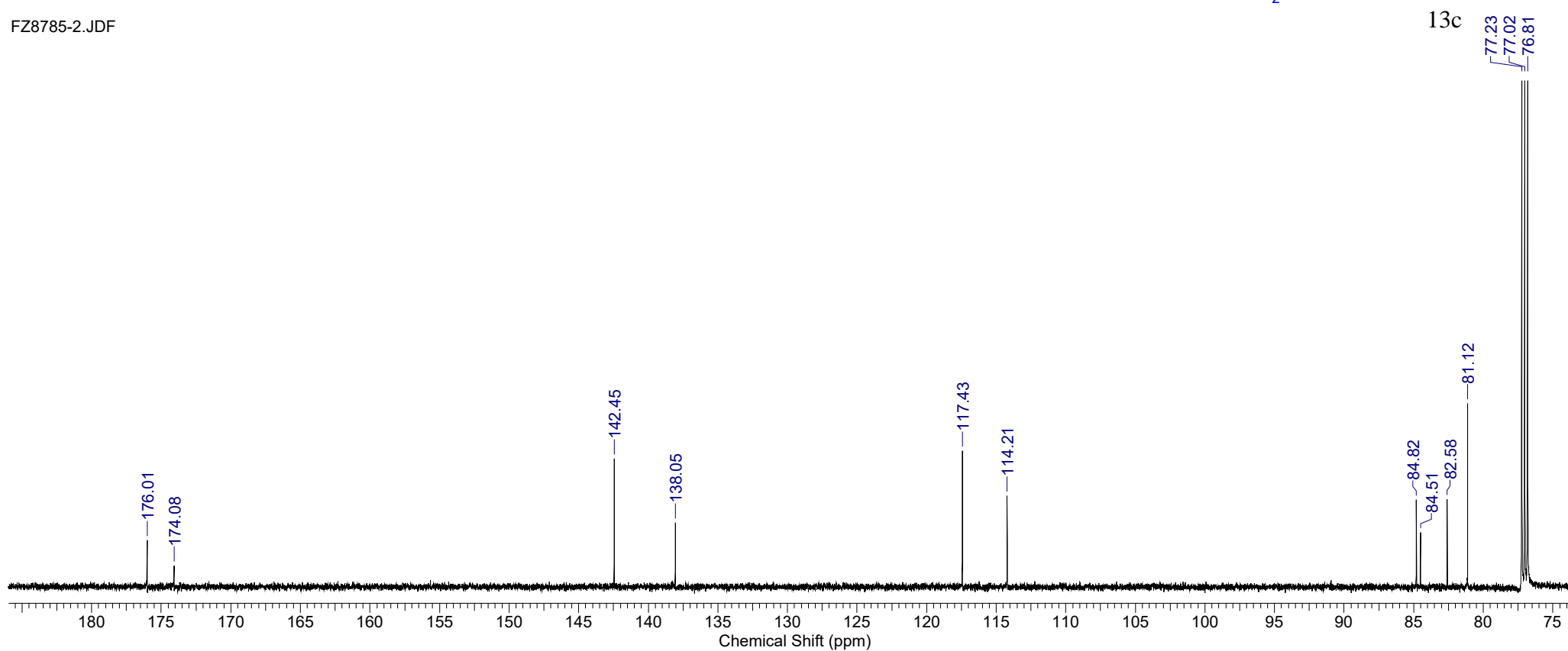


Formula C ₁₈ H ₂₁ NO ₄ S	FW 347.4286
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 16 Jul 2020 11:01:22
Date Stamp 16 Jul 2020 11:03:09	File Name C:\USERS\Лабa534\DOWNLOADS\FZ8785-2.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 4000
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 56.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15079.3525

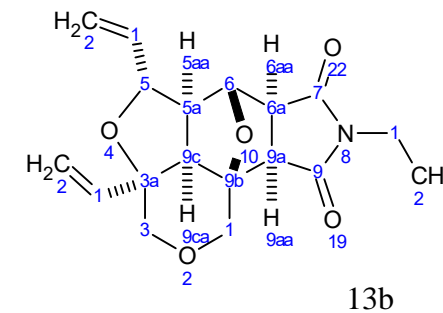


FZ8785-2.JDF

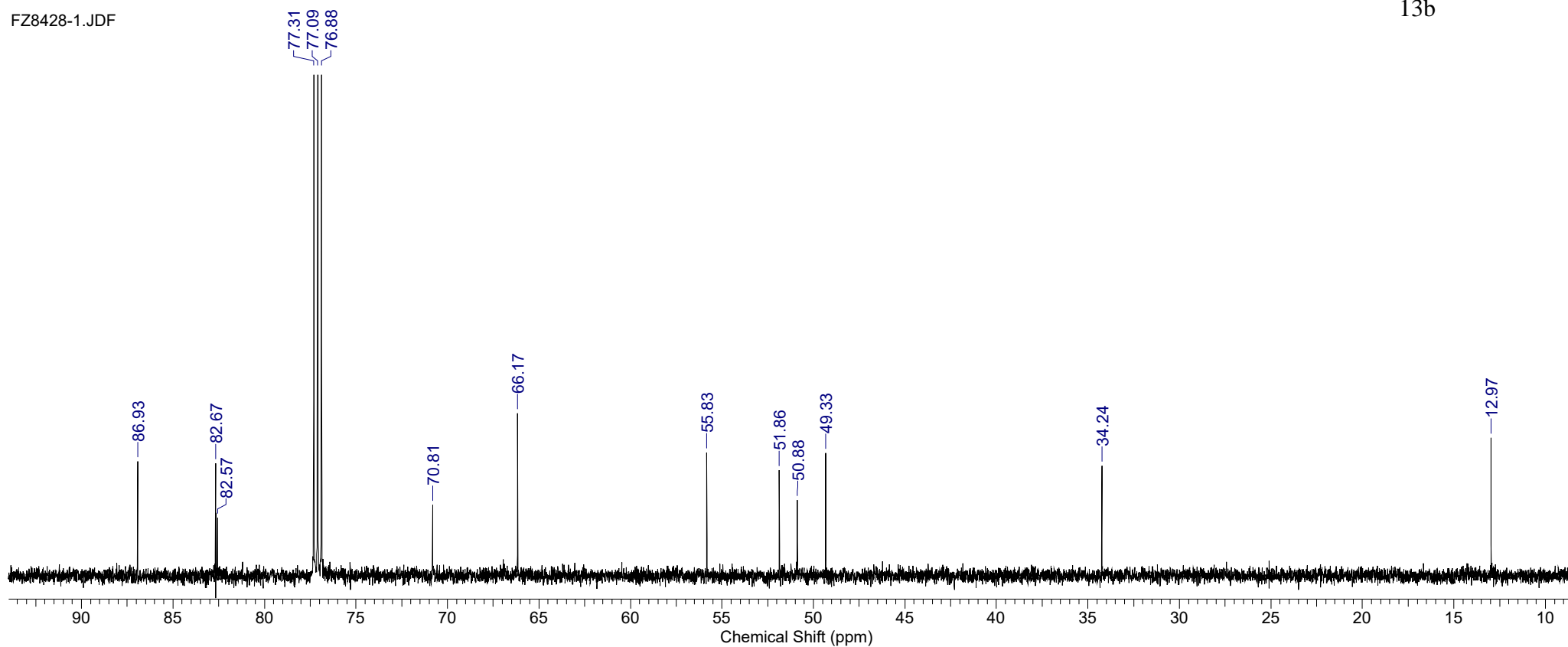


Formula C ₁₈ H ₂₁ NO ₅	FW 331.3630
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 12 Feb 2020 03:36:55
Date Stamp 12 Feb 2020 02:58:43	File Name C:\USERS\Лабa534\DOWNLOADS\FZ8428-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 1000
Original Points Count 32768	Owner Mass	Points Count 32768
Receiver Gain 54.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49	Temperature (degree C) 24.100	Spectrum Offset (Hz) 15091.3428

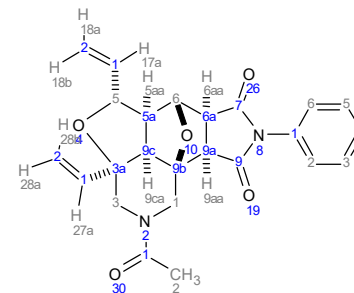


FZ8428-1.JDF



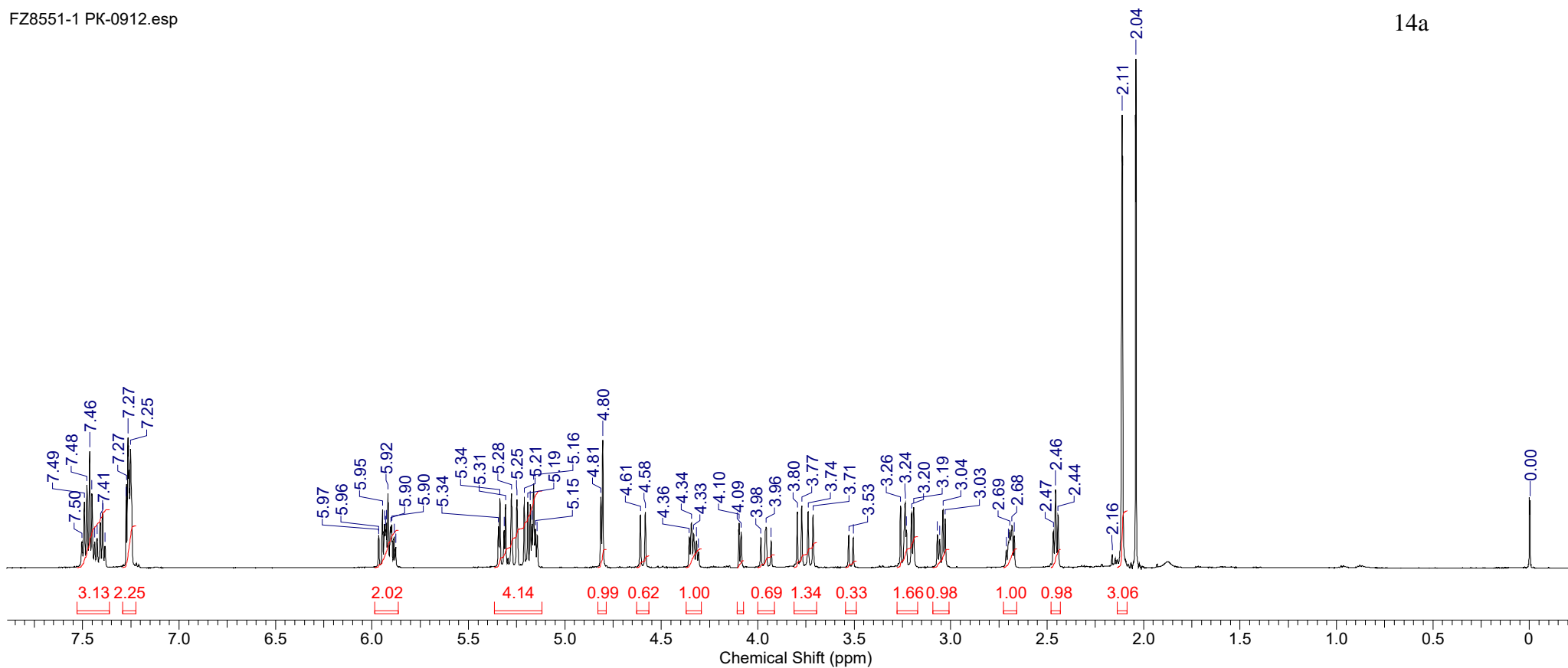
Formula C₂₄H₂₄N₂O₅ FW 420.4578

Acquisition Time (sec)	1.9818	Comment	single_pulse	Date	03 Mar 2020 13:17:44	Date Stamp	03 Mar 2020 12:37:33
File Name	H:\DOWNLOADS\FZ8551-1.JDF	Frequency (MHz)	600.17	Nucleus	1H	Number of Transients	8
Origin	ECA 600	Original Points Count	32768	Owner	CKP	Points Count	32768
Receiver Gain	32.00	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	5416.1777	Pulse Sequence	single_pulse.ex2
Temperature (degree C)	22.800					Sweep Width (Hz)	16534.39



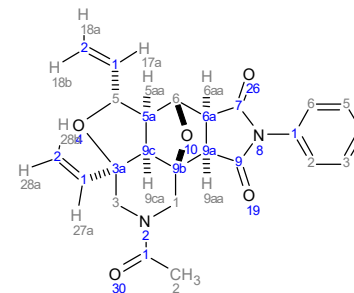
FZ8551-1 PK-0912.esp

14a



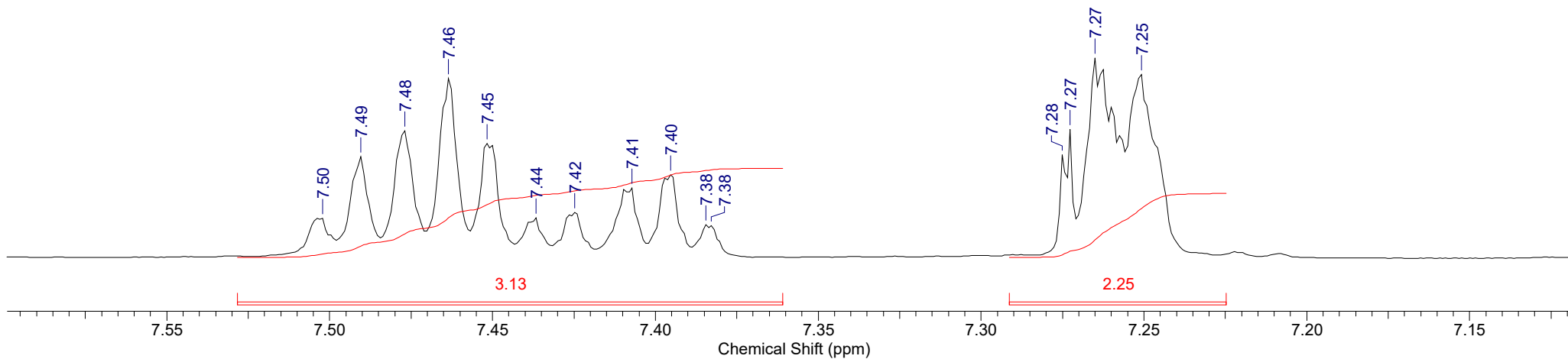
Formula C₂₄H₂₄N₂O₅ FW 420.4578

Acquisition Time (sec)	1.9818	Comment	single_pulse	Date	03 Mar 2020 13:17:44	Date Stamp	03 Mar 2020 12:37:33		
File Name	H:\DOWNLOADS\FZ8551-1.JDF			Frequency (MHz)	600.17	Nucleus	1H	Number of Transients	8
Origin	ECA 600	Original Points Count	32768	Owner	CKP	Points Count	32768	Pulse Sequence	single_pulse.ex2
Receiver Gain	32.00	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	5416.1777	Sweep Width (Hz)	16534.39		
Temperature (degree C)	22.800								



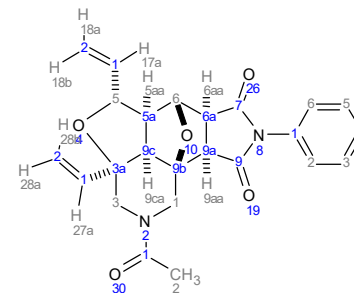
14a

FZ8551-1 PK-0912.esp



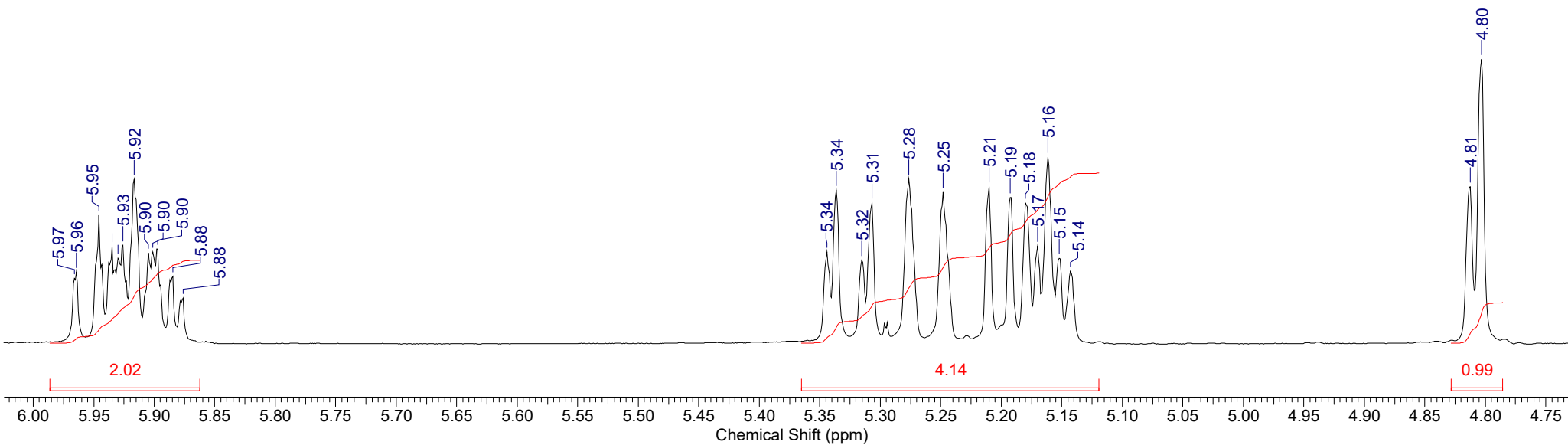
Formula C₂₄H₂₄N₂O₅ FW 420.4578

Acquisition Time (sec)	1.9818	Comment	single_pulse	Date	03 Mar 2020 13:17:44	Date Stamp	03 Mar 2020 12:37:33
File Name	H:\DOWNLOADS\FZ8551-1.JDF			Frequency (MHz)	600.17	Nucleus	1H
Origin	ECA 600	Original Points Count	32768	Owner	CKP	Points Count	32768
Receiver Gain	32.00	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	5416.1777	Sweep Width (Hz)	16534.39
Temperature (degree C)	22.800						



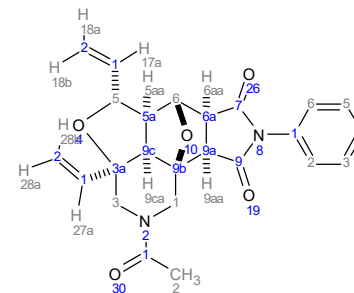
14a

FZ8551-1 PK-0912.esp



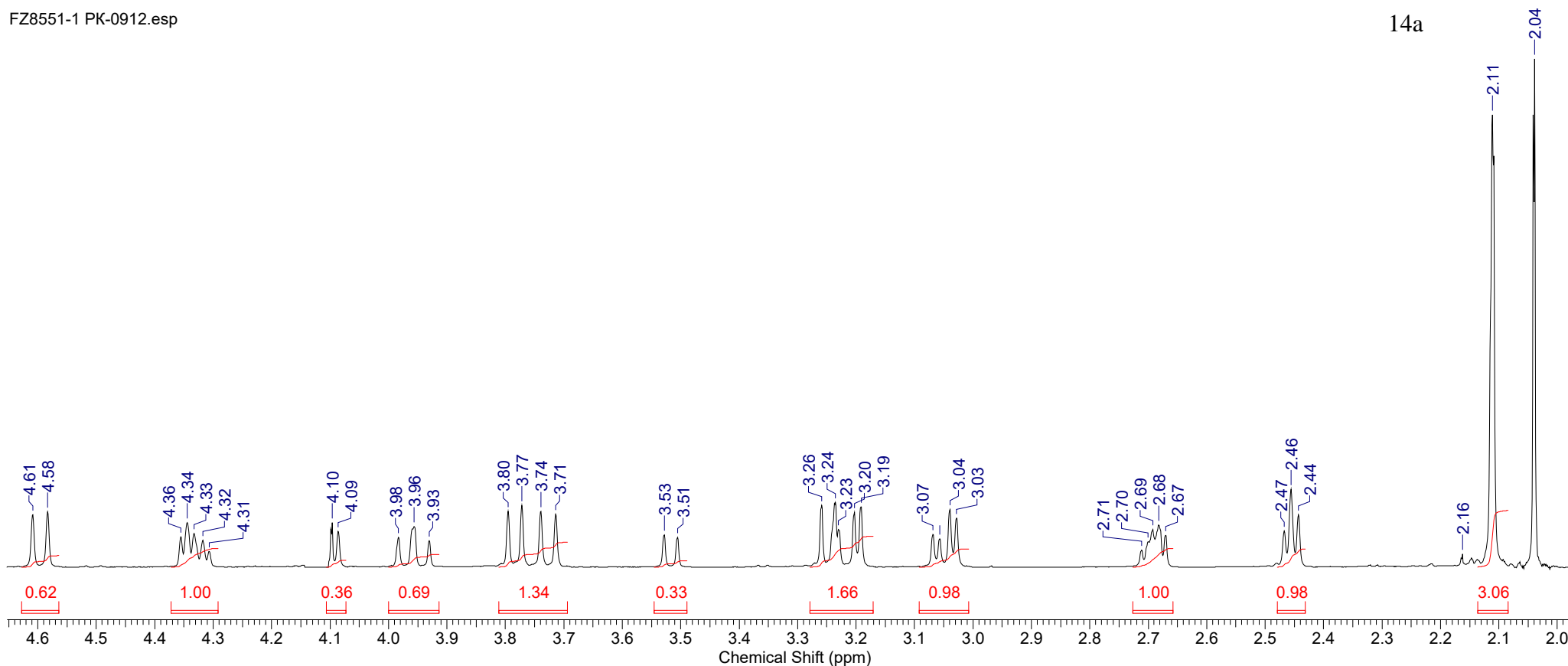
Formula C ₂₄ H ₂₄ N ₂ O ₅	FW 420.4578
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 03 Mar 2020 13:17:44	Date Stamp 03 Mar 2020 12:37:33
File Name H:\DOWNLOADS\FZ8551-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 32.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 5416.1777	Sweep Width (Hz) 16534.39
Temperature (degree C) 22.800			



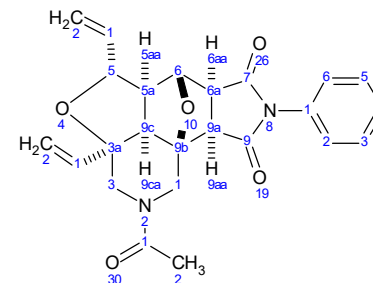
FZ8551-1 PK-0912.esp

14a



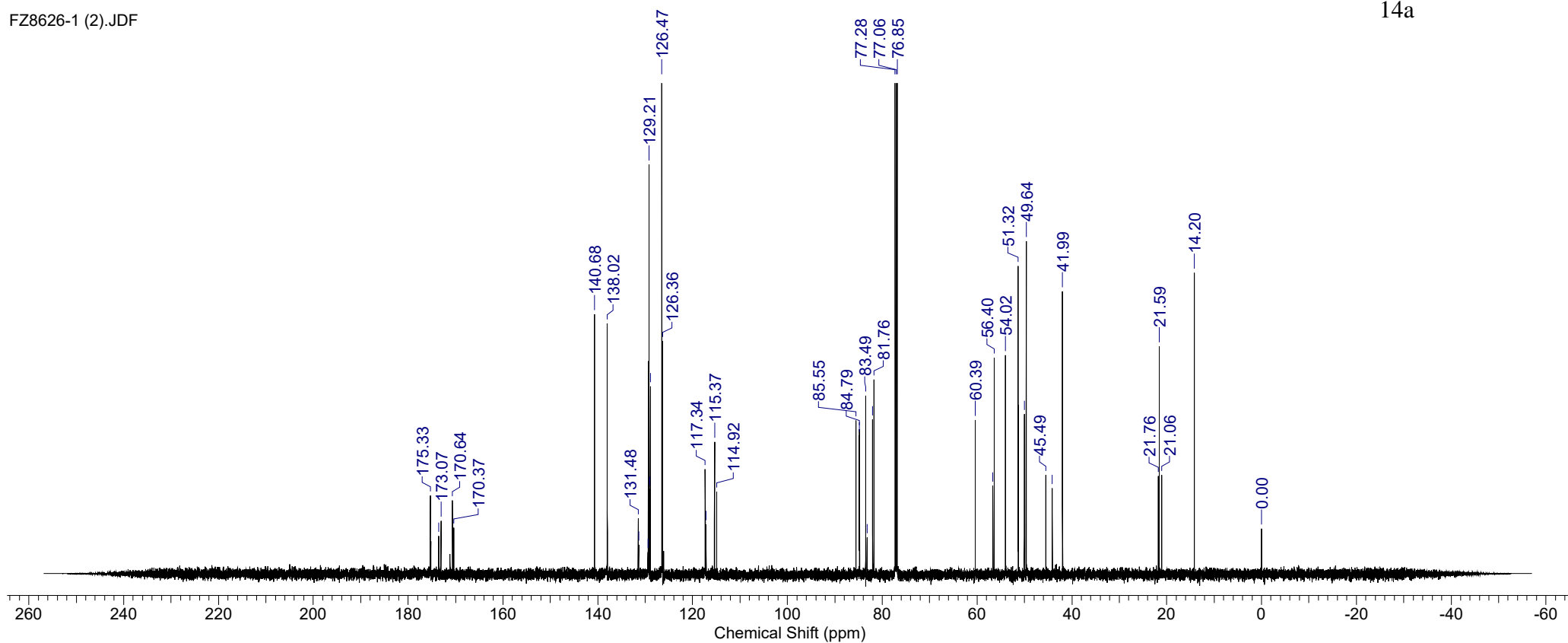
Formula C ₂₄ H ₂₄ N ₂ O ₅	FW 420.4578
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 18 Mar 2020 10:20:40
Date Stamp 18 Mar 2020 09:38:51	File Name C:\USERS\Л1а6а534\DOWNLOADS\FZ8626-1 (2).JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 800
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 58.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49	Temperature (degree C) 23.300	Spectrum Offset (Hz) 15079.3525



