

Sak

SØKNADER 1987.

Dok.nr.	Dato	Dokument (type, tittel)	Merknader

Liste over 14C-dateringer, TUFTER.

Å 10	Reinsgjerda	Vier	Ua-***	760	100
Å 11/1	Hollo 1	Bjørk, vier	Ua-***	765	70
Å 11/2	Hollo 2	Bjørk	Ua-859	845	100
Å 17	Vallehalli	Bjørk, vier	Ua-858	1235	100
Å 27	Osestølen	Furu	Ua-853	915	75
Å 149/1	Grasbakkan 1	Vier	Ua-856	640	100
Å 149/2	Grasbakkan 2	Vier	To-1401	1070	50
Å 149/3	Grasbakkan 3	Einer	To-1402	1200	90
Å 158/2	Skardgrovi 2	Bjørk	To-1403	820	50
Å 160	Storehovda	Bjørk, vier	T-8288	780	80
Å 168/1	Staurtjørn 1	Bjørk	To-1404	930	50
Å 172	Øvre Eitretj.	Bjørk	Ua-854	940	65
Å 181/2	Grytingen 2	Bjørk	T-8289	880	80
Å 181/3	Grytingen 3	Bjørk	T-8290	750	80
Å 191	Kolsrudstølen	Bjørk	T-8291	890	60
Å 196	Skard	Furu	To-1405	1220	50
Å 500	Skarvanstølen	Bjørk, vier	Ua-***	890	100
Ho 11/1	Langegard	Bjørk	T-7970	750	40
Ho 112	Varaldset	Bjørk, einer	T-8287	750	60
Ho 136	Osmundset	Bjørk	Ua-851	970	100
Ho 138	Byrkjedalstøy.	Bjørk	Ua-855	600	75
Ho 200	Urdevassbotn	Bjørk	Ua-857	1140	95

UNIVERSITETET I OSLO

OLDSAKSAMLINGEN
FREDERIKS GATE 2, 0164 OSLO 1
TELEFON (02) 41 63 00



UNIVERSITY MUSEUM OF
NATIONAL ANTIQUITIES
FREDERIKS GATE 2, 0164 OSLO 1

KOPI

Göran Possnert,
Tandemacceleratorlaboratoriet,
Box 533,
751 21 UPPSALA,
Sverige.

OSLO, 22. mars 1988.

SAKSBEHANDLER:

DERES REF.:

VAR REF.: (BES OPPGITT VED SVAR) IL/gi

DATERINGER, HALLINGDALSPROSJEKTET.

Jeg viser til telefonsamtale mellom deg og Tom Bloch-Nakkerud den 16. mars 1988.

I 1987 fikk vi innvilget 20 dateringer. Av denne kvoten har jeg (i desember 1987) 9 prøver til datering hos deg. Tom Bloch-Nakkerud har i alt også innlevert 9 prøver. Dermed står det igjen 2 ubrukte innvilgede dateringer for 1987.

Når det dreier seg om 1988 fikk vi dessverre ikke innsendt søknadsskjema. Håper ikke det er for sent på dette tidspunkt. Som du kanskje har sett av prosjektplanen som jeg sendte deg, er vi langt på vei et dateringsprosjekt. Vi er derfor helt avhengig av et større antall dateringer både i 1988 og i 1989. Vi håper også på et samarbeid med deg når alle dateringene foreligger. Bl.a. ser vi statistiske problemstillinger med hensyn på 14C-dateringene. Vi vil antakelig også ha behov for en drøfting av callibreringene i middelalderen. Det virker som om vi har en nedgang i utnyttelsen av fjellet (jern, skinn etc.) god tid før Svartedauen (pesten) kom til Norge.

Vi håper at det er mulig å innvilge oss 20 prøver for 1988.

Med hilsen

Inge Lindblom

Vedlegg: Arsrapport for Hallingdalsprosjektet 1987.

ANSÖKNINGSBLANKETT FÖR ¹⁴C-ACCELERATORDATERING.

Projektområde(arkeologi,geologi,oceanografi etc):.....*ARKEOLOGI*.....

