

**FINAL REPORT**

---

**VIBRACORE SAMPLING  
SOUTH AMELIA ISLAND SAND SEARCH**

---

**Prepared for:**

**Olsen Associates, Inc.  
4438 Herschel Street  
Jacksonville, FL 32210**

**Submitted by:**



**Alpine Ocean Seismic Survey, Inc.  
70 Oak Street  
Norwood, NJ 07648**

**August 15, 2007**



## TABLE OF CONTENTS

### 1.0 Introduction

#### 1.1 Summary of Operations

### 2.0 Equipment and Personnel

#### 2.1 Survey Vessel

#### 2.2 Positioning System

#### 2.3 Navigation Data Acquisition and Logging System

#### 2.4 Digital Echosounder

#### 2.5 Vibracore

#### 2.6 Personnel

### 3.0 Vibracore Data Presentation

#### 3.1 Table 1: Locations

#### 3.2 Penetration Graphs

### Appendices

#### 1 Navigation Logs (handwritten)

#### 2 Core Logs (handwritten)



## 1.0 Introduction

Alpine Ocean Seismic Survey, Inc. (Alpine), under contract to Olsen Associates, has conducted a Vibracore survey offshore of Amelia Island, Florida. The work was conducted using an Alpine model 270 pneumatic Vibracore, as deployed from the R/V Atlantic Twin.

The purpose of the project was to collect sediment samples for use in characterization of the work area as a potential offshore borrow site for beach renourishment. Samples were collected at 53 locations within the work area. The cores were delivered to SEA in Melbourne, Florida for core description and sediment analyses. The SEA report will be delivered under separate cover.

## 1.1 Summary of Operations

### July 29

06:11 Client on board. Leave dock.  
09:36 TGT B-1: refusal at 14.1'  
10:32 TGT B-1: jet to 13'  
11:04 TGT B-2: refusal at 14.2'  
11:45 TGT B-2: jet to 13'  
13:19 TGT B-27  
13:42 TGT B-26  
14:52 Return to dock.

### July 30

08:30 Client on board. Leave dock.  
10:11 TGT B-4: refusal at 11.9'  
10:52 TGT B-4: jet to 11'  
11:43 TGT B-5: refusal 9.7'  
12:25 TGT B-5: jet to 9'. Liner stuck in pipe: no recovery.  
12:57 TGT B-5: jet to 9'  
14:51 TGT B-41  
15:36 TGT B-48  
16:12 TGT B-49  
16:47 TGT B-47  
17:33 Head for dock.

### July 31

06:11 Client on board. Leave dock.  
07:37 TGT B-12  
08:33 TGT B-15  
09:02 TGT B-10  
09:25 TGT B-9  
09:53 TGT B-8  
10:16 TGT B-7



11:02 TGT B-14  
13:00 TGT B-17: too shallow. Not done.  
14:42 TGT B-28: wind and waves contrary. Not done. Standing by.  
16:11 TGT B-28 completed.  
16:38 TGT B-37  
17:06 Head for dock.

### **August 1**

06:34 Client on board. Leave dock.  
08:15 TGT B-50. Wind and waves contrary: not taken.  
10:30 Return to dock.

### **August 2**

05:42 Client on board. Leave dock.  
07:28 TGT B-53  
08:10 TGT B-52  
08:51 TGT B-51  
09:24 TGT B-43  
10:04 TGT B-40  
10:34 TGT B-34: 12.4' retention.  
10:57 TGT B-34: jet to 12'  
11:23 TGT B-35  
13:03 TGT B-31: tide change. Not done.  
13:35 TGT B-36  
14:15 TGT B-32  
15:10 Seas building to 5+ feet. Head for dock.

### **August 3**

Air compressor maintenance. Stand by.

### **August 4**

06:40 Leave dock.  
08:21 TGT B-3: too shallow: hit bottom.  
08:38 TGT B-18  
09:31 TGT B-19  
10:01 TGT B-20  
10:28 TGT B-17  
10:51 TGT B-16: refusal 15.5'  
11:34 TGT B-16: jet to 14'  
12:54 TGT B-21  
13:49 TGT B-22  
14:18 TGT B-30  
14:42 TGT B-33  
15:07 TGT B-31: refusal 11.85



16:01 TGT B-31: jet to 11'  
16:39 Head for dock.

### **August 5**

05:42 Client on board. Leave dock.  
07:33 TGT B-25: 12.9' retention.  
08:04 TGT B-25: jet to 12'  
08:32 TGT B-24  
09:01 TGT B-23  
09:31 TGT B-29  
10:20 TGT B-38  
10:40 TGT B-39  
11:05 TGT B-42  
12:31 TGT B-11 (150' N of target)  
13:04 TGT B-6 (400' SE of target): refusal at 9'  
13:36 TGT B-6: jet to 8.5'  
14:23 TGT B-3 (300' WNW of target)  
15:38 TGT B-31: jet to 12.5'  
16:23 TGT B-44  
17:21 TGT B-45  
17:48 TGT B-46  
18:42 TGT B-50 no jet  
18:56 Head for dock.

## **2.0 Equipment and Personnel**

### **2.1 Survey Vessel**

The R/V Atlantic Twin, a 90-foot steel catamaran hull research vessel with a 7-foot draft, was used as the platform for vibracoring operation. It has ample laboratory and deck space, an anchoring system, hydraulic crane, deck winches and an A-frame for vibracoring. The navigational equipment and echosounder, with associated computers, printer and display units are mounted in the pilothouse. The vessel has sleeping facilities to accommodate crew and survey staff during the survey period.

### **2.2 Positioning System**

A Trimble NT300D Differential GPS Navigation System was used throughout this operation. The DGPS system consists of a 12-channel satellite receiver and a built-in dual-channel radio beacon receiver, which obtains differential correction signals from the United States Coast Guard GPS transmitter in Jacksonville, Florida. A C-100 KVH Fluxgate compass provided heading information.



## 2.3 Navigation Data Acquisition and Logging System

The WGS-84 Geographic positions obtained by the GPS navigation system were converted into Florida State Plane (NAD 83) grid coordinate positions, using a computer and Hypack Max navigation software, version 6.2. The system consists of the following components:

- 1) Dell computer.
- 2) Color video monitor (helmsman's display).
- 3) Hypack Max software.

## 2.4 Digital Echosounder

An Innerspace 448 Digital Echosounder with a 200 KHz 8° transducer was used to collect water depths at the time of vibracoring. In order to calibrate the echo sounder, the speed of sound in the water was determined by bar check every morning during the survey and entered into the echosounder.

## 2.5 Vibracore

A model 271 B Alpine Pneumatic Vibracore configured to take cores 20 feet in length was used on this project. The model 271 B is a self-contained freestanding pneumatic Vibracore unit. It consists of: an air-driven vibratory hammer assembly; an aluminum H-beam which acts as the vertical guide for the vibrator; a set of four steel support pads and legs which hold the beam upright on the sea bottom; a steel coring pipe; a cutting edge; a core retainer; a clear lexan core liner; and a penetrometer which records time and depth of penetration of the core pipe into the sea bottom. An air hose array provides passage of compressed air from the compressor on deck to drive the Vibracore. Whenever refusal occurred with initial penetration of less than acceptable, or recovery was less than 80% of penetration, the sampled portion was removed from the pipe, a new liner inserted, and jet pump hose was attached just below the Vibracore head. The rig was lowered to the bottom and jetted to refusal depth of the prior run, the jet turned off and vibrator turned on, taking the additional part of the core.

## 2.6 Key Personnel

Captain, R/V Atlantic Twin	Darren McClave
Field Supervisor	Michael Sutherland
Navigator/Geologist	Michael Sutherland
Vibracore Technician	Steve Reynolds

## 2.7 Field Methods

The proposed location of each core was entered into the Hypack program, which



displays the location of the survey vessel relative to each selected core. The vessel was anchored within 50 feet of a given core location and the water depth recorded with the echo sounder. Once the vessel was determined to be in a stable position, the Vibracore was placed on the sea floor and the core conducted. In most cases, the Vibracore was able to penetrate to the desired depth on the first attempt. In those cases where refusal was encountered, the jetting technique was used to complete the core.

Once the Vibracore reached the desired core depth, the air power was turned off and the Vibracore secured to the side of the survey boat, where the sample was removed and placed on deck.

### **3.0 Vibracore Data Presentation**

Immediately upon removal of the plastic liner from the core pipe, the sediment filled liners were measured, marked, cut into sections and sealed. Shipboard descriptions were made and the heading data was entered onto the shipboard log sheet. This data included date, time, location, water depth, penetration and recovery information. Table 1 presents a summary of the final core locations for all the samples.

The penetration graphs for each of the cores conducted are presented in section 3.2. The graph headers contain the core number, the location in state grid and latitude – longitude, the length of penetration and recovery, along with the raw and corrected water depths, and time of each core. The changes in rate of penetration with depth at each core are useful to the geologist in describing the core.



### 3.1 Table 1 – Vibracore Sample Listing

FL East, NAD 83					
Date	Core	Easting	Northing	North Latitude	West Longitude
7/29/2007	B-1	374021	2243245	30° 30.3501'	81° 23.9996'
7/29/2007	B-1 r2 JET	374020	2243207	30° 30.2263'	81° 24.0124'
7/29/2007	B-2	374166	2243898	30° 30.3403'	81° 23.9968'
7/29/2007	B-2 r2 JET	374191	2243904	30° 30.3471'	81° 23.9862'
7/29/2007	B-3	373290	2744459	30° 30.7247'	81° 24.1380'
7/30/2007	B-4	373950	2245064	30° 30.5386'	81° 24.0749'
7/30/2007	B-4 r2 JET	373955	2245078	30° 30.5311'	81° 24.0538'
7/30/2007	B-5	373609	2246315	30° 30.7408'	81° 24.1094'
7/30/2007	B-5 r2 JET	373603	2246325	30° 30.7575'	81° 24.0949'
8/5/2007	B-6	373460	2245418	30° 30.5827'	81° 24.1073'
8/5/2007	B-6 r2 JET	373486	2248438	30° 30.5866'	81° 24.1009'
7/31/2007	B-7	372645	2244917	30° 30.5210'	81° 24.2881'
7/31/2007	B-8	372271	2244436	30° 30.4353'	81° 24.3588'
7/31/2007	B-9	371485	2244989	30° 30.5239'	81° 24.5039'
7/31/2007	B-10	371850	2245512	30° 30.6080'	81° 24.4335'
8/5/2007	B-11	372359	2246372	30° 30.7402'	81° 24.3192'
7/31/2007	B-12	372861	2246963	30° 30.8433'	81° 24.2591'
7/31/2007	B-13	372150	2247719	30° 30.9689'	81° 24.3747'
7/31/2007	B-14	371591	2246860	30° 30.8368'	81° 24.5008'
7/31/2007	B-15	371033	2246010	30° 30.7088'	81° 24.5980'
8/4/2007	B-16	370219	2246620	30° 30.7812'	81° 24.7258'
8/4/2007	B-16 r2 JET	370227	2246614	30° 30.7805'	81° 24.7251'
8/4/2007	B-17	370805	2247531	30° 30.9283'	81° 24.6151'
8/4/2007	B-18	370526	2248403	30° 31.0731'	81° 24.6710'
8/4/2007	B-19	370137	2248020	30° 30.7408'	81° 24.1094'
8/4/2007	B-20	369978	2247443	30° 30.9185'	81° 24.7760'
8/4/2007	B-21	369503	2247123	30° 30.8651'	81° 24.8660'
8/4/2007	B-22	368808	2247660	30° 30.9512'	81° 24.9985'
8/5/2007	B-23	369191	2248150	30° 31.0235'	81° 24.9263'
8/5/2007	B-24	369413	2248741	30° 31.1212'	81° 24.8843'
8/5/2007	B-25	370021	2248914	30° 30.1501'	81° 24.7637'
8/5/2007	B-25 r2 JET	370012	2248916	30° 31.1497'	81° 24.7705'



7/29/2007	B-26	369227	2250007	30° 31.3340'	81° 24.9264'
7/29/2007	B-27	369221	2249539	30° 31.2702'	81° 24.9015'
7/31/2007	B-28	368522	2249385	30° 31.2455'	81° 25.0611'
8/5/2007	B-29	368278	2248739	30° 31.1278'	81° 25.1022'
8/4/2007	B-30	368080	2248178	30° 31.0353'	81° 25.1368'
8/4/2007	B-31	367563	2248590	30° 31.0965'	81° 25.2305'
8/4/2007	B-31 r2 JET	367557	2248584	30° 31.1154'	81° 25.2330'
8/4/2007	B-31 r3 JET	367555	2248600	30° 31.1015'	81° 25.2315'
8/2/2007	B-32	367754	2250032	30° 31.3368'	81° 25.1915'
8/4/2007	B-33	367870	2247691	30° 30.9560'	81° 25.1802'
8/2/2007	B-34	366164	2248972	30° 31.1661'	81° 25.4993'
8/2/2007	B-34 r2 JET	366153	2248959	30° 31.1640'	81° 25.5007'
8/2/2007	B-35	367048	2248900	30° 31.1539'	81° 25.3298'
8/2/2007	B-36	367393	2249381	30° 31.2302'	81° 25.2063'
7/31/2007	B-37	368154	2250495	30° 31.4422'	81° 25.1457'
8/5/2007	B-38	366949	2250137	30° 31.3569'	81° 25.3497'
8/5/2007	B-39	36611	2249903	30° 31.3212'	81° 25.4176'
8/2/2007	B-40	366987	2249600	30° 31.2697'	81° 25.5328'
7/30/2007	B-41	368597	2250994	30° 31.5243'	81° 25.0328'
8/5/2007	B-42	365676	2250258	30° 31.3776'	81° 25.5968'
8/2/2007	B-43	365372	2250920	30° 31.4839'	81° 25.6506'
8/5/2007	B-44	365941	2251000	30° 31.4947'	81° 25.5396'
8/5/2007	B-45	366488	2251289	30° 31.5461'	81° 25.4370'
8/5/2007	B-46	366933	2251073	30° 31.5064'	81° 25.3511'
7/30/2007	B-47	367591	2251510	30° 31.5930'	81° 25.2523'
7/30/2007	B-48	368252	2251861	30° 31.6533'	81° 25.1431'
7/30/2007	B-49	367438	2242360	30° 31.7254'	81° 25.2974'
7/30/2007	B-50	366982	2251730	30° 31.6178'	81° 25.3430'
8/2/2007	B-51	365340	2251412	30° 31.5666'	81° 25.6565'
8/2/2007	B-52	365260	2241943	30° 31.6534'	81° 25.6745'
8/2/2007	B-53	365795	2251931	30° 31.6660'	81° 25.5895'



## 3.2 Penetration Graphs

# Penetration Graph for Core No. B-1, Run 1

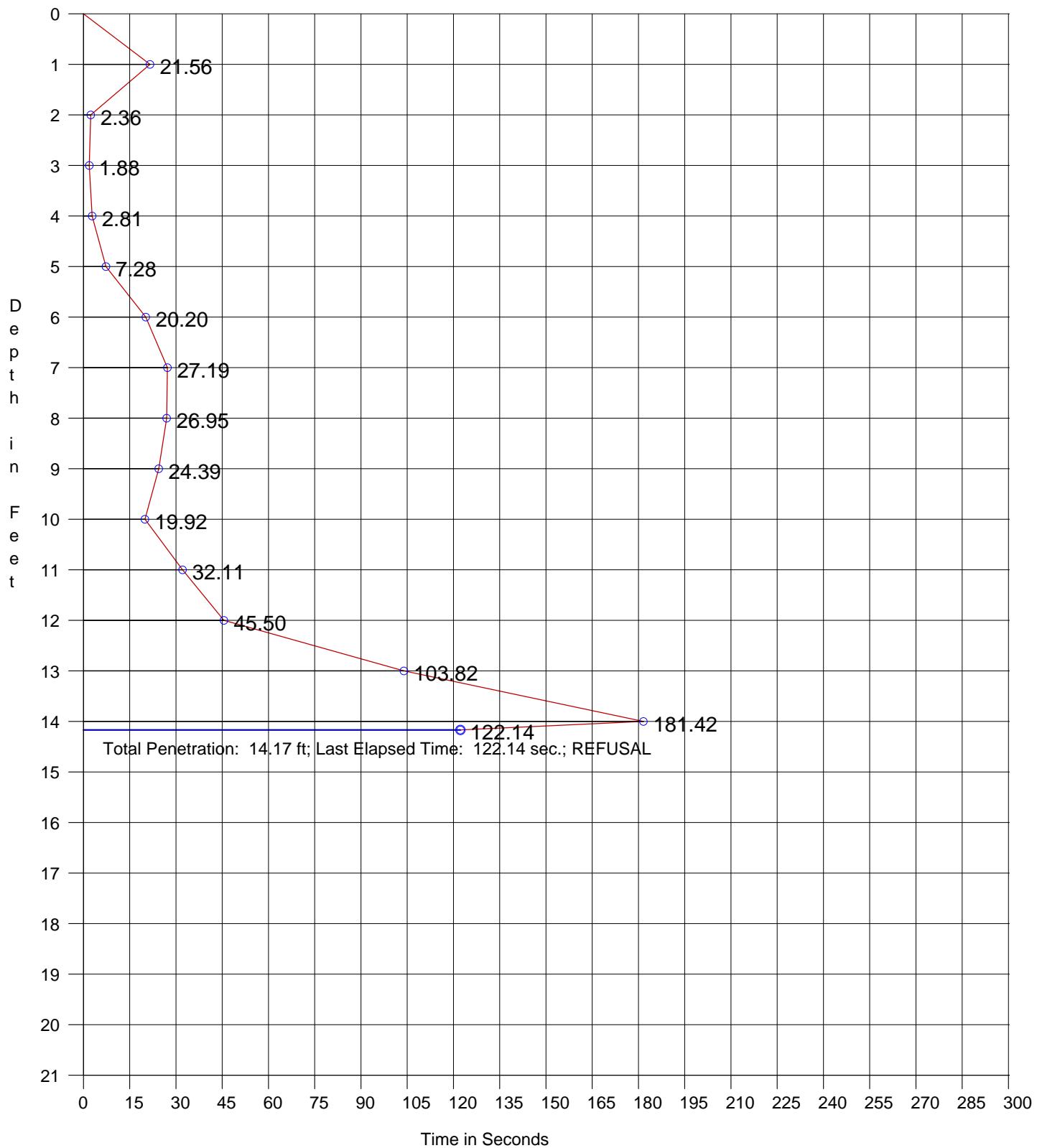
Date: 7/29/2007  
Start Time: 8:52:33 AM  
End Time: 9:03:13 AM

Penetration: 14.17 ft  
Recovery: 13.9  
W. D. Corrected: 10.9  
W. D. Raw: 15.5

Easting: 374021  
Northing: 2243245  
Coord. System: FL East

Lat: 30d 30.2501' N  
Long: 81d 23.9996' W  
Datum: NAD-27

Comment:



## Penetration Graph for Core No. B-1, Run 2

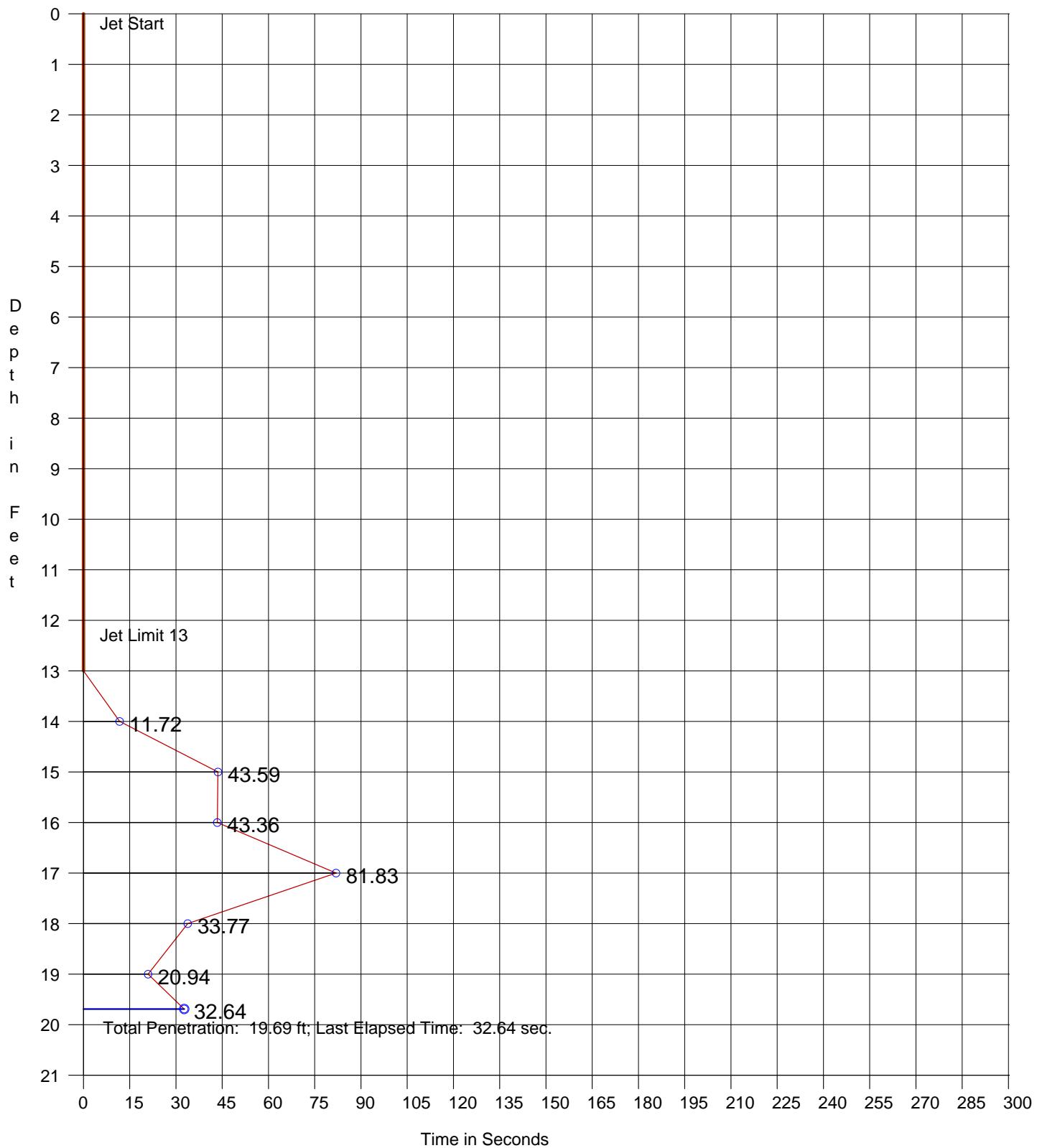
Date: 7/29/2007  
Start Time: 9:59:09 AM  
End Time: 10:05:07 AM

Penetration: 19.69 ft  
Recovery: 4.5  
W. D. Corrected: 11.3  
W. D. Raw: 15.5

Easting: 374070  
Northing: 2243207  
Coord. System: FL E. NAD-83

Lat: 81d 24.0124' N  
Long: 30d 30.2263' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-2, Run 1

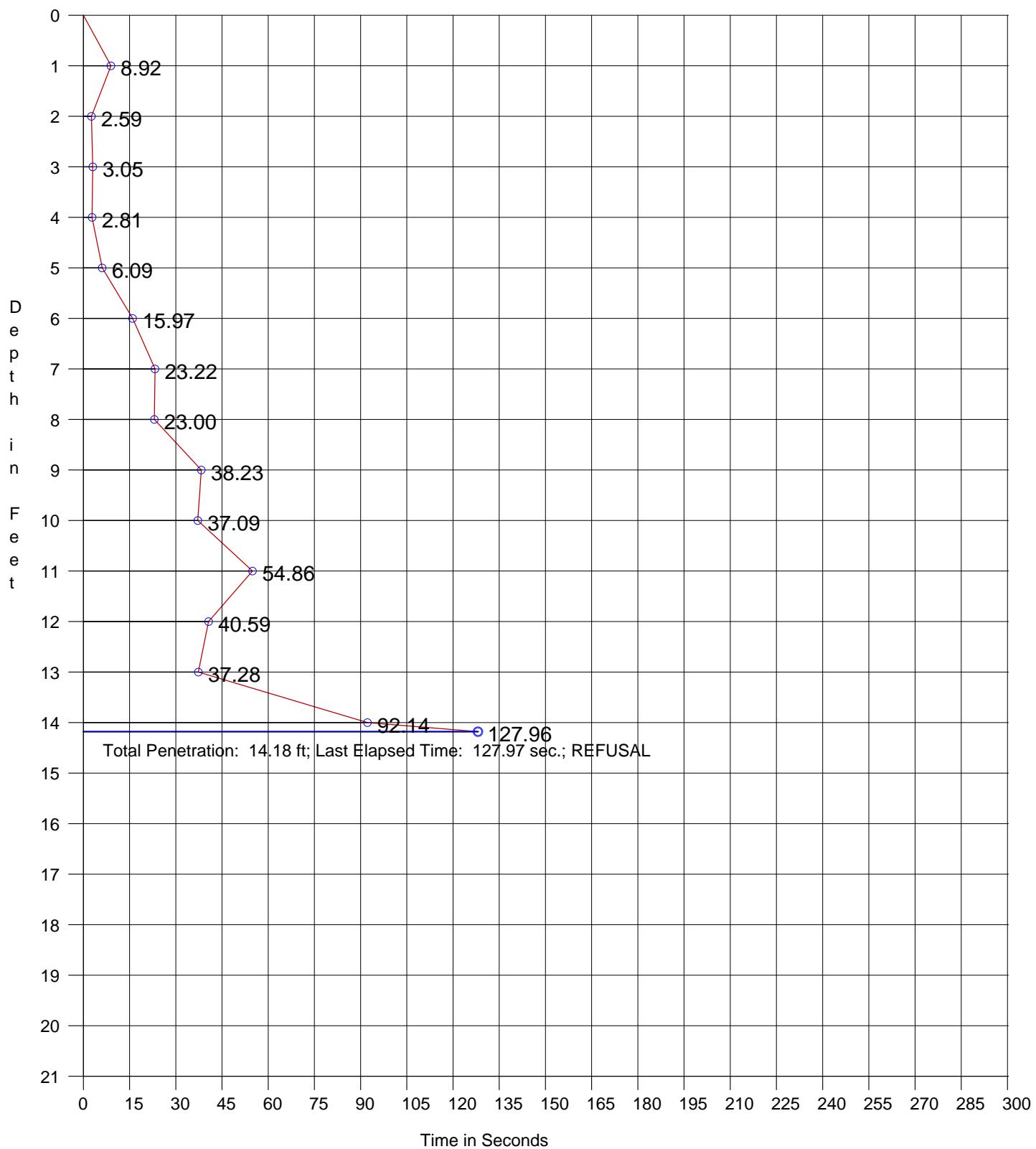
Date: 7/29/2007  
Start Time: 10:39:19 AM  
End Time: 10:47:53 AM

Penetration: 14.18 ft  
Recovery: 13.5  
W. D. Corrected: 8.4  
W. D. Raw: 12

Easting: 374166  
Northing: 2243898  
Coord. System: FL East

Lat: 30d 30.3403' N  
Long: 81d 23.9968' W  
Datum: NAD-27

Comment:



## Penetration Graph for Core No. B-2, Run 2

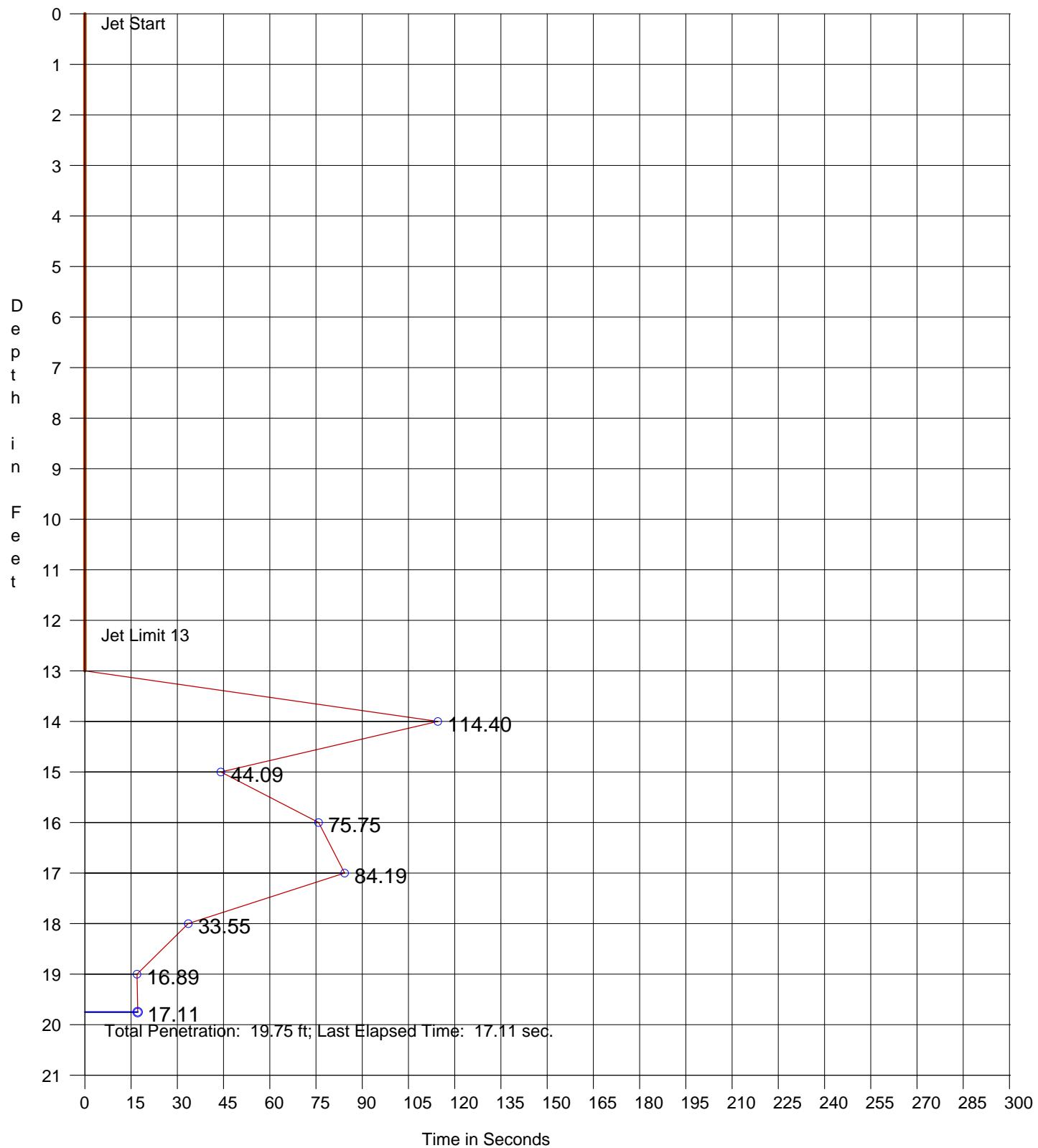
Date: 7/29/2007  
Start Time: 11:10:21 AM  
End Time: 11:17:39 AM

Penetration: 19.75 ft  
Recovery: 7.9  
W. D. Corrected: 9  
W. D. Raw: 12

Easting: 374191  
Northing: 2243904  
Coord. System: FL E. NAD-83

Lat: 30d 30.3471' N  
Long: 81d 23.9862' W  
Datum: MLLW

Comment:



## Penetration Graph for Core No. B-3, Run 1

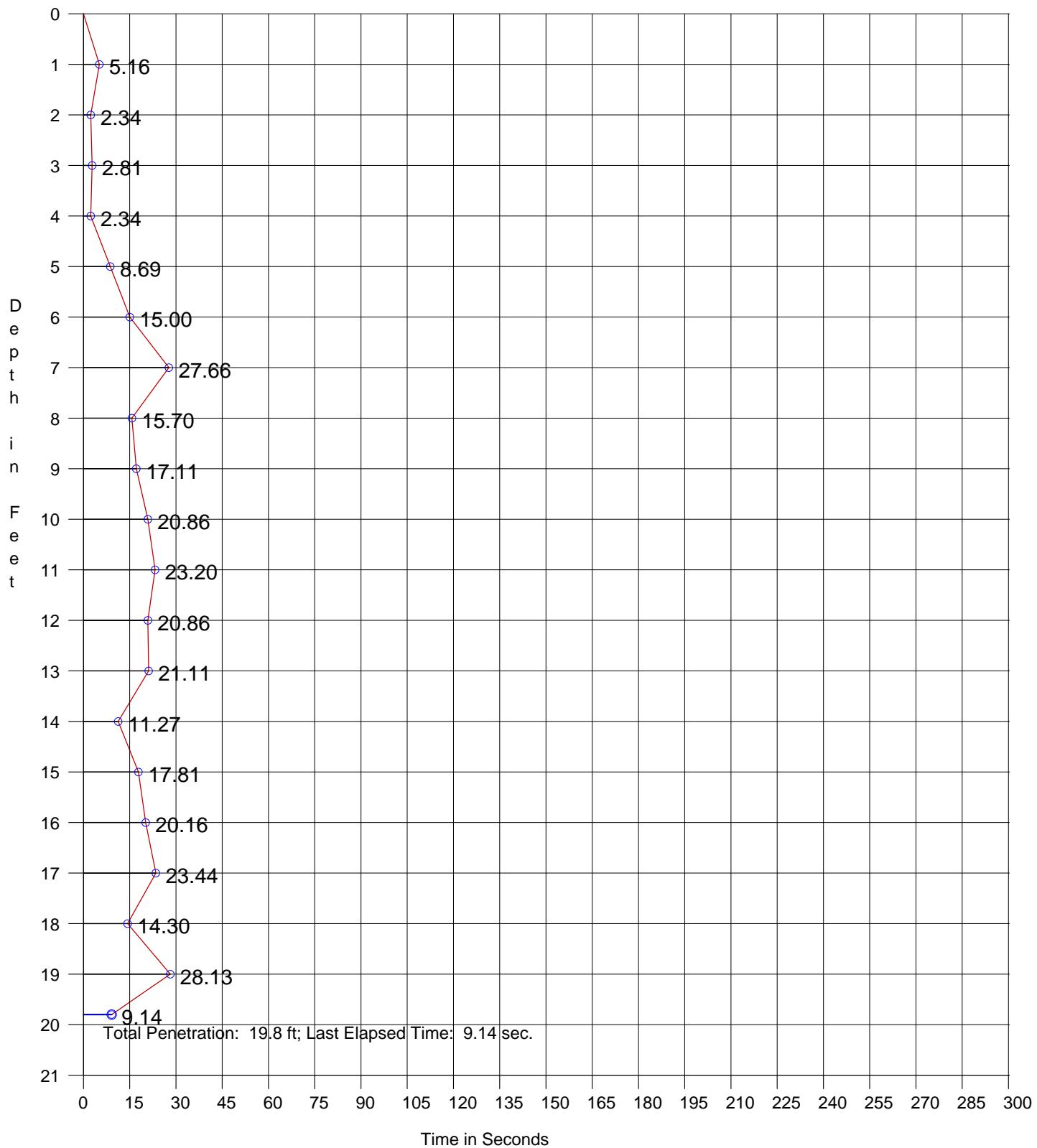
Date: 8/5/2007  
Start Time: 2:30:37 PM  
End Time: 2:35:44 PM

Penetration: 19.80 ft  
Recovery: 18.8  
W. D. Corrected: 9  
W. D. Raw: 14.5

Easting: 373290  
Northing: 2244459  
Coord. System: FL East

Lat: 30d 30.4247' N  
Long: 81d 24.1380' W  
Datum: NAD-27

Comment:



## Penetration Graph for Core No. B-4, Run 1

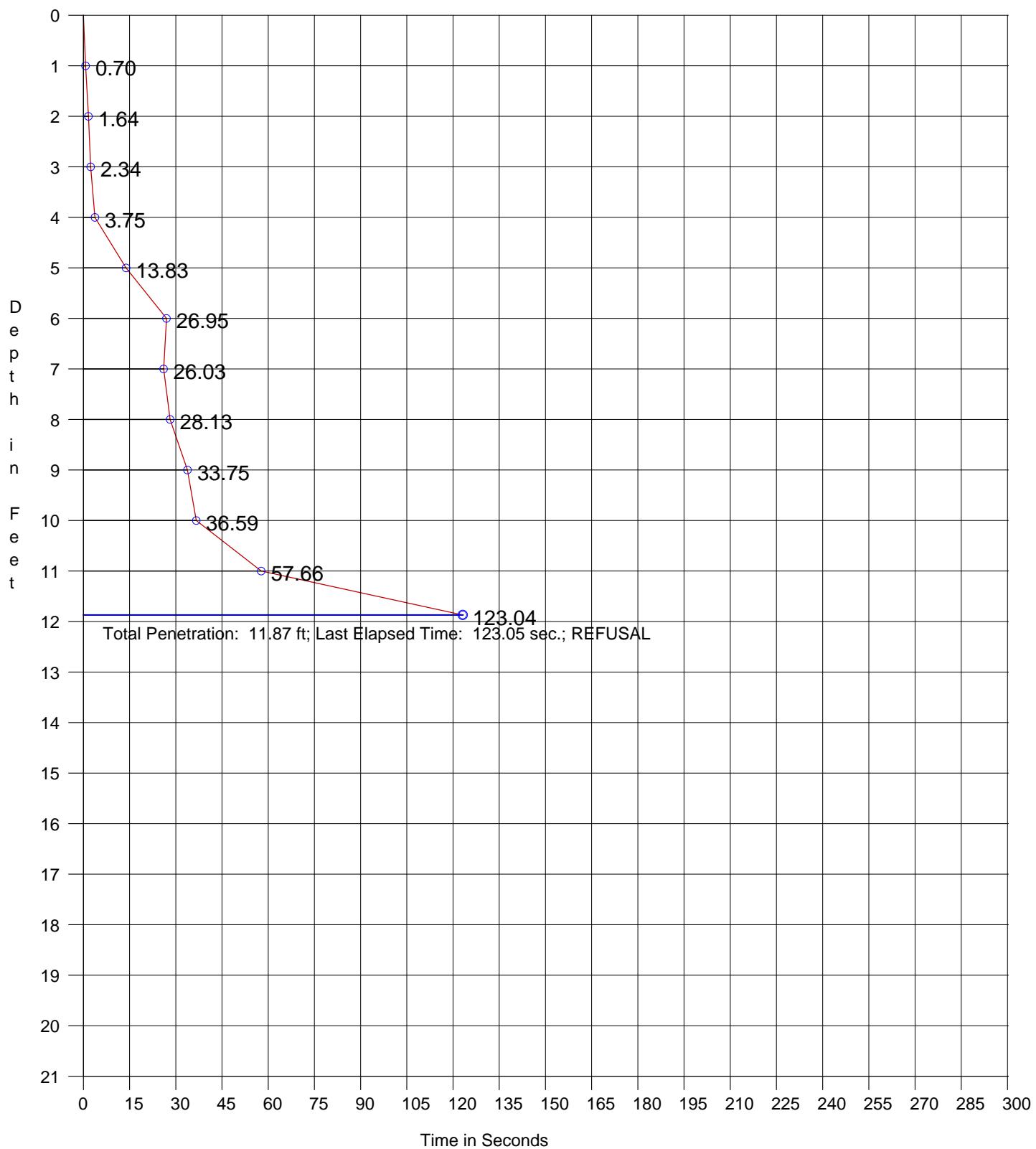
Date: 7/30/2007  
Start Time: 10:33:31 AM  
End Time: 10:39:25 AM

Penetration: 11.87 ft  
Recovery: 11.9  
W. D. Corrected: 10  
W. D. Raw: 14.5

Easting: 373950  
Northing: 2245064  
Coord. System: FL East

Lat: 30d 30.5386' N  
Long: 81d 24.0749' W  
Datum: NAD-27

Comment:



## Penetration Graph for Core No. B-4, Run 2

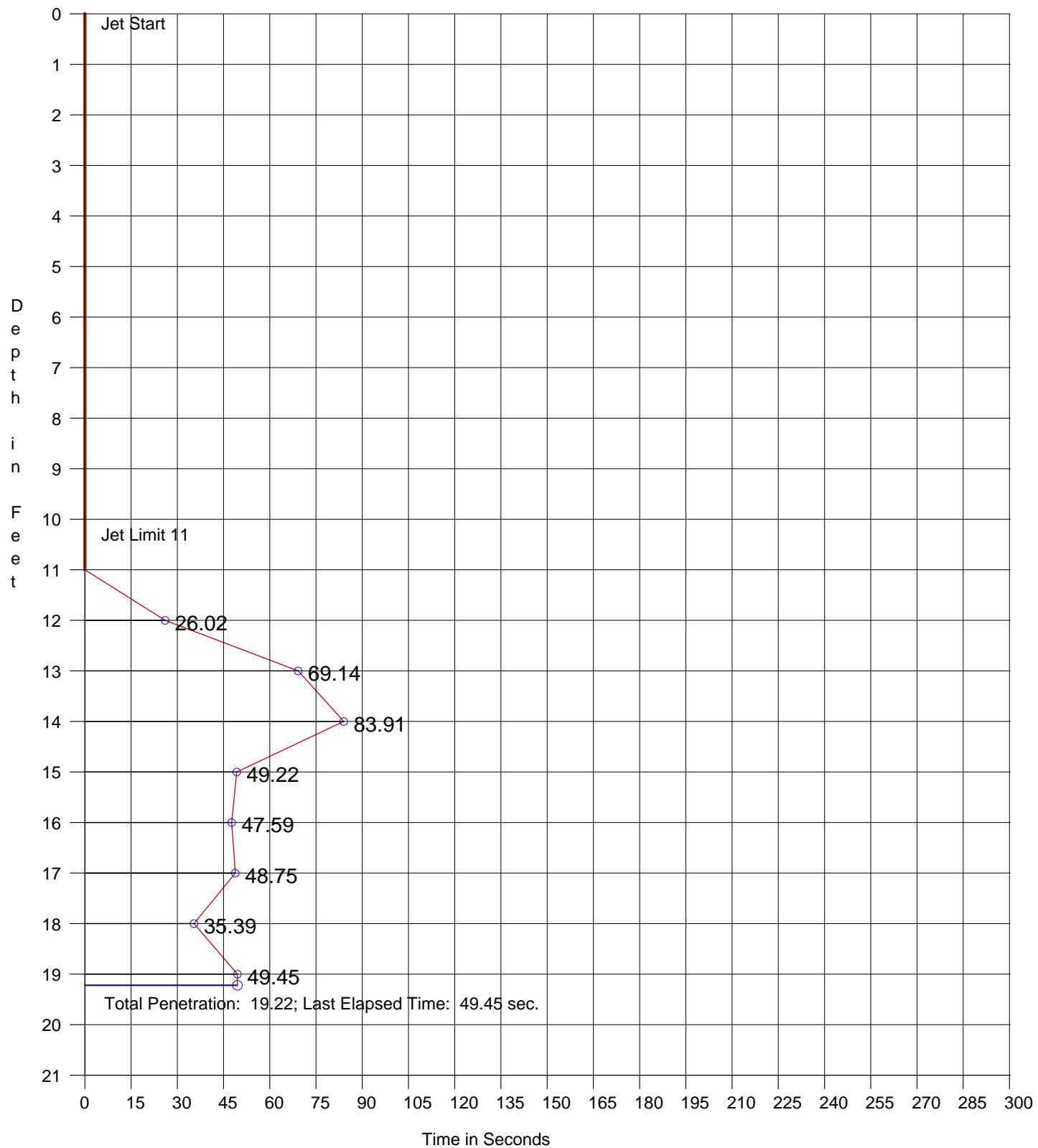
Date: 7/30/2007  
Start Time: 11:09:30 AM  
End Time: 11:20:05 AM

