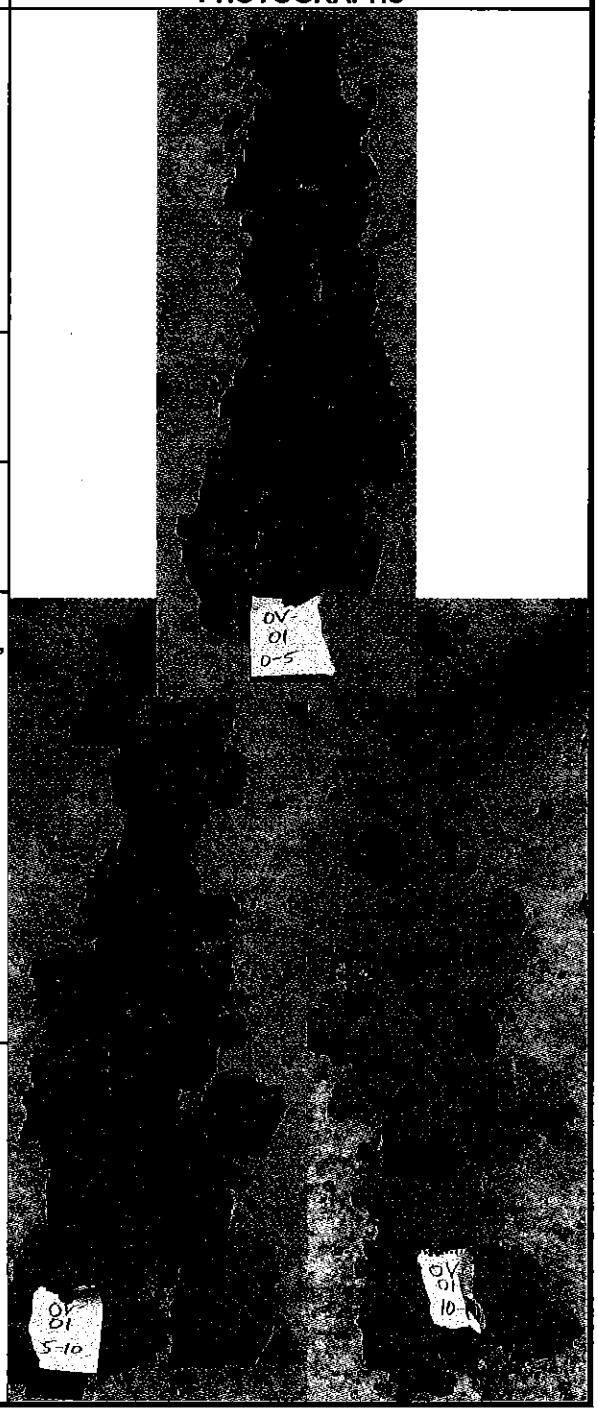
Core No.	Run	Date	Time	Easting	Northing	Elevation (ft)	Latitude		Longitude	
06OV-07	1	05/03/06	11:17:40 AM	12,128,650.1	3,528,449.1	-23.7	36	59.5596	76	17.325966
06OV-08	1	05/03/06	12:14:00 PM	12,130,809.8	3,524,735.3	-17.2	36	58.939391	76	16.900389
06OV-09	1	05/03/06	1:08:40 PM	12,134,828.2	3,522,932.3	-20.8	36	58.626749	76	16.0839
06OV-10	1	05/04/06	8:51:41 AM	12,138,359.2	3,531,153.8	-21.3	36	59.967444	76	15.318617
06OV-11	1	05/03/06	1:59:42 PM	12,137,702.9	3,524,991.5	-21.8	36	58.954822	76	15.483521
06OV-12	1	05/04/06	4:36:26 PM	12,141,124.9	3,527,127.8	-18.4	36	59.293263	76	14.770406
06OV-13	1	05/04/06	9:36:02 AM	12,144,076.9	3,529,673.0	-24.2	36	59.700962	76	14.151511
06OV-14	1	05/04/06	4:13:51 PM	12,142,975.0	3,524,391.4	-23.5	36	58.835212	76	14.403864
06OV-15	2	05/04/06	3:44:28 PM	12,141,796.7	3,520,255.0	-24.2	36	58.158314	76	14.666095
06OV-16	1	05/04/06	10:13:28 AM	12,146,534.7	3,526,638.6	-18.3	36	59.191337	76	13.661692
06OV-17	1	05/04/06	10:56:35 AM	12,149,368.9	3,527,659.0	-25.4	36	59.348202	76	13.074597
06OV-18	1	05/04/06	2:49:26 PM	12,147,916.9	3,522,480.2	-21.9	36	58.500789	76	13.398457
06OV-19	1	05/04/06	2:14:35 PM	12,146,188.6	3,517,702.6	-25.1	36	57.720506	76	13.777032
06OV-20	1	05/04/06	11:29:58 AM	12,151,773.1	3,524,361.7	-21.64	36	58.795371	76	12.597274
06OV-21	1	05/04/06	1:44:35 PM	12,149,859.1	3,518,821.5	-24.8	36	57.890287	76	13.017847
06OV-22	1	05/04/06	12:12:10 PM	12,154,988.4	3,526,210.1	-29.8	36	59.08701	76	11.927768
06OV-23	1	05/04/06	12:43:18 PM	12,153,382.1	3,520,776.1	-22.1	36	58.198206	76	12.284838
06OV-24	1	05/04/06	1:16:12 PM	12,151,636.0	3,515,642.7	-22.6	36	57.35945	76	12.668949
06OV-25	1	05/05/06	9:50:10 AM	12,130,992.2	3,526,976.1	-13.6	36	59.307874	76	16.852042
06OV-26	1	05/05/06	9:10:01 AM	12,135,064.8	3,526,979.7	-16.8	36	59.292672	76	16.01565
06OV-27	1	05/05/06	11:17:35 AM	12,129,976.0	3,528,047.6	-18.3	36	59.488324	76	17.055596
06OV-28	1	05/05/06	11:53:50 AM	12,132,021.1	3,527,993.6	-15.4	36	59.47166	76	16.635909
06OV-29	1	05/05/06	8:42:02 AM	12,134,110.2	3,527,945.4	-16.8	36	59.455514	76	16.206908
06OV-30	1	05/10/06	12:20:45 PM	12,133,535.7	3,529,965.1	-19.7	36	59.790422	76	16.315203
06OV-31	1	05/05/06	10:24:24 AM	12,130,024.8	3,526,986.7	-8.44	36	59.313378	76	17.050697
06OV-32	1	05/05/06	12:26:27 PM	12,131,042.3	3,528,979.3	-21.5	36	59.637717	76	16.83216
06OV-33	1	05/10/06	11:14:05 AM	12,132,979.5	3,528,996.5	-14.05	36	59.63309	76	16.43404
06OV-34	1	05/10/06	2:49:21 PM	12,134,697.5	3,529,072.8	-9.3	36	59.638897	76	16.080912
06OV-35	1	05/10/06	2:27:49 PM	12,134,994.0	3,529,988.7	-15.6	36	59.788639	76	16.015567
06OV-36	1	05/05/06	1:00:29 PM	12,129,969.1	3,528,956.9	-23.3	36	59.637933	76	17.052565
06OV-37	1	05/05/06	3:28:40 PM	12,131,990.5	3,530,016.3	-28.4	36	59.804849	76	16.632376
06OV-38	1	05/10/06	1:47:25 PM	12,135,020.7	3,531,007.3	-26	36	59.956357	76	16.005119
06OV-39	1	05/10/06	10:33:59 AM	12,133,009.6	3,528,008.9	-17	36	59.470194	76	16.432446
06OV-40	1	05/05/06	2:42:44 PM	12,128,998.6	3,528,989.3	-27.4	36	59.647394	76	17.251754
06TS-01	1	05/06/06	11:51:06 AM	12,192,284.8	3,522,096.8	-32.1	36	58.255518	76	4.2906
06TS-02	1	05/06/06	12:29:29 PM	12,192,058.8	3,521,076.8	-36.6	36	58.088252	76	4.342378
06TS-03	1	05/06/06	1:03:02 PM	12,196,707.3	3,521,271.1	-36.6	36	58.100461	76	3.387028
06TS-04	1	05/06/06	1:32:13 PM	12,196,239.7	3,519,989.8	-42.6	36	57.891483	76	3.489715
06TS-05	1	05/06/06	2:11:05 PM	12,199,818.6	3,520,239.7	-42	36	57.917283	76	2.753627
06TS-06	1	05/06/06	3:07:49 PM	12,199,456.2	3,519,011.9	-48.4	36	57.716721	76	2.834308

Hole No. 06OV-01

VIBRACORE LOG

PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/6/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Thimble Shoal Channel	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
17.90	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
16.00	-32.1	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
89.4%	12,192,284.8	3,522,096.8

ELEVATION	DEPTH	DESCRIPTION	PHOTOGRAPHS
-32.1	0.0	dark gray fine silty sand, d50=0.107 @0-0.5'	
		d50=0.117@2-2.5'	
-37.1	5.0	d50=0.17@5-5.5'	
		dark gray silty sand with some shell fragments	
-39.1	7.0		
		gray medium sand with shell	
-41.1	9.0		
		d50=0.388@10-10.5' orange medium sand and gravel, d50=0.412@16'	
-48.1	16.0		

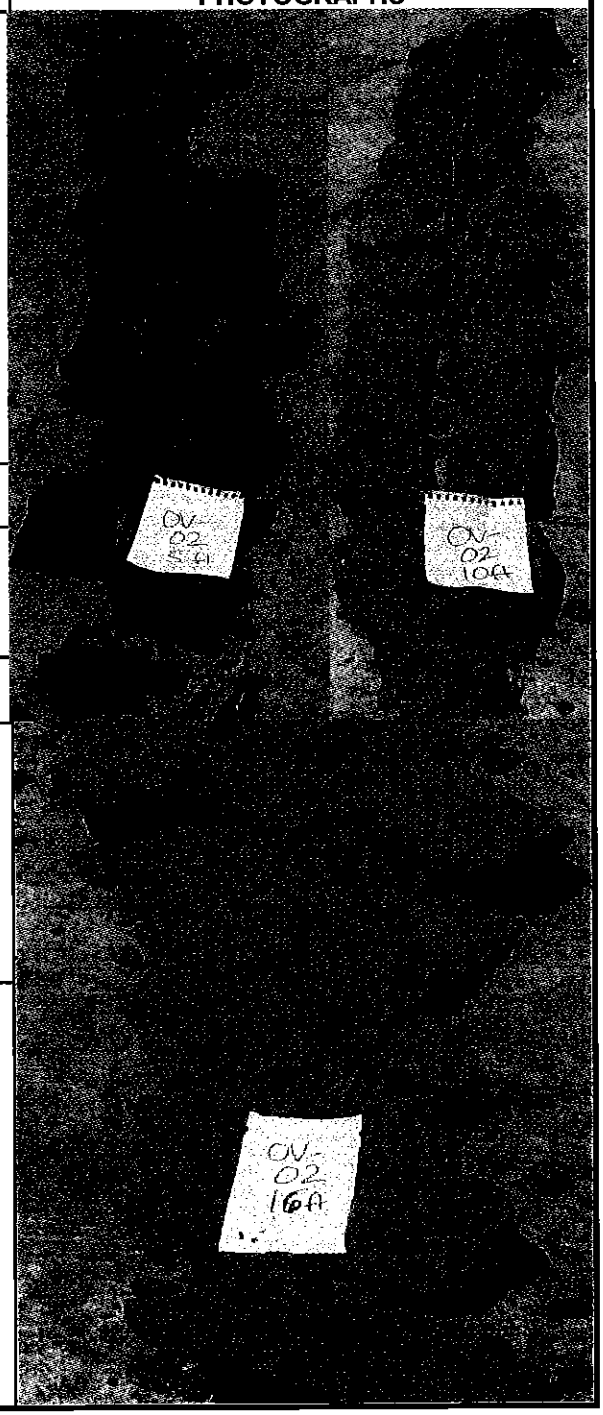
Hole No. 06OV-02

VIBRACORE LOG

PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/6/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Thimble Shoal Channel	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
18.37	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
16.90	-36.6	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
92.0%	12,192,058.8	3,521,076.8

ELEVATION	DEPTH	DESCRIPTION
-36.6	0.0	dark gray fine silty sand with shell, d50=0.293@0-0.5'
		d50=0.155@2-2.5'
-43.6	7.0	d50=0.11@5-5.5'
-44.6	8.0	light gray med-fine sand
-46.6	10.0	light gray silty sand, d50=0.183@10-10.5'
-47.6	11.0	light gray fine silty sand
-51.6	15.0	orange silty sand with gravel d50=0.442@12' d50=0.201@16.9'

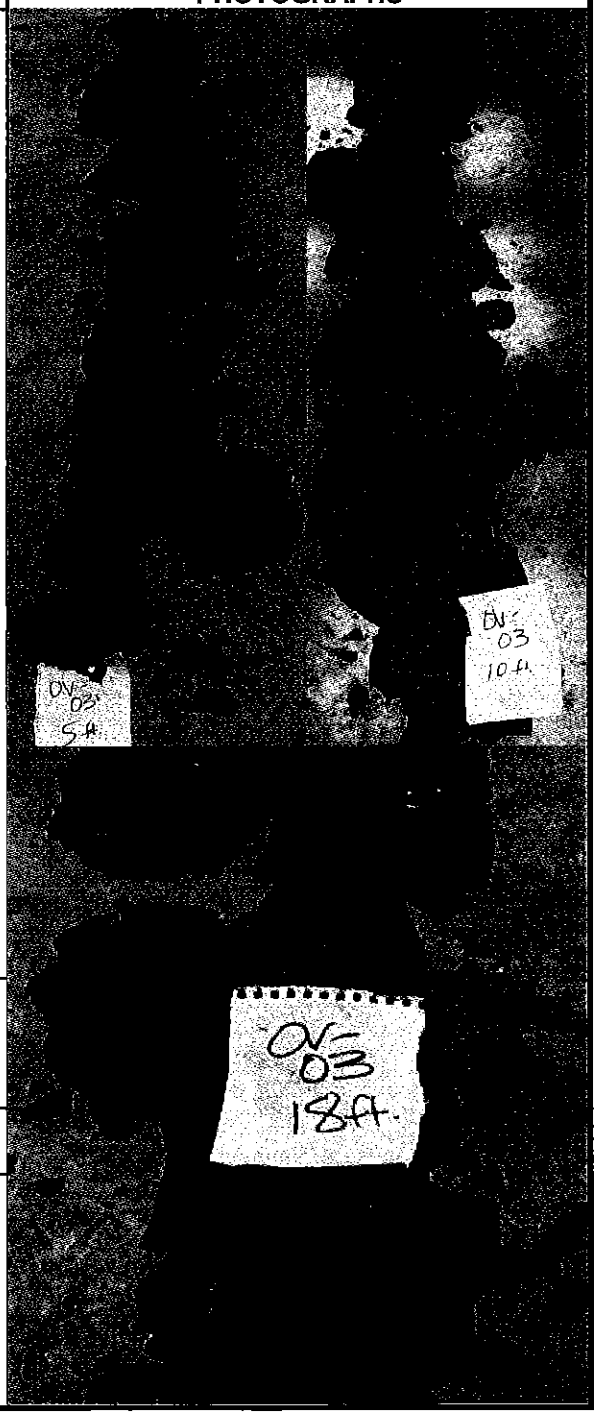
PHOTOGRAPHS



Hole No. 06OV-03

VIBRACORE LOG

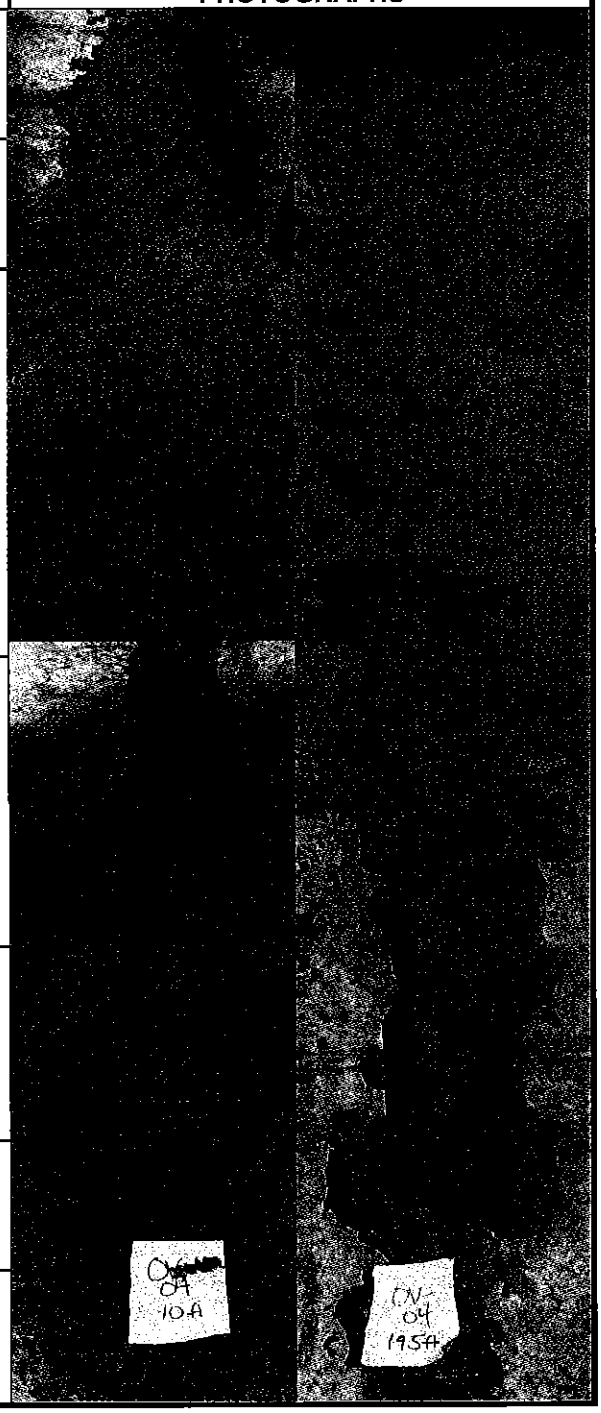
PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/6/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Thimble Shoal Channel	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
19.84	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
18.00	-36.6	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
90.7%	12,196,707.3	3,521,271.1

ELEVATION	DEPTH	DESCRIPTION	PHOTOGRAPHS
-36.6	0.0	dark gray fine silty sand with some shell, d50=0.117@0-0.5	
		d50=0.107@2-2.5'	
		d50=0.115@5-5.5'	
		d50=0.0996@10-10.5'	
-51.6	15.0	d50=0.224	
		dark gray silty sand with gravel	
-53.6	17.0		
		orange fine sand with gravel,	
-54.6	18.0	d50=0.112	

Hole No. 06OV-04

VIBRACORE LOG

PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/6/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Thimble Shoal Channel	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
19.83	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
19.50	-42.6	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
98.3%	12,196,239.7	3,519,989.8

ELEVATION	DEPTH	DESCRIPTION	PHOTOGRAPHS
-42.6	0.0	dark gray medium sand, d50=0.259@0-0.5'	
-44.6	2.0	d50=0.4@2-2.5'	
-46.6	4.0	orange medium sand with gravel, d50=0.393	
-52.6	10.0	orange med-coarse sand with gravel, d50=0.217 d50=0.393@5-5.5'	
-57.1	14.5	orange med-fine sand, d50=0.478@10-10.5'	
-60.1	17.5	d50=0.478@15' orange med-coarse sand with 3/4 inch gravel	
-62.1	19.5	gray clay	

Hole No. 06OV-05

VIBRACORE LOG

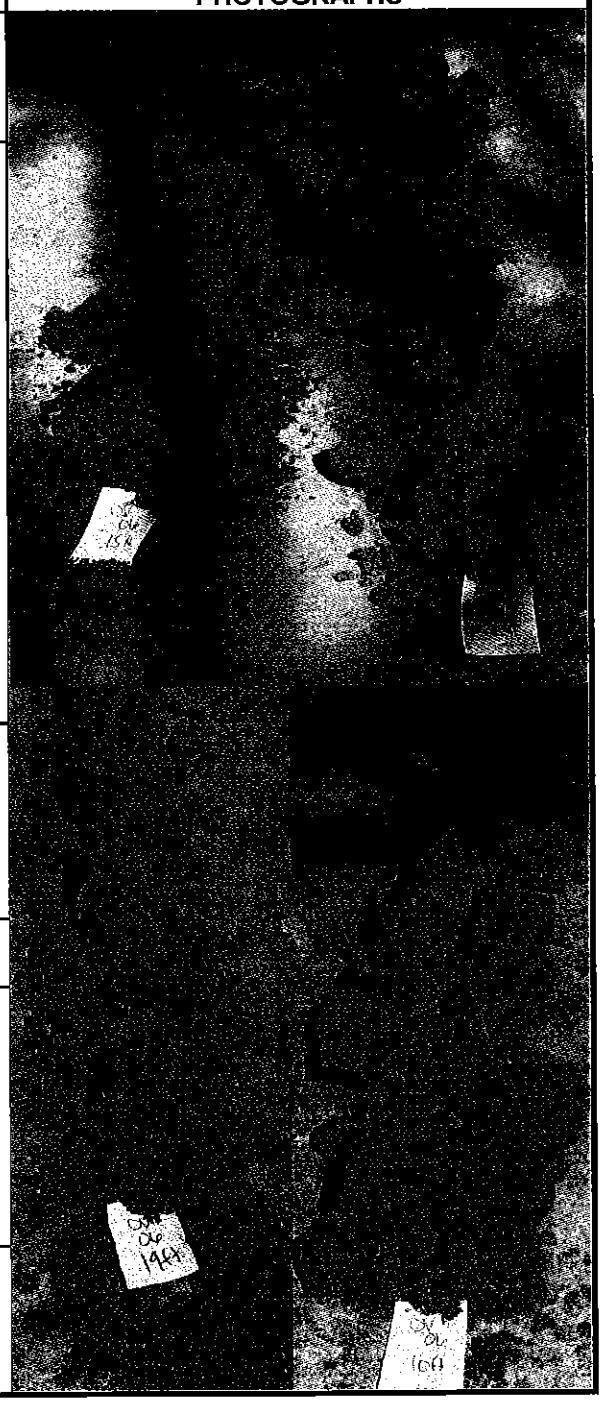
PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/6/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Thimble Shoal Channel	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
18.00	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
17.50	-42	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
97.2%	12,199,818.6	3,520,239.7

ELEVATION	DEPTH	DESCRIPTION	PHOTOGRAPHS
-42.0	0.0	gray fine-med sand with some shell, d50=0.307@0-0.5'	
-47.0	5.0	d50=0.274@2-2.5' d50=0.211@5-5.5'	
-51.0	9.0	gray sand, d50=0.327	
-57.0	15.0	d50=0.327@10-10.5' fine-med orange sand, d50=0.494@15'	
-59.0	17.0	orange med-coarse sand with some gravel	
-59.5	17.5	orange fine sand, d50=0.26	

Hole No. 06OV-06

VIBRACORE LOG

PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/6/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Thimble Shoal Channel	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
18.47	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
19.00	-48.4	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
102.9%	12,199,456.2	3,519,011.9

ELEVATION	DEPTH	DESCRIPTION	PHOTOGRAPHS
-48.4	0.0	dark gray med-fine sand, d50=0.322@0-0.5'	
-50.4	2.0	d50=0.335@2-2.5'	
-59.4	11.0	d50=0.255@5-5.5' orange med-fine sand, d50=0.503@10-10.5'	
-62.4	14.0	orange medium sand	
-63.4	15.0	orange med-coarse sand with gravel, d50=0.887	
-67.4	19.0	orange med-fine sand, d50=0.427	

Hole No. 06OV-07

VIBRACORE LOG

PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/3/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Willoughby Bank	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
13.11	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
13.00	-23.7	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
99.2%	12,128,650.1	3,528,449.1

ELEVATION	DEPTH	DESCRIPTION
-23.7	0.0	Gray med-fine sand (SP), d50=0.363
-27.7	4.0	d50=0.342@2-4'
		d50=0.151@4-5'
		Gray silty sand (SM-SP), d50=0.546@7-8'
-31.7	8.0	
		Gray medium sand (SP)
-33.7	10.0	
-34.7	11.0	Light gray med-coarse sand with shell fragments
-35.7	12.0	Gray silt
-36.7	13.0	Light gray med-coarse sand with shell fragments, d50=0.386

PHOTOGRAPHS

Hole No. 06OV-08

VIBRACORE LOG

PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/3/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Willoughby Bank	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
11.21	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
10.00	-17.2	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
89.2%	12,130,809.8	3,524,735.3

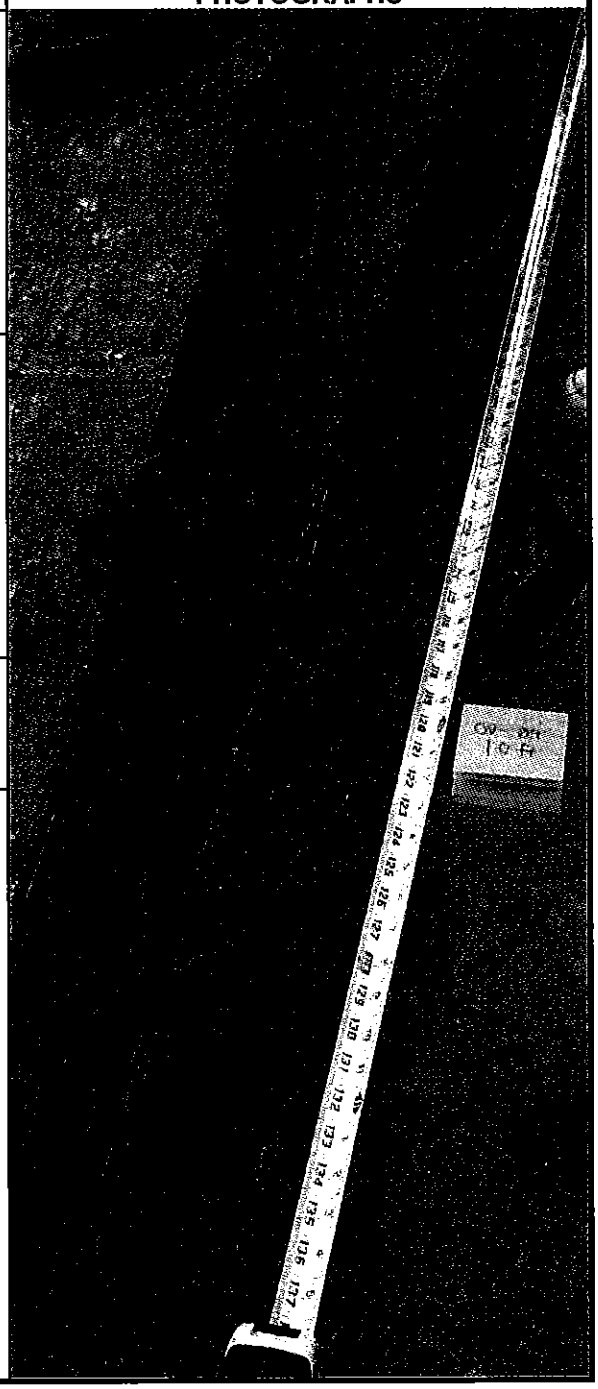
ELEVATION	DEPTH	DESCRIPTION
-17.2	0.0	Gray sandy clay with shell
-18.2	1.0	Gray sandy clay, d50=0.251
		Gray clay, LL=46, PL=23, PI=23
-22.2	5.0	
		Gray clay
-27.2	10.0	

PHOTOGRAPHS

Hole No. 06OV-09

VIBRACORE LOG

PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/3/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Willoughby Bank	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
13.00	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
12.00	-20.8	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
92.3%	12,134,828.2	3,522,932.3

ELEVATION	DEPTH	DESCRIPTION	PHOTOGRAPHS
-20.8	0.0	Gray sandy clay with shell, d50=0.573@0-1'	
-25.8	5.0	LL=32, PL=20, PI=12	
		Gray clay	
-30.8	10.0		
		Gray clay with shell	
-32.8	12.0		

Hole No. 06OV-10

VIBRACORE LOG

PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/3/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Willoughby Bank	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
19.35	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
16.00	-21.3	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
82.7%	12,138,359.2	3,531,153.8

ELEVATION	DEPTH	DESCRIPTION
-21.3	0.0	Gray sandy clay mix (SM)
-23.3	2.0	d50=0.0854@1-2'
		Silty clay (SM/SC),
		d50=0.0771@4-5'
-26.3	5.0	
		Gray clay (SC),
		d50=0.18@8-8.5'
-29.3	8.0	
		Sand with clay (SM),
		d50=0.186@9.5-10'
-31.3	10.0	
		Gray clay (SC)
-37.3	16.0	

