



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: **29.06.2010**

Lab-nº: **10/1448D Rev 1**

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 : 15, 16, 18, 19 e 20.04.2010
Entrega das amostras : 21.04.2010
Início dos ensaios/extração : 21.04.2010
Término dos ensaios : 29.06.2010

INNOLAB do Brasil Ltda.
Rua Sacadura Cabral - 236
Saúde - Rio de Janeiro - RJ
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CNPJ. 04.183.043/0001-00
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Projeto : PAI-Projeto de Avaliação de Impactos da Bacia de Santos
Gerente do Projeto : Cristina Falcão

Parâmetro	BS500#1-R1 (0-2cm) (µg/kg)	BS500#1-R2 (0-2cm) (µg/kg)	BS500#1-R3 (0-2cm) (µg/kg)	BS500#2-R1 (0-2cm) (µg/kg)	L.Q (µg/kg)	L.D. (µg/kg)
n-Alcanos C8 - C40						
n-C8	nd	nd	nd	nd	10	5
n-C9	<10	<10	<10	nd	10	5
n-C10	nd	nd	nd	nd	10	5
n-C11	nd	nd	nd	nd	10	5
n-C12	nd	nd	nd	nd	10	5
n-C13	nd	nd	nd	14	10	5
n-C14	23	<10	nd	298	10	5
n-C15	24	nd	nd	238	10	5
n-C16	<10	nd	nd	94	10	5
n-C17	12	nd	nd	43	10	5
Pristano	<10	nd	nd	<10	10	5
n-C18	<10	nd	nd	13	10	5
Fitano	nd	nd	nd	nd	10	5
n-C19	nd	nd	nd	41	10	5
n-C20	<10	nd	nd	<10	10	5
n-C21	<10	nd	nd	93	10	5
n-C22	nd	nd	nd	<10	10	5
n-C23	nd	<10	nd	<10	10	5
n-C24	nd	nd	nd	nd	10	5
n-C25	nd	14	nd	<10	10	5
n-C26	nd	<10	nd	nd	10	5
n-C27	18	275	<10	22	10	5
n-C28	nd	<10	nd	nd	10	5

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Parâmetro	BS500#1-R1 (0-2cm) (µg/kg)	BS500#1-R2 (0-2cm) (µg/kg)	BS500#1-R3 (0-2cm) (µg/kg)	BS500#2-R1 (0-2cm) (µg/kg)	L.Q. (µg/kg)	L.D. (µg/kg)
n-Alcanos C8 - C40						
n-C29	<10	<10	<10	22	10	5
n-C30	nd	12	<10	18	10	5
n-C31	27	19	11	38	10	5
n-C32	nd	nd	nd	nd	10	5
n-C33	<10	<10	<10	12	10	5
n-C34	nd	nd	nd	nd	10	5
n-C35	nd	<10	nd	nd	10	5
n-C36	nd	nd	nd	nd	10	5
n-C37	<10	<10	<10	14	10	5
n-C38	nd	nd	nd	nd	10	5
n-C39	nd	nd	nd	nd	10	5
n-C40	nd	nd	nd	nd	10	5



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Parâmetro	BS500#2-R2 (0-2cm) (µg/kg)	BS500#2-R3 (0-2cm) (µg/kg)	BS500#3-R1 (0-2cm) (µg/kg)	BS500#3-R2 (0-2cm) (µg/kg)	L.Q (µg/kg)	L.D. (µg/kg)
n-Alcanos C8 - C40						
n-C8	nd	nd	nd	nd	10	5
n-C9	nd	nd	nd	nd	10	5
n-C10	nd	<10	nd	nd	10	5
n-C11	nd	16	nd	nd	10	5
n-C12	nd	16	nd	nd	10	5
n-C13	48	117	nd	nd	10	5
n-C14	878	2339	20	24	10	5
n-C15	565	1738	29	27	10	5
n-C16	187	673	18	13	10	5
n-C17	67	237	18	12	10	5
Pristano	24	84	17	13	10	5
n-C18	37	91	<10	11	10	5
Fitano	11	22	<10	11	10	5
n-C19	54	155	<10	<10	10	5
n-C20	<10	17	<10	<10	10	5
n-C21	<10	19	<10	nd	10	5
n-C22	<10	<10	<10	11	10	5
n-C23	<10	<10	<10	nd	10	5
n-C24	nd	nd	nd	<10	10	5
n-C25	21	44	17	18	10	5
n-C26	nd	<10	nd	<10	10	5
n-C27	nd	nd	nd	nd	10	5
n-C28	nd	nd	nd	nd	10	5



