PORT OF OAKLAND

May 30, 2002

MAY 31 2002

Barney Chan
Hazardous Materials Specialist
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

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P0187 940 / 38999

Re: Additional Site Characterization and Remedial Action Plan for 2225 and 2277 Seventh Street, Port of Oakland, Oakland, California

Dear Mr. Chan,

Please find enclosed the subject Port of Oakland (Port) Additional Site Characterization and Remedial Action Plan report for 2225 and 2277 Seventh Street in Oakland, California. This report is being submitted in accordance with Alameda County Health Care Services Agency (ACHCSA) requirements, as specified in your letter dated November 20, 2001 that approves the work plan for this work.

After you review the report, we would be pleased to discuss the next steps to implement remedial actions. If you have any questions concerning the report and recommended remedial approach, please contact me at (510) 627-1134.

Sincerely,

Jeffrey L. Rubin, CPSS, REA
Associate Port Environmental Scientist
Environmental Health and Safety Compliance

Enclosure: noted

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ADDITIONAL SITE CHARACTERIZATION AND REMEDIAL ACTION PLAN FOR 2225 AND 2277 SEVENTH STREET, OAKLAND, CALIFORNIA

Prepared for:

Port of Oakland
Environmental Health and Safety Compliance Department
530 Water Street,
Oakland, California, 94607

Prepared by:
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May 2002

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LIST OF ACRONYMS

bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, xylenes
CPT	Cone Penetration Test
MTBE	methyl-tert butyl ether
PAH	polynuclear aromatic ~~hydrocarbons~~
PIANO	paraffins, isoparaffins, olefins, naphthenes and aromatics
RWQCB	Regional Water Quality Control Board
TPH	total petroleum hydrocarbons
UST	underground storage tank
UVIF	ultraviolet-induced fluorescence
VOCs	volatile organic compounds

1.0 INTRODUCTION AND BACKGROUND

Innovative Technical Solutions, Inc. (ITSI) has prepared this Additional Site Characterization and Remedial Alternative Report (Report) to document additional field investigations and evaluation of remedial alternatives for the petroleum release site located at 2225 and 2277 Seventh Street in Oakland, California. The additional activities were performed consistent with the *Workplan for Additional Site Characterization*[1] dated November 8, 2001, approved by Alameda County Health Care Services Agency (Alameda County) on November 20, 2001.

Figure 1 shows the location of the site, and Figure 2 shows the general site layout. At 2225 Seventh Street, the previous tenant removed eight underground storage tanks (UST's) in 1990 and 1992 from a tank cluster located adjacent to and east of Building C-407. In 1992 the previous tenant also removed one waste oil tank from adjacent to and north of Building C-407. At 2277 Seventh Street, the Port of Oakland removed four UST's in 1993 from a tank cluster located adjacent to and south of Building C-401.

A series of site investigations were conducted following the UST removals. [redacted] in [redacted] petroleum hydrocarbons beneath the site. This free product plume straddles the boundary b[redacted]eet. A larger dissolved-phase plume is present in the groundwater beneath the site, and although not fully delineated, appears spatially associated with the free product plume. The dissolved-phase plume is composed primarily of diesel fuel-grade petroleum hydrocarbons with some gasoline fuel-grade petroleum hydrocarbons also present.

[1] ITSI, 2001. Workplan for Additional Site Characterization, 2225 and 2277 7th Street, Oakland, CA. November 8.

2.0 SCOPE OF WORK

The scope of work performed as part of the additional site characterization included the following:

- Advancing a series of 32 Cone Penetration Test (CPT) borings throughout the 2225 and 2277 7th Street site to evaluate soil behavior type and presence of petroleum hydrocarbons using an ultraviolet-induced fluorescence (UVIF) module.
- Installation of six temporary piezometers to facilitate collection of free product samples.
- Collection of free product samples, where present and obtainable, from the CPT borings, temporary piezometers and existing monitoring wells at the site.
- Fuel fingerprinting of the product samples to identify product type.

2.2 UTILITY CLEARANCE

Each sample location was cleared for the possible presence of underground utilities prior to drilling on January 22, 2002 by California Utility Surveys, an independent underground utility locating service. Additionally, Underground Service Alert was notified 48-hours prior to drilling. Suspect locations were hand-dug to a depth of three feet to evaluate the potential presence of buried utilities or conduits prior to drilling.

2.3 LITHOLOGIC TESTING

Thirty-two CPT borings were advanced throughout the site to evaluate subsurface lithology at the site, aligned in a pattern to facilitate the creation of cross-sections both parallel and perpendicular to the axis of the plume, and to evaluate the potential "groundwater barrier" between Building C-401 and MW-8A. Figure 2 shows the locations of the CPT borings. The CPT borings were advanced to a depth of approximately 20 feet each. Copies of the CPT logs are provided in Appendix A.

A UVIF module was used with the CPT rig, accessible only with the full size CPT rig, to qualitatively identify the presence of petroleum hydrocarbons. The UVIF module uses a down-

hole high energy UV light that causes fluorescence of aromatic hydrocarbons. The results of the UVIF scan can be seen on the CPT logs provided in Appendix A.

[redacted] These soil borings were completed as temporary piezometers to facilitate measurement and sampling of free product. [redacted]

The soil borings were continuously logged according to ASTM methodology (ASTM Method D2488), with soil descriptions recorded on boring logs. Copies of these boring logs are provided in Appendix A.

Soil samples representing each major lithologic unit encountered in one or more soil borings were collected for geotechnical analysis (grain-size distribution [ASTM Method D422], and liquid limit, plastic limit and plasticity index [ASTM Method D4318]). The major lithologic units were determined in the field by correlating the results of the CPT logs with descriptions of soils encountered in the soil borings.

The temporary piezometers were constructed of 2-inch diameter Schedule 40 PVC, with 0.010-inch machine-cut slotted PVC screen from approximately 5 feet below ground surface to total depth, a filter pack of number 2/12 sand, and were completed to a total depth of between 15 and 15.5 feet. A threaded bottom plug was installed at the end of the slotted casing. A minimum 1-foot thick bentonite seal was placed approximately one foot above the top of screen interval, followed by a cement/bentonite grout to the ground surface. Six-inch diameter traffic-rated well boxes were placed flush with existing ground surface. The newly constructed piezometers were surveyed for elevation and location, along with the existing monitoring wells present on the site.

After allowing sufficient time for the cement to set (a minimum of 72 hours following installation), the piezometers were developed by surging and pumping until water clarity improved, water quality as measured by pH, electrical conductivity, and temperature stabilized,

or until a maximum of 10 well volumes was removed. Copies of the development forms for the piezometers are provided in Appendix A. The piezometers were then sampled.

Investigation-derived wastes (drill cuttings, decontamination and purge water, and PPE [personal protective equipment]) were properly contained, labeled, inventoried, and stored on-site in an area designated by the Port for subsequent disposal under a separate contract with the Port's waste disposal contractor.

2.4 SAMPLING AND ANALYSIS

Three soil samples were collected from each of the six soil boring during drilling. Soil samples were collected from the approximate depths of one foot, three feet, and between five and seven feet below ground surface (bgs). The piezometers subsequently installed in these soil borings were sampled. The groundwater samples were collected using a disposable bailer, and transferred to clean sample containers provided by the laboratory. The samples were sealed, labeled, placed in an iced cooler, and transported under chain-of-custody procedures to Severn Trent Laboratories, a California-certified laboratory under contract to the Port of Oakland.

The soil and groundwater samples were analyzed for the following:

- Total petroleum hydrocarbons (TPH) as gasoline (modified EPA Method 8015)
- TPH as diesel and motor oil with silica gel cleanup (modified EPA Method 8015)
- Benzene, toluene, ethylbenzene and xylenes (BTEX), and methyl-tert butyl ether (MTBE)

Table 1 provides the analytical results for the soil samples, and Table 2 provides the analytical results for the water samples. Analytical results for the soil and groundwater samples are provided in Appendix B.

Product samples were collected from existing monitoring wells, CPT boreholes, and newly installed piezometers where present at sufficient volume to sample. The product samples were collected using a disposable bailer, and transferred to clean sample containers provided by the

laboratory. The samples were sealed, labeled, placed in an iced cooler, and transported under chain-of-custody procedures to Friedman and Bruya, Inc., a laboratory specializing in petroleum hydrocarbon characterization located in Seattle, Washington.

The product samples were analyzed for the following:

- Volatile organic compounds (VOCs) with MTBE (EPA Method 8260B)
- Polynuclear aromatic hydrocarbons (PAH), diesel and motor oil (EPA Method 8270C)
- Fuel scan (ASTM D2887)
- Paraffins, isoparaffins, olefins, naphthenes and aromatics (PIANO) (ASTM D5134-92)
- Cadmium, copper, lead, nickel and zinc (EPA Method 6010)
- Tetraethyl lead (Modified EPA Method 8082)

Tables 3 through 5 provide the results of the product samples. Analytical results for the products samples are provided in Appendix C.

A duplicate sample was collected of a groundwater sample collected during this investigation for quality control purposes. This sample, designated Dup-A on the chain-of-custody, was collected from piezometer PZ-C.

Geotechnical tests were conducted on representative samples from the sediments beneath the site, and analyzed for the following:

- Particle size distribution
- Liquid and plastic limits

Results of the geotechnical tests performed for the soil samples are provided in Appendix D.

Drill rods, augers, split-spoon samplers and other non-disposable equipment were cleaned by high-temperature pressure washing between sample locations. Clean packaged casing was used for the construction of the piezometers.

3.0 RESULTS OF SUBSURFACE INVESTIGATION

3.1 GEOLOGY AND HYDROGEOLOGY

Based on the results of the CPT borings and soil borings performed as part of this investigation, a better understanding of the subsurface conditions beneath the site has been developed. The site is largely underlain by bay mud at a depth of approximately 10 feet bgs. Above the bay mud, a series of sedimentary depositional sequences are present, likely representing one or more hydraulic fill events. Figure 3 provides the location of a series of geologic cross-sections developed based on CPT logs, and Figures 4 through 6 are the geologic cross-sections.

The sediments immediately overlying the bay mud are generally coarse grained (sands and silty sands) along the northern portion of the site, transitioning to finer grained sediments (sandy silts to clays) towards the southern portion of the site. The sediments overlying this sequence consist of coarse-grained sediments along the southern portion of the site, transitioning to finer-grained sediments towards the northern portion of the site.

Figure 7 is a generalized geologic map of this second sequence above the bay mud. The top of the groundwater table is generally present within this second sequence. Thus the sediments within the second sequence will have the most effect on the migration of free product on the upper surface of the groundwater. As shown in Figure 7, the sediments corresponding to the upper surface of the groundwater transition from coarser sediments in the southern portion of the site to silts beneath Building C–401. This transition could account for the lack of free product north of Building C–401, and may represent the so-called "hydraulic barrier" previously suggested at this site.

Groundwater levels were collected in the monitoring wells at the site on March 27, 2002. Figure 8 shows a groundwater contour map of the top of the groundwater beneath the site based on the March 27, 2002 measurements. Groundwater flow is generally towards the north to northwest,

with a greater westerly component to the groundwater flow in the area of the former tank pit associated with Building C–406.

3.2 NATURE AND EXTENT OF FREE PRODUCT

Free product was identified in several of the existing monitoring wells and CPT boreholes. Evidence of trace product was observed in soil borings installed by others. Figure 9 delineates the extent of free product identified during these field activities.

Based on the results of product analysis by Friedman and Bruya, Inc., the samples of free product collected from the existing monitoring wells and CPT boreholes, generally consisted of medium boiling range petroleum hydrocarbons, such as diesel or possibly kerosene or similar fuel. One or more BTEX compounds were detected in several of the product samples, whereas MTBE was not reported in the product samples collected.

The product samples collected from CPT-30, the closest CPT borehole to the upgradient portion of the plume, was characterized by Friedman and Bruya, Inc. as "a mixture of degraded and relatively undegraded fuel". There is a general trend in increased biological degradation of the product the further downgradient (towards Building C–401) the product was collected in the plume. This suggests the upgradient portion of the plume represents the source area of the majority of the product.

However, the detection of several compounds exclusively in the product samples at the downgradient edge of the plume may also suggest a possible additional and/or more local source area. Lead (presumably tetraethyllead) was reported in both the primary and duplicate product samples from MW-1 and product samples from CPT-14 and piezometer PZ-E completed in the same borehole. Benzene was reported in both the primary and duplicate product samples from MW-1, but was not reported in the remaining product samples collected. Results for a second sample from MW-1 (as MW-1 [C–401] were similar to the first sample.

The migration of free product appears to have been significantly restricted by the generally fine-grained sediments along the downgradient edge of the free product plume, resulting in only

minor lateral expansion of the plume since the initial investigations following removal of the underground tanks in 1990 and 1992. Significantly, the continued operation of the current extraction system and the fortuitous location of the extraction well MW-3 immediately upgradient of these fine-grained sediments has served to significantly reduce the volume of product beneath the site.

4.0 PROPOSED REMEDIAL ALTERNATIVE

The overall goal of continued remedial action plan is to achieve site closure based on the Regional Water Quality Control Board's (RWQCB) "Interim Guidance on Required Cleanup of Low Risk Fuel Sites" (1996)[2]. The primary obstacle for achieving site closure is the presence of free product on the groundwater surface beneath the site. An expanded free product recovery system is currently proposed for removal of the free product at the site to further this objective.

4.1 IMPACTS OF PROPOSED SITE REDEVELOPMENT

The Port of Oakland is currently planning to redevelop the site, including the removal of the three existing buildings, raising the surface grade at the site several feet in most areas with imported fill, and constructing two new buildings. As part of the redevelopment, the existing free product recovery system and all of the current groundwater monitoring wells will likely be removed. Due to the success of the current free product recovery system in reducing the free product thickness at the site, an expanded free product recovery system of similar design is proposed to replace the existing system. The proposed system will reuse many of the components of the current system.

Prior to site demolition, the active free product skimmer pump in MW-3 and the above-ground components of the recovery system including the air compressor, control panel, and product storage tank, will be removed and stored off-site. The concrete recovery system pad and fence enclosure will be demolished in conjunction with the building demolition activities. The existing wells will be destroyed by either over-drilling or pressure grouting. After the site redevelopment is completed, the expanded free product recovery system and replacement monitoring wells will be installed. Pending accessibility and close coordination with the construction contractor, portions of the recovery system's piping may be installed during the course of site development.

At the time of this report's preparation, the Port is considering the possibility of a more aggressive cleanup approach to facilitate planned site development and to potentially shorten the

length of operation and maintenance of the expanded free product recovery system currently proposed. Although the initial costs for a more aggressive cleanup would be considerably more, those costs may be partially offset by the reduction in the length of system operation and maintenance required for site cleanup and closure. Should such an approach be determined as more fiscally beneficial, this plan will be modified to reflect the approach.

4.2 EXPANDED FREE PRODUCT RECOVERY SYSTEM DESIGN

Figure 9 shows the extent of the free product layer based on recent product thickness measurements from monitoring wells, temporary piezometers, and soil borings. As shown, the area of significant free product thickness (greater than 3 inches) and measurable free product thickness (greater than 0.1 inch) is generally located between the east end of Buildings C–401 and the east end Buildings C–407. This core area is surrounded by a fringe area with a very thin product layer (ranging from less than 0.1 inch to a sheen) which extends further to the west, south, and east.

Figure 10 shows the layout of the proposed expanded free product recovery system. The design objective is to aggressively recover free product from the core area while continuing product skimming in the fringe area. The overall design goal is to reduce free product thickness to less than 0.1 inch throughout the site. To accomplish this goal, the proposed recovery system includes five 4-inch diameter recovery wells in the free product core area and two 4-inch diameter recovery wells in the free product fringe area. The recovery wellheads will be enclosed in 12-inch diameter, flush mounted vaults connected by 4-inch diameter underground conduits to an aboveground recovery system pad. The recovery system pad will be concrete measuring approximately 10 feet by 12 feet. The pad will have a chain-link fence enclosure and contain recovery system components including the air compressor, control panel, and product storage tank. The product storage tank will contain a high-level float switch and redundant high-level safety controls. Recovered product will be removed from the tank as needed and transported off site for recycling. The exact layout of the recovery system and location of the pad may be

[2] RWQCB. 1996. "Supplemental Instructions to State Water Board. December 8, 1995. Interim Guidance on Required Cleanup at Low Risk Fuel Sites." January 5.

revised based on the location of new buildings and other surface features constructed during site redevelopment.

[redacted]. Each pump will have a hydrophobic skimmer that floats at the product/water interface adjusting to tidal and seasonal water level changes. Shutoff valves will be incorporated into the air supply and product return lines at each wellhead allowing any of the skimmer pumps to be shut down or removed for service without affecting the operation of the remaining pumps.

4.3 REPLACEMENT GROUNDWATER MONITORING WELLS

[redacted] 10. The wells will be 2-inch diameter and approximately 15 feet deep. Six of the wells will be placed around the periphery of the current free product fringe area to monitor the extent of free product and concentrations of dissolved hydrocarbons regardless of the direction groundwater flow or potential free product migration. The groundwater flow direction is typically toward the northwest but the groundwater gradient is almost flat thus, groundwater flow direction may vary considerably throughout the year. One monitoring well will also be installed in the center of the free product core and one in the product fringe area along the south wall of Building C–401. The well in the product core will be used to measure the effectiveness of the free product recovery system in reducing free product thickness. The fringe area well is located in the area toward which the product core may be migrating. Results of the recent field activities suggests that free product migration toward the west may have occurred in this area.

4.4 GROUNDWATER MONITORING

During operation of the product recovery system, groundwater will be monitored on a regular basis. Wells will be checked for free product and product thickness measured, as needed. Groundwater samples will be collected using low-flow sampling techniques and analyzed for TPH as gasoline, diesel, and motor oil, and for BTEX and organic lead. Selected wells may also be analyzed for various natural attenuation monitoring parameters, possibly including dissolved oxygen, total organic carbon, total dissolved solids, nitrate/nitrite, sulfate/sulfide, alkalinity, ferrous/ferric iron, and methane.

4.5 SITE CLOSURE

Once the free product has been removed, the residual hydrocarbon concentrations will be evaluated relative to the RWQCB "Interim Guidance on Required Cleanup of Low Risk Fuel Sites" (1996). If the site meets the RWQCB requirements, site closure will be requested. If requirements are not met, it is likely that a monitored natural attenuation management strategy would be implemented until site closure requirements are met.

Table 1
Analytical Results for Soil Samples
2225 and 2277 Seventh Street, Oakland, California

Sample ID	Date	Units	Gasoline *	Diesel**	Motor Oil **	Benzene	Toluene	Ethylbenzene	Xylene(s)	MTBE
PZ-A 1.0-1.5'	2/11/02	mg/kg	< 1.0	**4.9**	< 50	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
PZ-A 3.0-3.5'	2/11/02	mg/kg	< 1.0	**2.2**	< 50	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
PZ-A 5.0-5.5'	2/11/02	mg/kg	< 1.0	< 1.0	< 50	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
PZ-B 1.0-1.5'	2/12/02	mg/kg	< 1.0	**120**	**360**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
PZ-B 3.0-3.5'	2/12/02	mg/kg	< 1.0	**2.2**	< 50	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
PZ-B 7.0-7.5'	2/12/02	mg/kg	< 1.0	< 1.0	< 50	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
PZ-C 1.0-1.5'	2/12/02	mg/kg	< 1.0	**4.7**	< 50	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
PZ-C 3.0-3.5'	2/12/02	mg/kg	< 1.0	**3.1**	< 50	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
PZ-C 5.5-6.0'	2/11/02	mg/kg	**74**	**2300**	< 2500	< 0.62	< 0.62	< 0.62	**1.3**	< 0.62
PZ-D 1.0-1.5'	2/12/02	mg/kg	< 1.0	**3.2**	< 50	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
PZ-D 3.0-3.5'	2/12/02	mg/kg	< 1.0	**22**	**62**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
PZ-D 5.0-5.5'	2/11/02	mg/kg	**140**	**7700**	< 5000	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62
PZ-E 1.0-1.5'	2/13/02	mg/kg	< 1.0	**19**	< 50	< 0.0051	< 0.0051	< 0.0051	< 0.0051	< 0.0051
PZ-E 3.0-3.5'	2/13/02	mg/kg	< 1.0	**17**	< 50	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
PZ-E 5.5-6.0'	2/13/02	mg/kg	**280**	**20000**	< 5000	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62
PZ-F 1.0-1.5'	2/12/02	mg/kg	**4.8**	**41**	< 250	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
PZ-F 3.0-3.5'	2/12/02	mg/kg	< 1.0	**2.4**	< 50	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
PZ-F 5.0-5.5'	2/11/02	mg/kg	**1.0**	**83**	**170**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050

Notes and Abbreviations:
PZ = peizometer
MTBE = methyl t-butyl ether
mg/kg = milligrams per kilogram
* Gasoline was analyzed using EPA Method 8015B (purgeables)
** Diesel and motor oil were analyzed using EPA Method 8015B with silica gel cleanup

Table 2
Analytical Results for Water Samples
2225 and 2277 Seventh Street, Oakland, California

Sample	Date	Units	Gasoline *	Diesel**	Motor Oil **	Benzene	Toluene	Ethylbenzene	Xylene(s)	MTBE
PZ-A	2/19/02	ug/L	**65**	**700**	< 500	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0
DUP-A	2/19/02	ug/L	**700**	**1,200**	< 500	**70**	< 0.50	**3.7**	**8.8**	< 5.0
PZ-B	2/19/02	ug/L	< 50	**570**	**670**	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0
PZ-C	2/19/02	ug/L	**510**	**2,200**	< 500	**73**	< 0.50	**2.5**	**7.3**	< 5.0
PZ-D	2/19/02	ug/L	**760**	**2,500**	< 500	**49**	**2.6**	**21**	**12**	< 5.0
PZ-E	2/19/02	ug/L	**2,000**	**4,400**	< 500	**380**	< 2.5	**11**	**5.2**	< 25
PZ-F	2/19/02	ug/L	**1,000**	**110,000**	< 10000	**20**	< 5.0	**9.4**	**10**	< 50
Trip Blank	2/19/02	ug/L	< 50	NA	NA	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0
Historical Data: Analyzed by Sequoia Analytical										
MW-8A	10/5/01	ug/L	**370**	**760**	< 280	< 1.2	< 1.2	< 1.2	< 1.2	< 6.2
Trip Blank	10/5/01	ug/L	< 50	NA	NA	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5

Notes and Abbreviations:
PZ = peizometer
MTBE = methyl t-butyl ether
ug/L = micrograms per liter
* Gasoline was analyzed using EPA Method 8015B (purgeables)
** Diesel and motor oil were analyzed using EPA Method 8015B with silica gel cleanup
NA = Not applicable

Table 3
Analytical Results for Product Samples-Fuel Type
2225 and 2277 Seventh Street, Oakland, California

Sample	Date	Units	Fuel Type
CJRS-1	1/31/02	NA	diesel fuel, lubricating oil, or similar
CPT-14	1/29/02	NA	diesel #2 or similar
CPT-19	1/30/02	NA	diesel #2 or similar
CPT-20	1/28/02	NA	kerosene, diesel, or similar
CPT-30	2/1/02	NA	kerosene, diesel, or similar
MW-1	2/8/02	NA	diesel #2 or similar
MW-3	2/8/02	NA	diesel #2 or similar
PZ-F	2/15/02	NA	diesel #2 or similar
MFC-18	3/26/02	NA	diesel #2 or heating oil
MFC-19	3/26/02	NA	diesel #2 or heating oil
MW-1-[C-401]	3/26/02	NA	diesel #2 or heating oil

Notes and Abbreviations:
PZ = peizometer
MTBE = methyl t-butyl ether
mg/kg = milligrams per kilogram
% = weight percent
PAH = polyaromatic nuclear hydrocarbons by Method 8270C
PIANO = parrafins, isoparrafins, olefins, naphthalenes and aromatrics by ASTM D5134-92
VOC = volatile organic compounds by Method 8260B
CJRS-1 = Sample collected from washrack inside Building C–407

Table 4
Analytical Results for Product Samples-Organic Compounds
2225 and 2277 Seventh Street, Oakland, California

Compound	Sample: / Date:	CJRS-1 1/31/02	CPT-14 1/29/02	CPT-19 1/30/02	CPT-20 1/28/02	CPT-30 2/1/02	MW-1 2/8/02	MW-3 2/8/02	PZ-F 2/15/02	MFC-18 3/26/02	MFC-19 3/26/02	MW1-[C-401]] 3/26/02
PAH by EPA Method 8270												
	Units											
Naphthalene	µg/g	<10	<10	1,000	1,900	1,200	1,100	<100	200	980	1,400	1,300
C1-naphthalenes	µg/g	<10	3,100	3,300	6,400	3,700	4,700	3,100	2,900	3,400	5,500	5,500
C2-naphthalenes	µg/g	22	6,600	5,600	11,000	5,700	7,700	8,200	7,500	6,600	9,700	9,200
C3-naphthalenes	µg/g	43	6,100	5,000	7,600	4,600	5,800	6,700	6,200	5,900	7,300	6,600
C4-naphthalenes	µg/g	<10	3,500	2,800	3,200	2,300	1,900	2,100	1,900	2,200	2,400	2,100
Biphenyl	µg/g	<10	<10	190	440	350	<100	<100	<100	180	<100	<100
Acenaphthylene	µg/g	<10	<10	<10	<100	<10	<100	<100	<100	<100	<100	<100
Acenaphthene	µg/g	<10	63	66	120	73	180	150	120	150	160	190
Dibenzofuran	µg/g	<10	170	140	250	210	180	160	150	120	210	190
Fluorene	µg/g	<10	370	380	360	340	340	340	320	480	460	380
C1-fluorenes	µg/g	15	930	850	850	750	800	920	880	1300	1200	860
C2-fluorenes	µg/g	17	1,200	1,100	970	880	970	1200	1100	1400	1200	950
C3-fluorenes	µg/g	15	690	640	430	400	490	570	560	920	700	570
Dibenzothiophene	µg/g	<10	220	210	190	270	150	170	160	190	270	160
C1-dibenzothiophenes	µg/g	<10	560	600	410	610	370	450	410	550	640	380
C2-dibenzothiophenes	µg/g	<10	620	650	320	550	360	430	410	530	620	360
C3-dibenzothiophenes	µg/g	<10	260	280	160	230	210	210	200	240	270	170
C4-dibenzothiophenes	µg/g	<10	<10	<10	<100	<10	<100	<100	<100	<100	<100	<100
Phenanthrene	µg/g	10	690	820	710	700	660	620	580	1000	840	720
Anthracene	µg/g	<10	66	<10	<100	<10	<100	<100	<100	<100	<100	<100
C1-phenanthrenes/anthracenes	µg/g	24	1,700	1,800	1,200	1,200	1,100	1,300	1,200	1,900	1,500	1,100
C2-phenanthrenes/anthracenes	µg/g	43	1,400	1,400	820	820	830	1000	930	1400	1100	900
C3-phenanthrenes/anthracenes	µg/g	24	460	570	290	270	270	390	380	550	370	410
C4-phenanthrenes/anthracenes	µg/g	<10	<10	<10	< 100	<10	<100	<100	<100	<100	<100	<100
Fluoranthene	µg/g	<10	170	16	< 100	<10	110	<100	110	<100	<100	130
Pyrene	µg/g	20	200	36	< 100	40	160	150	190	<100	<100	180
C1-fluoranthenes/pyrenes	µg/g	36	250	69	< 100	54	190	190	230	120	<100	190
C2-fluoranthenes/pyrenes	µg/g	<10	<10	<10	< 100	<10	<100	<100	<100	<100	<100	<100
C3-fluoranthenes/pyrenes	µg/g	<10	<10	<10	< 100	<10	<100	<100	<100	<100	<100	<100
Benz(a)anthracene	µg/g	<10	48	<10	< 100	<10	<100	<100	<100	<100	<100	<100
Chrysene	µg/g	<10	53	<10	< 100	<10	<100	<100	<100	<100	<100	<100
C1-chrysenes	µg/g	<10	82	11	< 100	<10	<100	<100	<100	<100	<100	<100
C2-chrysenes	µg/g	<10	53	<10	< 100	<10	<100	<100	<100	<100	<100	<100
C3-chrysenes	µg/g	<10	<10	<10	< 100	<10	<100	<100	<100	<100	<100	<100
C4-chrysenes	µg/g	<10	<10	<10	< 100	<10	<100	<100	<100	<100	<100	<100
Benzo(e)pyrene	µg/g	<10	37	<10	< 100	<10	<100	<100	<100	<100	<100	<100
Benzo(a)pyrene	µg/g	<10	58	<10	< 100	<10	<100	<100	<100	<100	<100	<100
Perylene	µg/g	<10	<10	<10	< 100	<10	<100	<100	<100	<100	<100	<100
Benzo(b)fluoranthene	µg/g	<10	18	<10	< 100	<10	<100	<100	<100	<100	<100	<100
Benzo(k)fluoranthene	µg/g	<10	29	<10	< 100	<10	<100	<100	<100	<100	<100	<100

Table 4
Analytical Results for Product Samples-Organic Compounds
2225 and 2277 Seventh Street, Oakland, California

Compound	Sample: / Date:	CJRS-1 1/31/02	CPT-14 1/29/02	CPT-19 1/30/02	CPT-20 1/28/02	CPT-30 2/1/02	MW-1 2/8/02	MW-3 2/8/02	PZ-F 2/15/02	MFC-18 3/26/02	MFC-19 3/26/02	MW1-[C-401]] 3/26/02
Indeno(1,2,3-cd)pyrene	µg/g	<10	23	<10	< 100	<10	<100	<100	<100	<100	<100	<100
Dibenzo(a,h)anthracene	µg/g	<10	<10	<10	< 100	<10	<100	<100	<100	<100	<100	<100
Benzo(g,h,i)perylene	µg/g	<10	34	<10	< 100	<10	<100	<100	<100	<100	<100	<100
PIANO by ASTM Method D5134-92												
	Units											
Total Identified Compounds	%	2.92	4.13	7.79	9.69	7.17	8.72	3.50	3.40	8.78	5.41	8.72
Oxygenated Compounds	%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydrocarbon Compounds	%	2.92	4.13	7.79	9.69	7.17	8.72	3.50	3.40	8.78	5.41	8.72
Unidentified Compounds	%	97.08	95.87	92.21	90.31	92.83	91.28	96.50	96.60	91.22	94.59	91.28
Total Compounds	%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Paraffins												
C3	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
C4	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
C5	%	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	0.02
C6	%	<0.01	0.14	0.06	0.07	0.07	0.32	0.47	0.33	0.24	0.02	0.16
C7	%	<0.01	0.02	0.02	0.02	0.02	0.24	<0.01	0.02	0.02	0.02	0.25
C8	%	<0.01	0.03	0.05	0.05	0.05	0.10	<0.01	0.02	0.08	0.05	0.10
C9	%	<0.01	<0.01	0.14	0.14	0.15	0.01	<0.01	0.01	0.25	0.12	0.02
C10	%	<0.01	<0.01	0.32	0.50	0.41	0.02	<0.01	0.06	0.52	0.27	<0.01
C11	%	<0.01	0.24	0.68	0.97	0.80	0.12	<0.01	0.23	0.92	0.42	<0.01
C12	%	1.65	0.20	0.86	0.67	0.67	<0.01	<0.01	<0.01	0.41	0.18	<0.01
C13	%	<0.01	0.22	1.09	0.60	0.70	<0.01	<0.01	<0.01	0.66	0.33	<0.01
C14	%	1.27	0.32	1.00	0.45	0.18	0.27	0.35	0.31	0.35	0.32	0.30
C15	%	<0.01	0.45	1.36	0.44	0.65	<0.01	<0.01	<0.01	0.58	0.33	<0.01
Total	%	2.92	1.61	5.57	3.91	3.69	1.11	0.82	0.98	4.01	2.04	0.85
Isoparaffins												
C3	%											
C4	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
C5	%	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	0.02
C6	%	<0.01	<0.01	<0.01	<0.01	<0.01	0.37	0.03	0.04	0.01	<0.01	0.36
C7	%	<0.01	0.03	<0.01	<0.01	<0.01	0.82	0.01	0.07	0.03	<0.01	0.83
C8	%	<0.01	0.13	<0.1	0.07	0.03	1.50	<0.1	0.18	<0.1	<0.1	1.54
C9	%	<0.01	0.02	0.07	0.10	0.10	0.28	0.06	0.07	0.13	0.11	0.25
C10	%	<0.01	0.13	0.11	0.15	0.15	0.17	0.11	0.08	0.23	0.16	0.19
C11	%											
C12	%											
C13	%											
C14	%											
C15	%											
Total	%	<0.01	0.32	0.18	0.32	0.28	3.15	0.21	0.44	0.4	0.27	3.19

Table 4
Analytical Results for Product Samples-Organic Compounds
2225 and 2277 Seventh Street, Oakland, California

Compound	Sample: / Date:	CJRS-1 1/31/02	CPT-14 1/29/02	CPT-19 1/30/02	CPT-20 1/28/02	CPT-30 2/1/02	MW-1 2/8/02	MW-3 2/8/02	PZ-F 2/15/02	MFC-18 3/26/02	MFC-19 3/26/02	MW1-[C-401]] 3/26/02
Aromatics												
C3	%											
C4	%											
C5	%											
C6	%	<0.01	<0.01	<0.01	<0.01	<0.01	0.06	<0.01	<0.01	<0.01	<0.01	0.04
C7	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
C8	%	<0.01	<0.01	0.04	0.16	0.07	0.09	<0.01	<0.01	0.03	0.03	0.08
C9	%	<0.01	0.05	0.32	0.60	0.40	0.26	0.02	0.09	0.34	0.29	0.44
C10	%	<0.01	0.74	0.78	1.99	1.24	1.30	0.63	0.56	1.58	1.11	1.55
C11	%	<0.01	1.13	0.69	1.93	1.12	1.20	1.36	0.86	1.50	1.12	1.05
C12	%	<0.01	0.14	0.05	0.47	0.21	0.15	<0.01	0.16	0.42	0.24	0.17
C13	%											
C14	%											
C15	%											
Total	%	<0.01	2.06	1.87	5.15	3.03	3.06	2.01	1.67	3.88	2.86	3.33
Naphthenes												
C3	%											
C4	%											
C5	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02
C6	%	<0.01	0.04	0.01	0.01	0.02	0.34	0.08	0.09	0.05	<0.01	0.30
C7	%	<0.01	0.04	0.04	0.07	0.03	0.55	0.03	0.07	0.07	0.04	0.55
C8	%	<0.01	0.04	0.08	0.12	0.05	0.39	0.08	0.08	0.12	0.07	0.37
C9	%	<0.01	0.01	0.04	0.11	0.07	0.11	0.17	0.06	0.15	0.09	0.10
C10	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
C11	%											
C12	%											
C13	%											
C14	%											
C15	%											
Total	%	<0.01	0.14	0.17	0.31	0.17	1.4	0.36	0.31	0.40	0.20	1.34
Olefins												
C3	%											
C4	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
C5	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
C6	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
C7	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
C8	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
C9	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
C10	%											
C11	%											
C12	%											
C13	%											