Penetration: 19.22  
Recovery: 9.7  
W. D. Corrected: 9.5  
W. D. Raw: 13.5

Easting: 373955  
Northing: 2245078  
Coord. System: FL E. NAD-83

Lat: 30d 30.5311' N  
Long: 81d 24.0538' W  
Datum: MLLW

Comment:



## Penetration Graph for Core No. B-5, Run 1

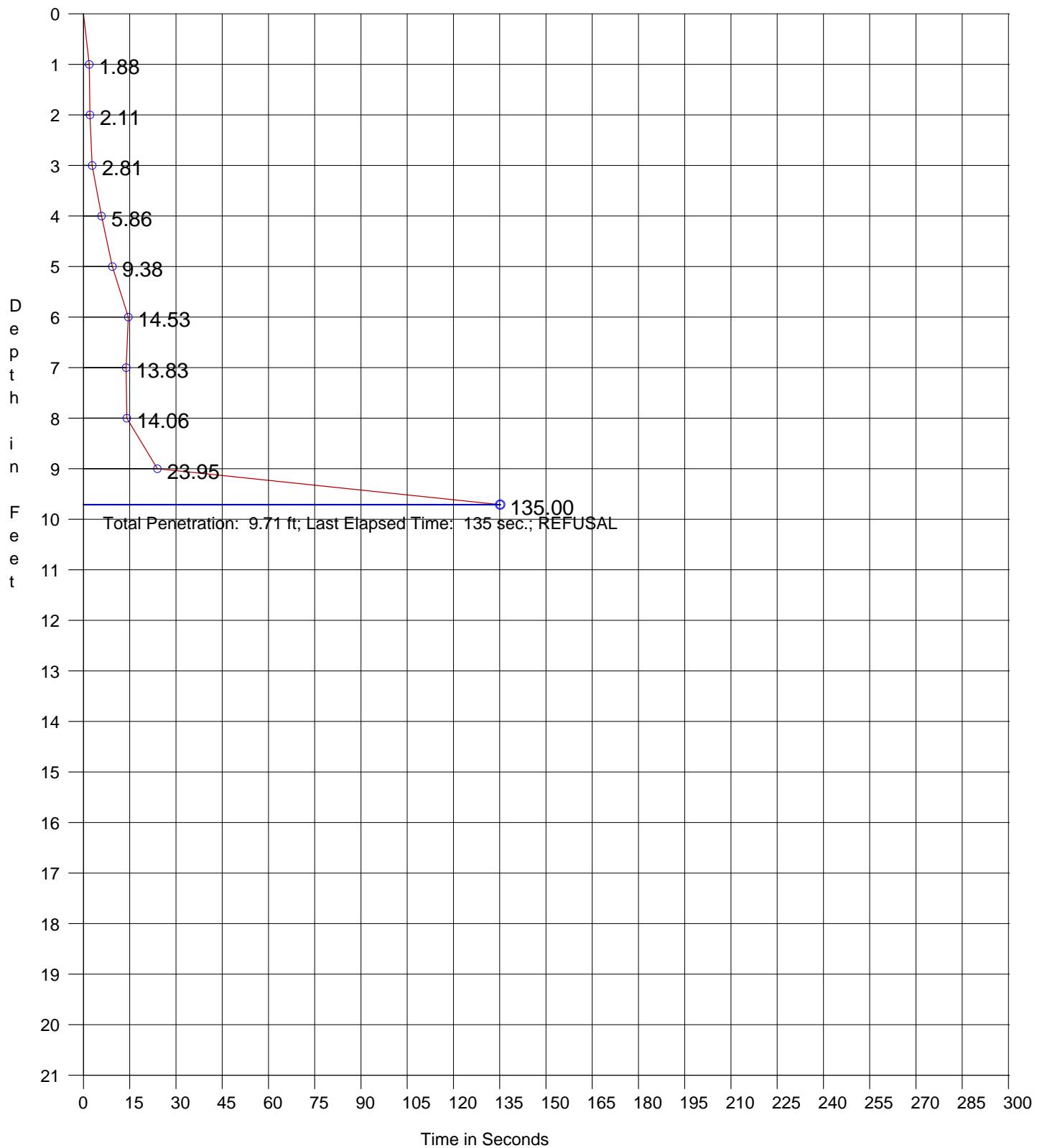
Date: 7/30/2007  
Start Time: 11:51:25 AM  
End Time: 11:55:09 AM

Penetration: 9.71 ft  
Recovery: 9.7  
W. D. Corrected: 11.3  
W. D. Raw: 14.5

Easting: 373609  
Northing: 2246315  
Coord. System: FL East

Lat: 30d 30.7408' N  
Long: 81d 24.1094' W  
Datum: NAD-27

Comment:



## Penetration Graph for Core No. B-5, Run 2

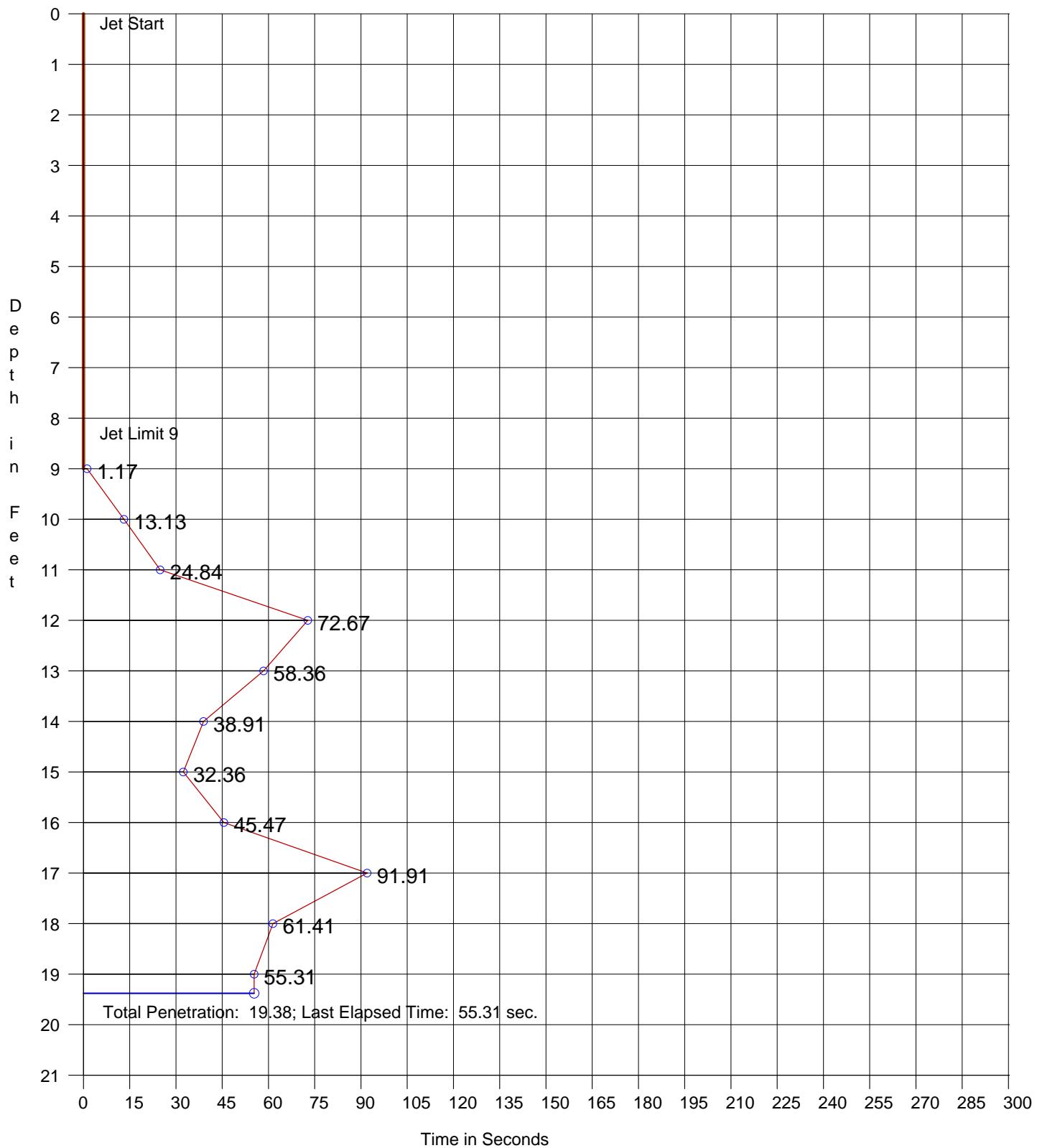
Date: 7/30/2007  
Start Time: 1:08:02 PM  
End Time: 1:17:02 PM

Penetration: 19.38  
Recovery: 10.3  
W. D. Corrected: 11.2  
W. D. Raw: 12.7

Easting: 373603  
Northing: 2246325  
Coord. System: FL E. NAD-83

Lat: 30d 30.7575' N  
Long: 81d 24.0949' W  
Datum: MLLW

Comment:



## Penetration Graph for Core No. B-6, Run 1

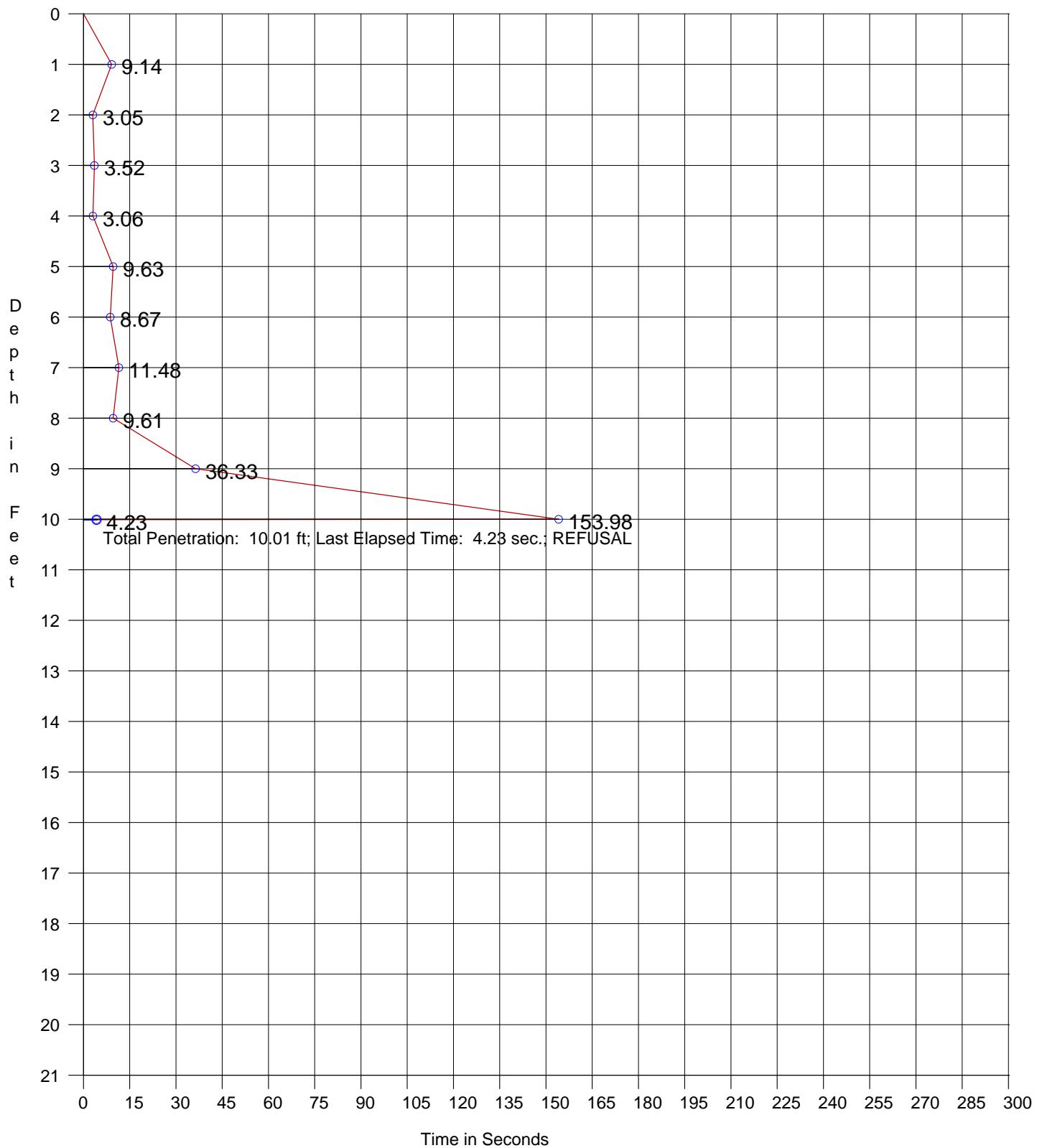
Date: 8/5/2007  
Start Time: 1:22:45 PM  
End Time: 1:26:57 PM

Penetration: 10.01 ft  
Recovery: 8.7  
W. D. Corrected: 7.5  
W. D. Raw: 12.7

Easting: 373460  
Northing: 2245418  
Coord. System: FL E. NAD-83

Lat: 30d 30.5827' N  
Long: 81d 24.1073' W  
Datum: MLLW

Comment:



## Penetration Graph for Core No. B-6, Run 2

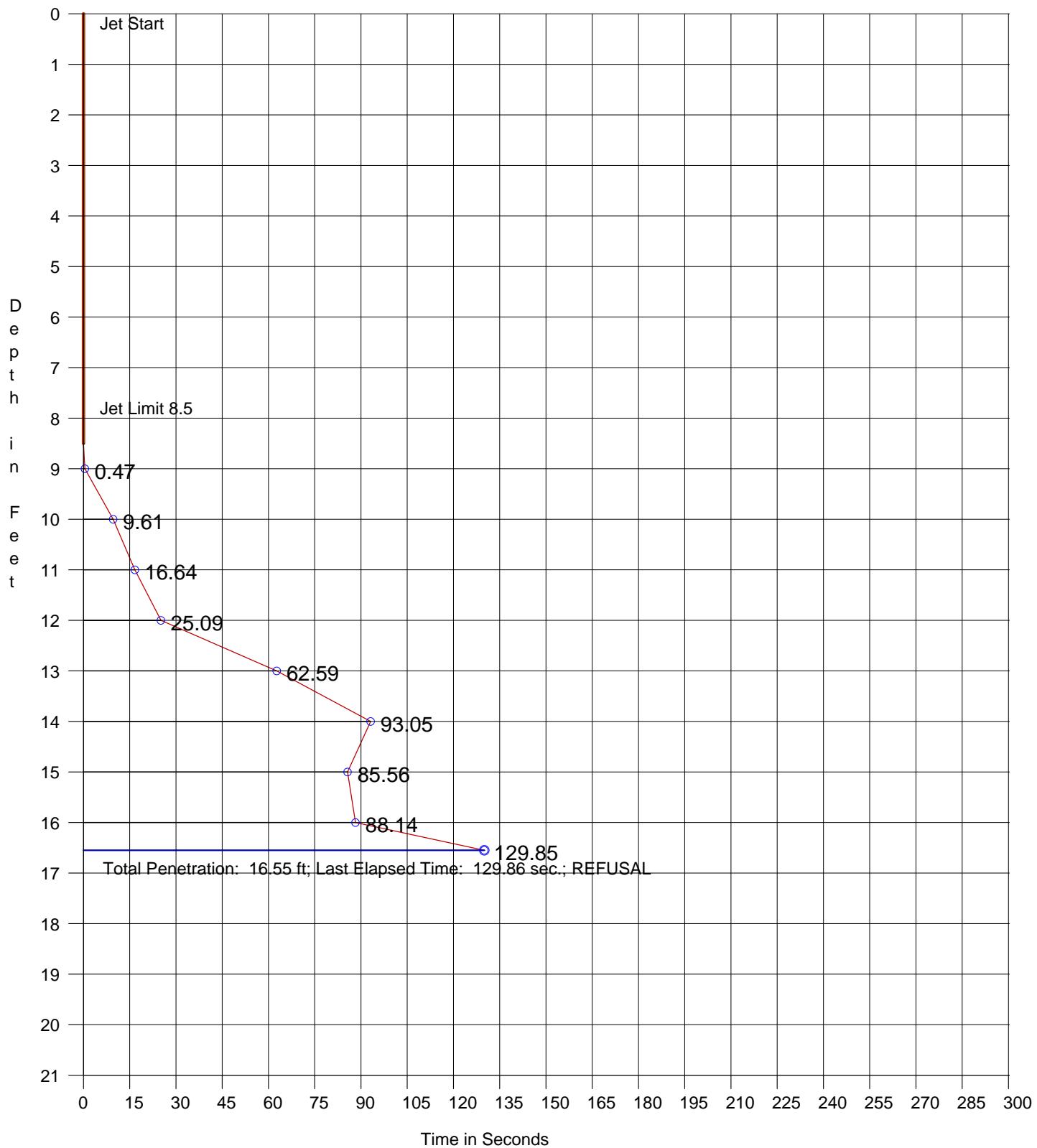
Date: 8/5/2007  
Start Time: 1:45:11 PM  
End Time: 1:54:15 PM

Penetration: 16.55 ft  
Recovery: 9.7  
W. D. Corrected: 6.4  
W. D. Raw: 11.8

Easting: 373486  
Northing: 2245438  
Coord. System: FL E. NAD-83

Lat: 30d 30.5866' N  
Long: 81d 24.1009' W  
Datum: MLLW

Comment:



## Penetration Graph for Core No. B-7, Run 1

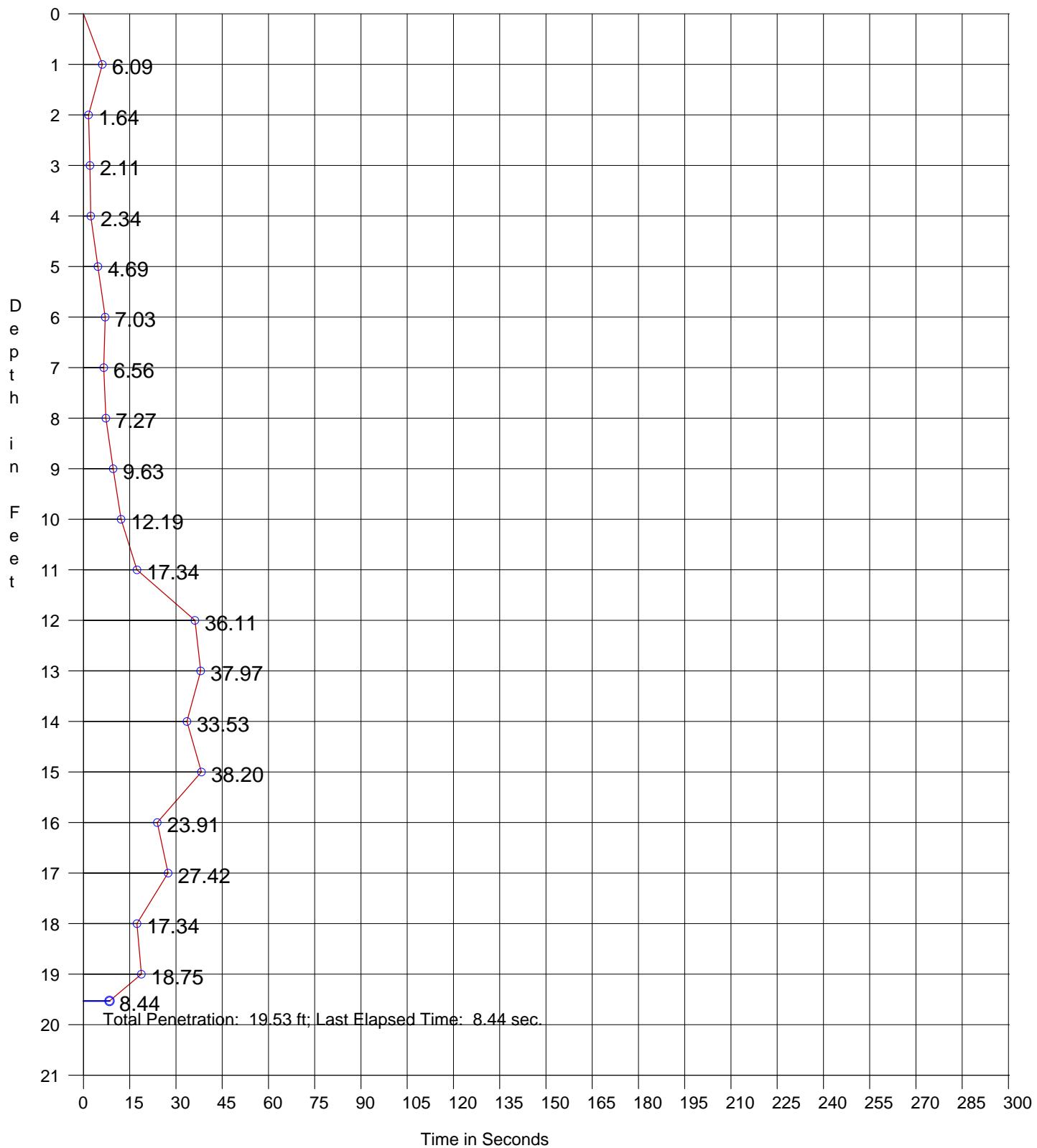
Date: 7/31/2007  
Start Time: 10:22:47 AM  
End Time: 10:28:06 AM

Penetration: 19.53 ft  
Recovery: 18.9  
W. D. Corrected: 6.5  
W. D. Raw: 11.5

Easting: 372645  
Northing: 2244917  
Coord. System: FL E. NAD-83

Lat: 30d 30.5210' N  
Long: 81d 24.2881' W  
Datum: MLLW

Comment:



## Penetration Graph for Core No. B-8, Run 1

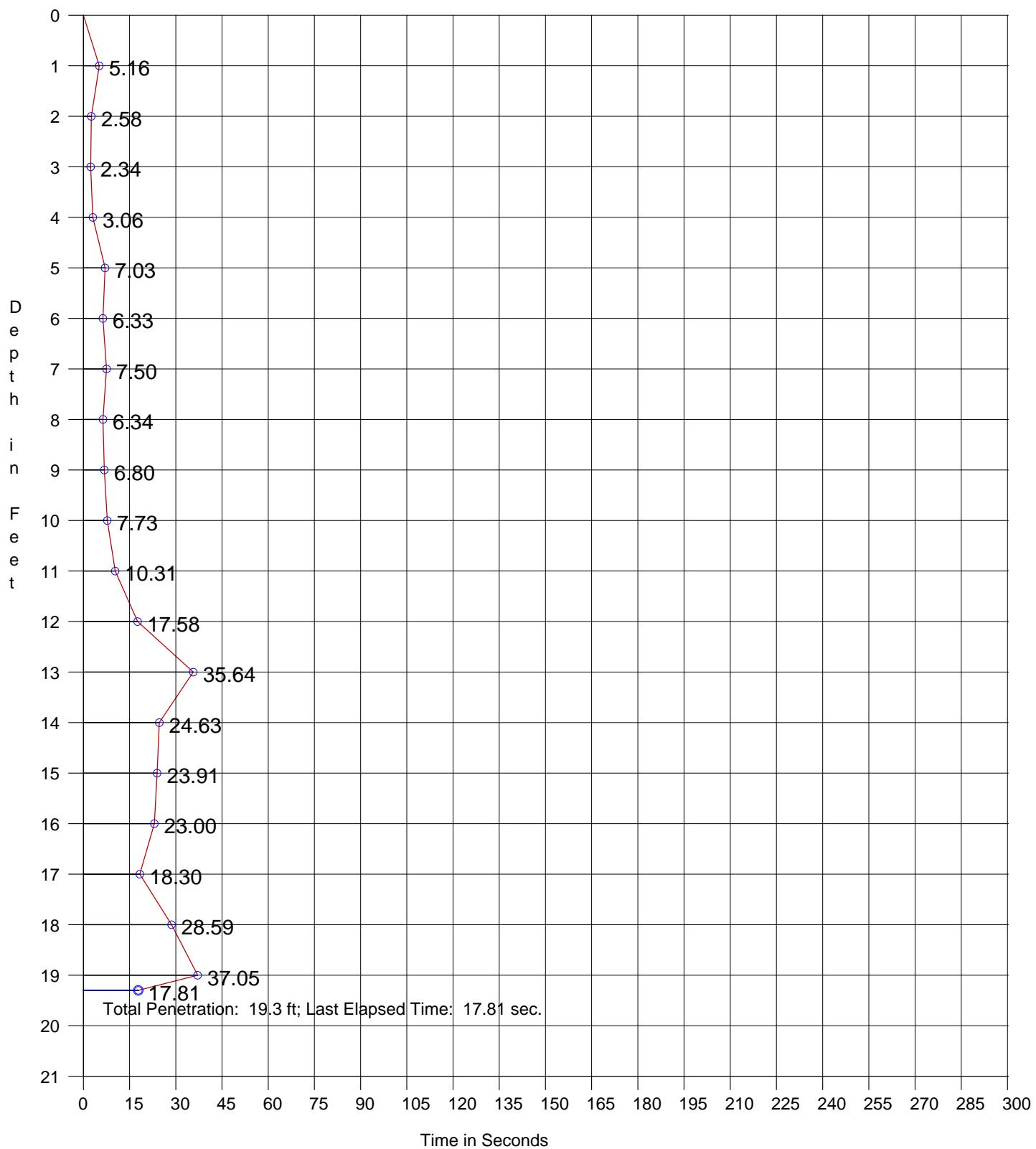
Date: 7/31/2007  
Start Time: 9:57:42 AM  
End Time: 10:02:34 AM

Penetration: 19.30 ft  
Recovery: 17.2  
W. D. Corrected: 6.6  
W. D. Raw: 11.6

Easting: 372271  
Northing: 2244436  
Coord. System: FL E. NAD-83

Lat: 30d 30.4353' N  
Long: 81d 24.3588' W  
Datum: MLLW

Comment:



## Penetration Graph for Core No. B-9, Run 1

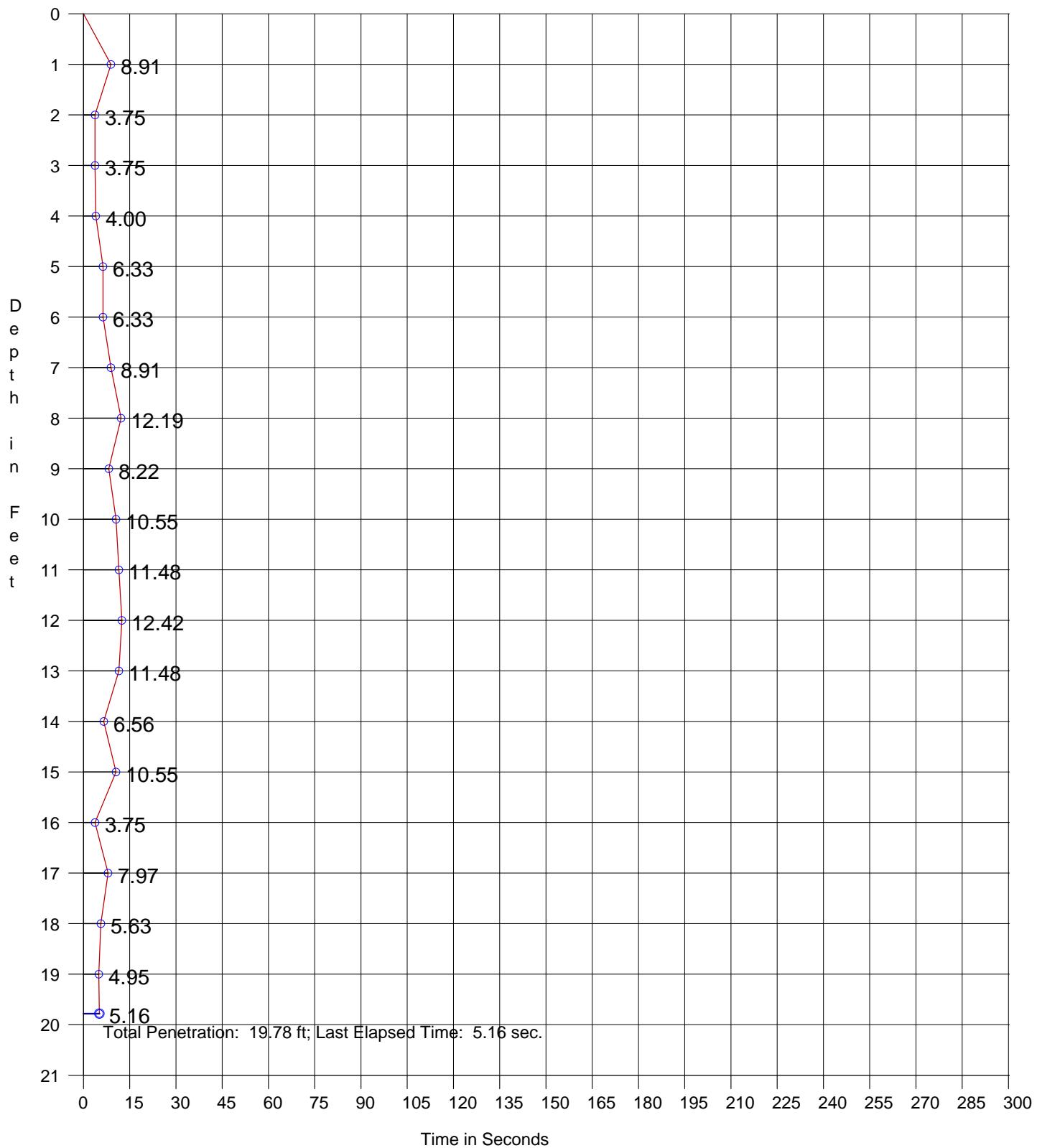
Date: 7/31/2007  
Start Time: 9:30:12 AM  
End Time: 9:32:45 AM

Penetration: 19.78 ft  
Recovery: 19.6  
W. D. Corrected: 14.5  
W. D. Raw: 19.3

Easting: 371485  
Northing: 2244989  
Coord. System: FL E. NAD-83

Lat: 30d 30.5239' N  
Long: 81d 24.5039' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-10, Run 1

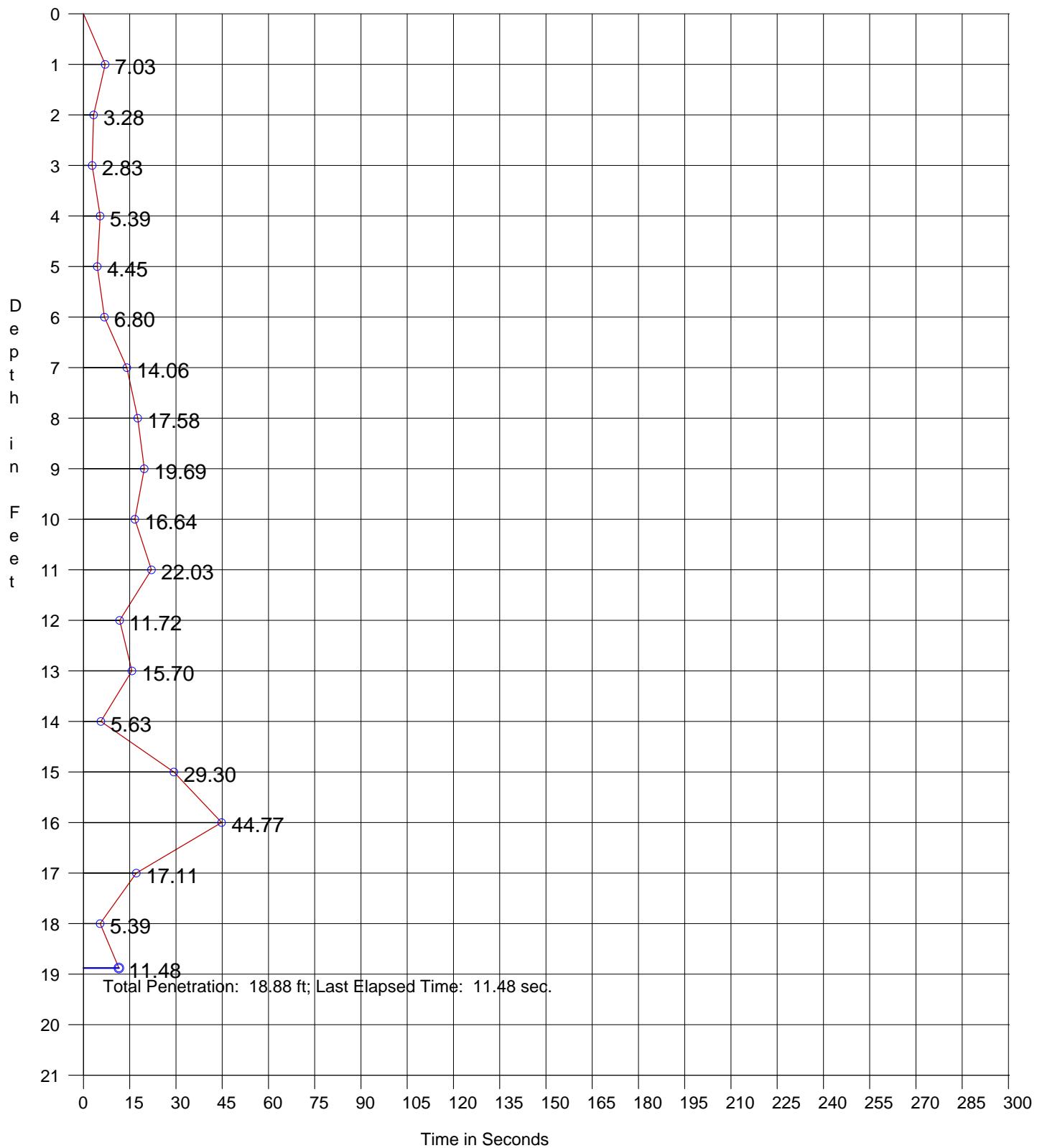
Date: 7/31/2007  
Start Time: 9:07:22 AM  
End Time: 9:11:43 AM

Penetration: 18.88 ft  
Recovery: 19.8  
W. D. Corrected: 11.9  
W. D. Raw: 16.5

Easting: 371850  
Northing: 2245512  
Coord. System: FL East

Lat: 30d 30.6080' N  
Long: 81d 24.4335' W  
Datum: NAD-27

Comment:



# Penetration Graph for Core No. B-11, Run 1

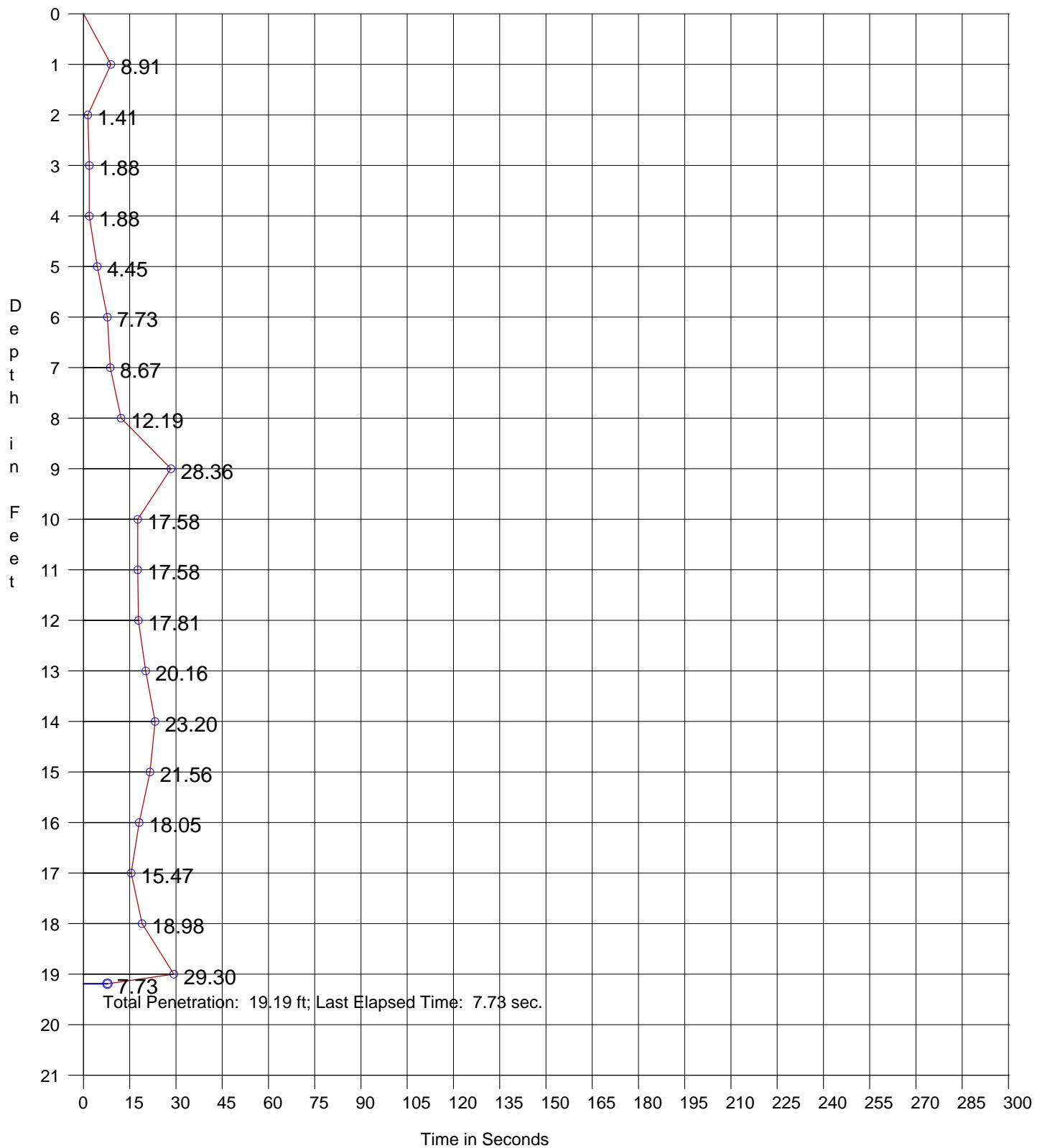
Date: 8/5/2007  
Start Time: 12:41:18 PM  
End Time: 12:46:00 PM

Penetration: 19.19 ft  
Recovery: 18.3  
W. D. Corrected: 8.2  
W. D. Raw: 13.2

Easting: 372359  
Northing: 2246372  
Coord. System: FL E. NAD-83

Lat: 30d 30.7402' N  
Long: 81d 24.3192' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-12, Run 1

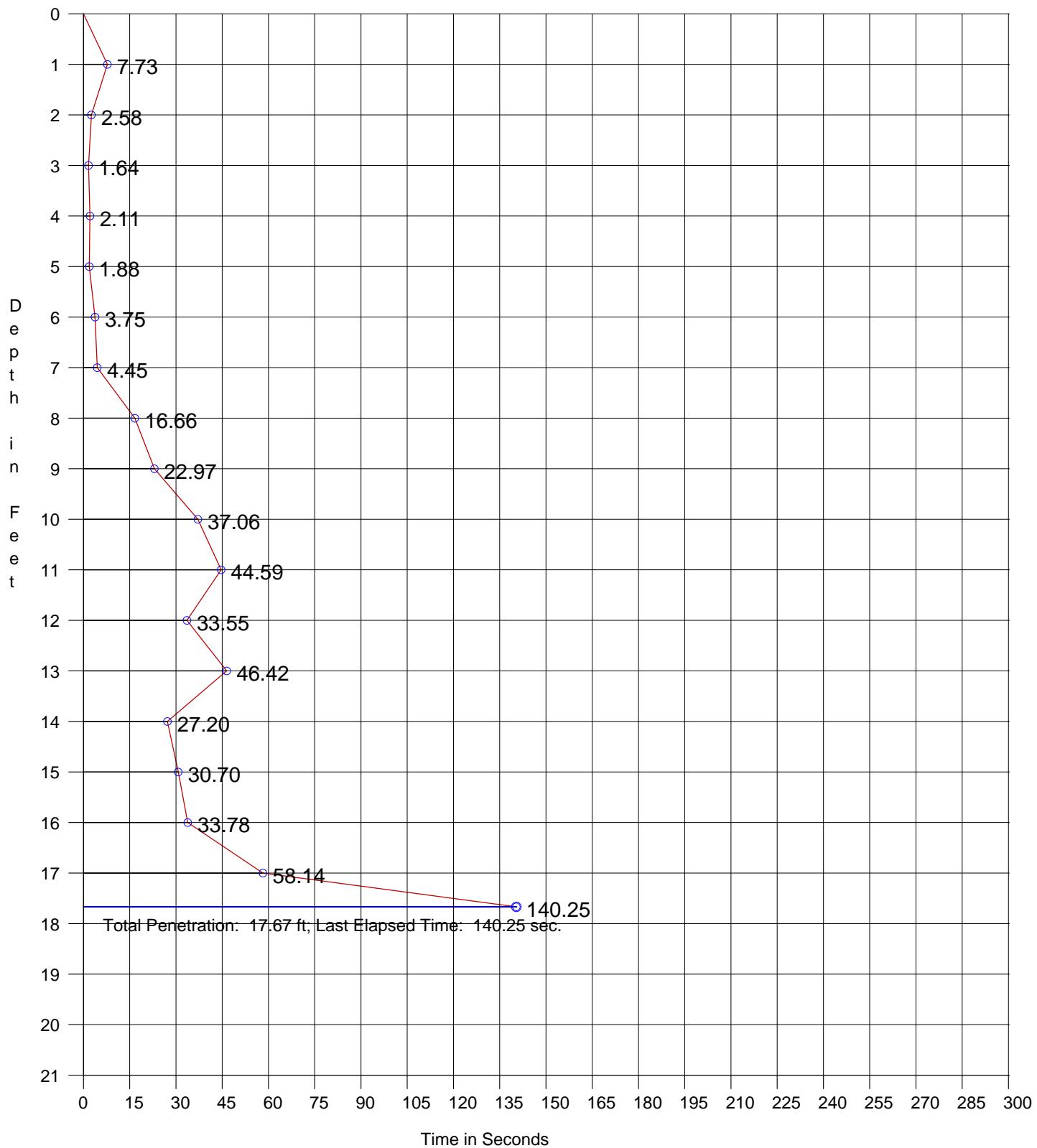
Date: 7/31/2007  
Start Time: 8:02:34 AM  
End Time: 8:11:09 AM