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Resp. Téc.: **Carina Casal**

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Parâmetro	BS500#2-R2 (0-2cm) (µg/kg)	BS500#2-R3 (0-2cm) (µg/kg)	BS500#3-R1 (0-2cm) (µg/kg)	BS500#3-R2 (0-2cm) (µg/kg)	L.Q (µg/kg)	L.D. (µg/kg)
n-Alcanos C8 - C40						
n-C29	18	15	11	<10	10	5
n-C30	15	15	11	17	10	5
n-C31	30	27	20	17	10	5
n-C32	nd	nd	nd	nd	10	5
n-C33	<10	<10	<10	<10	10	5
n-C34	nd	nd	nd	nd	10	5
n-C35	nd	nd	nd	nd	10	5
n-C36	nd	nd	nd	nd	10	5
n-C37	<10	12	<10	11	10	5
n-C38	nd	nd	nd	nd	10	5
n-C39	nd	nd	nd	nd	10	5
n-C40	nd	nd	nd	nd	10	5



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Resp. Téc.: **Carina Casal**

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Parâmetro	BS500#3-R3 (0-2cm) (µg/kg)	BS500#4-R1 (0-2cm) (µg/kg)	BS500#4-R2 (0-2cm) (µg/kg)	BS500#4-R3 (0-2cm) (µg/kg)	L.Q (µg/kg)	L.D. (µg/kg)
n-Alcanos C8 - C40						
n-C8	nd	nd	nd	nd	10	5
n-C9	nd	nd	nd	nd	10	5
n-C10	nd	nd	nd	nd	10	5
n-C11	nd	nd	nd	nd	10	5
n-C12	nd	nd	nd	nd	10	5
n-C13	nd	nd	nd	nd	10	5
n-C14	22	nd	<10	<10	10	5
n-C15	19	<10	17	11	10	5
n-C16	10	nd	<10	<10	10	5
n-C17	11	nd	<10	<10	10	5
Pristano	nd	nd	nd	<10	10	5
n-C18	<10	<10	<10	11	10	5
Fitano	nd	nd	nd	nd	10	5
n-C19	nd	nd	nd	nd	10	5
n-C20	nd	nd	nd	nd	10	5
n-C21	nd	nd	nd	nd	10	5
n-C22	nd	nd	nd	nd	10	5
n-C23	<10	nd	nd	nd	10	5
n-C24	nd	nd	nd	nd	10	5
n-C25	32	nd	10	<10	10	5
n-C26	nd	nd	nd	nd	10	5
n-C27	nd	nd	nd	nd	10	5
n-C28	nd	nd	nd	nd	10	5



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Parâmetro	BS500#3-R3 (0-2cm) (µg/kg)	BS500#4-R1 (0-2cm) (µg/kg)	BS500#4-R2 (0-2cm) (µg/kg)	BS500#4-R3 (0-2cm) (µg/kg)	L.Q (µg/kg)	L.D. (µg/kg)
n-Alcanos C8 - C40						
n-C29	13	<10	11	<10	10	5
n-C30	17	nd	<10	<10	10	5
n-C31	22	12	18	13	10	5
n-C32	nd	nd	nd	nd	10	5
n-C33	nd	nd	nd	nd	10	5
n-C34	nd	nd	nd	nd	10	5
n-C35	<10	nd	nd	nd	10	5
n-C36	nd	nd	nd	nd	10	5
n-C37	16	nd	<10	<10	10	5
n-C38	nd	nd	nd	nd	10	5
n-C39	nd	nd	nd	nd	10	5
n-C40	nd	nd	nd	nd	10	5



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Resp. Téc.: **Carina Casal**