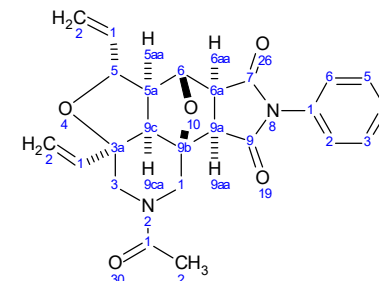
14a

FZ8626-1 (2).JDF



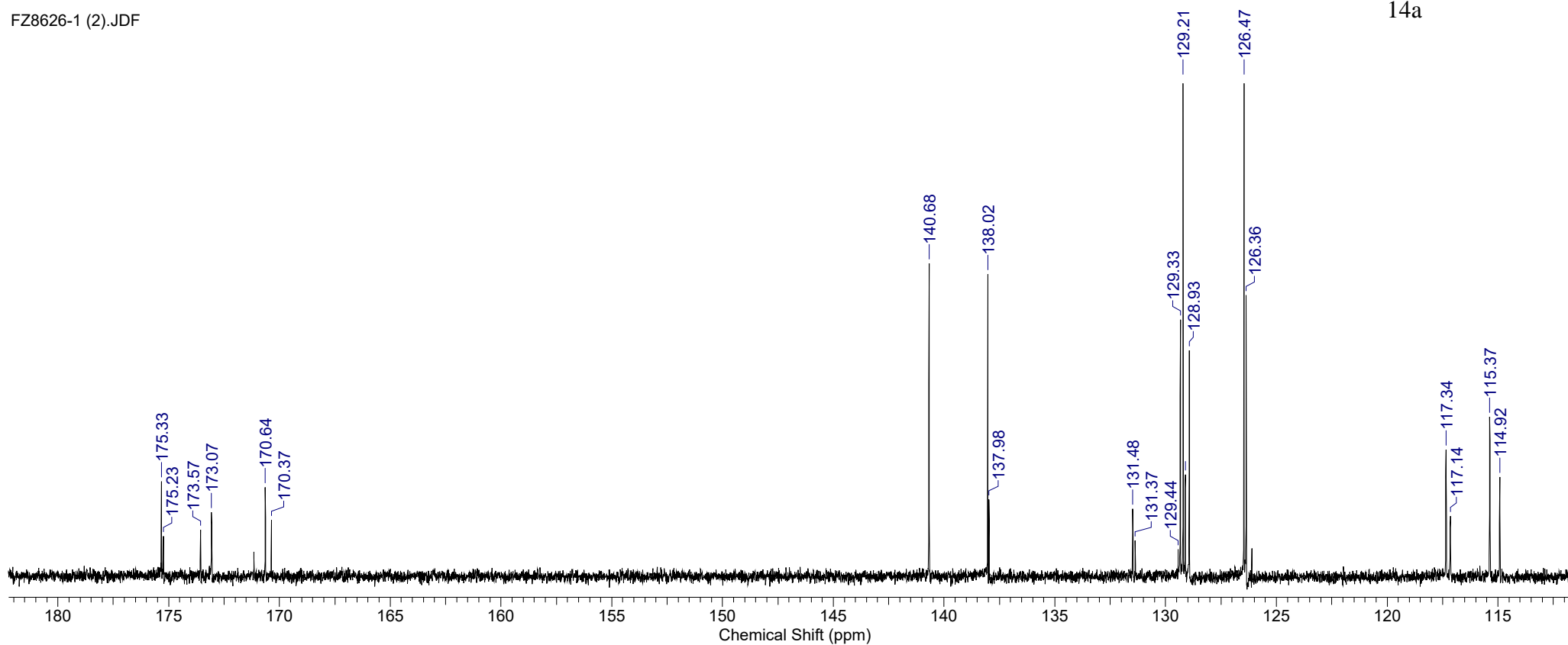
Formula C ₂₄ H ₂₄ N ₂ O ₅	FW 420.4578
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 18 Mar 2020 10:20:40
Date Stamp 18 Mar 2020 09:38:51	File Name C:\USERS\Лабa534\DOWNLOADS\FZ8626-1 (2).JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 800
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 58.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49	Temperature (degree C) 23.300	Spectrum Offset (Hz) 15079.3525



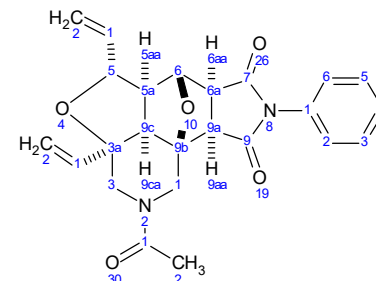
14a

FZ8626-1 (2).JDF

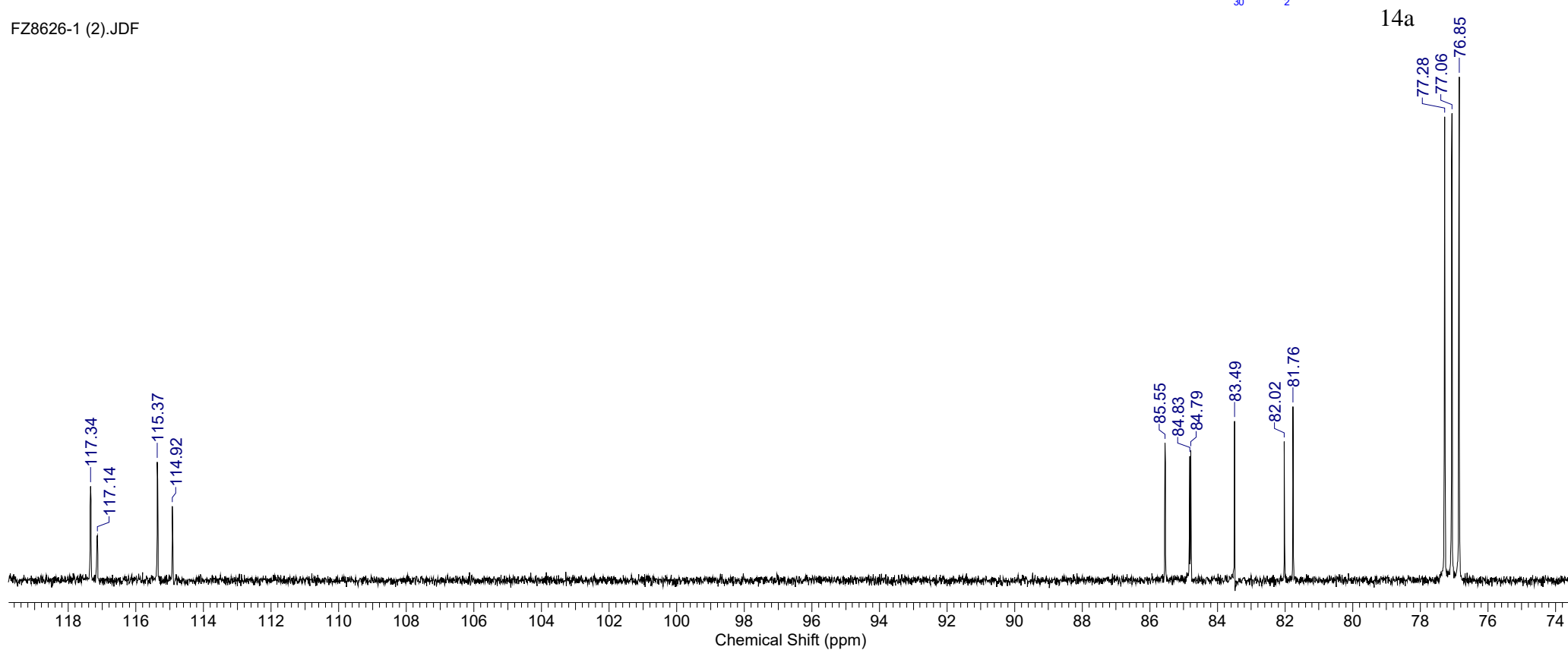


Formula C ₂₄ H ₂₄ N ₂ O ₅	FW 420.4578
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 18 Mar 2020 10:20:40
Date Stamp 18 Mar 2020 09:38:51	File Name C:\USERS\Лаб6a534\DOWNLOADS\FZ8626-1 (2).JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 800
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 58.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49	Temperature (degree C) 23.300	Spectrum Offset (Hz) 15079.3525

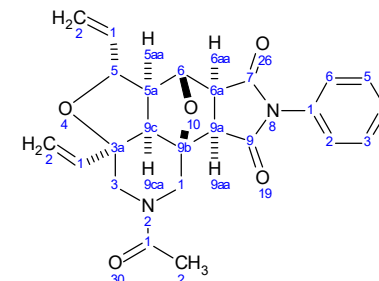


FZ8626-1 (2).JDF

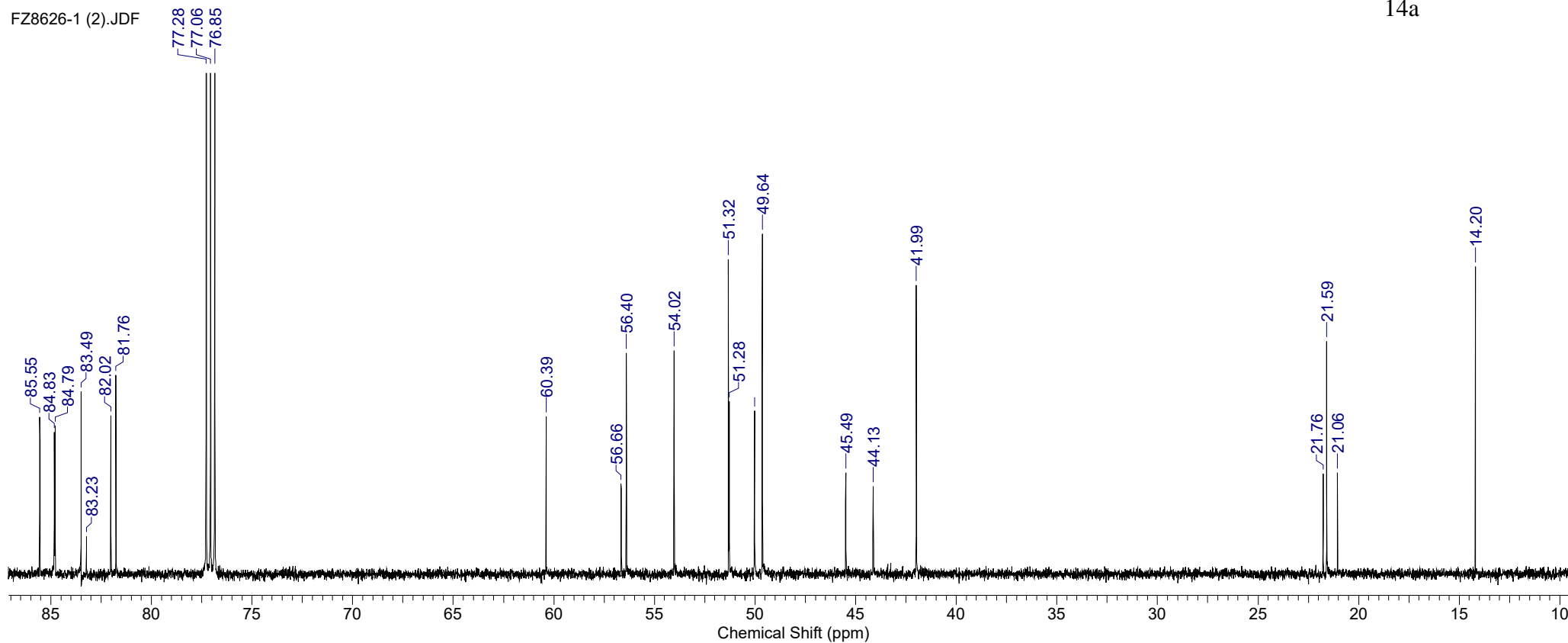


Formula C ₂₄ H ₂₄ N ₂ O ₅	FW 420.4578
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 18 Mar 2020 10:20:40
Date Stamp 18 Mar 2020 09:38:51	File Name C:\USERS\Л1а6а534\DOWNLOADS\FZ8626-1 (2).JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 800
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 58.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49	Temperature (degree C) 23.300	Spectrum Offset (Hz) 15079.3525

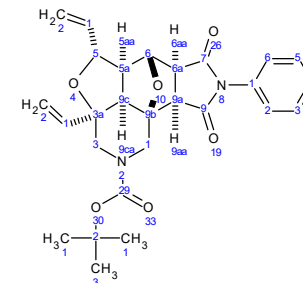


14a



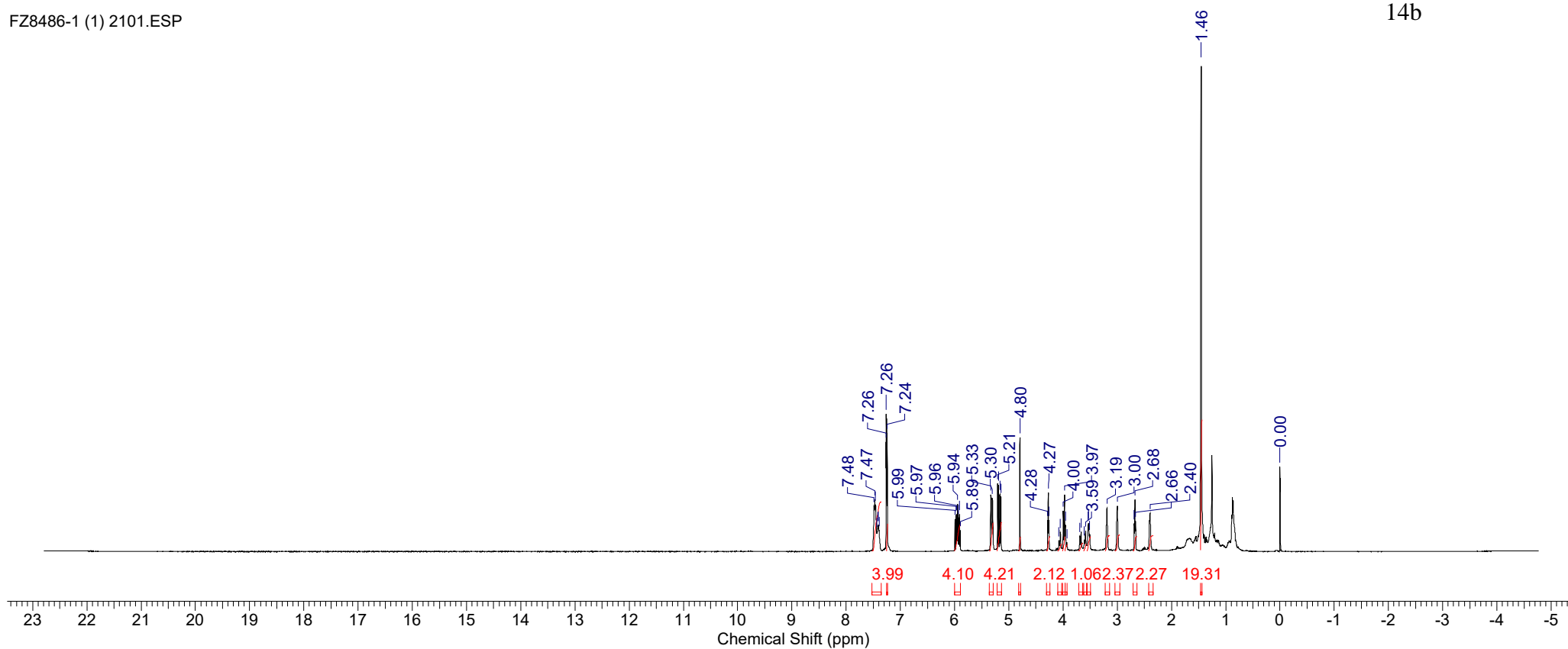
Formula C ₂₇ H ₃₀ N ₂ O ₆	FW 478.5369
--	--------------------

Acquisition Time (sec) 0.9909	Comment single_pulse	Date 07 Feb 2020 08:29:58	Frequency (MHz) 600.17
Date Stamp 19 Feb 2020 10:15:38	File Name C:\USERS\Лa6a534\DOWNLOADS\FZ8486-1 (1).JDF	Original Points Count 16384	Owner CKP
Nucleus 1H	Number of Transients 8	Origin ECA 600	Solvent CHLOROFORM-d
Points Count 16384	Pulse Sequence single_pulse.ex2	Receiver Gain 38.00	
Spectrum Offset (Hz) 5409.0264	Sweep Width (Hz) 16534.39	Temperature (degree C) 22.600	



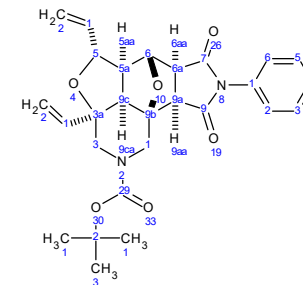
14b

FZ8486-1 (1) 2101.ESP



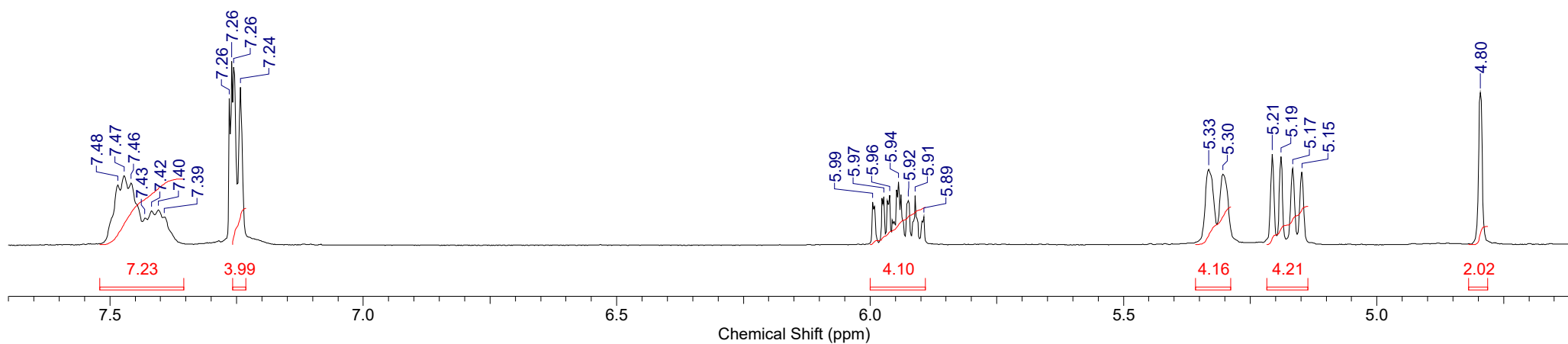
Formula $C_{27}H_{30}N_2O_6$ FW 478.5369

Acquisition Time (sec)	0.9909	Comment	single_pulse	Date	07 Feb 2020 08:29:58
Date Stamp	19 Feb 2020 10:15:38	File Name	C:\USERS\Лa6a534\DOWNLOADS\FZ8486-1 (1).JDF		
Nucleus	1H	Number of Transients	8	Origin	ECA 600
Points Count	16384	Pulse Sequence	single_pulse.ex2	Original Points Count	16384
Spectrum Offset (Hz)	5409.0264	Sweep Width (Hz)	16534.39	Receiver Gain	38.00
		Temperature (degree C)	22.600		
		Frequency (MHz)	600.17		
		Owner	CKP		
		Solvent	CHLOROFORM-d		



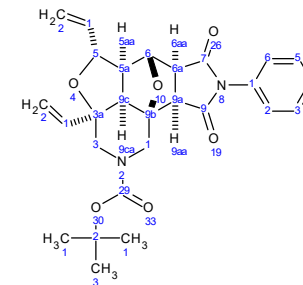
14b

FZ8486-1 (1) 2101.ESP



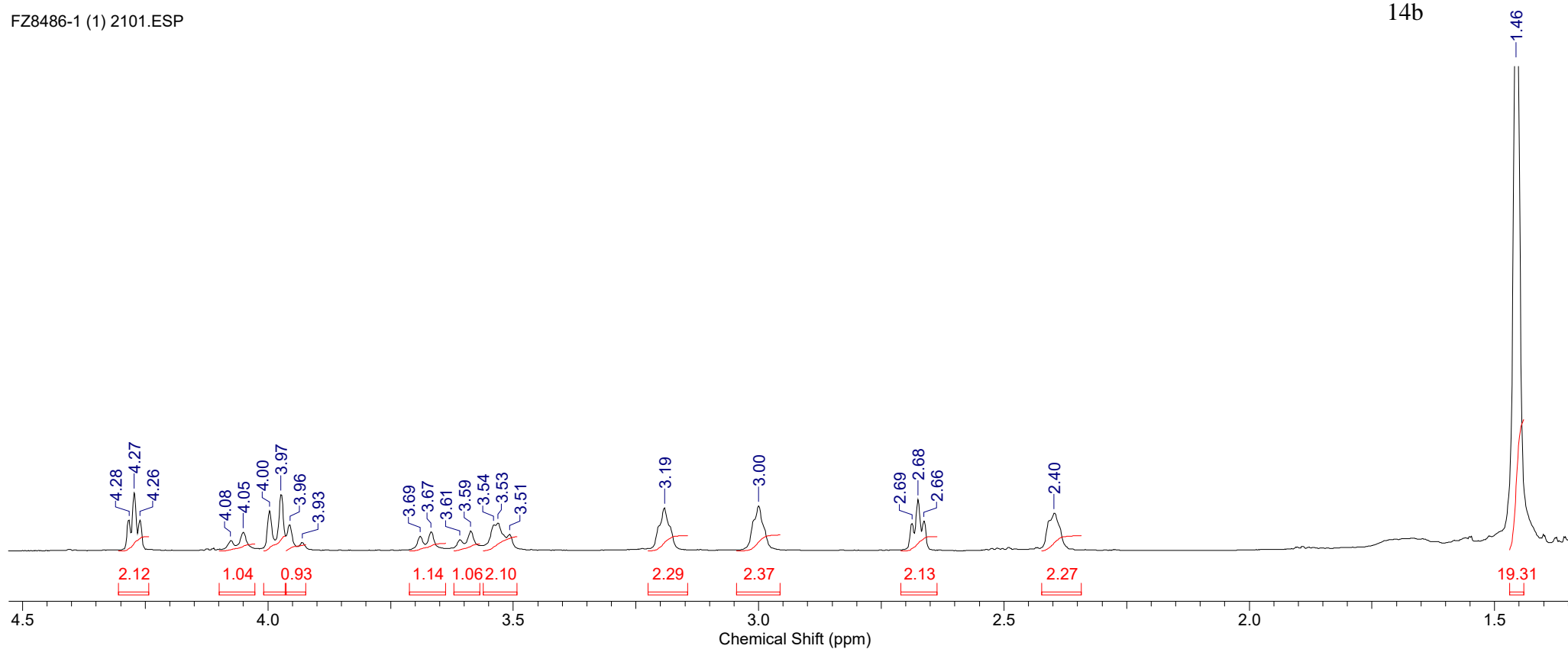
Formula $C_{27}H_{30}N_2O_6$ FW 478.5369

Acquisition Time (sec)	0.9909	Comment	single_pulse	Date	07 Feb 2020 08:29:58
Date Stamp	19 Feb 2020 10:15:38	File Name	C:\USERS\Лa6a534\DOWNLOADS\FZ8486-1 (1).JDF		
Nucleus	1H	Number of Transients	8	Origin	ECA 600
Points Count	16384	Pulse Sequence	single_pulse.ex2	Original Points Count	16384
Spectrum Offset (Hz)	5409.0264	Sweep Width (Hz)	16534.39	Receiver Gain	38.00
		Temperature (degree C)	22.600		
				Frequency (MHz)	600.17
				Owner	CKP
				Solvent	CHLOROFORM-d



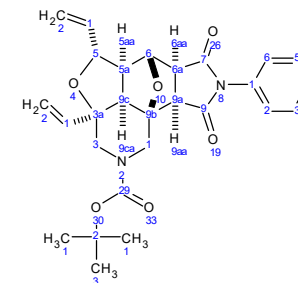
FZ8486-1 (1) 2101.ESP

14b



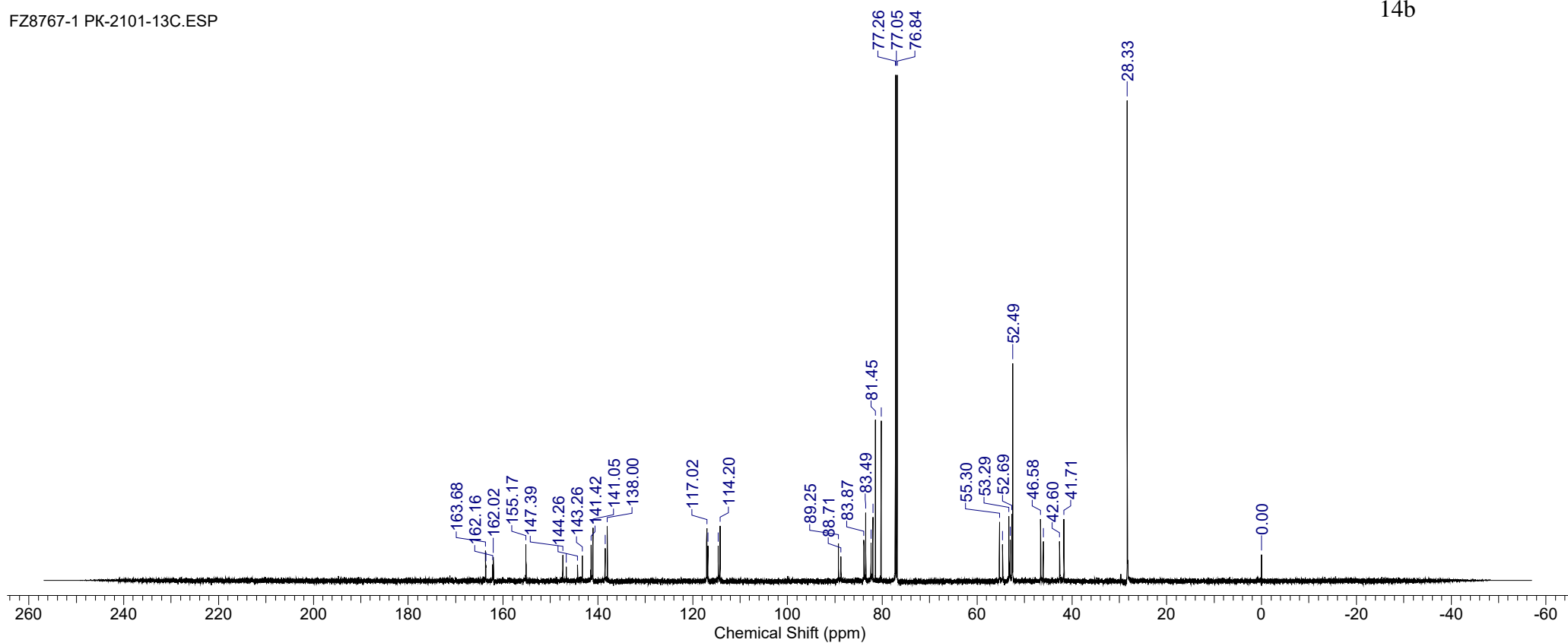
Formula C ₂₇ H ₃₀ N ₂ O ₆	FW 478.5369
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 11 Jul 2020 01:04:25
Date Stamp 11 Jul 2020 01:06:03	File Name C:\USERS\J1a6a534\DOWNLOADS\FZ8767-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 8000
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 58.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49	Temperature (degree C) 28.600	Spectrum Offset (Hz) 15080.7979



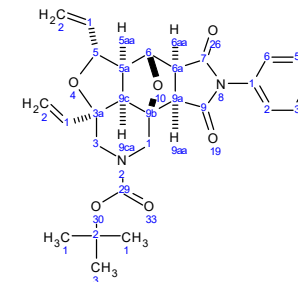
14b

FZ8767-1 PK-2101-13C.ESP



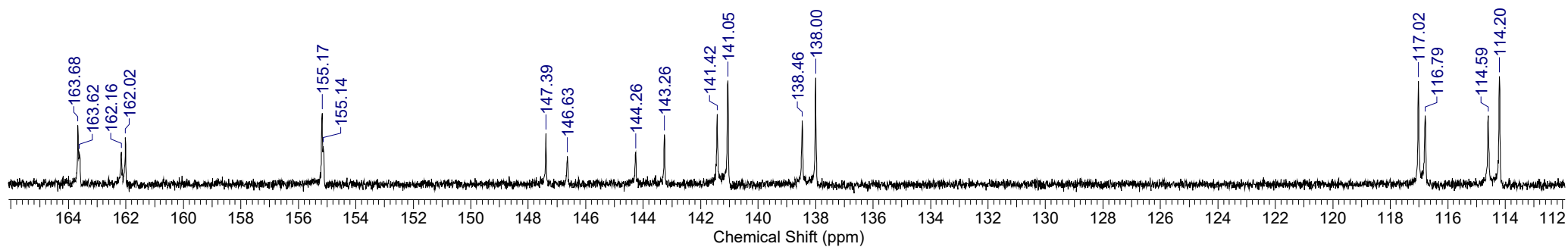
Formula C ₂₇ H ₃₀ N ₂ O ₆	FW 478.5369
--	--------------------

