



Laboratório de Ensaio acreditado
pela Cgcre/Inmetro de acordo com
a ABNT NBR ISO/IEC 17025.



Boletim de Ensaio

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Resp. Téc.: **Carina Casal**

Emitido em: **17/01/2011**

Lab-nº: **10/4070B**

Análise em amostras de solo

Cliente : Fundação Bio-Rio / Petrobras – UN-BS
Endereço : Av. Carlos Chagas Filho, nº 791
Cidade Universitária - Rio de Janeiro - RJ
Localização do Projeto : Bacia de Santos
Data da Coleta : 25, 26, 27, 28 e 29/10/2010
Entrega das amostras : 05/11/2010
Início dos ensaios/extração : 05/11/2010
Término dos ensaios : 17/01/2011

INNOLAB do Brasil Ltda.
Rua Sacadura Cabral - 236
Saúde - Rio de Janeiro - RJ
Cep. 20221-161
CNPJ. 04.183.043/0001-00
Tel. (21) 3509-1750
Fax (21) 2233-4621

Projeto : PAI-Projeto de Avaliação de Impactos da Bacia de Santos
Gerente do Projeto : Cristina Falcão

Parâmetro	MXL_21_R1 (0-2cm) (µg/kg)	MXL_21_R2 (0-2cm) (µg/kg)	MXL_21_R3 (0-2cm) (µg/kg)	MXL_22_R1 (0-2cm) (µg/kg)	L.D. (µg/kg)
n-Alcanos C5 – C7					
n-C5 (N-Pentano)	nd	nd	nd	nd	1
n-C6 (N-Hexano)	nd	nd	nd	nd	1
n-C7 (N-Heptano)	nd	nd	nd	nd	1
Parâmetro	MXL_22_R2 (0-2cm) (µg/kg)	MXL_22_R3 (0-2cm) (µg/kg)	MXL_23_R1 (0-2cm) (µg/kg)	MXL_23_R2 (0-2cm) (µg/kg)	L.D. (µg/kg)
n-Alcanos C5 – C7					
n-C5 (N-Pentano)	nd	nd	nd	nd	1
n-C6 (N-Hexano)	nd	nd	nd	nd	1
n-C7 (N-Heptano)	nd	nd	nd	nd	1
Parâmetro	MXL_23_R3 (0-2cm) (µg/kg)	MXL_24_R1 (0-2cm) (µg/kg)	MXL_24_R2 (0-2cm) (µg/kg)	MXL_24_R3 (0-2cm) (µg/kg)	L.D. (µg/kg)
n-Alcanos C5 – C7					
n-C5 (N-Pentano)	nd	nd	nd	nd	1
n-C6 (N-Hexano)	nd	nd	nd	nd	1
n-C7 (N-Heptano)	nd	nd	nd	nd	1



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Parâmetro	MXL_31_R1 (0-2cm) (µg/kg)	MXL_31_R2 (0-2cm) (µg/kg)	MXL_31_R3 (0-2cm) (µg/kg)	MXL_32_R1 (0-2cm) (µg/kg)	L.D. (µg/kg)
n-Alcanos C5 – C7					
n-C5 (N-Pentano)	nd	nd	nd	nd	1
n-C6 (N-Hexano)	nd	nd	nd	nd	1
n-C7 (N-Heptano)	nd	nd	nd	nd	1
Parâmetro	MXL_32_R2 (0-2cm) (µg/kg)	MXL_32_R3 (0-2cm) (µg/kg)	MXL_33_R1 (0-2cm) (µg/kg)	MXL_33_R2 (0-2cm) (µg/kg)	L.D. (µg/kg)
n-Alcanos C5 – C7					
n-C5 (N-Pentano)	nd	nd	nd	nd	1
n-C6 (N-Hexano)	nd	nd	nd	nd	1
n-C7 (N-Heptano)	nd	nd	nd	nd	1
Parâmetro	MXL_33_R3 (0-2cm) (µg/kg)	MXL_34_R1 (0-2cm) (µg/kg)	MXL_34_R2 (0-2cm) (µg/kg)	MXL_34_R3 (0-2cm) (µg/kg)	L.D. (µg/kg)
n-Alcanos C5 – C7					
n-C5 (N-Pentano)	nd	nd	nd	nd	1
n-C6 (N-Hexano)	nd	nd	nd	nd	1
n-C7 (N-Heptano)	nd	nd	nd	nd	1
Parâmetro	MXL_41_R1 (0-2cm) (µg/kg)	MXL_41_R2 (0-2cm) (µg/kg)	MXL_41_R3 (0-2cm) (µg/kg)	MXL_42_R1 (0-2cm) (µg/kg)	L.D. (µg/kg)
n-Alcanos C5 – C7					
n-C5 (N-Pentano)	nd	nd	nd	nd	1
n-C6 (N-Hexano)	nd	nd	nd	nd	1
n-C7 (N-Heptano)	nd	nd	nd	nd	1



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Parâmetro	MXL_42_R2 (0-2cm) (µg/kg)	MXL_42_R3 (0-2cm) (µg/kg)	MXL_43_R1 (0-2cm) (µg/kg)	MXL_43_R2 (0-2cm) (µg/kg)	L.D. (µg/kg)
n-Alcanos C5 – C7					
n-C5 (N-Pentano)	nd	nd	nd	nd	1
n-C6 (N-Hexano)	nd	nd	nd	nd	1
n-C7 (N-Heptano)	nd	nd	nd	nd	1
Parâmetro	MXL_43_R3 (0-2cm) (µg/kg)	MXL_44_R1 (0-2cm) (µg/kg)	MXL_44_R2 (0-2cm) (µg/kg)	MXL_44_R3 (0-2cm) (µg/kg)	L.D. (µg/kg)
n-Alcanos C5 – C7					
n-C5 (N-Pentano)	nd	nd	nd	nd	1
n-C6 (N-Hexano)	nd	nd	nd	nd	1
n-C7 (N-Heptano)	nd	nd	nd	nd	1
Parâmetro	MXL_51_R1 (0-2cm) (µg/kg)	MXL_51_R2 (0-2cm) (µg/kg)	MXL_51_R3 (0-2cm) (µg/kg)	MXL_52_R1 (0-2cm) (µg/kg)	L.D. (µg/kg)
n-Alcanos C5 – C7					
n-C5 (N-Pentano)	nd	nd	nd	nd	1
n-C6 (N-Hexano)	nd	nd	nd	nd	1
n-C7 (N-Heptano)	nd	nd	nd	nd	1
Parâmetro	MXL_52_R2 (0-2cm) (µg/kg)	MXL_52_R3 (0-2cm) (µg/kg)	MXL_53_R1 (0-2cm) (µg/kg)	MXL_53_R2 (0-2cm) (µg/kg)	L.D. (µg/kg)
n-Alcanos C5 – C7					
n-C5 (N-Pentano)	nd	nd	nd	nd	1
n-C6 (N-Hexano)	nd	nd	nd	nd	1
n-C7 (N-Heptano)	nd	nd	nd	nd	1



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Parâmetro	MXL_53_R3 (0-2cm) (µg/kg)	MXL_54_R1 (0-2cm) (µg/kg)	MXL_54_R2 (0-2cm) (µg/kg)	MXL_54_R3 (0-2cm) (µg/kg)	L.D. (µg/kg)
n-Alcanos C5 – C7					
n-C5 (N-Pentano)	nd	nd	nd	nd	1
n-C6 (N-Hexano)	nd	nd	nd	nd	1
n-C7 (N-Heptano)	nd	nd	nd	nd	1

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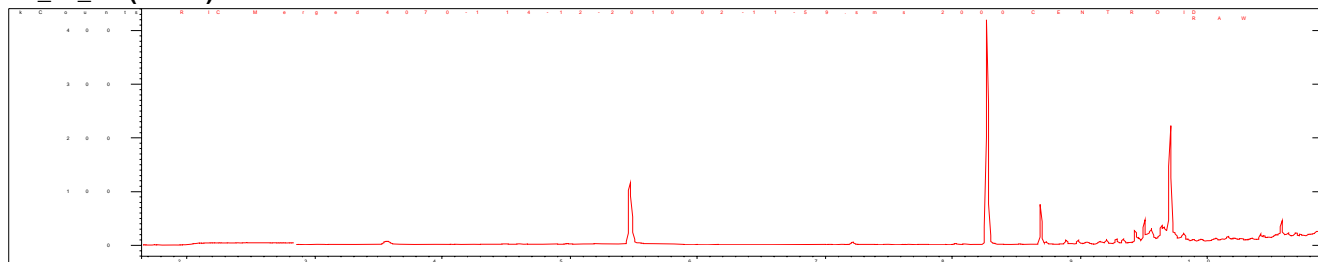
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Resp. Téc.: **Carina Casal**

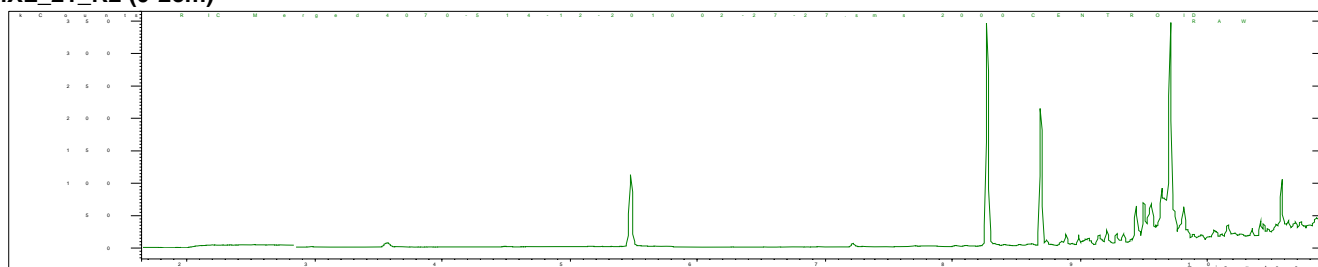
Emitido em: **17/01/2011**

Lab-nº: **10/4070B**

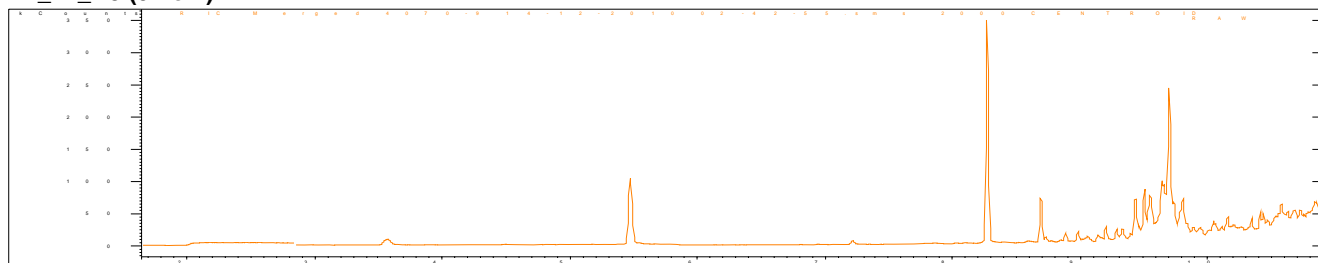
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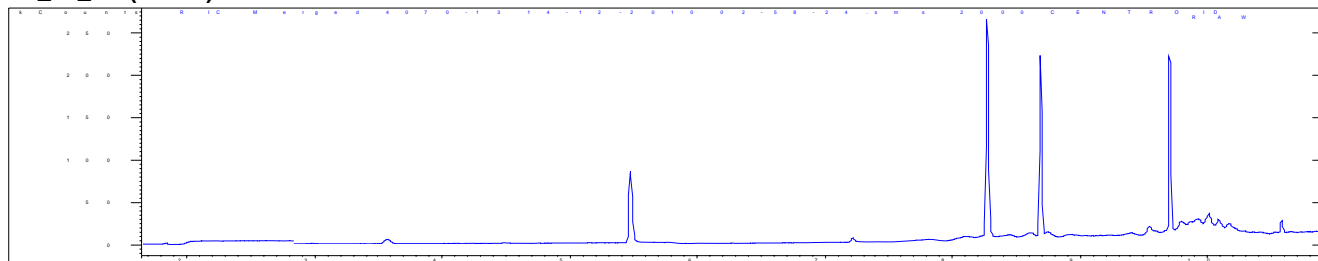
MXL_21_R2 (0-2cm)



MXL_21_R3 (0-2cm)



MXL_22_R1 (0-2cm)





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Boletim de Ensaio

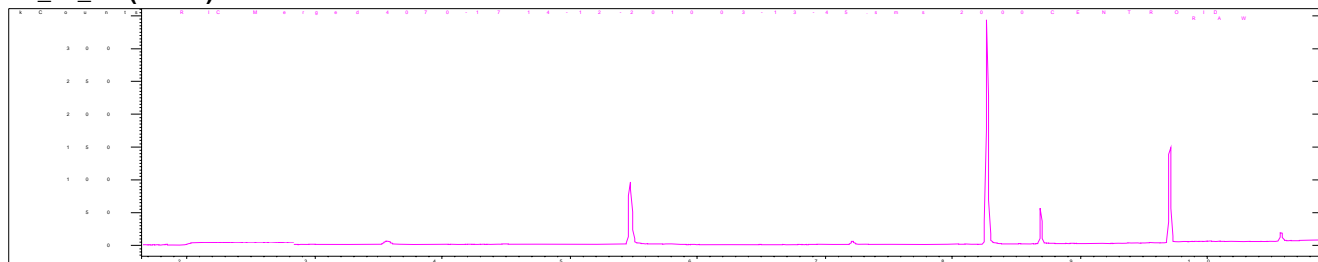
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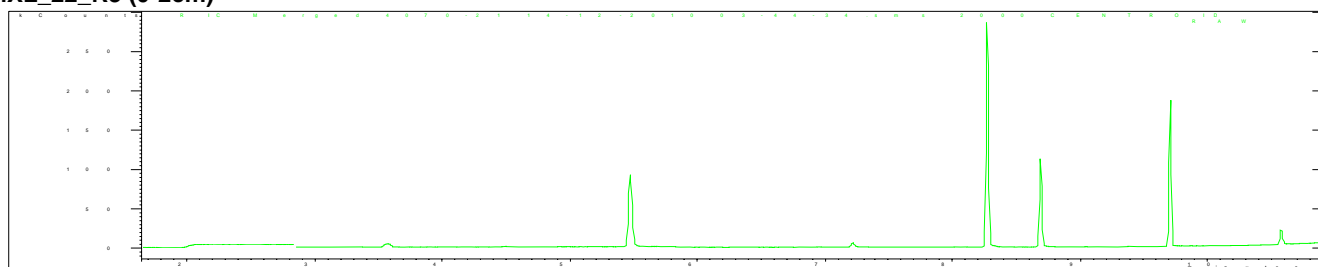
Emitido em: **17/01/2011**

Lab-nº: **10/4070B**

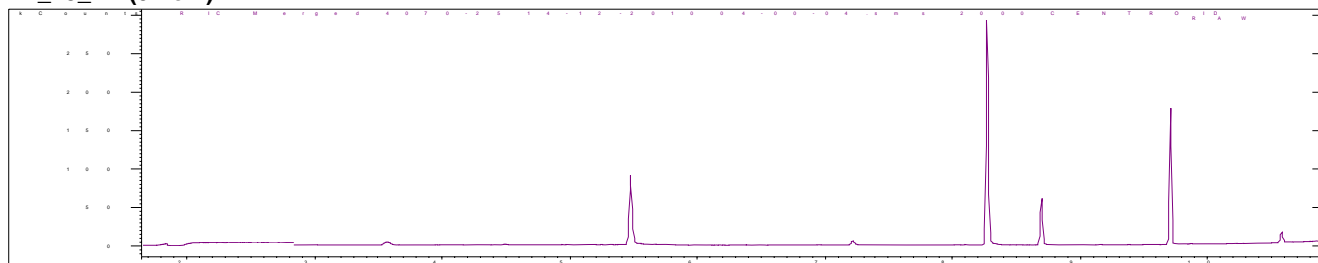
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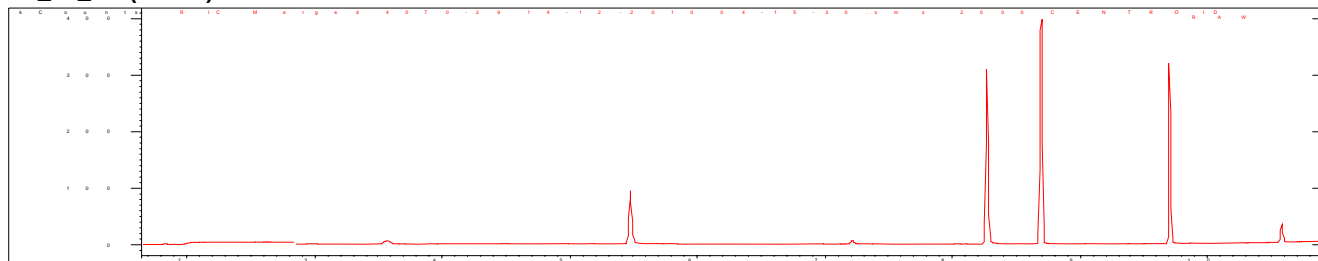
MXL_22_R3 (0-2cm)



MXL_23_R1 (0-2cm)



MXL_23_R2 (0-2cm)





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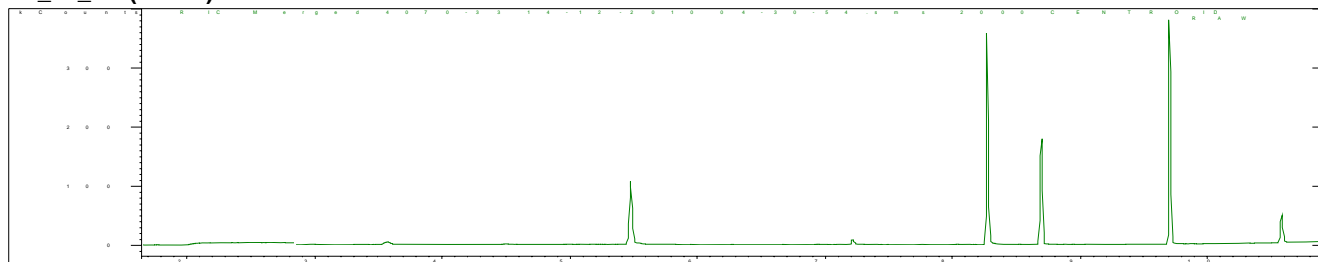
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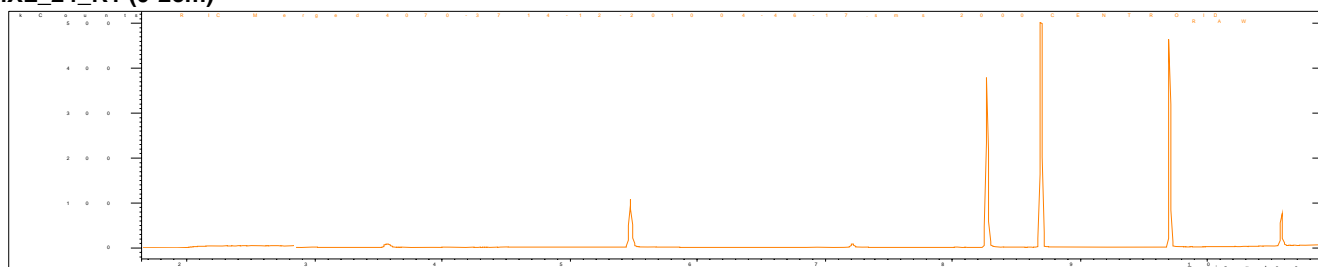
Emitido em: **17/01/2011**

Lab-nº: **10/4070B**

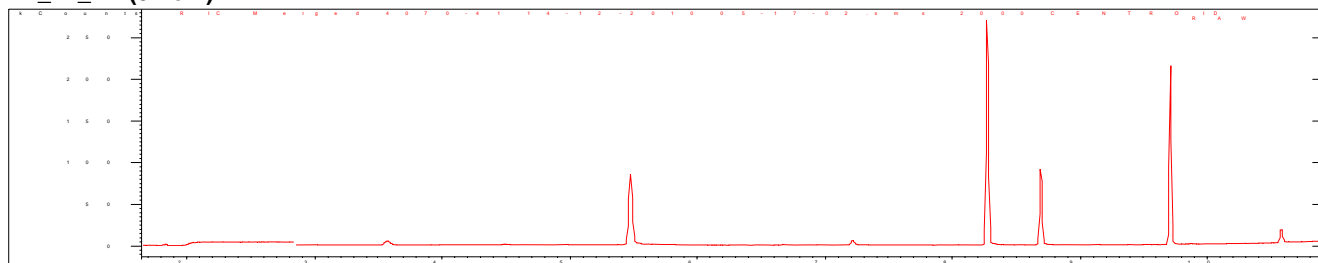
MXL_23_R3 (0-2cm)



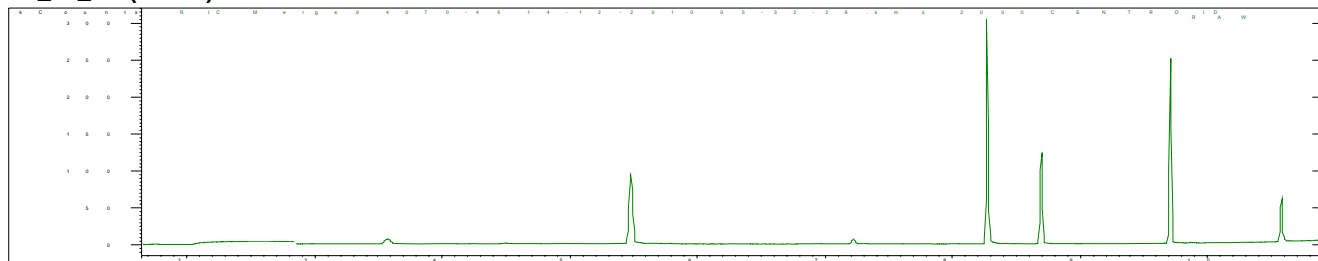
MXL_24_R1 (0-2cm)



MXL_24_R2 (0-2cm)



MXL_24_R3 (0-2cm)





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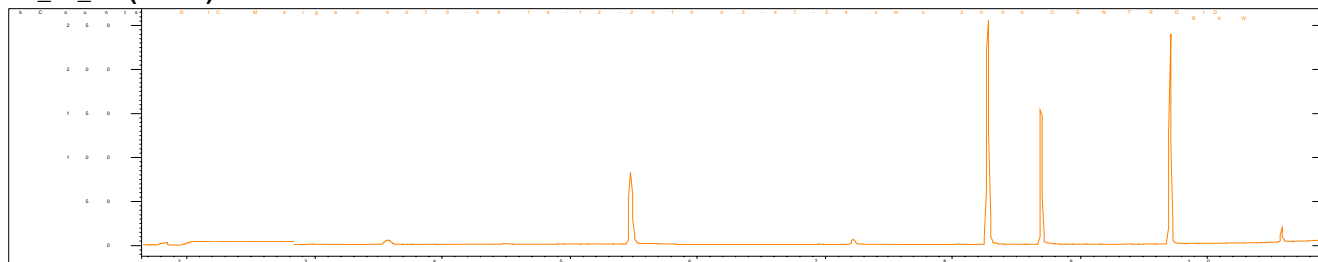
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Resp. Téc.: **Carina Casal**

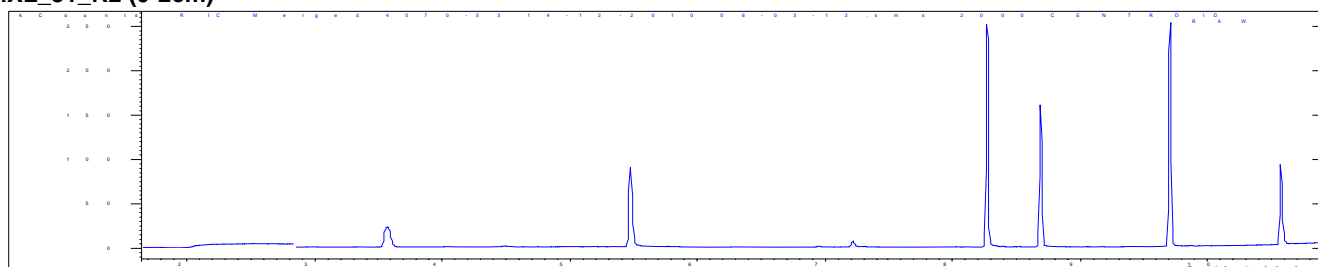
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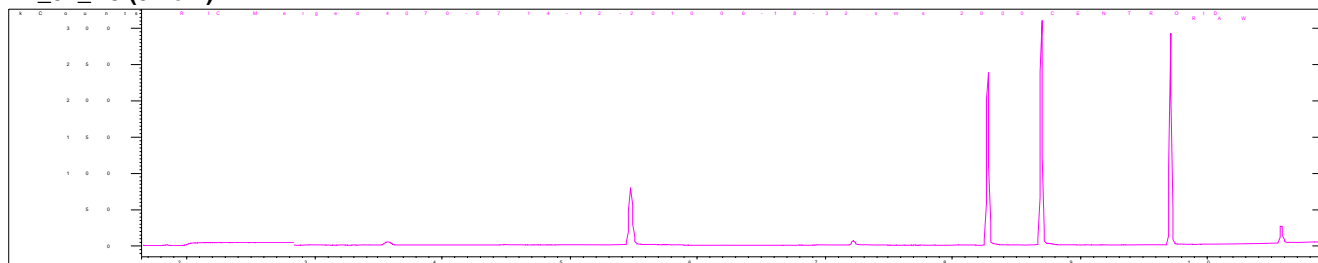
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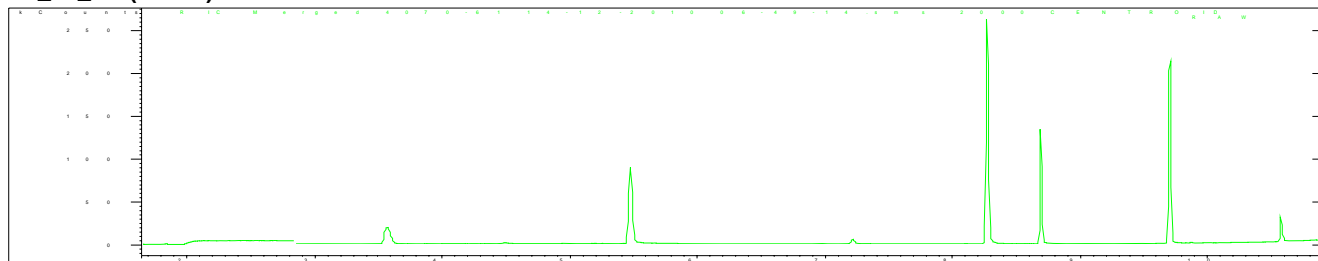
MXL_31_R2 (0-2cm)