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Lab-nº: **10/1448D Rev 1**

Parâmetro	BS500#5-R1 (0-2cm) (µg/kg)	BS500#5-R2 (0-2cm) (µg/kg)	BS500#5-R3 (0-2cm) (µg/kg)	BS500#6-R1 (0-2cm) (µg/kg)	L.Q (µg/kg)	L.D. (µg/kg)
n-Alcanos C8 - C40						
n-C8	nd	nd	nd	nd	10	5
n-C9	nd	nd	nd	nd	10	5
n-C10	nd	nd	nd	nd	10	5
n-C11	nd	nd	nd	nd	10	5
n-C12	nd	nd	nd	nd	10	5
n-C13	nd	nd	nd	<10	10	5
n-C14	<10	<10	<10	99	10	5
n-C15	13	<10	14	104	10	5
n-C16	<10	nd	<10	51	10	5
n-C17	12	<10	12	26	10	5
Pristano	<10	nd	<10	<10	10	5
n-C18	<10	nd	<10	29	10	5
Fitano	nd	nd	<10	<10	10	5
n-C19	nd	nd	<10	nd	10	5
n-C20	nd	nd	nd	<10	10	5
n-C21	<10	nd	nd	<10	10	5
n-C22	nd	nd	nd	nd	10	5
n-C23	nd	nd	nd	nd	10	5
n-C24	nd	nd	nd	nd	10	5
n-C25	<10	nd	<10	<10	10	5
n-C26	nd	nd	nd	nd	10	5
n-C27	nd	nd	nd	nd	10	5
n-C28	nd	nd	nd	nd	10	5



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Parâmetro	BS500#5-R1 (0-2cm) (µg/kg)	BS500#5-R2 (0-2cm) (µg/kg)	BS500#5-R3 (0-2cm) (µg/kg)	BS500#6-R1 (0-2cm) (µg/kg)	L.Q (µg/kg)	L.D. (µg/kg)
n-Alcanos C8 - C40						
n-C29	nd	nd	nd	<10	10	5
n-C30	14	<10	<10	<10	10	5
n-C31	18	<10	14	15	10	5
n-C32	nd	nd	nd	nd	10	5
n-C33	<10	nd	nd	nd	10	5
n-C34	nd	nd	nd	nd	10	5
n-C35	<10	nd	nd	nd	10	5
n-C36	nd	nd	nd	nd	10	5
n-C37	13	<10	<10	<10	10	5
n-C38	nd	nd	nd	nd	10	5
n-C39	nd	nd	nd	nd	10	5
n-C40	nd	nd	nd	nd	10	5



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Parâmetro	BS500#6-R2 (0-2cm) (µg/kg)	BS500#6-R3 (0-2cm) (µg/kg)	BS500#7-R1 (0-2cm) (µg/kg)	BS500#7-R2 (0-2cm) (µg/kg)	L.Q (µg/kg)	L.D. (µg/kg)
n-Alcanos C8 - C40						
n-C8	nd	nd	nd	nd	10	5
n-C9	nd	nd	nd	nd	10	5
n-C10	nd	nd	nd	nd	10	5
n-C11	nd	nd	nd	nd	10	5
n-C12	nd	nd	nd	nd	10	5
n-C13	<10	19	nd	nd	10	5
n-C14	226	362	nd	<10	10	5
n-C15	182	284	<10	11	10	5
n-C16	72	123	<10	<10	10	5
n-C17	34	64	<10	<10	10	5
Pristano	11	23	<10	<10	10	5
n-C18	28	130	nd	<10	10	5
Fitano	<10	<10	nd	nd	10	5
n-C19	nd	nd	nd	nd	10	5
n-C20	nd	10	nd	nd	10	5
n-C21	nd	16	nd	nd	10	5
n-C22	nd	<10	nd	nd	10	5
n-C23	<10	<10	nd	nd	10	5
n-C24	nd	<10	nd	nd	10	5
n-C25	21	35	14	nd	10	5
n-C26	nd	11	nd	nd	10	5
n-C27	nd	nd	nd	nd	10	5
n-C28	nd	nd	nd	nd	10	5