Table 4
Analytical Results for Product Samples-Organic Compounds
2225 and 2277 Seventh Street, Oakland, California

Compound	Sample: / Date:	CJRS-1 1/31/02	CPT-14 1/29/02	CPT-19 1/30/02	CPT-20 1/28/02	CPT-30 2/1/02	MW-1 2/8/02	MW-3 2/8/02	PZ-F 2/15/02	MFC-18 3/26/02	MFC-19 3/26/02	MW1-[C-401]] 3/26/02
C14	%											
C15	%											
Total	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Total												
C3	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
C4	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
C5	%	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	<0.01	<0.01	<0.01	<0.01	0.06
C6	%	<0.01	0.18	0.07	0.08	0.10	1.09	0.57	0.46	0.30	0.02	0.87
C7	%	<0.01	0.10	0.06	0.09	0.05	1.62	0.04	0.16	0.12	0.06	1.63
C8	%	<0.01	0.20	0.17	0.40	0.19	2.07	<0.25	0.28	< 0.25	< 0.25	2.09
C9	%	<0.22	0.09	0.57	0.95	0.72	0.66	0.25	0.24	0.87	0.60	0.81
C10	%	<0.01	0.87	1.21	2.63	1.80	1.49	0.74	0.69	2.33	1.54	1.74
C11	%	<0.01	1.37	1.36	2.91	1.91	1.32	1.36	1.10	2.42	1.62	1.05
C12	%	1.65	0.34	0.90	1.13	0.88	0.15	<0.01	0.16	0.83	0.41	0.17
C13	%	<0.01	0.22	1.09	0.60	0.70	<0.01	<0.01	<0.01	0.66	0.33	<0.01
C14	%	1.27	0.32	1.00	0.45	0.18	0.27	0.35	0.31	0.35	0.32	0.30
C15	%	<0.01	0.45	1.36	0.44	0.65	<0.01	<0.01	<0.01	0.58	0.33	<0.01
Total	%	2.92	4.13	7.79	9.69	7.17	8.72	3.33	3.40	8.46	5.23	8.72
Specific PIANO Compound List by ASTM D5134-92												
	Units											
Propane	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Methanol	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Isobutane	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-Methyl-1-propene	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Ethanol	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
n-Butane	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
t-2-Butene	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
c-2-Butene	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Isopropanol	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
3-Methyl-1-butene	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Isopentane	%	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	0.02
tert-Butanol	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1-Pentene	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-Methyl-1-butene	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
n-Propanol	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
n-Pentane	%	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	0.02
t-2-Pentene	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
c-2-Pentene	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-Methyl-2-butene	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
MTBE	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
sec-Butanol	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Table 4
Analytical Results for Product Samples-Organic Compounds
2225 and 2277 Seventh Street, Oakland, California

Compound	Sample: / Date:	CJRS-1 1/31/02	CPT-14 1/29/02	CPT-19 1/30/02	CPT-20 1/28/02	CPT-30 2/1/02	MW-1 2/8/02	MW-3 2/8/02	PZ-F 2/15/02	MFC-18 3/26/02	MFC-19 3/26/02	MW1-[C-401]] 3/26/02
4-Methyl-1-pentene	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Isobutanol	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2,3-Dimethylbutane	%	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	<0.01	<0.01	<0.01	<0.01	0.05
Cyclopentane	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02
2-Methylpentane	%	<0.01	<0.01	<0.01	<0.01	<0.01	0.19	<0.01	0.02	<0.01	<0.01	0.18
DIPE	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
3-Methylpentane	%	<0.01	<0.01	<0.01	<0.01	<0.01	0.14	0.03	0.02	0.01	<0.01	0.14
n-Butanol	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1-Hexene	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
ETBE	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
n-Hexane	%	<0.01	0.14	0.06	0.07	0.07	0.32	0.47	0.33	0.24	0.02	0.16
t-2-Hexene	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-Methyl-1-pentene	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-Methyl-2-pentene	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
c-2-Hexene	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2,2-Dimethylpentane	%	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	0.01
2,4-Dimethylpentane	%	<0.01	<0.01	<0.01	<0.01	<0.01	0.08	<0.01	<0.01	<0.01	<0.01	0.07
Methylcyclopentane	%	<0.01	0.04	0.01	<0.01	0.02	0.24	0.08	0.08	0.04	<0.01	0.21
2,2,3-Trimethylbutane	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzene	%	<0.01	<0.01	<0.01	<0.01	<0.01	0.06	<0.01	<0.01	<0.01	<0.01	0.04
1-Methylcyclopentene	%	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	0.01
TAME	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
3,3-Dimethylpentane	%	<0.01	<0.01	<0.01	<0.01	<0.01	0.03	<0.01	<0.01	<0.01	<0.01	0.02
Cyclohexane	%	<0.01	<0.01	<0.01	0.01	<0.01	0.09	<0.01	0.01	0.01	<0.01	0.08
2-Methylhexane	%	<0.01	<0.01	<0.01	<0.01	<0.01	0.26	<0.01	0.02	0.01	<0.01	0.27
2,3-Dimethylpentane	%	<0.01	0.01	<0.01	<0.01	<0.01	0.11	<0.01	0.02	<0.01	<0.01	0.12
1,1-Dimethylcyclopentane	%	<0.01	<0.01	<0.01	<0.01	<0.01	0.03	<0.01	<0.01	<0.01	<0.01	0.02
3-Methylhexane	%	<0.01	0.02	<0.01	<0.01	<0.01	0.30	0.01	0.03	0.02	<0.01	0.31
c-1,3-Dimethylcyclopentane	%	<0.01	0.01	<0.01	<0.01	<0.01	0.11	<0.01	0.01	<0.01	<0.01	0.10
3-Ethylpentane	%	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	0.03
Isooctane	%	<0.01	0.03	<0.01	<0.01	<0.01	0.30	0.01	0.03	0.01	<0.01	0.33
t-1,2-Dimethylcyclopentane	%	<0.01	0.01	<0.01	<0.01	<0.01	0.03	<0.01	<0.01	<0.01	<0.01	0.04
1-Heptene	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
n-Heptane	%	<0.01	0.02	0.02	0.02	0.02	0.24	<0.01	0.02	0.02	0.02	0.25
t-3-Heptene	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
c-3-Heptene	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
t-2-Heptene	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
c-2-Heptene	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2,2-Dimethylhexane	%	<0.01	<0.01	<0.01	<0.01	<0.01	0.03	<0.01	<0.01	<0.01	<0.01	0.02
2,5-Dimethylhexane	%	<0.01	0.02	<0.01	<0.01	<0.01	0.09	<0.01	<0.01	<0.01	<0.01	0.09
Methylcyclohexane	%	<0.01	0.02	0.04	0.06	0.03	0.30	0.03	0.05	0.07	0.04	0.31
2,4-Dimethylhexane	%	<0.01	<0.01	<0.01	<0.01	<0.01	0.11	0.01	0.02	<0.01	<0.01	0.11

Table 4
Analytical Results for Product Samples-Organic Compounds
2225 and 2277 Seventh Street, Oakland, California

Compound	Sample: / Date:	CJRS-1 1/31/02	CPT-14 1/29/02	CPT-19 1/30/02	CPT-20 1/28/02	CPT-30 2/1/02	MW-1 2/8/02	MW-3 2/8/02	PZ-F 2/15/02	MFC-18 3/26/02	MFC-19 3/26/02	MW1-[C-401]] 3/26/02
Ethylcyclopentane	%	<0.01	<0.01	<0.01	0.02	<0.01	0.08	<0.01	0.01	<0.01	<0.01	0.08
t-1,c-2,4-Trimethylcyclopentane	%	<0.01	<0.01	0.01	0.02	<0.01	0.08	<0.01	0.01	0.01	<0.01	0.08
t-1,c-2,3-Trimethylcyclopentane	%	<0.01	<0.01	0.01	0.02	<0.01	0.08	0.01	0.01	0.01	<0.01	0.07
2,3,4-Trimethylpentane	%	<0.01	0.01	<0.01	<0.01	<0.01	0.17	0.01	0.02	<0.01	<0.01	0.17
Toluene	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2,3-Dimethylhexane	%	<0.01	0.02	<0.01	<0.01	<0.01	0.26	0.01	0.03	0.01	<0.01	0.27
2-Methylheptane	%	<0.01	0.02	0.02	0.02	0.02	0.19	0.01	0.02	0.03	0.02	0.20
3-Methylheptane	%	<0.01	0.02	0.01	0.03	0.01	0.22	0.02	0.03	0.02	0.02	0.23
4-Methylheptane	%	<0.01	0.01	<0.01	<0.01	<0.01	0.08	<0.01	0.01	0.01	<0.01	0.08
3-Ethylhexane	%	<0.01	<0.01	<0.01	0.02	<0.01	0.04	0.01	<0.01	<0.01	<0.01	0.05
1-Octene	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,2,3-Trimethylcyclopentane	%	<0.01	<0.01	<0.01	<0.01	<0.01	0.03	<0.01	<0.01	<0.01	<0.01	0.02
t-1,2-Dimethylcyclohexane	%	<0.01	0.03	0.04	0.05	0.03	0.12	0.04	0.04	0.06	0.04	0.12
n-Octane	%	<0.01	0.03	0.05	0.05	0.05	0.10	<0.01	0.02	0.08	0.05	0.10
1-Ethyl-1-methylcyclopentane	%	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01
c-2-Octene	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
c-1,2-Dimethylcyclohexane	%	<0.01	0.01	0.02	0.03	0.01	0.05	0.03	0.02	0.03	0.02	0.05
Isopropylcyclopentane	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2,5-Dimethylheptane	%	<0.01	<0.01	0.01	<0.01	<0.01	0.04	0.01	0.01	0.01	0.01	0.05
3,5-Dimethylheptane	%	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	0.01
n-Propylcyclopentane	%	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	0.01	0.02
Ethylbenzene	%	<0.01	<0.01	0.02	0.02	0.03	0.09	<0.01	<0.01	0.03	0.03	0.08
2,3-Dimethylheptane	%	<0.01	<0.01	0.02	0.03	0.02	0.05	0.02	0.03	0.03	0.03	0.05
3,4-Dimethylheptane	%	<0.01	<0.01	<0.01	<0.01	0.01	0.03	<0.01	<0.01	<0.01	<0.01	0.01
2-Methyloctane	%	<0.01	<0.01	0.01	0.05	0.03	0.07	0.01	0.01	0.04	0.03	0.05
m-Xylene	%	<0.01	<0.01	0.02	0.05	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
p-Xylene	%	<0.01	<0.01	<0.01	0.03	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
3-Methyloctane	%	<0.01	0.02	0.03	0.03	0.04	0.06	0.01	0.02	0.05	0.04	0.07
1-Nonene	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
3,3-Diethylpentane	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
4-Nonene	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
o-Xylene	%	<0.01	<0.01	<0.01	0.03	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
n-Nonane	%	<0.01	<0.01	0.14	0.14	0.15	0.01	<0.01	0.01	0.25	0.12	0.02
Isobutylcyclopentane	%	<0.01	<0.01	<0.01	0.03	0.01	0.01	0.02	0.01	0.01	0.01	0.01
t-2-Nonene+c-2-Nonene	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Isopropylbenzene	%	<0.01	0.02	0.02	0.02	0.01	0.04	<0.01	0.01	0.01	0.02	0.05
3,3-Dimethyloctane	%	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	0.02
n-Butylcyclopentane	%	<0.01	0.01	0.03	0.03	0.02	0.03	0.03	0.01	0.04	0.03	0.02
n-Propylbenzene	%	<0.01	0.04	0.04	0.04	0.03	0.14	0.02	0.03	0.05	0.04	0.14
2,3-Dimethyloctane	%	<0.01	0.01	0.02	0.02	0.02	0.02	0.03	0.02	0.04	0.03	0.03
1-Methyl-3-ethylbenzene	%	<0.01	<0.01	<0.01	0.05	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	0.04
1-Methyl-4-ethylbenzene	%	<0.01	<0.01	0.03	0.03	0.03	<0.01	<0.01	<0.01	0.01	0.02	<0.01

Table 4
Analytical Results for Product Samples-Organic Compounds
2225 and 2277 Seventh Street, Oakland, California

Compound	Sample: / Date:	CJRS-1 1/31/02	CPT-14 1/29/02	CPT-19 1/30/02	CPT-20 1/28/02	CPT-30 2/1/02	MW-1 2/8/02	MW-3 2/8/02	PZ-F 2/15/02	MFC-18 3/26/02	MFC-19 3/26/02	MW1-[C-401]] 3/26/02
2-Methylnonane	%	<0.01	0.04	0.04	0.06	0.06	0.05	0.03	0.02	0.08	0.05	0.05
3-Ethyloctane	%	<0.01	0.03	0.02	0.03	0.02	0.02	0.03	0.02	0.04	0.03	0.03
3-Methylnonane	%	<0.01	0.05	0.04	0.05	0.05	0.06	0.03	0.03	0.07	0.05	0.06
1,3,5-Trimethylbenzene	%	<0.01	<0.01	<0.01	0.05	0.02	<0.01	<0.01	0.01	<0.01	0.02	<0.01
1-Methyl-2-ethylbenzene	%	<0.01	<0.01	0.04	0.07	0.06	0.04	<0.01	0.02	0.08	0.05	0.06
1,2,4-Trimethylbenzene	%	<0.01	<0.01	0.10	0.14	0.12	<0.01	<0.01	0.01	<0.01	0.02	<0.01
tert-Butylbenzene	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
n-Decane	%	<0.01	<0.01	0.32	0.50	0.41	0.02	<0.01	0.06	0.52	0.27	<0.01
Isobutylbenzene	%	<0.01	<0.01	<0.01	0.04	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.04
Isopropylcyclohexane	%	<0.01	<0.01	0.02	0.05	0.03	0.06	0.12	0.04	0.10	0.04	0.07
sec-Butylbenzene	%	<0.01	<0.01	0.02	0.06	0.02	0.04	0.06	0.03	0.06	0.03	0.03
1-Methyl-3-isopropylbenzene	%	<0.01	<0.01	<0.01	0.06	0.02	<0.01	<0.01	<0.01	<0.01	0.02	0.05
sec-Butylcyclohexane	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1-Methyl-4-isopropylbenzene	%	<0.01	<0.01	0.04	0.08	0.06	<0.01	<0.01	<0.01	0.05	0.05	<0.01
1,2,3-Trimethylbenzene	%	<0.01	<0.01	0.09	0.19	0.10	0.04	<0.01	<0.01	0.19	0.13	0.04
Indan	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.11
1-Methyl-3-n-propylbenzene	%	<0.01	<0.01	<0.01	0.11	0.15	<0.01	<0.01	<0.01	<0.01	<0.01	0.15
1-Methyl-4-n-propylbenzene	%	<0.01	<0.01	0.01	0.06	0.05	<0.01	<0.01	<0.01	0.04	0.02	0.05
n-Butylbenzene	%	<0.01	0.19	0.09	0.07	0.13	0.18	<0.01	<0.01	0.19	0.14	0.15
1,3-Dimethyl-5-ethylbenzene	%	<0.01	0.04	0.05	0.21	0.12	0.04	0.01	0.01	0.07	0.12	0.04
1,2-Diethylbenzene	%	<0.01	0.04	0.03	0.04	0.03	0.04	0.01	0.03	0.07	0.04	0.04
1-Methyl-2-n-propylbenzene	%	<0.01	<0.01	0.03	0.06	0.05	0.05	<0.01	<0.01	0.06	0.04	0.03
1,4-Dimethyl-2-ethylbenzene	%	<0.01	<0.01	0.06	0.10	0.06	0.05	<0.01	<0.01	0.06	0.07	0.05
1,2-Dimethyl-4-ethylbenzene	%	<0.01	0.15	0.06	0.11	0.07	0.22	0.11	0.06	0.09	0.08	0.19
1,3-Dimethyl-2-ethylbenzene	%	<0.01	0.22	0.02	0.06	0.02	0.12	<0.01	0.08	0.04	0.05	0.21
1,2-Dimethyl-3-ethylbenzene	%	<0.01	<0.01	<0.01	0.02	0.01	<0.01	<0.01	<0.01	0.01	0.01	<0.01
n-Undecane	%	<0.01	0.24	0.68	0.97	0.80	0.12	<0.01	0.23	0.92	0.42	<0.01
1,2,4,5-Tetramethylbenzene	%	<0.01	<0.01	0.08	0.11	0.05	0.14	0.17	0.08	0.08	0.09	0.16
2-Methylbutylbenzene	%	<0.01	<0.01	<0.01	0.04	<0.01	0.04	0.05	0.02	0.14	0.02	0.04
1-tert-Butyl-2-methylbenzene	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
n-Pentylbenzene	%	<0.01	0.10	0.05	0.11	0.08	0.06	0.12	0.11	0.08	0.09	0.08
Methylindan	%	<0.01	0.10	0.05	0.11	0.08	0.18	0.26	0.11	0.16	0.09	0.16
1-tert-Butyl-3,5-dimethylbenzene	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1-tert-Butyl-4-ethylbenzene	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
n-Dodecane	%	1.65	0.20	0.86	0.67	0.67	<0.01	<0.01	<0.01	0.41	0.18	<0.01
1,3,5-Triethylbenzene	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,2,4-Triethylbenzene	%	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Naphthalene	%	<0.01	<0.01	0.23	0.69	0.31	0.23	<0.01	0.16	0.60	0.25	0.20
n-Hexylbenzene	%	<0.01	0.14	0.05	0.47	0.21	0.15	<0.01	0.16	0.42	0.24	0.17
2-Methylnaphthalene	%	<0.01	0.36	0.34	1.04	0.59	0.59	0.39	0.25	0.73	0.64	0.49
n-Tridecane	%	<0.01	0.22	1.09	0.60	0.70	<0.01	<0.01	<0.01	0.66	0.33	<0.01
1-Methylnaphthalene	%	<0.01	0.67	0.30	0.75	0.45	0.51	0.80	0.48	0.55	0.45	0.45

Table 4
Analytical Results for Product Samples-Organic Compounds
2225 and 2277 Seventh Street, Oakland, California

Compound	Sample: / Date:	CJRS-1 1/31/02	CPT-14 1/29/02	CPT-19 1/30/02	CPT-20 1/28/02	CPT-30 2/1/02	MW-1 2/8/02	MW-3 2/8/02	PZ-F 2/15/02	MFC-18 3/26/02	MFC-19 3/26/02	MW1-[C-401j] 3/26/02
n-Tetradecane	%	1.27	0.32	1.00	0.45	0.18	0.27	0.35	0.31	0.35	0.32	0.30
n-Pentadecane	%	<0.01	0.45	1.36	0.44	0.65	<0.01	<0.01	<0.01	0.58	0.33	<0.01
Volatile Organic Compounds by EPA Method 8260B												
	Units											
Dichlorodifluoromethane	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Chloromethane	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Vinyl chloride	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Bromomethane	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Chloroethane	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Trichlorofluoromethane	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Acetone	µg/g	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	1100
1,1-Dichloroethene	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Methylene chloride	µg/g	<500	<500	<500	<500	<500	<500	<500	<500	<1,000	<1,000	<1,000
Methyl t-butyl ether (MTBE)	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
trans-1,2-Dichloroethene	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Diisopropyl ether (DIPE)	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
1,1-Dichloroethane	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Ethyl t-butyl ether (ETBE)	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
2,2-Dichloropropane	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
cis-1,2-Dichloroethene	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Chloroform	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
2-Butanone (MEK)	µg/g	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
t-Amyl methyl ether (TAME)	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
1,2-Dichloroethane (EDC)	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
1,1,1-Trichloroethane	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
1,1-Dichloropropene	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Carbon Tetrachloride	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Benzene	µg/g	<100	<100	<100	<100	<100	710	<100	<100	<100	<100	600
Trichloroethene	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
1,2-Dichloropropane	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Bromodichloromethane	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Dibromomethane	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
4-Methyl-2-pentanone	µg/g	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
cis-1,3-Dichloropropene	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Toluene	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
trans-1,3-Dichloropropene	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
1,1,2-Trichloroethane	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
2-Hexanone	µg/g	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
1,3-Dichloropropane	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Tetrachloroethene	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100

Table 4
Analytical Results for Product Samples-Organic Compounds
2225 and 2277 Seventh Street, Oakland, California

Compound	Sample: / Date:	CJRS-1 1/31/02	CPT-14 1/29/02	CPT-19 1/30/02	CPT-20 1/28/02	CPT-30 2/1/02	MW-1 2/8/02	MW-3 2/8/02	PZ-F 2/15/02	MFC-18 3/26/02	MFC-19 3/26/02	MW1-[C-401]] 3/26/02
Dibromochloromethane	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
1,2-Dibromoethane (EDB)	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Chlorobenzene	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Ethylbenzene	µg/g	<100	<100	**180**	**140**	**170**	**730**	<100	<100	**110**	**140**	**650**
1,1,1,2-Tetrachloroethane	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
m,p-Xylene	µg/g	<100	<100	**150**	**500**	**280**	<100	<100	<100	<100	<100	<100
o-Xylene	µg/g	<100	<100	<100	**210**	<100	<100	<100	<100	<100	<100	<100
Styrene	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Isopropylbenzene	µg/g	<100	<100	<100	<100	<100	**350**	<100	<100	<100	<100	**340**
Bromoform	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
n-Propylbenzene	µg/g	<100	**140**	**190**	**190**	**200**	**2,700**	<100	**250**	**150**	**190**	**1300**
Bromobenzene	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
1,3,5-Trimethylbenzene	µg/g	<100	<100	<100	**340**	**260**	<100	<100	<100	<100	<100	<100
1,1,2,2-Tetrachloroethane	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
1,2,3-Trichloropropane	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
2-Chlorotoluene	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
4-Chlorotoluene	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
tert-Butylbenzene	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
1,2,4-Trimethylbenzene	µg/g	<100	<100	**1,100**	**1,300**	**1,400**	<100	<100	**110**	<100	**370**	<100
sec-Butylbenzene	µg/g	<100	**130**	**100**	**150**	**140**	**270**	**120**	**150**	**120**	**180**	**270**
p-Isopropyltoluene	µg/g	<100	<100	**130**	**220**	**170**	<100	<100	<100	<100	**110**	<100
1,3-Dichlorobenzene	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
1,4-Dichlorobenzene	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
1,2-Dichlorobenzene	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
1,2-Dibromo-3-chloropropane	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
1,2,4-Trichlorobenzene	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Hexachlorobutadiene	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Naphthalene	µg/g	<100	<100	**920**	**1,900**	**1,500**	**1,400**	<100	<100	**710**	**1200**	**1100**
1,2,3-Trichlorobenzene	µg/g	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100

Notes and Abbreviations:
PZ = peizometer
MTBE = methyl t-butyl ether
mg/kg = milligrams per kilogram
% = weight percent
PAH = polyaromatic nuclear hydrocarbons by Method 8270C
PIANO = parrafins, isoparrafins, olefins, naphthalenes and aromatrics by ASTM D5134-92
VOC = volatile organic compounds by Method 8260B

Table 5
Analytical Results for Product Samples-Metals
2225 and 2277 Seventh Street, Oakland, California

Sample	Date	Units	Cadmium	Copper	Lead	Nickel	Zinc
CJRS-1	1/31/02	mg/L	<1.0	**2.9**	<2.0	<1.0	**77**
CPT-14	1/29/02	mg/L	<1.0	**4.4**	**14**	**7.2**	**12**
CPT-19	1/30/02	mg/L	<1.0	**3.4**	<2.0	<1.0	<1.0
CPT-20	1/28/02	mg/L	<1.0	<1.0	<2.0	<1.0	<1.0
CPT-30	2/1/02	mg/L	<1.0	<1.0	<2.0	<1.0	**2.8**
MW-1	2/8/02	mg/kg	<1.0	**2.8**	**20**	<1.0	<1.0
MW-3	2/8/02	mg/kg	<1.0	**6.1**	<2.0	**1.5**	**2.6**
PZ-F	2/15/02	mg/kg	<1.0	<1.0	**1.8**	**1.1**	<1.0
MFC-18	3/26/02	mg/kg	<1.0	<1.0	<2.0	<1.0	<1.0
MFC-19	3/26/02	mg/kg	<1.0	<1.0	<2.0	**1.2**	<1.0
MW1-[C-401]	3/26/02	mg/kg	<1.0	**9.7**	**30**	**4.5**	<1.0

Sample	Date	Units	TML	TMEL	DMDEL	MTEL	TEL	MMT
CJRS-1	1/31/02	µg/kg	<5	<5	<5	<5	<5	<5
CPT-14	1/29/02	µg/kg	<5	<5	<5	<5	**6**	<5
CPT-19	1/30/02	µg/kg	<5	<5	<5	<5	<5	<5
CPT-20	1/28/02	µg/kg	<5	<5	<5	<5	<5	<5
CPT-30	2/1/02	µg/kg	<5	<5	<5	<5	<5	<5
MW-1	2/8/02	µg/kg	<5	<5	<5	<5	**56**	<5
MW-3	2/8/02	µg/kg	<5	<5	<5	<5	<5	<5
PZ-F	2/15/02	µg/kg	<5	<5	<5	<5	**7**	<5
MFC-18	3/26/02	µg/kg	<5	<5	<5	<5	<5	<5
MFC-19	3/26/02	µg/kg	<5	<5	<5	<5	<5	<5
MW1-[C-401]	3/26/02	µg/kg	<5	<5	<5	<5	**44**	<5

Notes and Abbreviations:

PZ = peizometer
mg/kg = milligrams per kilogram
mg/L = milligrams per liter
µg/kg = micrograms per kilogram

TML= Tetramethyl Lead
TMEL= Trimethylethyl Lead
DMDEL= Dimethyldiethyl Lead
MTEL= Methyltriethyl Lead
TEL= Tetraethyl Lead
MMT= Methylcyclopentadienyl Manganese Tricarbonyl

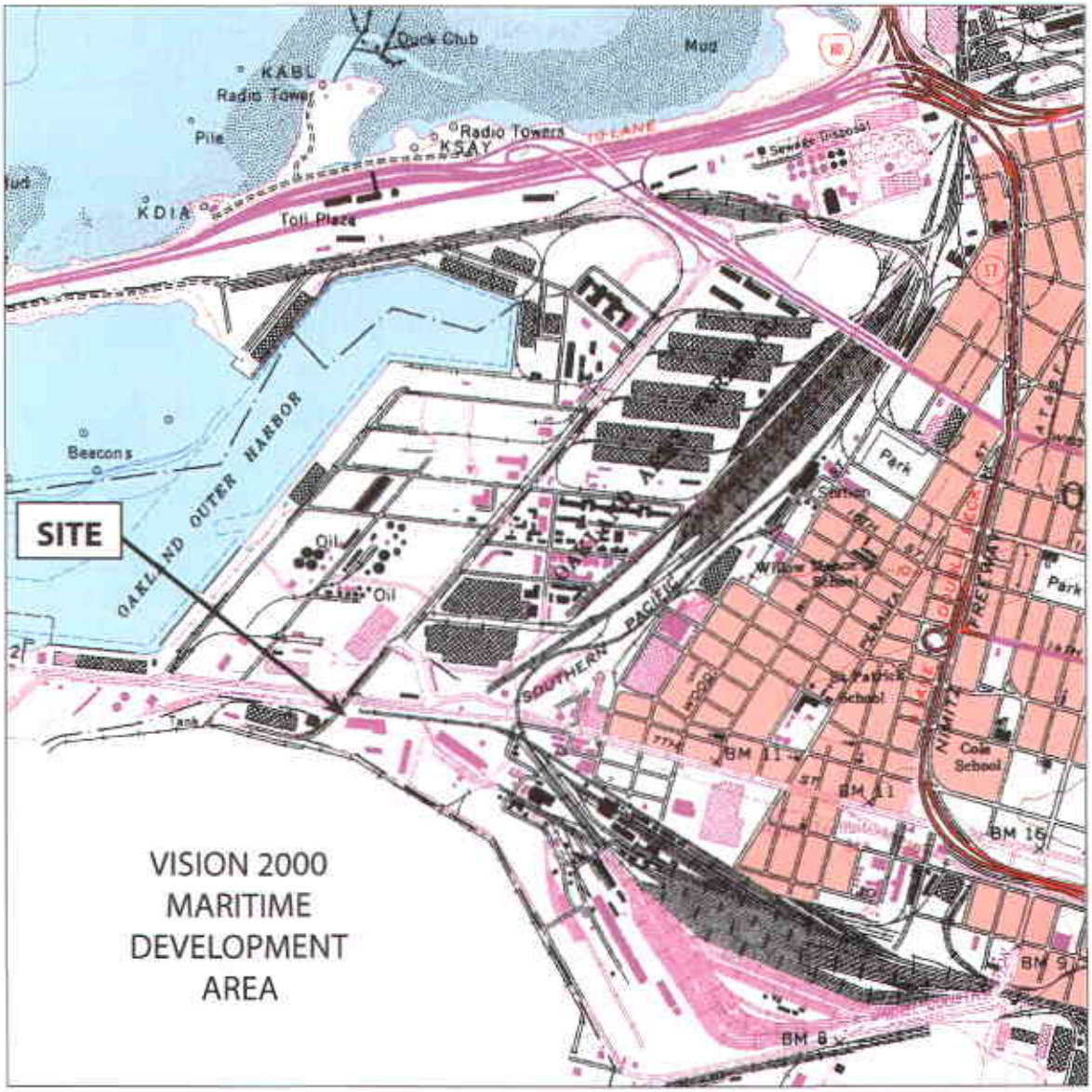


FIGURE 1

SITE LOCATION

2225 and 2277 Seventh Street
Oakland, California

Source: Oakland West 7.5-minute U.S.G.S. Quadrangle, dated 1959, and photorevised in 1980.

ITSI Innovative Technical Solutions, Inc.

Public/Projects/2000/00-152/00-152.15 Shippers FS/Graphics/Figure 1 Site Location.ai

LEGEND

- C-407 — BUILDING
- PROPERTY BOUNDARY
- CPT-13 — CPT LOCATIONS WITH UVIF PROFILING (ITSI, 2002)
- PZ-F — PIEZOMETER LOCATIONS (ITSI, 2002)
- MW-2 — EXISTING GROUNDWATER MONITORING WELL LOCATIONS
- FORMER LOCATION OF USTs
- MFC-20 — SOIL AND GRAB GROUNDWATER BORING (BY OTHERS, 2002)
- MFC-43 — SOIL BORING (BY OTHERS, 2002)

NOTE:

SURVEYED DATA FOR CPTs, PEIZOMETERS, GROUNDWATER MONITORING WELLS, AND BUILDINGS C-401 AND C-407 PROVIDED BY PLS SURVEYS INC., DRAWING 02-100, 2/27/02

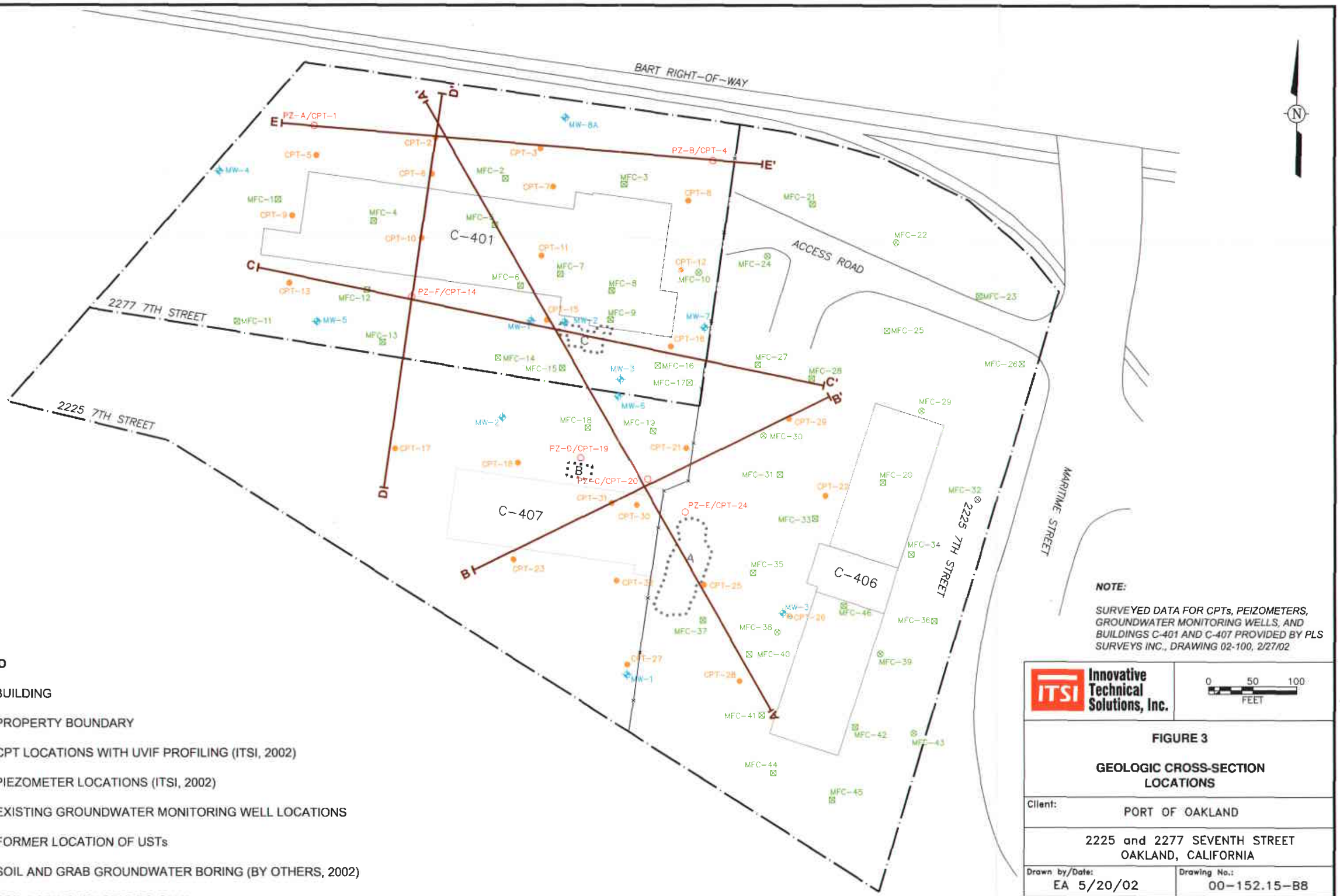
ITSI Innovative Technical Solutions, Inc.

