USGS STATION LOG

SHIP / LEG: S13-79-NC

LATITUDE: 40° 49.09' N

LONGITUDE: -124° 30.32' W

STATION NO.: 130

LINE NO.:

DAY/MONTH/YEAR

DATE: 27/10/79

TYPE OF STORAGE (check one)

	X	
DRY	COLD	FROZEN

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
130P1	461 m	494 cm		

REMARKS:

Sections 1 & 2 stuck in barrel, imploded liner (split & described 6/80)

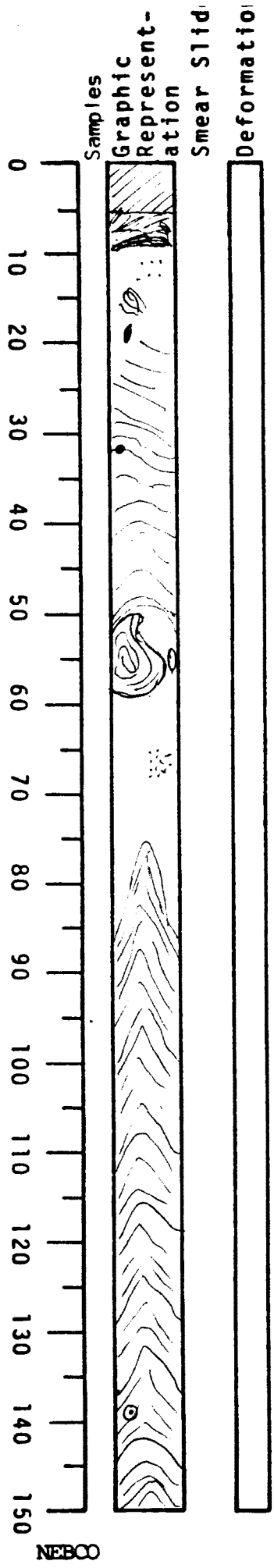
Section 1 = 0-150 cm
2 = 150-186 cm
3 = 186-195 cm (9 cm section to Kvenvolden-gas analysis)
4 = 195-335 cm (140 cm long)
5 = 335-494 cm (9 cm to KK + 150cm split = 159 cm)

MGG 06 1 1 5 0 1 6

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	3	0	P	1	1

STATION#				OBSERVER
	1	3	0	D.Bright



0-5 cm, empty

5-10 cm, approx. 1 cm of grayish olive silty mud (10Y 4/2) grading into blackish-olive organics (?) (approx. 4 cm)

Core holder was deformed (crushed concave inward) from approx. 0-30 cm and about 3 cm wide. Relationship to slightly folded layers at that interval is unknown

10-50 cm, irregularly folded (?) layers, sometimes mottled, grayish olive silty mud with light olive silty mud (5Y 5/2) and olive gray mud (5Y 3/2). Small (approx. 1 mm) brown wood fragments (?) at 10-15 cm. Black organic chip, 2 cm long at 18-20 cm and 0.5 x 0.5 cm at 31 cm. Smaller (1 mm) black organic (?) specks occurring irregularly throughout section.

50-60 cm, pocket (approx. 10 x 4 cm) of olive gray mud. Shell fragment at 52 cm surrounded by folded and mottled grayish olive and light olive muds.

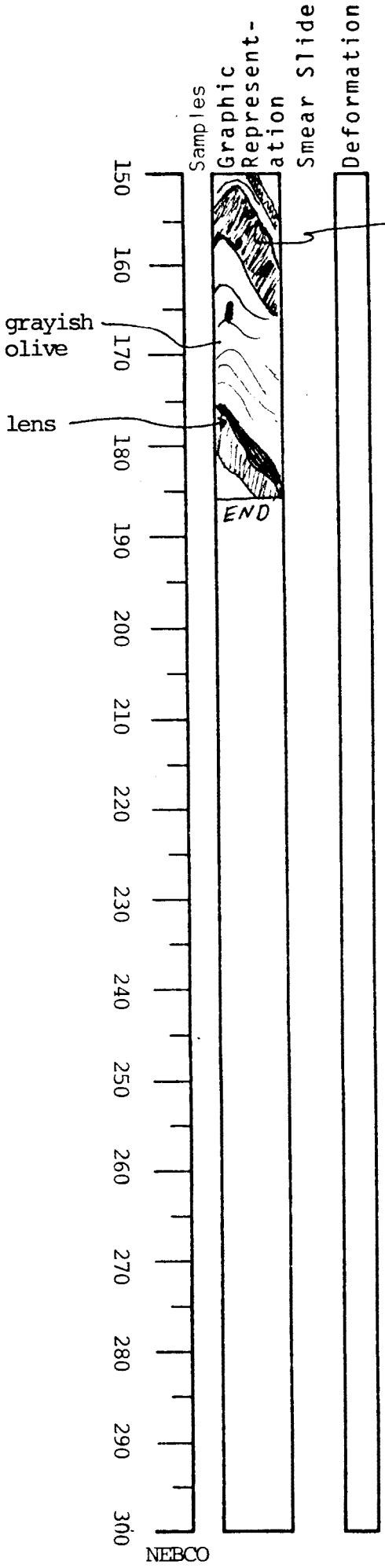
60-76 cm, mottled olive gray, light olive gray and grayish olive muds with small brown organic speck from 63-66 cm.

76-150 cm, more prominent folded layers of grayish olive, light olive, and olive gray silty muds, with brown organic and black organic specks occurring irregularly throughout section. Brownish-black circular organic fragment occurs at 138-319 cm. Slight smell of H_2S gas over this area (130-150 cm).

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.						SEC.
S	1	3	-	7	9	N	C	1	3	0	P	1		2

STATION#				OBSERVER
	1	3	0	D.Bright



150-186 cm, folded layers of olive gray (5Y 3/2) silty mud and grayish olive (10Y 4/2) silty mud

154 cm, small white shell fragment

155 cm, small black organic (?) bleb both in olive gray layer

160 cm, brown wood fragment (?) in olive gray layer

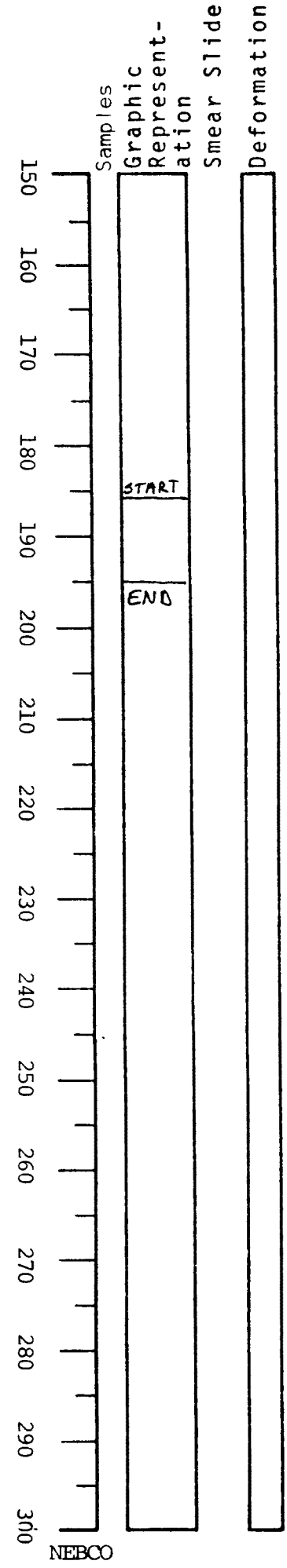
164 cm, brown wood fragment in grayish olive layer (and at 172 cm)

176-185 cm, dark brownish black lens of organic matter (?) with small brown wood fragments (?) and white shell fragment (?)

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.						SEC.	
S	1	3	-	7	9	N	C	1	3	0	P	1			3

STATION#				OBSERVER
	1	3	0	



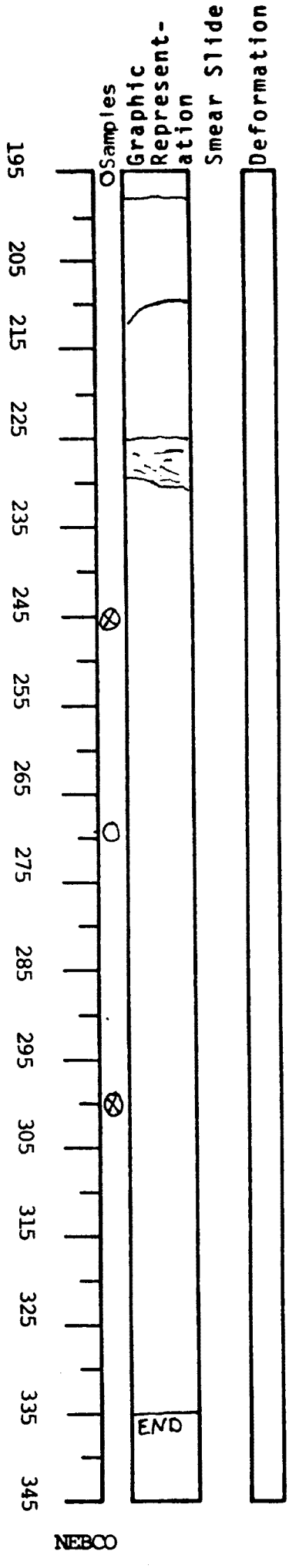
Section 3 = 186-195 cm

Sample for Kvenvolden - gas analysis.

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.						SEC.
S	1	3	-	7	9	N	C	1	3	0	P	1		4

STATION#				OBSERVER
	1	3	0	NEB



Section 4 = 195-335 cm (140 cm long)

195-198 cm, bottom of a sandy mud olive gray (possible flow) sharp bottom contact

198-210 cm, olive gray mud grading into an olive gray sandy mud with sharp bottom contact

210-225 cm, olive gray mud

225-230 cm, organic dark brown matter mixed with sand, underlain by gray clay layer to 231 cm

231-307 cm, olive gray homogeneous mud

307-311 cm, olive gray muddy sand with sharp bottom contact

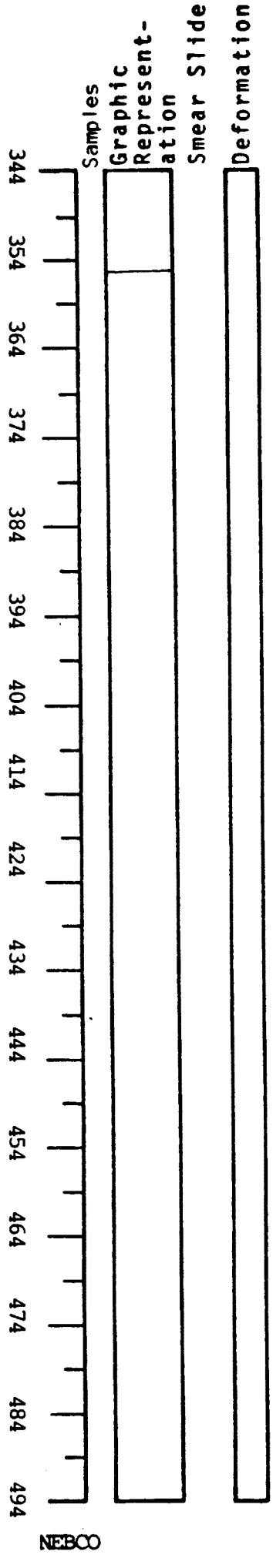
311-335 cm, olive gray homogeneous mud

X = vane shear
O = water content

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.						SEC.
S	1	3	-	7	9	N	C	1	3	0	P	1		5

STATION#				OBSERVER
	1	3	0	NEB



Section 5 = 335-494 cm

335-344 cm, not described, sample to Kvenvolden for gas analysis

344-356 cm, olive gray homogeneous mud

356-494 cm, vertical structure, suspect suck-in

SAMPLE LOG

LOCATOR: S13-79-NC SAMPLE NO: 130P1

STATION NO: 130

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	13-15 & 131-133 cm	Mike Field	USGS	C^{14} Dating	8/80
2	170 cm	Brian Edwards	"	Vane Shear & Water Content	6/12/80
3	186-195 cm	Keith Kvenvolden	"	Gas Analysis	10/27/79
4	291 cm	" "	"	" "	"
5	335-344 cm	" "	"	" "	"
4	195 cm & 269 cm	Brian Edwards	"	Bulk Density	"
4	245 cm & 300 cm	" "	"	Vane Shear & Water Content	"
4	204-206,216-218 cm	Mike Field	"	Grain Size & Carbon Content	10/14/80
4	244-246, 269-271 cm	" "	"	" "	"
4	299-301, 320-322 cm	" "	"	" "	"
5	363-365, 383-385 cm	" "	"	" "	"
5	403-405, 423-425 cm	" "	"	" "	"
5	443-445, 463-465 cm	" "	"	" "	"
5	475-477 cm	" "	"	" "	"
4	225-228 cm	" "	"	C^{14} Dating	8/80

NEBCO

USGS STATION LOG

SHIP / LEG S13-79-NC

LATITUDE 40° 49.51' N

LONGITUDE -124° 32.13' W

STATION NO. 131

LINE NO.

DAY/MONTH/YEAR

DATE 27/10/79

TYPE OF STORAGE (check one)

DRY	COLD	FROZEN
	X	

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
131G1	510 m	222 cm		
131P1	525 m	349 cm		

REMARKS:

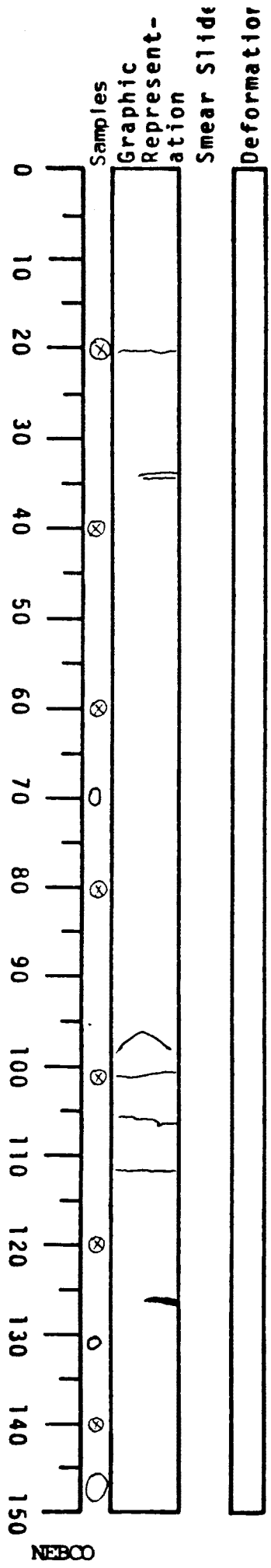
Piston Core 131 - Location: 40° 49.51' N, -124° 32.23' W
Geotechnical core, not split or described.

Gravity Core 131 - Location: 40° 49.51' N, -124° 32.13' W

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	7	9	-	N	C	1	3	1	G	1	1

STATION#			OBSERVER
	1	3	1	NEB



0-22cm-- highly deformed from coring.

22-98cm-- olive grey silty mud.

35cm-- possible organic layer (wood)

X ≡ Vane Shear

○≡ Water Content

95-100cm-- disturbed sand layer

108-110cm-- sand layer w/possible organic matter.

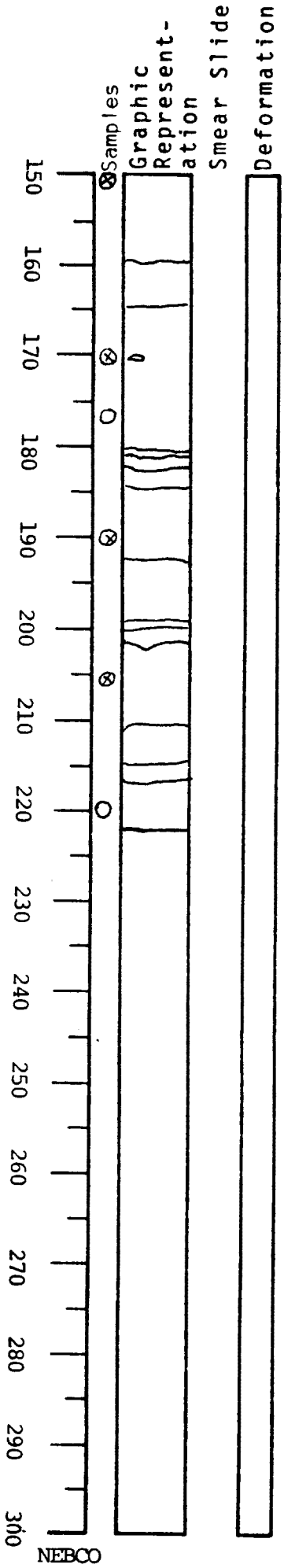
127cm-- dark brown(organic)layer?

145-150cm-- water content.

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.	
S	1	3-	7	9	-	N	C	1	3	1	G	1	0	2

STATION#				OBSERVER
	1	3	1	NEB



158-163cm-- Sandy layer. Gradational top w/sharp bottom contact.

180-184cm-- Two sandy layers, grading downwards w/sharp contact at 184 cm.

193-198cm-- Gradational contact at top of sandy layer, grading downwards to sharp bottom contact w/1 cm thick mud layer. This grades into sandy layer (199-201cm) with slump bottom contact w/mud.

201-211cm-- Mixed sand & mud layers.

211-215cm-- Sharp top contact of sandy layer w/upper organic layer.

215-222cm-- Mixed layers of mud & sand.

X ≡ Vane Shear

O ≡ Water Content

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 131G1

STATION NO: 131

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	19-21,39-41, 59-61 cm	Mike Field	USGS	Carbon Content Grain Size	10/14/80
1	79-81,102-104 cm	Mike Field	USGS	Carbon Content Grain Size	10/14/80
1	108-110,119-121 cm	Mike Field	USGS	Carbon Content Grain Size	10/14/80
1	139-141	Mike Field	USGS	Carbon Content Grain Size	10/14/80
1	20,40,60, 80,100 cm	Brian Edwards	USGS	Vane Shear & Water Content	10/27/79
1	140 120 & 150cm	Brian Edwards	USGS	Vane Shear & Water Content	10/27/79
2	170,190 & 207 cm	Brian Edwards	USGS	Vane Shear & Water Content	10/27/79
2	178 cm & 220 cm	Brian Edwards	USGS	Bulk Density Water Content	10/27/79
2	159-161,169-171 cm	Mike Field	USGS	Carbon Content Grain Size	10/14/80
2	176-178, 189-191 cm	Mike Field	USGS	Carbon Content Grain Size	10/14/80
2	206-208, 211-213 cm	Mike Field	USGS	Carbon Content Grain Size	10/14/80
1	34-36 & 125-127 cm	Mike Field	USGS	C^{14} Dating	8/80
1	70, 132 & 148 cm	Brian Edwards	"	Bulk Density	10/27/79

SAMPLE LOG

LOCATOR: S13-79-NC SAMPLE NO: 131P1

STATION NO: 131

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	0-60 cm	Brian Edwards	USGS	Geotechnical	10/27/79
1	60-69 cm	Keith Kvenvolden	USGS	Geochemistry	10/27/79
2	69-160 cm	Brian Edwards	USGS	Geotechnical	10/27/79
2	160-169cm	Keith Kvenvolden	USGS	Geochemistry	10/27/79
3	169-260 cm	Brian Edwards	USGS	Geotechnical	10/27/79
3	260-266 cm	Keith Kvenvolden	USGS	Geochemistry	10/27/79
4	266-349 cm	Brian Edwards	USGS	Geotechnical	10/27/79

NEBCO

USGS STATION LOG

SHIP / LEG S13-79-NC

LATITUDE 40° 50.17-50.14' N

LONGITUDE -124° 33.41-33.42' W

STATION NO. 132

LINE NO.

DAY/MONTH/YEAR

DATE 27/10/79

TYPE OF STORAGE (check one)

DRY	COLD	FROZEN
	X	

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
132G1	540 m	262 cm		
132G2	549 m	336 cm		

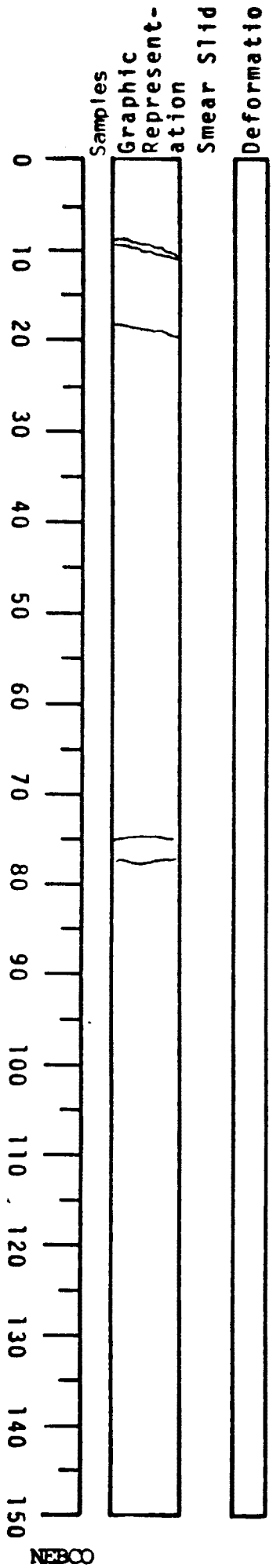
REMARKS:

Gravity Core 132G1 - split and described.
Gravity Core 132G2 - for geotechnical analysis.

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.	
S	1	3	-7	9	-	N	C	1	3	2	G	1	o	1

STATION#			OBSERVER
	1	3	2	NEB



0-9cm-- Disturbed mud.

9-10cm-- Black (organic?) layer.

10-19cm-- Grey homogeneous mud.

19-76cm-- Olive grey mud w/some banding.

76-78cm-- Sandy layer w/gradational top & sharp bottom contact,disturbed by burrow mark.

78-98cm-- Olive grey mud W/shell frags at 83 & 91 cm.

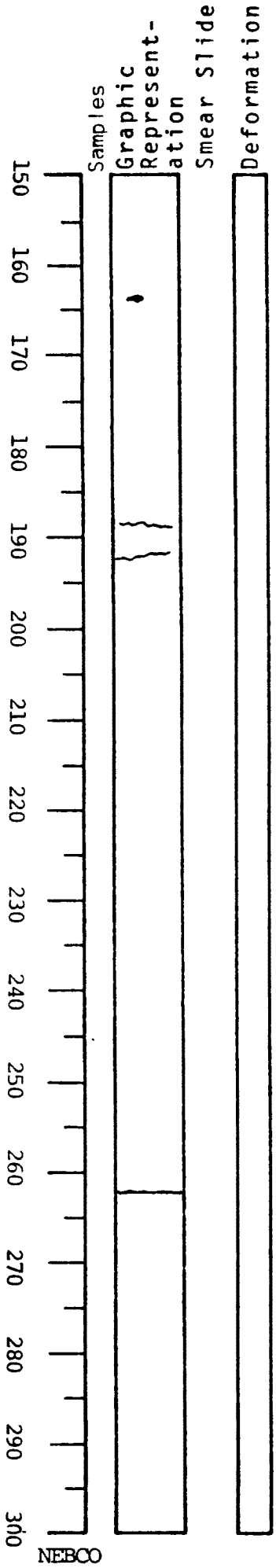
98-102cm--Sandy layer, gradational top & bottom.

102-150cm-- Olive grey mud.

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.	
S	1	3	-7	9	-	N	C	1	3	2	G	1	0	2

STATION#			OBSERVER
	1	3	2	NEB



150-189cm-- Olive grey homogeneous mud.

163cm-- Shell fragment

189-193cm-- Disturbed sandy muddy layer.

193-197cm-- Olive grey mud.

197-220cm-- Mixed disturbed sandy & muddy layer.

220-221cm-- Sandy layer.

227-228cm-- Sandy layer.

251cm-- Shell fragment.

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 132G1

STATION NO: 132

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	21-23,40-42, 59-61 cm	Mike Field	USGS	Grain Size & Carbon Content	10/14/80
1	79-81,99-101, 119-121 cm	Mike Field	USGS	Grain Size & Carbon Content	10/14/80
1	139-141 cm	Mike Field	USGS	Grain Size Carbon Content	10/14/80
1	120, 140 & 150 cm	Brian Edwards	USGS	Vane Shear& Water Content	10/27/79
2	151 & 262 cm	Brian Edwards	USGS	Vane Shear & Water Content	10/27/79
2	255 cm	John Barron	USGS	Diatoms	10/27/79
2	168.5-171.5, 184-187 cm	Mike Field	USGS	Grain Size & Carbon Content	10/14/80
2	194-196, 209-211 cm	Mike Field	USGS	Grain Size & Carbon Content	10/14/80
2	219-221, 229-231 cm	Mike Field	USGS	Grain Size & Carbon Content	10/14/80
2	248.5-251.5 cm	Mike Field	USGS	Grain Size & Carbon Content	10/14/80
1	22,40,60,80, & 100 cm	Brian Edwards	"	Vane Shear & Water Content	10/27/79
2	170,186,210, 230,250& 261	" "	"	" "	"
1	68, 110 & 149 cm	" "	"	Bulk Density	"
2	163 cm	" "	"	" "	"

NEBCO

SAMPLE LOG

LOCATOR: S13-79-NC SAMPLE NO: 132G2

STATION NO: 132

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	0-100 cm	Fugro, Inc. c/o Brian Edwards	USGS	Geotechnical	10/27/79
1	109 cm	Brian Edwards	USGS	Vane Shear & Water Content	10/27/79
1	100-109 cm	Keith Kvenvolden	USGS	Gas Analysis	10/27/79
2	109-200 cm	Fugro, Inc. c/o Brian Edwards	USGS	Geotechnical	10/27/79
2	200-209 cm	Keith Kvenvolden	USGS	Gas Analysis	10/27/79
2	209 cm	Brian Edwards	USGS	Vane Shear & Water Content	10/27/79
3	209-300 cm	Fugro, Inc. c/o Brian Edwards	USGS	Geotechnical	10/27/79
3	300-309 cm	Keith Kvenvolden	USGS	Gas Analysis	10/27/79
3	309 cm	Brian Edwards	USGS	Vane Shear & Water Content	10/27/79
4	309-336 cm	Fugro, Inc. c/o Brian Edwards	USGS	Geotechnical	10/27/79

USGS STATION LOG

SHIP / LEG S13-79-NC

LATITUDE 40° 50.58-50.49' N

LONGITUDE -124° 35.06-34.99' W

STATION NO. 133

LINE NO.

DAY/MONTH/YEAR

DATE 27/10/79

TYPE OF STORAGE (check one)

	X	
DRY	COLD	FROZEN

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
133G1	570 m	295 cm		
133G2	574 m	328 cm		

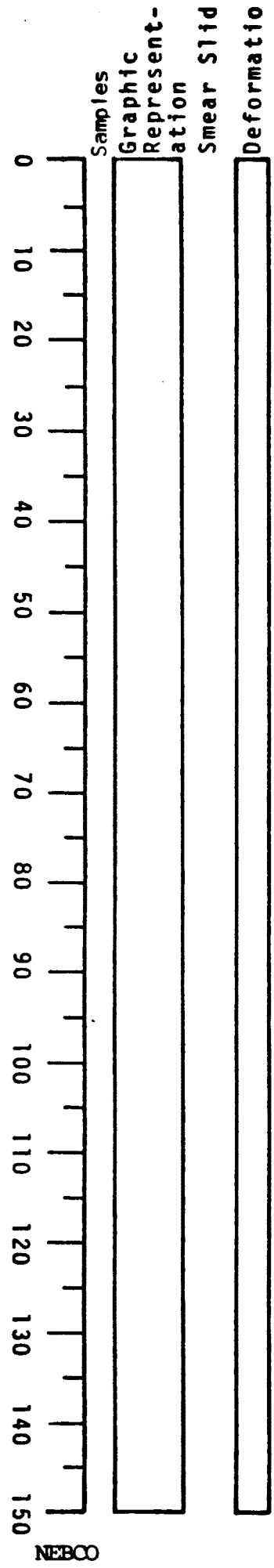
REMARKS:

Gravity Core 133G1 - for geotechnical analysis.
Gravity Core 133G2 - split, subsampled and described.

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.	
S	1	3	-	7	9	N	C	1	3	3	G	2	1-	3

STATION#			OBSERVER
	1	3	3	MEF



0-60 cm, olive gray homogeneous mud (dominantly silt) grading into similar but firmer sediments. Indistinct mottles occur near top. The sediment is massive; lower contact is arbitrary.

60-108 cm, same as upper unit but more compact/firm

108-274 cm, olive gray clayey silt with numerous faint burrow traces. Thin laminae of coarse silt occur at 172, 200, 208, 220 etc.. Laminae are very thin.

274-330 cm (bottom of core), olive gray silt with increase in coarse silt content - occurs as laminae, layers and pods up to 5 cm thick.

This core is 328 cm long - 3 sections

Sect. 1 - 0-150 cm
Sect. 2 - 150-300 cm
Sect. 3 - 300-328 cm

Vane Shear & Water Content (approx.) every 20 cm, water content also at other location

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 133G1

STATION NO: 133

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	0-100 cm	Brian Edwards	USGS	Geotechnical	10/27/79
2	100-109 cm	Keith Kvenvolden	USGS	Gas Analysis	10/27/79
2	109 cm	Brian Edwards	USGS	Vane Shear & Water Content	10/27/79
2	109-200 cm	Brian Edwards	USGS	Geotechnical	10/27/79
3	200-210 cm	Keith Kvenvolden	USGS	Gas Analysis	10/27/79
3	210-295 cm	Brian Edwards	USGS	Geotechnical	10/27/79
3	210 cm	Brian Edwards	USGS	Vane Shear & Water Content	10/27/79

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 133G2

STATION NO: 133

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	19-21,39-41, 59-61 cm	Mike Field	USGS	Grain Size & Carbon Content	10/15/80
1	79-81,99-101, 109-111 cm	Mike Field	USGS	Grain Size & Carbon Content	10/15/80
1	119-121, 139-141.5cm	Mike Field	USGS	Grain Size & Carbon Content	10/15/80
1	150 cm	Brian Edwards	USGS	Vane Shear & Water Content	10/27/79
1	110 & 149 cm	Brian Edwards	USGS	Bulk Density	10/27/79
2	169-171, 189-191 cm	Mike Field	USGS	Grain Size & Carbon Content	10/15/80
2	209-211, 219-221 cm	Mike Field	USGS	Grain Size & Carbon Content	10/15/80
2	229-231, 249-251 cm	Mike Field	USGS	Grain Size & Carbon Content	10/15/80
2	263-265, 279-281 cm	Mike Field	USGS	Grain Size & Carbon Content	10/15/80
2	150,170 & 190 cm	Brian Edwards	USGS	Vane Shear & Water Content	10/27/79
3	320 & 300 cm	Brian Edwards	USGS	Vane Shear & Water Content	10/27/79
3	328.5-331.5cm	Mike Field	USGS	Grain Size & Carbon Content	10/15/80
1	20,40,60, 80,100 cm	Brian Edwards	"	Vane Shear & Water Content	10/27/79
1 2	120 & 140, 210,230 cm	" "	"	" "	"
2	250, 270 & 290 cm	" "	"	" "	"
2	200, 280 & 298 cm	" "	"	Bulk Density	"

NEBCO

USGS STATION LOG

SHIP / LEG S13-79-NC

LATITUDE 40° 51.00-50.96' N

LONGITUDE -124° 36.64-36.54' W

STATION NO. 134

LINE NO.