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Parâmetro	BS500#6-R2 (0-2cm) (µg/kg)	BS500#6-R3 (0-2cm) (µg/kg)	BS500#7-R1 (0-2cm) (µg/kg)	BS500#7-R2 (0-2cm) (µg/kg)	L.Q (µg/kg)	L.D. (µg/kg)
n-Alcanos C8 - C40						
n-C29	<10	26	13	<10	10	5
n-C30	11	25	<10	<10	10	5
n-C31	17	51	18	<10	10	5
n-C32	nd	nd	nd	nd	10	5
n-C33	<10	15	nd	nd	10	5
n-C34	nd	nd	nd	nd	10	5
n-C35	nd	nd	nd	nd	10	5
n-C36	nd	nd	nd	nd	10	5
n-C37	14	<10	<10	nd	10	5
n-C38	nd	nd	nd	nd	10	5
n-C39	nd	nd	nd	nd	10	5
n-C40	nd	nd	nd	nd	10	5



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Resp. Téc.: **Carina Casal**

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Parâmetro	BS500#7-R3 (0-2cm) (µg/kg)	BS500#8-R1 (0-2cm) (µg/kg)	BS500#8-R2 (0-2cm) (µg/kg)	BS500#8-R3 (0-2cm) (µg/kg)	L.Q (µg/kg)	L.D. (µg/kg)
n-Alcanos C8 - C40						
n-C8	nd	nd	nd	nd	10	5
n-C9	nd	nd	nd	nd	10	5
n-C10	nd	nd	nd	nd	10	5
n-C11	nd	nd	nd	nd	10	5
n-C12	nd	nd	nd	nd	10	5
n-C13	nd	nd	nd	nd	10	5
n-C14	<10	13	111	nd	10	5
n-C15	13	11	96	<10	10	5
n-C16	<10	<10	42	<10	10	5
n-C17	10	<10	29	<10	10	5
Pristano	<10	nd	<10	<10	10	5
n-C18	<10	nd	36	<10	10	5
Fitano	<10	nd	nd	nd	10	5
n-C19	<10	nd	nd	nd	10	5
n-C20	nd	nd	nd	nd	10	5
n-C21	<10	nd	<10	nd	10	5
n-C22	nd	nd	nd	nd	10	5
n-C23	<10	<10	<10	<10	10	5
n-C24	nd	nd	<10	nd	10	5
n-C25	22	16	23	17	10	5
n-C26	nd	nd	13	nd	10	5
n-C27	nd	nd	nd	nd	10	5
n-C28	nd	nd	nd	nd	10	5



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Parâmetro	BS500#7-R3 (0-2cm) (µg/kg)	BS500#8-R1 (0-2cm) (µg/kg)	BS500#8-R2 (0-2cm) (µg/kg)	BS500#8-R3 (0-2cm) (µg/kg)	L.Q (µg/kg)	L.D. (µg/kg)
n-Alcanos C8 - C40						
n-C29	19	12	34	12	10	5
n-C30	14	<10	27	<10	10	5
n-C31	26	13	35	16	10	5
n-C32	nd	nd	<10	nd	10	5
n-C33	<10	nd	18	<10	10	5
n-C34	nd	nd	nd	nd	10	5
n-C35	nd	nd	19	nd	10	5
n-C36	nd	nd	nd	nd	10	5
n-C37	14	<10	28	<10	10	5
n-C38	nd	nd	<10	nd	10	5
n-C39	nd	nd	nd	nd	10	5
n-C40	nd	nd	nd	nd	10	5



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Parâmetro	BS500#9-R1 (0-2cm) (µg/kg)	BS500#9-R2 (0-2cm) (µg/kg)	BS500#9-R3 (0-2cm) (µg/kg)	BS500#10-R1 (0-2cm) (µg/kg)	L.Q (µg/kg)	L.D. (µg/kg)
n-Alcanos C8 - C40						
n-C8	nd	nd	nd	nd	10	5
n-C9	nd	nd	nd	nd	10	5
n-C10	nd	nd	nd	nd	10	5
n-C11	nd	nd	nd	nd	10	5
n-C12	nd	nd	nd	nd	10	5
n-C13	nd	nd	nd	nd	10	5
n-C14	nd	nd	nd	36	10	5
n-C15	<10	10	<10	24	10	5
n-C16	nd	nd	nd	<10	10	5
n-C17	<10	<10	<10	<10	10	5
Pristano	nd	10	<10	<10	10	5
n-C18	<10	<10	<10	11	10	5
Fitano	nd	nd	nd	nd	10	5
n-C19	nd	nd	nd	nd	10	5
n-C20	nd	nd	nd	nd	10	5
n-C21	nd	nd	nd	nd	10	5
n-C22	nd	nd	nd	nd	10	5
n-C23	nd	nd	nd	nd	10	5
n-C24	nd	nd	nd	nd	10	5
n-C25	15	<10	nd	<10	10	5
n-C26	nd	nd	nd	nd	10	5
n-C27	nd	nd	nd	nd	10	5
n-C28	nd	nd	nd	nd	10	5



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Parâmetro	BS500#9-R1 (0-2cm) (µg/kg)	BS500#9-R2 (0-2cm) (µg/kg)	BS500#9-R3 (0-2cm) (µg/kg)	BS500#10-R1 (0-2cm) (µg/kg)	L.Q (µg/kg)	L.D. (µg/kg)
n-Alcanos C8 - C40						
n-C29	12	<10	<10	<10	10	5
n-C30	<10	<10	nd	<10	10	5
n-C31	16	14	<10	13	10	5
n-C32	nd	nd	nd	nd	10	5
n-C33	nd	nd	nd	nd	10	5
n-C34	nd	nd	nd	nd	10	5
n-C35	nd	nd	nd	nd	10	5
n-C36	nd	nd	nd	nd	10	5
n-C37	<10	<10	nd	nd	10	5
n-C38	nd	nd	nd	nd	10	5
n-C39	nd	nd	nd	nd	10	5
n-C40	nd	nd	nd	nd	10	5



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Parâmetro	BS500#10-R2 (0-2cm) (µg/kg)	BS500#10-R3 (0-2cm) (µg/kg)	BS500#11-R1 (0-2cm) (µg/kg)	BS500#11-R2 (0-2cm) (µg/kg)	L.Q (µg/kg)	L.D. (µg/kg)
n-Alcanos C8 - C40						
n-C8	nd	nd	nd	nd	10	5
n-C9	nd	nd	nd	nd	10	5
n-C10	nd	nd	nd	nd	10	5
n-C11	nd	nd	nd	nd	10	5
n-C12	nd	<10	nd	nd	10	5
n-C13	nd	194	nd	nd	10	5
n-C14	39	3002	nd	22	10	5
n-C15	30	1392	nd	28	10	5
n-C16	33	313	nd	13	10	5
n-C17	13	85	nd	10	10	5
Pristano	nd	25	nd	<10	10	5
n-C18	33	58	nd	nd	10	5
Fitano	nd	12	<10	nd	10	5
n-C19	nd	nd	nd	nd	10	5
n-C20	nd	nd	nd	nd	10	5
n-C21	<10	<10	nd	nd	10	5
n-C22	nd	nd	nd	nd	10	5
n-C23	nd	<10	nd	nd	10	5
n-C24	nd	<10	nd	nd	10	5
n-C25	21	14	<10	11	10	5
n-C26	nd	nd	nd	nd	10	5
n-C27	nd	nd	nd	nd	10	5
n-C28	nd	nd	nd	nd	10	5



Laboratório de Ensaio acreditado
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a ABNT NBR ISO/IEC 17025.



Boletim de Ensaio

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Resp. Téc.: **Carina Casal**

Emitido em: **29.06.2010**

Lab-nº: **10/1448D Rev 1**

Parâmetro	BS500#10-R2 (0-2cm) (µg/kg)	BS500#10-R3 (0-2cm) (µg/kg)	BS500#11-R1 (0-2cm) (µg/kg)	BS500#11-R2 (0-2cm) (µg/kg)	L.Q (µg/kg)	L.D. (µg/kg)
n-Alcanos C8 - C40						
n-C29	17	10	<10	11	10	5
n-C30	13	13	nd	<10	10	5
n-C31	26	19	<10	16	10	5
n-C32	nd	nd	15	nd	10	5
n-C33	<10	<10	11	nd	10	5
n-C34	nd	nd	nd	nd	10	5
n-C35	<10	nd	nd	nd	10	5
n-C36	nd	nd	nd	nd	10	5
n-C37	<10	<10	nd	<10	10	5
n-C38	nd	nd	nd	nd	10	5
n-C39	nd	nd	<10	nd	10	5
n-C40	nd	nd	nd	nd	10	5



Laboratório de Ensaio acreditado
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a ABNT NBR ISO/IEC 17025.



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Resp. Téc.: **Carina Casal**

Emitido em: **29.06.2010**

Lab-nº: **10/1448D Rev 1**

Parâmetro	BS500#11-R3 (0-2cm) (µg/kg)	BS500#12-R1 (0-2cm) (µg/kg)	BS500#12-R2 (0-2cm) (µg/kg)	BS500#12-R3 (0-2cm) (µg/kg)	L.Q (µg/kg)	L.D. (µg/kg)
n-Alcanos C8 - C40						
n-C8	nd	nd	nd	nd	10	5
n-C9	nd	nd	nd	nd	10	5
n-C10	nd	nd	nd	nd	10	5
n-C11	nd	nd	nd	nd	10	5
n-C12	nd	nd	nd	nd	10	5
n-C13	nd	nd	nd	nd	10	5
n-C14	nd	25	nd	nd	10	5
n-C15	<10	23	11	nd	10	5
n-C16	nd	<10	<10	nd	10	5
n-C17	<10	<10	<10	<10	10	5
Pristano	nd	nd	<10	nd	10	5
n-C18	nd	nd	<10	nd	10	5
Fitano	nd	nd	<10	nd	10	5
n-C19	nd	nd	nd	nd	10	5
n-C20	nd	nd	nd	nd	10	5
n-C21	nd	nd	nd	nd	10	5
n-C22	nd	nd	nd	nd	10	5
n-C23	nd	nd	nd	nd	10	5
n-C24	nd	nd	nd	nd	10	5
n-C25	<10	12	<10	17	10	5
n-C26	nd	nd	nd	nd	10	5
n-C27	nd	nd	nd	nd	10	5
n-C28	nd	nd	nd	nd	10	5



Laboratório de Ensaio acreditado
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a ABNT NBR ISO/IEC 17025.



Boletim de Ensaio

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Resp. Téc.: **Carina Casal**

Emitido em: **29.06.2010**

Lab-nº: **10/1448D Rev 1**

Parâmetro	BS500#11-R3 (0-2cm) (µg/kg)	BS500#12-R1 (0-2cm) (µg/kg)	BS500#12-R2 (0-2cm) (µg/kg)	BS500#12-R3 (0-2cm) (µg/kg)	L.Q (µg/kg)	L.D. (µg/kg)
n-Alcanos C8 - C40						
n-C29	12	13	13	27	10	5
n-C30	<10	nd	<10	17	10	5
n-C31	16	18	17	42	10	5
n-C32	nd	nd	nd	nd	10	5
n-C33	nd	<10	nd	13	10	5
n-C34	nd	nd	nd	nd	10	5
n-C35	nd	nd	nd	nd	10	5
n-C36	nd	nd	nd	nd	10	5
n-C37	11	11	<10	19	10	5
n-C38	nd	nd	nd	nd	10	5
n-C39	nd	nd	nd	nd	10	5
n-C40	nd	nd	nd	nd	10	5



Laboratório de Ensaio acreditado
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a ABNT NBR ISO/IEC 17025.



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Resp. Téc.: **Carina Casal**

Emitido em: **29.06.2010**

Lab-nº: **10/1448D Rev 1**

Parâmetro	BS500#13-R1 (0-2cm) (µg/kg)	BS500#13-R2 (0-2cm) (µg/kg)	BS500#13-R3 (0-2cm) (µg/kg)	BS500#14-R1 (0-2cm) (µg/kg)	L.Q (µg/kg)	L.D. (µg/kg)
n-Alcanos C8 - C40						
n-C8	nd	nd	nd	nd	10	5
n-C9	nd	nd	nd	nd	10	5
n-C10	nd	nd	nd	nd	10	5
n-C11	nd	<10	nd	nd	10	5
n-C12	nd	nd	nd	nd	10	5
n-C13	nd	nd	nd	nd	10	5
n-C14	nd	nd	nd	25	10	5
n-C15	nd	<10	<10	32	10	5
n-C16	nd	<10	<10	18	10	5
n-C17	<10	<10	<10	22	10	5
Pristano	nd	nd	<10	13	10	5
n-C18	nd	nd	nd	<10	10	5
Fitano	nd	nd	11	<10	10	5
n-C19	nd	nd	nd	nd	10	5
n-C20	nd	nd	10	nd	10	5
n-C21	nd	nd	nd	<10	10	5
n-C22	nd	nd	11	nd	10	5
n-C23	nd	nd	nd	nd	10	5
n-C24	nd	nd	13	<10	10	5
n-C25	11	<10	12	nd	10	5
n-C26	nd	nd	13	<10	10	5
n-C27	nd	nd	nd	nd	10	5
n-C28	nd	nd	nd	nd	10	5



Laboratório de Ensaio acreditado
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Resp. Téc.: **Carina Casal**

Emitido em: **29.06.2010**

Lab-nº: **10/1448D Rev 1**

Parâmetro	BS500#13-R1 (0-2cm) (µg/kg)	BS500#13-R2 (0-2cm) (µg/kg)	BS500#13-R3 (0-2cm) (µg/kg)	BS500#14-R1 (0-2cm) (µg/kg)	L.Q (µg/kg)	L.D. (µg/kg)
n-Alcanos C8 - C40						
n-C29	22	12	18	<10	10	5
n-C30	19	11	25	<10	10	5
n-C31	24	26	23	10	10	5
n-C32	nd	nd	10	nd	10	5
n-C33	nd	<10	<10	nd	10	5
n-C34	nd	nd	nd	nd	10	5
n-C35	115	nd	35	<10	10	5
n-C36	nd	nd	nd	nd	10	5
n-C37	nd	<10	nd	nd	10	5
n-C38	nd	nd	nd	nd	10	5
n-C39	nd	nd	nd	nd	10	5
n-C40	nd	nd	nd	nd	10	5



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Resp. Téc.: **Carina Casal**

Emitido em: **29.06.2010**

Lab-nº: **10/1448D Rev 1**

Parâmetro	BS500#14-R2 (0-2cm) (µg/kg)	BS500#14-R3 (0-2cm) (µg/kg)	BS500#15-R1 (0-2cm) (µg/kg)	BS500#15-R2 (0-2cm) (µg/kg)	L.Q (µg/kg)	L.D. (µg/kg)
n-Alcanos C8 - C40						
n-C8	nd	nd	nd	nd	10	5
n-C9	nd	nd	nd	nd	10	5
n-C10	nd	nd	nd	nd	10	5
n-C11	<10	nd	nd	nd	10	5
n-C12	nd	nd	nd	nd	10	5
n-C13	46	nd	nd	nd	10	5
n-C14	821	64	<10	nd	10	5
n-C15	485	49	11	nd	10	5
n-C16	181	23	<10	nd	10	5
n-C17	95	11	<10	nd	10	5
Pristano	42	<10	nd	nd	10	5
n-C18	39	16	<10	nd	10	5
Fitano	23	nd	nd	nd	10	5
n-C19	57	<10	nd	nd	10	5
n-C20	nd	nd	nd	nd	10	5
n-C21	31	nd	nd	nd	10	5
n-C22	nd	nd	nd	nd	10	5
n-C23	26	nd	nd	nd	10	5
n-C24	19	nd	nd	nd	10	5
n-C25	45	<10	14	nd	10	5
n-C26	30	nd	nd	nd	10	5
n-C27	nd	nd	nd	nd	10	5
n-C28	nd	nd	nd	nd	10	5



Laboratório de Ensaio acreditado
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Boletim de Ensaio

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Resp. Téc.: **Carina Casal**

Emitido em: **29.06.2010**

Lab-nº: **10/1448D Rev 1**

Parâmetro	BS500#14-R2 (0-2cm) (µg/kg)	BS500#14-R3 (0-2cm) (µg/kg)	BS500#15-R1 (0-2cm) (µg/kg)	BS500#15-R2 (0-2cm) (µg/kg)	L.Q (µg/kg)	L.D. (µg/kg)
n-Alcanos C8 - C40						
n-C29	61	12	21	<10	10	5
n-C30	50	<10	14	nd	10	5
n-C31	89	16	23	<10	10	5
n-C32	22	nd	nd	nd	10	5
n-C33	52	nd	<10	nd	10	5
n-C34	nd	nd	nd	nd	10	5
n-C35	66	nd	nd	nd	10	5
n-C36	<10	nd	nd	nd	10	5
n-C37	24	<10	11	nd	10	5
n-C38	nd	nd	nd	nd	10	5
n-C39	nd	nd	nd	nd	10	5
n-C40	nd	nd	nd	nd	10	5



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Boletim de Ensaio

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Resp. Téc.: **Carina Casal**

Emitido em: **29.06.2010**

Lab-nº: **10/1448D Rev 1**

Parâmetro	BS500#15-R3 (0-2cm) (µg/kg)	BS500#16-R1 (0-2cm) (µg/kg)	BS500#16-R2 (0-2cm) (µg/kg)	BS500#16-R3 (0-2cm) (µg/kg)	L.Q (µg/kg)	L.D. (µg/kg)
n-Alcanos C8 - C40						
n-C8	nd	nd	nd	nd	10	5
n-C9	nd	nd	nd	nd	10	5
n-C10	nd	nd	nd	nd	10	5
n-C11	<10	nd	nd	<10	10	5
n-C12	nd	nd	nd	nd	10	5
n-C13	nd	nd	nd	nd	10	5
n-C14	<10	nd	nd	nd	10	5
n-C15	12	nd	<10	nd	10	5
n-C16	<10	nd	<10	nd	10	5
n-C17	<10	nd	<10	<10	10	5
Pristano	nd	nd	nd	nd	10	5
n-C18	<10	nd	<10	nd	10	5
Fitano	nd	nd	nd	nd	10	5
n-C19	<10	nd	<10	<10	10	5
n-C20	<10	nd	nd	nd	10	5
n-C21	nd	nd	nd	nd	10	5
n-C22	<10	nd	nd	nd	10	5
n-C23	<10	nd	nd	nd	10	5
n-C24	nd	nd	nd	nd	10	5
n-C25	nd	nd	nd	nd	10	5
n-C26	nd	nd	nd	nd	10	5
n-C27	13	<10	12	nd	10	5
n-C28	nd	nd	nd	nd	10	5



Laboratório de Ensaio acreditado
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Boletim de Ensaio

Pág. 24 de 24

Resp. Téc.: **Carina Casal**

Emitido em: **29.06.2010**

Lab-nº: **10/1448D Rev 1**

Parâmetro	BS500#15-R3 (0-2cm) (µg/kg)	BS500#16-R1 (0-2cm) (µg/kg)	BS500#16-R2 (0-2cm) (µg/kg)	BS500#16-R3 (0-2cm) (µg/kg)	L.Q (µg/kg)	L.D. (µg/kg)
n-Alcanos C8 - C40						
n-C29	14	<10	10	<10	10	5
n-C30	12	<10	<10	<10	10	5
n-C31	19	<10	13	<10	10	5
n-C32	nd	nd	nd	nd	10	5
n-C33	<10	nd	<10	nd	10	5
n-C34	nd	nd	nd	nd	10	5
n-C35	nd	nd	nd	nd	10	5
n-C36	nd	nd	nd	nd	10	5
n-C37	<10	<10	<10	<10	10	5
n-C38	nd	nd	nd	nd	10	5
n-C39	nd	nd	nd	nd	10	5
n-C40	nd	nd	nd	nd	10	5

Padrões de Controle Analítico – (PCA)

(Faixa de Aceitação: 70-130%)

Taxa de Recuperação (%)

PCA


83

FM-004-L3A – 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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