0 50 100 FEET

FIGURE 2

SITE MAP WITH CPT, BORING AND PIEZOMETER LOCATIONS

Client: PORT OF OAKLAND	
2225 and 2277 SEVENTH STREET OAKLAND, CALIFORNIA	
Drawn by/Date: EA 5/20/02	Drawing No.: 00-152.15 B1
Checked By:	Approved By:



LEGEND

- C-407 — BUILDING
- PROPERTY BOUNDARY
- CPT-13 — CPT LOCATIONS WITH UVIF PROFILING (ITSI, 2002)
- PZ-F — PIEZOMETER LOCATIONS (ITSI, 2002)
- MW-2 — EXISTING GROUNDWATER MONITORING WELL LOCATIONS
- FORMER LOCATION OF USTs
- MFC-20 — SOIL AND GRAB GROUNDWATER BORING (BY OTHERS, 2002)
- MFC-43 — SOIL BORING (BY OTHERS, 2002)

NOTE:

SURVEYED DATA FOR CPTs, PEIZOMETERS, GROUNDWATER MONITORING WELLS, AND BUILDINGS C-401 AND C-407 PROVIDED BY PLS SURVEYS INC., DRAWING 02-100, 2/27/02

ITSI Innovative Technical Solutions, Inc.

0 50 100 FEET

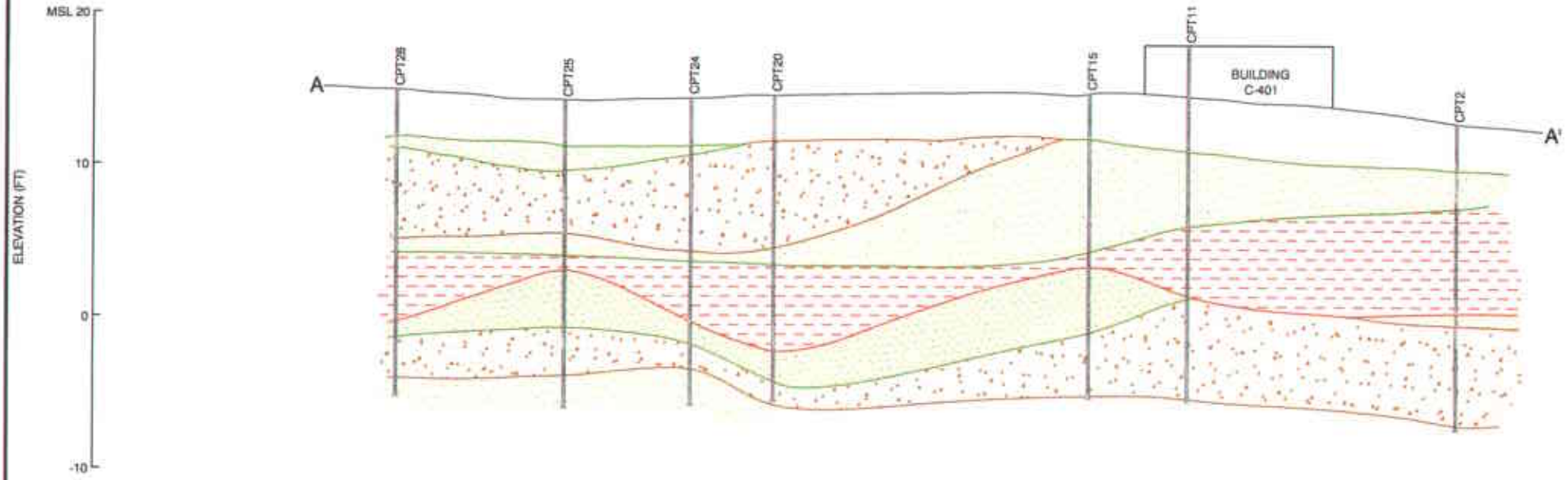
FIGURE 3

GEOLOGIC CROSS-SECTION LOCATIONS

Client: PORT OF OAKLAND

2225 and 2277 SEVENTH STREET
OAKLAND, CALIFORNIA

Drawn by/Date:	Drawing No.:
EA 5/20/02	00-152.15-B8
Checked By:	Approved By:



LEGEND

- SECTION NOT INVESTIGATED
- CLAY/SENSITIVE FINES/SILTY CLAY
- SILT/CLAYEY SILT/SANDY SILT
- SAND/SILTY SAND

VERTICAL SCALE 0 – 10 FEET

HORIZONTAL SCALE 0 – 100 FEET

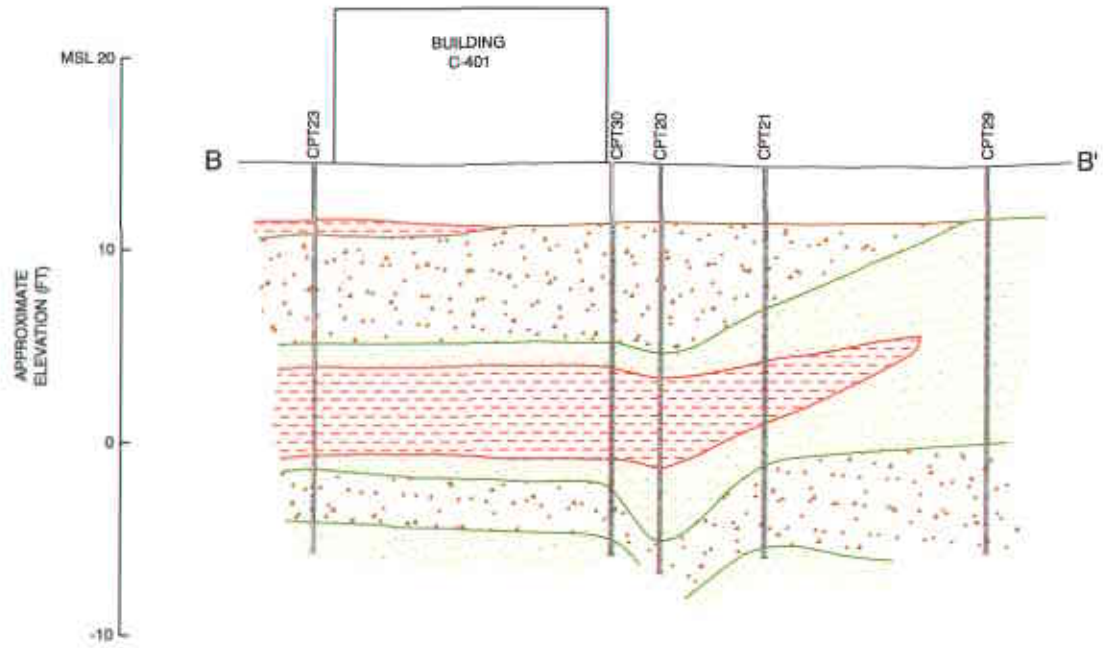
VERTICAL EXAGGERATION = 10X

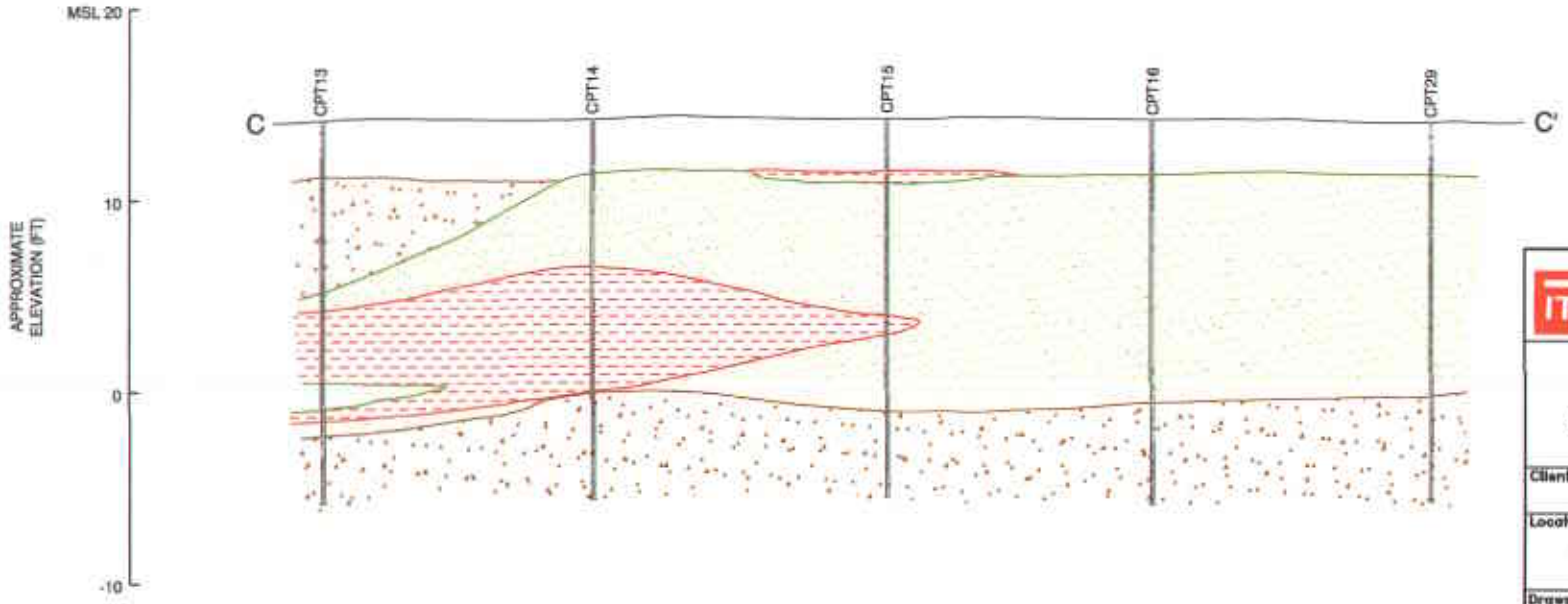
Innovative Technical Solutions, Inc.	SCALE AS NOTED

FIGURE 4

GEOLOGIC CROSS-SECTION A-A'

Client: PORT OF OAKLAND	
Location: PORT OF OAKLAND 2225 & 2277 SEVENTH STREET OAKLAND, CALIFORNIA	
Drawn By/Date: EA 05/11/02	Drawing No.: 00-152.15-B3
Checked By/Date:	Approved By/Date:





LEGEND

- SECTION NOT INVESTIGATED
- CLAY/SENSITIVE FINES/SILTY CLAY
- SILT/CLAYEY SILT/SANDY SILT
- SAND/SILTY SAND

VERTICAL SCALE 10 0 FEET

HORIZONTAL SCALE 0 100 FEET

VERTICAL EXAGGERATION = 10X

Innovative Technical Solutions, Inc.	SCALE AS NOTED

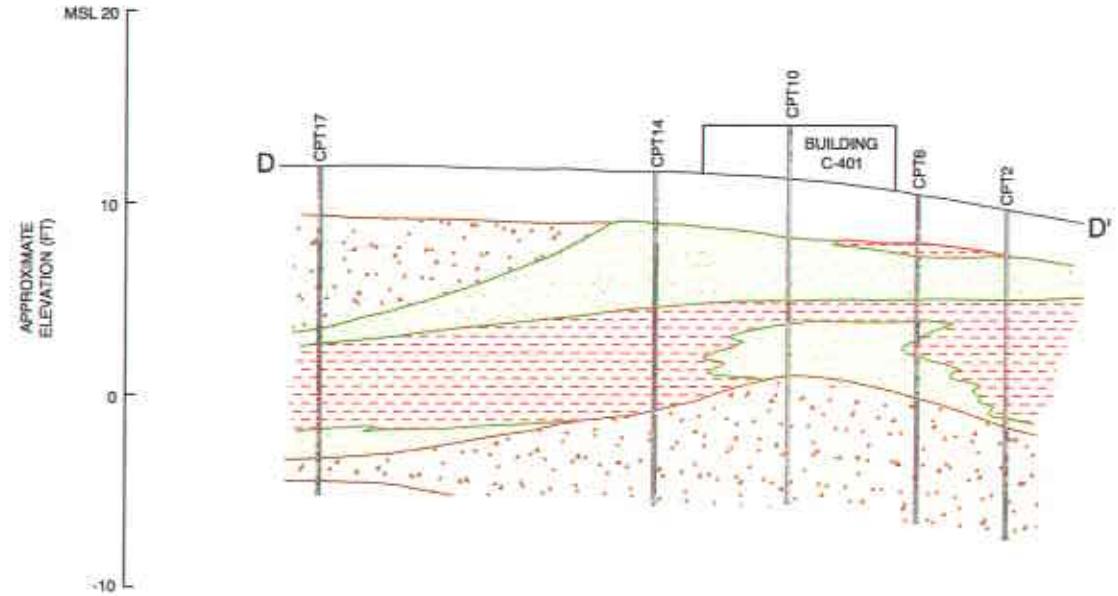
FIGURE 5

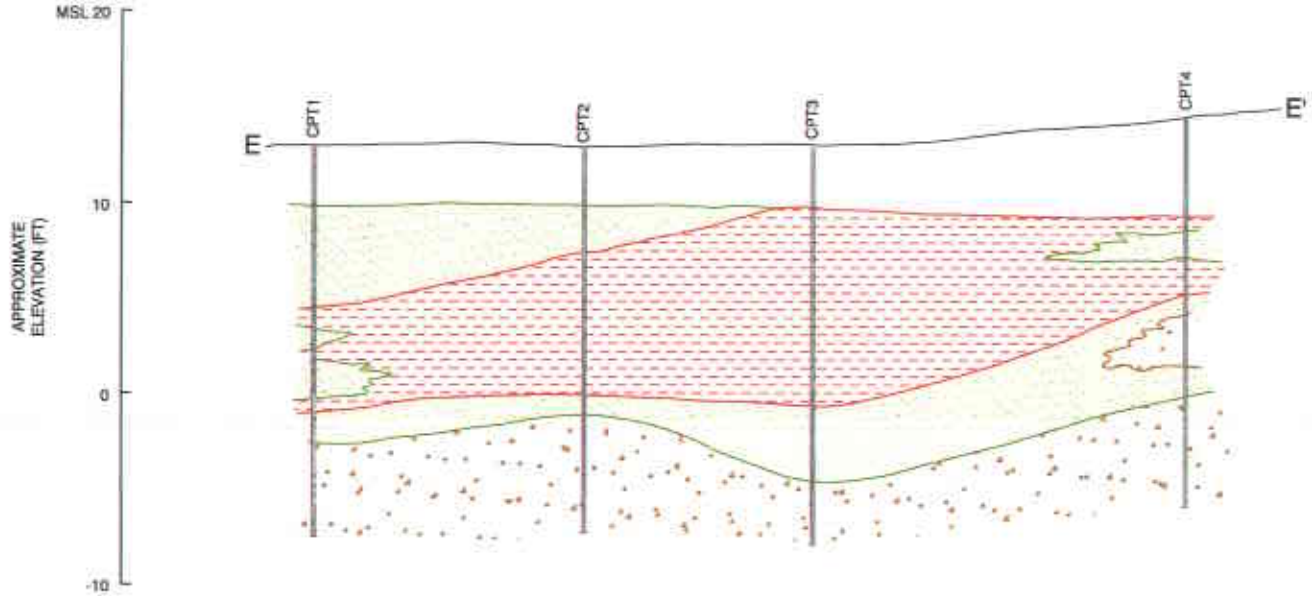
GEOLOGIC CROSS-SECTIONS B-B' AND C-C'

Client: PORT OF OAKLAND

Location: PORT OF OAKLAND
2225 & 2277 SEVENTH STREET
OAKLAND, CALIFORNIA

Drawn By/Date: EA 05/11/02	Drawing No.: 00-152.15-B4-5
Checked By/Date:	Approved By/Date:





LEGEND

- SECTION NOT INVESTIGATED
- CLAY/SENSITIVE FINES/SILTY CLAY
- SILT/CLAYEY SILT/SANDY SILT
- SAND/SILTY SAND

VERTICAL SCALE

10

0

FEET

HORIZONTAL SCALE

0 100

FEET

VERTICAL EXAGGERATION = 10X

ITSI Innovative Technical Solutions, Inc.	SCALE AS NOTED

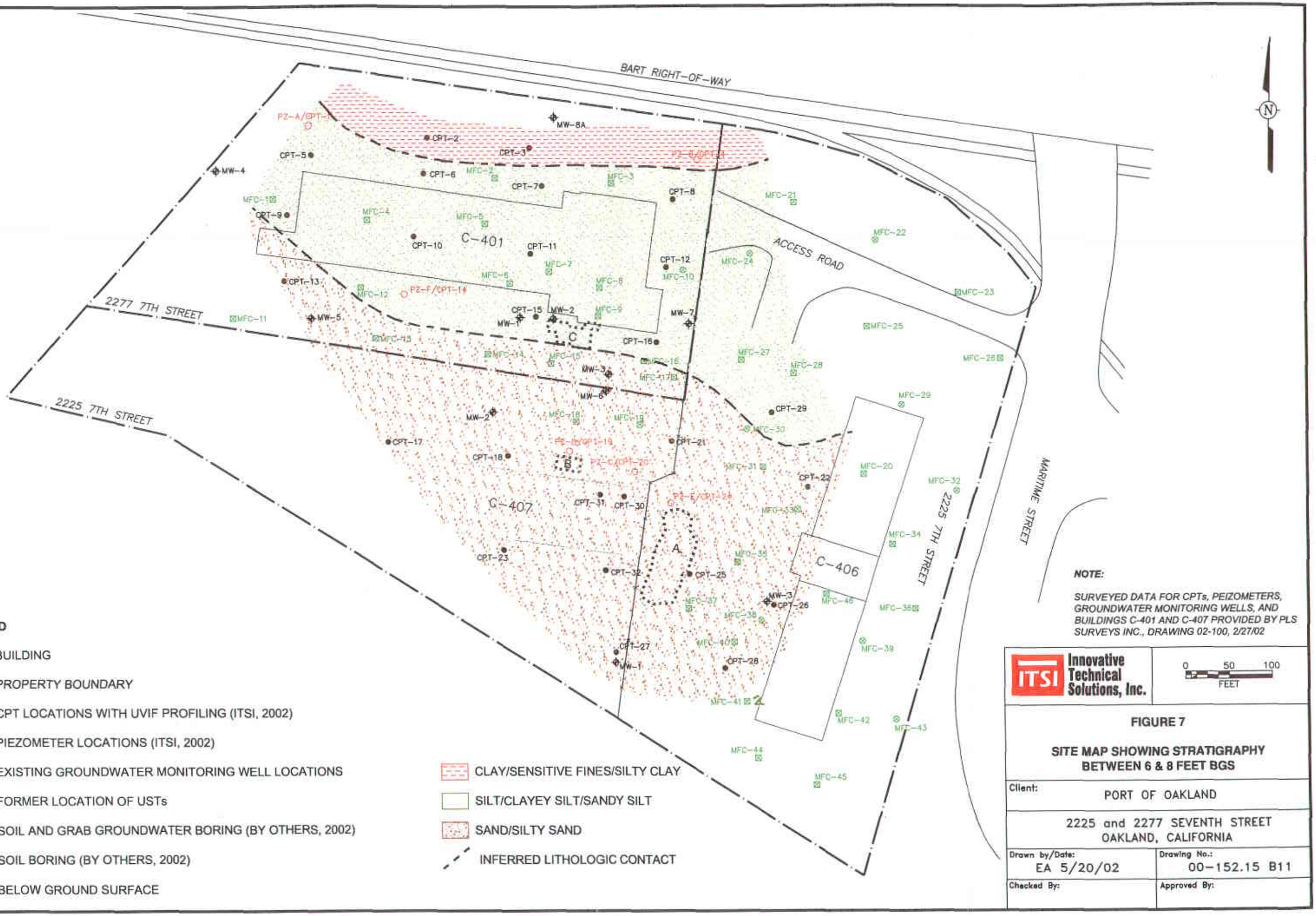
FIGURE 6

GEOLOGIC CROSS-SECTIONS D-D' AND E-E'

Client: PORT OF OAKLAND

Location: PORT OF OAKLAND
2225 & 2277 SEVENTH STREET
OAKLAND, CALIFORNIA

Drawn By/Date: EA 05/11/02	Drawing No.: 00-152.15-B6-7
Checked By/Date:	Approved By/Date:



LEGEND

- C-407 — BUILDING
- PROPERTY BOUNDARY
- CPT-13 — CPT LOCATIONS WITH UVIF PROFILING (ITSI, 2002)
- PZ-F — PIEZOMETER LOCATIONS (ITSI, 2002)
- MW-2 — EXISTING GROUNDWATER MONITORING WELL LOCATIONS
- FORMER LOCATION OF USTs
- MFC-20 — SOIL AND GRAB GROUNDWATER BORING (BY OTHERS, 2002)
- MFC-43 — SOIL BORING (BY OTHERS, 2002)
- BGS — BELOW GROUND SURFACE

- CLAY/SENSITIVE FINES/SILTY CLAY
- SILT/CLAYEY SILT/SANDY SILT
- SAND/SILTY SAND
- INFERRED LITHOLOGIC CONTACT

NOTE:

SURVEYED DATA FOR CPTs, PEIZOMETERS, GROUNDWATER MONITORING WELLS, AND BUILDINGS C-401 AND C-407 PROVIDED BY PLS SURVEYS INC., DRAWING 02-100, 2/27/02

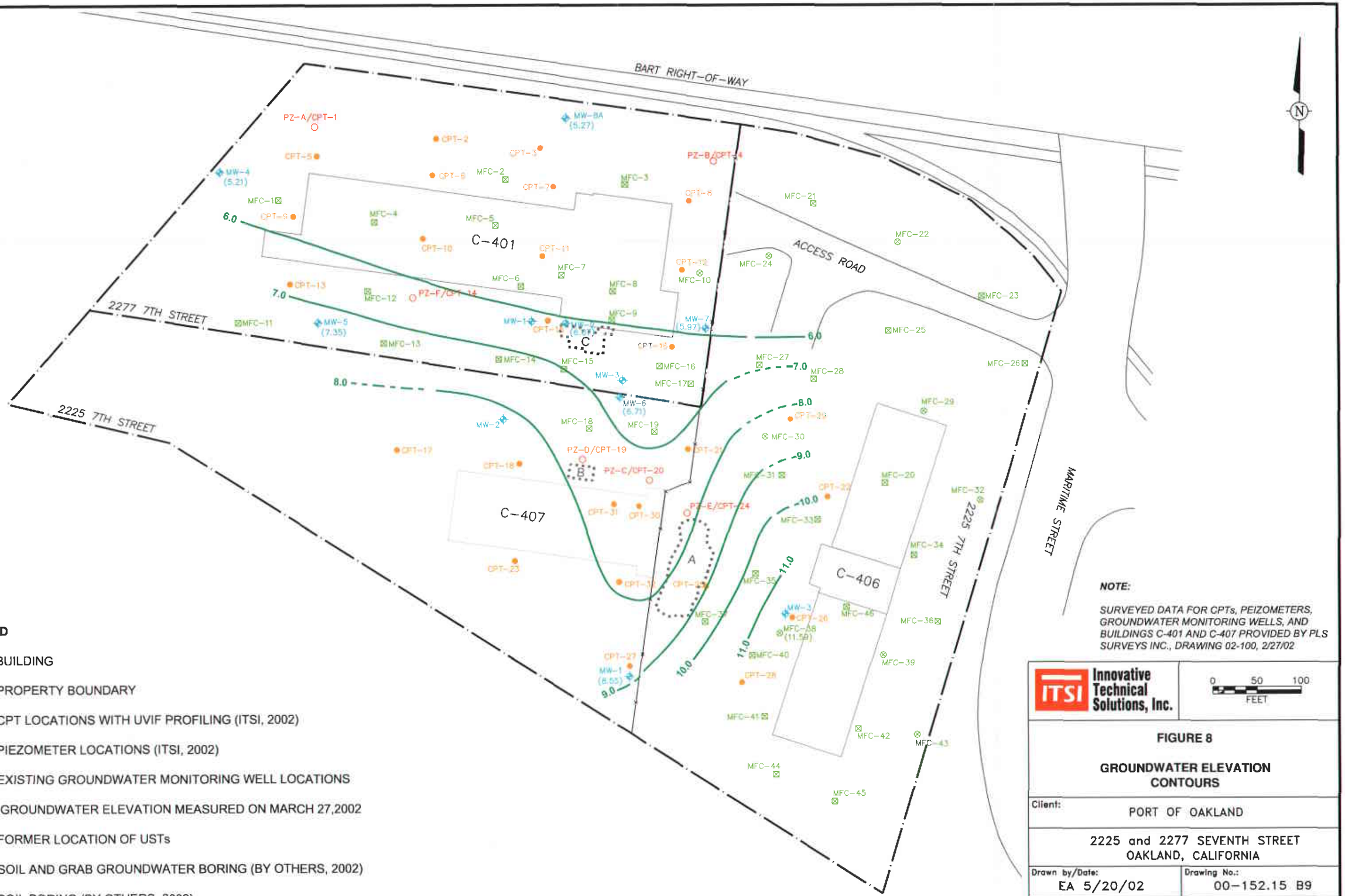
Innovative Technical Solutions, Inc.

0 50 100 FEET

FIGURE 7

SITE MAP SHOWING STRATIGRAPHY BETWEEN 6 & 8 FEET BGS

Client: PORT OF OAKLAND	
2225 and 2277 SEVENTH STREET OAKLAND, CALIFORNIA	
Drawn by/Date: EA 5/20/02	Drawing No.: 00-152.15 B11
Checked By:	Approved By:



LEGEND

- C-407 — BUILDING
- PROPERTY BOUNDARY
- CPT-13 — CPT LOCATIONS WITH UVIF PROFILING (ITSI, 2002)
- PZ-F — PIEZOMETER LOCATIONS (ITSI, 2002)
- MW-2 — EXISTING GROUNDWATER MONITORING WELL LOCATIONS
- (6.77) — GROUNDWATER ELEVATION MEASURED ON MARCH 27,2002
- FORMER LOCATION OF USTs
- MFC-20 — SOIL AND GRAB GROUNDWATER BORING (BY OTHERS, 2002)
- MFC-43 — SOIL BORING (BY OTHERS, 2002)

NOTE:

SURVEYED DATA FOR CPTs, PEIZOMETERS, GROUNDWATER MONITORING WELLS, AND BUILDINGS C-401 AND C-407 PROVIDED BY PLS SURVEYS INC., DRAWING 02-100, 2/27/02

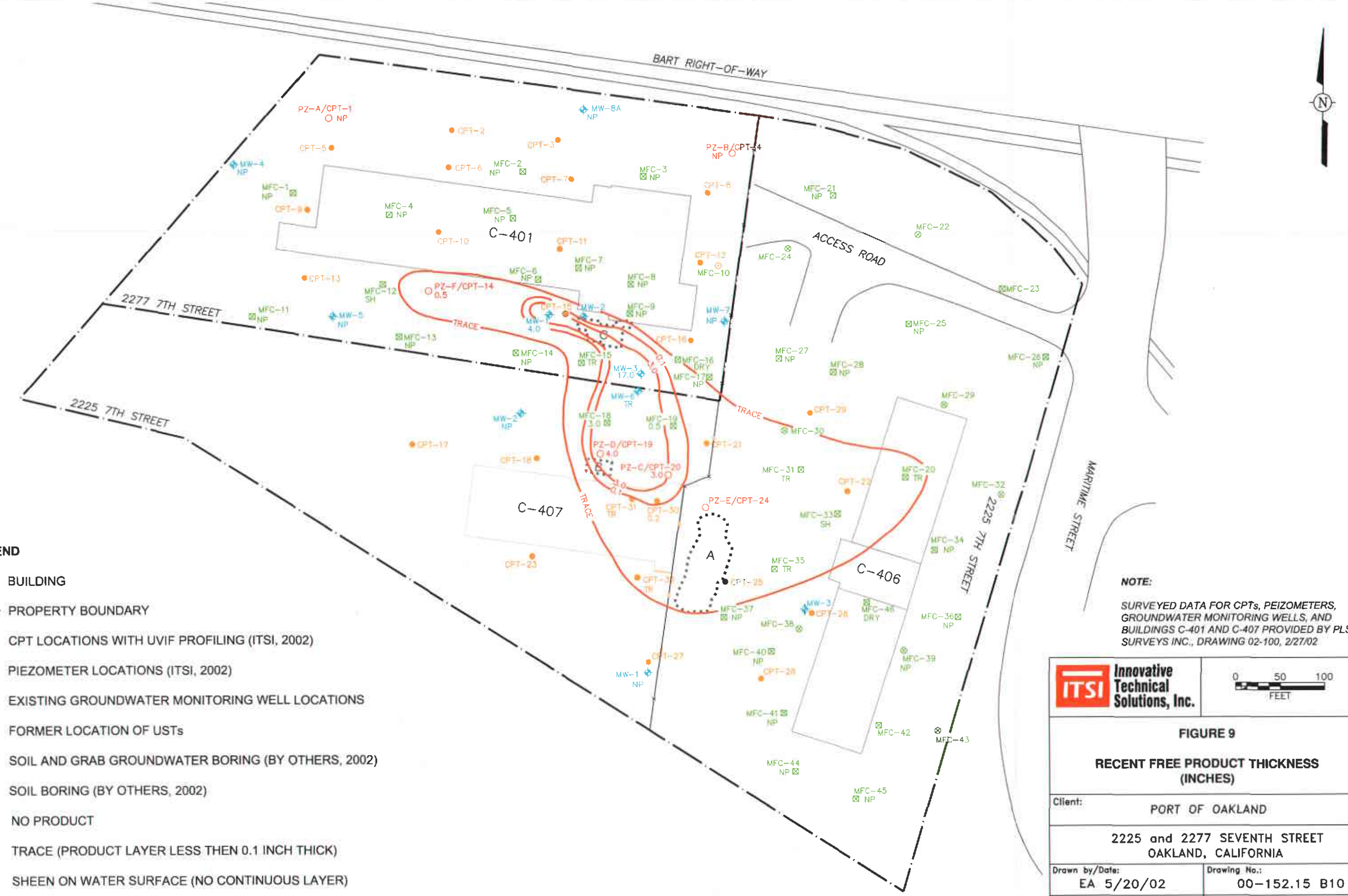
ITSI Innovative Technical Solutions, Inc.

0 50 100 FEET

FIGURE 8

GROUNDWATER ELEVATION CONTOURS

Client: PORT OF OAKLAND	
2225 and 2277 SEVENTH STREET OAKLAND, CALIFORNIA	
Drawn by/Date: EA 5/20/02	Drawing No.: 00-152.15 B9
Checked By:	Approved By:



LEGEND

C-407	BUILDING
— — —	PROPERTY BOUNDARY
CPT-13	CPT LOCATIONS WITH UVIF PROFILING (ITSI, 2002)
PZ-F	PIEZOMETER LOCATIONS (ITSI, 2002)
MW-2	EXISTING GROUNDWATER MONITORING WELL LOCATIONS
	FORMER LOCATION OF USTs
MFC-20	SOIL AND GRAB GROUNDWATER BORING (BY OTHERS, 2002)
MFC-43	SOIL BORING (BY OTHERS, 2002)
NP	NO PRODUCT
TR	TRACE (PRODUCT LAYER LESS THEN 0.1 INCH THICK)
SH	SHEEN ON WATER SURFACE (NO CONTINUOUS LAYER)

FREE PRODUCT MEASURED IN CPT BORING USING CLEAR BAILER.