PHOTOGRAPHS

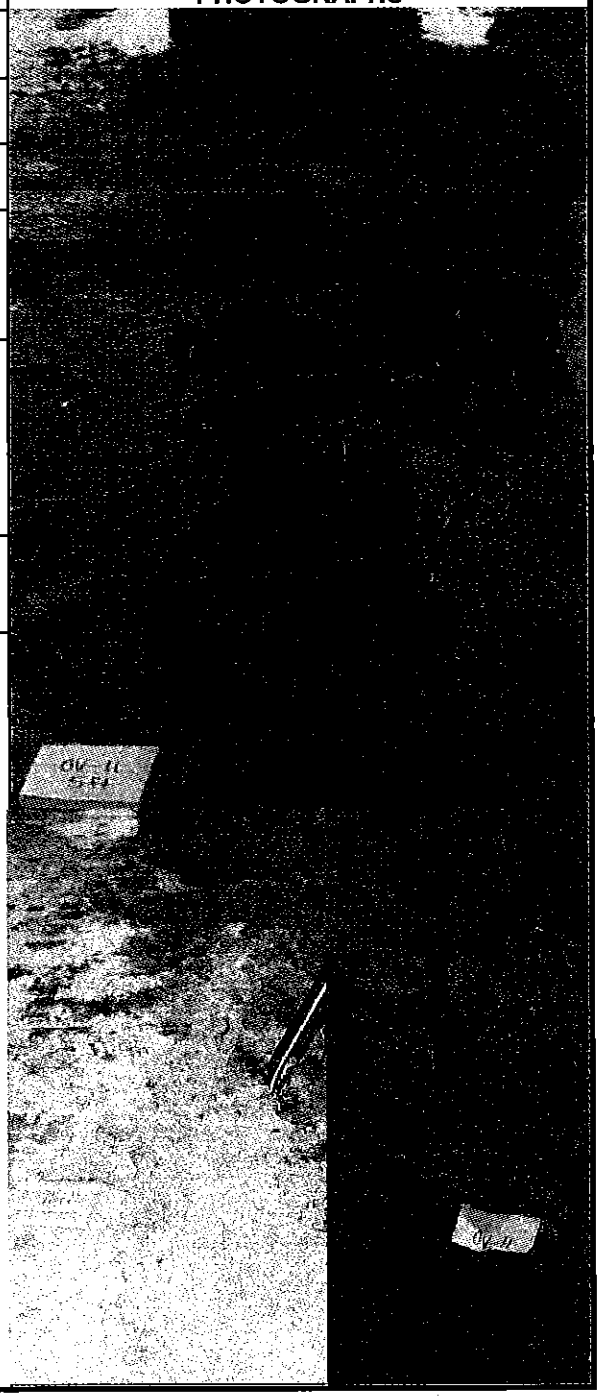
Hole No. 06OV-11

VIBRACORE LOG

PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/3/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Willoughby Bank	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
10.61	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
10.50	-21.8	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
99.0%	12,137,702.9	3,524,991.5

ELEVATION	DEPTH	DESCRIPTION
-21.8	0.0	gray sandy clay (SC)
-23.8	2.0	
-24.8	3.0	gray clay with shell (SM), d50=0.0925
-25.8	4.0	tan fine sand with clay (SC)
-27.8	6.0	gray fine sand (SP), d50=0.245@5-6'
-30.8	9.0	light gray fine sand
-32.3	10.5	light gray med-coarse sand

PHOTOGRAPHS



Hole No. 06OV-12

VIBRACORE LOG

PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/4/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Willoughby Bank	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
19.85	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
16.60	-18.4	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
83.6%	12,141,124.9	3,527,127.8

ELEVATION	DEPTH	DESCRIPTION	PHOTOGRAPHS
-18.4	0.0	gray clay with some sand (CL), d50=0.106@0-0.5'	
-25.4	7.0	(SM), d50=0.0776@5-5.5'	
		gray clay	
-35.0	16.6		

Hole No. 06OV-13

VIBRACORE LOG

PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/4/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Willoughby Bank	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
16.72	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
14.30	-24.2	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
85.5%	12,144,076.9	3,529,673.0

ELEVATION	DEPTH	DESCRIPTION	PHOTOGRAPHS
-24.2	0.0	gray silty clay with shell	
-26.2	2.0	d50=0.0781@2-2.5'	
		gray clay (CH)	
-29.2	5.0		
		gray clay (CH)	
-34.2	10.0		
		gray clay with shell	
-38.5	14.3		

Hole No. 06OV-14

VIBRACORE LOG

PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/4/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Willoughby Bank	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
19.65	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
16.90	-23.5	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
86.0%	12,142,975.0	3,524,391.4

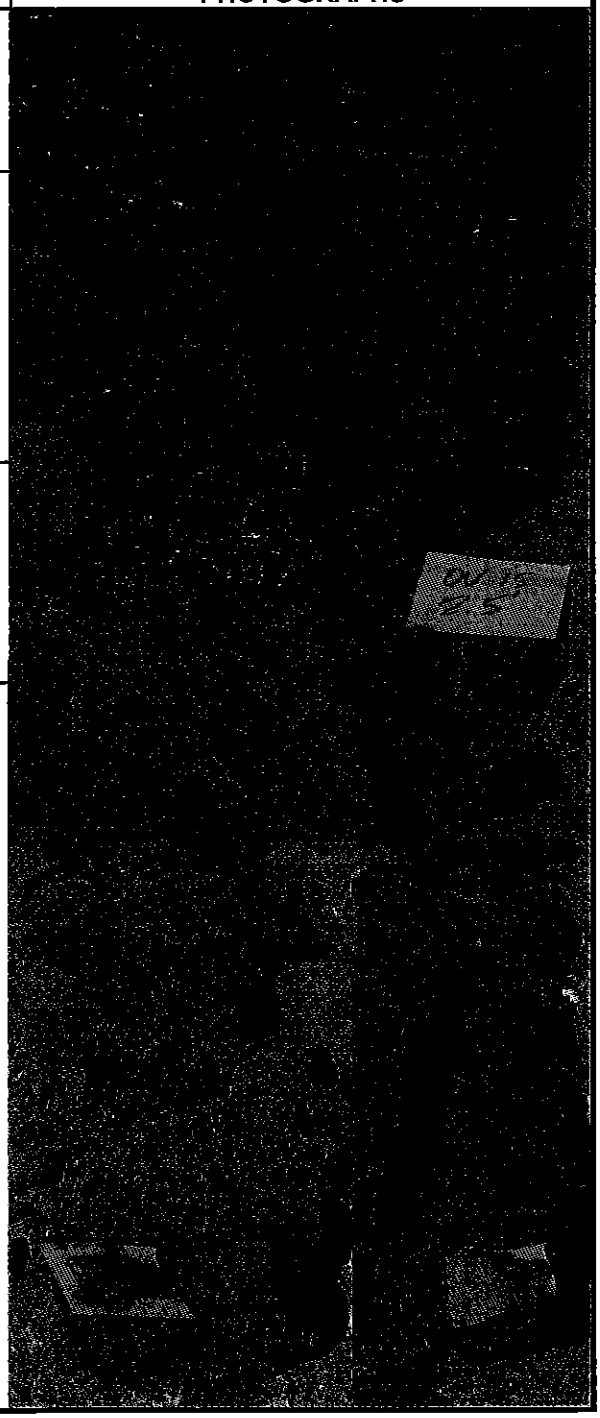
ELEVATION	DEPTH	DESCRIPTION
-23.5	0.0	silty sand with shell, d50=0.106
-26.5	3.0	
-27.5	4.0	silty clay with shell
-33.0	9.5	gray clay
-40.4	16.9	gray clay with some shell

PHOTOGRAPHS

Hole No. 06OV-15

VIBRACORE LOG

PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/4/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Willoughby Bank	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
15.22	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
10.40	-24.2	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
68.3%	12,141,796.7	3,520,255.0

ELEVATION	DEPTH	DESCRIPTION	PHOTOGRAPHS
-24.2	0.0	sandy clay (SC), d50=0.0914	
-26.7	2.5	(SM/SP), d50=0.23@2.5-3'	
		gray fine sand, d50=0.158@5-5.5'	
-31.2	7.0		
		gray silty sand (SC)	
-34.6	10.4		

Hole No. 06OV-16

VIBRACORE LOG

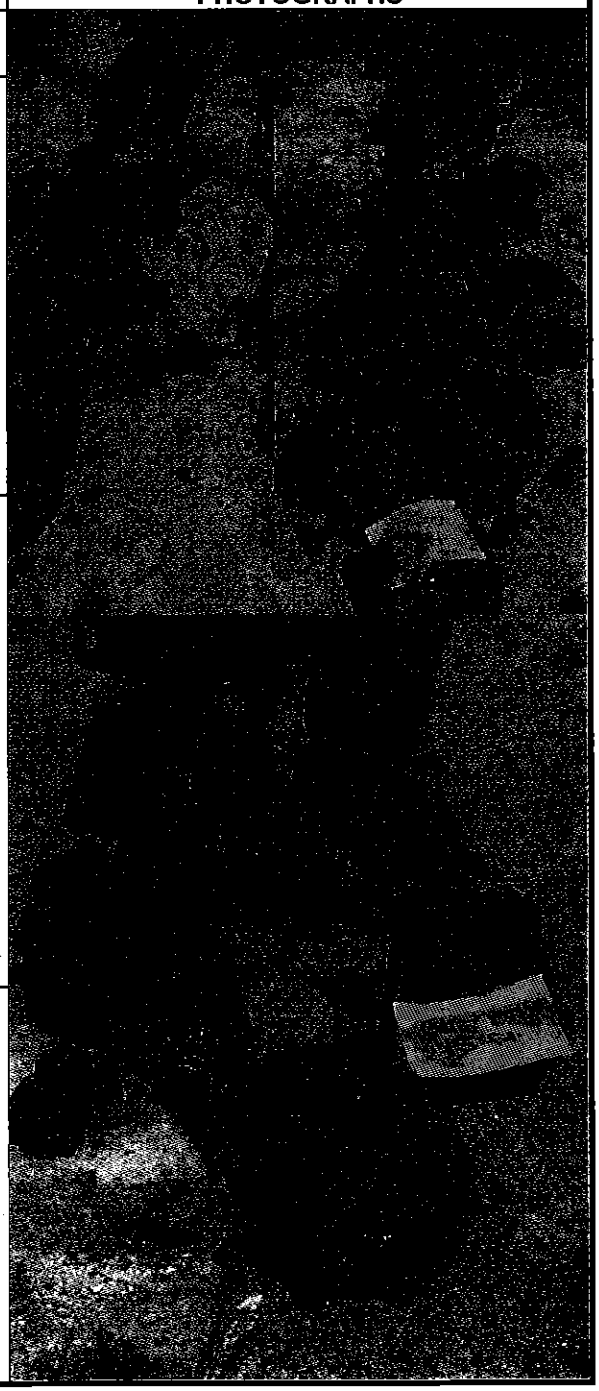
PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/4/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Willoughby Bank	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
14.84	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
14.50	-18.3	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
97.7%	12,146,534.7	3,526,638.6

ELEVATION	DEPTH	DESCRIPTION	PHOTOGRAPHS
-18.3	0.0	sand w/clay (SC), d50=.0917	
-19.3	1.0	d50=0.0875@2-2.5'	
		gray clay	
-23.3	5.0		
		gray clay (SC)	
-28.3	10.0		
		gray clay	
-32.8	14.5		

Hole No. 06OV-17

VIBRACORE LOG

PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/4/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Willoughby Bank	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
19.86	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
15.60	-25.4	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
78.5%	12,149,368.9	3,527,659.0

ELEVATION	DEPTH	DESCRIPTION	PHOTOGRAPHS
-25.4	0.0	silty clay w/shell, d50=.115	
-26.9	1.5	gray clay with sand lens and gravel (CL)	
-33.4	8.0		
		gray clay	
-41.0	15.6		

Hole No. 06OV-18

VIBRACORE LOG

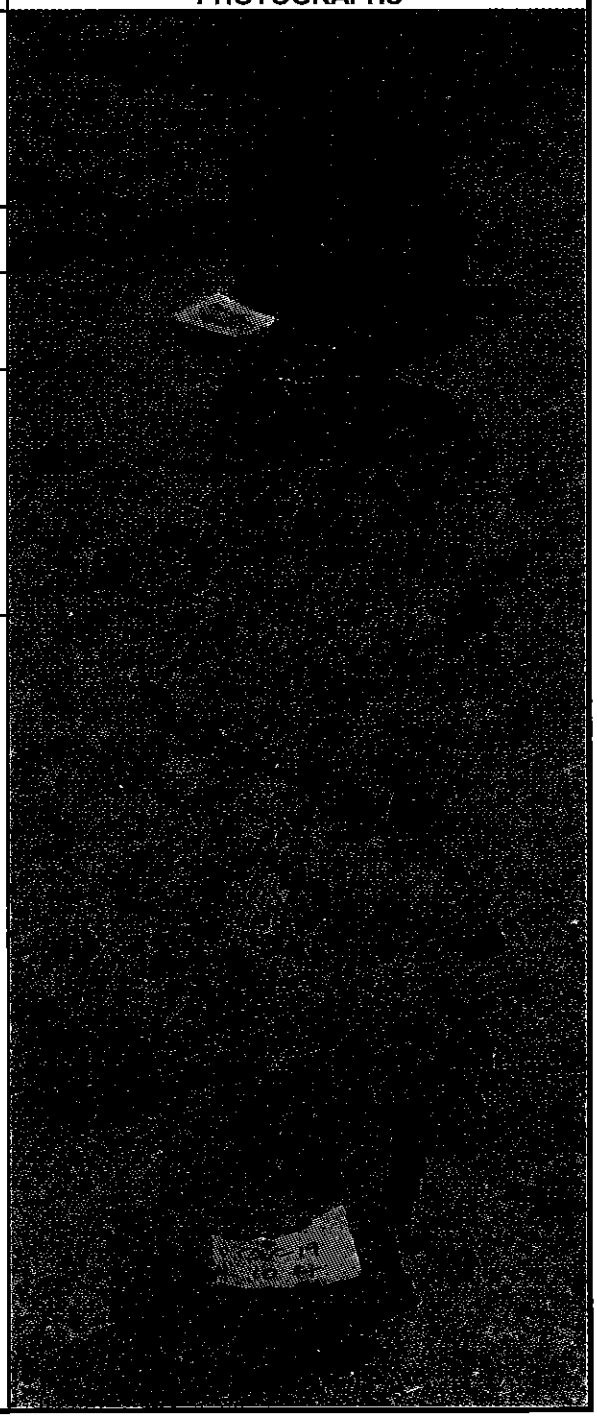
PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/4/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Willoughby Bank	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
16.87	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
13.40	-21.9	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
79.4%	12,147,916.9	3,522,480.2

ELEVATION	DEPTH	DESCRIPTION	PHOTOGRAPHS
-21.9	0.0	gray silty clay (CH) LL=24, PL=20, PI=4	
-23.9	2.0		
		gray clay (CH)	
-33.4	11.5		
		gray clay with some sand	
-35.3	13.4		

Hole No. 06OV-19

VIBRACORE LOG

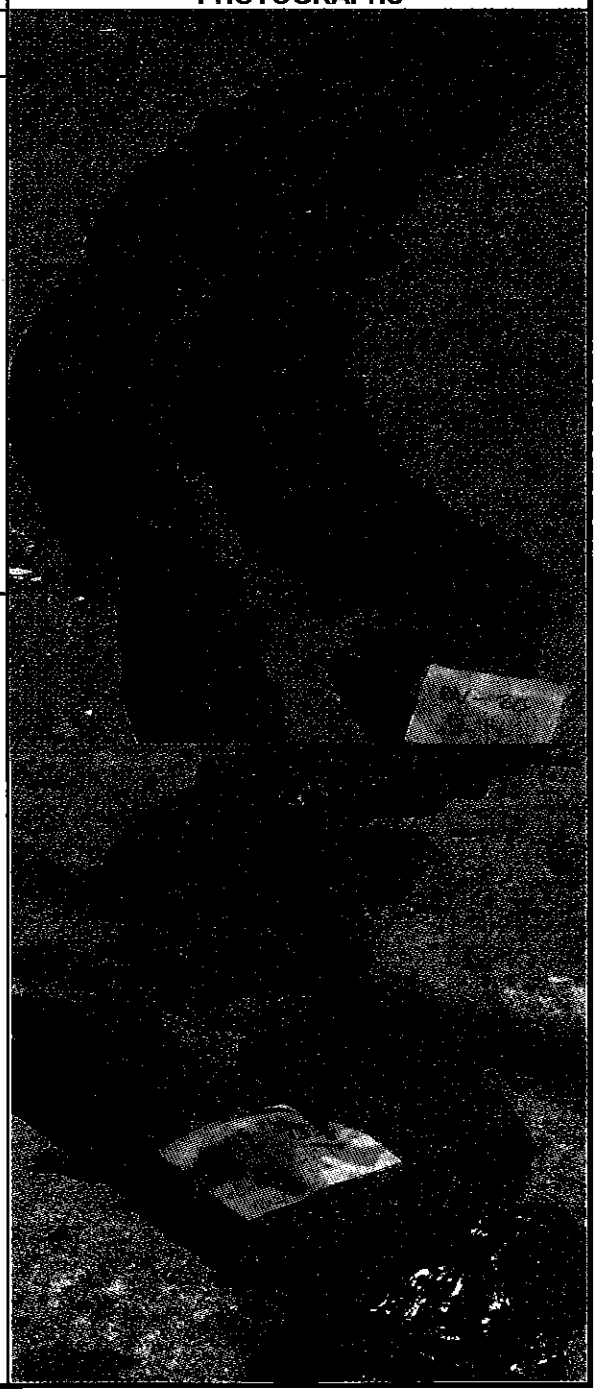
PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/4/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Willoughby Bank	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
16.16	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
10.30	-25.1	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
63.7%	12,146,188.6	3,517,702.6

ELEVATION	DEPTH	DESCRIPTION	PHOTOGRAPHS
-25.1	0.0	gray fine silty sand, d50=0.0925 (SC), d50=0.0845@2-2.5'	
-29.1	4.0		
-30.1	5.0	gray clay	
-31.6	6.5	silty gray clay	
-35.4	10.3	light gray fine-med sand	

Hole No. 06OV-20

VIBRACORE LOG

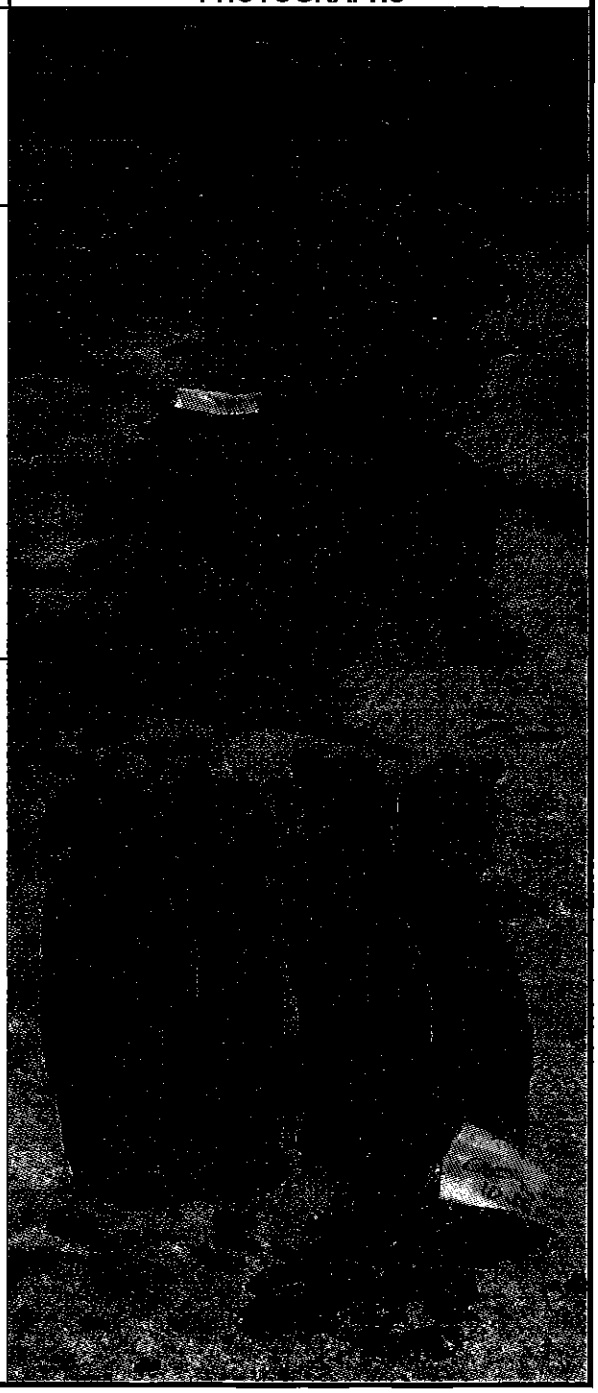
PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/4/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Willoughby Bank	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
12.82	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
10.50	-21.64	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
81.9%	12,151,773.1	3,524,361.7

ELEVATION	DEPTH	DESCRIPTION	PHOTOGRAPHS
-21.6	0.0	gray silty clay	
-23.6	2.0	LL=29, PL=21, PI=8	
		gray clay with some silt (SC)	
-31.6	10.0		

Hole No. 06OV-21

VIBRACORE LOG

PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/4/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Willoughby Bank	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
14.10	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
10.00	-24.8	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
70.9%	12,149,859.1	3,518,821.5

ELEVATION	DEPTH	DESCRIPTION	PHOTOGRAPHS
-24.8	0.0	silty gray clay (CL) LL=38, PI=19, PI=19	
-27.8	3.0		
		gray clay with some shell fragments	
-34.8	10.0		

Hole No. 06OV-22

VIBRACORE LOG

PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/4/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Willoughby Bank	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
19.80	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
14.80	-29.8	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
74.7%	12,154,988.4	3,526,210.1

ELEVATION	DEPTH	DESCRIPTION	PHOTOGRAPHS
-29.8	0.0	silty clay with shell	
-30.8	1.0	LL=39, PL=18, PI=21	
		gray clay with 1 inch organic (CH)	
-32.8	3.0		
		gray clay	
-33.8	4.0		
		gray clay	
-39.8	10.0		
		gray clay	
-43.8	14.0		

Hole No. 06OV-23

VIBRACORE LOG

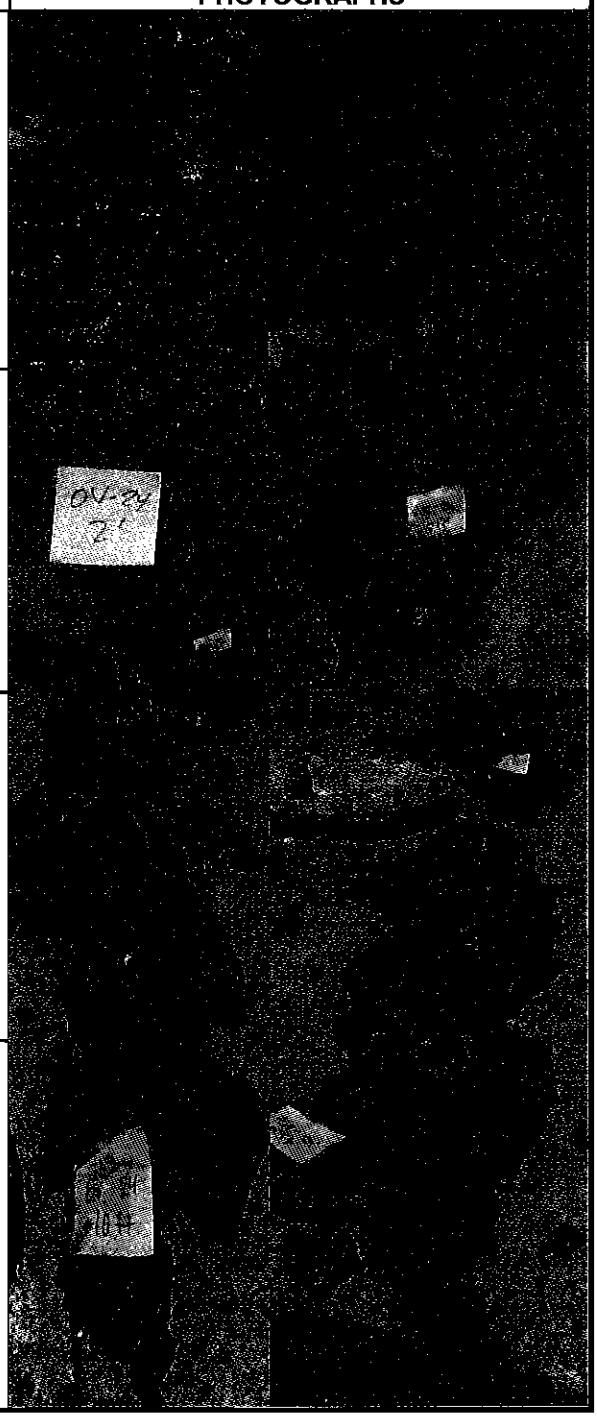
PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/4/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Willoughby Bank	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
14.15	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
10.50	-22.1	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
74.2%	12,153,382.1	3,520,776.1

ELEVATION	DEPTH	DESCRIPTION	PHOTOGRAPHS
-22.1	0.0	gray silty clay with organics (CH), d50=0.0824@0-0.5'	
-27.1	5.0		
		gray silty clay (CH)	
-32.1	10.0		

Hole No. 06OV-24

VIBRACORE LOG

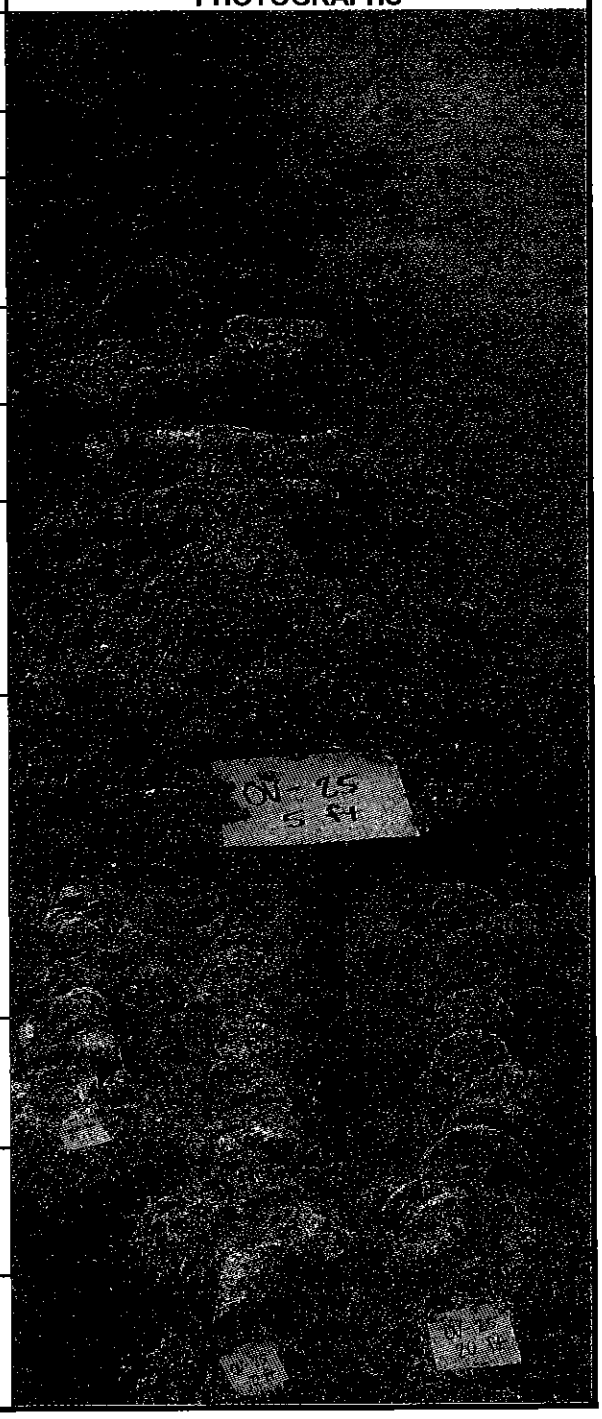
PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/4/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Willoughby Bank	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
19.03	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
15.40	-22.6	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
80.9%	12,151,636.0	3,515,642.7

ELEVATION	DEPTH	DESCRIPTION	PHOTOGRAPHS
-22.6	0.0	silty sand w/shell (SM) d50=0.0929@0-0.5' d50=0952@2-2.5'	
-28.1	5.5		
		gray clay with shell	
-32.6	10.0		
		gray clay	
	15.4		

Hole No. 06OV-25

VIBRACORE LOG

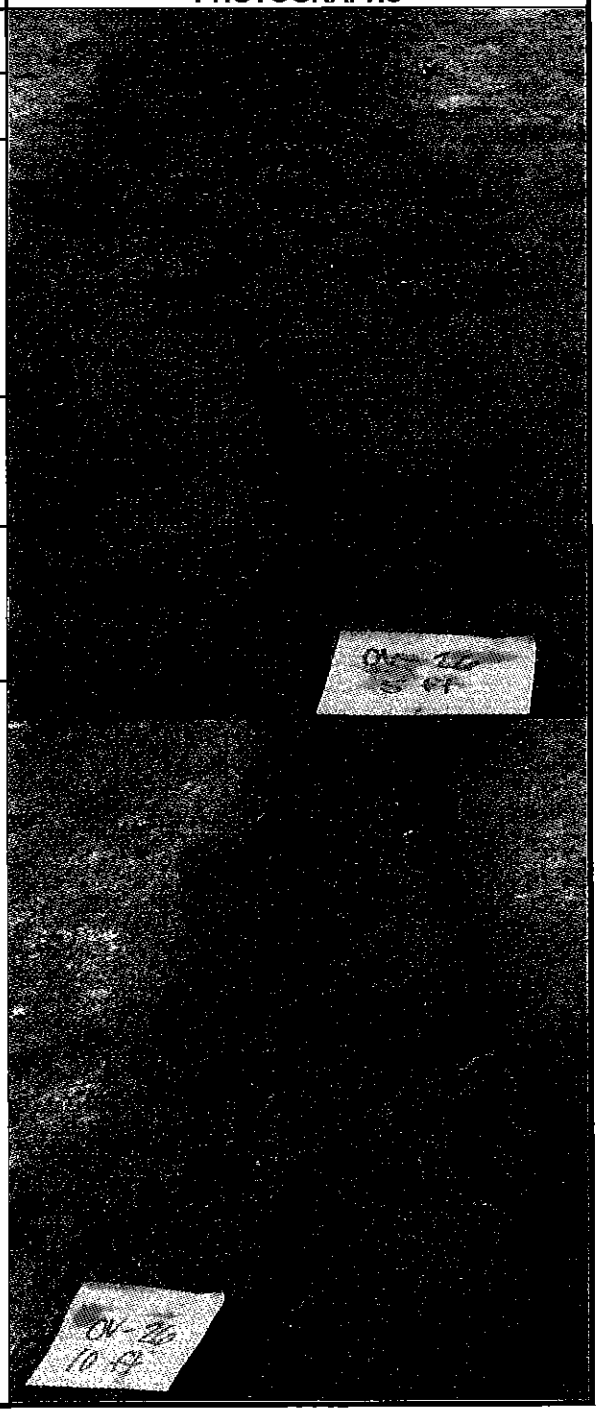
PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/5/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Willoughby Bank	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
17.64	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
20.00	-13.6	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
113.4%	12,130,992.2	3,526,976.1

