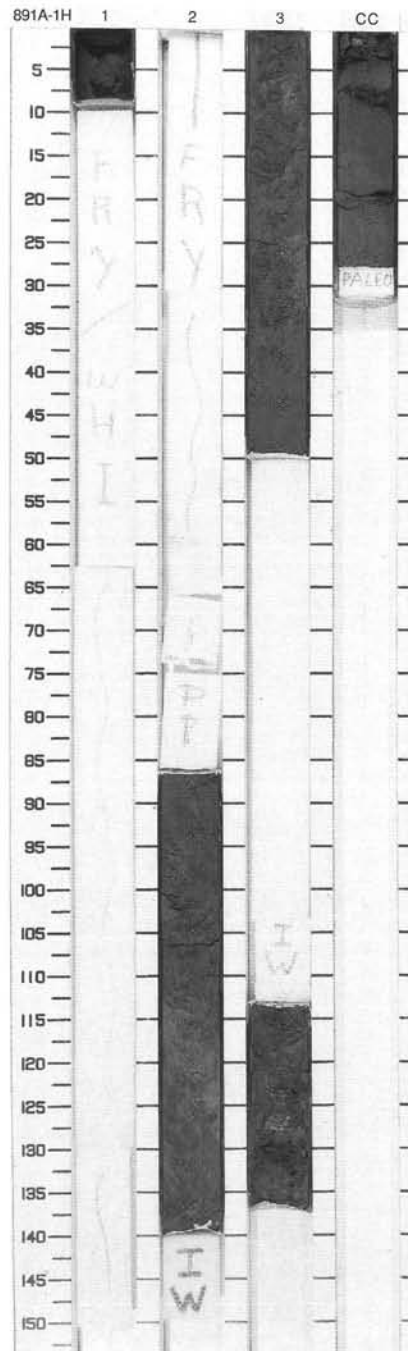


Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0-1		1				S	W	SILT
1-2		1				WW		<p>Major Lithology: SILT, varying colors from very dark gray to very dark greenish gray and very dark olive gray (0.1GY 2.7/1.0 to 6.7GY 3.0/0.7 and 8Y 2.5/0.5 to 10Y 2.9/0.8), observed as irregular patches or layers. Greenish layers are enriched in diatoms (up to 50%), while very dark gray layers contain carbonate (bioclasts and dolomite grains). Small amounts of medium to coarse sand occur at Section 2, 110–114 cm, and Section 3, 119–125 cm. Layers of well-rounded pebbles are present at Section 3, 129–130 cm, and in the Core Catcher, 0–3 cm, and in the Core Catcher, 7–9 cm. Hard rock pebbles (quartzite) range from 0.2 to 2 cm in diameter.</p> <p>General Description: Sediment recovered in Core 146-891A-1H mainly consists of silt of varying gray color. Convolute lamination, patches, and disturbed layers of very fine sand are common. Very thin (a few mm) sand and thin (&lt;3 cm) pebbly layers are observed in Sections 2, 3, and Core Catcher. Mud clasts are present in Section 3, 22 cm and 40 cm.</p>
2-3		2				W		
3-3.5		2				W		
3.5-4		2				W		
4-4.7		2				W		
0-1		3				I	9.2Y 3.4/0.4	
1-2		3				I	0.1G 2.7/1.0	
2-3		3				W		
3-4		3				W <sub>1</sub>		
4-4.7		CC				S S M	1.3GY 3.1/0.4 to 10.0Y 2.9/0.8	



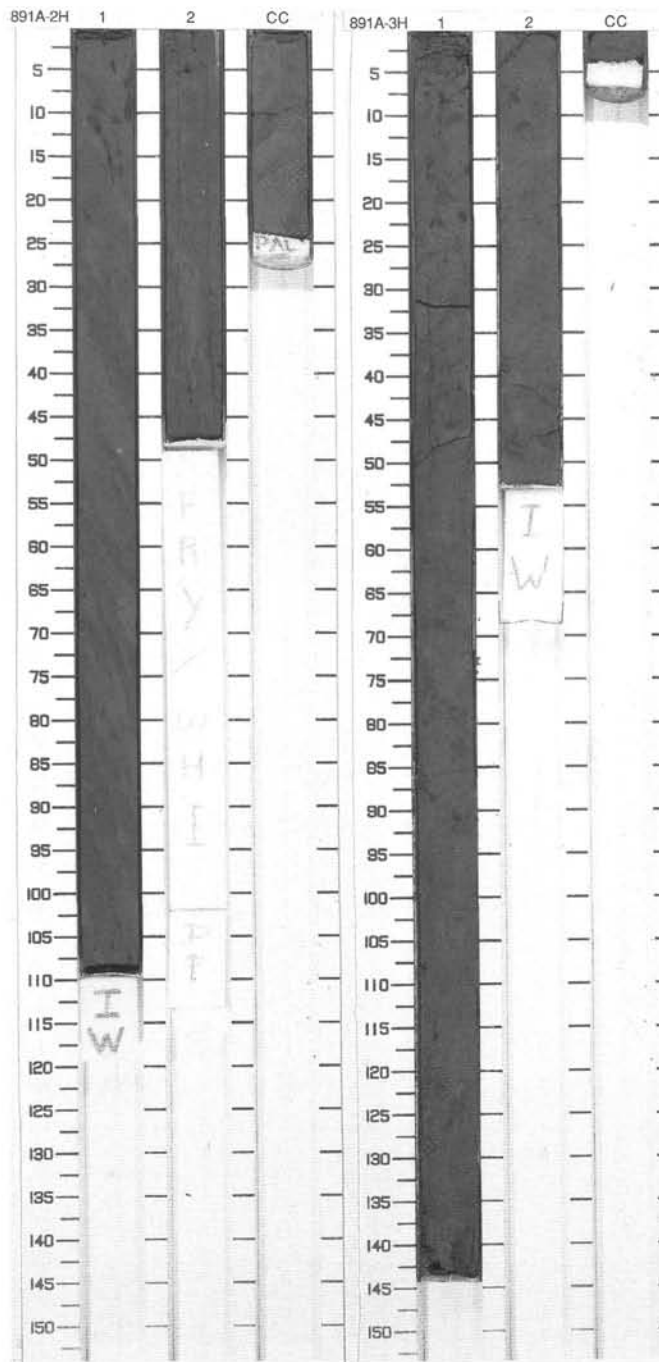
SITE 891 HOLE A CORE 2H CORED 4.7- 7.3 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Hatched pattern]	1	Pleistocene	S	I	S	2.4GY	<p>CLAYEY SILT</p> <p>Major Lithology: Firm CLAYEY SILT of very dark gray to very dark greenish or olive gray color (9.1Y 2.3/0.7 to 2.4GY 3.1/0.6), with inclined layers and convolute lamination. Clayey silt bears highly variable amounts of carbonate (3% to 8%) and contains black sulfide in disseminated patches. White aggregates of siliceous sponge spicules and foraminifer shells are observed throughout Sections 1 and 2. Some micaceous silt patches are mixed with very fine sand.</p> <p>General Description: Core 146-891A-2H consists of clayey silt of varying gray colors with fine sand patches and white aggregates of foraminifers and sponge spicules. Tilting and convolute lamination are observed.</p>
1	[Hatched pattern]	1					3.1/0.6 to 0.3GY	
1	[Hatched pattern]	1	3.2/0.4					
2	[Hatched pattern]	2	9.1Y					
2	[Hatched pattern]	2	2.3/0.7					
		CC				9.9Y		
						2.7/0.5		

SITE 891 HOLE A CORE 3H CORED 7.3 - 9.5 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Dotted pattern]	1	Pleistocene	S	I	M	0.5GY	<p>CLAYEY SILT and SILTY TO VERY FINE SAND</p> <p>Major Lithologies: Firm CLAYEY SILT of very dark greenish gray to dark olive gray color (0.5GY 2.8/0.7 to 8.3Y 2.9/0.5) dominates sediment of Section 1, 0-50 cm. Convolute lamination and patches of sand (Section 1, 2-3 cm and 24-26 cm) and black sulfide disseminations are found in this interval. SILTY TO VERY FINE SAND, olive black (4.9Y 2.0/0.5 to 5.2Y 1.7/0.5), structureless, very soupy, occurs with sharp and inclined upper contact below Section 1, 50 cm. Sand grains are well rounded and consist of gray (quartz, feldspar) and black (rock fragments, volcanic glass, and opaques) material.</p>
1	[Dotted pattern]	1					2.8/0.7	
2	[Dotted pattern]	2				5GY		
						2.3/0.4		

891B 1X THROUGH 3X Entire core given to paleontologist.



SITE 891 HOLE B CORE 4X CORED 29.6 - 38.4 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
			Pleistocene					<p>CLAYEY SILT</p> <p>Major Lithology: Structureless, very dark greenish gray (6GY 3.0/0.7) CLAYEY SILT with fragments of carbonate-cemented sand, highly disturbed by drilling.</p> <p>General Description: 5 cm recovery. 4 cm were sampled for interstitial water, microbiology, and head-space samples. A smear slide at 1 cm was described.</p>

891B 5X NO RECOVERY

891B 6X Entire core given to paleontologist.

891B 7X Entire core given to paleontologist.

SITE 891 HOLE B CORE 8X CORED 65.2 - 74.1 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1	Pleist.			S MI		<p>CLAYEY SILT and CLAYEY SILT AND SAND</p> <p>Major Lithologies: CLAYEY SILT, very dark greenish gray (9.4GY 2.5/1.1) with patches of fine to medium sand. It occurs from 0 cm to 7 cm. CLAYEY SILT and SAND, very firm, very fine beds (2 mm to 4 mm thick) of greenish black (9.3 GY 2.1/1.3) clayey silt and fine sand, normally graded and laminated on a mm scale. Matrix of both lithologies shows reaction with HCl.</p>

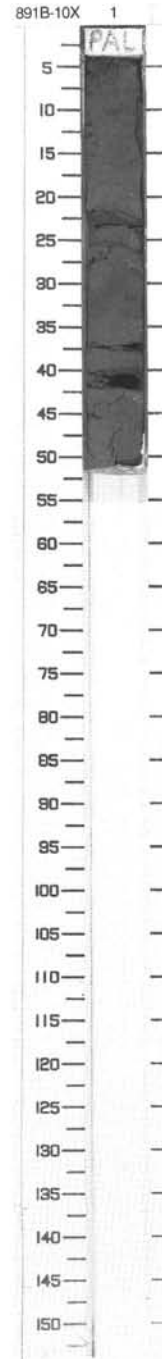
891B 9X NO RECOVERY



## SITE 891 HOLE B CORE 10X

CORED 83.1 - 92.0 mbsf

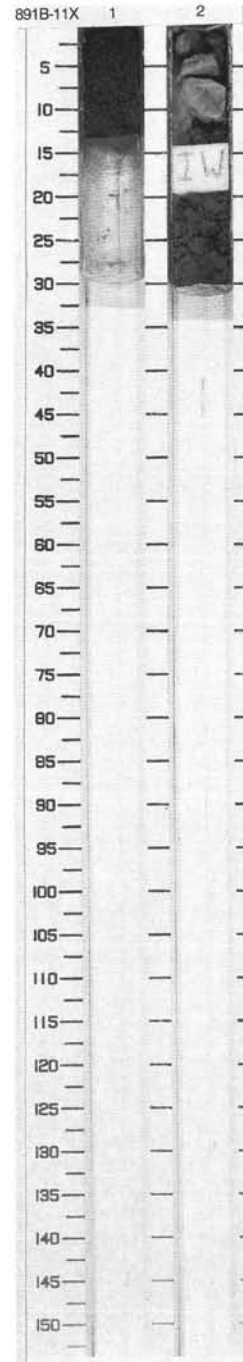
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1	Pleist		○ -	M S	8.1GY 2.1/0.6	<p>SAND, CLAYEY SILT and GRAVEL</p> <p>Major Lithologies: FINE SAND and GRAVEL, structureless greenish black (8.1GY 2.1/0.6) occurs from 0 cm to 13 cm. Gravel grains are randomly distributed in the sand and consist of chert, claystone, and quartzite. Maximum size of grains is 4 mm. FINE SAND and CLAYEY SILT, greenish gray (5.2GY 5.1/0.7), with very fine interbedding, occur from 13 cm to 22 cm. SILTY SAND and VERY FINE SAND, greenish gray (5.2GY 5.1/0.7), very firm, poorly laminated, occur from 22 cm to 51 cm.</p> <p>General Description: The finest fraction of the sediment shows reaction to HCl.</p>



Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		2	Pleist.	⌘ ◆ ⊕	S	M	2.3G 1.9/1.4	SAND, CARBONATE CONCRETIONS, and MUD CLASTS
	Void							<p>Major Lithologies: SAND, olive black (2.3G 1.9/1.4), moderately sorted, occurs from 0 cm to 13 cm. Subangular grains are represented by quartz, quartzite, siltstone, chert, rock fragments, and volcanic rock fragments. CARBONATE CONCRETIONS are dolomitic, very dark greenish gray (7.5GY 3.1/0.7), angular to subangular in shape and reach about 6 cm in size. Slight to moderate bioturbation is present. MUD CLASTS are composed of greenish siltstone in a carbonate-bearing soft matrix.</p> <p>General Description: Section 146-891B-11X-1 was recovered with the WSTP probe after a WSTP run immediately before this core.</p>

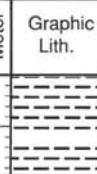
891B 12N NO RECOVERY

891B 13X NO RECOVERY



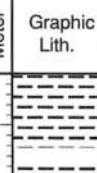

## SITE 891 HOLE B CORE 14X

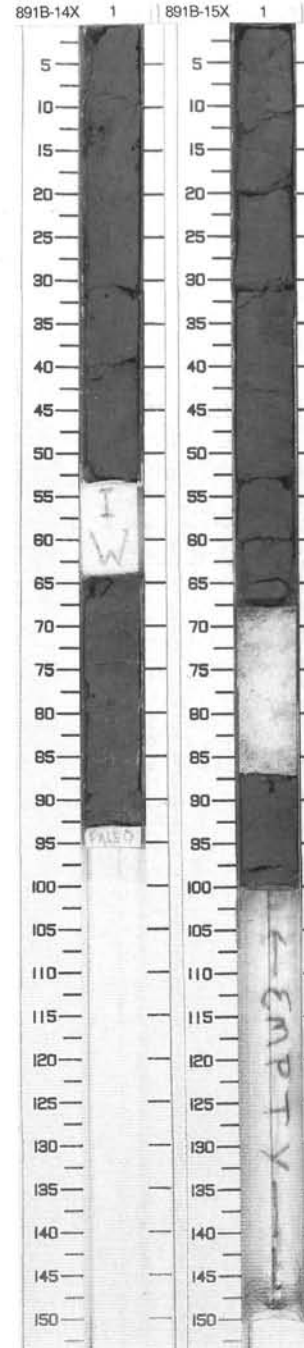
CORED 109.5 - 118.4 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1	Pleistocene		www	S I S M	6.9GY 3.2/0.8	<p>CLAYEY SILT</p> <p>Major Lithology: CLAYEY SILT, very dark greenish gray (6.9GY 3.2/0.8). Shows weak reaction to HCl: carbonate content estimated at 20% in smear slide at 87 cm. Up to 2 cm-thick beds of coarse sand and gravel are present (less than 10% of the section).</p> <p>Minor Lithology: COARSE SAND and PEBBLES, distributed in clayey silt either as patches or within drilling biscuits and pseudolayers. Subangular polymictic pebbles of basalt, carbonate, and quartz.</p> <p>General Description: Origin of plastic deformation (kneading of coarse sand and pebbles into silt) is unclear: either original structure or drilling disturbance.</p>

## SITE 891 HOLE B CORE 15X

CORED 118.4 - 127.3 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1	Pleistocene		www	S I W S M	6.6GY 3.6/0.7	<p>CLAYEY SILT</p> <p>Major Lithology: CLAYEY SILT, very dark greenish gray (6.6GY 3.6/0.7), with sandy layers and carbonate-cemented sand.</p> <p>Minor Lithologies: SAND, very dark greenish gray (similar in color to the clayey silt). Fine micaceous sand with ripple lamination occurs from 10 cm to 37 cm. Coarser sand, sometimes with mica and rock fragments, is present in Section 1, 42-46 cm, 49 cm, and 55-56 cm. CARBONATE-CEMENTED SAND, dark gray, is observed as angular pieces in Section 1, at 5 cm, 9 cm, and 92-100 cm.</p>



SITE 891 HOLE B CORE 16X

CORED 127.3 - 136.2 mbsf

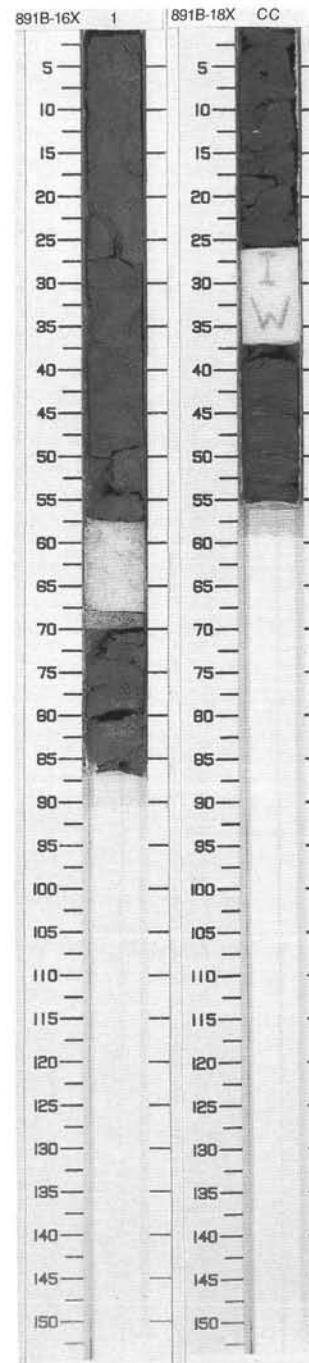
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1	Pleist.			S I SM	7.1GY 3.1/0.9	<p>CLAYEY SILT</p> <p>Major Lithology: CLAYEY SILT, very dark greenish gray (7.1GY 3.1/0.9), finely laminated, with 1 cm-thick sandy layers (less than 10% of the section).</p> <p>Minor Lithology: CARBONATE-CEMENTED SILTY SAND, dark gray, very finely laminated, with black sandy particles.</p> <p>General Description: The sediment is moderately to very disturbed by drilling. Relicts of original lamination, contorted bedding and microfaults can be identified.</p>

891B 17X NO RECOVERY

SITE 891 HOLE B CORE 18X




CORED 148.1 - 153.9 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		CC	Pleist.			S I M	7.4GY 3.0/0.9	<p>SAND-SILT-CLAY</p> <p>Major Lithology: SAND-SILT-CLAY, dark olive gray (7.4Y 3.0/0.9). Relict cross- and parallel-lamination can be identified as original structure of the sediment. The coarsest sand grains reach 1 mm in size.</p> <p>General Description: The sediment is strongly disturbed and homogenized by the formation of drilling biscuits.</p>



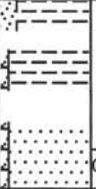


## SITE 891 HOLE B CORE 19X

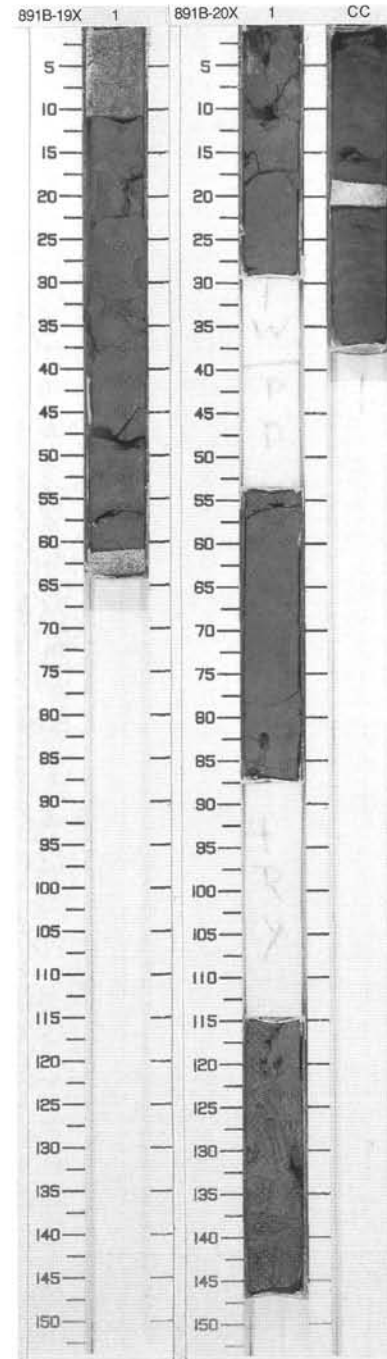
CORED 153.9 - 162.7 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1	Pleist.			S M	6.8GY 3.5/0.7	<p>SILTY CLAY and CLAYEY SILT</p> <p>Major Lithologies: SILTY CLAY and CLAYEY SILT, very dark greenish gray (6.8GY 3.5/0.7) with ripple marks and inclined bedding.</p> <p>Minor Lithology: Very fine SAND (about 10% of the section) is mixed with the finer components.</p> <p>General Description: The sediment is strongly disturbed and homogenized by the formation of drilling biscuits. Faults are present in the biscuits.</p>

## SITE 891 HOLE B CORE 20X

CORED 162.7 - 171.6 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1	Pleistocene			I S W W S M	6.4GY 3.4/0.8  7.7GY 3.2/0.8	<p>CLAYEY SILT and SILTY SAND</p> <p>Major Lithologies: CLAYEY SILT, very dark greenish gray (6.4GY 3.4/0.8), structureless, very firm but not cemented. SILTY SAND, very dark greenish gray (7.7GY 3.2/0.8), slightly cemented by carbonates, with ripple laminations and microfaults. Disseminated pyrite occurs in silt at Section CC, 23 cm. Dolomite is present as a proportion between 6% and 15% of components in the smear slides.</p> <p>General Description: The sediment is strongly disturbed and homogenized by the formation of drilling biscuits.</p>



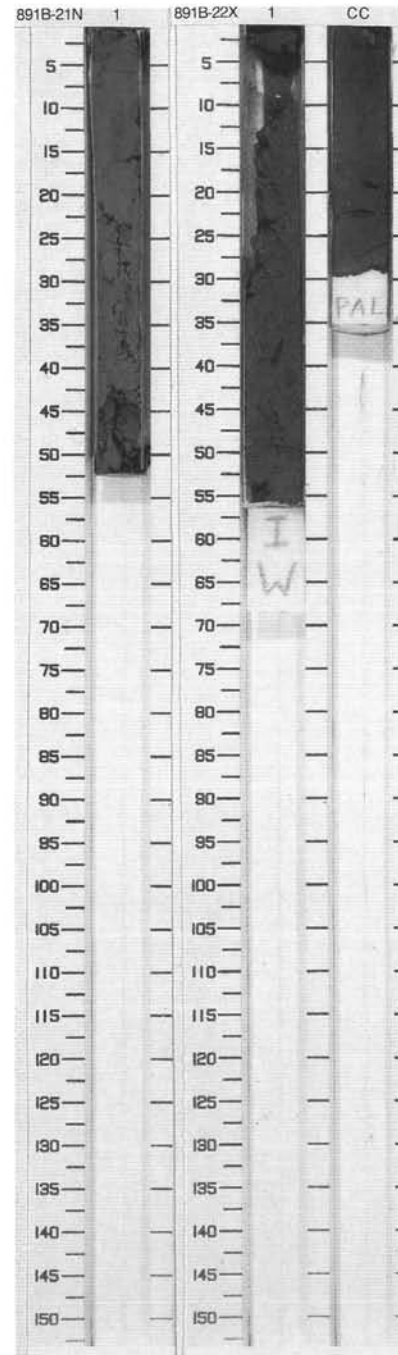


SITE 891 HOLE B CORE 21N CORED 171.6 - 176.1 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1	Pleist.	X	W	S M	7.3GY 3.2/0.9	CLAYEY SILT and SAND  Major Lithologies: CLAYEY SILT, dark olive gray (7.3GY 3.2/0.9) firm, structureless, with patches of micaceous sand. Medium SAND, greenish black (0.3G 2.0/1.6) well consolidated, fragmented into pieces up to 4 cm in size.  General Description: The sediment is strongly disturbed by drilling.

SITE 891 HOLE B CORE 22X CORED 176.1 - 180.5 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1	Pleistocene		--	S I S M	7.9GY 2.7/1.2 to 8.5GY 2.4/1.3	SANDY SILT  Major Lithology: SANDY SILT, very dark olive gray (7.9GY 2.7/1.2 to 8.5GY 2.4/1.3), structureless, very poorly sorted.  Minor Lithology: SAND, structureless, containing light gray quartz and feldspar and dark gray to black basalt, chert, quartzite fragments, and mica flakes. The matrix shows no reaction to HCl.  General Description: The poor sorting of the sediment is likely due to drilling disturbance.



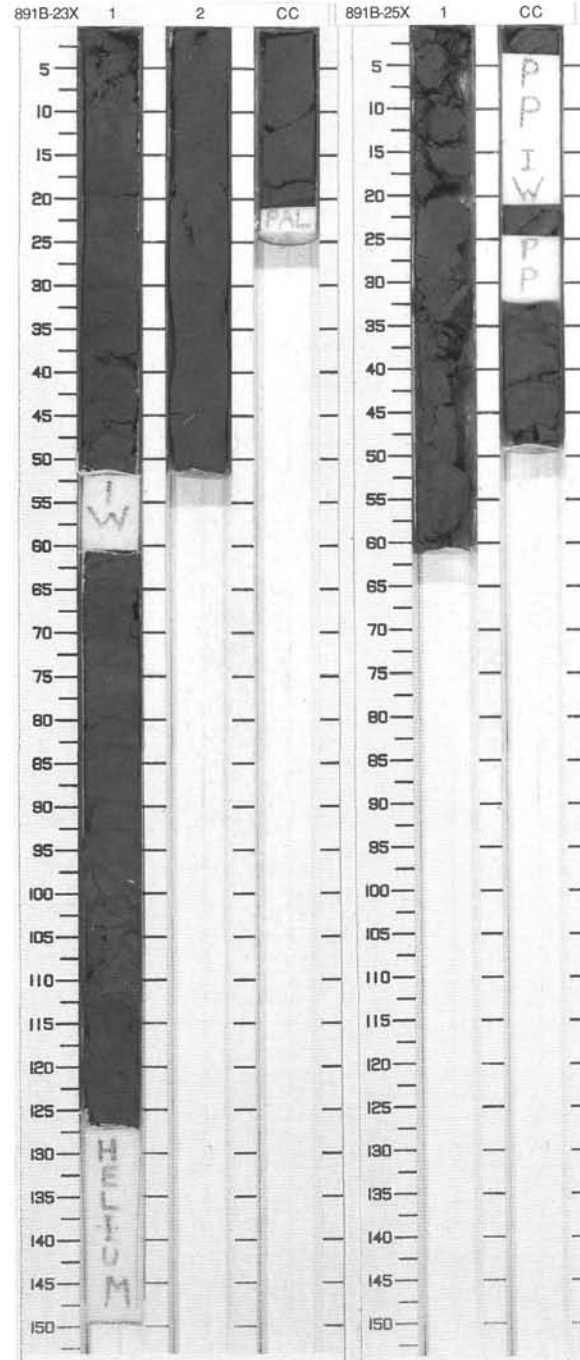
SITE 891 HOLE B CORE 23X CORED 180.5 - 189.4 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Hatched pattern]	1	Pleistocene	X	WWW	S	6.6GY 3.1/1.1	CLAYEY SILT and SANDY SILT  Major Lithologies: CLAYEY SILT, very dark greenish gray (6.6GY 3.1/1.1), soft, plastic, with sand contamination from other parts of the hole. Plant fragments are restricted to thin chains in Section 1, 103-110 cm. SANDY SILT, dark greenish gray (5.5GY 3.5/0.7), with needle-like wood fragments, oriented vertically in Section 2. Weak reaction with HCl.  General Description: Sediments are very disturbed by drilling biscuits, pseudolayers, and contamination.
2	[Dotted pattern]	2					5.5GY 3.5/0.7	
CC	[Dotted pattern]	CC					5.5GY 3.5/0.7	

891B 24X NO RECOVERY

SITE 891 HOLE B CORE 25X CORED 198.2 - 207.1 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Hatched pattern]	1	Pleistocene	X	WWW	S	5.6GY 3.3/0.8	CLAYEY SILT WITH SAND  Major Lithology: CLAYEY SILT WITH SAND, very dark greenish gray (5.6GY 3.3/0.8), fractured into individual fragments, with small wood fragments in Section 1, 18 cm and CC, 31-49 cm. In Section 1, 20-28 cm the sediment is more plastic, with higher sand content (black particles) and mica.  General Description: Sediment is very disturbed by drilling (biscuiting, fracturing, separation of pieces of different lithology). Bedding planes are visible in some biscuits.
CC	[Hatched pattern]	CC					W M	



SITE 891 HOLE B CORE 26X CORED 207.1 - 215.9 mbsf

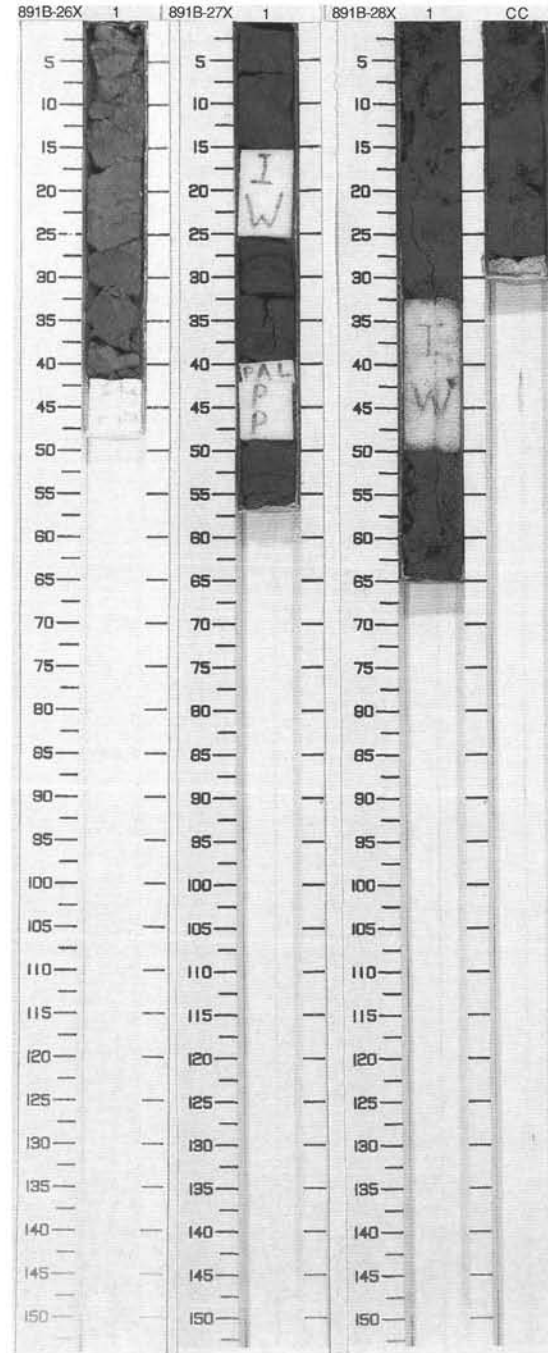
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1	Pleist.	X R	W	S S M I		CLAYEY SILT WITH SAND
<p>Major Lithology:                      CLAYEY SILT WITH SAND, very dark greenish gray (6.9GY 3.3/0.7 to 7.2GY 3.0/0.8), partly firm, and fractured. Wood fragments are in both clayey and sandy silt pieces.</p>								

SITE 891 HOLE B CORE 27X CORED 215.9 - 224.7 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1	Pleist.	R R	W W	W I S M		CLAYEY SILT WITH SAND
<p>Major Lithology:                      CLAYEY SILT WITH SAND, very dark greenish gray to greenish black (7.8GY 2.7/1.0 to 8.7GY 2.4/1.2), below 26 cm coarser and with numerous small (less than 1 mm) wood fragments, very disturbed by drilling.</p>								

SITE 891 HOLE B CORE 28X CORED 224.7 - 233.6 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1	Pleist.	X		I	6.5GY 3.3/0.7	CLAYEY SILT
		CC		X X		S M	5.9GY 3.2/0.8	Major Lithology: CLAYEY SILT, very dark greenish gray (6.5GY 3.3/0.7), firm, fractured, with dispersed patches of micaceous fine sands in Section 1, 12 cm and 25 cm.
<p>Minor Lithology:                      SILT: Patches of very dark gray (sulfide-rich) SILT are present in Section 1, 23-25 cm.</p>								



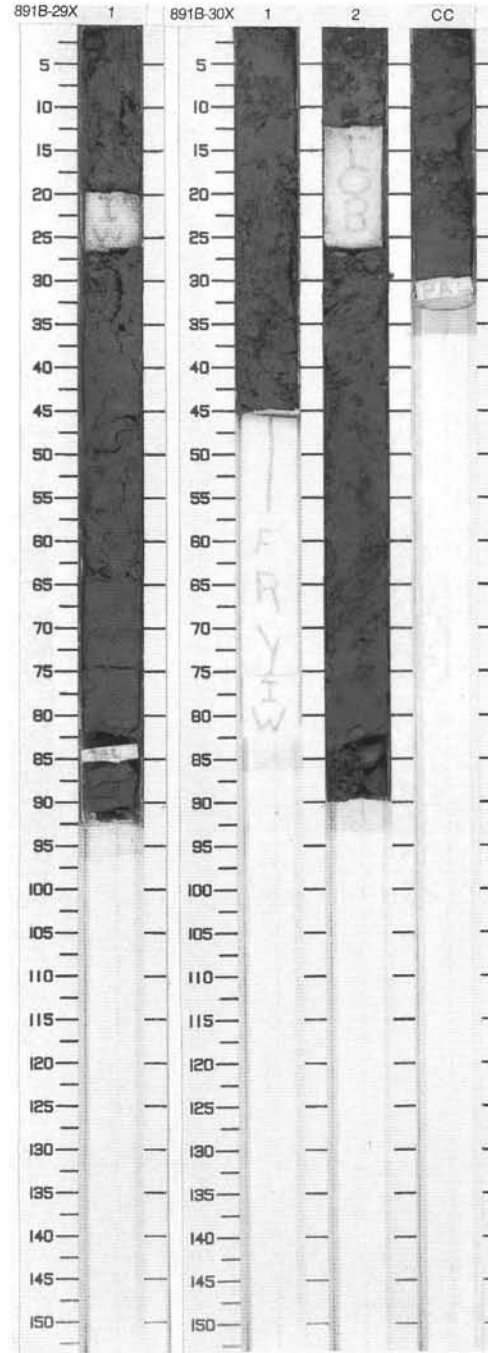
SITE 891 HOLE B CORE 29X CORED 233.6 - 237.6 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
5		1	Pleist.	∕∕ ∕∕ ◆	∕∕∕ ∕∕∕	I S M	6.8GY 3.3/0.7	CLAYEY SILT  Major Lithology: CLAYEY SILT, very dark greenish gray (6.8GY 3.3/0.7), fractured from 0 cm to 30 cm, and from 48 cm to 64 cm. Angular fragments of more firm clayey silt, with individual clast (about 1.5 cm in size) of very firm green carbonate-cemented silt and coarse sand grains (rock fragments), are present from 48 cm to 58 cm. No bedding planes are observed. Drilling biscuits are present below 70 cm.
10								

SITE 891 HOLE B CORE 30X CORED 237.6 - 242.4 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
5		1	Pleistocene	∕∕ ∕∕	∕∕∕ ∕∕∕	W I W	6.8GY 2.7/1.0	CLAYEY SILT  Major Lithology: CLAYEY SILT, dark to very dark greenish gray (5.0GY 3.5/0.8 to 6.8GY 3.0/0.9), shows slight reaction to HCl. Sedimentary structures are not preserved except for one thin bedding plane in Section CC, 29 cm. Sediment is indurated and fragmented into angular pieces (up to 5 cm across). Sets of fractures show two directions of preferred orientation, with dips of about 45° and 75°.
1		2		∕∕ ∕∕			6.8GY 3.0/0.9	
2		CC		∕∕ ∕∕		S M		

General Description:  
Sets of fractures with both moderate and steep inclination are found. Bedding planes are believed to be subhorizontal because of the occurrence of a single silt layer in the Core Catcher. No other sedimentary structures are preserved.

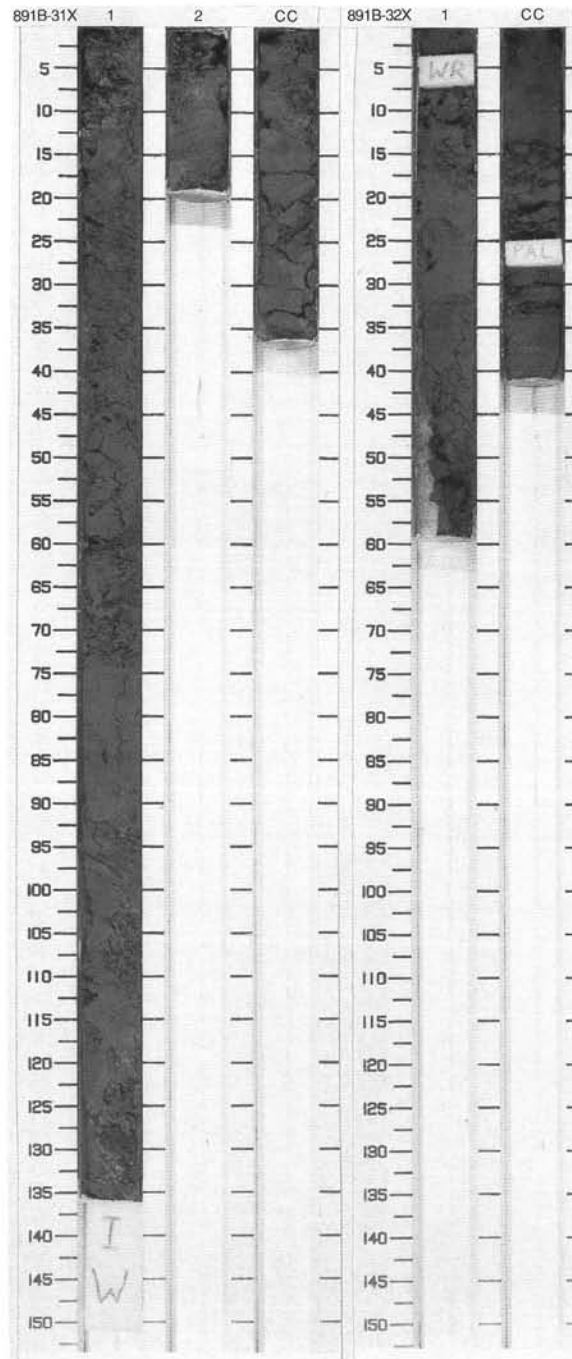


SITE 891 HOLE B CORE 31X CORED 242.4 - 251.4 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Graphic Lith. 1]	1	Pleistocene	X		S	5.9GY 3.2/0.8 to 6.5GY 3.4/0.7	<p>CLAYEY SILT and SILT</p> <p>Major Lithologies: Dark to very dark greenish gray (5.6GY 3.7/0.7 to 6.5GY 3.3/0.7) CLAYEY SILT and SILT, indurated and fractured into angular fragments (5 cm to 40 cm thick). Thin (&lt;3 mm) silt layers with subhorizontal to inclined orientation (-20° to +20° dips) occur in Section 1, 75–95 cm, Section 2, 6 cm and 11 cm, and Core Catcher, 0–18 cm. Sediments bear small amounts of carbonate (up to 13%). A peculiar heavy mineral assemblage composed of grossular, apatite, magnetite, tourmaline, and epidote is observed in the smear slide (max. 8%).</p> <p>General Description: Scattering of the orientation of bedding planes and fractures is believed to be due to drilling disturbance. The sediment is moderately to highly disturbed.</p>
2	[Graphic Lith. 2]	CC		X	WW	S M		

SITE 891 HOLE B CORE 32X CORED 251.4 - 260.2 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Graphic Lith. 1]	1	Pleist.	X		W	5.1GY 3.5/0.7	<p>CLAYEY SILT and SILT</p> <p>Major Lithologies: Dark greenish to yellowish gray (5.1GY 3.5/0.7 to 9.6GY 2.4/1.3) CLAYEY SILT, interbedded with SILT. Thin horizons of silt are observed in Section 1, 23 cm and 31 cm, and Section 2, 13 cm. Sediments are fractured, with main fracture sets inclined at 20° and 65°. Slight reaction with HCl (less than 10% dolomite). Clayey silt in the Core Catcher is heavily disturbed by drilling. Wood is present in smear slide (12%).</p> <p>General Description: Fine-grained sediment recovered in this core is heavily fractured and biscuitied due to drilling process. Clayey silt with single layers of silt (up to 1 cm thick) is found.</p>
		CC		X	W	M	8.0GY 2.7/1.1	

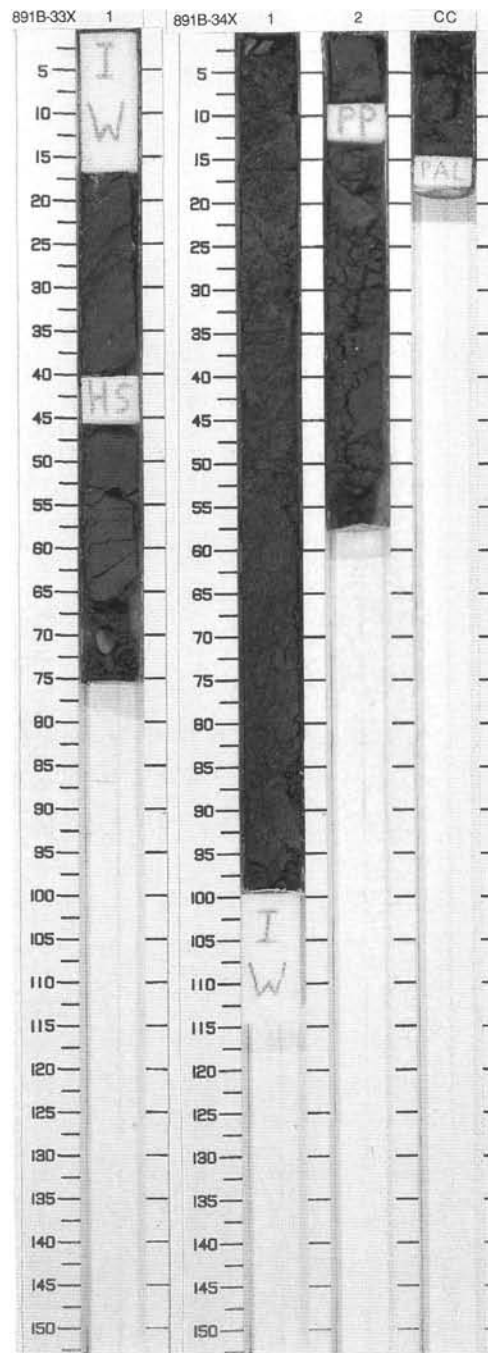


## SITE 891 HOLE B CORE 33X CORED 260.2 - 263.1 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1	Pleist.	◆ ◆ ◆	---	I	6.8GY 3.4/0.8 to 6.6GY 3.4/0.8	CLAYEY SILT Major Lithology: CLAYEY SILT, very dark greenish gray (6.6GY 3.4/0.8 to 6.8GY 3.1/1.0). Sets of fractures are inclined 30° and 65°. The basal interval (Section 1, 64–75 cm) consists of carbonate-bearing mud clasts (up to 4 cm in diameter).

## SITE 891 HOLE B CORE 34X CORED 263.1 - 269.0 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1	Pleistocene	◆ ◆ ◆	---	S	7.8GY 2.8/1.0	SILT WITH PEBBLES Major Lithology: SILT WITH PEBBLES, very dark greenish gray (7.8GY 2.8/1.0), firm, fractured. Dip of fractures is about 50°. Silt contains pebbles, randomly distributed throughout the core, but especially common in Section 1, 0–20 cm and 50–100 cm. Angular to subrounded pebbles reach 3 cm in size and represent a great diversity in composition (quartz, basalts, mudstones with different colors and carbonate-cemented mudstone). Shell fragments are observed in Section 2, 37–40 cm.
		2	Pleistocene	◆ ◆ ◆	www	I W M	7.4GY 2.8/1.1	



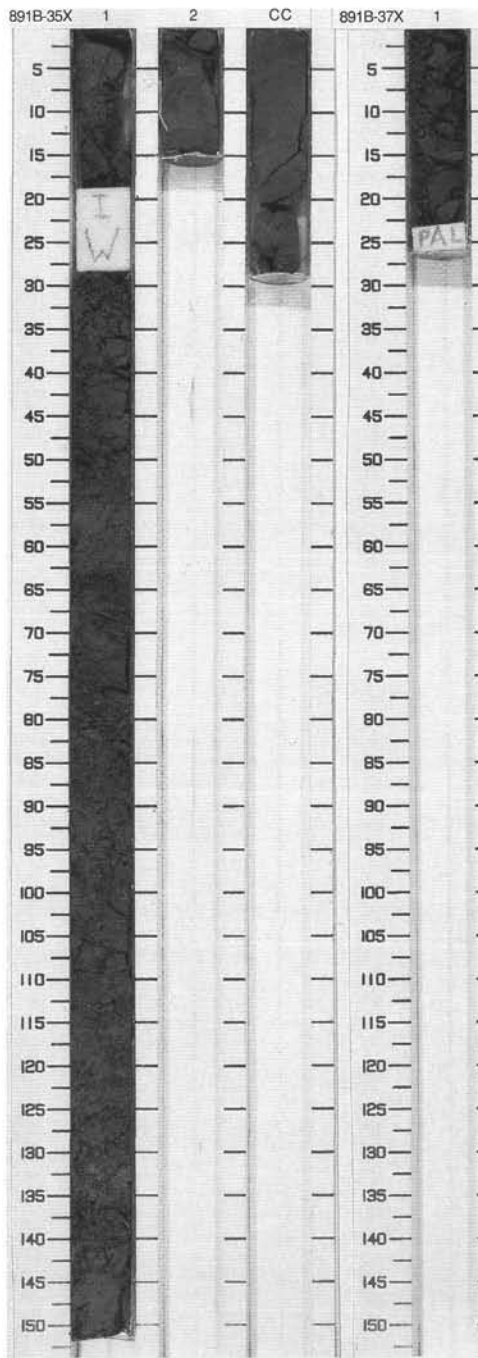
SITE 891 HOLE B CORE 35X CORED 269.0 - 277.8 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1	Pleistocene	X X X X X	⊕ S S M	I S S M	7.0GY 3.1/0.7	<p>SILT</p> <p>Major Lithology: SILT, very dark greenish gray (7GY 3.1/0.7), firm, fractured into individual pieces below Section 1, 6 cm. Drilling biscuits are common below Section 2, 2 cm. In Section 1 silt contains dispersed coarse sand and small pebbles, comprising mostly black aphyric basalts. Below Section 1 coarse material is represented by fine sand, most commonly in patches or deformed thin layers (&lt;1 cm thick). Inclination of fracture sets 22°–29° to the right and up to 37° to the left of the liner's axis.</p>

891B 36P WASH CORE

SITE 891 HOLE B CORE 37X CORED 278.8 - 286.4 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1	Pleist.	X X X	S M	S M		<p>CLAYEY SILT</p> <p>Major Lithology: CLAYEY SILT, greenish black (9.3GY 2.3/1.4), firm, fractured, with wood and shell fragments at 8 cm and 18 cm respectively.</p>

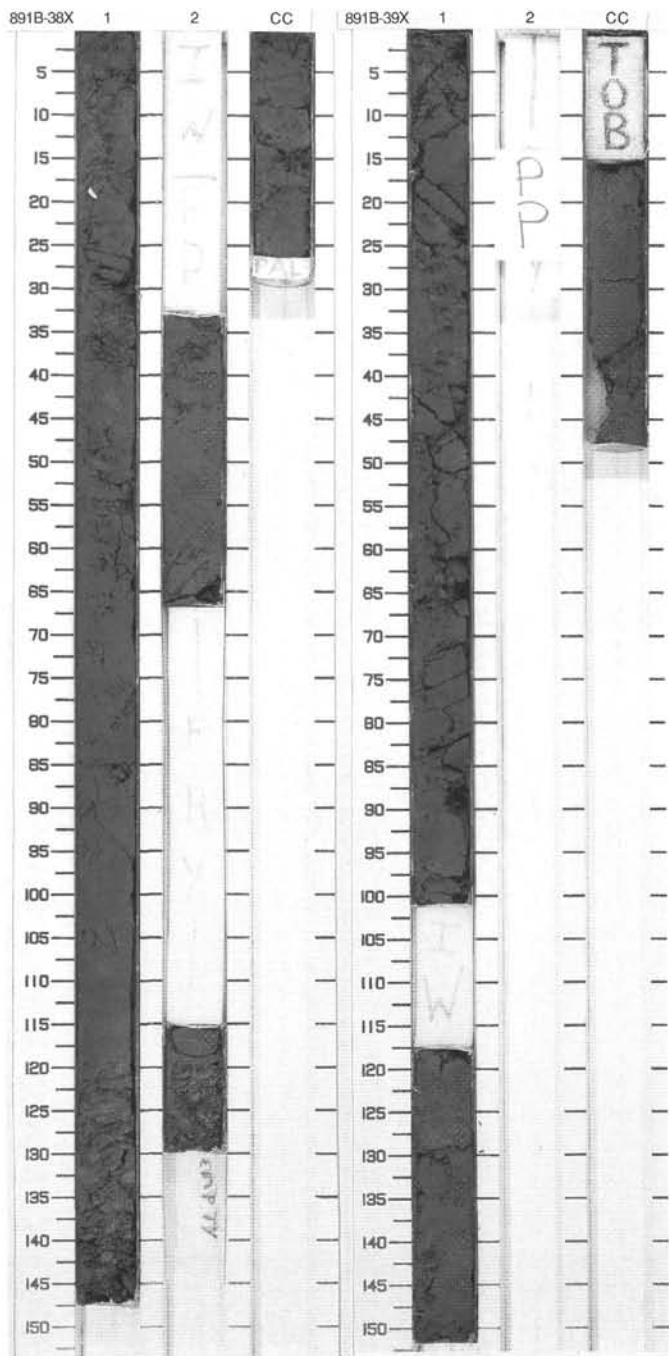


## SITE 891 HOLE B CORE 38X CORED 286.4 - 295.1 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Dotted pattern]	1	Pleistocene	X	W	S	6.9GY 3.1/1.1	SILT and CLAYEY SILT Major Lithologies: SILT, very dark greenish gray (6.9GY 3.1/1.0 to 6.4GY 3.1/1.3) with numerous angular pieces of firm clayey silt in silty matrix. Section 1 is intensely fractured. Silt contains very fine to coarse sand, mostly disseminated, rarely restricted to patches. The Core Catcher contains micaceous sands and gravel-size subangular to subrounded black basalt clasts. CLAYEY SILT, very dark greenish gray (9GY 2.5/1.0 to 7.4G 3.1/0.4), firm, fissile, and fractured. In Section 2, 115–118 cm, carbonate cementation is observed.
2						S	7.3GY 2.7/1.2	
3						I W S S W S M	9GY 2.5/1.2  6.4GY 3.1/1.3	

## SITE 891 HOLE B CORE 39X CORED 295.1 - 304.0 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Dotted pattern]	1	Pleistocene	X	W	S	6.6GY 3.3/1.0	SILT Major Lithology: SILT, very dark greenish gray (6.6GY 3.3/1.0), fractured in Section 1 and very firm, uniform in the Core Catcher. Silt contains disseminated fine, medium sand, and gravel grains, and does not show contacts or bedding planes. In Section 1, intervals 47–70 cm, 76–92 cm, and 130–136 cm are especially enriched in coarse material. Either small (a few mm in size), tabular and chaotically oriented, or large (1–2 cm) irregular pieces of dark brown wood are observed in Section 1, 64–70 cm and 88–90 cm. In the Core Catcher (36 cm to 38 cm) firm silt is bioturbated.
2						I P S S S M	7.0GY 3.1/1.1	





SITE 891 HOLE B CORE 40X

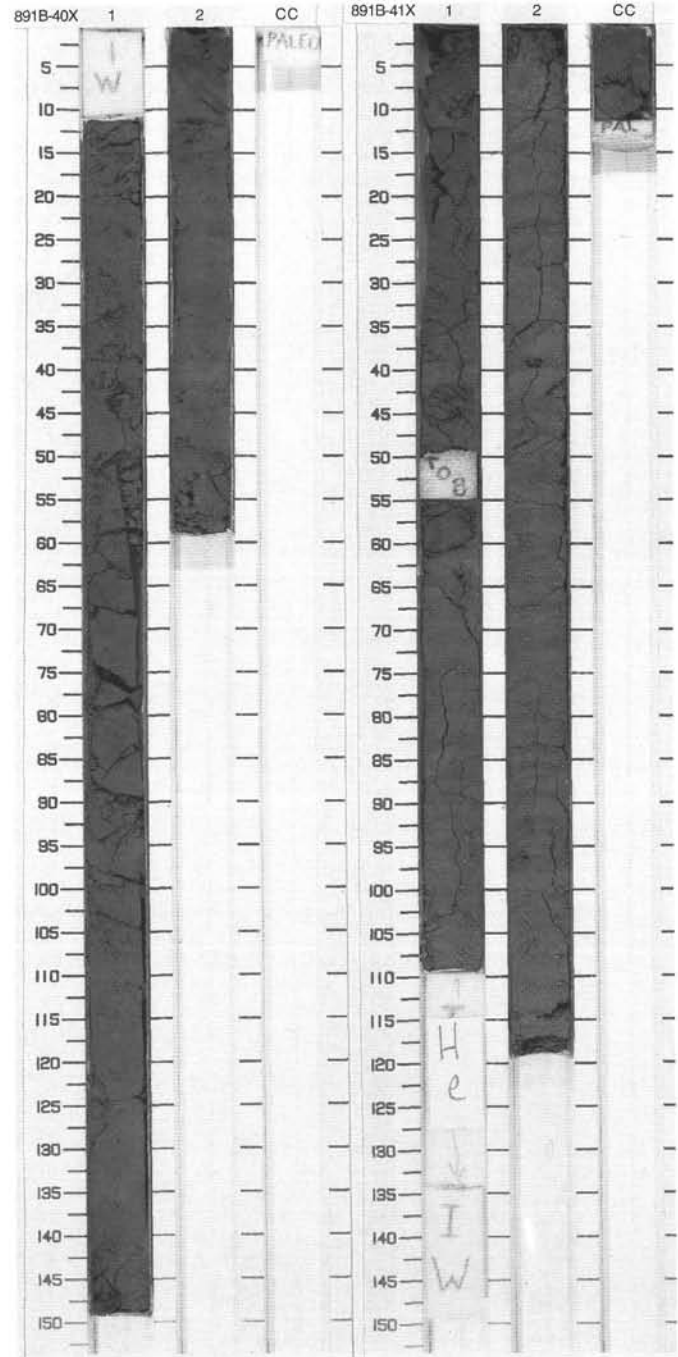
CORED 304.0 - 312.8 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Dotted pattern]	1	Pleistocene	X	---	I	6.7GY 3.3/0.9 to 6.9GY 2.9/1.1	SILT Major Lithology: SILT, dark greenish gray (6.7GY 3.3/0.9 to 6.9GY 2.9/1.1), firm, and fractured, shows no reaction to HCl. Thin bedding planes (about 1 cm thick) can be recognized in Section 2, at 12 cm, 16 cm, 34 cm, 42 cm, and 49 cm.
2	[Dotted pattern]	2				S	about 9GY 2/1	
<p>Minor Lithology: Fine SAND, very dark greenish gray (color as major lithology) is present as cm-size patches in Section 2, 5-8 cm.</p>								

SITE 891 HOLE B CORE 41X

CORED 312.8 - 321.6 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Dotted pattern]	1	Pleistocene	X	W	S	7.7GY 2.9/1.0	SAND and SAND-SILT-CLAY Major Lithologies: Coarse SAND, very dark greenish gray (7.7GY 2.9/1.0) contains floating rounded mud clasts (1 cm to 6 cm size) and lithified clasts of silt in the top 20 cm of Section 1. Sand is moderately disturbed by drilling. SAND-SILT-CLAY, dark greenish gray (6.0GY 3.5/0.7), soft to slightly firm, is disturbed by biscuiting and fracturing. In Section 2, drilling disturbance is stronger, and biscuits are separated by 1 cm- to 2 cm-thick soft, very dark gray mud. From Section 2, 104 cm downwards the color is very dark greenish gray (6.5GY 3.3/0.7). Original sedimentary structures (ripples) can be observed. Section 2 bears mm- to cm-size wood fragments.
2	[Dotted pattern]	2				W <sub>1</sub>	6.0GY 3.5/0.7	
						S	6.5GY 3.3/0.7	
<p>General Description: The sediment is intensely disturbed by drilling biscuits, fractures, and contorted bedding.</p>								

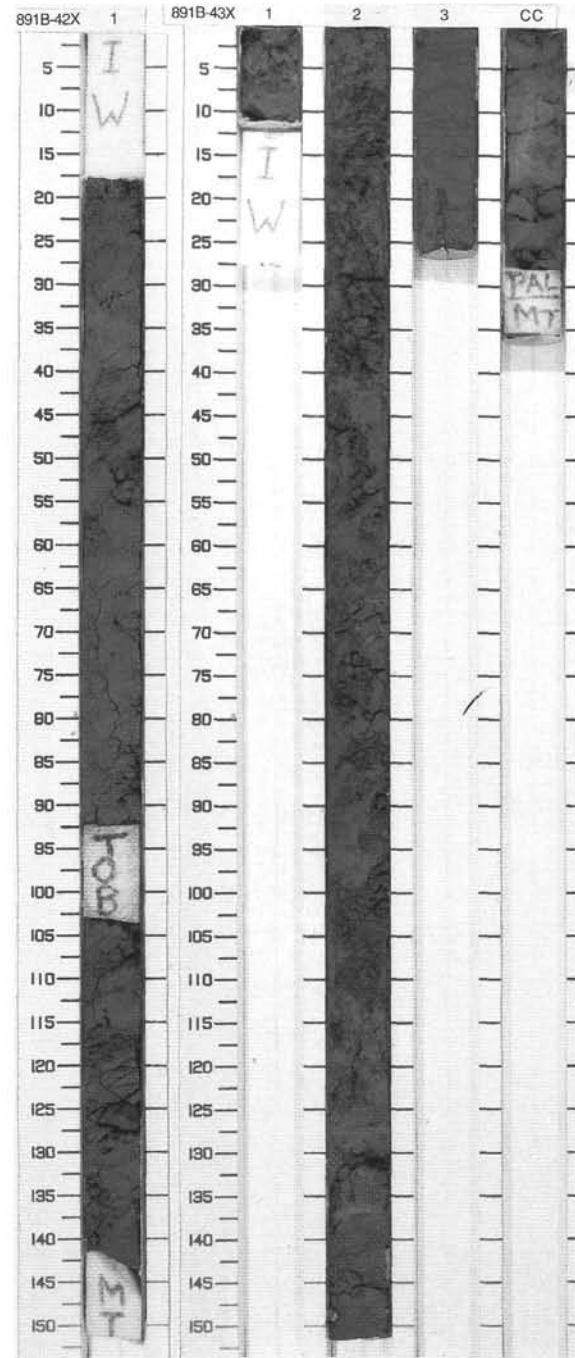


SITE 891 HOLE B CORE 42X CORED 321.6 - 330.4 mbsf

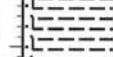
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1	Pleistocene			I W M	5.4GY 3.6/0.7	<p>SAND-SILT-CLAY and CLAYEY SILT</p> <p>Major Lithologies: SAND-SILT-CLAY, dark greenish gray (5.4GY 3.6/0.7), structureless, homogenized by drilling disturbance. CLAYEY SILT, dark greenish gray (like sand-silt-clay), indurated and heavily disturbed by drilling (mainly fractures).</p> <p>Minor Lithology: SILTSTONE is found in Section 1, 53-70 cm.</p>

SITE 891 HOLE B CORE 43X CORED 330.4 - 339.3 mbsf


Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1	Pleistocene			I	6.1GY 3.3/0.7	CLAYEY SILT
1		2				S		
2		3				S M		



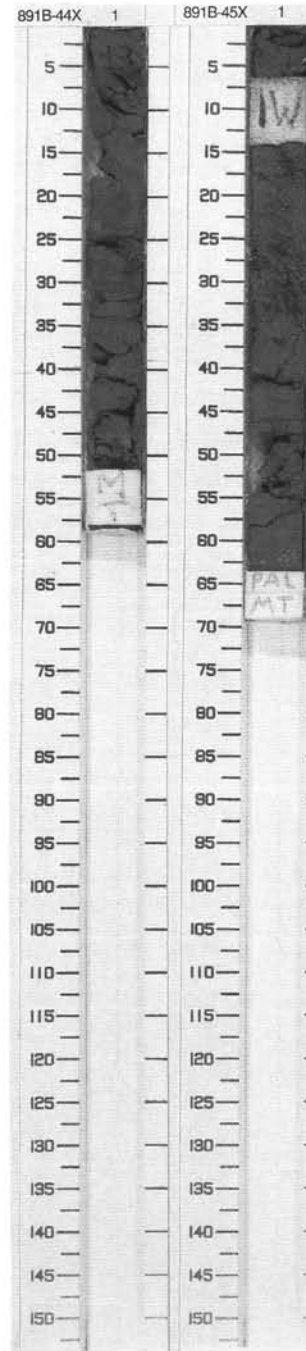
SITE 891 HOLE B CORE 44X CORED 339.3 - 348.2 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1	Pleist.	X	www	S W S	7.0GY 3.4/0.7	<p>CLAYEY SILT</p> <p>Major Lithology: CLAYEY SILT, very dark greenish gray (7.0GY 3.4/0.7), with darker layers, 2 cm to 3 cm thick, at 3 cm and 10 cm. Layering shows about 15° dip. From 13 cm to 52 cm the sediment is strongly disturbed by drilling biscuits. A slight reaction to HCl is observed. Wood fragments are present at 27 cm.</p> <p>Minor Lithology: SILTY SAND, very dark greenish gray (6.7GY 3.2/0.7) and structureless, is interbedded in biscuits from 24 cm to 37 cm.</p>

SITE 891 HOLE B CORE 45X CORED 348.2 - 357.1 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1	Pleist.	X X X	W	I S M	6.5GY 3.0/0.9	<p>CLAYEY SILT</p> <p>Major Lithology: CLAYEY SILT, very dark greenish gray (6.5GY 3.0/0.9), firm, fractured (dominant dip of fractures about 30°-35°), is strongly disturbed by biscuiting below 35 cm. One rounded clast of igneous rock, about 2 cm in diameter, is present at 2 cm. The sediment shows slight reaction to HCl.</p>

891B 46X NO RECOVERY

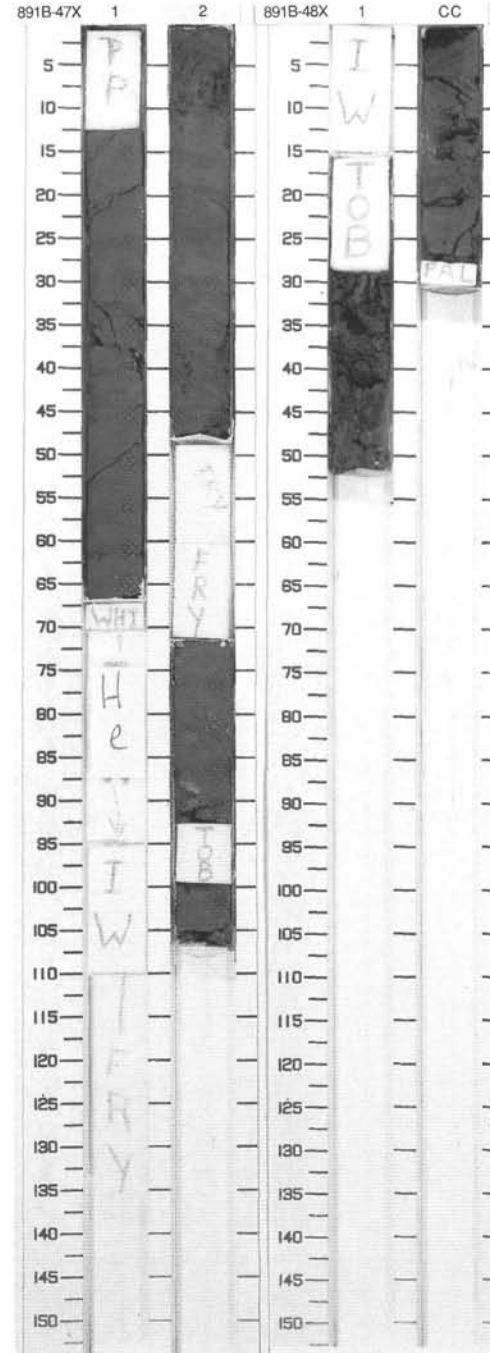


## SITE 891 HOLE B CORE 47X CORED 366.1 - 375.0 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1	Pleistocene	◇	W	W	10.0GY	CLAYEY SILT and SANDY SILT Major Lithologies: CLAYEY SILT and SANDY SILT, very dark greenish gray (7.9GY 3.1/0.8 to 0.8G 3.0/0.8) biscuitied by drilling. Sedimentary structures are not preserved. Sediment is very firm and consists mainly of quartz, feldspar, and volcanic glass. Only small amounts of carbonate (<6%) are found. At Section 2, 25 cm, one single, well-rounded quartzite pebble is observed.
SS						2.6/1.0		
W						7.9GY		
W						3.1/0.8		
2		2	Pleistocene	◇	W	W	9.6GY	
WM						3.2/0.8		

## SITE 891 HOLE B CORE 48X CORED 375.0 - 383.9 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1	Pleist.	◇	W	T	6.5GY	SILT WITH CLAY and SANDY SILT Major Lithologies: Very dark greenish gray (6.5GY 3.3/0.9 to 7.7GY 2.7/1.2) SILT WITH CLAY dominates the upper part of Core 146-891B-48X (above Section CC, 22 cm). The basal interval consists of very dark greenish gray (7.3GY 2.8/1.0) SANDY SILT, with amounts of carbonate >10%. Sedimentary structures are absent due to biscuiting of the sediment by drilling. Silt is very firm and fractured into subangular pieces at Section 1, 29-52 cm. Single pebbles of dark gray quartzitic rock (rich in pyrite) are found at Section 1, 10 cm and 36 cm.  General Description: Sediment recovered from this core is heavily disturbed by drilling. Silt with varying amounts of sand and clay is observed.
TS						3.3/0.9 to 7.7GY		
2		2	Pleist.	◇	W	SM	2.7/1.2	



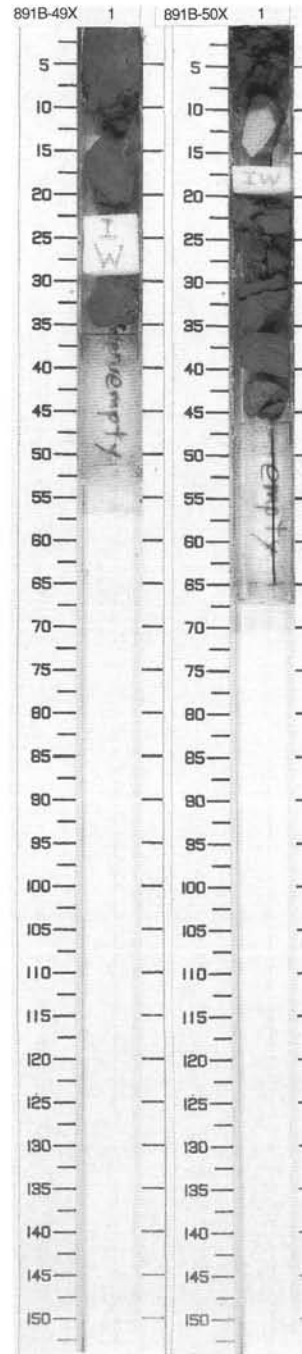
SITE 891 HOLE B CORE 49X CORED 383.9 - 392.8 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1	Pleist.		W	S W S		CLAYEY SILT and FINE TO MEDIUM SAND
<p>Major Lithologies:                      CLAYEY SILT, dark greenish gray (5.5GY 3.8/0.8), plastic and structureless from 0 cm to 7 cm; interbedded with FINE TO MEDIUM SAND, very dark greenish gray (5.6GY 3.4/0.8), faintly laminated. Mixed CLAYEY SILT and FINE TO MEDIUM SAND without visible boundaries or layering were observed at intervals 12-20 cm and 30-34 cm.</p>								

SITE 891 HOLE B CORE 50X CORED 392.8 - 401.7 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1	Pleist.	◇	W	S S M	4.8GY 3.5/0.8	CLAYEY SILT TO SILT and FINE MICACEOUS SAND
<p>Major Lithologies:                      CLAYEY SILT TO SILT, dark greenish gray (4.8GY 3.5/0.8), structureless, very disturbed. Below 20 cm CLAYEY SILT TO SILT and FINE MICACEOUS SAND are represented in drilling biscuits.</p> <p>Minor Lithologies:                      Two pebbles are present in the top 2 cm of the cored interval: a single CLAYEY SILTSTONE clast surrounding a core of FINE TO MEDIUM POLYMICTIC SAND, and a pyritized wood fragment. CARBONATE CONCRETIONS (from 3 cm to 7 cm in size) are present from 10 cm to 17 cm.</p>								

891B 51X NO RECOVERY



SITE 891 HOLE B CORE 52X CORED 410.5 - 419.3 mbsf

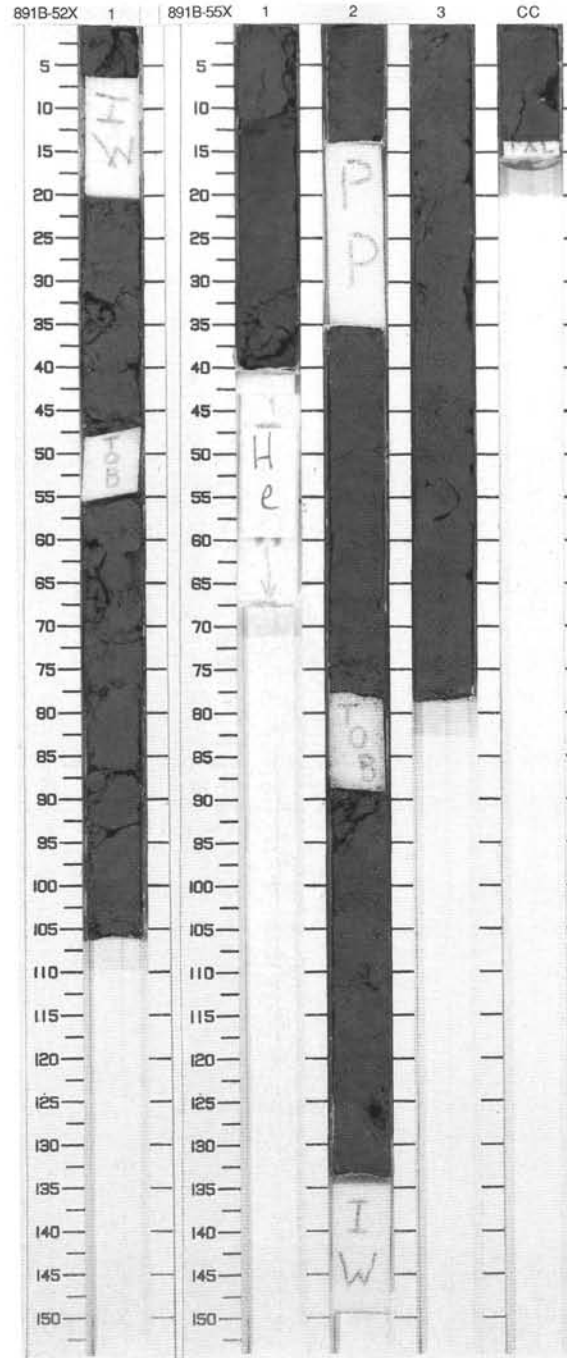
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0-10	[Dotted pattern]	1	Pleist.	◆	W	S I	5.5GY 3.4/0.8	<p>SANDY SILT and CLAYEY SILT</p> <p>Major Lithologies:                      SANDY SILT, very dark greenish gray (from about 5.5GY 3.4/0.8 to 7.0GY 3.4/0.8), contains small wood fragments at 0 cm to 6 cm. Sandy silt is observed from 0-6 cm and 55-106 cm. CLAYEY SILT, very dark greenish gray (5.8GY 3.5/0.8), found at 20-47 cm, contains mud clasts and is very disturbed by drilling (biscuits at 40 cm to 47 cm), partly firm and fractured. At 56 cm to 61 cm and at 77 cm to 86 cm, clayey silt is interbedded with sandy silt.</p> <p>General Description:                      The sediments from the entire core slightly react to HCl.</p>
10-20	[Dotted pattern]	1		◆	W	S S	7.0GY 3.4/0.8	
20-40	[Dotted pattern]	1		◆	W	S S	7.0GY 3.4/0.8	
40-56	[Dotted pattern]	1		◆	W	S M	3.4/0.8	

891B 53X NO RECOVERY

891B 54X NO RECOVERY

SITE 891 HOLE B CORE 55X CORED 437.0 - 445.8 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0-1	[Dotted pattern]	1	Pleistocene		W	S S	8.1GY 3.2/0.9	<p>CLAYEY SILT</p> <p>Major Lithology:                      CLAYEY SILT, very dark greenish gray (6.9GY 3.2/1.0 to 8.1GY 3.2/0.9), interbedded with thin beds of coarser material which contain pyrite and mica in Section 2, at 5 cm, 70-75, 95-103, 111 cm and in Section 3, at 23 cm, 30 cm, 43 cm, 69 cm, and 72 cm; structureless in Sections 1, 11-40 cm and CC, 0-14 cm. In Section 3, 48-77 cm, CLAYEY SILT becomes more sandy. In Sections 2 and CC CLAYEY SILT is partly firm and fissile.</p> <p>General Description:                      In Section CC very weak reaction to HCl.</p>
1-2	[Dotted pattern]	2				W	7.6GY 3.0/1.0	
2-3	[Dotted pattern]	3				W	6.9GY 3.2/1.0	
3	[Dotted pattern]	CC			W	S M	3.2/1.0	

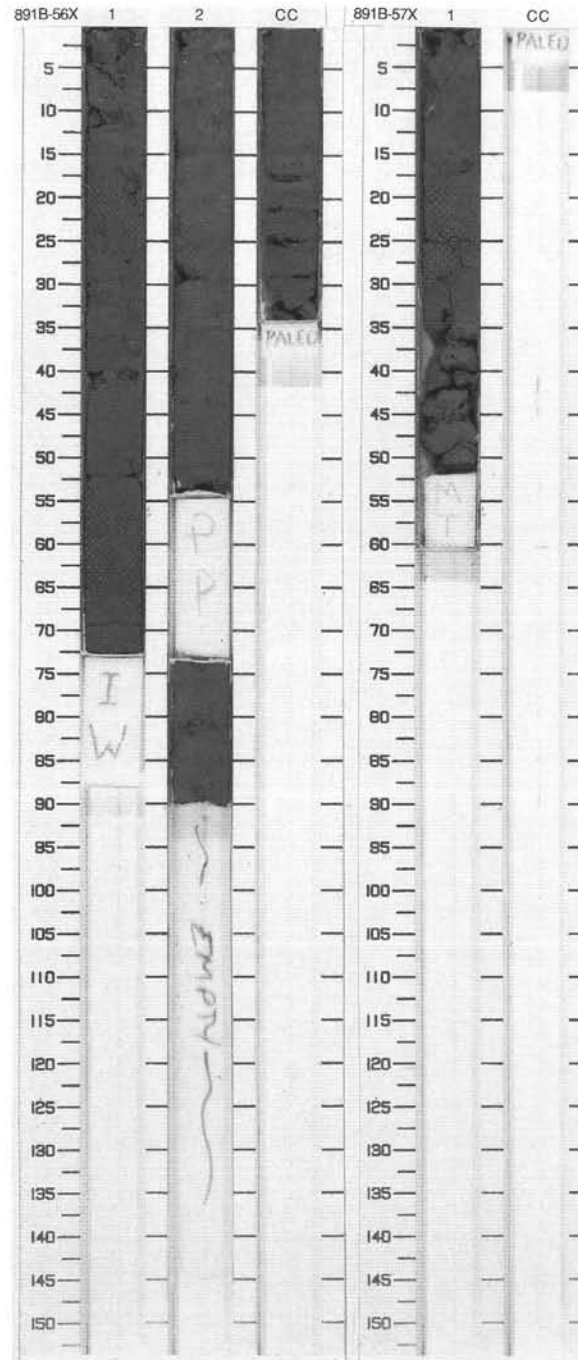


SITE 891 HOLE B CORE 56X CORED 445.8 - 454.7 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0-1	[Horizontal dashed lines]	1	Pleistocene	X Ⓢ	---	S	7.1GY	CLAYEY SILT Major Lithology: CLAYEY SILT, dark greenish gray (7.0GY 3.5/1.0), mostly firm or very firm, nearly siltstone, without visible sedimentary structures. Sulfide nodules are present in Section 1, at 44 cm, 56 cm, and 57 cm. In Section 2, 74-86 cm, incipient scaly fabric is present.  Minor Lithology: A 2 cm-thick, dark greenish gray layer of SANDY SILT shows inclined bedding in Section 2, 24-30 cm.  General Description: The sediment is disturbed by slight fracturing and biscuiting.
1-2	[Horizontal dashed lines]	2				I	3.5/1.0	
2-3	[Horizontal dashed lines]	CC				W	7GY	
3-4	[Horizontal dashed lines]					M	3.5/1.0	

SITE 891 HOLE B CORE 57X CORED 454.7 - 463.5 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
0-1	[Dotted pattern]	1	Pleist.	[Dotted pattern]	---	M	7.0GY 3.5/1.0	SANDY SILT Major Lithology: Olive gray (7.0Y 3.5/1.0) SANDY SILT, poorly sorted, with mud clasts (<6 mm in diameter) at Section 1, 16-20 cm. Sand is more abundant at Section 1, 10 cm and 30 cm, with a single 1 cm-thick bed, showing gradational contacts. Faint inclined bedding (dip about 50°) is observed.  General Description: Material of this core is soft and slightly to heavily disturbed by drilling. Core Catcher all to paleontology.



SITE 891 HOLE B CORE 58X CORED 463.5 - 472.3 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1	[Dotted pattern]	1	Pleistocene		---	S	7.6GY 3.2/0.8	<p>SILT and SILTY SAND</p> <p>Major Lithologies: SILT, very dark greenish gray (7.6GY 3.2/0.8), with parallel, cross, and convolute lamination. Laminae are composed of 1- to 5-mm-thick darker silt. Mud clasts of greener color, about 2 cm in size, are present in Section 1, 5 cm. One indurated mud clast with strong reaction to HCl, about 3 cm in size, is present in Section CC, 45 cm. The sediment shows weak reaction to HCl.</p>
2	[Dotted pattern]	2				W I S	5.4GY 3.5/0.7	
		CC				S M		
<p>General Description: There is no evidence of biscuiting drilling disturbance. The sediment is soft and sedimentary structures are well preserved.</p>								