Acquisition Time (sec)	0.6921	Comment	single pulse decoupled gated NOE	Date	11 Jul 2020 01:04:25
Date Stamp	11 Jul 2020 01:06:03	File Name	C:\USERS\J1a6a534\DOWNLOADS\FZ8767-1.JDF		
Frequency (MHz)	150.91	Nucleus	13C	Number of Transients	8000
Original Points Count	32768	Owner	CKP	Points Count	32768
Receiver Gain	58.00	Solvent	CHLOROFORM-d	Pulse Sequence	single pulse dec
Sweep Width (Hz)	47348.49	Temperature (degree C)	28.600	Spectrum Offset (Hz)	15080.7979



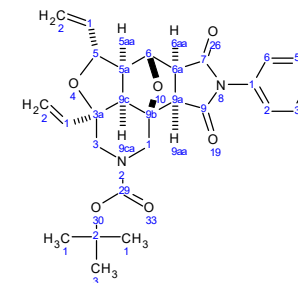
14b

FZ8767-1 PK-2101-13C.ESP



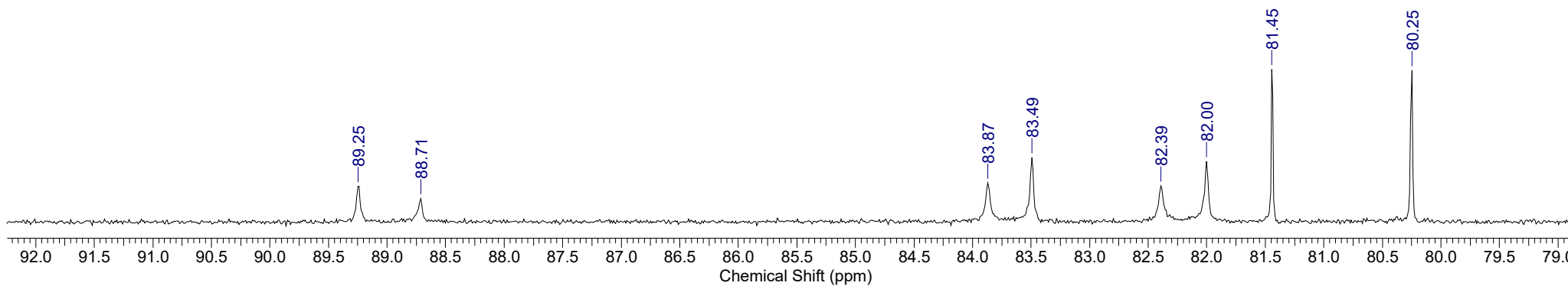
Formula C ₂₇ H ₃₀ N ₂ O ₆	FW 478.5369
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 11 Jul 2020 01:04:25
Date Stamp 11 Jul 2020 01:06:03	File Name C:\USERS\1a6a534\DOWNLOADS\FZ8767-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 8000
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 58.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49	Temperature (degree C) 28.600	Spectrum Offset (Hz) 15080.7979



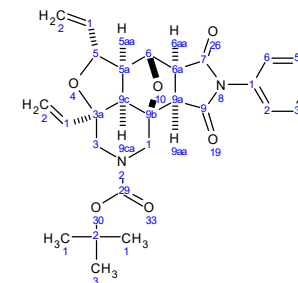
14b

FZ8767-1 PK-2101-13C.ESP



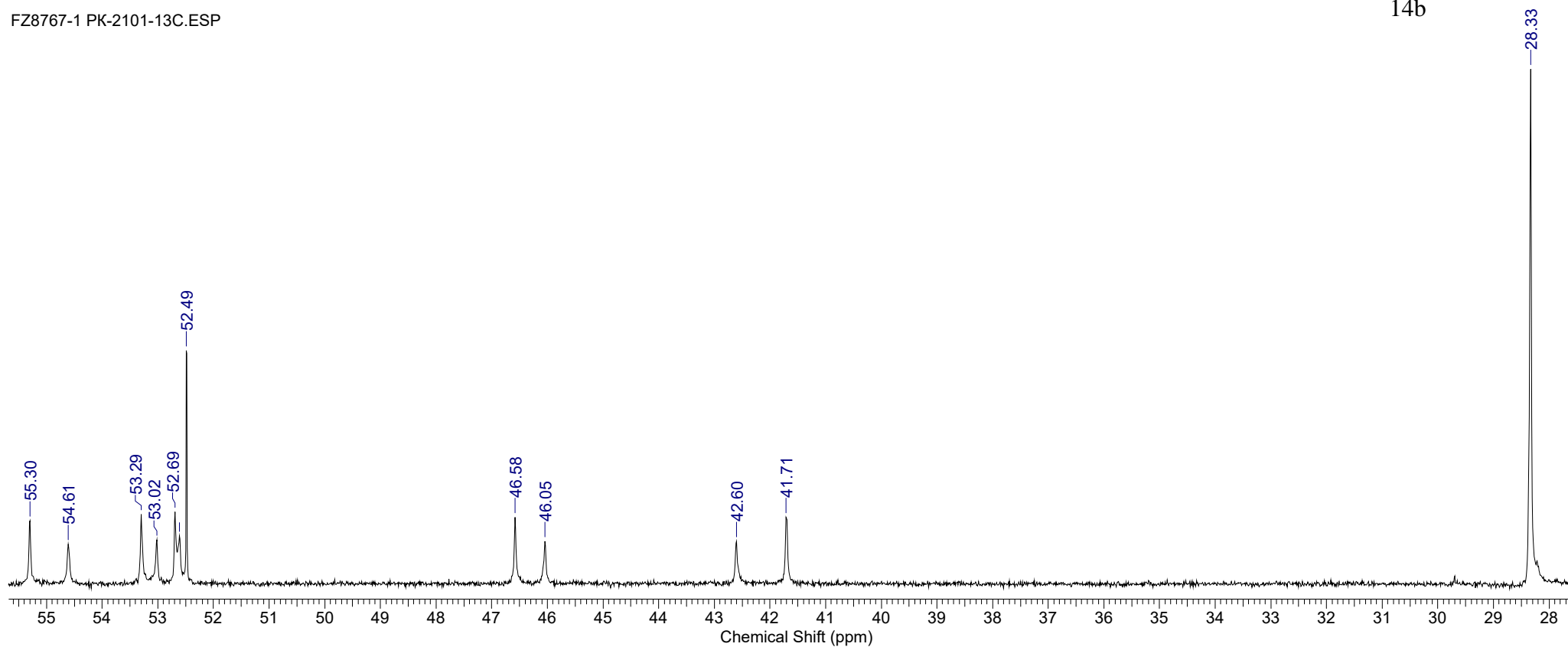
Formula C₂₇H₃₀N₂O₆ **FW** 478.5369

Acquisition Time (sec)	0.6921	Comment	single pulse decoupled gated NOE	Date	11 Jul 2020 01:04:25
Date Stamp	11 Jul 2020 01:06:03	File Name	C:\USERS\J1a6a534\DOWNLOADS\FZ8767-1.JDF		
Frequency (MHz)	150.91	Nucleus	13C	Number of Transients	8000
Original Points Count	32768	Owner	CKP	Points Count	32768
Receiver Gain	58.00	Solvent	CHLOROFORM-d	Pulse Sequence	single pulse dec
Sweep Width (Hz)	47348.49	Temperature (degree C)	28.600	Spectrum Offset (Hz)	15080.7979



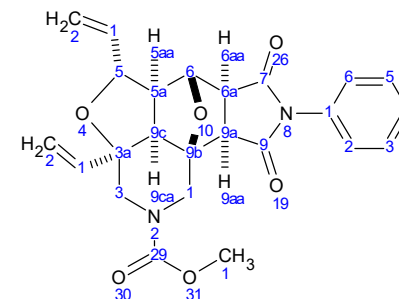
14b

FZ8767-1 PK-2101-13C.ESP



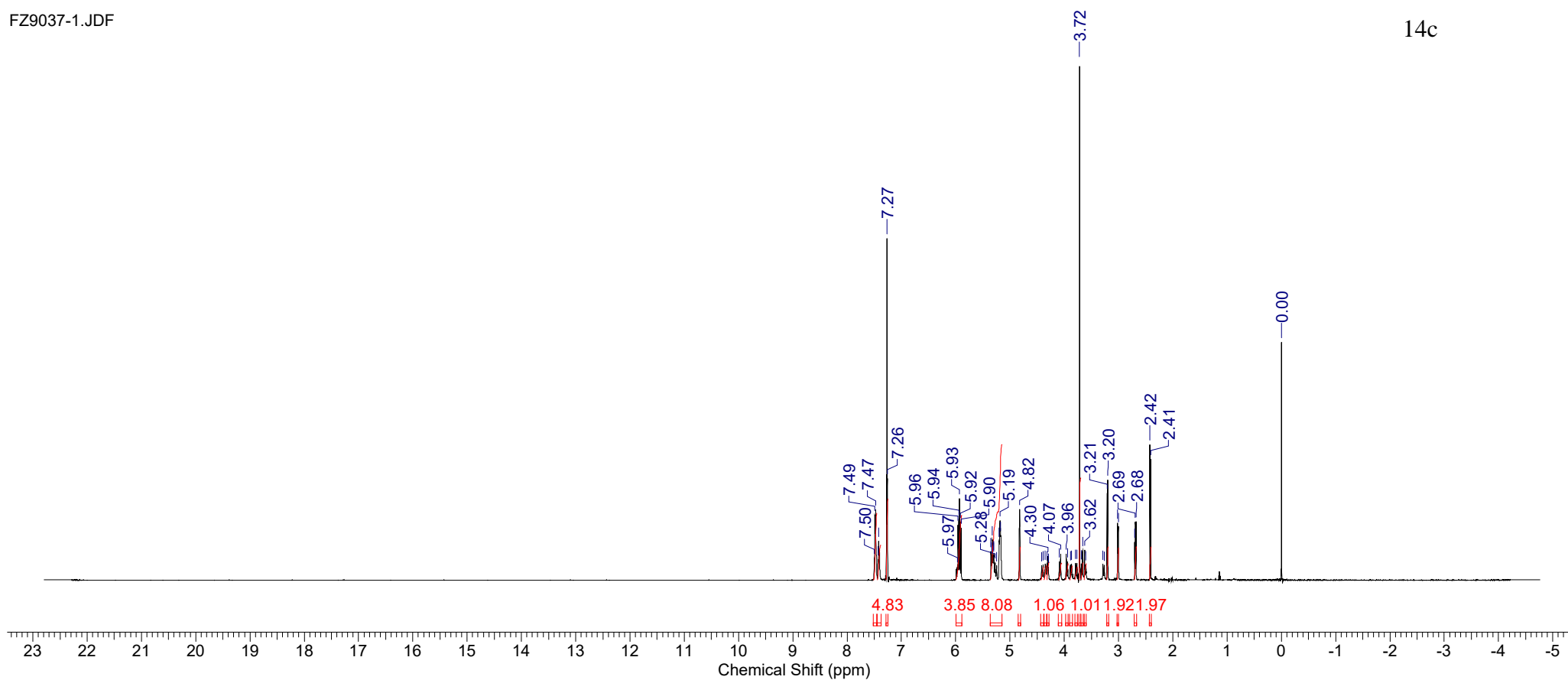
Formula C ₂₄ H ₂₄ N ₂ O ₆	FW 436.4572
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 25 Aug 2020 13:47:02	Date Stamp 25 Aug 2020 13:48:17
File Name C:\USERS\Лабa534\DOWNLOADS\FZ9037-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 42.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 5410.6274	Sweep Width (Hz) 16534.39



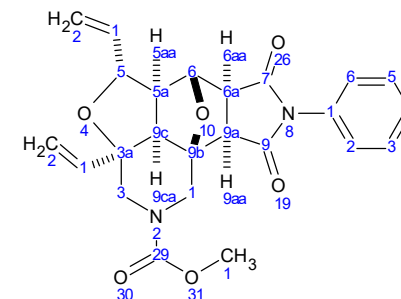
14c

FZ9037-1.JDF



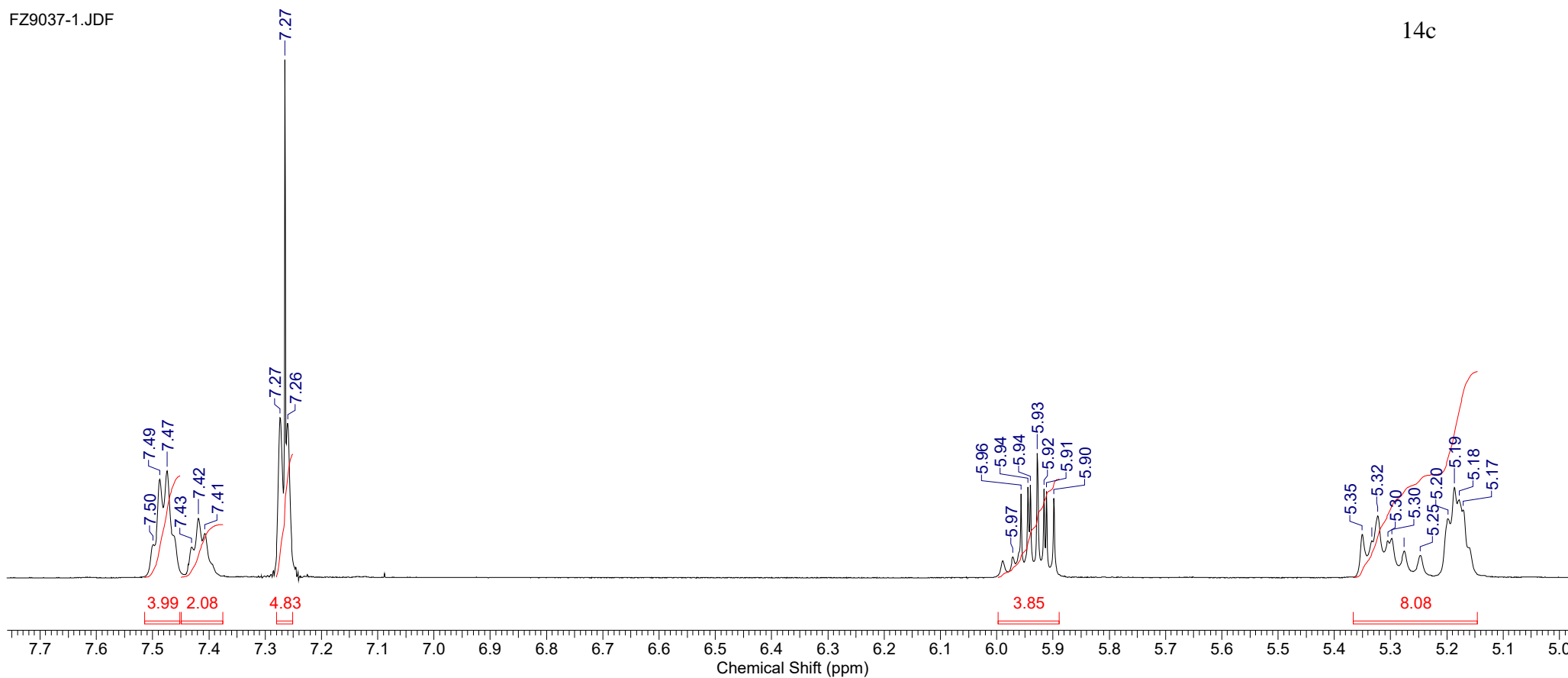
Formula C ₂₄ H ₂₄ N ₂ O ₆	FW 436.4572
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 25 Aug 2020 13:47:02	Date Stamp 25 Aug 2020 13:48:17
File Name C:\USERS\Лабa534\DOWNLOADS\FZ9037-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 42.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 5410.6274	Sweep Width (Hz) 16534.39



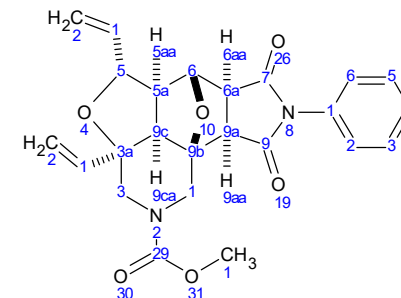
14c

FZ9037-1.JDF

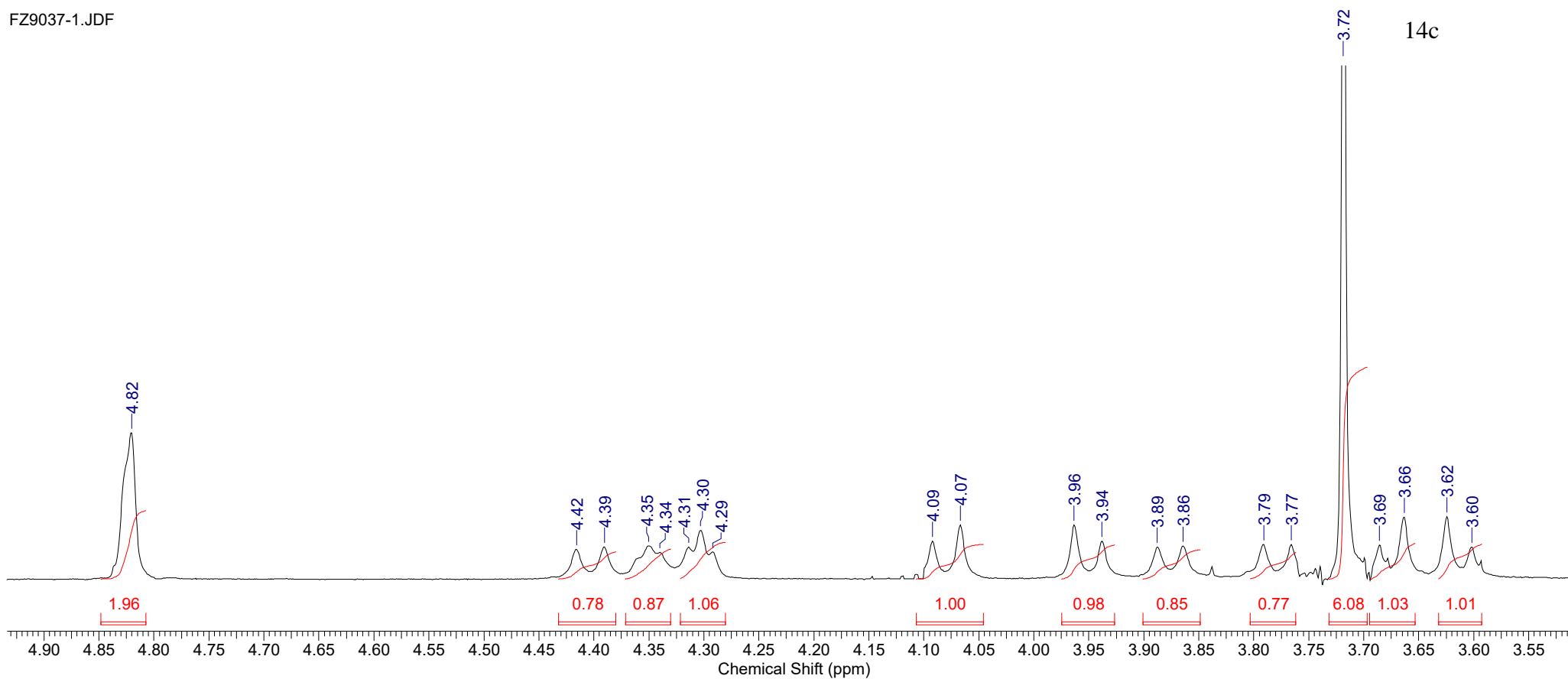


Formula C ₂₄ H ₂₄ N ₂ O ₆	FW 436.4572
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 25 Aug 2020 13:47:02	Date Stamp 25 Aug 2020 13:48:17
File Name C:\USERS\Лабa534\DOWNLOADS\FZ9037-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 42.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 5410.6274	Sweep Width (Hz) 16534.39

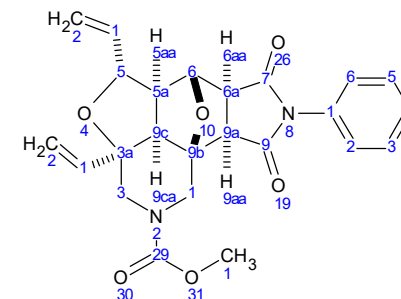


FZ9037-1.JDF



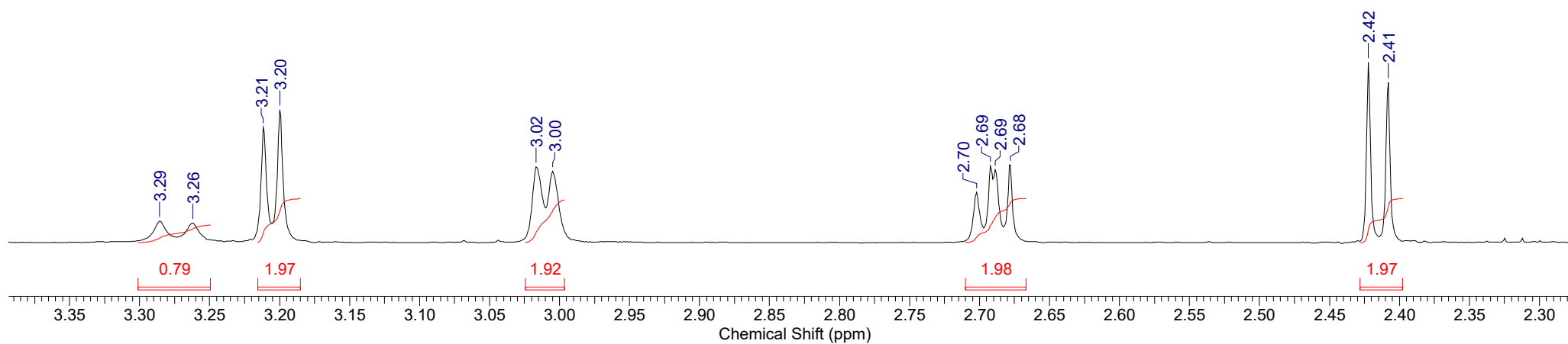
Formula C ₂₄ H ₂₄ N ₂ O ₆	FW 436.4572
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 25 Aug 2020 13:47:02	Date Stamp 25 Aug 2020 13:48:17
File Name C:\USERS\Лабa534\DOWNLOADS\FZ9037-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 42.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 5410.6274	Sweep Width (Hz) 16534.39



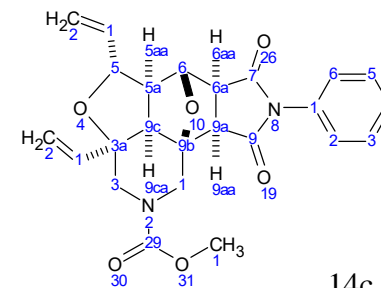
14c

FZ9037-1.JDF

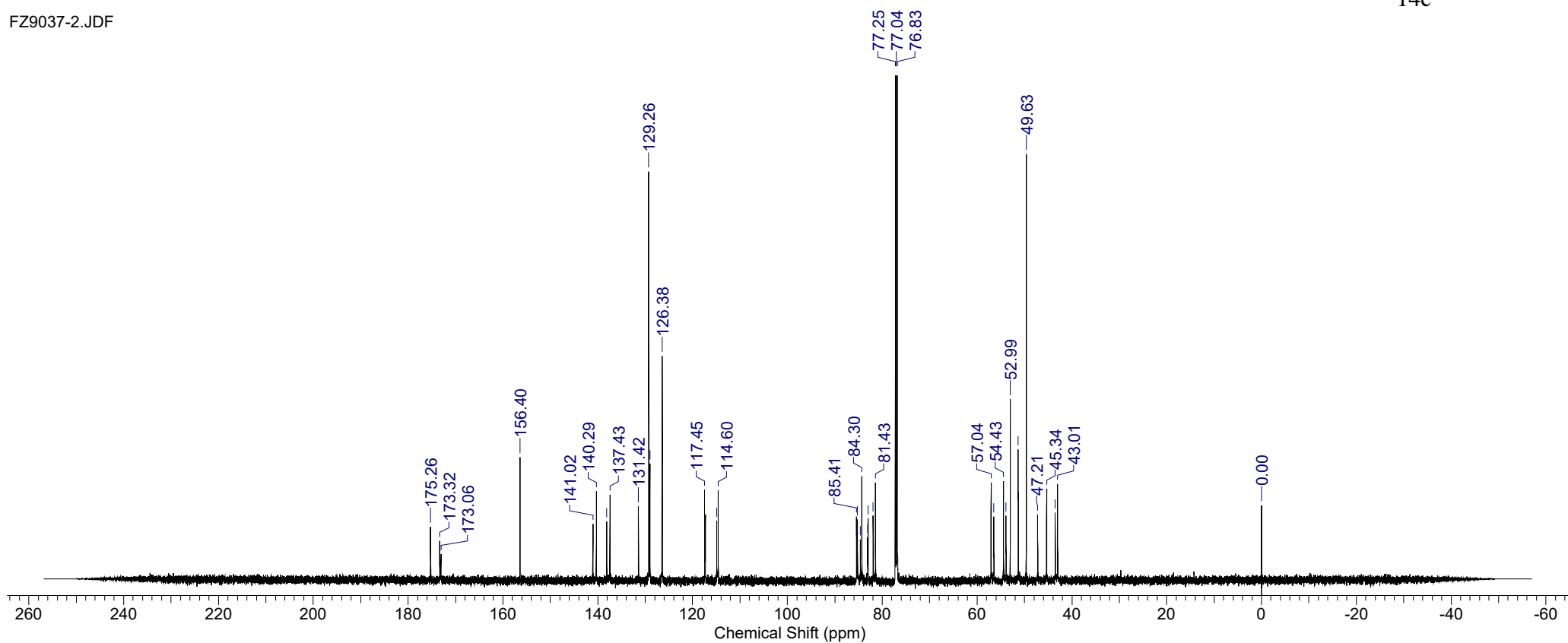


Formula C ₂₄ H ₂₄ N ₂ O ₆	FW 436.4572
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 26 Aug 2020 01:02:05
Date Stamp 26 Aug 2020 01:03:21	File Name C:\USERS\l1a6a534\DOWNLOADS\FZ9037-2.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 20000
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 58.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15079.3525

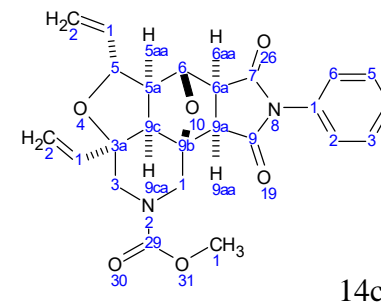


FZ9037-2.JDF

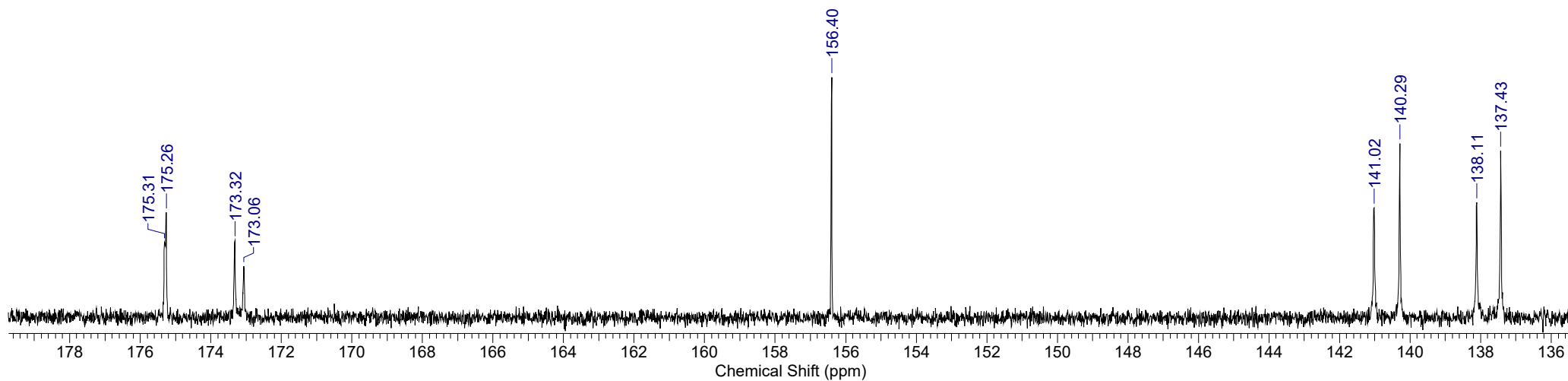


Formula C ₂₄ H ₂₄ N ₂ O ₆	FW 436.4572
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 26 Aug 2020 01:02:05
Date Stamp 26 Aug 2020 01:03:21	File Name C:\USERS\l1a6a534\DOWNLOADS\FZ9037-2.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 20000
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 58.00	Solvent CHLOROFORM-d	Pulse Sequence single_pulse_dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15079.3525