Penetration: 17.67 ft  
Recovery: 16.1  
W. D. Corrected: 10.1  
W. D. Raw: 14

Easting: 372861  
Northing: 2246963  
Coord. System: FL E. NAD-83

Lat: 30d 30.8433' N  
Long: 81d 24.2591' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-13, Run 1

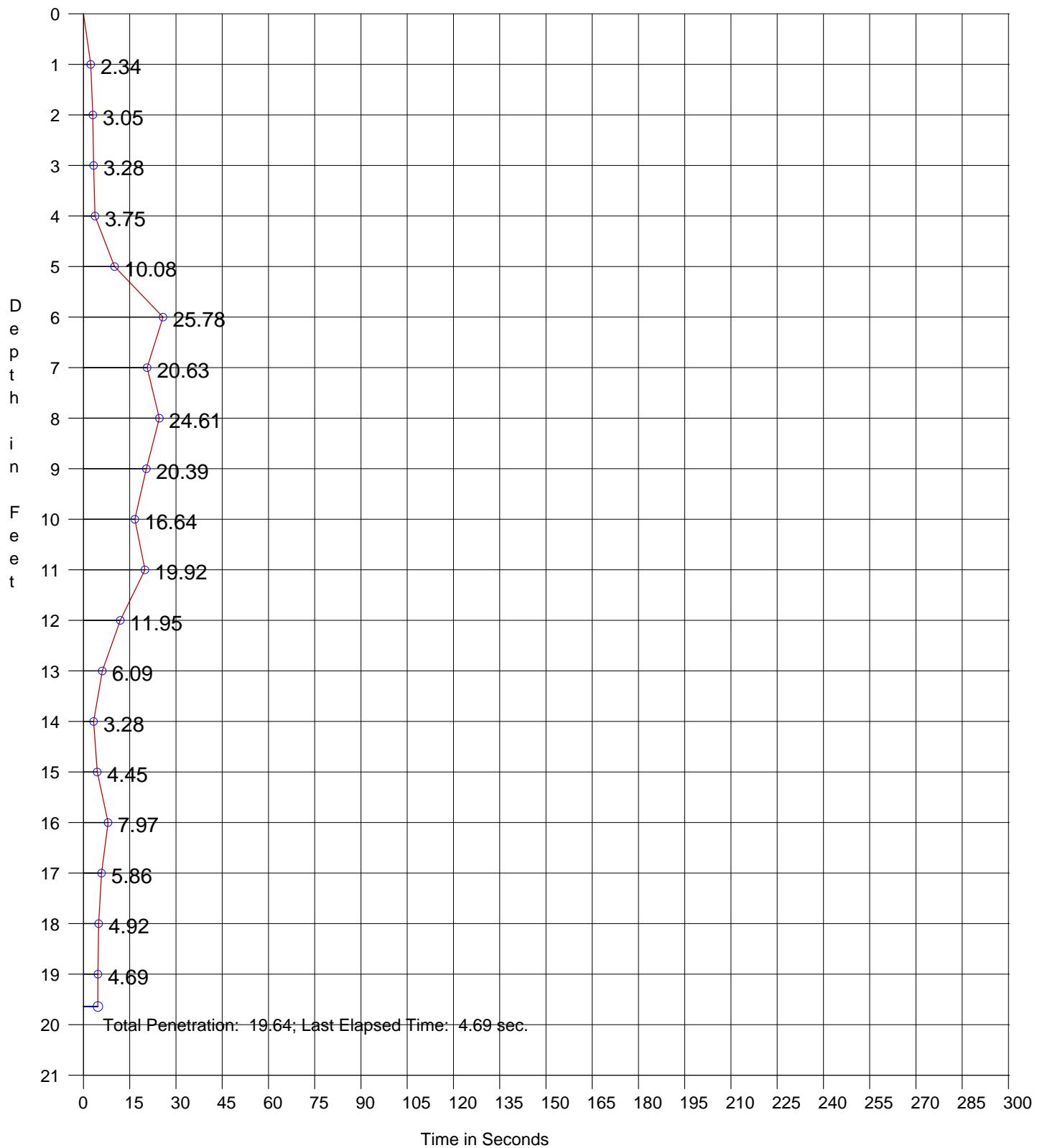
Date: 7/31/2007  
Start Time: 2:00:53 PM  
End Time: 2:05:17 PM

Penetration: 19.64  
Recovery: 17.8  
W. D. Corrected: 17.1  
W. D. Raw: 18.5

Easting: 372150  
Northing: 2247719  
Coord. System: FL E. NAD-83

Lat: 30d 30.9689' N  
Long: 81d 24.3747' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-14, Run 1

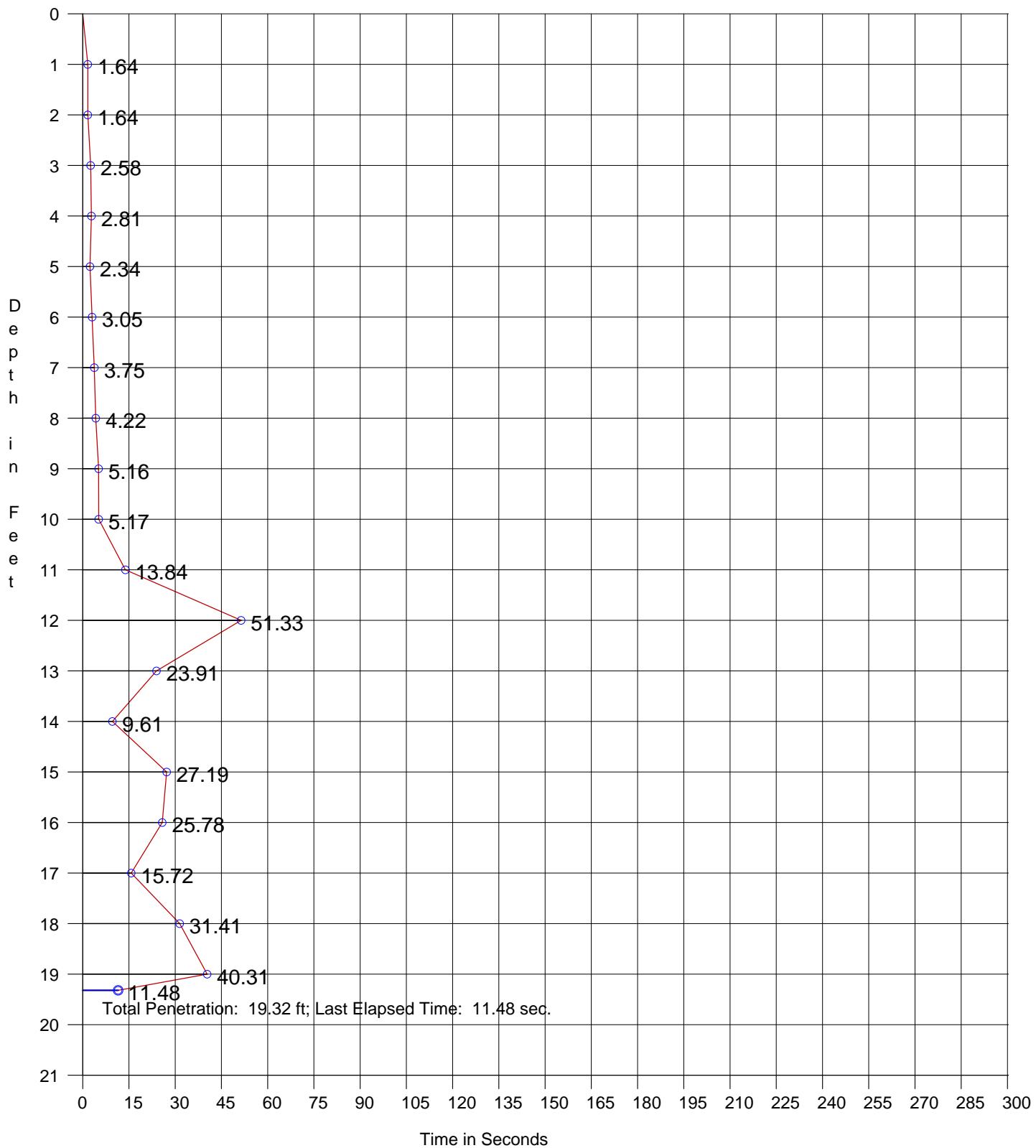
Date: 7/31/2007  
Start Time: 11:06:01 AM  
End Time: 11:10:59 AM

Penetration: 19.32 ft  
Recovery: 18.1  
W. D. Corrected: 8.9  
W. D. Raw: 13.7

Easting: 371591  
Northing: 2246860  
Coord. System: FL E. NAD-83

Lat: 30d 30.8368' N  
Long: 81d 24.5008' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-15, Run 1

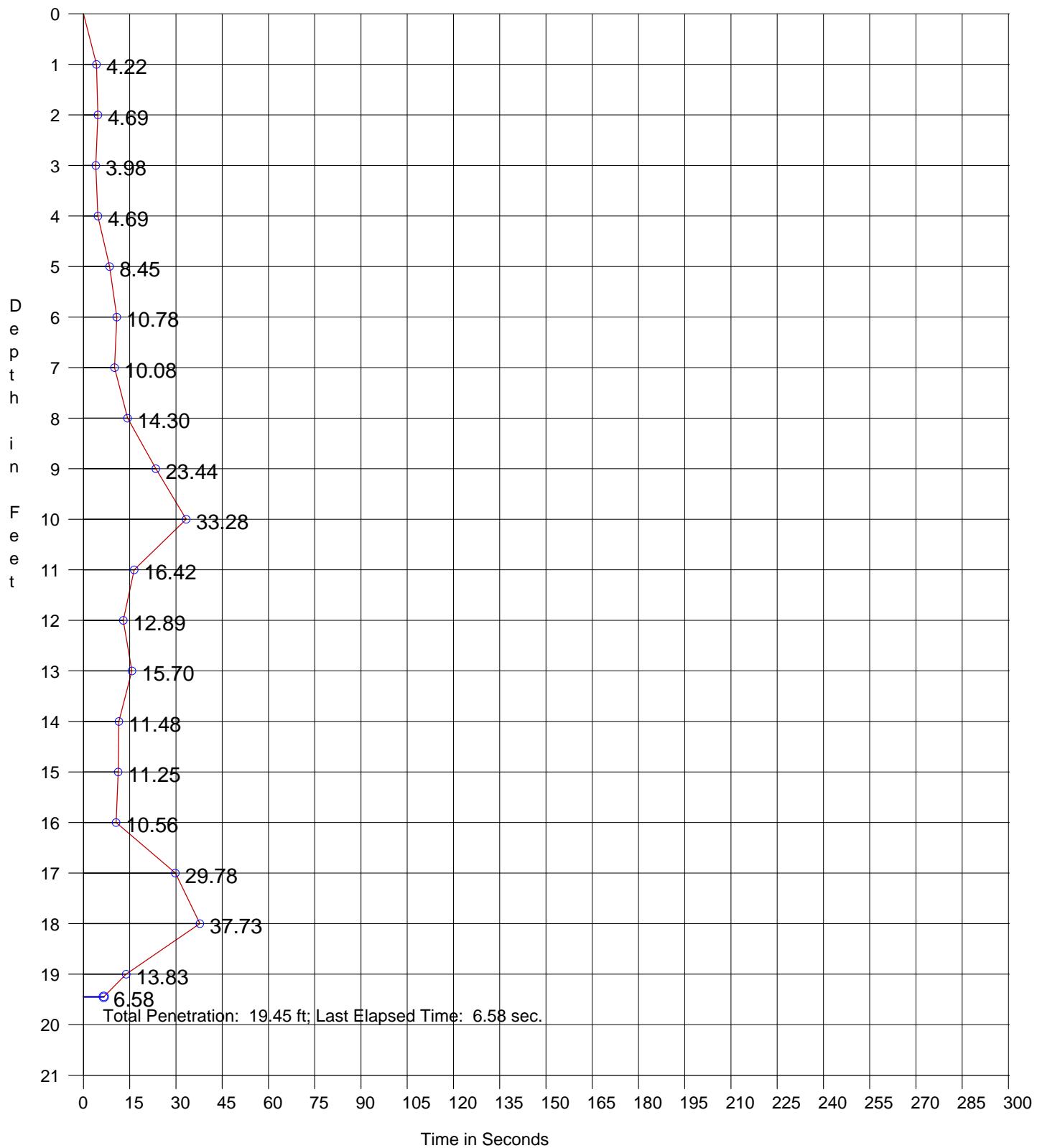
Date: 7/31/2007  
Start Time: 8:38:36 AM  
End Time: 8:43:20 AM

Penetration: 19.45 ft  
Recovery:  
W. D. Corrected: 10.5  
W. D. Raw: 14.8

Easting: 371033  
Northing: 2246010  
Coord. System: FL E. NAD-83

Lat: 30d 30.7088' N  
Long: 81d 24.5980' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-16, Run 1

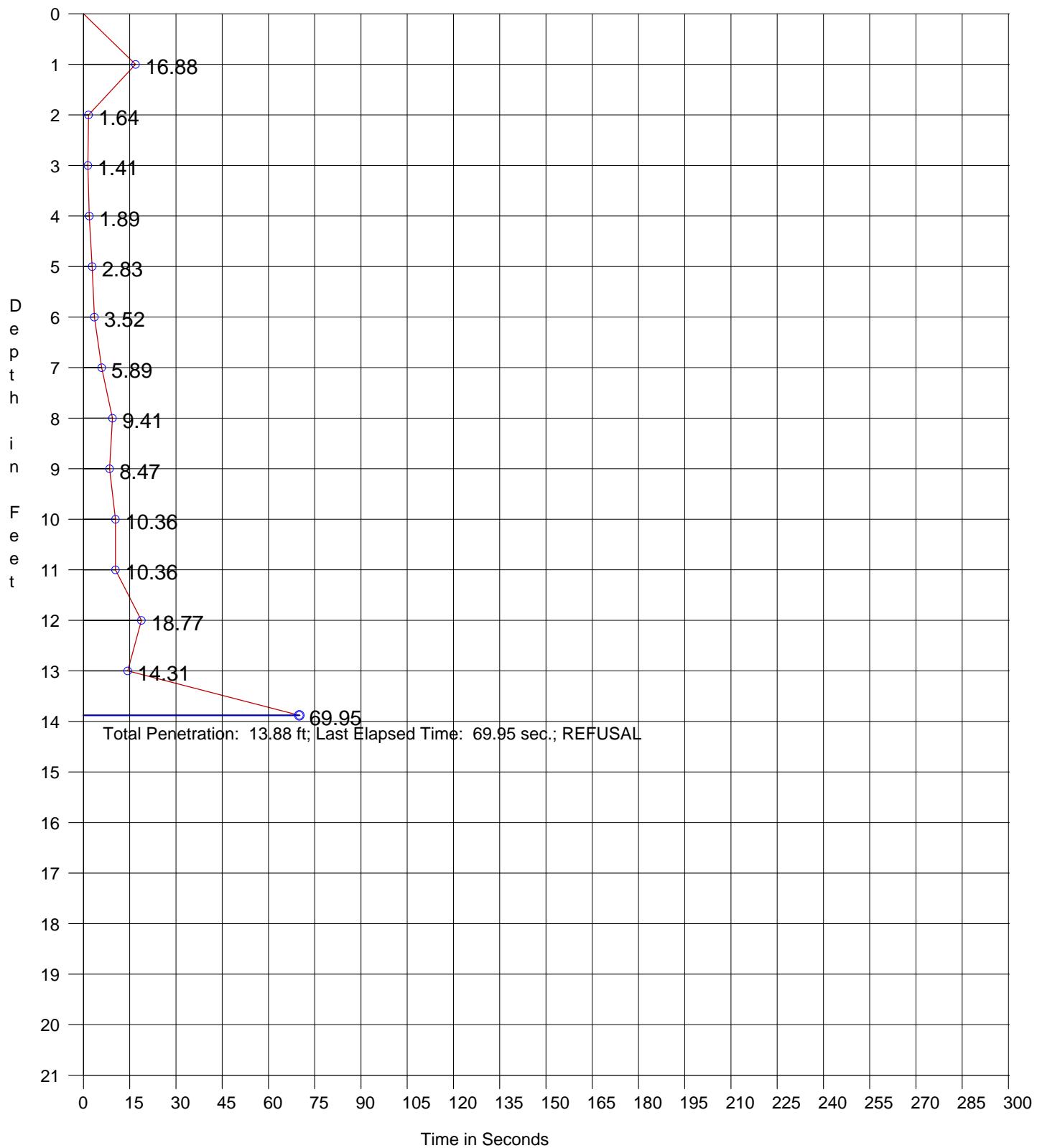
Date: 8/4/2007  
Start Time: 11:12:28 AM  
End Time: 11:15:23 AM

Penetration: 13.88 ft  
Recovery:  
W. D. Corrected: 8.8  
W. D. Raw: 13

Easting: 370219  
Northing: 2246620  
Coord. System: FL E. NAD-83

Lat: 30d 30.7812' N  
Long: 81d 24.7258' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-17, Run 1

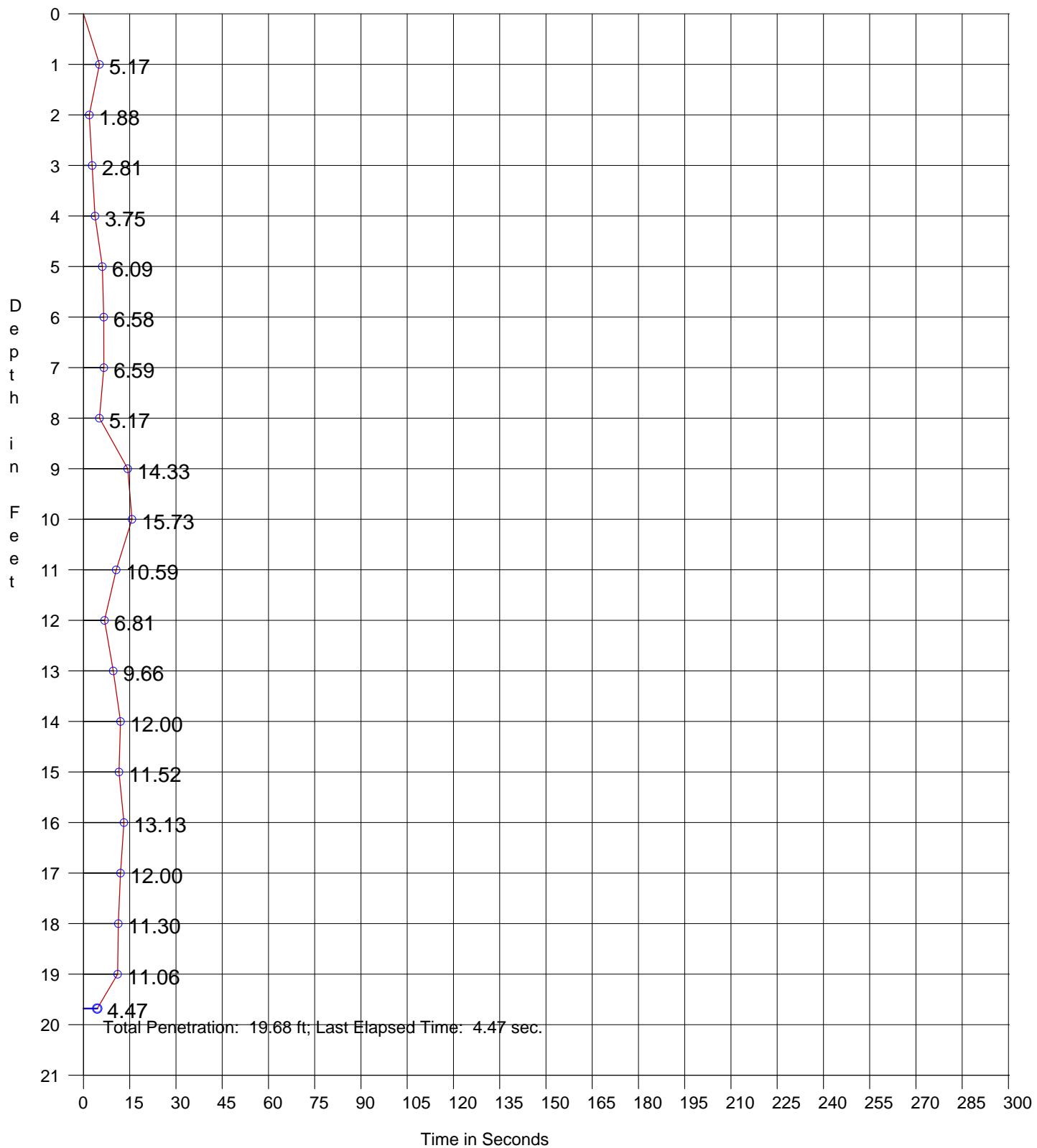
Date: 8/4/2007  
Start Time: 10:51:25 AM  
End Time: 10:54:16 AM

Penetration: 19.68 ft  
Recovery: 20  
W. D. Corrected: 8.2  
W. D. Raw: 11.9

Easting: 370805  
Northing: 2247531  
Coord. System: FL E. NAD-83

Lat: 30d 30.9283' N  
Long: 81d 24.6151' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-18, Run 1

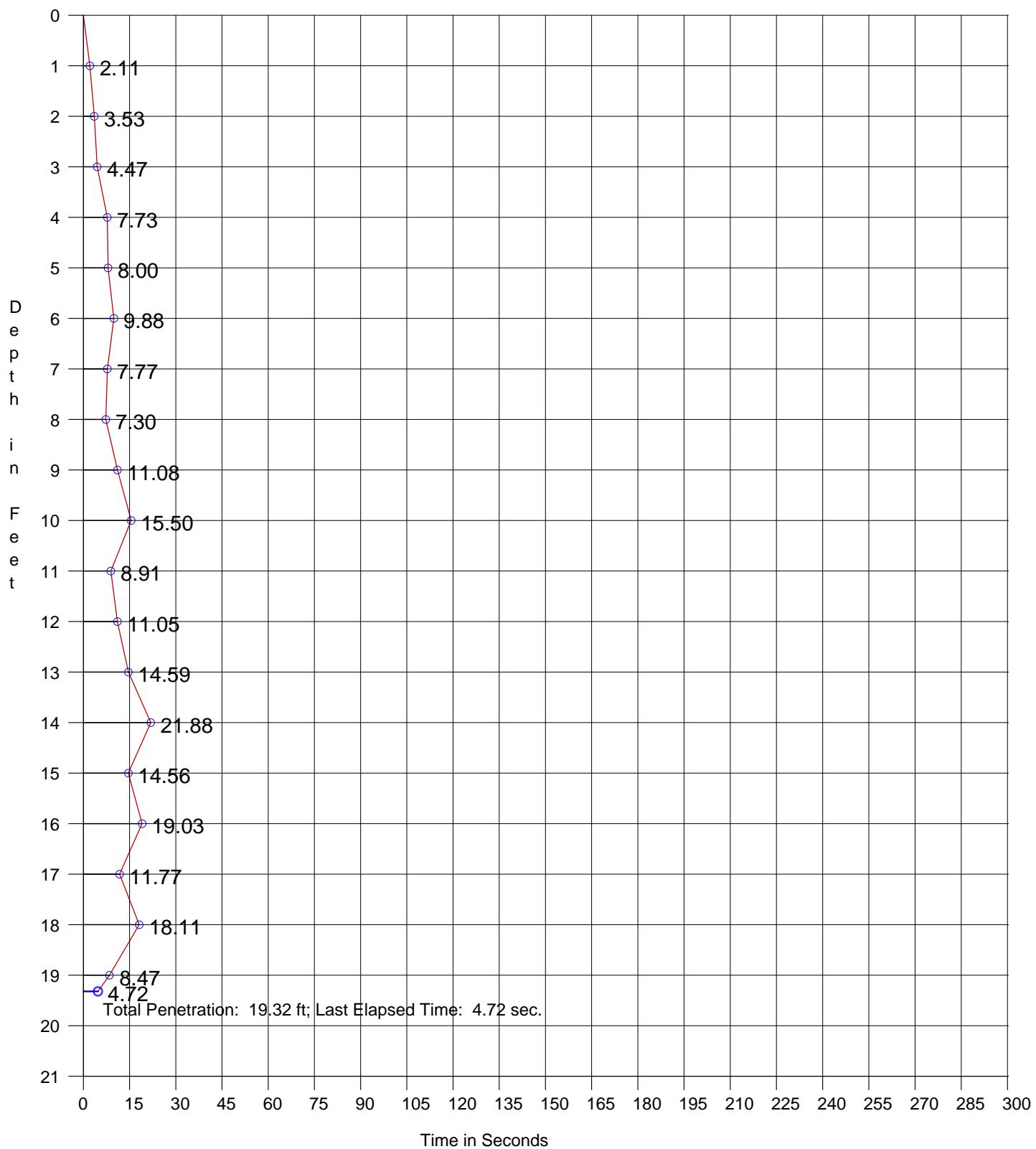
Date: 8/4/2007  
Start Time: 9:10:33 AM  
End Time: 9:14:03 AM

Penetration: 19.32 ft  
Recovery: 20  
W. D. Corrected: 14.4  
W. D. Raw: 16.1

Easting: 370549  
Northing: 2248417  
Coord. System: FL E. NAD-83

Lat: 30d 31.0732' N  
Long: 81d 24.6989' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-19, Run 1

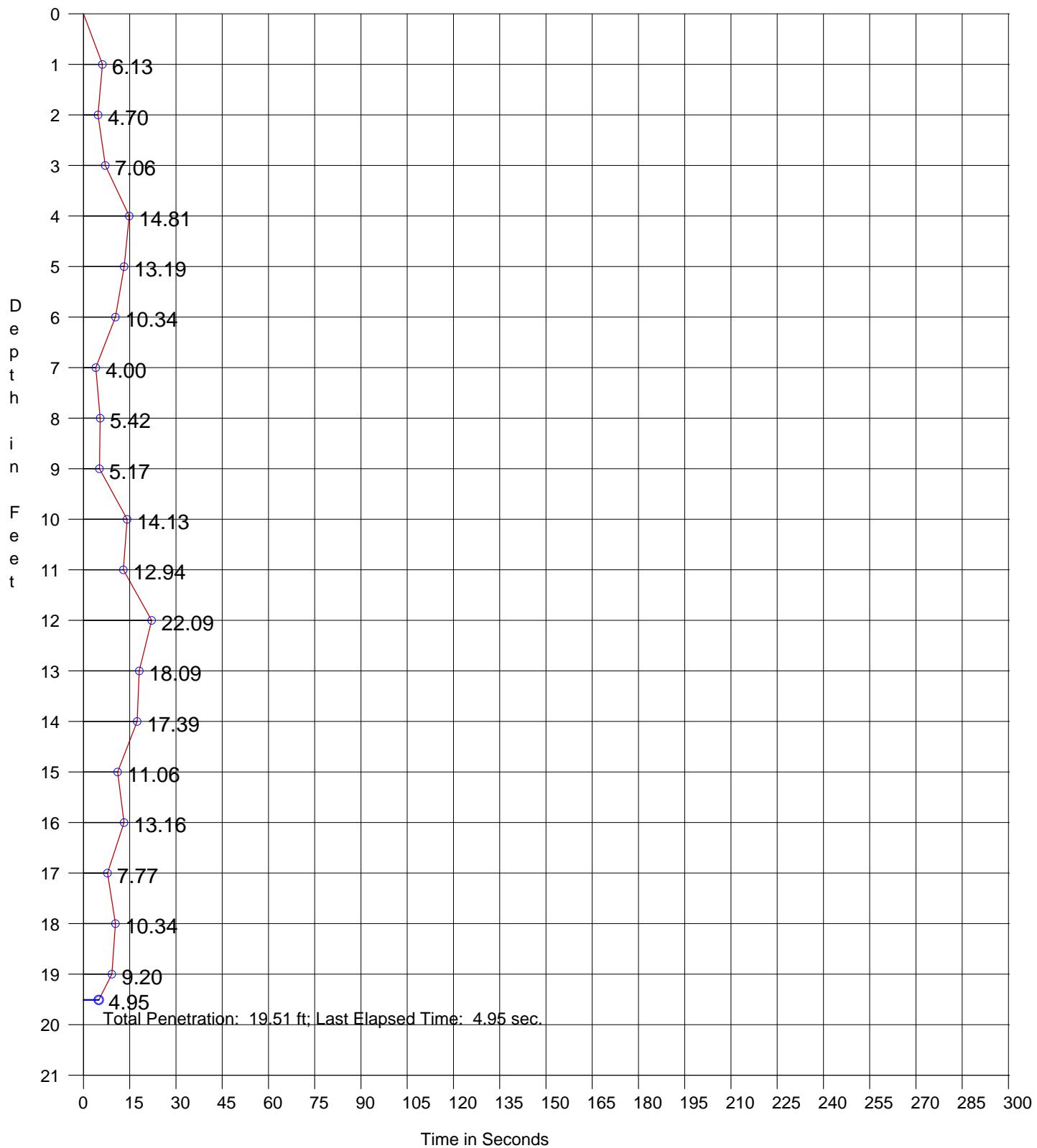
Date: 8/4/2007  
Start Time: 9:46:47 AM  
End Time: 9:50:19 AM

Penetration: 19.51 ft  
Recovery: 16.8  
W. D. Corrected: 17.6  
W. D. Raw: 20.1

Easting: 370137  
Northing: 2248020  
Coord. System: FL E. NAD-83

Lat: 30d 31.0106' N  
Long: 81d 24.7460' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-20, Run 1

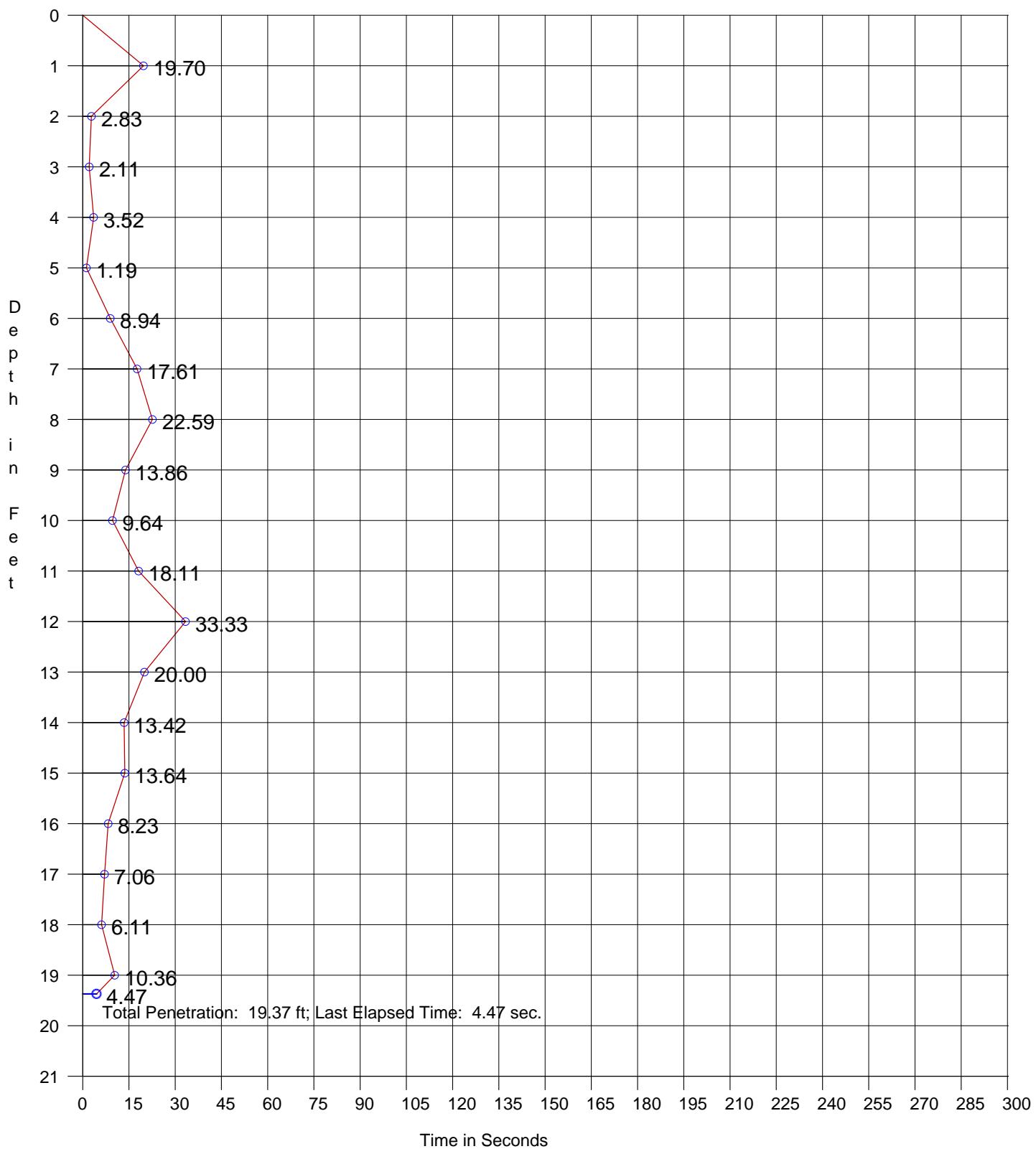
Date: 8/4/2007  
Start Time: 10:10:41 AM  
End Time: 10:14:38 AM

Penetration: 19.37 ft  
Recovery: 20  
W. D. Corrected: 18.4  
W. D. Raw: 21.3

Easting: 369978  
Northing: 2247443  
Coord. System: FL E. NAD-83

Lat: 30d 30.9185' N  
Long: 81d 24.7760' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-21, Run 1

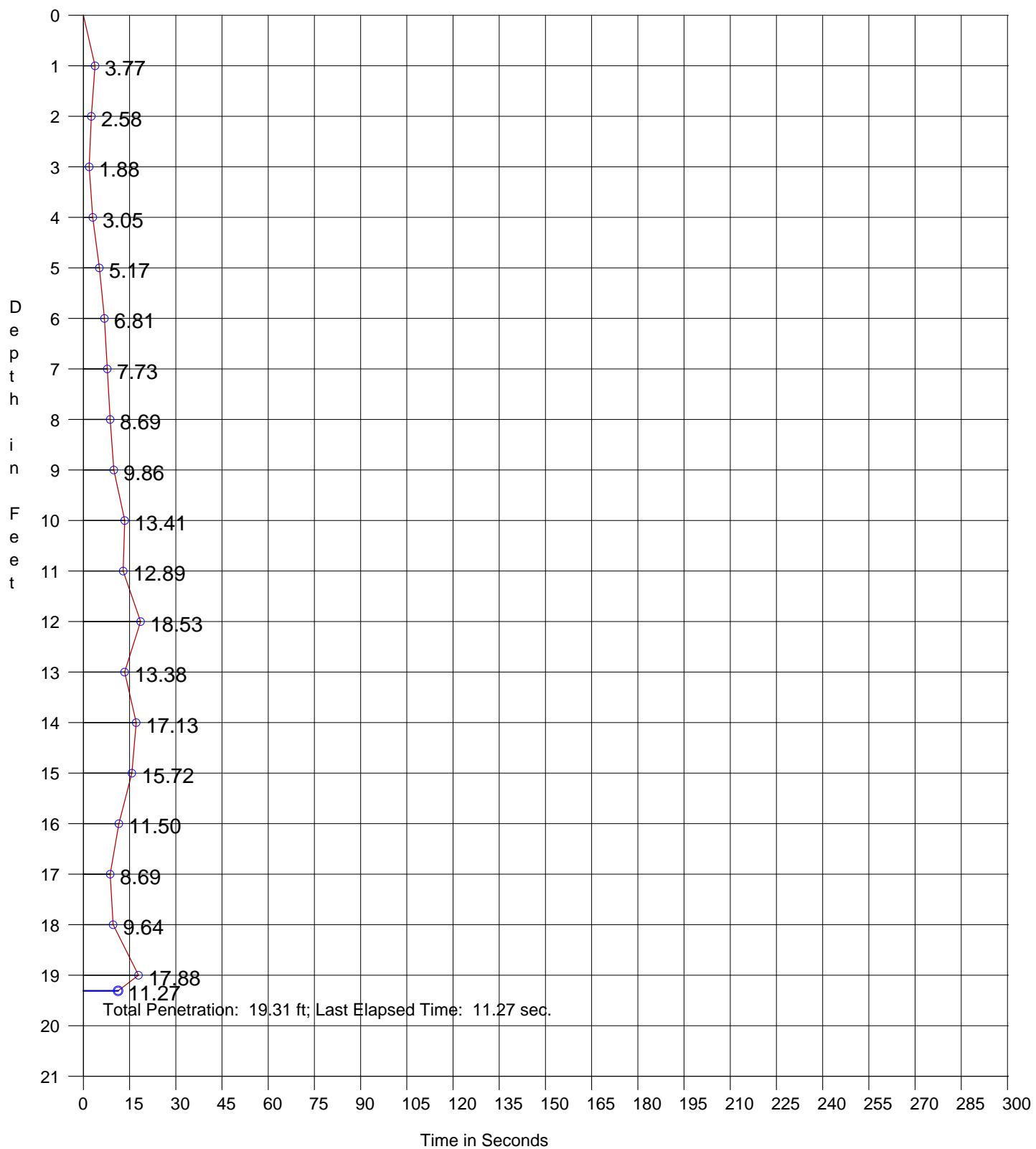
Date: 8/4/2007  
Start Time: 1:28:54 PM  
End Time: 1:32:14 PM

Penetration: 19.31 ft  
Recovery: 17.9  
W. D. Corrected: 9.1  
W. D. Raw: 14.6

Easting: 369503  
Northing: 2247123  
Coord. System: FL E. NAD-83

Lat: 30d 30.8651' N  
Long: 81d 24.8660' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-22, Run 1

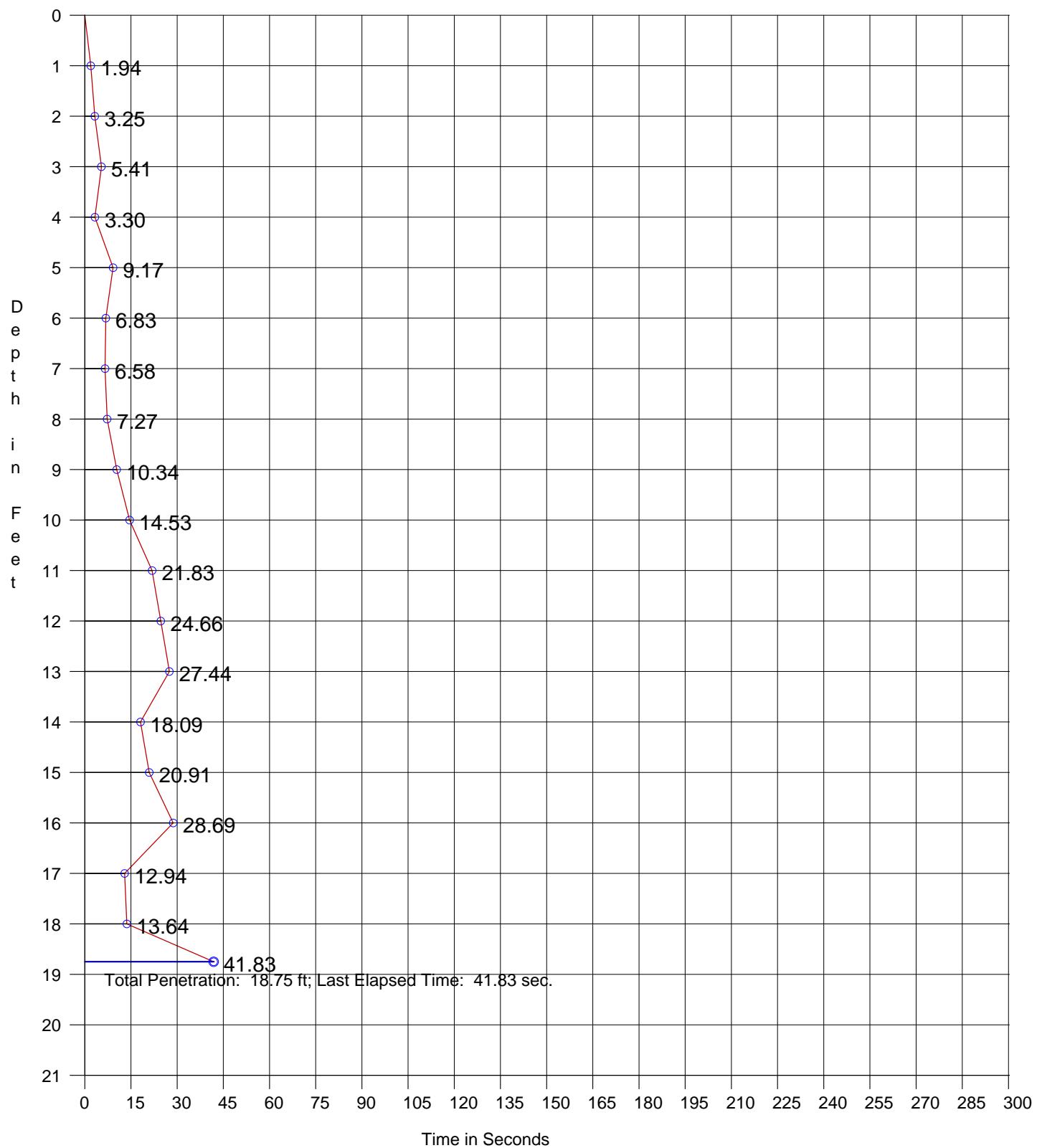
Date: 8/4/2007  
Start Time: 1:54:12 PM  
End Time: 1:59:35 PM

Penetration: 18.75 ft  
Recovery: 17.5  
W. D. Corrected: 9.5  
W. D. Raw: 15

Easting: 368808  
Northing: 2247660  
Coord. System: FL E. NAD-83

Lat: 30d 30.9512' N  
Long: 81d 24.9985' W  
Datum: MLLW

Comment:



## Penetration Graph for Core No. B 23, Run 1

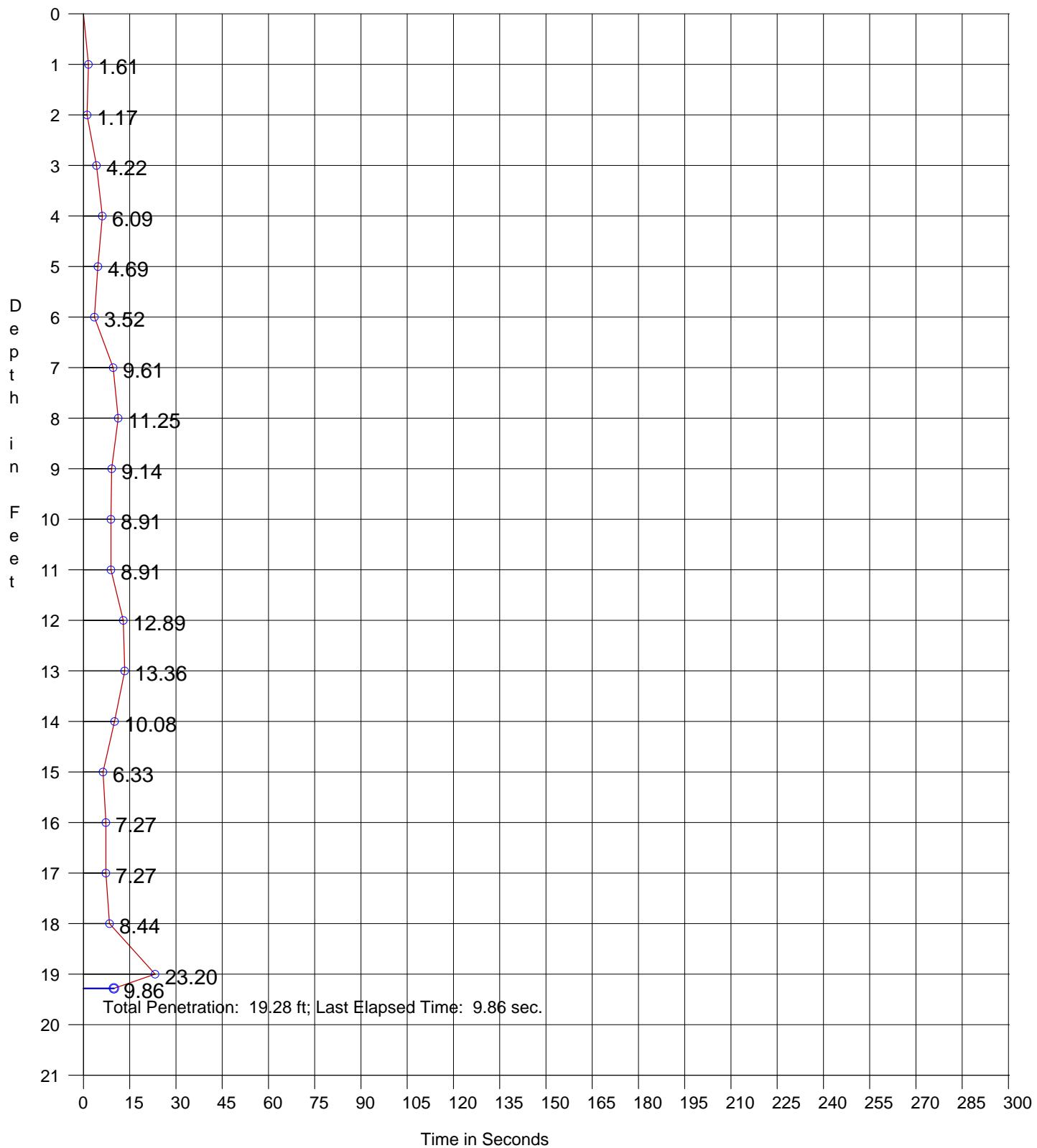
Date: 8/5/2007  
Start Time: 9:10:45 AM  
End Time: 9:13:41 AM

Penetration: 19.28 ft  
Recovery: 20  
W. D. Corrected: 19.9  
W. D. Raw: 20.8

Easting: 369191  
Northing: 2248150  
Coord. System: FL E. NAD-83

Lat: 30d 31.0235' N  
Long: 81d 24.9263' W  
Datum: MLLW

Comment:



## Penetration Graph for Core No. B 24, Run 1

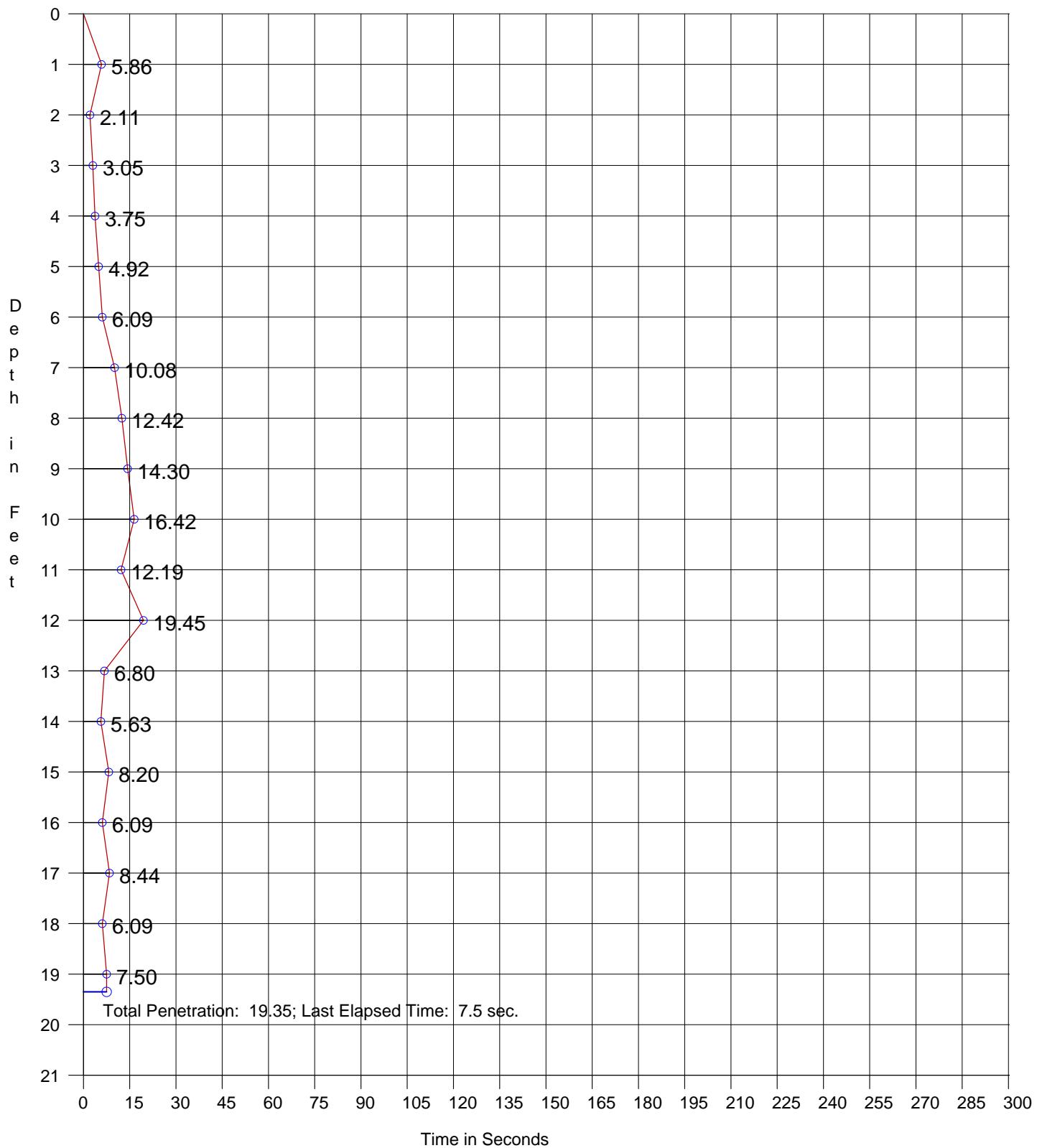
Date: 8/5/2007  
Start Time: 8:47:07 AM  
End Time: 8:49:52 AM

Penetration: 19.35  
Recovery: 17.2  
W. D. Corrected: 19.4  
W. D. Raw: 20.1

Easting: 369413  
Northing: 2248741  
Coord. System: FL E. NAD-83

Lat: 30d 31.1212' N  
Long: 81d 24.8843' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-25, Run 1

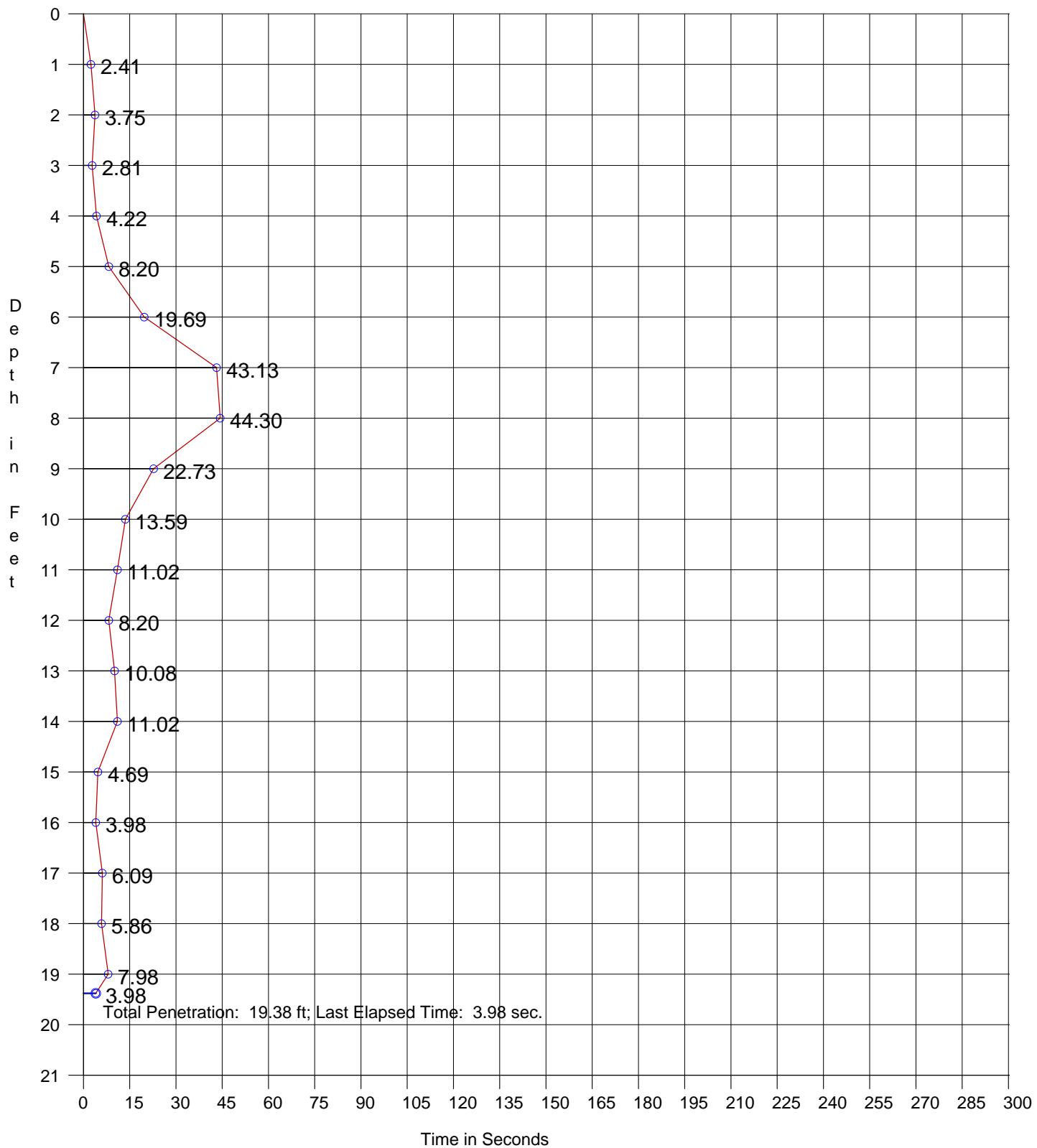
Date: 8/5/2007  
Start Time: 7:34:21 AM  
End Time: 7:39:22 AM

Penetration: 19.38 ft  
Recovery: 12.9  
W. D. Corrected: 16.2  
W. D. Raw: 16.7

Easting: 370021  
Northing: 2248914  
Coord. System: FL E. NAD-83

Lat: 30d 31.1507' N  
Long: 81d 24.7637' W  
Datum: MLLW

Comment:



## Penetration Graph for Core No. B-25, Run 2

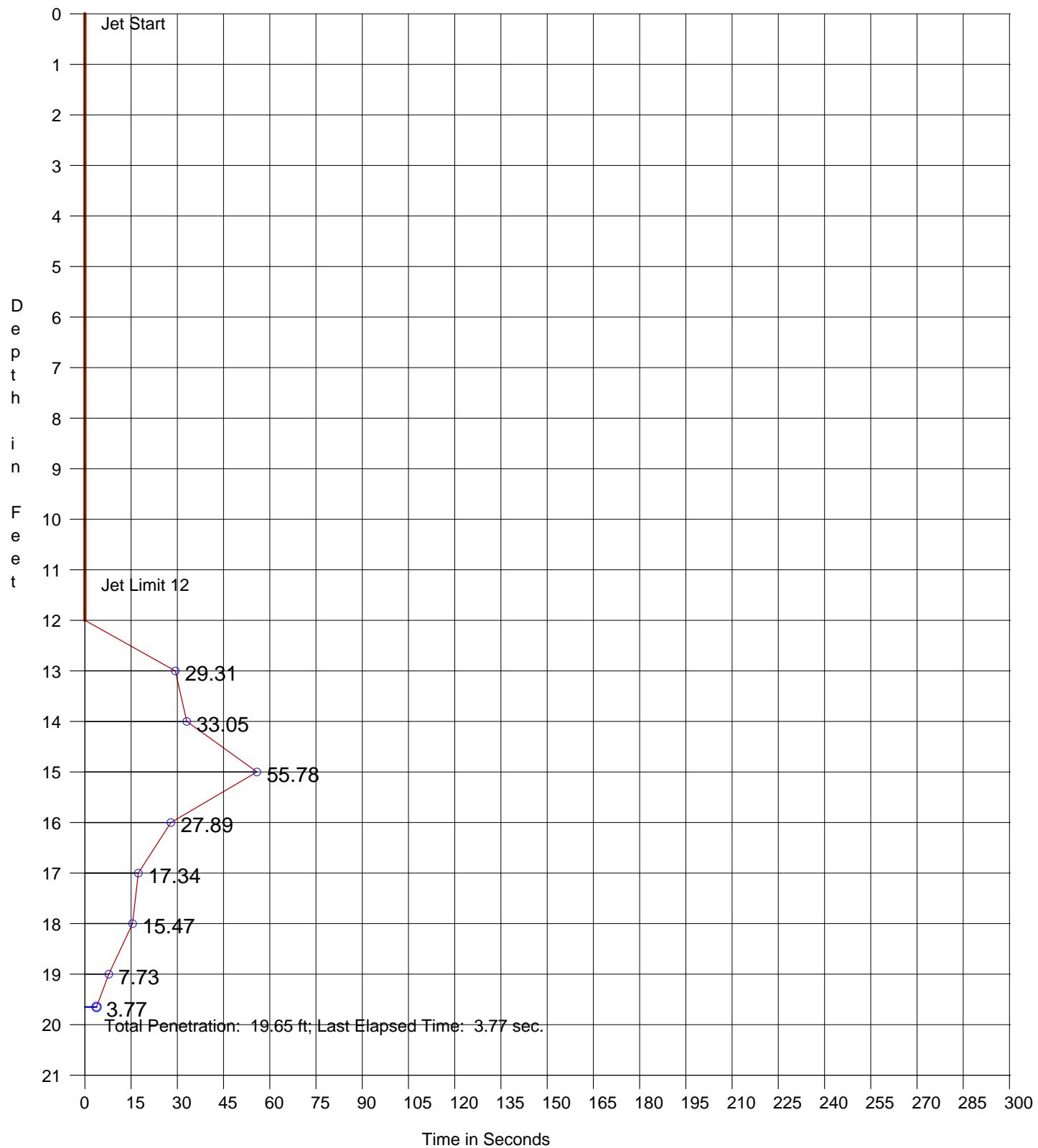
Date: 8/5/2007  
Start Time: 8:10:17 AM  
End Time: 8:14:26 AM

Penetration: 19.65 ft  
Recovery: 5.4  
W. D. Corrected: 16  
W. D. Raw: 16.5

Easting: 370012  
Northing: 2248916  
Coord. System: FL E. NAD-83

Lat: 30d 31.1497' N  
Long: 81d 24.7705' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-26, Run 1

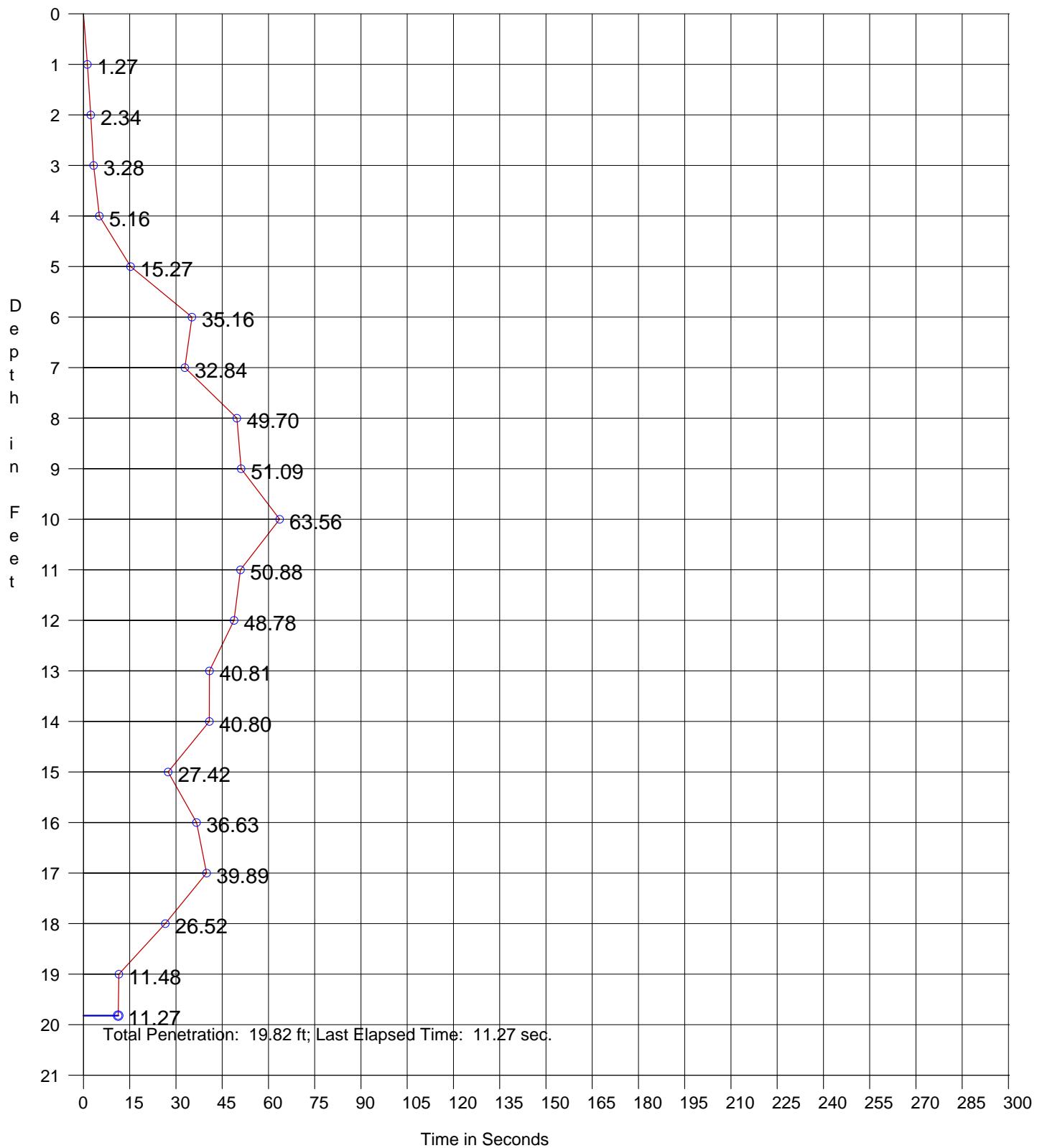
Date: 7/29/2007  
Start Time: 2:16:45 PM  
End Time: 2:26:49 PM

Penetration: 19.82 ft  
Recovery: 18.6  
W. D. Corrected: 19.1  
W. D. Raw: 19.5

Easting: 369227  
Northing: 2250007  
Coord. System: FL E. NAD-83

Lat: 30d 31.3340' N  
Long: 81d 24.9264' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-27, Run 1

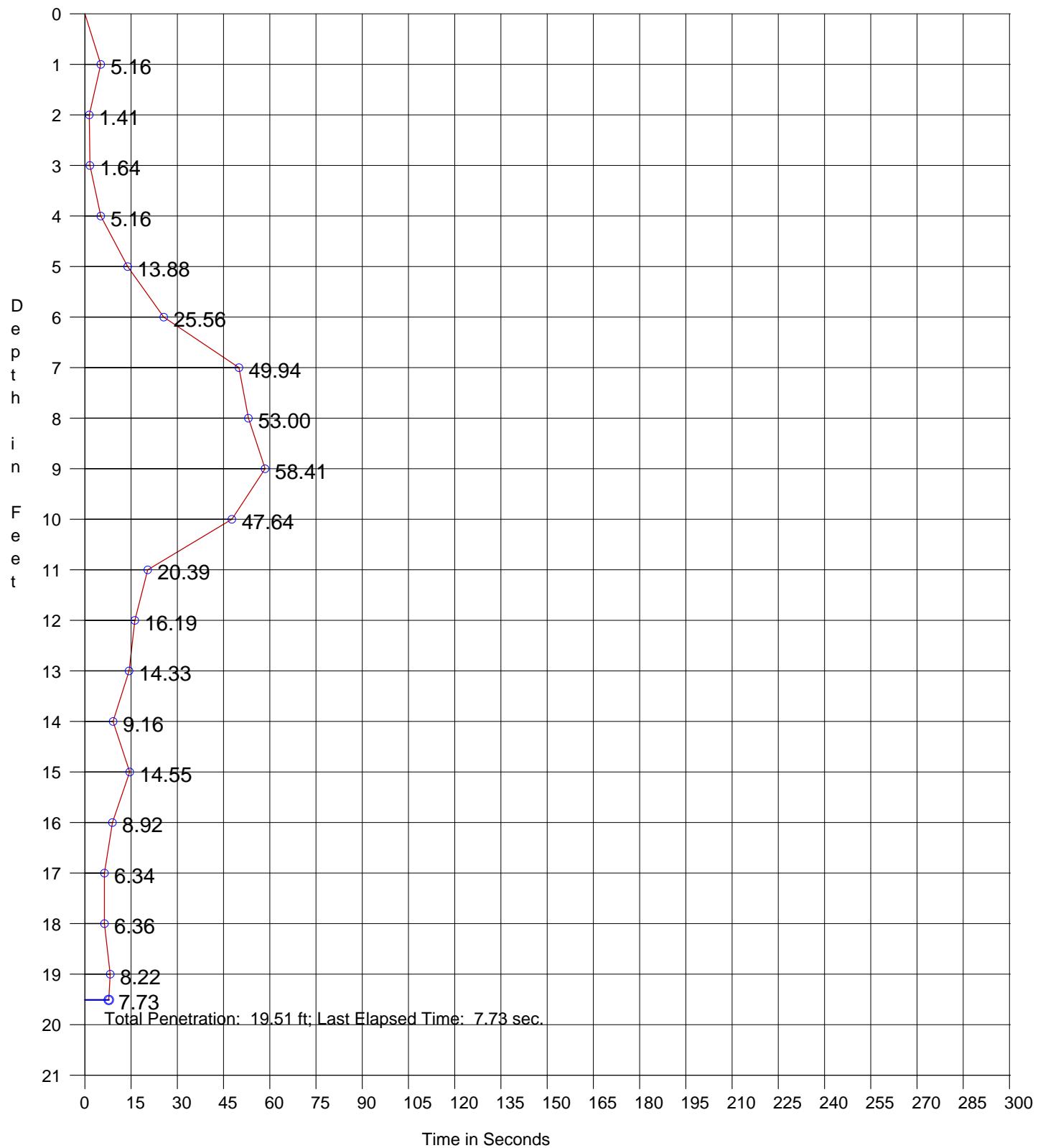
Date: 7/29/2007  
Start Time: 1:24:18 PM  
End Time: 1:30:32 PM

Penetration: 19.51 ft  
Recovery: 20  
W. D. Corrected: 18.4  
W. D. Raw: 19

Easting: 369221  
Northing: 2249539  
Coord. System: FL E. NAD-83

Lat: 30d 31.2702' N  
Long: 81d 24.9015' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-28, Run 1

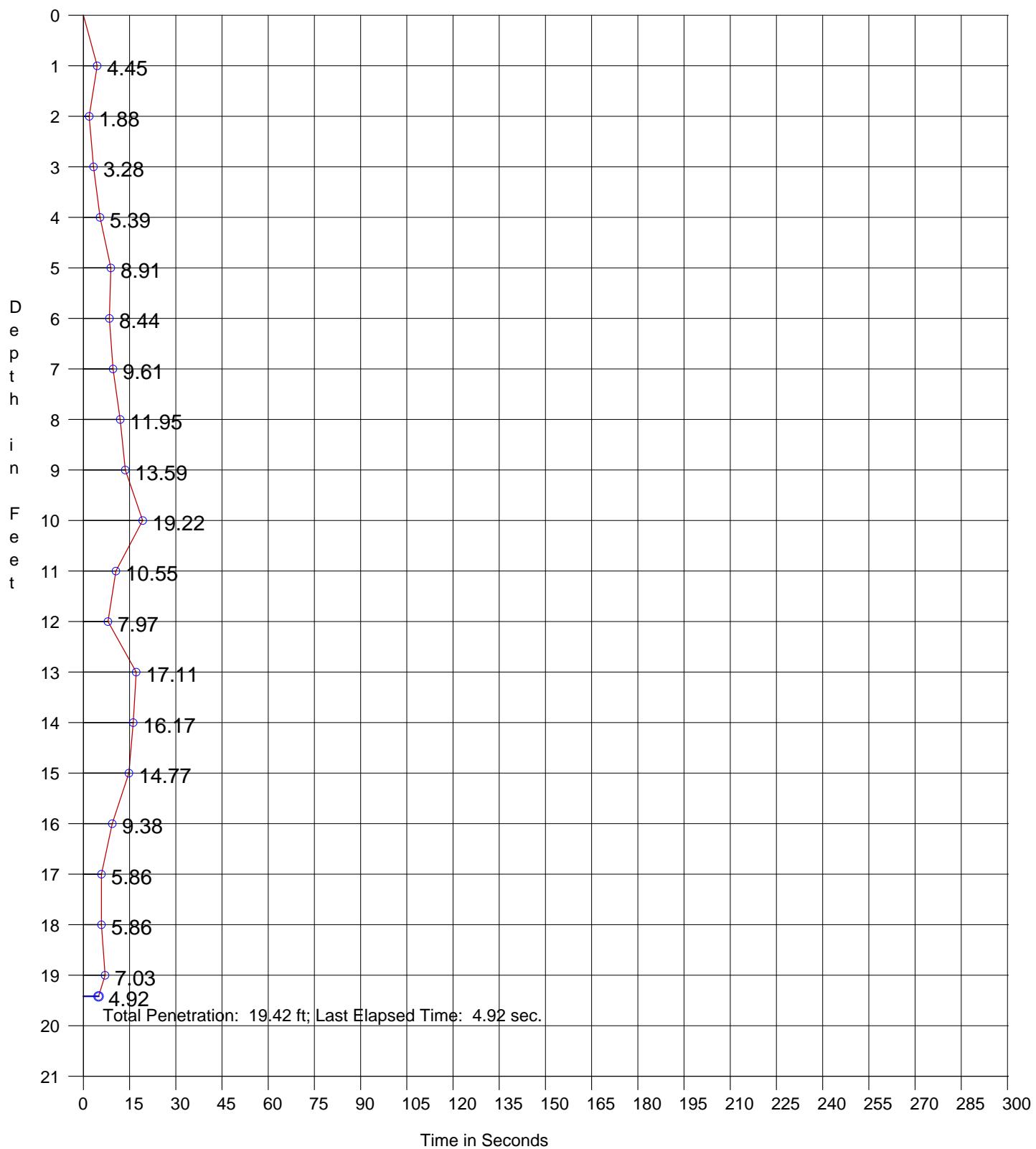
Date: 7/31/2007  
Start Time: 4:11:20 PM  
End Time: 4:14:26 PM

Penetration: 19.42 ft  
Recovery: 15.6  
W. D. Corrected: 18.8  
W. D. Raw: 19

Easting: 368522  
Northing: 2249385  
Coord. System: FL E. NAD-83

Lat: 30d 31.2455' N  
Long: 81d 25.0611' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-29, Run 1

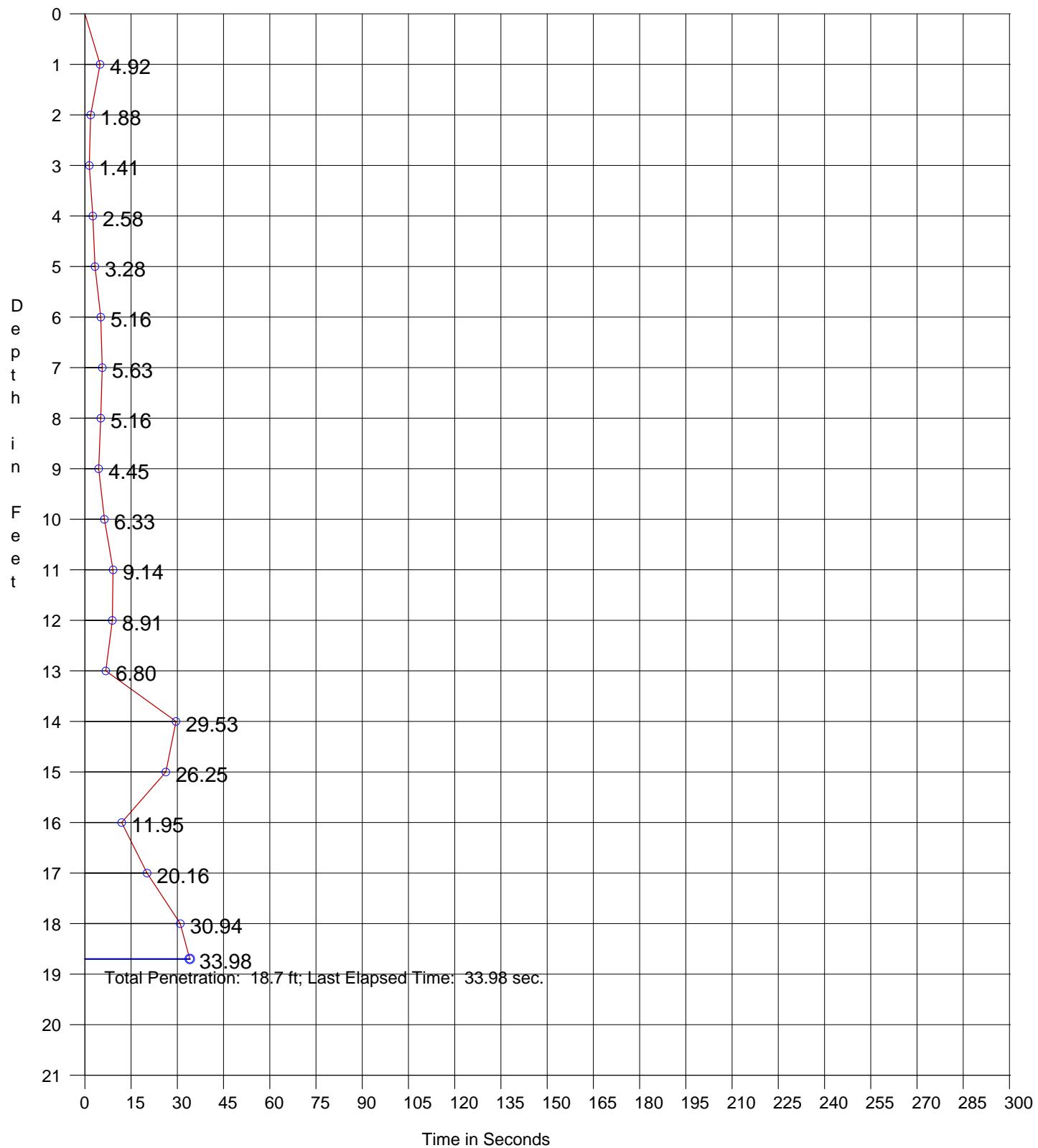
Date: 8/5/2007  
Start Time: 9:52:00 AM  
End Time: 9:55:39 AM

Penetration: 18.70 ft  
Recovery: 17.9  
W. D. Corrected: 10.4  
W. D. Raw: 12

Easting: 368278  
Northing: 2248739  
Coord. System: FL E. NAD-83

Lat: 30d 31.1278' N  
Long: 81d 25.1022' N  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-30, Run 1

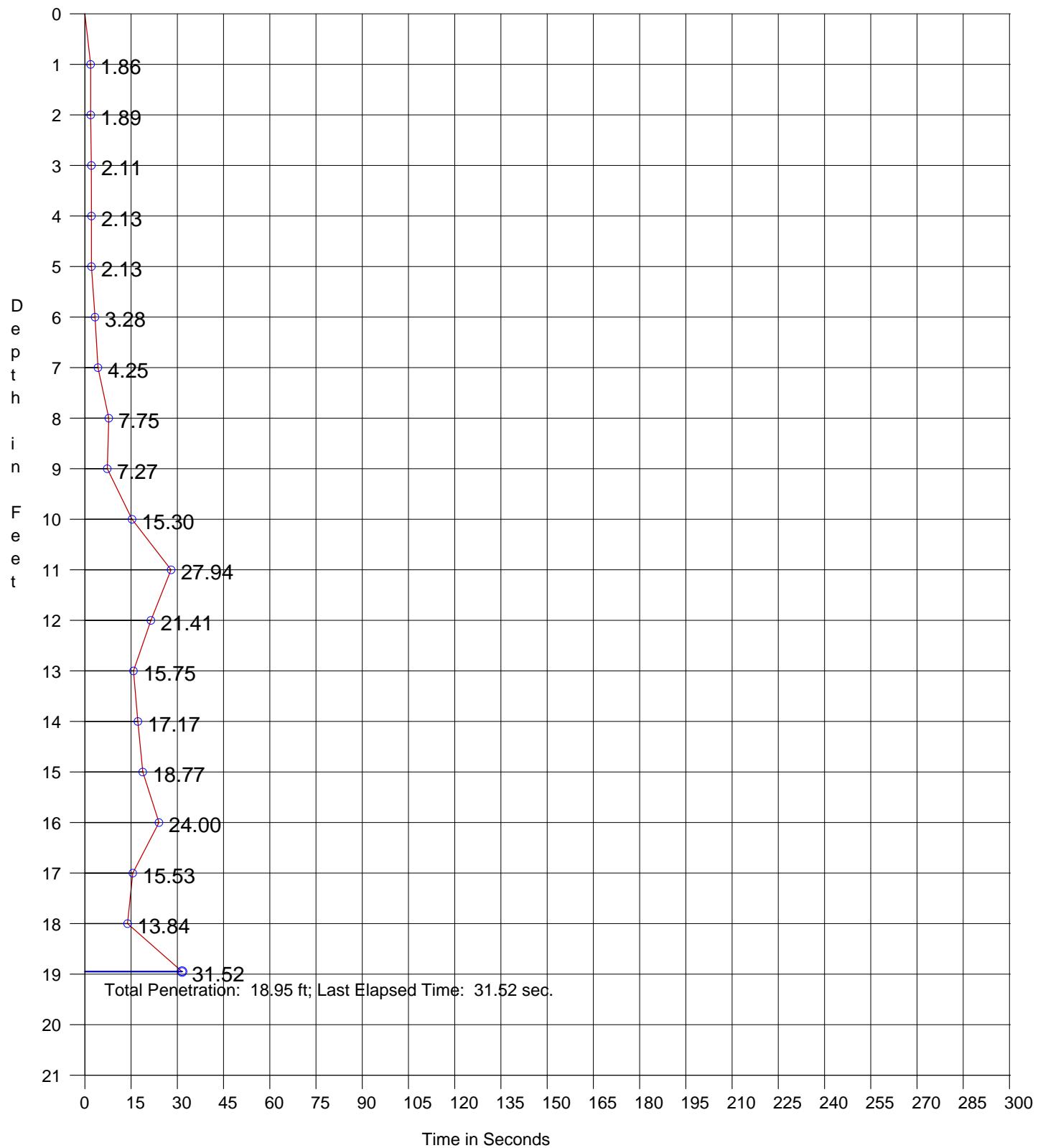
Date: 8/4/2007  
Start Time: 2:24:18 PM  
End Time: 2:28:50 PM

Penetration: 18.95 ft  
Recovery: 17.2  
W. D. Corrected: 11.4  
W. D. Raw: 16.7

Easting: 368080  
Northing: 2248178  
Coord. System: FL E. NAD-83

Lat: 30d 31.0353' N  
Long: 81d 25.1368' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-31, Run 1

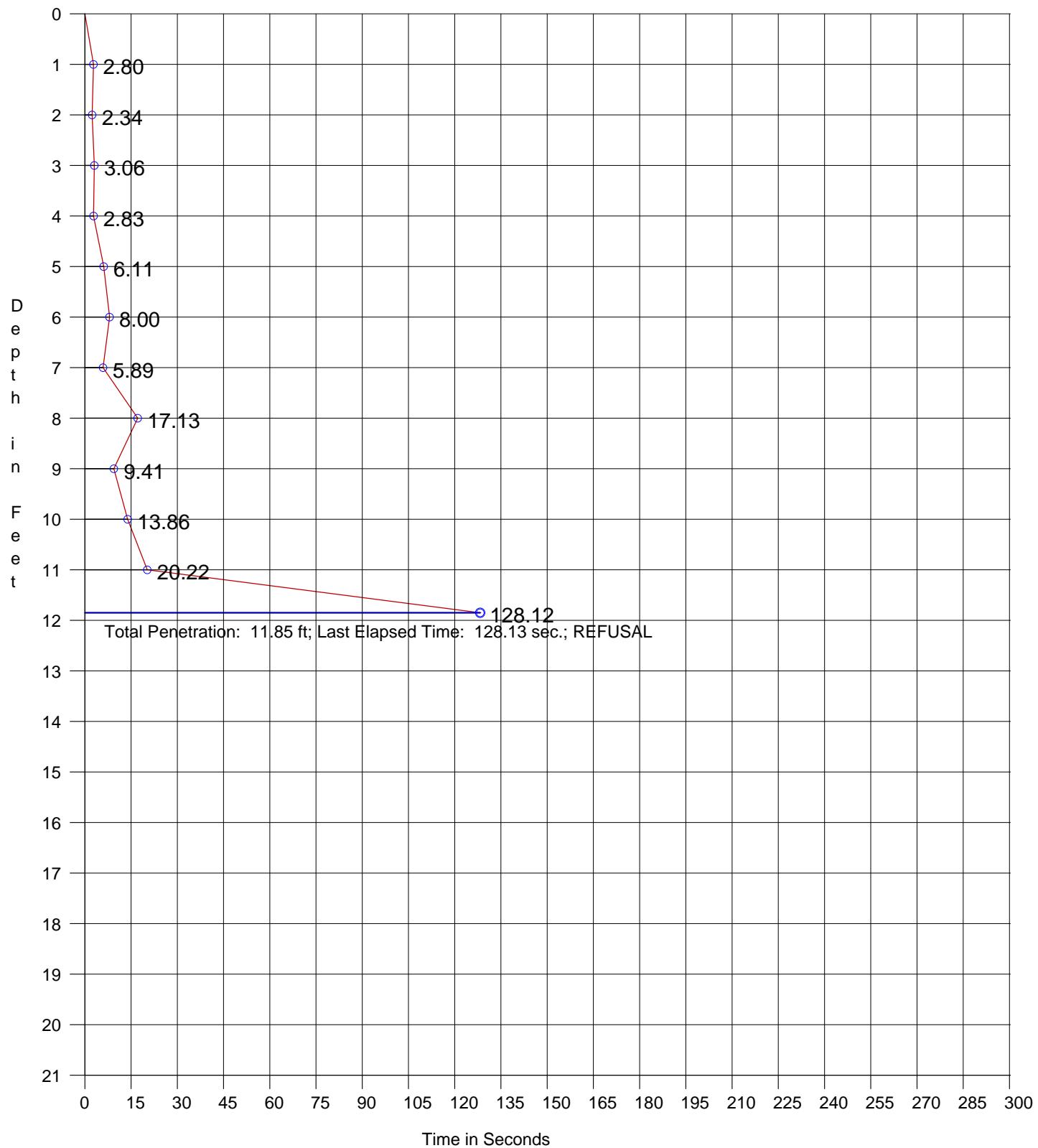
Date: 8/4/2007  
Start Time: 3:49:20 PM  
End Time: 3:53:20 PM

Penetration: 11.85 ft  
Recovery: 9.5  
W. D. Corrected: 6.2  
W. D. Raw: 10.4

Easting: 367563  
Northing: 2248590  
Coord. System: FL E. NAD-83

Lat: 30d 31.0965' N  
Long: 81d 25.2305' W  
Datum: MLLW

Comment:



## Penetration Graph for Core No. B-31, Run 2

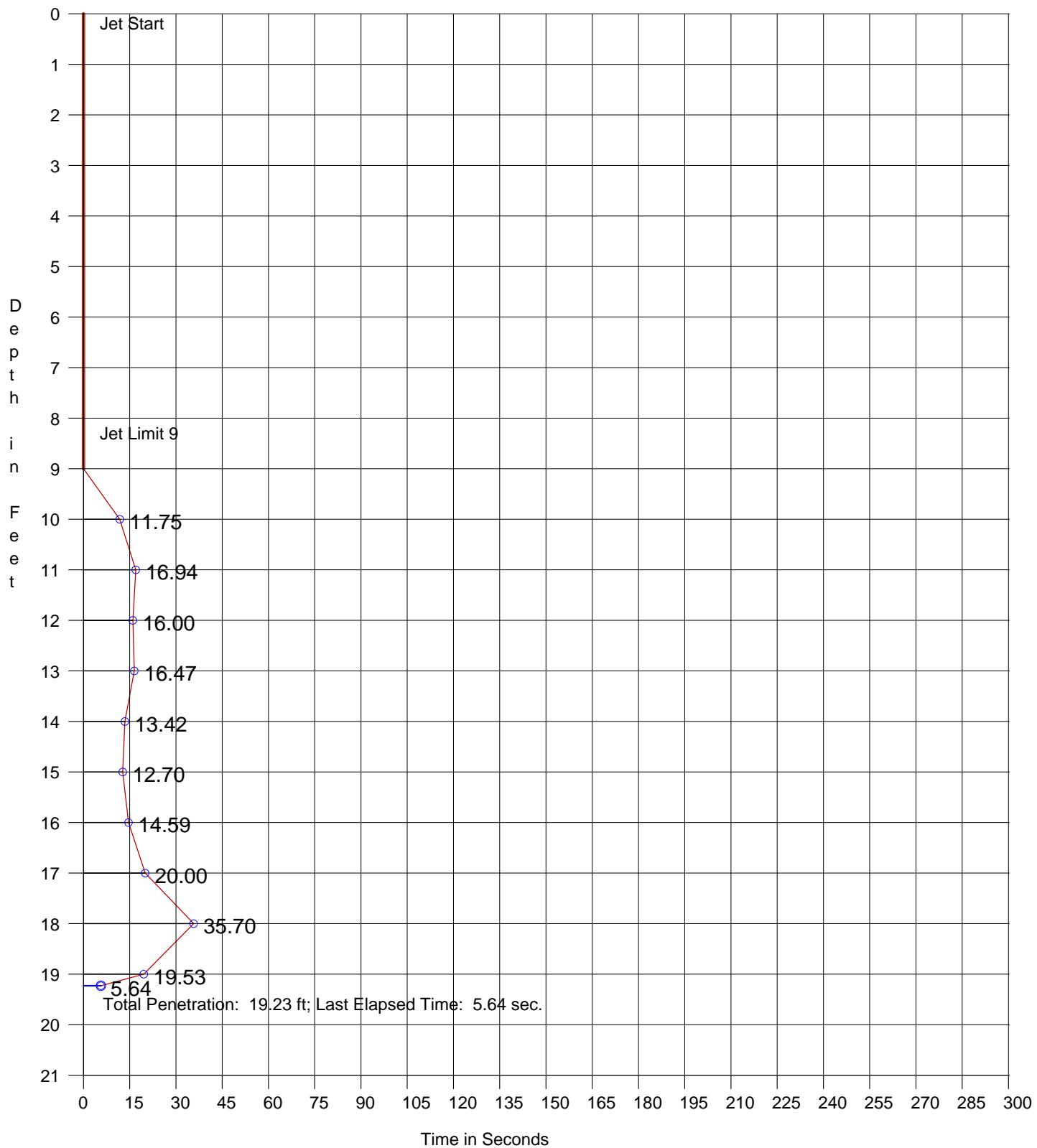
Date: 8/4/2007  
Start Time: 4:13:54 PM  
End Time: 4:17:43 PM

Penetration: 19.23 ft  
Recovery: 3.5  
W. D. Corrected: 4.7  
W. D. Raw: 10.1

Easting: 367557  
Northing: 2248584  
Coord. System: FL E. NAD-83

Lat: 30d 31.1154' N  
Long: 81d 25.2330' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-31, Run 3

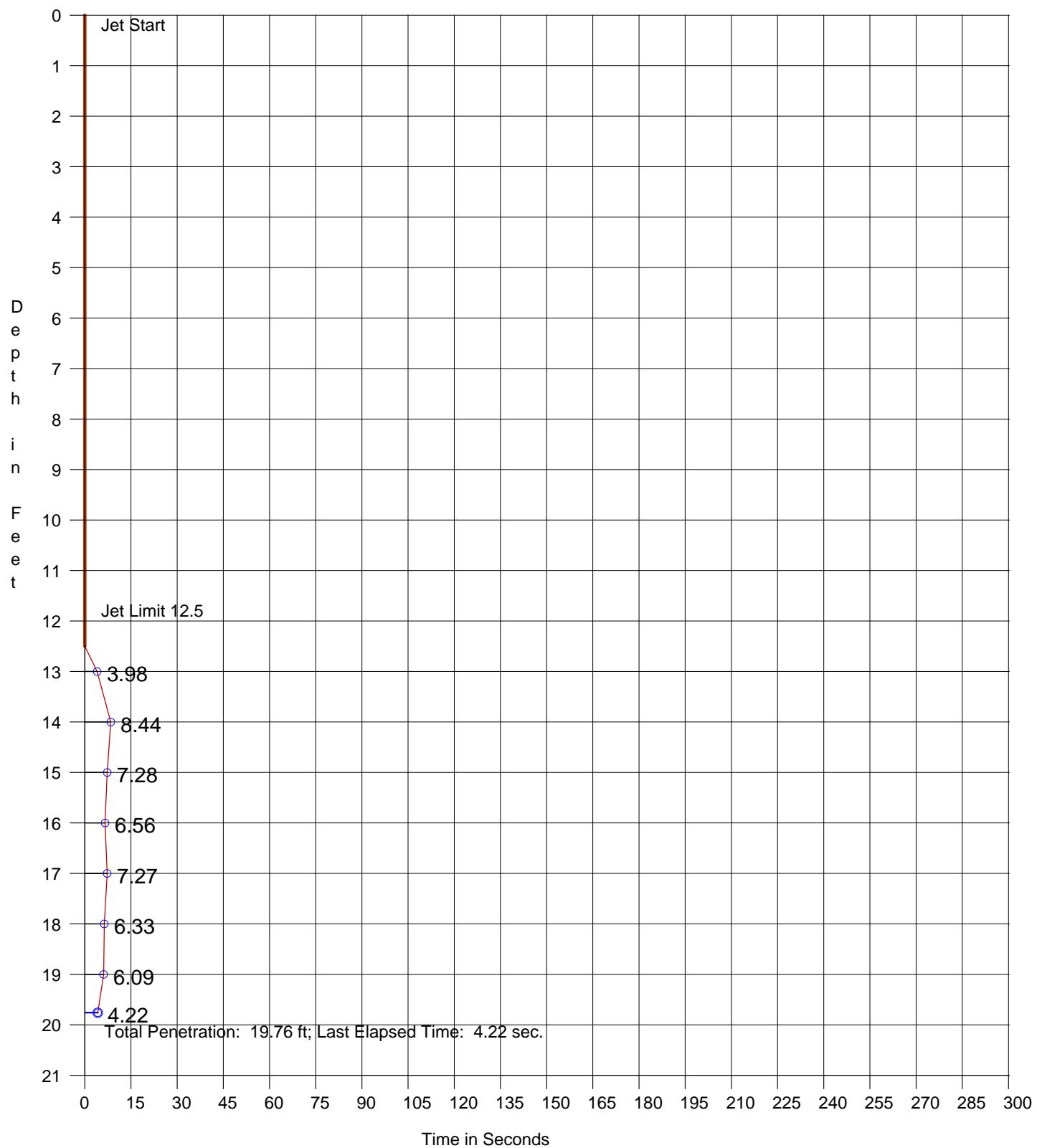
Date: 8/5/2007  
Start Time: 4:02:44 PM  
End Time: 4:04:35 PM

Penetration: 19.76 ft  
Recovery: 5.7  
W. D. Corrected:  
W. D. Raw: 11.6

Easting: 367555  
Northing: 2248600  
Coord. System: FL E. NAD-83

Lat: 30d 31.1015' N  
Long: 81d 25.2315' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-32, Run 1

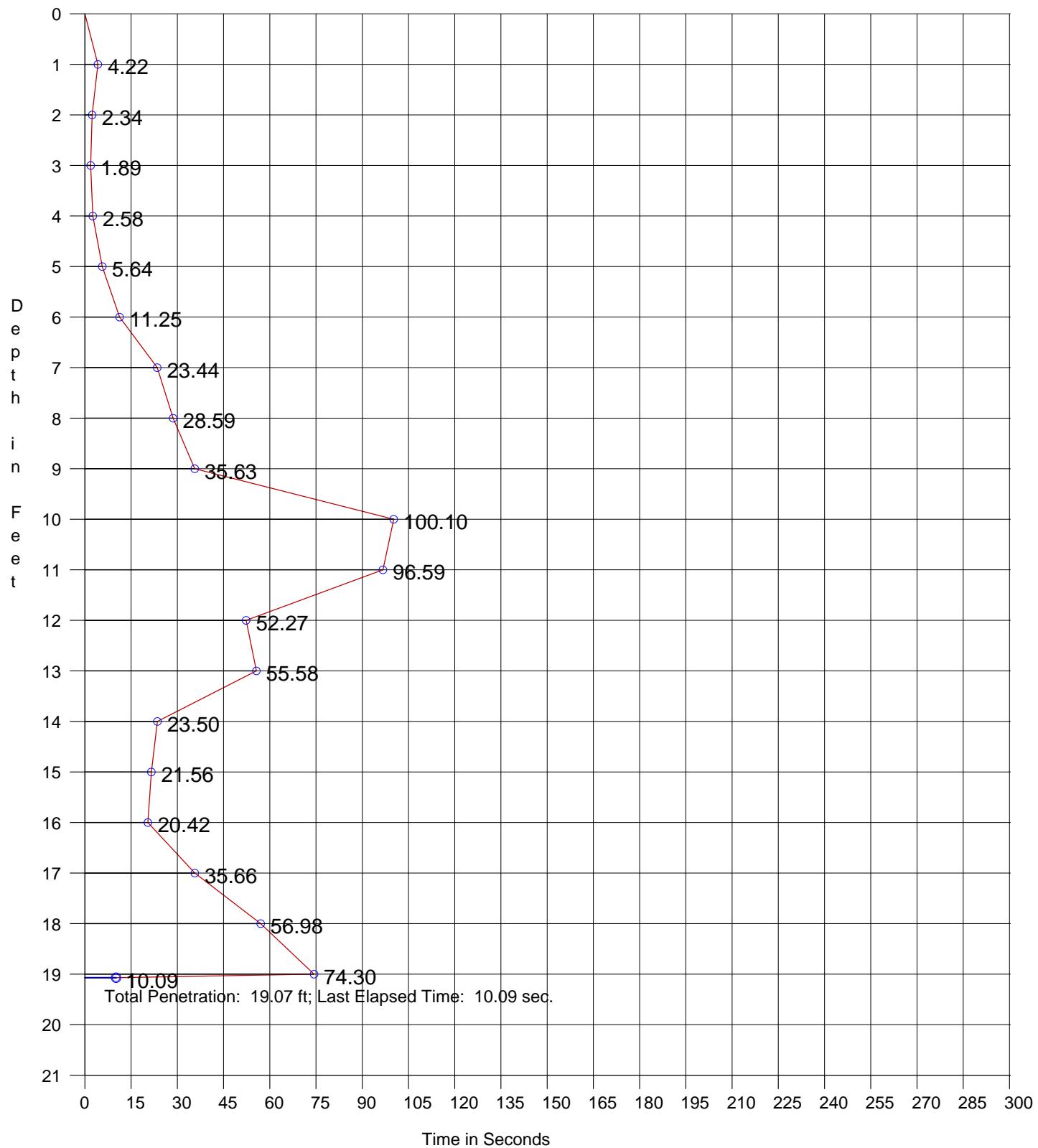
Date: 8/2/2007  
Start Time: 2:21:40 PM  
End Time: 2:32:43 PM

Penetration: 19.07 ft  
Recovery: 18.2  
W. D. Corrected: 14  
W. D. Raw: 17.3

Easting: 367754  
Northing: 2250032  
Coord. System: FL E. NAD-83

Lat: 30d 31.3368' N  
Long: 81d 25.1915' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-33, Run 1

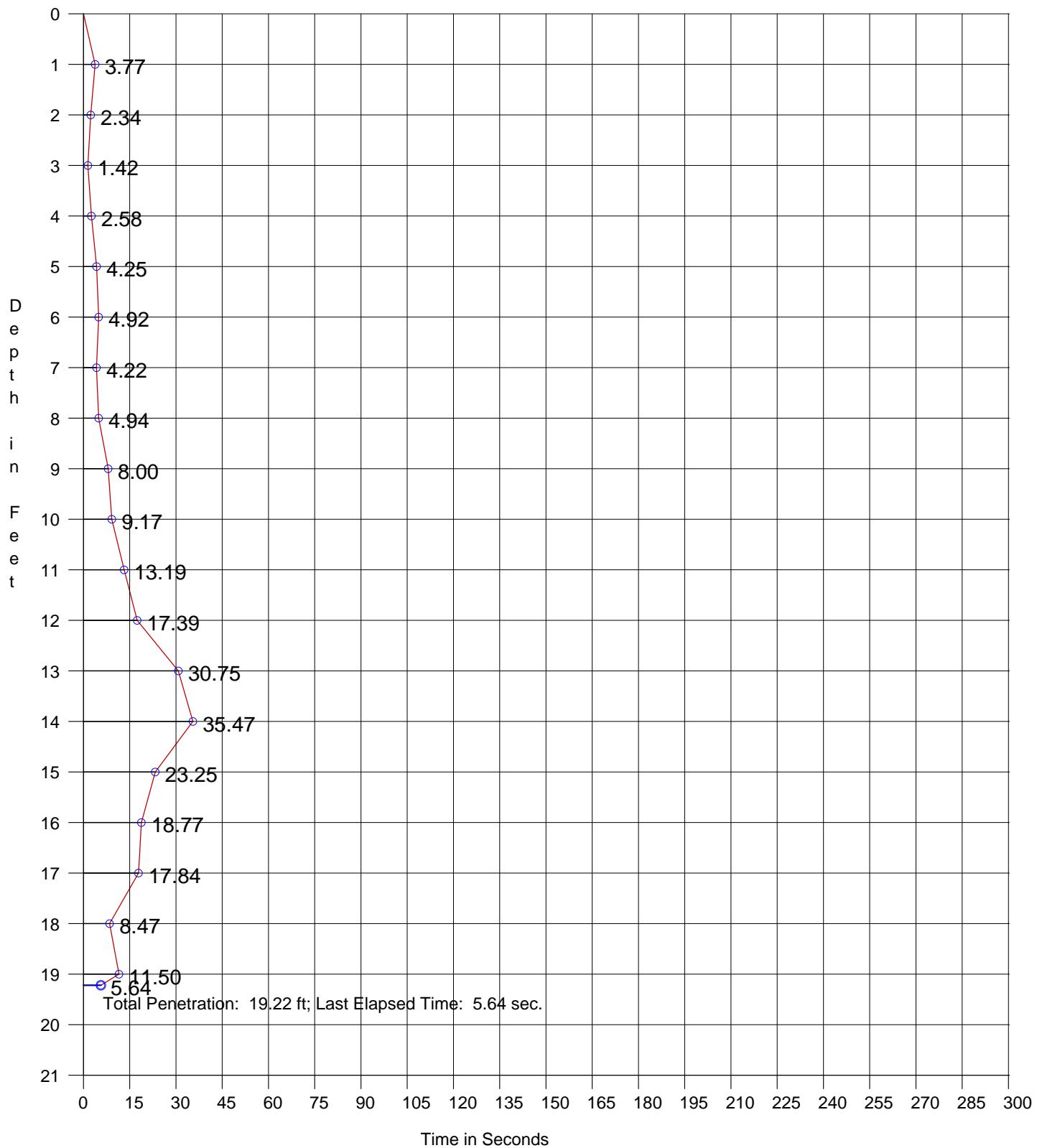
Date: 8/4/2007  
Start Time: 2:46:24 PM  
End Time: 2:50:12 PM

Penetration: 19.22 ft  
Recovery: 16.5  
W. D. Corrected: 8.6  
W. D. Raw: 13.7

Easting: 367870  
Northing: 2247691  
Coord. System: FL E. NAD-83

Lat: 30d 30.9560' N  
Long: 81d 25.1802' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-34, Run 1

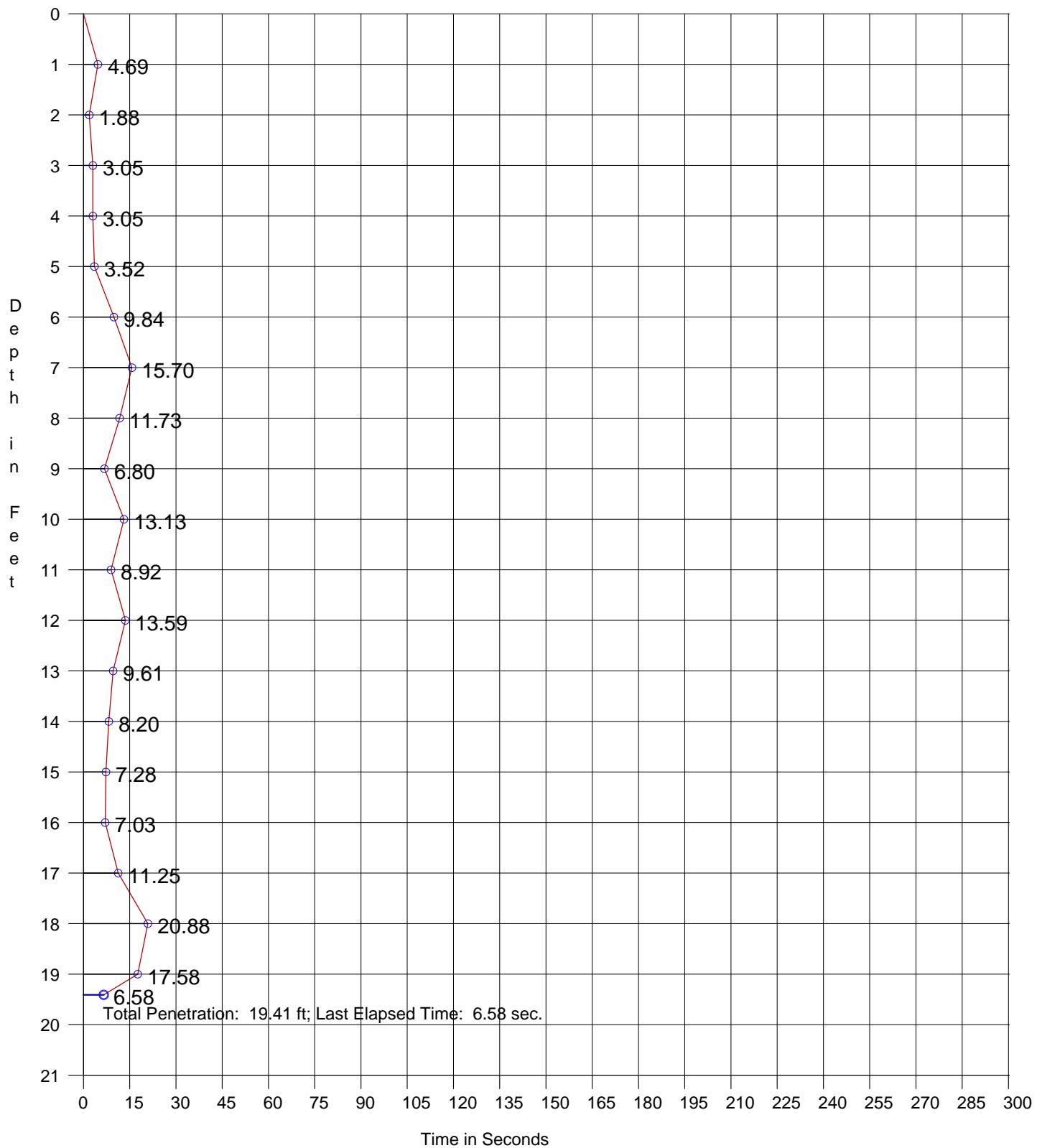
Date: 8/2/2007  
Start Time: 10:40:34 AM  
End Time: 10:43:38 AM

Penetration: 19.41 ft  
Recovery: 12.4  
W. D. Corrected: 12.7  
W. D. Raw: 17.7

Easting: 366164  
Northing: 2248972  
Coord. System: FL E. NAD-83

Lat: 30d 31.1661' N  
Long: 81d 25.4993' W  
Datum: MLLW

Comment:



## Penetration Graph for Core No. B-34, Run 2

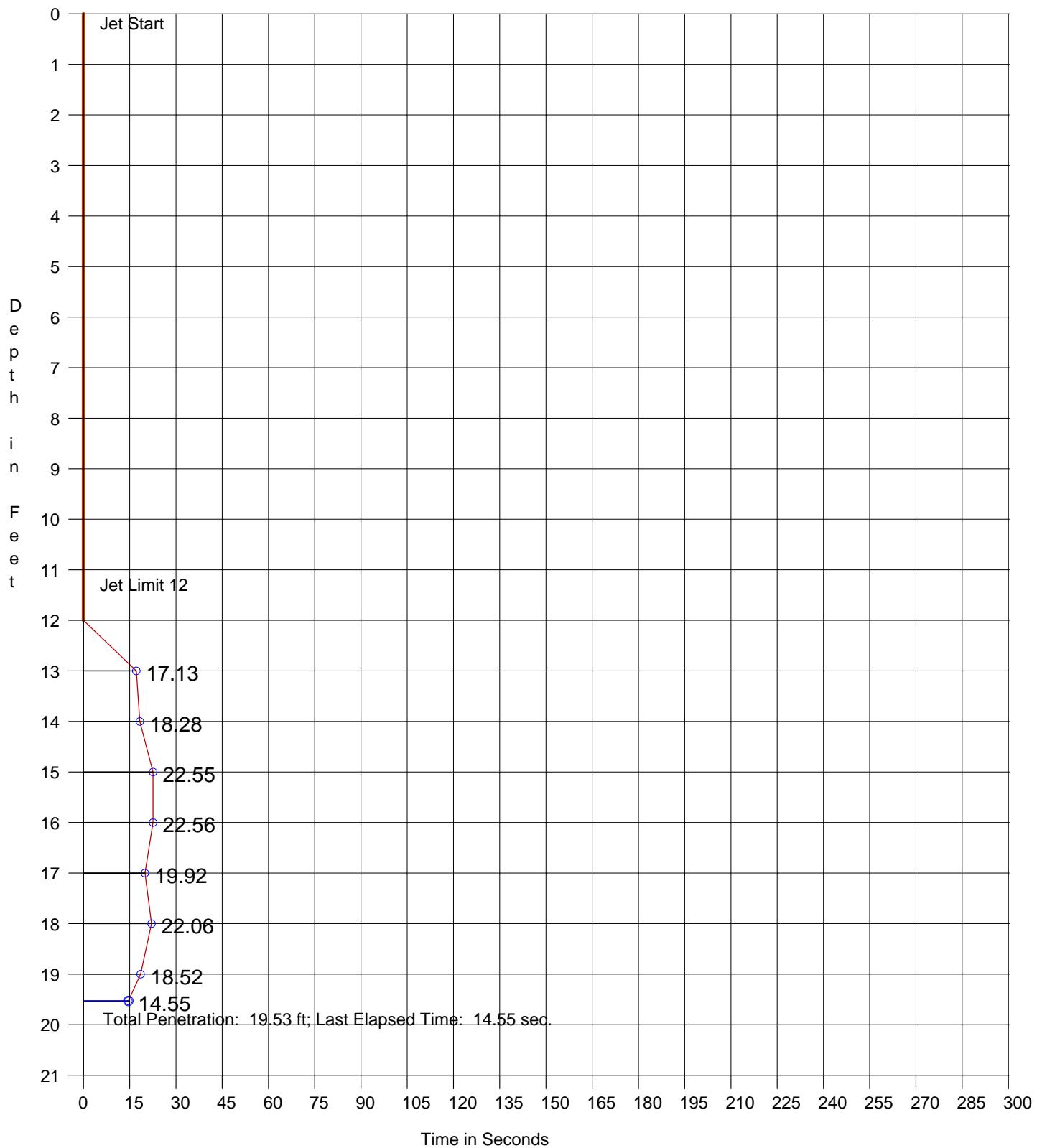
Date: 8/2/2007  
Start Time: 11:01:49 AM  
End Time: 11:05:50 AM

Penetration: 19.53 ft  
Recovery: 4.2  
W. D. Corrected: 12.5  
W. D. Raw: 17.7

Easting: 366153  
Northing: 2248959  
Coord. System: FL E. NAD-83

Lat: 30d 31.1640' N  
Long: 81d 25.5007' W  
Datum: MLLW

Comment:



## Penetration Graph for Core No. B 35, Run 1

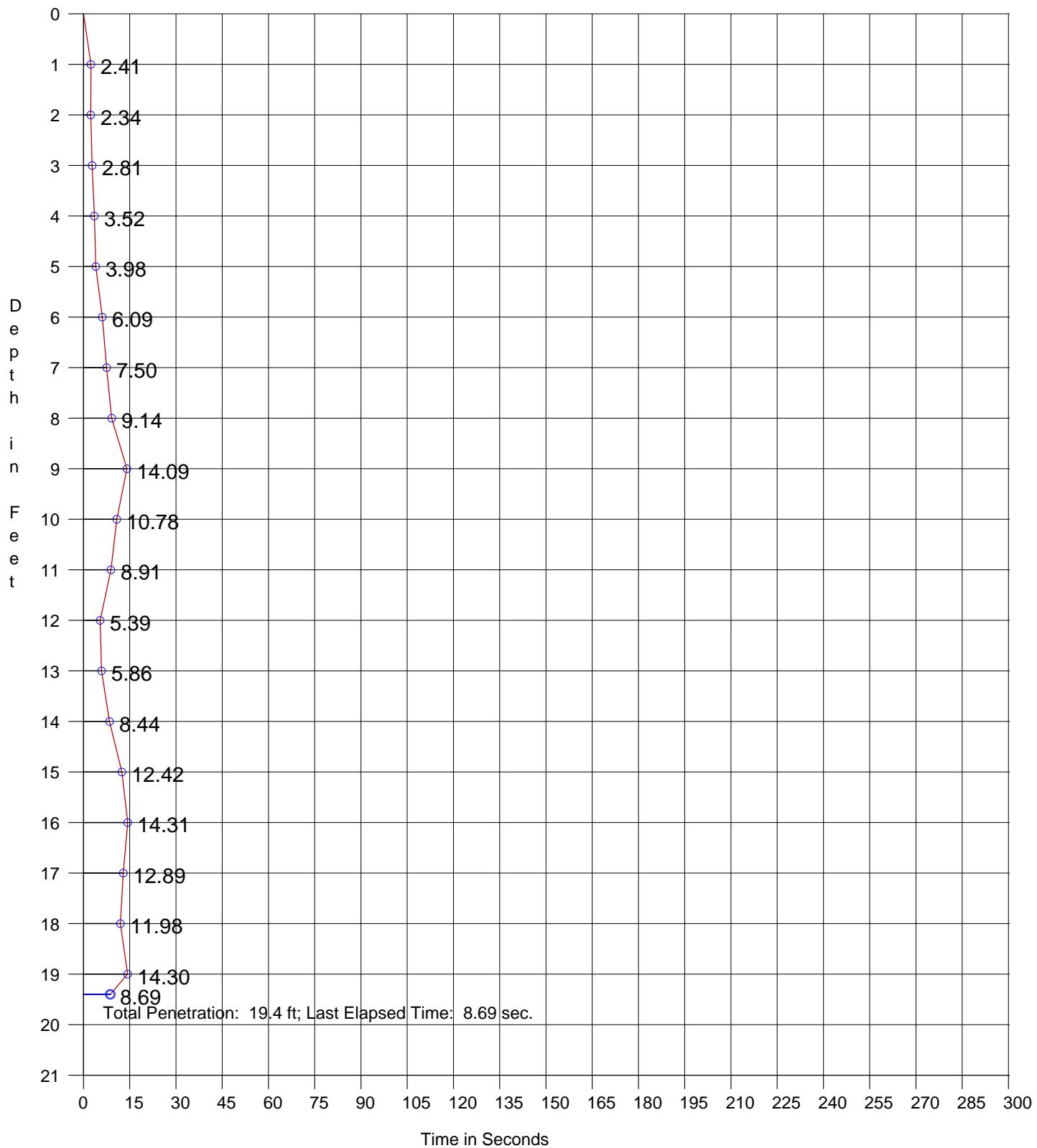
Date: 8/2/2007  
Start Time: 11:27:17 AM  
End Time: 11:30:20 AM

Penetration: 19.40 ft  
Recovery: 18.2  
W. D. Corrected: 9.8  
W. D. Raw: 15.1

Easting: 367048  
Northing: 2248900  
Coord. System: FL E. NAD-83

Lat: 30d 31.1539' N  
Long: 81d 25.3298' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-36, Run 1

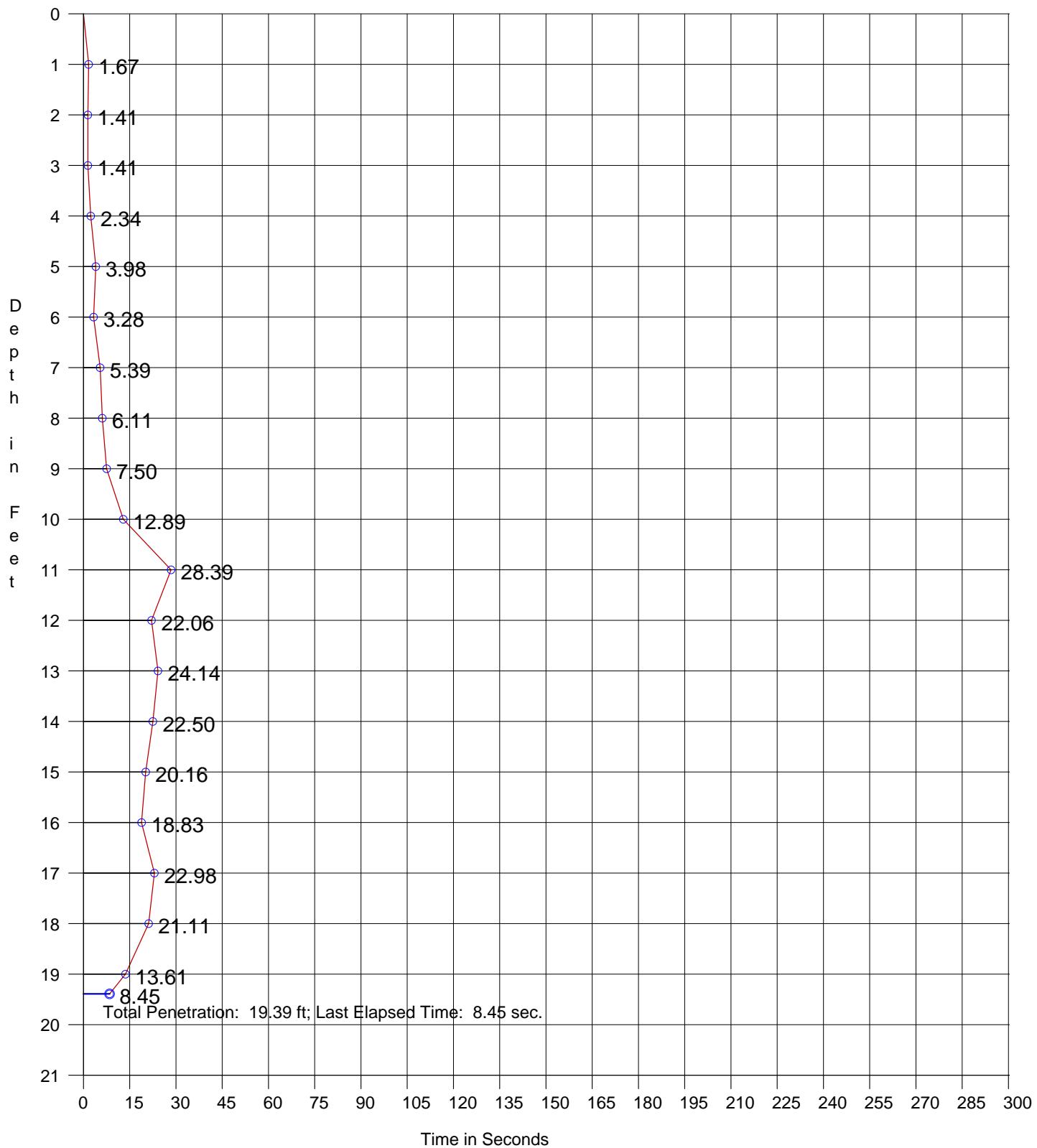
Date: 8/2/2007  
Start Time: 1:45:14 PM  
End Time: 1:49:29 PM

Penetration: 19.39 ft  
Recovery: 19  
W. D. Corrected: 12.6  
W. D. Raw: 16.9

Easting: 367393  
Northing: 2249381  
Coord. System: FL E. NAD-83

Lat: 30d 31.2302' N  
Long: 81d 25.2063' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-37, Run 1

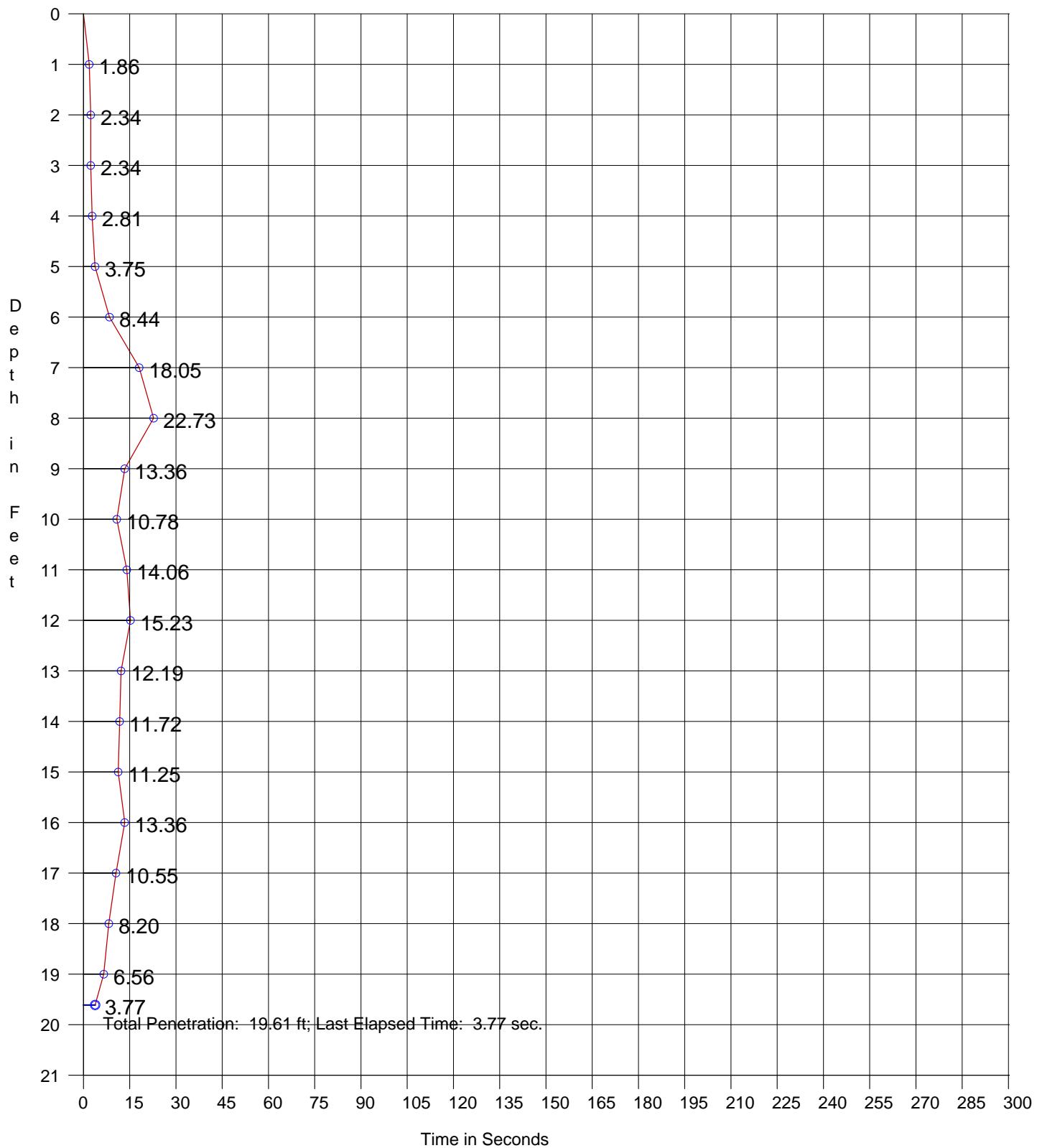
Date: 7/31/2007  
Start Time: 4:44:43 PM  
End Time: 4:48:30 PM

Penetration: 19.61 ft  
Recovery: 20  
W. D. Corrected: 17.14  
W. D. Raw: 17.5

Easting: 368154  
Northing: 2250495  
Coord. System: FL E. NAD-83

Lat: 30d 31.4422' N  
Long: 81d 25.1457' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-38, Run 1

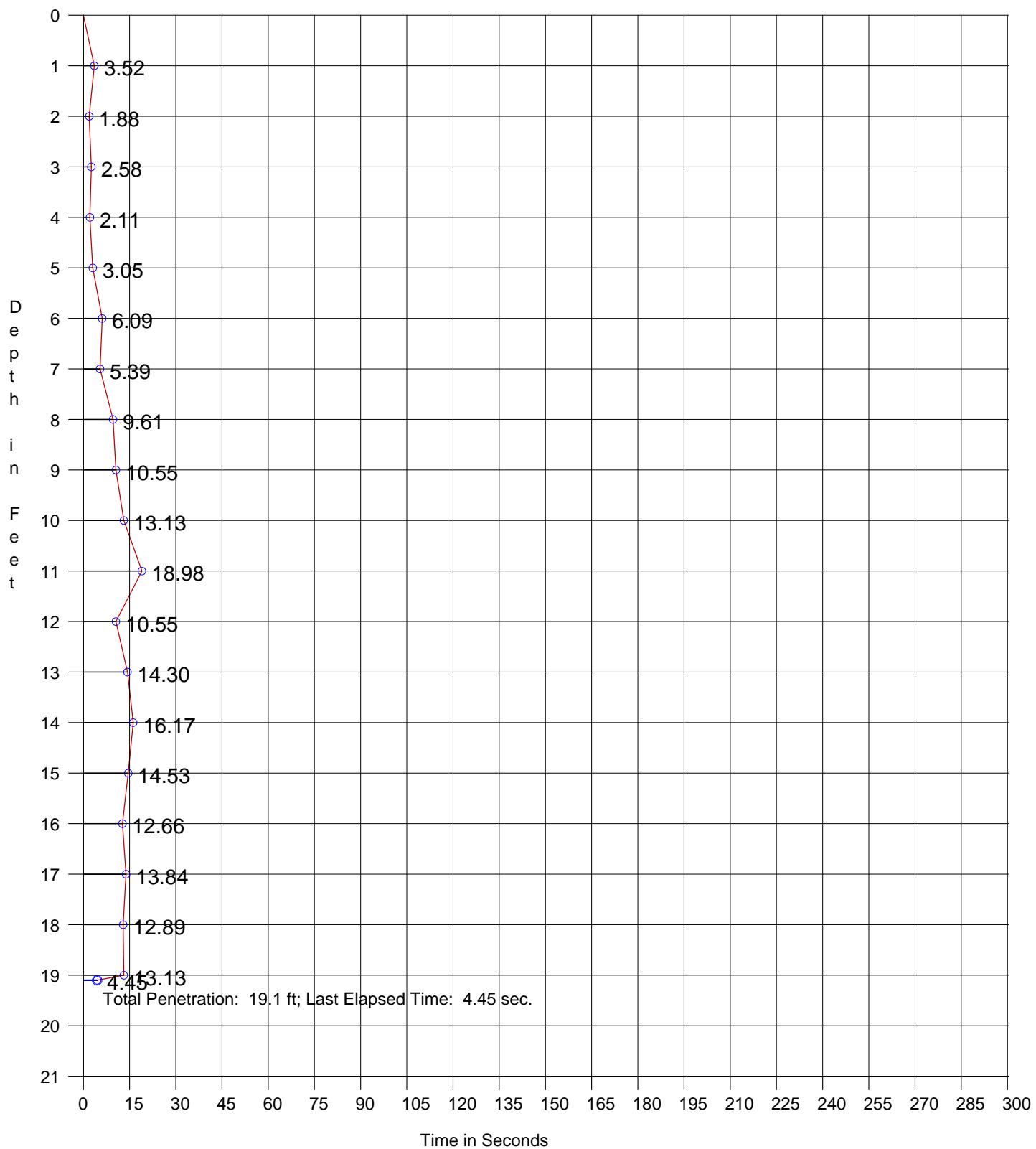
Date: 8/5/2007  
Start Time: 10:24:19 AM  
End Time: 10:27:29 AM

Penetration: 19.10 ft  
Recovery: 18.5  
W. D. Corrected: 11.7  
W. D. Raw: 13.9

Easting: 366949  
Northing: 2250137  
Coord. System: FL E. NAD-83

Lat: 30d 31.2569' N  
Long: 81d 25.3497' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-39, Run 1

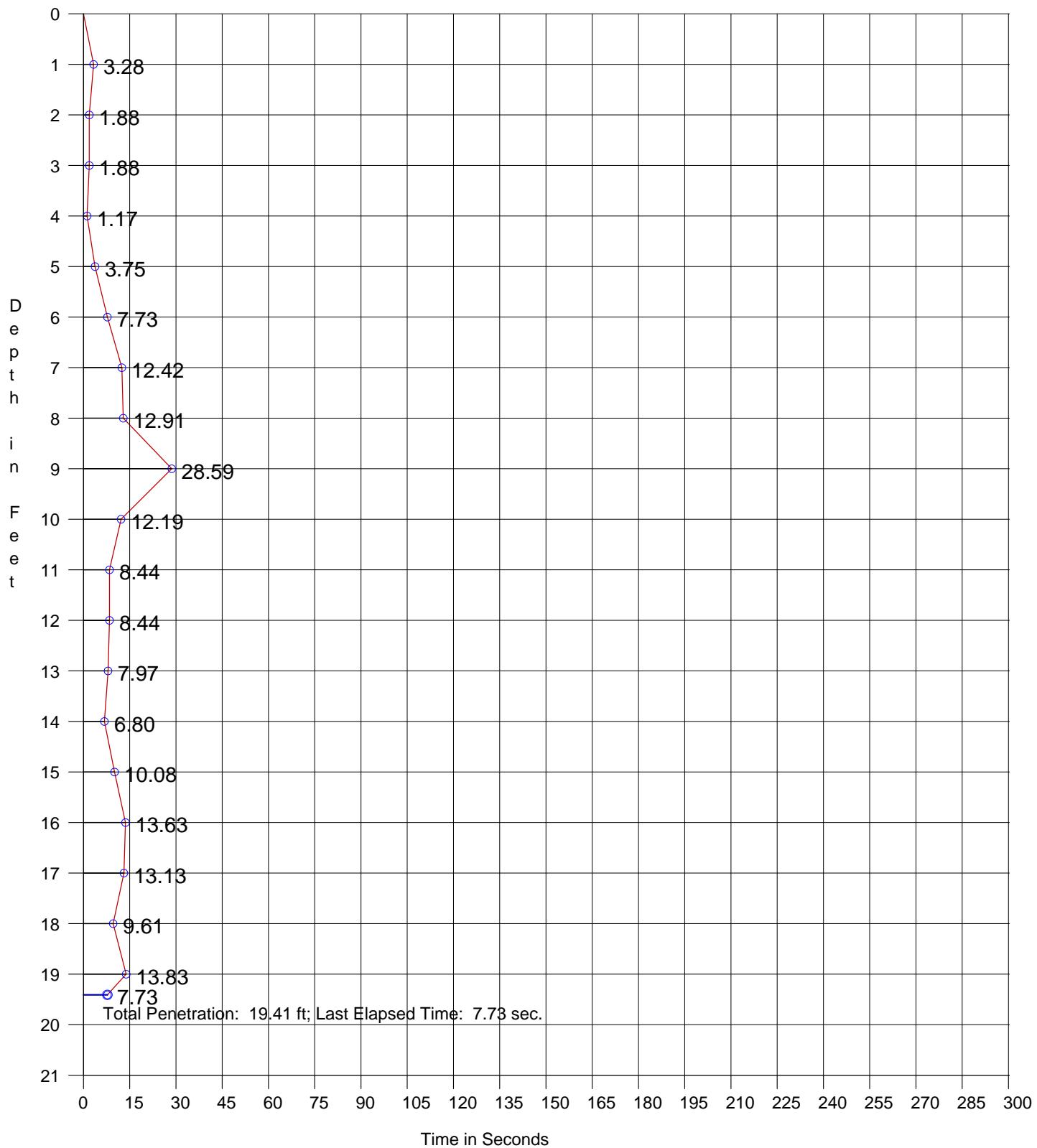
Date: 8/5/2007  
Start Time: 10:45:27 AM  
End Time: 10:48:32 AM