ELEVATION	DEPTH	DESCRIPTION	PHOTOGRAPHS
-13.6	0.0	gray clay with some gravel (CH)	
-15.1	1.5		
-16.6	3.0	d50=0.577@2-2.5'	
-18.6	5.0	gray medium sand	
-20.1	6.5	light gray sand w/gravel (SP), d50=0.717@5-5.5'	
-21.6	8.0	light gray coarse sand with gravel (SP), d50=0.51@7'	
-24.6	11.0	light gray med-coarse sand with clay, d50=0.819@10-10.5'	
-29.6	16.0	light gray med-coarse sand, d50=0.588@12'	
-31.6	18.0	light gray med-coarse sand with some clay, d50=0.62@15'	
-33.6	20.0	light gray med-coarse sand with some clay, d50=0.495	

Hole No. 06OV-26

VIBRACORE LOG

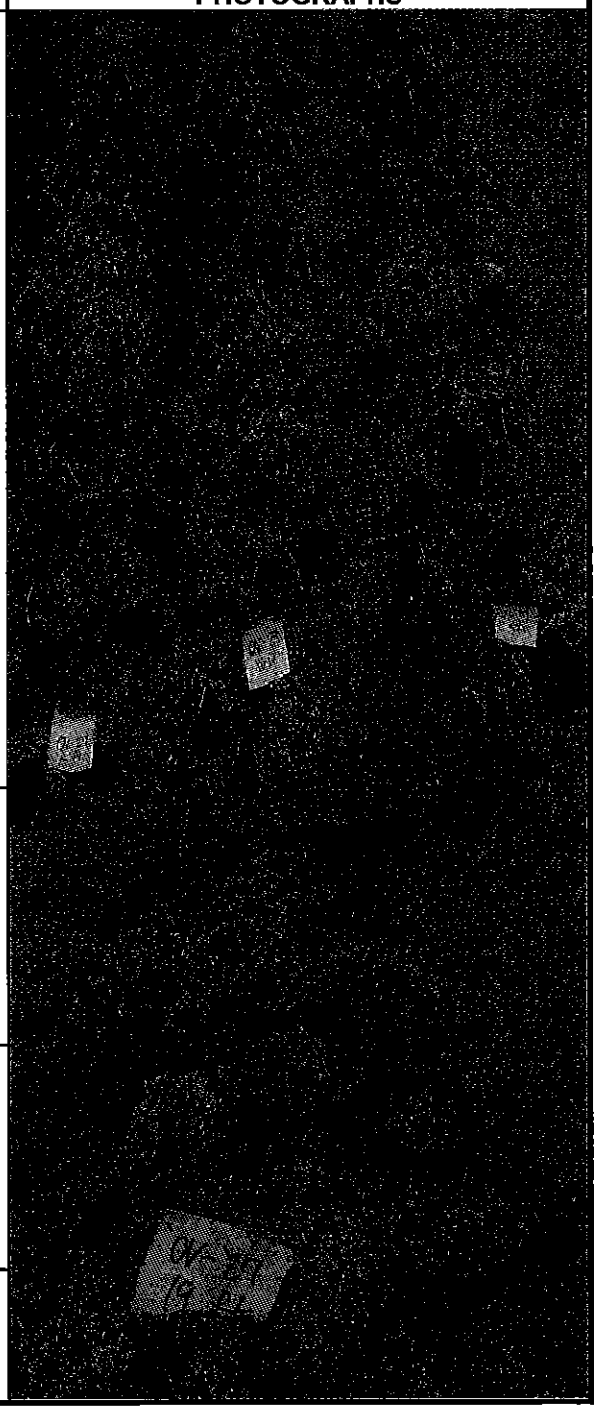
PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/5/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Willoughby Bank	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
19.09	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
12.40	-16.8	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
65.0%	12,135,064.8	3,526,979.7

ELEVATION	DEPTH	DESCRIPTION	PHOTOGRAPHS
-16.8	0.0	gray med silty sand, d50=0.276	
-19.3	2.5	(SP), d50=0.343@2-2.5'	
-19.8	3.0	coarse sand with gravel	
-24.8	8.0	gray clay with organics	
-26.8	10.0	gray clay with shell, sand (SC), d50=0.249@10-10.5'	
-29.2	12.4	gray silty fine sand	

Hole No. 06OV-27

VIBRACORE LOG

PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/5/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Willoughby Bank	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
19.13	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
19.50	-18.3	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
101.9%	12,129,976.0	3,528,047.6

ELEVATION	DEPTH	DESCRIPTION	PHOTOGRAPHS
-18.3	0.0	med-fine sand (SP), d50=.51	
		d50=0.453@2-2.5' d50=0.376@5-5.5' d50=0.3042@10-10.5'	
-30.3	12.0		
		light gray med-fine sand with gray clay (SP), d50=0.385@15'	
-34.3	16.0		
		light gray med-fine sand with 1 foot of gray clay (SP), d50=0.433@19'	
-37.8	19.5		

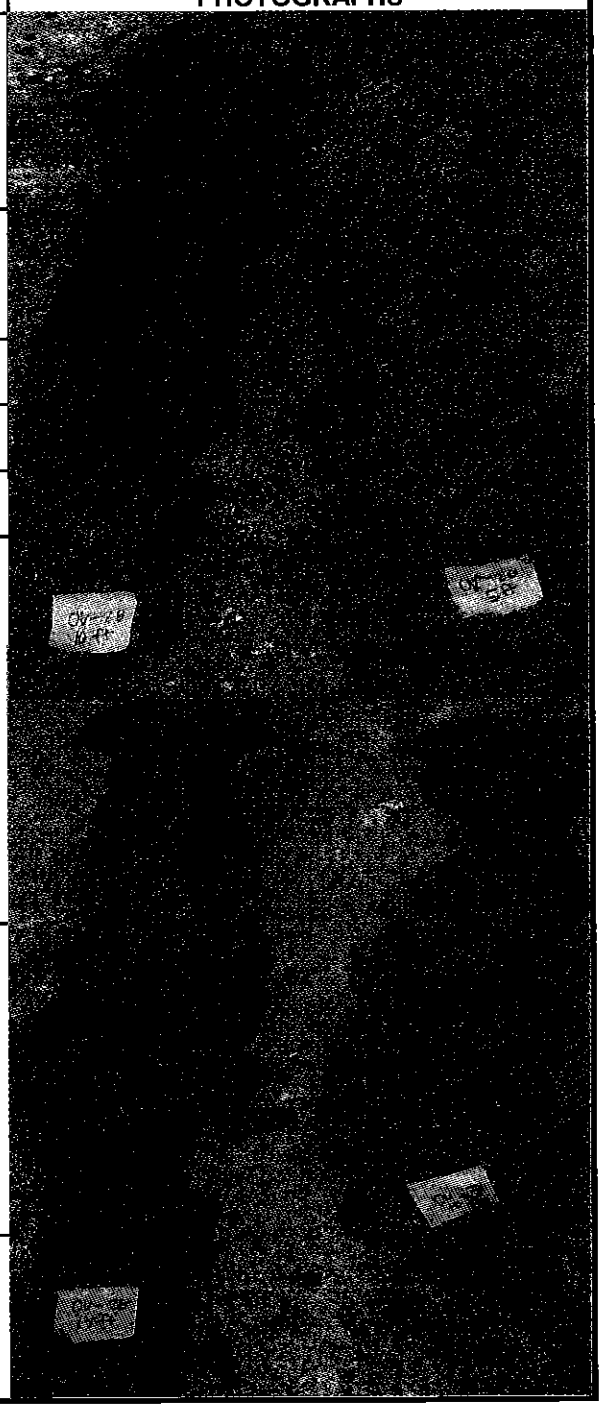
Hole No. 06OV-28

VIBRACORE LOG

PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/5/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Willoughby Bank	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
19.82	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
18.80	-15.4	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
94.9%	12,132,021.1	3,527,993.6

ELEVATION	DEPTH	DESCRIPTION
-15.4	0.0	tan med sand (SP), d50=0.468 d50=0.485@2-2.5'
-18.4	3.0	
-20.4	5.0	gray sand w/clay (SC), d50=0.132@5-5.5'
-21.4	6.0	gray silty fine sand
-22.4	7.0	gray clay with sand
-23.4	8.0	gray clay
-29.4	14.0	d50=0.275@10-10.5' gray fine sand (SM-SP)
-34.2	18.8	gray fine silty sand with clay and shell (SM), d50=0.236@18'

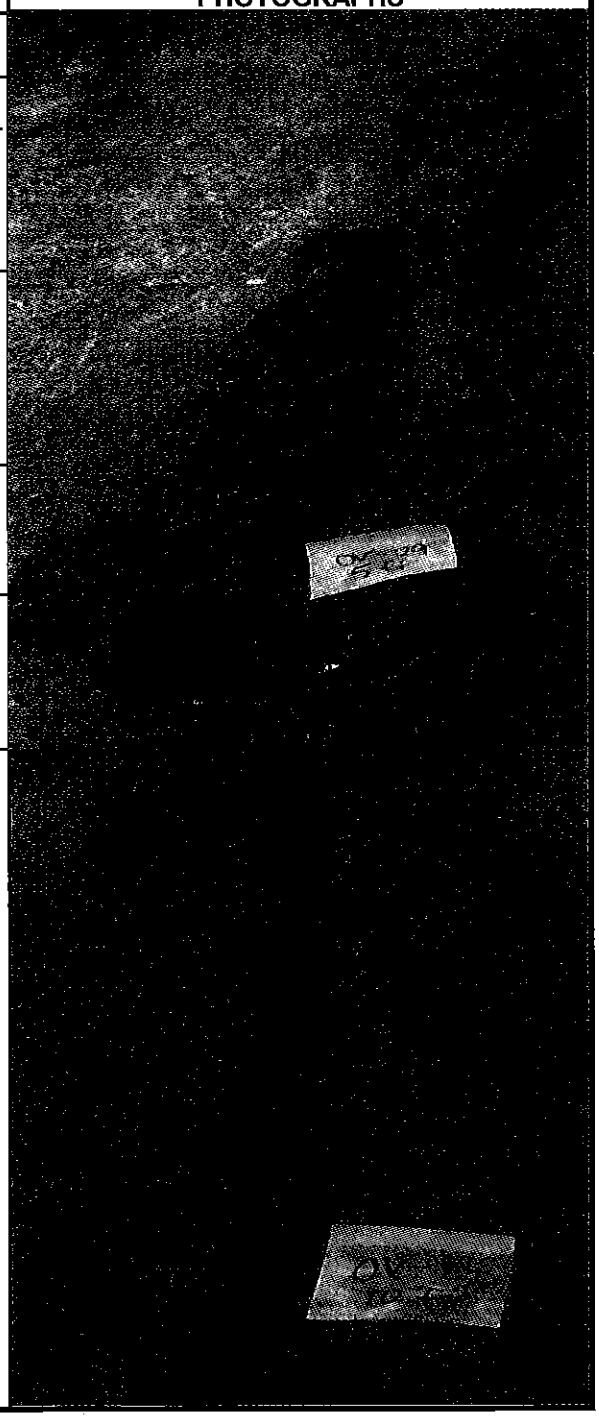
PHOTOGRAPHS



Hole No. 06OV-29

VIBRACORE LOG

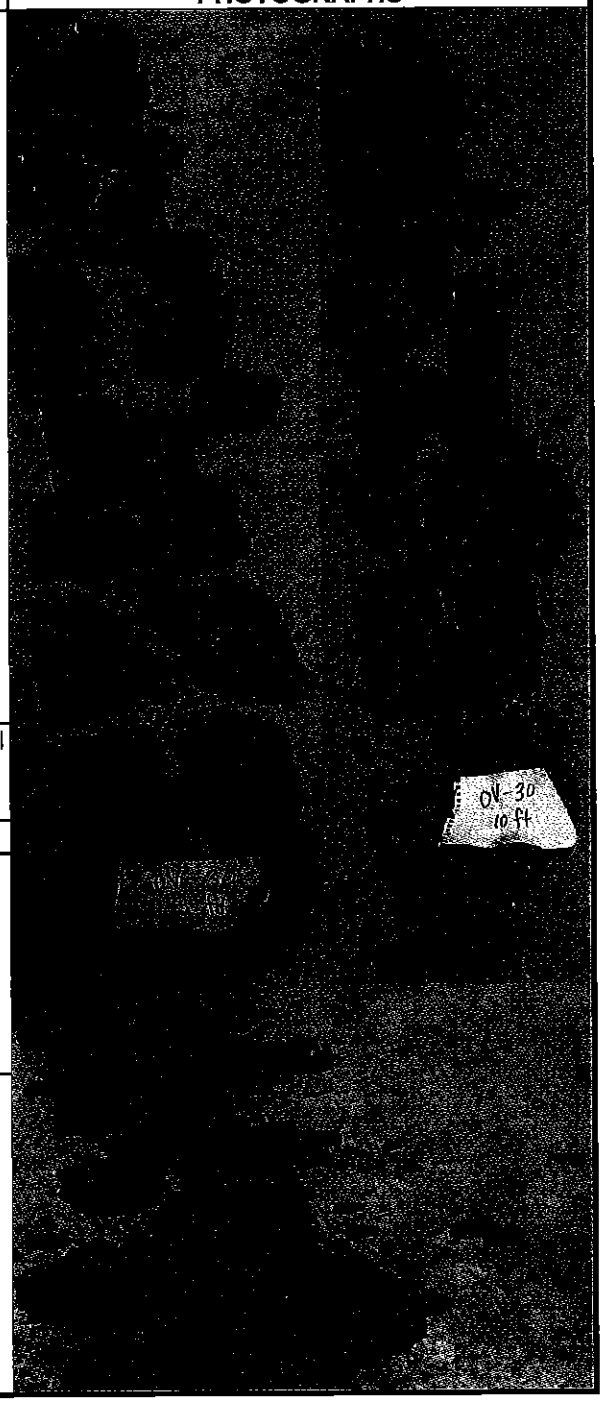
PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/5/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Willoughby Bank	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
17.06	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
11.40	-16.8	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
66.8%	12,134,110.2	3,527,945.4

ELEVATION	DEPTH	DESCRIPTION	PHOTOGRAPHS
-16.8	0.0	gr sandy clay (CH), d50=0.304	
-17.8	1.0		
-20.8	4.0	gray sandy clay with shell fragments (SC), d50=0.0893@5-5.5'	
-23.8	7.0	gray sandy clay with shell	
-25.8	9.0	gray clay	
-28.2	11.4	gray clay with some sand	

Hole No. 06OV-30

VIBRACORE LOG

PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/10/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Willoughby Bank	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
19.89	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
17.50	-19.7	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
88.0%	12,133,535.7	3,529,965.1

ELEVATION	DEPTH	DESCRIPTION	PHOTOGRAPHS
-19.7	0.0	silty sand (SM), d50=0.217	
		d50=0.264@2-2.5' med-fine gray sand with shell fragments	
-30.7	11.0	d50=0.231@10-10.5'	
-32.2	12.5	gray clayey sand with some shell (SC)	
-32.7	13.0	clay lens	
-37.2	17.5	fine gray sand	

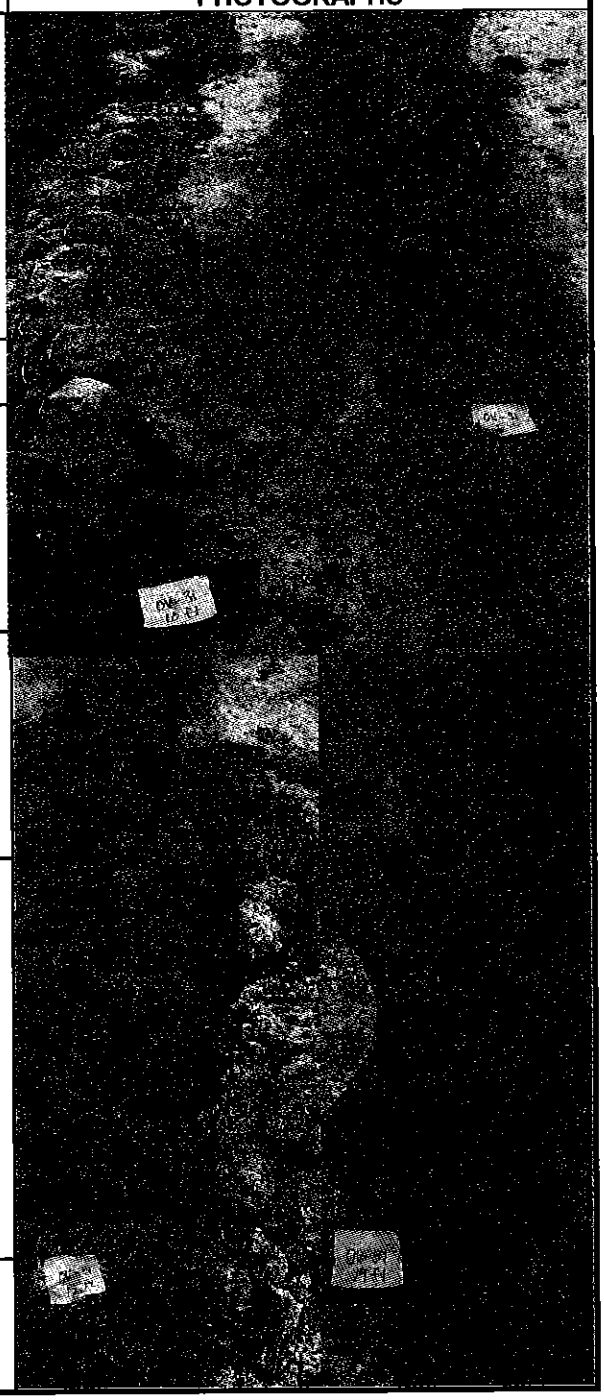
Hole No. 06OV-31

VIBRACORE LOG

PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/5/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Willoughby Bank	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
19.83	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
19.20	-8.4	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
96.8%	12,130,024.8	3,526,986.7

ELEVATION	DEPTH	DESCRIPTION
-8.4	0.0	gray med-fine sand, d50=0.413
-13.4	5.0	d50=0.244@2-2.5' d50=0.585@5-5.5'
-14.4	6.0	gray medium sand (SP)
-17.9	9.5	light gray med-fine sand (SP)
-21.4	13.0	gray clay
-27.6	19.2	light gray silty sand with some clay

PHOTOGRAPHS



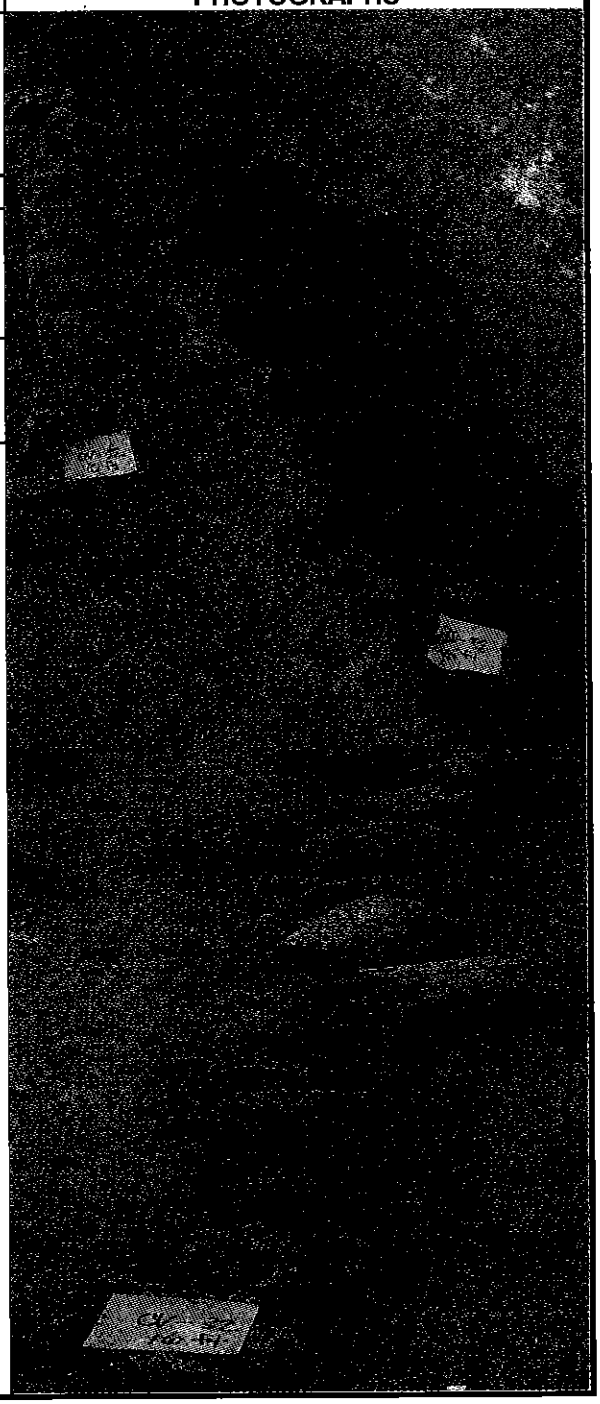
Hole No. 06OV-32

VIBRACORE LOG

PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/5/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Willoughby Bank	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
18.16	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
16.60	-21.5	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
91.4%	12,131,042.3	3,528,979.3

ELEVATION	DEPTH	DESCRIPTION
-21.5	0.0	gr sand w/shell (SP), d50=.409
-24.0	2.5	gray sand w/shell (SM), d50=0.172@2-2.5'
-24.5	3.0	gray silty sand
-26.5	5.0	gray sand with clay (SC), d50=0.205@5-5.5'
-38.1	16.6	d50=0.262@10-10.5' gray fine sand w/some clay (SM), d50=0.241@16'

PHOTOGRAPHS

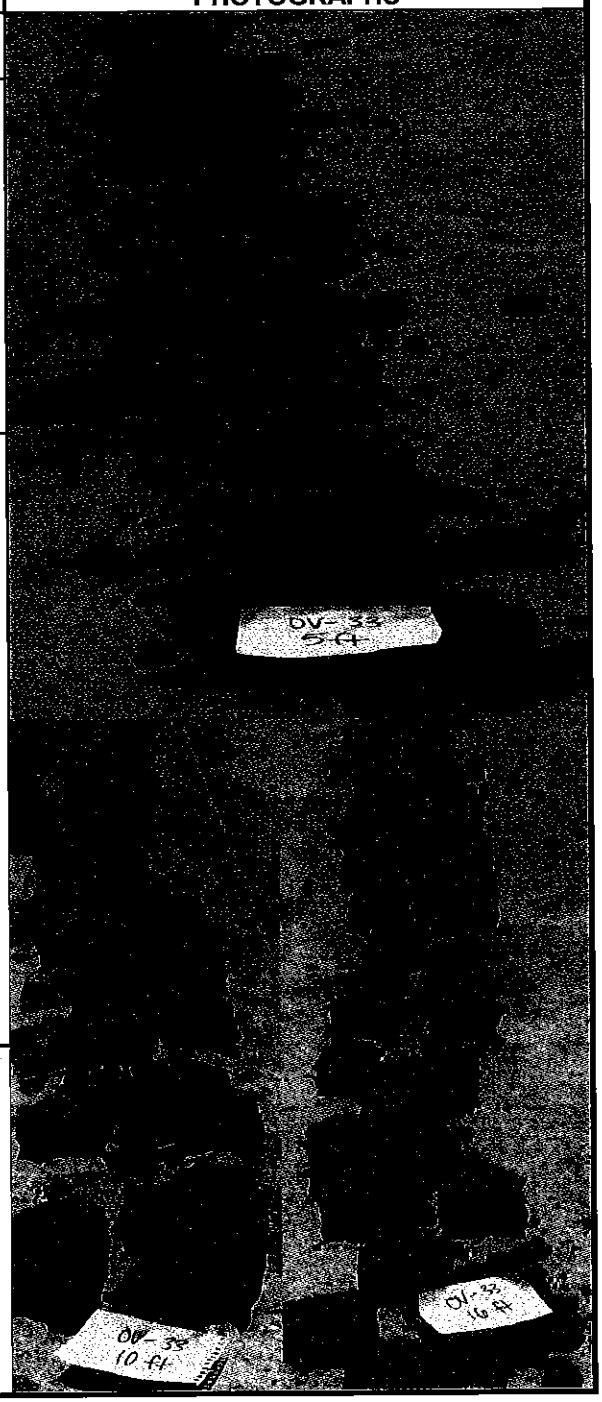


Hole No. 06OV-33

VIBRACORE LOG

PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/10/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Willoughby Bank	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
19.93	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
16.40	-14.1	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
82.3%	12,132,979.5	3,528,996.5

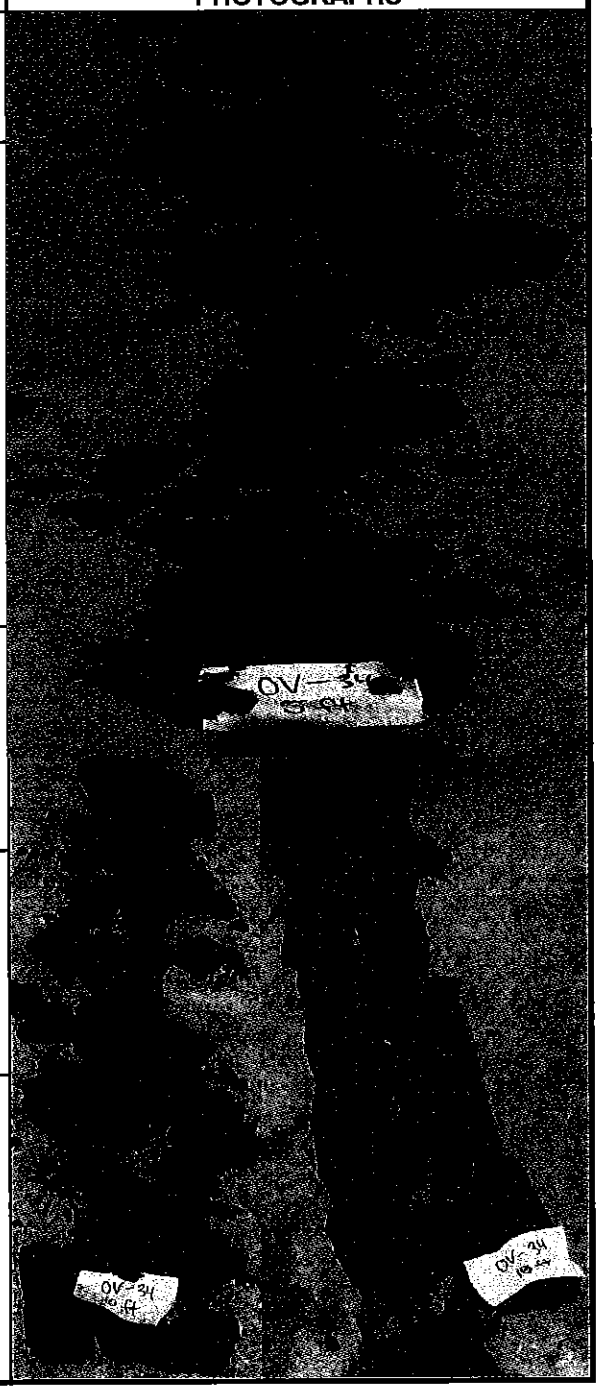
ELEVATION	DEPTH	DESCRIPTION	PHOTOGRAPHS
-14.1 -15.1	0.0 1.0	gray sand (SP), d50=0.454	
-20.6	6.5	d50=0.342@2-2.5' med-fine gray sand (SM-SP), d50=0.272@5-5.5'	
-30.1	16.0	d50=0.0879@10-10.5' silty gray fine sand (SM), d50=0.201@16'	



Hole No. 06OV-34

VIBRACORE LOG

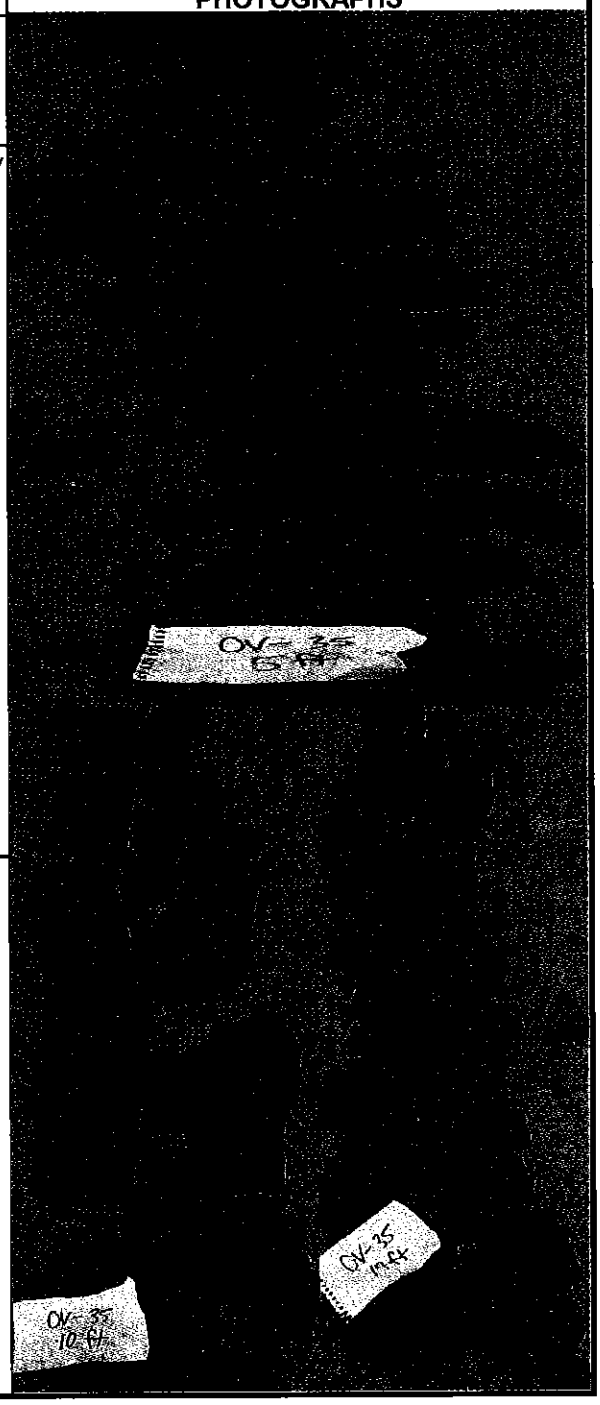
PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/10/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Willoughby Bank	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
19.89	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
18.30	-9.3	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
92.0%	12,134,697.5	3,529,072.8

ELEVATION	DEPTH	DESCRIPTION	PHOTOGRAPHS
-9.3	0.0	gray sand (SP), d50=0.427	
-11.3	2.0	tan gray sand (SP)	
		d50=0.47@2-2.5' d50=0.424@5-5.5' dark gray medium sand (SM/SP) d50=0.273@10-10.5'	
-18.8	9.5		
		dark gray silty fine sand (SP)	
-22.3	13.0		
		d50=0.0888@15' silty fine sand w/clay lenses (CL)	
-27.6	18.3		

Hole No. 06OV-35

VIBRACORE LOG

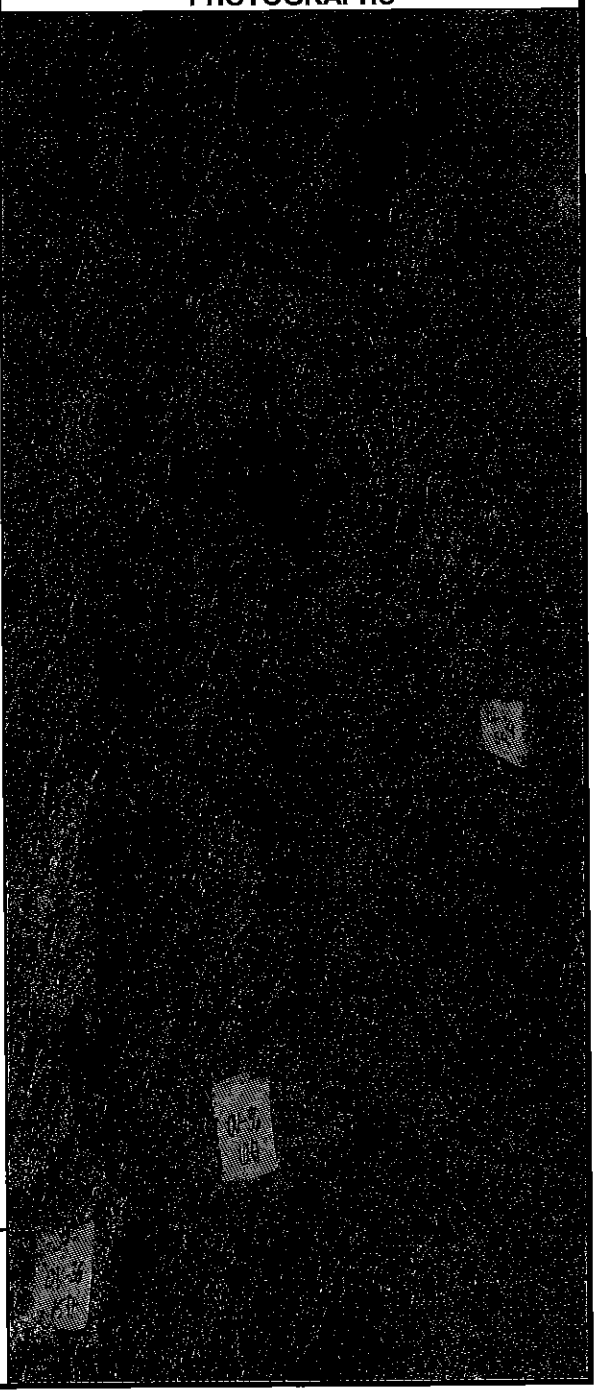
PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/10/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Willoughby Bank	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
19.89	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
17.40	-15.6	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
87.5%	12,134,994.0	3,529,988.7

ELEVATION	DEPTH	DESCRIPTION	PHOTOGRAPHS
-15.6	0.0	gray med sand, d50=0.487 d50=0.469@2-2.5' d50=0.273@5-5.5'	
-21.6	6.0		
		gray silty med-fine sand with clay lenses throughout (SM), d50=0.204@13'	
-33.0	17.4		

Hole No. 06OV-36

VIBRACORE LOG

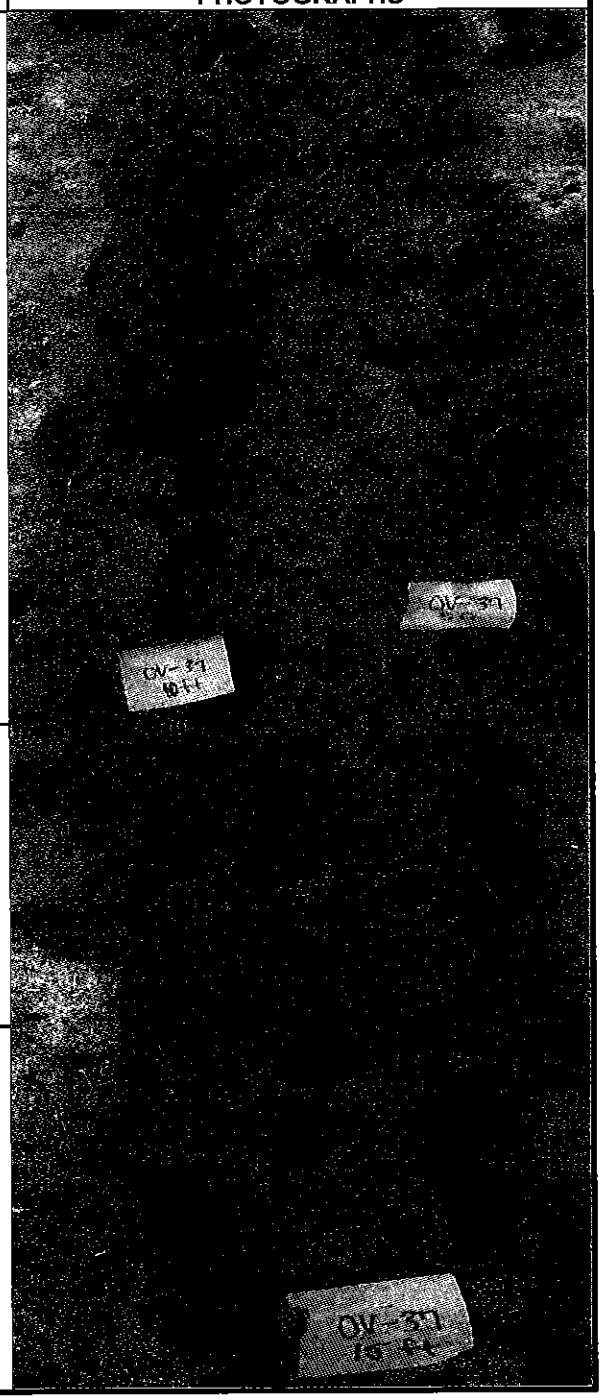
PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/5/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Willoughby Bank	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
18.43	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
18.80	-23.3	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
102.0%	12,129,969.1	3,528,956.9

ELEVATION	DEPTH	DESCRIPTION	PHOTOGRAPHS
-23.3	0.0	gray med-fine sand, d50=0.275	
-24.3	1.0	organic lens	
-25.3	2.0	light gray med-fine sand (SP), d50=0.406@2-2.5'	
-27.3	4.0	light gray med-fine sand with some gravel (SP)	
-42.1	18.8	d50=0.491@5-5.5' d50=0.494@10-10.5' light gray med-fine sand (SP) d50=0.478@15'	

Hole No. 06OV-37

VIBRACORE LOG

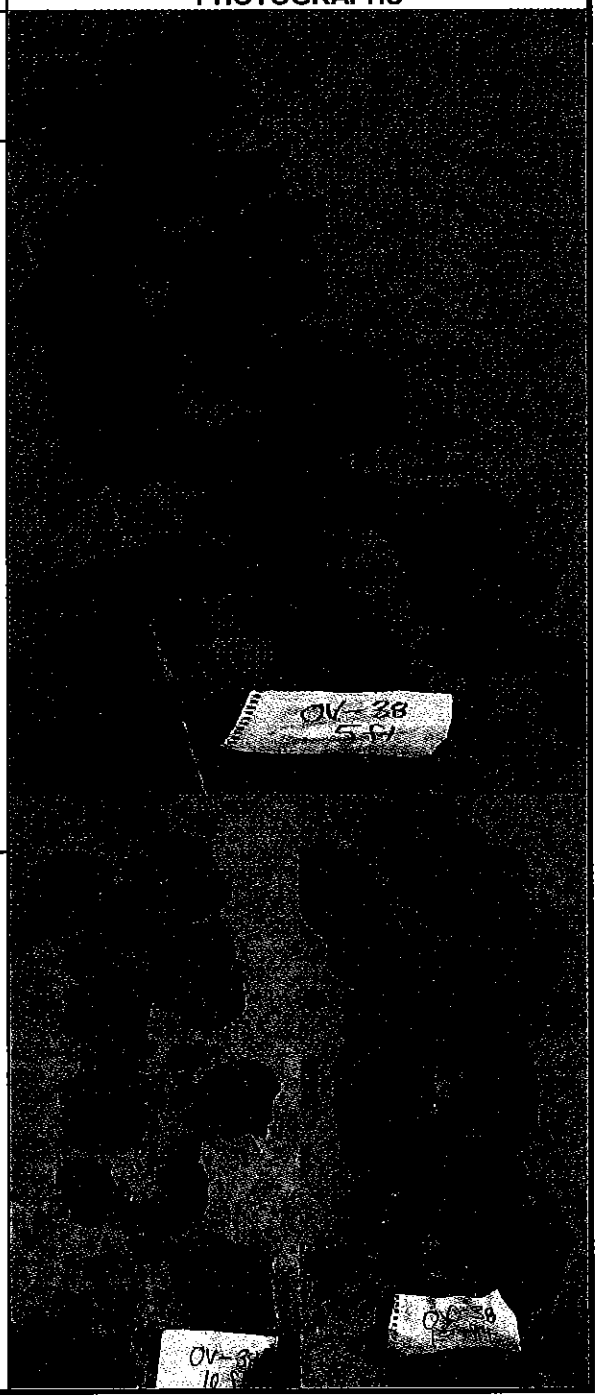
PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/5/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Willoughby Bank	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
17.14	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
15.70	-28.4	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
91.6%	12,131,990.5	3,530,016.3

ELEVATION	DEPTH	DESCRIPTION	PHOTOGRAPHS
-28.4	0.0	gray med-fine sand, d50=0.373	
		d50=0.35@2-2.5'	
		d50=0.241@5-5.5'	
-39.4	11.0	d50=0.213@10-10.5'	
		gray med-fine sand with clay lens (SM)	
-44.1	15.7		

Hole No. 06OV-38

VIBRACORE LOG

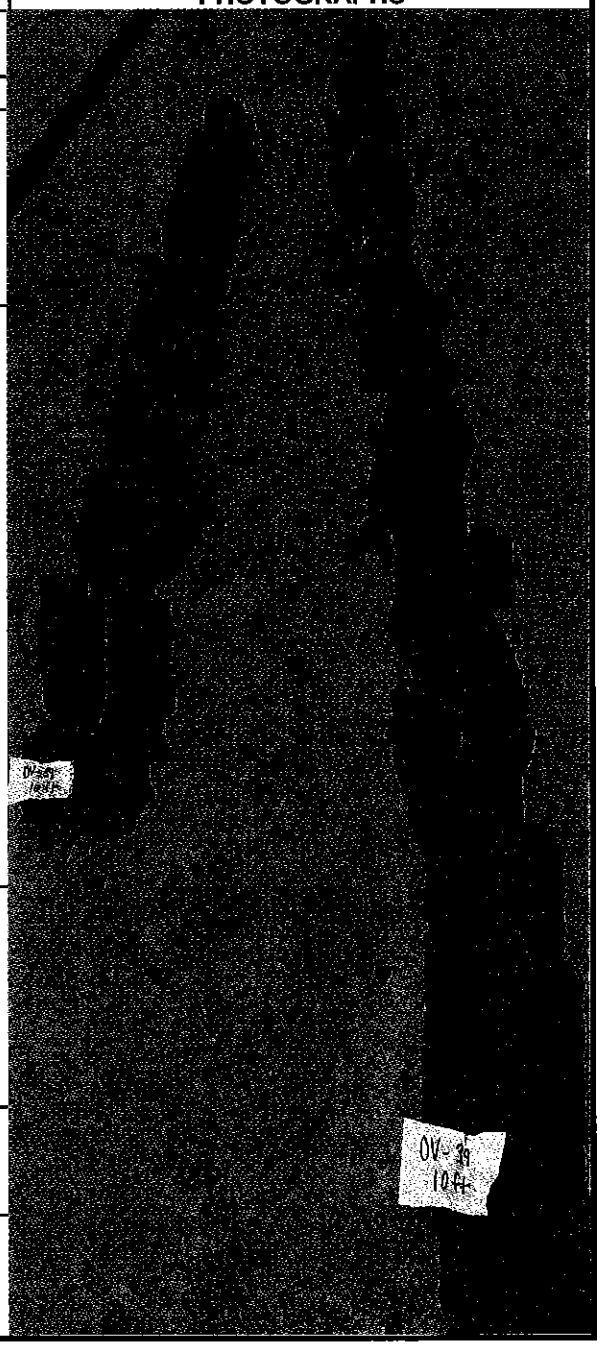
PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/10/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Willoughby Bank	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
19.86	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
13.00	-26.0	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
65.5%	12,135,020.7	3,531,007.3

ELEVATION	DEPTH	DESCRIPTION	PHOTOGRAPHS
-26.0	0.0	gray silty sand, d50=0.247	
-28.0	2.0	(SP-SM), d50=0.216@2-2.5'	
		d50=0.248@5-5.5' gray silty sand w/clay lens (SC) d50=0.214@10-10.5'	
-39.0	13.0		

Hole No. 06OV-39

VIBRACORE LOG

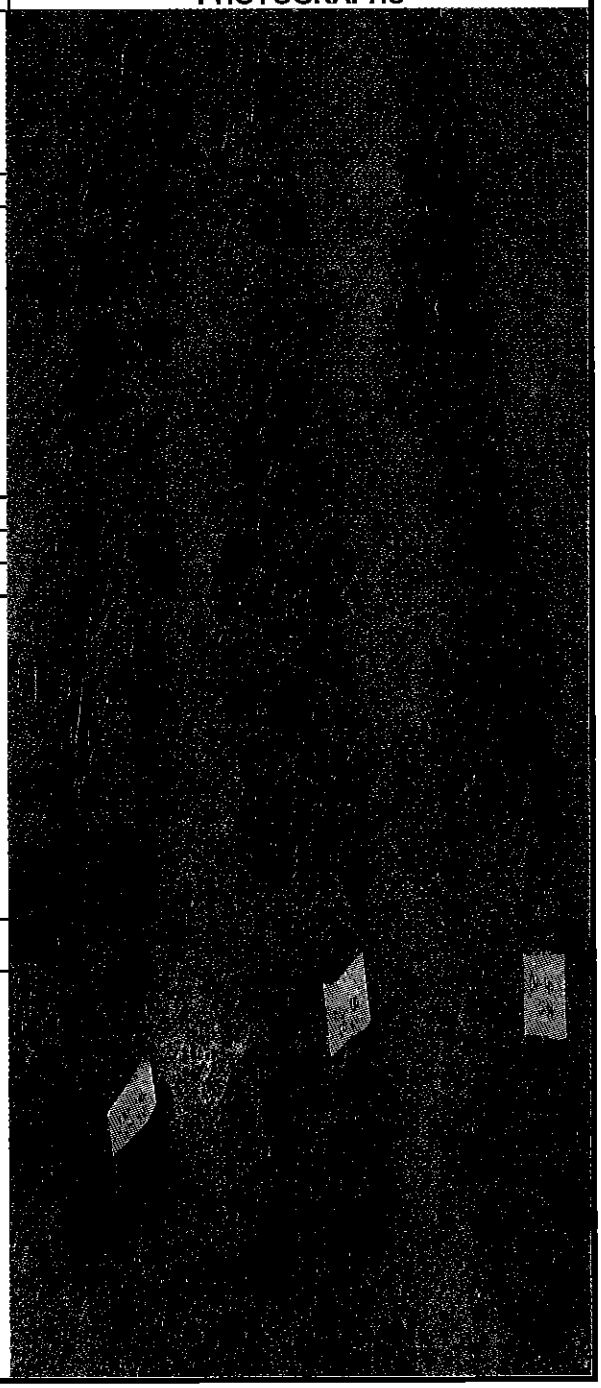
PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/10/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Willoughby Bank	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
18.40	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
16.40	-17.0	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
89.1%	12,133,009.6	3,528,008.9

ELEVATION	DEPTH	DESCRIPTION	PHOTOGRAPHS
-17.0 -17.5	0.0 0.5	gray sand w/clay, shell (CH) d50=0.324	
-18.0	1.0	gray silty clay, d50=0.329	
-21.0	4.0	gray fine silty clay with shell (SM), d50=0.206	
-30.0	13.0	d50=0.176@5-5.5' gray clay d50=0.218@10-10.5'	
-33.4	16.4	gray clay	

Hole No. 06OV-40

VIBRACORE LOG

PROJECT:	DATE:	
Offshore Borrow Area Investigation	5/5/2006	
DRILLING AGENCY:	MANUFACTURER'S DESIGNATION OF DRILL:	
Alpine Ocean Seismic Survey, Inc.	Alpine Model 271B Vibracore	
LABORATORY TESTING:	LOCATION:	
PSI	Willoughby Bank	
PENETRATION (ft):	DATUM FOR ELEVATION SHOWN:	
19.35	MLLW	
RECOVERY (ft):	ELEVATION TOP OF HOLE:	
15.80	-27.4	
TOTAL CORE RECOVERY:	EASTING:	NORTHING:
81.7%	12,128,998.6	3,528,989.3

ELEVATION	DEPTH	DESCRIPTION	PHOTOGRAPHS
-27.4	0.0	gray med-fine sand (SP) gray sand w/organics (SP) d50=0.329@2-2.5'	
-29.9	2.5		
-30.4	3.0	organics	
		d50=-.206@5-5.5' light gray med-fine sand with shell and clay lens (CH/SP)	
-34.9	7.5		
-35.4	8.0	clay lens	
-36.9	9.5	light gray med-fine sand	
-37.4	10.0	gray sand (SC/CH)	
		light gray med-fine sand d50=0.218@10-10.5'	
-42.4	15.0		
-43.2	15.8	gray clay	

Penetration Graph for Core No. 06TS-01, Run 1

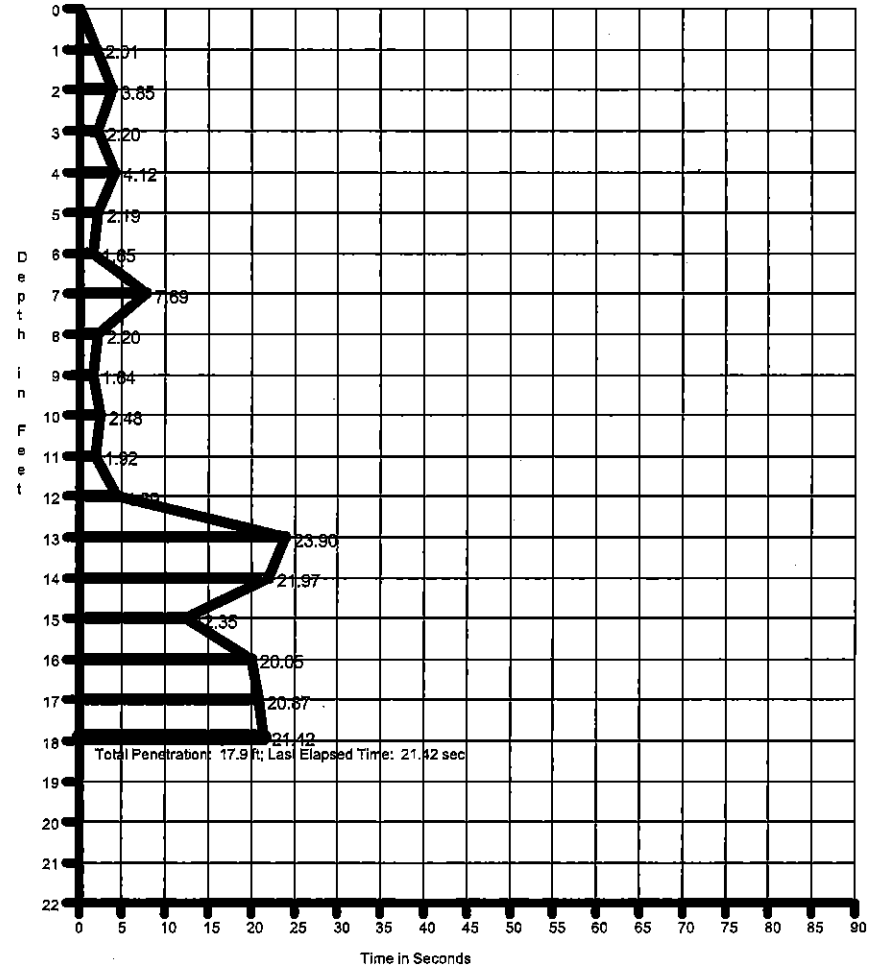
Date: 05/06/2006
Start Time: 11:51:06 AM
End Time: 11:54:09 AM

Penetration: 17.90 ft
Recovery: 16.0
W. D. Corrected: 32.1
W. D. Raw: 33.7

Easting: 12192284.8
Northing: 3522096.8
Coord. System: VA SOUTH 83

Lat: 36 58.255518
Long: 76 04.290600
Datum: WGS 84

Comment:



Penetration Graph for Core No. 06TS-02, Run 1

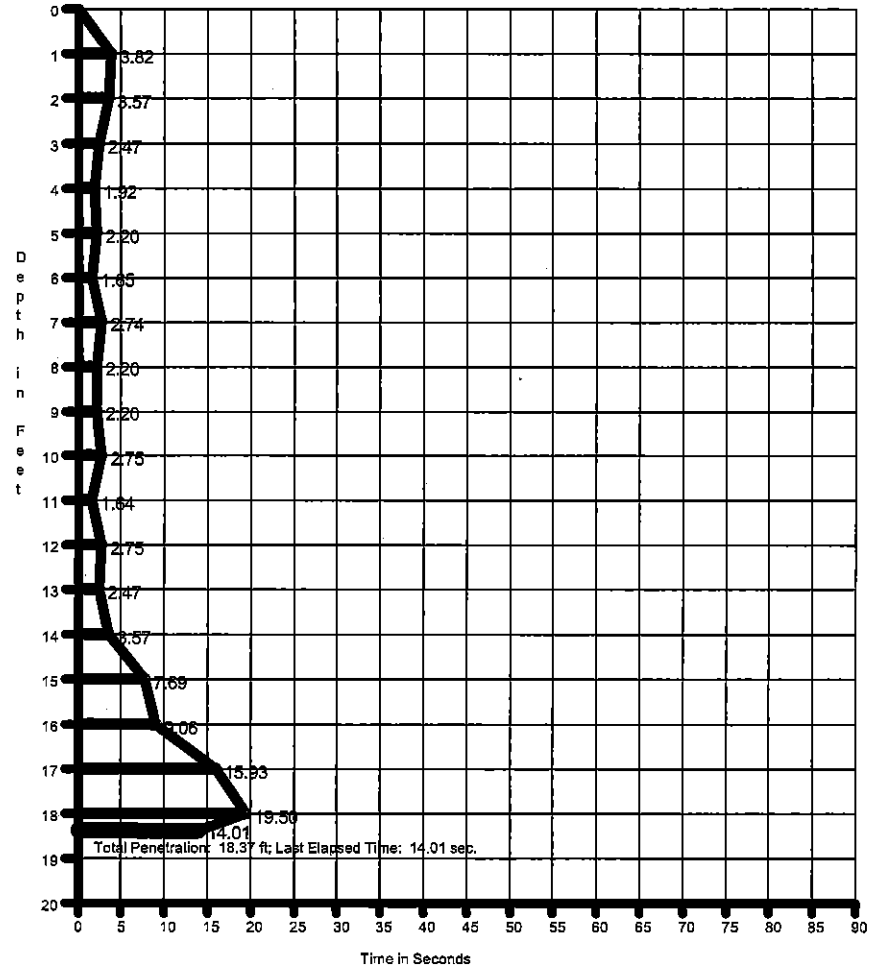
Date: 05/06/2006
Start Time: 12:29:29 PM
End Time: 12:31:47 PM

Penetration: 18.37 ft
Recovery: 16.9
W. D. Corrected: 36.6
W. D. Raw: 38.2

Easting: 12192058.8
Northing: 3521076.8
Coord. System: VA SOUTH 83

Lat: 36 56.088252
Long: 76 04.342378
Datum: WGS 84

Comment:



Penetration Graph for Core No. 06TS-03, Run 1

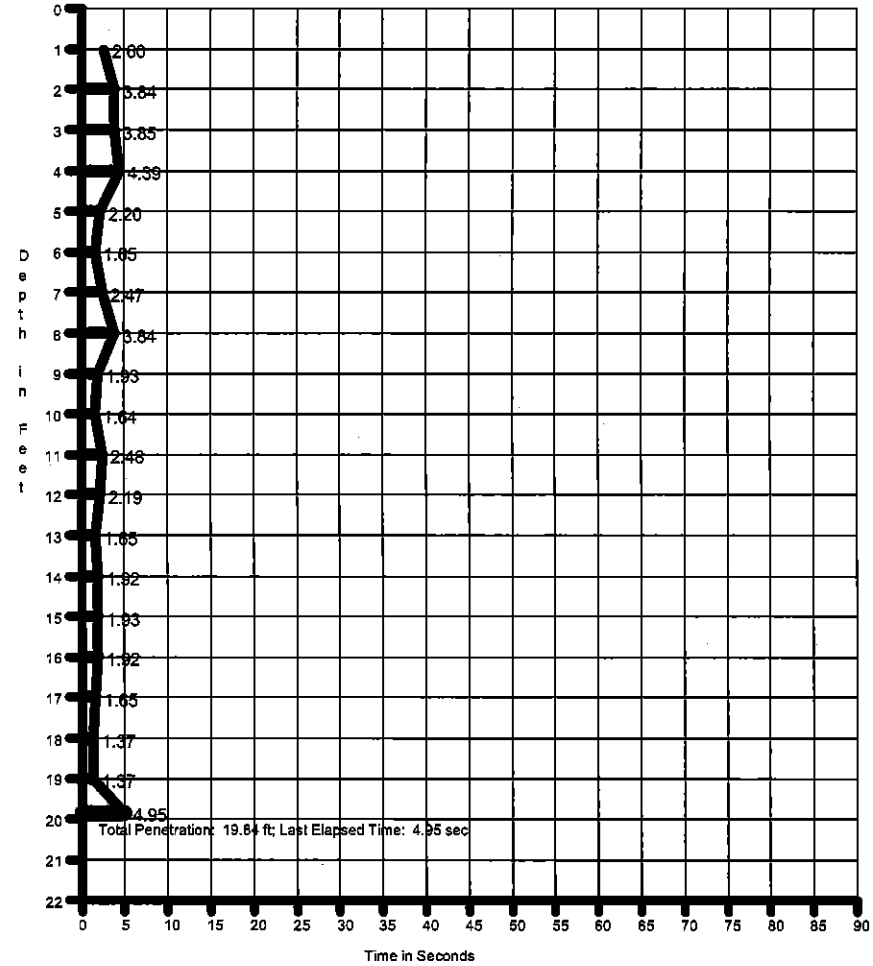
Date: 05/06/2006
Start Time: 1:03:02 PM
End Time: 1:04:10 PM

Penetration: 19.84 ft
Recovery: 18.0
W. D. Corrected: 36.6
W. D. Raw: 37.6

Easting: 12196707.3
Northing: 3521271.1
Coord. System: VA SOUTH 83

Lat: 36 58.100461
Long: 76 03.387028
Datum: WGS 84

Comment:



Penetration Graph for Core No. 06TS-04, Run 1

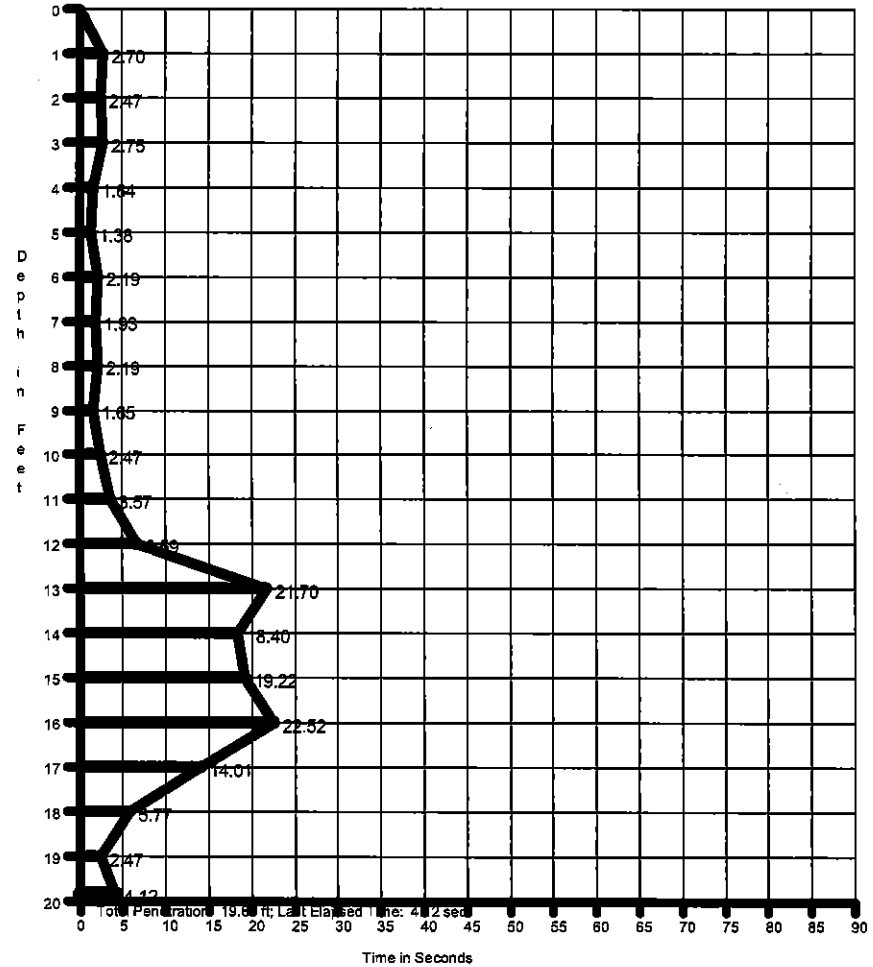
Date: 05/06/2006
Start Time: 1:32:13 PM
End Time: 1:34:52 PM

Penetration: 19.83 ft
Recovery: 19.5
W. D. Corrected: 42.6
W. D. Raw: 43.5

Easting: 12196239.7
Northing: 3519989.8
Coord. System: VA SOUTH 83

Lat: 36 57.891483
Long: 76 03.489715
Datum: WGS 84

Comment:



Penetration Graph for Core No. 06TS-05, Run 1

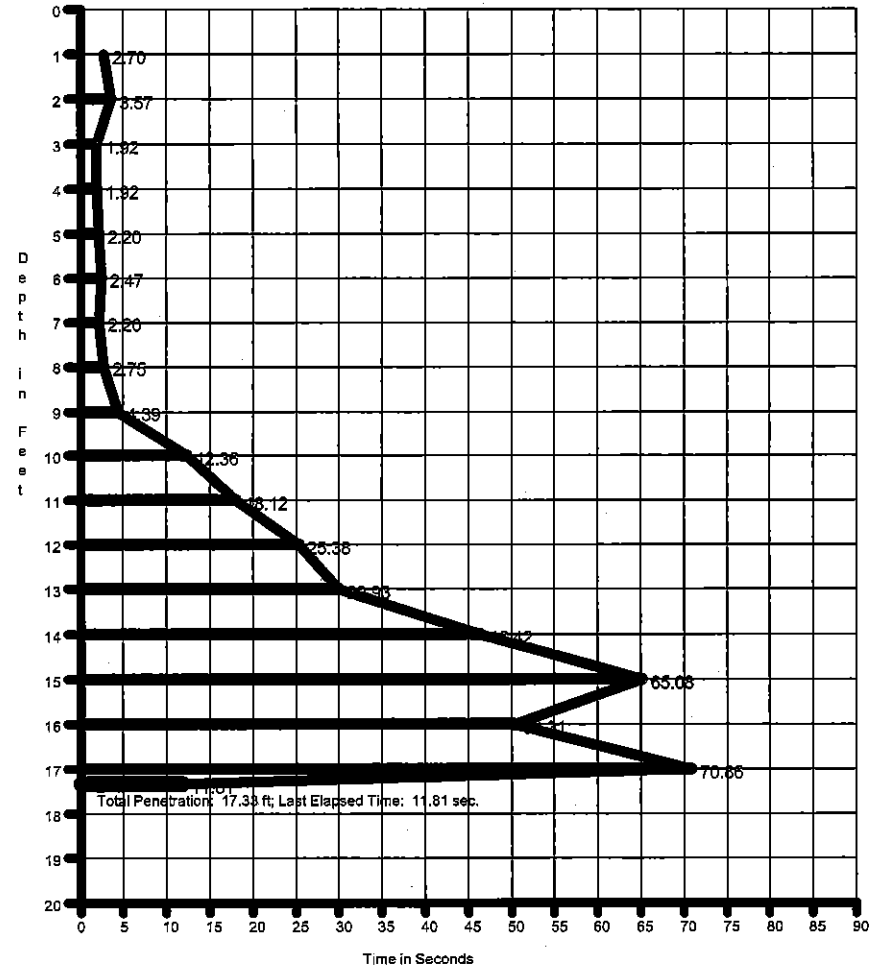
Date: 05/06/2006
Start Time: 2:11:05 PM
End Time: 2:17:19 PM

Penetration: 17.33 ft
Recovery: 17.5
W. D. Corrected: 42.0
W. D. Raw: 42.8

Easting: 12199818.6
Northing: 3520239.7
Coord. System: VA SOUTH 83

Lat: 36 57.917283
Long: 76 02.753627
Datum: WGS 84

Comment:



Penetration Graph for Core No. 06TS-06, Run 1

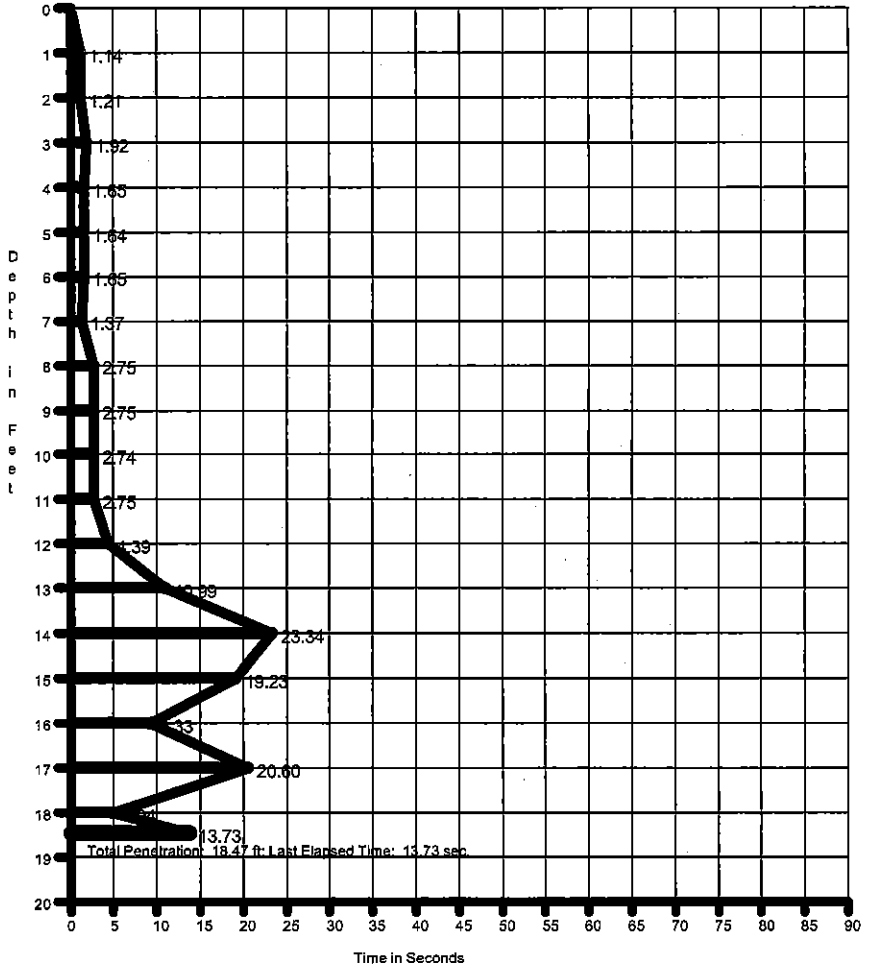
Date: 05/06/2006
Start Time: 3:07:49 PM
End Time: 3:10:18 PM

Penetration: 18.47 ft
Recovery: 19.0
W. D. Corrected: 48.4
W. D. Raw: 49.3

Easting: 12199456.2
Northing: 3519011.9
Coord. System: VA SOUTH 83

Lat. 36 57.716721
Long: 76 02.834308
Datum: WGS 84

Comment:



Penetration Graph for Core No. O6OV-07, Run 1

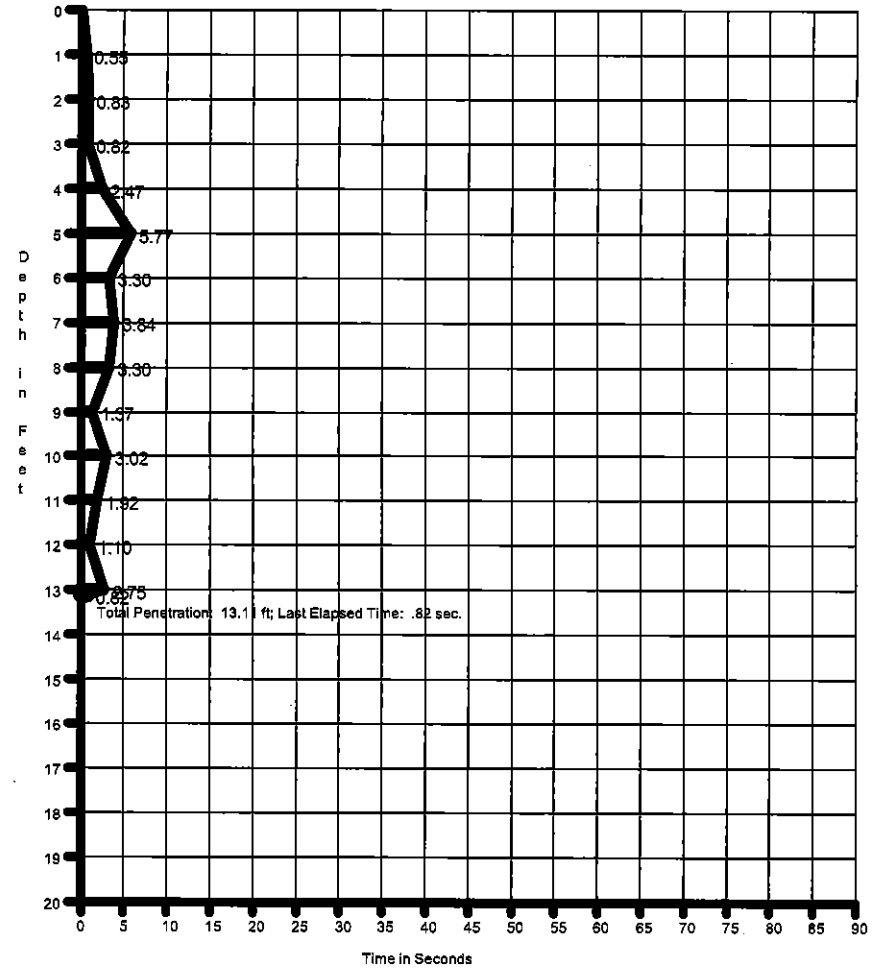
Date: 05/03/2006
Start Time: 11:17:40 AM
End Time: 11:18:11 AM

Penetration: 13.11 ft
Recovery: 13.0
W. D. Corrected: 23.7
W. D. Raw: 25.0

Easting: 12128650.1
Northing: 3528449.1
Coord. System: VA SOUTH 84

Lat: 36 59.5596
Long: 76 17.325966
Datum: WGS 84

Comment:



Penetration Graph for Core No. O6OV-08, Run 1

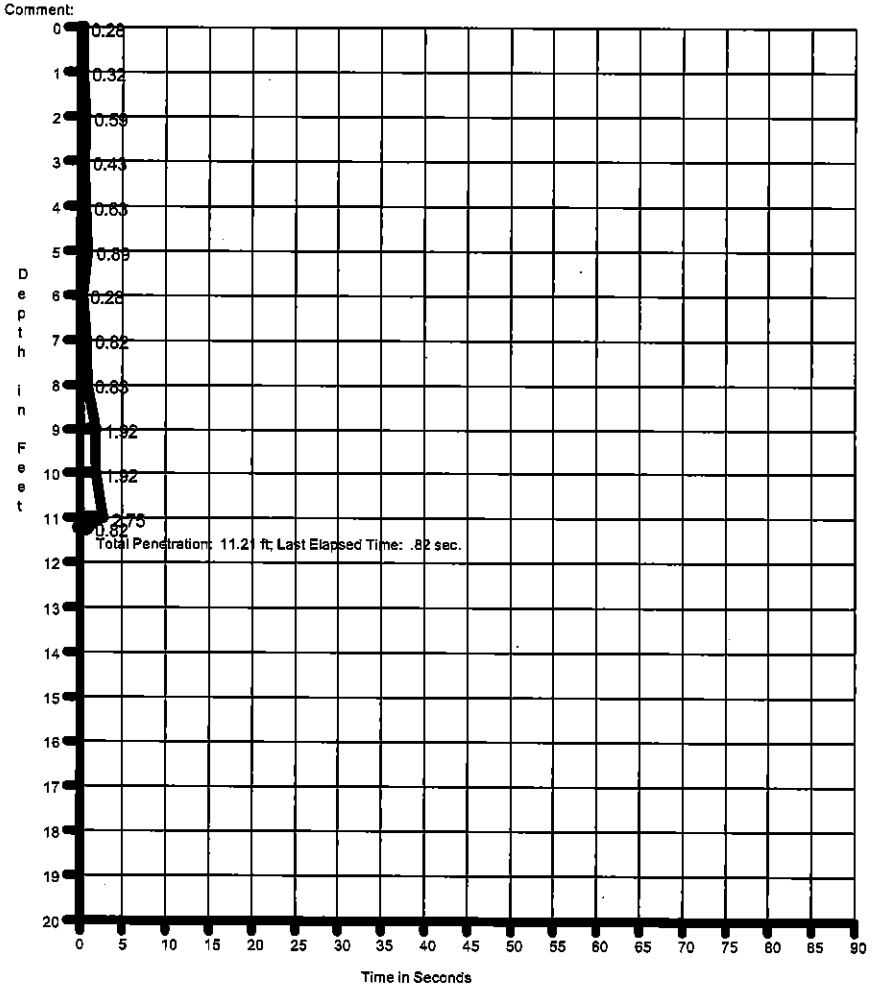
Date: 05/03/2006
Start Time: 12:14:00 PM
End Time: 12:14:09 PM

Penetration: 11.21 ft
Recovery: 10.0
W. D. Corrected: 17.2
W. D. Raw: 16.5

Easting: 12130809.8
Northing: 3524735.3
Coord. System: VA SOUTH 83

Lat: 36 58.939391
Long: 76 16.900389
Datum: WGS 84

Comment:



Penetration Graph for Core No. O6OV-09, Run 1

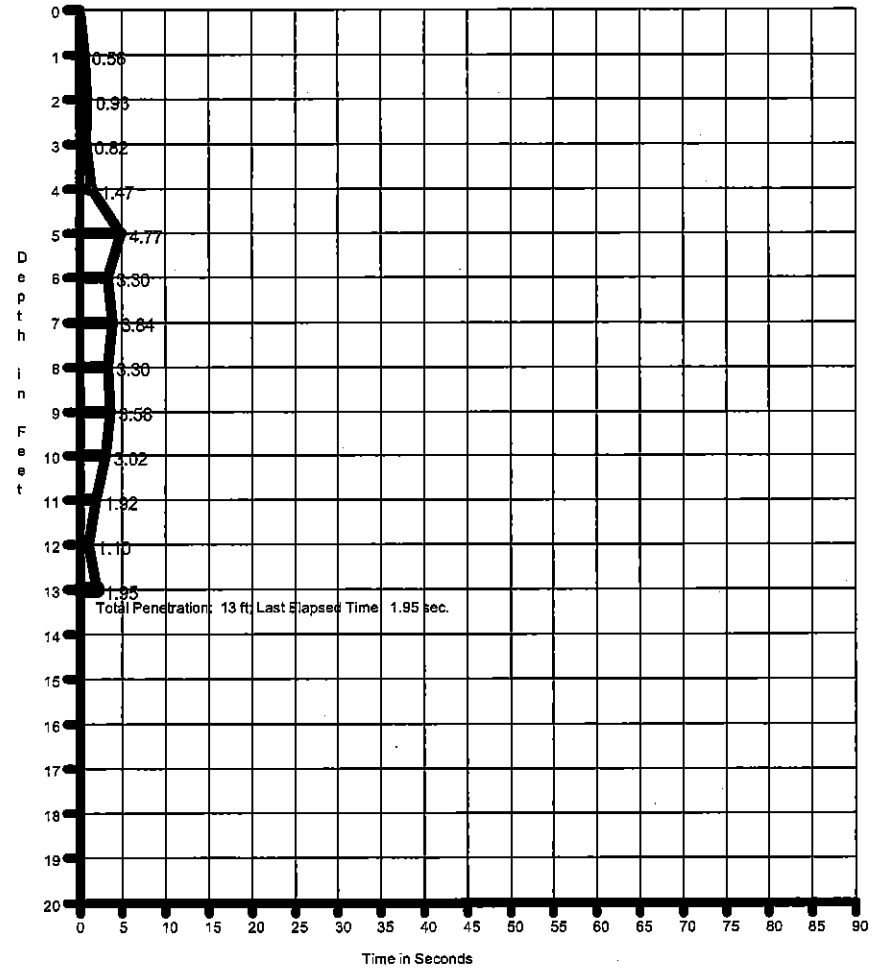
Date: 05/03/2006
Start Time: 1:08:40 PM
End Time: 1:09:11 AM

Penetration: 13.0 ft
Recovery: 12.0
W. D. Corrected: 20.8
W. D. Raw: 22.3

Easting: 12134828.2
Northing: 3522932.3
Coord. System: VA SOUTH 84

Lat: 36 58.626749
Long: 76 16.083900
Datum: WGS 84

Comment:



Penetration Graph for Core No. 06OV-10, Run 1

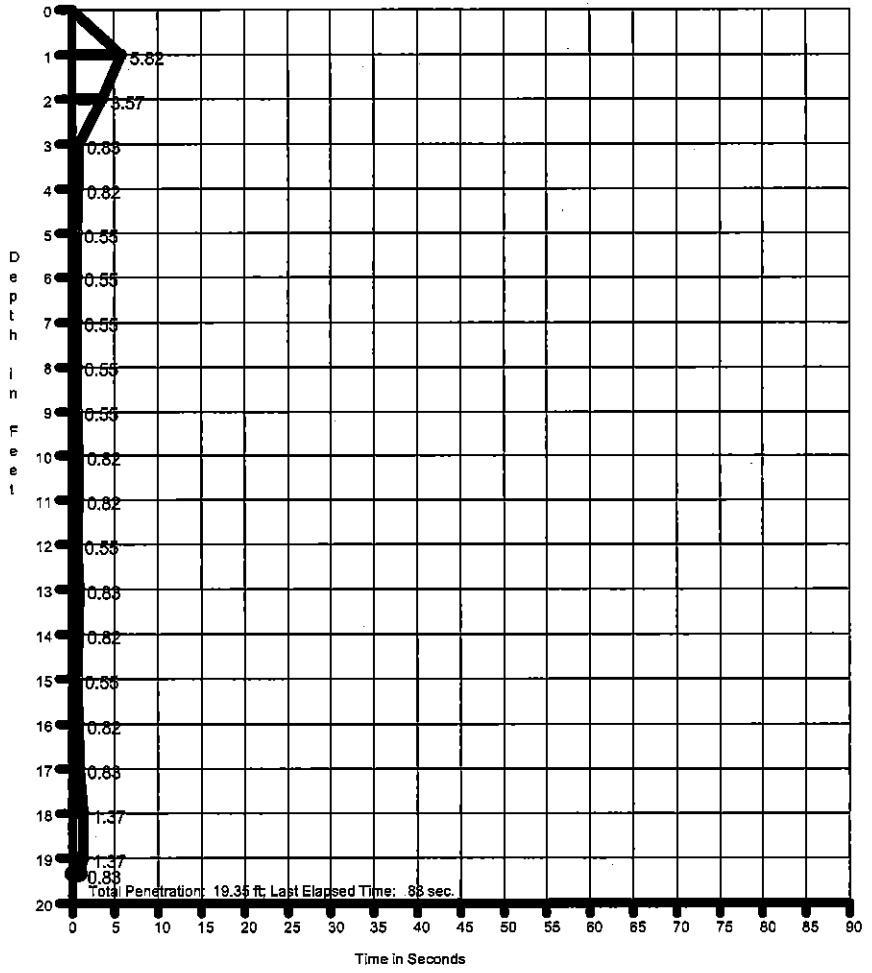
Date: 05/04/2006
Start Time: 8:51:41 AM
End Time: 8:52:05 AM

Penetration: 19.35 ft
Recovery: 16.0
W. D. Corrected: 21.3
W. D. Raw: 23.5

Easting: 12138359.2
Northing: 3531153.8
Coord. System: VA SOUTH 83

Lat: 36 59.967444
Long: 76 15.318617
Datum: WGS 84

Comment:



Penetration Graph for Core No. 06OV-11, Run

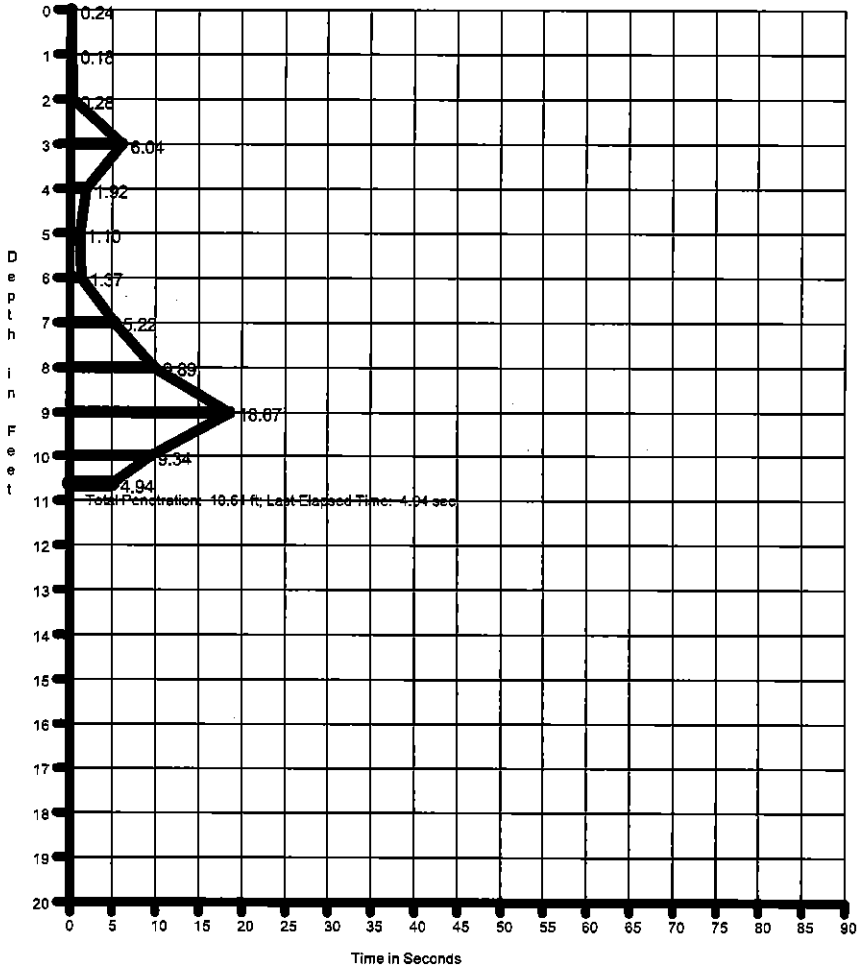
Date: 05/03/2006
Start Time: 1:59:42 PM
End Time: 2:00:41 PM

Penetration: 10.61 ft
Recovery: 10.5
W. D. Corrected: 21.8
W. D. Raw: 23.6

Easting: 12137702.9
Northing: 3524991.5
Coord. System: VA SOUTH 83

Lat: 36 58.954822
Long: 76 15.483521
Datum: WGS 84

Comment:



Penetration Graph for Core No. 06OV-12, Run 1

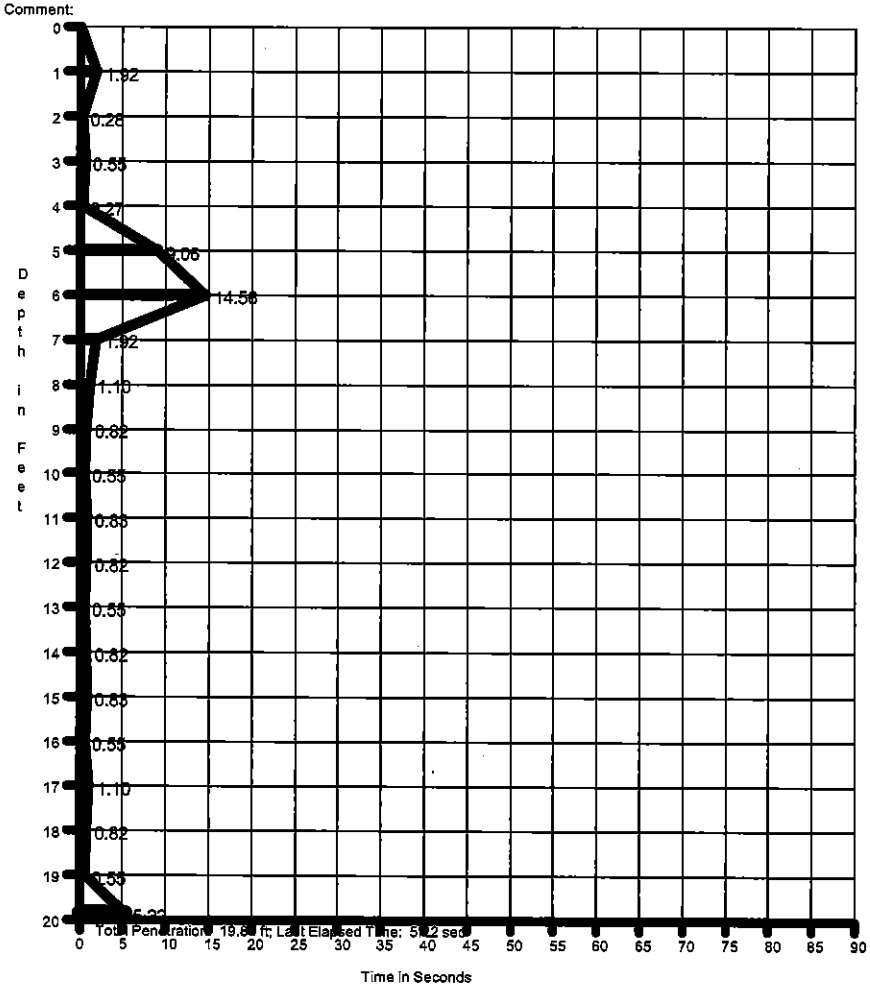
Date: 05/04/2006
Start Time: 4:36:26 PM
End Time: 4:37:09 PM

Penetration: 19.85 ft
Recovery: 16.6
W. D. Corrected: 18.4
W. D. Raw: 20.7

Easting: 12141124.9
Northing: 3527127.8
Coord. System: VA SOUTH 83

Lat: 36 59.293263
Long: 76 14.770406
Datum: WGS 84

Comment:



Penetration Graph for Core No. 06OV-13, Run 1

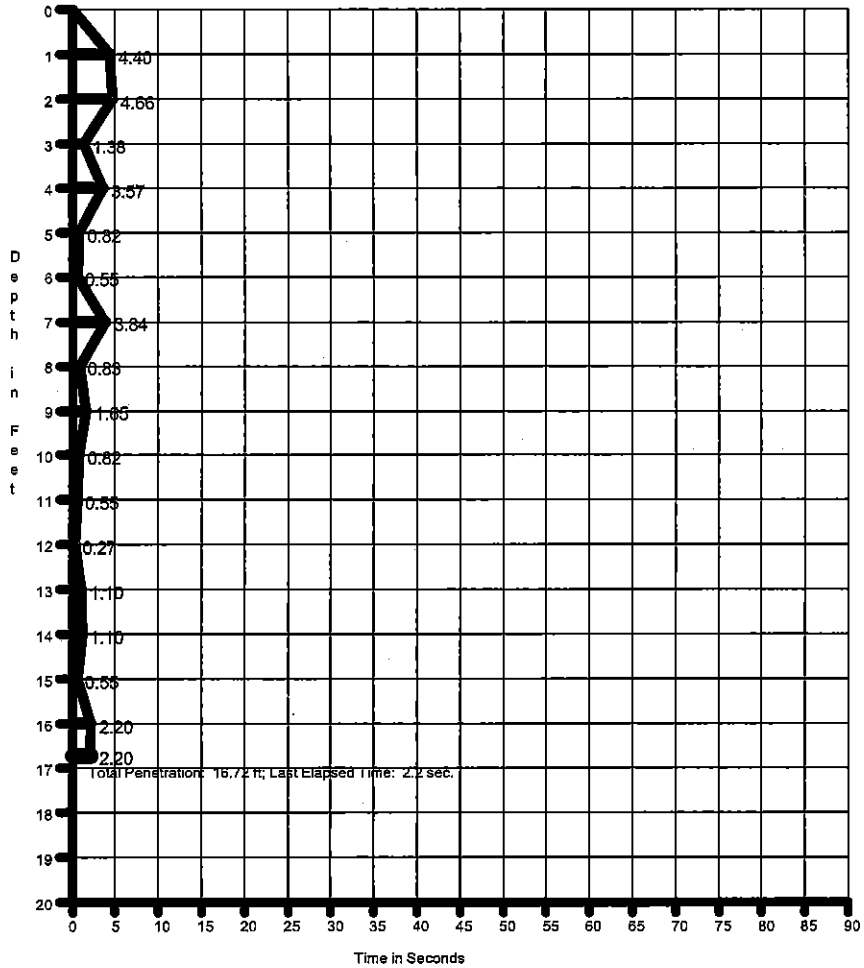
Date: 05/04/2006
Start Time: 9:36:02 AM
End Time: 9:36:34 AM

Penetration: 16.72 ft
Recovery: 14.3
W. D. Corrected: 24.2
W. D. Raw: 20.6

Easting: 12144076.9
Northing: 3529673.0
Coord. System: VA SOUTH 83

Lat: 36 59.700962
Long: 76 14.151511
Datum: WGS 84

Comment:



Penetration Graph for Core No. 06OV-14, Run 1

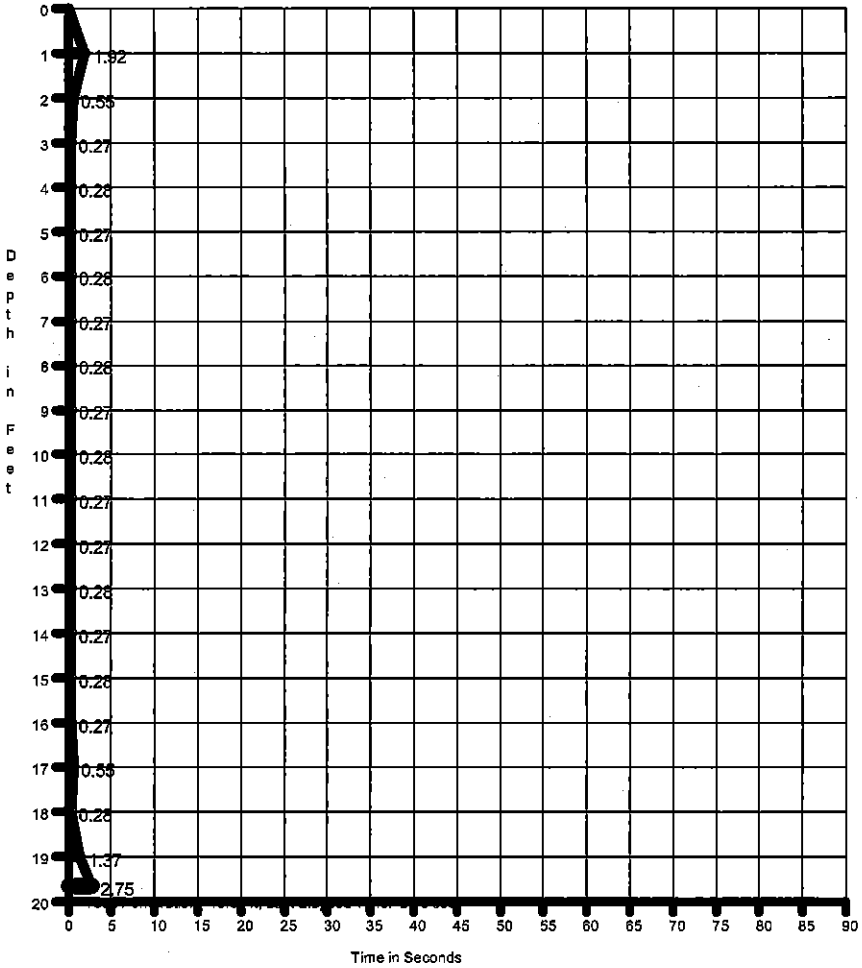
Date: 05/04/2006
Start Time: 4:13:51 PM
End Time: 4:14:03 PM

Penetration: 19.65 ft
Recovery: 16.9
W. D. Corrected: 23.5
W. D. Raw: 25.6

Easting: 12142975.0
Northing: 3524391.4
Coord. System: VA SOUTH 83

Lat: 36 58.835212
Long: 76 14.403864
Datum: WGS 84

Comment:



Penetration Graph for Core No. 06OV-15, Run 2

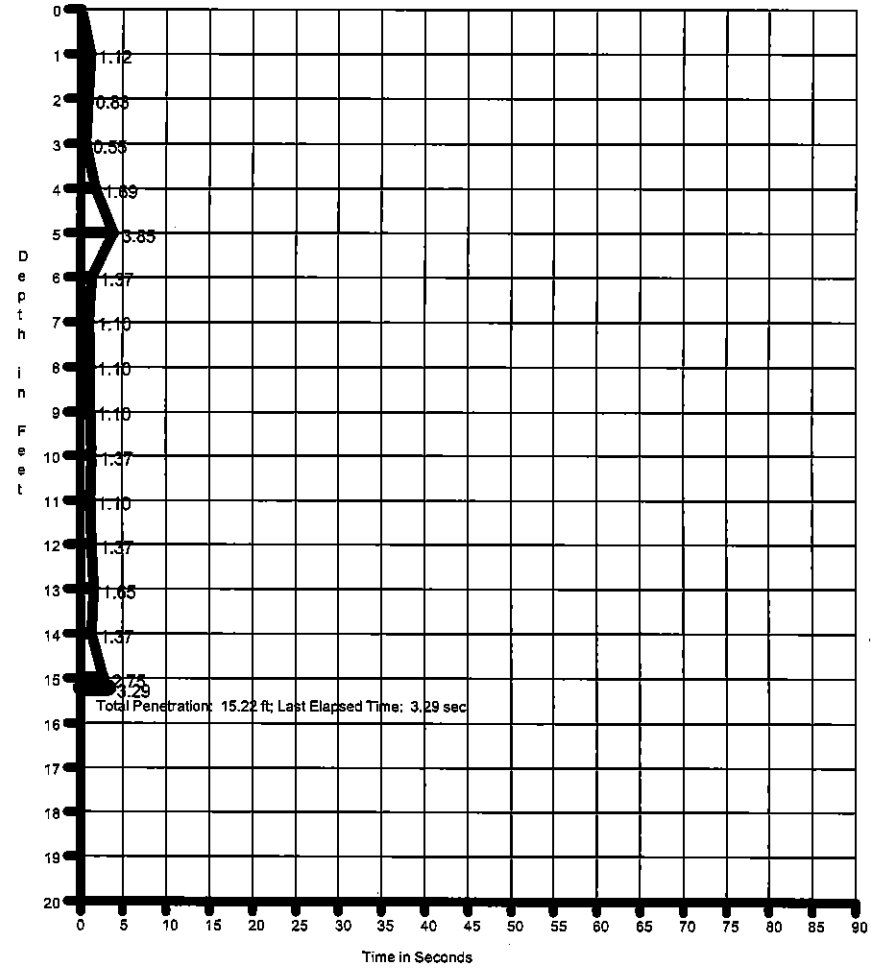
Date: 05/04/2006
Start Time: 3:44:28 PM
End Time: 3:45:16 PM

Penetration: 15.22 ft
Recovery: 10.4
W. D. Corrected: 24.2
W. D. Raw: 26.1

Easting: 12141796.7
Northing: 3520255.0
Coord. System: VA SOUTH 83

Lat: 36 58.158314
Long: 76 14.666095
Datum: WGS 84

Comment:



Penetration Graph for Core No. 06OV-16, Run 1

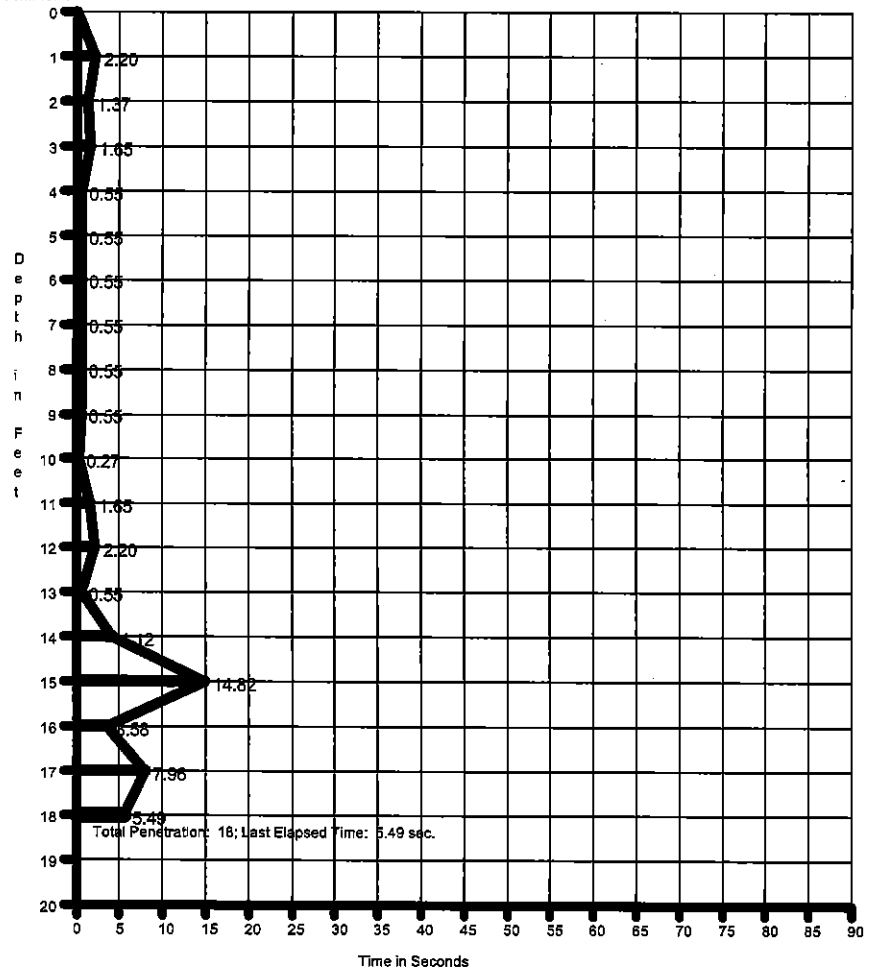
Date: 05/04/2006
Start Time: 10:13:28 AM
End Time: 10:14:21 AM

Penetration: 18.0
Recovery: 14.5
W. D. Corrected: 18.3
W. D. Raw: 19.9

Easting: 12146534.7
Northing: 3526638.6
Coord. System: VA SOUTH 83

Lat: 36 59.191337
Long: 76 13.661692
Datum: WGS 84

Comment:



Penetration Graph for Core No. 06OV-17, Run 1

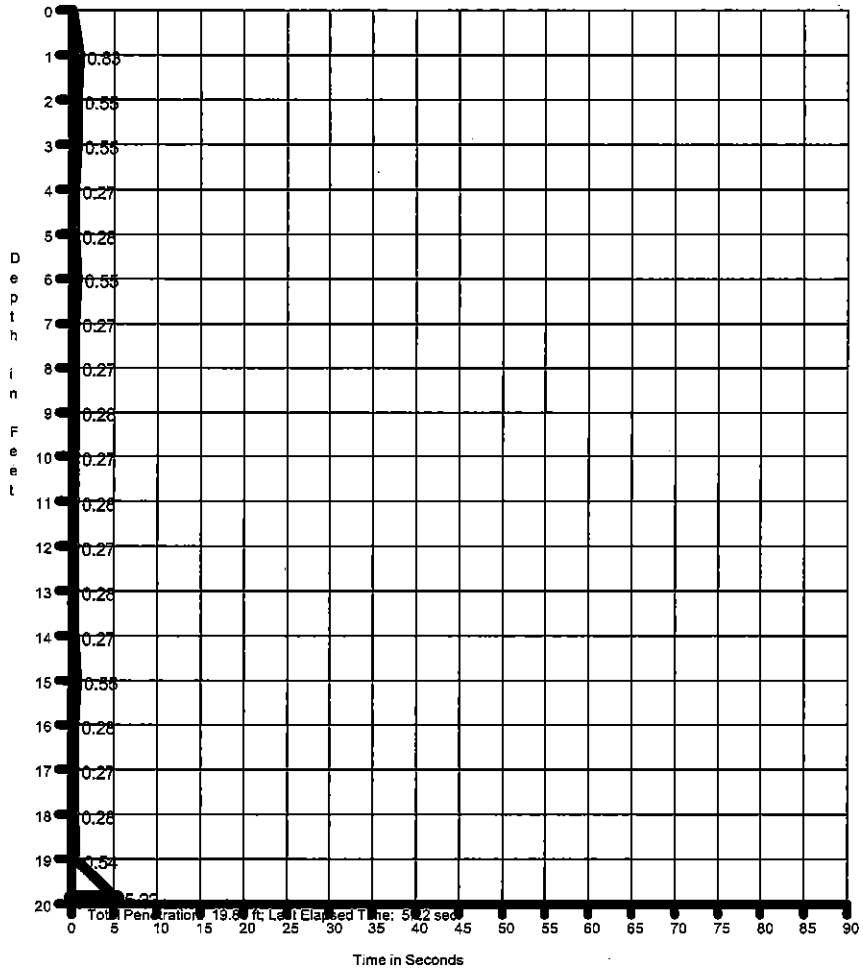
Date: 05/04/2006
Start Time: 10:56:35 AM
End Time: 10:56:48 AM

Penetration: 19.86 ft
Recovery: 15.6
W. D. Corrected: 25.4
W. D. Raw: 26.7

Easting: 12149368.9
Northing: 3527659.0
Coord. System: VA SOUTH 83

Lat: 36 59.348202
Long: 76 13.074597
Datum: WGS 84

Comment:



Penetration Graph for Core No. 06OV-18, Run 1

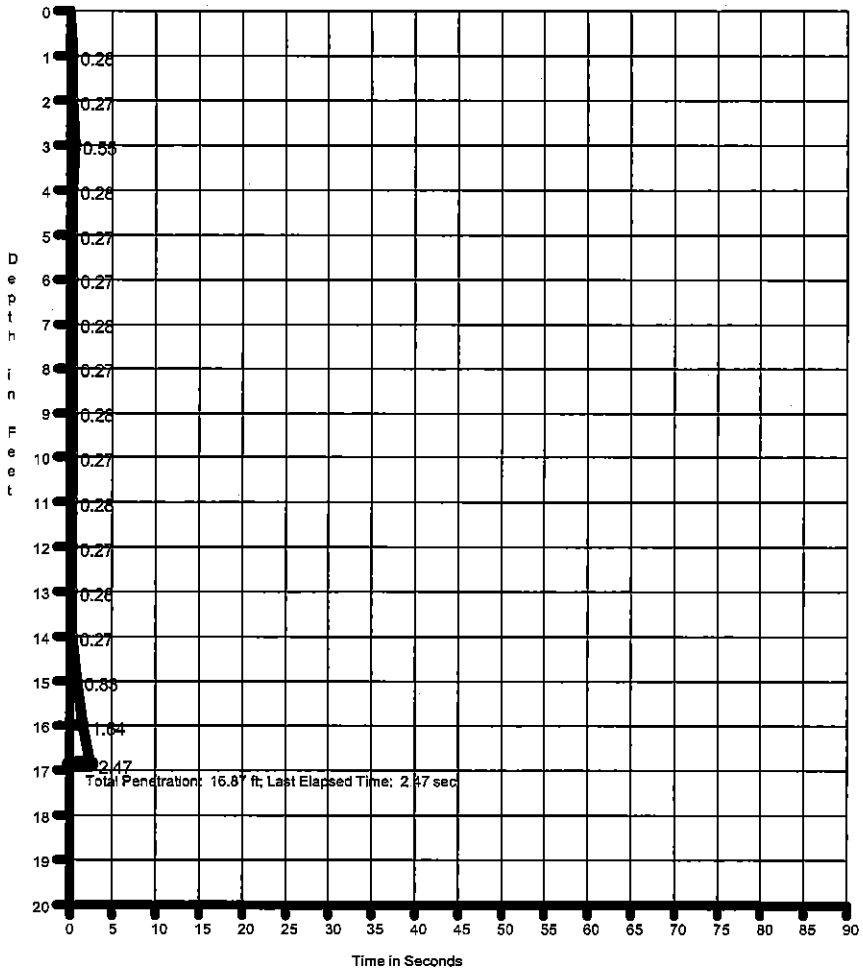
Date: 05/04/2006
Start Time: 2:49:26 PM
End Time: 2:49:37 PM

Penetration: 16.87 ft
Recovery: 13.4
W. D. Corrected: 21.9
W. D. Raw: 23.4

Easting: 12147916.9
Northing: 3522480.2
Coord. System: VA SOUTH 83

Lat: 36 58.500769
Long: 76 13.398457
Datum: WGS 84

Comment:



Penetration Graph for Core No. 06OV-19, Run 1

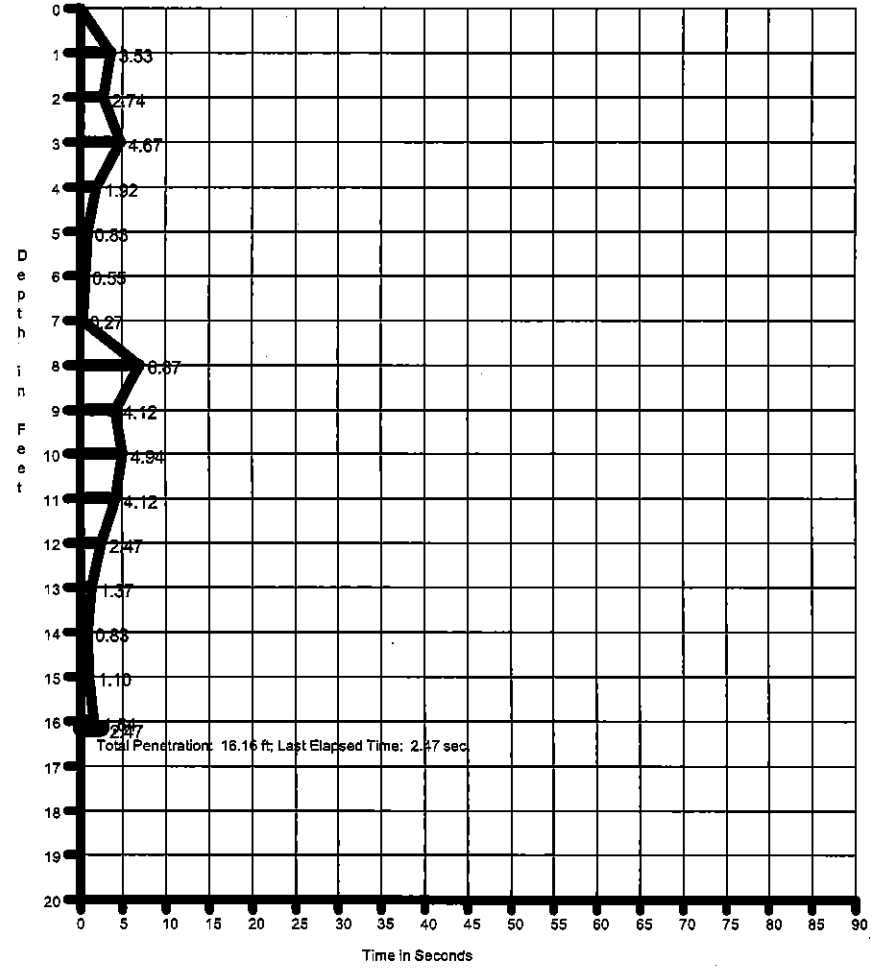
Date: 05/04/2006
Start Time: 2:14:35 PM
End Time: 2:15:52 PM

Penetration: 16.16 ft
Recovery: 10.3
W. D. Corrected: 25.1
W. D. Raw: 26.4

Easting: 12146188.6
Northing: 3517702.6
Coord. System: VA SOUTH 83

Lat: 36 57.720506
Long: 76 13.777032
Datum: WGS 84

Comment:



Penetration Graph for Core No. 06OV-20, Run 1

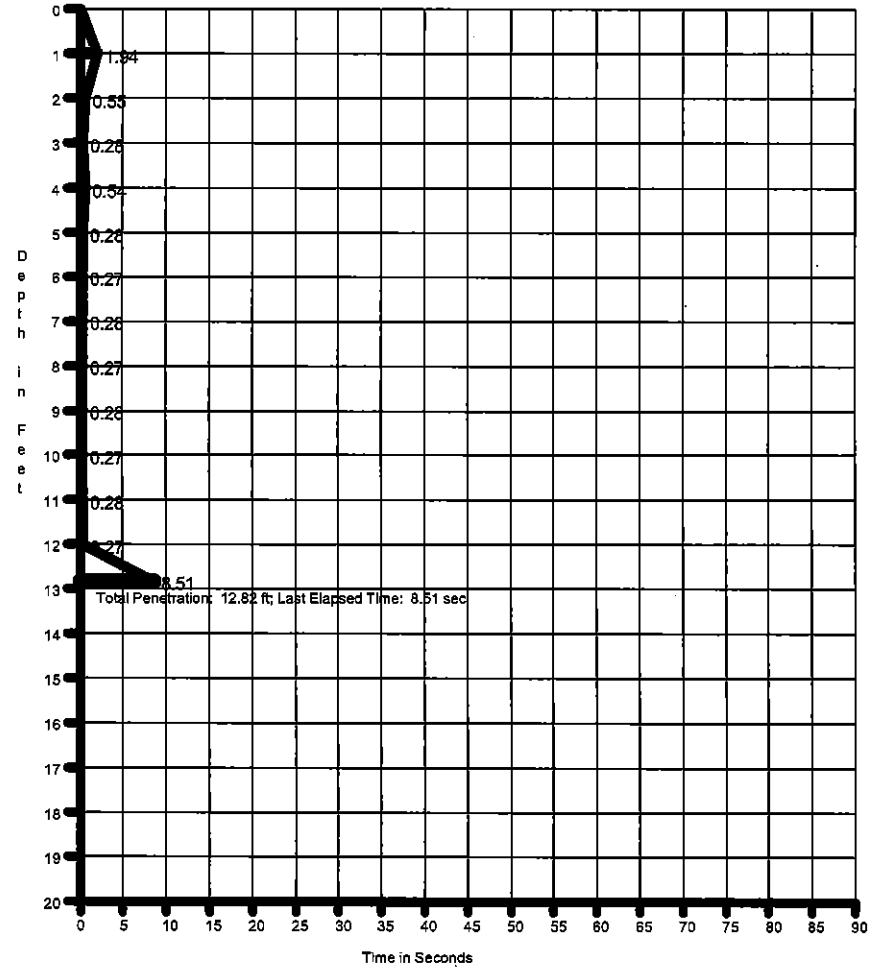
Date: 05/04/2006
Start Time: 11:29:58 AM
End Time: 11:30:15 AM

Penetration: 12.82 ft
Recovery: 10.5
W. D. Corrected: 21.64
W. D. Raw: 24.6

Easting: 12151773.1
Northing: 3524361.7
Coord. System: VA SOUTH 83

Lat: 36 58.795371
Long: 76 12.597274
Datum: WGS 84

Comment:



Penetration Graph for Core No. 06OV-21, Run 1

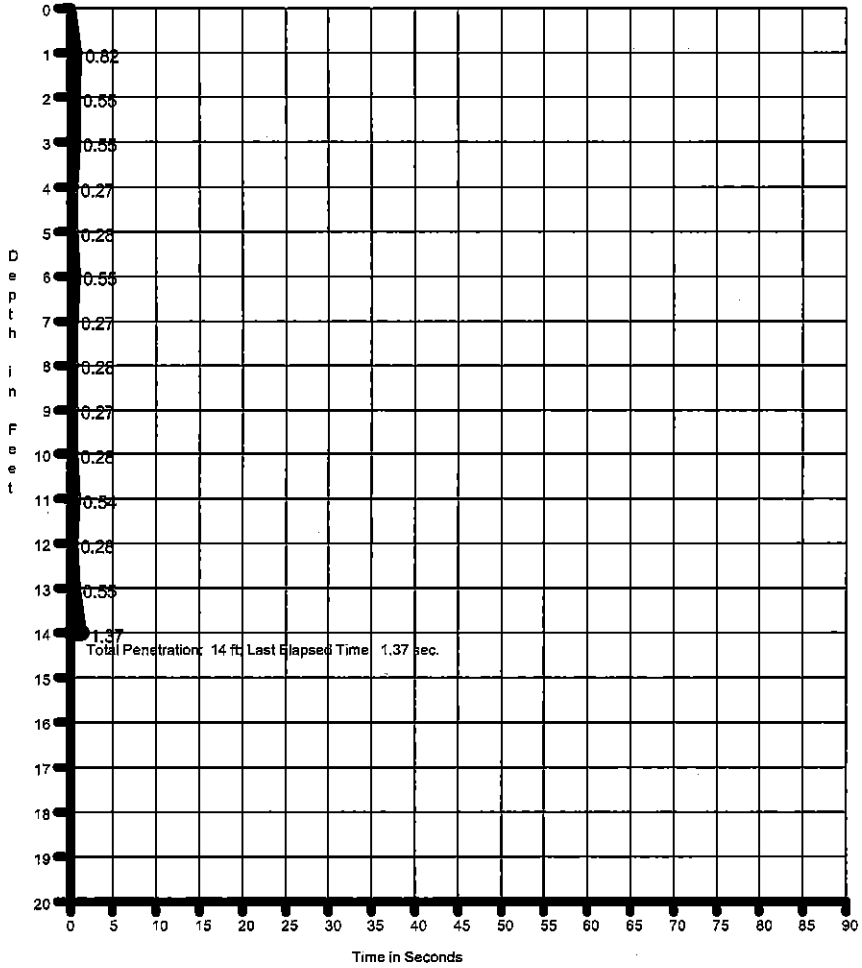
Date: 05/04/2006
Start Time: 1:44:35 PM
End Time: 1:44:52 PM

Penetration: 14.00 ft
Recovery: 10.0
W. D. Corrected: 24.8
W. D. Raw: 26.0

Easting: 12149859.1
Northing: 3518821.5
Coord. System: VA SOUTH 83

Lat: 36 57.890287
Long: 76 13.017847
Datum: WGS 84

Comment:



Penetration Graph for Core No. 06OV-22, Run 1

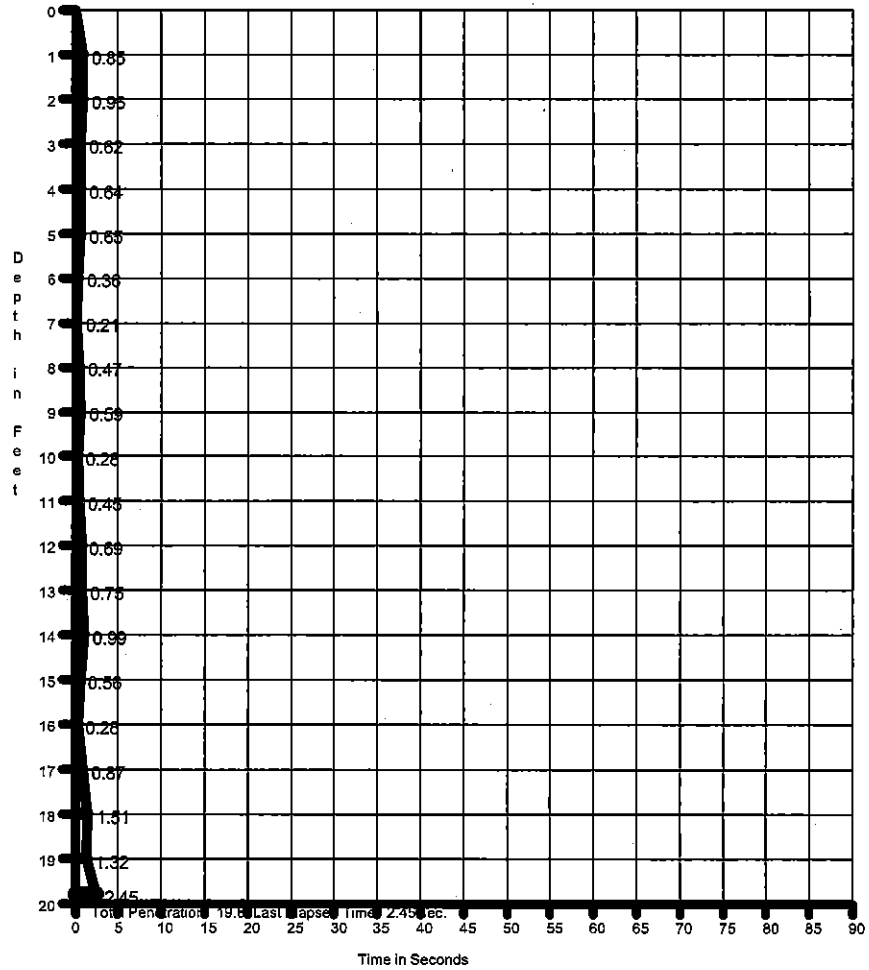
Date: 05/04/2006
Start Time: 12:10.10
End Time: 12:11.22