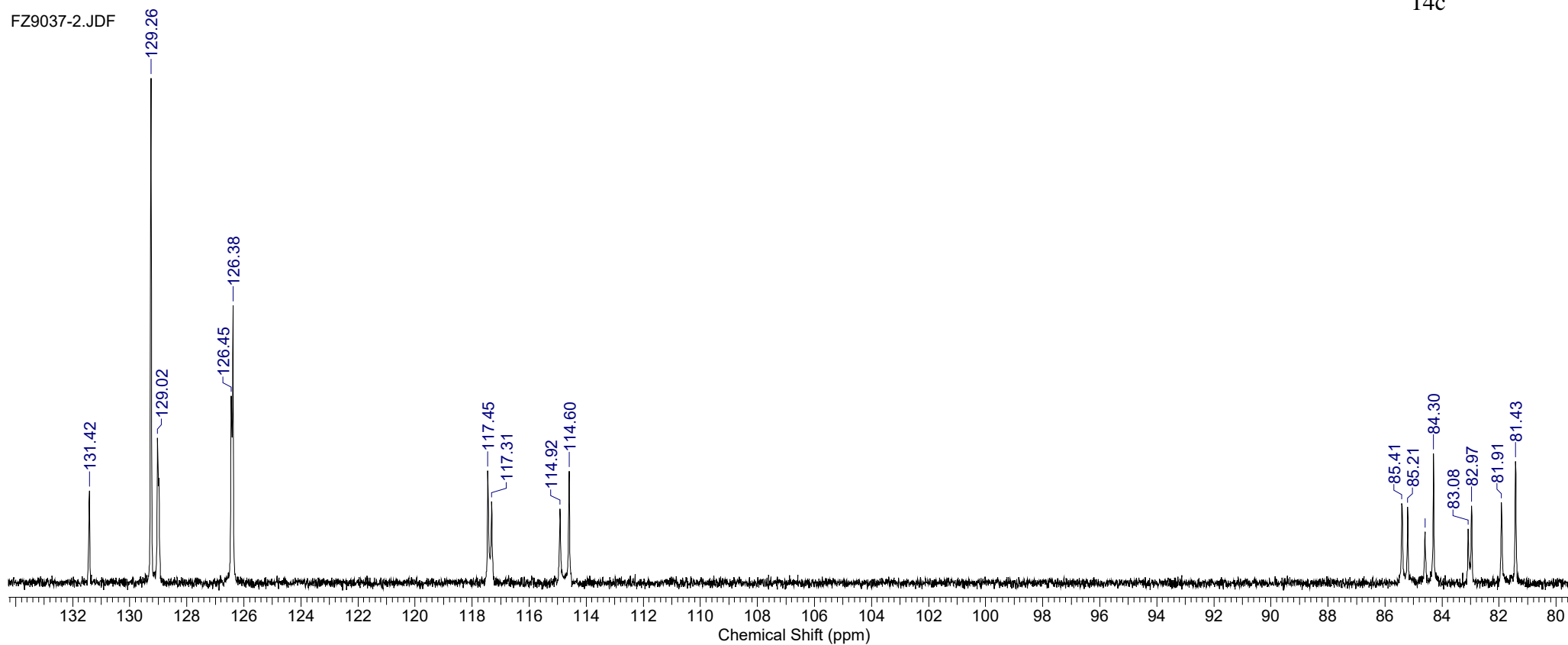
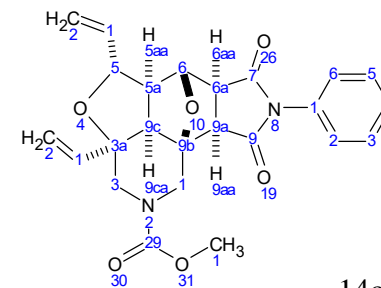


FZ9037-2.JDF



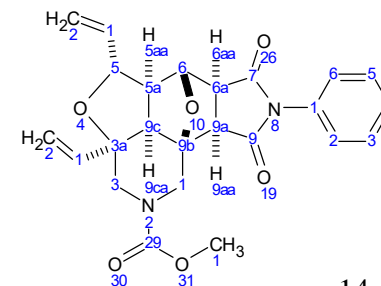
Formula C ₂₄ H ₂₄ N ₂ O ₆	FW 436.4572
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 26 Aug 2020 01:02:05
Date Stamp 26 Aug 2020 01:03:21	File Name C:\USERS\l1a6a534\DOWNLOADS\FZ9037-2.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 20000
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 58.00	Solvent CHLOROFORM-d	Pulse Sequence single_pulse_dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15079.3525



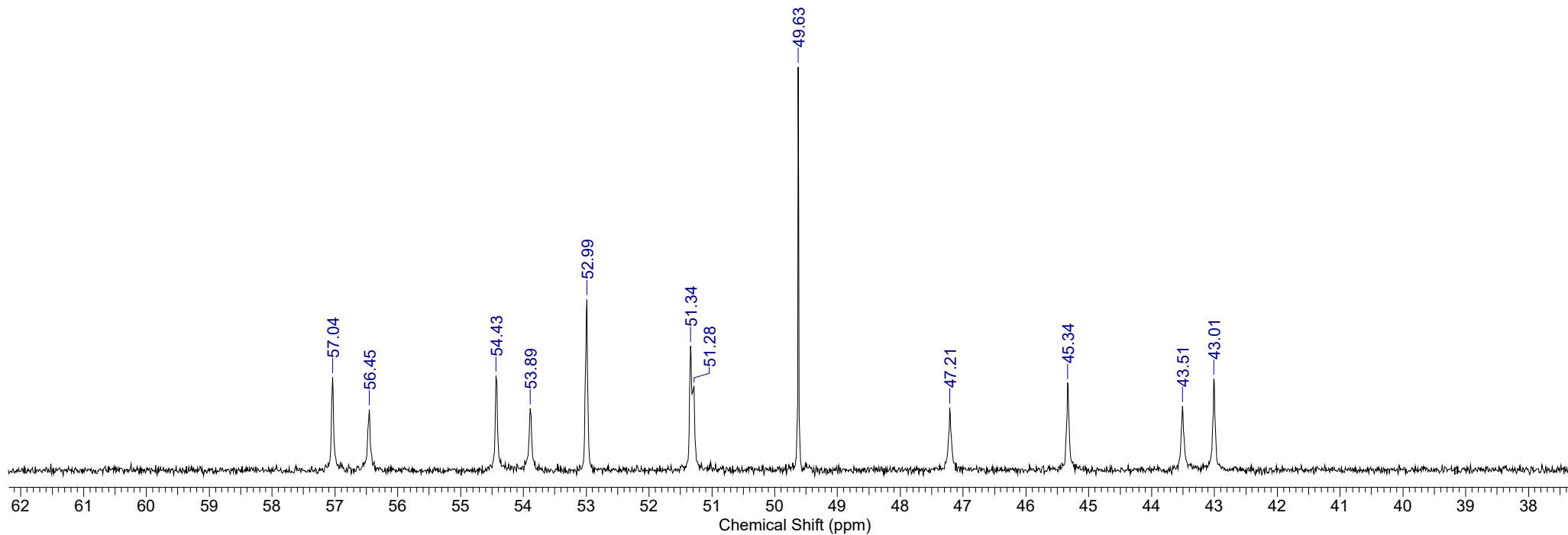
Formula C ₂₄ H ₂₄ N ₂ O ₆	FW 436.4572
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 26 Aug 2020 01:02:05
Date Stamp 26 Aug 2020 01:03:21	File Name C:\USERS\l1a6a534\DOWNLOADS\FZ9037-2.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 20000
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 58.00	Solvent CHLOROFORM-d	Pulse Sequence single_pulse_dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15079.3525



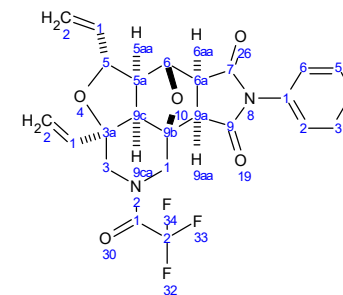
14c

FZ9037-2.JDF



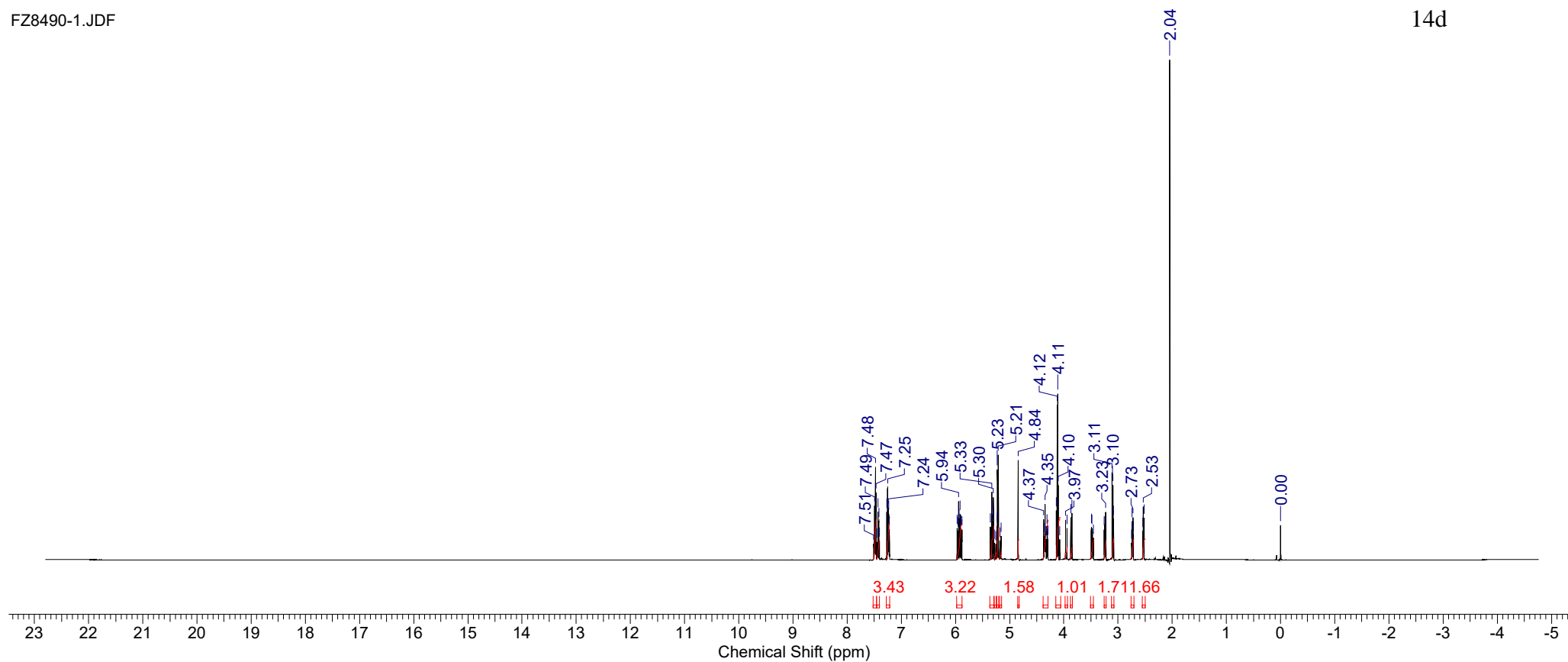
Formula C ₂₄ H ₂₁ F ₃ N ₃ O ₅	FW 474.4291
---	--------------------

Acquisition Time (sec) 0.9909	Comment single pulse	Date 07 Feb 2020 08:41:28	Frequency (MHz) 600.17
Date Stamp 19 Feb 2020 10:27:08	File Name C:\USERS\I\ab534\DOWNLOADS\FZ8490-1.JDF	Original Points Count 16384	Owner CKP
Nucleus 1H	Number of Transients 8	Origin ECA 600	Receiver Gain 36.00
Points Count 16384	Pulse Sequence single_pulse.ex2	Spectrum Offset (Hz) 5412.0542	Solvent CHLOROFORM-d
Sweep Width (Hz) 16534.39	Temperature (degree C) 22.900		



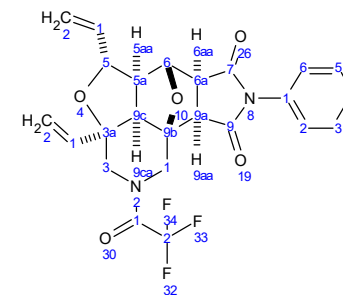
FZ8490-1.JDF

14d



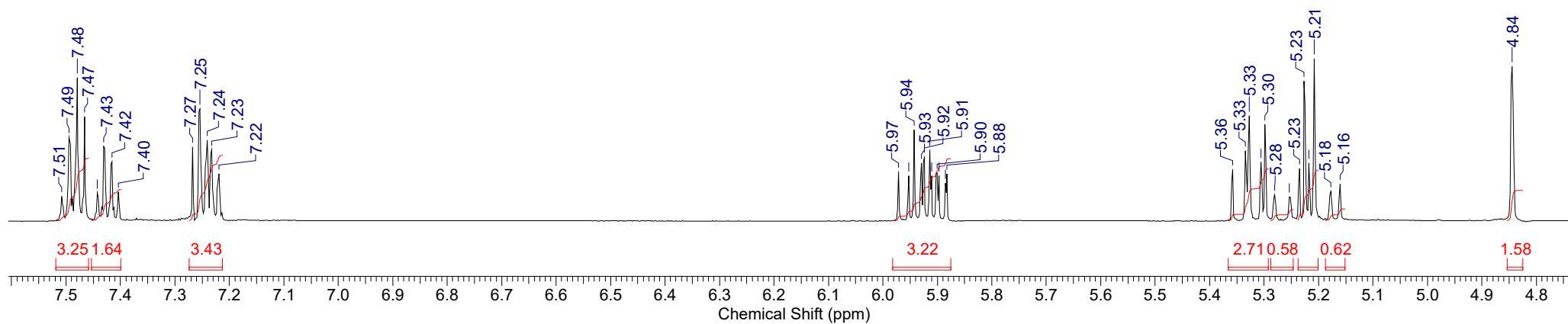
Formula C ₂₄ H ₂₁ F ₃ N ₃ O ₅	FW 474.4291
---	--------------------

Acquisition Time (sec) 0.9909	Comment single pulse	Date 07 Feb 2020 08:41:28	
Date Stamp 19 Feb 2020 10:27:08		File Name C:\USERS\Лабa534\DOWNLOADS\FZ8490-1.JDF	Frequency (MHz) 600.17
Nucleus 1H	Number of Transients 8	Origin ECA 600	Original Points Count 16384
Points Count 16384	Pulse Sequence single_pulse.ex2	Receiver Gain 36.00	Owner CKP
Spectrum Offset (Hz) 5412.0542	Sweep Width (Hz) 16534.39	Temperature (degree C) 22.900	Solvent CHLOROFORM-d



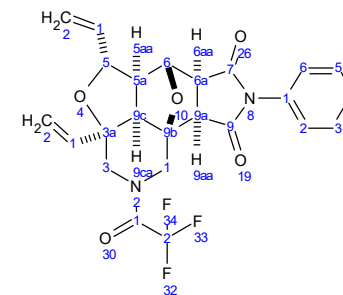
FZ8490-1.JDF

14d



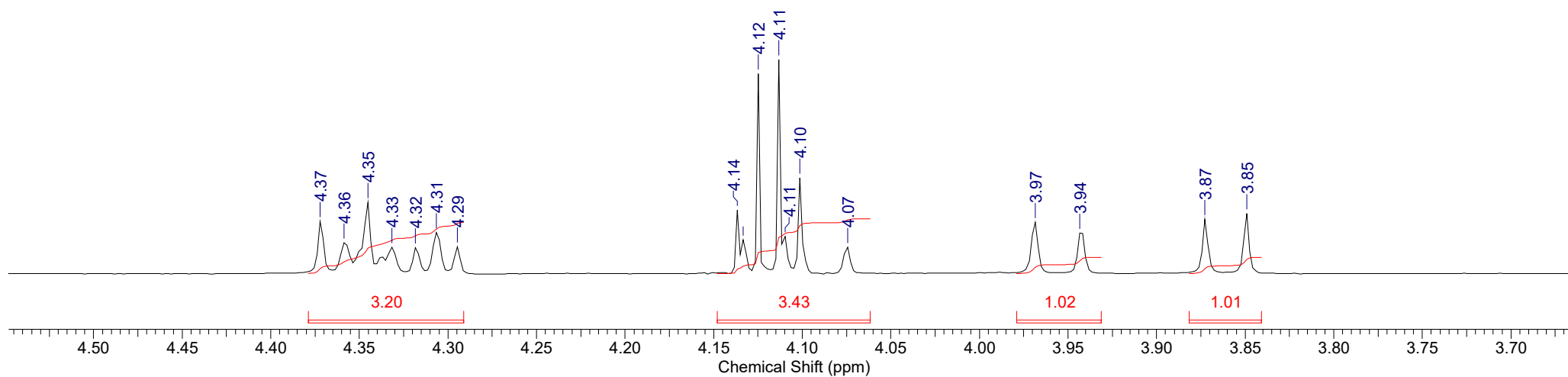
Formula C ₂₄ H ₂₁ F ₃ N ₃ O ₅	FW 474.4291
---	--------------------

Acquisition Time (sec) 0.9909	Comment single pulse	Date 07 Feb 2020 08:41:28	Frequency (MHz) 600.17
Date Stamp 19 Feb 2020 10:27:08	File Name C:\USERS\Лабa534\DOWNLOADS\FZ8490-1.JDF	Original Points Count 16384	Owner CKP
Nucleus 1H	Number of Transients 8	Origin ECA 600	Receiver Gain 36.00
Points Count 16384	Pulse Sequence single_pulse.ex2	Temperature (degree C) 22.900	Solvent CHLOROFORM-d
Spectrum Offset (Hz) 5412.0542	Sweep Width (Hz) 16534.39		



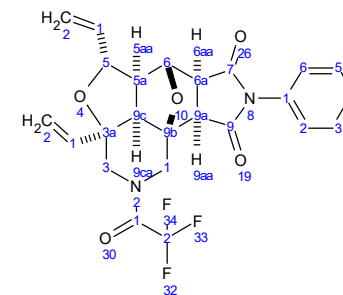
FZ8490-1.JDF

14d



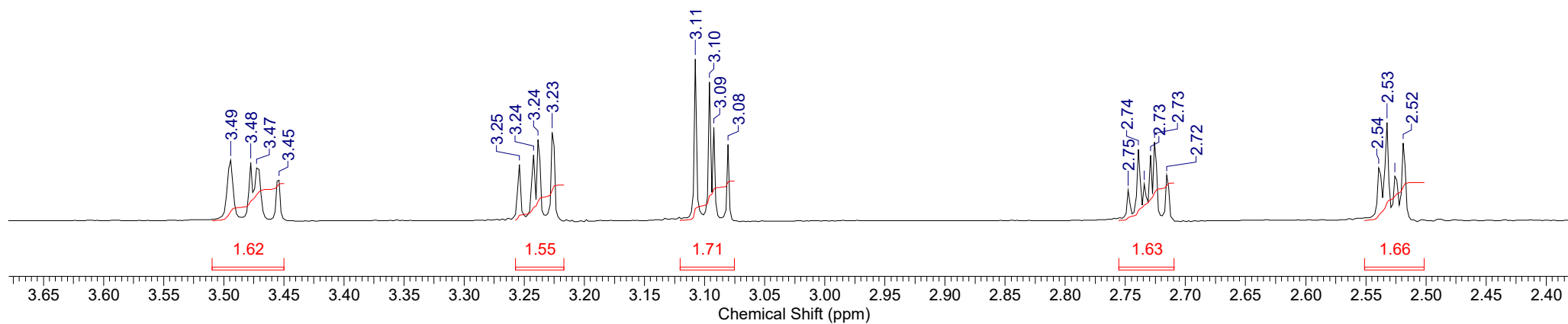
Formula C ₂₄ H ₂₁ F ₃ N ₃ O ₅	FW 474.4291
---	--------------------

Acquisition Time (sec) 0.9909	Comment single pulse	Date 07 Feb 2020 08:41:28	
Date Stamp 19 Feb 2020 10:27:08		File Name C:\USERS\Лабa534\DOWNLOADS\FZ8490-1.JDF	Frequency (MHz) 600.17
Nucleus 1H	Number of Transients 8	Origin ECA 600	Original Points Count 16384
Points Count 16384	Pulse Sequence single_pulse.ex2	Receiver Gain 36.00	Owner CKP
Spectrum Offset (Hz) 5412.0542	Sweep Width (Hz) 16534.39	Temperature (degree C) 22.900	Solvent CHLOROFORM-d



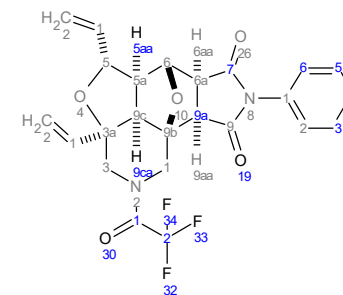
FZ8490-1.JDF

14d



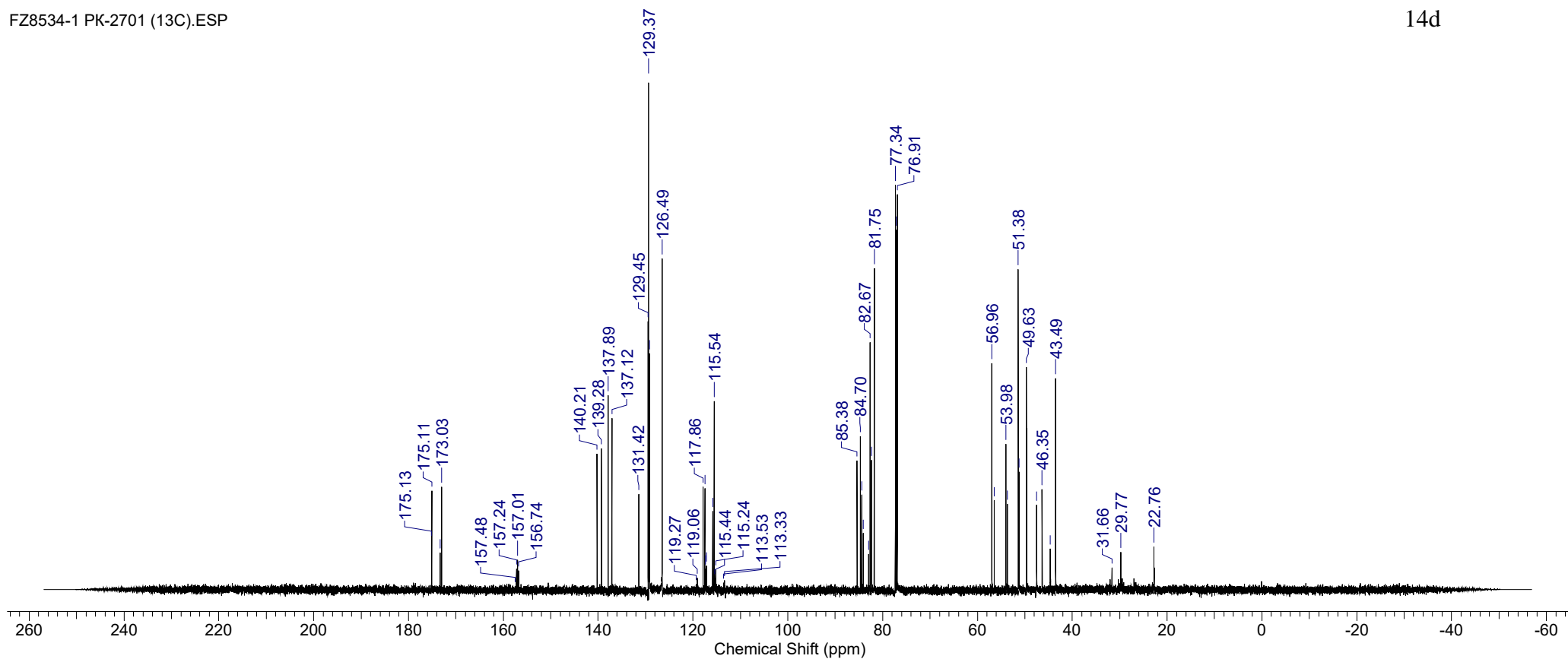
Formula C ₂₄ H ₂₁ F ₃ N ₃ O ₅	FW 474.4291
---	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 27 Feb 2020 17:32:34
Date Stamp 27 Feb 2020 16:52:15	File Name H:\DOWNLOADS\FZ8534-1.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 1000	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Solvent CHLOROFORM-d	Spectrum Offset (Hz) 15091.3428	Receiver Gain 54.00
	Sweep Width (Hz) 47348.49	Owner CKP
		Temperature (degree C) 23.700



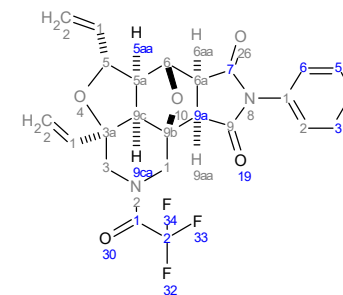
FZ8534-1 PK-2701 (13C).ESP

14d



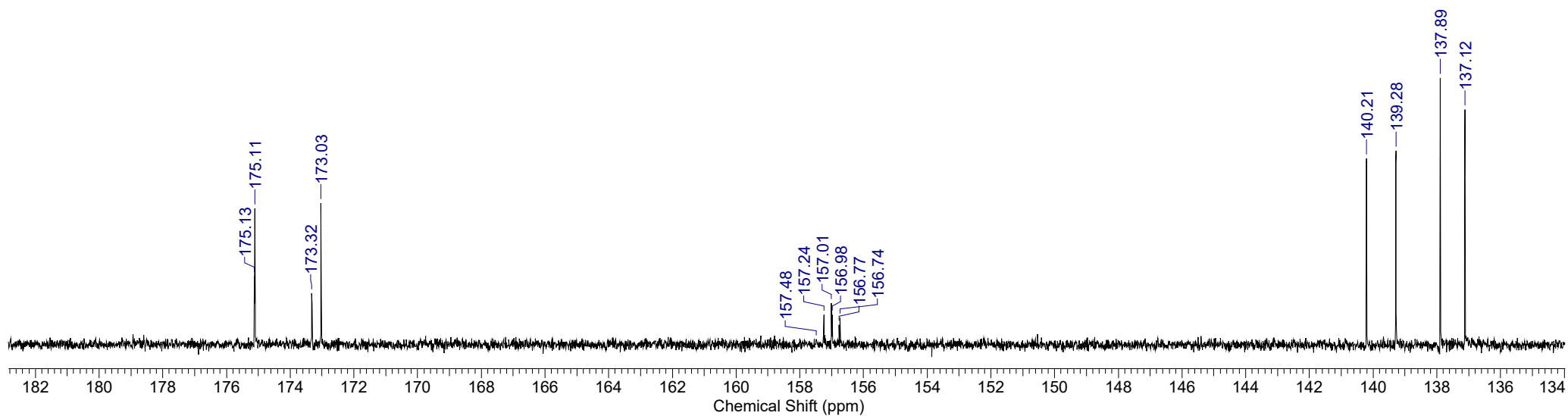
Formula C ₂₄ H ₂₁ F ₃ N ₃ O ₅	FW 474.4291
---	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 27 Feb 2020 17:32:34
Date Stamp 27 Feb 2020 16:52:15	File Name H:\DOWNLOADS\FZ8534-1.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 1000	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Solvent CHLOROFORM-d	Spectrum Offset (Hz) 15091.3428	Receiver Gain 54.00
	Sweep Width (Hz) 47348.49	Owner CKP
		Temperature (degree C) 23.700