MXL_31_R3 (0-2cm)



MXL_32_R1 (0-2cm)





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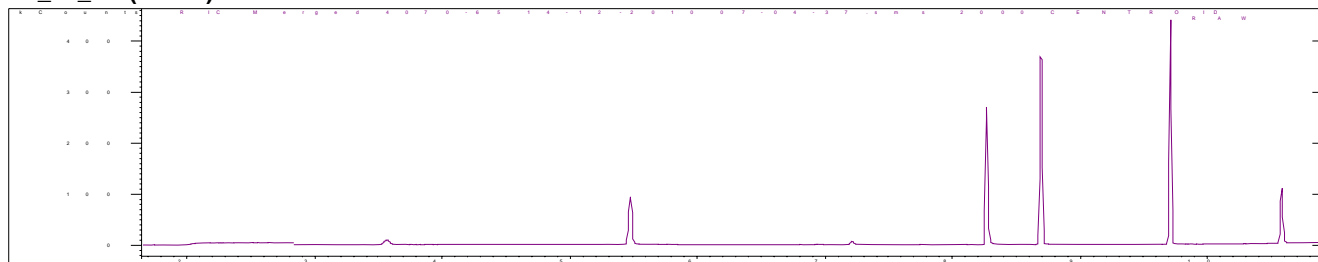
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Resp. Téc.: **Carina Casal**

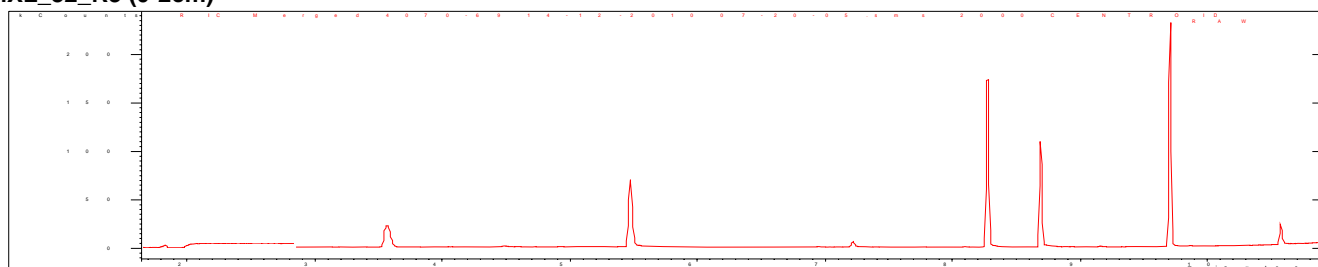
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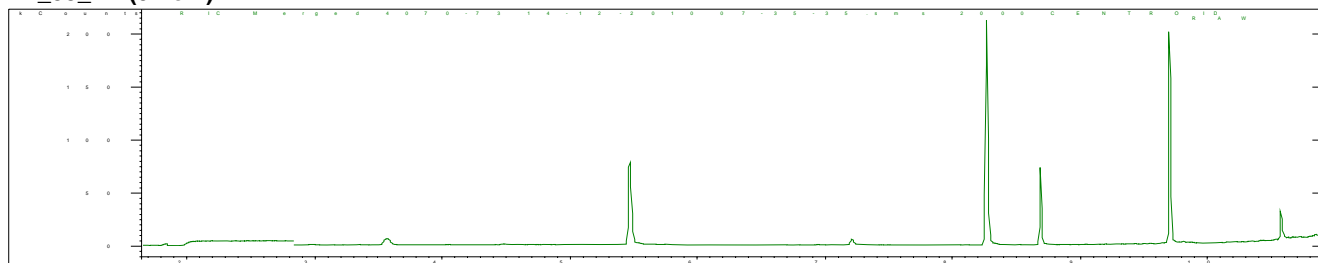
MXL_32_R2 (0-2cm)



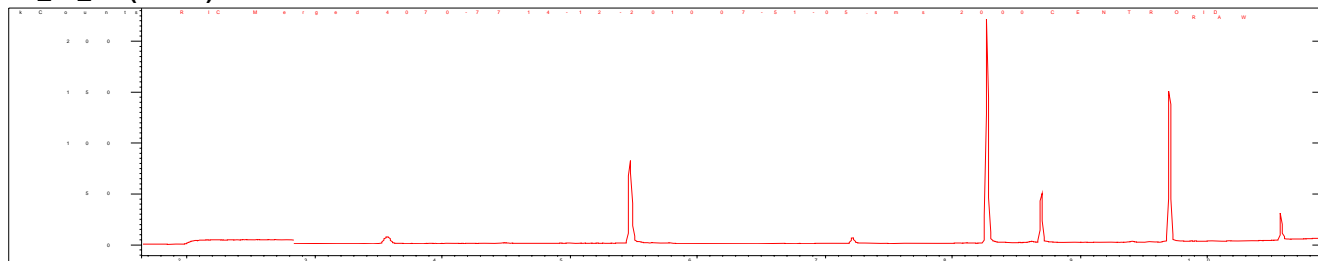
MXL_32_R3 (0-2cm)



MXL_33_R1 (0-2cm)



MXL_33_R2 (0-2cm)





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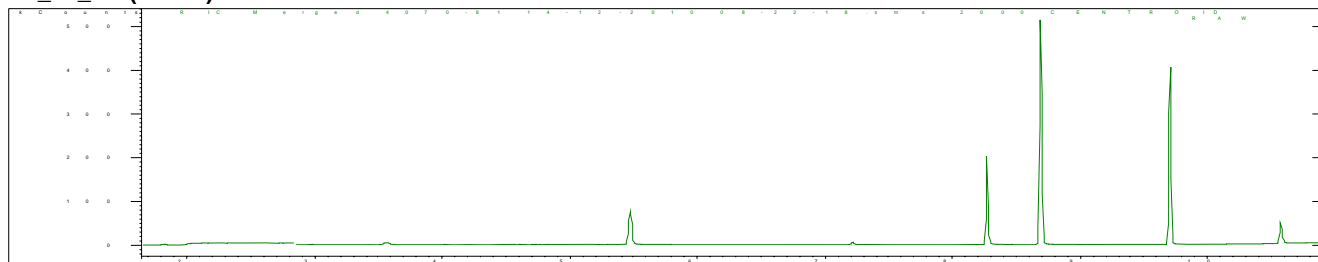
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Resp. Téc.: **Carina Casal**

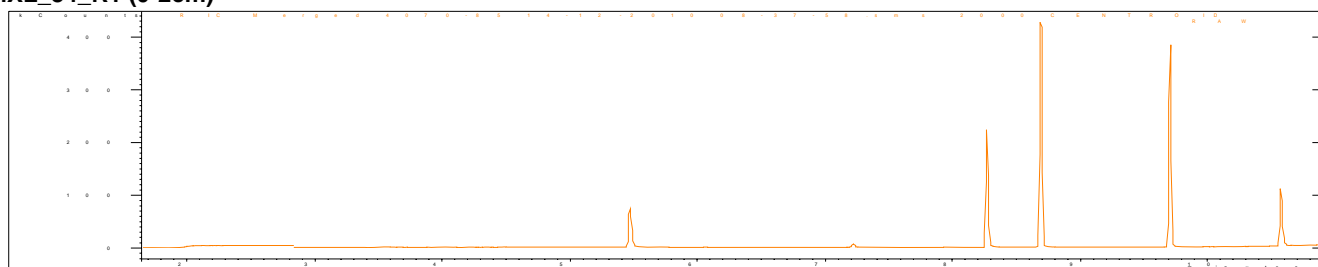
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Lab-nº: **10/4070B**

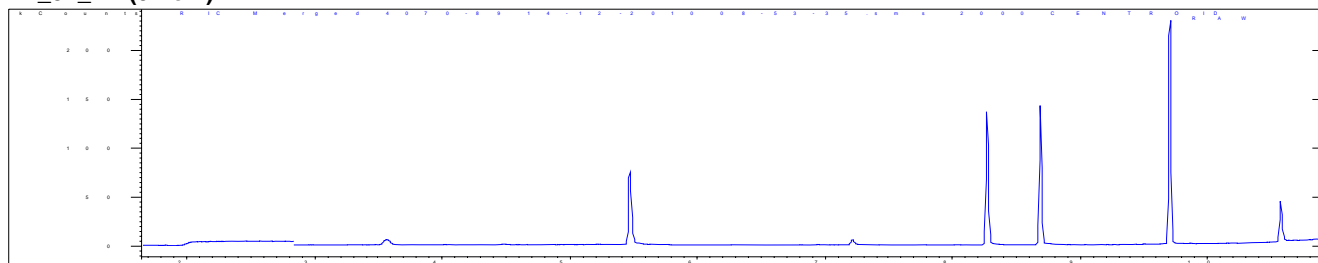
MXL_33_R3 (0-2cm)



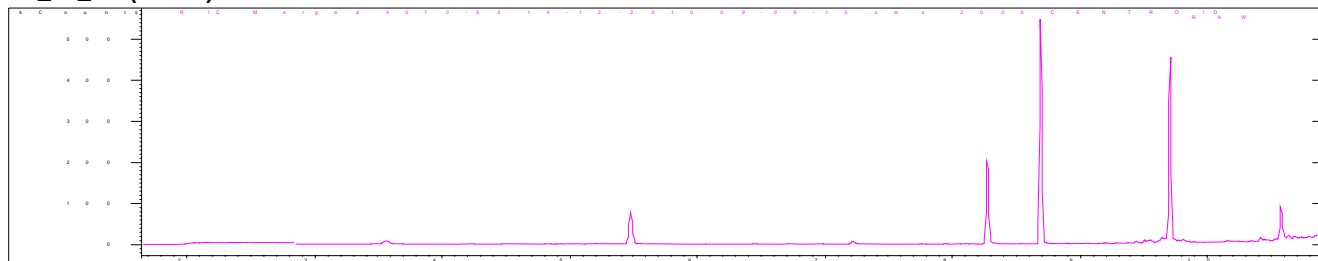
MXL_34_R1 (0-2cm)



MXL_34_R2 (0-2cm)



MXL_34_R3 (0-2cm)





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Boletim de Ensaio

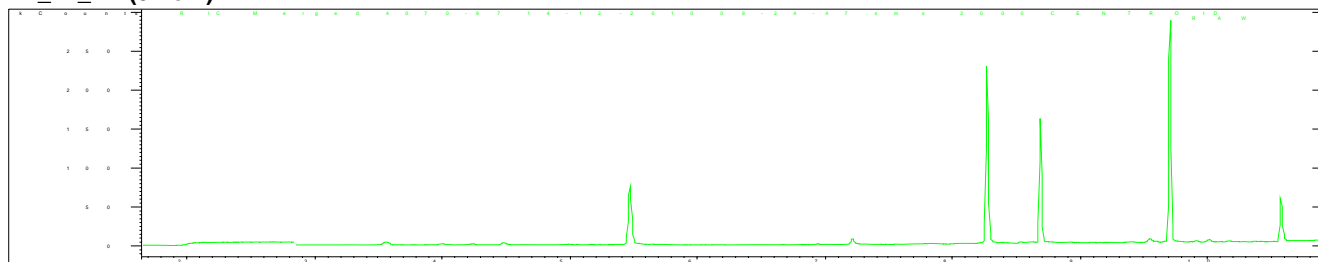
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Resp. Téc.: **Carina Casal**

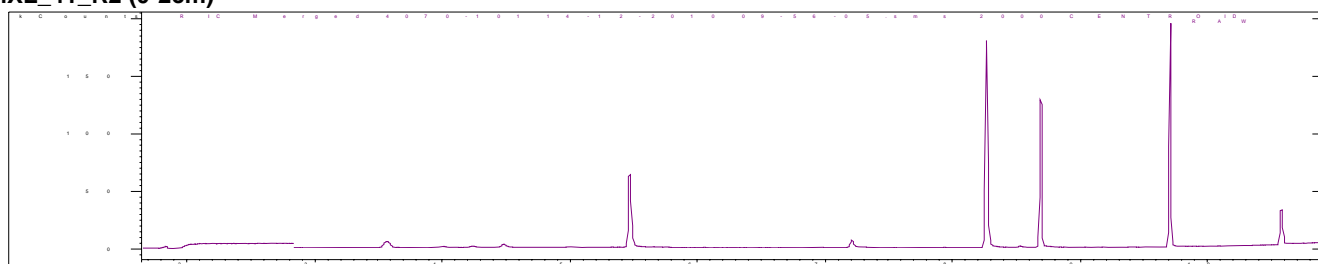
Emitido em: **17/01/2011**

Lab-nº: **10/4070B**

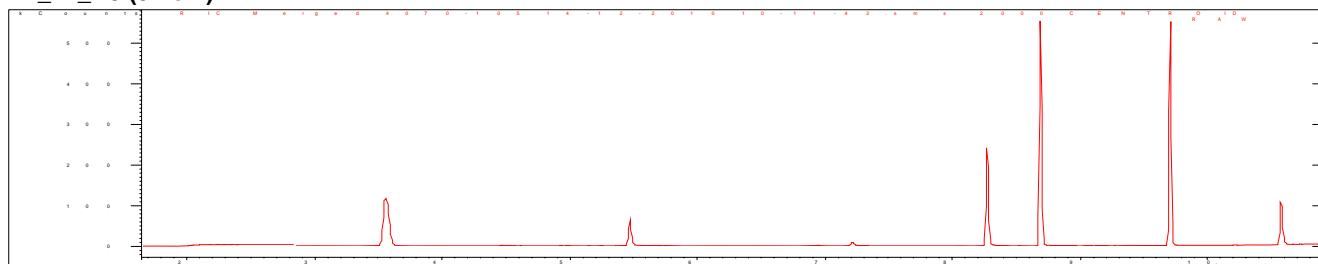
MXL_41_R1 (0-2cm)



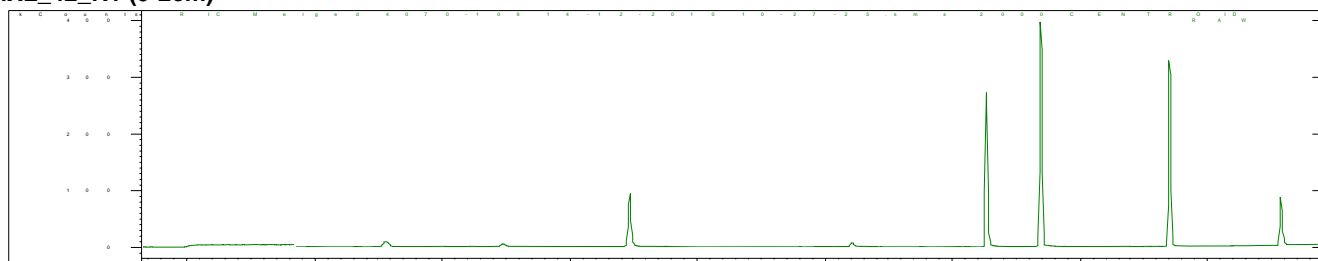
MXL_41_R2 (0-2cm)



MXL_41_R3 (0-2cm)



MXL_42_R1 (0-2cm)





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Boletim de Ensaio

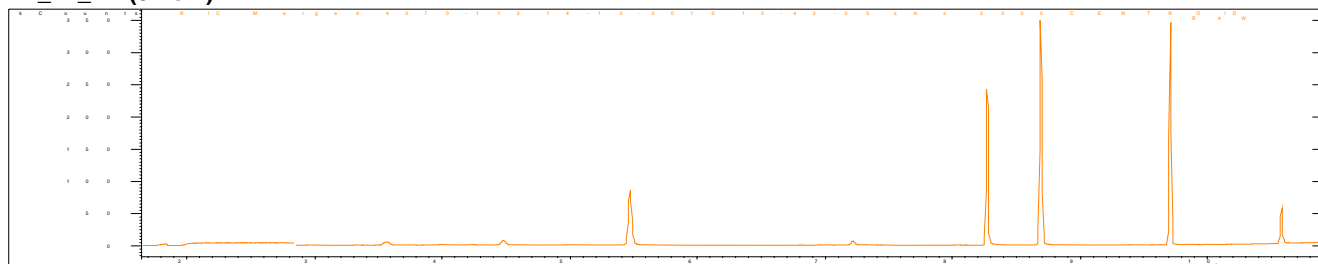
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Resp. Téc.: **Carina Casal**

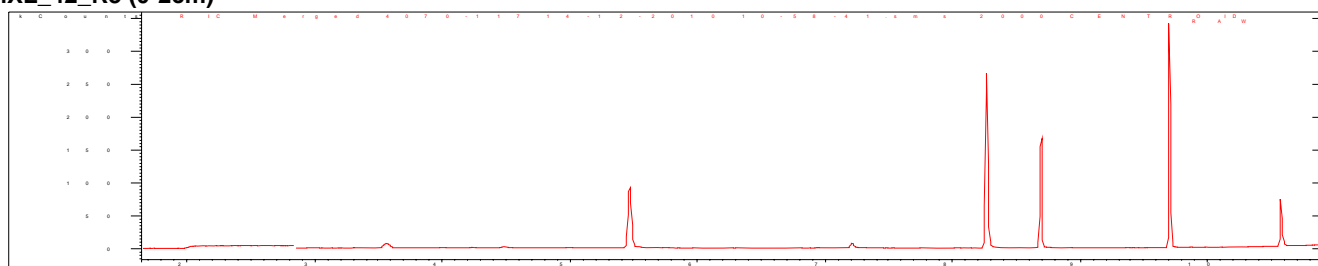
Emitido em: **17/01/2011**

Lab-nº: **10/4070B**

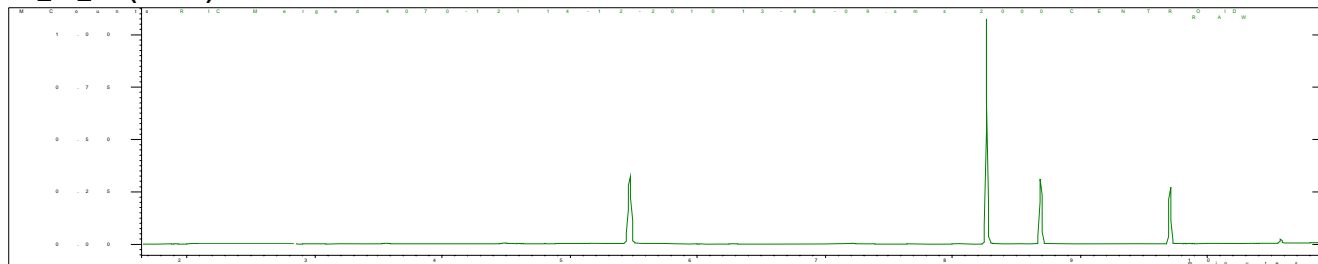
MXL_42_R2 (0-2cm)



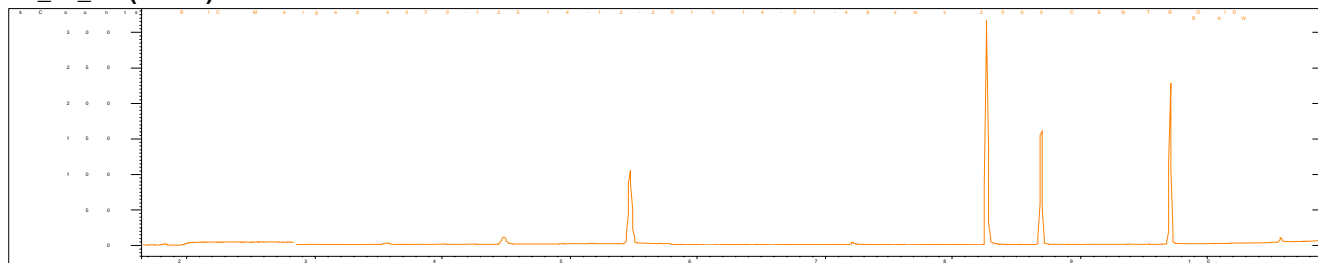
MXL_42_R3 (0-2cm)



MXL_43_R1 (0-2cm)



MXL_43_R2 (0-2cm)





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Boletim de Ensaio

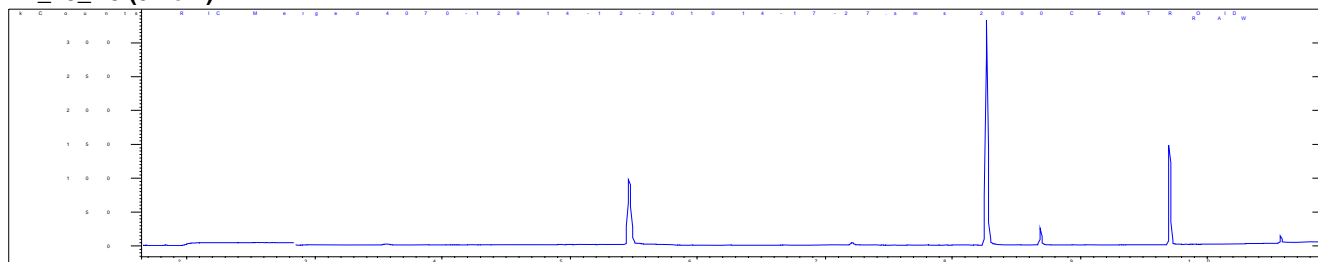
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Resp. Téc.: **Carina Casal**

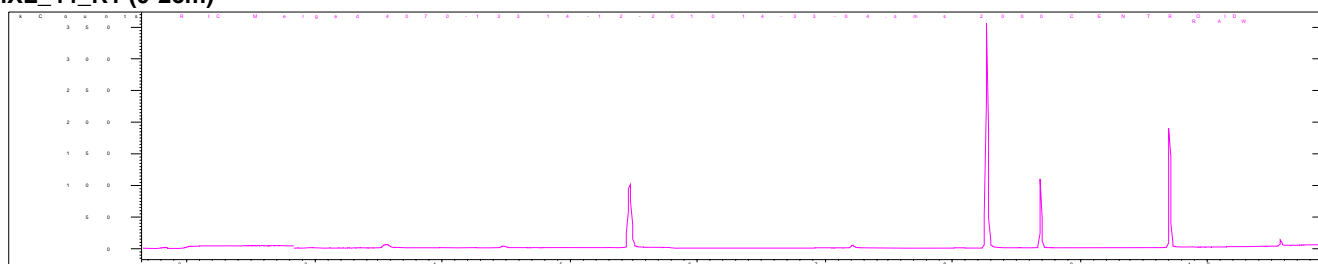
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Lab-nº: **10/4070B**

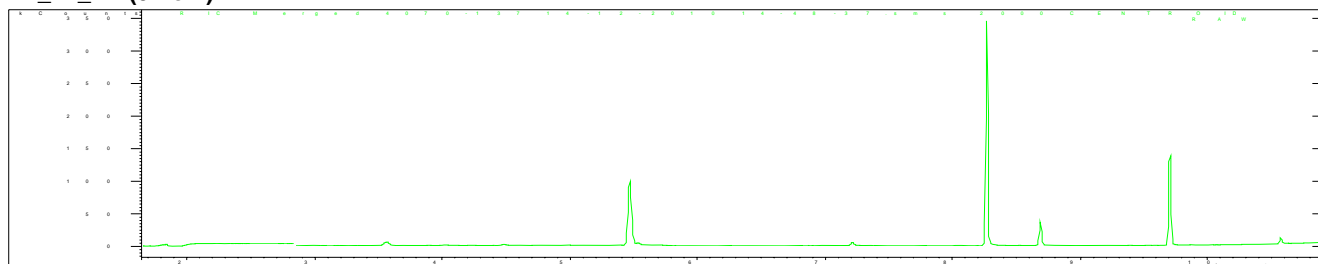
MXL_43_R3 (0-2cm)



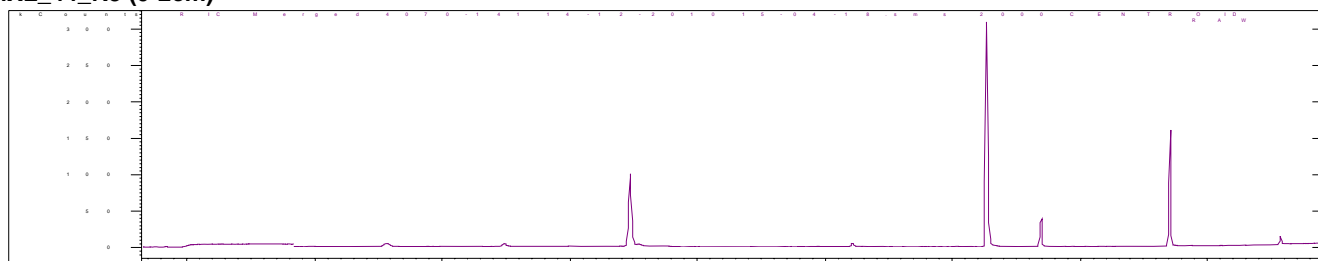
MXL_44_R1 (0-2cm)



MXL_44_R2 (0-2cm)



MXL_44_R3 (0-2cm)



conferido



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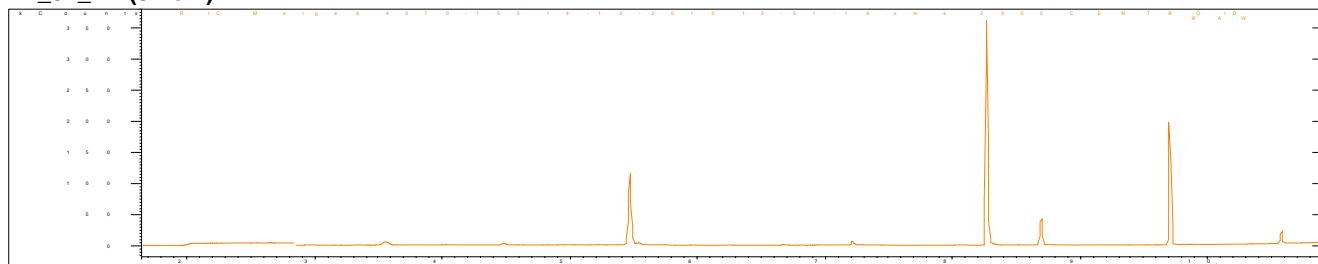
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Resp. Téc.: **Carina Casal**

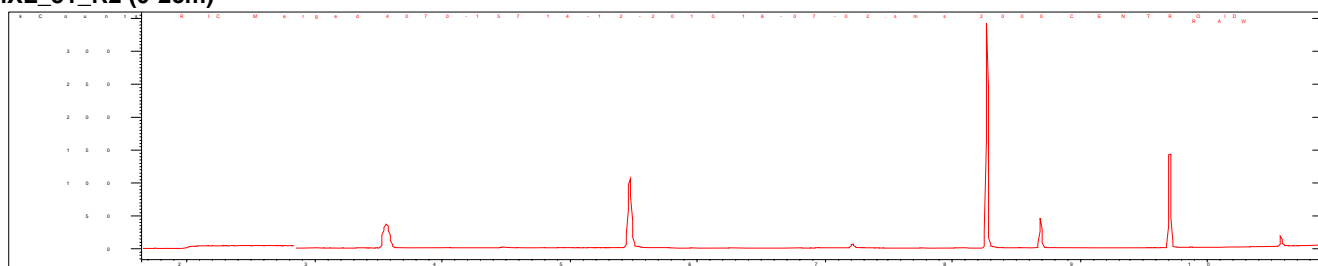
Emitido em: **17/01/2011**

Lab-nº: **10/4070B**

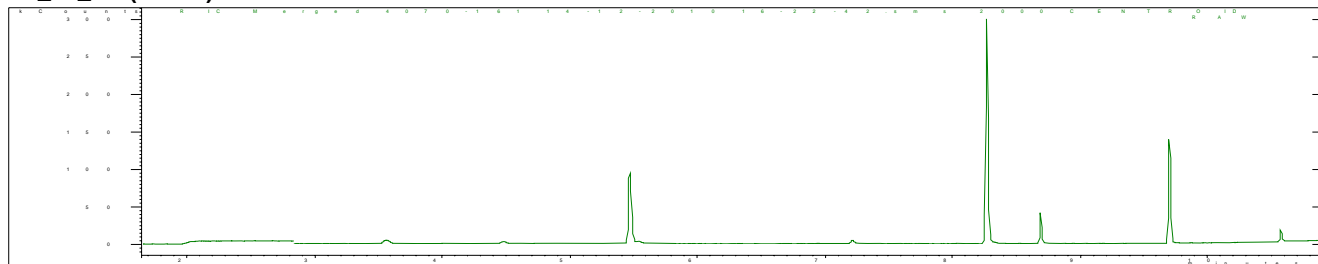
MXL_51_R1 (0-2cm)



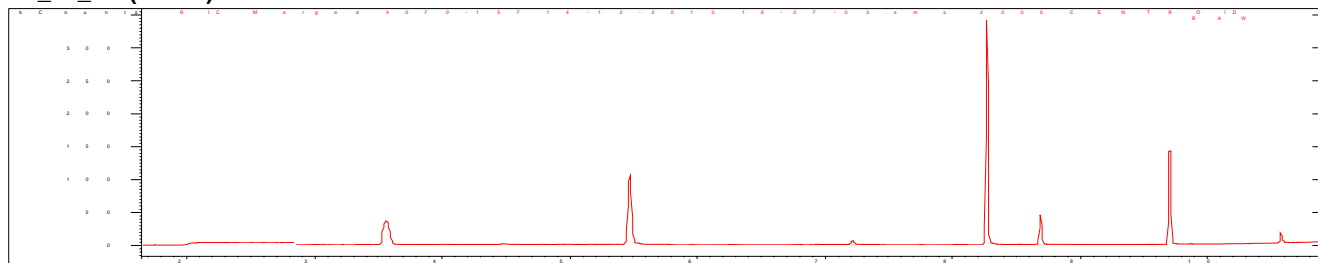
MXL_51_R2 (0-2cm)



MXL_51_R3 (0-2cm)



MXL_52_R1 (0-2cm)





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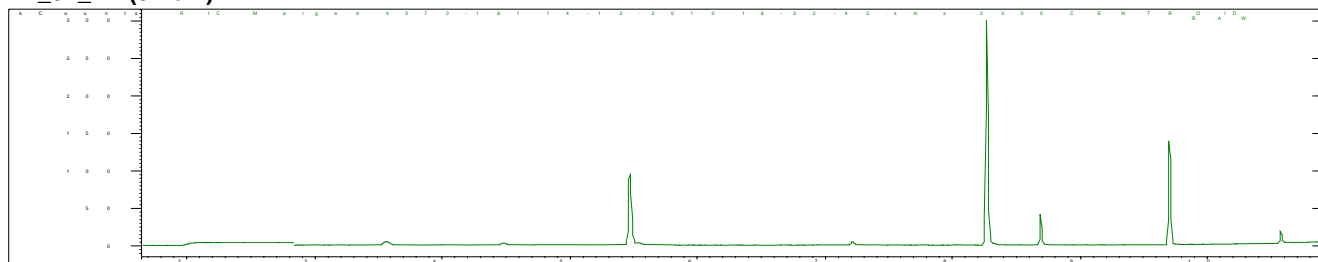
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Resp. Téc.: **Carina Casal**

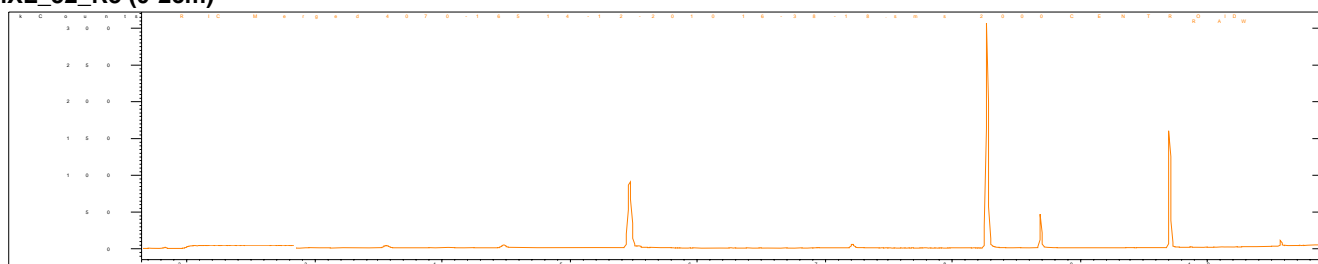
Emitido em: **17/01/2011**

Lab-nº: **10/4070B**

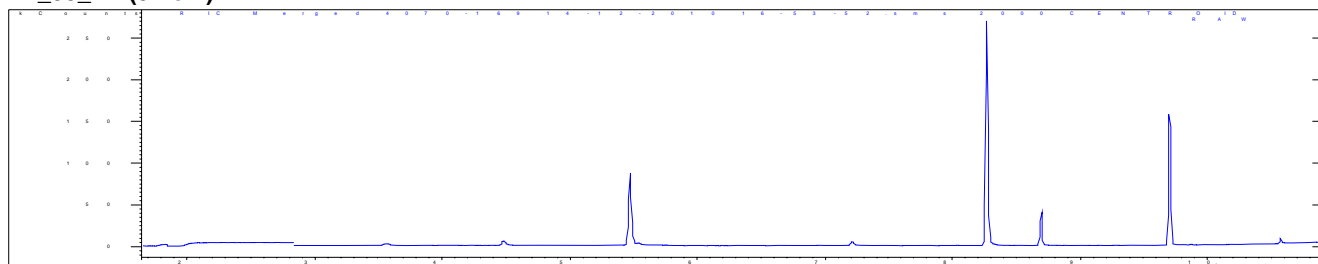
MXL_52_R2 (0-2cm)



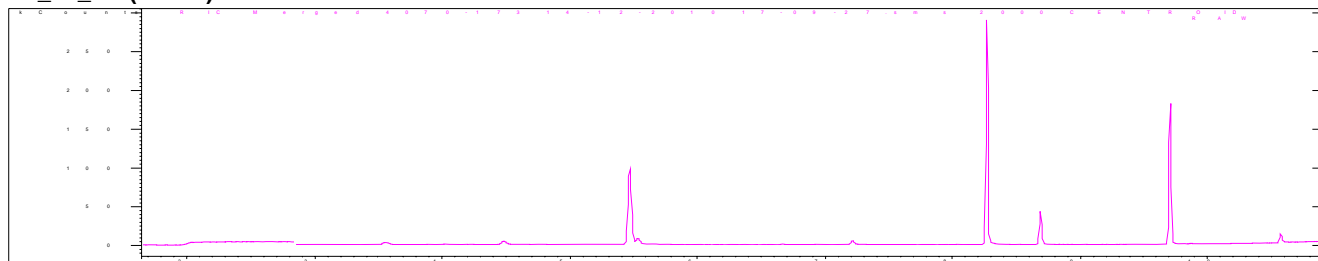
MXL_52_R3 (0-2cm)



MXL_53_R1 (0-2cm)



MXL_53_R2 (0-2cm)





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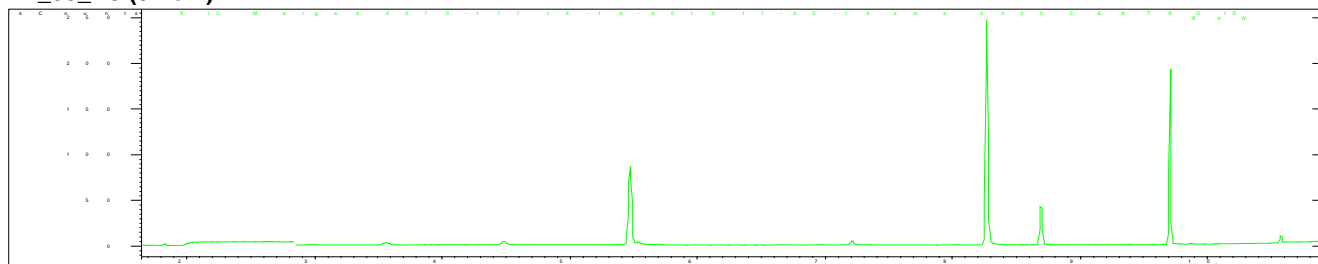
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Resp. Téc.: **Carina Casal**

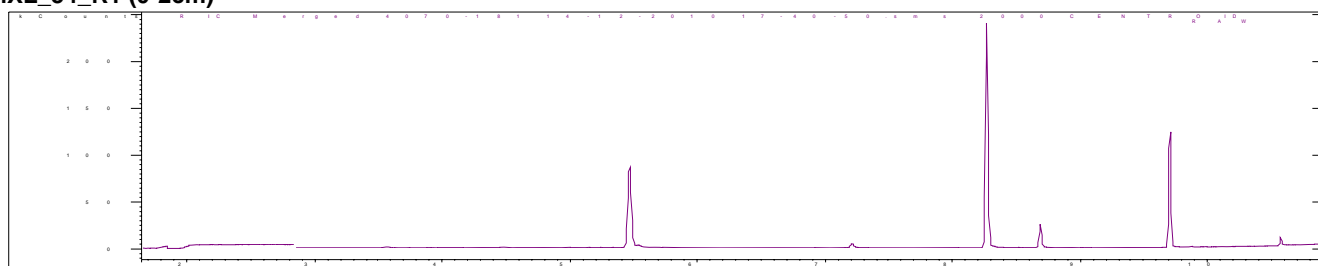
Emitido em: **17/01/2011**

Lab-nº: **10/4070B**

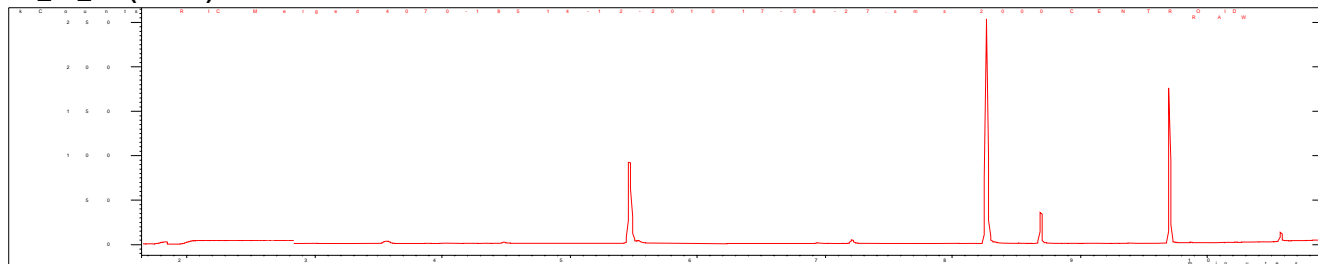
MXL_53_R3 (0-2cm)



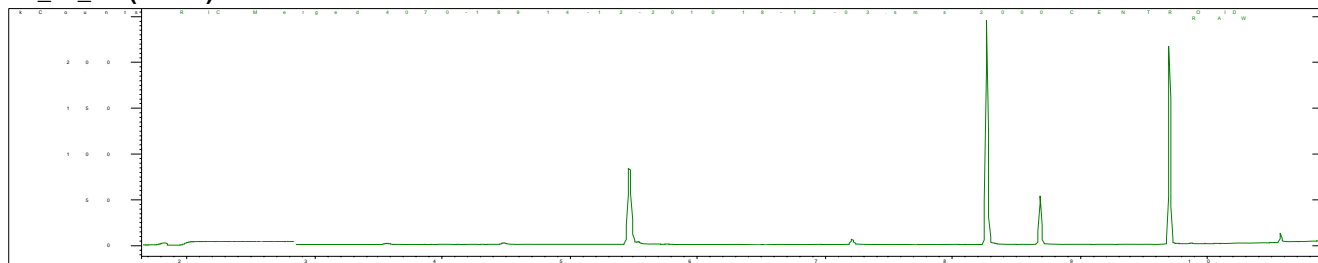
MXL_54_R1 (0-2cm)



MXL_54_R2 (0-2cm)



MXL_54_R3 (0-2cm)





Laboratório de Ensaio acreditado
pela Cgcre/Inmetro de acordo com
a ABNT NBR ISO/IEC 17025.



Boletim de Ensaio

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Resp. Téc.: **Carina Casal**

Emitido em: **17/01/2011**

Lab-nº: **10/4070B**

Padrões de Controle Analítico – (PCA)

(Faixa de Aceitação: 70-130%)


Taxa de Recuperação (%)	
PCA	70

FM-004-L3N – Rev.00 18/02/2009– Apr. FEV/09

Observações

1. Ref. Método – ISO 16703:2001
2. Foram utilizados Brancos de Controle conforme metodologia informada conferido


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