Penetration: 19.41 ft  
Recovery: 19  
W. D. Corrected: 10.6  
W. D. Raw: 13.2

Easting: 366611  
Northing: 2249903  
Coord. System: FL E. NAD-83

Lat: 30d 31.3212' N  
Long: 81d 25.4176' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-40, Run 1

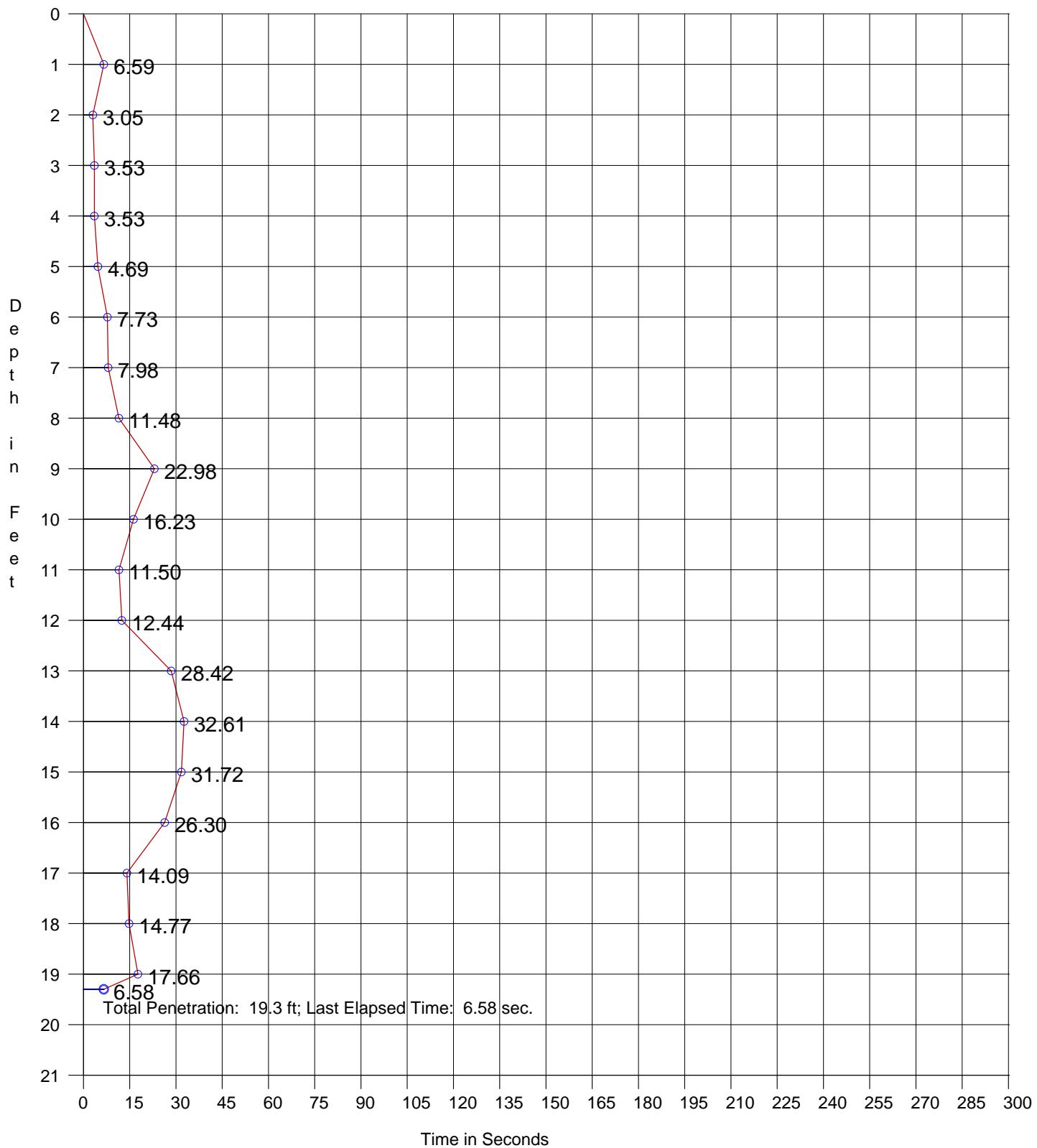
Date: 8/2/2007  
Start Time: 10:12:04 AM  
End Time: 10:16:48 AM

Penetration: 19.30 ft  
Recovery: 18.3  
W. D. Corrected: 11.3  
W. D. Raw: 16

Easting: 366987  
Northing: 2249600  
Coord. System: FL E. NAD-83

Lat: 30d 31.2697' N  
Long: 81d 25.5328' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-41, Run 1

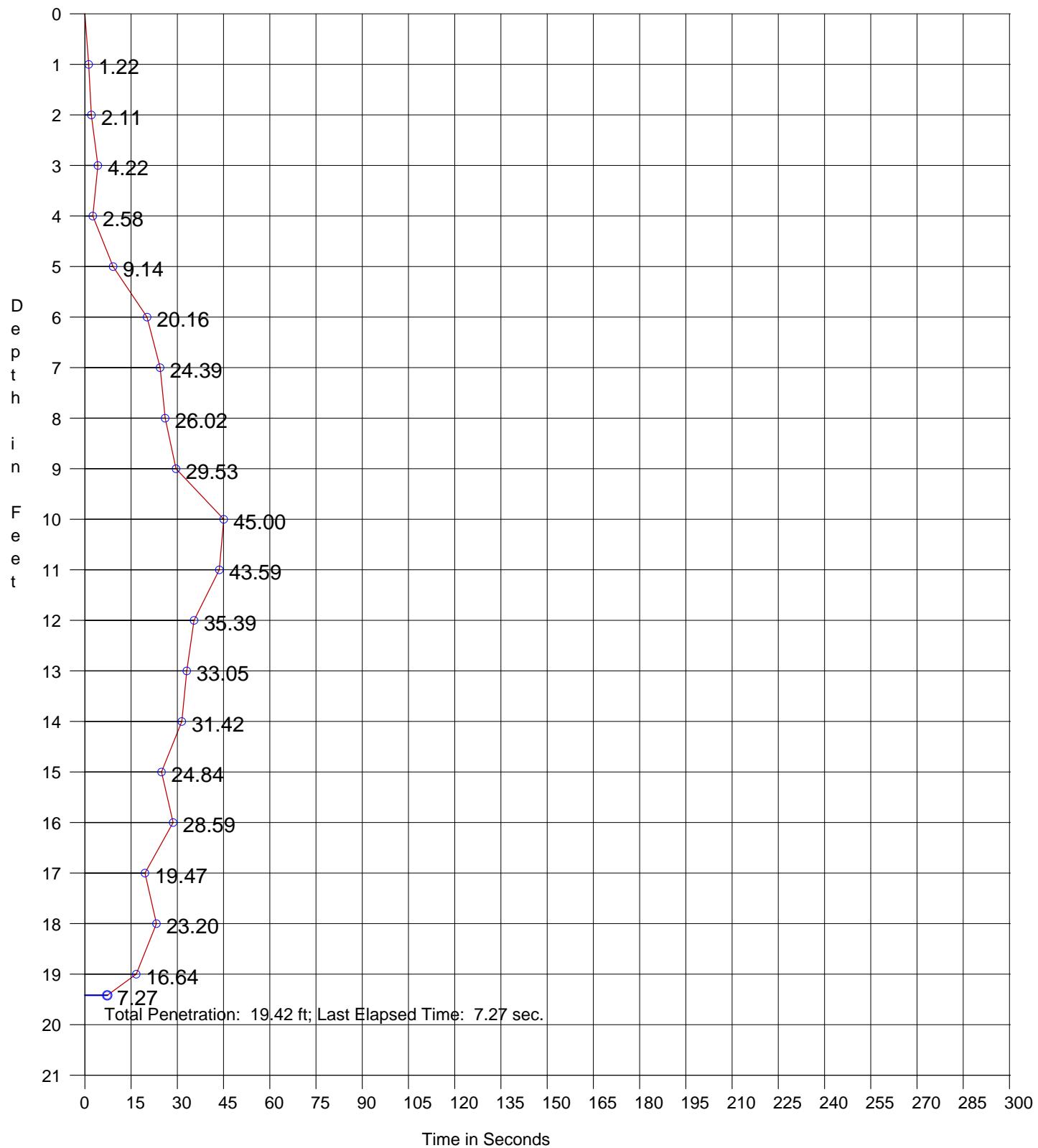
Date: 7/30/2007  
Start Time: 3:20:11 PM  
End Time: 3:29:37 PM

Penetration: 19.42 ft  
Recovery: 19.8  
W. D. Corrected: 20.2  
W. D. Raw: 20.4

Easting: 368597  
Northing: 2250994  
Coord. System: FL E. NAD-83

Lat: 30d 31.5243' N  
Long: 81d 25.0328' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-42, Run 1

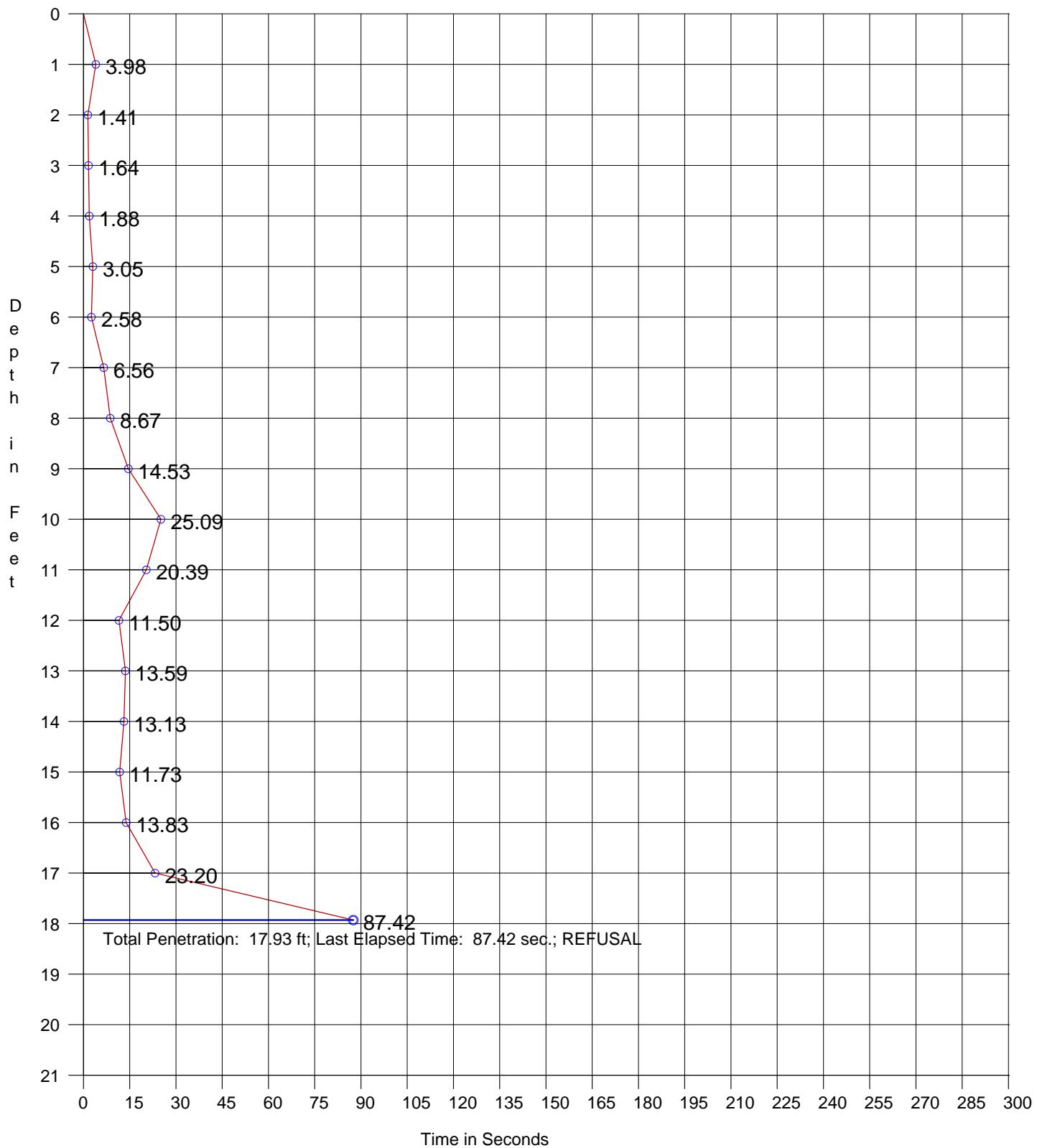
Date: 8/5/2007  
Start Time: 11:08:19 AM  
End Time: 11:12:43 AM

Penetration: 17.93 ft  
Recovery: 19.2  
W. D. Corrected: 13.6  
W. D. Raw: 15.7

Easting: 365676  
Northing: 2250258  
Coord. System: FL E. NAD-83

Lat: 30d 31.3776' N  
Long: 81d 25.5968' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-43, Run 1

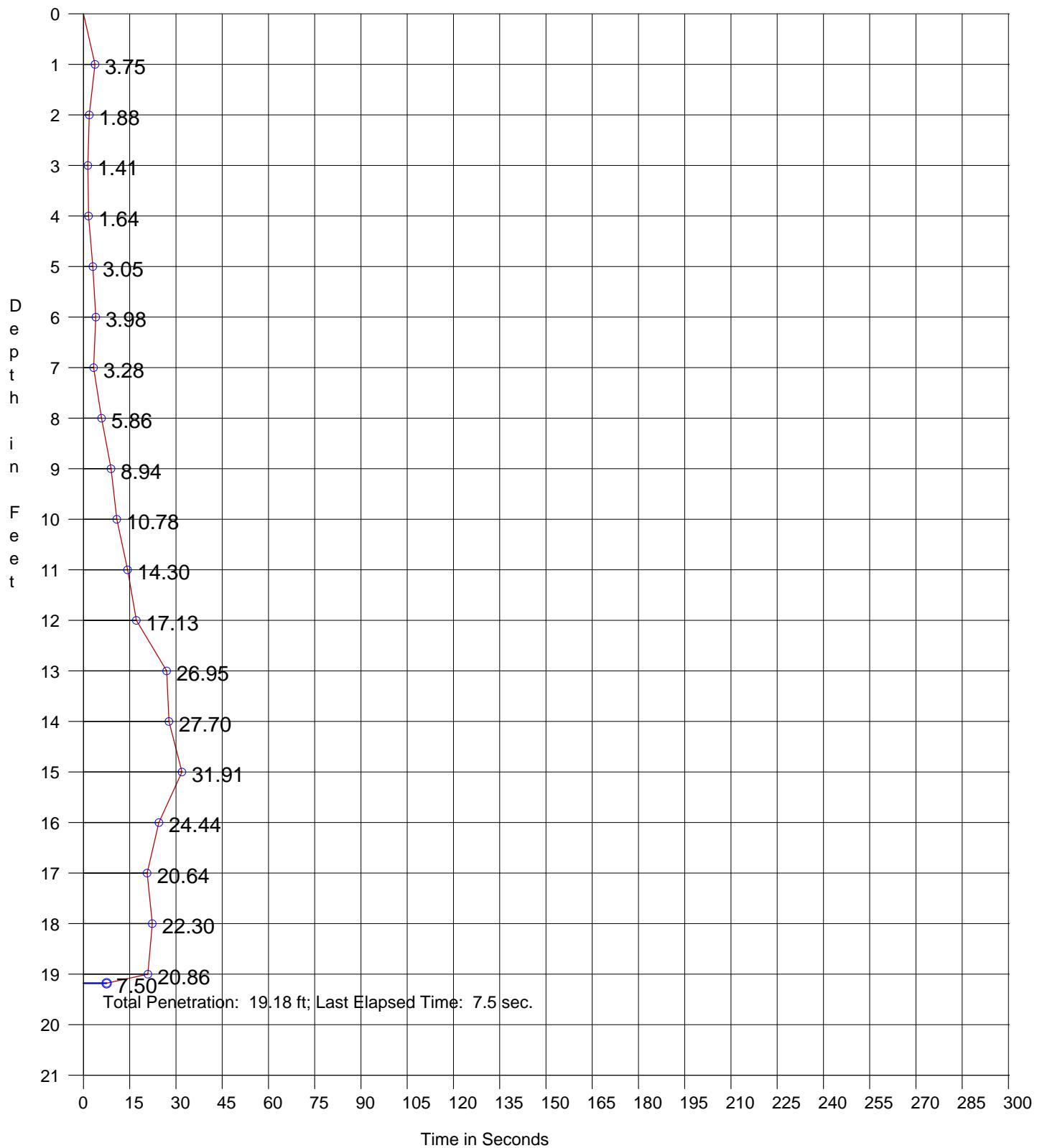
Date: 8/2/2007  
Start Time: 9:32:44 AM  
End Time: 9:37:02 AM

Penetration: 19.18 ft  
Recovery: 18.3  
W. D. Corrected: 10.5  
W. D. Raw: 14.5

Easting: 365372  
Northing: 2250920  
Coord. System: FL E. NAD-83

Lat: 30d 31.4839' N  
Long: 81d 25.6506' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-44, Run 1

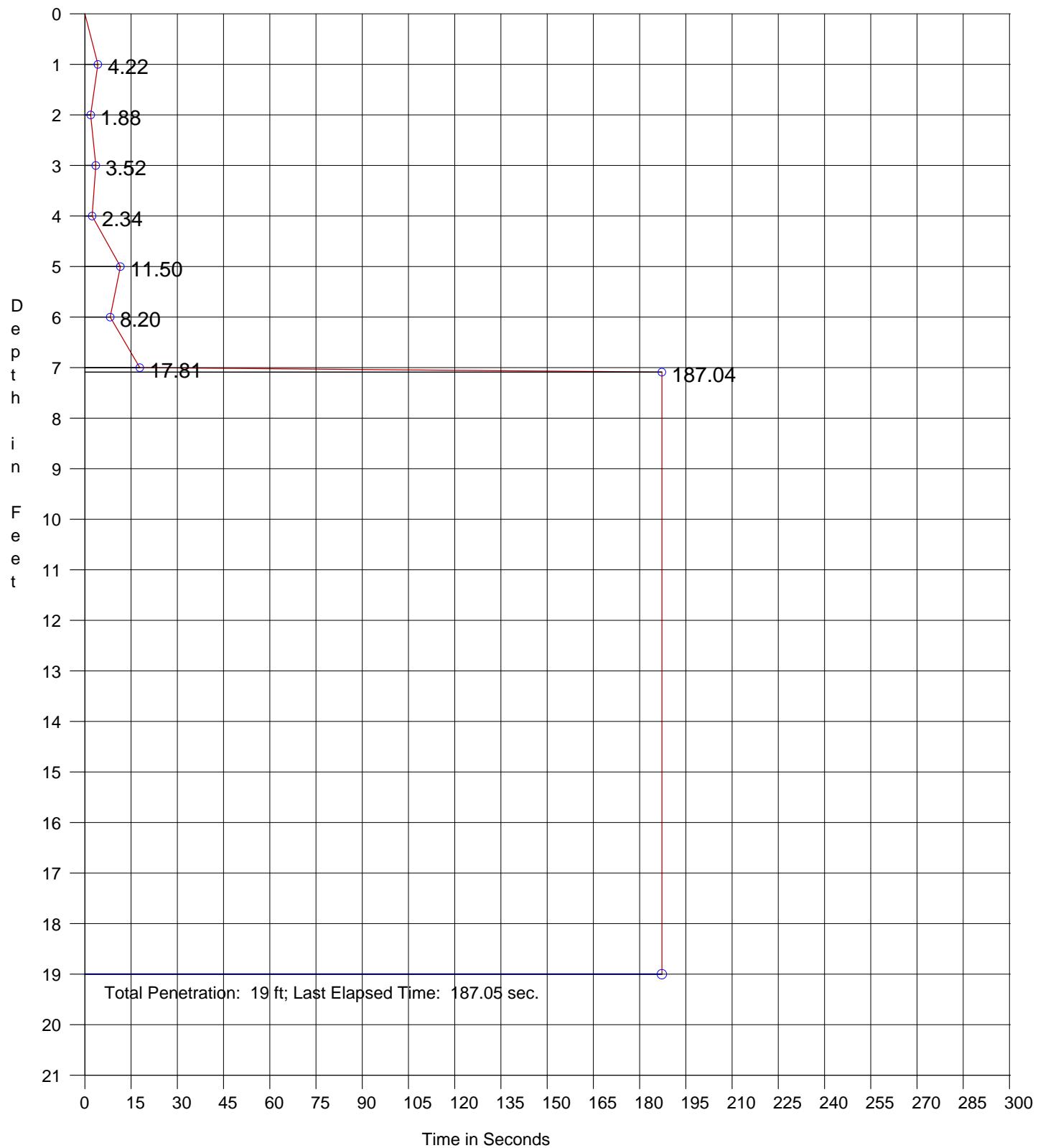
Date: 8/5/2007  
Start Time: 4:26:35 PM  
End Time: 4:30:31 PM

Penetration: 19 ft  
Recovery: 18.5  
W. D. Corrected: 10.6  
W. D. Raw: 15.2

Easting: 365941  
Northing: 2251000  
Coord. System: FL E. NAD-83

Lat: 30d 31.4947' N  
Long: 81d 25.5396' W  
Datum: MLLW

Comment: Penetrometer Chain off at 7'



# Penetration Graph for Core No. B-45, Run 1

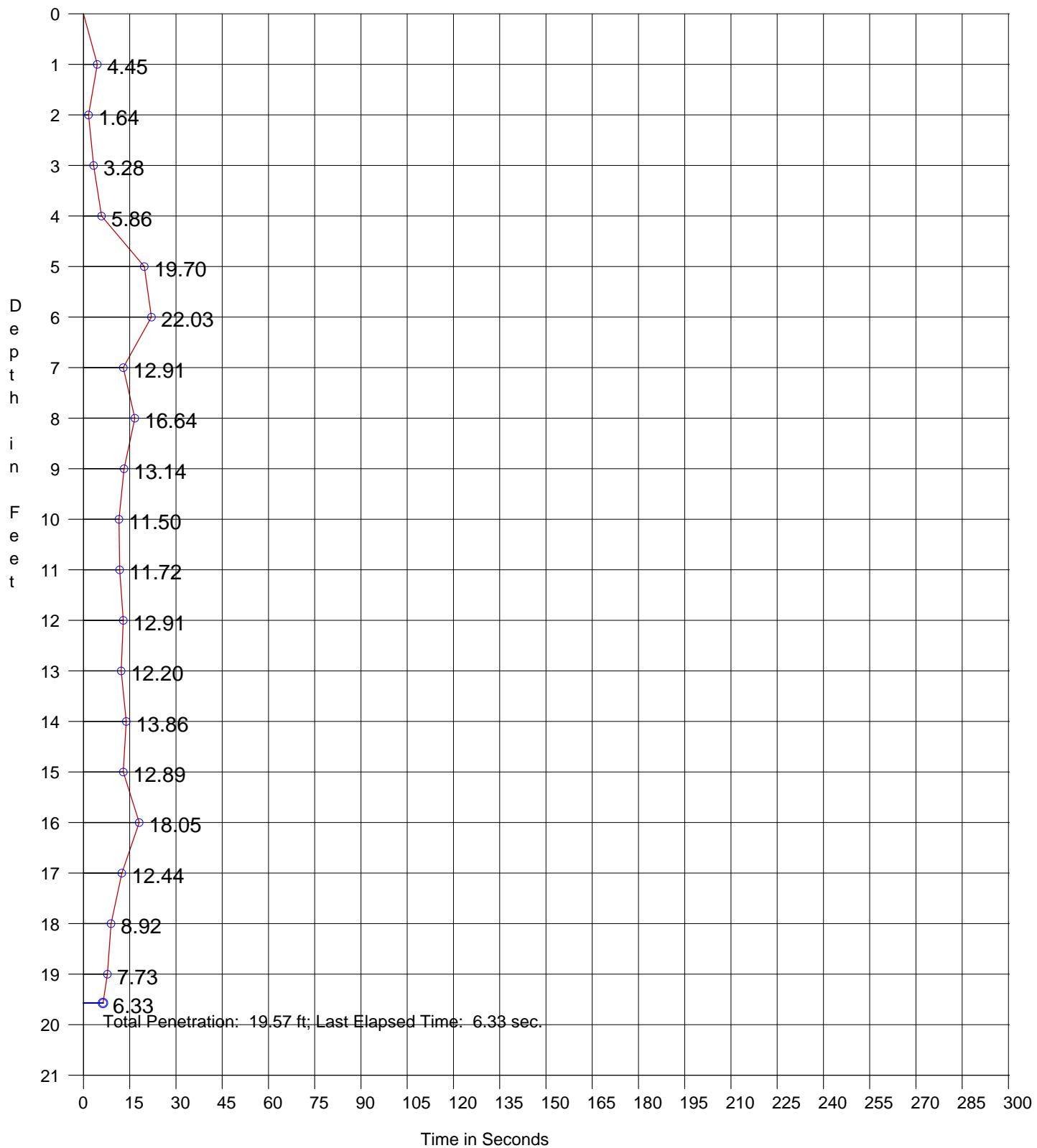
Date: 8/5/2007  
Start Time: 5:25:17 PM  
End Time: 5:29:05 PM

Penetration: 19.57 ft  
Recovery: 19.5  
W. D. Corrected: 16.9  
W. D. Raw: 20.5

Easting: 366488  
Northing: 2251289  
Coord. System: FL E. NAD-83

Lat: 30d 31.5461' N  
Long: 81d 25.4370' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-46, Run 1

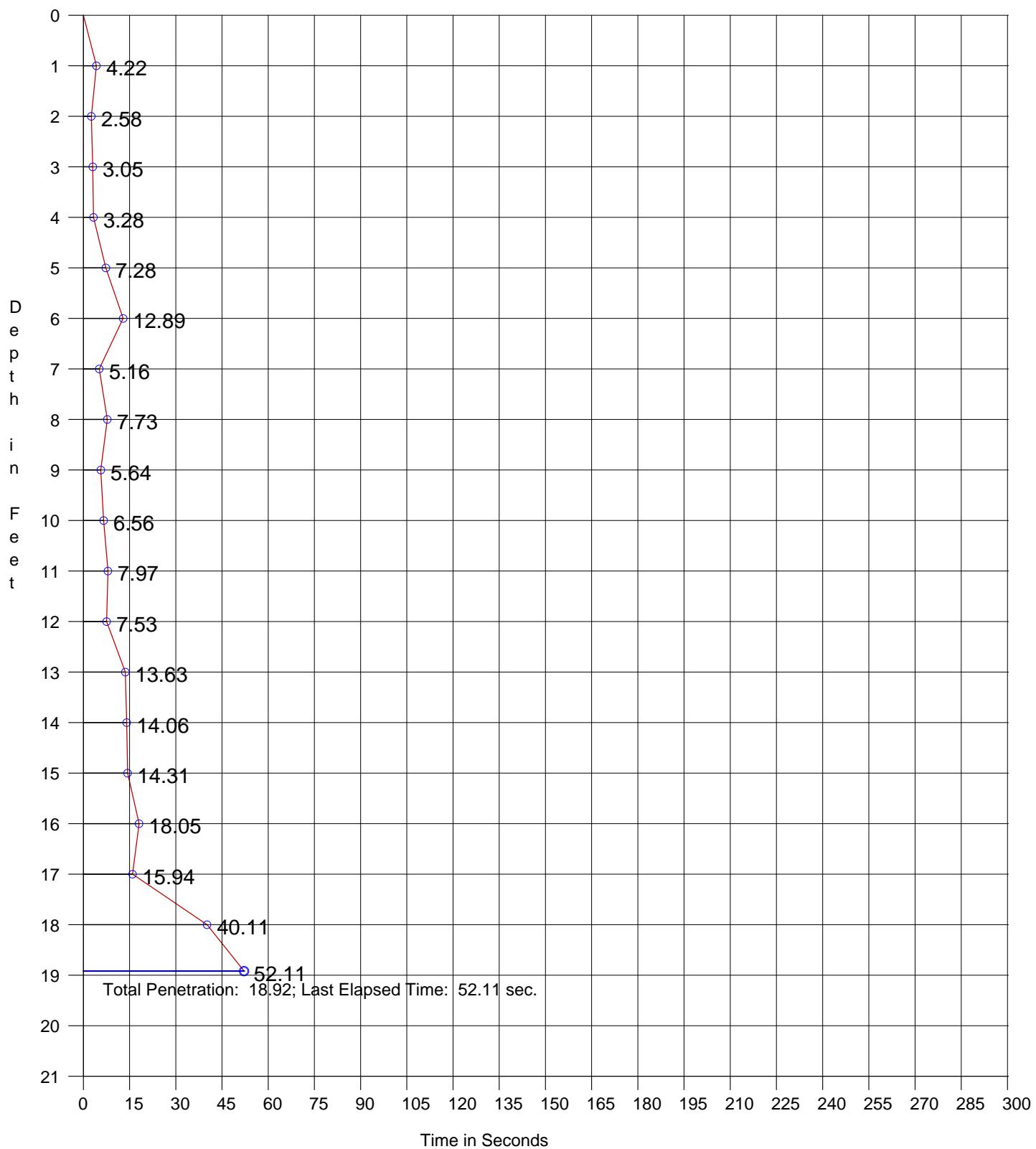
Date: 8/5/2007  
Start Time: 5:51:02 PM  
End Time: 5:54:57 PM

Penetration: 18.92  
Recovery: 18.5  
W. D. Corrected: 16.2  
W. D. Raw: 19.2

Easting: 366933  
Northing: 2251073  
Coord. System: FL E. NAD-83

Lat: 30d 31.5064' N  
Long: 81d 25.3511' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B 47, Run 1

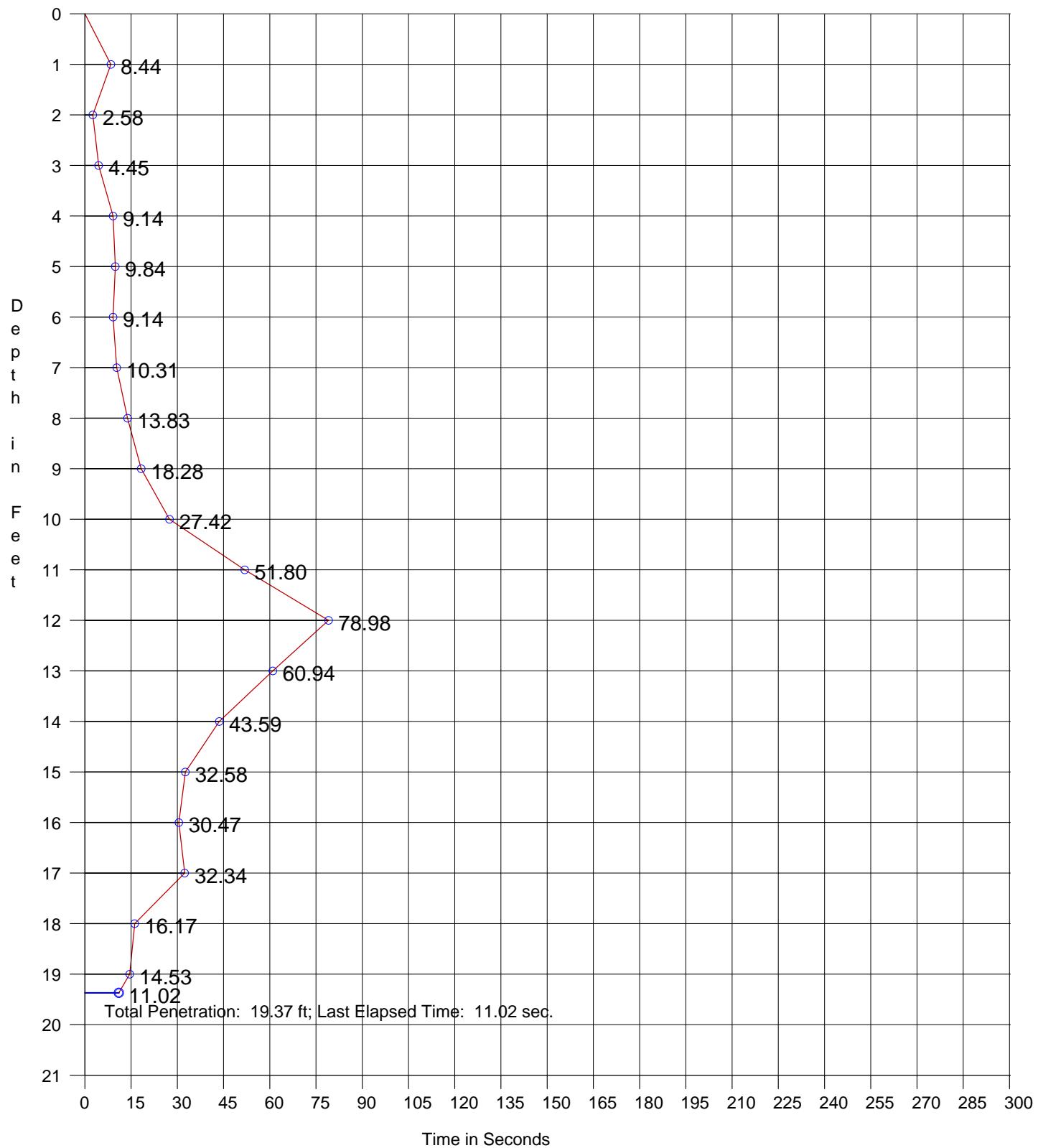
Date: 7/30/2007  
Start Time: 5:05:52 PM  
End Time: 5:13:58 PM

Penetration: 19.37 ft  
Recovery: 17.1  
W. D. Corrected: 21  
W. D. Raw: 20.7

Easting: 367591  
Northing: 2251510  
Coord. System: FL E. NAD-83

Lat: 30d 31.5930' N  
Long: 81d 25.2523' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-48, Run 1

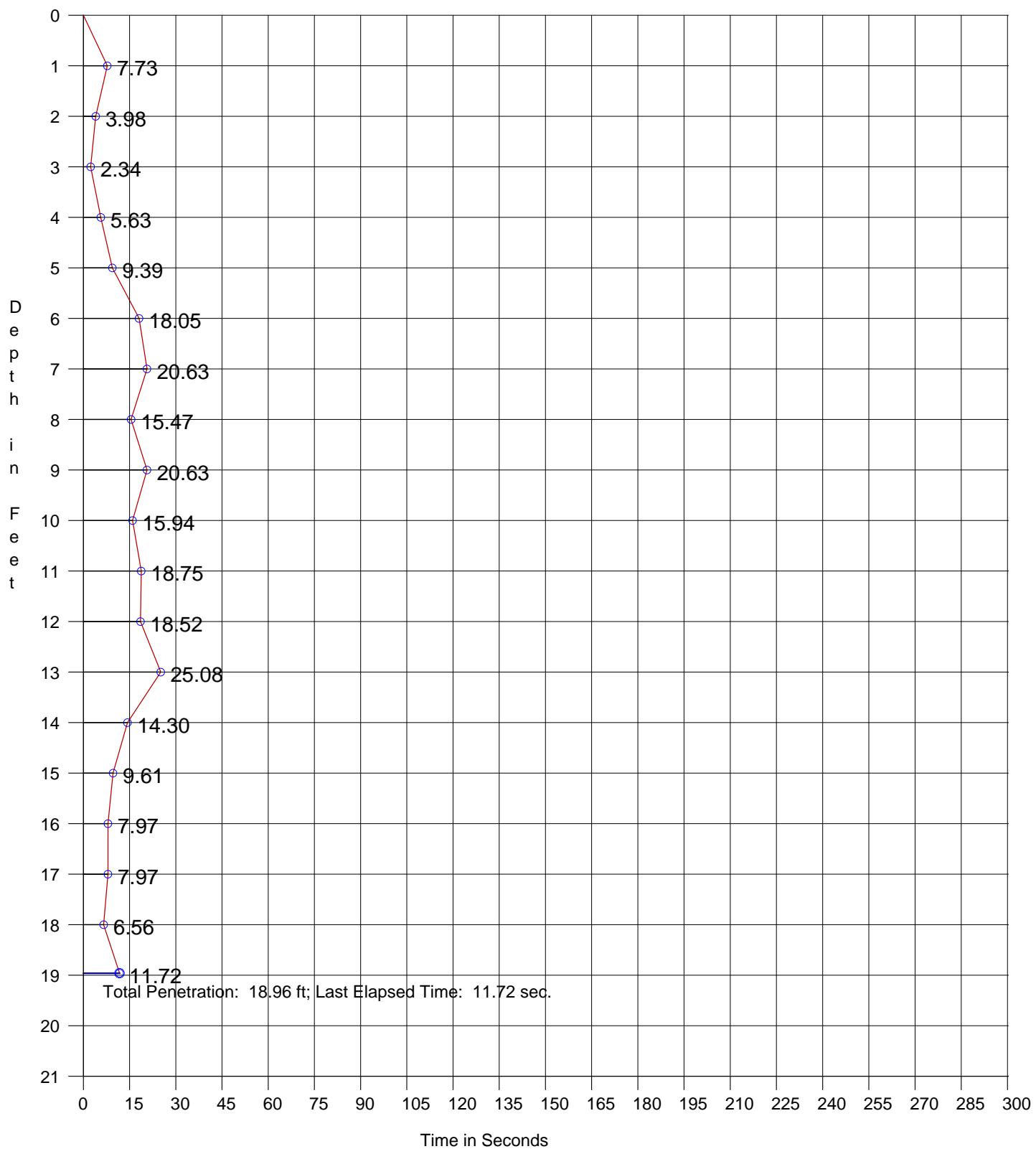
Date: 7/30/2007  
Start Time: 3:53:45 PM  
End Time: 3:57:45 PM

Penetration: 18.96 ft  
Recovery: 19.6  
W. D. Corrected: 22.7  
W. D. Raw: 23.1

Easting: 368252  
Northing: 2251861  
Coord. System: FL E. NAD-83

Lat: 30d 31.6533' N  
Long: 81d 25.1431' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-49, Run 1

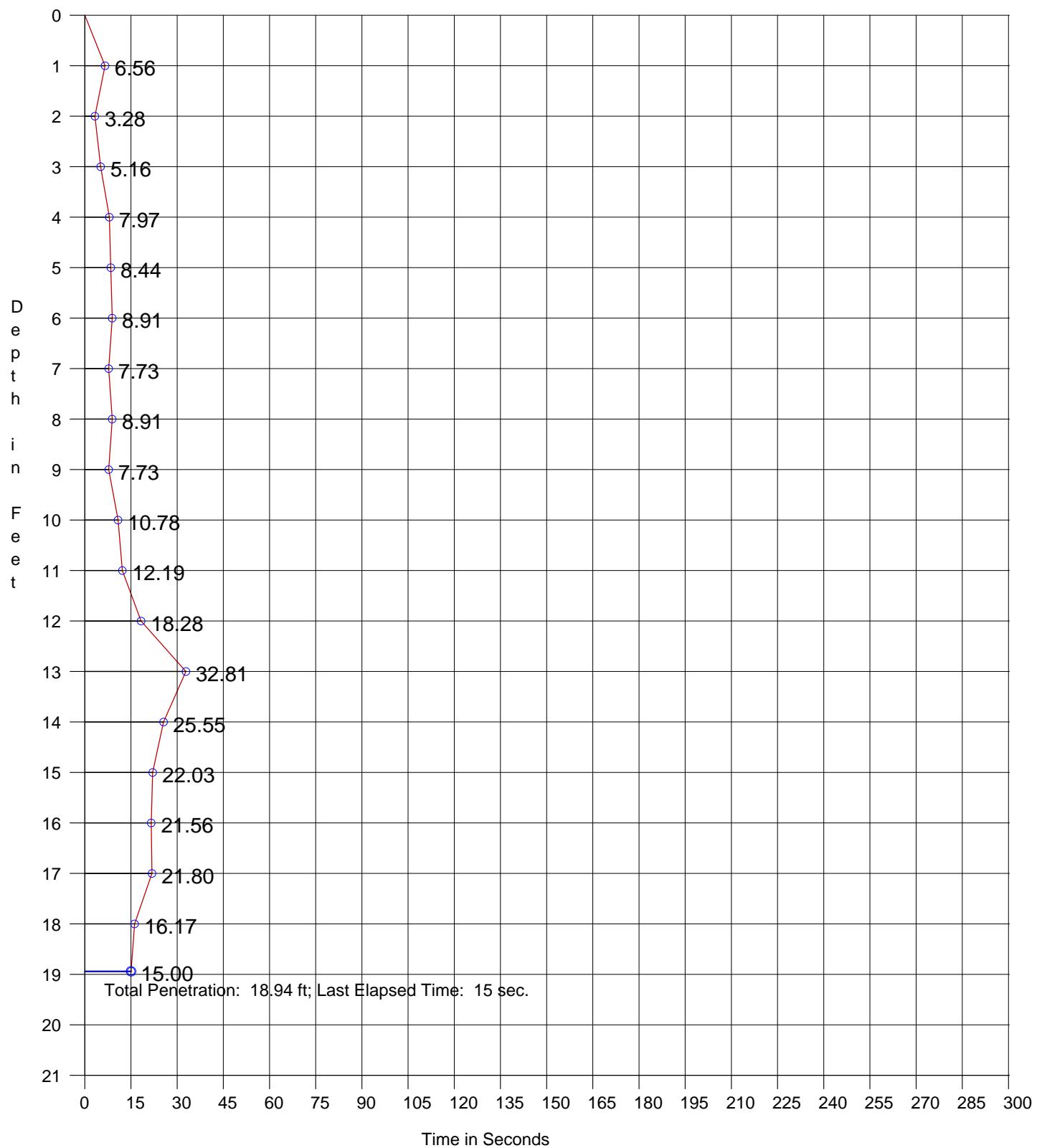
Date: 7/30/2007  
Start Time: 4:21:27 PM  
End Time: 4:25:48 PM

Penetration: 18.94 ft  
Recovery: 19.8  
W. D. Corrected: 21.3  
W. D. Raw: 22.1

Easting: 367438  
Northing: 2252360  
Coord. System: FL E. NAD-83

Lat: 30d 31.7254' N  
Long: 81d 25.2974' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-50, Run 1

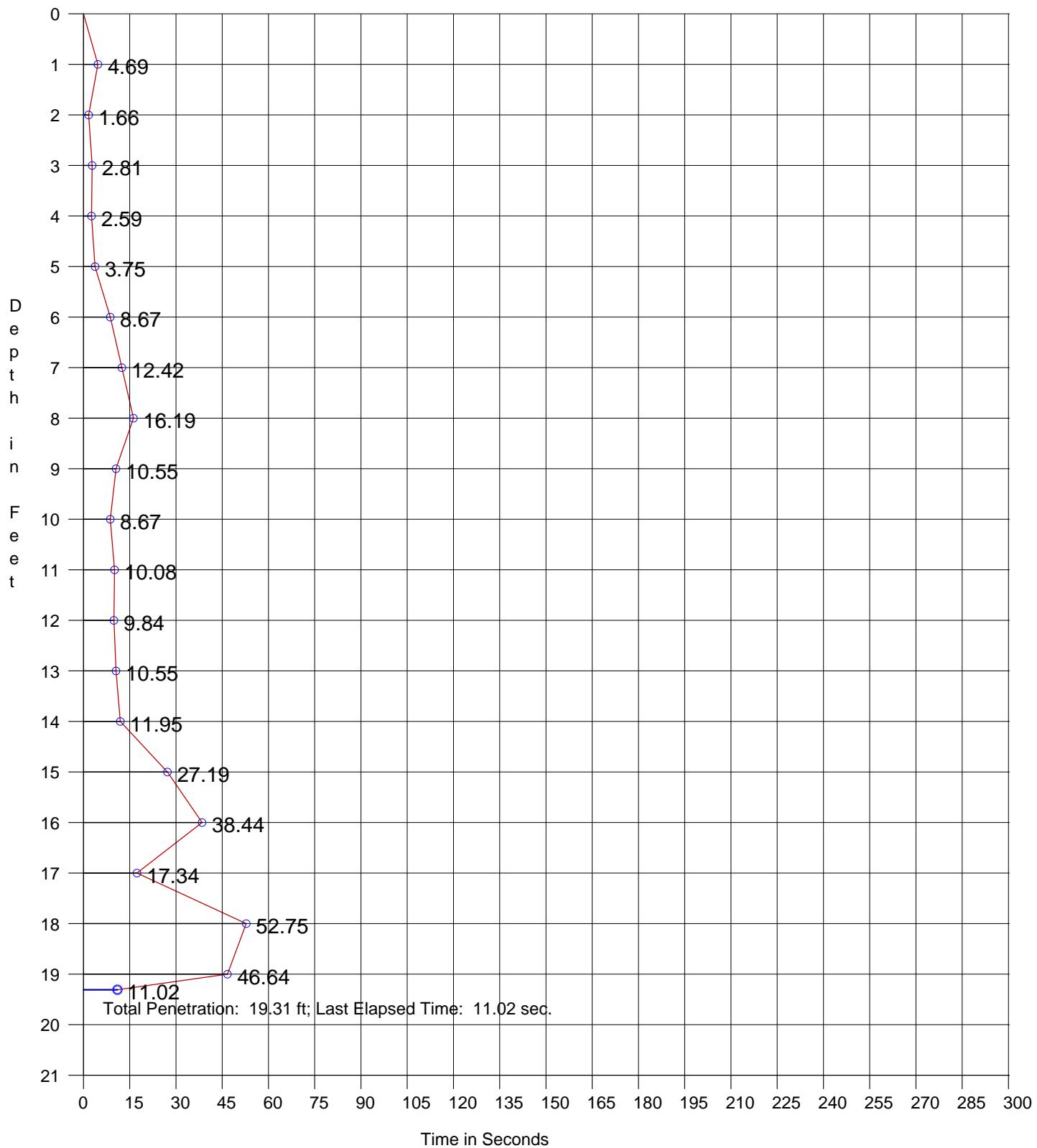
Date: 8/5/2007  
Start Time: 6:29:51 PM  
End Time: 6:34:59 PM

Penetration: 19.31 ft  
Recovery: 17.5  
W. D. Corrected: 20.2  
W. D. Raw: 22.5

Easting: 366982  
Northing: 2251730  
Coord. System: FL E. NAD-83

Lat: 30d 31.6175' N  
Long: 81d 25.3430' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-51, Run 1

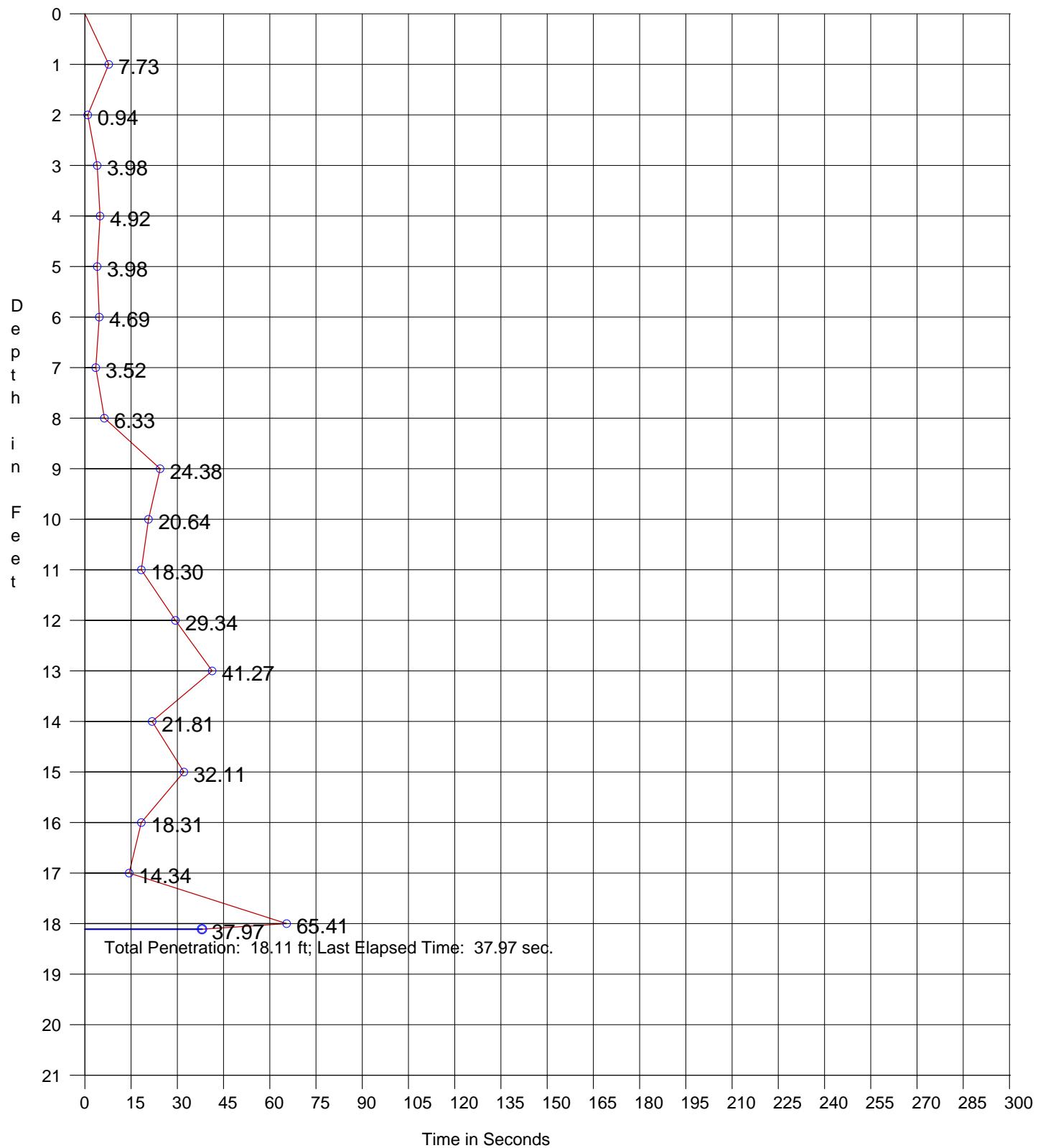
Date: 8/2/2007  
Start Time: 9:01:59 AM  
End Time: 9:07:59 AM

Penetration: 18.11 ft  
Recovery: 18  
W. D. Corrected: 10.5  
W. D. Raw: 14

Easting: 365340  
Northing: 2251412  
Coord. System: FL E. NAD-83

Lat: 30d 31.5666' N  
Long: 81d 25.6565' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-52, Run 1

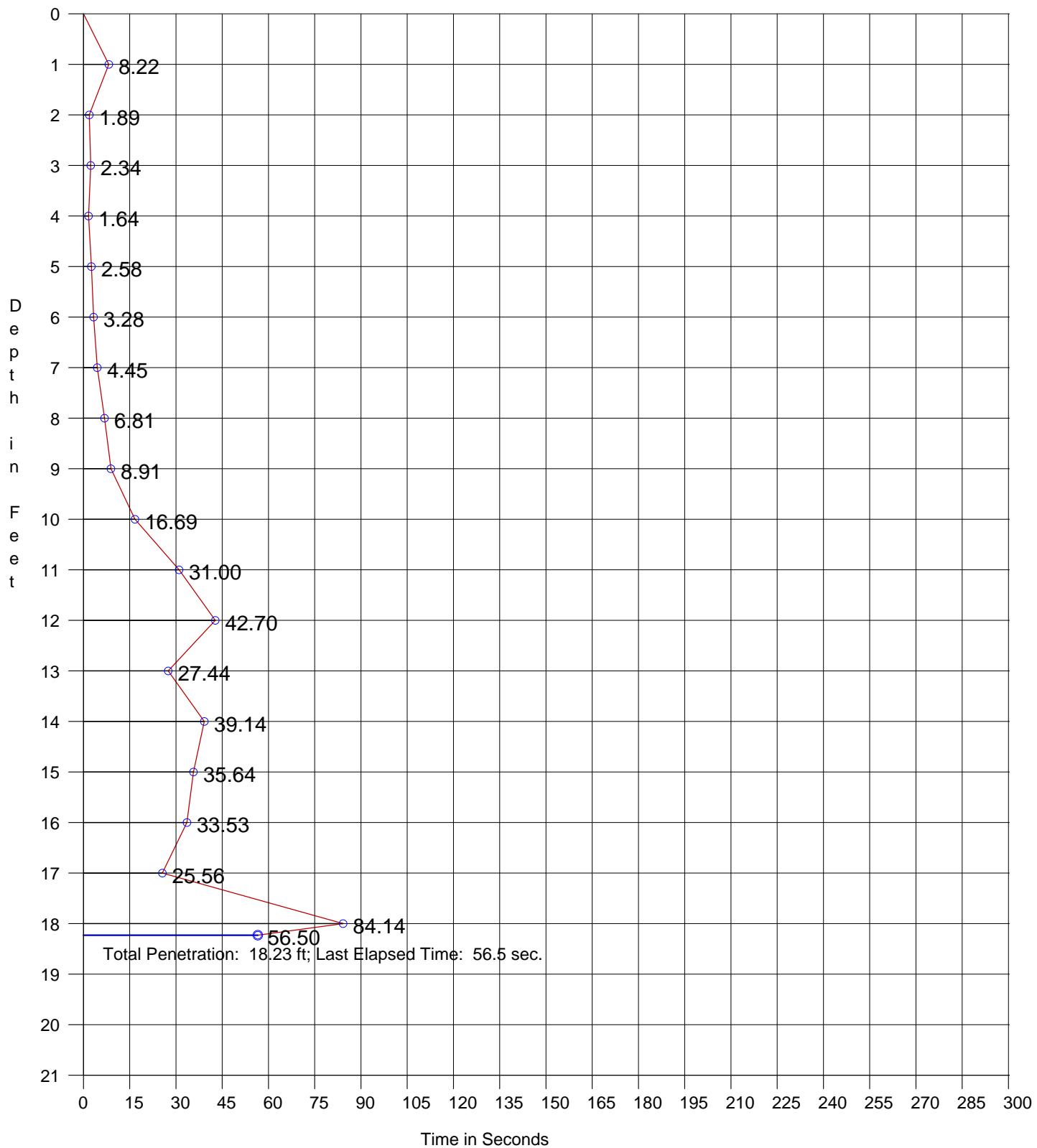
Date: 8/2/2007  
Start Time: 8:22:51 AM  
End Time: 8:30:04 AM

Penetration: 18.23 ft  
Recovery: 17.2  
W. D. Corrected: 10.6  
W. D. Raw: 13.2

Easting: 365260  
Northing: 2251943  
Coord. System: FL E. NAD-83

Lat: 30d 31.6534' N  
Long: 81d 25.6745' W  
Datum: MLLW

Comment:



# Penetration Graph for Core No. B-53, Run 1

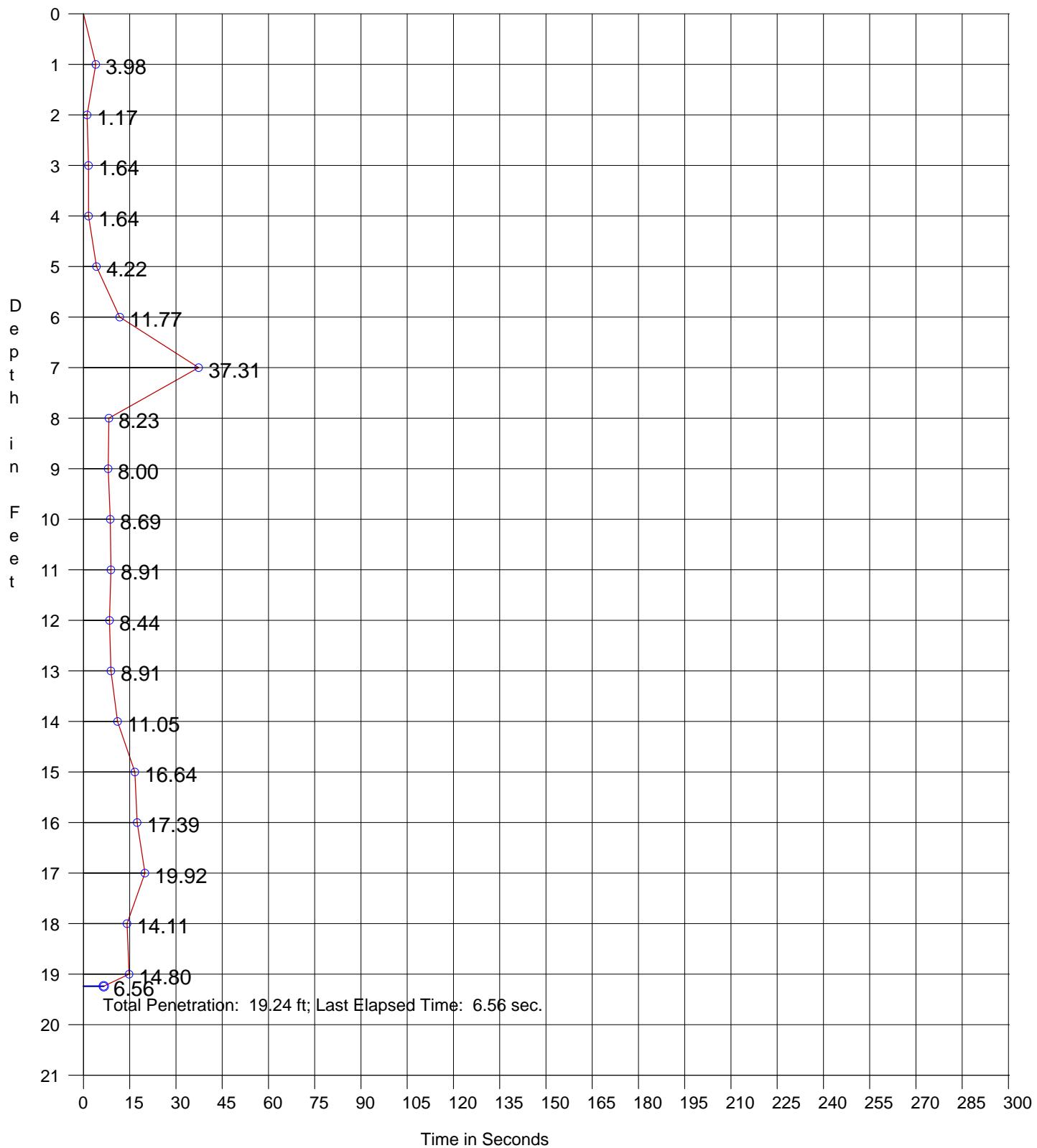
Date: 8/2/2007  
Start Time: 7:46:33 AM  
End Time: 7:50:06 AM

Penetration: 19.24 ft  
Recovery: 18.7  
W. D. Corrected: 15.3  
W. D. Raw: 17.2

Easting: 365795  
Northing: 2251931  
Coord. System: FL E. NAD-83

Lat: 30d 31.6660' N  
Long: 81d 25.5895' W  
Datum: MLLW

Comment:





# **Appendix 1**

## **Navigation Logs**



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel: (201) 768-8000 Fax: (201) 768-5750

## NAVIGATION LOG

JOB NO. 1556

LOCATION AMERICA ISLAND, FL  
*Savall*

CLIENT OLSEN ASSOCIATES DATES 7-29-07

INSTRUMENTATION NAV - SINGLE BEAM - VIBRACORE

### DATE TIME

### EVENTS

7-29	0611	CLIENT ( <del>STEVE HOWARD</del> Scott Howard) ON BOARD. LEAVE DOCK
	0824	TGT B-1 ; REFUSAL AT 14.1'
	0936	TGT B-1 JET RUN TO 13'
	1032	TGT B-2 ; REFUSAL AT 14.2'
	1104	TGT B-2 JET RUN TO 13'
	1145	TGT B-5 NOT DONE. TOO SHALLOW
	1319	TGT B-27
	1342	TGT B-28 26
	1452	RETURN TO DOCK JAX FL.
7-30	0830	CLIENT ON BOARD. MARWA MANAGER (SUPPLYING JET HOSE) STILL NOT AVAILABLE - LEAVE DOCK JAX FL.
	1011	TGT B-4 : REFUSAL 11.9'
	1052	TGT B-4 JET RUN TO 11'
	1143	TGT B-5 : REFUSAL 9.7'
	1225	TGT B-5 : JET RUN TO 9'
		LINER STUCK IN PIPE. NO RECOVERY
	1257	TGT B-5 : JET RUN TO 9'
	1451	TGT B-4 HAMMER IS STICKING PERSISTENTLY, EVEN AFTER PRE-RUN TEST



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel: (201) 768-8000 Fax: (201) 768-5750

## NAVIGATION LOG

JOB NO. 1556 LOCATION SOUTH AMELIA ISLAND, FL

CLIENT OLSEN ASSOCIATES DATES 7/30/07

INSTRUMENTATION NAV, SINGLE BEAM, VIBRACORE

### DATE TIME

### EVENTS

7/30	1536	TGT B-48
	1612	TGT B-49
	1647	TGT B-47
	1733	HEAD FOR DOCK JAX FL.
7/31	0611	CLIENT ON BOARD. LEAVE DOCK JAX FL.
	0737	TGT B-12
	0833	TGT B-125
	0902	TGT B-10
	0925	TGT B-9
	0953	TGT B-8
	1016	TGT B-7
	1102	TGT B-14
1300	1129	TGT B-17 TOO SHALLOW. NOT DONE
	1327	TGT B-13 THREE RE-ANCHORINGS.
		WIND AND CURRENT DIFFICULT.
	1442	TGT B-28 CONTINUED DIFFICULTY ANCHORING
	1509	STEERING FLUID LEAK. STANDING BY
	1540	BROKEN HOSE REPAIRED, 10-15 KTS WIND,
		4-6 FT WAVES = STANDING BY FOR CHANGE IN CONDITIONS.



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel: (201) 768-8000 Fax: (201) 768-5750

## NAVIGATION LOG

JOB NO. 1556

LOCATION SOUTH AMELIA

CLIENT Olsen Assoc.

DATES 7/31/07 -

INSTRUMENTATION NAV, SINGLE BEAM, VIBRACORE

### DATE TIME

### EVENTS

7/31	0611	TGT 5-28 BEGUN + COMPLETED
	1638	TGT B-37
	1706	HEAD FOR DOCK JAX FL.
8/1	0634	CLIENT ON BOARD. ANCHOR SHEAVE RE-PAVED. LEAVE DOCK JAX FL.
	0815	TGT B-50 : RETAINER FAILURE @ 15.8'
	0908	TGT B-50 : JET TO 13' : FAILED
	0936	TGT B-50 : JET TO 13' : FAILED
	1000	TGT B-50 : JET TO 13' : FAILED
8/2	0542	CLIENT ON BOARD LEAVE DOCK JAX FL.
	0728	TGT B-53
		DEPTH IN ECHO 0.5' DEEP A/T BAR CHECK
	0810	TGT B-52
	0851	TGT B-51
	0924	TGT B-43 THUNDERBOMER APPROACHING
	1004	TGT B-44/10
	1034	TGT B-34 : ONLY 12.4' RETENTION
	1057	TGT B-34 JET



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel: (201) 768-8000 Fax: (201) 768-5750

## NAVIGATION LOG

JOB NO. 1556 LOCATION SOUTH AMERICA ISL. FL  
CLIENT OASEN ASSOC. DATES 8/2/07 -  
INSTRUMENTATION NAV, SINGLE BEAM, VIBRACORE

DATE	TIME	EVENTS
8/2	1123	TGT B-35
	1303	TGT B-31 TIDE CHANGE. NOT DONE
	1335	TGT B-36
	0215	TGT B-32
	1452	TGT B-38 : COMPRESSOR FAILED. NO CORE
	1510	SEAS BUILDING TO 5+ FEET. HEAD FOR DOCK JAX FL.
8/3	0541	CLIENT ON BOARD. LEAVE DOCK JAX FL.
	0729	TGT B-50 BAR CHECK ~0.5' DEEP COMPRESSOR FAILED : NO CORE
0	0935	RETURN TO DOCK JAX FL FOR REPAIRS TO AIR COMPRESSOR.
8/4	0640	LEAVE DOCK JAX FL.
	0821	TGT B-3 : TOO SHALLOW : HIT BOTTOM. WILL CONSULT WITH CLIENT.
	0838	TGT B-18 BAR CHECK + 0.5 (TOO DEEP)

NOT  
DONE



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel: (201) 768-8000 Fax: (201) 768-5750

## NAVIGATION LOG

JOB NO. 1556 LOCATION S-AMERIA ISLAND, FL  
CLIENT OLSEN ASSOCIATES DATES 8/4/07 -  
INSTRUMENTATION NAV, SINGLE BEAM, VIBRACORE

DATE	TIME	EVENTS
8/4	0931	TGT B-19
	1001	-TGT B-20
	1028	TGT B-17  INADVERTENTLY BROKE HYDRAULIC COMPUTER CD TRAY.
		11' OFF CENTER OF TARGET TO NW, ALONG TRENDS OF SHOAL. MS OK'D.
1051		TGT B-16 : REFUSAL 15.5'  AIR COMPRESSOR MOTOR STALLED DURING CORE. RE-STARTED WITHOUT REMOVAL (13.8' → 15.5')
	1131	TGT B-16 R2 JET: 14  Motor stalled at 13.76': RE-STARTED WITHOUT REMOVAL
	1251	TGT B-21  TIDE VS. WIND. STANDBY
	1349	TGT B-22
	1418	TGT B- <del>38</del> 30
	1442	TGT B-33
	1507	TGT B-31 : REFUSAL 11.85
	1601	TGT B-31 JET RUN



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel: (201) 768-8000 Fax: (201) 768-5750

## NAVIGATION LOG

JOB NO. 1556 LOCATION SOUTH AMERICA ISLAND, FL  
CLIENT OLSEN ASSOCIATES DATES 8/4/07 -  
INSTRUMENTATION NAV, SWOOLE BEAM, VIBRACORE

DATE	TIME	EVENTS
8/4	1633	TGT B-38 TIDE CONSIDERED TO WWD. NOT DONE
	1639	HEAD FOR DOCK JAX FL.
8/5	0542	CLIENT ON BOARD. LEAVE DOCK JAX FL.
	0733	TGT B-25 : 12.9' RETENTION: JET FINGERS BREAKING OFF OF RETAINERS: WILL USE NEW BATCH
	0804	TGT B-25 JET ROW (12')
	0832	TGT B-24
	0901	TGT B-23
	0931	TGT B-29
	1020	TGT B-38
	1040	TGT B-39
	1105	TGT B-42
	1231	TGT B-11 <sup>150'</sup> <sub>200'</sub> N OF TARGET. CLIENT OK'D)
	1304	TGT B-6 (400' SE OF TARGET: CLIENT OK'D)
	1336	TGT B-6 JET 8.5'
	1423	TGT B-3 (300' WNW OF TARGET: CLIENT OK'D)
	1453	BLOW AN ELBOW FITTING ON HAMMER. MAKING REPAIRS

**ALPINE OCEAN SEISMIC SURVEY, INC.**  
**70 Oak Street, Norwood, New Jersey 07648**  
**Tel: (201) 768-8000 Fax: (201) 768-5750**

**NAVIGATION  
LOG  
(copy)**

**JOB NO.** 1556

**LOCATION** South Amelia Island, FL

**CLIENT** Olsen Associates, Inc.

**DATES** 8/5/07

**INSTRUMENTATION** Nav, single beam, Vibracore.

<b>DATE</b>	<b>TIME</b>	<b>EVENTS</b>
8/5/07	0542	Client on board. Leave dock JAX FL.
	0804	TGT B-25: jet to 12'
	0832	TGT B-24
	0901	TGT B-23
	0931	TGT B-29
	1020	TGT B-38
	1040	TGT B-39
	1105	TGT B-42
	1231	TGT B-11: 150' N of target. Client (S. Howard) OK'd.
	1304	TGT B-6: 400' SE of target. Client (S. Howard) OK'd.
	1336	TGT B-6: jet to 8.5'
	1423	TGT B-3: 300' WNW of target. Client (S. Howard) OK'd.
	1453	Elbow fitting on hammer blown out. Making repairs.
	1538	TGT B-31: jet to 12.5'
	1623	TGT B-44: penetrometer slipped chain. Core kept.
	1649	TGT B-45: penetrometer slipped chain. Core rejected.
	1721	TGT B-45 r2
	1748	TGT B-46
	1808	TGT B-50 r6: jet to 13.5'. Blown air hose: not done.
	1842	TGT B-50 r7 no jet.
	1856	Head for dock JAX FL.
		On the day: 15 cores. 53 complete: job complete.



## **Appendix 2**

### **Core Logs**



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. B1 Run No. 1 Date: 7-29-07 Area: S Am Isc

Grid Position: Easting 374 021 Northing 2243 245

Geographic Position: Lat. 30° 30.2501' N Long. 81° 23.9996' W

Water Depth

Uncorrected: -15.5 Stop: 9:03:13

Tide: 1.78 ~~-0.53~~

Vibration Time

Start: 8:32:33

= Corrected: -15.514.2 = Elapsed: 10:39.55  
+ 0.5 echo

Core Depth

Penetration: 14.7 REFUSAL

Recovery: 13.9

Jet:

Depth      Core Description

0 FINE LG SAND

1

2

3

4

5 FINE LG SAND

6

7

8

9

10 FINE GRAY SAND

11

12

13

14 FINE LG SAND

15

16

17

18

19

20

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job # 1550

Core No. B-1 Run No. 2 JET Date: 7-29 Area: S Am Is.

Grid Position: Easting 374070 Northing 81° 24.0124'

Geographic Position: Lat. 22°43'20" Long. 30° 30.2263'W

Water Depth

Uncorrected: 15.5

Tide: 2.8 0.38

= Corrected: 13.2 15.60  
+0.5 echo

Vibration Time

Stop: 10:05:07

Start: 9:59:09

= Elapsed: 4:27.84

Core Depth

Penetration: 19.69

Recovery: 4.5

Jet: 13'

Depth      Core Description

0    LG    VF    SAND

1

2

3

4    GRAY    <sup>EX FINE</sup> LAYER SAND

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. 32 Run No. 1 Date: 7-29 Area: S Am Isc

Grid Position: Easting 374166 Northing 2243898

Geographic Position: Lat. 30° 30. 3403' N Long. 81° 23. 9908' W

Water Depth

Uncorrected: 12 Stop: 10:47:53

Tide: 0.28 14.18 3.49 Start: 10:39:19

= Corrected: 12.29 = Elapsed: 8:33.83

Core Depth

Penetration: 14.18

Recovery: 13.5

Jet: \_\_\_\_\_

Depth      Core Description

0      VF      GRAY      SAND

1

2

3

4

5      VF      GRAY      SAND

6

7

8

9

10      VF      GRAY      SAND

11

12

13      VF      GRAY      SAND

14

15

16

17

18

19

20

Remarks: \_\_\_\_\_



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. B-2 Run No. 2 JET Date: 7-29 Area: S Am Isl

Grid Position: Easting 374191 Northing 2243904

Geographic Position: Lat. 30° 30.3471' N Long. 81° 23.9862' W

Water Depth

Uncorrected: 12

Tide: 3.73 0.22

= Corrected: 12.38.8  
+0.5 echo

Vibration Time

Stop: \_\_\_\_\_

Start: 11:10:21

= Elapsed: \_\_\_\_\_

Core Depth

Penetration: 19.75

Recovery: 7.9

Jet: 13

Depth

Core Description

[0 MP DG CLAY w/ VF SAND]

1 VF LG SAND

2

3

4

5 VF LG SAND

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

Remarks: \_\_\_\_\_



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job #1556

Core No. B3 Run No. 1 Date: 8/5/07 Area: S Am Isc

Grid Position: Easting 373290 Northing 22944.59

Geographic Position: Lat. 30°30.4247'N Long. 81°24.1380'W

Water Depth

Uncorrected: 14.5

Tide: 1.97 0.25

= Corrected: 14.813.0

+ 0.5 echo

Vibration Time

Stop: 14:35:44

Start: 14:30:37

= Elapsed: 5:07.08

Core Depth

Penetration: 19.80

Recovery: 18.8

Jet: \_\_\_\_\_

Depth      Core Description

0    VF    (B6    SD)

1

2

3

4

5    VF    LG    SD    SSF

6

7

8

9

10    VF    G    ~~S~~    SILTY SD)

11

12

13

14

15    VF    LG    SD)

16

17

18

19    VF    G    SD)

20

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. B4 Run No. 1 Date: 7-30-07 Area: S Am Isc

Grid Position: Easting 373950 Northing 2245064

Geographic Position: Lat. 30° 30.5' N Long. 81° 24.0' W

Water Depth

Uncorrected: 14.5

Tide: 2.73 0.37

= Corrected: 14.6 = Elapsed: 12.3

+0.5 echo

Vibration Time

Stop: 10:39:25

Start: 10:33:31

Core Depth

Penetration: 11.87 REFUSAL

Recovery: 11.9

Jet: \_\_\_\_\_

Depth Core Description

0 VF LG SAND

1

2

3

4

5 VF LG SAND, SOME SMALL SHELL FRAGS

6

7

8

9

10 VF LG SAND

11

12 VF LG SAND

13

14

15

16

17

18

19

20

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. 34 Run No. 2 Date: 7-30-07 Area: S Am Is  
Grid Position: Easting 373955 Northing 224503478  
Geographic Position: Lat. 30° 30.54' N Long. 81° 24.0467' W  
Water Depth 13.5 Vibration Time 53:11 Core Depth 0.538'  
Uncorrected: 45 Stop: 11:20:05 Penetration: 19.22  
Tide: 3.43 02T Start: 11:09:30 Recovery: 9.7  
= Corrected: 13.710.6 = Elapsed: 7:07.05 Jet: \_\_\_\_\_  
+ 0.5 echo.

Depth      Core Description

0      VF LG SAND

1

2

3

4

5      VF G SAND

6

7

8

9

10      VF G SAND

11

12

13

14

15

16

17

18

19

20

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. B-5 Run No. 1 Date: 7-30-07 Area: S Am Isc

Grid Position: Easting 373609 Northing 2246315

Geographic Position: Lat. 30° 30.7408' N Long. 81° 24.1094' W

Water Depth

Uncorrected: 14.5 Stop: 11:55:09 Penetration: 9.71 REFUSAL

Tide: 3.92 019

Vibration Time

Start: 11:51:25

Core Depth

Recovery: 9.7

= Corrected: 14.811.1 = Elapsed: 3:43.41

Jet: \_\_\_\_\_

+0.5 echo.

Depth      Core Description

0 VF LG SAND

1

2

3

4

5 VF LG SAND, SMALL SHELL FRAGS

6

7

8

9 VF GRAY LG SAND

10

11

12

13

14

15

16

17

18

19

20

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. 85 Run No. 2 Date: 7-30-07 Area: S Am Is.

Grid Position: Easting 373617 Northing 2246315

Geographic Position: Lat. 30° 30.7415' N Long. 81° 24.1073' W

Water Depth

Uncorrected: 14.13.9

Vibration Time

Stop: 12:33:57

Core Depth

Penetration: 11.86

Tide:

Start: 12:26:38

Recovery: 0

= Corrected: \_\_\_\_\_

= Elapsed: 7:19.00

Jet: 9' [9.69]

Depth Core Description

0

1 LINER JAMMED IN PIPE :

2 NO RECOVERY

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

Remarks: \_\_\_\_\_



## ALPINE OCEAN SEISMIC SURVEY, INC.

70 Oak Street Norwood, New Jersey 07648

Tel. (201) 768-8000 Fax: (201) 768-5750

E-mail alpine@alpineocean.com

## CORE LOG

Job # 1556

Named run 2 in computer record

Core No. B5 Run No. 3 Date: 7-30-07 Area: S Am IscGrid Position: Easting 373603 Northing 2246325Geographic Position: Lat. 30°30.75'N Long. 81°21.0949'N

Water Depth

Vibration Time

Core Depth

Uncorrected: 12.7 Stop: 13:17:02 Penetration: 19.38Tide: 4.48 0.72 Start: 13:08:02 Recovery: 10.3= Corrected: 13.18.7 = Elapsed: 8:59.83 Jet: 9' [9.45]

Depth

Core Description

0 VF LG SAND12345 VF LG SAND678910 EX FINE GRAY SAND, SOME SMALL SHELL FRAGS11121314151617181920

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

## CORE LOG

Job # 1556

Core No. B6 Run No. 1 Date: 8/5/07 Area: S Am 1sc

Grid Position: Easting 373 460 Northing 22 85 418

Geographic Position: Lat. 30°30.5827'N Long. 81°24.1073'W

Water Depth

Uncorrected: 12.7 Vibration Time 13:26:57 Core Depth 10.01 REFUSAL

Tide: -0.8

Start: 13:22:45 Recovery: 8.7

= Corrected: 11.7 Elapsed: 4:12.70  
+ 0.5 echo

Core Depth

Penetration: 10.01

Recovery: 8.7

Jet: \_\_\_\_\_

Depth      Core Description

0    VF    LG    SD    SS .

1 \_\_\_\_\_

2 \_\_\_\_\_

3 \_\_\_\_\_

4 \_\_\_\_\_

5 VF    LG    SD    SSF .

6 \_\_\_\_\_

7 \_\_\_\_\_

8 \_\_\_\_\_

9 VF    CBG    SD .

10 \_\_\_\_\_

11 \_\_\_\_\_

12 \_\_\_\_\_

13 \_\_\_\_\_

14 \_\_\_\_\_

15 \_\_\_\_\_

16 \_\_\_\_\_

17 \_\_\_\_\_

18 \_\_\_\_\_

19 \_\_\_\_\_

20 \_\_\_\_\_

Remarks: \_\_\_\_\_



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

# CORE LOG

JET Job # 1556

Core No. B6 Run No. 2 Date: 8/5/07 Area: S Am Isc

Grid Position: Easting 3734860 Northing 2245438

Geographic Position: Lat. 30°30.5866'N Long. 81°24.6976'W

Water Depth

Uncorrected: 11.8 Stop: 13:58:15

Tide: 1.12 0.84 Start: 13:45:11

= Corrected: 11.5 Elapsed: 8:31.0

+0.5 echo

Vibration Time

Core Depth

Penetration: 16.55 REFLAC

Recovery: 9.7

Jet: 8.5 [9.4]

Depth      Core Description

0 VF LBG SD

1

2

3

4

5 VF LG SD

6

7

8

9 VF LBG SD

10

11

12

13

14

15

16

17

18

19

20

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. B7 Run No. 1 Date: 7-31-07 Area: S Am Isc

Grid Position: Easting 372645 Northing 2244917

Geographic Position: Lat. 30° 30.5210' N Long. 81° 24.2881' W

Water Depth

Uncorrected: 11.5 Stop: 10:28:06 Core Depth 19.53

Tide: 1.67 0.48 Start: 10:22:47 Recovery: 18.9

= Corrected: 11.5<sup>10.3</sup> = Elapsed: 5:18.56 Jet: \_\_\_\_\_

+ 0.5 echo

Depth      Core Description

0 VF LB SAND

1

2

3

4

5 VF LG SAND

6

7

8

9

10 VP LG SAND

11

12

13

14

15 VF GRAY SAND

16

17

18

19

20 EX FINE GRAY SAND

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. B-8 Run No. 1 Date: 7-31-07 Area: S Am 1c

Grid Position: Easting 372271 Northing 2244436

Geographic Position: Lat. 30° 30.4353' N Long. 81° 24.3588' W

Water Depth

Uncorrected: 11.6

Tide: 1.19 056

= Corrected: 11.5 10.9 = Elapsed:  
+ 0.5 echo

Vibration Time

Stop: \_\_\_\_\_

Start: 9:57:42

= Elapsed: \_\_\_\_\_

Core Depth

Penetration: 19.30

Recovery: 17.2

Jet: \_\_\_\_\_

Depth      Core Description

0 VF LB SAND

1

2

3

4

5 VF LG SAND

6

7

8

9

10 VF LG SAND

11

12

13

14

15 MED GRAY SAND, SMALL SHELL FRAGS

16

17

18

19

20 MF GRAY SAND, SMALL SHELL FRAGS

Remarks: \_\_\_\_\_



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. B9 Run No. 1 Date: 7-31-07 Area: S Am Is.

Grid Position: Easting 371485 Northing 2244989

Geographic Position: Lat. 30° 30.5239' N Long. 81° 24.5039' W

Water Depth

Uncorrected: 19.3

Tide: 0.63 2.66

= Corrected: 19.2  
+ 0.5 echo

Vibration Time

Stop: 9:32:45

Start: 9:30:12

= Elapsed: 2:32.88

Core Depth

Penetration: 19.78

Recovery: 19.8

Jet:

[CHANGE

CORE LOG

to 19.8] (ML)

Depth      Core Description

0 ~~VF~~ MF LG SAND, MANY SHELL FRAGS

1

2

3

4

5 VF LG SAND

6

7

8

9

10 VF LG SAND

11

12

13

14

15 VF GRAY SAND

16

17

18

19

20 EX FINE GRAY SAND

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. B10 Run No. 1 Date: 7-31-07 Area: S Am Isl

Grid Position: Easting 371850 Northing 2245512

Geographic Position: Lat. 30° 30. 6080' N Long. 81° 24. 4335' W

Water Depth

Uncorrected: 16.5

Vibration Time

Stop: 9:11:43

Core Depth

Penetration: 18.88

Tide: 0.25 D/T2

Start: 9:07:22

Recovery: \_\_\_\_\_

= Corrected: 16.3 = Elapsed: 9:20.88  
+0.5 echo

Jet: \_\_\_\_\_

Depth      Core Description

0 MF      GRAY SAND, SHELL HASH

1

2

3

4

5 FWF      LG SAND

6

7

8

9

10 QTZ + GRAY GRAVEL, SHELL HASH

11

12

13

14

15 MP      CLAY, SHELL HASH

16

17

18

19

20

Remarks: \_\_\_\_\_



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. B11 Run No. 1 Date: 8/5/07 Area: S Am Isl

Grid Position: Easting 372359 Northing 2246372

Geographic Position: Lat. 30°30.7402'N Long. 81°24.3192'W

Water Depth

Uncorrected: 13.2 Stop: 12:46:00

Tide: 0-15 6.42 Start: 12:41:18

= Corrected: 13.3 13.6 = Elapsed: 4:42.89  
+ 0.5 echo

Core Depth

Penetration: 19.19

Recovery: \_\_\_\_\_

Jet: \_\_\_\_\_

Depth      Core Description

0 VF LG SP

1

2

3

4

5 VF LG ~~SD~~ SD

6

7

8

9

10 VF LG SILTY SD

11

12

13

14

15 VF LG SD

16

17

18

19 VF LG SD

20

Remarks: \_\_\_\_\_



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job # 155 G

Core No. 8-12 Run No. 1 Date: 7/31/07 Area: S Am Is.