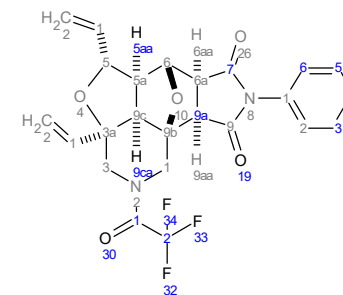
FZ8534-1 PK-2701 (13C).ESP

14d



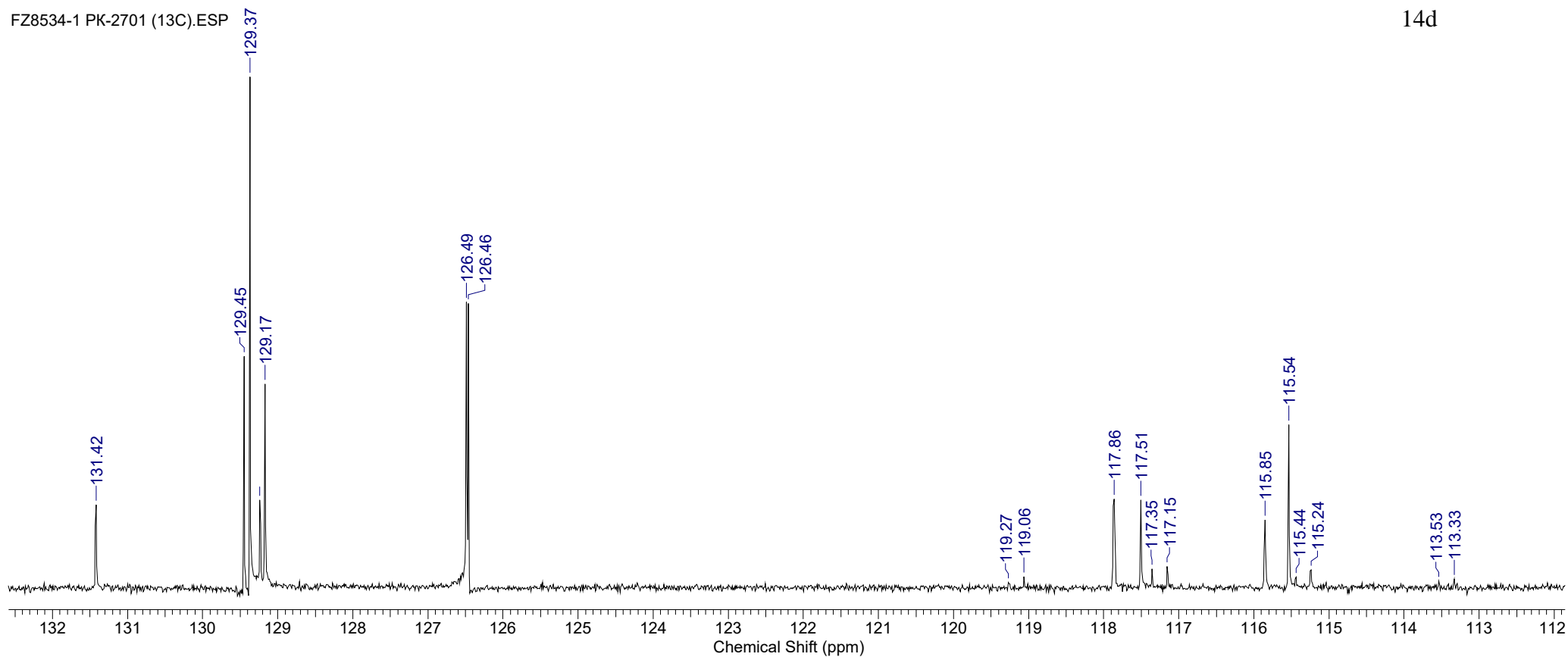
Formula C ₂₄ H ₂₁ F ₃ N ₃ O ₅	FW 474.4291
---	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 27 Feb 2020 17:32:34
Date Stamp 27 Feb 2020 16:52:15	File Name H:\DOWNLOADS\FZ8534-1.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 1000	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Solvent CHLOROFORM-d	Spectrum Offset (Hz) 15091.3428	Receiver Gain 54.00
	Sweep Width (Hz) 47348.49	Owner CKP
		Temperature (degree C) 23.700



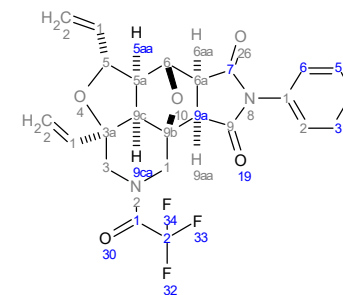
14d

FZ8534-1 PK-2701 (13C).ESP



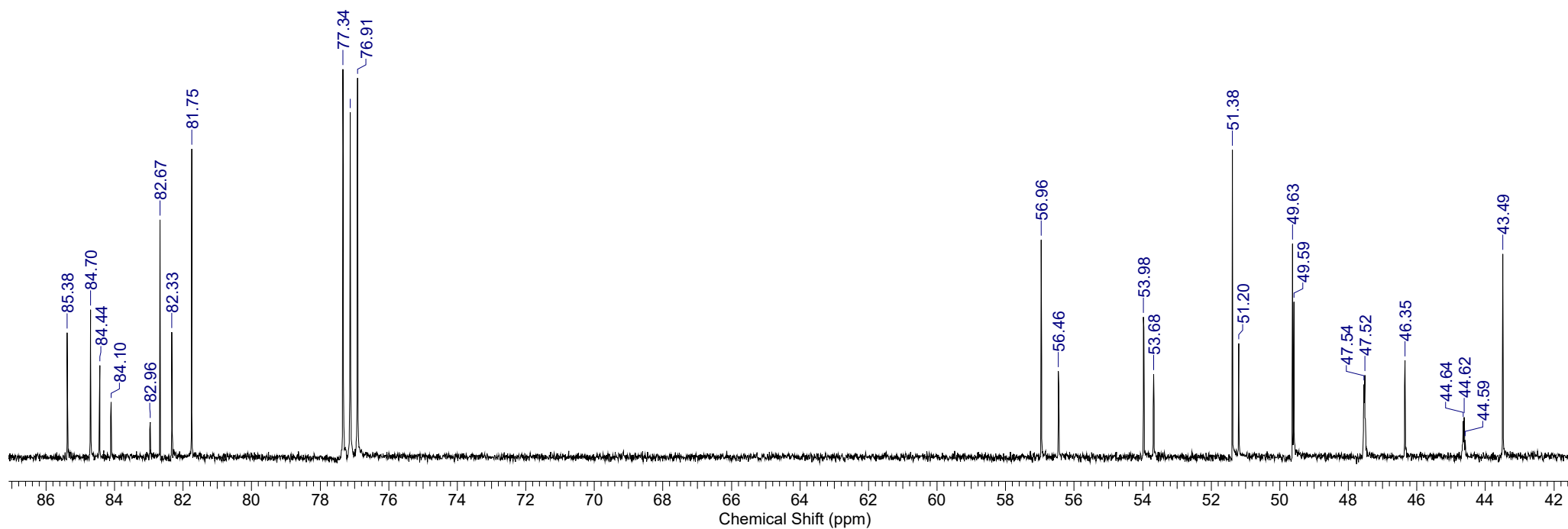
Formula C ₂₄ H ₂₁ F ₃ N ₃ O ₅	FW 474.4291
---	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 27 Feb 2020 17:32:34
Date Stamp 27 Feb 2020 16:52:15	File Name H:\DOWNLOADS\FZ8534-1.JDF	Frequency (MHz) 150.91
Nucleus 13C	Number of Transients 1000	Origin ECA 600
Points Count 32768	Pulse Sequence single pulse dec	Original Points Count 32768
Solvent CHLOROFORM-d	Spectrum Offset (Hz) 15091.3428	Receiver Gain 54.00
	Sweep Width (Hz) 47348.49	Owner CKP
		Temperature (degree C) 23.700



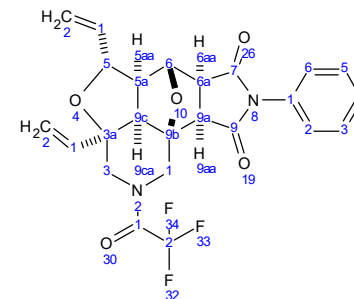
FZ8534-1 PK-2701 (13C).ESP

14d



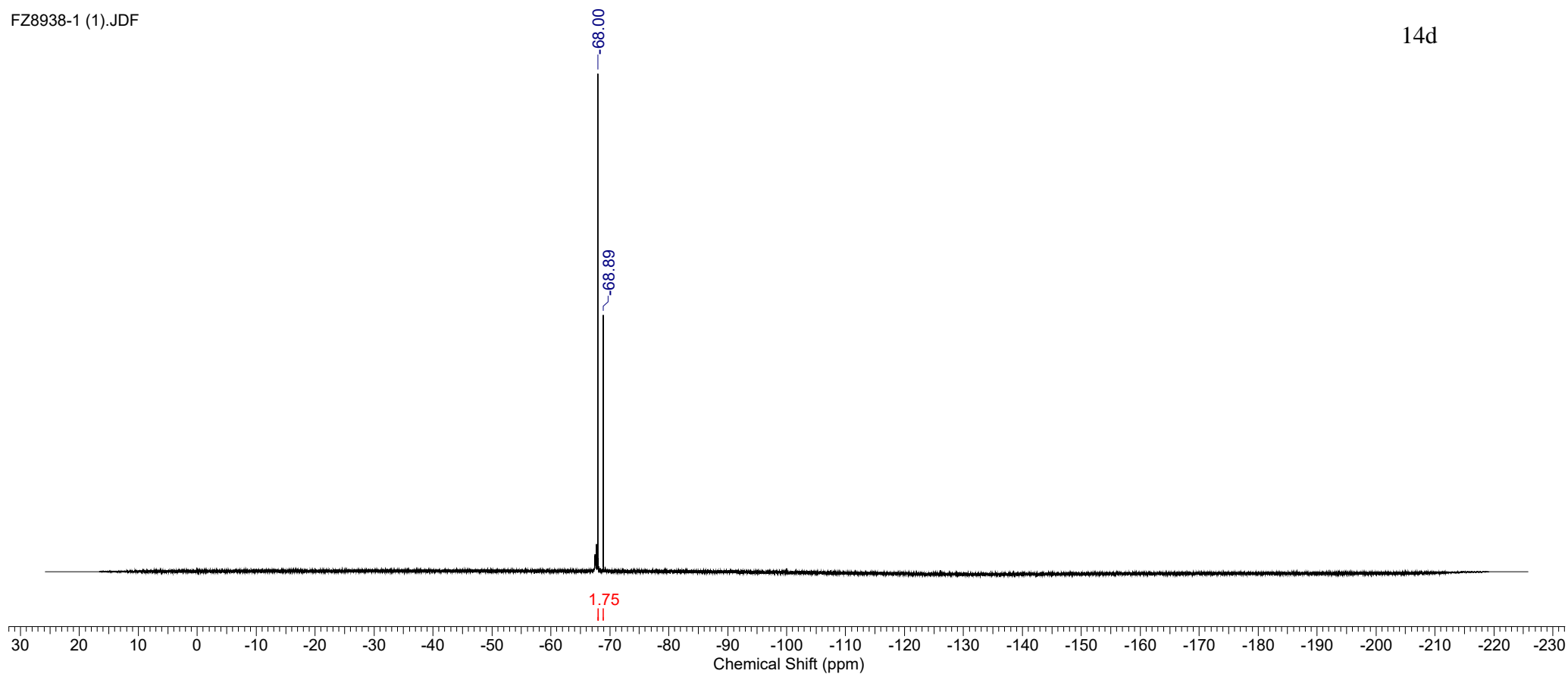
Formula C ₂₄ H ₂₁ F ₃ N ₃ O ₅	FW 474.4291
---	--------------------

Acquisition Time (sec) 0.4614	Comment single_pulse	Date 05 Aug 2020 11:02:14	Date Stamp 05 Aug 2020 11:02:55
File Name C:\USERS\Лабa534\DOWNLOADS\FZ8938-1 (1).JDF	Frequency (MHz) 564.73	Nucleus 19F	Number of Transients 8
Origin ECA 600	Original Points Count 65536	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 44.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) -56472.6094	Sweep Width (Hz) 142045.45



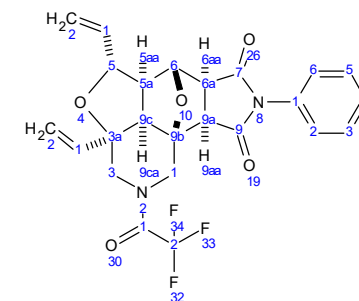
14d

FZ8938-1 (1).JDF



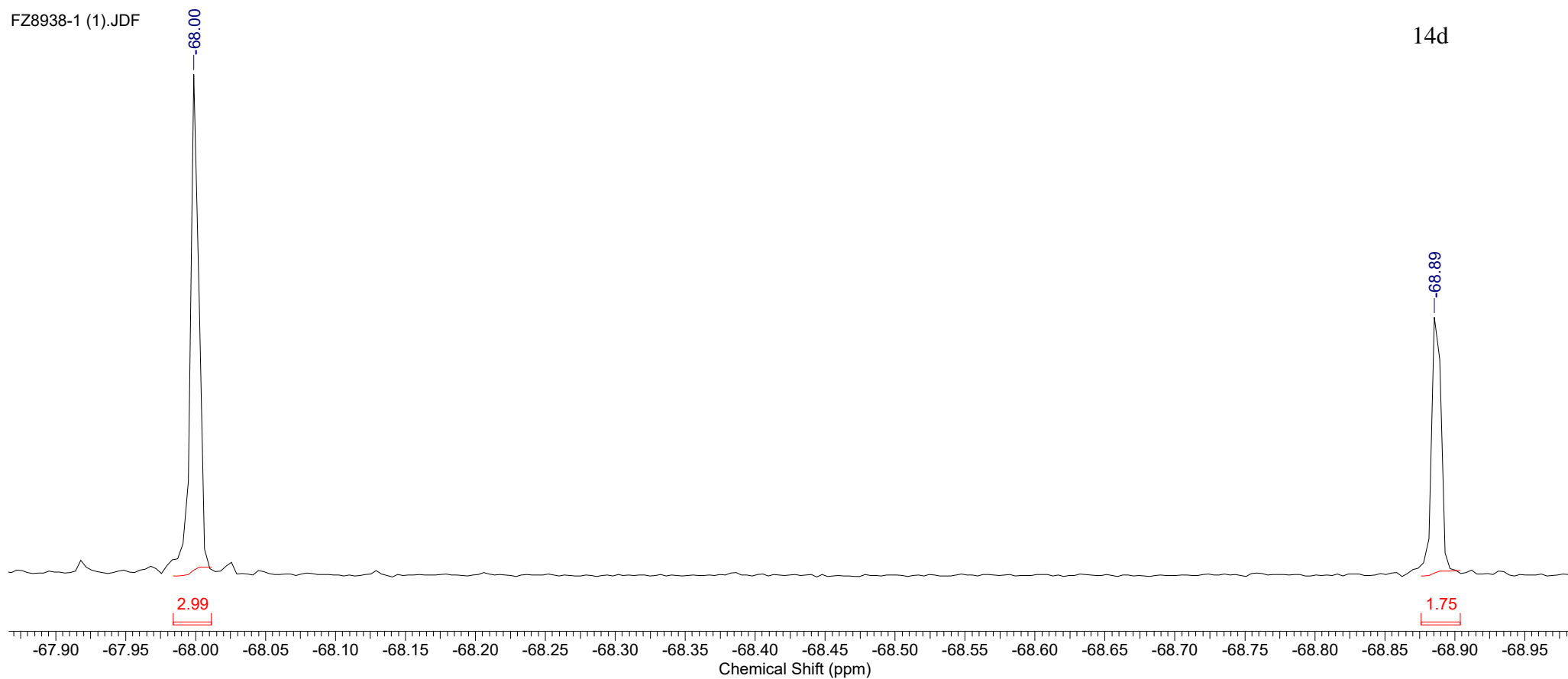
Formula C ₂₄ H ₂₁ F ₃ N ₃ O ₅	FW 474.4291
---	--------------------

Acquisition Time (sec) 0.4614	Comment single_pulse	Date 05 Aug 2020 11:02:14	Date Stamp 05 Aug 2020 11:02:55
File Name C:\USERS\Лаб6а534\DOWNLOADS\FZ8938-1 (1).JDF	Frequency (MHz) 564.73	Nucleus 19F	Number of Transients 8
Origin ECA 600	Original Points Count 65536	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 44.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) -56472.6094	Sweep Width (Hz) 142045.45



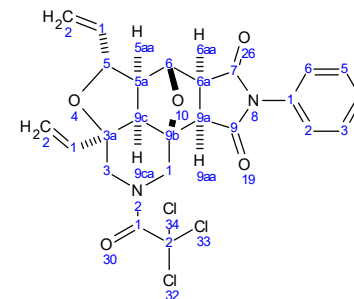
14d

FZ8938-1 (1).JDF



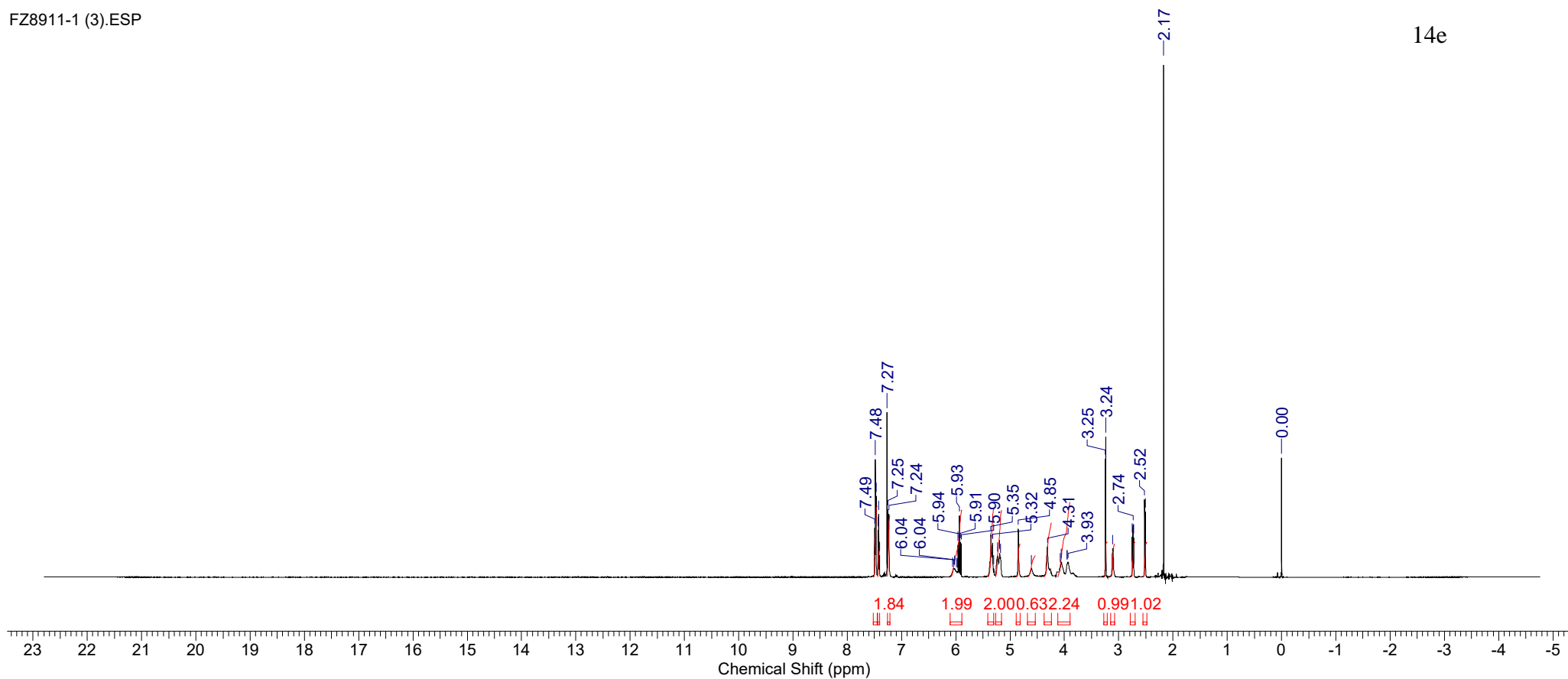
Formula C ₂₄ H ₂₁ Cl ₃ N ₃ O ₅	FW 523.7929
--	--------------------

Acquisition Time (sec) 1.9818	Comment single pulse	Date 31 Jul 2020 11:12:55	Date Stamp 31 Jul 2020 11:14:13
File Name C:\USERS\Лабa534\DOWNLOADS\FZ8911-1 (3).JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 40.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 5412.1411	Sweep Width (Hz) 16534.39



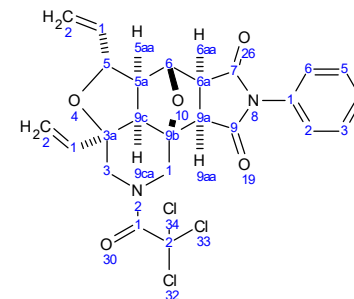
FZ8911-1 (3).ESP

14e



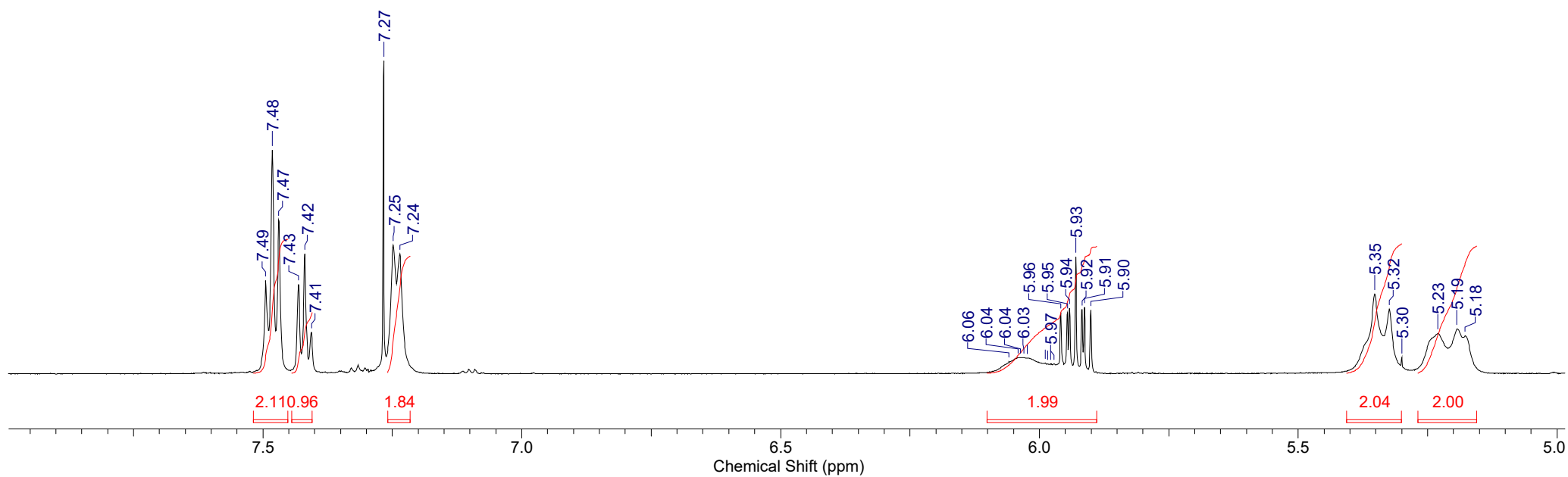
Formula C ₂₄ H ₂₁ Cl ₃ N ₃ O ₅	FW 523.7929
--	--------------------

Acquisition Time (sec) 1.9818	Comment single pulse	Date 31 Jul 2020 11:12:55	Date Stamp 31 Jul 2020 11:14:13
File Name C:\USERS\Лабa534\DOWNLOADS\FZ8911-1 (3).JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 40.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 5412.1411	Sweep Width (Hz) 16534.39



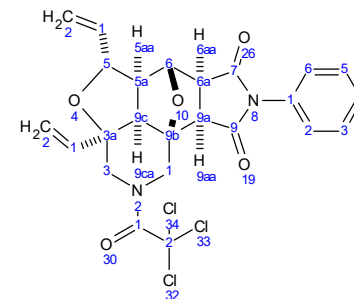
FZ8911-1 (3).ESP

14e



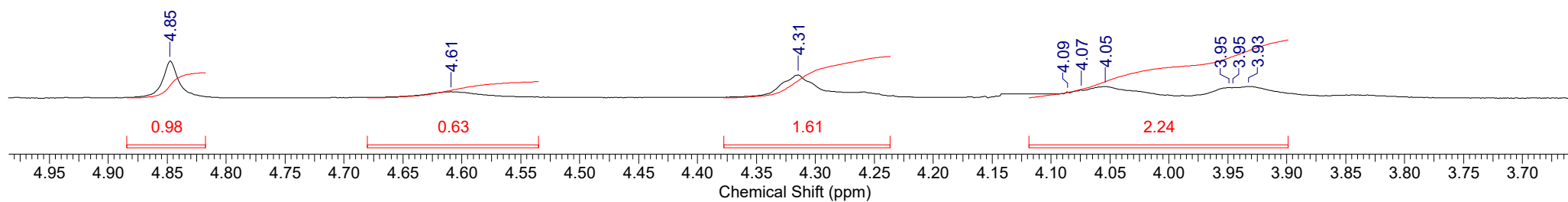
Formula C ₂₄ H ₂₁ Cl ₃ N ₃ O ₅	FW 523.7929
--	--------------------

Acquisition Time (sec) 1.9818	Comment single pulse	Date 31 Jul 2020 11:12:55	Date Stamp 31 Jul 2020 11:14:13
File Name C:\USERS\Лабa534\DOWNLOADS\FZ8911-1 (3).JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 40.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 5412.1411	Sweep Width (Hz) 16534.39