DAY/MONTH/YEAR

DATE 27/10/79

TYPE OF STORAGE (check one)

	X	
DRY	COLD	FROZEN

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
134G1	595 m	310 cm		
134G2	592 m	314 cm		

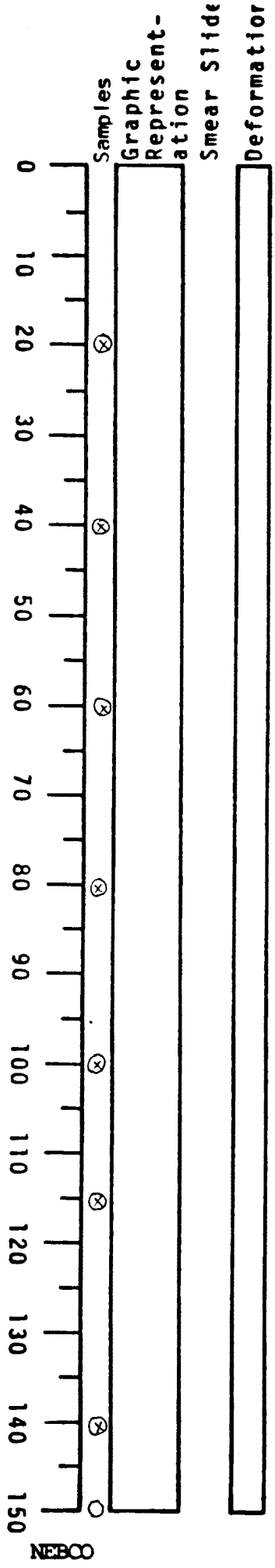
REMARKS:

Gravity Core 134G1 - for geotechnical analysis.
Gravity Core 134G2 - split and described.

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.	
S	1	3	-	7	9-	N	C	1	3	4	G	2	0	1

STATION#				OBSERVER
	1	3	4	NEB



0-150cm-- Olive grey slightly bioturbated.

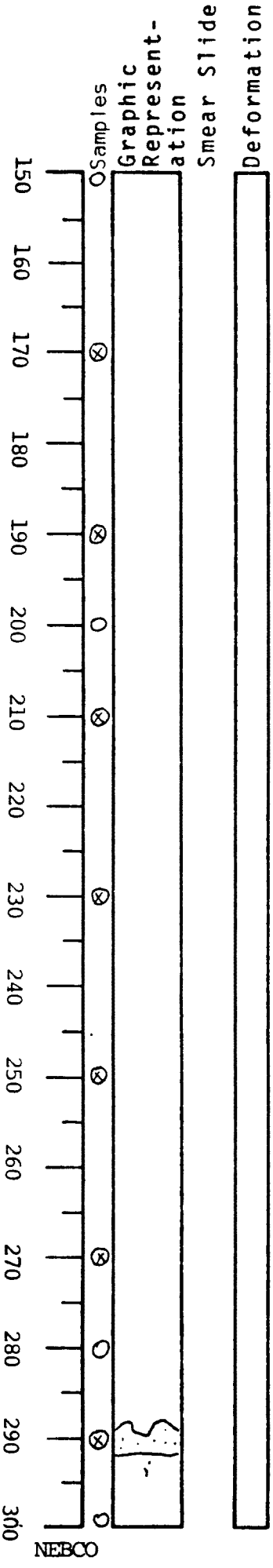
X ≡ Vane shear

O ≡ Water content

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.	
S	1	3	-7	9	-	N	C	1	3	4	G	2	0	2

STATION#			OBSERVER
	1	3	4	NEB



150-288cm-- Olivegrey homogeneous mud.

288-292cm-- Bioturbated sandy layer.

292-300cm-- Grey mud.

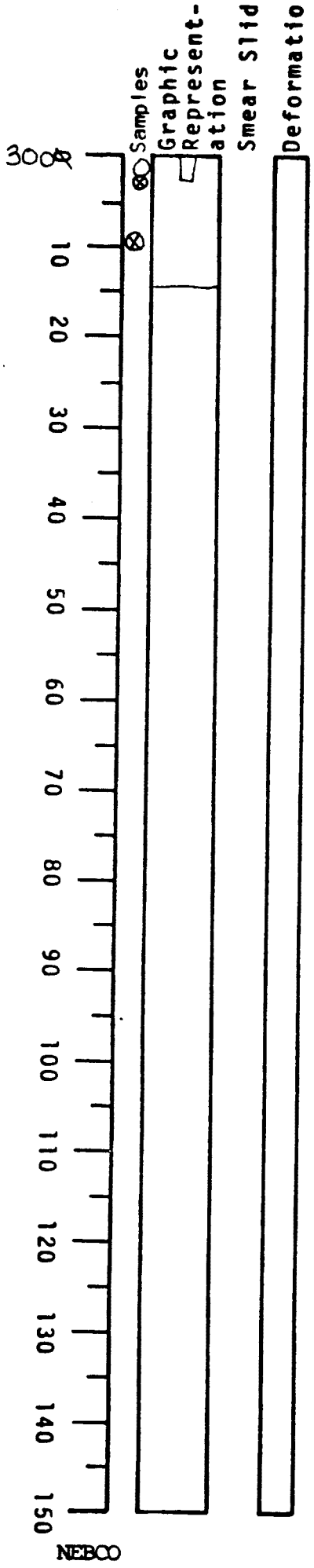
X ≡ Vane shear

O ≡ Water content

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC
S	1	3	-	7	9-	N	C	1	3	4	G	2	0

STATION#				OBSERVE
	1	3	4	NEB



300-314cm-- Olive grey homogeneous mud.

○ = Water content

SAMPLE LOG

LOCATOR: S13-79-NC SAMPLE NO: 134G1

STATION NO: 134

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	0-100 cm	Fugro Inc., c/o Brian Edwards	USGS	Geotechnical	10/27/79
2	100-109 cm	Keith Kvenvolden	USGS	Gas Analysis	10/27/79
2	109-200 cm	Fugro, Inc. c/o Brian Edwards	USGS	Geotechnical	10/27/79
3	200-209 cm	Keith Kvenvolden	USGS	Gas Analysis	10/27/79
3	209-300 cm	Fugro, Inc., c/o Brian Edwards	USGS	Geotechnical	10/27/79
4	300-310 cm	Keith Kvenvolden	USGS	Gas Analysis	10/27/79
2	109 cm	Brian Edwards	USGS	Vane Shear & Water Content	10/27/79
3	209 cm	Brian Edwards	USGS	Vane Shear & Water Content	10/27/79
4	300 cm	Brian Edwards	USGS	Vane Shear & Water Content	10/27/79

SAMPLE LOG

LOCATOR: S13-79-NC SAMPLE NO: 134G2

STATION NO: 134

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	18-21.5, 39-41 cm	Mike Field	USGS	Grain Size & Carbon Content	10/15/80
1	49-51, 58-61 cm	" "	"	" "	"
1	79-82, 98.5-101 cm	" "	"	" "	"
1	109-110.5, 134-136.5cm	" "	"	" "	"
2	169-171, 189-191.5	" "	"	" "	"
2	208-211, 229-231.5	" "	"	" "	"
2	248.5-251, 261-263 cm	" "	"	" "	"
2	269-272, 287-289 cm	" "	"	" "	"
3	307-310 cm	" "	"	" "	"
1	20,40,60,80, 100,115 cm	Brian Edwards	"	Vane Shear & Water Content	10/27/79
1	140 & 150cm	" "	"	" "	"
2	170,190,210, 230,250 cm	" "	"	" "	"
2	270 cm & 290 cm	" "	"	" "	"
3	300, 301 & 309 cm	" "	"	" "	"
1	70, 130 & 148 cm	" "	"	Bulk Density	"
2	200, 280 & 299 cm	" "	"	" "	"
3	306 cm	John Barron	"	Diatoms	6/11/80

NEBCO

USGS STATION LOG

SHIP / LEG S13-79-NC

LATITUDE 40° 49.71-49.76' N

LONGITUDE -124° 32.50-32.59' W

STATION NO. 135

LINE NO. _____

DAY/MONTH/YEAR

DATE 28/10/79

TYPE OF STORAGE (check one)

	X	
DRY	COLD	FROZEN

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
135G1	525 m	272 cm		
135G2	527 m	289.5 cm		

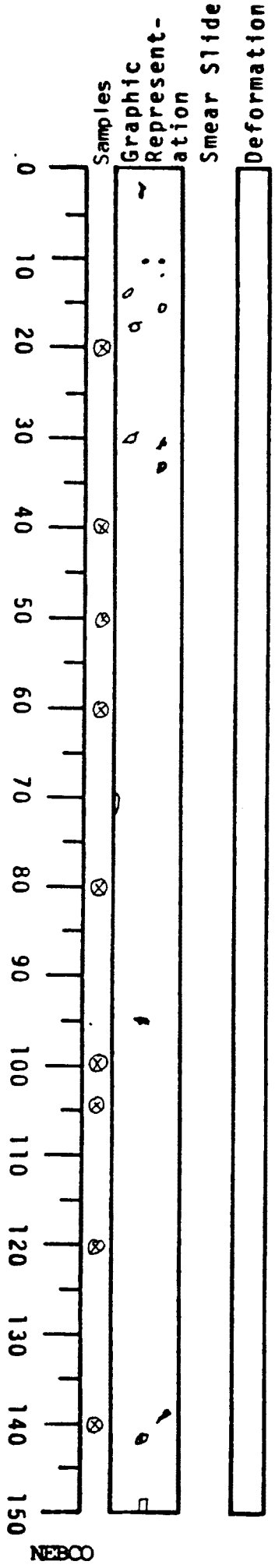
REMARKS:

Gravity Core 135G1 - for geotechnical analysis.
Gravity Core 135G2 - split, subsampled and described.

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.	
S	1	3	-	7	9-	N	C	1	3	5	G	2	0	1

STATION#			OBSERVER
	1	3	5	MY



2 cm worm

10-37cm-- Air pockets, probably from burrowing.

0-150cm-- Homogeneous moderately bioturbated olive grey silty mud (5Y 3/2).

72cm-- Air cavity,

96cm-- Shell fragment.

138cm-- Shell fragments

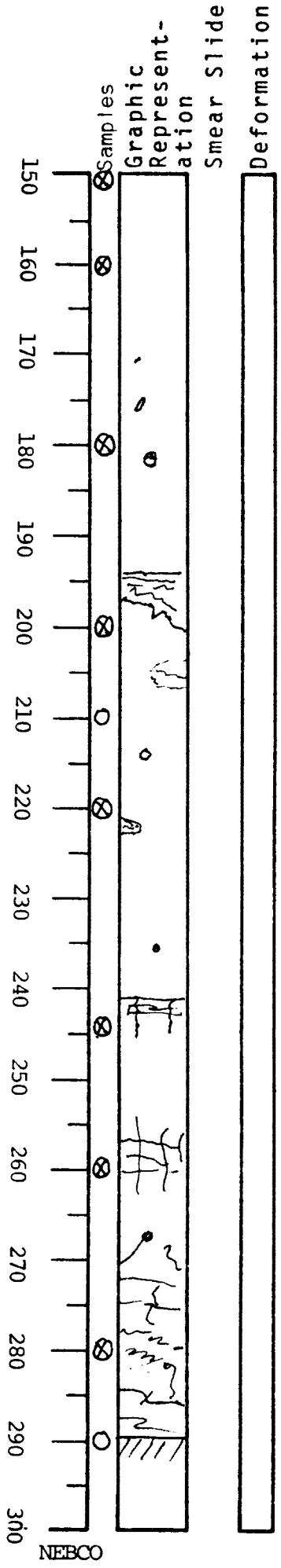
141cm-- Wood chip

150cm-- plug

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	3	5	G	2	2

STATION#			OBSERVER
	1	3	5	MY



150-289.5 cm, olive gray mud, 5Y 3/2

171 cm, small shell fragment

176 cm, shell fragment

183 cm, organic fragment

196-200 cm, lens of silt

203-207 cm, silty sand lens

213 cm, rock fragment

223-224 cm, silty sand lens

237 cm, organic fragment

237-289.5 cm, numerous partings in lower silty clay mud layers, no H_2S Smell

266 cm, organic fragment

282 cm, shell fragment

X = vane shear
O = water content

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 135G1

STATION NO: 135

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	0-100 cm	Brian Edwards	USGS	Geotechnical	10/28/79
2	100-109 cm	Keith Kvenvolden	USGS	Gas Analysis	10/28/79
2	109 cm	Brian Edwards	USGS	Vane Shear & Water Content	10/28/79
2	109-200 cm	Brian Edwards	USGS	Geotechnical	10/28/79
3	200-209 cm	Keith Kvenvolden	USGS	Gas Analysis	10/28/79
3	209 cm	Brian Edwards	USGS	Vane Shear & Water Content	10/28/79
3	209-272 cm	Brian Edwards	USGS	Geotechnical	10/28/79

SAMPLE LOG

LOCATOR: S13-79-NC SAMPLE NO: 135G2

STATION NO: 135

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	19.5-21, 29-31 cm	Mike Field	USGS	Grain Size & Carbon Content	10/15/80
1	39-41.5, 59-61.5 cm	" "	"	" "	"
1	69-71.5, 78.5-81 cm	" "	"	" "	"
1	98.5-101, 119-121.5cm	" "	"	" "	"
1	130-132, 139-141.5	" "	"	" "	"
2	158.5-161, 169-171.5	" "	"	" "	"
2	179-181.5, 189-191 cm	" "	"	" "	"
2	219-221.5, 234-236 cm	" "	"	" "	"
2	253-255, 274-276 cm	" "	"	" "	"
1	20,40,60,80, 100,120 cm	Brian Edwards	"	Vane Shear & Water Content	10/28/79
1	140 cm	" "	"	" "	"
2	151,160,180, 200,220 cm	" "	"	" "	"
2	244,260, & 280 cm	" "	"	" "	"
1	50, 105 & 149 cm	" "	"	Bulk Density	"
2	210 & 290 cm	" "	"	" "	"

NEBCO

USGS STATION LOG

SHIP / LEG: S13-79-NC

LATITUDE: 40° 49.27-49.29' N

LONGITUDE: -124° 30.36-30.40' W

STATION NO.: 136

LINE NO.:

DAY/MONTH/YEAR

DATE: 28/10/79

TYPE OF STORAGE (check one)

	X	
DRY	COLD	FROZEN

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
136G1	450 m	190 cm		
136G2	450 m	184 cm		

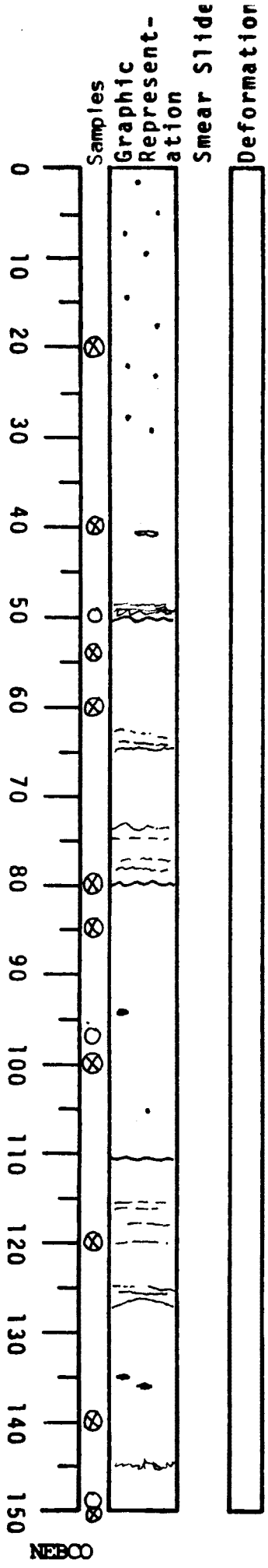
REMARKS:

Gravity Core 136G1 - for geotechnical analysis.
Gravity Core 136G2 - split, subsampled and described.

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	3	6	G	2	1

STATION#			OBSERVER
1	3	6	MY



0-150 cm, fairly homogeneous in color, olive gray (5Y 3/2), bioturbated with small organic fragments throughout

0-35 cm, numerous small cavities

42 cm, organic fragments

55 cm, erosional contact with silty layers above, possible turbidite

55-80 cm, one depositional unit with silty zone 62-65 cm

74-82 cm, silty interbeds grading up from contact

82 cm, erosional contact

94 cm, shell fragment

105 cm, organic fragment

111 cm, depositional contact with silty layers grading up

114-120 cm, silty zone

122 cm, shell fragment

124-126 cm, silty zone

135-136 cm, organic fragment

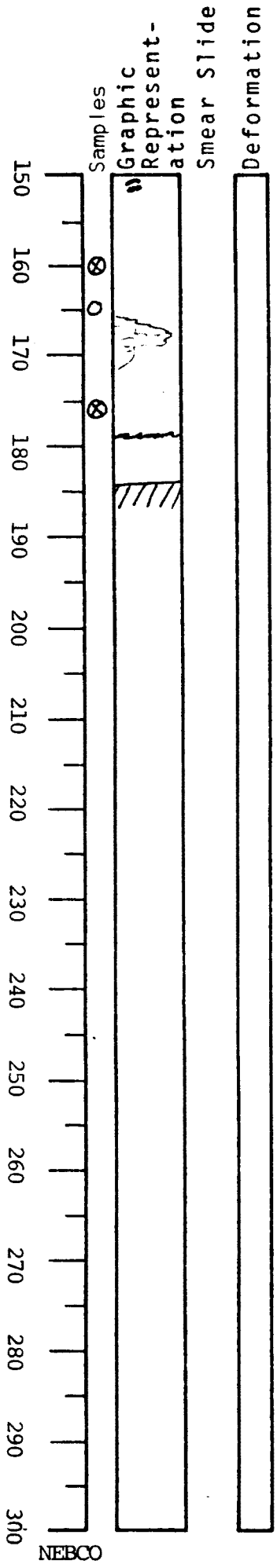
145-146 cm, shell fragment zone

X = vane shear
O = water content

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	3	6	G	2	2

STATION#				OBSERVER
	1	3	6	MY



150-184 cm, fairly homogeneous color, olive gray (5Y 3/2) with organic fragments throughout

152 cm, organic fragment

153 cm, shell fragment

168-173 cm, silty zone

178 cm, erosional contact

H_2S Smell

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 136G1

STATION NO: 136

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	0-100 cm	Brian Edwards	USGS	Geotechnical	10/28/79
2	100-109 cm	Keith Kvenvolden	USGS	Gas Analysis	10/28/79
2	109-190 cm	Brian Edwards	USGS	Geotechnical	10/28/79
2	109 cm	Brian Edwards	USGS	Vane Shear & Water Content	10/28/79

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SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 136G2

STATION NO: 136

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	17-19, 37-39.5 cm	Mike Field	USGS	Grain Size & Carbon Content	10/16/80
1	59-61.5, 77-79.5 cm	" "	"	" "	"
1	89-91.5, 108-110 cm	" "	"	" "	"
1	119-121, 128.5-130.5	" "	"	" "	"
1	139-141 cm	" "	"	" "	"
2	169-171.5cm	" "	"	" "	"
1	20,40,53,60, 80,85 cm	Brian Edwards	"	Vane Shear & Water Content	10/28/79
1	100,120,140 & 150 cm	" "	"	" "	"
2	160 cm & 176 cm	" "	"	" "	"
1	50, 97 & 148 cm	" "	"	Bulk Density	"
2	165 cm	" "	"	" "	"

NEBCO

USGS STATION LOG

SHIP / LEG S13-79-NC

LATITUDE 40° 48.94-48.87' N

LONGITUDE -124° 28.99-28.96' W

STATION NO. 137

LINE NO.

DAY/MONTH/YEAR

DATE 28/10/79

TYPE OF STORAGE (check one)

	X	
DRY	COLD	FROZEN

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
137G1	385 m	220 cm		
137G2	380 m	259 cm		

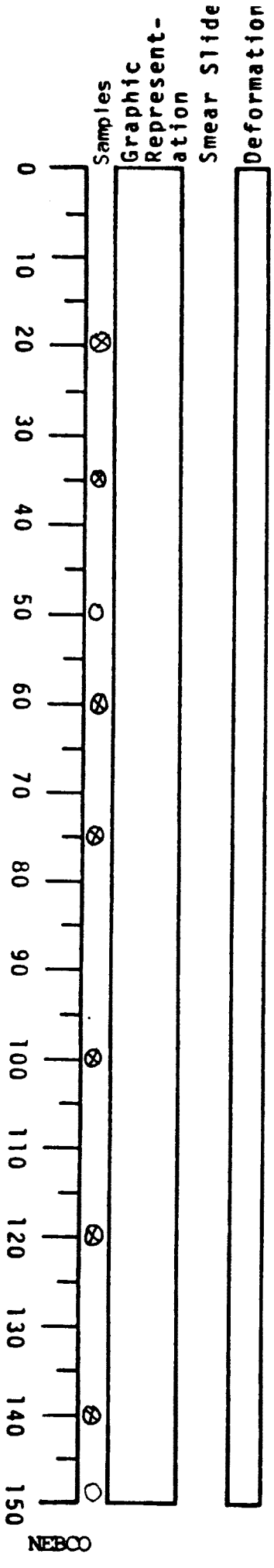
REMARKS:

Gravity Core 137G1 - for geotechnical analysis.
Gravity Core 137G2 - split, subsampled and described.

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.	
S	1	3	-7	9	-	N	C	1	3	7	G	2	0	1

STATION#			OBSERVER
	1	3	7	NEB



0-150cm-- Olive grey bioturbated mud mixed w/sandy mud.

Shell frags at 41,63,115.

Wood frags at 82,115.

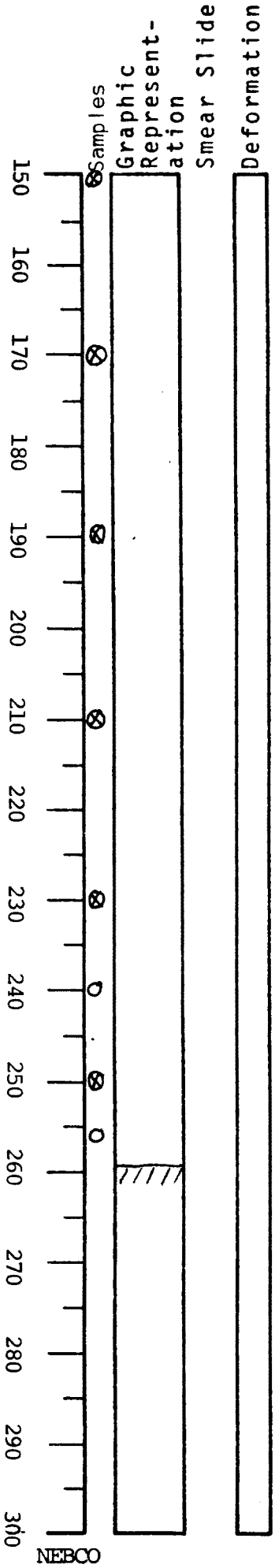
Smells like s__t

○≡ water content

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	3	7	G	2	2

STATION#				OBSERVER
	1	3	7	NEB



150-259 cm, olive gray mixed with gray mud
bioturbated full length

Smells like s__t

X = vane shear
O = water content

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 137G1

STATION NO: 137

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	0-100 cm	Fugro Inc., c/o Brian Edwards	USGS	Geotechnical	10/28/79
2	100-109 cm	Keith Kvenvolden	USGS	Gas Analysis	10/28/79
2	109-200 cm	Fugro Inc., c/o Brian Edwards	USGS	Geotechnical	10/28/79
2	109 cm	Brian Edwards	USGS	Vane Shear & Water Content	10/28/79
3	200-209 cm	Keith Kvenvolden	USGS	Gas Analysis	10/28/79
3	209-220 cm	Fugro Inc., c/o Brian Edwards	USGS	Geotechnical	10/28/79
3	209 cm	Brian Edwards	USGS	Vane Shear & Water Content	10/28/79

SAMPLE LOG

LOCATOR: S13-79-NC SAMPLE NO: 137G2

STATION NO: 137

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	18-21,34-36.5 cm	Mike Field	USGS	Grain Size & Carbon Content	8/16/80
1	59-62, 75-77.5 cm	" "	"	" "	"
1	85-87.5, 99-101.5 cm	" "	"	" "	"
1	106-109, 127-129 cm	" "	"	" "	"
1	139.5-142cm	" "	"	" "	"
1	50 cm & 149 cm	Brian Edwards	"	Bulk Density Water Content	10/28/79
1	114-115 cm	Mike Field	"	C^{14} Dating	7/31/80
2	210 cm	John Barron	"	Diatoms	6/11/80
2	150,170,190 210 cm	Brian Edwards	"	Vane Shear & Water Content	10/28/79
2	193-195, 169-171 cm	Mike Field	"	Grain Size & Carbon Content	8/16/80
2	209-211, 219-221 cm	" "	"	" "	"
2	228.5-231, 249-251.5cm	" "	"	" "	"
1	20,35,60, 75,100 cm	Brian Edwards	"	Vane Shear & Water Content	10/28/79
1	120 & 140 cm	" "	"	" "	"
2	230 cm & 250 cm	" "	"	" "	"
2	240 cm & 256 cm	" "	"	Bulk Density	"

NEBCO

USGS STATION LOG

SHIP / LEG S13-79-NC

LATITUDE 40° 48.50-48.51' N

LONGITUDE -124° 27.79-27.75' W

STATION NO. 138

LINE NO.

DAY/MONTH/YEAR

DATE 28/10/79

TYPE OF STORAGE (check one)

	X	
DRY	COLD	FROZEN

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
138G1	275 m	138 cm		
138G2	270 m	125 cm		

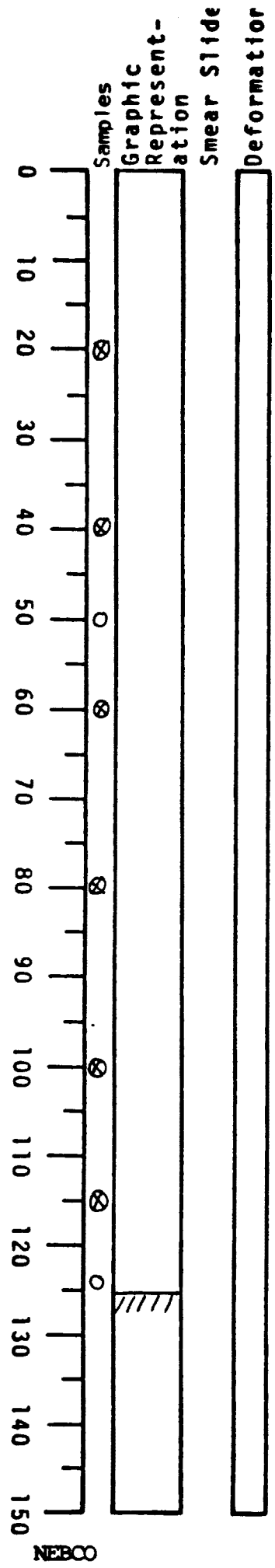
REMARKS:

Gravity Core 138G1 - for geotechnical analysis.
Gravity Core 138G2 - split, subsampled and described.

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	3	8	G	2	1

STATION#				OBSERVER
	1	3	8	MEF



Entire core is silty gray mud with numerous bioturbation and deformed/contorted laminations. Repeating laminae of higher/lower clay content common. Few small fragments of shell at 98 cm.

Of particular note is the absence of soupy brown holocene mud at top of section. Few small holes (burrows) at top.

Small blotches of black organic material at 39, 52, 88-92 cm.

X = vane shear
O = water content

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 138G1

STATION NO: 138

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	0-100 cm	Fugro, Inc. c/o Brian Edwards	USGS	Geotechnical	10/28/79
2	100-109 cm	Keith Kvenvolden	"	Gas Analysis	"
2	109-138 cm	Fugro Inc. c/o Brian Edwards	"	Geotechnical	"
2	109 cm	Brian Edwards	"	Vane Shear & Water Content	"

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SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 138G2

STATION NO: 138

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	19-21,39-41.5 cm	Mike Field	USGS	Grain Size & Carbon Content	8/16/80
1	59-61,79-81.5 cm	" "	"	" "	"
1	89-91,99-101.5 cm	" "	"	" "	"
1	114-116 cm	" "	"	" "	"
1	120 cm	John Barron	"	Diatoms	6/11/80
1	20,40,60,80,100,115	Brian Edwards	"	Vane Shear & Water Content	10/28/79
1	50 & 124 cm	" "	"	Bulk Density	"

NEBCO

USGS STATION LOG

SHIP / LEG S13-79-NC

LATITUDE 40° 48.31' N

LONGITUDE -124° 27.00' W

STATION NO. 139

LINE NO.

DAY/MONTH/YEAR

DATE 28/10/79

TYPE OF STORAGE (check one)

DRY	COLD	FROZEN
	x	

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
139G1	190 m	190 cm		
139G2	190 m	140 cm		

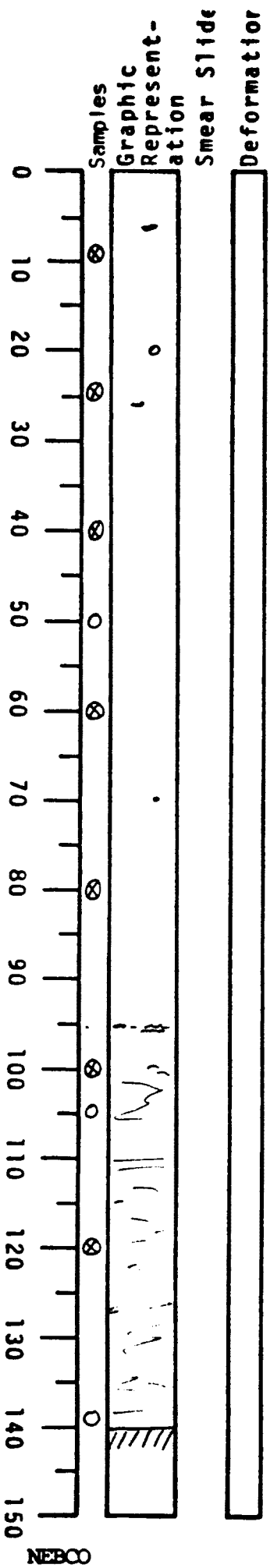
REMARKS:

Gravity Core 139G1 - for geotechnical analysis.
Gravity Core 139G2 - no core catcher, split and described.

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	3	9	G	2	1

STATION#			OBSERVER
	1	3	9	MY



0-140 cm, core color olive gray (5Y 3/2) to olive black (5Y 2/1), top to bottom homogeneous mud, bioturbation

7 cm, shell fragment

18-20 cm, rock in working half

26 cm, wood chip in working half, might be big enough for dating

64 cm, organic fragment

95 cm, layer rich in wood fragments

110-140 cm, silty zone

X = vane shear
O = water content

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 139G1

STATION NO: 139

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	0-100 cm	Fugro Inc., c/o Brian Edwards	USGS	Geotechnical	10/28/79
2	100-109 cm	Keith Kvenvolden	USGS	Gas Analysis	10/28/79
2	109-190 cm	Fugro Inc., c/o Brian Edwards	USGS	Geotechnical	10/28/79
2	109 cm	Brian Edwards	USGS	Vane Shear & Water content	10/28/79

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 139G2

STATION NO: 139

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	22.5-25, 38.5-41 cm	Mike Field	USGS	Grain Size & Carbon Content	10/17/80
1	58.5-61, 68.5-71 cm	" "	"	" "	"
1	78.5-81, 98.5-101 cm	" "	"	" "	"
1	113-115.5, 119-121.5cm	" "	"	" "	"
1	135 cm	John Barron	"	Diatoms	6/11/80
1	8 ,25,40,50, 60,80 cm	Brian Edwards	"	Vane Shear & Water Content	10/28/79
1	100,105, 120 cm	" "	"	" "	"
1	50, 105 & 138 cm	" "	"	Bulk Density	"

NEBCO

USGS STATION LOG

SHIP / LEG S13-79-NC

LATITUDE 40° 47.91-47.90' N

LONGITUDE -124° 25.62-25.63' W

STATION NO. 140

LINE NO.