Penetration: 19.8
Recovery: 14.8
W. D. Corrected: 29.8
W. D. Raw: 30.9

Easting: 12154988.4
Northing: 3526210.1
Coord. System: VA SOUTH 83

Lat: 36 59.087010
Long: 76 11.927768
Datum: WGS 84

Comment:



Penetration Graph for Core No. 06OV-23, Run 1

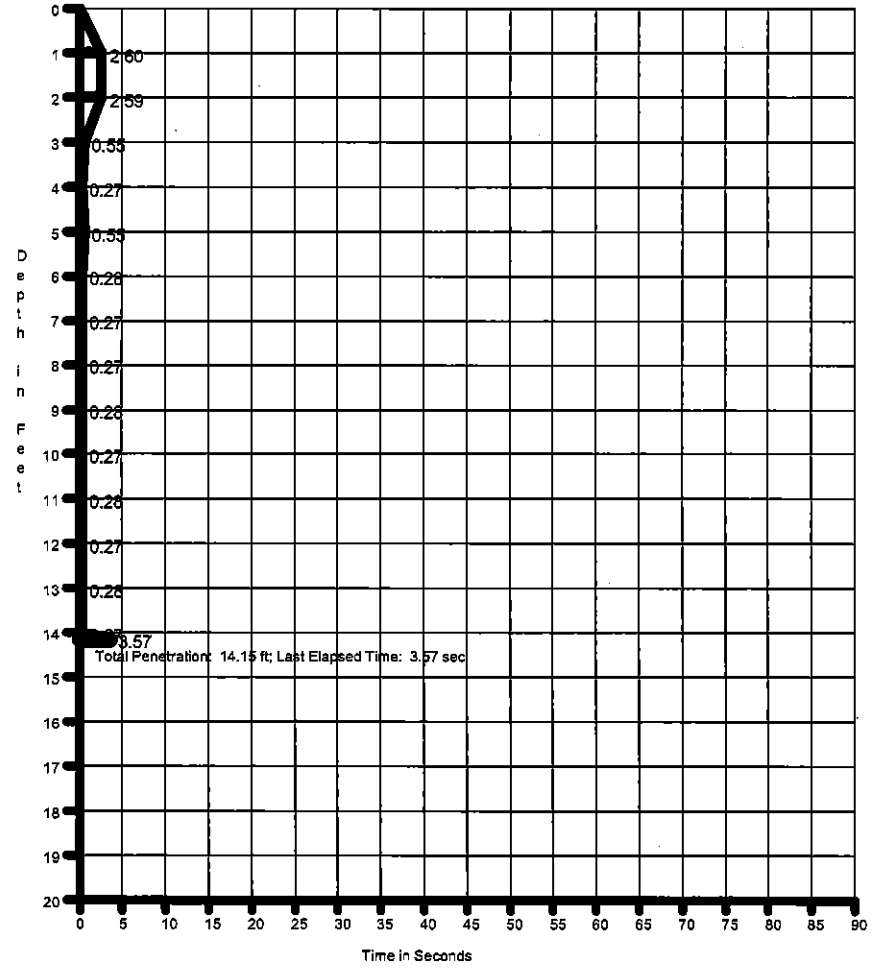
Date: 05/04/2006
Start Time: 12:43:16 PM
End Time: 12:43:53 PM

Penetration: 14.15 ft
Recovery: 10.5
W. D. Corrected: 22.1
W. D. Raw: 23.1

Easting: 12153382.1
Northing: 3520776.1
Coord. System: VA SOUTH 83

Lat: 36 58.198206
Long: 76 12.284838
Datum: WGS 84

Comment:



Penetration Graph for Core No. 06OV-24, Run 1

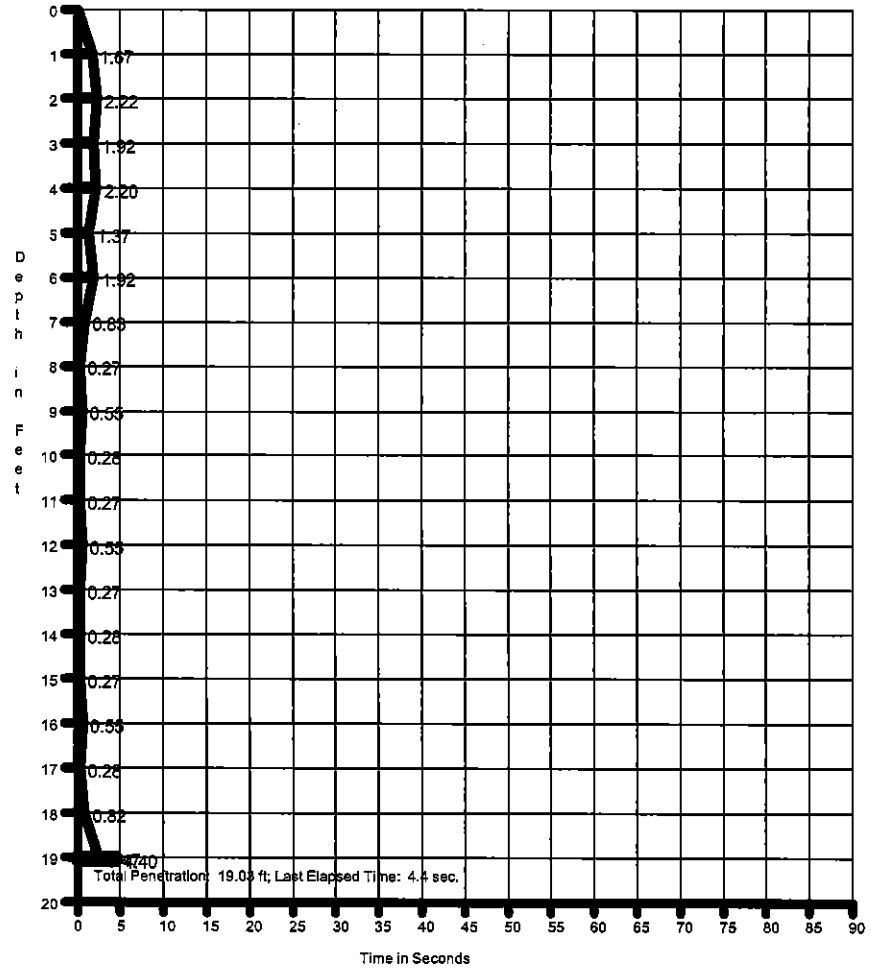
Date: 05/04/2006
Start Time: 1:16:12 PM
End Time: 1:16:55 PM

Penetration: 19.03 ft
Recovery: 15.4
W. D. Corrected: 22.6
W. D. Raw: 23.7

Easting: 12151636.0
Northing: 3515642.7
Coord. System: VA SOUTH 83

Lat: 36 57.359450
Long: 76 12.668949
Datum: WGS 84

Comment:



Penetration Graph for Core No. 06OV-25, Run 1

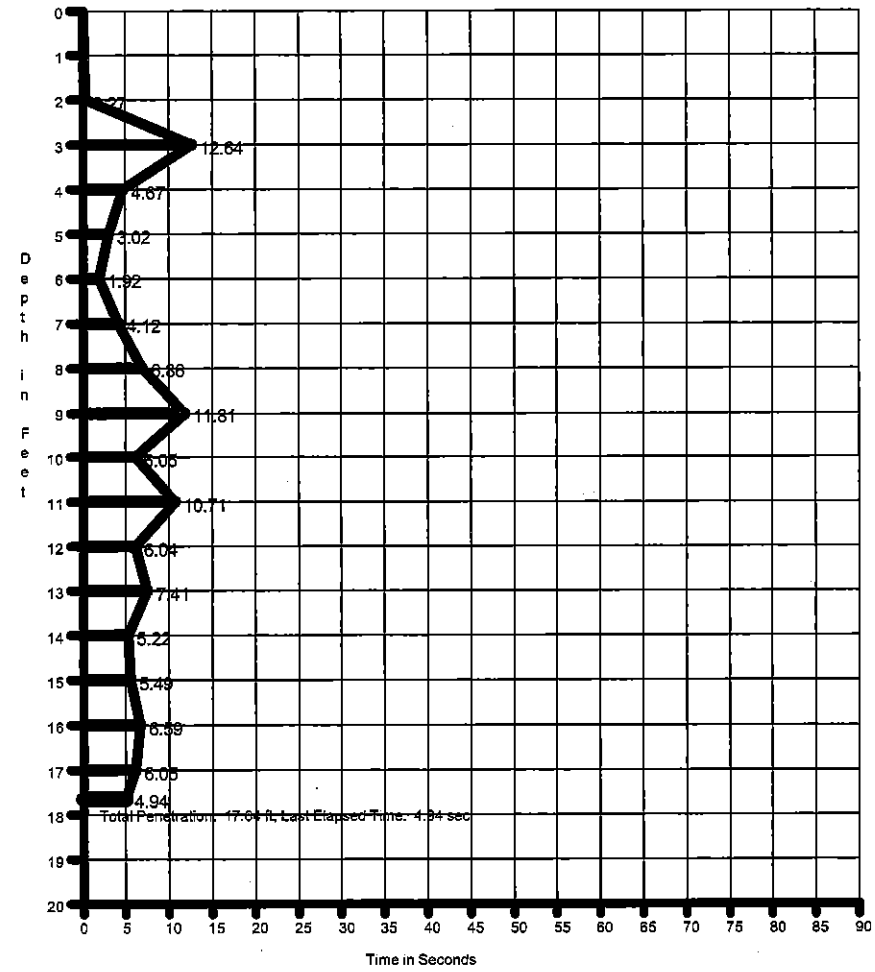
Date: 05/05/2006
Start Time: 9:50:10 AM
End Time: 9:52:03 AM

Penetration: 17.64 ft
Recovery: 20.0
W. D. Corrected: 13.6
W. D. Raw: 15.3

Easting: 12130992.2
Northing: 3526976.1
Coord. System: VA SOUTH 83

Lat: 36 59.307874
Long: 76 16.852042
Datum: WGS 84

Comment:



Penetration Graph for Core No. 06OV-26, Run 1

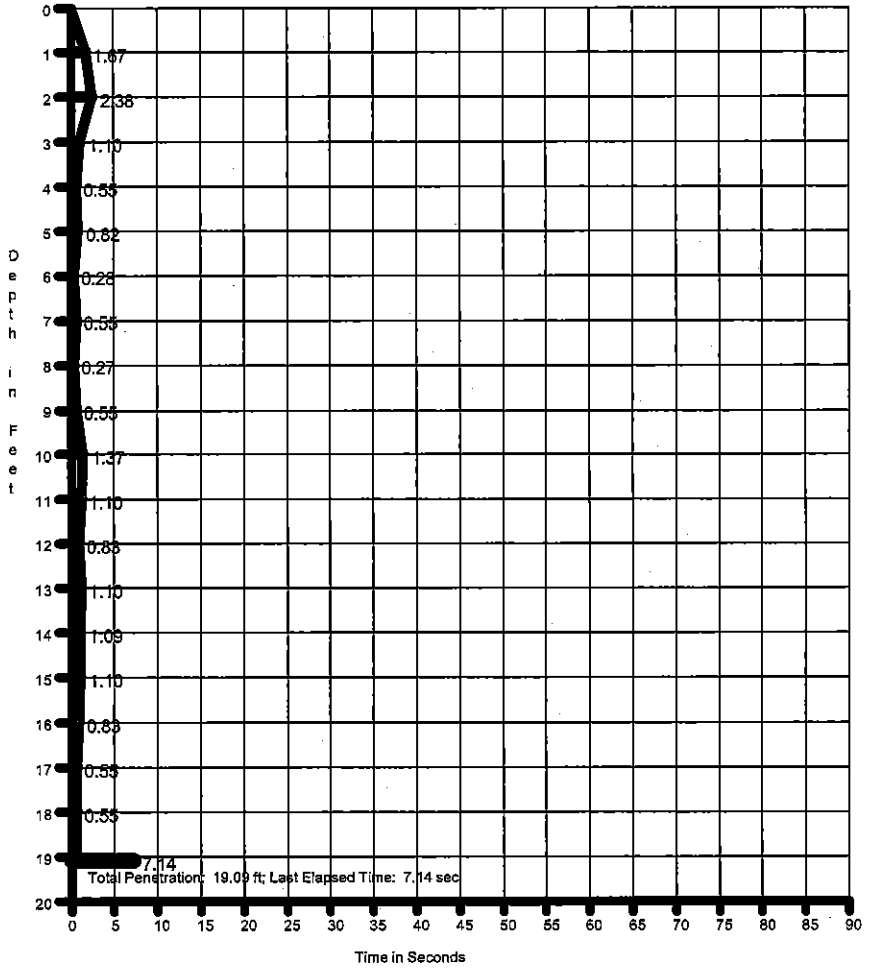
Date: 05/05/2006
Start Time: 9:10:01 AM
End Time: 9:10:55 AM

Penetration: 19.09 ft
Recovery: 12.4
W. D. Corrected: 16.8
W. D. Raw: 14.8

Easting: 12135064.8
Northing: 3526979.7
Coord. System: VA SOUTH 83

Lat: 36 59.292672
Long: 76 16.015650
Datum: WGS 84

Comment:



Penetration Graph for Core No. 06OV-27, Run 1

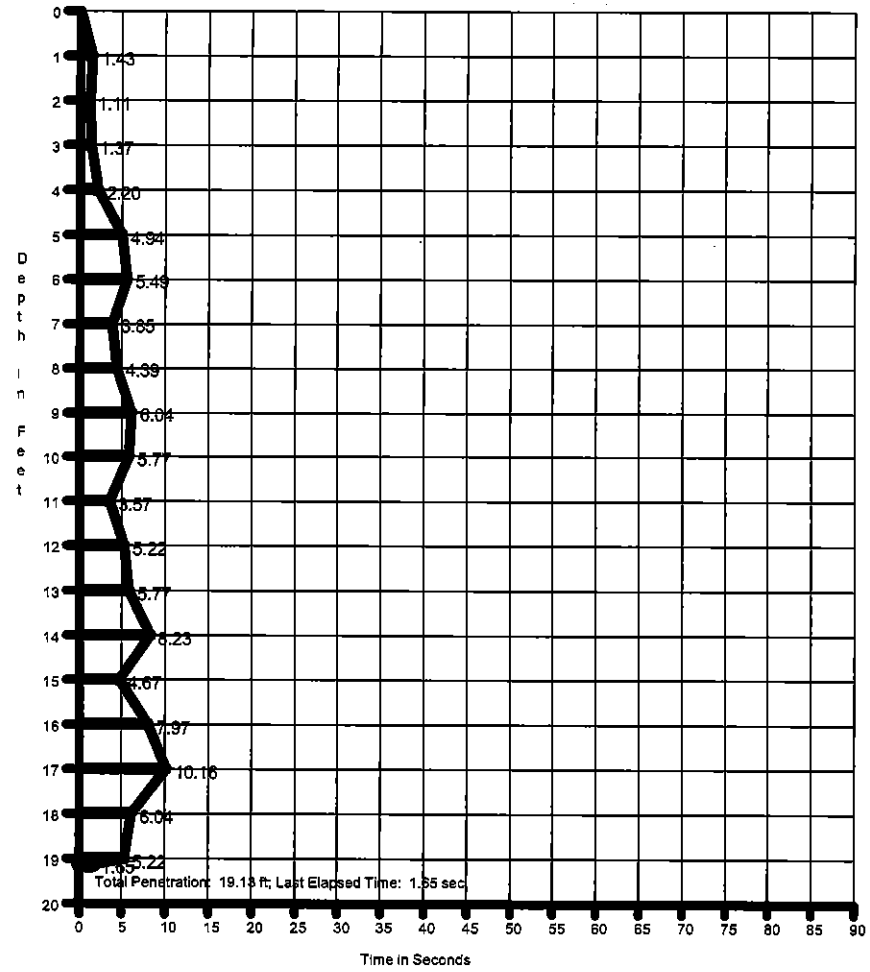
Date: 05/05/2006
Start Time: 11:17:35 AM
End Time: 11:19:33 AM

Penetration: 19.13 ft
Recovery: 19.5
W. D. Corrected: 18.3
W. D. Raw: 19.7

Easting: 12129976.0
Northing: 3528047.6
Coord. System: VA SOUTH 83

Lat: 36 59.488324
Long: 76 17.055596
Datum: WGS 84

Comment:



Penetration Graph for Core No. 06OV-28, Run 1

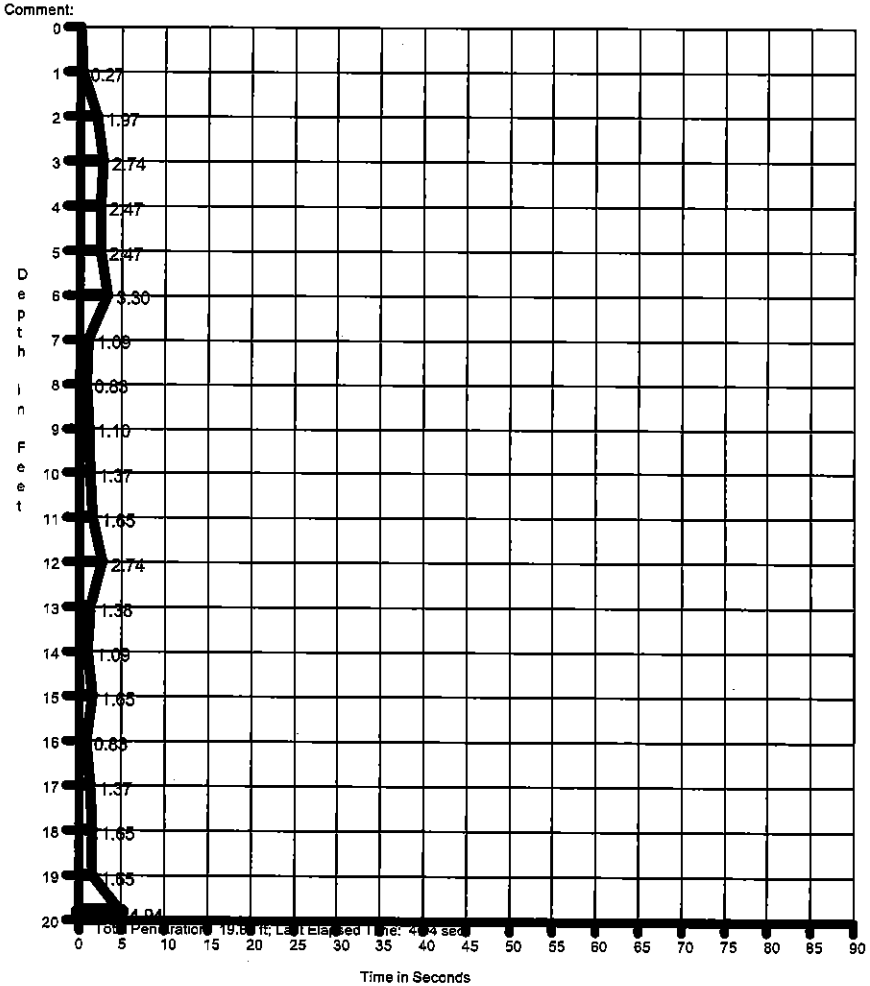
Date: 05/05/2006
Start Time: 11:53:50 AM
End Time: 11:54:58 AM

Penetration: 19.82 ft
Recovery: 18.8
W. D. Corrected: 15.4
W. D. Raw: 16.5

Easting: 12132021.1
Northing: 3527993.6
Coord. System: VA SOUTH 83

Lat: 36 59.471660
Long: 76 16.635909
Datum: WGS 84

Comment:



Penetration Graph for Core No. 06OV-29, Run 1

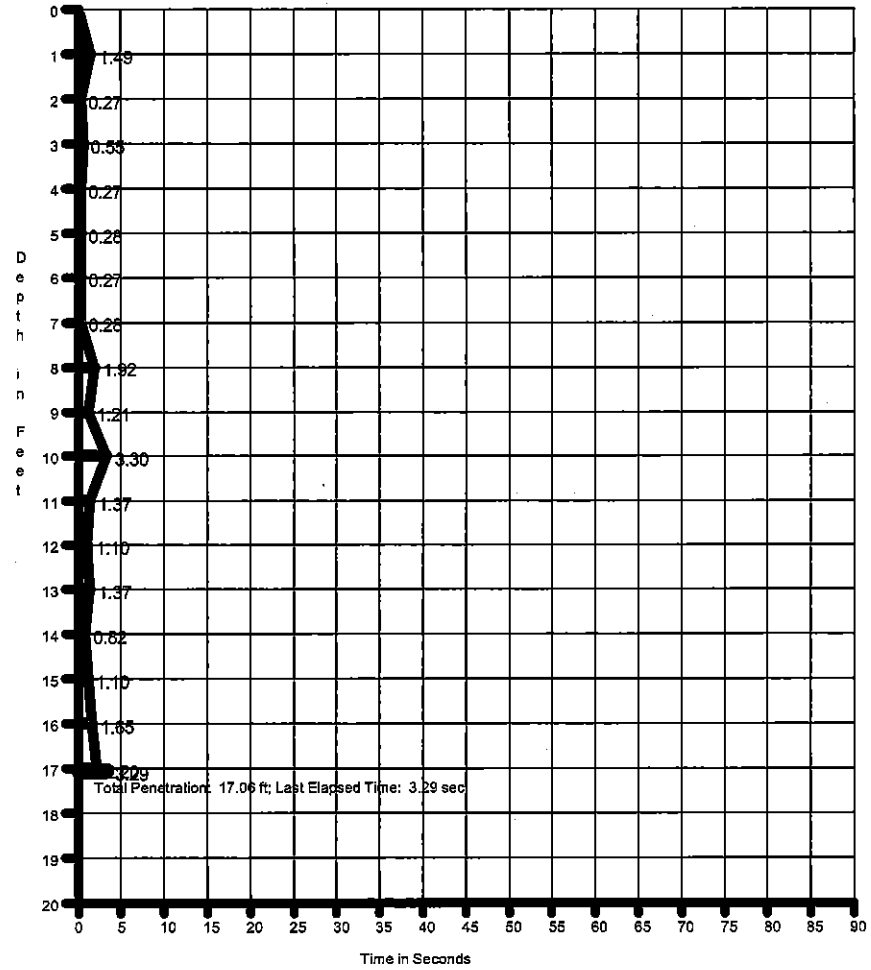
Date: 05/05/2006
Start Time: 8:42:02 AM
End Time: 8:43:36 AM

Penetration: 17.06 ft
Recovery: 11.4
W. D. Corrected:
W. D. Raw: 17.2

Easting: 12134110.2
Northing: 3527945.4
Coord. System: VA SOUTH 83

Lat: 36 59.455514
Long: 76 16.206908
Datum: WGS 84

Comment:



Penetration Graph for Core No. OV06-30, Run 1

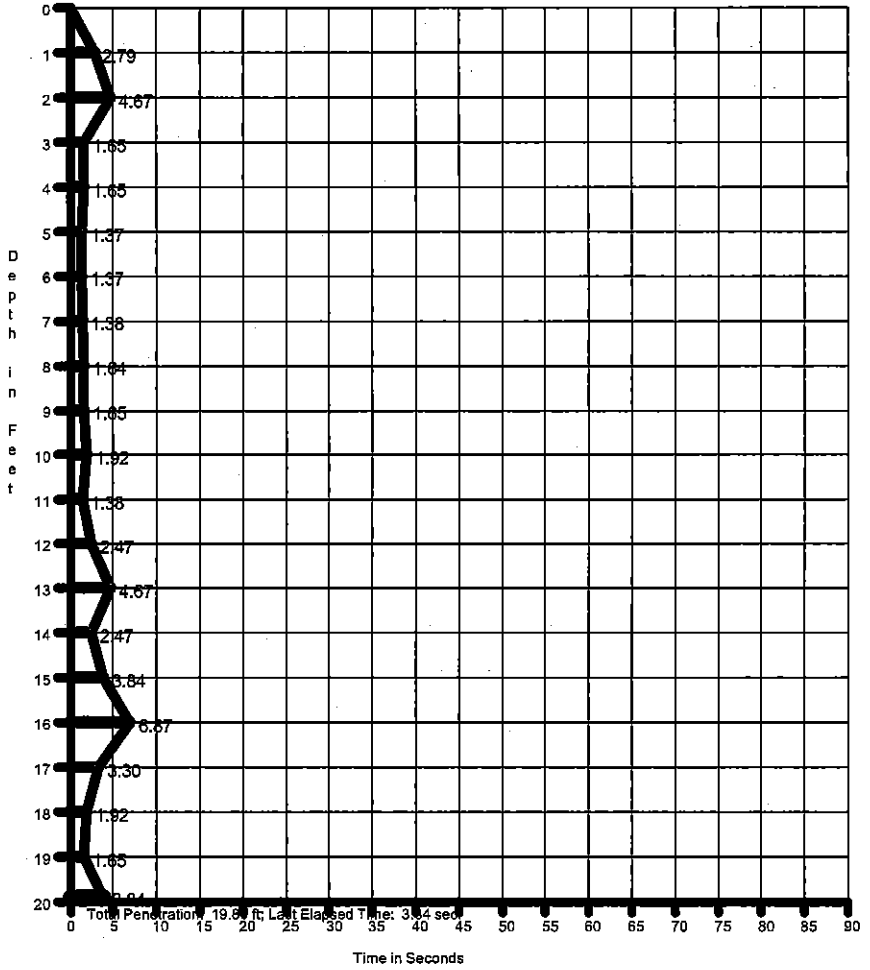
Date: 05/10/2006
Start Time: 12:20:45 PM
End Time: 12:21:58 PM

Penetration: 19.89 ft
Recovery: 17.5
W. D. Corrected: 19.7
W. D. Raw: 22.5

Easting: 12133535.7
Northing: 3529965.1
Coord. System: VA SOUTH 83

Lat: 36 59.790422
Long: 76 16.315203
Datum: WGS 84

Comment:



Penetration Graph for Core No. 06OV-31, Run 1

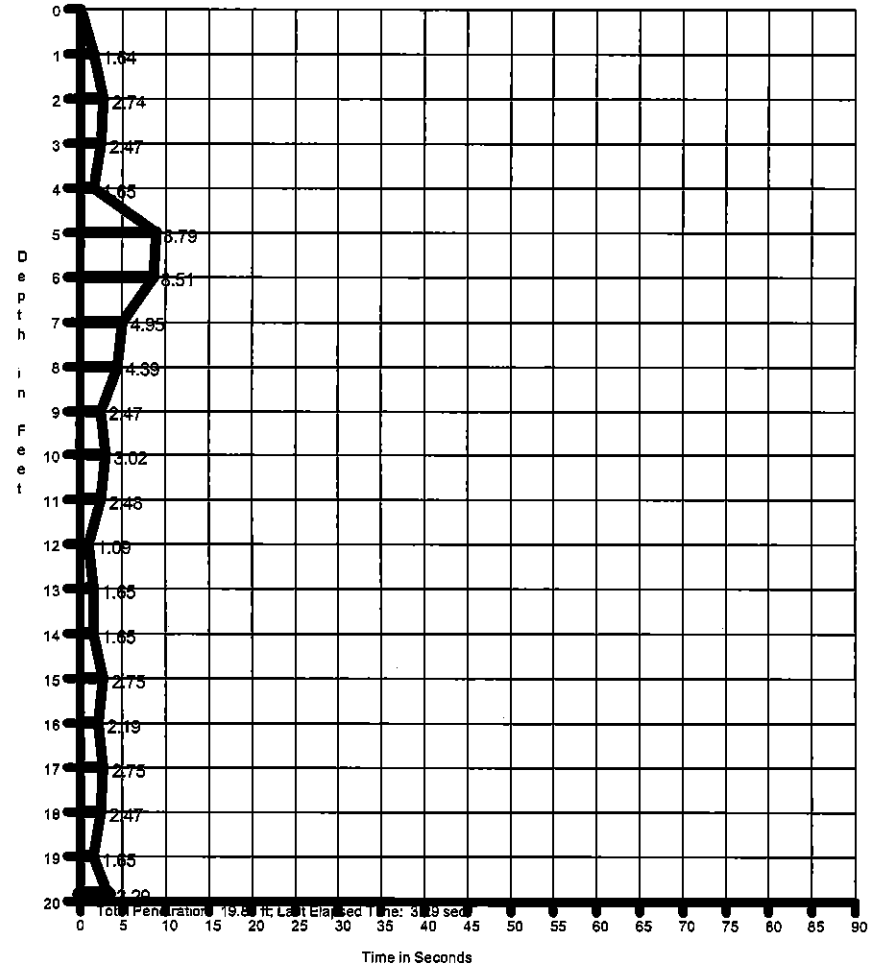
Date: 05/05/2006
Start Time: 10:24:24 AM
End Time: 10:25:38 AM