Kortfattad projektbeskrivning(eventuella referenser kan bifogas separat):..

.....
SE VEDLEGG
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Antal prover:.....*ca 20*.....

Provtyp(träkol,skal,gyttja,ben etc):.....*Träull cert. ben*.....

Dateringen bekostas av:.....*HALLINGDALSPROJEKTET, UNIVERSITETETS OLOSÅKSAMLING*.....

När kommer proverna att inlämnas:.....*AUGUST - SEPTEMBER*.....

Ansökarens namn:.....*INGE LINDBLOM + TOM BLOCH-NØKKERUD*.....

adress:.....*UNIVERSITETETS OLOSÅKSAMLING*
FREDRIKSGT 2
.....
0164 OSLO 1
.....

telefon:.....*02 - 41 63 00*.....

Ansökan insänds till:

Göran Possnert
Tandemacceleratorlaboratoriet
Box 533
S-751 21 Uppsala

tel.018-18 30 59

OBS

Sample collected at place UREVASSBOTN province HOL, BUSKERUD country NORWAY Lat. 60°40'45 Long., 07°43 day AUGUST 1987 by: INGE LINDBLOM address: UNIVERSITY OF OSLO MUSEUM OF NATIONAL ANTIQUITIES FREDRIKSGT 2 N-0164 OSLO 1 responsible person: INGE LINDBLOM		S1 Collector's sample code: HO 788 200 S3 S3 Submitter's suggestion for name in date list UREVASSBOTN
Sample submitted by: INGE LINDBLOM S2 day AUGUST 1987		S4 Dating to be paid with money from . LOKALHISTORIEUTVALGET FOR HAULINGDAL S4 Investigation supported by _____ _____ S5 Have any samples in this series been submitted to another lab? Yes <input type="checkbox"/> No <input type="checkbox"/> What lab:
Sample accepted without reservations L1 with reservations Doubts:		S5 Is this sample a duplicate sample? Yes <input type="checkbox"/> No <input type="checkbox"/> Earlier results:
Type of material: CHARCOAL S7 Species: BETULA Determined by . AAD SIMONSEN, STAVANGER.	Size and S8 carbon content etc.:	S6 References Author Journal Vol. year pp. Title . Author Journal Vol. year pp. Title
Association to the research problem S9 Certain <input checked="" type="checkbox"/> Almost certain <input type="checkbox"/> High probability <input type="checkbox"/> Reasonable probability <input type="checkbox"/> Low probability <input type="checkbox"/> Why is the sample submitted: TO DATE THE USE OF THE SITE.		S9 Author Journal Vol. year pp. Title
Artefacts etc. associated to the sample S10 NON		S10 Dating list no. RC P. Cover Storing Mechanical treatment Chemical treatment Amount g wet <input type="checkbox"/> moist <input type="checkbox"/> dry <input type="checkbox"/> Pretreated g After pretreatment g Combustion of g → cm Hg 10 l Repurified Diluted Measured
Pollen analytical level or zone S11 according: analyses by:		S11 Sample supposed to consist of Submersed plants? Salt water origin? Brackish water origin? Soft water origin? Hard water origin? Humus infiltration? Old carbonaceous contamination? Indication of erosion? Estimated age rate 800 BP. S1
Diatoms indicate: S12 analyses by		S12
Other correlation S13		S13
Roots in the sample? S14 Sample sieved? Sample treatment DRYING		S14