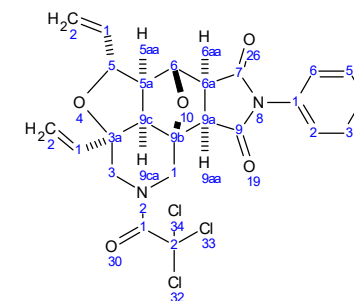
FZ8911-1 (3).ESP

14e



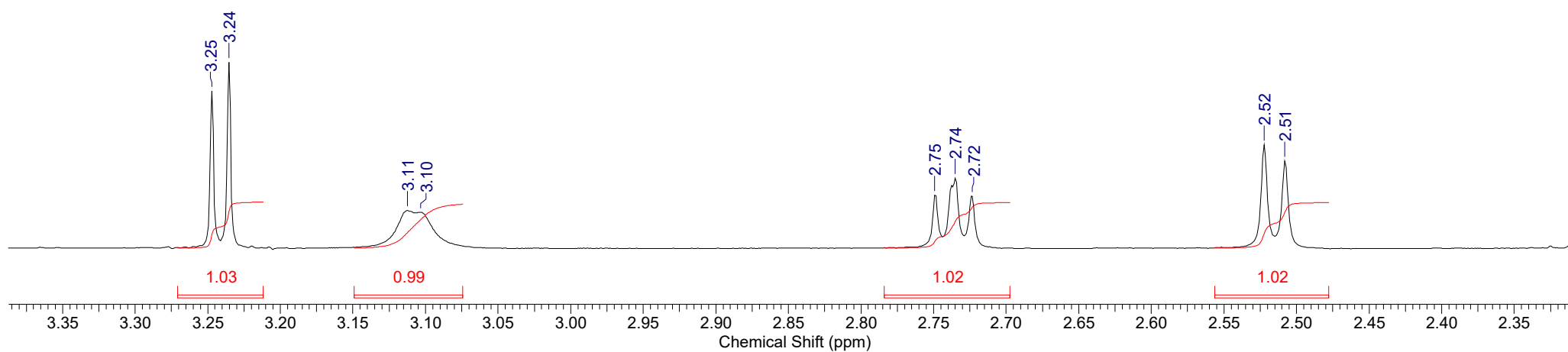
Formula C ₂₄ H ₂₁ Cl ₃ N ₃ O ₅	FW 523.7929
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 31 Jul 2020 11:12:55	Date Stamp 31 Jul 2020 11:14:13
File Name C:\USERS\Лабa534\DOWNLOADS\FZ8911-1 (3).JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 40.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 5412.1411	Sweep Width (Hz) 16534.39



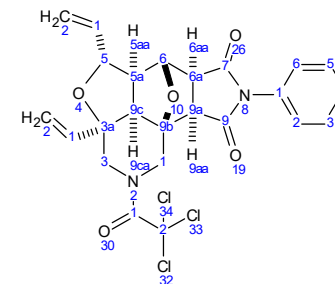
FZ8911-1 (3).ESP

14e



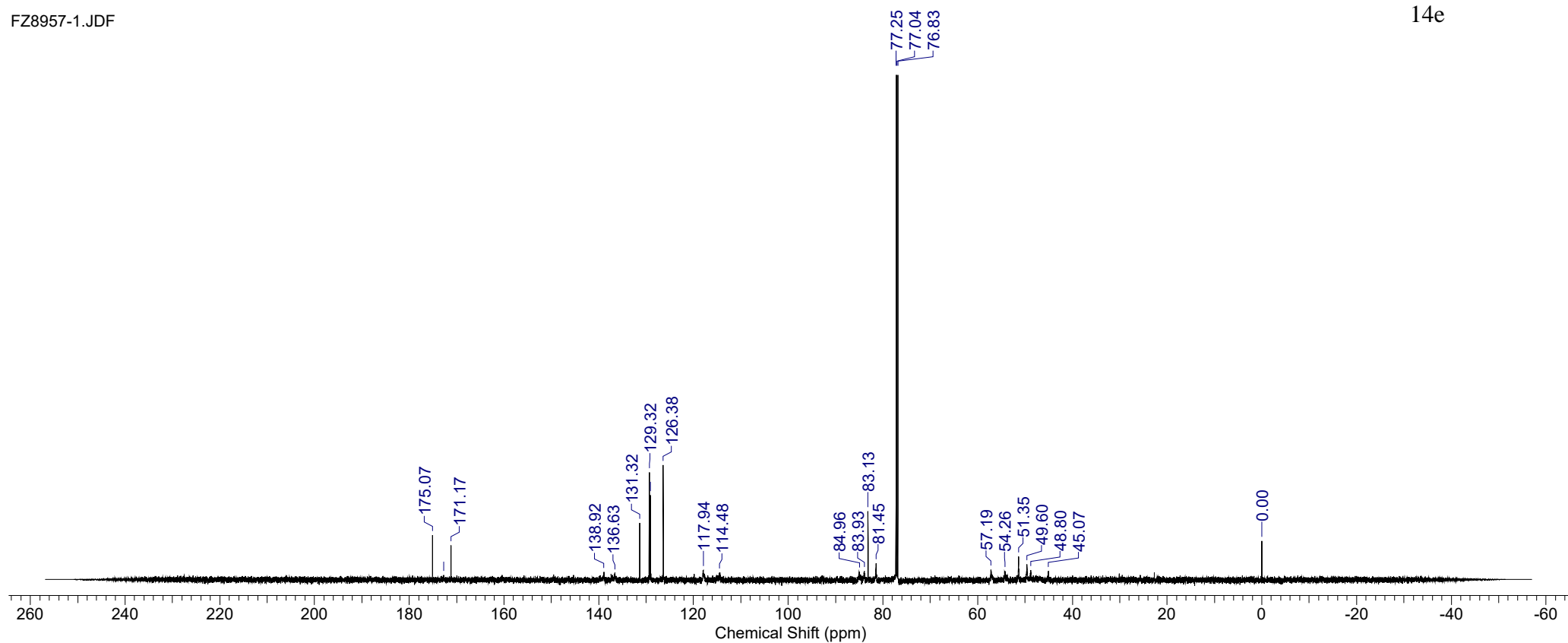
Formula C ₂₄ H ₂₁ Cl ₃ N ₂ O ₅	FW 523.7929
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 06 Aug 2020 11:07:39
Date Stamp 06 Aug 2020 11:08:22	File Name C:\USERS\la6a534\DOWNLOADS\FZ8957-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 4000
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 58.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15079.3525



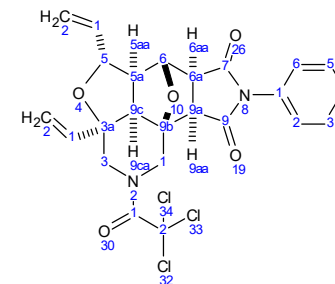
14e

FZ8957-1.JDF



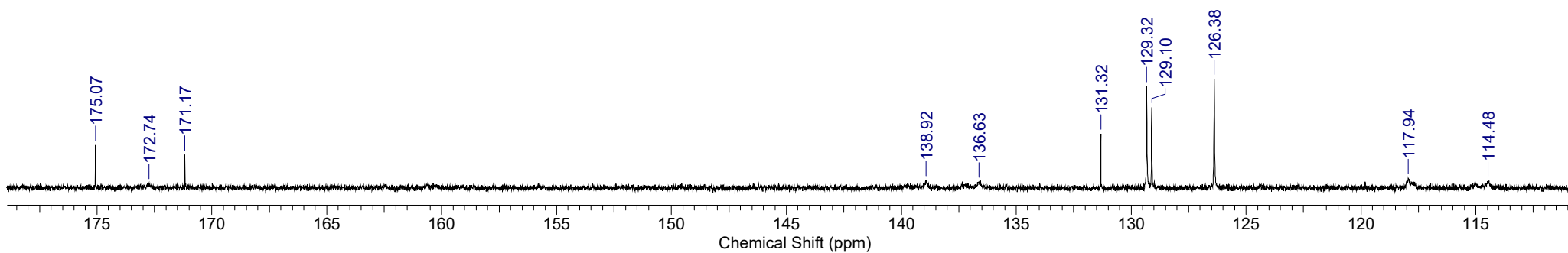
Formula C ₂₄ H ₂₁ Cl ₃ N ₃ O ₅	FW 523.7929
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 06 Aug 2020 11:07:39
Date Stamp 06 Aug 2020 11:08:22	File Name C:\USERS\la6a534\DOWNLOADS\FZ8957-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 4000
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 58.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15079.3525



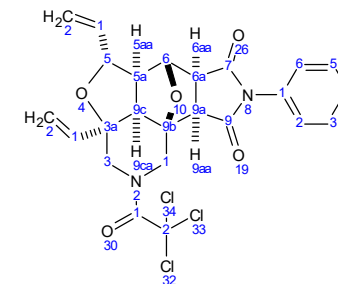
14e

FZ8957-1.JDF



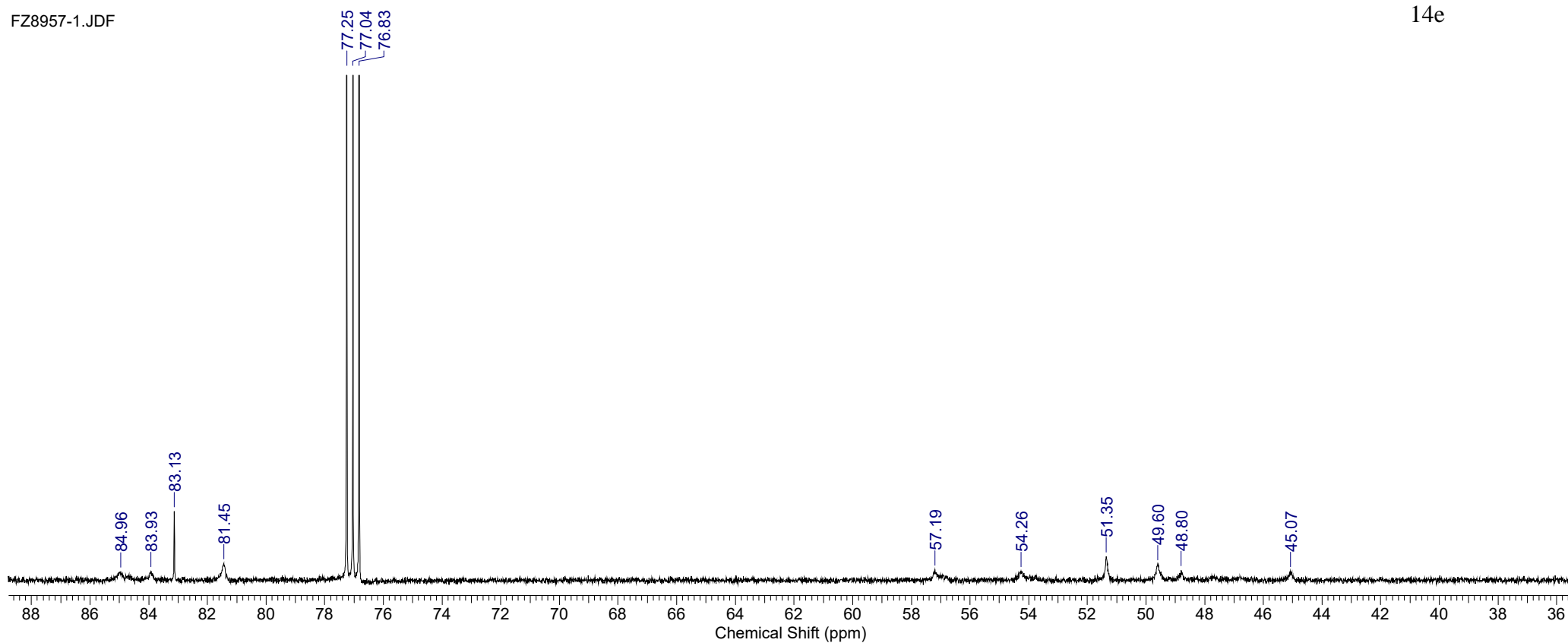
Formula C ₂₄ H ₂₁ Cl ₃ N ₃ O ₅	FW 523.7929
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 06 Aug 2020 11:07:39
Date Stamp 06 Aug 2020 11:08:22	File Name C:\USERS\la6a534\DOWNLOADS\FZ8957-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 4000
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 58.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15079.3525



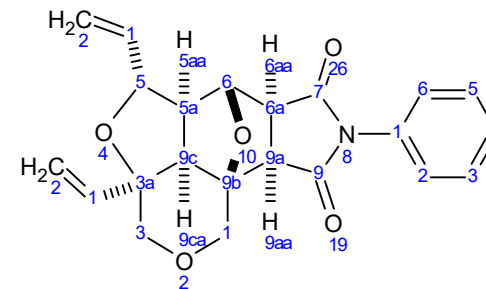
14e

FZ8957-1.JDF



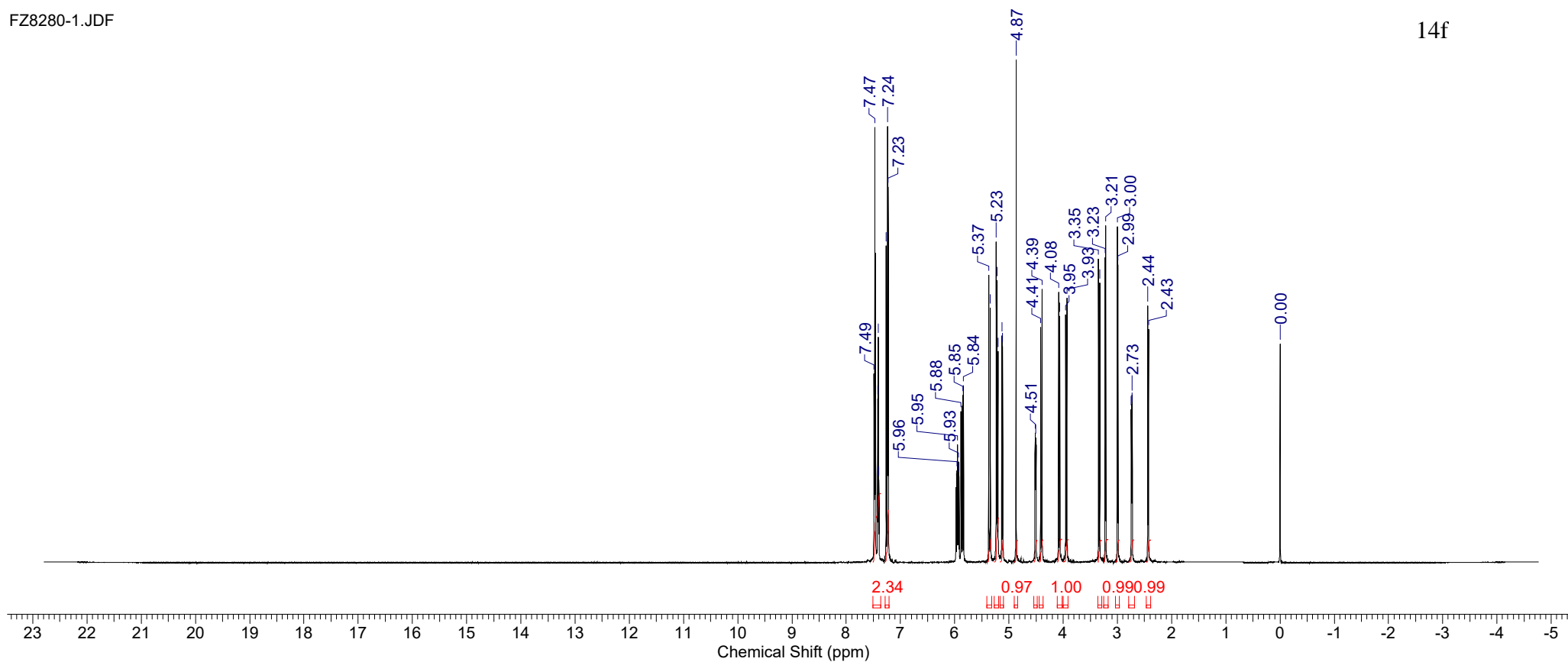
Formula C ₂₂ H ₂₁ NO ₅	FW 379.4058
--	--------------------

Acquisition Time (sec) 1.9818	Comment single pulse	Date 06 Oct 1990 03:11:15	
Date Stamp 16 Dec 2019 08:28:05		File Name C:\USERS\I\Ia\ba534\DOWNLOADS\FZ8280-1.JDF	Frequency (MHz) 600.17
Nucleus 1H	Number of Transients 8	Origin ECA 600	Original Points Count 32768
Points Count 32768	Pulse Sequence single_pulse.ex2	Receiver Gain 40.00	Owner delta
Spectrum Offset (Hz) 5410.1226	Sweep Width (Hz) 16534.39	Temperature (degree C) 23.000	Solvent CHLOROFORM-d



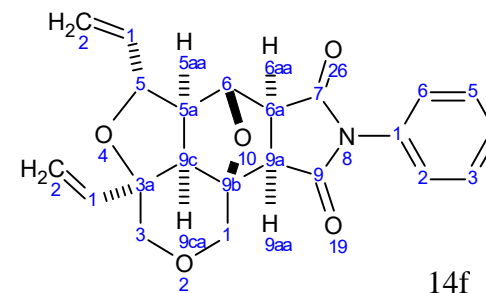
14f

FZ8280-1.JDF

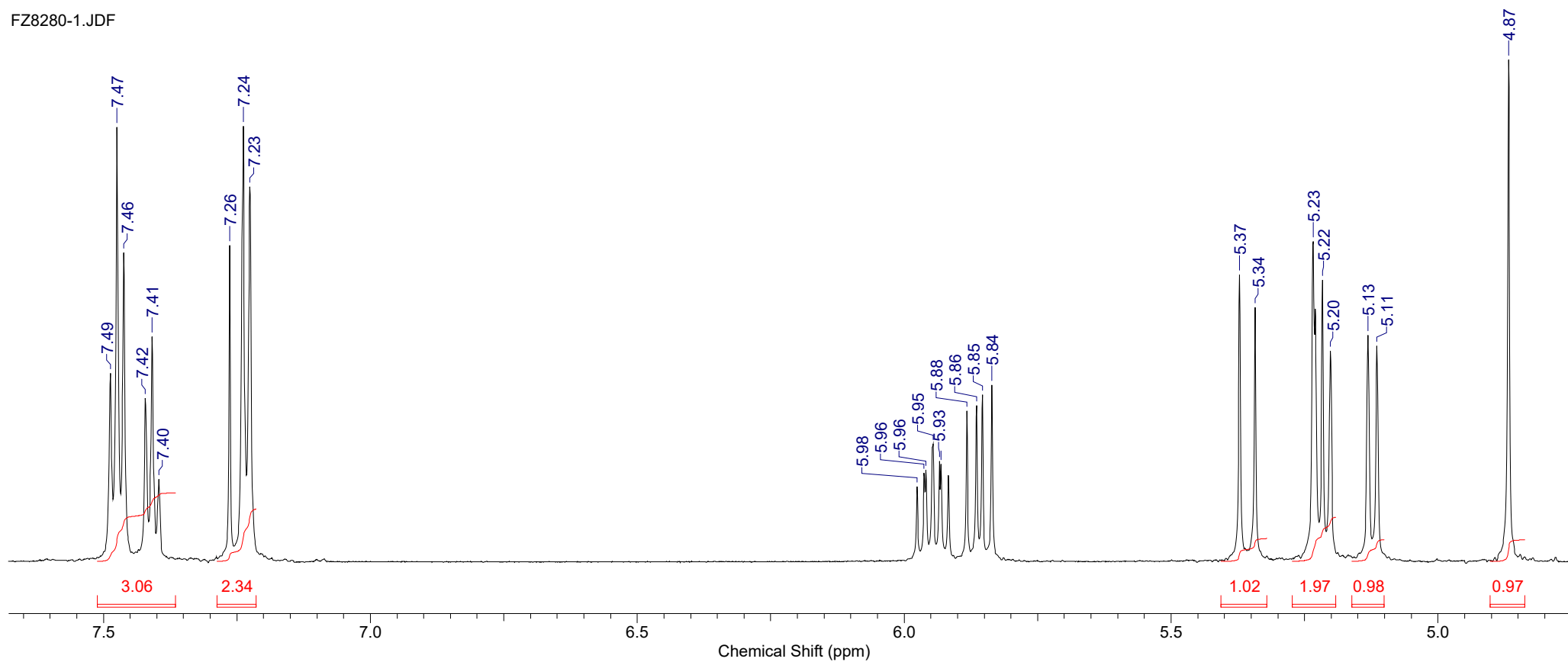


Formula C₂₂H₂₁NO₅ FW 379.4058

Acquisition Time (sec)	1.9818	Comment	single pulse	Date	06 Oct 1990 03:11:15	Frequency (MHz)	600.17
Date Stamp	16 Dec 2019 08:28:05	File Name	C:\USERS\Лабa534\DOWNLOADS\FZ8280-1.JDF			Owner	delta
Nucleus	1H	Number of Transients	8	Origin	ECA 600	Original Points Count	32768
Points Count	32768	Pulse Sequence	single_pulse.ex2	Receiver Gain	40.00	Solvent	CHLOROFORM-d
Spectrum Offset (Hz)	5410.1226	Sweep Width (Hz)	16534.39	Temperature (degree C)	23.000		

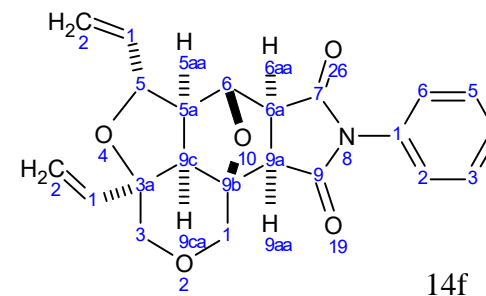


FZ8280-1.JDF

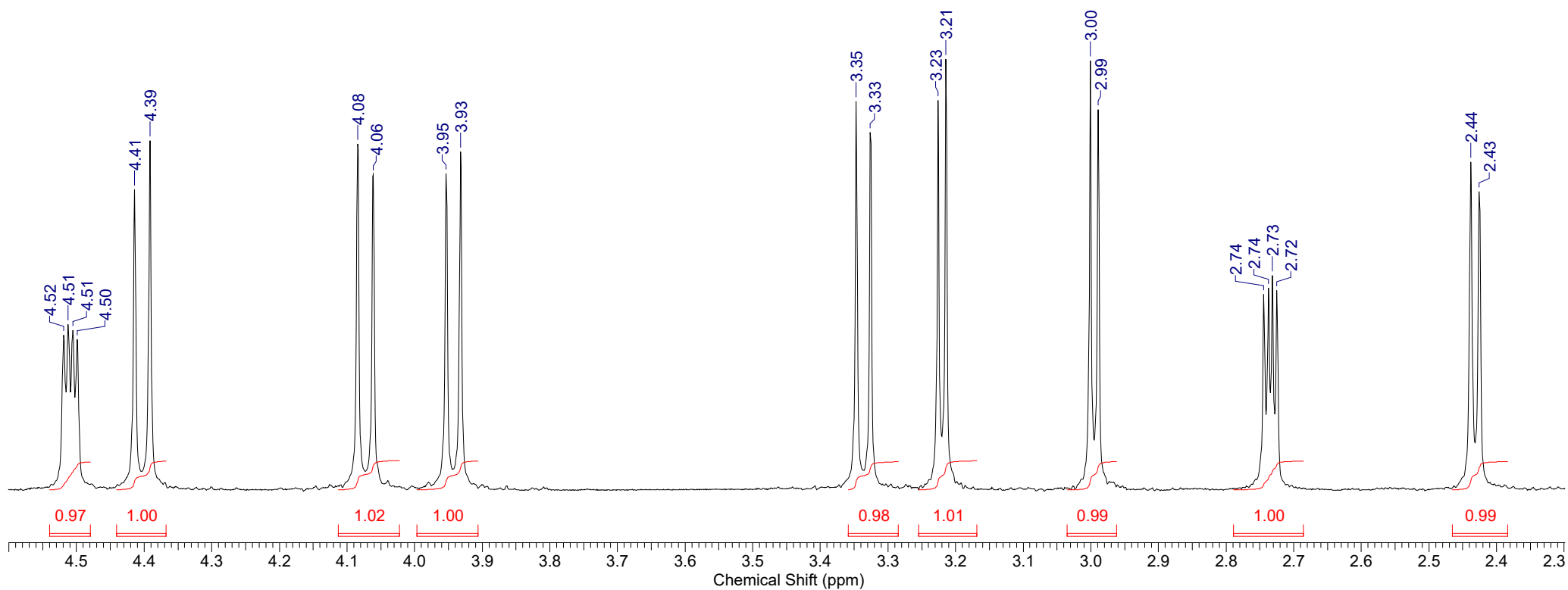


Formula C ₂₂ H ₂₁ NO ₅	FW 379.4058
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 06 Oct 1990 03:11:15	Frequency (MHz) 600.17
Date Stamp 16 Dec 2019 08:28:05	File Name C:\USERS\I\aba534\DOWNLOADS\FZ8280-1.JDF	Original Points Count 32768	Owner delta
Nucleus 1H	Number of Transients 8	Origin ECA 600	Receiver Gain 40.00
Points Count 32768	Pulse Sequence single_pulse.ex2	Temperature (degree C) 23.000	Solvent CHLOROFORM-d
Spectrum Offset (Hz) 5410.1226	Sweep Width (Hz) 16534.39		

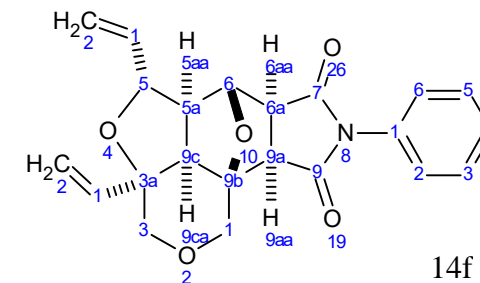


FZ8280-1.JDF

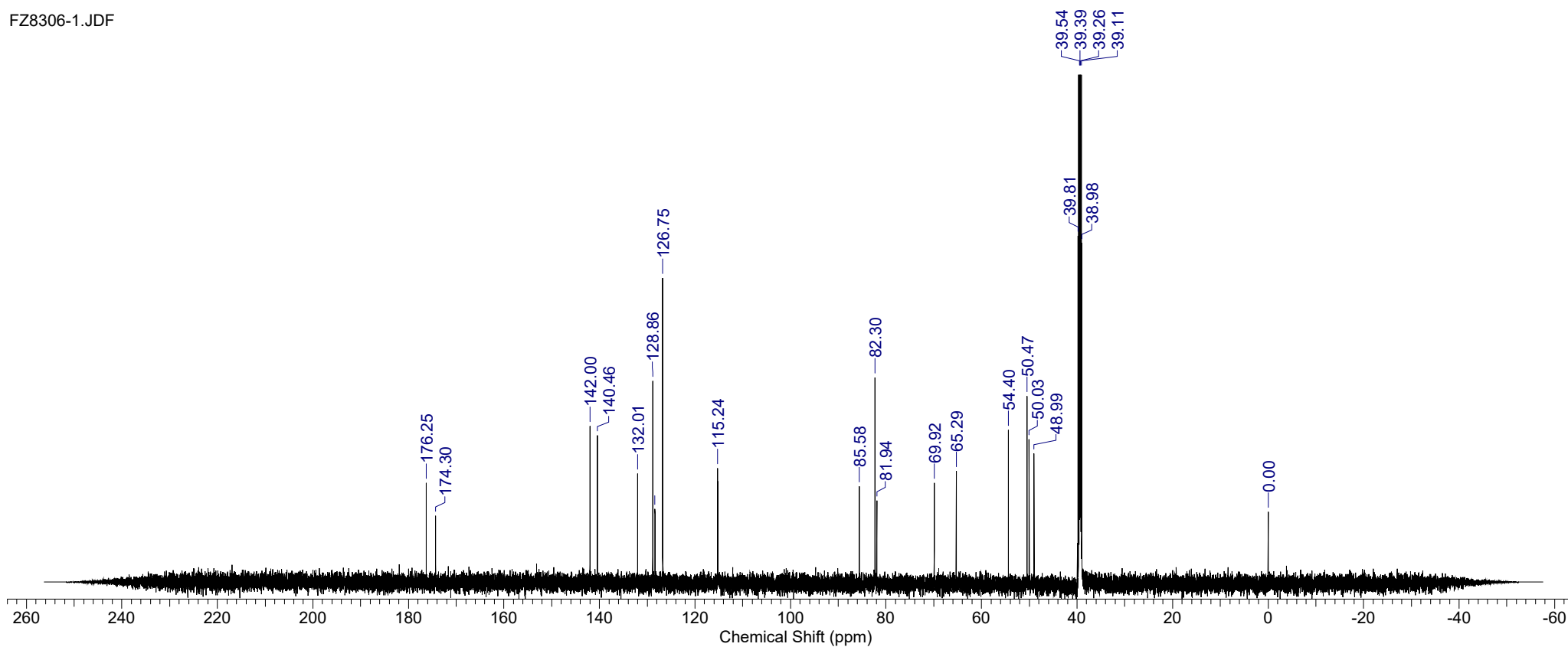


Formula C ₂₂ H ₂₁ NO ₅	FW 379.4058
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 10 Oct 1990 04:12:47
Date Stamp 20 Dec 2019 09:29:41	File Name C:\USERS\Ta6a534\DOWNLOADS\FZ8306-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 1000
Original Points Count 32768	Owner delta	Points Count 32768
Receiver Gain 58.00	Solvent DMSO-d6	Spectrum Offset (Hz) 14994.0977
Temperature (degree C) 24.400		Sweep Width (Hz) 47348.49

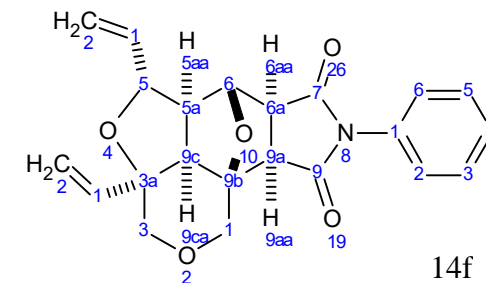


FZ8306-1.JDF

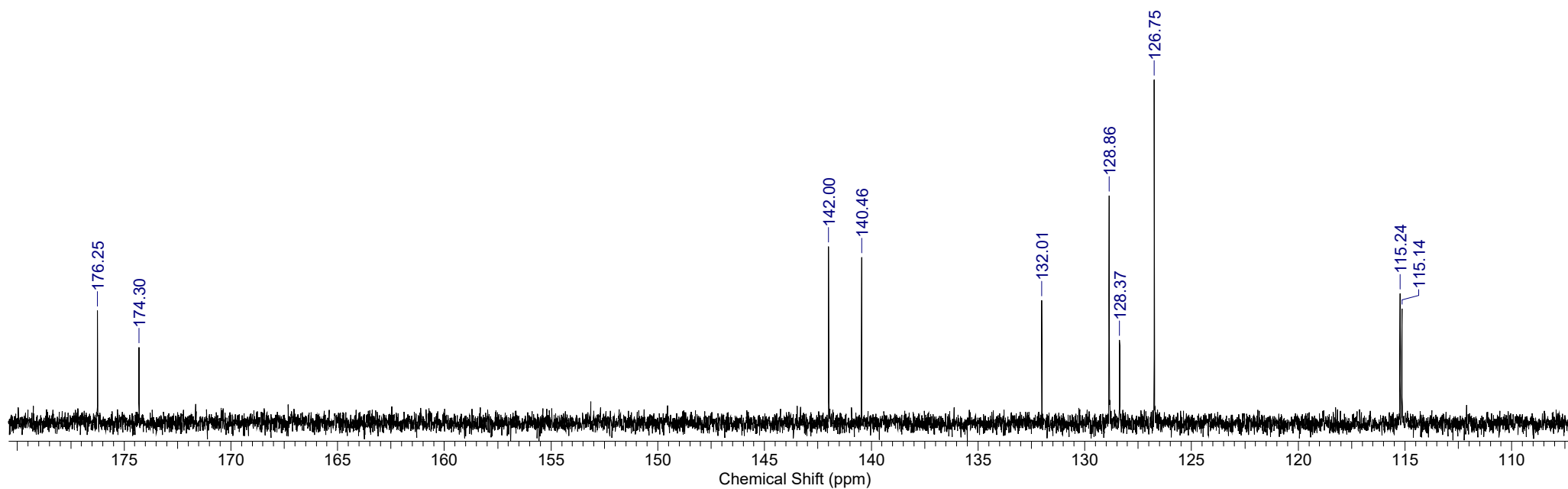


Formula C ₂₂ H ₂₁ NO ₅	FW 379.4058
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 10 Oct 1990 04:12:47
Date Stamp 20 Dec 2019 09:29:41	File Name C:\USERS\lta6a534\DOWNLOADS\FZ8306-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 1000
Original Points Count 32768	Owner delta	Points Count 32768
Receiver Gain 58.00	Solvent DMSO-d6	Pulse Sequence single pulse dec
Temperature (degree C) 24.400	Spectrum Offset (Hz) 14994.0977	Sweep Width (Hz) 47348.49

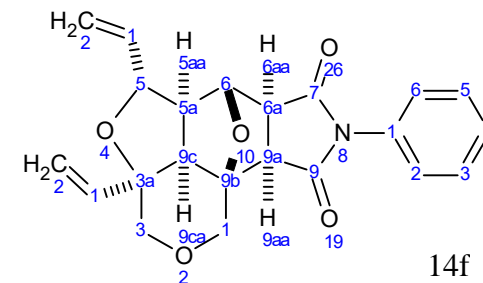


FZ8306-1.JDF

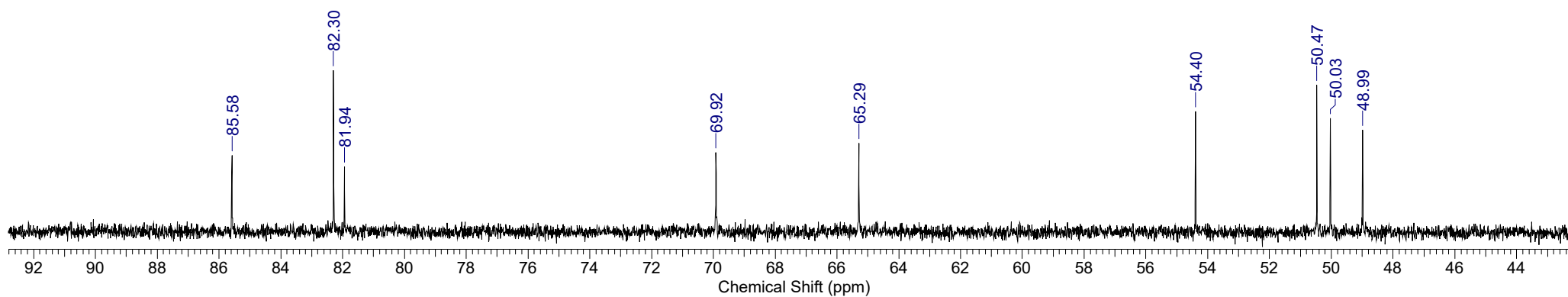


Formula C ₂₂ H ₂₁ NO ₅	FW 379.4058
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 10 Oct 1990 04:12:47
Date Stamp 20 Dec 2019 09:29:41	File Name C:\USERS\lta6a534\DOWNLOADS\FZ8306-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 1000
Original Points Count 32768	Owner delta	Origin ECA 600
Receiver Gain 58.00	Solvent DMSO-d6	Points Count 32768
	Spectrum Offset (Hz) 14994.0977	Pulse Sequence single pulse dec
Temperature (degree C) 24.400		Sweep Width (Hz) 47348.49

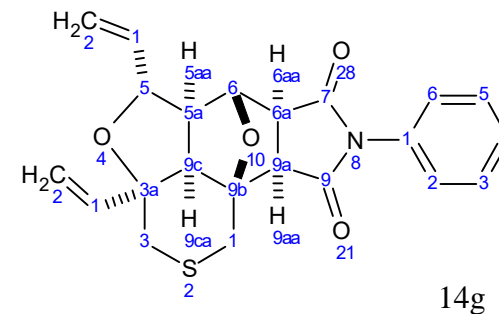


FZ8306-1.JDF

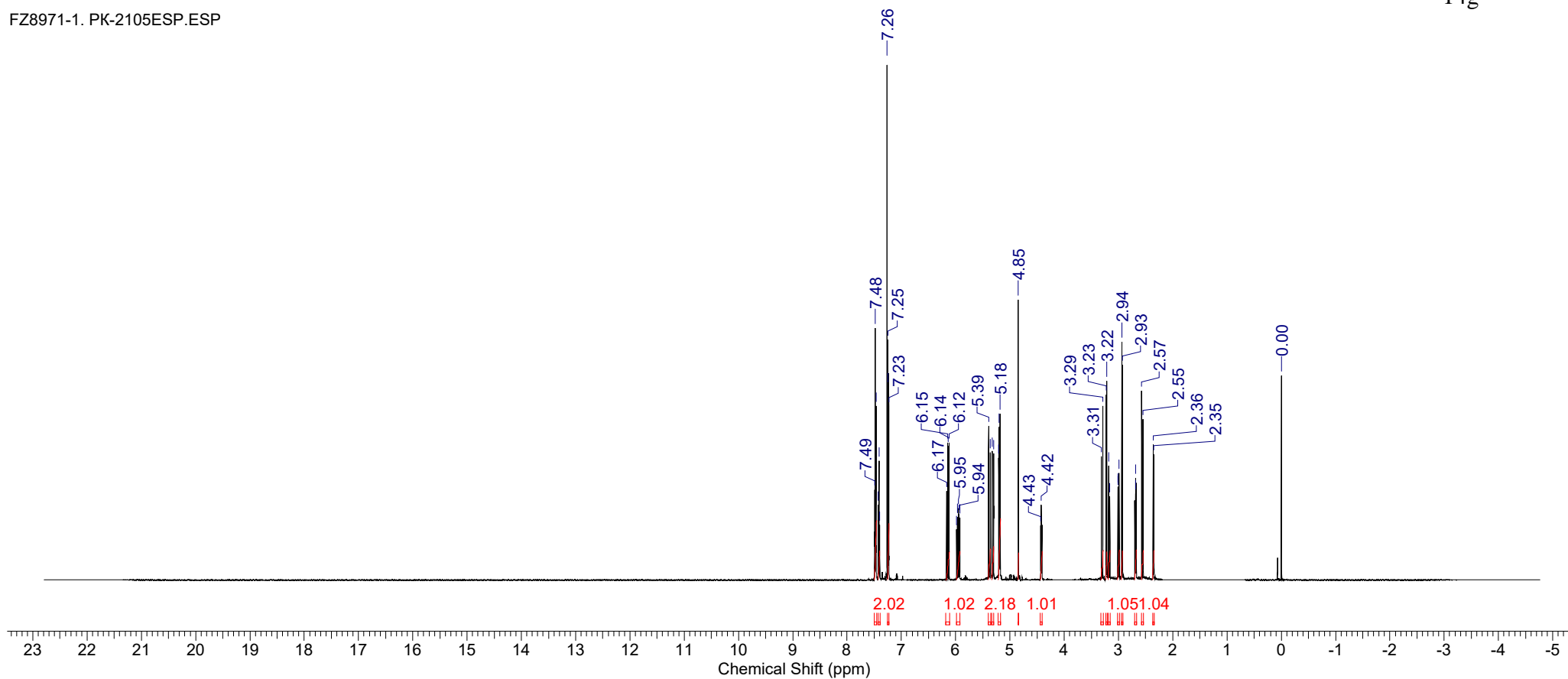


Formula C ₂₂ H ₂₁ NO ₄ S	FW 395.4714
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 11 Aug 2020 08:17:30	Date Stamp 11 Aug 2020 08:18:21
File Name C:\USERS\LIZA\DOWNLOADS\FZ8971-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 42.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 5410.1226	Sweep Width (Hz) 16534.39

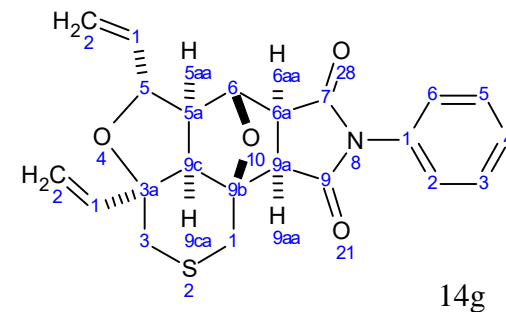


FZ8971-1. PK-2105ESP.ESP

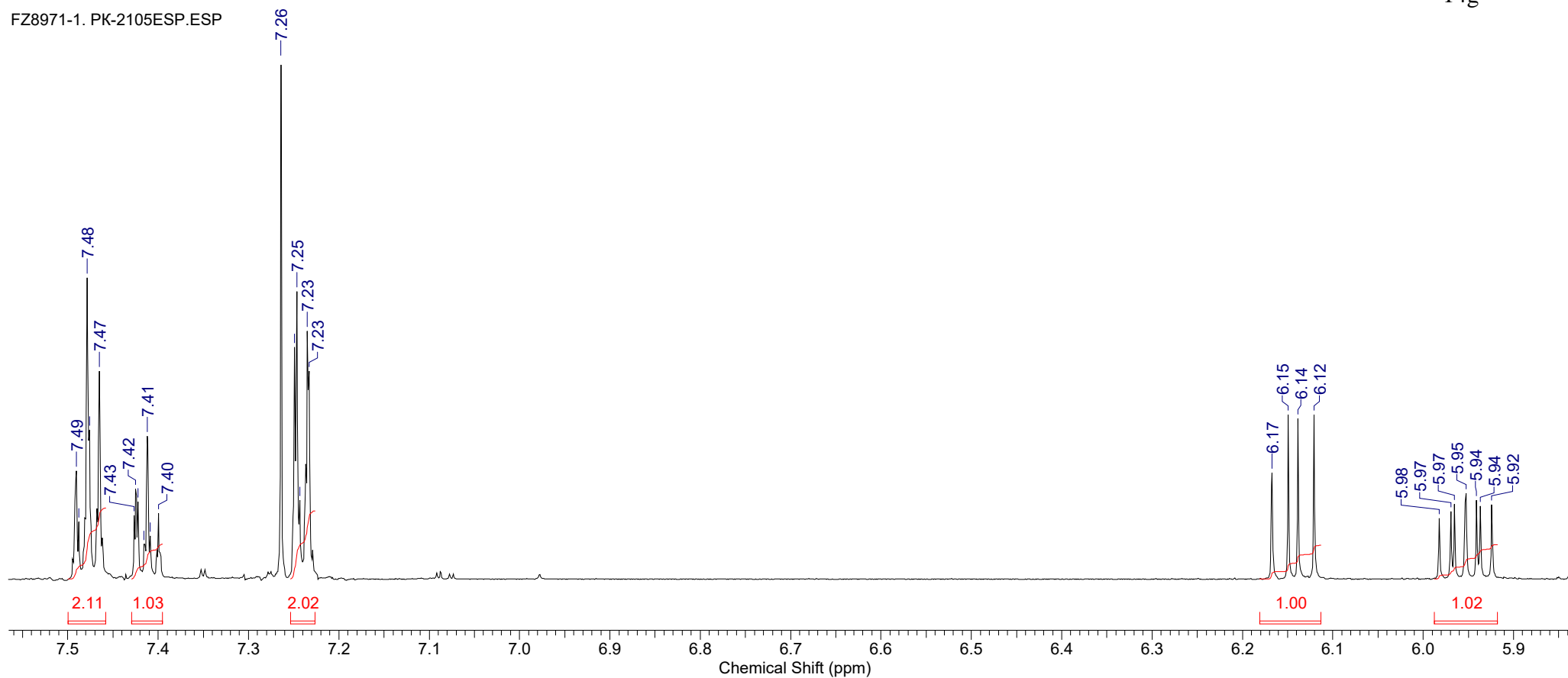


Formula C₂₂H₂₁NO₄S **FW** 395.4714

Acquisition Time (sec)	1.9818	Comment	single_pulse	Date	11 Aug 2020 08:17:30	Date Stamp	11 Aug 2020 08:18:21
File Name	C:\USERS\LIZA\DOWNLOADS\FZ8971-1.JDF	Frequency (MHz)	600.17	Nucleus	1H	Number of Transients	8
Origin	ECA 600	Original Points Count	32768	Owner	CKP	Pulse Sequence	single_pulse.ex2
Receiver Gain	42.00	Solvent	CHLOROFORM-d	Spectrum Offset (Hz)	5410.1226	Sweep Width (Hz)	16534.39

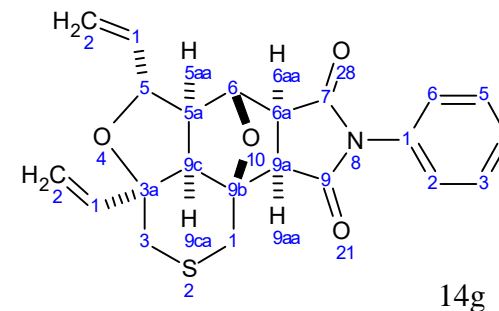


FZ8971-1. PK-2105ESP.ESP

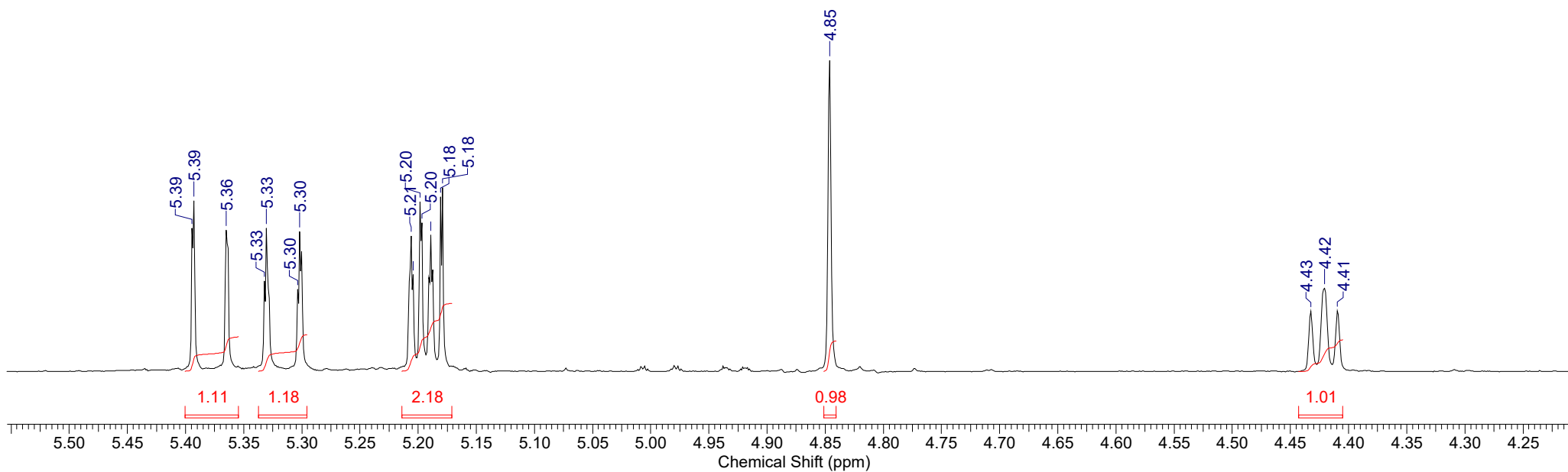


Formula C ₂₂ H ₂₁ NO ₄ S	FW 395.4714
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 11 Aug 2020 08:17:30	Date Stamp 11 Aug 2020 08:18:21
File Name C:\USERS\LIZA\DOWNLOADS\FZ8971-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 42.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 5410.1226	Sweep Width (Hz) 16534.39

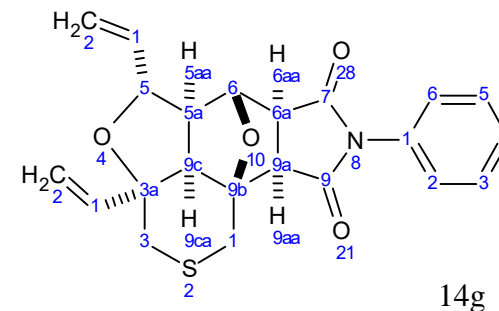


FZ8971-1. PK-2105ESP.ESP

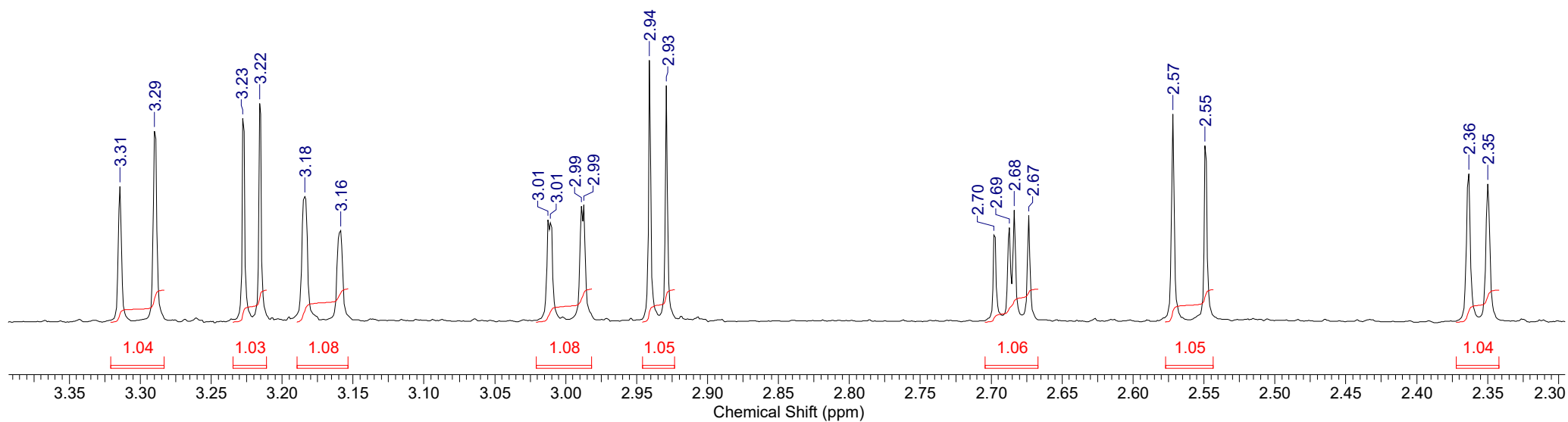


Formula C ₂₂ H ₂₁ NO ₄ S	FW 395.4714
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 11 Aug 2020 08:17:30	Date Stamp 11 Aug 2020 08:18:21
File Name C:\USERS\LIZA\DOWNLOADS\FZ8971-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 42.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 5410.1226	Sweep Width (Hz) 16534.39

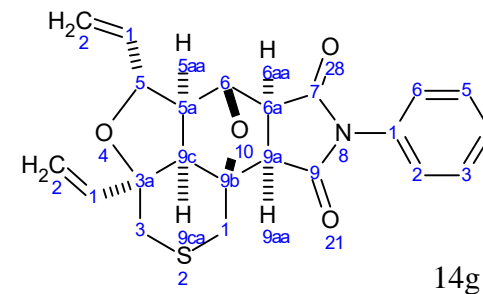


FZ8971-1. PK-2105ESP.ESP

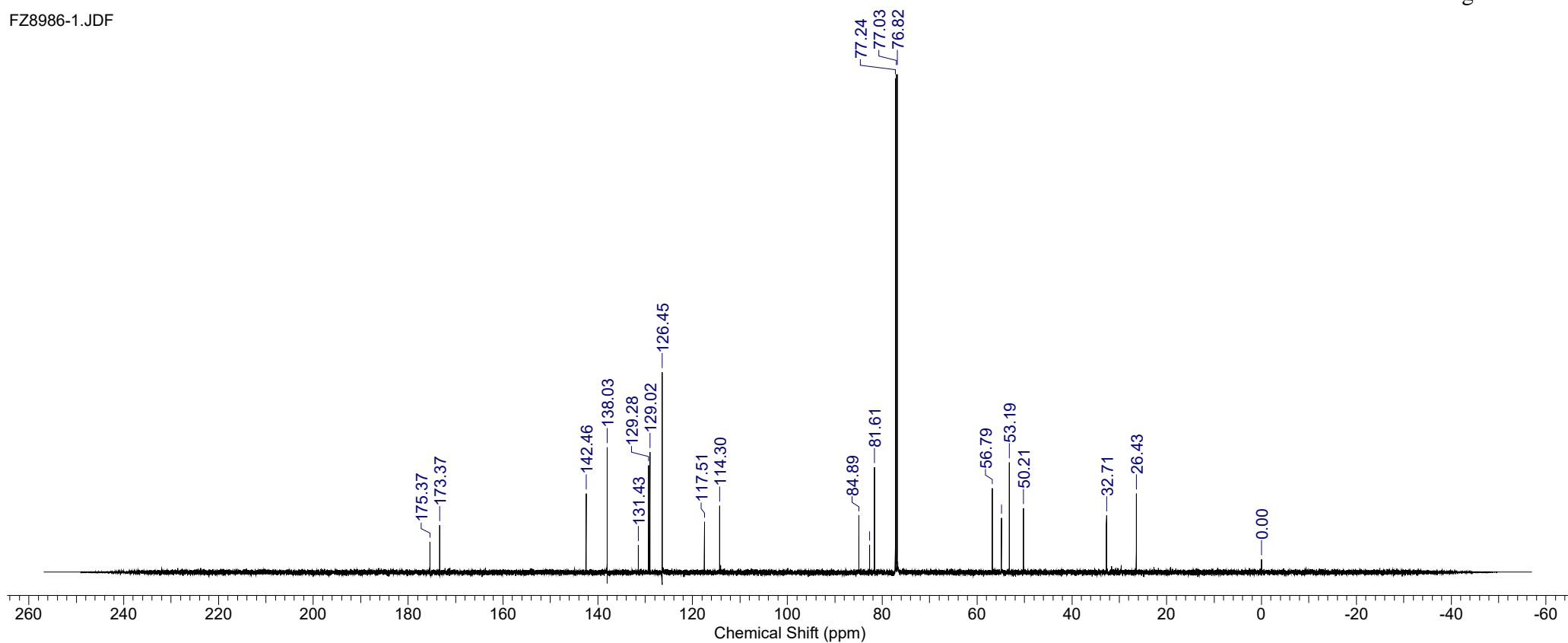


Formula C ₂₂ H ₂₁ NO ₄ S	FW 395.4714
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 14 Aug 2020 13:21:00
Date Stamp 14 Aug 2020 13:21:57	File Name C:\USERS\l1a6a534\DOWNLOADS\FZ8986-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 2231
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 56.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15079.3525

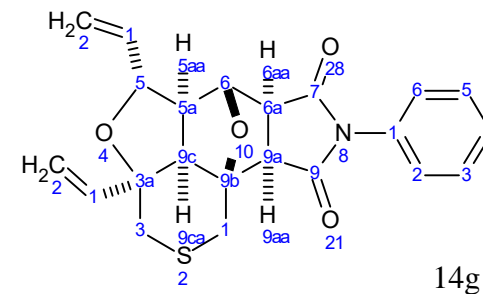


FZ8986-1.JDF

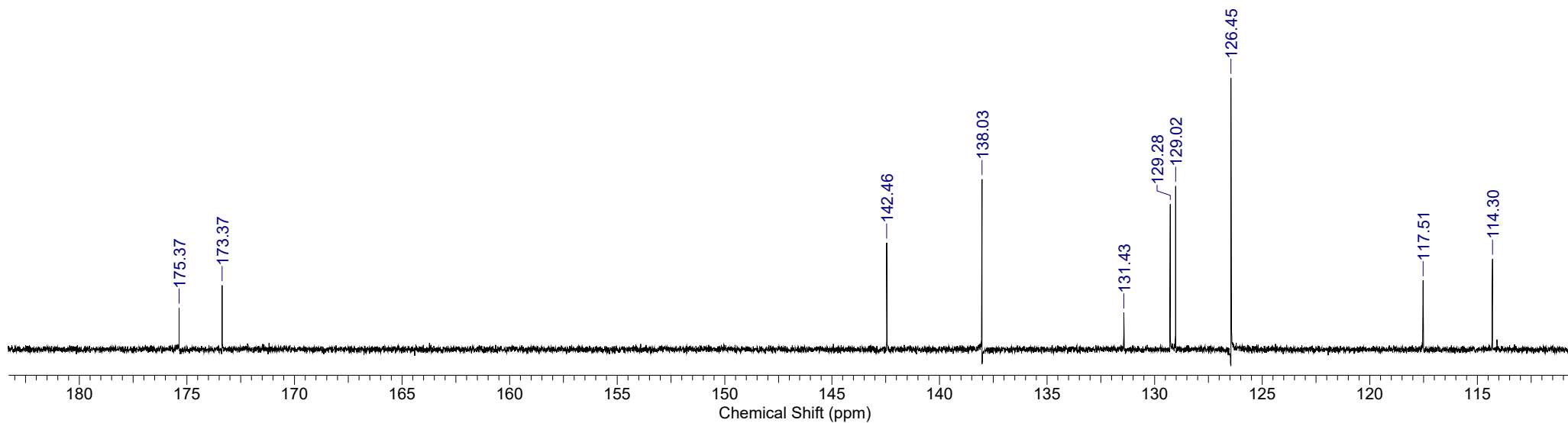


Formula C ₂₂ H ₂₁ NO ₄ S	FW 395.4714
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 14 Aug 2020 13:21:00
Date Stamp 14 Aug 2020 13:21:57	File Name C:\USERS\la6a534\DOWNLOADS\FZ8986-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 2231
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 56.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15079.3525

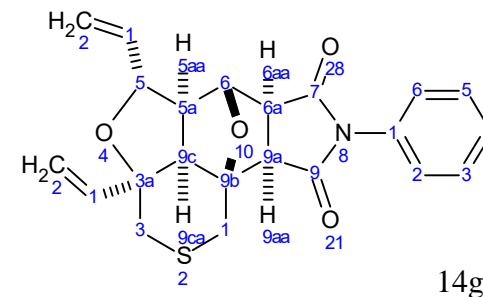


FZ8986-1.JDF

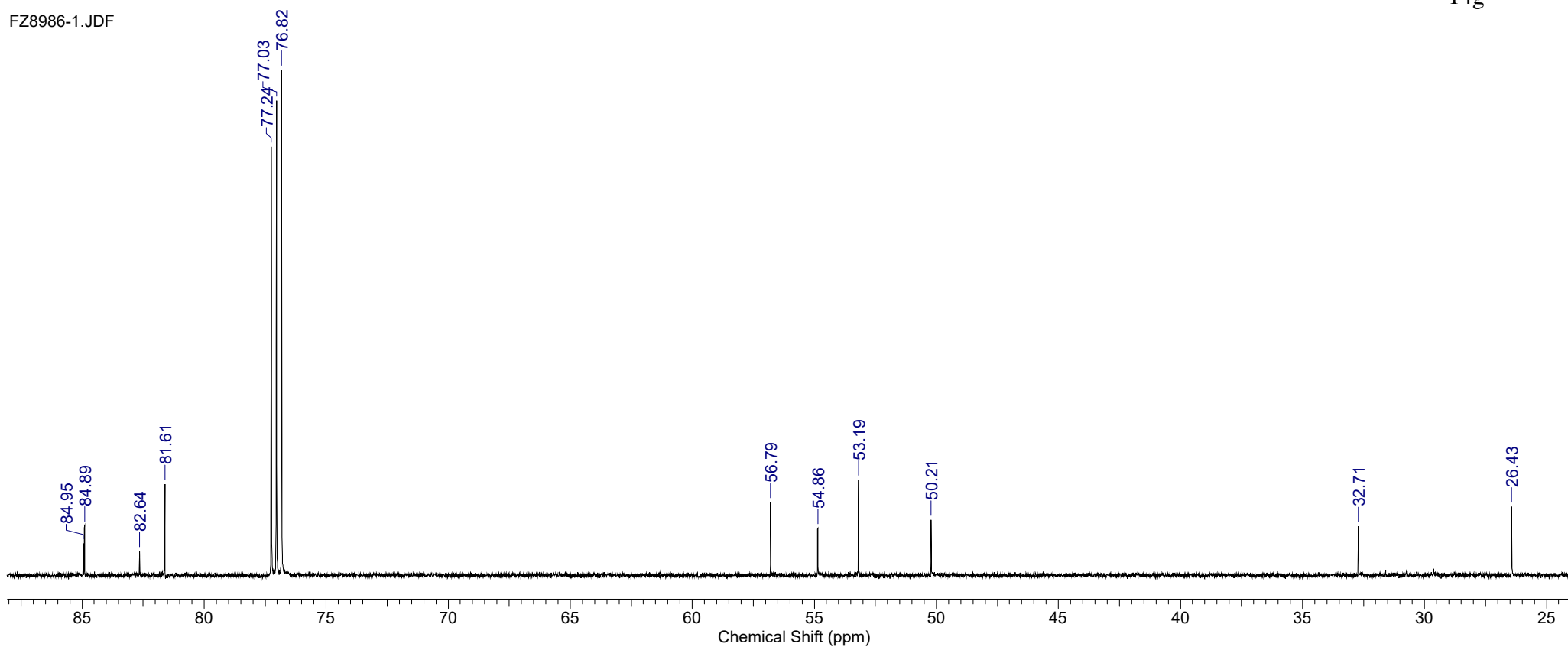


Formula C ₂₂ H ₂₁ NO ₄ S	FW 395.4714
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 14 Aug 2020 13:21:00
Date Stamp 14 Aug 2020 13:21:57	File Name C:\USERS\l1a6a534\DOWNLOADS\FZ8986-1.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 2231
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 56.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15079.3525

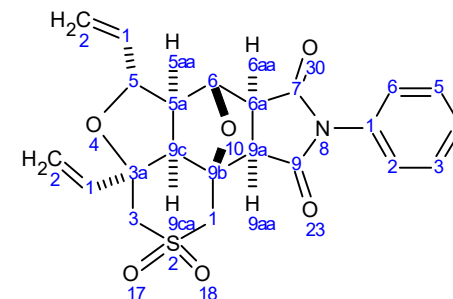


FZ8986-1.JDF



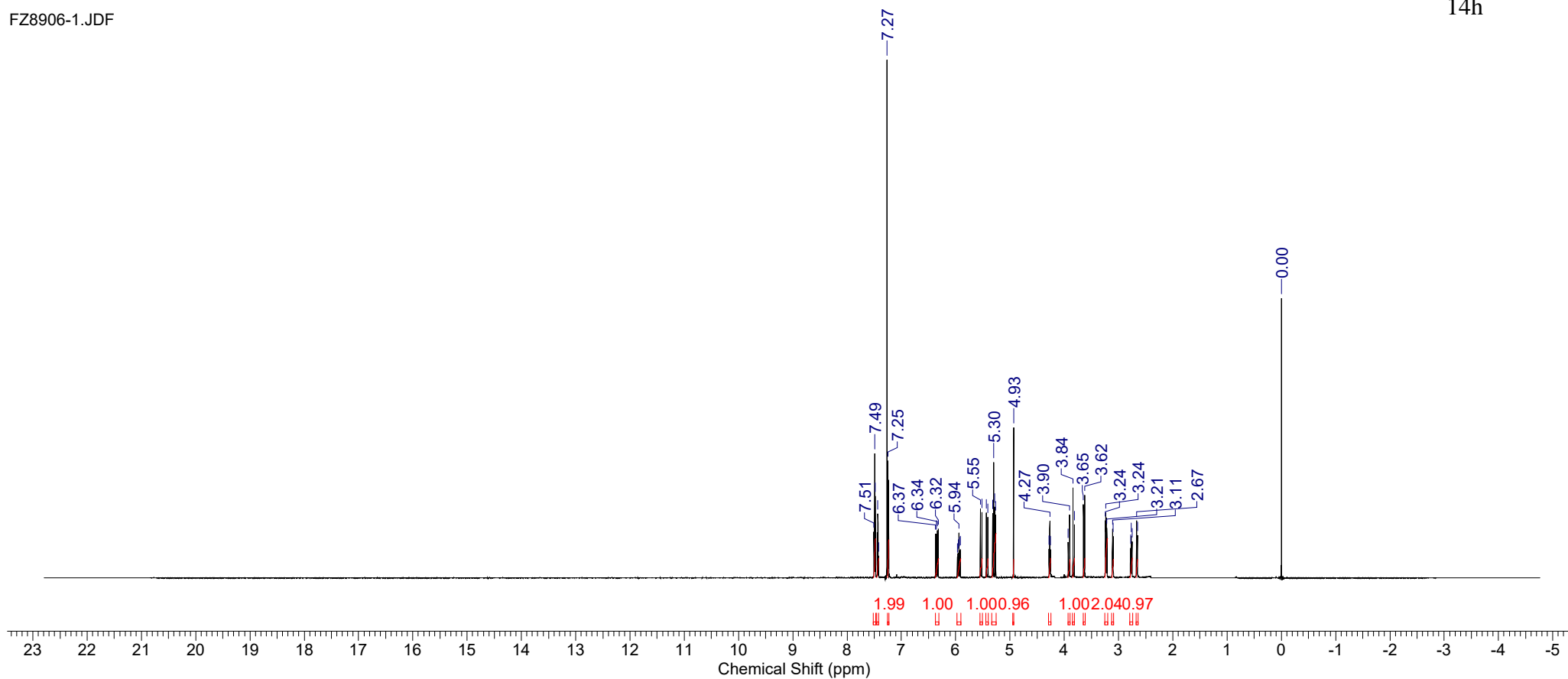
Formula C ₂₂ H ₂₁ NO ₆ S	FW 427.4702
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 29 Jul 2020 10:26:15	Date Stamp 29 Jul 2020 10:27:29
File Name C:\USERS\Лабa534\DOWNLOADS\FZ8906-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 46.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 5410.6274	Sweep Width (Hz) 16534.39



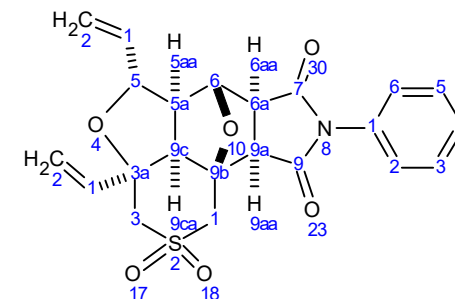
14h

FZ8906-1.JDF



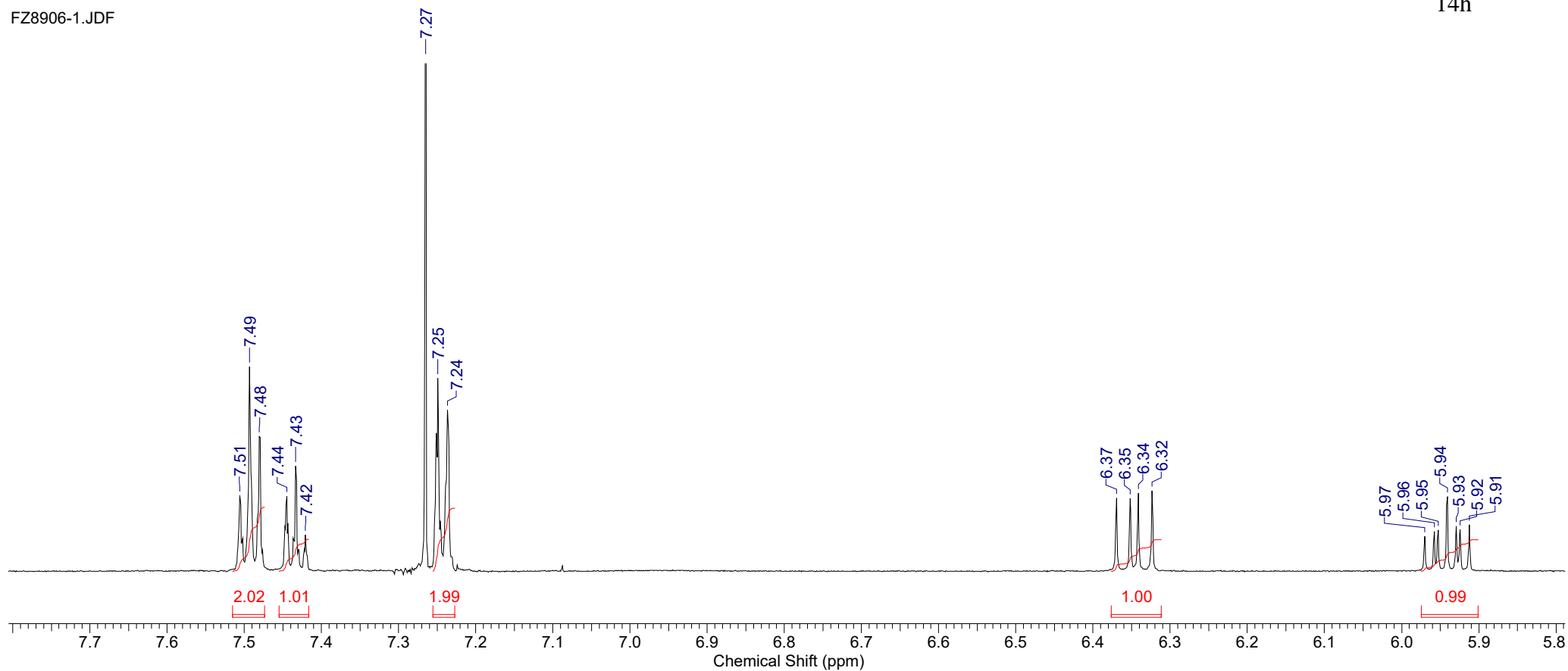
Formula C ₂₂ H ₂₁ NO ₆ S	FW 427.4702
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 29 Jul 2020 10:26:15	Date Stamp 29 Jul 2020 10:27:29
File Name C:\USERS\Лабa534\DOWNLOADS\FZ8906-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 46.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 5410.6274	Sweep Width (Hz) 16534.39



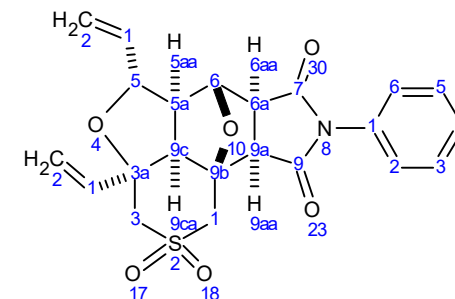
14h

FZ8906-1.JDF



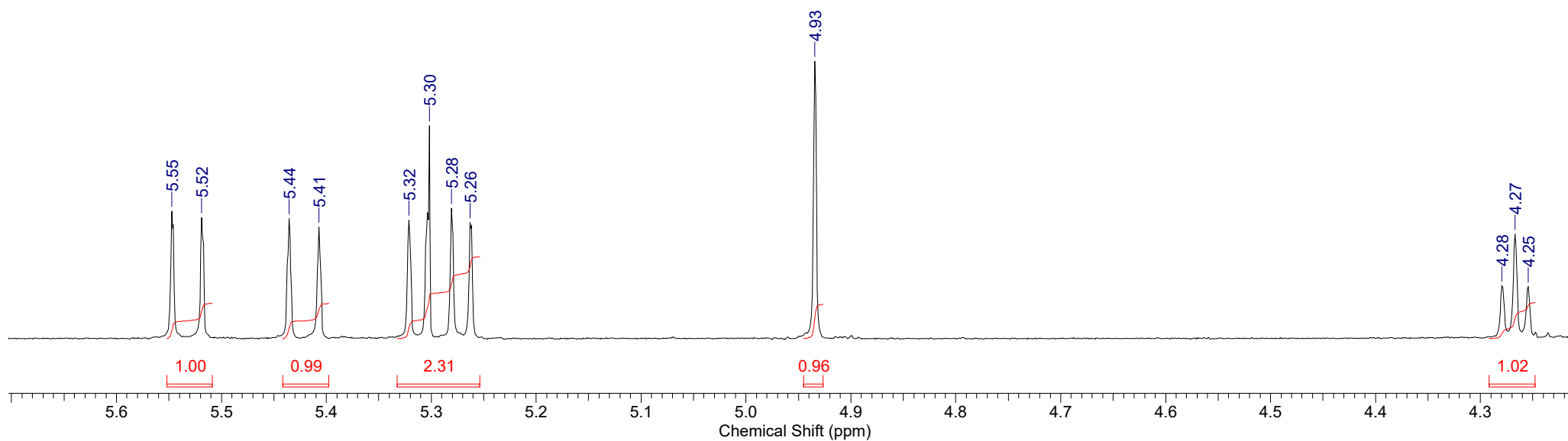
Formula C ₂₂ H ₂₁ NO ₆ S	FW 427.4702
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 29 Jul 2020 10:26:15	Date Stamp 29 Jul 2020 10:27:29
File Name C:\USERS\Лабa534\DOWNLOADS\FZ8906-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 46.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 5410.6274	Sweep Width (Hz) 16534.39



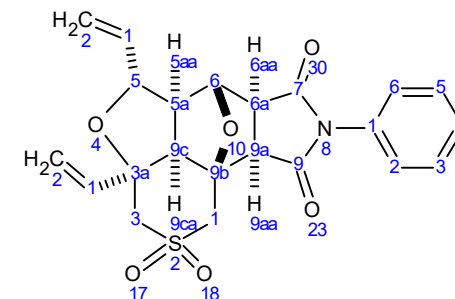
14h

FZ8906-1.JDF



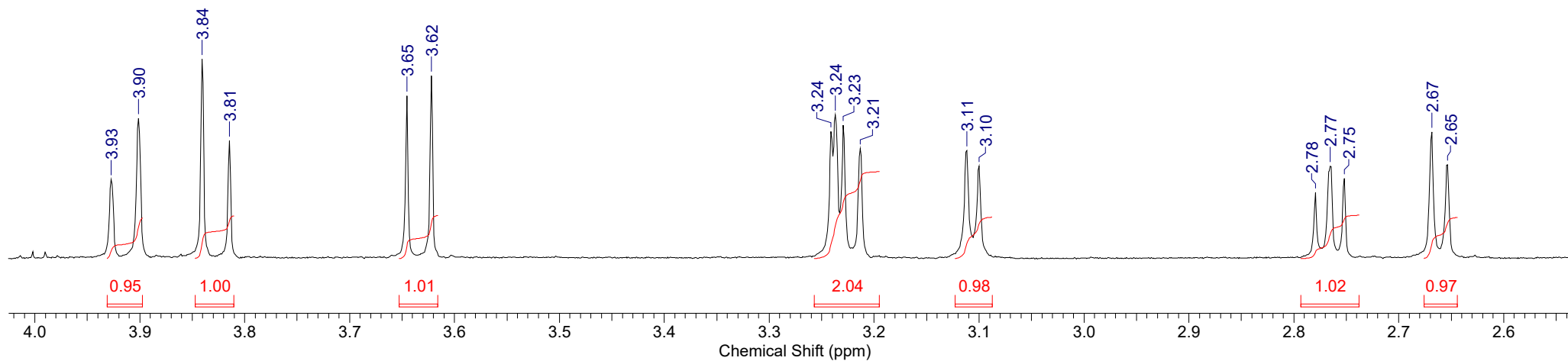
Formula C ₂₂ H ₂₁ NO ₆ S	FW 427.4702
--	--------------------

Acquisition Time (sec) 1.9818	Comment single_pulse	Date 29 Jul 2020 10:26:15	Date Stamp 29 Jul 2020 10:27:29
File Name C:\USERS\Лабa534\DOWNLOADS\FZ8906-1.JDF	Frequency (MHz) 600.17	Nucleus 1H	Number of Transients 8
Origin ECA 600	Original Points Count 32768	Owner CKP	Pulse Sequence single_pulse.ex2
Receiver Gain 46.00	Solvent CHLOROFORM-d	Spectrum Offset (Hz) 5410.6274	Sweep Width (Hz) 16534.39



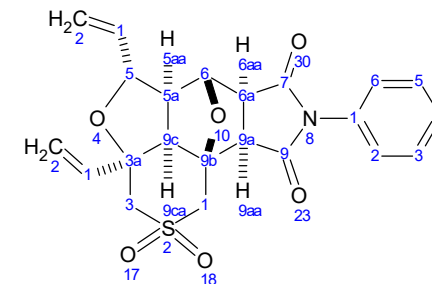
14h

FZ8906-1.JDF



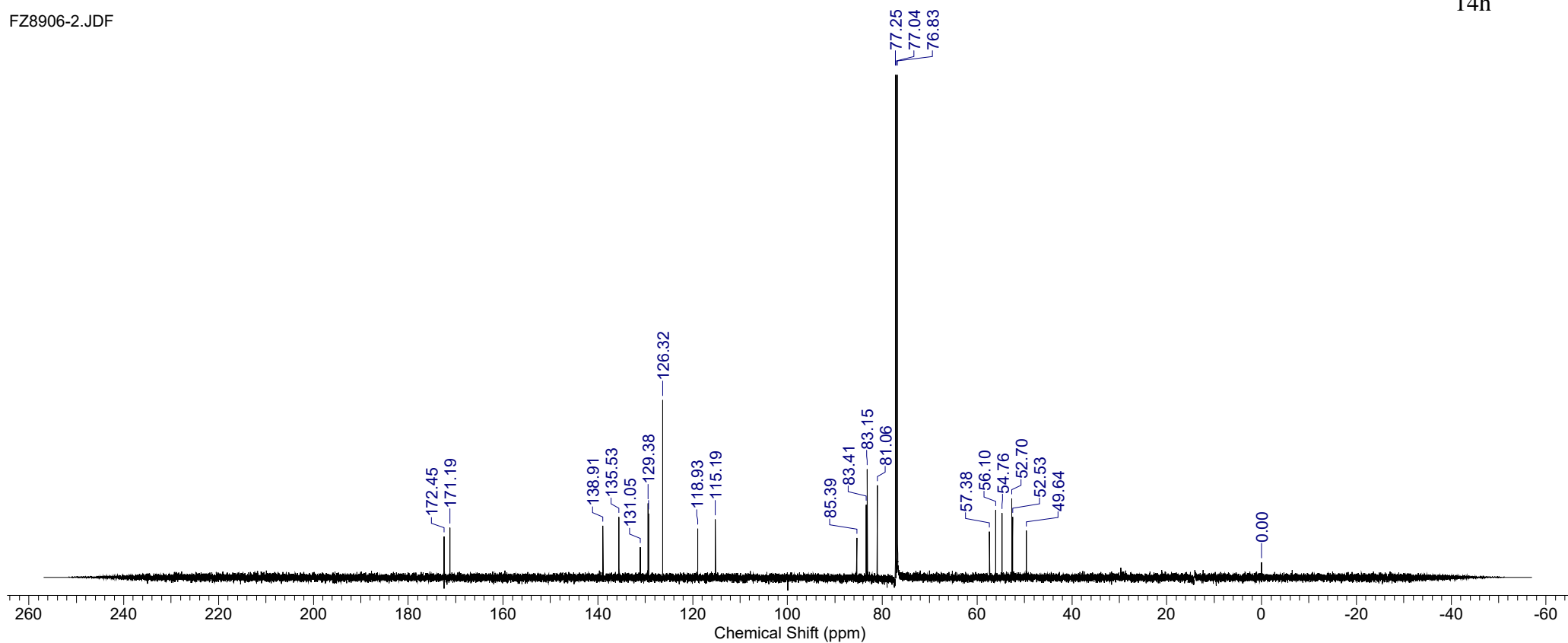
Formula C ₂₂ H ₂₁ NO ₆ S	FW 427.4702
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 05 Aug 2020 10:05:02
Date Stamp 05 Aug 2020 10:05:43	File Name C:\USERS\la6a534\DOWNLOADS\FZ8906-2.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 3311
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 56.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15080.7979



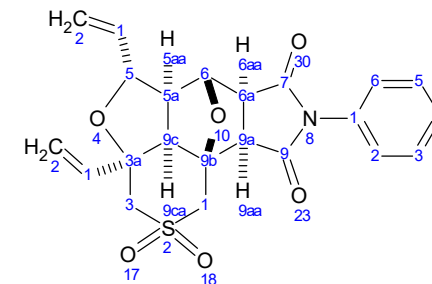
14h

FZ8906-2.JDF



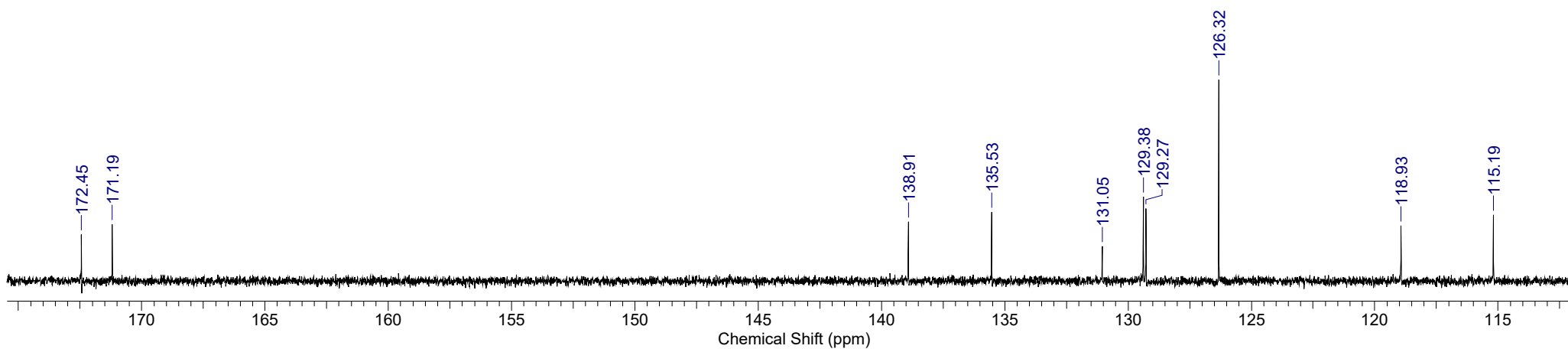
Formula C ₂₂ H ₂₁ NO ₆ S	FW 427.4702
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 05 Aug 2020 10:05:02
Date Stamp 05 Aug 2020 10:05:43	File Name C:\USERS\l1a6a534\DOWNLOADS\FZ8906-2.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 3311
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 56.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15080.7979



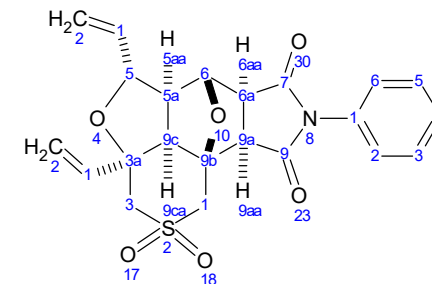
14h

FZ8906-2.JDF



Formula C ₂₂ H ₂₁ NO ₆ S	FW 427.4702
--	--------------------

Acquisition Time (sec) 0.6921	Comment single pulse decoupled gated NOE	Date 05 Aug 2020 10:05:02
Date Stamp 05 Aug 2020 10:05:43	File Name C:\USERS\la6a534\DOWNLOADS\FZ8906-2.JDF	
Frequency (MHz) 150.91	Nucleus 13C	Number of Transients 3311
Original Points Count 32768	Owner CKP	Points Count 32768
Receiver Gain 56.00	Solvent CHLOROFORM-d	Pulse Sequence single pulse dec
Sweep Width (Hz) 47348.49		Spectrum Offset (Hz) 15080.7979



14h

FZ8906-2.JDF