DAY/MONTH/YEAR

DATE 28/10/79

TYPE OF STORAGE (check one)

	X	
DRY	COLD	FROZEN

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
140G1	110 m	216 cm		
140G2	110 m	264 cm		

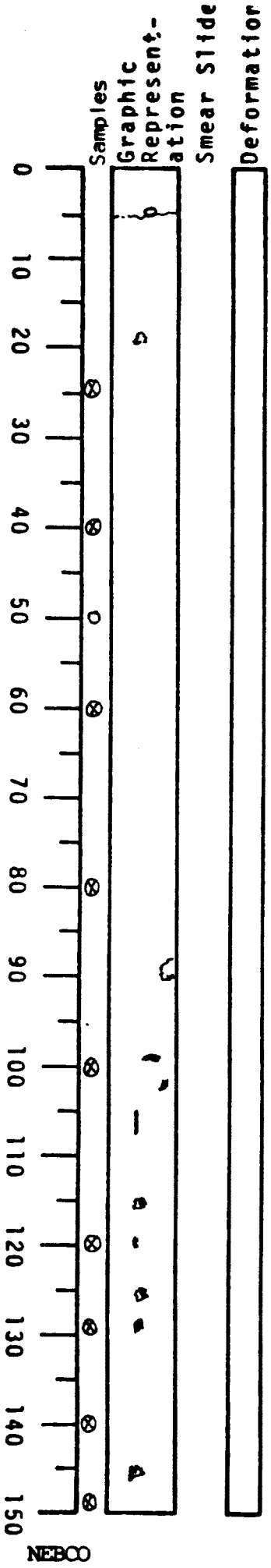
REMARKS:

Gravity Core 140G1 - for geotechnical analysis.
Gravity Core 140G2 - split, subsampled and described.

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	4	0	G	2	1

STATION#			OBSERVER
1	4	0	MY



0-8 cm, very enriched black organic zone with shell fragment

19 cm, black organic zone

8-100 cm, bioturbated homogeneous olive gray (5Y 3/2) to olive black (5Y 2/1) silty clay

89 cm, large shell fragment

98 cm, wood chip possibly large enough for age date

102 cm, shell fragment

104 cm, wood fiber

114 cm & 119 cm, shell fragment

125 cm, shell

128 cm, wood chip

145 cm, shell fragment

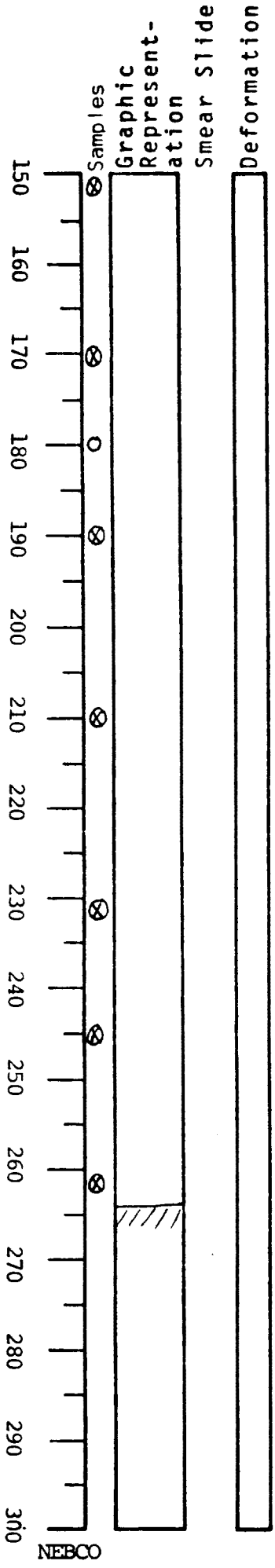
100-150 cm, interbedded silty layers, olive gray (5Y 3/2) silty clay

X = vane shear
O = water content

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	4	0	G	2	2

STATION#				OBSERVER
1	4	0		NEB



Olive gray homogeneous bioturbated mud.

Shell fragments at 159, 183, & 210 cm.

Organic matter (wood) at 152 (large), 189, 230, 249, & 255 (several) cm.

X = vane shear
O = water content

SAMPLE LOG

LOCATOR: S13-79-NC SAMPLE NO: 140G1

STATION NO: 140

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	0-100 cm	Brian Edwards	USGS	Geotechnical	10/28/79
2	109-200 cm	" "	"	"	"
3	209-216 cm	" "	"	"	"
2	100-109 cm	Keith Kvenvolden	"	Gas Analysis	"
3	200-209 cm	" "	"	" "	"
2	109 cm	Brian Edwards	"	Vane Shear & Water Content	"

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 140G2

STATION NO: 140

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	22.5-25, 48.5-51 cm	Mike Field	USGS	Grain Size & Carbon Content	10/17/80
1	59-61.5, 69-71 cm	" "	"	" "	"
1	79-81.5, 99-101.5 cm	" "	"	" "	"
1	109-111.5, 119-121.5cm	" "	"	" "	"
1	139-141.5cm	" "	"	" "	"
1	2 samples Top	" "	"	C^{14} Dating	7/31/80
1	95-97 cm	" "	"	" "	"
1	50 cm	Brian Edwards	"	Bulk Density Water Content	10/28/79
2	152, 170, 190, 210 cm	" "	"	Vane Shear & Water Content	"
2	180, 262 cm	" "	"	Bulk Density Water Content	"
2	168.5-171, 189-191 cm	Mike Field	"	Grain Size & Carbon Content	10/17/80
2	199-201.5, 209-211.5cm	" "	"	" "	"
2	221-223.5, 231-233.5cm	" "	"	" "	"
2	244-247 cm	" "	"	" "	"
1	24,40,60, 80, 100 cm	Brian Edwards	"	Vane Shear & Water Content	10/28/79
1	120, 128, 140,148 cm	" "	"	" "	"
2	210, 232, & 245 cm	" "	"	" "	"

USGS STATION LOG

SHIP / LEG S13-79-NC

LATITUDE 40° 46.80-46.74' N

LONGITUDE -124° 21.63-21.89' W

STATION NO. 141

LINE NO.

DAY/MONTH/YEAR

DATE 28/10/79

TYPE OF STORAGE (check one)

	X	
DRY	COLD	FROZEN

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
141G1	64 m	150 cm		
141G2	64 m	117 cm		

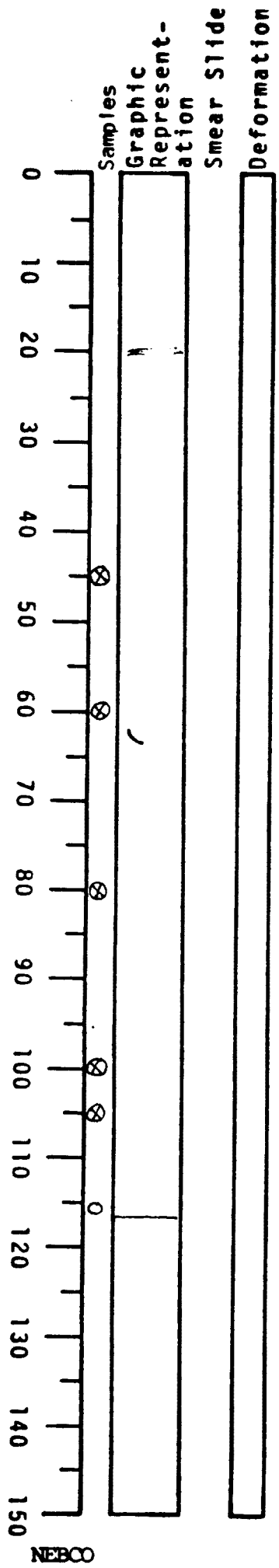
REMARKS:

Gravity Core 141G1 - for geotechnical analysis.
Gravity Core 141G2 - split, subsampled and described.

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	4	1	G	2	1

STATION#			OBSERVER
1	4	1	NEB



0-17 cm, homogeneous olive gray mud except for dark layer possibly organic at 21 cm

Shell at 63 cm

X = vane shear
O = water content

SAMPLE LOG

LOCATOR: S13-79-NC SAMPLE NO: 141G1

STATION NO: 141

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	0-100 cm	Brian Edwards	USGS	Geotechnical	10/28/79
2	100-109 cm	Keith Kvenvolden	"	Gas Analysis	"
2	109-150 cm	Brian Edwards	"	Geotechnical	"
2	109 cm	Brian Edwards	"	Vane Shear & Water Content	"

NEBCO

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 141G2

STATION NO: 141

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	19-22,28-31, 45-47.5 cm	Mike Field	USGS	Grain Size & Carbon Content	10/17/80
1	69-71.5, 88-91 cm	" "	"	" "	"
1	99-101.5	" "	"	" "	"
1	45,60,80, 100,105 cm	Brian Edwards	"	Vane Shear & Water Content	10/28/79
1	70, cm	" "	"	Bulk Density Water Content	10/28/79

NEBCO

USGS STATION LOG

SHIP / LEG S13-79-NC

LATITUDE 40° 45.59' N

LONGITUDE -124° 25.48' W

STATION NO. 142

LINE NO.

DAY/MONTH/YEAR

DATE 28/10/79

TYPE OF STORAGE (check one)

	X	
DRY	COLD	FROZEN

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
142G1	82 m	176 cm		

REMARKS:

SAMPLE LOG

LOCATOR: S13-79-NC SAMPLE NO: 142G1

STATION NO: 142

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	0-100 cm	Brian Edwards	USGS	Geotechnical	10/28/79
2	100-109 cm	Keith Kvenvolden	USGS	Gas Analysis	"
2	109-176 cm	Brian Edwards	USGS	Geotechnical	"
2	109 cm	Brian Edwards	USGS	Vane Shear & Water Content	"

NEBCO

USGS STATION LOG

SHIP / LEG S13-79-NC

LATITUDE 40° 48.93-48.61' N

LONGITUDE -124° 29.51-29.11' W

STATION NO. 143

LINE NO. _____

DAY/MONTH/YEAR

DATE 28/10/79

TYPE OF STORAGE (check one)

☐ DRY ☐ COLD ☐ FROZEN

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
Camera Drop	432-385 m	-		

REMARKS:

Camera Drop #143 - Start: 301/1212, End: 301/1249

USGS STATION LOG

SHIP / LEG S13-79-NC

LATITUDE 40° 49.97-49.77' N

LONGITUDE -124° 33.59-33.81' W

STATION NO. 144

LINE NO.

DAY/MONTH/YEAR

DATE 28/10/79

TYPE OF STORAGE (check one)

	X	
DRY	COLD	FROZEN

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
Camera Drop	550-565 m	-		

REMARKS:

Camera Drop #144 - Start: 301/1442, End: 301/1514

(44)

USGS STATION LOG

SHIP / LEG S13-79-NC

LATITUDE 40° 51.53-51.43' N

LONGITUDE -124° 31.11-31.57' W

STATION NO. 145

LINE NO.

DAY/MONTH/YEAR

DATE 28/10/79

TYPE OF STORAGE (check one)

☐ DRY ☐ COLD ☐ FROZEN

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
Camera Drop #1	490-510 m	-		
Camera Drop #2	525 m	-		

REMARKS:

Camera Drop #1 - latitude and longitude stated above,
Start: 301/1625, End: 301/1700

Camera Drop #2 - latitude: 40° 51.52-51.38' N
longitude: -124° 32.09-32.10' W
Start: 301/1734, End: 301/1800

USGS STATION LOG

SHIP / LEG: S13-79-NC

LATITUDE: 40° 57.00' N

LONGITUDE: -124° 32.69' W

STATION NO.: 146

LINE NO.:

DAY/MONTH/YEAR

DATE: 28/10/79

TYPE OF STORAGE (check one)

DRY	COLD	FROZEN
	X	

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
146G1	531 m	220 cm		
146G2	540 m	278 cm		

REMARKS:

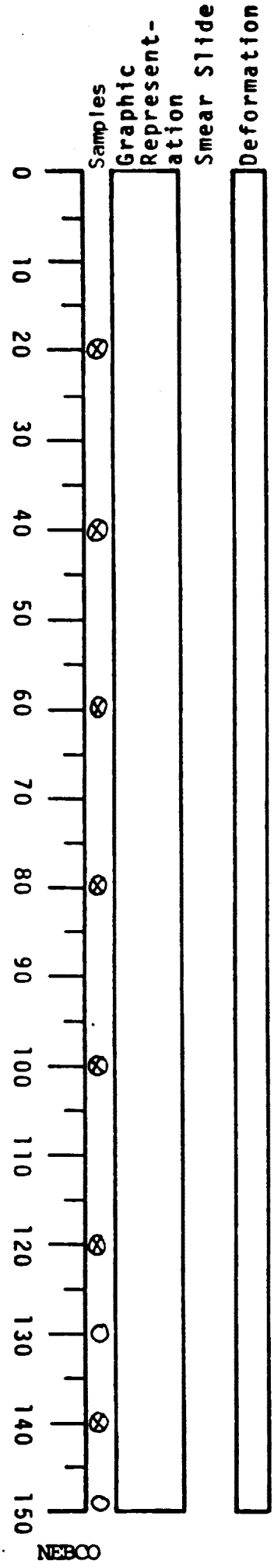
Gravity Core 146G1 - 40° 57.00' N, -124° 32.69' W, core for geotechnical analysis

Gravity Core 146G2 - 40° 57.06' N, -124° 32.78' W, core split, subsampled and described.

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	4	6	G	2	1

STATION#				OBSERVER
	1	4	6	NEB



0-150 cm, olive gray homogeneous silty mud,
highly bioturbated from 75 to 120 cm

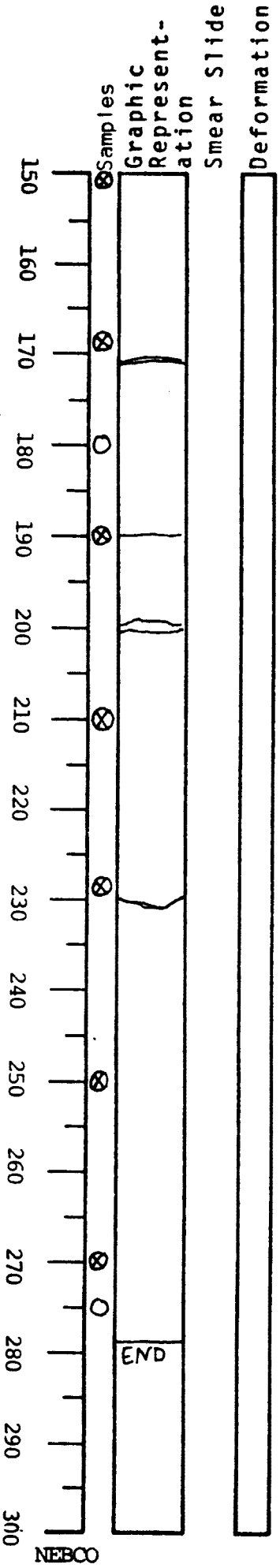
Shell fragments (small) at 77 & 98 cm

X = vane shear
O = water content

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.						SEC.
S	1	3	-	7	9	N	C	1	4	6	G	2		2

STATION#				OBSERVER
	1	4	6	NEB



150-278 cm, olive gray homogeneous silty mud to mud with little to no bioturbation distinct bands or layers of gray mud at 173 cm, 191 cm and 202 cm

Shell fragments at 186, 236 and 240 cm

Gastropod at 220 cm

X = vane shear
O = water content

SAMPLE LOG

LOCATOR: S13-79-NC SAMPLE NO: 146G1

STATION NO: 146

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	0-100 cm	Fugro Inc., c/o Brian Edwards	USGS	Geotechnical	10/28/79
2	100-109 cm	Keith Kvenvolden	USGS	Gas Analysis	"
2	109-200 cm	Fugro Inc., c/o Brian Edwards	USGS	Geotechnical	"
2	109 cm	Brian Edwards	USGS	Vane Shear & Water Content	"
3	200-209 cm	Keith Kvenvolden	USGS	Gas Analysis	"
3	209-220 cm	Fugro Inc., c/o Brian Edwards	USGS	Geotechnical	"
3	209 cm	Brian Edwards	USGS	Vane Shear & Water Content	"

NEBCO

SAMPLE LOG

LOCATOR: S13-79-NC SAMPLE NO: 146G2

STATION NO: 146

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	18.5-21, 29.5-31 cm	Mike Field	USGS	Grain Size & Carbon Content	10/17/80
1	39-41.5, 59-61.5 cm	" "	"	" "	"
1	80-82.5, 89-91 cm	" "	"	" "	"
1	99-101, 119-121.5cm	" "	"	" "	"
1	139.5-142cm	" "	"	" "	"
1	20,40,60,80, 100,120,140cm	Brian Edwards	"	Vane Shear & Water Content	10/28/79
1	130,149 cm	" "	"	Bulk Density	"
2	212 cm	John Barron	"	Diatoms	"
2	180 &275 cm	Brian Edwards	"	Bulk Density	"
2	167-170, 189-192 cm	Mike Field	"	Grain Size & Carbon Content	10/27/80
2	209-212, 232.5-235cm	" "	"	" "	"
2	249-251.5, 261-263.5cm	" "	"	" "	"
2	151,168,190, 210 cm	Brian Edwards	"	Vane Shear & Water Content	10/28/79
2	228, 250 & 270 cm	" "	"	" "	"

NEBCO

USGS STATION LOG

SHIP / LEG: S13-79-NC

LATITUDE: 40° 58.36-58.35' (G1) (G2) N

LONGITUDE: -124° 29.87-29.84' W

STATION NO.: 147

LINE NO.:

DAY/MONTH/YEAR

DATE: 28/10/79

TYPE OF STORAGE (check one)

DRY	COLD	FROZEN
	X	

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
147G1	490 m	234 cm		
147G2	588 m	287 cm		

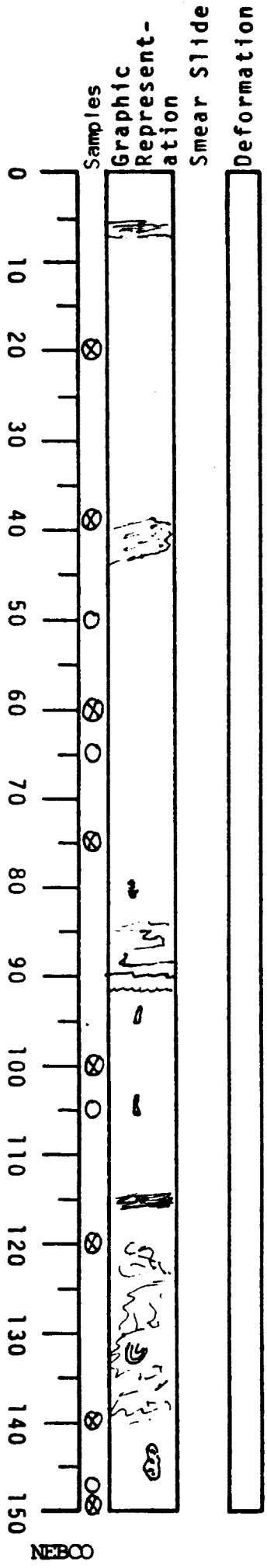
REMARKS:

Gravity Core 147G1 - for geotechnical analysis.
Gravity Core 147G2 - split, subsampled and described.

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	4	7	G	2	1

STATION#			OBSERVER
	1	4	7	MY



5-7 cm, organic zone, black

0-150 cm, fairly homogeneous silty clay to clay, olive gray 5Y 3/2 mud

39-44 cm, silty zone

80 cm, good spiral shell fragment

83-89 cm, clay zone

89 cm, possible erosional contact

89-91 cm, silty zone

95 cm, air pocket

103 cm, 3 cm cavity

115 cm, clay organic zone

120-140 cm, burrow mottling

134 cm, back fill structure

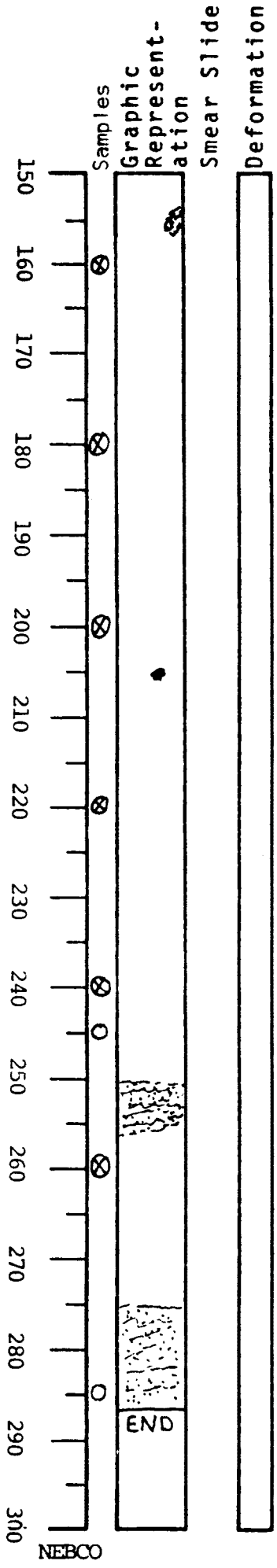
145 cm, sandy lens

X = vane shear
O = water content

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	4	7	G	2	2

STATION#			OBSERVER
	1	4	7	MY



155 cm, fine sand lens

150-287 cm, homogeneous olive gray, 5Y 3/2, silty clay to clay mud extensively bioturbated

180-183 cm, shell fragments

206 cm, organic fragment

251-255 cm sand zone, black sand

275-287 cm, fine sand zone, black

X = vane shear
O = water content

SAMPLE LOG

LOCATOR: S13-79-NC SAMPLE NO: 147G1

STATION NO: 147

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	0-100 cm	Brian Edwards	USGS	Geotechnical	10/28/79
2	100-109 cm	Keith Kvenvolden	"	Gas Analysis	"
2	109-200 cm	Brian Edwards	"	Geotechnical	"
2	109 cm	" "	"	Vane Shear & Water Content	"
3	209-234 cm	" "	"	Geotechnical	"
3	200-209 cm	Keith Kvenvolden	"	Gas Analysis	"
3	209 cm	Brian Edwards	"	Vane Shear & Water Content	"

NEBCO

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 147G2

STATION NO: 147

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	18.5-21.5, 39-42.5 cm	Mike Field	USGS	Grain Size & Carbon Content	10/27/80
1	58-60.5, 74-76.5 cm	" "	"	" "	"
1	93-96, 109-111.5 cm	" "	"	" "	"
1	119-121.5, 139-141.5 cm	" "	"	" "	"
2	168-171, 189-191.5 cm	" "	"	" "	"
2	209-211, 218.5-221 cm	" "	"	" "	"
2	239-241.5, 251-254 cm	" "	"	" "	"
2	259-261, 278-282 cm	" "	"	" "	"
1	20,38,60,75, 100 cm	Brian Edwards	"	Vane Shear & Water Content	10/28/79
1	120, 140 & 150 cm	" "	"	" "	"
2	160,180,200, 220,240,260cm	" "	"	" "	"
1	50, 65, 105 and 149 cm	" "	"	Bulk Density	"
2	250 & 285 cm	" "	"	" "	"

NEBCO

USGS STATION LOG

SHIP / LEG S13-79-NC

LATITUDE (G1) (G2) 41° 00.56-00.47' N

LONGITUDE -124° 26.95-26.94' W

STATION NO. 148

LINE NO.

DAY/MONTH/YEAR

DATE 28/10/79

TYPE OF STORAGE (check one)

DRY	COLD	FROZEN
	X	

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
148G1	440 m	274 cm		
148G2	442 m	321 cm		

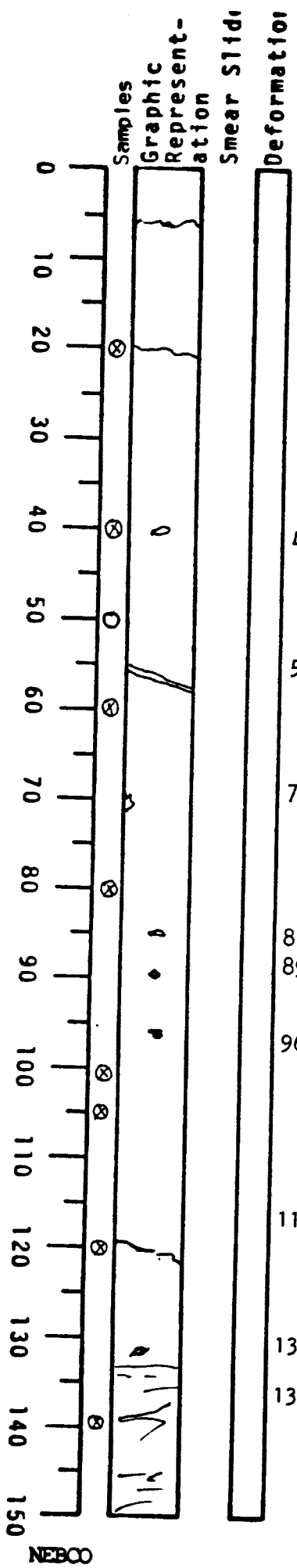
REMARKS:

Gravity Core 148G1 - core for geotechnical analysis.
Gravity Core 148G2 - split, subsampled and described.

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.						SEC
S	1	3	-	7	9	-N	C	1	4	8	G	2	0	

STATION#				OBSERVE
	1	4	8	M.Y.



0-5cm--VOID

5-22cm-- Organic rich zone.

0-150cm-- Homogeneous,bioturbated,olive grey(5Y 3/2) silty clay mud.

40cm-- Shell fragment

55-59cm-- Crack in core.

70cm-- Cavity

87cm-- Shell fragment.
89cm-- Gas bubble ?

96cm-- Shell fragment.

119cm-- Thin clay layer.

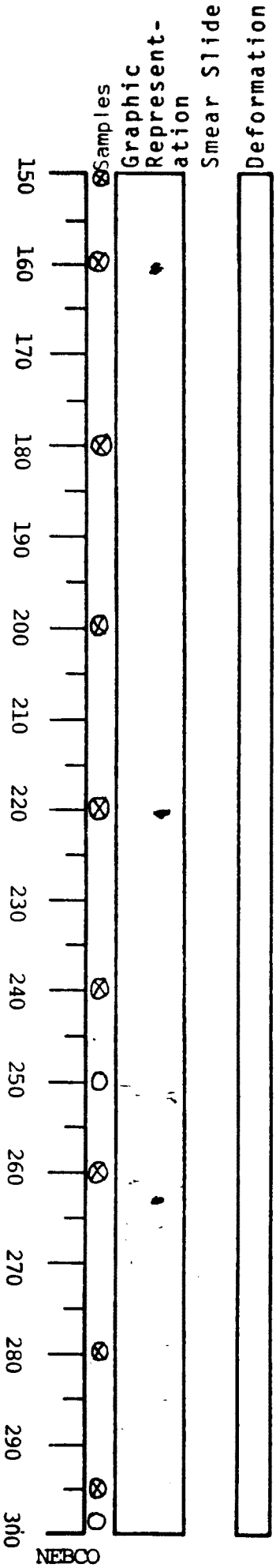
132cm-- Shell fragment.

132-150cm-- Silty zone.

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	4	8	G	2	2

STATION#				OBSERVER
	1	4	8	my



162 cm, shell fragment

150-300 cm, homogeneous olive gray (5Y 3/2) bioturbated silty clay mud

221 cm, shell fragment

250-300 cm, H_2S smell in silty zone

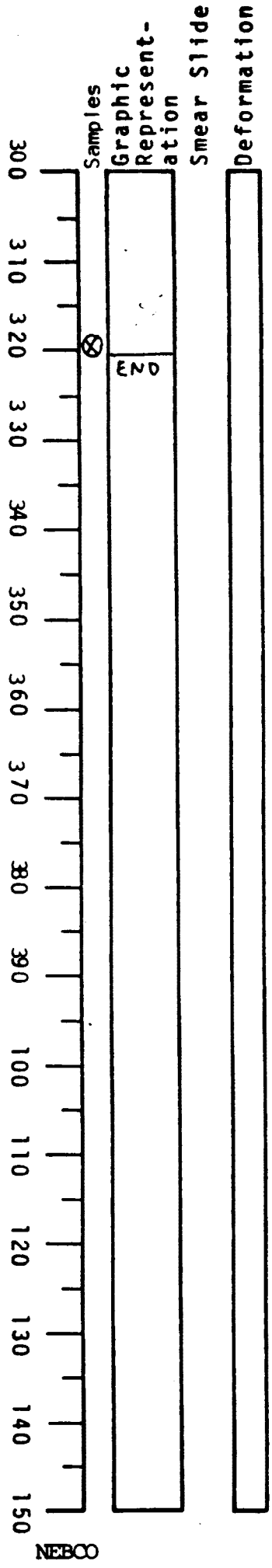
263 cm, organic fragment

X = vane shear
O = water content

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	4	8	G	2	3

STATION#				OBSERVER
	1	4	8	MY



300-321 cm, silty zone

300-321 cm, homogeneous bioturbated olive gray (5Y 3/2) silty clay mud. H_2S odor prominent

X = vane shear
O = water content

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 148G1

STATION NO: 148

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	0-100 cm	Brian Edwards	USGS	Geotechnical	10/28/79
2	100-109 cm	Keith Kvenvolden	"	Gas Analysis	"
2	109-200 cm	Brian Edwards	"	Geotechnical	"
2	109 cm	" "	"	Vane Shear & Water Content	"
3	200-209 cm	Keith Kvenvolden	"	Gas Analysis	"
3	209-274 cm	Brian Edwards	"	Geotechnical	"
3	209 cm	" "	"	Vane Shear & Water Content	"

SAMPLE LOG

LOCATOR: S13-79-NC SAMPLE NO: 148G2

STATION NO: 148

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	19-22, 39-41.5 cm	Mike Field	USGS	Grain Size & Carbon Content	10/29/80
1	59-61.5, 78.5-81 cm	" "	"	" "	"
1	89-91.5, 99-101.5 cm	" "	"	" "	"
1	119-121.5, 129-132 cm	" "	"	" "	"
1	138.5-141cm	" "	"	" "	"
1	20, 40, 60, 80, 100 cm	Brian Edwards	"	Vane Shear & Water Content	10/28/79
1	150, 120, 140 cm	" "	"	" "	"
1	50 & 105 cm	" "	"	Bulk Density	"
2	158-160.5, 178-180.5cm	Mike Field	"	Grain Size & Carbon Content	10/29/80
2	188.5-191, 198-201 cm	" "	"	" "	"
2	218-220.5, 237.5-240cm	" "	"	" "	"
2	258-260.5, 268.5-271.5cm	" "	"	" "	"
2	278-280.5cm	" "	"	" "	"
2	160,180,200, 151,220 cm	Brian Edwards	"	Vane Shear & Water Content	10/28/79
2	240 & ,260, 280,295 cm	" "	"	" "	"
2	250 & 298 cm	" "	"	Bulk Density	"
3	320 cm	" "	"	Vane Shear & Water Content	"
3	309-312.5cm	Mike Field	"	Grain Size & Carbon Content	10/29/80

NEBCO

USGS STATION LOG

SHIP / LEG S13-79-NC

LATITUDE (G1) (G2) 41° 01.44-01.49' N

LONGITUDE -124° 23.59-23.65' W

STATION NO. 149

LINE NO.

DAY/MONTH/YEAR

DATE 28-29/10/79

TYPE OF STORAGE (check one)

	X	
DRY	COLD	FROZEN

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
149G1	240 m	228 cm		
149G2	245 m	271 cm		

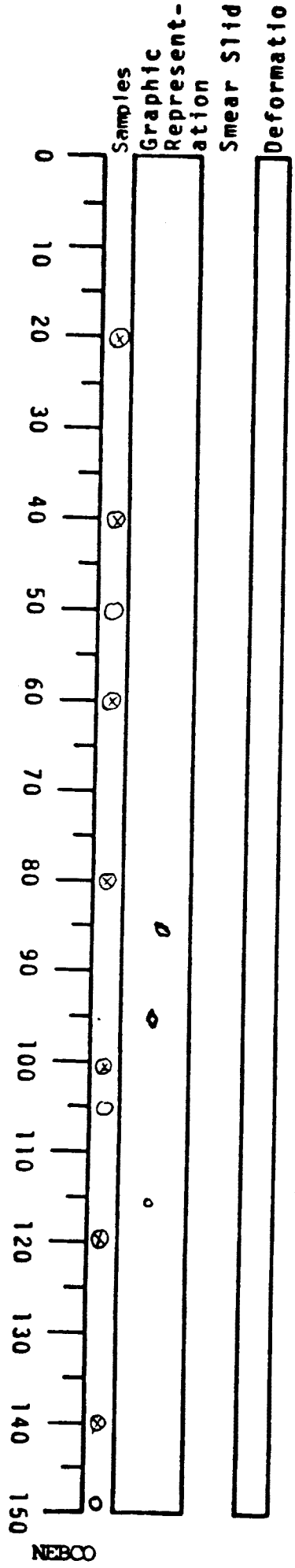
REMARKS:

Gravity Core 149G1 - for geotechnical analysis.
Gravity Core 149G2 - split, subsampled and described.

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.	
S	1	3	-	7	9-	N	C	1	4	9	G	2	0	1

STATION#			OBSERVER
	1	4	9	



0-150cm-- Homogeneous, bioturbated, grey olive(5Y 3/2) silty clay mud.

15-150cm-- Slump structures throughout.

X= vane shear
O= water content

85cm-- Shell fragment.

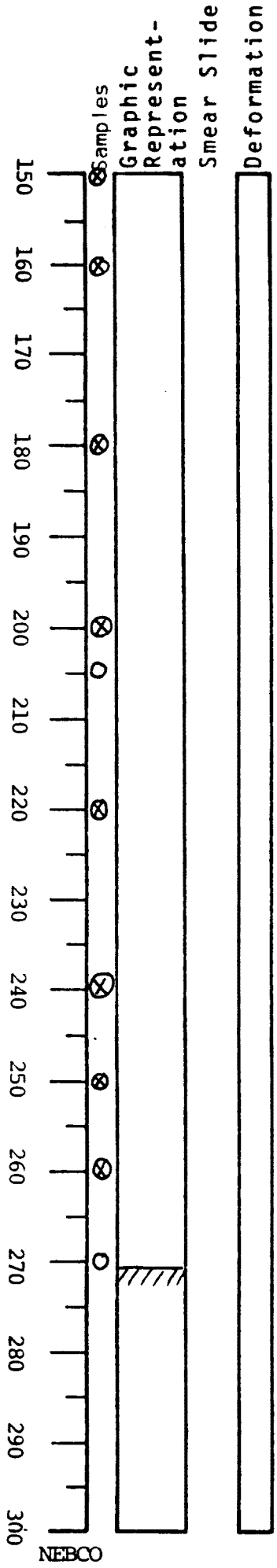
96cm-- Shell fragment.

117cm-- Small cavity, air pocket.

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	4	9	G	2	2

STATION#			OBSERVER
	1	4	9	J.M.Y.



150-271 cm, homogeneous, bioturbated olive gray (5Y 3/2) silty clay mud. H_2S smell very prominent. Slump structure throughout core.

209 cm, shell fragment

X - vane shear
O - water content

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 149G1

STATION NO: 149

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	0-100 cm	Brian Edwards	USGS	Geotechnical	10/29/79
2	100-109 cm	Keith Kvenvolden	"	Gas Analysis	"
2	109 cm	Brian Edwards	"	Vane Shear & Water Content	"
2	109-200 cm	" "	"	Geotechnical	"
3	200-209 cm	Keith Kvenvolden	"	Gas Analysis	"
3	209-228 cm	Brian Edwards	"	Geotechnical	"
3	209 cm	" "	"	Vane Shear & Water Content	"

NEBCO

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 149G2

STATION NO: 149

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	18-21,38-41, 58-60.5 cm	Mike Field	USGS	Grain Size & Carbon Content	10/29/80
1	68.5-71.5, 78.5-81 cm	" "	"	" "	"
1	99-101.5, 118-121 cm	" "	"	" "	"
1	129-132, 138.5-141cm	" "	"	" "	"
2	158-160.5, 178.5-181cm	" "	"	" "	"
2	188-191.5, 198-201 cm	" "	"	" "	"
2	218-221, 229-231 cm	" "	"	" "	"
2	239-241.5, 258-260.5cm	" "	"	" "	"
1	20,40,60, 80,100 cm	Brian Edwards	"	Vane Shear & Water Content	10/29/79
1	120 & 140 cm	" "	"	" "	"
1	50, 105 &148 cm	" "	"	Bulk Density	"
2	160,180,220, 240,260 cm	" "	"	Vane Shear & Water Content	"
2	205,250, & 271 cm	" "	"	Water Content	"
2	220 cm	John Barron	"	Diatoms	"
2	150, 200, 250 cm	Brian Edwards	"	Vane Shear & Water Content	"

NEBCO

USGS STATION LOG

SHIP / LEG S13-79-NC

LATITUDE (G1) (G2) 41° 04.91-05.00' N

LONGITUDE -124° 23.07-23.11' W

STATION NO. 150

LINE NO.

DAY/MONTH/YEAR

DATE 29/10/79

TYPE OF STORAGE (check one)

	X	
DRY	COLD	FROZEN

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
150G1	285 m	306 cm		
150G2	285 m	329 cm		

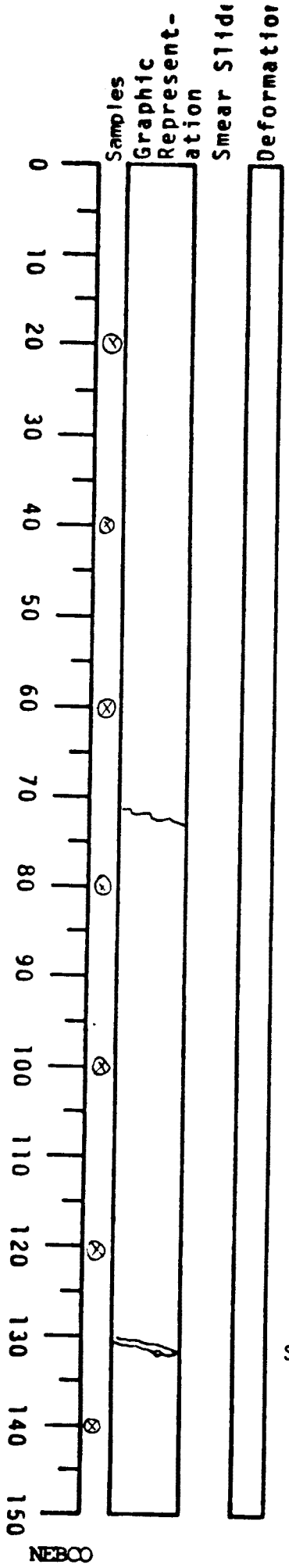
REMARKS:

Gravity Core 150G1 - for geotechnical analysis.
Gravity Core 150G2 - split, subsampled and described.

VISUAL CORE DESCRIPTION

LOCATOR	SAMPLE NO.	SEC.
S 1 3 -7 9 - N C	1 5 0 G 2	0 1

STATION#	OBSERVER
1 5 0	M.Y.



0-150cm-- Homogeneous, bioturbated, olive grey(5Y 3/2), silty clay mud to clayey silt. H_2S smell very prominent.

0-73cm-- Slump structure prominent. Clayey silt.

73cm-- Erosional contact.

73-150cm-- Bioturbated silty clay.

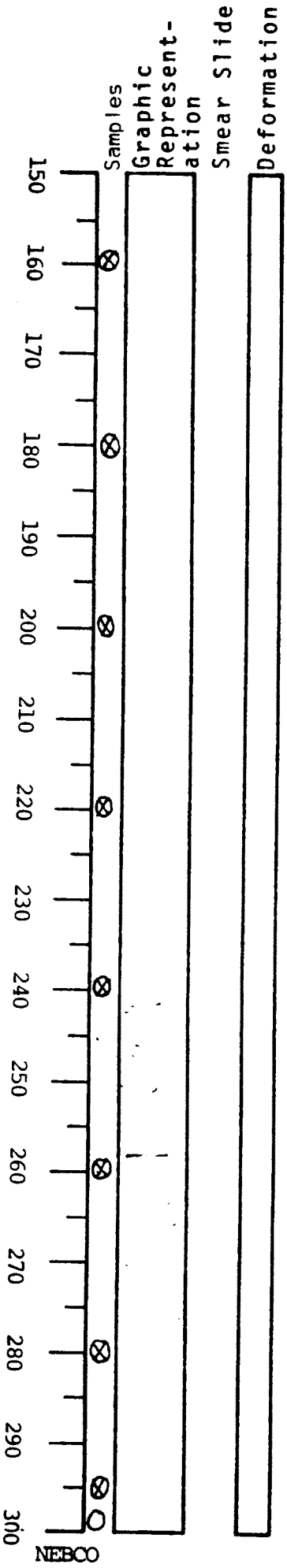
Silt lens & shell fragment.

X≡ vane shear
O≡ water content

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.						SEC.
S	1	3	-	7	9	N	C	1	5	0	G	2		2

STATION#			OBSERVER
	1	5	0	MY



150-300 cm, homogeneous, bioturbated olive gray (5Y 3/2) silty clay mud. H_2S odor very prominent. Slump structure throughout.

240-270 cm, clayey silt zone

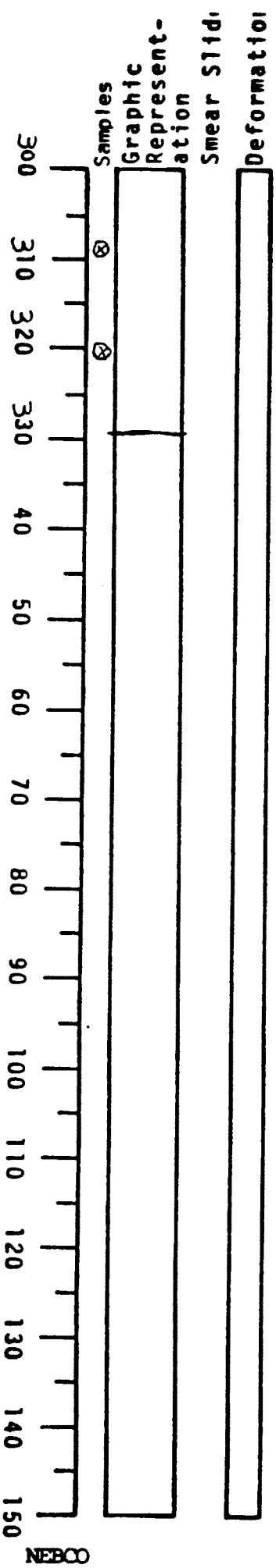
X = vane shear
O = water content

VISUAL CORE DESCRIPTION

LOCATOR	SAMPLE NO.	SEC.
S 1 3 - 7 9 - N C	1 5 0 G 2	0 3

STATION#	OBSERVER
1 5 0	M.Y.

300-329cm-- Homogeneous, bioturbated olive grey(5Y 3/2), clayey silt mud. H_2S odor. Slump structure.



x= vane shear
o=water content

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 150G1

STATION NO: 150

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	0-100 cm	Brian Edwards	USGS	Geotechnical	10/29/79
2	100-109 cm	Keith Kvenvolden	"	Gas Analysis	"
2	109-200 cm	Brian Edwards	"	Geotechnical	"
2	109 cm	" "	"	Vane Shear & Water Content	"
3	200-209 cm	Keith Kvenvolden	"	Gas Analysis	"
3	209-306 cm	Brian Edwards	"	Geotechnical	"
3	209 cm	" "	"	Vane Shear & Water Content	"

NEBCO

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 150G2

STATION NO: 150

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	18.5-21, 39-41.5 cm	Mike Field	USGS	Grain Size & Carbon Content	10/29/80
1	58.5-61, 69.5-72 cm	" "	"	" "	"
1	79-81.5, 89-91.5 cm	" "	"	" "	"
1	98.5-101, 119-121.5 cm	" "	"	" "	"
1	139-142 cm	" "	"	" "	"
2	158.5-161, 168.5-171 cm	" "	"	" "	"
2	178.5-180, 198.5-201 cm	" "	"	" "	"
2	219-221.5, 238.5-241 cm	" "	"	" "	"
2	258.5-261, 268.5-271 cm	" "	"	" "	"
2 3	279-282, 315-316.5 cm	" "	"	" "	"
1	20,40,60,80, 100,120,140	Brian Edwards	"	Vane Shear & Water Content	10/29/79
2	160,180,200, 220,240 cm	" "	"	" "	"
2	260,280, 295 cm	" "	"	" "	"
3	306, 320 cm	" "	"	" "	"
1 2	151, 300 cm	" "	"	Vane Shear & Water Content	"
1 2	148 cm, 299 cm	" "	"	Bulk Density	"

NEBCO

USGS STATION LOG

SHIP / LEG S13-79-NC (G1) (G2)

LATITUDE 41° 02.23-02.28' N

LONGITUDE -124° 29.28-29.17' W

STATION NO. 151

LINE NO.

DAY/MONTH/YEAR

DATE 29/10/79

TYPE OF STORAGE (check one)

DRY	COLD	FROZEN
	X	

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
151G1	575 m	330 cm		
151G2	575 m	327 cm		

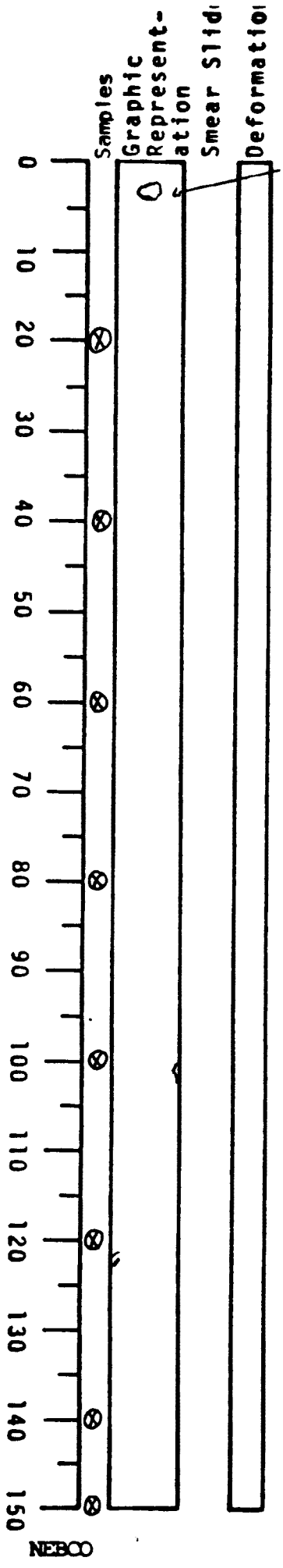
REMARKS:

Gravity Core 151G1 - for geotechnical analysis.
Gravity Core 151G2 - split, subsampled and described.

VISUAL CORE DESCRIPTION

LOCATOR	SAMPLE NO.	SEC.
S 1 3 - 7 9 - N C	1 5 1 G 2	0 1

STATION#	OBSERVER
1 5 1	M.Y.



Sea Urchin

0-150cm-- Very homogeneous, bioturbated, olive grey (5Y 3/2), clayey silt mud. No odor.

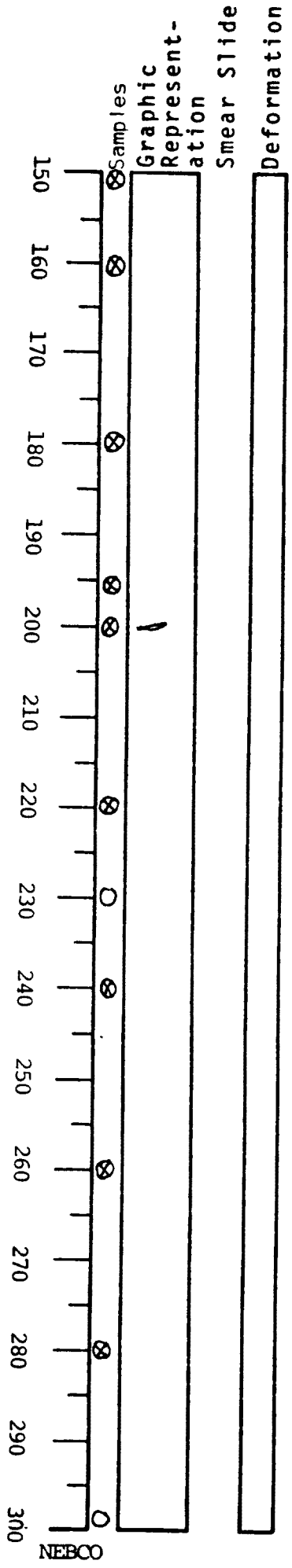
100cm-- Cavity

122cm-- Shell fragments.

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	5	1	G	2	2

STATION#			OBSERVER
	1	5	1	MY



150-300 cm, very homogeneous bioturbated olive gray (5Y 3/2) clayey silt mud

200 cm, shell fragment

X = vane shear
O = water content

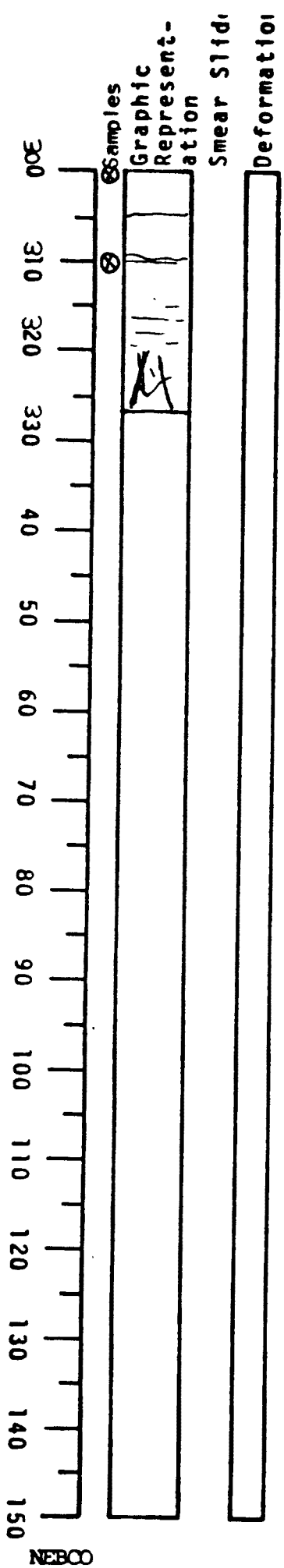
VISUAL CORE DESCRIPTION

LOCATOR	SAMPLE NO.	SEC.
S 1 3 7 9- N C	1 5 1 G 2	0 3

STATION#	OBSERVER
1 5 1	NEB

300-318cm-- Olive grey, silty clay w/a grey clay layer at 310 cm.

318-327cm-- Disturbed by core catcher.



SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 151G1

STATION NO: 151

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	0-100 cm	Brian Edwards	USGS	Geotechnical	10/29/79
2	100-109 cm	Keith Kvenvolden	"	Gas Analysis	"
2	109-200 cm	Brian Edwards	"	Geotechnical	"
2	109 cm	" "	"	Vane Shear & Water Content	"
3	209 cm	" "	"	" "	"
3	200-209 cm	Keith Kvenvolden	"	Gas Analysis	"
3	209-300 cm	Brian Edwards	"	Geotechnical	"
4	300-309 cm	Keith Kvenvolden	"	Gas Analysis	"
4	309-330 cm	Brian Edwards	"	Geotechnical	"

NEBCO

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 151G2

STATION NO: 151

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	19-21.5, 39-41.5 cm	Mike Field	USGS	Grain Size & Carbon Content	11/3/80
1	59-61.5, 79-81.5 cm	" "	"	" "	"
1	89-91, 99-101.5 cm	" "	"	" "	"
1	119-121.5, 139-141.5 cm	" "	"	" "	"
2	158.5-161, 178.5-181 cm	" "	"	" "	"
2	194.5-197, 218.5-221 cm	" "	"	" "	"
2	238.5-241, 259-261.5 cm	" "	"	" "	"
2	278.5-281, 289-291.5 cm	" "	"	" "	"
3	308.5-311 cm	" "	"	" "	"
1 2	150, 151, 196 cm	Brian Edwards	"	Vane Shear Water Content	10/29/79
2	230, 299 cm	" "	"	Bulk Density	"
1	20,40,60,80, 100,120,140	" "	"	Vane Shear & Water Content	"
2	160,180,200, 220,240 cm	" "	"	" "	"
2 3	260,280 & 310, 300 cm	" "	"	" "	"

NEBCO

USGS STATION LOG

SHIP / LEG S13-79-NC (G1)

LATITUDE 40° 56.47' N

LONGITUDE -124° 36.93' W

STATION NO. 152

LINE NO.

DAY/MONTH/YEAR

DATE 29/10/79

TYPE OF STORAGE (check one)

	X	
DRY	COLD	FROZEN

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
152G1	490 m	20 cm		
152G2	500 m	161 cm		
152G3	500 m	14 cm		

REMARKS:

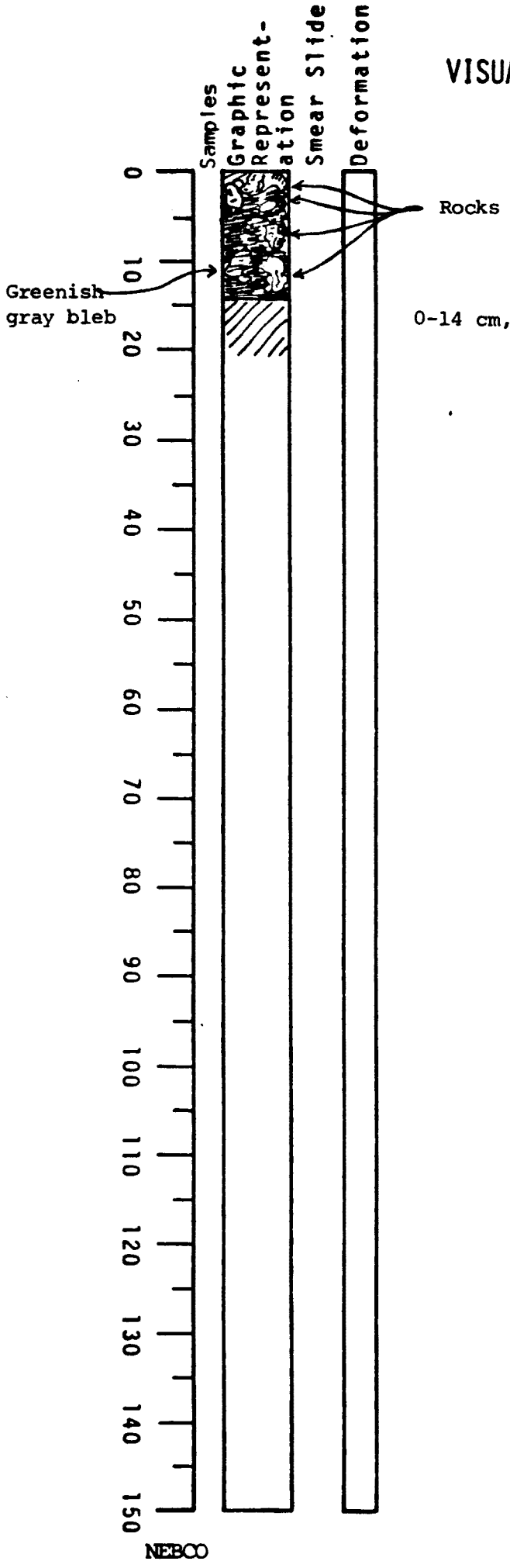
Gravity Core 152G2 - location: 40° 56.40'N, -124° 37.00' W
Gravity Core 152G3 - location: 40° 56.52'N, -124° 36.88' W

152G1 - no sample description, sample stored in 3 bags
152G2 - for gas analysis, remainder frozen
152G3 - split and described

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	5	2	G	3	1

STATION#				OBSERVER
	1	5	2	P.Spragge



0-14 cm, dark greenish gray (5GY 4/1) poorly consolidated. Rocks (1-5 cm) throughout sample. Sediment portion - clayey silt grading to silty clay. Greenish gray (5G 6/1) clayey bleb at 9-12 cm. Some organics (wood).

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 152G2

STATION NO: 152

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	100-110 cm	Keith Kvenvolden	USGS	Gas Analysis	10/29/79
1	151-161 cm	" "	"	" "	"
1	remainder	" "	"	Frozen - Archive	"
1	130-140 cm	John Barron	"	Diatoms	06/11/80

NEBCO

USGS STATION LOG

SHIP / LEG S13-79-NC (G1)

LATITUDE 40° 57.63' N

LONGITUDE -124° 37.87' W

STATION NO. 153

LINE NO.

DAY/MONTH/YEAR

DATE 29/10/79

TYPE OF STORAGE (check one)

	X	
DRY	COLD	FROZEN

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
153G1	480 m	51 cm		
153G2	480 m	v. small CC only		
153G3	480 m	CC only		
153G4	500 m	223 cm		
Camera Drop	600-640 m	-		

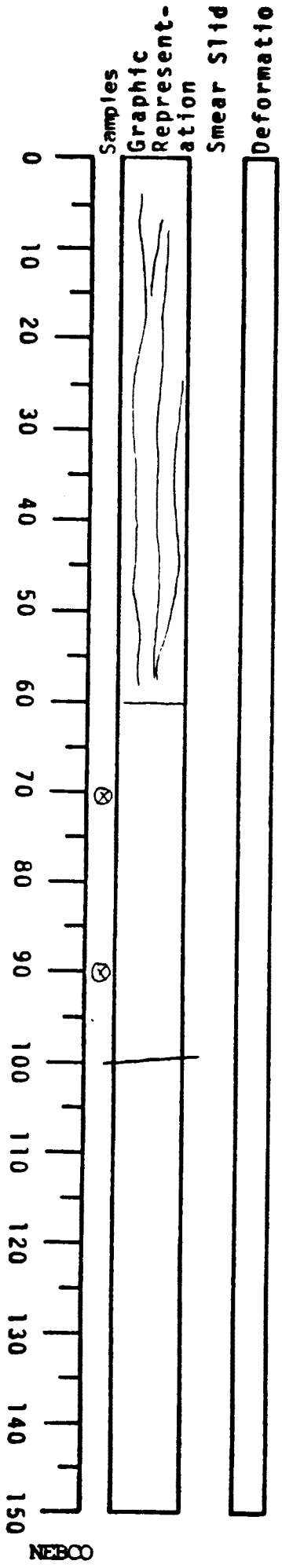
REMARKS:

Gravity Core 153G2 - location: 40° 57.56'N, -124° 37.99'W
Gravity Core 153G3 - location: 40° 57.52'N, -124° 38.01'W
Gravity Core 153G4 - location: 40° 57.08'N, -124° 38.57'W
Camera Drop 153 - location: 40° 57.49-57.01'N, -124° 37.53-38.43'W
start: 302/1030, end: 302/1130

VISUAL CORE DESCRIPTION

LOCATOR	SAMPLE NO.	SEC.
S13-79-NC	153G4	01

STATION#	OBSERVER
153	NEB



0-60cm-- Disturbed by coring.

61-100cm-- Olive grey,homogeneous,bioturbated mud.

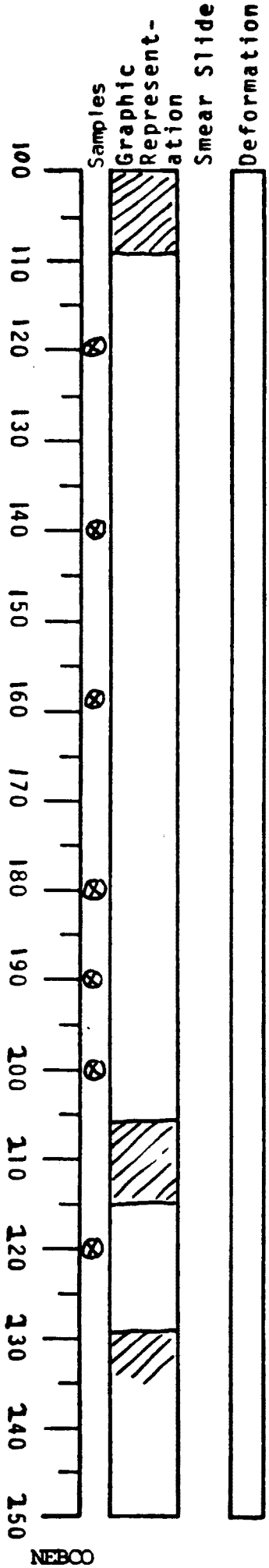
Cut at 1 m.

x≡ vane shear
O≡water content

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.						SEC.
S	1	3	-	7	9	N	C	1	5	3	G	4	2	&3

STATION#				OBSERVER
	1	5	4	N.Barnes



100-109 cm, to KK for gas analysis

109-206 cm, olive gray, homogeneous mud, bioturbated
at 142 cm and 159-174 cm
large wood fragment at 151 cm
small wood fragment at 186 cm

Cut at 206 cm

206-215 cm, to KK for gas analysis

Section 3 = 215-229 cm, no description found

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 153G1

STATION NO: 153

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	34 cm	Brian Edwards	USGS	Vane Shear & Water Content	11/1/80
1	10-13, 18.5-21 cm	Mike Field	"	Grain Size & Carbon Content	11/16/80
1	33-35.5 cm	" "	"	" "	"

NEBCO

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 153G4

STATION NO: 153

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	9-11.5 cm 29-31.5 cm	Mike Field	USGS	Grain Size & Carbon Content	11/17/80
1	48.5-51, 69-71.5 cm	" "	"	" "	"
1	89-91.5 cm	" "	"	" "	"
2	119-122, 139-142 cm	" "	"	" "	"
2	157-159, 179-182 cm	" "	"	" "	"
2	197-201 cm	" "	"	" "	"
2	190 cm	Brian Edwards	"	Bulk Density	10/29/79
2	173-175 cm	Mike Field	"	C^{14} Dating	06/80
1	70,90 cm	Brian Edwards	"	Vane Shear & Water Content	10/29/79
2	120,140,158, 180,200 cm	" "	"	" "	"
3	223 cm	" "	"	" "	"
2	100-109 cm	Keith Kvenvolden	"	Gas Analysis	"
3	206-215 cm	" "	"	" "	"

NEBCO

USGS STATION LOG

SHIP / LEG: S13-79-NC

LATITUDE: 41° 46.00' N

LONGITUDE: -124° 26.64' W

STATION NO.: 154

LINE NO.:

DAY/MONTH/YEAR

DATE: 01/11/79

TYPE OF STORAGE (check one)

	X	
DRY	COLD	FROZEN

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
154G1	146 m	358 cm		

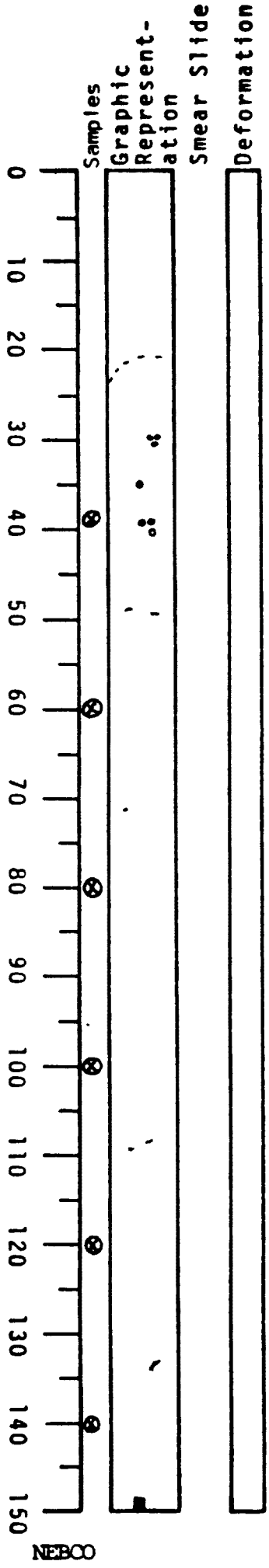
REMARKS:

Gravity Core 154G1 - 2500 lb pullout, core split and described.

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	5	4	G	1	1

STATION#			OBSERVER
	1	5	4	C.Madison



Total core length = 358 cm

0-22 cm, slightly soupy, homogeneous clayey mud,
olive gray (5Y 3/2), gradational change to:

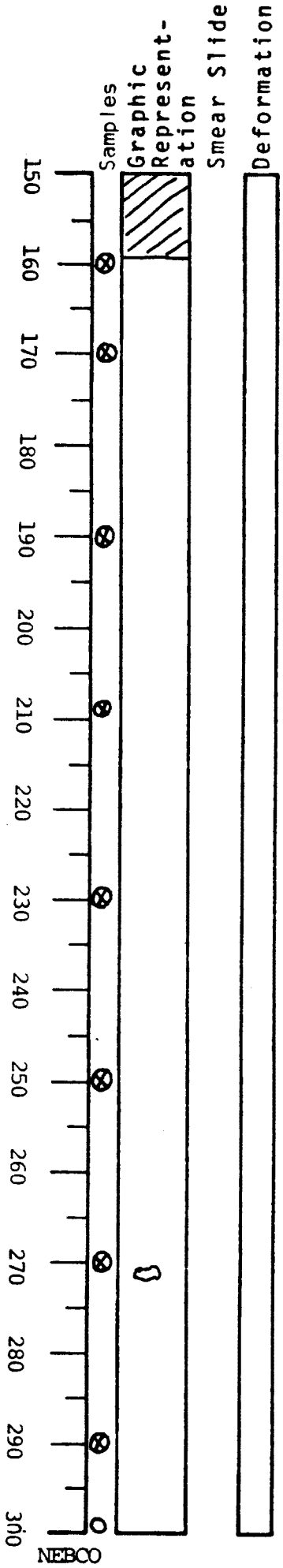
22-150 cm, more cohesive homogeneous silty mud,
olive gray (5Y 3/2)
at 30 cm, soft but semi-consolidated mud lumps
at 35, 39 and 40 cm open holes (burrows ?)
.2-.5 cm in diameter
Vague silty lenses throughout, no color change
or obvious bedding
very small shell fragments at 48 & 49 cm,
25 cm, 71 cm, 109 & 110 cm, 133 cm

Note: original core description missing, this description made on 6/5/81 on archive half

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	5	4	G	1	2

STATION#			OBSERVER
	1	5	4	N.Barnes



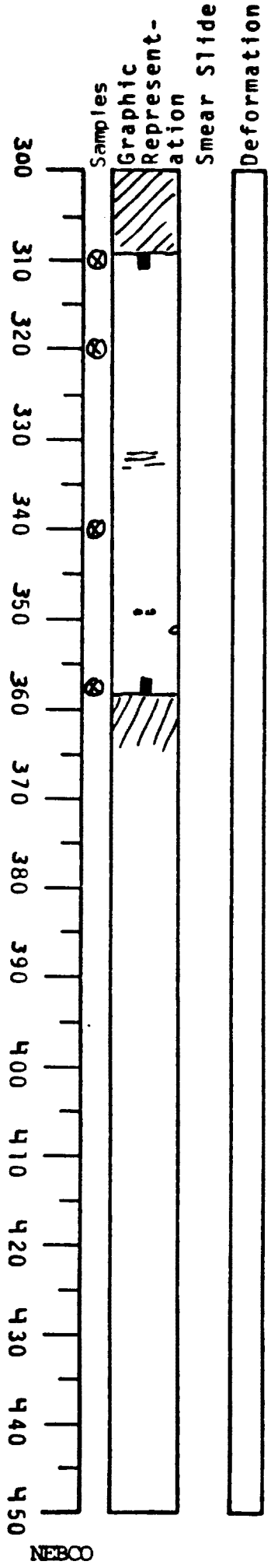
150-159 cm, to KK for gas analysis

159-300 cm, homogeneous olive gray (5Y 3/2) mud

271 cm, large chunk of wood

X = vane shear
O = water content

VISUAL CORE DESCRIPTION



LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	5	4	G	1	3

STATION#			OBSERVER
	1	5	4	C. Madison

300-309 cm, to Kvenvolden for gas analysis

Section 3 = 309-358 cm

Water Content samples from top and bottom of section.

309-358 cm, homogeneous silty mud, olive gray (5Y 3/2)
hint of horizontal bedding at about 331 cm
defined by siltier patches,
small open holes at 349 and 352 cm

Note: original core description missing, this description made on 6/5/81. Mold growing inward from edges down entire length of section.

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 154G1

STATION NO: 154

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	36-39, 58.5-61 cm	Mike Field	USGS	Grain Size & Carbon Content	11/17/80
1	78.5-81, 99-102 cm	" "	"	" "	"
1	119-122, 139-142 cm	" "	"	" "	"
1	38,60,80, 100,120 cm	Brian Edwards	"	Vane Shear & Water Content	11/1/79
1	140 & 148, 150 cm	" "	"	" "	"
2	181-183 cm	Mike Field	"	C^{14} Dating	6/80
2	150-159 cm	Keith Kvenvolden	"	Gas Analysis	11/1/79
2	169-172, 189-192 cm	Mike Field	"	Grain Size & Carbon Content	11/17/80
2	207-210, 229-231 cm	" "	"	" "	"
2	249-252, 269-272 cm	" "	"	" "	"
2	289.5-292.5 cm	" "	"	" "	"
2	160,170,190, 208,230 cm	Brian Edwards	"	Vane Shear & Water Content	11/1/79
2	250,270, 290 cm	" "	"	" "	"
3	310, 320, 340, 358 cm	" "	"	" "	"
3	352 cm	John Barron	"	Diatoms	6/11/80
3	310-313 cm	Mike Field	"	Grain Size & Carbon Content	11/17/80
3	300-309 cm	Keith Kvenvolden	"	Gas Analysis	11/1/79
1 2	90 cm, 298 cm	Brian Edwards	"	Bulk Density	"

USGS STATION LOG

SHIP / LEG S13-79-NC

LATITUDE 41° 45.93' N

LONGITUDE -124° 29.51' W

STATION NO. 155

LINE NO.

DAY/MONTH/YEAR

DATE 01/11/79

TYPE OF STORAGE (check one)

	X	
DRY	COLD	FROZEN

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
155G1	331 m	334 cm		

REMARKS:

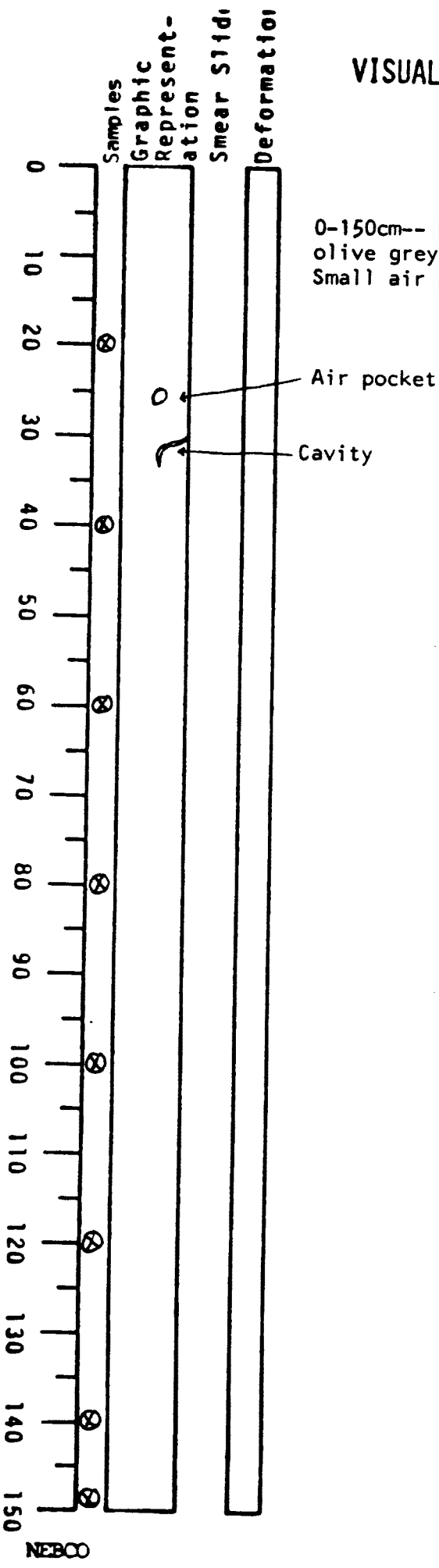
Gravity Core 155G1 - 3200 lb. pullout

VISUAL CORE DESCRIPTION

LOCATOR	SAMPLE NO.	SEC.
S 1 3 - 79- N C	1 5 5 G 1 0	1

STATION#	OBSERVER
1 5 5	M.Y.

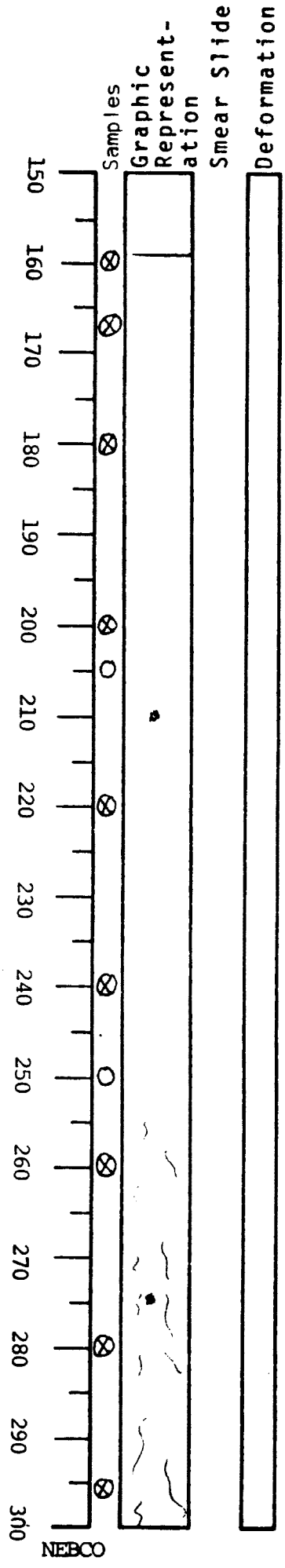
0-150cm-- Homogeneous, bioturbated, olive grey(5Y 3/2), clayey silt. Small air pockets throughout.



VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.						SEC.
S	1	3	-	7	9	N	C	1	5	5	G	1		2

STATION#				OBSERVER
	1	5	5	MY



150-159 cm - to KK gas analysis

159-300 cm, homogeneous olive gray (5Y 3/2) clayey silt. Contorted bedding throughout. H_2S smell strong; weak at top increasing to very strong at bottom

210 cm, shell fragment

255-300 cm, extensive cracking structures

274 cm, shell fragment

X = vane shear
O = water content

VISUAL CORE DESCRIPTION

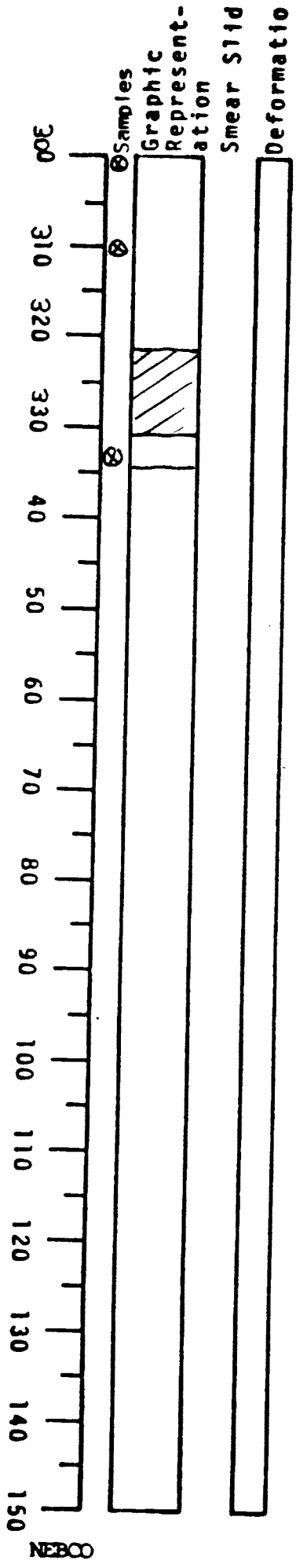
LOCATOR								SAMPLE NO.						SEC
S	1	3	7	9	-	N	C	1	5	5	G	1	0	3

STATION#			OBSERVE
	1	5	5	M.Y.

300-322cm-- Homogeneous, olive grey (5y 3/2), clayey silt. Contorted bedding & H_2S odor throughout.

322-331 cm, to KK for gas analysis

331-334 cm, no description, section stored with CC's



SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 155G1

STATION NO: 155

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	7-9.5,38-40, 59-61 cm	Mike Field	USGS	Grain Size & Carbon Content	11/18/80
1	79-81,99-101, 119-121 cm	" "	"	" "	"
1	139-141 cm	" "	"	" "	"
1	20,40,60,80, 100,120,140	Brian Edwards	"	Vane Shear & Water Content	11/1/79
2	150-159 cm	Keith Kvenvolden	"	Gas Analysis	"
2	160,167,180, 200,220 cm	Brian Edwards	"	Vane Shear & Water Content	"
2	240,260,280, 296,301 cm	" "	"	" "	"
2	166-168, 179-181 cm	Mike Field	"	Grain Size & Carbon Content	11/18/80
2	199-201, 218-220 cm	" "	"	" "	"
2	239-241, 259-261 cm	" "	"	" "	"
2	289-291 cm	" "	"	" "	"
3	333 cm	Brian Edwards	"	Bulk Density	11/1/79
3	322-331 cm	Keith Kvenvolden	"	Gas Analysis	"
1 2	50, 110 cm 205, 250 cm	Brian Edwards	"	Bulk Density	"
3	301, 310 & 331 cm	" "	"	Vane Shear & Water Content	"

USGS STATION LOG

SHIP / LEG S13-79-NC

LATITUDE 41°45.89'N

LONGITUDE -124°31.12'W

STATION NO. 156

LINE NO.

DAY/MONTH/YEAR

DATE 01/11/79

TYPE OF STORAGE (check one)

	x	
DRY	COLD	FROZEN

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
156 G1	426	330cm		

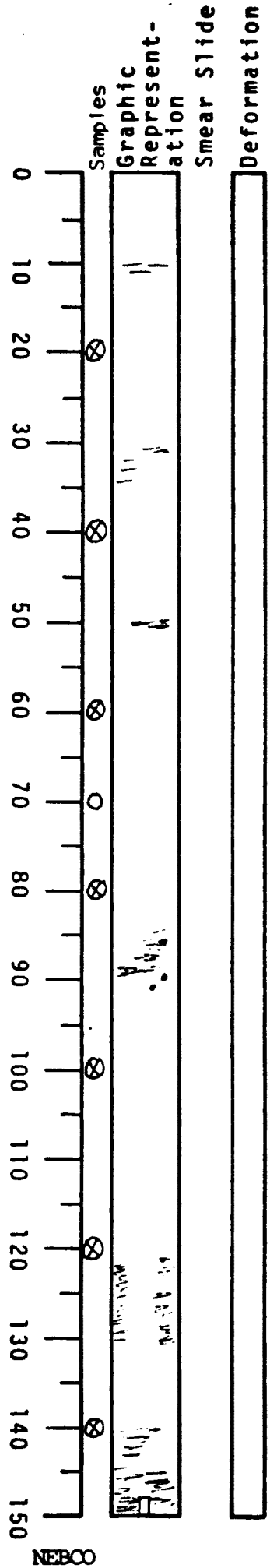
REMARKS: Strat/Sed

9cm from top of Sec.2 & 3 to K.K.

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.						SEC.
S	1	3	-	7	9	N	C	1	5	6	G	1		1

STATION#				OBSERVER
	1	5	6	CM



No original sample description found. This description from archive half 9/24/81.

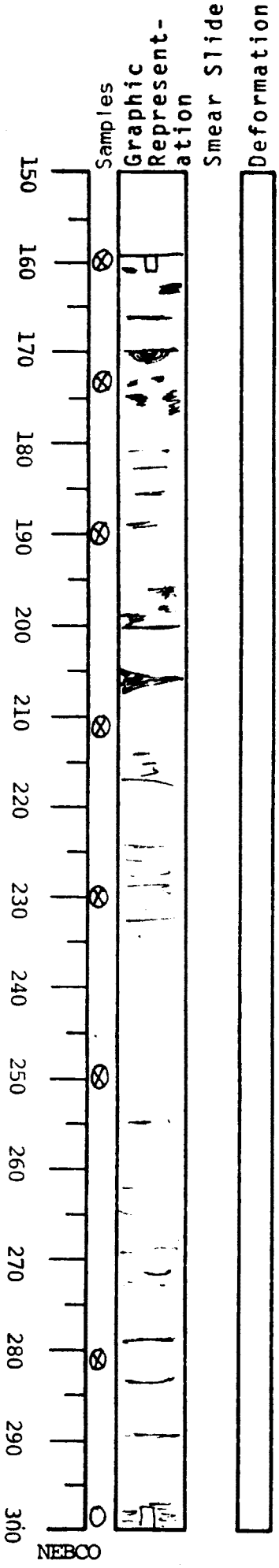
0-150 cm, homogeneous olive gray (5Y 3/2) mud. Siltier patches at 10, 30-35, 85-90, 120-130 and 140-150 cm. Hint of horizontal bedding in siltier patches Two small (.2 cm) unfilled holes at 90 & 91 cm.

X = vane shear
O = water content

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	5	6	G	1	2

STATION#			OBSERVER
	1	5	6	NEB CM



150-159 cm to KK for gas analysis

No original sample description found. This description from archive half 9/24/81.

159-300 cm, olive gray (5Y 3/2) at top gradually changing to light olive gray (5Y 5/2) at base. Silty clay with siltier lenses, pods and laminae. From 224-300 cm silty laminae show good horizontal bedding. Small shell fragments at 162-163, 168, 177, 245, 255 and 286 cm. Very small wood fragments (?) at 211 and 232 cm.

X = vane shear
O = water content

VISUAL CORE DESCRIPTION

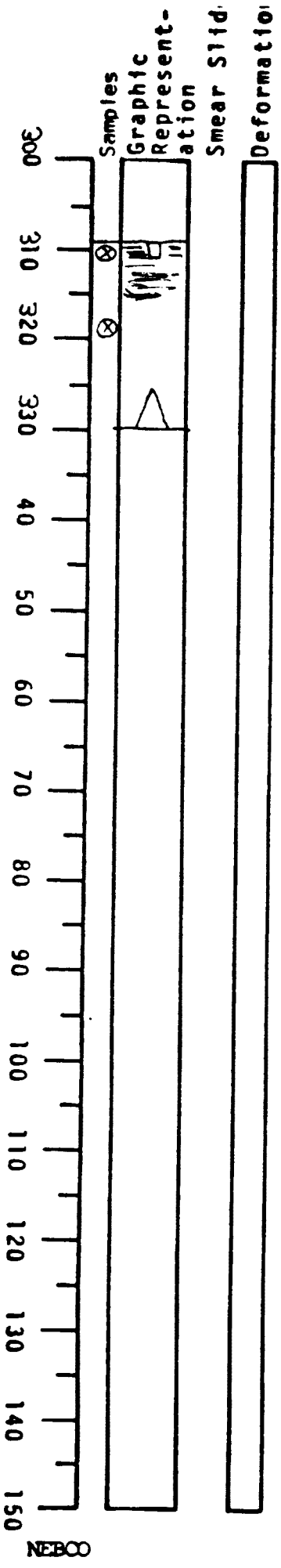
LOCATOR	SAMPLE NO.	SEC.
S 1 3 - 7 9 - N C	1 5 6 G 1	0 3

STATION#	OBSERVER
1 5 6	CM N E B

300-309cm-- To K.K.

No original sample description found. This description from archive half on 9/24/81.

309-330 cm, homogeneous color (5Y 3/2) olive gray mud. Silty mud from 309-316 cm. Less silt from 316-330 cm. Hint of horizontal bedding.



SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 156G1

STATION NO: 156

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	18-20,38-40, 60-62 cm	Mike Field	USGS	Grain Size & Carbon Content	11/18/80
1	79-81, 98-100 cm	" "	"	" "	"
1	118-120, 139-141 cm	" "	"	" "	"
2	172-174, 189-191 cm	" "	"	" "	"
2	211-213, 229-231 cm	" "	"	" "	"
2	250-252, 270-272 cm	" "	"	" "	"
2 3	291-293, 310-312	" "	"	" "	"
2 3	150-159, 300-309 cm	Keith Kvenvolden	"	Gas Analysis	11/1/79
3	317 cm	John Barron	"	Diatoms	"
1	20,40,60, 80,100 cm	Brian Edwards	"	Vane Shear & Water Content	"
1	120,140, 150 cm	" "	"	" "	"
2	160,173,190, 211,230 cm	" "	"	" "	"
2 3	250,282,300 310,317 cm	" "	"	" "	"
1 2	70 cm 299 cm	" "	"	Bulk Density	"

NEBCO

USGS STATION LOG

SHIP / LEG S13-79-NC

LATITUDE 41° 45.92' N

LONGITUDE -124° 33.50' W

STATION NO. 157

LINE NO.

DAY/MONTH/YEAR

DATE 01/11/79

TYPE OF STORAGE (check one)

	X	
DRY	COLD	FROZEN

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
157G1	530 m	336 cm		

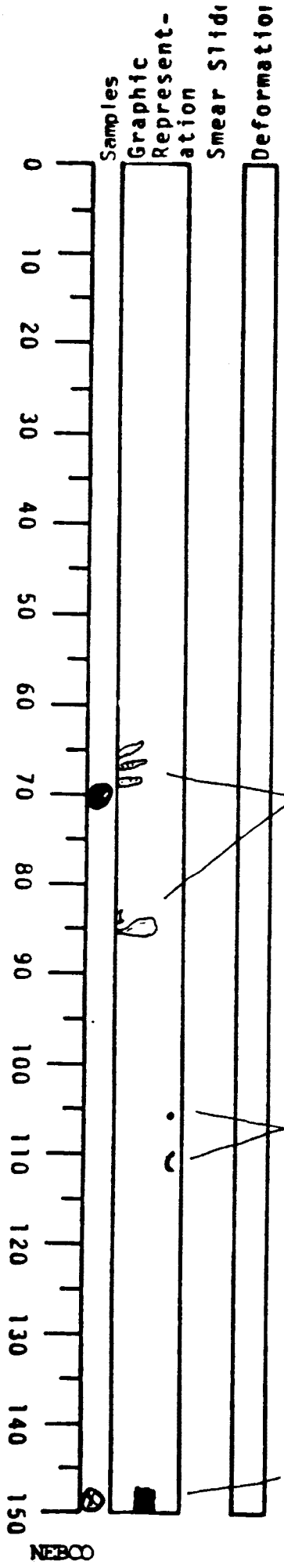
REMARKS:

Gravity Core 157G1 - 4000 lb pullout, core split and described.

VISUAL CORE DESCRIPTION

LOCATOR	SAMPLE NO.	SEC.
S 1 3 - 7 9 - N C	1 5 7 G 1	0 1

STATION#	OBSERVER
1 5 7	M.White



0-48cm-- Olive grey(5Y 3/2), clayey silt, homogeneous.

48-150cm-- Olive grey(5Y 3/2), clayey silt w/silty lenses.

Silty lenses

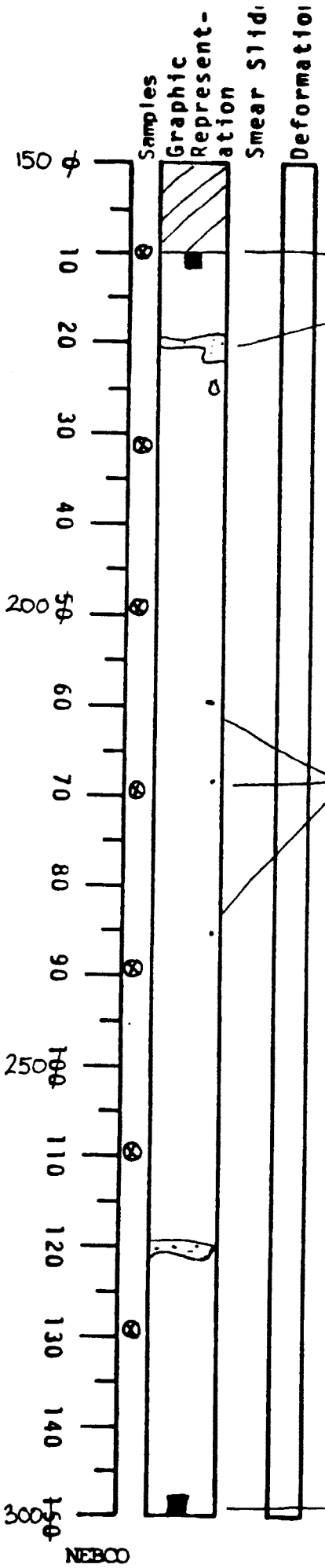
Shell frags

Water content sample taken.

VISUAL CORE DESCRIPTION

LOCATOR	SAMPLE NO.	SEC.
S 1 3 - 7 9- N C	1 5 7 G 1	0 2

STATION#	OBSERVER
1 5 7	M.White



150-160cm-- To k.k. for gas.

Water content sample

Silt lens

174cm-- Shell fragment

General

Olive grey(5Y 3/2),clayey silt; silt lenses throughout, becomeing grey silt downcore. Silt increases downcore.

Shell fragments

Grey silt layer

X = Vane Shear
O = water content

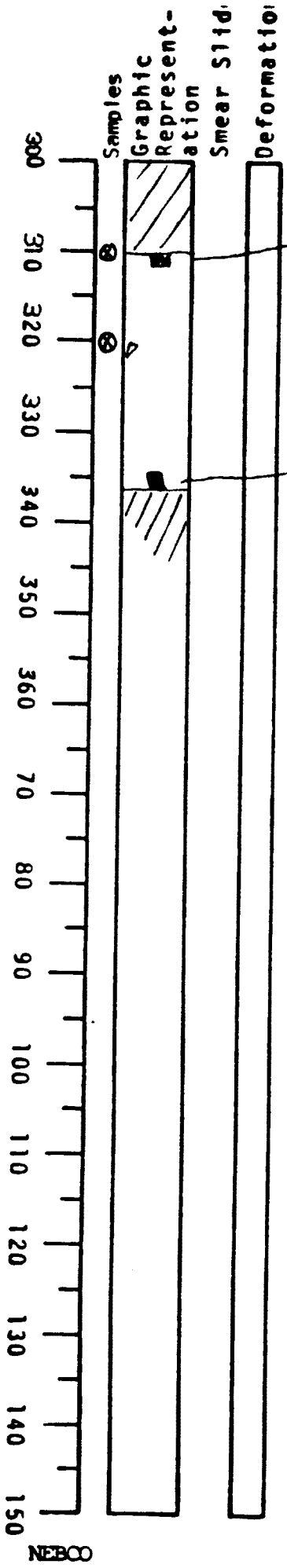
289-300cm-- Becomes more silty

Water content sample

VISUAL CORE DESCRIPTION

LOCATOR	SAMPLE NO.	SEC.
S 1 3 - 7 9 - N C	1 5 7 G 1	0 3

STATION#	OBSERVER
1 5 7	M.White



300-310cm-- To K.K.

Water content sample taken.

321cm-- Shell frag

Water content sample taken.

General

Olive grey(5Y 3/2), homogeneous, clayey silt w/silty lenses

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 157G1

STATION NO: 157

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	18-20, 39-41 cm	Mike Field	USGS	Grain Size & Carbon Content	11/18/80
1	59-61, 79-81 cm	" "	"	" "	"
1	99-101, 119-121 cm	" "	"	" "	"
2	181.5-183.5, 198-201 cm	" "	"	" "	"
2	219-221, 241-243 cm	" "	"	" "	"
2	259-261, 279-281 cm	" "	"	" "	"
3	319-321 cm	" "	"	" "	"
2 3	150-159, 300-309 cm	Keith Kvenvolden	"	Gas Analysis	11/1/79
1 2	70,148, 192,298 cm	Brian Edwards	"	Bulk Density	"
3	336 cm	" "	"	" "	"
1	20,40,60,80, 100,120 cm	" "	"	Vane Shear & Water Content	"
1 2	140, 160,182 cm	" "	"	" "	"
2	199,219,239, 259,279 cm	" "	"	" "	"
3	310,320 cm	" "	"	" "	"

NEBCO

USGS STATION LOG

SHIP / LEG S13-79-NC

LATITUDE 41°45.90'N

LONGITUDE -124°36.76'W

STATION NO. 158

LINE NO.

DAY/MONTH/YEAR

DATE 01/11/79

TYPE OF STORAGE (check one)

	X	
DRY	COLD	FROZEN

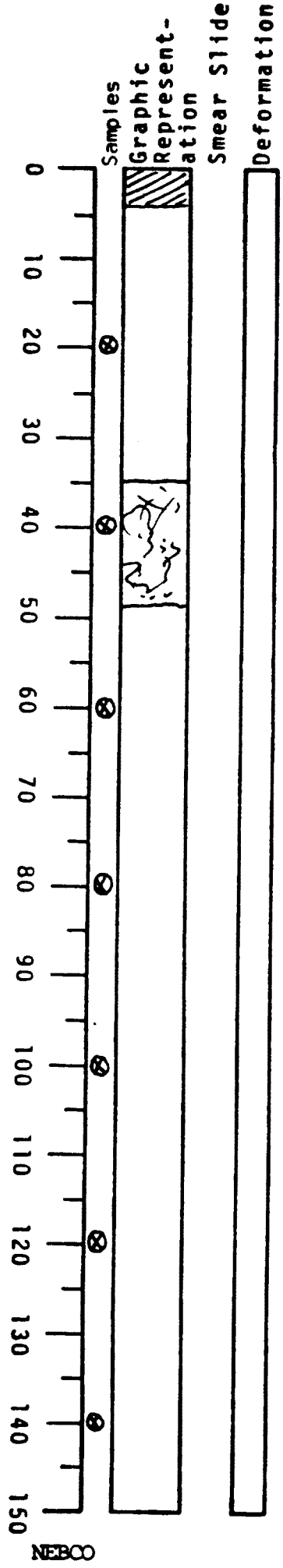
SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
158 G1	634	338cm		

REMARKS:

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.	
S	1	3	-	7	9	N	C	1	5	8	G	1		1

STATION#				OBSERVER
	1	5	8	S.Griscom



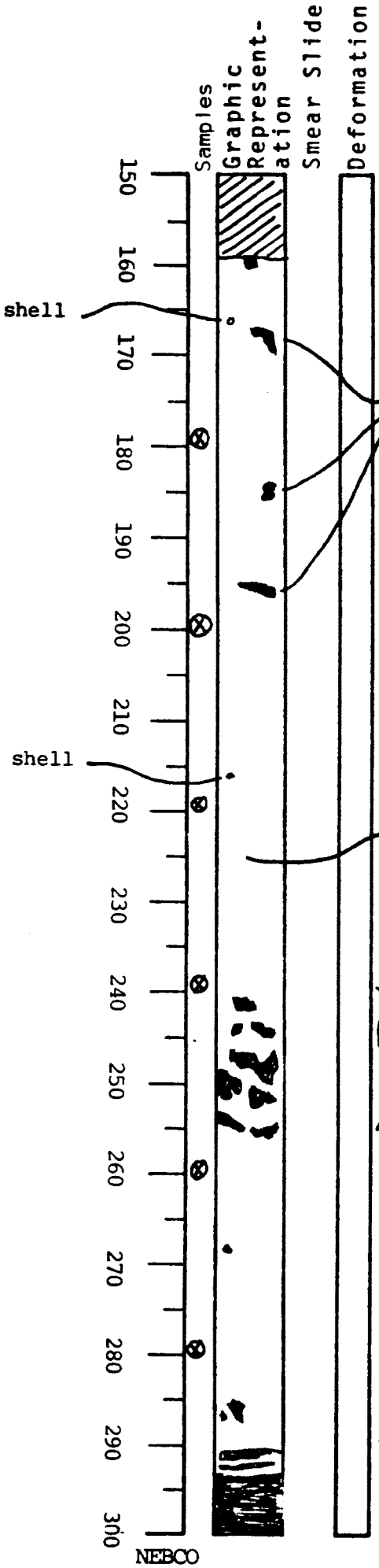
3-150 cm, greyish olive (10Y 4/2) massive mud with no outstanding features. Core cutter mangled area between 35 cm and 48 cm.

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	5	8	G	1	2

STATION#			OBSERVER
	1	5	8	D.Bright

150-159 cm, to KK for gas analysis



159-169 cm, graysih olive clayey mud (10Y 4/2)

167-170 cm, black sand lens

169 cm, shell fragment

169-244 cm, mottled grayish olive clayey mud and olive gray clayey mud (5Y 3/2) with black sand blebs occurring at 184 cm, 196 cm, 237 cm, 241 cm

244-254 cm, larger lenses and blebs of black sand within mottled clays

254-293 cm, mottled clays (10Y 4/2 and 5Y 3/2) or possible layering (?) with small blebs of black sand occurring at 267 cm, 286 cm

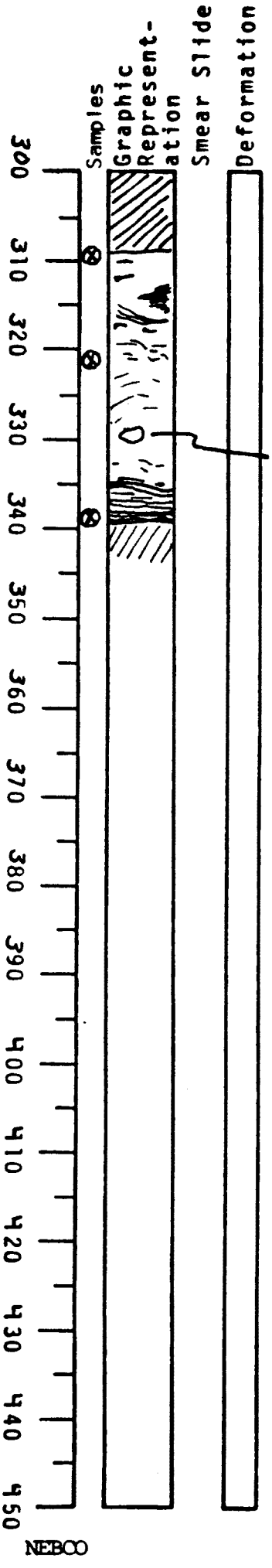
293-300 cm, mottled clays grading into layer of black sand

Specks of dull white shell fragments (?) and specks of shiny clear mica (?) occur irregularly throughout core (see 217, 281 cm)

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	5	8	G	1	3

STATION#			OBSERVER
	1	5	8	Spragge



300-309 cm to KK for gas analysis

309-330 cm, disturbed bedding, mottling
grayish olive (10Y 4/2) silty clay
with dark gray sand layers.

322 cm, 2 cm^2 (fish scale?) in water content hole.

Burrow

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 158G1

STATION NO: 158

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	19-21,39-41, 59-61 cm	Mike Field	USGS	Grain Size & Carbon Content	11/19/80
1	79-81, 99-101 cm	" "	"	" "	"
1	119-121, 139-141 cm	" "	"	" "	"
1	20,40,60,80, 100,120 cm	Brian Edwards	"	Vane Shear & Water Content	11/1/79
1 2	140, 179,199,219	" "	"	" "	"
1 2	130,148, 160,299 cm	" "	"	Bulk Density	"
2 3	239,259,279, 309,322,338	" "	"	Vane Shear & Water Content	"
2 3	150-159, 300-309 cm	Keith Kvenvolden	"	Gas Analysis	"

NEBCO

USGS STATION LOG

SHIP / LEG S13-79-NC

LATITUDE 41° 45.84' N

LONGITUDE -124° 38.52' W

STATION NO. 159

LINE NO.

DAY/MONTH/YEAR

DATE 01/11/79

TYPE OF STORAGE (check one)

	X	
DRY	COLD	FROZEN

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
159G1	690 m	358 cm		

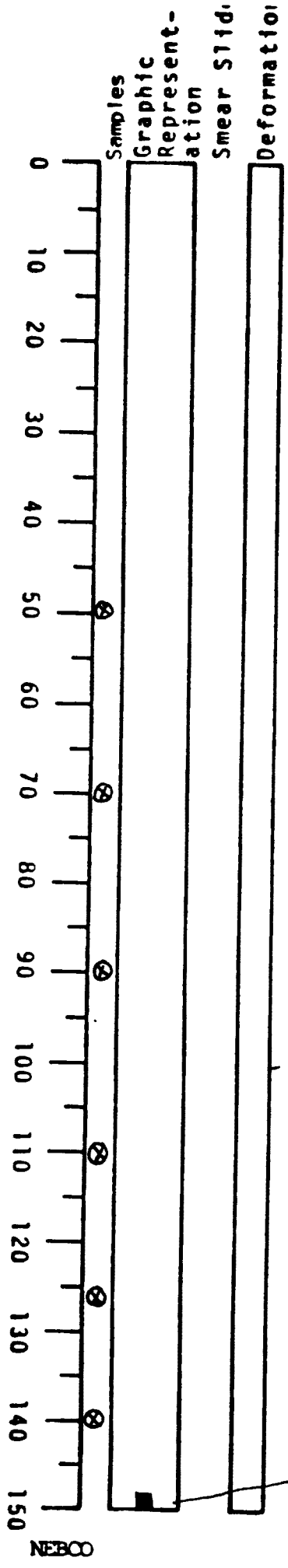
REMARKS:

Gravity Core 159G1 - 4200 lb pullout, core split and described.

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.	
S	1	3	-	7	9	-	N	C	1	5	9	G	1	0	1

STATION#			OBSERVER
	1	5	9	M.White



0-100cm-- More clay

General

Homogeneous, structureless, olive grey(5Y 3/2), clayey silt. Silt increases downcore.

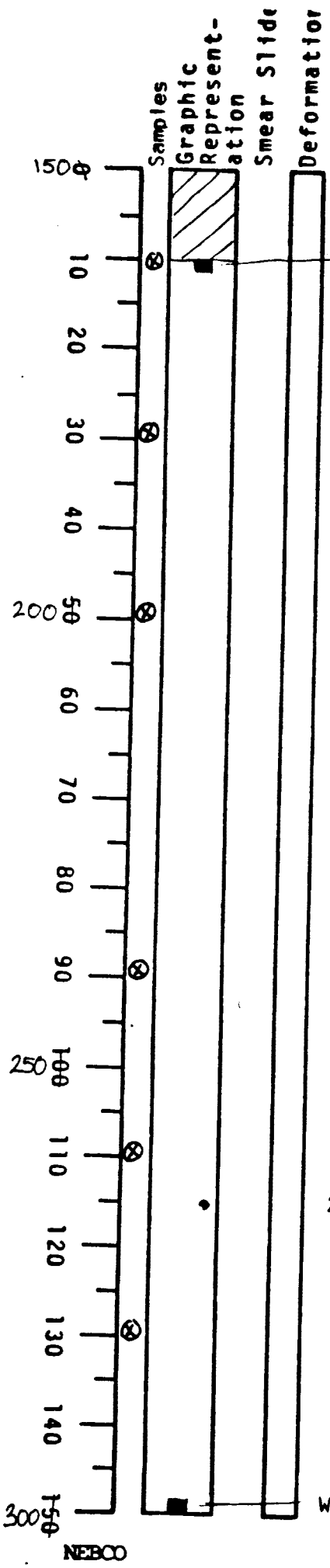
100-150cm-- Silt increases

Water content sample

VISUAL CORE DESCRIPTION

LOCATOR	SAMPLE NO.	SEC.
S 1 3 - 7 9 - N C	1 5 9 G 1 0 2	

STATION#	OBSERVER
1 5 9	M.White



150-160cm-- To K.K.

Water content sample

General

Homogeneous, clayey silt, structureless, olive grey(5Y 3/2
More silty than Sec. 1.

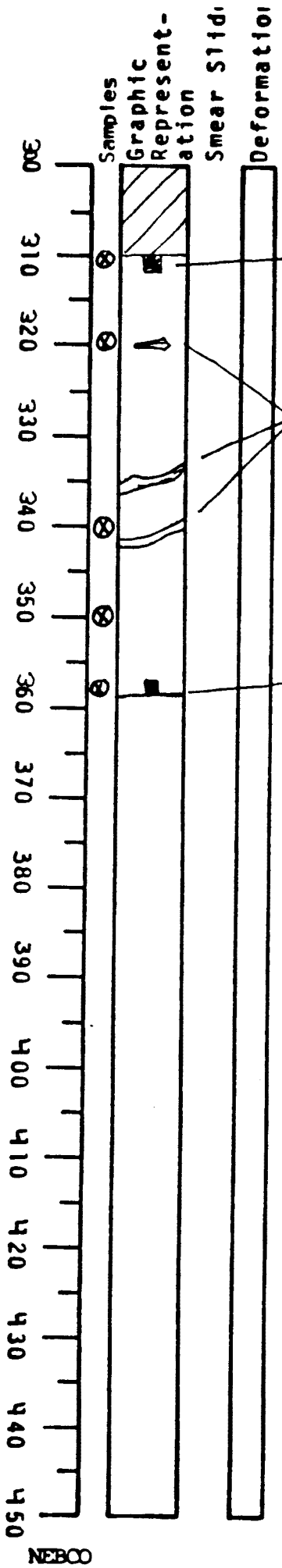
267cm-- Shell frag

Water content sample

VISUAL CORE DESCRIPTION

LOCATOR	SAMPLE NO.	SEC.
S 1 3 - 7 9 - N C	1 5 9 G 1 0 3	

STATION#	OBSERVER
1 5 9	



300-310cm-- To K.K.

Water content sample

Silty lenses(greyer than rest of core).

General

Homogeneous clayey silt(5Y 3/2), w/silty lenses.

Water content sample

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 159G1

STATION NO: 159

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	9-11,29-31, 49-51 cm	Mike Field	USGS	Grain Size & Carbon Content	11/19/80
1	69-71,89-91, 109-111 cm	" "	"	" "	"
1	125-127, 139-141 cm	" "	"	" "	"
2	178-180, 198-200 cm	" "	"	" "	"
2	218-220, 239-241 cm	" "	"	" "	"
2	259-261, 278-280 cm	" "	"	" "	"
3	319-321, 339-341 cm	" "	"	" "	"
3	351 cm	John Barron	"	Diatoms	6/11/80
2 3	150-159 cm 300-308 cm	Keith Kvenvolden	"	Gas Analysis	11/1/79
1	50,70,90, 110,126,140	Brian Edwards	"	Vane Shear & Water Content	"
2	159,179,199, 219,239 cm	" "	"	" "	"
2 3	259,279, 309,320 cm	" "	"	" "	"
3	340,350, 358 cm	" "	"	" "	"
1 2	148, 229,299 cm	" "	"	Bulk Density	"

NEBCO

USGS STATION LOG

SHIP / LEG S13-79-NC

LATITUDE 41° 45.61' N

LONGITUDE -124° 40.56' W

STATION NO. 160

LINE NO.

DAY/MONTH/YEAR

DATE 01/11/79

TYPE OF STORAGE (check one)

DRY	COLD	FROZEN
	X	

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
160G1	750 m	370 cm		

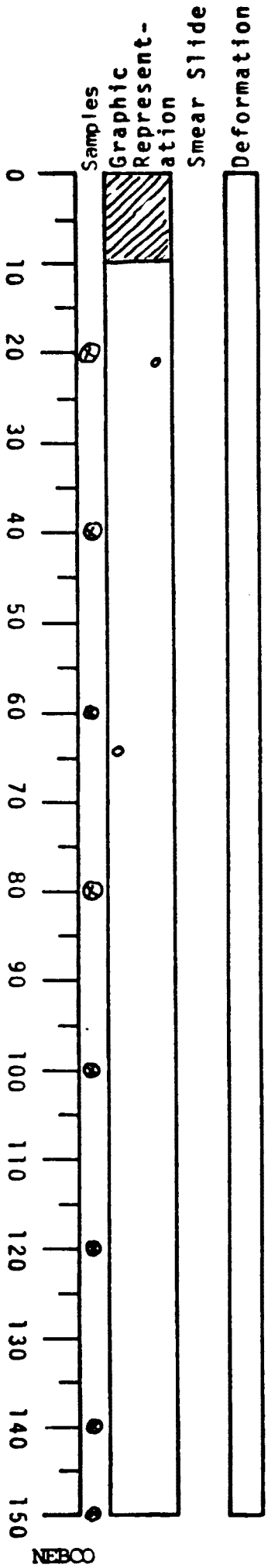
REMARKS:

Gravity Core 160G1 - split, subsampled and described.

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.				SEC.	
S	1	3	-	7	9	N	C	1	6	0	G	1	1

STATION#			OBSERVER
1	6	0	S.Griscom



0-9 cm, to Kvenvolden for gas analysis

9-20 cm, grayish olive (10Y 4/2) very goopy massive mud

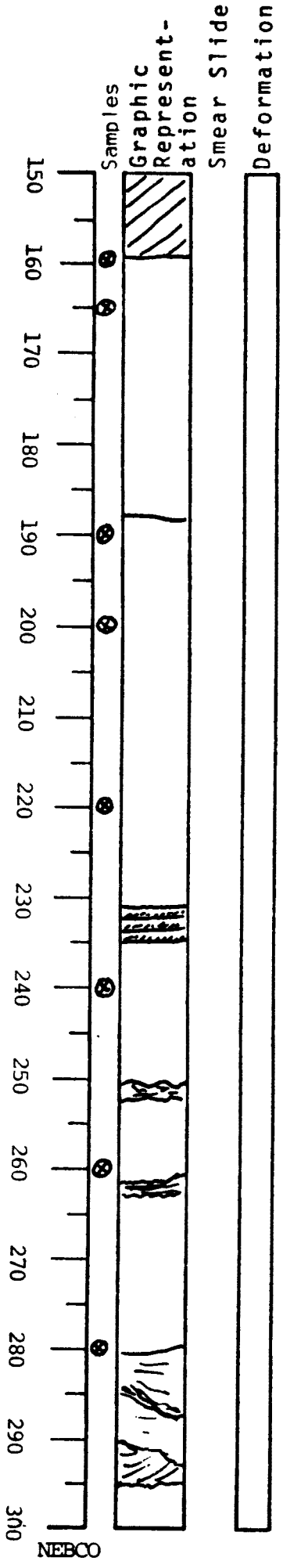
20-150 cm, grayish olive (10Y 4/2) goopy massive mud progressively becoming harder packed
No signs of layers or disturbed layers
Excellent burrowing structures located at 22 cm and 64 cm, 1 to 2 cm diameter and open

X = vane shear
O = water content

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	6	0	G	1	2

STATION#				OBSERVER
1	6	0		S.Griscom



150-159 cm, to Kvenvolden for gas analysis

159-232 cm, grayish olive (10Y 4/2) massive silty mud to 187 cm then a small contact of siltier mud below massive to 232 cm

232-235 cm, olive gray (5Y 3/2) silt 1 cm laminations with possible graded bedding

235-252 cm, grayish olive (10Y 4/2) massive silty mud

252-280 cm, grayish olive (10Y 4/2) silty mud with disturbed silty layers found at 252-254 cm and 262-264 cm

280-295 cm, olive gray (5Y 3/2) angularly laminated silt layers

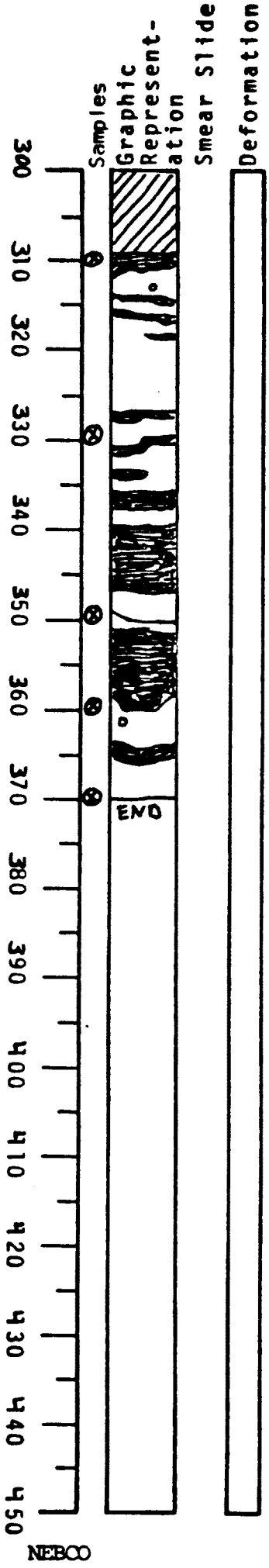
290-300 cm, grayish olive (10Y 4/2) massive mud

O = water content
X = vane shear

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.						SEC.
S	1	3	-	7	9	N	C	1	6	0	G	1		3

STATION#				OBSERVER
	1	6	0	D.Bright



300-309 cm, to Kvenvolden for gas analysis

309-311 cm, dark gray silty mud (3-N3)

311-318 cm, grayish olive clayey mud (10Y 4/2) with 2 lt. stringers of dark green silty mud at 313 and 315 cm, possible shell fragment at 312 cm

318-319 cm, dark green silty mud, gradational contacts

319-320 cm, green olive clayey mud, gradational contacts

320-322 cm, dark green silty mud, gradational contacts

322-334 cm, green olive clayey mud with stringers of dark green silty mud at 323, 329, 331 and 332 cm

334-346 cm, dark green silty mud with specks of shiny mica? Layer of greenish olive clayey mud at 336-338 cm

346-349 cm, greenish olive clayey mud with stringer of dark gray silty mud

349-359 cm, dark gray silty mud

359-370 cm, greenish olive clayey mud with possible shell fragment at 360 cm and light pocket of dark greenish silty mud at 363-365 cm

X = vane shear
O = water content

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 160G1

STATION NO: 160

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	19-21,39-41, 59-61 cm	Mike Field	USGS	Grain Size & Carbon Content	11/19/80
1	79-81, 99-101 cm	" "	"	" "	"
1	119-121, 139-141 cm	" "	"	" "	"
2	161-163, 189-191 cm	" "	"	" "	"
2	209-211, 219-221 cm	" "	"	" "	"
2	239-241, 259-261 cm	" "	"	" "	"
2	279-281 cm	" "	"	" "	"
2 3	150-159, 300-309 cm	Keith Kvenvolden	"	Gas Analysis	11/1/79
1	20,40,60,80, 100,120 cm	Brian Edwards	"	Vane Shear & Water Content	"
1 2	140,150, 159,165,190	" "	"	" "	"
2	200,220,240, 260,280 cm	" "	"	" "	"
3	309,329,349, 359,370 cm	" "	"	" "	"
1 2	90, 210,299 cm	" "	"	Bulk Density	"

NEBCO

USGS STATION LOG

SHIP / LEG S13-79-NC

LATITUDE 41° 45.63' N

LONGITUDE -124° 43.49' W

STATION NO. 161

LINE NO.

DAY/MONTH/YEAR

DATE 01/11/79

TYPE OF STORAGE (check one)

	X	
DRY	COLD	FROZEN

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
161G1	831 m	338 cm		

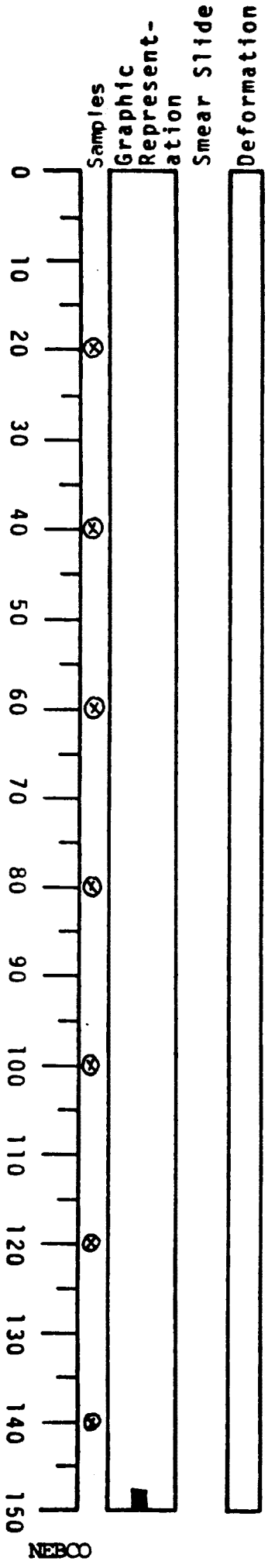
REMARKS:

Gravity Core 161G1 - core split, subsampled and described.

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	6	1	G	1	1

STATION#			OBSERVER
1	6	1	M.White



Section 1 = 0-150 cm

Core is 338 cm long, top of section 2 (150-159 cm) and top of section 3 (300-309 cm) to Kvenvolden for gas analysis.

5Y 3/2, olive gray homogeneous clayey silt with increasing silt from 40 cm through rest of core.

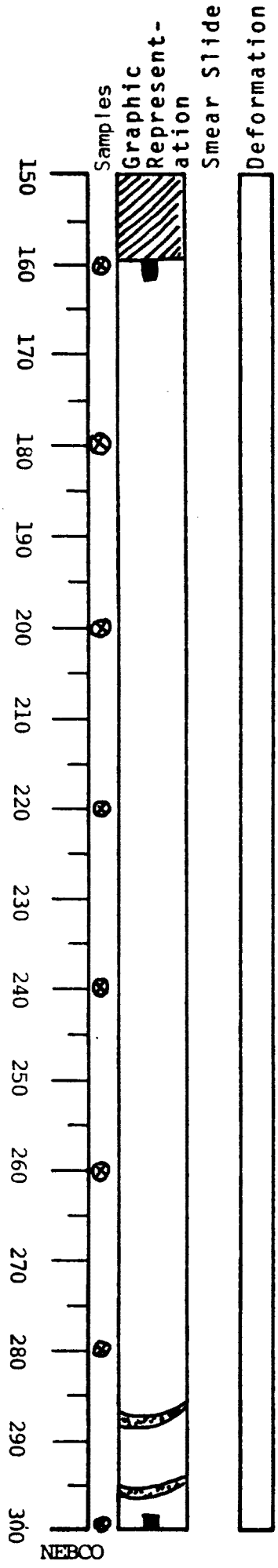
X = vane shear
O = water content

bulk density sample taken at 149 cm

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.						SEC.
S	1	3	-	7	9	N	C	1	6	1	G	1		2

STATION#				OBSERVER
	1	6	1	M.White



Section 2 = 159-300 cm

5Y 3/2 olive gray homogeneous clayey silt with silty lenses becoming grayer towards bottom of section.

240-250 cm, slight H_2S aroma

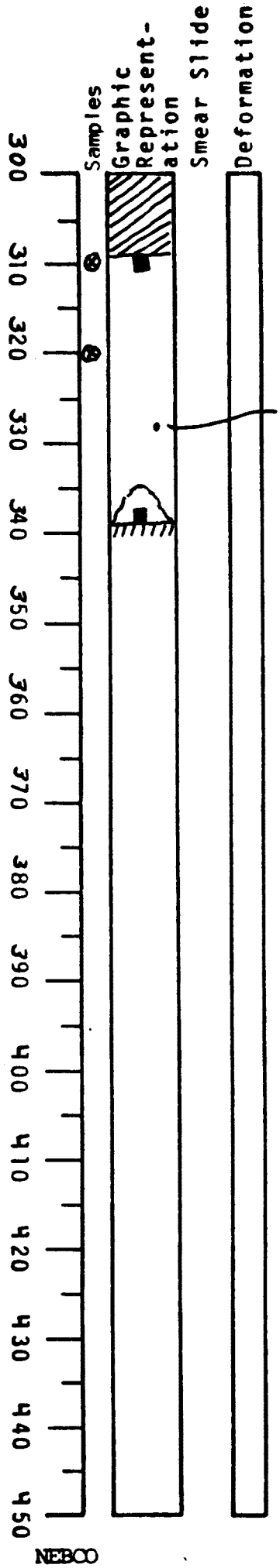
287 and 296 cm, gray silty layers

X = vane shear
O = water content

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.	
S	1	3	-	7	9	N	C	1	6	1	G	1		3

STATION#				OBSERVER
	1	6	1	M.White



shell fragment

5Y 3/2 olive gray but with bluish gray tinge
homogeneous clayey silt
core catcher impression at base

X = vane shear
0 = water content

SAMPLE LOG

LOCATOR: S13-79-NC SAMPLE NO: 161G1

STATION NO: 161

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	19-21, 39.5-41.5 cm	Mike Field	USGS	Grain Size & Carbon Content	11/20/80
1	59-61, 80-82 cm	" "	"	" "	"
1	99.5-101.5, 120-122 cm	" "	"	" "	"
1	141.5-143.5	" "	"	" "	"
2	168-170, 199-201 cm	" "	"	" "	"
2	219-221, 239-241 cm	" "	"	" "	"
2 3	279-281, 319-321 cm	" "	"	" "	"
2 3	150-159 cm, 300-309 cm	Keith Kvenvolden	"	Gas Analysis	11/1/79
1	20,40,60,80, 100,120 cm	Brian Edwards	"	Vane Shear & Water Content	"
1 2	140, 160,180,200	" "	"	" "	"
2	220,240,260, 280,300 cm	" "	"	" "	"
3	310 & 320 cm	" "	"	" "	"
1 2	149, 190 cm	" "	"	Bulk Density	"
3	337 cm	" "	"	" "	"

NEBCO

USGS STATION LOG

SHIP / LEG: S13-79-NC

LATITUDE: 41° 45.57' N

LONGITUDE: -124° 46.93' W

STATION NO.: 162

LINE NO.:

DAY/MONTH/YEAR

DATE: 01/11/79

TYPE OF STORAGE (check one)

	X	
DRY	COLD	FROZEN

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
162G1	856 m	409 cm		

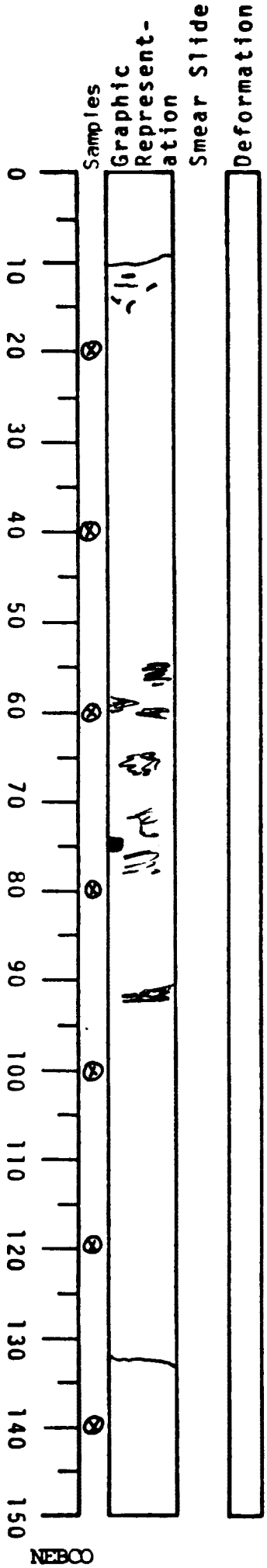
REMARKS:

Gravity Core 162G1 - split, subsampled and described.

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.	
S	1	3	-	7	9	N	C	1	6	2	G	1		1

STATION#				OBSERVER
	1	6	2	J.Esterle



0-10 cm, empty

10-150 cm, olive gray (5Y 3/2) clayey mud

black "organics" in top 5 cm (10-15 cm)

2 plant fragments at 15 cm

dark gray (N3) clay "lenses" fairly distinct at 54-76 cm, 74 cm (bleb of siltier clay) and 92-93 cm (a bit siltier)

possible dark gray silt stringer at 133 cm

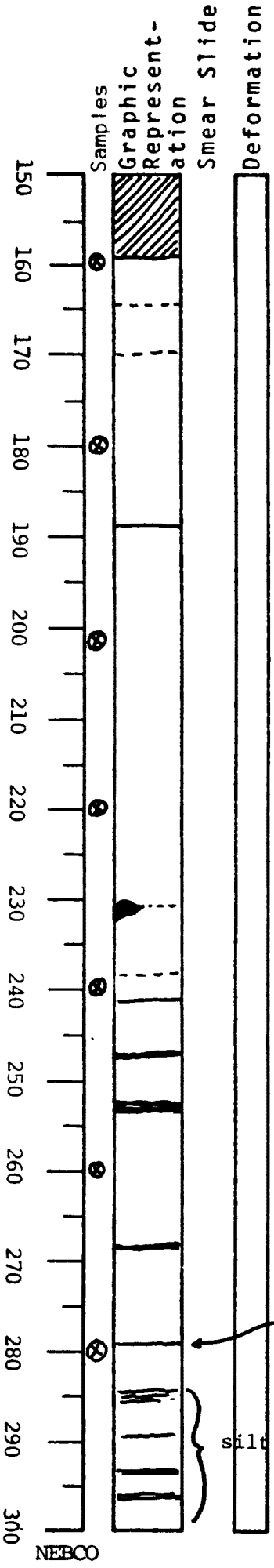
core becomes darker gray at base

X = vane shear
O = water content

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	6	2	G	1	2

STATION#				OBSERVER
	1	6	2	J.Esterle



150-159 cm, to Kvenvolden for gas analysis

159-164 cm, olive black (5Y 2/1) clayey mud

164-170 cm, olive gray (5Y 3/2) clayey mud, indistinct bottom boundary

170-198 cm, olive black (5Y 2/1) clayey mud, distinct bottom boundary (possible silt stringer) at 183 cm, indistinct bleb of olive gray mud

198-231 cm, majority is olive gray (5Y 2/1) clayey mud with indistinct blebs and lenses of olive black clayey mud, olive gray lens of siltier mud at base

231-238 cm, olive gray (5Y 2/1) clayey mud, somewhat mottled

238-254 cm, olive black (5Y 3/2) mud with silt layers at 241 cm (2 mm thick), 247 cm (5 mm), 252.5 cm (1.5 cm) and 253 cm (1 cm)

255-268 cm, olive black clayey mud, fines up, top 3 cm is olive green, distinct silt layer at base

268-300 cm, olive black (5Y 3/2) clayey mud with olive green clay layer 3 mm at 279 cm (fining up layer above clay)
Silt layers at base ranging from 1 mm to 3 mm thick

X = vane shear
O = water content

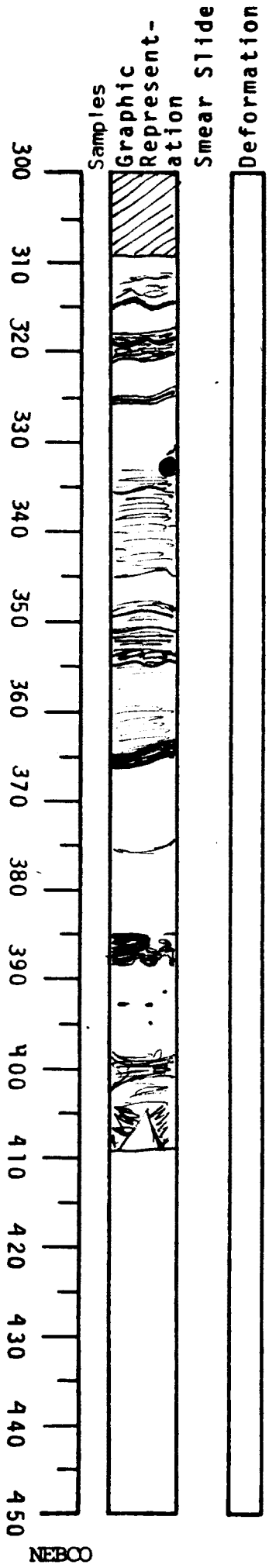
clay

silt stringers

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	6	2	G	1	3

STATION#			OBSERVER
	1	6	2	J. Esterle



Section 3 = 309-409 cm

300-309 cm, to Kvenvolden for gas analysis

309-315 cm, top 2 cm olive gray mud (5Y 4/1), rest is olive black (5Y 2/1), 2 cm silt layer at base, fines up from there

315-317 cm, olive gray clayey mud

317-320 cm, olive black mud with siltier laminae

320-325 cm, olive gray with faint grayish blue (5PB 5/2) streaks

325-326 cm, grayish blue (5PB 5/2) clay layer with darker silt stringer

326-333 cm, olive gray mud with faint darker laminations, wood fragment at 332 cm

333-344 cm, olive black silty mud fining up to clayey mud at 336-333 with clayier lens at 347 cm

344-347 cm, olive black silty mud fining up to faintly laminated olive gray clay mud

347-353 cm, 2 cm olive black silty layer with undulating base fining up to change in color at 346 to olive gray

353-366 cm, base is 2 cm olive black silt fining up into clayey mud overlain by alternating laminae of olive gray and olive black, topped by medium dark gray (N3) clay (cm. thick), gray blue lamina at 357 cm

366-375 cm, olive gray (lighter in color) clayey mud with laminations

375-386 cm, olive gray mud with olive black silty layer at base

386-409 cm, olive gray and some small siltier darker blebs

H_2S smell at bottom, traverse cracks from gas escaping

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 162G1

STATION NO: 162

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	19-21, 38-40 cm	Mike Field	USGS	Grain Size & Carbon Content	11/20/80
1	59-61,78-80, 99-101 cm	" "	"	" "	"
1	119-121, 139-141 cm	" "	"	" "	"
2	179-181, 202-204 cm	" "	"	" "	"
2	220-222, 239-241 cm	" "	"	" "	"
2	259-261, 249-255 cm	" "	"	" "	"
2 3	279-281, 319-321 cm	" "	"	" "	"
3	338-340, 349-355 cm	" "	"	" "	"
3	358-360, 379-381 cm	" "	"	" "	"
3	394-396	" "	"	" "	"
2 3	150-159 300-309 cm	Keith Kvenvolden	"	Gas Analysis	11/1/79
3	322-324 cm	Mike Field	"	C^{14} Dating	8/80
3	400 cm	John Barron	"	Diatoms	6/11/80
1	20,40,60,80, 100,120,140	Brian Edwards	"	Vane Shear & Water Content	11/1/79
2	159,180,202, 220,240 cm	" "	"	" "	"
2 3	260,280, 309,320,340	" "	"	" "	"
3	360,380, 396,409 cm	" "	"	" "	"
1 2	149 cm 298 cm	" "	"	Bulk Density	"

NEBCO

USGS STATION LOG

SHIP / LEG S13-79-NC

LATITUDE 41° 43.40' N

LONGITUDE -124° 49.50' W

STATION NO. 163

LINE NO.

DAY/MONTH/YEAR

DATE 01/11/79

TYPE OF STORAGE (check one)

	X	
DRY	COLD	FROZEN

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
163G1	879 m	367 cm		

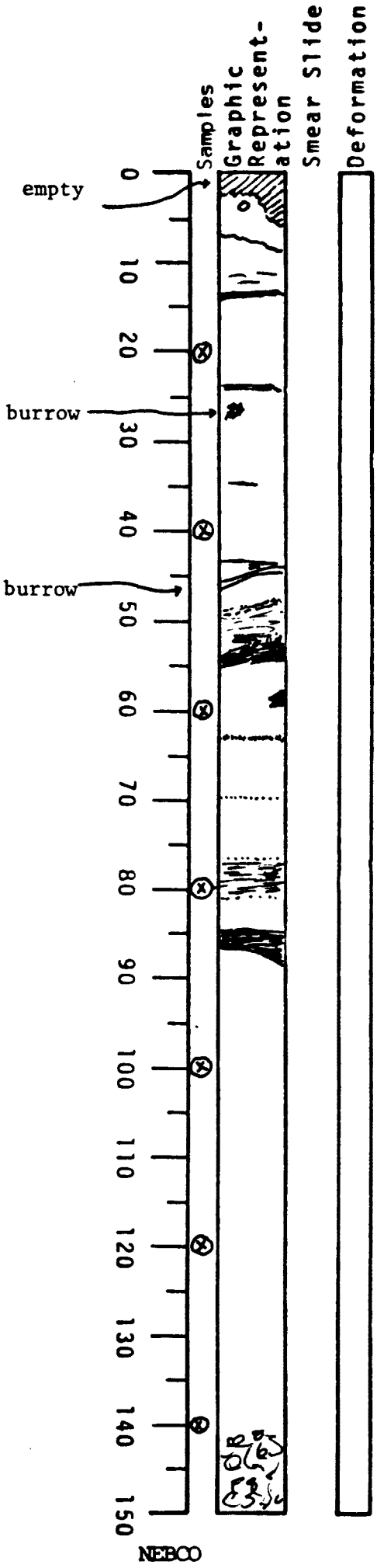
REMARKS:

Gravity Core 163G1 - split, subsampled and described.

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	6	3	G	1	1

STATION#			OBSERVER
	1	6	3	Spragge



core starts at 3 cm

3-8 cm, moderate olive brown (5Y 4/4) silt, small blebs of clay, shell & wood fragments

3-14 cm, grayish olive (10Y 4/2) clayey silt grading to greenish black (5G 2/1) silt

14-43 cm, grayish olive (10Y 4/2) clayey silt with lenses of greenish black silt at 22 cm, 34 cm, and 43 cm. Burrow at 26 cm.

44 cm, burrow 1 cm thick - 20° from horizontal

44-89 cm, grayish olive clayey silt with lenses and disturbed layers of greenish black silt at 50 cm and 63 cm

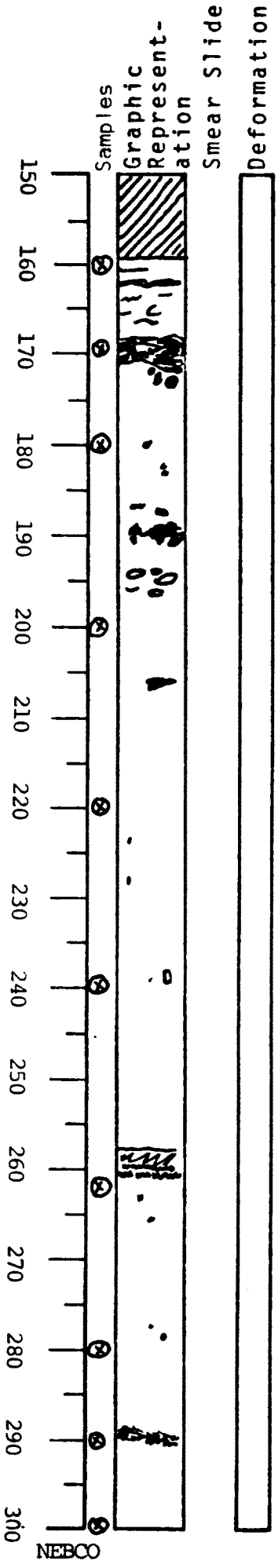
90-150 cm, homogeneous grayish olive clayey silt, small organic fragments, mottling at 140-150 cm

X = vane shear
O = water content

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.						SEC.
S	1	3	-	7	9	N	C	1	6	3	G	1		2

STATION#				OBSERVER
	1	6	3	J.Esterle



150-159 cm, to Kvenvolden for gas analysis

Overall grayish olive (10Y 4/2) clayey mud with medium bluish gray (5B 5/1) clay lamina in top 12 cm, "rayed" structure in blue-gray layer at 169 cm, fine sand bleb at 172, grayish black (N2),grayish black fine sand lenses at 191 cm, bleb at 206 cm, at 194 cm - shells (bivalves)
very small "wood fragments" between 220 and 230 cm, at 240and 264 cm
257-260 cm, fines from grayish black fine sand to dark medium bluish gray mud
291 cm, fine discontinuous grayish black fine sand lamina overlain by medium bluish gray mud 1 cm thick

No distinct structures within grayish olive mud but there are discolorations (towards the bluish gray) indicating layering: 170-194 cm, 206-230 cm, 240-251 cm, 263-280 cm

Small white pinhead size blebs at 277 cm

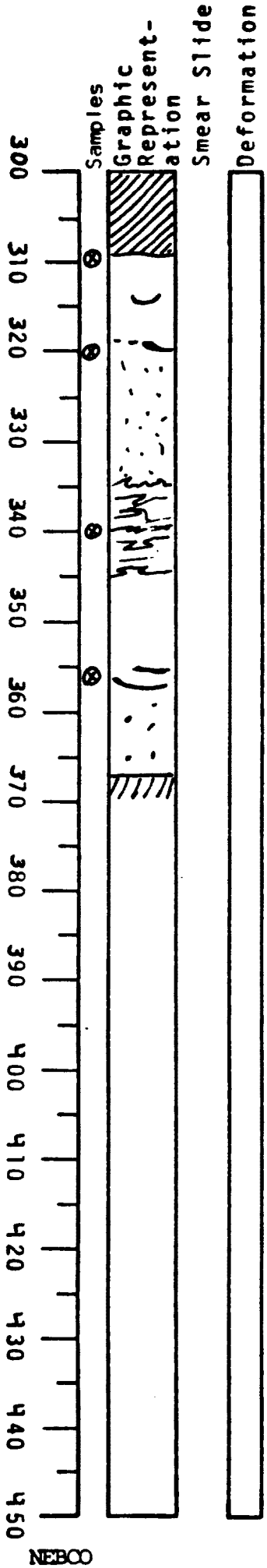
H_2S from 250-300 cm

X = vane shear
O = water content

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	6	3	G	1	3

STATION#				OBSERVER
	1	6	3	D.Bright



300-309 cm, to Kvenvolden for gas analysis

Section 3 = 309-367 cm

309-313 cm, grayish olive (10Y 4/2) clayey mud

313 cm, black sand lens, surrounded by light olive clayey mud (10Y 5/4)

313-319 cm, interlayered grayish olive & light olive clayey mud

319 cm, black sand lens

319-321 cm, gray olive clayey mud

321-333 cm, light olive clayey mud with small irregular blebs of black sand

333-334 cm, irregular layers of grayish olive clayey mud and light olive clayey mud approx. 2 cm each, with irregular blebs of black sand

344-348 cm, grayish olive clayey mud with patches of light olive clayey mud

348-356 cm, grayish olive clayey mud with black sand lenses at 350 cm and 352 cm

356-367 cm, olight olive clayey mud with a few black sand blebs

X = vane shear
O = water content

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 163G1

STATION NO: 163

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	20-22, 39.5-41.5 cm	Mike Field	USGS	Grain Size & Carbon Content	11/20/80
1	60-62, 79.5-81.5 cm	" "	"	" "	"
1	99-101, 119.5-121.5	" "	"	" "	"
1 2	139-141 cm, 179-181 cm	" "	"	" "	"
2	219-221, 199-201 cm	" "	"	" "	"
2	239-241, 255-259 cm	" "	"	" "	"
2	260-262, 278-280 cm	" "	"	" "	"
3	320-322, 340-342 cm	" "	"	" "	"
3	357-359 cm	" "	"	" "	"
2 3	150-159 cm 300-309 cm	Keith Kvenvolden	"	Gas Analysis	11/1/79
1	20,40,60,80, 100,120,140	Brian Edwards	"	Vane Shear & Water Content	"
2	159,169,180, 200,220 cm	" "	"	" "	"
2 2	240,262,280, 290,300 cm	" "	"	" "	"
3	309,320,340, 357 cm	" "	"	" "	"
1 2	150 cm 230 cm	" "	"	Bulk Density	"
3	365 cm	" "	"	" "	"

USGS STATION LOG

SHIP / LEG S13-79-NC

LATITUDE 41° 43.46' N

LONGITUDE -124° 53.74' W

STATION NO. 164

LINE NO.

DAY/MONTH/YEAR

DATE 02/11/79

TYPE OF STORAGE (check one)

	X	
DRY	COLD	FROZEN

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
164G1	850 m	332 cm		

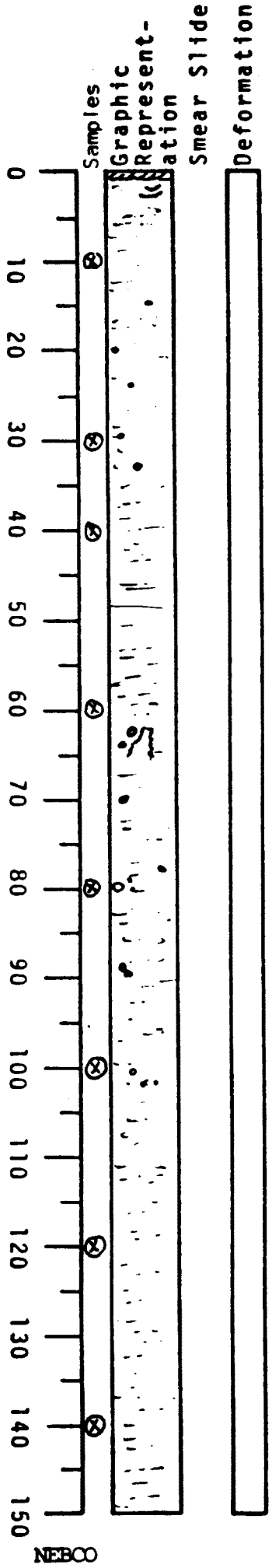
REMARKS:

Gravity Core 164G1 - split, subsampled and described.

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	6	4	G	1	1

STATION#			OBSERVER
	1	6	4	D.Bright



Section 1 = 0-150 cm

0-1 cm, void

1-3 cm, moderate olive brown (5Y 4/4) with small, faint brown lenses in a clayey mud

3-60 cm, grayish olive (10Y 4/2) clayey mud with small black blebs of sand (?) and small white specks of shell fragments (?)

60-65 cm, mottled light olive gray mud (5Y 5/2) with grayish olive clayey mud

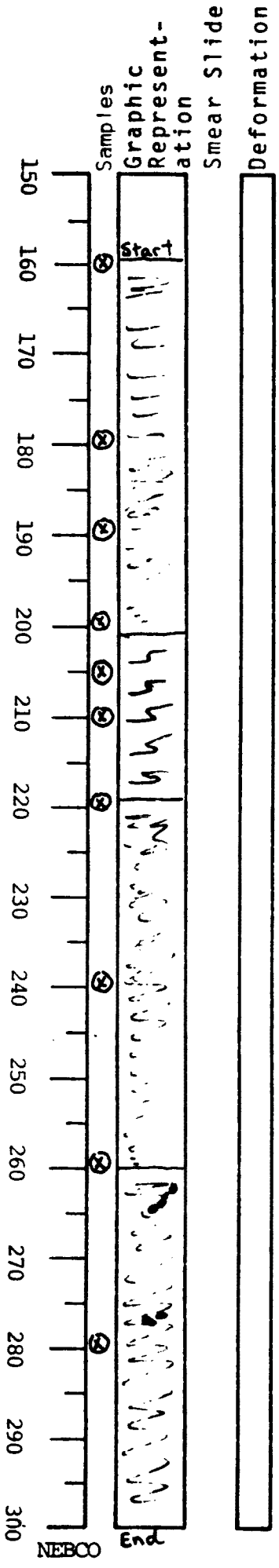
65-150 cm, grayish olive clayey mud with small black blebs of sand (?) and white specks of shell fragments (?)
some sand fragments (?) at 70, 80, 87 and 102 cm
possible shell fragments at 65, 78, 85, and 100 cm (very small white specks)

X = vane shear
O = water content

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	6	4	G	1	2

STATION#			OBSERVER
	1	6	4	D.Bright



Section 2 = 159-300 cm

150-159 cm, to Kvenvolden for gas analysis

159-202 cm, layering not apparent, solid grayish olive clayey mud (10Y 4/2)

202-218 cm, solid grayish olive clayey mud, increase in water content

218-260 cm, layering not apparent, solid grayish olive clayey mud

260-263 cm, solid grayish olive clayey mud with shell fragments

263-275 cm, solid grayish olive clayey mud, no layering apparent

275-276 cm, solid grayish olive clayey mud with shell fragments

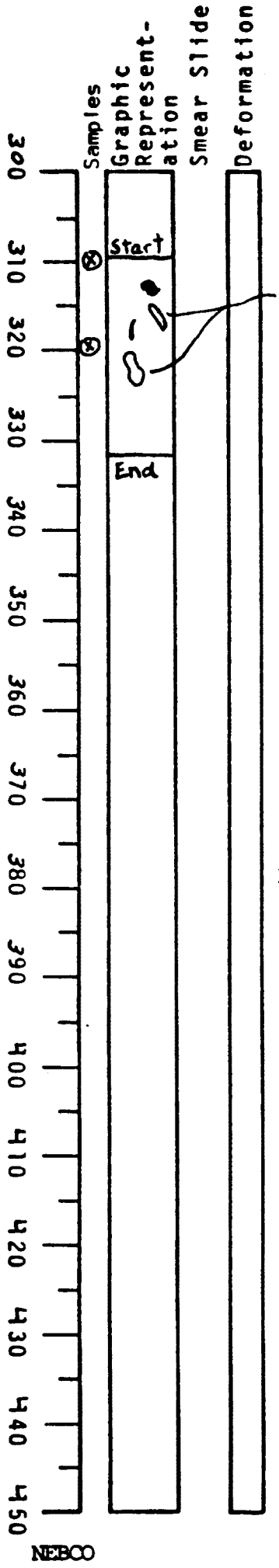
276-300 cm, solid grayish olive clayey mud

X = vane shear
O = water content

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.						SEC.
S	1	3	-	7	9	N	C	1	6	4	G	1		3

STATION#				OBSERVER
	1	6	4	Bright



mottled sand

Section 3 = 309-332 cm

309-322 cm, grayish olive clayey mud (10Y 4/2) with black sand (?) blebs at 313 cm, 319 cm, mottled with pale olive clayey mud (10Y 6/2) or possible layers (?), see 314-318 and 319-323 cm

X = vane shear
O = water content

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 164G1

STATION NO: 164

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
2	178-180, 198-200 cm	Mike Field	USGS	Grain Size & Carbon Content	11/20/80
2	218-220, 238-240 cm	" "	"	" "	"
2	258-260, 277-279 cm	" "	"	" "	"
2 3	150-159, 300-309 cm	Keith Kvenvolden	"	Gas Analysis	11/2/79
1	10,30,40,60, 80,100,120	Brian Edwards	"	Vane Shear & Water Content	6/11/80
1 2	140 cm 159,179,189	" "	"	" "	6/10/80
2	199,205,210, 219,239,259	" "	"	" "	"
2 3	279 cm, 309,319 cm	" "	"	" "	"
1 2	150 cm 300 cm	" "	"	Bulk Density	"

NEBCO

USGS STATION LOG

SHIP / LEG S13-79-Nc

LATITUDE 41° 43.41'N

LONGITUDE -124° 54.16'W

STATION NO. 165

LINE NO.

DAY/MONTH/YEAR

DATE 02/11/79

TYPE OF STORAGE (check one)

	X	
DRY	COLD	FROZEN

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
165 G1	770	59cm		

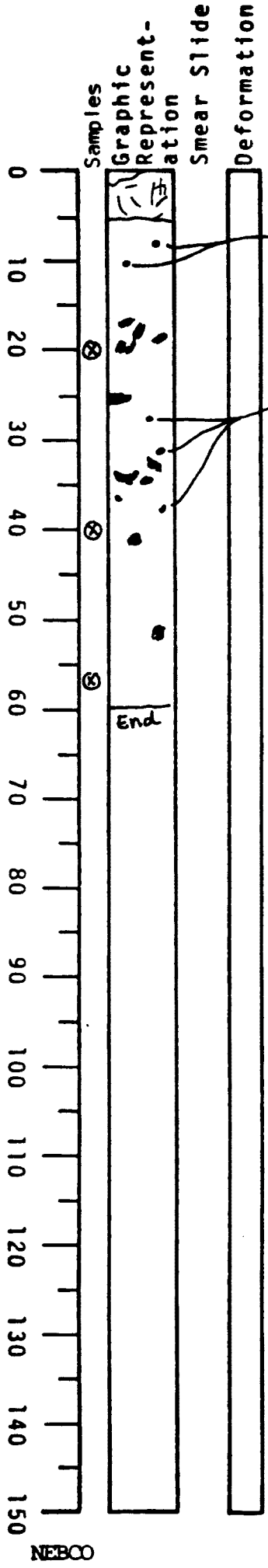
REMARKS:

Gravity Core 165G1 - split and described.

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	6	5	G	1	1

STATION#			OBSERVER
	1	6	5	Bright



shell fragments

0-5 cm, moderate olive brown clayey mud (5Y 4/4), broken and fractured

shell fragments

5-59 cm, solid grayish olive clayey mud (10Y 4/2) with gray sand blebs at 18-20 cm, 25 cm, 33-37 cm, 41 cm, 50 cm
possible shell fragments at 6, 10, 26, 31 and 35 cm (very small white specks)

X = vane shear
O = water content

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 165G1

STATION NO: 165

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	20,40 & 57 cm	Brian Edwards	USGS	Vane Shear & Water Content	11/2/79

NEBCO

USGS STATION LOG

SHIP / LEG S13-79-NC

LATITUDE 41°42.56'/41°42.99'N

LONGITUDE -124°57.78'/-124°57.98'W

STATION NO. 166

LINE NO.

DAY/MONTH/YEAR

DATE 02/11/79

TYPE OF STORAGE (check one)

	X	
DRY	COLD	FROZEN

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
166 G1	913	68cm		
166 G3	909	128cm		

REMARKS: 166 G2-- No recovery

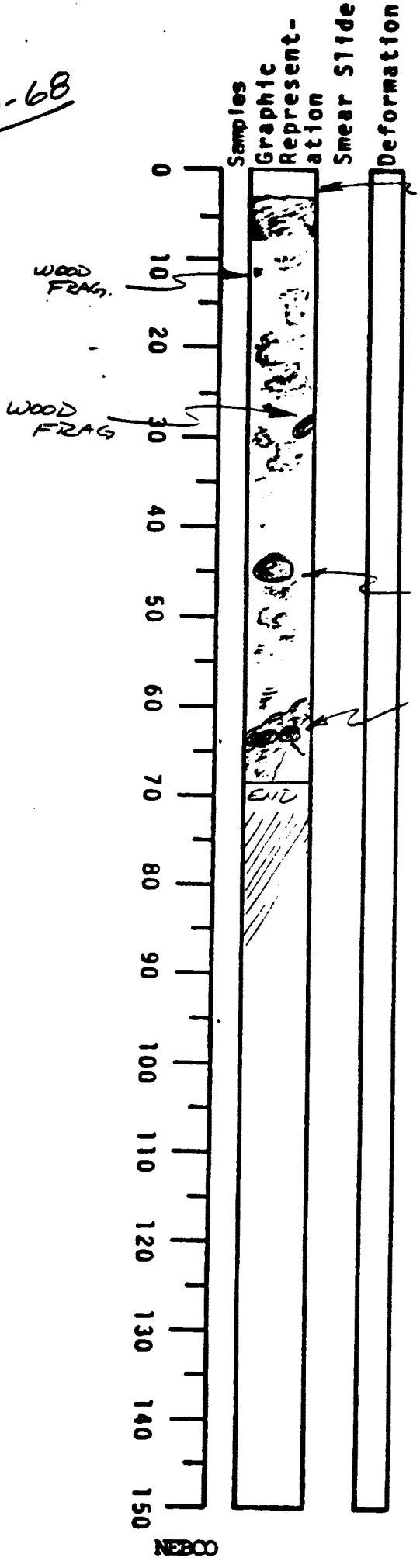
Gravity Cores 166G1 & 166G3 - split and described

0-68

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.						SEC.	
S	1	3	-	7	9	N	C	1	6	6	G	1			1

STATION#				OBSERVER
	1	6	6	Spragge



0-7 cm, light olive gray (5Y 5/2) sandy silt mixed with black sand

7-68 cm, grayish olive (10Y 4/2) sandy silt mottled with olive gray (5Y 3/2) sandy silt (turbulent mixing)

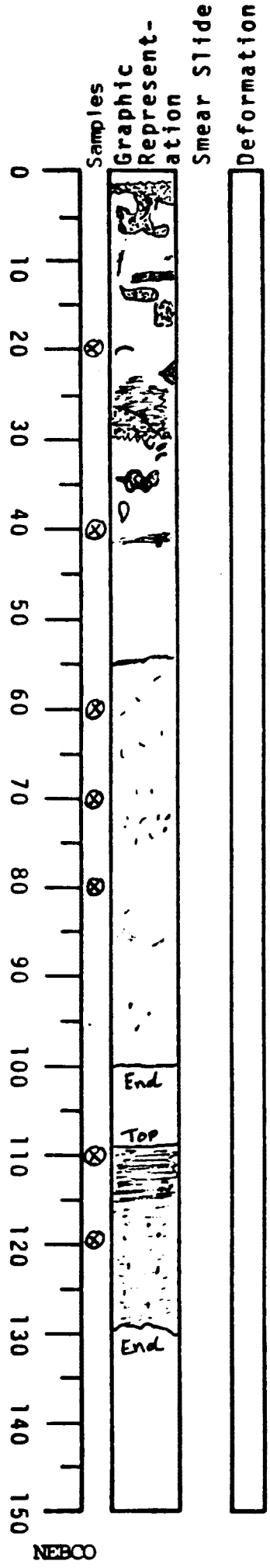
at 45 cm, rock with pale olive (10Y 6/2) clayey silt surrounding it

57-68 cm, rocks with pale olive (10Y 6/2) clayey silt

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.						SEC.
S	1	3	-	7	9	N	C	1	6	6	G	3	1	&2

STATION#				OBSERVER
	1	6	6	J.Esterle



0-1 cm, empty

1-28 cm, dark greenish gray (5GY 4/1) silt layer 3 cm thick at base fining up into greenish gray (5GY 6/1) and light olive gray (5Y 6/1) clayey mud with dark greenish gray medium sand lenses or pods, overlain by "mushroom" shaped sand layer with a browner (oxidized) tint in which individual sand (med) grains are black

28 cm, 2 shell fragments

28-54 cm, greenish gray (5GY 6/1) clayey mud with dark greenish gray silt pod at 32 cm & indistinct medium bluish gray (5B 5/1) layer at 42 cm containing small white fragment

54 cm, thin dark greenish gray silt stringer

54-100 cm, homogeneous greenish gray clayey mud with minute rock and/or shell fragments especially between 68 & 74 cm

Section 1 = 0-100 cm
Section 2 = 109-128 cm

100-109 cm, to Kvenvolden for gas analysis

109-114 cm, olive gray (5Y 3/2) clayey mud

114-128 cm, light olive gray (5Y 5/2) clayey mud with minute silt blebs

X = vane shear
O = water content

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 166G1

STATION NO: 166

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	20,40,55 66 cm	Brian Edwards	USGS	Vane Shear & Water Content	11/2/79

NEBCO

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 166G3

STATION NO: 166

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	19-20, 39.5-41.5 cm	Mike Field	USGS	Grain Size & Carbon Content	11/20/80
1	59-61, 78.5-81.5 cm	" "	"	" "	"
2	117-119 cm	" "	"	" "	"
1	100-109 cm	Keith Kvenvolden	"	Gas Analysis	11/2/79
1	6-9 cm	Mike Field	"	C^{14} Dating	6/80
2	122 cm	" "	"	Diatoms	6/11/80
1	20,40,60,70, 80 cm	Brian Edwards	"	Vane Shear & Water Content	11/2/79
2	110,119 cm	" "	"	" "	"
1	98 cm	" "	"	Bulk Density	"

NEBCO

USGS STATION LOG

SHIP / LEG S13-79-NC

LATITUDE 41°40.98'/41°41.41'N

LONGITUDE -124°52.99/-124°53.04'W

STATION NO. 167

LINE NO.

DAY/MONTH/YEAR

DATE 02/11/79

TYPE OF STORAGE (check one)

	X	
DRY	COLD	FROZEN

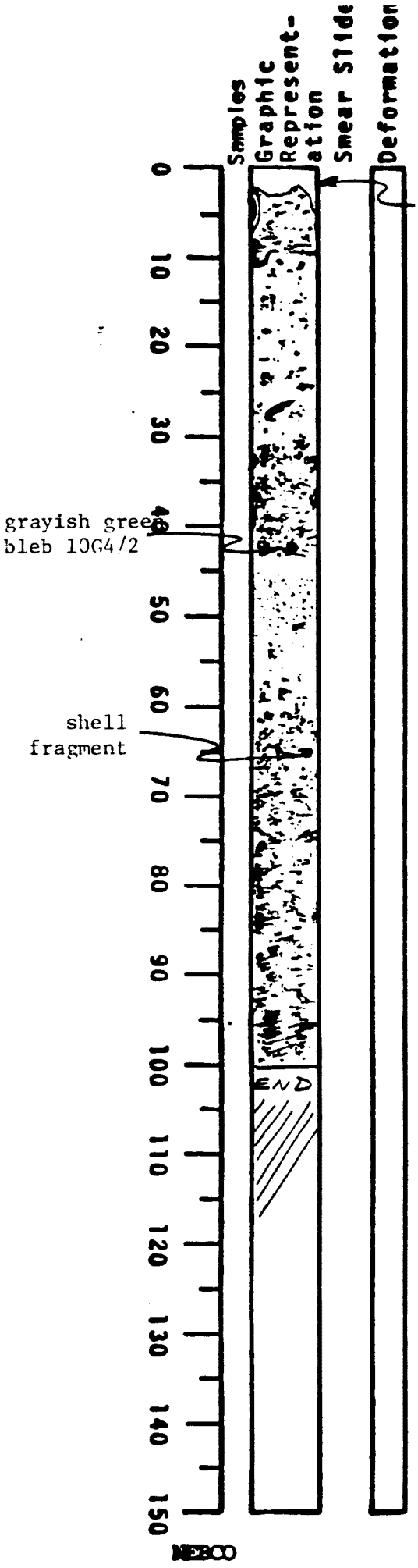
SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
167 G2	795	126cm		
167 G1	790	c.c. only		

REMARKS:

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	6	7	G	2	1

STATION#				OBSERVER
1	6	2		P.Spragge



0-10 cm, grayish olive (10Y 4/2) sandy silt mixed with black sandy silt

10-30 cm, grayish olive sandy silt (as in 0-10) but less black sandy silt, at 15 cm faint moderate olive brown (5Y 4/4) layer 2-3 cm wide, not well defined

30-45 cm, grayish olive sandy silt mixed with black sandy silt (as in 0-10 cm)

45-60 cm, grayish olive (10Y 4/2) sandy silt with traces of black sandy silt, concentration of yellowish gray (5Y 7/2) grains resembling sand but very well rounded spheroids (organics?)

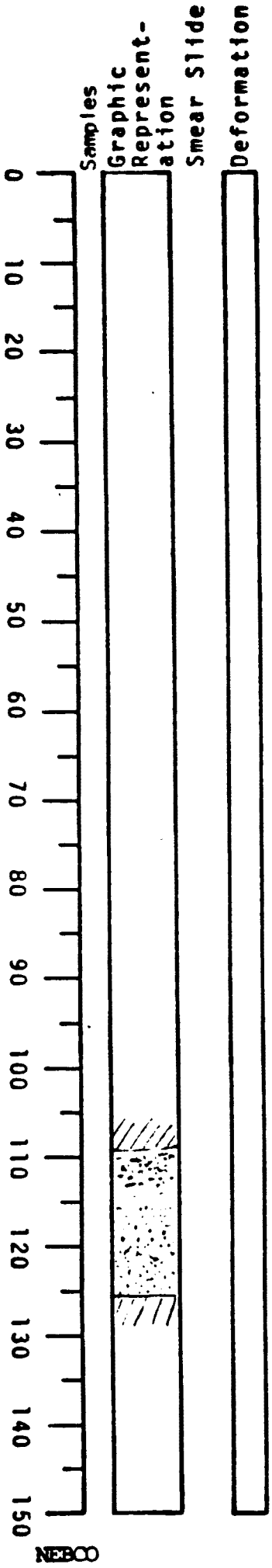
60-100 cm, grayish olive (10Y 4/2) sandy silt mixed with black sandy silt (as in 0-10 cm)

100-100 cm, to Kvenvolden for gas analysis

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	6	7	G	2	2

STATION#				OBSERVER
1	6	2		Spragge



Section 2 - 109-126 cm

109-126 cm, dark greenish gray (5G 4/1) silty clay mottled with black sand

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 167G2

STATION NO: 167

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	100-109 cm	Keith Kvenvolden	USGS	Gas Analysis	11/2/79
1 2	20,40,60,80 110,117 cm	Brian Edwards	"	Vane Shear & Water Content	"
1	98 cm	" "	"	Bulk Density	"

NEBCO

USGS STATION LOG

SHIP / LEG S13-79-NC

LATITUDE 41°41.37'N

LONGITUDE -124°54.07'W

STATION NO. 168

LINE NO.

DAY/MONTH/YEAR

DATE 02/11/79

TYPE OF STORAGE (check one)

	X	
DRY	COLD	FROZEN

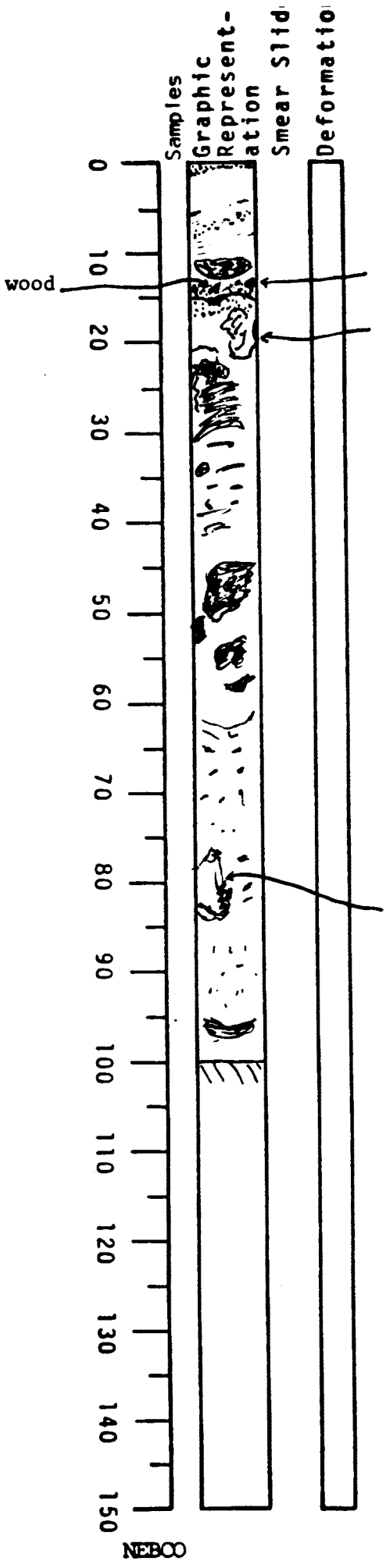
SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
168 G1		no recovery		
168 G2	789	136cm		

REMARKS:

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	6	8	G	2	1

STATION#			OBSERVER
	1	6	8	J.Esterle



green

mud clast

0-6 cm, dark yellowish brown (10YR 4/2) very fine sand, coarsens up to darker sand

6-18 cm, olive gray (5Y 3/2) silty mud with lens of darker fine sand, approx. 3 cm, with dusky green (5G 3/2) pod above rt. of lens thin layer (1/4 cm) near top boundary of sand size particles with whitish spherical grains (pinhead size), oxidation near base, left, possible wood fragment

18-100 cm, overall dark greenish gray (5G 4/1) silty mud with greenish gray mud (clay - rock?) clasts about 4 cm diam. at 16 cm & 80 cm, clast at 80 cm based and sided by fine sand lenses, greenish gray clay lens at 20-22 cm, dark gray (N3) fine sand sections (indistinct pods) from 22-30, 43-48, & 93 cm, blebs of this dark fine sand throughout

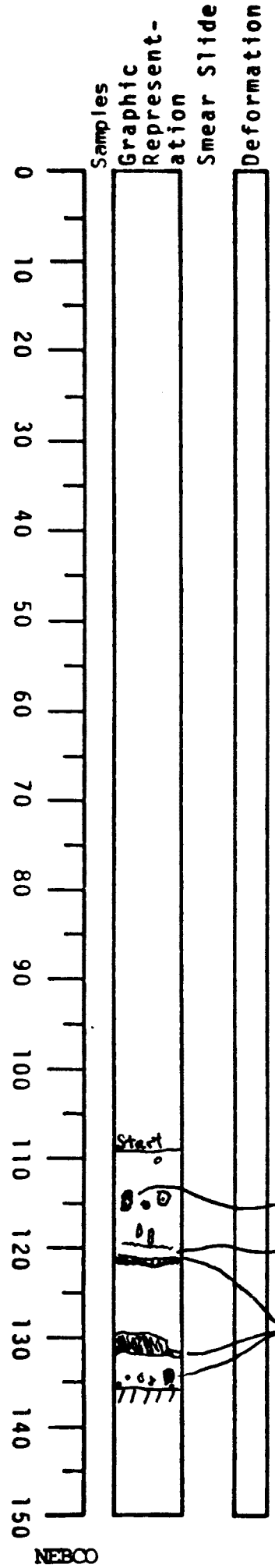
Note: roughly 2 cm^3 sample of rock fragment taken from 20 cm, sent off for description

100-109 cm, to Kvenvolden for gas analysis

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	6	8	G	2	2

STATION#				OBSERVER
	1	6	8	Bright



Section 2 - 109-136 cm

109-119 cm, grayish olive (10Y 4/2) clayey mud with pockets and small blebs of black sand occurring at 113-116 cm, 114 cm, 115-116 cm

119 cm, very small light brown shell fragment (?)

119-121 cm, hue changes to a pale olive (10Y 6/2) for about 2 cm

121-124 cm, layer of black sand

124-129 cm, grayish olive layer with possible shell fragment at 125 cm

129-132 cm, layer of black sand

132-136 cm, grayish olive clayey mud with bleb of black sand

Specks of a clear, shiny mica (?) occur throughout core

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 168G2

STATION NO: 168

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	20-22, 39-41 cm	Mike Field	USGS	Grain Size & Carbon Content	11/20/80
1	59-61, 80-82 cm	" "	"	" "	"
1	100-109 cm	Keith Kvenvolden	"	Gas Analysis	11/2/79
1	22,40,60,81, 90 cm	Brian Edwards	"	Vane Shear & Water Content	6/80
2	110,127 cm	" "	"	" "	"
1	100 cm	" "	"	Bulk Density	"
1	20 & 58 cm	Mike Field	"	Diatoms	"

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USGS STATION LOG

SHIP / LEG S13-79-NC

LATITUDE 41°35.71'N

LONGITUDE -124°31.14'W

STATION NO. 169

LINE NO.

DAY/MONTH/YEAR

DATE 02/11/79

TYPE OF STORAGE (check one)

	X	
DRY	COLD	FROZEN

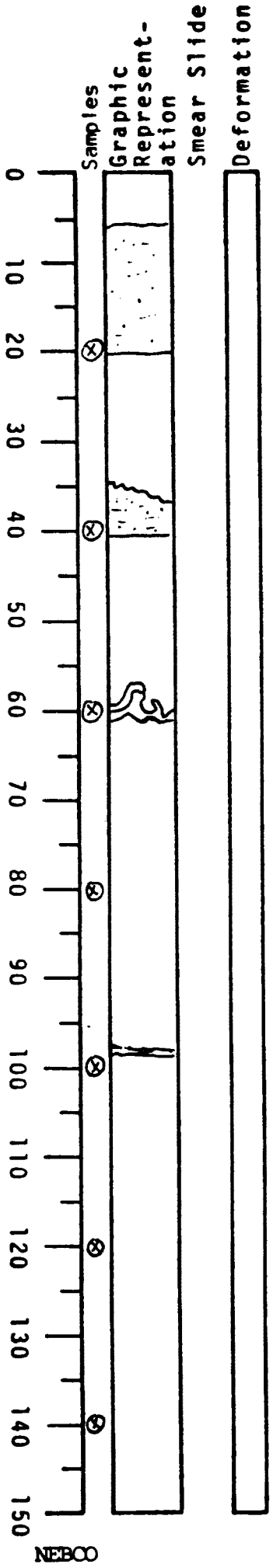
SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
169 G1	421	202cm		

REMARKS:

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	6	9	G	1	1

STATION#			OBSERVER
	1	6	9	S.Griscom



0-6 cm, Tube empty

6-20 cm, olive grey (5Y 3/2) silty mud, possible layers

20-35 cm, dark greenish grey (5GY 4/1) massive mud

35-41 cm, dark greenish grey silty mud, top contact with mud is wavy

58-61 cm, burrowed disturbed area

41-150 cm, dark greenish grey massive mud with infrequent possible horizontal layering

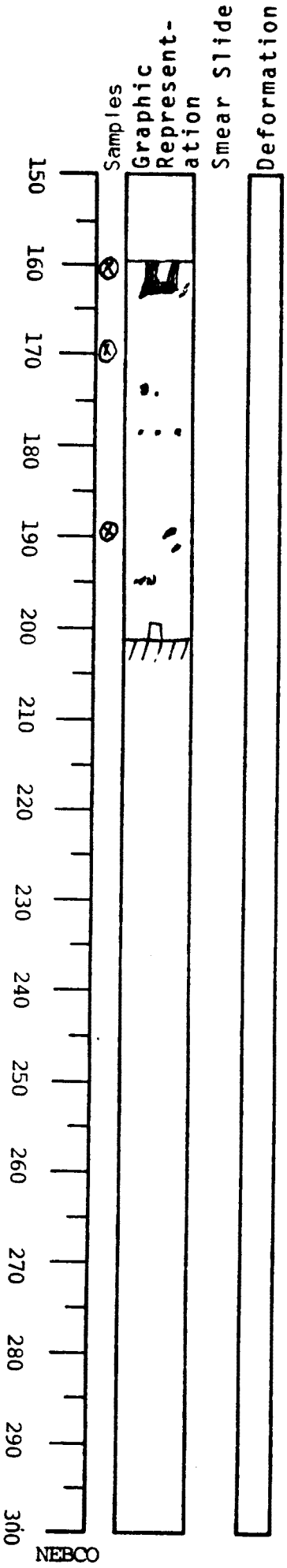
150 cm, bottom of section

O = water content
X = vane shear

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.						SEC.
S	1	3	-	7	9	N	C	1	6	9	G	1		2

STATION#				OBSERVER
	1	6	9	Spragge



Overall olive gray (5Y 3/2) silty mud with micaceous specks thruout

159-166 cm, Hue change to grayish olive (10Y 4/2) around plug

162 cm, 5 mm x 1 mm cylindrical shell fragment

173 cm, 1 mm x 2 mm cylindrical shell fragment & 1 mm black "organic" speck

177 cm, three 1 mm black "organic" specks

187-191 cm, two (2) clay blebs with no color change

192 cm, sandy bleb

194-202 cm, increase in moisture with slight seepage into plug hole

X = vane shear
O = water content

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 169G1

STATION NO: 169

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	20-22,39-41, 59-61 cm	Mike Field	USGS	Grain Size & Carbon Content	11/21/80
1	79-81, 99-101 cm	" "	"	" "	"
1	119-121, 139-141 cm	" "	"	" "	"
2	168-171, 188-191 cm	" "	"	" "	"
2	150-159 cm	Keith Kvenvolden	"	Gas Analysis	11/2/79
1	22,40,60,80, 100,120,140	Brian Edwards	"	Vane Shear & Water Content	"
2	160,169 & 189 cm	" "	"	" "	"
1 2	70,130 & 150 cm	" "	"	Bulk Density	"

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USGS STATION LOG

SHIP / LEG S13-79-NC

LATITUDE 41°34.55'N

LONGITUDE -124°21.72'W

STATION NO. 170

LINE NO.

DAY/MONTH/YEAR

DATE 02/11/79

TYPE OF STORAGE (check one)

	X	
DRY	COLD	FROZEN

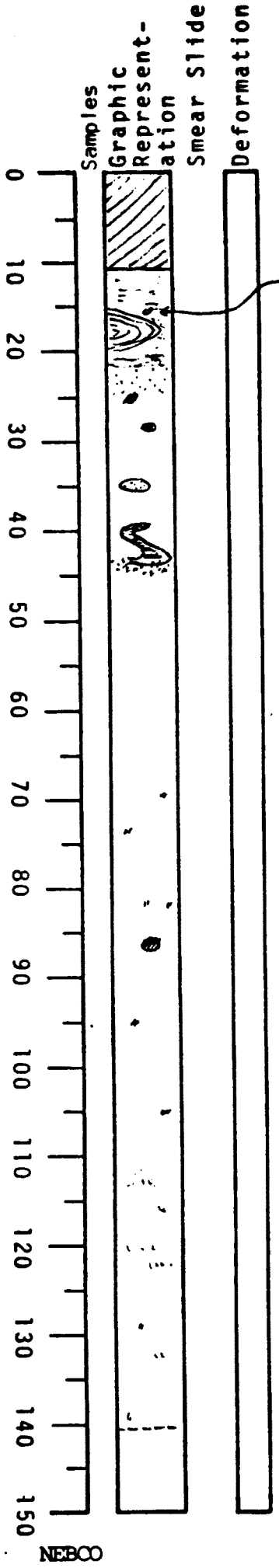
SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
170 G1	94	150cm		

REMARKS:

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.	
S	1	3	-	7	9	N	C	1	7	0	G	1		1

STATION#				OBSERVER
	1	7	0	Spragge



organic fragment

0-11 cm, Empty

11-16 cm, Silty mud, olive black (5Y 2/1)

16-20 cm, Alternating coloring (olive black to greenish black, 5Y 2/1 - 5G 2/1)

20-40 cm, Olive Gray (5Y 3/2) clayey mud with organic fragments, shells and sandy lenses Interface of clayey mud (40-44 cm) with silty mud below shows distortion

44-140 cm, Silty mud, olive black (5Y 2/1) becoming increasingly wet towards 140 cm, numerous shells and shell fragments, some organics and wood, 1.5 x 1.5 cm wood fragment at 86-88 cm

140-149 cm, to Kvenvolden for gas analysis

SAMPLE LOG

LOCATOR: S13-79-NC SAMPLE NO: 170G1

STATION NO: 170

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	76-79 cm	Mike Field	USGS	C^{14} Dating	8/80
1	140-149 cm	Keith Kvenvolden	"	Gas Analysis	11/2/79
1	23,40,60,80, 100,120 cm	Brian Edwards	"	Vane Shear & Water Content	"
1	140 cm	" "	"	Bulk Density	"
1	21.5-23.5, 39-41 cm	Mike Field	"	Grain Size & Carbon Content	11/21/80
1	59-61, 79-81 cm	" "	"	" "	"
1	99-101, 120-122 cm	" "	"	" "	"

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USGS STATION LOG

SHIP / LEG S13-79-NC

LATITUDE 41°35.80'N

LONGITUDE -124°19.33'W

STATION NO. 171

LINE NO.

DAY/MONTH/YEAR

DATE 02/11/79

TYPE OF STORAGE (check one)

	X	
DRY	COLD	FROZEN

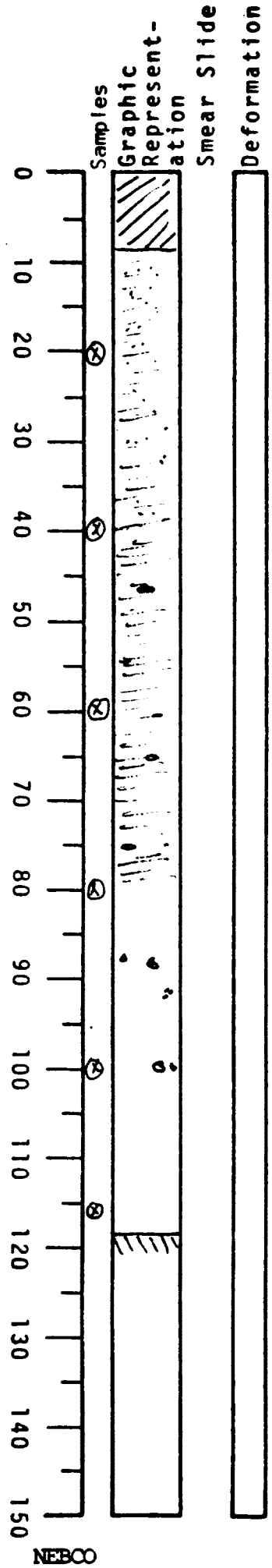
SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
171 G1	81	127cm		

REMARKS:

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	7	1	G	1	1

STATION#				OBSERVER
	1	7	1	D. Bright



0-8 cm, void

8-46 cm, irregular layers of light olive grey (5Y 5/2) and olive gray (5Y 3/2) silty mud with specks of shiny mica (?)

46 cm, black wood fragment (?)

46-80 cm, irregular layers of light olive gray and olive gray silty muds with a gradual increase in the olive gray mud and gradual decrease in per-cent of shiny mica (?) towards 80 cm depth. Small blebs of black sand (?) occur irregularly (i.e. 47, 64, 75 cm)

80-118 cm, moist olive gray silty mud with white shell fragments occurring at 98-100, 91-92, 87-88 cm.

118-127 cm, for gas analysis

O = water content
X = vane shear

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 171G1

STATION NO: 171

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	118-127 cm	Keith Kvenvolden	USGS	Gas Analysis	11/2/79
1	20,40,60,80 110,116 cm	Brian Edwards	"	Vane Shear & Water Content	6/9/80
1	19-21,39-41 59-61 cm	Mike Field	"	Grain Size & Carbon Content	11/21/80
1	79-81, 100-102 cm	" "	"	" "	"

NEBCO

USGS STATION LOG

SHIP / LEG S13-79-NC

LATITUDE 41°37.30'/41°37.35'W

LONGITUDE -124°17.03/-124°17.08'W

STATION NO. 172

LINE NO.

DAY/MONTH/YEAR

DATE 02/11/79

TYPE OF STORAGE (check one)

	X	
DRY	COLD	FROZEN

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
172 G1	50	c.c. only		
172 G2	50	48cm		

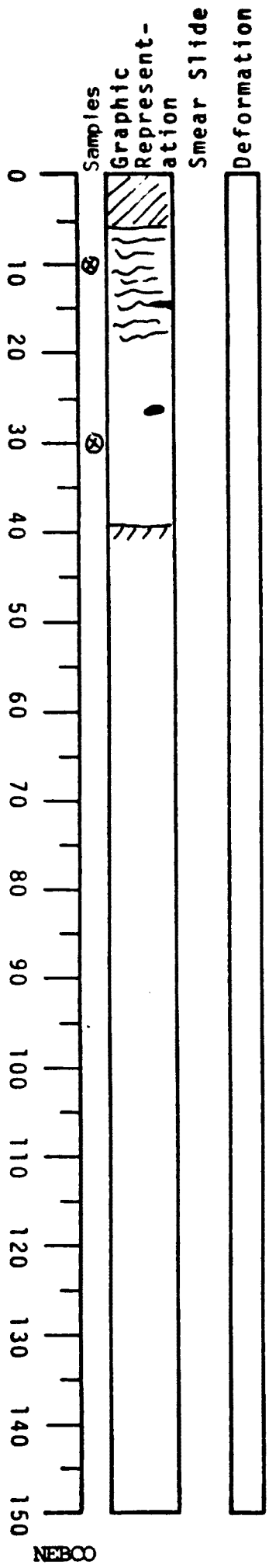
REMARKS:

NEBOO

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.
S	1	3	-	7	9	N	C	1	7	2	G	2	1

STATION#				OBSERVER
	1	7	2	D.Bright



0-6 cm, Void filled with water and small amount olive grey (5Y 3/2) silty mud

6 cm, black (organic?) chip

6-18 cm, moderate olive brown layer (?)of silty mud with brown lens of sand (?) or some organics (?) at 16 cm

38-39 cm, olive gray silty mud with black sand (?) bleb at 26 cm

O = water content
X = vane shear

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 172G2

STATION NO: 172

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	38-47 cm	Keith Kvenvolden	USGS	Gas Analysis	11/2/79
1	9.5-11.5, 29-31 cm	Mike Field	"	Grain Size & Carbon Content	11/21/80
1	10,30 cm	Brian Edwards	"	Vane Shear & Water Content	6/11/80
1	36 cm	" "	"	Bulk Density	"

USGS STATION LOG

SHIP / LEG S13-79-NC

LATITUDE 41°38.30'N

LONGITUDE -124°14.30'W

STATION NO. 173

LINE NO.

DAY/MONTH/YEAR

DATE 02/11/79

TYPE OF STORAGE (check one)

	x	
DRY	COLD	FROZEN

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
173 G1	45	c.c. only		

REMARKS:

USGS STATION LOG

SHIP / LEG S13-79-NC

LATITUDE 41°39.57'N

LONGITUDE -124°12.15'W

STATION NO. 174

LINE NO.

DAY/MONTH/YEAR

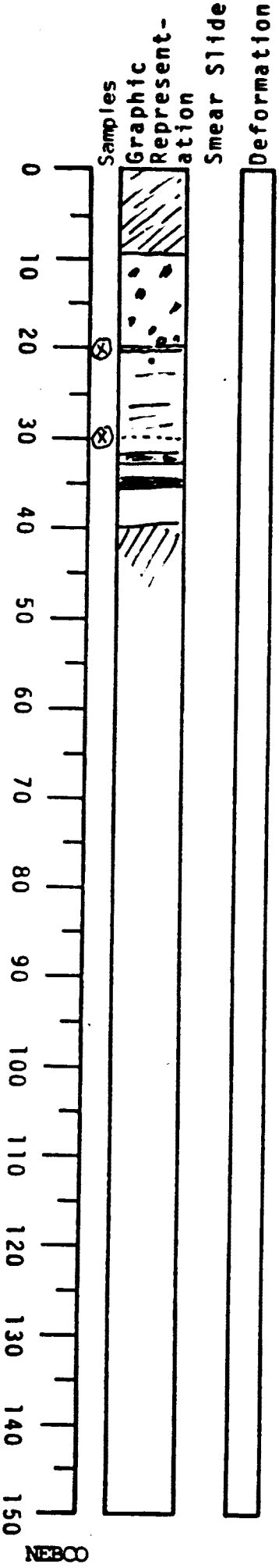
DATE 02/11/79

TYPE OF STORAGE (check one)

DRY	COLD	FROZEN
	X	

SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
174 G1	32	40 cm		

REMARKS:



VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.						SEC.
S	1	3	-	7	9	N	C	1	7	4	G	1		1

STATION#				OBSERVER
1	7	4		Spragge

0-9 cm, empty

9-20 cm, olive gray (5Y 3/2) clayey silt mottled with light olive brown (5Y 5/6) silt (organics?) shell fragments (19-21 cm), black organics (wood) at about 9 cm.

20 cm, 1 cm band of olive gray (5Y 3/2) silty clay

21-23 cm, layer of olive gray (5Y 3/2) clayey silt

23-34 cm, alternating layers of olive gray (5Y 3/2) clayey silt and grayish olive (10Y 4/2) clayey silt

35 cm, 1 cm band of black clayey silt

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 174G1

STATION NO: 174

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	29-31 cm	Mike Field	USGS	Grain Size & Carbon Content	11/21/80
1	20, 30 cm	Brian Edwards	"	Vane Shear & Water Content	6/11/80
1	38 cm	" "	"	Bulk Density	"

NEBCO

USGS STATION LOG

SHIP / LEG S13-79-NC

LATITUDE 41°41.36'N

LONGITUDE -124°20.29'W

STATION NO. 175

LINE NO.

DAY/MONTH/YEAR

DATE 02/11/79

TYPE OF STORAGE (check one)

DRY	COLD	FROZEN
	x	

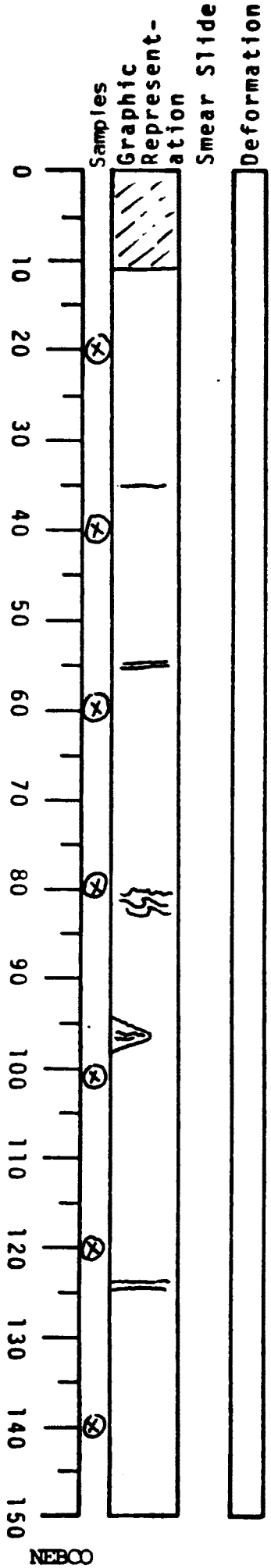
SAMPLE NO. TYPE & ID.	UNCORRECTED DEPTH (M)	CORE LENGTH	BASIC LITHOLOGY	AGE OF BOTTOM
175 G1	80	175cm		

REMARKS:

VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.						SEC.
S	1	3	7	9	N	C		1	7	5	G	1		1

STATION#				OBSERVER
	1	7	5	S.Griscom



0-11 cm, empty

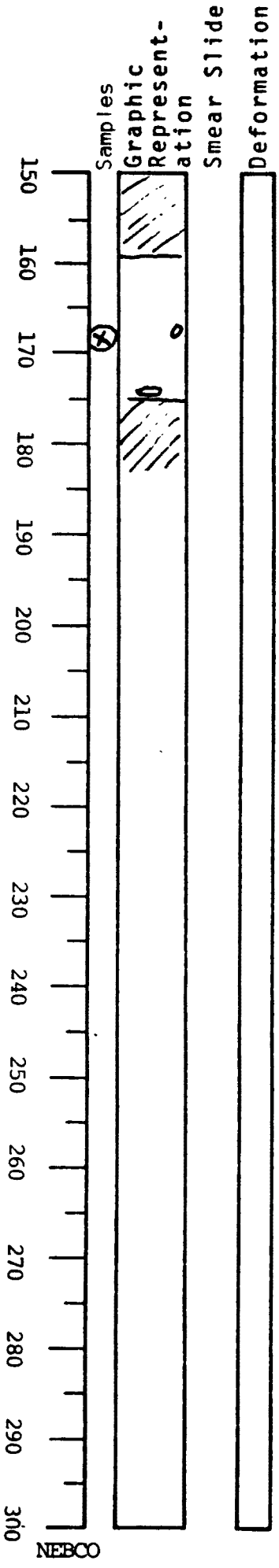
11-35 cm, greenish black (SG 2/1) blotchy silty mud. clayier at bottom with laminated darker layers. Definite contact at bottom

35-124 cm, olive grey (5Y 3/2) silty mud with vague laminations, lower grades darker.

124-126 cm, olive black (5Y 2/1), large air pocket with two definite boundaries at 124 & 126 cm, doesn't appear to be dessication cracks.

126-150 cm, olive black (5Y 2/1), moister silty mud, massive.

O = water content
X = vane shear



VISUAL CORE DESCRIPTION

LOCATOR								SAMPLE NO.					SEC.	
S	1	3	-	7	9	N	C	1	7	5	G	1		2

STATION#				OBSERVER
	1	7	5	Spragge

150-159 cm, For gas analysis

159-175 cm, homogeneous olive black (5Y 2/1) sandy silt. Very moist.

169 cm - shell fragment

174 cm - burrow

SAMPLE LOG

LOCATOR: S13-79-NC

SAMPLE NO: 175G1

STATION NO: 175

SECTION	INTERVAL	NAME	ORGANIZATION	PURPOSE	DATE
1	19-21,39-41, 59-61 cm	Mike Field	USGS	Grain Size & Carbon Content	11/21/80
1	79-81, 99-103 cm	" "	"	" "	"
1	119.5-121.5, 139-141 cm	" "	"	" "	"
2	150-159 cm	Keith Kvenvolden	"	Gas Analysis	11/2/79
1	20,40,60,80, 101,120,140	Brian Edwards	"	Vane Shear & Water Content	6/12/80
2	168 cm	" "	"	" "	"
1	28,115 & 150 cm	" "	"	Bulk Density	"

NEBCO