Sample collected at BYRKEDALSSTØLEN SØRE S1 place province HOL, BUSKERUD country NORWAY Lat. 60° 38' 30 Long., G. 0756 day AUGUST 1987 by: INGE LINDBLOM address: UNIVERSITY OF OSLO • MUSEUM OF NATIONAL ANTIQUITIES • FREDRIKSGT 2 • N-0164 OSLO 1 responsible person:		Collector's sample code: Ho 138 (OBS) S3 Submitter's suggestion for name in date list BYRKEDALSSTØLEN BYRKEDALSSTØLEW	
Sample submitted by: INGE LINDBLOM S2 day AUGUST 1987		Dating to be paid with money from S4 • LOKAL HISTORIEUTVALGET i HALLINGDAL Investigation supported by _____ 11 _____	
Sample accepted without reservations L1 with reservations Doubts:		Have any samples in this series S5 been submitted to another lab? Yes <input type="checkbox"/> No <input type="checkbox"/> What lab:	
Type of material: CHARCOAL S7 Species: BETA BETULA Determined by AUD SIMONSEN		Size and S8 carbon content etc.:	
Association to the research problem S9 Certain <input checked="" type="checkbox"/> Almost certain <input type="checkbox"/> High probability <input type="checkbox"/> Reasonable probability <input type="checkbox"/> Low probability <input type="checkbox"/> Why is the sample submitted: TO DATE THE USE OF THE SITE		References S6 Author Journal Vol. year pp. Title Author Journal Vol. year pp. Title	
Artefacts etc. associated to the sample S10 NON		Dating list no. RC p. L3 Cover Storing Mechanical treatment Chemical treatment Amount g wet <input type="checkbox"/> moist <input type="checkbox"/> dry <input type="checkbox"/> Pretreated g After pretreatment g Combustion of g → cm Hg 10 l Repurified Diluted Measured	
Pollen analytical level or zone S11 according: analyses by:		Sample book: S5 Year: p.:	
Diatoms indicate: S12 analyses by:		Sample supposed to consist of S15 Submersed plants? Salt water origin? Brackish water origin? Soft water origin? Hard water origin? Humus infiltration? Old carbonaceous contamination? Indication of erosion?	
Other correlation S13 Roots in the sample? S14 Sample sieved? Sample treatment DRYING.		Estimated age S16 800 BP. rate	

Sample collected at OSMUNDSET S1 place province HOL, BUSKERUD country NORWAY . Lat. 60°43' Long., 6.07°48' day AUGUST 1978 by: INGE LINDBLOM address: UNIVERSITY OF OSLO MUSEUM OF NATIONAL ANTIQUITIES FREDRIKSGT 2 N-0164 OSLO 1. responsible person: INGE LINDBLOM		Collector's sample code: HOL 136 S3 Submitter's suggestion for name in date list OSMUNDSET
Sample submitted by: INGE LINDBLOM S2 day AUGUST 1978		Date no. Result 6C¹³ Remarks S2 U- U- U-
Sample accepted without reservations CHARCOAL L1 with reservations Doubts:		Dating to be paid with money from S4 LOMRAHISTORIE UTVALGET i HILLINGDAL Investigation supported by A Have any samples in this series S5 been submitted to another lab? Yes <input type="checkbox"/> No <input type="checkbox"/> What lab: Is this sample a duplicate sample? Yes <input type="checkbox"/> No <input type="checkbox"/> Earlier results:
Type of material: S7 Species: BETULA? Determined by (LQVTRÉ)	Size and S8 carbon content etc.:	References S6 Author Journal Vol. year pp. Title Author Journal Vol. year pp. Title
Association to the research problem S9 Certain <input checked="" type="checkbox"/> Almost certain <input type="checkbox"/> High probability <input type="checkbox"/> Reasonable probability <input type="checkbox"/> Low probability <input type="checkbox"/> Why is the sample submitted: TO DATE THE USE OF THE SITE.		Dating list no. RC p. S10 Cover Storing Mechanical treatment Chemical treatment Amount g wet <input type="checkbox"/> moist <input type="checkbox"/> dry <input type="checkbox"/> Pretreated g After pretreatment g Combustion of g → cm Hg 10 l Repurified Diluted Measured
Artefacts etc. associated to the sample S10 NON		Sample supposed to consist of S15 Submersed plants? Salt water origin? Brackish water origin? Soft water origin? Hard water origin? Humus infiltration? Old carbonaceous contamination? Indication of erosion? Estimated age S16 rate 800 BP
Pollen analytical level or zone S11 according: analyses by:		Diatoms indicate: S12 analyses by
Other correlation S13 Roots in the sample? S14 Sample sieved? Sample treatment NON		

Sample collected at place GRASBAKKANE province AL, BUSKERUD country NORWAY. Lat. 60°45. Long., G.08°10' day 12/8-87 by: INGE LINDBLOM address: UNIVERSITY OF OSLO MUSEUM OF NATIONAL ANTIQUITIES FREDRIKSGT 2 N-0164 OSLO 1 responsible person: INGE LINDBLOM		S1 Collector's sample code: A-150/1 S3 Submitter's suggestion for name in date list GRASBAKKAN 1.
Sample submitted by: INGE LINDBLOM S2 day AUGUST 1987		Dating to be paid with money from LOKALHISTORIEUTVALGET FOR HALLINGDAL. S4 Investigation supported by 11 Have any samples in this series been submitted to another lab? S5 Yes <input type="checkbox"/> No <input type="checkbox"/> What lab:
Sample accepted without reservations with reservations L1 Doubts:		Is this sample a duplicate sample? Yes <input type="checkbox"/> No <input type="checkbox"/> Earlier results:
Type of material: CHARCOAL S7 Species: SALIX Determined by FUD SIMONSEN, STAVANGER	Size and S8 carbon content etc.:	References S6 Author Journal Vol. year pp. Title
Association to the research problem S9 Certain <input checked="" type="checkbox"/> Almost certain <input type="checkbox"/> High probability <input type="checkbox"/> Reasonable probability <input type="checkbox"/> Low probability <input type="checkbox"/> Why is the sample submitted: TO DATE THE USE OF THE SITE		Author Journal Vol. year pp. Title
Artefacts etc. associated to the sample S10		Dating list no. RC p. S15 Cover Storing Mechanical treatment Chemical treatment Amount g wet <input type="checkbox"/> moist <input type="checkbox"/> dry <input type="checkbox"/> Pretreated g After pretreatment g Combustion of g → cm Hg 10 l Repurified Diluted Measured
Pollen analytical level or zone S11 according: analyses by:		Sample supposed to consist of S15 Submersed plants? Salt water origin? Brackish water origin? Soft water origin? Hard water origin? Humus infiltration? Old carbonaceous contamination? Indication of erosion?
Diatoms indicate: S12 analyses by		Estimated age rate S16 800 BP.
Other correlation S13 Roots in the sample? DRYING. S14 Sample sieved? Sample treatment		

Sample collected at place OSESTØLEN province ÅL, BUSKERUD country NORWAY Lat. 60°43' Long., G. 08°12' day AUGUST 1987 by: INGE LINDBLOM address: UNIVERSITY OF OSLO MUSEUM OF NATIONAL ANTIQUITIES FREDRIKSGT 2. N-0164 OSLO 1 responsible person: INGE LINDBLOM		S1 Collector's sample code: A 27 S3 S3 Submitter's suggestion for name in date list OSESTØLEN
Sample submitted by: INGE LINDBLOM S2 day August 1987		S2 Dating to be paid with money from LOKALHISTORIEUTVALGET FOR HALLINGDALE Investigation supported by 11 S4 S5 Have any samples in this series been submitted to another lab? Yes <input type="checkbox"/> No <input type="checkbox"/> What lab:
Sample accepted without reservations CHARCOAL L1 with reservations Doubts:		L1 Is this sample a duplicate sample? Yes <input type="checkbox"/> No <input type="checkbox"/> Earlier results:
Type of material: S7 Species: LØVTRE Determined by	Size and S8 carbon content etc.:	S6 References Author Journal Vol. year pp. Title
Association to the research problem S9 Certain <input checked="" type="checkbox"/> Almost certain <input type="checkbox"/> High probability <input type="checkbox"/> Reasonable probability <input type="checkbox"/> Low probability <input type="checkbox"/> Why is the sample submitted: LØVTRE TO DATE THE USE OF THE SITE.		S9 Author Journal Vol. year pp. Title
Artefacts etc. associated to the sample S10 Non		S10 Dating list no. RC P. Cover Storing Mechanical treatment Sample book: Year: P.:
Pollen analytical level or zone S11 according: analyses by:		S11 Chemical treatment Amount g wet <input type="checkbox"/> moist <input type="checkbox"/> dry <input type="checkbox"/> Pretreated g After pretreatment g Combustion of g → cm Hg 10 l Repurified Diluted Measured
Diatoms indicate: S12 analyses by		S12 Sample supposed to consist of Submersed plants? Salt water origin? Brackish water origin? Soft water origin? Hard water origin? Humus infiltration? Old carbonaceous contamination? Indication of erosion?
Other correlation S13 Roots in the sample? S14 Sample sieved? Sample treatment NON		S13 S14 Estimated age rate 200 BP.

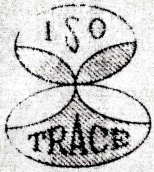
Sample collected at <i>TVIST</i> place province <i>ÅL, BUSKERUD</i> country <i>NORWAY</i> Lat. <i>60°44'</i> Long. <i>08°10'</i> day <i>AUGUST 1987</i> by: <i>INGE LINDBLOM</i> address: <i>UNIVERSITY OF OSLO</i> <i>MUSEUM OF NATIONAL ANTIQUITIES</i> <i>FREDRIKSGT 2</i> <i>N-0164 OSLO 1</i> responsible person: <i>INGE LINDBLOM</i>		S1 Collector's sample code: <i>A 11 / 5</i> S3 Submitter's suggestion for name in date list <i>TVIST 5</i>
Sample submitted by: <i>INGE LINDBLOM</i> S2 day <i>AUGUST 1987</i>		Dating to be paid with money from <i>LOKALHISTORIEUTVALGET I HALLINGDAL</i> S4 Investigation supported by <i>11</i> Have any samples in this series been submitted to another lab? Yes <input type="checkbox"/> No <input type="checkbox"/> What lab: Is this sample a duplicate sample? Yes <input type="checkbox"/> No <input type="checkbox"/> Earlier results:
Sample accepted without reservations L1 with reservations Doubts:		S5 References Author Journal Vol. year pp. Title
Type of material: <i>CHARCOAL</i> S7 Species: <i>BETULA</i> Determined by <i>AND SIMONSEN, STAVANGER</i>	Size and S8 carbon content etc.:	Author Journal Vol. year pp. Title
Association to the research problem S9 Certain <input checked="" type="checkbox"/> Almost certain <input type="checkbox"/> High probability <input type="checkbox"/> Reasonable probability <input type="checkbox"/> Low probability <input type="checkbox"/> Why is the sample submitted: <i>TO DATE THE USE OF THE</i> <i>SITE</i>		Author Journal Vol. year pp. Title
Artefacts etc. associated to the sample S10 <i>NON</i>		Dating list no. RC P. Cover Storing Mechanical treatment Chemical treatment Amount g wet <input type="checkbox"/> moist <input type="checkbox"/> dry <input type="checkbox"/> Pretreated g After pretreatment g Combustion of g → cm Hg 10 l Repurified Diluted Measured
Pollen analytical level or zone S11 according: analyses by:		Sample supposed to consist of S15 Submersed plants? Salt water origin? Brackish water origin? Soft water origin? Hard water origin? Humus infiltration? Old carbonaceous contamination? Indication of erosion?
Diatoms indicate: S12 analyses by		Estimated age S16 <i>800 BP.</i> rate
Other correlation S13 Roots in the sample? S14 Sample sieved? Sample treatment <i>DRYING</i>		

Sample collected at S1 place Vadvatnet, Fausko og Brandvol, 82, 83 province Hemsedal, Buskerud country Norway Lat. 60° 58' N Long., c. 08° 27' E day 18.08.1987 by: Tom Bloch-Nakkerud address: University of Oslo . Museum of National Antiquities . Frederiks gate 2 . N-0164 Oslo 1 responsible person: Tom Bloch-Nakkerud		Collector's sample code: He 30 S3 Submitter's suggestion for name in date list Vadvatnet
Sample submitted by: S2 . Tom Bloch-Nakkerud . . day 23.08.1987		Dating to be paid with money from S4 . Lokalhistorieutvalget for Hallingdal Investigation supported by . Lokalhistorieutvalget for Hallingdal Have any samples in this series S5 been submitted to another lab? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> What lab:
Sample accepted without reservations L1 with reservations Doubts:		Is this sample a duplicate sample? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Earlier results:
Type of material: S7 . Wood	Size and S8 carbon content etc.:	References S6 Author Journal Vol. year pp. Title
Association to the research problem S9 Certain <input type="checkbox"/> Almost certain <input checked="" type="checkbox"/> High probability <input type="checkbox"/> Reasonable probability <input type="checkbox"/> Low probability <input type="checkbox"/> Why is the sample submitted: To date the death of wood used as cover over a reindeer pitfall.		Author Journal Vol. year pp. Title
Artefacts etc. associated to the sample S10 Sample collected from the lowermost part of a 10 cm thick layer on flat stone in bottom.		Dating list no. RC P. L3 Cover Storing Mechanical treatment Chemical treatment Amount g wet <input type="checkbox"/> moist <input type="checkbox"/> dry <input type="checkbox"/> Pretreated g After pretreatment g
Pollen analytical level or zone S11 . . according: analyses by:		Combustion of g + cm Hg 10 l Repurified Diluted Measured
Diatoms indicate: S12 . . analyses by		Sample supposed to consist of S15 Submersed plants? Salt water origin? Brackish water origin? Soft water origin? Hard water origin? Humus infiltration? Old carbonaceous contamination? Indication of erosion?
Other correlation S13 .		Estimated age 1500-600 years S16 rate
Roots in the sample? S14 Sample sieved? Sample treatment Pieces of wood (some with bark) picked by hand.		

Sample collected at EITRETJERN S1 place province ÅL, BUSÄRVO country NORWAY Lat. 60°44' Long., G.D.B. 15' day 28/9-87 by: BIRTHE WEBER. address: UNIVERSITY OF OSLO . MUSEUM OF NATIONAL ANTIQUITIES . FREDRINGSGT 2 . N-0164 OSLO 1. responsible person: INGE LINDBLOM		Collector's sample code: ÅL 172 S3 Submitter's suggestion for name in date list EITRETJERN
Sample submitted by: INGE LINDBLOM S2 day SEPTEMBER 1987		Date no. Result 6C¹³ Remarks L2 U- U- U-
Sample accepted without reservations L1 with reservations Doubts:		Dating to be paid with money from S4 . LOKAL HISTORIEUTVALGET I HALLINGDAL. Investigation supported by 11 Have any samples in this series S5 been submitted to another lab? Yes <input type="checkbox"/> No <input type="checkbox"/> What lab:
Type of material: CHARCOAL S7 Species: BETULA (ALNUS) Determined by		Size and S8 carbon content etc.: References S6 Author Journal Vol. year pp. Title
Association to the research problem S9 Certain <input checked="" type="checkbox"/> Almost certain <input type="checkbox"/> High probability <input type="checkbox"/> Reasonable probability <input type="checkbox"/> Low probability <input type="checkbox"/> Why is the sample submitted: TO DATE THE USE OF THE SITE.		Author Journal Vol. year pp. Title
Artefacts etc. associated to the sample S10 IRON ARTEFACTS.		Dating list no. RC P. Cover Storing Mechanical treatment Chemical treatment Amount g wet <input type="checkbox"/> moist <input type="checkbox"/> dry <input type="checkbox"/> Pretreated g After pretreatment g Combustion of g + cm Hg 10 l Repurified Diluted Measured
Pollen analytical level or zone S11 according: analyses by:		Sample supposed to consist of S15 Submersed plants? Salt water origin? Brackish water origin? Soft water origin? Hard water origin? Humus infiltration? Old carbonaceous contamination? Indication of erosion?
Diatoms indicate: S12 analyses by:		Estimated age S16 rate 800 BP.
Other correlation S13 Roots in the sample? S14 Sample sieved? NO Sample treatment		

Sample collected at place GRAVABOTTEN province ÄL, BUSKERUO country NORWAY Lat. 60°49' Long., G. 08°17' day 28/9-87 by: OLA ELLINGSGARD, ÄL. address: UNIVERSITY OF OSLO MUSEUM OF NATIONAL ANTIQUITIES FREDRIKSGT 2 N-0164 OSLO 1 responsible person: INGE LINOBLOM		S1 Collector's sample code: Ä 151 S3 Smitter's suggestion for name in date list GRAVABOTTEN
Sample submitted by: INGE LINOBLOM S2 Dating to be paid with money from LOKALHISTORIEUTVALGET I HALLINGDAL. S4 Investigation supported by II		
day AUGUST 1987 S5 Have any samples in this series been submitted to another lab? Yes <input type="checkbox"/> No <input type="checkbox"/> What lab:		
Sample accepted without reservations L1 with reservations Doubts:		
Type of material: CHARCOAL S7 Species: BETULA Determined by	Size and S8 carbon content etc.: References S6 Author Journal Vol. year pp. Title	
Association to the research problem S9 Certain <input type="checkbox"/> Almost certain <input checked="" type="checkbox"/> High probability <input type="checkbox"/> Reasonable probability <input type="checkbox"/> Low probability <input type="checkbox"/> Why is the sample submitted: TO DATE THE USE OF THE SITE		
Artefacts etc. associated to the sample S10 NON		
Pollen analytical level or zone S11 according: analyses by:		
Diatoms indicate: S12 analyses by		
Other correlation S13 Roots in the sample? S14 Sample sieved? Sample treatment Noa.		
Dating list no. RC P. Cover Storing Mechanical treatment Chemical treatment Amount g wet <input type="checkbox"/> moist <input type="checkbox"/> dry <input type="checkbox"/> Pretreated g After pretreatment g Combustion of g → cm Hg 10 l Repurified Diluted Measured Sample supposed to consist of Submersed plants? Salt water origin? Brackish water origin? Soft water origin? Hard water origin? Humus infiltration? Old carbonaceous contamination? Indication of erosion? Estimated age rate 800 BP. S		

<p>Sample collected at place VALLEHALLI province AL, BUSKERUD country NORWAY Lat. 60°45'50 Long., E. 08°06 day AUGUST 1987 by: INGE LINDBLOM address: UNIVERSITY OF OSLO MUSEUM OF NATIONAL ANTIQUITIES FREDRIKSGT 2 N-0164 OSLO 1 responsible person: INGE LINDBLOM</p>	<p>S1 Collector's sample code: <u>A 17</u> S3</p>
<p>Sample submitted by: INGE LINDBLOM S2</p>	<p>Submitter's suggestion for name in date list <u>VALLEHALLI</u></p>
<p>day AUGUST 1987.</p>	<p>Date no. Result <u>6C¹³</u> Remarks L2 U- U- U-</p>
<p>Sample accepted without reservations L1 with reservations Doubts:</p>	<p>Dating to be paid with money from S4 <u>LOKALHISTORIEUTVALGET FOR HALLINGDAL</u> Investigation supported by <u>11</u></p>
<p>Type of material: (WOOD) CHARCOAL S7 Species: BETULA, SALIX. Determined by AUG SIMONSEN, STAVANGER.</p>	<p>Size and S8 carbon content etc.: References S6 Author Journal Vol. year pp. Title Author Journal Vol. year pp. Title</p>
<p>Association to the research problem S9 Certain <input type="checkbox"/> Almost certain <input type="checkbox"/> High probability <input checked="" type="checkbox"/> Reasonable probability <input type="checkbox"/> Low probability <input type="checkbox"/> Why is the sample submitted: TO DATE THE USE OR THE SIZE.</p>	<p>Dating list no. RC P. Cover Storing Mechanical treatment Chemical treatment Amount g wet <input type="checkbox"/> moist <input type="checkbox"/> dry <input type="checkbox"/> Pretreated g After pretreatment g Combustion of g → cm Hg 10 l Repurified Diluted Measured Sample supposed to consist of S1</p>
<p>Artefacts etc. associated to the sample S10 <u>NON</u></p>	<p>Submersed plants? Salt water origin? Brackish water origin? Soft water origin? Hard water origin? Humus infiltration? Old carbonaceous contamination? Indication of erosion?</p>
<p>Pollen analytical level or zone S11 according: analyses by: S12</p>	<p>Estimated age <u>800 BP</u> S1 rate</p>
<p>Diatoms indicate: S13 analyses by S14 Other correlation Roots in the sample? Sample sieved? Sample treatment <u>Drying</u></p>	<p>Estimated age <u>800 BP</u> S1 rate</p>



ISOTRACE LABORATORY ANALYTICAL SERVICES

RADIOCARBON SAMPLE SUBMISSION FORM

For IsoTrace use only

Sheet 1 of

Date Received:

Project Name:

Sample Code:

Location:

General Instructions

Please type or print; check appropriate boxes.
If space is insufficient append additional pages.
Please append any already existing sample data sheets.
For additional information, telephone (416) 978-2241

Return this form with the sample to:

IsoTrace Laboratory - Sample Preparation
University of Toronto
60 St. George Street
Toronto, Canada M5S 1A7

Submitter's Name:

INGE LINDBLOM

Submitter's Sample Number:

Å168/1, Å196
Å39a, Å149/2, Å149/3, Å1586, Å199

Sample Material: (include species name if possible)

CHARCOAL (See Bag's) BIRCH, PINE, SALIX, JUNIPER

Weight of Sample Submitted:

Sample Collector:

INGE LINDBLOM

Date of Collection:

AUGUST 1988

Sample Identifier:

AUD SIMONSEN

Number of Machine-ready Samples to be analysed:
(Consult price list)

Can the entire sample as submitted be used for dating? Yes No

If all the sample cannot be used, please add any special sectioning instructions on a sketch or photo of the sample.

Should any unused sample material be returned? Yes No

Estimated age or age range and basis for estimate:

600 - 1100 BP.

Have you other datable material from the same horizon? Yes No from adjacent horizons? Yes No
Describe briefly (type of material, degree of association to submitted sample).

Significance of this particular sample; reason for dating.

Have you submitted, or do you plan to submit, samples dating the same event to another laboratory? Yes No
If so, we would appreciate receiving the results for our records.



Geographic location - country: **NORWAY** - specific site:
BUSKERUD, ÅL.

- latitude: - longitude: - elevation

* ~~TURN~~ **TURN THE SHEET!**

Site Description (e.g. grave, dwelling, river bed, lake floor)

DWELLING, OPEN.

Local Stratigraphy: please append a sketch showing the sample position relative to the major strata at the site. Give special attention to carbon-containing layers.

Sample Location - on present surface - or buried 0.10-0.20 metres below surface.

- or partly exposed . Indicate on the above sketch which parts were exposed or buried.

Presence of possible sources of contamination in the local environment:

volcanoes hot springs high pollution area area or high pesticide use

other phenomena which may cause anomalous dates (specify)

Details of the immediate environment in which the sample was found:

- material (soil, sand, clay)

SOIL/SAND

- indicate the presence of the following carboniferous materials:

vegetation , humus , charcoal , carbonates (hard water marks)

other (specify)

- additional details:

Possible contaminants evident on or in the sample itself when found:

root penetration , microbial growth , animal activity , unusual odours ,

deposits, encrustations , other (specify)

additional details:

History of water contact with the sample:

little or no exposure to water , constant or near constant immersion in water ,

periodic wetting and drying (intermittent rains and/or flooding)

additional details:



History of temperature in sample environment:

primarily freezing , periodic freezing and thawing , primarily temperate ,
tropical , desert-like ; additional details:

Post collection history of the sample:

Describe any washing or cleaning performed. If contaminants (e.g. rootlets) were removed, describe how.

COLD WATER

Describe any drying carried out (method, temperature, duration).

AIR DRYING

List any chemical agents applied to sample (e.g. preservatives). Give chemical composition and/or trade name.

Describe sample storage (location, duration, packaging).

Please supply any other available information about the sample below and on additional sheets if necessary.