Penetration: 19.83 ft
Recovery: 19.2
W. D. Corrected: 8.44
W. D. Raw: 10.2

Easting: 12130024.8
Northing: 3526986.7
Coord. System: VA SOUTH 83

Lat: 36 59.313378
Long: 76 17.050697
Datum: WGS 84

Comment:



Penetration Graph for Core No. 06OV-32, Run 1

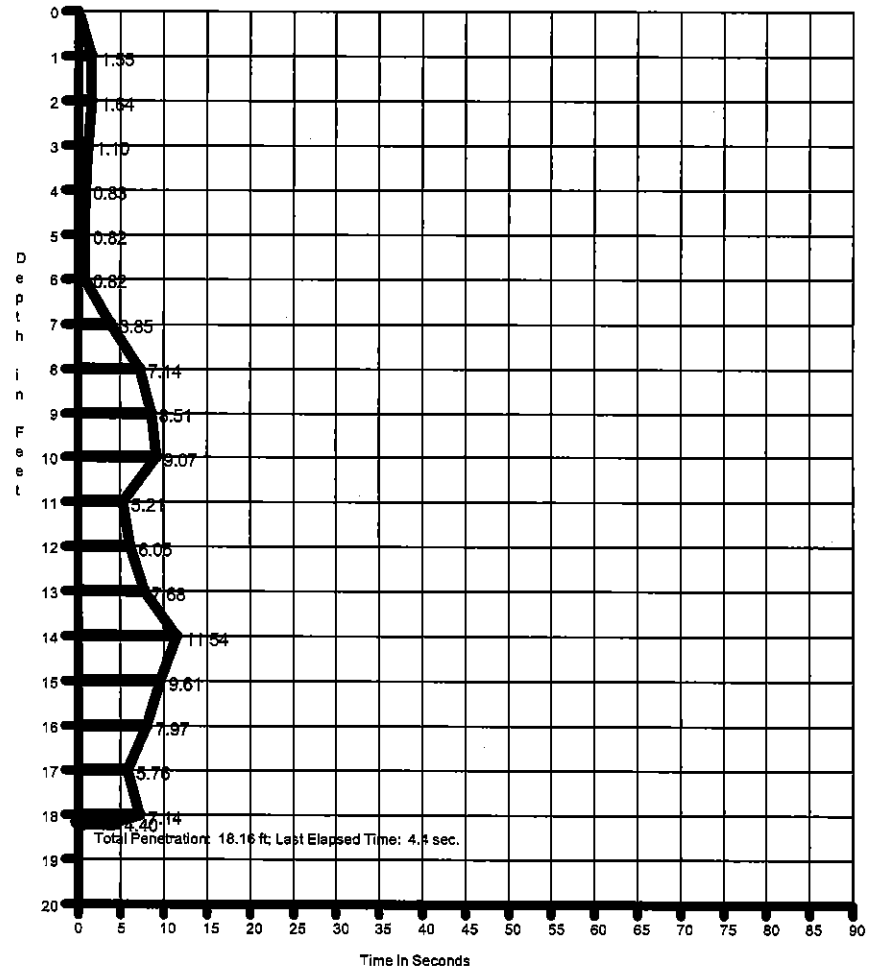
Date: 05/05/2006
Start Time: 12:26:27 PM
End Time: 12:28:46 PM

Penetration: 18.16 ft
Recovery: 16.6
W. D. Corrected: 21.5
W. D. Raw: 22.5

Easting: 12131042.3
Northing: 3528979.3
Coord. System: VA SOUTH 83

Lat: 36 59.637717
Long: 76 16.832160
Datum: WGS 84

Comment:



Penetration Graph for Core No. 06OV-33, Run 1

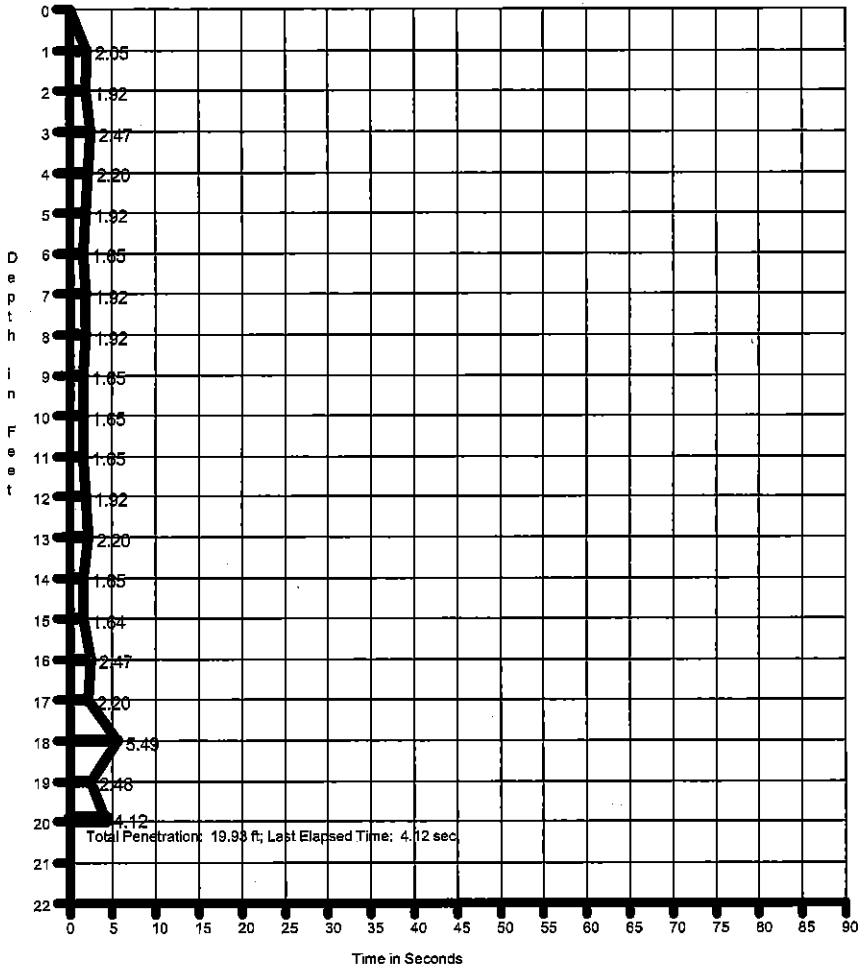
Date: 05/10/2006
Start Time: 11:14:05 AM
End Time: 11:15:08 AM

Penetration: 19.93 ft
Recovery: 16.4
W. D. Corrected: 14.05
W. D. Raw: 17.0

Easting: 12132979.5
Northing: 3528996.5
Coord. System: VA SOUTH 83

Lat: 36 59.63309
Long: 76 16.43404
Datum: WGS 84

Comment:



Penetration Graph for Core No. OV06-34, Run 1

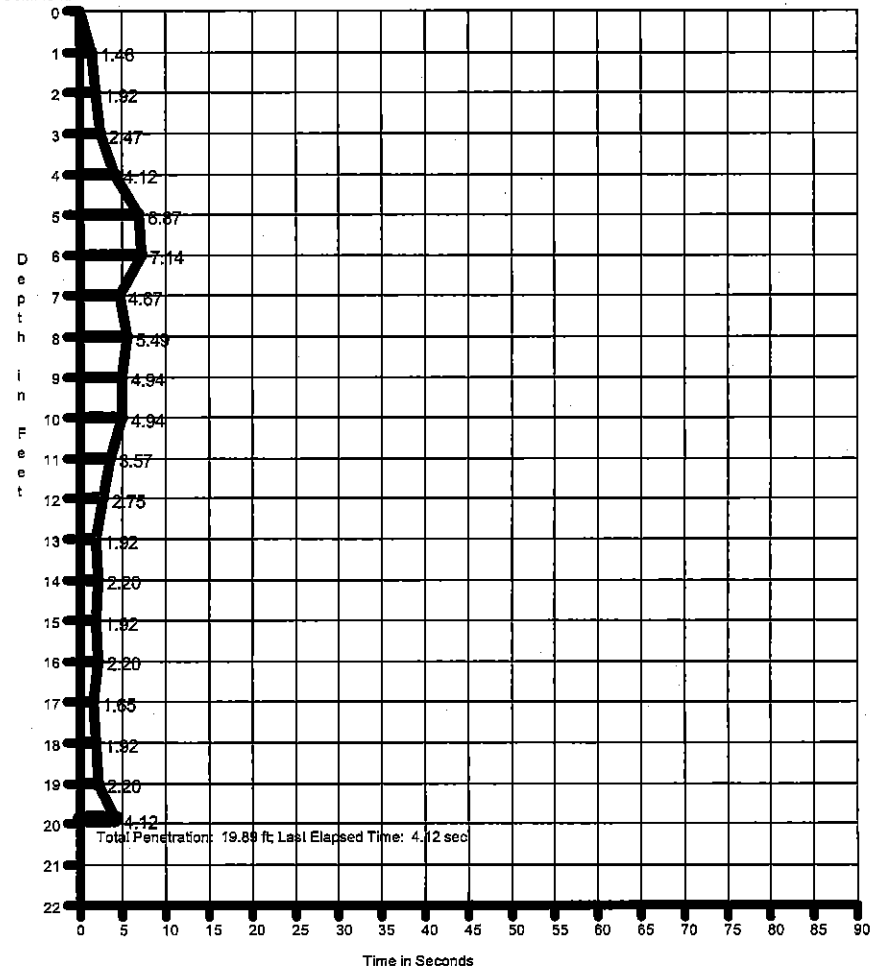
Date: 05/10/2006
Start Time: 2:49:21 PM
End Time: 2:50:41 PM

Penetration: 19.89 ft
Recovery: 18.3
W. D. Corrected: 9.3
W. D. Raw: 11.0

Easting: 12134697.5
Northing: 3529072.8
Coord. System: VA SOUTH 83

Lat: 36 59.638897
Long: 76 16.080912
Datum: WGS 84

Comment:



Penetration Graph for Core No. OV06-35, Run 1

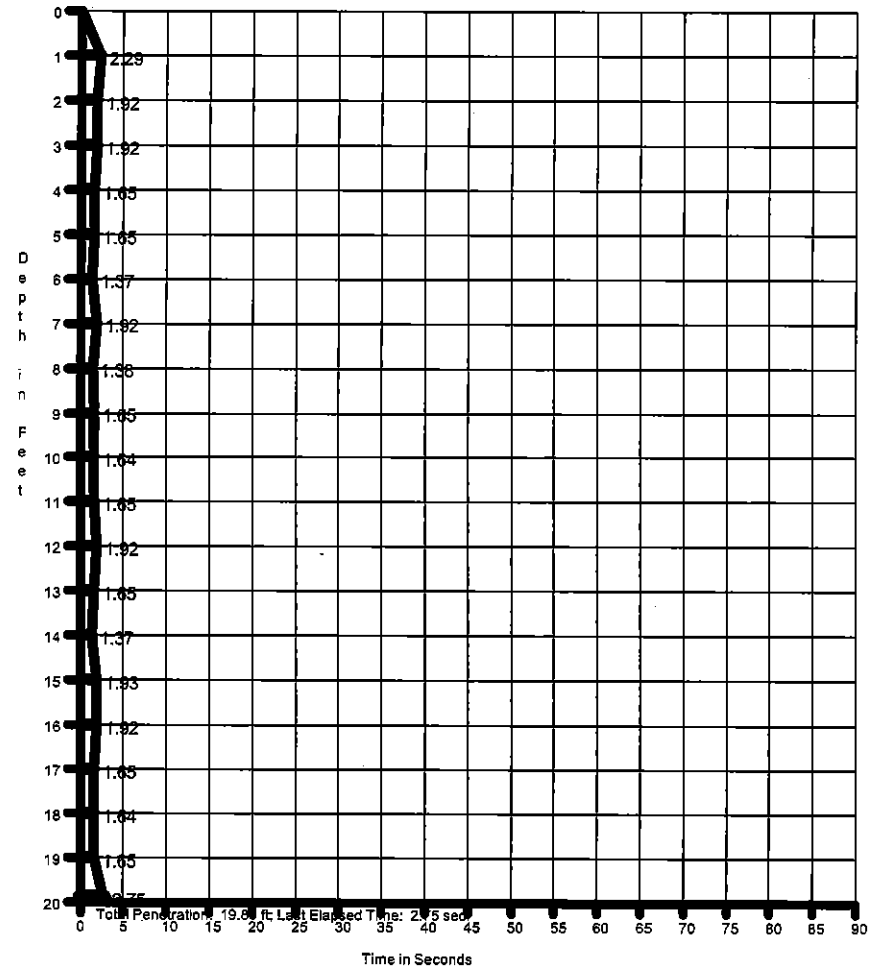
Date: 05/10/2006
Start Time: 2:27:49 PM
End Time: 2:28:51 PM

Penetration: 19.89 ft
Recovery: 17.4
W. D. Corrected: 15.6
W. D. Raw: 17.5

Easting: 12134994.0
Northing: 3529988.7
Coord. System: VA SOUTH 83

Lat: 36 59.788639
Long: 76 16.015567
Datum: WGS 84

Comment:



Penetration Graph for Core No. 06OV-36, Run 1

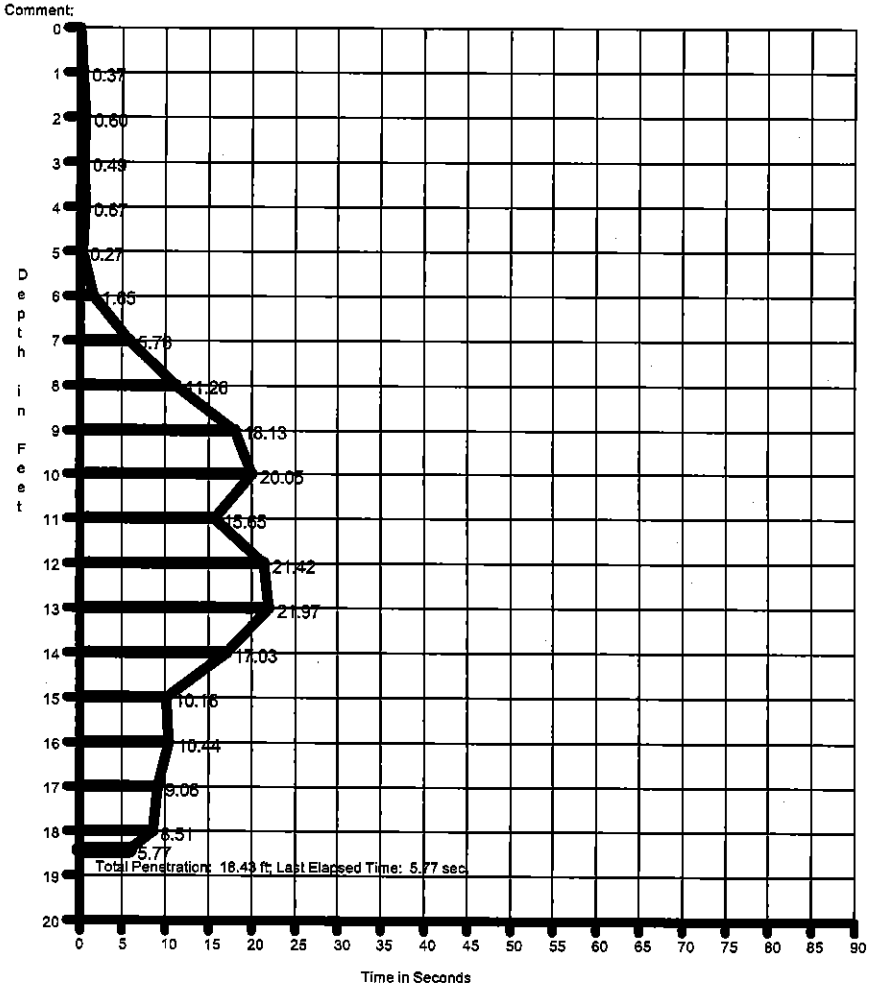
Date: 05/05/2006
Start Time: 1:00:29 PM
End Time: 1:03:26 PM

Penetration: 18.43 ft
Recovery: 18.8
W. D. Corrected: 23.3
W. D. Raw: 24.3

Easting: 12129969.1
Northing: 3528956.9
Coord. System: VA SOUTH 83

Lat: 36 59.637933
Long: 76 17.052565
Datum: WGS 84

Comment:



Penetration Graph for Core No. 06OV-37, Run 1

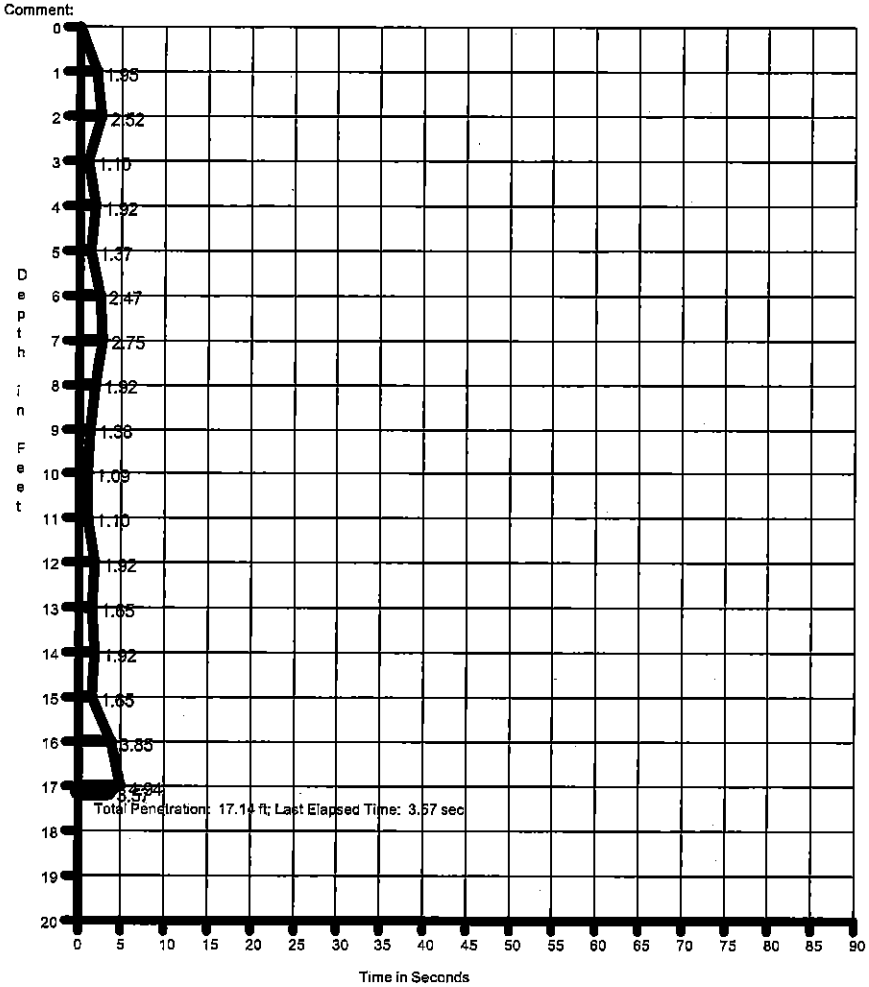
Date: 05/05/2006
Start Time: 3:28:40 PM
End Time: 3:29:42 PM

Penetration: 17.14 ft
Recovery: 15.7
W. D. Corrected: 28.4
W. D. Raw: 29.8

Easting: 12131990.5
Northing: 3530016.3
Coord. System: VA SOUTH 83

Lat: 36 59.804849
Long: 76 16.632376
Datum: WGS 84

Comment:



Total Penetration: 17.14 ft; Last Elapsed Time: 3.57 sec

Penetration Graph for Core No. OV06-38, Run 1

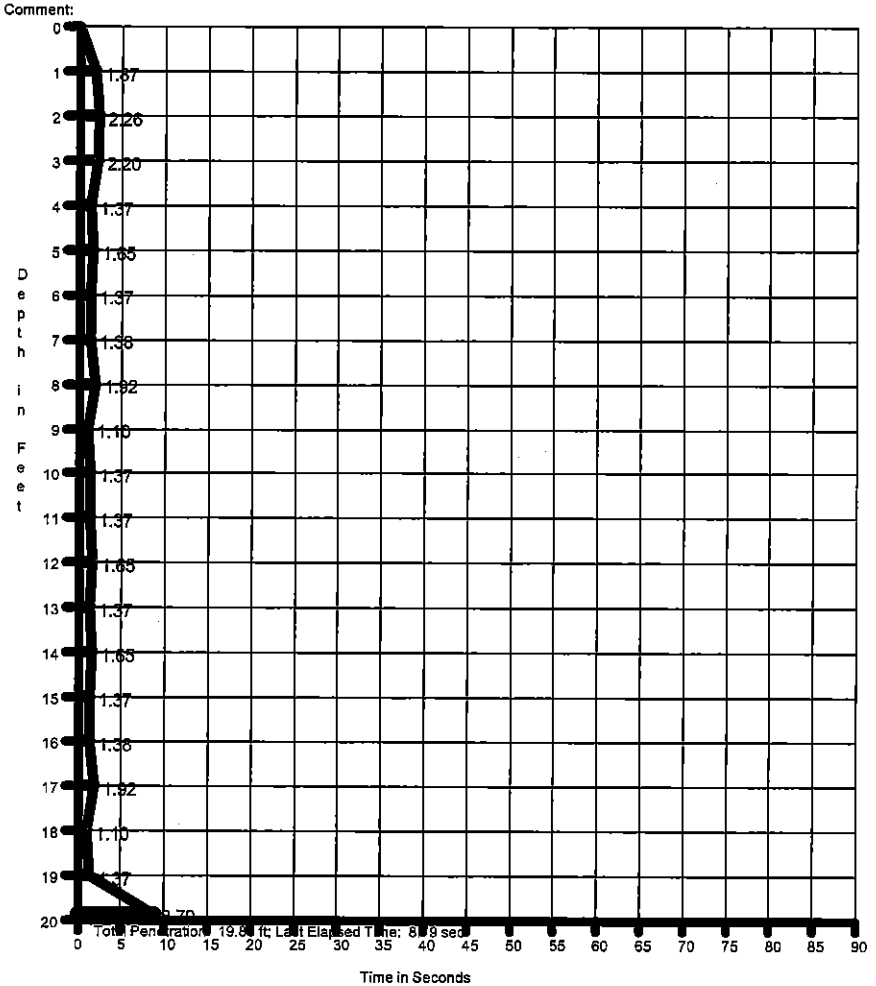
Date: 05/10/2006
Start Time: 1:47:25 PM
End Time: 1:48:32 PM

Penetration: 19.86 ft
Recovery: 13.0
W. D. Corrected: 26.0
W. D. Raw: 27.0

Easting: 12135020.7
Northing: 3531007.3
Coord. System: VA SOUTH 83

Lat: 36 59.956357
Long: 76 16.005119
Datum: WGS 84

Comment:



Total Penetration: 19.86 ft; Last Elapsed Time: 8.79 sec

Penetration Graph for Core No. 06OV-39, Run 1

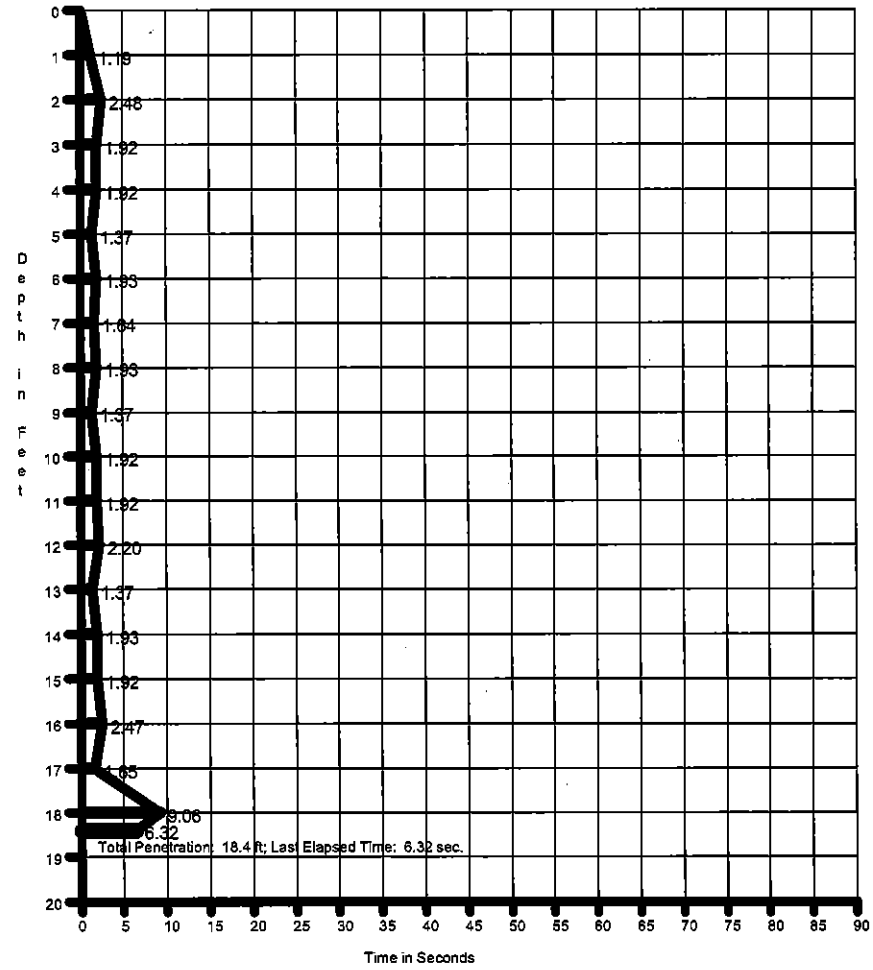
Date: 05/10/2006
Start Time: 10:33:59 AM
End Time: 10:35:25 AM

Penetration: 18.40 ft
Recovery: 16.4
W. D. Corrected: 17.0
W. D. Raw: 20.0

Easting: 12133009.6
Northing: 3528008.9
Coord. System: VA SOUTH 83

Lat: 36 59.470194
Long: 76 16.432446
Datum: WGS 84

Comment:

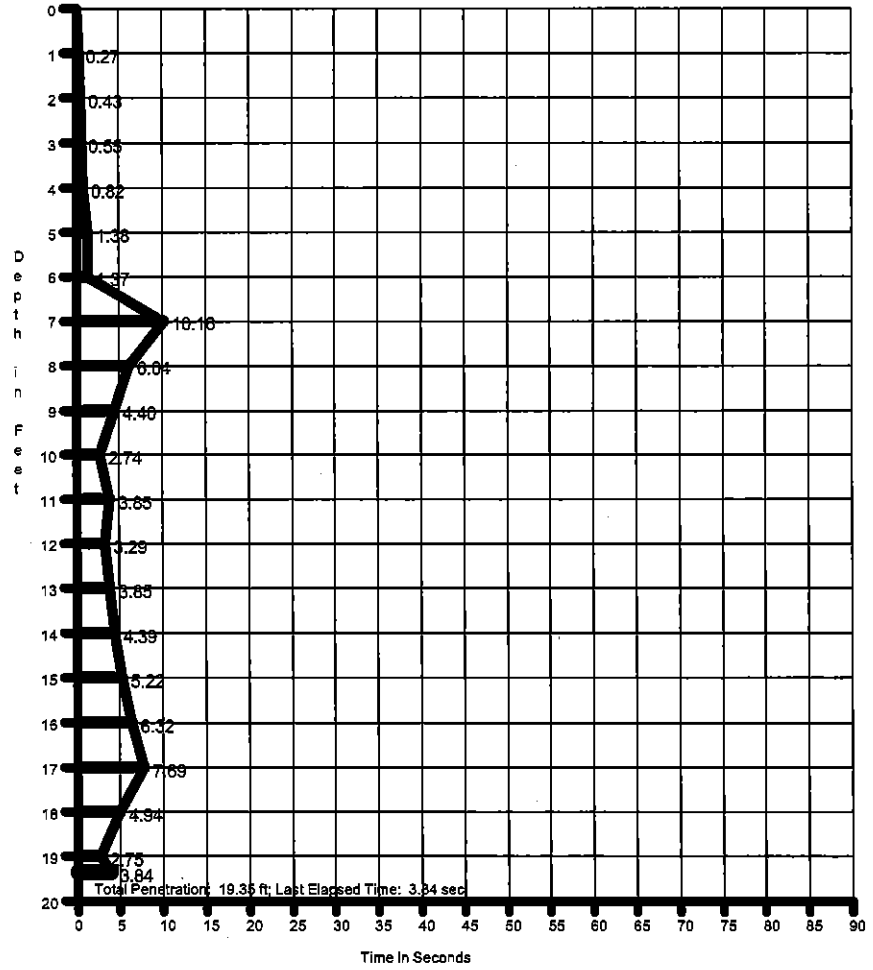


Penetration Graph for Core No. 06OV-40, Run 1

Date: 05/05/2006
Start Time: 2:42:44 PM
End Time: 2:44:33 PM

Penetration: 19.35 ft
Recovery: 15.8
W. D. Corrected: 27.4
W. D. Raw: 28.5

Easting: 12128998.6
Northing: 3528989.3
Coord. System: VA SOUTH 83

Lat: 36 59.647394
Long: 76 17.251754
Datum: WGS 84

Comment: