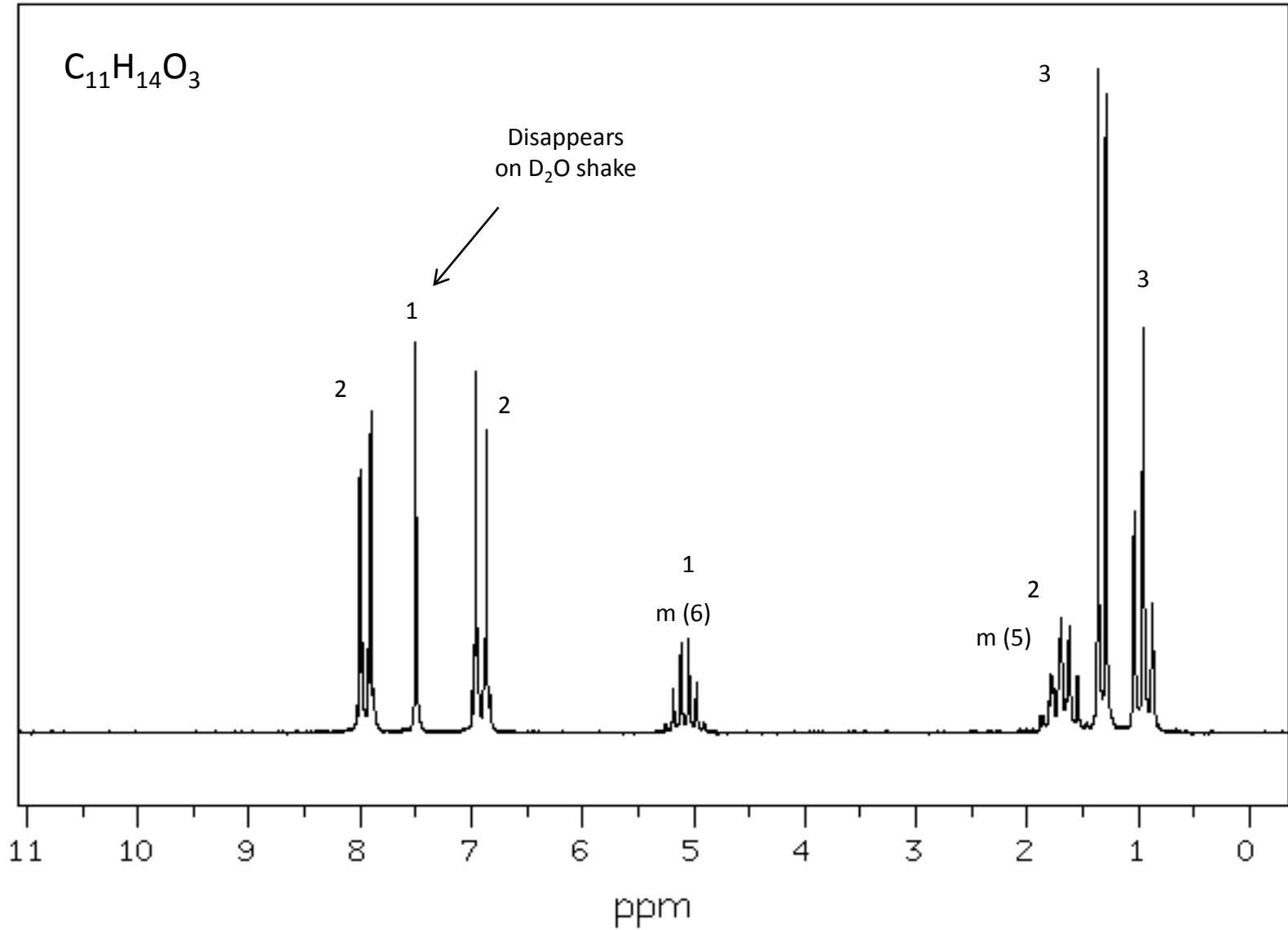


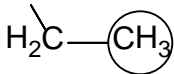
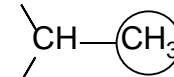
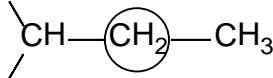
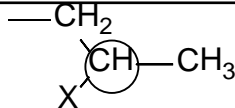
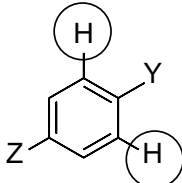
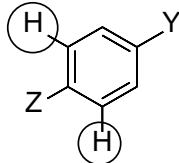
$^1\text{H-NMR}$ espektroa



Espektoaren datuak taularatu:

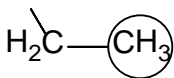
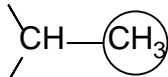
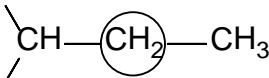
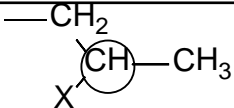
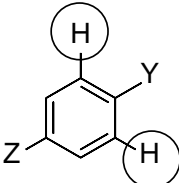
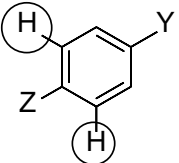
δ (ppm)	Integrala	Anizkoiztasuna	Molekula-zatia
1	3	t	
1.3	3	d	
1.7	2	m (5)	
5.1	1	m (6)	
7	2	d	
7.5	1	s	
8	2	d	

Espektoaren datuak analizatu eta zatiak proposatu:

δ (ppm)	Integrala	Anizkoiztasuna	Molekula-zatia
1	3	t	
1.3	3	d	
1.7	2	m (5)	
5.1	1	m (6)	 X-k ez du Hrik δ ikusita: X=O
7	2	d	
7.5	1	s	-OH (fenol) ez da akoplatzen
8	2	d	

CH₃ bat. Bi H aldameneko karbonoan = hirukote (t)

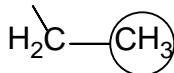
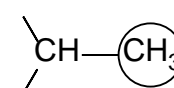
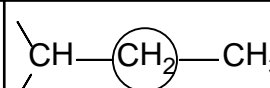
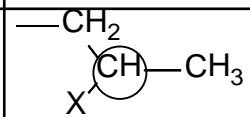
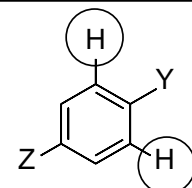
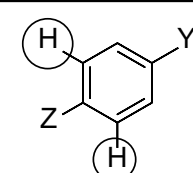
Espektoaren datuak analizatu eta zatiak proposatu:

δ (ppm)	Integrala	Anizkoiztasuna	Molekula-zatia
1	3	t	
1.3	3	d	
1.7	2	m (5)	
5.1	1	m (6)	 X-k ez du Hrik δ ikusita: X=O
7	2	d	
7.5	1	s	-OH (fenol) ez da akoplatzen
8	2	d	

CH₃ bat. Bi H aldameneko karbonoan = hirukote (t)

Beste CH₃ bat. Bikote (d) izateko, H Bat eduki behar du aldameneko Can

Espektoaren datuak analizatu eta zatiak proposatu:

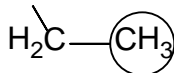
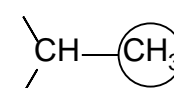
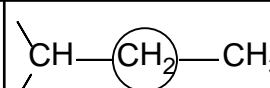
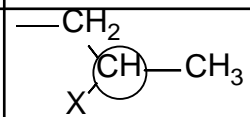
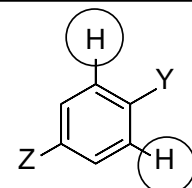
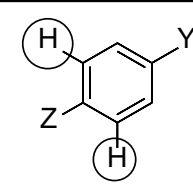
δ (ppm)	Integrala	Anizkoiztasuna	Molekula-zatia
1	3	t	
1.3	3	d	
1.7	2	m (5)	
5.1	1	m (6)	 X-k ez du Hrik δ ikusita: X=O
7	2	d	
7.5	1	s	-OH (fenol) ez da akoplatzen
8	2	d	

CH₃ bat. Bi H aldameneko karbonoan = hirukote (t)

Beste CH₃ bat. Bikote (d) izateko, H Bat eduki behar du aldameneko Can

CH₂ bat. Bostekote izateko, lau H eduki behar ditu inguruko Cetan (eta ezin dira bi CH₂ izan, bakarria baitago).

Espektoaren datuak analizatu eta zatiak proposatu:

δ (ppm)	Integrala	Anizkoiztasuna	Molekula-zatia
1	3	t	
1.3	3	d	
1.7	2	m (5)	
5.1	1	m (6)	 X-k ez du Hrik δ ikusita: X=O
7	2	d	
7.5	1	s	-OH (fenol) ez da akoplatzen
8	2	d	

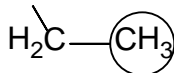
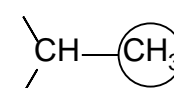
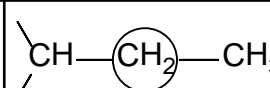
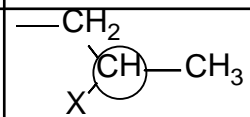
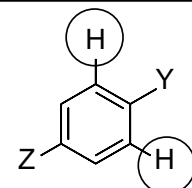
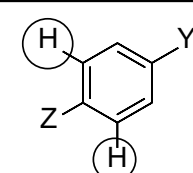
CH₃ bat. Bi H aldameneko karbonoan = hirukote (t)

Beste CH₃ bat. Bikote (d) izateko, H Bat eduki behar du aldameneko Can

CH₂ bat. Bostekote izateko, lau H eduki behar ditu inguruko Cetan

CH bat. Seikote izateko, bost H eduki behar ditu inguruko Cetan

Espektoaren datuak analizatu eta zatiak proposatu:

δ (ppm)	Integrala	Anizkoiztasuna	Molekula-zatia
1	3	t	
1.3	3	d	
1.7	2	m (5)	
5.1	1	m (6)	 X-k ez du Hrik δ ikusita: X=O
7	2	d	
7.5	1	s	-OH (fenol) ez da akoplatzen
8	2	d	

CH₃ bat. Bi H aldameneko karbonoan = hirukote (t)

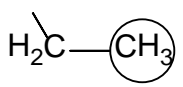
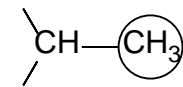
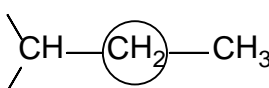
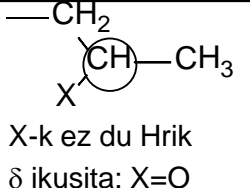
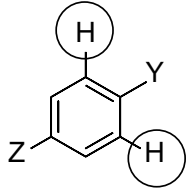
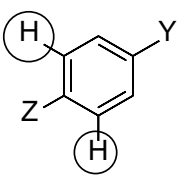
Beste CH₃ bat. Bikote (d) izateko, H Bat eduki behar du aldameneko Can

CH₂ bat. Bostekote izateko, lau H eduki behar ditu inguruko Cetan

CH bat. Seikote izateko, bost H eduki behar ditu inguruko Cetan

Bi H aromatikoko baliokide (orto Hekin akoplatuta). Bentzeno *para* diordezkatua

Espektoaren datuak analizatu eta zatiak proposatu:

δ (ppm)	Integrala	Anizkoiztasuna	Molekula-zatia
1	3	t	
1.3	3	d	
1.7	2	m (5)	
5.1	1	m (6)	
7	2	d	
7.5	1	s	-OH (fenol) ez da akoplatzen
8	2	d	

CH₃ bat. Bi H aldameneko karbonoan = hirukote (t)

Beste CH₃ bat. Bikote (d) izateko, H Bat eduki behar du aldameneko Can

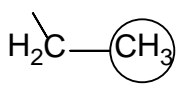
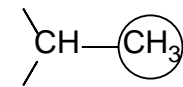
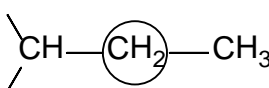
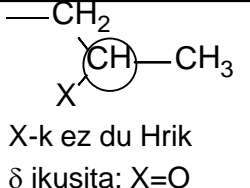
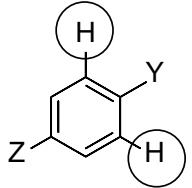
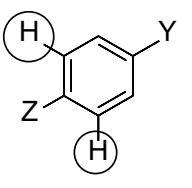
CH₂ bat. Bostekote izateko, lau H eduki behar ditu inguruko Cetan

CH bat. Seikote izateko, bost H eduki behar ditu inguruko Cetan

Bi H aromatiko baliokide (orto Hekin akoplatuta). Bentzeno *para* diordezkatua

Bi H aromatiko baliokide (orto Hekin akoplatuta). Bentzeno *para* diordezkatua

Espektoaren datuak analizatu eta zatiak proposatu:

δ (ppm)	Integrala	Anizkoiztasuna	Molekula-zatia
1	3	t	
1.3	3	d	
1.7	2	m (5)	
5.1	1	m (6)	
7	2	d	
7.5	1	s	-OH (fenol) ez da akoplatzen
8	2	d	

CH₃ bat. Bi H aldameneko karbonoan = hirukote (t)

Beste CH₃ bat. Bikote (d) izateko, H Bat eduki behar du aldameneko Can

CH₂ bat. Bostekote izateko, lau H eduki behar ditu inguruko Cetan

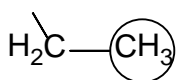
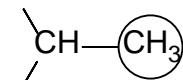
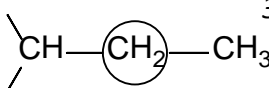
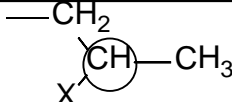
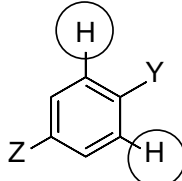
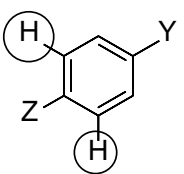
CH bat. Seikote izateko, bost H eduki behar ditu inguruko Cetan

Bi H aromatiko baliokide (orto Hekin akoplatuta). Bentzeno *para* diordezkatua

Orekin loturiko H. D₂Orekin astinduz, trukaketa gertatu eta seinalea desagertu.

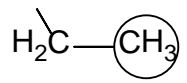
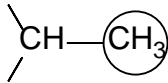
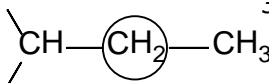
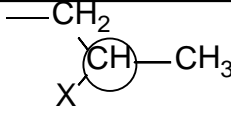
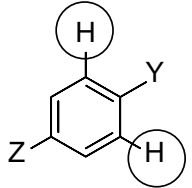
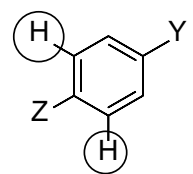
Bi H aromatiko baliokide (orto Hekin akoplatuta). Bentzeno *para* diordezkatua

Zatiak integratu:

δ (ppm)	Integrala	Anizkoiztasuna	Molekula-zatia
1	3	t	 ¹
1.3	3	d	 ²
1.7	2	m (5)	 ³
5.1	1	m (6)	 ⁴ X-k ez du Hrik δ ikusita: X=O
7	2	d	 ⁵
7.5	1	s	-OH (fenol) ez da akoplatzen ⁶
8	2	d	 ⁷

Metilo hau 3. laukian dagoen berbera da

Zatiak integratu:

δ (ppm)	Integrala	Anizkoiztasuna	Molekula-zatia
1	3	t	
1.3	3	d	
1.7	2	m (5)	
5.1	1	m (6)	 X-k ez du Hrik δ ikusita: X=O
7	2	d	
7.5	1	s	-OH (fenol) ez da akoplatzen
8	2	d	

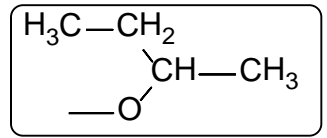
Metilo hau 3. laukian dagoen berbera da

Metilo hau 4. laukian dagoen berbera da

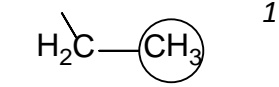
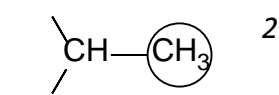
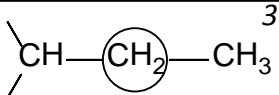
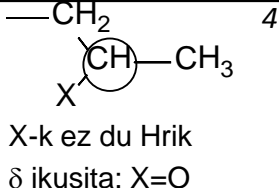
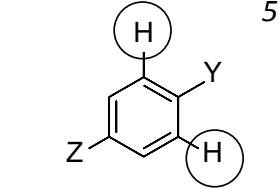
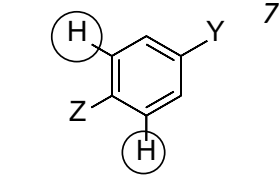
CH₂ hau 1. eta 4. laukian dagoen berbera da, CH₂ bakarria baitago espektroan

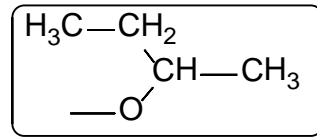
CH hau 2. eta 3. laukian dagoen berbera da, CH bakarria baitago espektroan

Lau datu horiek Integratuta...

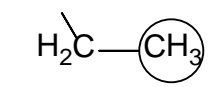
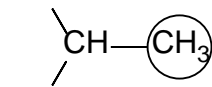
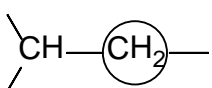
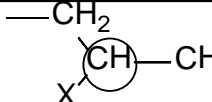
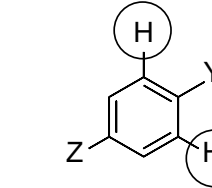
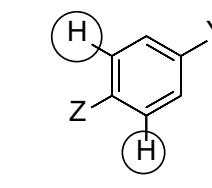


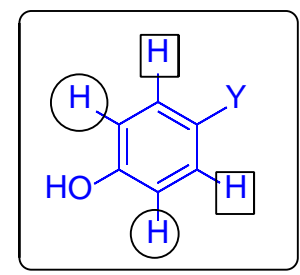
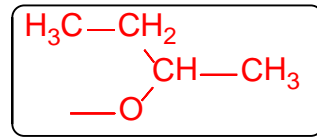
Zatiak integratu:

δ (ppm)	Integrala	Anizkoiztasuna	Molekula-zatia
1	3	t	
1.3	3	d	
1.7	2	m (5)	
5.1	1	m (6)	
7	2	d	
7.5	1	s	-OH (fenol) ez da akoplatzen
8	2	d	

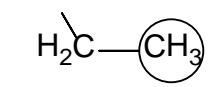
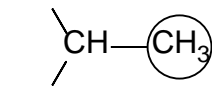
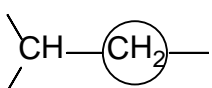
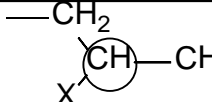
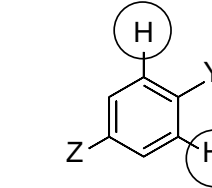
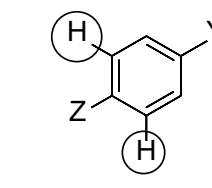


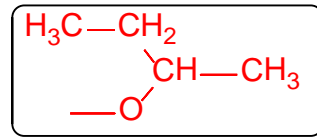
Zatiak integratu:

δ (ppm)	Integrala	Anizkoiztasuna	Molekula-zatia
1	3	t	 1
1.3	3	d	 2
1.7	2	m (5)	 3
5.1	1	m (6)	 4 X-k ez du Hrik δ ikusita: X=O
7	2	d	 5
7.5	1	s	-OH (fenol) ez da akoplatzen
8	2	d	 7

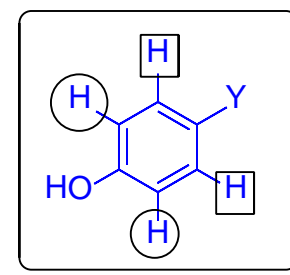


Zatiak integratu:

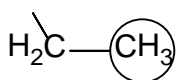
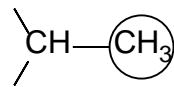
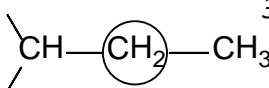
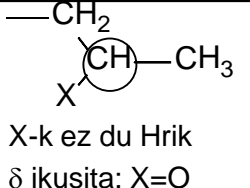
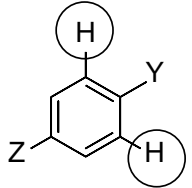
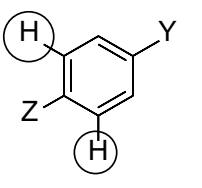
δ (ppm)	Integrala	Anizkoiztasuna	Molekula-zatia
1	3	t	 1
1.3	3	d	 2
1.7	2	m (5)	 3
5.1	1	m (6)	 4 X-k ez du Hrik δ ikusita: X=O
7	2	d	 5
7.5	1	s	-OH (fenol) ez da akoplatzen
8	2	d	 7



+ C=O bat.....
(IR espektrotik
edo formula
molekularretik)



Egitura osoa proposatu:

δ (ppm)	Integrala	Anizkoiztasuna	Molekula-zatia
1	3	t	 1
1.3	3	d	 2
1.7	2	m (5)	 3
5.1	1	m (6)	 4 X-k ez du Hrik δ ikusita: X=O
7	2	d	 5
7.5	1	s	-OH (fenol) ez da akoplatzen
8	2	d	 7