Grid Position: Easting 372861 Northing 2246963

Geographic Position: Lat. 30° 30.8433' N Long. 81° 24.2591' W

Water Depth 14 Vibration Time Core Depth

Uncorrected: 27.0 Stop: Penetration: 17.67

Tide: 0.94 Start: 8:02:39 Recovery: \_\_\_\_\_

= Corrected: 13.6 = Elapsed: Jet: \_\_\_\_\_  
+ 0.5 echo

Depth Core Description

0 VF LG SAND

1

2

3

4

5 VF LG SAND

6

7

8

9

10 VF LG SAND

11

12

13

14

15 VF GRAY LG SAND

16 VF GRAY SAND

17

18

19

20

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. B13 Run No. 1 Date: 7-31-07 Area: S Am 15c

Grid Position: Easting 372150 Northing 2247719

Geographic Position: Lat. 30°30.9689'N Long. 81°24.3747'W

Water Depth

Uncorrected: 18.5

Tide: 4.7

= Corrected: 18.9 18.3

+0.5 echo

Vibration Time

Stop: 19:04 14:05:17

Start: 14:00 :53

= Elapsed: 4:23.67

Core Depth

Penetration: 19.64

Recovery: 17.8

Jet: \_\_\_\_\_

Depth      Core Description

0 VF GRAY SD

1

2

3

4

5 VF LG SD

6

7

8

9

10 VF GRAY SD

11

12

13

14

15 VF GRAY SD

16

17

18

19 VF GRAY SD

20

Remarks: \_\_\_\_\_



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. B-14 Run No. 1 Date: 7-31-07 Area: S Am Isl

Grid Position: Easting 371591 Northing 2246860

Geographic Position: Lat. 30° 30.8368'N Long. 81° 24.5008'W

Water Depth	Vibration Time	Core Depth
Uncorrected: <u>13.7</u>	Stop: <u>11:10:59</u>	Penetration: <u>11.32</u>
Tide: <u>2.53</u> <u>0.36</u>	Start: <u>11:06:01</u>	Recovery: <u>18.1</u>
= Corrected: <u>12.39.8</u> <u>+ 0.5 echo 11.7</u>	= Elapsed: <u>4:57.94</u>	Jet: _____

Depth Core Description

0 VF LG SD

1

2

3

4

5 NF LG SD

6

7

8

9

10 VF GRAY SD

11

12

13

14

15 VF LG SD

16

17

18

19

20 VF LG SD

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job # \_\_\_\_\_

Core No. B15 Run No. 1 Date: 7-31-07 Area: S Am IsL

Grid Position: Easting 371033 Northing 2246010

Geographic Position: Lat. 30° 30.7088' N Long. 81° 24.5980' W

Water Depth	Vibration Time	Core Depth
Uncorrected: <u>19.8</u>	Stop: <u>8:43:20</u>	Penetration: <u>19.45</u>
Tide: <u>0.02</u> <u>0.83</u>	Start: <u>8:38:36</u>	Recovery: <u>19.8</u>
= Corrected: <u>14.515.3</u>	= Elapsed: <u>4:44.14</u>	Jet: _____
+0.5 echo		

Depth      Core Description

0 VF LG SAND

1

2

3

4

5 VF LG SAND

6

7

8

9

10 MF LG SAND

11

12

13

14

15 FINE LG SAND

16

17

18

19

20 VF GRAY SAND

Remarks: \_\_\_\_\_



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job #1556

Core No. B16 Run No. 1 Date: 8-9-07 Area: S Am 15c

Grid Position: Easting 370 219 Northing 229 6620

Geographic Position: Lat. 30°30.7812'N Long. 81°24.7258'W

Correct  
core log

Water Depth	Vibration Time	Core Depth	RE- FUSAL
Uncorrected: <u>18.13</u>	Stop: <u>11:15:38</u>	<u>15.55</u>	<u>REFUSAL</u>
-0.21	(1) Start: <u>11:12:28</u>	<u>13.88</u>	<u>REFUSAL</u>
Tide: <u>0.84</u>	= Elapsed: <u>2:55.67</u>	<u>14.5</u>	
= Corrected: <u>+2.1</u> <u>+0.5 Echo 18.7</u>		Jet:	RE- STARTED: (2) stop 11:21:40 COMPRESSOR tot 3:35.63 MOTOR STALLED

Depth      Core Description

0 VF    LBG    SD    SF

1

2

3

4

5 VF    LBG    SD    SF

6

7

8

9

10 VF    LG    SD

11

12

13

14

15 VF    LG SD SF

16

17

18

19

20

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. B16 Run No. 2 Date: 8-4-07 Area: S Am 1c

Grid Position: Easting 370227 Northing 2246614

Geographic Position: Lat. 30°30.7805'N Long. 81°624.7251'W

Water Depth

Uncorrected: 12.5 Stop: 11:40 :16 Penetration: 19.36

Tide: 0.073 Start: 11:40 :16 Recovery: 6

= Corrected: 12.3 13.0 = Elapsed: 1:58.00 Jet: 18 [13.49]

Depth      Core Description

0 SHELL HASH, FM & SAND

1

2

3

4

5 FINE GRAY SD, SF

6 FINE GRAY SD, SF

7

8

9

10

11

12

13

14

15

16

17

18

19

20

Remarks:

(STUCK AT 13.76:  
~5 min DELAY)



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. B17 Run No. 1 Date: 8-9-07 Area: S Am 5L

Grid Position: Easting 370805 Northing 2247531

Geographic Position: Lat. 30° 30.4283' N Long. 81° 24.151' W

Water Depth

Uncorrected: 11.9

Tide: -0.26 0.88

= Corrected: 11.9

0.8 echo 12.7

Vibration Time

Stop: 10:54:16

Start: 10:51:25

= Elapsed: 2:50.64

Core Depth

Penetration: 19.68

Recovery: 26

Jet: \_\_\_\_\_

Depth      Core Description

0 VF      LG SD

1

2

3

4

5 VF      G      SD

6

7

8

9

10 SHORC HASH, MED <sup>ED</sup> ~~red~~ <sup>brown</sup> SD

11

12

13

14

15 MED G SD, SSF

16

17

18

19 FINE

20 VF      G      SD

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

HYPACK 30°31.07'N 81°24.67'W

CORE LOG  
Job # 1556

Core No. 318 Run No. 1 Date: 8/1/07 Area: S Am Isc

Grid Position: Easting 370526 Northing 2248403

Geographic Position: Lat 30°31.07'N Long 81°24.67'W

Water Depth

Uncorrected: 16.1 Stop: 4:14:03

Tide: 0.58 0.93 Start: 9:10:33

= Corrected: 15.7 16.0 = Elapsed: 3:30:44  
+ 0.5 echo

Core Depth

Penetration: 19.32

Recovery:

Jet:

Depth Core Description

0 VF LBG SD SSF

1

2

3

4

5 ↗

6 MED GRAY SD MSF

7

8

9

10 MED GRAY SD MSF

11

12

13

14

15 MED GRAY SD + SH

16

17

18

19

20 GRAY MP SANDY CLAY, SSF

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. B19 Run No. (8-4-07) Date: (1) Area: S Am 15c

Grid Position: Easting 370 137 Northing 2218 020

Geographic Position: Lat. 30° 31.016' N Long. 81° 24.7460' W

Water Depth

Uncorrected: 20.1 Stop: 8:50:19 Core Depth 19.51

Tide: 0.07 Start: 9:46:47 Recovery: \_\_\_\_\_

= Corrected: 19.6 20.5 = Elapsed: 3:31.95 Jet: \_\_\_\_\_  
+ 0.5 echo

Depth Core Description

0 VF LBG SD

1

2

3

4

5 FWF G SD

6

7

8

9

10 MF LG SD

11

12

13

14

15 GRAY SANDY MP CLAY

16

17 GRAY SANDY MP CLAY SF

18

19

20

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job #1556

Core No. B20 Run No. 1 Date: 8/4/07 Area: S An 15c

Grid Position: Easting 369978 Northing 2247793

Geographic Position: Lat. 30°30.9185'N Long. 81°24.7760'W

Water Depth

Uncorrected: -21.3

Tide: -0.14 0.94

= Corrected: 20.9  
+0.5 echo 21.7

Vibration Time

Stop: 10:14:38

Start: 10:10:41

= Elapsed: 3:56.72

Core Depth

Penetration: 19.37

Recovery: 20

Jet:

Depth      Core Description

0    F    G    SD

SSF

1

2

3

4

5    F    G    SD

MSF

6

7

8

9

10 UF    LG    SD    SSF

11

12

13 SAND - CLAY    Xition    ~13'5"

14

15 CLAY    SANDY    MP    CLAY    SSF

16

17

18

19

20 GRAY    SANDY    MP    CLAY    SSF

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. B2 Run No. 1 Date: 8-4-07 Area: S Am 182

Grid Position: Easting 36953.89 Northing 224744.23

Geographic Position: Lat. 30° 30.865' N Long. 81° 30.850' W

Water Depth      Vibration Time      Core Depth

Uncorrected: 14.6 Stop: 13:32:14 Penetration: 19.31

Tide: 1.79 03 Start: 13:28:54 Recovery: 17.9

= Corrected: 14.8 13.3 = Elapsed: 3:19.55

Jet: \_\_\_\_\_

0.5 echo

Depth      Core Description

0 VF      CBG      SD      SF

1

2

3

4

5 S

6

7 VF      LBG      SD      SF

8

9

10 VF      LBG      SD      SF

11

12

13

14

15 VF      LG      SD      SF

16

17

18

19

20 GRAY      MED      SD      MSF

Remarks: \_\_\_\_\_



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. B22 Run No. 1 Date: 8/4/07 Area: S Am Isc

Grid Position: Easting 368808 Northing 22°47'66"

Geographic Position: Lat. 30°30.9512'N Long. 81°24.9985'W

Water Depth

Uncorrected: 1.5

Tide: 2.31 1.53

= Corrected: 1.3.3  
+0.5 echo

Vibration Time

Stop: 13:59:35

Start: 13:54:12

= Elapsed: 5:23.63

Core Depth

Penetration: 18.75

Recovery: \_\_\_\_\_

Jet: \_\_\_\_\_

Depth Core Description

0 VF CBG SD, SSF

1

2

3

4

5 MOD CBG SD, MSF

6

7

8

9

10 VF LG SD, SSF

11

12

13

14

15 VF LG SD

16

17

18

19

20 VF LG SD, SF

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. 324 Run No. 1 Date: 8/5/07 Area: S Am Isc

Grid Position: Easting 369 913 Northing 22 48 771

Geographic Position: Lat. 30° 31.1212' N Long. 81° 24.8843' W

Water Depth

Uncorrected: 20.1 Stop: 8:49:52 Penetration: 19.35

Tide: 2.22 0.78 Start: 8:47:07 Recovery: 17.2

= Corrected: 20.9 = Elapsed: 2:45.02 Jet: \_\_\_\_\_  
+0.5 echo 18.4

Depth      Core Description

0 VF LG SD

1

2

3

4

5 VF LG SD

6

7

8

9

10 VF G SD

11

12

13

14

15 G MP SANDY CAY

16

17 G MP SC

18

19

20

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. B25 Run No. 1 Date: 8/5/07 Area: S Am 1c

Grid Position: Easting 370 021 Northing 2248 914

Geographic Position: Lat. 30° 31.1507' N Long. 81° 24.7637' W

Water Depth

Uncorrected: 16.7

Tide: 3.68 ~~4.055~~

= Corrected: +6.7  
+0.9 echo 13.5

Vibration Time

Stop: 7:39:22

Start: 7:38:21

= Elapsed: 5:00.73

Core Depth

Penetration: 19.38

Recovery: 12.9

Jet: \_\_\_\_\_

Depth      Core Description

0    VF    C    SD

1

2

3

4

5    VF    LG SD

6

7

8

9

10    VF    CG SD,    SSF

11

12    VF    GRAY SD

13

14

15

16

17

18

19

20

Remarks: \_\_\_\_\_



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

## CORE LOG

Job # 1556

JET

Core No. 1325 Run No. 2 Date: 8/5/07 Area: S Am Isl

Grid Position: Easting 370 012 Northing 228 916

Geographic Position: Lat. 30° 31.1' N Long. 81° 24.7' W

Water Depth

Uncorrected: 16.5 Stop: 8:14:26 Core Depth 19.65

Tide: 2.99 0.68 Start: 8:10:17 Recovery: 5.4

= Corrected: 16.714 = Elapsed: 4:09:17 Jet: 12'  
+0.5 echo

Depth      Core Description

0 VF CL SD

1

2

3

4

5 GRAY CLAYER SAND

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

26  
Core No. B-28 Run No. 1 Date: 7-29-07 Area: Su Am Isl 225 0007

Grid Position: Easting 369220.27 Northing 234998.25 500881507  
Geographic Position: Lat. 30° 31.3340' N Long. 81° 24.9261' W

Water Depth      Vibration Time      Core Depth  
Uncorrected: 19.5 Stop: 14:26:19 Penetration: 19.82  
Tide: 3.4 Start: 14:16:45 Recovery: 18 6  
= Corrected: 19.516.6 = Elapsed: 10:04.14 Jet:

Depth      Core Description

0 F DG SAND, HI H<sub>2</sub>O content

1

2

3

4

5 F LG SAND

6

7

8

9

10 F LG SAND

11

12

13

14

15 MF LG SAND

16

17

18

19 GRAY MP (CARE, SHELL FRAGS (LARGE))

20

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. B526<sup>27</sup> Run No. 1 Date: 7-29 Area: S. Am Isc

Grid Position: Easting 369221 Northing 2249539

Geographic Position: Lat. 81° 24.9015'W Long. 30° 34.2702'N

Water Depth	Vibration Time	Core Depth
Uncorrected: <u>19</u>	Stop: <u>13:30:32</u>	Penetration: <u>19.51</u>
Tide: <u>4.09</u>	Start: <u>13:24:18</u>	Recovery: <u>20</u>
= Corrected: <u>19.2</u>	= Elapsed: <u>6:13.97</u>	Jet:
<u>10.5 echo</u>		

Depth	Core Description
<u>0</u>	<u>MC DG SAND, MANY SHELL FRAGS</u>
<u>1</u>	
<u>2</u>	
<u>3</u>	
<u>4</u>	
<u>5</u>	<u>F LG SAND</u>
<u>6</u>	
<u>7</u>	
<u>8</u>	
<u>9</u>	
<u>10</u>	<u>F LG SAND</u>
<u>11</u>	
<u>12</u>	
<u>13</u>	
<u>14</u>	
<u>15</u>	<u>MC DG SAND, MANY SHELL FRAGS; MP DG CLAY</u>
<u>16</u>	
<u>17</u>	
<u>18</u>	
<u>19</u>	<u>DG MP CLAY, SMALL SHELL FRAGS</u>
<u>20</u>	

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

## CORE LOG

Job # 1556

Core No. 328 Run No. 1 Date: 7-31-07 Area: S Am Is

Grid Position: Easting 368522 Northing 2249385

Geographic Position: Lat. 30° 31.2455' N Long. 81° 25.0611' W

Water Depth

Uncorrected: 19 Stop: 16:14:26

Tide: 3.28 0.57 Start: 16:11:20

= Corrected: 18.9 Elapsed: 3:06.33  
+0.5 echo

Core Depth

Penetration: 19.42

Recovery: 15.6

Jet: \_\_\_\_\_

Depth      Core Description

0 VF GRAY SD

1

2

3

4

5 MF GRAY SD

6

7

8

9

10 FME LG SD

11

12

13

14

15

16 GRAY SANDY MP CLAY

17

18

19

20

Remarks: \_\_\_\_\_



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. B29 Run No. 1 Date: 8/5/07 Area: S Am Isc  
Grid Position: Easting 368278 Northing 228739  
Geographic Position: Lat. 30°31.1278'N Long. 81°25.1022'W  
Water Depth Vibration Time Core Depth  
Uncorrected: 12.0 Stop: 9:55:39 Penetration: 18.7  
Tide: 0.89 0.88 Start: 9:52:00 Recovery: 17.9  
= Corrected: 11.6 11.6 = Elapsed: 3:38:44 Jet:   
+0.5 echo

Depth Core Description

0 VF FF LG SD

1

2

3

4

5 VF G SD

6

7

8

9

10 VF DG SD, ORGANIC SILT

11

12

13

14

15 VF LG SD

16

17

18

19

20 MF G SD, MSF

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. B30 Run No. 1 Date: 8/1/07 Area: S Am Isc

Grid Position: Easting 368080 Northing 2248178

Geographic Position: Lat. 30° 31.0353' N Long. 81° 25.1368' W

Water Depth

Uncorrected: 16.7 Stop: 14:28:50

Tide: 2.97 0.77 Start: 14:24:18

= Corrected: 17.04.2 = Elapsed: 4:31.88

+0.5 echo

Core Depth

Penetration: 18.95

Recovery: 17.2

Jet:

Depth      Core Description

0 VF    LBG    SD    SSF

1

2

3

4

5 VF    LBG    SD

6

7

8

9

10 S

11 VF    LG    SD    SSF

12

13

14

15 MED    GRAY    SD    MSF

16

17

18

19

20 ~~MED~~ MF    GRAY    SD    SF

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. B31 Run No. 1 Date: 8-4-07 Area: S Am Is

Grid Position: Easting 367563 Northing 2248590

Geographic Position: Lat 30° 31.0965' N Long. 81° 025.2305' W

Water Depth

Uncorrected: 10.4 Stop: 15:53:20 Penetration: 11.85 REFUSAL  
Tide: 4.52 0.64 Start: 15:55:49:20 Recovery: 9.5  
= Corrected: 10.96.3 = Elapsed: 3:59.77 Jet: \_\_\_\_\_  
+0.5 echo

Depth      Core Description

0 VF LBG SD , SSF .

1

2

3

4

5

6 MED - VF GRAY SD , SSF

7

8

9 VF LBG SD , SSF

10

11

12

13

14

15

16

17

18

19

20

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

JET

Core No. 331 Run No. 2 Date: 8-4-07 Area: S Am Isc

Grid Position: Easting 367 557 Northing 2248 584

Geographic Position: Lat. 30° 31.1154' N Long. 81° 25.2330' W

Water Depth

Uncorrected: 10.1

Tide: 4.83 0.02

= Corrected: 10.6 + d. 5 echo 5.8

Vibration Time

Stop: 16:17:43

Start: 16:13:54

= Elapsed: 3:02.75

Core Depth

Penetration: 19.23

Recovery: 3.5

Jet: 9'

Depth      Core Description

0 MF GRAY SD, SHELL HASH

1

2

3 SHELL HASH MAD GRAY SD

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

Remarks:



## ALPINE OCEAN SEISMIC SURVEY, INC.

70 Oak Street Norwood, New Jersey 07648

Tel. (201) 768-8000 Fax: (201) 768-5750

✉ E-mail alpine@alpineocean.com

~~(LWPA CR: 367555 228603 JET  
SO)~~

## CORE LOG

Job # 1556Core No. B31 Run No. 3 Date: 8/5/07 Area: S Am 1/5cGrid Position: Easting 367555 Northing 2288 595 000Geographic Position: Lat. 30°31'.031' N Long. 81°25.2402' WWater DepthUncorrected: 11.6 Stop: 16:04:35 Core Depth 19.76Tide: 4.69 0.08 Start: 16:02:44 Penetration: +2 5.7= Corrected: 12.0 = Elapsed: 0:50.17 Recovery: +2 5.7Depth      Core Description0 VF LBG SD, MSF12345 SHELL HASH, F LBG SD67891011121314151617181920

Remarks:



## ALPINE OCEAN SEISMIC SURVEY, INC.

70 Oak Street Norwood, New Jersey 07648

Tel. (201) 768-8000 Fax: (201) 768-5750

✉ E-mail alpine@alpineocean.com

HYACK 30°31.3374' 81°25.1915'W

## CORE LOG

Job # 1556

Core No. B32 Run No. 1 Date: 8-2-07 Area: S Am IslGrid Position: Easting 367754 Northing 2250032Geographic Position: Lat. 30°31.3368' Long. 81°25.1915'WWater DepthUncorrected: 17.3 Stop: 14:32:43Core DepthPenetration: 19.07Tide: -0.7 Start: 14:21:40Recovery: 18.2= Corrected: 17.7 = Elapsed: 11:02.04  
+0.5 echo

Jet:

Depth      Core Description0 ~SA PROPEL12345 VF LG SD678910 VF LG SD1112131415 VF LG SD16171819 VF GRAY SD, SSF20

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. B33 Run No. 1 Date: 8-4-07 Area: S Am bc

Grid Position: Easting 367870 Northing 2247691

Geographic Position: Lat. 30°30.9560' N Long. 81°25.1802' W

Water Depth

Uncorrected: 13.7 Stop: 14:50:12 Penetration: 19.22

Tide: 0.12 Start: 14:46:24 Recovery: 16.5

= Corrected: 14.1 = Elapsed: 3:47.88 Jet: \_\_\_\_\_  
+ 6.5 echo

Depth      Core Description

0 CM    LG    SD    SF

1

2

3

4

5 MF    LBG    SD    S F

6

7

8

9

10 VF    LG    SD

11

12

13

14

15 F    LG    SD

16

17

18

19

20 F    LG    SD    MSF

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

## CORE LOG

Job # 1556

Core No. B3X6 Run No. 1 Date: 8-2-07 Area: S Am Isl

Grid Position: Easting 367393 Northing 2248381

Geographic Position: Lat. 30° 31.230' N Long. 81° 25.2063' W

Water Depth

Uncorrected: 16.9

Vibration Time

Stop: 13:49:29

Core Depth

Penetration: 19.39

Tide: 0.12

Start: 13:45:14

Recovery: 19.0

= Corrected: 17.3

= Elapsed: 4:15.22

Jet: \_\_\_\_\_

Depth      Core Description

0 F    LB SAM) SSF

1

2

3

4

5 MED GRAY SD, MSF

6

7

8

9

10 VF LG SD

11

12

13

14

15 VF LG SD

16

17

18

19 VF GRAY SD

20

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. 637 Run No. 1 Date: 7-31-07 Area: S Am Is.

Grid Position: Easting 368154 Northing 2250495

Geographic Position: Lat. 30° 31.4422'N Long. 81° 25.1457'W

Water Depth

Uncorrected: 17.5

Vibration Time

Stop: 16:48:30

Core Depth

Penetration: 19.61

Tide:

Start: 16:44:43

Recovery: 20

= Corrected:

= Elapsed: 3:47.46

Jet:

+ 0.5 echo

Depth      Core Description

0 VF LG SD

1

2

3

4

5 VF LG SD

6

7

8

9

10 FINE LG SD

11

12

13

14

15 MF GRAY SD, MANY SMALL SHELL FRAGS

16

17

18

19

20 GRAY CLAYEY UF SAND

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. B38 Run No. 1 Date: 8-2-07 Area: S Am Isc

Grid Position: Easting 366960 Northing 2250172

Geographic Position: Lat. 30°31.3589'N Long. 81°28.3452'W

Water Depth                      Vibration Time                      Core Depth

Uncorrected: 14.5 Stop: \_\_\_\_\_ Penetration: \_\_\_\_\_

Tide: Start: \_\_\_\_\_ Recovery: \_\_\_\_\_

= Corrected: \_\_\_\_\_ = Elapsed: \_\_\_\_\_ Jet: \_\_\_\_\_

Depth                      Core Description

0

COMPRESSOR FAILED. NO CORE

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

Remarks: \_\_\_\_\_



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. B 38 Run No. 1 Date: 8/5/07 Area: S Am Br

Grid Position: Easting 366949 Northing 7250137

Geographic Position: Lat. 30°31.3569'N Long. 81°25.3497'W

Water Depth	Vibration Time	Core Depth
Uncorrected: <u>13.9</u>	Stop: <u>10:27:29</u>	Penetration: <u>19.10</u>
Tide:	Start: <u>10:24:19</u>	Recovery: <u>18.5</u>
= Corrected:	= Elapsed: <u>3:09.39</u>	Jet:

Depth      Core Description

0 F G SD MSF

1

2

3

4

5 MF G SD SF

6

7

8

9

10 F G SD SF

11

12

13

14

15 VF LG SD sf

16

17 VF LG SD SF

18

19

20

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. 839 Run No. 1 Date: 8/3/07 Area: S Am 15L

Grid Position: Easting 36611 Northing 2249903

Geographic Position: Lat. 30°31.3212' N Long. 81°25.4176' W

Water Depth

Uncorrected: 13.2

Vibration Time

Stop: \_\_\_\_\_

Core Depth

Penetration: 19.41

Tide: \_\_\_\_\_

Start: 10:45:27

Recovery: 19

= Corrected: \_\_\_\_\_

= Elapsed: \_\_\_\_\_

Jet: \_\_\_\_\_

Depth      Core Description

0    MF    LG    SD

SF

1

2

3

4

5    VF    LG    SD

SF

6

7

8

9

10    VF    LG    SD

11

12

13

14

15    VF    LG    SD

16

17

18

19    MF    G    SD    M/SF

20

Remarks: \_\_\_\_\_



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. B-1841 Run No. 1 Date: 7-31-07 Area: S Am Isc  
Grid Position: Easting 368553.97 Northing 225+035 0994  
Geographic Position: Lat. 30° 31.579' N Long. 81° 25.042' N  
243  
Water Depth Vibration Time Core Depth  
Uncorrected: 20.4 Stop: 3:29 : 37 Penetration: 19.42  
Tide: Start: 3:20 : 11 Recovery: 19.8  
= Corrected:  = Elapsed: 9:25.83 Jet:

Depth Core Description

0 VF DG SAND, SMALL SHELL FRAGS

1

2

3

4

5 VF LG SAND

6

7

8

9

10 VF LG SAND

11

12

13

14

15 MED GRD SAND, SMALL SHELL FRAGS

16

17

18

19

20 MF PG SAND, LARGE SHELL FRAGS

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. B42 Run No. 1 Date: 8/5/07 Area: S Am Isc  
Grid Position: Easting 365676 Northing 2250258  
Geographic Position: Lat. 30° 31.3776' N Long. 81° 25.5968' W  
Water Depth Vibration Time Core Depth  
Uncorrected: 15.7 Stop: 11:12:43 Penetration: 17.93 REFUSAL  
Tide: Start: 11:08:19 Recovery: 19.2  
= Corrected: = Elapsed: 4:27.19 Jet: \_\_\_\_\_

Depth Core Description

0 VF LG SD

1

2

3

4

5 VF LG SD

6

7

8

9

10 VF LG SD

11

12

13

14

15 VF LG SD

16

17

18

19 MF G SD MSP

20

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
 E-mail alpine@alpineocean.com  
HPACK : 30°31.48'N 81°

CORE LOG  
Job # 1556

Core No. B-43 Run No. 1 Date: 8-2-07 Area: S Am Is

Grid Position: Easting 365372 Northing 2250920

Geographic Position: Lat. 30°31.4839'N Long. 81°25.6506'W

<u>Water Depth</u>	<u>Vibration Time</u>	<u>Core Depth</u>
Uncorrected: <u>14.5</u>	Stop: <u>9:37:02</u>	Penetration: <u>19.18</u>
Tide:	Start: <u>9:32:44</u>	Recovery: <u>18.3</u>
= Corrected: _____	= Elapsed: <u>4:18.28</u>	Jet: _____

Depth      Core Description

0 VF LBG SD, SSF

1

2

3

4

5 MED GRAY SD, SF

6

7

8

9

10 MED GRAY SD, SF

11

12

13

14

15 VF LG SD

16

17

18

19 VF LC SD

20

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. BYY Run No. 1 Date: 8/5/07 Area: S Am Isc

Grid Position: Easting 365.941 Northing 2251000

Geographic Position: Lat. 30°31.4947'N Long. 81°025.5396'W

Water Depth                      Vibration Time                      Core Depth

Uncorrected: 18.2 Stop: 16:30:31 Penetration:       

Tide: Start: 16:26:35 Recovery: 18.5

= Corrected:        = Elapsed:        Jet:       

Depth                      Core Description

0 FINE CBG SD, SF

1 PENETROMETER FAILED

2

3

4

5 FM GRAY SD SF

6

7

8

9

10 VF CG SD

11

12

13

14

15 VF CG SD

16

17

18 VF CG SD

19

20

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

## CORE LOG

Job # 1556

Core No. BYS Run No. 1 Date: 8/5/07 Area: Am Is

Grid Position: Easting 366 475 Northing 2251.296

Geographic Position: Lat. 30° 31.5459' N Long. 81° 25.4393' W

Water Depth

Uncorrected: 21.0

Vibration Time

Stop: \_\_\_\_\_

Core Depth

Penetration: \_\_\_\_\_

Tide: \_\_\_\_\_

Start: \_\_\_\_\_

Recovery: \_\_\_\_\_

= Corrected: \_\_\_\_\_

= Elapsed: \_\_\_\_\_

Jet: \_\_\_\_\_

Depth      Core Description

0

PENETROMETER SLIPPED

1

CHAIN

2

3

4

NO CORE

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

Remarks: \_\_\_\_\_



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
 E-mail alpine@alpineocean.com

## CORE LOG

Job # 1556

1A 1 IN COMPTL

Core No. B45 Run No. 2 Date: 8/5/07 Area: S Am Isc

Grid Position: Easting 366488 Northing 2251289

Geographic Position: Lat. 30° 31.546' N Long. 81° 25.547' W

Water Depth

Uncorrected: 20.5 Stop: 17:29:05 Penetration: 19.57

Tide: Start: 17:25:17 Recovery: 19.5

= Corrected: 3:48.20 = Elapsed: 3:48.20 Jet: \_\_\_\_\_

Depth      Core Description

0 VF LBG SD SSF

1

2

3

4

5 VF LG SD

6

7

8

9

10 VF LG SD

11

12

13

14

15 VF LG SD

16

17

18

19

20 SHRE WASH F LG SD

Remarks: \_\_\_\_\_



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. B46 Run No. 1 Date: 8/5/07 Area: S Am Isc

Grid Position: Easting 366933 Northing 2251073

Geographic Position: Lat. 30°31.5064'N Long. 81°25.3511'W

Water Depth

Uncorrected: 19.2 Stop: 17:54:57 Penetration: 18.92

Tide:

Start: 17:51:02

Recovery: 18.5

= Corrected:

= Elapsed: 3:54.52

Jet:

Depth      Core Description

0 VF CBG SD SSF

1

2

3

4

5 MF G SD SSF

6

7

8

9

10 MED G SD SSF

11

12

13

14

15 MED G SD SF

16

17

18

19 MF GSN SSF

20

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. 847 Run No. 1 Date: 7-30-07 Area: S Am Isl

Grid Position: Easting 367591 Northing 2251510

Geographic Position: Lat. 30°31.5930'N Long. 81°25.2523'W

Water Depth                      Vibration Time                      Core Depth

Uncorrected: 20.7 Stop: 17:13:58 Penetration: 19.37

Tide: Start: 17:05:02 Recovery: 17:1

= Corrected: = Elapsed: 8:05.56 Jet: \_\_\_\_\_

Depth                      Core Description

0 F GRAY SAND, SHELL FRAGS

1

2

3

4

5 VF LG SAND

6

7

8

9

10 VF LG SAND

11

12

13

14

15 VF LG SAND

16

17 VF LG SAND

18

19

20

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. B18 Run No. 1 Date: 7-30-07 Area: S Am 1SL

Grid Position: Easting 368252 Northing 2251861

Geographic Position: Lat. 30° 31.6533' N Long. 81° 28.1431' W

Water Depth

Uncorrected: 23.1

Tide: \_\_\_\_\_

= Corrected: \_\_\_\_\_

Vibration Time

Stop: 13:57:45

Start: 15:53:45

= Elapsed: 4:00.25

Core Depth

Penetration: 18.96

Recovery: 19.6

Jet: \_\_\_\_\_

Depth      Core Description

0 FINE GRAY SAND, SHELL FRAGS

1

2

3

4

5 VF LG SAND

6

7

8

9

10 VF LG SAND

11

12

13

14

15 MC GRAY SAND, SHELL FRAGS

16

17

18

19

20 VF SILTY GRAY SAND

Remarks: \_\_\_\_\_



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job #1556

Core No. 849 Run No. 1 Date: 7-30-07 Area: S Am Isc

Grid Position: Easting 367438 Northing 2252360

Geographic Position: Lat. 30° 31.725' N Long. 81° 25.247' W

Water Depth

Uncorrected: 22.1

Vibration Time

Stop: 16:25:48

Core Depth

Penetration: 18.94

Tide:

Start: 016:21:27

Recovery: 19.8

= Corrected: \_\_\_\_\_

= Elapsed: 4:20.86

Jet: \_\_\_\_\_

Depth Core Description

0 MF GRAY SAND, SOME SMALL SHELL FRAGS

1

2

3

4

5 MF GRAY SAND, FEW SMALL SHELL FRAGS

6

7

8

9

10 VF LG SAND

11

12

13

14

15 VF LG SAND

16

17

18

19

20 MF GRAY SAND, SOME SMALL SHELL FRAGS

Remarks: \_\_\_\_\_



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. 550 Run No. 1 Date: 8-1-97 Area: S Am Is.

Grid Position: Easting 366975 Northing 2851695

Geographic Position: Lat. 30°31.6795'N Long. 81°25.3697'W

Water Depth 26.1 Vibration Time Core Depth

Uncorrected: 26.1 Stop: 8:55:23 Penetration: 18.11

Tide:  Start: 8:46:40 Recovery: 13.8

= Corrected:  = Elapsed: 9:42.91 Jet:

Depth Core Description

0 L6 VF SD

1

2

3

4

5 L6 VF SD

6

7

8

9

10 L6 VF SD

11

12

13

14 L6 VF SD

15

16

17

18

19

20

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. P50 Run No. 2 Date: 8-1-07 Area: S Am

Grid Position: Easting 366981 Northing 2251689

Geographic Position: Lat. \_\_\_\_\_ Long. \_\_\_\_\_

Water Depth

Vibration Time

Core Depth

Uncorrected: 26.5

Stop: \_\_\_\_\_

Penetration: \_\_\_\_\_

Tide: \_\_\_\_\_

Start: \_\_\_\_\_

Recovery: \_\_\_\_\_

= Corrected: \_\_\_\_\_

= Elapsed: \_\_\_\_\_

Jet: \_\_\_\_\_

Depth      Core Description

0

JET FAILED

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

Remarks: \_\_\_\_\_



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. 1350 Run No. 3 Date: 8-1-07 Area: S Am Isu

Grid Position: Easting 360977 Northing 2251695

Geographic Position: Lat. 30° 31.6311' N Long. 81° 25.3743' W

Water Depth 27 Vibration Time Core Depth

Uncorrected: 26 Stop: \_\_\_\_\_ Penetration: \_\_\_\_\_

Tide: \_\_\_\_\_ Start: \_\_\_\_\_ Recovery: \_\_\_\_\_

= Corrected: \_\_\_\_\_ = Elapsed: \_\_\_\_\_ Jet: \_\_\_\_\_

Depth Core Description

0 FAILED

1 RETAINER Blown out

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. 350 Run No. 4 Date: 8-1-07 Area: S Am 15c

Grid Position: Easting 366986 Northing 2251683

Geographic Position: Lat. 30° 31.6339' N Long. 81° 25.3647' W

Water Depth Vibration Time Core Depth

Uncorrected: 27 Stop: Penetration:

Tide: Start: Recovery:

= Corrected: = Elapsed: Jet:

Depth Core Description

0 FAILED RETAINER SCAWN OUT

1 TIDE CHANGING

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

Remarks:



## ALPINE OCEAN SEISMIC SURVEY, INC.

70 Oak Street Norwood, New Jersey 07648

Tel. (201) 768-8000 Fax: (201) 768-5750

✉ E-mail alpine@alpineocean.com

## CORE LOG

Job # 1580

No JET [Corelog: B50-r5]

Core No. B50 Run No. 2 Date: 8-3-07 Area: S Am IslGrid Position: Easting 367004 Northing 2251773Geographic Position: Lat. 30°31.61' N Long. 81°25.3376' W

Water Depth      Vibration Time      Core Depth

Uncorrected: \_\_\_\_\_ Stop: \_\_\_\_\_ Penetration: \_\_\_\_\_

Tide: \_\_\_\_\_ Start: \_\_\_\_\_ Recovery: \_\_\_\_\_

= Corrected: \_\_\_\_\_ = Elapsed: \_\_\_\_\_ Jet: \_\_\_\_\_

## Depth      Core Description

0      COMPRESSOR FAILED.

No core

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

## CORE LOG

Job # 1556

JET

Core No. B50 Run No. 6 <sup>(2 on core)</sup> Date: 8/5/07 Area: S Am Isc  
Grid Position: Easting 366998 Northing 2251758  
Geographic Position: Lat. 30°31.6175'N Long. 81°25.3388'W  
Water Depth Vibration Time Core Depth  
Uncorrected: 22.7 Stop: \_\_\_\_\_ Penetration: \_\_\_\_\_  
Tide: \_\_\_\_\_ Start: \_\_\_\_\_ Recovery: \_\_\_\_\_  
= Corrected: \_\_\_\_\_ = Elapsed: \_\_\_\_\_ Jet: 13.5 [12.3]

Depth      Core Description

0

AIR HOSE BREAK.

1

Not Taken

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

(7) 11m  
Core No. 350 Run No. 2 Date: 8/5/07 Area: S Am Is  
Grid Position: Easting 3066982 Northing 2251730  
Geographic Position: Lat. 30° 31.6178' N Long. 81° 25.6185' W  
Water Depth Vibration Time Core Depth  
Uncorrected: 22.5 Stop: 18:34:59 Penetration: 19.31  
Tide: Start: 18:29:51 Recovery: 17.5  
= Corrected: = Elapsed: 5:07.80 Jet:

Depth      Core Description

0 VF    G    SD    SF

1

2

3

4

5 VF    G    SD

6

7

8

9

10 VF    G    SD

11

12

13

14

15 VF    G    SD    SF

16

17

18

19 VF    G    SD    SSF

20

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. B51 Run No. 1 Date: 8-2-07 Area: S Am/Se

Grid Position: Easting 365340 Northing 2251412

Geographic Position: Lat. 30°31.5066' N Long. 81°25.6565' W

Water Depth

Uncorrected: 14

Vibration Time

Stop: 9:07:59

Core Depth

Penetration: 18.11

Tide: \_\_\_\_\_

Start: 9:01:59

Recovery: 18

= Corrected: \_\_\_\_\_

= Elapsed: 5:59.97

Jet: \_\_\_\_\_

Depth      Core Description

0 FWE GRAY SD SF

1

2

3

4

5 MF GRAY SD SF

6

7

8

9

10 MF GRAY SD SF

11

12

13

14

15 VF GRAY SD R

16

17

18

19 VF GRAY SD

20

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. 52 Run No. 1 Date: 8-2-07 Area: S Am Isl

Grid Position: Easting 365260 Northing 2251.943

Geographic Position: Lat. 30° 31.653' N Long. 81° 25.678' W

Water Depth

Uncorrected: 13.2

Vibration Time

Stop: 8:30:04

Core Depth

Penetration: 18.23

Tide:

Start: 8:22:51

Recovery: 17.2

= Corrected:

= Elapsed: 7:12:47

Jet:

Depth      Core Description

0 MED GRAY SD MSF

1

2

3

4

5 MF GRAY SD MSF

6

7

8

9

10 VF LG SD

11

12

13

14

15 VF LG SD

16

17

18

19 VF ~~GRAY~~ SD

20

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. B53 Run No. 1 Date: 8-2-07 Area: Se Am b

Grid Position: Easting 365795 Northing 2251931

Geographic Position: Lat. 30°31.6660'N Long. 81°25.5895'W

Water Depth

Uncorrected: 17.2

Vibration Time

Stop: 2:50:06

Core Depth

Penetration: 19.24

Tide: \_\_\_\_\_

Start: 2:46:33

Recovery: 47.8 18.7

= Corrected: \_\_\_\_\_

= Elapsed: 3:33.37

Jet: \_\_\_\_\_

Depth      Core Description

0 FINE LBG SAND, SMALL SHELL FRAGS

1

2

3

4

5 MED GRAY SAND, MANY SMALL SHELL FRAGS

6

7

8

9

10 VF LG SAND

11

12

13

14

15 VF LC SAND

16

17

18

19 VF LG SAND

20

Remarks: \_\_\_\_\_



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. B23 Run No. 1 Date: 8/5/87 Area: S Am 1se

Grid Position: Easting 369191 Northing 2248.150

Geographic Position: Lat. 30° 31.0252' N Long. 81° 02' 49.977" W

Water Depth      Vibration Time      Core Depth

Uncorrected: 20.8 Stop: 9:13:41 Penetration: 19.28

Tide: 1.7 0.82 Start: 9:10:45 Recovery: 20

= Corrected: 20.5 Elapsed: 2:57.80 Jet:

+0.5 echo

Depth      Core Description

0    DG    VF    SD , SF

1

2

3

4

5    SH , MF    G SD

6

7

8

9

10    VF    (G SD)

11

12

13

14

15    G HP C

16

17

18

19

20    G HP SC

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. B31 Run No. 1 Date: 8-2-07 Area: S Am Isc

Grid Position: Easting 366164 Northing 2248972

Geographic Position: Lat. 30°31.166'N Long. 81°25.4993'W

Water Depth

Uncorrected: 17.7 Stop: 10:43:38

Tide: 0.66 Start: 10:40:34

= Corrected: 17.5 = Elapsed: 3:04.30

Core Depth

Penetration: 19.41

Recovery: 12.4

Jet:

Depth      Core Description

0 FINE AAF    LBG SD SF

1

2

3

4

5 MF GRAY SD SF

6

7

8

9

10 MF GRAY SD SF

11

12

13 MED GRAY SD SHELL HASH

14

15

16

17

18

19

20

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. B34 Run No. 2 Date: 8-2-07 Area: S Am Is.

Grid Position: Easting 366153 Northing 2248959

Geographic Position: Lat. 30°31.1640' N Long. 81°25.5007' W

Water Depth

Uncorrected: 17.7

Tide: 0.59

= Corrected: 17.6  
*+0.5 echo*

Vibration Time

Stop: 11:05:50

Start: 11:01:49

= Elapsed: 2:35.56

Core Depth

Penetration: 19.53

Recovery: 4.2

Jet: 12'

Depth      Core Description

0 M GRAY SD SF

1

2

3

4 M GRAY SD SF

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

Remarks:



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
E-mail alpine@alpineocean.com

CORE LOG  
Job # 1556

Core No. B35 Run No. 1 Date: 8-2-07 Area: S Am Isl

Grid Position: Easting 36° 7' 048" Northing 2248900

Geographic Position: Lat. 30° 31. 1539' N Long. 81° 25. 3298' W

Water Depth

Uncorrected: 15.1 Stop: 11:30:20

Tide: 0.48 Start: 11:27:17

= Corrected: 15.1 = Elapsed: 3:03.86

+0.5 echo

Core Depth

Penetration: 19.40

Recovery: 18.2

Jet: \_\_\_\_\_

Depth      Core Description

0 VF LG SD SSF

1

2

3

4

5 MF B SD MSF

6

7

8

9

10 MF G SD MSF

11

12

13

14

15 VF LG SD

16

17

18

19

20

Remarks: \_\_\_\_\_



ALPINE OCEAN SEISMIC SURVEY, INC.  
70 Oak Street Norwood, New Jersey 07648  
Tel. (201) 768-8000 Fax: (201) 768-5750  
✉ E-mail alpine@alpineocean.com

CORE LOG  
Job # 1586

Core No. B40 Run No. 1 Date: 8-2-07 Area: S Ann Isc

Grid Position: Easting 366987 Northing 2249600

Geographic Position: Lat. 30° 31.2743' N Long. 81° 25.5287' W

Water Depth      Vibration Time      Core Depth

Uncorrected: 16 Stop: 10:16:48 Penetration: 19.3d

Tide: Start: 10:12:04 Recovery: 18.3

= Corrected:  = Elapsed: 4:43.89 Jet:

Depth      Core Description

0 F L B SD, SSF

1

2

3

4

5 F GRAY SD, SSF

6

7

8

9

10 VF LG SD

11

12

13

14

15 MF GRAY SD, SSF

16

17

18

19 F GRAY SD

20

Remarks: