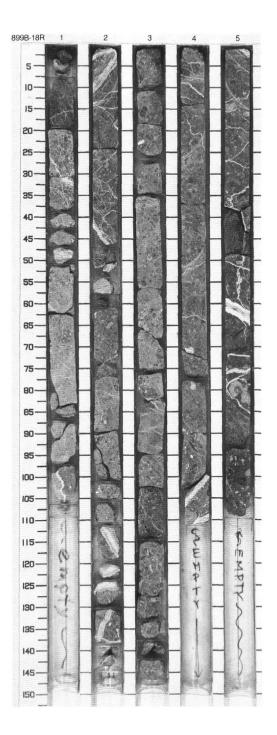
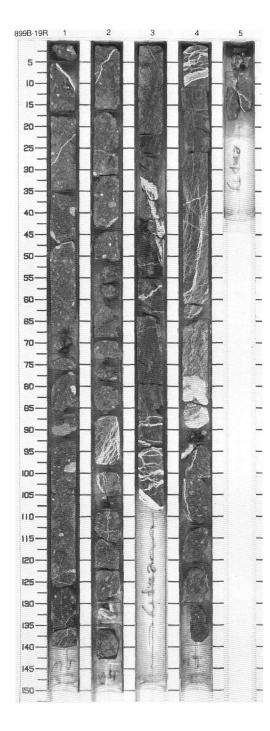
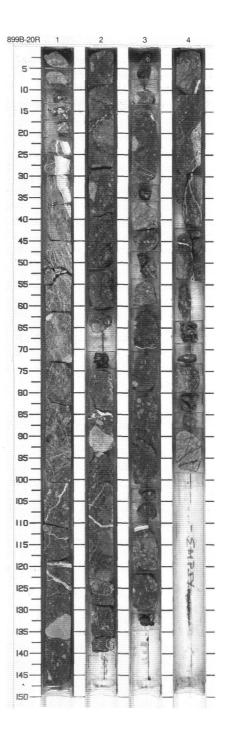
SIT	E 899 H	OL	.E	B CORE	18	8R		CORED 389.1 - 398.3 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1					1		5Y 4/1	BRECCIA
-		1		<	土土		10YR 6/2	Major Lithology: Matrix-supported BRECCIA forms all of
1		H		1<1	+		0/2	the core. Its matrix consists of coarse sandstone similar to that described in
1				1<1	丰			Core 17, and the color changes from
		2		1<1	十			olive gray (5Y 4/1) and pale yellowish brown (10YR 6/2) to medium dark gray
2					土			(N4) at the base. The clast sizes in the
-		L		1<1	土			BRECCIA range from 0.5 to 5 cm, and most appear to be derived from altered
2	22222		snc		1			serpentine except for a few ultramafic fragments.
3		3	Cretaceous		1		5Y 4/1	magments.
-		Ĭ	Cre	1<1	1			
4				1<1	1			
-					1			
-	88888	4			+			
5	2222				+			
	88888				土			
-	88888	5			丰		N4	
6_					土			y
					\perp			



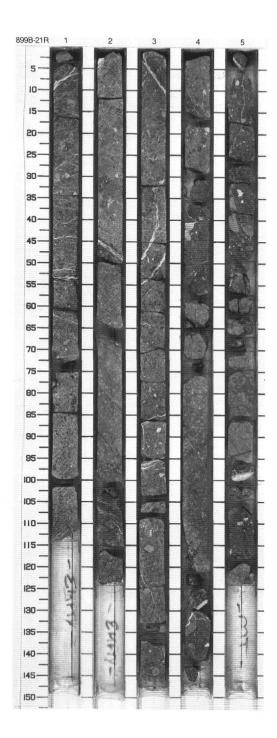
SIT	E 899 H	IOL	E	B CORE	19	9R		CORED 398.3 - 407.7 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1		1		< < <	$\neg \neg $		N4	BRECCIA Major Lithology: Matrix-supported BRECCIA forms all of the core. The medium dark gray (N4) to gray (5YR 5/1) matrix of the BRECCIA consists of coarse sandstone similar to that described in Core 17. The clasts in
3		2	etaceous	< < < <	<u> </u>		5YR 5/1	the BRECCIA range from 0.5 to 6 cm strze. General Description: Two intervals of altered serpentine occur (Section 2, 136 cm to Section 3.
4_		3	Ö	< < < <	HHHHHHH		5YR 5/1	90 cm, and Section 4, 0 cm to 110 cm) and are presumed to be large clasts.
5	ccccc	4		< < <	11111		5YR 5/1	



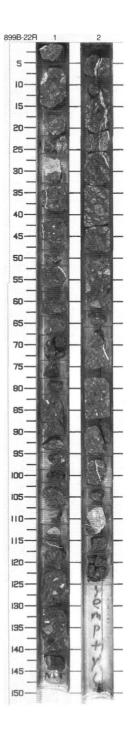
SI	E 899	HC	DL	E	B CORE	2	0R		CORED 407.7 - 417.1 mbsf
Meter	Graphi Lith.		Section	Age	Structure	Disturb	Sample	Color	Description
3.			3	ĕ		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	S	10YR 4/2 To 5YR 3/4 N4	BRECCIA Major Lithology: Polymictic, matrix-rich, homogeneous BRECCIA with angular to subangular fragments of serpentinite forms all of this core. The maximum size of clasts is 7 to 8 cm. Several clasts show internal fractures and placement of resulting clast pieces. General Description: The groundmass is dark yellowish brown (10YR 4/2) or moderate brown (5YR3/4) in Section 1 (0 to 125 cm) and medium dark gray (N4) to greenish black (N2) in the other parts of the core. Matrix angular fragments of mono- or polycrystalline composition (1 to 2 cm diameter) with a fine sand-sized groundmass. Calcite occurs in veins throughout the core.



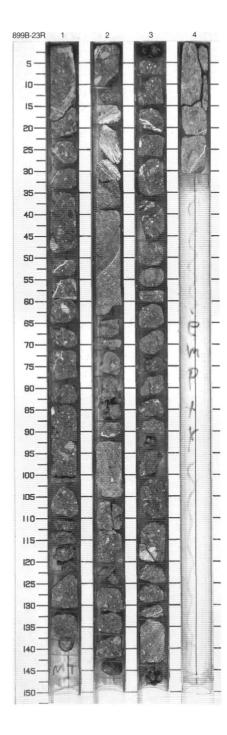
Graphic Lith. The composed of mostly periodite/serpentinite clasts makes up most of this core. Randomly oriented, angular to subrounded clasts in the BRECCIA range up 3 cm in diameter and average about 0.5 cm. The composed of mostly periodite/serpentinite clasts makes up most of this core. Randomly oriented, angular to subrounded clasts in the BRECCIA range up 3 cm in diameter and average about 0.5 cm. The composed of mostly periodite/serpentinite clasts makes up most of this core. Randomly oriented, angular to subrounded clasts in the BRECCIA range up 3 cm in diameter and average about 0.5 cm. The composed of mostly periodite/serpentinite clasts makes up most of this core. Randomly oriented, angular to subrounded clasts in the BRECCIA could be durited provided. The matrix changes from dark yellowish brown (10R 4/6) and very dusky red (10R 2/2) clasts in the BRECCIA could be durites or altered provided. The matrix changes from dark yellowish brown (10YR 4/2) to moderate brown (10R 4/6) to greenish black (N 2) colors and consists of sand and granules. Calcite cement is not evident.	SI	TE 899 H	OL	E	B CORE	2	1R		CORED 417.1 - 426.3 mbsf
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
	3		1 2 3 4		1<1		3	4/2 To 5YR 3/4	Major lithology: Matrix-supported, polymictic, and variegated colored BRECCIA composed of mostly peridotite/serpentinite clasts makes up most of this core. Randomly oriented, angular to subrounded clasts in the BRECCIA range up 3 cm in diameter and average about 0.5 cm. General Description: Dark greenish gray (5GY 4/1), moderate brown (10R 4/6) and very dusky red (10R 2/2) clasts in the BRECCIA could be dunites or altered pyroxene-rich igneous rocks. The matrix changes from dark yellowish brown (10YR 4/2) to moderate brown (10R 4/6) to greenish black (N 2) colors and consists of sand and granules. Calcite cement is not



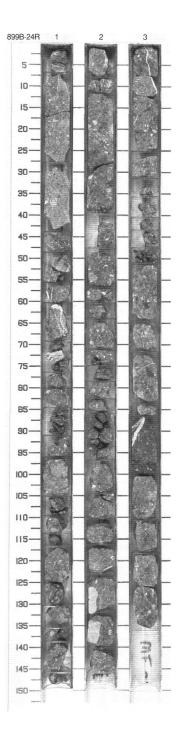
SITE 899	HOI	Æ	B CORE	2	2R		CORED 426.3 - 435.6 mbsf
Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
2	1	Cretaceous			SS	N2	BRECCIA Major Lithology: Matrix-supported BRECCIA similar to that described in Core 17 forms 81% of the core. The matrix of the breccia is gray black (N2). Minor Lithology: SERPENTINIZED PERIDOTITE forms 19% of this core. General Description: Medium dark gray (N4), medium bluish gray (5B 5/1) and light greenish gray (5G 8/1) clasts in the breccia vary from 2x2 mm to 3x4 mm in size, and they appear to consist mostly of serpentinized peridotite. SANDY CLAYSTONE and SILTY CLAYSTONE comprise the matrix of the BRECCIA. Calcite veins (1 to 3 mm wide) are common.



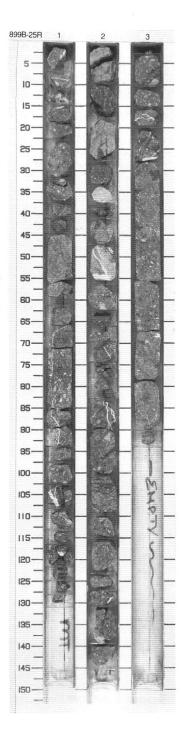
SI	ΓE 899_	H	OL	E	B CORE	2	3R		CORED 435.6 - 445.3 mbsf
Meter	Graphi Lith.		Section	Age	Structure	Disturb	Sample	Color	Description
3_3_4_			1 2 3	Cretaceous				N4 To 7.5R N2.5/0 N4 To 2.5Y 6/2	BRECCIA Major Lithology: BRECCIA with a medium dark gray matrix comprises about 91% of the core. Minor Lithology: SERPENTINE forms about 9% of the core, and is present as a block in Section 2, 33–63 cm. General Description: The BRECCIA is matrix supported and contains clasts ranging up to 3.5x1.5 cm in size. Sand to clay size particles forms the matrix. In Section 2, 15 to 30 cm, the grayish breccia gives way to dark yellowish orange, possibly altered serpentine (10YR 6/6) clasts with moderate reddish brown (10R 4/6) bands. In Section 2, 70–105 cm, clasts with a light brownish gray matrix occur. These clasts have a greater amount of
									sand sized matrix and smaller lithic fragments than the breccia in Section 1. Additionally, layers (2 mm thick) of mostly sand-sized material occur in the sample.



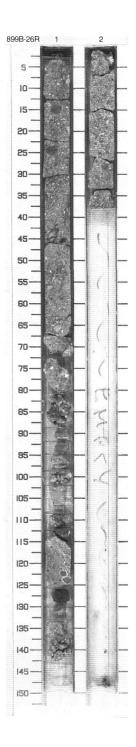
SI	ΓΕ 899 H	IOL	.E	B CORE	24	4R		CORED 445.3 - 454.7 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
3		2	Cretaceous			38	5YR 6/1 N4 5YR 6/1 N4 5YR 6/1 N4	BRECCIA Major Lithology: The entire core is composed of matrix- supported BRECCIA with grain size ranging from silt to cobble grade. The color of the matrix varies in the core from light brownish gray (5YR 6/1) to dark gray (N3, N4). The clasts in the lighter colored matrix show a wider range of colors (grays; N3-N6), grayish orange pink (5YR 7/2), light brown (5YR 6/4), moderate reddish brown (10YR 5/4) than those in the darker variety, which only show gray and greenish gray hues. The majority of the clasts are composed of serpentinite, and in the lighter colored rock are almost surrounded by calcite-filled microfractures less than 0.05 mm across.



Graphic Lith. Graphic BRECCIA BRECCIA	-							CORED 454.7 - 464.2 mbsf
	Mete	Section	Age	Structure	Disturb	Sample	Color	Description
Major Lithology: Matrix-supported BRECCIA forms 8 of the core. Its matrix varies from medium light gray (N6) to medium of gray (N4) to medium bluish gray (SE 5/1). Minor Lithology: SERPENTINIZED PERIDOTITE comprises 15% of the core. General Description: The BRECCIA consists of a silt to sometrix composed of serpentinite and angular clasts, also composed of serpentinite, ranging from 2 mm to 3 in size. The clasts vary from grayish orange (10YR 7/4) to grayish black to white (N9). Mostly vertical calcite veins (1 mm-1 cm thick) crosscut the matrix and clasts and are not as abundant as in previous cores. Bloc of SERPENTINIZED PERIDOTITE range up to 25 cm in thickness. A relatively sharp contact between medium gray and medium light gray BRECCIA matrices occurs in Sectio 47 cm. The color changes are	2	2 3	Cretaceous			8	To	Major Lithology: Matrix-supported BRECCIA forms 85% of the core. Its matrix varies from medium light gray (N6) to medium dark gray (N4) to medium bluish gray (5B 5/1). Minor Lithology: SERPENTINIZED PERIDOTITE comprises 15% of the core. General Description: The BRECCIA consists of a silt to sand matrix composed of serpentinite and angular clasts, also composed of serpentinite, ranging from 2 mm to 3 cm in size. The clasts vary from grayish orange (10YR 7/4) to grayish black (N2) to white (N9). Mostly vertical calcite veins (1 mm-1 cm thick) crosscut the matrix and clasts and are not as abundant as in previous cores. Blocks of SERPENTINIZED PERIDOTITE range up to 25 cm in thickness. A relatively sharp contact between medium gray and medium light gray BRECCIA matrices occurs in Section 3,



SIT	TE 899	НО	LE	B CORE	2	6R		CORED 464.2 - 473.6 mbsf
Meter	Graphi Lith.	Section 2	Age	Structure	Disturb	Sample	Color	Description
1		1	Cretaceous			S	N4 To 5B 7/1	BRECCIA Major Lithology: Matrix-supported BRECCIA comprises 99% of this core. The matrix varies from light bluish gray (5B 7/1) to medium dark gray (N4). Minor Lithology: Olive black (5Y 2/1) CALCAREOUS
								CLAYSTONE comprises about 1% of the core. General Description: The BRECCIA contains a sand- and silt-sized serpentinite matrix. Dark gray (N3) to white (N6) clasts in the BRECCIA are angular, range from 2x2 mm to 3x3 cm in size, and appear to be composed mostly for
								serpentinite. A few basalt clasts containing a pink (calcite?) mineral occur in Section 1, 90–93 cm. Some clasts are rimmed or cut by serpentine veins. The CALCAREOUS CLAYSTONE occurs in Section 1, 82–87 cm, and it contains nannofossils and granules of serpentine.



SI	ΓE 899 H	IOL	E	B CORE	2	7R		CORED 473.6 - 482.9 mbsf
Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1			an			s c	N3	BRECCIA Major Lithology:
1	55555	1	Apti			s s _s	N7	Dark gray BRECCIA shows grain sizes ranging from silt to granule grade and
			early Aptian			5		forms the lower half of the recovered material.
2		2		< <			N3	Minor Lithologies: SILTY CLAYSTONE is dark gray in
								color and occurs in association with an almost vertical band of grayish green (10GY 5/2) friable serpentine in Section 1, 40–65 cm. Fine-grained LIMESTONE occurs in Section 1, 65–108 cm and is light gray (N7) in color. ALTERED BASALT(?) is dark gray (N3) in color and forms Pieces 3 and 5 at the top of Section 1. SERPENTINE occurs in assocociation with SILTY CLAYSTONE as described above, and as Piece 4 at the top of Section 1: it is dark gray (N3) in color with a reddish tinge, and shows white spherules about 1 mm in diameter. General Description: The relationship between the sediments and the altered igneous is not clear in the core. The SILTY CLAYSTONE and greenish SERPENTINE may have been mixed and distorted by drilling.