NOTE:

SURVEYED DATA FOR CPTs, PEIZOMETERS, GROUNDWATER MONITORING WELLS, AND BUILDINGS C-401 AND C-407 PROVIDED BY PLS SURVEYS INC., DRAWING 02-100, 2/27/02

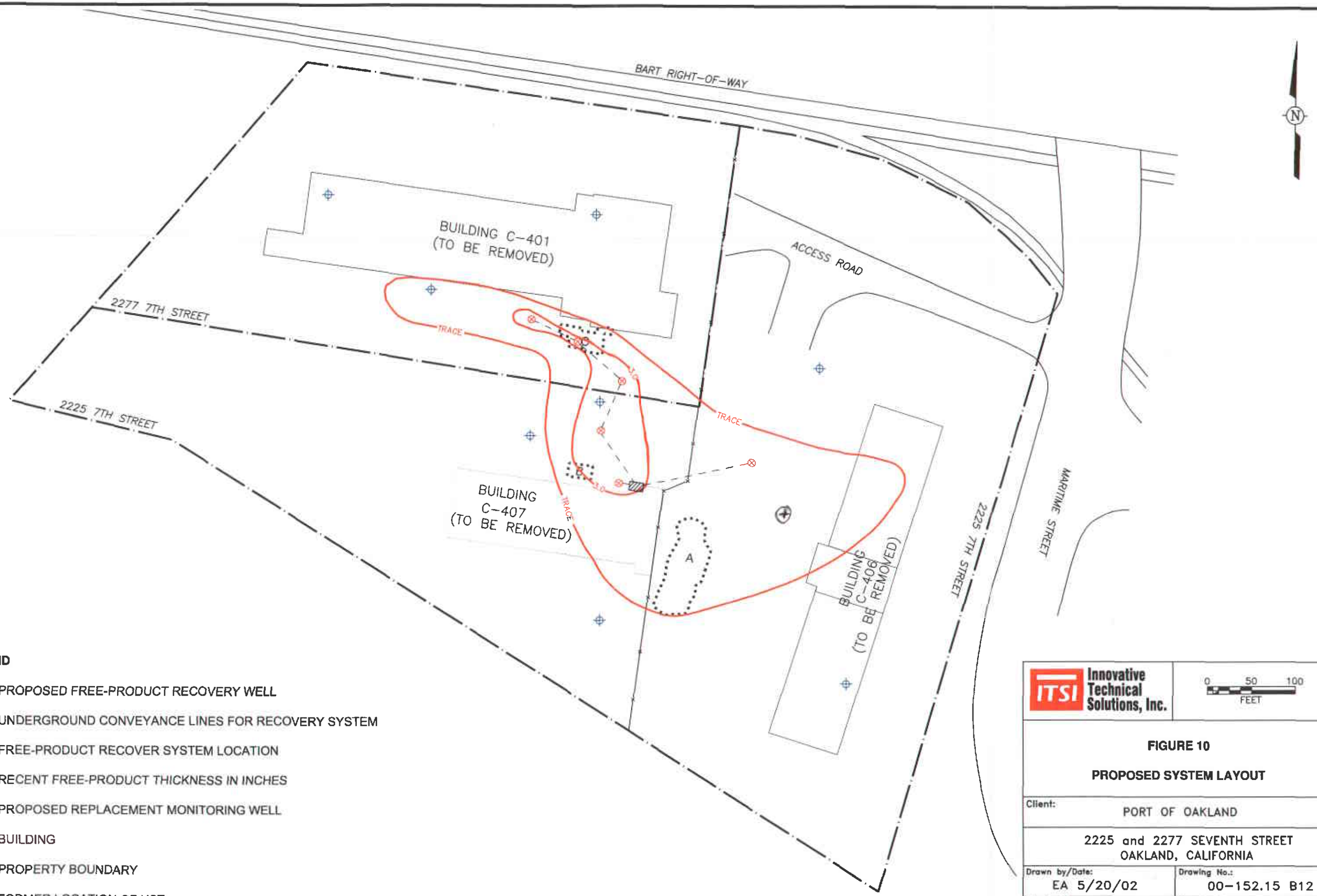
ITSI Innovative Technical Solutions, Inc.

0 50 100 FEET

FIGURE 9

RECENT FREE PRODUCT THICKNESS (INCHES)

Client: PORT OF OAKLAND	
2225 and 2277 SEVENTH STREET OAKLAND, CALIFORNIA	
Drawn by/Date: EA 5/20/02	Drawing No.: 00-152.15 B10
Checked By:	Approved By:



LEGEND

- PROPOSED FREE-PRODUCT RECOVERY WELL
- UNDERGROUND CONVEYANCE LINES FOR RECOVERY SYSTEM
- FREE-PRODUCT RECOVER SYSTEM LOCATION
- RECENT FREE-PRODUCT THICKNESS IN INCHES
- PROPOSED REPLACEMENT MONITORING WELL
- C-407 BUILDING
- PROPERTY BOUNDARY
- FORMER LOCATION OF USTs

ITSI Innovative Technical Solutions, Inc.

0 50 100 FEET

FIGURE 10

PROPOSED SYSTEM LAYOUT

Client: PORT OF OAKLAND	
2225 and 2277 SEVENTH STREET OAKLAND, CALIFORNIA	
Drawn by/Date: EA 5/20/02	Drawing No.: 00-152.15 B12
Checked By:	Approved By:

APPENDIX A

CONE PENETRATION TEST AND PEIZOMETER INSTALLATION FIELD ACTIVITY DOCUMENTATION

Alameda County Drilling Permits
Daily Activity Reports
Tailgate Safety Meetings
Cone Penetration Test (CPT) Results (logs)
Peizometer Borelogs
Peizometer Completion Forms
Peizometer Development and Sampling Forms
Chain of Custodies
Survey Data for Monitoring Wells, CPTs, Peizometers, and Buildings C-401 and C-407

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD CA. 94544-1395
PHONE (510) 670-5554
FAX (510)782-1939

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 2225 AND 8277 7TH STREET OAKLAND
(SEE ATTACHED MAP FOR DRILLING LOCATION)

CLIENT
Name PORT OF OAKLAND - EH&SC DEPT.
Address 530 WATER ST Phone 510 627 1134
City OAKLAND, CA Zip 94604

APPLICANT
Name INNOVATIVE TECHNICAL SOLUTIONS, INC.
Fax 925 256 8998
Address 2730 SHADELANDS, STE 100 Phone 925 944 3105
City WALNUT CREEK, CA Zip 94598

TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection	☐	General	☐
Water Supply	☐	Contamination	☐
Monitoring	☒	Well Destruction	☐

PROPOSED WATER SUPPLY WELL USE

New Domestic	☐	Replacement Domestic	☐
Municipal	☐	Irrigation	☐
Industrial	☐	Other	☐

DRILLING METHOD:

Mud Rotary	☐	Air Rotary	☐	Auger	☒
Cable	☐	Other	☐		

DRILLER'S NAME GREGG DRILLING & TESTING, INC.

DRILLER'S LICENSE NO. WELL: C57 HIC 485165
CPT: C57 HIC 656407

WELL PROJECTS
Drill Hole Diameter 6-8 in. Maximum
Casing Diameter 2 in. Depth 20 ft.
Surface Seal Depth 3+1 ft. Owner's Well Number SB-A
3' GROUT + 1' BENTONITE

GEOTECHNICAL PROJECTS
Number of Borings _____ Maximum
Hole Diameter _____ in. Depth _____ ft.

ESTIMATED STARTING DATE 7 FEB 2002
ESTIMATED COMPLETION DATE 28 FEB 2002

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE [signature] DATE 10 JAN 2002

PLEASE PRINT NAME JAMES ANDERSON

Rev. 5-13-00

FOR OFFICE USE
PERMIT NUMBER W02-0012
WELL NUMBER _____
APN _____

PERMIT CONDITIONS
Circled Permit Requirements Apply

A. GENERAL
1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources-Well Completion Report.
3. Permit is void if project not begun within 90 days of approval date

B. WATER SUPPLY WELLS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and Industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

D. GEOTECHNICAL
Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings.

E. CATHODIC
Fill hole anode zone with concrete placed by tremie.

F. WELL DESTRUCTION
Send a map of work site. A separate permit is required for wells deeper than 45 feet.

G. SPECIAL CONDITIONS

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED [signature] DATE 1-22-02

FAXED
Picked up
In person

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD CA. 94544-1395
PHONE (510) 670-5554
FAX (510)782-1939

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 2225 AND 2277 7TH STREET OAKLAND (SEE ATTACHED MAP FOR DRILLING LOCATIONS)

CLIENT
Name PORT OF OAKLAND - EH&SC DEPT.
Address 530 WATER ST Phone 510 627 1134
City OAKLAND, CA Zip 94604

APPLICANT
Name INNOVATIVE TECHNICAL SOLUTIONS, INC.
Fax 925 256 9973
Address 2730 SHADELANDS STE 100 Phone 925 946 3105
City WALNUT CREEK, CA Zip 94598

TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection	☐	General	☐
Water Supply	☐	Contamination	☐
Monitoring	☒	Well Destruction	☐

PROPOSED WATER SUPPLY WELL USE

New Domestic	☐	Replacement Domestic	☐
Municipal	☐	Irrigation	☐
Industrial	☐	Other _____	☐

DRILLING METHOD:

Mud Rotary	☐	Air Rotary	☐	Auger	☒
Cable	☐	Other	☐		

DRILLER'S NAME GREGG DRILLING & TESTING INC.

DRILLER'S LICENSE NO. WELL: C57 HIC 485165
CPT: C57 HIC 656407

WELL PROJECTS
Drill Hole Diameter 10-8 in. Maximum
Casing Diameter 2 in. Depth 20 ft.
Surface Seal Depth 3+1 ft. Owner's Well Number SB-B
3' GROUT, 1' BENTONITE

GEOTECHNICAL PROJECTS
Number of Borings _____ Maximum
Hole Diameter _____ in. Depth _____ ft.

ESTIMATED STARTING DATE 7 FEB 2002
ESTIMATED COMPLETION DATE 28 FEB 2002

FOR OFFICE USE
PERMIT NUMBER WR02-0013
WELL NUMBER _____
APN _____

PERMIT CONDITIONS
Circled Permit Requirements Apply

A. GENERAL
1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources-Well Completion Report.
3. Permit is void if project not begun within 90 days of approval date

B. WATER SUPPLY WELLS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

D. GEOTECHNICAL
Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings.

E. CATHODIC
Fill hole anode zone with concrete placed by tremie.

F. WELL DESTRUCTION
Send a map of work site. A separate permit is required for wells deeper than 45 feet.

G. SPECIAL CONDITIONS

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED _____ DATE 1-22-02

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE _____ DATE 10 JAN 2002

PLEASE PRINT NAME JAMES ANDERSON

Rev. 5-15-00

PICK UP in person

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD CA. 94544-1395
PHONE (510) 670-5554
FAX (510)782-1939

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 2325 AND 8277 7TH STREET OAKLAND (SEE ATTACHED MAP FOR DRILLING LOCATIONS)

CLIENT
Name PORT OF OAKLAND - EH&SC DEPT.
Address 530 WATER ST Phone 510 627 1134
City OAKLAND, CA Zip 94607

APPLICANT
Name INNOVATIVE TECHNICAL SOLUTIONS, INC.
Fax 925 256 8993
Address 2730 SHADELANDS STE 100 Phone 925 944 3105
City WALNUT CREEK, CA Zip 94598

TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection	☐	General	☐
Water Supply	☐	Contamination	☐
Monitoring	☒	Well Destruction	☐

PROPOSED WATER SUPPLY WELL USE

New Domestic	☐	Replacement Domestic	☐
Municipal	☐	Irrigation	☐
Industrial	☐	Other	☐

DRILLING METHOD:

Mud Rotary	☐	Air Rotary	☐	Auger	☒
Cable	☐	Other	☐		

DRILLER'S NAME GREGG DRILLING & TESTING INC.

DRILLER'S LICENSE NO. WELL: C57 HIC 485165
CPT: C57 HIC 656407

WELL PROJECTS
Drill Hole Diameter 6-8 in. Maximum
Casing Diameter 2 in. Depth 20 ft.
Surface Seal Depth 3.5 ft. Owner's Well Number SB-C
3' GIZOLT + 1' BENTONITE

GEOTECHNICAL PROJECTS
Number of Borings _____ Maximum
Hole Diameter _____ in. Depth _____ ft.

ESTIMATED STARTING DATE 7 FEB 2002
ESTIMATED COMPLETION DATE 28 FEB 2002

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE [signature] DATE 10 JAN 2002

PLEASE PRINT NAME JAMES ANDERSEN

Rev. 3-13-00

FOR OFFICE USE

PERMIT NUMBER W02-0014
WELL NUMBER _____
APN _____

PERMIT CONDITIONS
Circled Permit Requirements Apply

A. GENERAL
1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources-Well Completion Report.
3. Permit is void if project not begun within 90 days of approval date

B. WATER SUPPLY WELLS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

D. GEOTECHNICAL
Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings.

E. CATHODIC
Fill hole anode zone with concrete placed by tremie.

F. WELL DESTRUCTION
Send a map of work site. A separate permit is required for wells deeper than 45 feet.

G. SPECIAL CONDITIONS

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED [signature] DATE 1-22-02

FILED

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD CA. 94544-1395
PHONE (510) 670-5554
FAX (510)782-1939

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 3225 AND 3277 7TH STREET OAKLAND (SEE ATTACHED MAP FOR DRILLING LOCATION)

CLIENT
Name PORT OF OAKLAND - EH&SC DEPT.
Address 530 WATER ST. Phone 510 627 1134
City OAKLAND, CA Zip 94604

APPLICANT
Name INNOVATIVE TECHNICAL SOLUTIONS, INC.
Fax 925 256 8998
Address 2730 SHADELANDS STE 100 Phone 925 944 3105
City WALNUT CREEK, CA Zip 94598

FOR OFFICE USE
PERMIT NUMBER W02-0015
WELL NUMBER
APN

TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection	[ ]	General	[ ]
Water Supply	[ ]	Contamination	[ ]
Monitoring	[X]	Well Destruction	[ ]

PROPOSED WATER SUPPLY WELL USE

New Domestic	[ ]	Replacement Domestic	[ ]
Municipal	[ ]	Irrigation	[ ]
Industrial	[ ]	Other	[ ]

DRILLING METHOD:

Mud Rotary	[ ]	Air Rotary	[ ]	Auger	[X]
Cable	[ ]	Other	[ ]		

DRILLER'S NAME GREGG DRILLING & TESTING, INC.

DRILLER'S LICENSE NO. WELL: C57 HIC 485165
CPT: C57 HIC 656407

WELL PROJECTS
Drill Hole Diameter 6-8 in. Maximum
Casing Diameter 2 in. Depth 20 ft.
Surface Seal Depth 3+/- ft. Owner's Well Number SB-D
(3' GROUT +/- 1' BENTONITE)

GEOTECHNICAL PROJECTS
Number of Borings _____ Maximum
Hole Diameter _____ in. Depth _____ ft.

ESTIMATED STARTING DATE 7 FEB 2002
ESTIMATED COMPLETION DATE 28 FEB 2002

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE [signature] DATE 10 JAN 2002

PLEASE PRINT NAME JAMES ANDERSON

Rev. 5-13-00

PERMIT CONDITIONS
Circled Permit Requirements Apply

A. GENERAL
1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources-Well Completion Report.
3. Permit is void if project not begun within 90 days of approval date

B. WATER SUPPLY WELLS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the *maximum depth practicable* or 20 feet.

D. GEOTECHNICAL
Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings.

E. CATHODIC
Fill hole anode zone with concrete placed by tremie.

F. WELL DESTRUCTION
Send a map of work site. A separate permit is required for wells deeper than 45 feet.

G. SPECIAL CONDITIONS

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED [signature] DATE 1-22-02

PICK UP In person

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD CA. 94544-1395
PHONE (510) 670-5554
FAX (510)782-1939

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT
2325 AND 2277 7TH STREET OAKLAND
(SEE ATTACHED MAP FOR DRILLING LOCATIONS)

CLIENT
Name PORT OF OAKLAND - EH&SC DEPT.
Address 530 WATER ST Phone 510 627 1134
City OAKLAND, CA Zip 94604

APPLICANT
Name INNOVATIVE TECHNICAL SOLUTIONS, INC.
Fax 925 256 8948
Address 2730 SHADELANDS STE 100 Phone 925 944 3105
City WALNUT CREEK CA Zip 94598

FOR OFFICE USE
PERMIT NUMBER W02-0016
WELL NUMBER
APN

TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection	☐	General	☐
Water Supply	☐	Contamination	☐
Monitoring	☒	Well Destruction	☐

PROPOSED WATER SUPPLY WELL USE

New Domestic	☐	Replacement Domestic	☐
Municipal	☐	Irrigation	☐
Industrial	☐	Other	☐

DRILLING METHOD:

Mud Rotary	☐	Air Rotary	☐	Auger	☒
Cable	☐	Other	☐		

DRILLER'S NAME GREGG DRILLING & TESTING INC.

DRILLER'S LICENSE NO. WELL: C57 HIC 485165
CPT: C57 HIC 656407

WELL PROJECTS
Drill Hole Diameter 6-8 in. Maximum
Casing Diameter 2 in. Depth 20 ft.
Surface Seal Depth 3+1 ft. Owner's Well Number SB-E

GEOTECHNICAL PROJECTS
Number of Borings
Hole Diameter in. Maximum
Depth ft.

ESTIMATED STARTING DATE 7 FEB 2002
ESTIMATED COMPLETION DATE 28 FEB 2002

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE [signature] DATE 10 JAN 2002

PLEASE PRINT NAME JAMES ANDERSEN

Rev. 5-13-00

PERMIT CONDITIONS
Circled Permit Requirements Apply

A. GENERAL
1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources-Well Completion Report.
3. Permit is void if project not begun within 90 days of approval date

B. WATER SUPPLY WELLS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

D. GEOTECHNICAL
Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings.

E. CATHODIC
Fill hole anode zone with concrete placed by tremie.

F. WELL DESTRUCTION
Send a map of work site. A separate permit is required for wells deeper than 45 feet.

G. SPECIAL CONDITIONS

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED [signature] DATE 1-22-02

FAXED
PICK UP

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD CA. 94544-1395
PHONE (510) 670-5554
FAX (510)782-1939

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 2225 AND 6277 7TH STREET OAKLAND (SEE ATTACHED MAP FOR DRILLING LOCATIONS)

CLIENT
Name PORT OF OAKLAND - EH&SC DEPT.
Address 530 WATER ST Phone 510 627 1134
City OAKLAND, CA Zip 94604

APPLICANT
Name INNOVATIVE TECHNICAL SOLUTIONS, INC.
Fax 925 256 8993
Address 2730 SHADELANDS STE 100 Phone 925 946 5105
City WALNUT CREEK, CA Zip 94598

TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection	☐	General	☐
Water Supply	☐	Contamination	☒
Monitoring	☐	Well Destruction	☐

PROPOSED WATER SUPPLY WELL USE

New Domestic	☐	Replacement Domestic	☐
Municipal	☐	Irrigation	☐
Industrial	☐	Other	☐

DRILLING METHOD:

Mud Rotary	☐	Air Rotary	☐	Auger	☐
Cable	☐	Other	☒		

DRILLER'S NAME GREGG DRILLING & TESTING, INC.

DRILLER'S LICENSE NO. WELL: C57 HIC 485165
CPT: C57 HIC 656407

WELL PROJECTS
Drill Hole Diameter _____ in. Maximum
Casing Diameter _____ in. Depth _____ ft.
Surface Seal Depth _____ ft. Owner's Well Number _____

GEOTECHNICAL PROJECTS
Number of Borings 2 (2) 32
Hole Diameter 2 in. Maximum Depth 20 ft.

ESTIMATED STARTING DATE 7 FEB 2002
ESTIMATED COMPLETION DATE 28 FEB 2002

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE [signature] DATE 10 JAN 2002

PLEASE PRINT NAME JAMES ANDERSON

Rev. 5-13-00

FOR OFFICE USE
PERMIT NUMBER W02-0017
WELL NUMBER _____
APN _____

PERMIT CONDITIONS
Circled Permit Requirements Apply

A. GENERAL
1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources-Well Completion Report.
3. Permit is void if project not begun within 90 days of approval date

B. WATER SUPPLY WELLS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

D. GEOTECHNICAL
Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings.

E. CATHODIC
Fill hole anode zone with concrete placed by tremie.

F. WELL DESTRUCTION
Send a map of work site. A separate permit is required for wells deeper than 45 feet.

G. SPECIAL CONDITIONS

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED [signature] DATE 1-22-02

CANCELLED
PICK UP
In person

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD CA. 94544-1395
PHONE (510) 670-5554
FAX (510)782-1939

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 2225 AND 2277 7TH STREET OAKLAND (SEE ATTACHED MAP FOR DRILLING LOCATION)

CLIENT
Name PORT OF OAKLAND - EH&SC DEPT.
Address 530 WATER ST Phone 510 627 1134
City OAKLAND, CA Zip 94604

APPLICANT
Name INNOVATIVE TECHNICAL SOLUTIONS, INC.
Fax 925 256 8998
Address 2730 SHADELANDS, STE 100 Phone 925 944 2105
City WALNUT CREEK, CA Zip 94598

TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection	0	General	0
Water Supply	0	Contamination	0
Monitoring	(1)	Well Destruction	0

PROPOSED WATER SUPPLY WELL USE

New Domestic	0	Replacement Domestic	0
Municipal	0	Irrigation	0
Industrial	0	Other	0

DRILLING METHOD:

Mud Rotary	0	Air Rotary	0	Auger	0
Cable	0	Other	0		

DRILLER'S NAME GREGG DRILLING & TESTING, INC.

DRILLER'S LICENSE NO. WELL: C57 HIC 485105
CPT: C57 HIC 656407

WELL PROJECTS
Drill Hole Diameter 6-8 in. Maximum
Casing Diameter 2 in. Depth 20 ft.
Surface Seal Depth 3+1=4 ft. Owner's Well Number SB-F
3' GROUT + 1' BENTONITE

GEOTECHNICAL PROJECTS
Number of Borings _____ Maximum
Hole Diameter _____ in. Depth _____ ft.

ESTIMATED STARTING DATE 11 FEB 2002
ESTIMATED COMPLETION DATE 12 FEB 2002

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE _____ DATE 7 FEB 2002

PLEASE PRINT NAME JAMES ANDERSON

FOR OFFICE USE
PERMIT NUMBER W02-0171
WELL NUMBER _____
APN _____

PERMIT CONDITIONS
Circled Permit Requirements Apply

A. GENERAL
1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources-Well Completion Report.
3. Permit is void if project not begun within 90 days of approval date.

B. WATER SUPPLY WELLS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS
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D. GEOTECHNICAL
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E. CATHODIC
Fill hole anode zone with concrete placed by tremie.

F. WELL DESTRUCTION
Send a map of work site. A separate permit is required for wells deeper than 45 feet.

G. SPECIAL CONDITIONS

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED _____ DATE 2-7-02

Rev. 4-13-00

Innovative Technical Solutions, Inc.
2730 Shadelands Drive, Suite 100
Walnut Creek, California 94598
(925) 946-3100 (Tel), (925) 256-8998 (Fax)

PROJECT NAME: PORT OF OAKLAND
PROJECT NUMBER: 00-152.15
SITE LOCATION: 2277 7TH STREET

DAILY ACTIVITY REPORT

DATE: 22 JAN 2002
PAGE 1 OF 1

DESCRIPTION OF FIELD ACTIVITIES AND EVENTS

0900 ARRIVE AT 2277 7TH STREET TO MEET WITH REPRESENTATIVE FROM CU SURVEYORS. PAINT REMAINING LOCATIONS WITH USA MARKINGS

0915 GET TRAILERS MOVED IN ORDER TO CLEAR CPT LOCATIONS. OTIS FROM CUS ARRIVES ONSITE AND BEGINS CLEARING CPT LOCATIONS.

1150 HAVE TRUCKS AND TRAILERS REMOVED FROM CPT LOCATIONS IN ADJACENT PROPERTY 2225 7TH STREET.

1215 OTIS MOVES OPERATION TO ADJACENT PROPERTY — CONTINUES CLEARING SITES.

1300 OTIS FINISHES WITH CPT LOCATIONS. LOCATIONS O.K.

1315 CUS AND MYSELF DEPART SITE.

1325 AT PORT OF OAKLAND OFFICES PICK UP WELL KEY FROM JEFF RUBIN.

1330 HEAD TO ALAMEDA COUNTY PUBLIC WORKS OFFICES.

1400 AT ALAMEDA COUNTY OFFICES. FIND WATER RESOURCES DEPARTMENT AND GET DRILLING PERMITS APPROVED.

1415 DEPART ALAMEDA COUNTY OFFICES. PHONE OFFICE - DISCUSS SITUATION WITH RACHEL HESS. DRIVE HOME.

1530 FINISH WORK FOR TODAY.

PREPARED BY: JAMES ANDERSON
DATE: 22 JAN 2002
PREPARER'S SIGNATURE: James Anderson

Innovative Technical Solutions, Inc.
2730 Shadelands Drive, Suite 100
Walnut Creek, California 94598
(925) 946-3100 (Tel), (925) 256-8998 (Fax)

PROJECT NAME: PORT OF OAKLAND
PROJECT NUMBER: 00-152.15
SITE LOCATION: 2277 7TH STREET

DAILY ACTIVITY REPORT

DATE: 28 JAN 2002
PAGE 1 OF 2

DESCRIPTION OF FIELD ACTIVITIES AND EVENTS

0700 - ARRIVE ONSITE. BEGIN PAPERWORK. CHECK CPT LOCATIONS FOR CLEARANCE. ALL LOCATIONS IN 2277 CLEAR.
0730 - GREGG DRILLING ARRIVES. HOLD TAILGATE SAFETY MEETING, DISCUSS JOB SEQUENCING AND INITIAL PLAN FOR CPT LOCATIONS. PERSONNEL ONSITE: TODD GEE, JORGE TORRES, RAY JEFFRY
0745 - DRILLERS BEGIN HAND AUGERING LOCATIONS ADJACENT TO THE NORTHERN FENCELINE. (CPT LOCATIONS 4-1) TODD & JORGE SET UP CPT RIG.
0930 RACHEL HESS ARRIVES ONSITE. DISCUSS OPERATIONS.
0950 SET UP ON FIRST LOCATION, CPT-04.
1000 BEGIN DOWNHOLE TESTING AT CPT-04.
1045 FINISH CPT AT FIRST LOCATION.
1050 UPON MEASURING WATER LEVEL A BLACK STICKY SUBSTANCE IS NOTED COATING THE WATER LEVEL PROBE. TODD TAKES A BAILER AND RETRIEVES A WATER SAMPLE TO VIEW SUBSTANCE BETTER. DROPLETS OF THE BLACK LIQUID ARE OBSERVED SINKING TO THE BOTTOM OF A SMALL WATER SAMPLE. NO SAMPLE WAS TAKEN. WATER LEVEL WAS MEASURED AT ~9'.
1100 MOVE TO NEXT LOCATION, CPT-03.
1105 BEGIN DOWNHOLE PROGRESS -
1110 DRILLER HITS REFUSAL AT 1.8'. LOTS OF GRAVEL PRESENT - RAILROAD BALLAST. gave
1120 NEW HOLE DRILLED THROUGH ROCK. CPT PROGRESS BEGUN.
1155 PLOT COMPLETED AT CPT-03. WATER LEVEL ~~MEASURED AT~~ NOT AVAILABLE - HOLE COLLAPSED. gwa
1205 TODD & JORGE CHECK UVIF OPERATION, EVERYTHING CHECKS OUT.
1215 MOVE TO CPT-20 TO CHECK UVIF OPERATION IN A POTENTIALLY CONTAMINATED LOCATION.
1245 DOWNHOLE PROGRESS BEGUN.
1255 FINISH TEST LOCATION - LET RIG SET FOR DISSIPATION TEST.

PREPARED BY: JAMES ANDERSON DATE: 28 JAN 2002
PREPARER'S SIGNATURE: James Anderson

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PROJECT NAME: Port of Oakland
PROJECT NUMBER: 00-152.15
SITE LOCATION: 2277 7TH Street

DAILY ACTIVITY REPORT

DATE: 28 JAN 2002
PAGE 2 OF 2

DESCRIPTION OF FIELD ACTIVITIES AND EVENTS

1300 Break for lunch.

1355 Return from lunch. Test completed, results faulty. Test suggests water at ground surface. Water level measured at 6'5". Operator switches 15^{cm^2} cone.

1430 Move to next location.

1435 Set up at CPT-02.

1450 At 16.4', take dissipation test. Water level @ ~8'(±1').

1455 Complete boring to 20'.

1505 Rods pulled. Friction sleeve stuck. CPT operator leaves to tell helper to begin grouting beginning CPT locations.

1530 Rachel Hess phones. We discuss job progress. Rachel suggests trying to retrieve a product sample from CPT-20. Rachel departs office for site.

1540 I stop grouting process at CPT-20. CPT operators continue working on repairing friction sleeve.

1630 Rachel Hess onsite. Prepare to take product sample from CPT-20.

1645 Take product sample from CPT-20. Only 1.5 VOA's taken, Quick Boring deproducted. Approximately 3" of product in boring. CPT Operators continue grouting and asphalt patching todays locations.

1730 All CPT locations grouted and asphalt patched. Depart site.

28 JAN 2002

PREPARED BY: James Anderson
DATE: 28 JAN 2002
PREPARER'S SIGNATURE: James Anderson

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PROJECT NAME: Port of Oakland
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SITE LOCATION: 2277 7TH Street

DAILY ACTIVITY REPORT

DATE: 29 JAN 2002

DESCRIPTION OF FIELD ACTIVITIES AND EVENTS

0730 Arrive at 2277 7TH Street. Hold daily health & safety meeting. Todd Gee & Ray Jeffery onsite today.
0740 Set up at CPT-01. Begin downhole testing.
0755 Complete testing to 20'. UVIF background steadily rising. Todd removes UVIF module for exchange with module used yesterday. Water level @ 8.5' in CPT-01.
0815 UVIF module switched with the one used yesterday. (UVIF module switched at the end of the day yesterday) Discuss attempting another test at this location in order to confirm earlier readings. Will need to also discuss this matter with Rachel Hess.
0825 Set up to test at CPT-05. Begin testing.
0835 At 9' - take dissipation test. Suggest 9' water level.
0840 Finish test - pull test rods. Water level at 10.5'.
0900 Set up to test at CPT-06. Begin testing.
0915 At ~18' - take dissipation test. Test suggests 16.5' water level.
0930 Finish at CPT-06. ~~Water level at~~ Owner Water Level Not taken.
0940 Set up at CPT-07. Begin testing.
0950 At 17' - take dissipation test. Test does not work.
0955 At 18' - take dissipation test. Test suggests 6.5' water level.
1005 Finish at CPT-07. Water level @ 9.2'.
1015 Set up at CPT-08. Begin testing.
1025 At 17.5' - take dissipation test. Test does not work.
1030 At 18.2' - take dissipation test. Test suggests a water level of 10'.
1040 Finish at CPT-08. Water level measured at 9.3'.
1100 Set up at CPT-12. Begin testing.
1115 At 18.5' - take dissipation test. Test suggests water level of 13.5'

PREPARED BY: James Anderson DATE: 29 JAN 2002
PREPARERS SIGNATURE:

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PROJECT NAME: PORT OF OAKLAND
PROJECT NUMBER: 00-152.15
SITE LOCATION: 2277 7TH STREET

DAILY ACTIVITY REPORT

DATE: 29 JAN 2002
PAGE 2 OF 3

DESCRIPTION OF FIELD ACTIVITIES AND EVENTS

1120 - AT 19.5' - OPERATOR TAKES ANOTHER DISSIPATION TEST - TEST SUGGESTS SAME WATER LEVEL AS BEFORE ~13.5'.
1130 FINISH AT CPT-12. WATER LEVEL TAKEN @ 9.3'.
1140 MOVE TO NEXT LOCATION - CPT-16
1145 BEGIN TESTING AT CPT-16.
1155 AT 17' OPERATOR PERFORMS DISSIPATION TEST. TEST SUGGESTS A WATER LEVEL OF 8.5'.
1210 FINISH TESTING AT CPT-16. WATER LEVEL MEASURED AT 9.2'. NO PRODUCT OBSERVED.
1225 EAT LUNCH. JEFF HESS, RACHEL HESS ONSITE, DISCUSS PROGRESS.
1255 SET UP AT CPT-14.
1300 BEGIN DOWNHOLE PROGRESS.
1310 AT 17.5' TAKE DISSIPATION TEST. TEST SUGGESTS WATER LEVEL IS AT 8.5'.
1315 FINISH AT CPT-14.
1345 TAKE WATER LEVEL AT CPT-14 - 7.7' WITH APPROXIMATELY 1/2" OF FLOATING PRODUCT. LET BORING SIT TO STABILIZE FOR SAMPLING.
1350 SET UP AT CPT-13. BEGIN TESTING.
1355 AT 20' - TAKE DISSIPATION TEST, TEST SUGGEST WATER LEVEL OF 9.5'.
1400 PULL OFF CPT-13. ATTEMPT TO TAKE WATER SAMPLE BUT TEST HOLE COLLASPED AT APPROXIMATELY 6'. UNABLE TO OBTAIN WATER LEVEL ALSO.
1415 SET UP AT CPT-09. BEGIN TESTING.
1930 AT 18.2' TAKE DISSIPATION TEST. TEST SUGGESTS WATER LEVEL OF 7.7'.
1450 FINISH TESTING AT CPT-09. WATER LEVEL MEASURED AT 9.3' 9.2'.
1505 TAKE WATER LEVEL AGAIN AT CPT-09 @ 8.2'. BAILER REVEALS GW BLUEISH-GREEN WATER WITH NO PRODUCT.
1510 SET UP TO RETEST AT CPT-01 LABELED CPT-01A.

PREPARED BY: JAMES ANDERSON DATE: 29 JAN 2002
PREPARER'S SIGNATURE:

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PROJECT NAME: PORT OF OAKLAND
PROJECT NUMBER: 00-152.15
SITE LOCATION: 2277 7TH STREET

DAILY ACTIVITY REPORT

DATE: 29 JAN 2002
PAGE 3 OF 3

DESCRIPTION OF FIELD ACTIVITIES AND EVENTS

1515 AT 17.9' - TAKE DISSIPATION TEST, WATER LEVEL SUGGESTED AT 6.8'

1525 FINISH AT CPT-01A. WATER LEVEL TAKEN AT 9.2'. CPT OPERATORS GROUT AND CLEAN UP. I PREPARE TO TAKE PRODUCT SAMPLE FROM CPT-14.

1605 AFTER 25 MINUTES - ONLY ABLE TO RECOVER ABOUT 10 mL. DECIDE TO LET BOREHOLE REMAIN OPEN OVERNIGHT TO CHECK ON PRODUCT RECOVERY. SECURE BOREHOLE LOCATION.

1610 DRILLERS & MYSELF DEPART SITE.

1730 IN PETALUMA, RECIEVE MESSAGE REGARDING CPT-14.

PREPARED BY: JAMES ANDERSON DATE: 29 JAN 2002

PREPARER'S SIGNATURE:

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PROJECT NAME: PORT OF OAKLAND
PROJECT NUMBER: 00-152.15
SITE LOCATION: 2277 7th STREET

DAILY ACTIVITY REPORT

DATE: 30 JAN 2002
PAGE 1 OF 1

DESCRIPTION OF FIELD ACTIVITIES AND EVENTS

13:00 ARRIVE AT SITE AND MEET JIM ANDERSON + RACHEL HESS (ITSI)
13:20 GO TO CPT-11 WITH RAY AND ERNANO (GREGG DRILLING)
13:25 DOWNHOLE IN PROGRESS AT CPT-11
13:35 AT 19.03' TAKE DISSIPATION TEST. ADVANCES 0.98' (20.01').
13:45 ADVANCES FURTHER 20.51' AND TRY TO ACHIEVE STABILIZATION OF PORE PRESSURE x TIME CURVE. TEST SUGGESTS WATER LEVEL AT 12.50'.
14:00 STOP AT 23.13'. PULL OFF CPT-11. WATER LEVEL AT 11.75' USING A SOUNDER.
14:20 HOLE COLLAPSED AT 12.0'. NO PRODUCT OR ODOR OBSERVED.
14:25 MOB TO CPT-10 AND GET SET UP.
15:05 BEGIN DOWNHOLE PROGRESS.
15:30 AT 18.29' TAKE DISSIPATION TEST. TEST SUGGESTS WATER LEVEL AT 11.50'.
15:45 STOP AT 23.13'. PULL OFF CPT-10.
16:00 HOLE COLLAPSED AT 13.0'. COULD NOT MEASURE WATER LEVEL WITH SOUNDER. STILL DRY AT 13.0'.
16:15 SAMPLE FREE PRODUCT AT CPT-19. COLLECT TWO VOAS.
16:40 AT CPT-21 NO FREE PRODUCT IN BAILER.
16:45 RETURN TO CPT-19 TO COLLECT ONE MORE VOA.

01/30/02

PREPARED BY: ROGERIO LEONG DATE: 01/30/2002

PREPARER'S SIGNATURE:

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PROJECT NAME: Port of Oakland
PROJECT NUMBER: 00-152.15
SITE LOCATION: 2225 7TH Street & 2277 7TH Street

DAILY ACTIVITY REPORT

DATE: 30 Jan 2002
PAGE 1 OF 3

DESCRIPTION OF FIELD ACTIVITIES AND EVENTS

0800 Arrive onsite. Hold daily health & safety meeting. Personnel onsite today: Jorge Torres, German Garcia, Todd Gee & Ray Jeffrey.

0820 Give German Garcia health & safety site briefing.

0830 Crews begin set up. Ray and Herman begin concrete coring inside building C-401. Jorge & Todd set up CPT operations.

0855 Set up at CPT-27. Begin testing.

0905 At 18.5'. Take dissipation test. Test suggests water level of 8'. Test takes a long time to stabilize.

0920 Finish at CPT-27. No UVIF detected. Hole collasped-no water level

0930 Check on concrete coring crew. They have cored ~7" at CPT-11 location. Still in concrete.

0935 CPT crew sets up on CPT-23. Begin testing.

0945 At 17.9'. Take dissipation test. Test suggests water level of 8'. Continue CPT.

0950 At 20'. No UVIF detected. Hole collasped at 5.5' No water level taken. Unable to send bailer down borehole.

0955 Concrete coring crew has completed coring at CPT-11. Set up to use Ram-set. Crews work together to hook up Ram-set.

1040 Set up at CPT-17. Begin testing.

1050 At 19'. Take dissipation test. Test suggests a water level 8.5'.

1105 Completed testing at CPT-17. No UVIF detected. Unable to take water level - borehole collasped @ 6'.

1130 Ram-set crew begins testing at CPT-11

1145 Material under concrete loading dock (CPT-11) very resistive. Opt to drill down 2 more 6' and try testing again from there.

1205 Drilling completed - reset Ram-set at CPT-11. The rest of the crew sets up to drill through concrete at CPT-10.

1245 Necessary to drill another location at CPT-10.

PREPARED BY: James Anderson DATE: 30 Jan 2002

PREPARER'S SIGNATURE: James Anderson

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PROJECT NAME: PORT OF OAKLAND
PROJECT NUMBER: 00-152.15
SITE LOCATION: 2225 & 2277 7TH STREET

DAILY ACTIVITY REPORT

DATE: 30 JAN 2002

DESCRIPTION OF FIELD ACTIVITIES AND EVENTS

1250 BREAK FOR LUNCH.
1305 RACHEL HESS ARRIVES ONSITE. LAY OUT NEW LOCATIONS #30-32.
1310 ROGERIO LEONG ONSITE. HAVE ROGERIO LOG PROGRESS AT CPT-11. CPT RIG AND CREW MOB TO CPT-18.
1315 BEGIN TESTING AT CPT-18.
1325 AT 18.5'. TAKE DISSIPATION TEST. TEST RESULTS SUGGEST A WATER LEVEL OF 7.8'.
1335 FINISH AT CPT-18. PULL RODS. BOREHOLE COLLASPED AT 6'- UNABLE TO VIEW WATER OR TAKE WATER LEVEL.
1350 SET UP AT CPT-19. BEGIN TESTING.
1400 TAKE DISSIPATION TEST AT 20'. TEST SUGGESTS A WATER LEVEL OF 6.3'.
1415 FINISH AT CPT-19. PULL RODS. UVIF HIT AT ~6'. PHONE RACHEL TO SEE IF PVC SHOULD BE INSTALLED IN TEST HOLES IN ORDER TO OBTAIN PRODUCT SAMPLES. RACHEL GIVES O.K.
1420 INSTALL 5' OF 1/2" SCREENED PVC AND 5' OF 1/2" BLANK PVC INTO CPT-19 BOREHOLE.
1430 SET UP AT CPT-21. BEGIN TESTING.
1440 TAKE DISSIPATION TEST AT 18.5'. TEST SUGGEST A WATER LEVEL OF 8.5'.
1445 FINISH AT CPT-~~20~~ 21. PULL RODS. UVIF HIT AT ~6'. INSTALL 5' OF 1/2" SCREENED PVC AND 5' OF 1/2" BLANK PVC INTO CPT-20 BOREHOLE. WILL ATTEMPT TO TAKE PRODUCT SAMPLE LATER.
1455 SET UP SUPPORT TRUCK AT CPT-15 - DRILL THROUGH CONCRETE.
1525 SET CPT RIG UP AT LOCATION CPT-15. BEGIN TESTING.
1535 AT 17.5'. TAKE DISSIPATION TEST. RESULTS SUGGEST A WATER LEVEL OF ~9'.
1540 FINISH AT CPT-15. NO UVIF DETECTED. BOREHOLE COLLASPED AT 8.5' - NO WATER LEVEL TAKEN.
1550 PREPARED TO TAKE PRODUCT SAMPLES. CPT CREWS GROUT OPEN TEST HOLES.

PREPARED BY: JAMES ANDERSON DATE: 30 JAN 2002
PREPARER'S SIGNATURE:

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PROJECT NAME: Port of Oakland
PROJECT NUMBER: 00-152.15
SITE LOCATION: 2225 7TH Street

DAILY ACTIVITY REPORT

DATE: 30 Jan 2002
PAGE 3 OF 3

DESCRIPTION OF FIELD ACTIVITIES AND EVENTS

1600 Begin taking product sample at CPT-19. Approximately 4" of product initially.
1615 Two VOA's full of product. Let borehole recover.
1630 At CPT-21. ~~Begin taking product sample~~ JWA. Bailer reveals no visable product in the borehole. Strong hydrocarbon odor. Water level at 6'.
1640 Back at CPT-19. Attempt to fill a third VOA with product.
1655 Completed sampling at CPT-19. CPT crew grouts borehole. Water level at 6.4'.
1700 Finish work at site for today.
1715 Depart site.

JWA 30Jan2002

PREPARED BY: James Anderson
DATE: 30 Jan 2002
PREPARER'S SIGNATURE:

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PROJECT NAME: PORT OF OAKLAND
PROJECT NUMBER: 00-152.15
SITE LOCATION: 2225 7TH STREET

DAILY ACTIVITY REPORT

DATE: 31 JAN 2002
PAGE 1 OF 2

DESCRIPTION OF FIELD ACTIVITIES AND EVENTS

0755 ARRIVE ONSITE. HOLD DAILY HEALTH & SAFETY MEETING WITH GREGG EMPLOYEES: TODD GEE, JORGE TORRES & GERMAN GARCIA.
0820 SET UP AT CPT-29.
0830 BEGIN TESTING AT CPT-29.
0840 TAKE DISSIPATION TEST AT 15.5'. POOR TEST LOCATION.
0845 AT 20' - TRY ANOTHER DISSIPATION TEST. TEST RESULTS SUGGEST A WATER LEVEL OF 10'.
0850 FINISH TESTING AT CPT-29. NO UVIF DETECTED. WATER LEVEL MEASURED AT 7.5'. BAILER SAMPLE REVEALS DARK BLUEISH GREEN WATER WITH NO VISABLE PRODUCT.
0905 SET UP AT CPT-22. BEGIN TESTING.
0910 AT 19.4'. TAKE DISSIPATION TEST. TEST SUGGESTS A WATER LEVEL OF 8.5'.
0915 FINISH AT CPT-22. UVIF DETECTED AT ~8'. ~~NO~~ GWC ~~WATER LEVEL OR~~ GWC BAILED SEND 5' OF ½" SCREENED PVC AND 5' OF ½" BLANK PVC INTO BOREHOLE - OPEN COLLASPED BOREHOLE. WATER LEVEL MEASURED AT 7.3'. NO VISABLE PRODUCT OBSERVED - SLIGHT HYDROCARBON ODOR - GREENISH GRAY COLORED WATER.
0935 SET UP AT CPT-24. BEGIN TESTING.
0945 AT 20' - ATTEMPT DISSIPATION TEST. TEST IN SILT - RESULTS SUGGEST WATER LEVEL 4' ABOVE GROUND SURFACE.
0955 FINISH AT CPT-24. UVIF DETECTED FROM 5 TO 10' BELOW GROUND SURFACE. PVC PLACED INTO BOREHOLE. HOLE COLLASPED, GERMAN RUNS DRILL ROD TO 9' IN ORDER TO INSTALL PVC CASING. WATER LEVEL AT 6.1'
1010 SET UP AT CPT-26. BEGIN TESTING
1020 AT 17.7' TAKE DISSIPATION TEST. TEST SUGGESTS A WATER LEVEL OF 9.2'.
1025 FINISH TESTING AT CPT-26. NO UVIF DETECTED. ATTEMPT TO TAKE WATER LEVEL - BOREHOLE COLLASPED AT 6.3'. TRY AND PUSH PVC DOWN BOREHOLE - COLLASPE TOO COMPLETE.

PREPARED BY: JAMES ANDERSON DATE: 31 JAN 2002
PREPARER'S SIGNATURE:

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PROJECT NAME: PORT OF OAKLAND
PROJECT NUMBER: 00-152.15
SITE LOCATION: 2225 7TH STREET

DAILY ACTIVITY REPORT

DATE: 31 JAN 2002
PAGE 2 OF 2

DESCRIPTION OF FIELD ACTIVITIES AND EVENTS

1050 CPT RIG AND CREW SET UP AT CPT-25. BEGIN TESTING.
1100 AT 16' - TAKE DISSIPATION TEST. TEST RESULTS SUGGESTS A WATER LEVEL OF 8'.
1105 FINISH TESTING AT CPT-25. UVIF DETECTED FROM 5 TO 10'.
1110 ROGERIO LEONG ONSITE. HAVE HIM SET UP TO TAKE PRODUCT SAMPLE FROM CPT-24. WATER LEVEL MEASURED AT 6.1' IN CPT-24. BAILER ONLY REVEALS DROPLETS OF FLOATING PRODUCT. STRONG HYDROCARBON ODOR DETECTED.
1120 SET UP AT CPT-28. BEGIN TESTING. ROGERIO TAKES WATER LEVEL AT CPT-25 @ 5.8'. DISPOSABLE BAILER REVEALS ONLY A FEW DROPS OF PRODUCT WITH A STRONG HYDROCARBON ODOR.
1130 AT 18.2' QWCA IN AT CPT-28. TAKE DISSIPATION TEST. TEST SUGGESTS A WATER LEVEL OF 7.8'.
1140 FINISH AT CPT-28. NO UVIF DETECTED. HOLE COLLAPSED. TRY AN FORCE PVC PASSED CAVING WITH NO SUCCESS. NO WATER LEVEL OBTAINED.
1200 COMPLETE ALL DRILLING PAPERWORK.
1215 BREAK FOR LUNCH.
1345 BACK FROM LUNCH. PREPARE TO TAKE SAMPLE FROM WASH RACK SUMP.
1410 TAKE SAMPLE FROM WASH RACK SUMP QWCA ~~WRS~~ WRS-1.
1500 MOVE INTO MAINTENANCE BUILDING. SEND BAILER INTO EASTERN PIT. BAILER COMES UP WITH RUST COLORED WATER-NO VISABLE PRODUCT. NO HYDROCARBON ODOR
1505 OPEN LID TO WESTERN PIT. LIQUID APPEARS CLEARER THAN EASTERN PIT WITH NO VISABLE PRODUCT. NO HYDROCARBON ODOR.
1515 LABEL AND INVENTORY ALL PRODUCT SAMPLES.
1530 DEPART SITE. FINISH WORK FOR TODAY

PREPARED BY: JAMES ANDERSON DATE: 31 JAN 2002
PREPARER'S SIGNATURE:

Dly Activity Form "Reviewed by"

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PROJECT NAME: Port of Oakland
PROJECT NUMBER: 00-152.15
SITE LOCATION: 2225 7TH Street

DAILY ACTIVITY REPORT

DATE: 1 Feb 2002
PAGE 1 OF 2

DESCRIPTION OF FIELD ACTIVITIES AND EVENTS

0850 Arrive onsite. Meet with Gregg Drilling personnel: Todd Gibbs, Terry Hornsby. Hold daily health & safety meeting.
0900 Operators drill through concrete at CPT location 30 & 31. Rogerio Leonga arrives onsite - give him health & safety briefing. Foss Environmental onsite to take wash rack debris.
0910 Set up on CPT-31. Calibrate equipment.
0920 Begin testing. Chris Algee & Emily
0925 At 18.4' - take dissipation test. Test results suggest a water level of 8.5'.
0930 Finish testing at CPT-31. UVIF detected from 5.5' to 9'. PVC casing placed into borehole in order to measure water level and take product sample. Water level measured at 6.3'. Bailer view of water reveals only droplets of product.
0950 Set up at CPT-30. Begin testing.
1000 At 18.4'. Take dissipation test. Test results suggest a water level of 8.1'.
1010 Finish testing at CPT-30. UVIF detected from 5.5' to 11'. PVC placed into borehole to facilitate water level and potential product measurements. Water level measured at 7.3'. Disposable bailer reveals droplets of product about 1/4" thick at top of water. Strong hydrocarbon odor.
1020 CPT operator cores through asphalt and hand augers to 3'.
1030 Set up at CPT-32. Begin testing.
1040 At 17.7'. Take dissipation test. Test suggests a water level of 7.2'.
1050 Finish at CPT-32. ~~Very slight~~ hit from the UVIF at 5.5 to 10'. Place PVC into borehole to measure water level and view product. Water level at 6'. Disposable bailer view reveals a few droplets of product. Strong hydrocarbon odor.
1100 Begin taking product sample from CPT-30. Rachel Hegg onsite.

PREPARED BY: James Anderson DATE: 1 Feb 2002
PREPARER'S SIGNATURE:

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PROJECT NAME: PORT OF OAKLAND
PROJECT NUMBER: 00-152.15
SITE LOCATION: 2225 7TH STREET

DAILY ACTIVITY REPORT

DATE: 1 FEB 2002
PAGE 2 OF 2

DESCRIPTION OF FIELD ACTIVITIES AND EVENTS

1130 STOP SAMPLING PRODUCT AT CPT-30. CHECK PRODUCT IN CPT-31 ONE MORE TIME. NO VISABLE PRODUCT IN CPT-31 THIS TIME.
1140 BACK AT CPT-30 - CONTINUE SAMPLING PRODUCT. CPT CREW BEGINS GROUTING
1205 FINISH SAMPLING AT CPT-30 OPERATORS MOVE TO CPT-30 TO END TODAYS FIELD WORK. LOAD UP EQUIPMENT - SECURE SITE.
1225 SIGN OPERATORS S.O.F. FOR TODAY.
1230 DEPART SITE FOR OFFICE.
1300 IN WALNUT CREEK - BREAK FOR LUNCH.
1400 BACK FROM LUNCH - ON TO OFFICE. COMPLETE PORT OF OAKLAND PAPERWORK.

NOT VALID
1 FEBRUARY 2002

PREPARED BY: JAMES ANDERSON DATE: 1 FEB 2002
PREPARER'S SIGNATURE: James Anderson

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PROJECT NAME: Port of Oakland
PROJECT NUMBER: 00.152.15
SITE LOCATION: 2277 7th Street

DAILY ACTIVITY REPORT

DATE: 02/06/02
PAGE 1 OF 1

DESCRIPTION OF FIELD ACTIVITIES AND EVENTS

8:30 Arrive at site

8:40 Begin opening well lids and perform a general check on the maintenance needed for each of the wells.

Well Nº	Ø inches	Well Cap	Locks	Well Lid	Bolts	Other Services
MW-1 (2225)	4"	Yes	Yes (Old) Rusted	Yes	Yes	- Needs to cut lock and replace it with new
MW-2 (2277)	Unable to access inside compound (wrong keys). It has a master lock Nº1					
MW-3	4"	Yes	No	Yes	Yes	- Spanned bolts. Hoses in well. Well cap without lock.
MW-4	2"	Yes	Replaced new	Yes	Yes	
MW-1 (2277)	4" (ORC?)	Yes (No lock)	No	Yes	Spanned	- Needs to replace 4" well cap with lock
MW-2 (2225)	4"	Broken	No	Yes	Spanned	- Replace well cap w/ new lock
MW-5	2"	Yes	Replaced new	Yes	Yes	
MW-6	2"	Broken	No	Yes	2/3	- Replace well cap w/ new lock + 1 bolt
MW-7	2"	Yes	Replaced new	Cracked	None	- Needs new well box or lid w/ bolts
MW-8	2"	Yes	Replaced new	Yes	Yes	
MW-3 (2225)	4"	Yes	Yes old rusted	Yes	Spanned	- Cut old lock and replace w/ new one.

2225

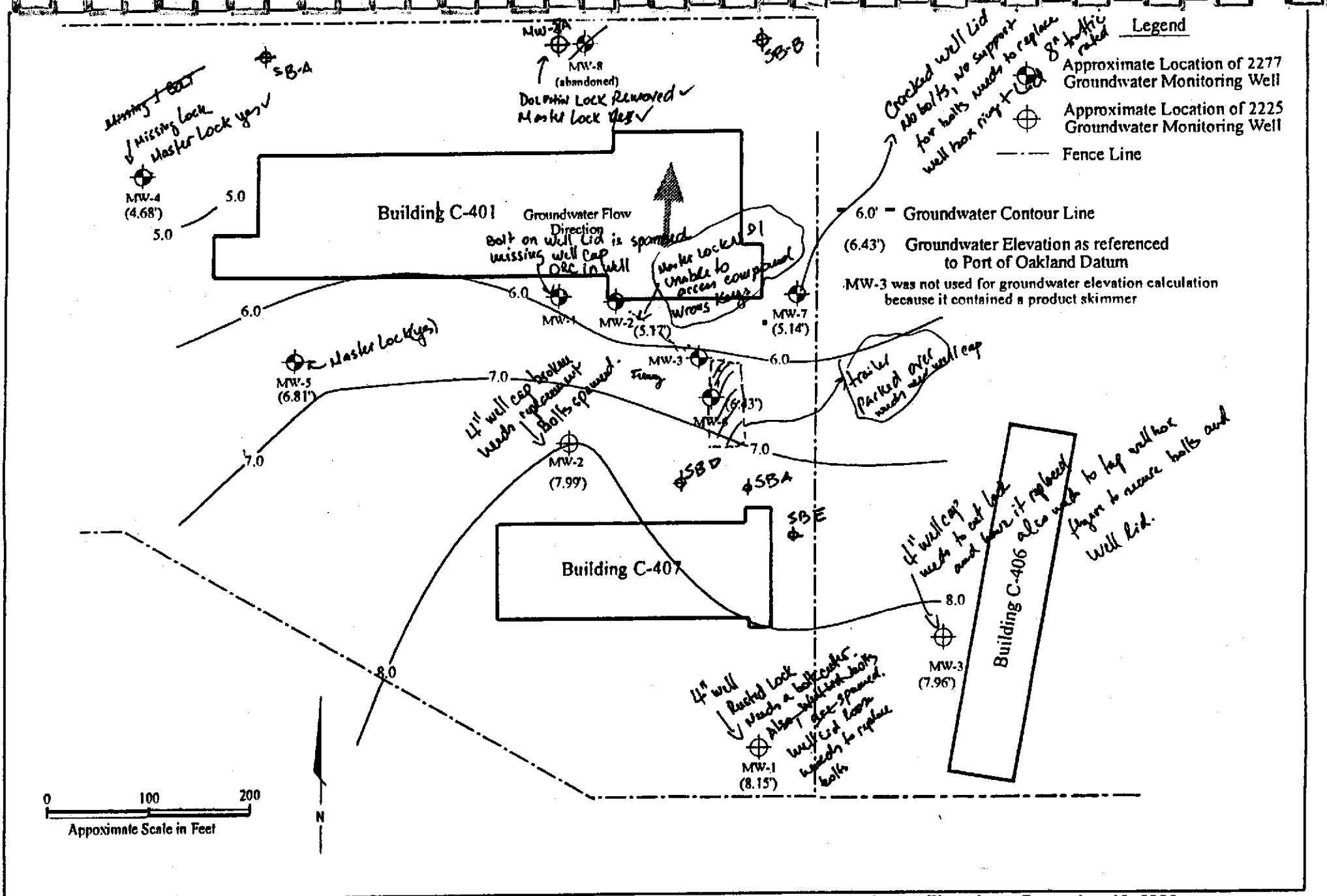
9:40 Go to Home Depot and purchase locks. I bought 12 new master locks.

10:50 Return to site and put new locks in wells: MW-4; MW-5; MW-7 and MW-8.

11:30 Leave site to office.

Obs. Wells MW-1 (2277); MW-1 (2225); MW-2 (2225); MW-3 (2277); MW-3 (2225), need tapping and new bolts to secure lid properly

PREPARED BY: Rogelio Leonel
DATE: 02/06/2002
PREPARERS SIGNATURE:



Harding ESE
A MACTEC COMPANY

Groundwater Elevations, December 19, 2000
Quarterly Groundwater Monitoring Report
2277 and 2225 Seventh Street
Oakland, California 94607

PLATE **3**

DRAWN	PROJECT NUMBER	APPROVED	DATE	REVISED DATE
jn	42633.1		1/30/01	

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PROJECT NAME: Port of Oakland
PROJECT NUMBER: 00-152.15
SITE LOCATION: 2225 & 2277 7TH Street

DAILY ACTIVITY REPORT

DATE: 8 Feb 2002
PAGE 1 OF 2

DESCRIPTION OF FIELD ACTIVITIES AND EVENTS

0700 Arrive at site - meet with Rogerio Leong. Discuss todays planned activities.

0730 Set up van for sampling. Cut lock

0745 At MW-1 (2225 7TH St.). Open well cover - drain water. Measure water at 5.30'. Oil interface probe detects no product. Disposable bailer reveals no product on top of water. Replace with new well cap and lock.

0810 At MW-3 (2225 7TH St.). Open well cover - cut lock. Remove cap - sewer like odor comes from well casing. Water level measured using oil interface probe at 6.85' (no product detected). Disposable bailer reveals no visable product. Close well cover - replace lock. Well traffic cover threaded holes stripped.

0830 At MW-2 (2225 7TH St.). Open well cover. Traffic cover bolt holes stripped. Water level measured using an oil interface probe at 5.57' (no product detected). Disposable bailer reveals rust colored floating precipitated material but no visable product. Well cap is not lockable - unsecured well. Cap and lock needed.

0840 At MW-4 (2277 7TH St.). Open well cover. Water level measured at 8.05' using an oil interface probe - no product detected. Disposable bailer reveals no visable product.

0900 At MW-5 (2277 7TH St.). Drain water from around well cover. Open well cover. Using an oil interface probe water is measured at 6.01' with no product detected. Disposable bailer reveals no visable product. Well cap should be replaced (can not unthread). Close up well.

0920 At MW-8A (2277 7TH St.). Open well cover. Water level measured at 7.76' using the oil interface probe. No product detected. Disposable bailer reveals no visable product. Well secured and closed.

0930 At MW-7 (2277 7TH St.). Open well cover. Cover broken. Water level at 8.50' using the interface probe. No product detected. Disposable bailer reveals no visable product. Secure well cap. Replace lid.

PREPARED BY: James Anderson DATE:

PREPARER'S SIGNATURE: James Anderson

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PROJECT NAME: PORT OF OAKLAND
PROJECT NUMBER: 00-152.15
SITE LOCATION: 2277 7TH STREET

DAILY ACTIVITY REPORT

DATE: 8 FEB 2002
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DESCRIPTION OF FIELD ACTIVITIES AND EVENTS

0945 AT MW-6 (2277 7TH ST.). DRAIN WATER FROM AROUND WELL COVER. WELL BOX FILLED WITH WATER. AFTER DRAINING WATER - WATER LEVEL IS MEASURED AT 6.88' USING A OIL INTERFACE PROBE. ND PRODUCT DETECTED. DISPOSABLE BAILER REVEALS NO VISABLE PRODUCT. CAP NEEDS REPLACING - UNABLE TO LOCK. COVER NEEDS REPAIR - IS IN A DEPRESSION - WILL ALWAYS FILL WITH WATER - LOCK WILL RUST - CAP WILL BE BROKEN - CAP WILL NEED REPLACING.

1015 AT MW-3 (2277 7TH ST.). OPEN WELL COVER. REMOVE SKIMMER. MEASURE TOP OF PRODUCT AT 7.55' AND TOP OF WATER AT 8.42'. TAKE 4 VOA SAMPLES OF 30ml EACH. LABEL PRODUCT SAMPLE MW-3 AT SAMPLE TIME (1030) TO FRIEDMAN & BRUYA, INC.; TO BE ANAMYZED FOR: 8270 PAH's, DIESEL & MOTOR OIL; ASTM D-2887 STD. FUEL SCAN; PIANO; 8260 VOC's w/ MTBE; 6010 METALS Ca, Cu, Pb, N. & Zn.

1055 AT MW-1 (2277 7TH ST.). OPEN WELL COVER. REMOVE SKIMMER. MEASURE TOP OF PRODUCT AT 8.17' AND TOP OF WATER AT 8.79'. TAKE 4 VOA SAMPLES OF 30ml EACH. LABLE PRODUCT SAMPLES MW-1 AT SAMPLE TIME (1115) TO FRIEDMAN & BRUYA, INC.. SAME ANALYSIS AS ABOVE.

1135 AT MW-2. OPEN WELL - SKIMMER HAS BEEN REMOVED. MEASURE WATER LEVEL AT 8.28' USING THE OIL INTERFACE PROBE. NO PRODUCT DETECTED. DISPOSABLE BAILER REVEALS NO VISABLE PRODUCT. SECURE WELL AND SITE.

1210 FINISH WORK AT SITE FOR TODAY.

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PROJECT NAME: PORT OF OAKLAND
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SITE LOCATION: 2277 7TH STREET

DAILY ACTIVITY REPORT

DATE: 11 FEB 2002
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DESCRIPTION OF FIELD ACTIVITIES AND EVENTS

0705 ARRIVE AT SITE. BEGIN PAPER WORK. ROGERIO LEOAS ONSITE.
0715 GREGG DRILLING ARRIVES ONSITE. MEET WITH JASON NEFF, DON PEARSON & ANGEL SALAZAR.
0720 HOLD DAILY TAILGATE SAFETY MEETING. DISCUSS JOB PROCEDURES.
0730
0740 SET UP AT FIRST BORING LOCATION PZ-20 (PZ-C). BEGIN BREAKING THROUGH ASPHALT.
0740 SAMPLE FROM 1.5-3.0'. KEEP 2-2.5' SAMPLE FOR ENVIRONMENTAL.
0800 AT 4.5-6.0'. TAKE SAMPLE FOR ENVIRONMENTAL ANALYSIS FROM 5.5-6.0'. NEXT SAMPLE INTERVAL IS IN WATER.
0815 BORING COMPLETED TO DEPTH ~15.5'. BEGIN WELL CONSTRUCTION. CASING SET AT 15.4'. 10' OF 0.010" SCREEN WITH A 0.5' SILT TRAP, BELOW 5' OF BLANK, SET INTO RUBBLE. FILTER PACK BROUGHT TO 4' BELOW GROUND SURFACE, BENTONITE SEAL (CHIPS) TO 3' B.G.S. AND GROUT TO SURFACE. SIX INCH TRAFFIC BOX CEMENTED INTO PLACE.
0845 DRILLERS MOVE AND SET UP ON PZ-19 (PZ-D).
0850 BEGIN BREAKING THROUGH ASPHALT AT PZ-19 (PZ-D).
0900 SAMPLE FROM 1.5-3.0'. KEEP 2-2.5' SAMPLE FOR ENVIRONMENTAL ANALYSIS. RACHEL HESS ONSITE TO OBSERVE OPERATIONS.
0910 AT 4.5-6.0'. KEEP 5.0-5.5' SAMPLE FOR ENVIRONMENTAL ANALYSIS. NEXT SAMPLE INTERVAL IS IN WATER.
0920 KEEP SAMPLE FROM 7.0-7.5' FOR GEOTECHNICAL ANALYSIS (SAND).
0935 BORING COMPLETED TO 15.5'. UNABLE TO OBTAIN SAMPLE OF CLAY FOR GEOTECHNICAL TESTING - TOO SOFT. DRILLERS BEGIN BUILDING WELL. 0.5' SILT TRAP + 10' OF 0.010" SCREENED PVC WITH 5' OF BLANK CASING TO THE SURFACE. FILTER PACK TAKEN TO 4' BELOW GROUND SURFACE. BENTONITE CHIPS ADDED TO 3' B.G.S.. GROUTED TO THE SURFACE. SIX INCH TRAFFIC BOX CEMENTED INTO PLACE.
1000 HAVE TRAILERS MOVED ADJACENT TO BUILDING L-401 IN ORDER TO ACCESS PZ-19 (PZ-F). BREAK FOR LUNCH.
1100 BEGIN BREAKING THROUGH ASPHALT ON PZ-F (PT-14).

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PROJECT NUMBER: 00-152.15
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DAILY ACTIVITY REPORT

DATE: 11 FEB 2002

DESCRIPTION OF FIELD ACTIVITIES AND EVENTS

1110 SAMPLE AT 1.5 TO 3.0'. KEEP 2.5' TO 3.0' SAMPLE FOR ENVIRONMENTAL ANALYSIS.

1115 AT 4.5 TO 6.0' SAMPLE INTERVAL. KEEP 5.0-5.5' SAMPLE FOR ENVIRONMENTAL ANALYSIS.

1120 OBSTRUCTION IN BOREHOLE FORCES AUGERS TO THE SOUTH WEST. ABANDON BOREHOLE - MOVE 2' EAST WITHIN SAME CLEARED BOX.

1135 BEGIN BREAKING THROUGH ASPHALT ON SECOND ATTEMPT AT PZ-F.

1145 HIT REFUSAL AT 6' IN SECOND ATTEMPT. MOVE NORTH WEST OF PRIOR LOCATIONS FOR THIRD AND FINAL ATTEMPT.

1200 BEGIN BREAKING THROUGH ASPHALT ON THIRD ATTEMPT.

1220 AT 10.5', SAMPLER LOST INTO AUGERS. DRILLER OVERDRILLS TO 12' AND PULLS AUGERS TO RECOVER SAMPLER BUT SAMPLER IS NOT RECOVERED.

1235 DRILLER OVERDRILLS TO 15' TO RECOVER SAMPLER. NO SAMPLES TAKEN FROM 10.5' TO 15'.

1300 WELL SET AT 14.5'. 0.5' SILT TRAP, 10' OF 0.010" SCREENED PVC AND 4' OF BLANK CASING. FILTER PACK TO 3' BELOW GROUND SURFACE, BENTONITE SEAL TO 2' B.G.S., GROUT TO 1', INSTALL TRAFFIC BOX AND CEMENT IN PLACE.

1330 SET UP AT PZ-A (CPT-01).

1340 BEGIN GRIN BREAKING ASPHALT AT PZ-A.

1350 SAMPLE FROM 1-2'. KEEP SAMPLE FROM 1.0-1.5' FOR ENVIRONMENTAL ANALYSIS.

1355 SAMPLE FROM 3'-4.5' - RETAIN 3-3.5' SAMPLE FOR ENVIRONMENTAL ANALYSIS.

1405 LABEL SAMPLE FROM 5.0-5.5' (ABOVE WATER TABLE) FOR ENVIRONMENTAL ANALYSIS.

1910 KEEP SAMPLE OF POORLY GRADED SAND/CLAYEY SAND FOR GEOTECHNICAL ANALYSIS. (@ 6.5-7.0')

1425 BORING COMPLETED TO 15.5'. BEGIN WELL INSTALLATION. 0.5' SILT TRAP AT BOTTOM WITH 10' OF 0.010" SCREEN AND 5' OF BLANK PLACED INTO BOREHOLE. CASING ONLY GOES DOWN TO 14'.

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SITE LOCATION: 2277 7TH Street

DAILY ACTIVITY REPORT

DATE: 11 Feb 2002
PAGE 3 OF 3

DESCRIPTION OF FIELD ACTIVITIES AND EVENTS

1435 Water added to augers in order to force material from augers.
1440 Augers open to 15.5'=. Casing placed at bottom of borehole - sanding begun. Filter pack brought to 4' below ground surface, bentonite chips to 3', grout up to ~0.8' B.G.S..
1500 Traffic box installed and cemented into place. Pallet wall installed.
1525 Drillers depart. Rogerio and myself review todays core boxes.
1700 Finish logging for today. Put equipment and samples away.
1705 Depart site for home. Talk with Rachel on the way home regarding redrilling and sampling at PZ-C, D & F.

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PROJECT NAME: PORT OF OAKLAND
PROJECT NUMBER:
SITE LOCATION:

DAILY ACTIVITY REPORT

DATE: 12 FEB 2002
PAGE 1 OF 2

DESCRIPTION OF FIELD ACTIVITIES AND EVENTS

0655 ARRIVE ONSITE. CHECK WITH GUARD AND SUPERVISOR IN THREE RIVERS TRUCKING YARD ABOUT DRILL THIS MORNING.

0700 ROGERIO LEONG ONSITE. PID IS NOT FUNCTIONING. CHECK AGAIN WITH CHARGER - NOT WORKING.

0705 DRILLERS ONSITE.

0710 HOLD DAILY HEALTH & SAFETY MEETING. ATTENDEES: ROGERIO LEONG, JASON NEFF, DON PEARSON & ANGEL SALAZAR.

0720 SET UP DRILL RIG AT PZ-B (CPT-04).

0725 BEGIN BREAKING THROUGH ASPHALT.

0740 SAMPLE TAKEN FROM 1 TO 2.5'. KEEP 1.0 TO 1.5' SECTION FOR ENVIRONMENTAL ANALYSIS.

0745 SAMPLE TAKEN FROM 3.0' TO 4.5'. RETAIN 3.0 TO 3.5' PORTION OF SAMPLE FOR ENVIRONMENTAL ANALYSIS.

0750 SAMPLE TAKEN FROM 4.5' TO 6.0'. STORE THE 5.0 TO 5.5' SECTION FOR ENVIRONMENTAL ANALYSIS.

0800 SAMPLE TAKEN FROM 6.0 TO 7.5'. KEEP THE 7.0 TO 7.5' PART FOR ENVIRONMENTAL ANALYSIS. SAMPLE DOES NOT APPEAR TO BE IN WATER.

0820 OBSTRUCTION HIT AT 9.5'. DRILLER DRIVES SAMPLER TO 10' AND RECOVERS ROCKY / PRODUCT / CLAY SAMPLE.

0825 AT 13' DRILLER LOSES SAMPLER IN BOREHOLE. NO WAY TO RETRIEVE IT. DRILLER OPTS TO DRIVE SAMPLER TO BOTTOM OF BOREHOLE AND BUILD WELL. I WILL TAKE GRAB SAMPLES FROM AUGERS.

0845 DRILLERS AT 15.0 ~~15.5~~' agw. SAMPLER CAUSING PROBLEMS IN AUGERS. HAVE DRILLERS DRILL TO 15.0 ~~15.5~~' agw AND FOUND SAMPLER AHEAD OF AUGERS. BEGIN SETTING WELL AT 15.0 ~~15.5~~' agw WITH A 6" SILT TRAP AND 10' OF 0.010" SCREEN AND 5' OF BLANK CASING. FILTER PACK WAS BROUGHT TO 4' (½' ABOVE TOP OF SCREEN), BENTONITE CHIPS ADDED TO 3' BELOW GROUND SURFACE, GROUT TO APPROXIMATELY 1' B.G.S. AND TRAFFIC BOX CEMENTED INTO PLACE.

PREPARED BY: JAMES ANDERSON DATE: 12 FEB 2002

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PROJECT NUMBER: 00-152.15
SITE LOCATION: 2225 & 2277 7TH STREET

DAILY ACTIVITY REPORT

DATE: 12 FEB 2002

DESCRIPTION OF FIELD ACTIVITIES AND EVENTS

0915 MOVE DRILL RIG TO NEXT LOCATION PZ-E (CPT-24).
0920 BEGIN BREAKING THROUGH ASPHALT. UPON SETTING UP AT PZ-E DRILLER NOTES THE EXISTENCE OF OVERHEAD POWER LINES. UNABLE TO DRILL AT THIS LOCATION. PHONE RACHEL REGARDING THIS SITUATION. HAVE DRILLERS MOVE TO PZ-C TO TAKE ONE AND THREE FOOT SAMPLES. ANGEL STEAM CLEANS AUGERS.
0940 SAMPLE FROM 1' TO 2'. KEEP SAMPLE FROM 1.0 TO 1.5' FOR ENVIRONMENTAL ANALYSIS
0945 SAMPLE FROM 3.0' TO 4.0'. KEEP SAMPLE FROM 3.0 TO 3.5' FOR ENVIRONMENTAL ANALYSIS.
0950 FINISH AT PZ-C. MOVE DRILL RIG TO PZ-D TO SAMPLE.
0955 BEGIN BREAKING THROUGH ASPHALT AT PZ-D FOR 1' & 3' SAMPLES.
1000 SAMPLE FROM 1' TO 2'. KEEP SAMPLE FROM 1.0 TO 1.5' FOR ENVIRONMENTAL ANALYSIS
1010 SAMPLE FROM 3.0' TO 4.5'. KEEP SAMPLE FROM 3.0' TO 3.5' FOR ENVIRONMENTAL ANALYSIS.
1015 MOVE DRILL RIG AND EQUIPMENT TO PZ-F.
1020 BEGIN BREAKING THROUGH ASPHALT AT PZ-F.
1025 SAMPLE FROM 1' TO 2.5'. RETAIN 1.0 TO 1.5' SLEEVE FOR ENVIRONMENTAL ANALYSIS.
1030 SAMPLE FROM 3.0 TO 4.5'. KEEP THE SLEEVE FROM 3.0 TO 3.5' FOR ENVIRONMENTAL ANALYSIS.
1035 DRILLERS CEMENT PZ-C, D & F LOCATIONS.
1100 DRILLERS LOAD UP EQUIPMENT, SECURE SITE. ROGERIO CHECKS CHAIN OF CUSTODY AGAINST SAMPLES.
1115 BREAK FOR LUNCH.
1145 RESUME LOGGING SAMPLES. (1230) SAMPLES RELEASED TO PHIL RICHEY
1630 FINISH LOGGING SAMPLES. TO LAB TO INVENTORY SAMPLES.
1800 SAMPLES CHECKED. FINISH WORK FOR TODAY.

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SITE LOCATION: 2225 & 2277 7TH STREET

DAILY ACTIVITY REPORT

DATE: 13 FEB 2002
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DESCRIPTION OF FIELD ACTIVITIES AND EVENTS

1030 ARRIVE ONSITE. MEET WITH ROGERIO LEONG.
1035 HOLD DAILY HEALTH AND SAFETY MEETING. WORK ON BORING LOGS - PAPERWORK.
1210 GREGG DRILLING REPRESENTATIVES ARRIVE. DISCUSS JOB / PIEZOMETER PLACEMENT. GIVE SAFETY BRIEFING.
1230 SET UP AT PZ-E.
1240 HYDRO PUNCH (DIRECT PUSH) TO 4' (APPROXIMATELY 1' RECOVERY).
1250 SECOND TRY 4' TO 8' (APPROXIMATELY 3' RECOVERY) KEEP SAMPLE ABOVE WATER ESTIMATED FROM RECOVERY TO BE 5.5 TO 6.0' SECTION.
1255 SWITCH TO SPLIT SPOON SAMPLER. MOVE BOREHOLE LOCATION 2' EAST. BEGIN DIRECT PUSH (0-2').
1300 KEEP 1.0 TO 1.5' PORTION OF FIRST DIRECT PUSH SAMPLE FOR ENVIRONMENTAL ANALYSIS.
1305 SAMPLE FROM 2 TO 3.5', RETAIN 3.0 TO 3.5' PORTION OF RECOVERY FOR ENVIRONMENTAL ANALYSIS.
1310 SAMPLE REMAING 1.5' SECTION TO 5' (3.5 TO 5'). PLACE IN CORE BOX. BOREHOLE SAMPLED LIKEWISE FOR THE REMAINDER OF THE DRILLING (2', 1.5', 1.5').
1325 AT 15'. HAVE WELL PLACED AT BOTTOM OF BOREHOLE. 6" SILT TRAP (14.5 TO 15.0'), 10' OF 0.010" SCREENED PVC (4.5' TO 14.5'), 4.5' OF BLANK PVC (0 TO 4.5'). FILTER PACK PLACED 15 TO 3.5', BENTONITE SEAL 2.5' TO 3.5', GROUT ~0.8' TO 2.5', 6" MORRISON WELL BOX CEMENTED INTO PLACE.
1430 DRILLERS FINISH AT SITE. BREAK FOR LUNCH.
1535 BACK FROM LUNCH. SIGN SAMPLES (PRODUCT) OVER TO ROGERIO LEONG FOR CONTINUATION OF SAMPLING ON FRIDAY. GIVE ROGERIO EQUIPMENT NEEDED FOR SAMPLING.
1605 DEPART SITE FOR RENO.
1650 PASS OFFICE IN ROUTE TO NEXT JOB.

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Dry Acetate sheet "Reviewed by"

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PROJECT NAME: Port of Oakland
PROJECT NUMBER: 00-152.15
SITE LOCATION: 2225 & 2277 7th Street

DAILY ACTIVITY REPORT

DATE: 02/15/2002
PAGE 1 OF 1

DESCRIPTION OF FIELD ACTIVITIES AND EVENTS

7:30 Arrive at site. Surveyors already on site (Joe + Allen) performing survey on CPT points and piezometers.
7:40 Discuss briefly with Joe and show some other CPT points. Joe questioned whether or not Sanjay to have old wells surveyed as well (Called Rachel to confirm)
8:00 Get set up to check and sample product in all newly installed piezometers.
8:15 Lower slowly bailer at Pz-A(11). No product visible in groundwater. Water is clear and with no hydrocarbon odor.
8:20 Disposes bailer into drums.
8:30 At Pz-B(11) No visible product and hydrocarbon odor in the disposable bailer.
9:00 At Pz-F(14) Approximately 1/10 of 1-inch of product thickness was detected in bailer.
9:30 Extracted ~~20~~ 10 ml of product in 30 minutes.
9:45 At Pz-E(14)(24). No visible product in bailer. Water has a yellowish color with slight hydrocarbon odor.
10:00 At Pz-C(19). No visible product in bailer. Slight hydrocarbon odor in groundwater.
10:10 At Pz-D(20). No visible product in bailer. Slight hydrocarbon odor in groundwater
10:15 Return to Pz-F to extract more product out of the well
11:20 Collect 5ml of product in 1 hour. Product thickness decrease to less than 1/10 of an inch during sampling.
11:30 Surveyors leave site. I dispose ~~bailer~~ tubing and close off Pz-F.
11:40 Leave site.

02/15/02

PREPARED BY: Rogerio Leong DATE: 02/15/02
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PROJECT NAME: PORT OF OAKLAND
PROJECT NUMBER: 00-152.15
SITE LOCATION: 2225 & 2277 7TH STREET

DAILY ACTIVITY REPORT

DATE: 19 FEB 2002
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DESCRIPTION OF FIELD ACTIVITIES AND EVENTS

0720 ARRIVE ONSITE. BEGIN PAPERWORK
0725 GREGG DRILLING'S REPRESENTATIVE MOE RUUD ARRIVES ONSITE. DISCUSS JOB AND HOLD HEALTH & SAFETY MEETING.
0735 SET UP AT PZ-B. WATER LEVEL - 9.23', TOTAL DEPTH 14.9'.
0740 BEGIN SURGING SCREEN INTERVAL. AUTO CALIBRATE HORIBA. PH - 3.99, COND - 4.52 mS/cm, TURB - 0, D.O. - 10.81, TEMP - 11.6°C.
STD " - 4.00 " - 4.49 " - 0
0750 SET UP TO BAIL.
0804 BEGIN BAILING.
0820 FINISH BAILING. > 10 CASING VOLUMES REMOVED. HIGH TURBIDITY PARAMETERS STABILIZED. LET WELL WATER SETTLE PRIOR TO SAMPLING.
0830 SET UP AT PZ-A. W.L. - 7.41', T.D - 15.4'.
0835 BEGIN SURGING SCREEN INTERVAL.
0900 SAMPLE PZ-B FOR TPH GAS, BTEX + MTBE & TPH DIESEL & MOTOR OIL WITH SILICA GEL CLEANUP. SECURE WELL.
0905 BEGIN PURGING PZ-A.
0915 WELL IS DEWATERING. READINGS STABILIZED. LET RECOVER FOR SAMPLING.
0935 RESUME BAILING. WATER LEVEL STILL DROPPING.
0950 STOP PURGING @ 58%. WELL NOT MAKING WATER. READINGS STABILIZED. GET O.K. TO STOP PURGING FROM RACHEL HESS. LET WELL RECOVER FOR SAMPLING.
1000 SET UP AT PZ-D. W.L. - 5.95, T.D. - 15.5'
1005 BEGIN SURGING SCREEN INTERVAL.
1027 BEGIN BAILING WATER FROM WELL - SHEEN ON WATER.
1040 FINISH BAILING + 10 WELL VOLUMES. SECURE WELL
1050 AT PZ-A. PREPARE TO SAMPLE. W.L. - 7.95'
1100 SAMPLE PZ-A FOR TPH GAS, BTEX + MTBE & TPH DIESEL, MOTOR OIL WITH SILICA GEL CLEAN UP.
1105 HEAD TO PZ-F. W.L. - 7.72', T.D. - 14.7 (FLOATING PRODUCT)

PREPARED BY: JAMES ANDERSON DATE: 19 FEB 2002
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PROJECT NAME: ~~1225 & 2297 7th STREET~~ PORT OF OAKLAND
PROJECT NUMBER: 00-152.15
SITE LOCATION:

DAILY ACTIVITY REPORT

DATE: 19 FEB 2002
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DESCRIPTION OF FIELD ACTIVITIES AND EVENTS

1115 BEGIN SURGING PZ-F. HEAD TO PZ-D TO SAMPLE.
1130 SAMPLE PZ-~~A~~D FOR TPH GAS, BTEX + MTBE & TPH DIESEL, MOTOR OIL WITH SILICA GEL CLEANUP. BACK TO PZ-F
1145 BEGIN PURGING PIEZOMETER AT PZ-F.
1215 FINISH DEVELOPMENT AT PZ-F. LET SEDIMENT SETTLE PRIOR TO SAMPLING. MOVE DRUM TO DRUM STORAGE AREA. LABEL DRUM PZ-A, PZ-B, PZ-D & PZ-F PURGE WATER.
1235 HEAD TO PZ-C. W.L.- 6.21', T.D.- 15.5'.
1245 BEGIN SURGING PZ-C. HEAD BACK TO PZ-F TO SAMPLE
1305 FINISH SAMPLING AT PZ-F FOR TPH GAS, BTEX + MTBE & TPH DIESEL/MOTOR OIL WITH SILICA GEL CLEANUP.
1310 BACK AT PZ-C. BEGIN BAILING.
1330 FINISH DEVELOPMENT AT PZ-C. LET SEDIMENT SETTLE OUT. HEAD TO PZ-E. TRUCK TRAILER NEEDS TO BE MOVED PRIOR TO SET UP AT PZ-E.
1350 SET UP AT PZ-E. W.L.- 6.21', T.D.- 15.5'.
1355 BEGIN SURGING AT PZ-E. HEAD BACK TO PZ-C TO SAMPLE.
1400 BEGIN SAMPLING AT PZ-C FOR TPH GAS, BTEX + MTBE, TPH DIESEL/MOTOR OIL WITH SILICA GEL CLEANUP. TAKE DUPLICATE HERE LABELED DUP-A @ (1440 TIME).
1420 BACK AT PZ-E. BEGIN BAILING.
1500 FINISH BAILING AT PZ-E. LET WATER SETTLE PRIOR TO SAMPLING. TAKE PURGE WATER DRUM TO DRUM STORAGE AREA. TOTAL OF 13 DRUMS (2 WATER FROM PZ DEVELOPMENT, 2 WATER FROM MW-8A, 9 SOIL [1 PARTIAL + PPE]).
1515 SAMPLE PZ-E FOR TPH GAS, BTEX + MTBE & TPH DIESEL/MOTOR OIL WITH SILICA GEL CLEAN UP.
1530 GREGG DEVELOPER DEPARTS SITE.
1600 I DEPART SITE FOR LAB - BREAK FOR LUNCH.
1820 AT LAB DROP OFF SAMPLES.
1830 FINISH WORK FOR TODAY.

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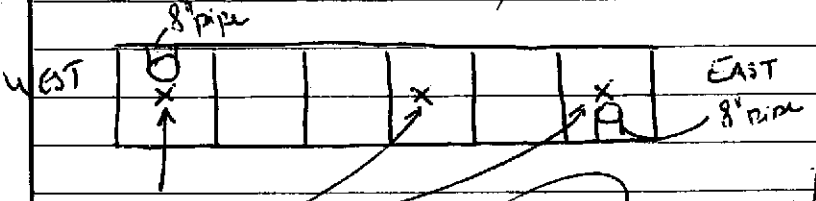
PROJECT NAME: 00.152.15
PROJECT NUMBER: Port of Oakland
SITE LOCATION: 2277 7th Street, Oakland Ca

DAILY ACTIVITY REPORT

DATE: 03/11/02
PAGE 1 OF 1

DESCRIPTION OF FIELD ACTIVITIES AND EVENTS

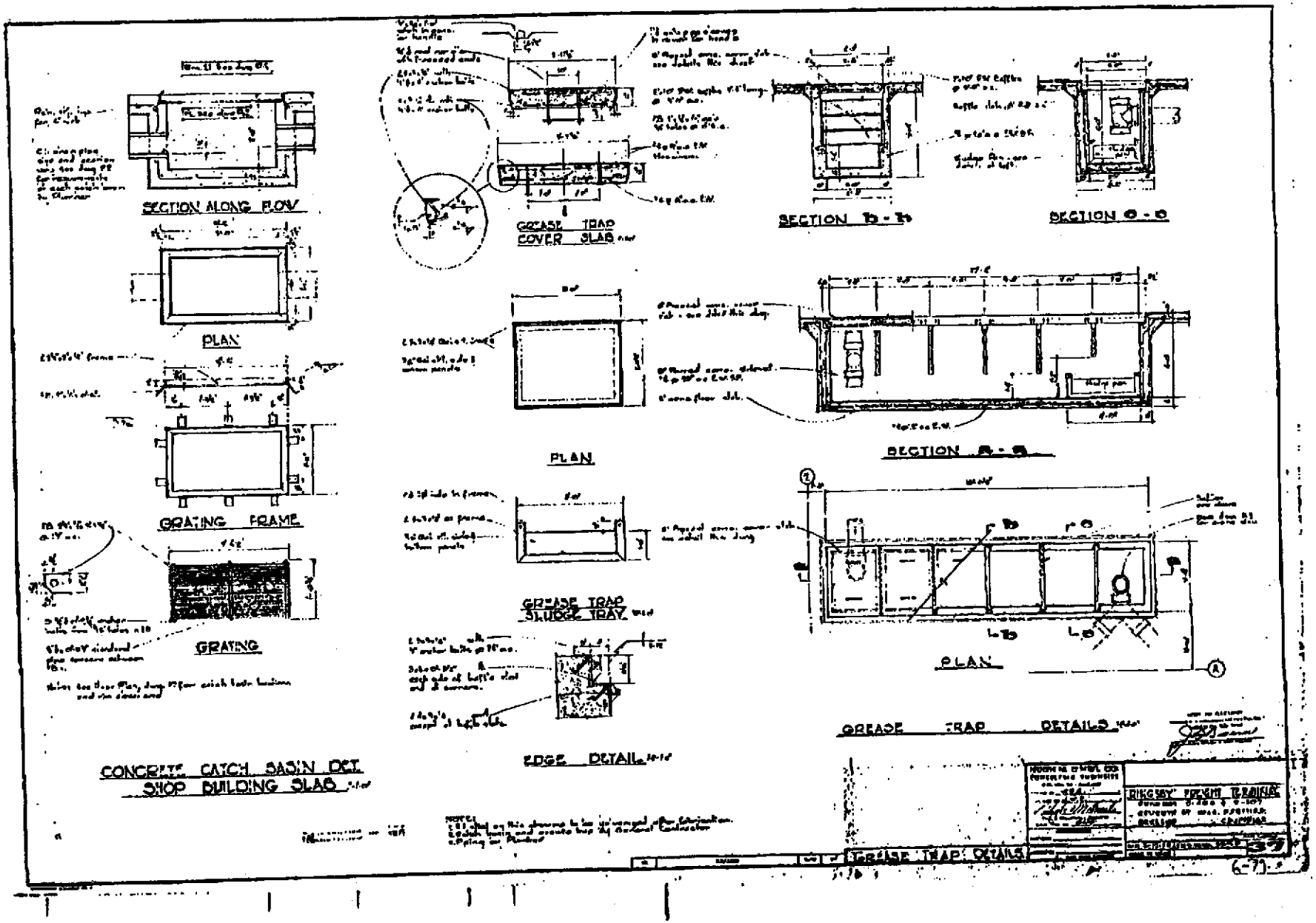
7:10 Calls Dave Newck (Port of Oakland) to confirm forklift schedule at 9:00 AM at site.
9:00 Arrive at sit and meet jack (Port of Oakland) forklift operator and Show him location of Grease Trap Catch Basin at the south end of Building C407 adjacent to wash rack.
9:10 Begin lifting the west end of the Grease Trap. No visible oil product is noted inside the 8" galvanized pipe as well as the standing water in the Catch Basin Concrete. Bailer confirms that water is clear with no odor.
9:15 Lift the west end of the concrete lid. A 8" galvanized pipe containing liquid is observed. Bailer reveals oily coating (very light) and very slight hydrocarbon odor from the liquid retrieved inside the 8" galvanized pipe. Water appearance is clear. A very light sheen is noted on the surface water.
9:20 Lift Concrete lid from the center of the Concrete Catch Basin, Water is clear with no odor.
9:30 Put concrete lids back
10:10 Leave site to office



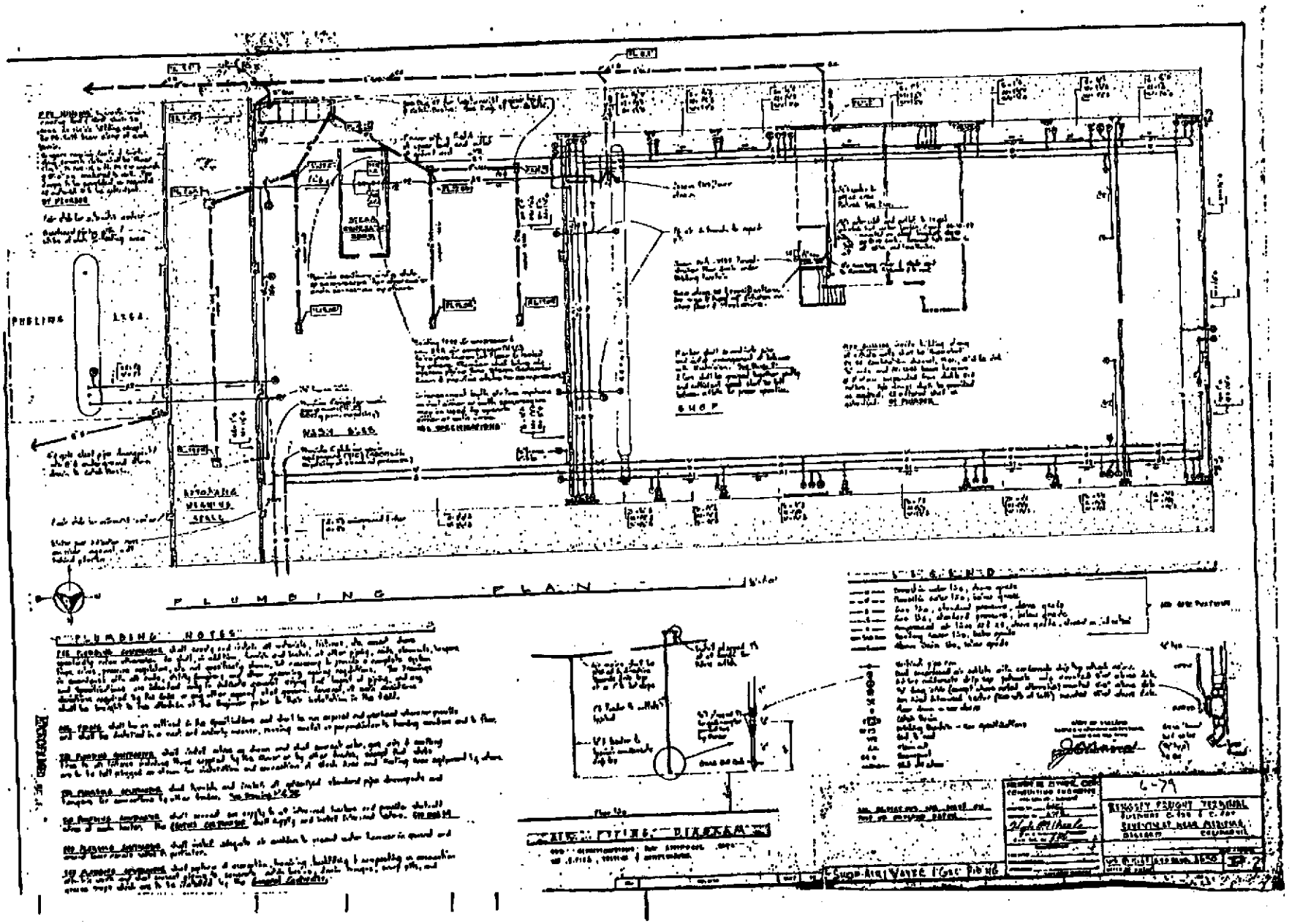
03/11/02

PREPARED BY: Rogelio Leong
DATE: 03/11/02
PREPARER'S SIGNATURE:

Mar-04-02 10:52am From-Iris Environmental T-180 P.007/003 F-913 510 834 4199



Mar-04-02 10:53am From-Iris Environmental 510 834 4199 T-180 P.008/003 F-813



ITSI Innovative Technical Solutions, Inc.
2730 Shadlands Drive, Suite 100
Walnut Creek, California 94598
(925) 946-3100 (Tel), (925) 256-8998 (Fax)

PROJECT NAME: Port of Oakland
PROJECT NUMBER: 00152.15 — 05
SITE LOCATION: 2277 & 2225 7th Street, Oakland

DAILY ACTIVITY REPORT

DATE: 3-25-02
PAGE 1 OF 1

DESCRIPTION OF FIELD ACTIVITIES AND EVENTS

0700 AT site system running.
0900 H&S meeting — introductions - Precision will be working two crews
IRIS - Chris - Head
Emily - Hydro
Elaina - Geologist (Environmental)
Mike - Geologist
Port of Oakland John Prull at site. Reminded to put on safety (hat & vest)
Precision installing - 2" wells to @ 10-15' bgs - using XD rigs to "core" & collect soil samples.
IRIS to collect soil samples, groundwater samples, & Air samples from the bore holes.
IRIS will use Elaina to run one rig and Mike to run the other. Chris will oversee & give direction, Emily will provid support between both rigs.

IISE presence on site — look for transition zone from (bottom-up) sand-clay-sand to sand-clay-silt north toward building C-401
② Collect product samples when encountered
③ Observe IRIS

Bill White calls — will be out on site on 3-26-02
9:45 MFC-19 — one crew working near Bldg C-401
9:30 MFC-31 - one crew working near - Bldg C-406
10:40 MFC-18 -
MFC-14 - no sheen
IRIS Asks about how long to leave monitoring wells in after installation? Told IRIS the longer the better to give product (if present) a chance to accumulate in wells. Precision will cut the wells a little below grade & put a small plate over the bore hole for protection. The protection works.
MFC-33 small product-like sheen on mucin of VOA sample
MFC-18 - no observable product - slight sheen or emulsion - leave well in
MFC-19 " " very slight sheen or emulsion - leave well in
MFC-35 set temp well
MFC-37 2:00 drilling
MFC-16 2:40 drilling
MFC-15 Refusal at 8' bgs. No step out → not cleared. Could not tell if Concrete or something else.
4:00PM Begin to wind down - start to clean-up.
Precision puts plates on wells.
IRIS stores soil cores in Bldg C-407 in cardboard boxes.

PREPARED BY: Tim Watchers
PREPARERS SIGNATURE: T. Watchers
DATE: 3-25-02

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PROJECT NAME: Port of Oakland
PROJECT NUMBER: 00152.15 - 05
SITE LOCATION: 2277 & 2225 7th Street Oakland

DAILY ACTIVITY REPORT

DATE: 3-26-02
PAGE 1 OF 1

DESCRIPTION OF FIELD ACTIVITIES AND EVENTS

Prep at site with XD + SD rig. There was hard material the first few feet at 2277 7th St. Decided to use stronger rig.
MFC - 37 sampled for water - very small product globs in water
MFC - 38 no product on water
MFC - 40 no product on water
Re-check MFC - 19. Product in well - collect samples & take pictures
Re-check MFC - 18. Product in well - collect samples & take pictures

Call Bill White. 925-946-3148 not there - cell 925-250-9977. Calls back says in route. Ask about well keys? The wells at the site are locked.
0900 Jeff Rubin at site. Bill White & Jeff Rubin look at treatment system & walk near Bldg C-401 while talking
Set well casing in MFC-8 - same type of soil material as MFC-16. MFC-16 is dry - no water
Begining to encounter different color material in MFC 8+9 as compared to green material found in MFC 14-15-16 Today, south of 14-15-16 the material is brown.
MFC-41 no product when water sampling
Walk site with Bill White - locate storm drains, utilities, for Bill White's estimate
MFC-15 - Chris noted possible sm small product globs or emulsion on water
Elaine to do MFC-17 then move to platform of building C-401 & continue
10:45 begin MFC-17
1145 on platform Bldg C-401
1230 no product MFC-44
Check more monitoring wells - wells are secured & locked.
1:45 collect additional product from MFC-19 @ ½" of product in water
1:50 " " MFC-18 @ ½" of product in water
2:25 check MW-1 south of Bldg C-401. There is @ 4" of product in well. The product skimmer is set above the product layer. Could be the tidal influence - but not adjust the skimmer. Collect product samples. Re-play the product.
MW-3 at Bldg C-401 is part of the active system. Did not check MW-3 for product. Did not want to interfere w/ the active product recovery system.
Took soil samples from MFC-4, 5, 6, 7, 8, 9, 14, 15, 16, 17, at 8' bsg put VOA & added water & shook. Arranged VOAs in order as the MFC & looked for similarities or differences in the sediment sequences. Took color pictures for later evaluation.
5:30PM secured site by Caverion. There is also a mobile lab set-up in a bay of Bldg C-401.
Air sampling begins at MFC-17 @ 4' bsg.
" " MFC-16 "
" " MFC-15 " Prior sample begin again possibly 3-27-02

PREPARED BY: Tim Matthews
PREPARERS SIGNATURE: T. Matthews
DATE: 3-26-02

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PROJECT NAME: Port of Oakland
PROJECT NUMBER: 00152.15 — 05

DAILY ACTIVITY REPORT

DATE: 3-27-02
PAGE 1 OF 3

SITE LOCATION: 2277 & 2225 7th Street, Oakland

DESCRIPTION OF FIELD ACTIVITIES AND EVENTS

0700 on site

MFC-6 no product during water sampling
MFC-7 no product - well goes dry - very sediment rich water
MFC-13 installed
MFC-12 installed
MFC-5 no product 3-27-02
MFC-27 installed
MFC-28 "
MFC-24 "
MFC-11 installed
MFC-4 no product 3-27-02 goes dry during sampling
MFC-8 goes dry during sampling - no product
MFC-9 no product

Called Bill White - told him lithology from MFC-11, 12, 13 SAND - 8' bsg no odors & info @ products in MW's from monitoring

MFC-2 installed
MFC-3 installed
MFC-46 - step out south on platform Bldg C-406
MFC-20 - step out north on platform Bldg C-406
MFC-10
@ 2:10 Port of Oakland - white truck - looks at drums at site
@ 2:30 " leaves site
Drum inventory - 13 drums on site. Drums located north of Bldg C-401

Drum #	Contents 1 2 3 etc. → 0 0 0 0 0	Bldg C-401
1	H_2O	PZ-C, PZ-E
2	H_2O	PZA, PZ-B, PZ-D, PZ-F
3	Soil	PZ-E
4	Soil	PZ-B 12 Feb 02
5	Soil	PZ-C, PZ-D, PZ-F & Core samples
6	Soil	PZ-A cores PZ-A, PZ-B, PZ-E
7	Soil	PZ-F
8	Soil	PZ-C
9	Soil	PZ-D
10	H_2O	PZ-A PZ-E
11	Soil	MW-B & PPE → Put disposable bucket & PPE Here -
12	H_2O	SAT 2001
13	Soil	MW-B

2:30 Finish drilling at C-401 & C-407

PREPARED BY: Tim Leitchou
PREPARERS SIGNATURE: T Leitchou
DATE: 3-27-02

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PROJECT NAME: Port of Oakland
PROJECT NUMBER: 00152.15 - 05
SITE LOCATION: 2277+2225 7th St., Oakland

DAILY ACTIVITY REPORT

DATE: 3-27-07

DESCRIPTION OF FIELD ACTIVITIES AND EVENTS

MFC-20 (step out at Bldg C-406 - strong odor @ 18' bgs. Collect small portion + place in VOA w/ H_2O, Shake. No product on top of water in VOA. Product does not seem to be trapped in the interstitial spaces between pores.
4:10 St.11 no product in VOA sample w/ water + sediment of MFC-20 However product was seen on flight rods threads when extracting.

Precision begins Air sampling at C-401 - Air samples at MFC-3, MFC-15, MFC-14, MFC-10, MFC-13, and MFC-1.

Recon at locations MFC-7 + MFC-5 for Air sample collection.
Start drilling at MFC-26

Collect air samples at MFC-5 + MFC-7

PREPARED BY: Tim Hutchins
PREPARERS SIGNATURE: T. Hutchins
DATE: 3-27-07

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PROJECT NAME: Port of Oakland
PROJECT NUMBER: 00152.15 – 05
SITE LOCATION: 2274 & 2225 7th Street, Oakland

DAILY ACTIVITY REPORT

DATE: 3-27-02
PAGE 3 OF 3

DESCRIPTION OF FIELD ACTIVITIES AND EVENTS

Precision on site - Continue installing monitg wells
Monitor wells (on site) for DTW & DTP.

Bldg C-401

	Depth to water (DTW)	Depth to Product (DTP) 4" product	Comments
MW-1	—	—	collect sample
MW-2	8.29	—	2" well
MW-3	—	—	pump system
MW-4	7.94	—	2" cap needs replaced
MW-5	6.14	—	2" cap needs replaced
MW-6	7.23	—	2" well replaced cap + locks
MW-7	8.38	—	2" roadroad box lid broken
MW-8	7.67	—	2" well
PZ-A	7.36	—	2"
PZ-B	6.09	—	2"
PZ-F	7.35	—	2"

Bldg C-407

	DTW	DTP	Comments
MW-1	5.17	—	4" well
MW-2	5.54	—	4" well put lock + cap
PZ-C	6.17	—	2" well
PZ-D	5.91	—	2" well put caps lock on

Bldg C-406

	DTW	DTP	
MW-3	3.46	—	4" well
PZ-E	5.94	—	4" well

Visual check w/ bailer because of approximity to suspected product plume

PZ-C - no product – clear water
PZ-D ✓ ✓ ✓
MW-2
MW-5 no product – clear water
PZ-F product was smeared on side of bailer - strong sheen on water <0.01
MW-6 no product – clear water
MW-7 ✓ ✓
PZ-E no product – clear water

Returned on 3-28-02
replaced road box lid on MW-7 at Bldg C-401
replaced 2" cap on MW-4 at Bldg C-401
replaced 2" cap on MW-5 at Bldg C-401

PREPARED BY: Tim Watchers
PREPARERS SIGNATURE: T-Watchers
DATE: 3-27-02

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PROJECT NAME: Port of Oakland
PROJECT NUMBER: 00152.15 – 05
SITE LOCATION: 2277 + 2225 7th St., Oakland

DAILY ACTIVITY REPORT

DATE: 3-28-02
PAGE 1 OF 2

DESCRIPTION OF FIELD ACTIVITIES AND EVENTS

0700 -
check product level MFC-19 — .75"
MFC-18 — 1.25"

MFC-3 water clear when water sampling
Begin drilling MFC-23
Air Sample MFC-28, MFC-29, —
MFC-13 no product when water sampling
MFC-12 no product when water sampling
MFC-11 "
MFC-25 "
MFC-27 "

Precision - begins to pull well casing. Follow Precision from well to well + inspect well casings for for signs of products. Take pictures for photo documentation.

ABANDON -
MFC-17 0.01 foot of product similar to MFC-18, & MFC-19 picture
MFC-19 .03 foot of product picture
MFC-18 0.25 foot of product picture
MFC-8 clear screen, no product in bailer - muddy "
MFC-9 "
MFC-31 0.01 of product @ 4" at 2:00 pm
MFC-30 dry - soil boring @ 7' bsg
MFC-15 Clear water - some mud on screen "
MFC-14 " "
MFC-13 " "
MFC-5 " "
MFC-6 " "
MFC-35 Trace of product - screen smeared w/ product (6"s) picture "
MFC-36 " "
MFC-20 "
MFC-40 Clear water - no product - screen muddy "
MFC-41 " "
MFC-44 " "
MFC-39 " "
MFC-38 "
MFC-46 no water

MFC-1 clear H_2O when water sampling "
MFC-2 "
MFC-3 clear H_2O when water sampling

PREPARED BY: Tim Leatherman
PREPARERS SIGNATURE: T-Leatherman
DATE: 3-28-02

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DAILY ACTIVITY REPORT

PROJECT NAME: Port of Oakland
PROJECT NUMBER: 00152.15 -05
SITE LOCATION: 2277 & 2225 7th St., Oakland
DATE: 3-28-02

DESCRIPTION OF FIELD ACTIVITIES AND EVENTS

1200
Foss Environmental removes drums invetoried at Bldg C-401 on 3-25-02.

Continue abandonments
MFC-25 clear water - muddy casing
MFC-28 " "
MFC-27 clear water - muddy casing

MFC-31 product at @ 0.25" product smeared on screen - picture
MFC-33 trace of product - product smeared on screen

MFC-21 dry during abandonment
MFC-23 clear H_2O during sampling
MFC-16 still dry - Abandon well
MFC-15 abandon soil boring
ABANDONMENTS
MFC-12 slight sheen on water surface - product stain on screen
MFC-11 muddy screen
MFC-1 clean water in bailer - mud on screen "
MFC-2 "
MFC-3 "
MFC-23 clear water in bailer - mud on screen

MFC-26 clear water during sampling
MFC-36 clear water during abandonment
MFC-45 " "
MFC-34 " "
MFC-26 clear water during abandonments
ABANDONMENTS
MFC-20 hollow screen product smeared -
MFC-4 clean water + screen during abandonments
MFC-7 "
MFC-21 clean water + screen during abandonment
MFC-22 soil boring - dry - abandon
MFC-46 soil boring - dry - abandon "
MFC-24 " "
MFC-29 " "
MFC-32 " "
MFC-43 soil boring - dry abandonment
MFC-42 abandon mw- dry unit see if.

PREPARED BY: Tim Watchers
PREPARERS SIGNATURE: T. Watchers
DATE: 3-28-02

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PROJECT NAME: Port of Oakland
PROJECT NUMBER: 00152.15-05
SITE LOCATION: 2277 & 2225 7th St., Oakland

DAILY ACTIVITY REPORT

DATE: 3-20-02
PAGE 1 OF 2

DESCRIPTION OF FIELD ACTIVITIES AND EVENTS

Summary of screen condition during the ABANDONMENTS. OBSERVATIONS

Well or Soil Boring #	Condition	Product	Comments
MFC-1	clear - muddy	—	
2	clear - muddy	—	
3	clear - muddy	—	
4	clear - muddy	—	
5	clear - muddy	—	
6	clear - muddy	—	
7	muddy screen	—	
8	clear - muddy	—	
9	clear - muddy	—	
10	—	—	soil boring
11	muddy screen	—	
12		Slight sheen	product smear on screen
13	muddy screen	—	
14	muddy screen	—	
15	muddy screen	—	
16	dry	—	dry well
17	product on screen	0.01	picture
18	product on screen	~~ore~~ 0.25	picture
19	product on screen	0.05	picture
20	product on screen	trace	picture
21	dry	—	another tone
22	soil boring dry	—	—
23	clear water	—	
24	soil boring	—	
25	clear muddy screen	—	
26	clear - muddy screen	—	
27	clear - muddy screen	—	
28	clear - muddy screen	—	
29	soil boring dry	—	
30	dry - soil boring	—	
31	product on screen dry - soil boring	trace ¼"?	picture
32	dry - soil boring	—	
33	product on screen	trace	
34	clear H_2O	—	
35	product on screen	trace	
36	clear H_2O	—	
37	product on screen	trace	
38	clear H_2O / muddy	—	
39	clear H_2O / muddy	—	
40	clear H_2O / muddy	—	
41	clear H_2O / muddy	—	
42	——— did not see this being abated ———		

PREPARED BY: Tim Leitheiser
PREPARERS SIGNATURE: T. Leitheiser
DATE: 3/28/02

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PROJECT NAME: Port of Oakland
PROJECT NUMBER: 00152.15-05
SITE LOCATION: 2277 + 2225 7th St., Oakland

DAILY ACTIVITY REPORT

DATE: 7-28-02

DESCRIPTION OF FIELD ACTIVITIES AND EVENTS

MFC-43	Soil boring - dry
44	Clear H_2O - muddy screen
45	clear H_2O drip blank
46	Soil boring dry

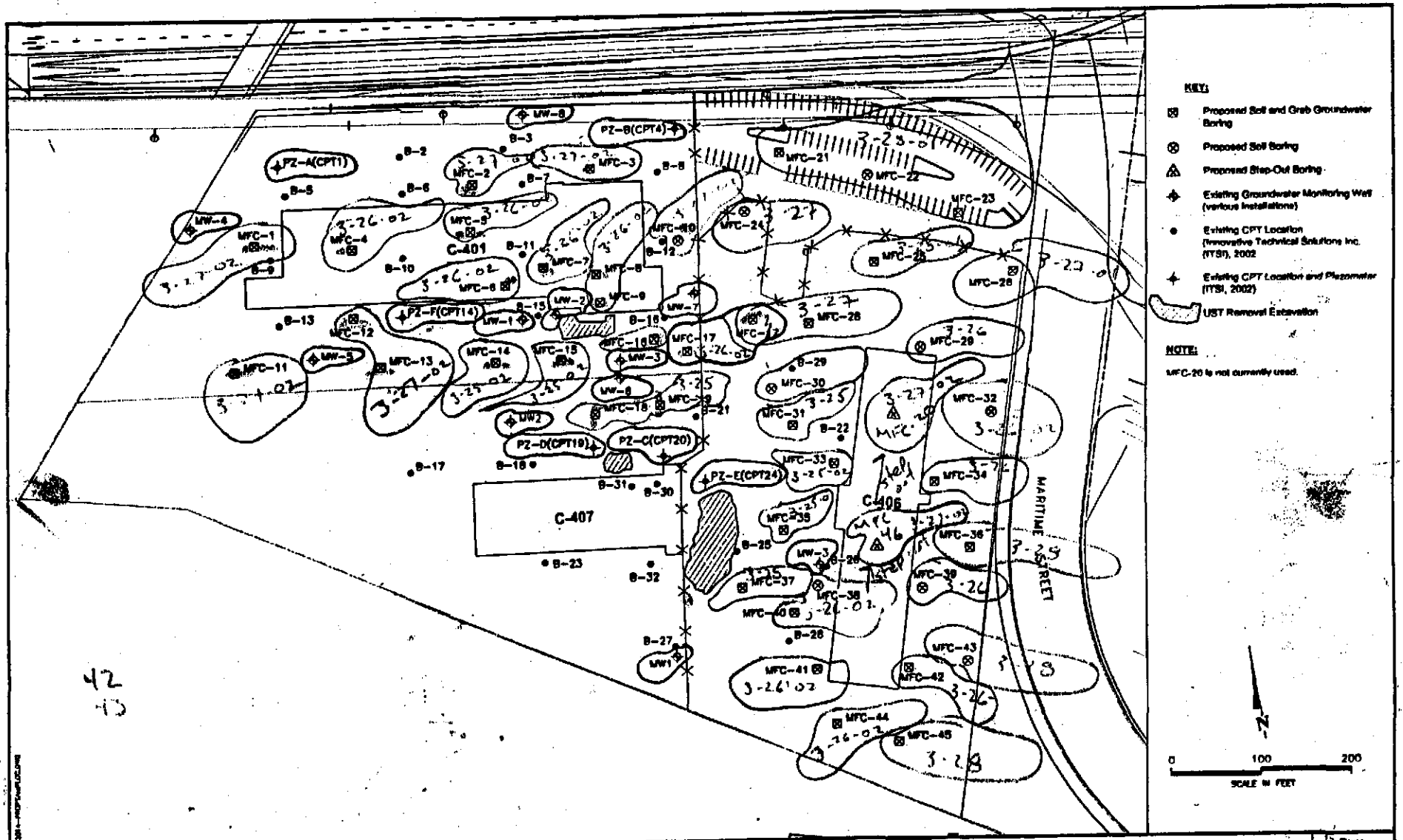
Wells + MFC contain product at site during the ERIS Investigation

Number	Location	Product Sheen	Screen
MFC-12	C-401	yes	
MFC-17	C-401	0.01	"
MFC-18	C-407	0.25	"
MFC-19	C-407	0.05	"
MFC-20	C-406	trace *	"
MFC-31	C-406	trace ½" *	"
MFC-33	C-406	trace *	"
MFC-35	C-406	trace *	"
MFC-37	C-406	trace *	"

* Trace amount of product is sheen like in appearance but not at measureable levels -
There was not product in sufficient amounts to collect from soil borings with trace amounts.

PREPARED BY: Tim Watchers
PREPARERS SIGNATURE: T. Watchers
DATE: 7-28-02

2-MFC47



IRIS ENVIRONMENTAL	Proposed Sampling Locations Port of Oakland Future Port Field Support Services Complex 2225 and 2277 7th Street Oakland, California	Figure 3
Drafter: MAS	Date: 3/18/02 Contract Number: 01-201A Approved: Revised:	

Innovative Technical Solutions, Inc.

TAILGATE SAFETY MEETING

19 JWC

DATE 15 FEBRUARY 2002 TIME 0725 JOB NUMBER 00-152.15

CUSTOMER PORT OF OAKLAND ADDRESS 530 WATER ST. OAKLAND, CA.

SPECIFIC LOCATION 2225 & 2277 7TH STREET OAKLAND, CA.

TYPE OF WORK PIEZOMETER DEVELOPMENT & SAMPLING

CHEMICALS USED

SAFETY TOPICS PRESENTED

PROTECTIVE CLOTHING/EQUIPMENT LEVEL D. HARD HAT, SAFETY GLASSES, REFLECTIVE SAFETY VEST, STEEL TOED BOOTS.

CHEMICAL HAZARDS PURGE WATER (PRODUCT)

PHYSICAL HAZARDS MOVING RIG PARTS, TRUCK TRAFFIC, SLIP, TRIP & FALL HAZARDS

EMERGENCY PROCEDURES CALL 911 - FOLLOW EMERGENCY PERSONNELS DIRECTIONS.

HOSPITAL SUMMIT MEDICAL CENTER PHONE(510)869-6600 AMBULANCE PHONE 911

HOSPITAL ADDRESS 350 HAWTHORNE AVE. OAKLAND, CA.

SPECIAL EQUIPMENT DEVELOPMENT RIG

OTHER

ATTENDEES

PRINTED NAME	SIGNATURE
MOE RUUD	Moe Ruud

CONDUCTED BY: JAMES ANDERSON SIGNATURE: James Anderson

SUPERVISOR

ITSSafetymtg.xls

Innovative Technical Solutions, Inc.

TAILGATE SAFETY MEETING

DIVISION/SUBSIDIARY FACILITY

DATE 13 FEB 2002 TIME 1035 / 1220 JOB NUMBER 00-152.15

CUSTOMER PORT OF OAKLAND ADDRESS 530 WATER ST. OAKLAND, CA.

SPECIFIC LOCATION 2225 7TH STREET

TYPE OF WORK DRILLING / LOGGING

CHEMICALS USED DIESEL FUEL, GASOLINE, CEMENT

SAFETY TOPICS PRESENTED

PROTECTIVE CLOTHING/EQUIPMENT LEVEL D

CHEMICAL HAZARDS DIESEL FUEL, GASOLINE, CEMENT, UNDERGROUND PRODUCT.

PHYSICAL HAZARDS MOVING PARTS ON DRILL RIG, TRUCK TRAFFIC, OVERHEAD LINES

EMERCENCY PROCEDURES CALL 911

HOSPITAL SUMMITT MEDICAL CENTER PHONE (510) 869-4000 AMBULANCE PHONE 911

HOSPITAL ADDRESS 350 HAWTHORNE AVE. OAKLAND, CA.

SPECIAL EQUIPMENT DRILL RIG / PID

OTHER BE VERY CAREFUL

ATTENDEES

PRINTED NAME	SIGNATURE
Rogesio Leong	
Bobby Pearson	
Vincent Delgado	

CONDUCTED BY: JAMES ANDERSON SIGNATURE:

SUPERVISOR

Innovative Technical Solutions, Inc.

TAILGATE SAFETY MEETING

DIVISION/SUBSIDIARY FACILITY

DATE 12 FEB 2002 TIME 0710 JOB NUMBER 00-152.15

CUSTOMER PORT OF OAKLAND ADDRESS 530 WATER STREET OAKLAND, CA.

SPECIFIC LOCATION 2225 & 2277 SEVENTH STREET OAKLAND, CA.

TYPE OF WORK DRILLING / PIEZOMETER INSTALLATION

CHEMICALS USED DIESEL FUEL, GASOLINE, CEMENT

SAFETY TOPICS PRESENTED

PROTECTIVE CLOTHING/EQUIPMENT LEVEL D

CHEMICAL HAZARDS DIESEL FUEL, GASOLINE, CEMENT, PRODUCT

PHYSICAL HAZARDS DRILL RIG MOVING PARTS, STEAM CLEANER

EMERCENCY PROCEDURES CALL 911 FOLLOW EMERGENCY PERSONNELS DIRECTIONS.

HOSPITAL PHONE AMBULANCE PHONE

HOSPITAL ADDRESS

SPECIAL EQUIPMENT

OTHER

ATTENDEES

PRINTED NAME	SIGNATURE
ROGELIO LEONG	
DON PEARSON	
ANGEL SEDANO	
J. NEFF	

CONDUCTED BY: JAMES ANDERSON SIGNATURE:

SUPERVISOR

Innovative Technical Solutions, Inc.

TAILGATE SAFETY MEETING

DIVISION/SUBSIDIARY FACILITY

DATE 11 FEBRUARY 2002 TIME 0720 JOB NUMBER

CUSTOMER PORT OF OAKLAND ADDRESS 530 WATER ST.

SPECIFIC LOCATION 2225 & 2277 7TH STREET

TYPE OF WORK DRILLING, SAMPLING, PIEZOMETER INSTALLATION

CHEMICALS USED DIESEL FUEL, GASOLENE, CEMENT

SAFETY TOPICS PRESENTED

PROTECTIVE CLOTHING/EQUIPMENT

CHEMICAL HAZARDS DIESEL, GAS, UNDERGROUND PRODUCT

PHYSICAL HAZARDS DRILLING EQUIPMENT

EMERCENCY PROCEDURES CALL 911 - FOLLOW EMERGENCY PERSONNELS DIRECTIONS

HOSPITAL PHONE AMBULANCE PHONE

HOSPITAL ADDRESS

SPECIAL EQUIPMENT

OTHER

ATTENDEES

PRINTED NAME	SIGNATURE
ROGERIO LEONG	
Jason Neff	
DON PEARSON	
Angel Salazar	

CONDUCTED BY: JAMES ANDERSON SIGNATURE:

SUPERVISOR

ITSTailgate

Innovative Technical Solutions, Inc.

TAILGATE SAFETY MEETING

DATE 1 Feb 2002 TIME 0900 JOB NUMBER 00-152.15

CUSTOMER Port of Oakland ADDRESS 530 Water Street 2nd Floor Oakland, California

LOCATION 2277 7th Street and 2225 7th Street Oakland, California

TYPE OF WORK Cone Penetration Testing

CHEMICALS USED Deisel fuel, Gasoline

SAFETY TOPICS PRESENTED

PROTECTIVE CLOTHING/EQUIPMENT Modified Level D

CHEMICAL HAZARDS DIESEL FUEL

PHYSICAL HAZARDS Inclimate Weather, slips, trips and falls, moving equipment and machinery

EMERGENCY PROCEDURES Call 911- Follow Emergency Personnels Instructions

HOSPITAL Summit Medical Center PHONE (510) 869-6600 AMBULANCE PHONE 911

HOSPITAL ADDRESS 350 Hawthorne Ave. Oakland California

SPECIAL EQUIPMENT Cone Peretration Testing Rig

OTHER

ATTENDEES

PRINTED NAME	SIGNATURE
Rogerio Leong	
Todd Gee	
Terry Hornsby	

CONDUCTED BY: James Anerson SIGNATURE:

SUPERVISOR James Anderson

Innovative Technical Solutions, Inc.

TAILGATE SAFETY MEETING

DATE 31 JANUARY 2002 TIME 0800 JOB NUMBER 00-152.15

CUSTOMER Port of Oakland ADDRESS 530 Water Street 2nd Floor Oakland, California

LOCATION 2277 7th Street and 2225 7th Street Oakland, California

TYPE OF WORK *Cone Penetration Testing*

CHEMICALS USED Deisel fuel, Gasoline

SAFETY TOPICS PRESENTED

PROTECTIVE CLOTHING/EQUIPMENT Modified Level D

CHEMICAL HAZARDS

PHYSICAL HAZARDS Inclimate Weather, slips, trips and falls, moving equipment and machinery

EMERGENCY PROCEDURES Call 911- Follow Emergency Personnels Instructions

HOSPITAL Summit Medical Center PHONE (510) 869-6600 AMBULANCE PHONE 911

HOSPITAL ADDRESS 350 Hawthorne Ave. Oakland California

SPECIAL EQUIPMENT Cone Peretration Testing Rig

OTHER

ATTENDEES

PRINTED NAME	SIGNATURE
Todd Cox	
JORGE TORRES	
German Garcia	
Rogelio Leon	

CONDUCTED BY: James Anerson SIGNATURE:

SUPERVISOR James Anderson

ITSI tailgate 7th st.xls

Innovative Technical Solutions, Inc.

TAILGATE SAFETY MEETING

DATE 30 January 2002 TIME 0800 JOB NUMBER 00-152.15

CUSTOMER Port of Oakland ADDRESS 530 Water Street 2nd Floor Oakland, California

LOCATION 2277 7th Street and 2225 7th Street Oakland, California

TYPE OF WORK Cone Penetration Testing

CHEMICALS USED Deisel fuel, Gasoline

SAFETY TOPICS PRESENTED

PROTECTIVE CLOTHING/EQUIPMENT Modified Level D

CHEMICAL HAZARDS

PHYSICAL HAZARDS Inclimate Weather, slips, trips and falls, moving equipment and machinery

EMERGENCY PROCEDURES Call 911- Follow Emergency Personnels Instructions

HOSPITAL Summit Medical Center PHONE (510) 869-6600 AMBULANCE PHONE 911

HOSPITAL ADDRESS 350 Hawthorne Ave. Oakland California

SPECIAL EQUIPMENT Cone Peretration Testing Rig

OTHER

ATTENDEES

PRINTED NAME	SIGNATURE
JORGE TORRES	Jorge Torres
German Garcia	German G.
Todd Gee	
Ray Jeffrey	
ROGELIO LEONG	

CONDUCTED BY: James Anerson SIGNATURE: James Anderson

SUPERVISOR James Anderson

ITSItailgate 7dc m.xls

Innovative Technical Solutions, Inc.

TAILGATE SAFETY MEETING

DATE 29 JAN 2002 TIME 0730 JOB NUMBER 00-152.15

CUSTOMER Port of Oakland ADDRESS 530 Water Street 2nd Floor Oakland, California

LOCATION 2277 7th Street and 2225 7th Street Oakland, California

TYPE OF WORK Cone Penetration Testing

CHEMICALS USED ~~Deisel~~ Fuel, Gasoline
DIESEL

SAFETY TOPICS PRESENTED

PROTECTIVE CLOTHING/EQUIPMENT Modified Level D

CHEMICAL HAZARDS DIESEL

PHYSICAL HAZARDS Inclimate Weather, slips, trips and falls, moving equipment and machinery

EMERGENCY PROCEDURES Call 911- Follow Emergency Personnels Instructions

HOSPITAL Summit Medical Center PHONE (510) 869-6600 AMBULANCE PHONE 911

HOSPITAL ADDRESS 350 Hawthorne Ave. Oakland California

SPECIAL EQUIPMENT Cone Peretration Testing Rig

OTHER

ATTENDEES

PRINTED NAME	SIGNATURE
Ray Jeffrey	
Todd Gee	

CONDUCTED BY: James Anerson SIGNATURE:

SUPERVISOR James Anderson

Innovative Technical Solutions, Inc.

TAILGATE SAFETY MEETING

DATE 28 JANUARY 2002 TIME 0740 JOB NUMBER 00-152.15

CUSTOMER Port of Oakland ADDRESS 530 Water Street 2nd Floor Oakland, California

LOCATION 2277 7th Street and 2225 7th Street Oakland, California

TYPE OF WORK Cone Penetration Testing

CHEMICALS USED ~~Diesel~~ fuel, Gasoline
DIESEL

SAFETY TOPICS PRESENTED

PROTECTIVE CLOTHING/EQUIPMENT Modified Level D

CHEMICAL HAZARDS DIESEL FUEL

PHYSICAL HAZARDS Inclimate Weather, slips, trips and falls, moving equipment and machinery

EMERGENCY PROCEDURES Call 911- Follow Emergency Personnels Instructions

HOSPITAL Summit Medical Center PHONE (510) 869-6600 AMBULANCE PHONE 911

HOSPITAL ADDRESS 350 Hawthorne Ave. Oakland California

SPECIAL EQUIPMENT Cone Peretration Testing Rig

OTHER COLD WEATHER, AUGER RIG MOVING PARTS.

ATTENDEES

PRINTED NAME	SIGNATURE
Ray Jeffrey	
JORGE TORRES	
Todd Lee	
Rachel Hess	

CONDUCTED BY: James Anerson SIGNATURE:

SUPERVISOR James Anderson

GREGG IN SITU, INC.
ENVIRONMENTAL AND GEOTECHNICAL PENETRATION TESTING

February 11, 2002

ITSI
2370 Shadelands Drive
Suite 100
Walnut Creek, California 94598

Attn: Jim Andersen

Subj: 2225 & 2277 7th Street
CPT Site Investigation
Oakland, California
GREGG Project Number: 02-009MA

Dear Mr. Andersen:

The following report presents the results of GREGG IN SITU's Cone Penetration Test investigation for the above-referenced site.

GREGG IN SITU appreciates the opportunity to provide our testing services on this project. We trust that the information presented in this report is sufficient for your purposes.

If you have any questions regarding the contents of this report, please do not hesitate to contact our office at (925) 313-5800.

Sincerely,

Mary Walker for

Chris Christensen
Vice President

PRESENTATION OF CONE PENETRATION TEST DATA

2225 & 2277 7th STREET

SUBSURFACE INVESTIGATION

OAKLAND, CALIFORNIA

FEBRUARY 2002

Prepared for:

ITSI
2730 Shadelands Drive
Suite 100
Walnut Creek, California 94598

Prepared by:

GREGG IN SITU, INC.
950 Howe Road
Martinez, California 94553

February 11, 2002

TABLE OF CONTENTS

1.0 INTRODUCTION

This report contains the results of Cone Penetration Testing conducted at 2225 and 2277 7th Street in Oakland, California. The program consisted of thirty one CPT soundings to depths of approximately 20 feet below the existing ground surface. Gregg In Situ's 25-Ton CPT rig and associated tooling were used for the CPT sounding. A data acquisition system collected information from the cone as it penetrated the soils. The scope of work was completed at the direction of ITSI personnel. The investigation program was conducted on January 29 through February 1, 2002.

2.0 FIELD EQUIPMENT AND PROCEDURES

2.1 Electric Cone Penetration Testing

The Cone Penetration Tests (CPT) were performed using GREGG IN SITU of Martinez, California using an integrated electronic cone system. The CPT soundings were performed in general accordance with ASTM D5778-95 and industry standards.

A 20-ton compression type cones was utilized at this site. The 20-ton cone has a tip area (A_c) of 15cm^2 and a friction sleeve area of 225 cm^2. A pore water pressure transducer and filter is located directly behind the cone tip. The 5.0 mm filter element is composed of a porous plastic and is saturated in glycerin under vacuum pressure prior to use. An illustration of the cone is shown in Figure 1.

The GREGG IN SITU cone is designed with an equal end area friction sleeve and a tip net area ratio, a, of 0.85 (based on A_c equal to 15cm^2). The net area ratio, a, has been verified in the laboratory by subjecting the cone to a known pressure then measuring the load recorded on the tip. The net area ratio can then be calculated by dividing the measured pressure on the tip by the known applied pressure.

The cone is capable of recording the following parameters at 2-cm depth intervals:

Tip Resistance	(q_c)
Sleeve Friction	(f_s)
Dynamic Pore Pressure	(u_2)

Due to the inner geometry of the cone, the measured tip resistance (q_c) is influenced by the ambient pore water pressure. This effect is commonly referred to as the "unequal area effect". Therefore, a corrected total cone tip resistance (q_t) is utilized for CPT correlations, where:

$$q_t = q_c + (1\text{-}a) \times u_2$$

where: q_c is the recorded tip stress
a is the net area ratio (Based on Laboratory Measurements)
u_2 is the dynamic pore pressure measured just behind the tip

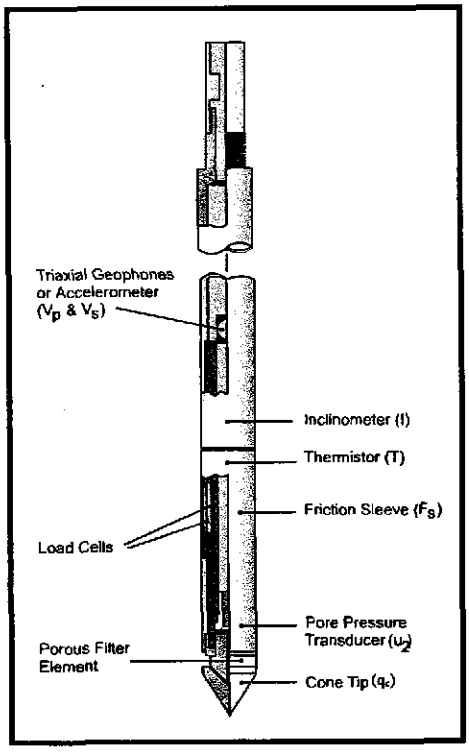


Figure 1
Gregg In Situ Cone Penetrometer
(Type 2 Shoulder Cone)

Complete sets of baseline readings were taken prior to and after the sounding to determine temperature shifts and any zero load offsets. Establishing temperature shifts and load offsets enables corrections to be made to the cone data where necessary.

The CPT soundings were advanced using GREGG IN SITU's 25 ton CPT rig and associated tooling.

3.0 CONE PENETRATION TEST DATA AND INTERPRETATION

3.1 CPT Data

The cone penetration test data and pore pressure measurements are presented in graphical form in Appendix A. Penetration depth is referenced to the existing ground surface at the time of the investigation.

The inferred stratigraphic profile at the CPT test location is included with this report. The stratigraphic soil type behavior interpretations are based on relationships between q_t, f_s, and u_2. The friction ratio (f_s/q_t) is a calculated parameter that is indicative of soil behavior and is therefore used to identify the soil behavior type.

Generally, cohesive soils have high friction ratios, low cone bearing and generate large excess pore water pressures. Cohesionless soils have lower friction ratios, high cone bearing and generate little in the way of excess pore water pressures. In this report, the classification of soils is based on the correlations developed by Robertson (1990) shown in Figure 2.

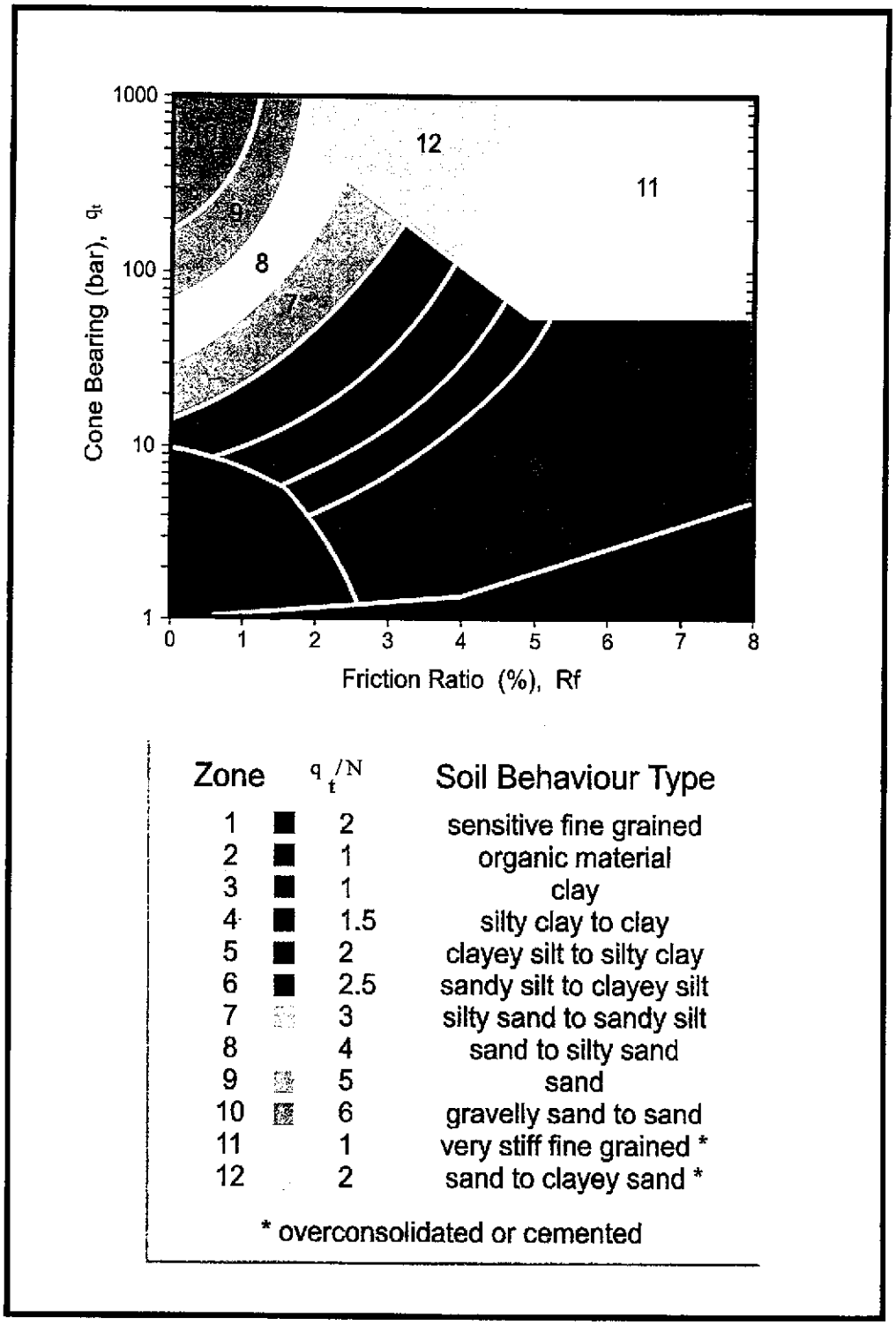


Figure 2
Soil Behavior Type Classification Chart
(Robertson 1990)

3.2 PORE PRESSURE DISSIPATION TEST RESULTS

Pore water pressures are monitored in order to measure hydrostatic water pressures and approximate the depth to the groundwater table. Pore pressure dissipations were automatically recorded at 5-second intervals and where appropriate during pauses in the penetration. Often, complete dissipations are conducted at selected depths. Select pore pressure dissipations were conducted as part of this investigation and are included in Appendix B.

3.3 ULTRA VIOLET INDUCED FLOURESCENSE

Several of the soundings included ultra violet induced fluorescence (UVIF) measurements recorded on a continuous basis as the cone was advanced into the subsurface. The UVIF module has a high energy ultra violet light directed through a sapphire window into the soil and groundwater. The intensity of the light is detected by the module and recorded with respect to depth. These measurements have been included on the plots where applicable included in Appendix A.

3.4 CPT INTERPRETATION SUMMARY

Generalized summaries have been generated for the soil parameters with respect to depth. These methods are based on general geotechnical engineering principles and current literature being published in the discipline of CPT technologies. This output file has been presented as an importable (ie. to spreadsheet) file. A listing of definitions and interpretation methodologies is presented in the Appendix C.

The interpretations of soils encountered are conducted using correlations developed by Robertson, 1990. It should be noted that it is not always possible to clearly identify a soil type based on q_c, f_s and u_2. In these situations, experience and judgement and an assessment of the pore pressure dissipation test data should be used to infer the soil behavior type.

4.0 DATA DISKETTE

The enclosed data diskette contains the data file recorded and generated for this testing program. The following table details the file.

Files on Data Diskette

File Extension	File Description
COR	Gregg format CPT file: Column 1: Depth (m) Column 2: Tip Resistance – q_c (tsf) Column 3: Sleeve Friction – f_s (tsf) Column 4: Dynamic Pore Pressure – u_2 (psi)
PPD	Pore Pressure Dissipation File
IFI	Interpretation File Importable

This file and parameters were generated for 009C01.*, 009C02.*, etc. The Data Diskette is included in Appendix D.

APPENDIX A

CPT PLOTS

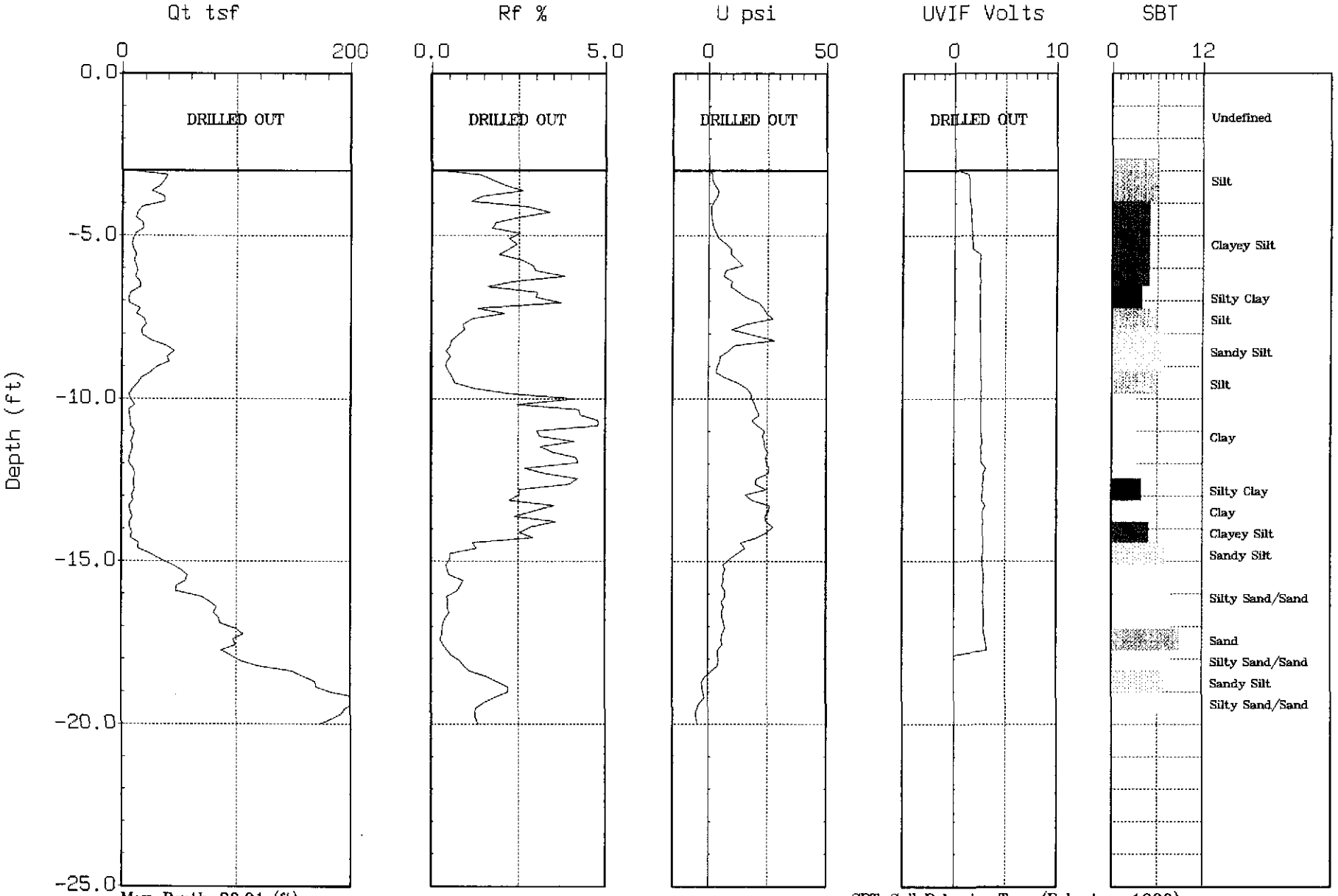
GREGG

GREGG

ITSI

Site: 2277 7th St.
Sounding: CPT-01

Engineer: J. Anderson
Date: 01:29:02 08:23



Max. Depth: 20.01 (ft)

Depth Inc.: 0.164 (ft)

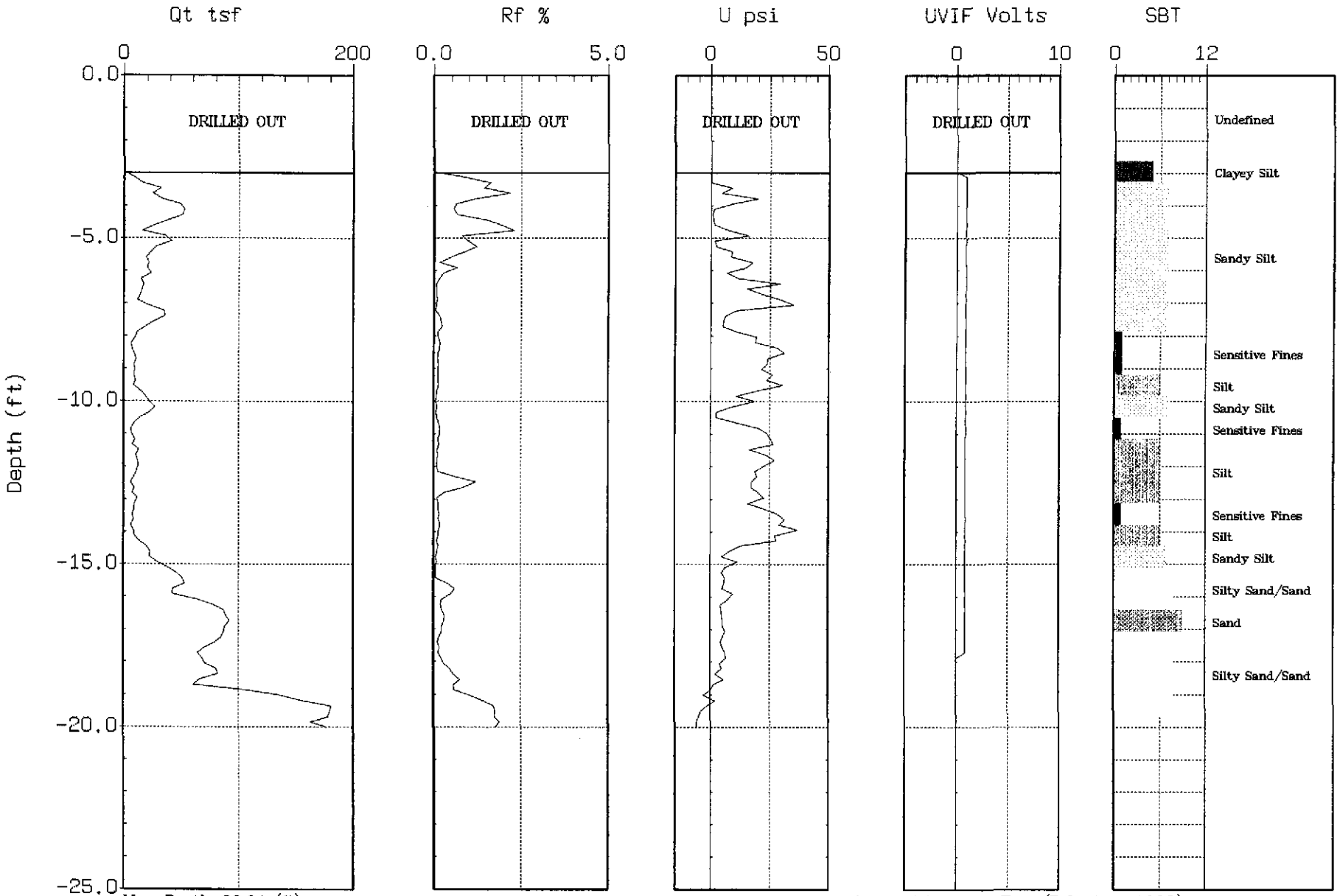
SBT: Soil Behavior Type (Robertson 1990)

GREGG

ITSI

Site: 2277 7th St.
Sounding: CPT-01A

Engineer: J. Anderson
Date: 01:29:02 15:14



Max. Depth: 20.01 (ft)

Depth Inc.: 0.164 (ft)

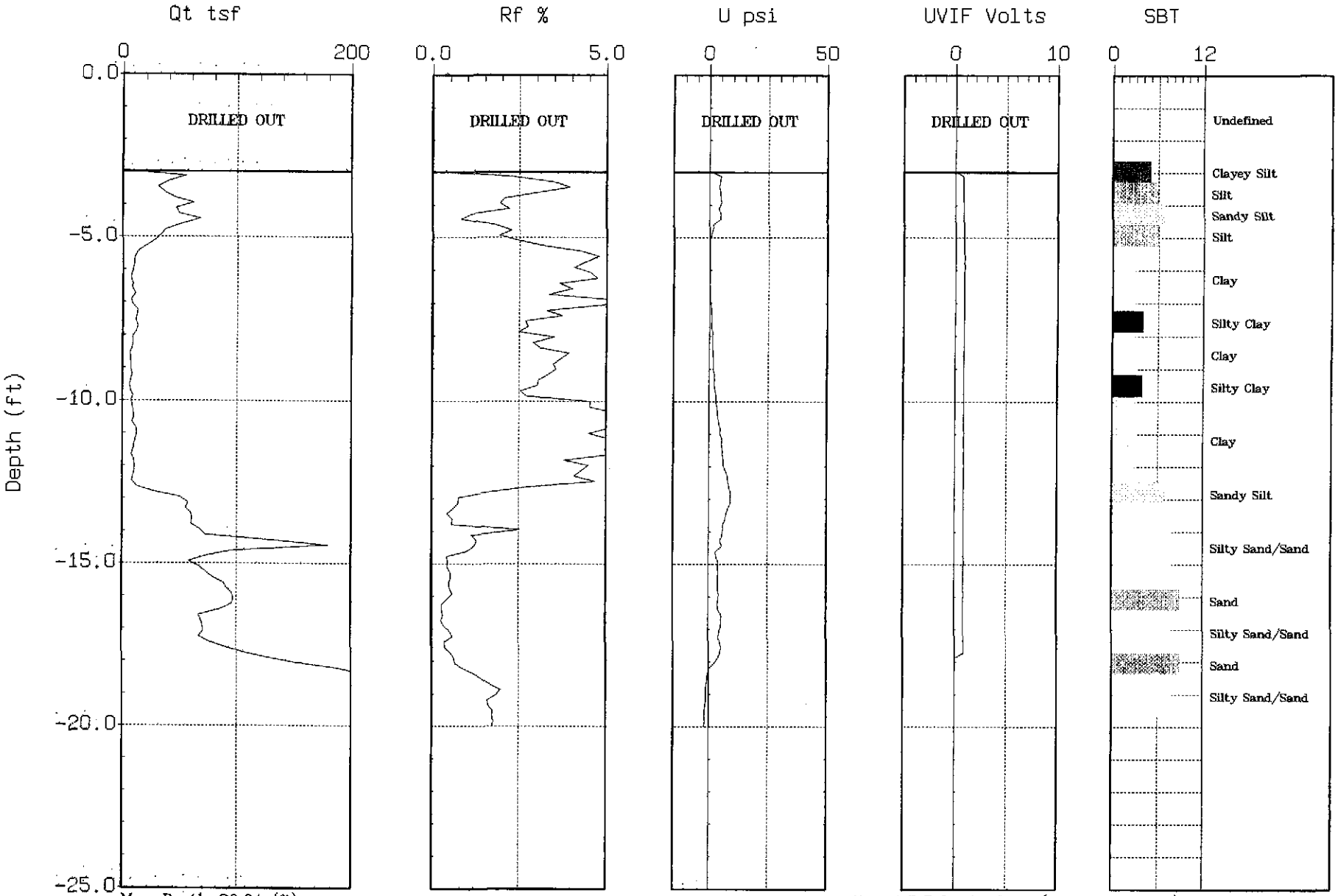
SBT: Soil Behavior Type (Robertson 1990)

GREGG

ITSI

Site: 2277 7th St.
Sounding: CPT-02

Engineer: J. Anderson
Date: 01:28:02 15:29



Max. Depth: 20.01 (ft)

Depth Inc.: 0.164 (ft)

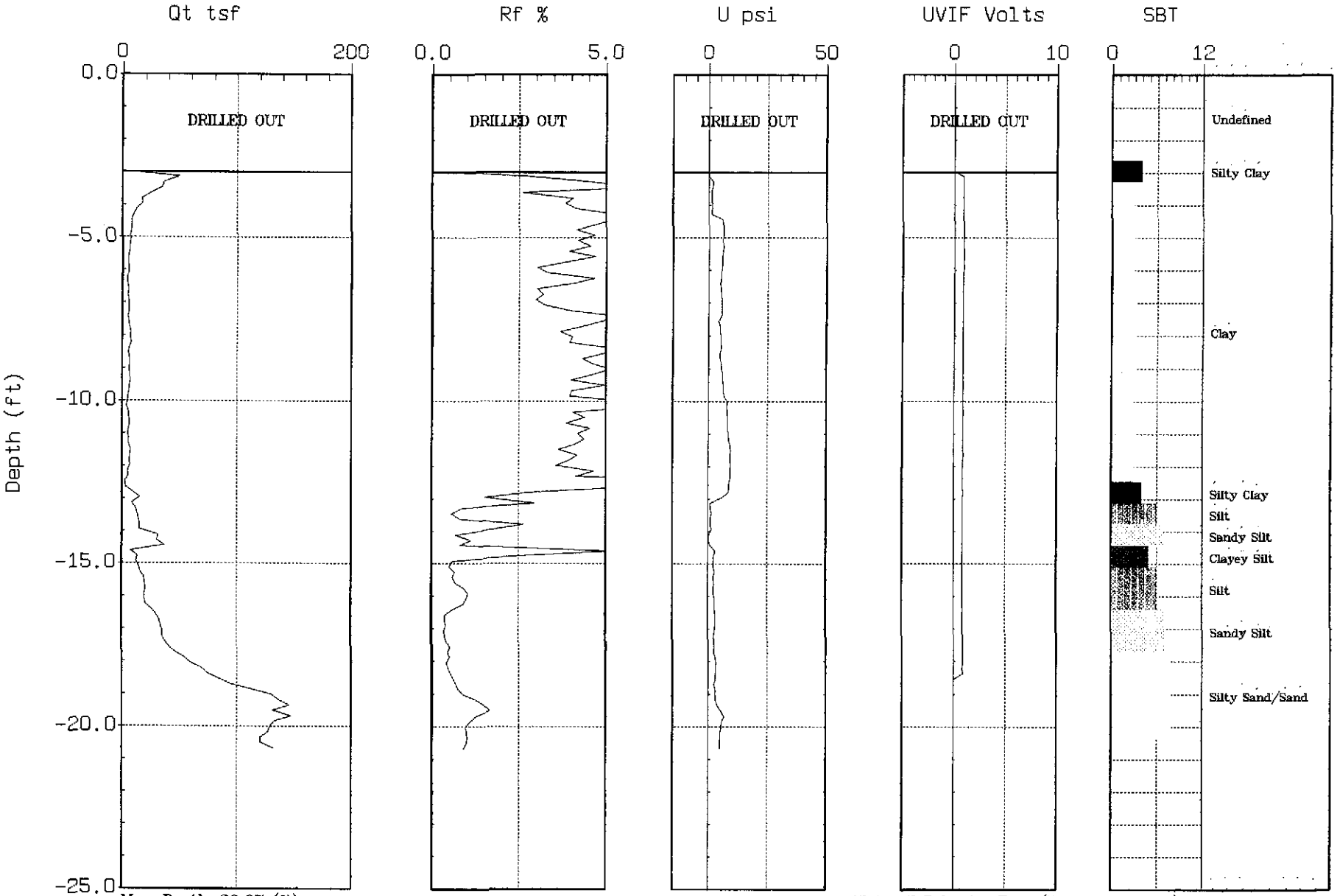
SBT: Soil Behavior Type (Robertson 1990)

GREGG

ITSI

Site: 2277 7th. St.
Sounding: CPT-03 J

Engineer: . Anderson
Date: 01:28:02 12:21



Max. Depth: 20.67 (ft)

Depth Inc.: 0.164 (ft)

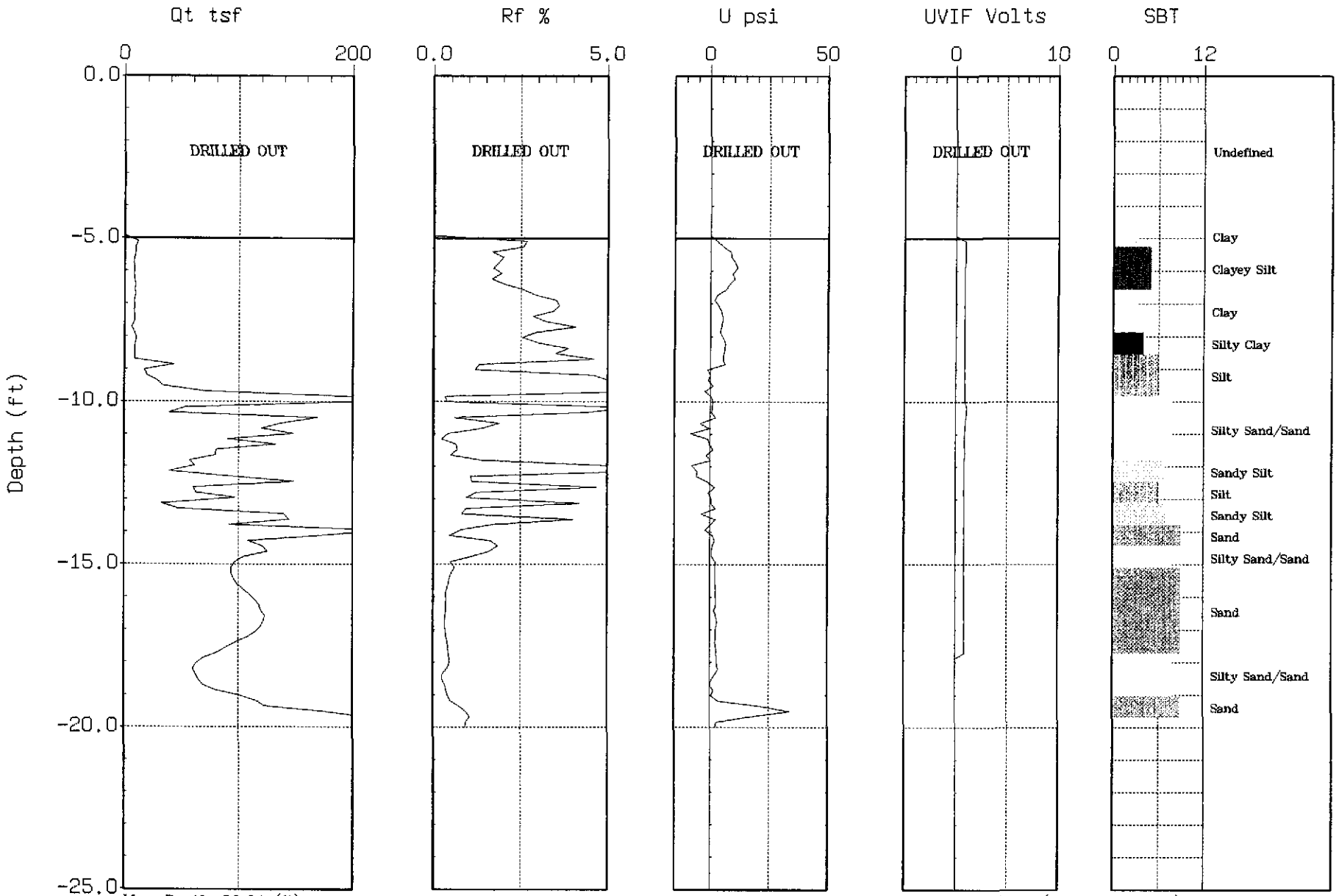
SBT: Soil Behavior Type (Robertson 1990)

GREGG

ITSI

Site: 2277 7th. St.
Sounding: CPT-04

Engineer: J. Anderson
Date: 01:28:02 10:38



Max. Depth: 20.01 (ft)

Depth Inc.: 0.164 (ft)

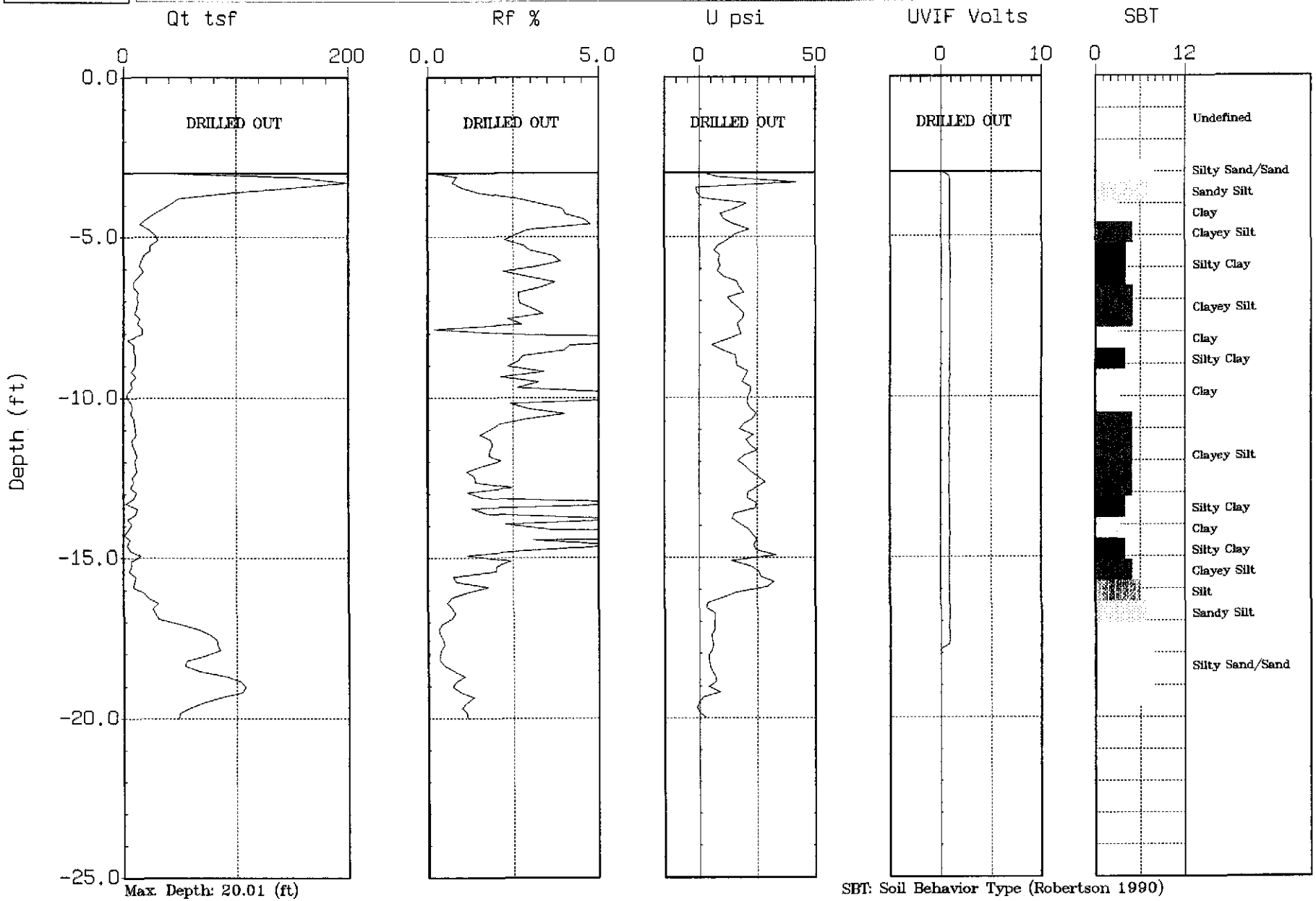
SBT: Soil Behavior Type (Robertson 1990)

GREGG

ITSI

Site: 2277 7th St.
Sounding: CPT-05

Engineer: J. Anderson
Date: 01:29:02 09:10



Max. Depth: 20.01 (ft)

Depth Inc.: 0.164 (ft)

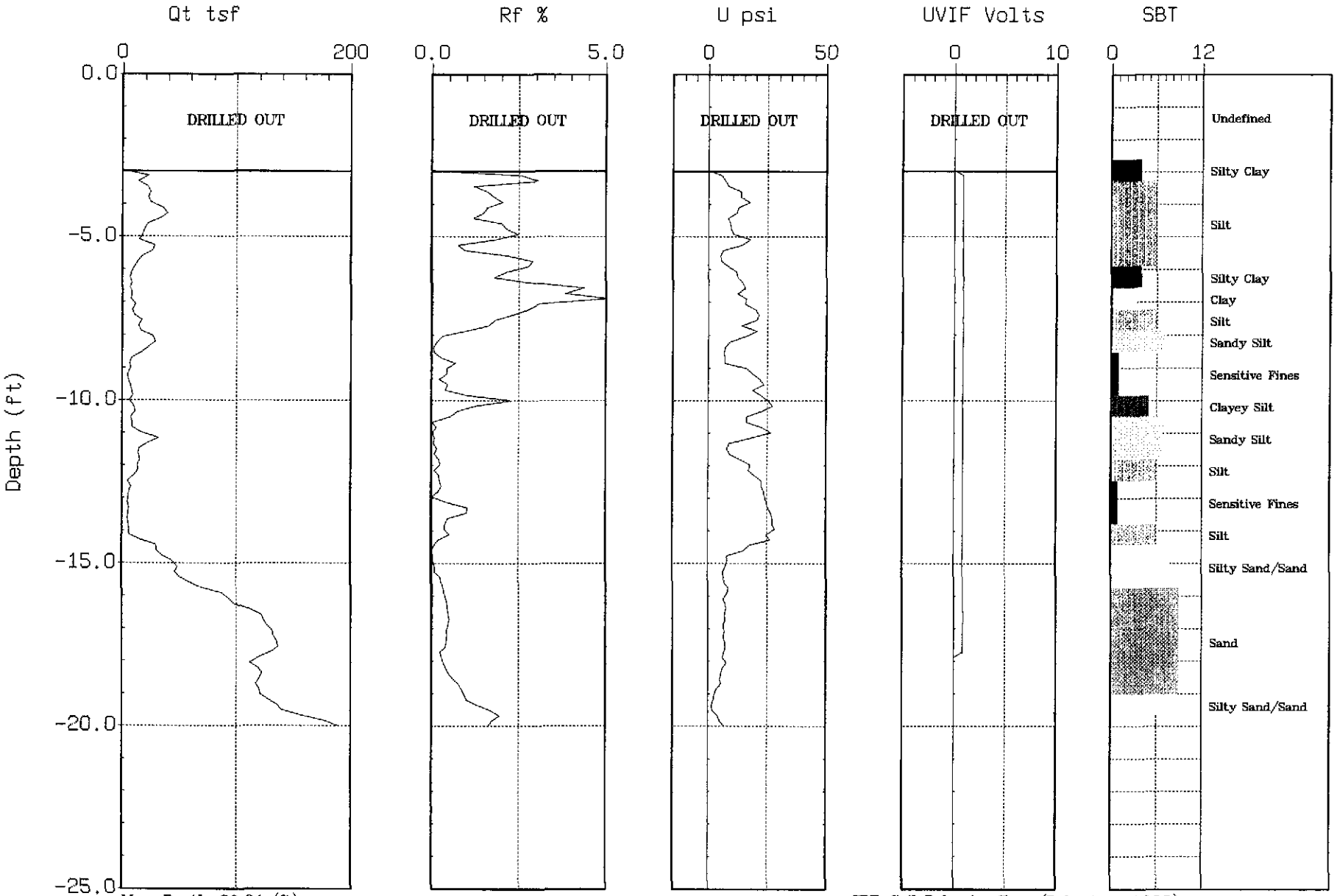
SBT: Soil Behavior Type (Robertson 1990)

GREGG

ITSI

Site: 2277 7th St.
Sounding: CPT-06

Engineer: J. Anderson
Date: 01:29:02 09:09



Max. Depth: 20.01 (ft)

Depth Inc.: 0.164 (ft)

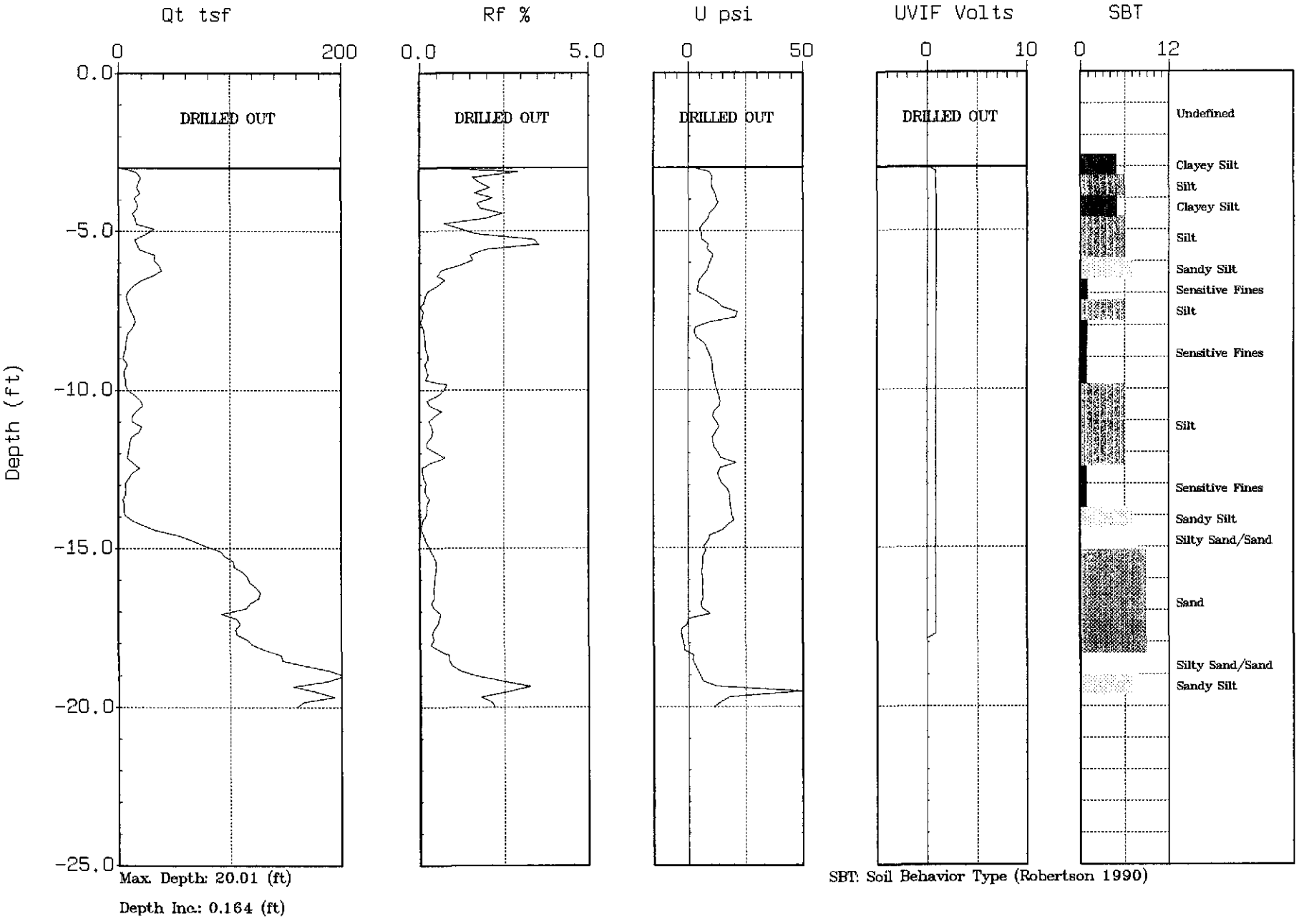
SBT: Soil Behavior Type (Robertson 1990)

GREGG

ITSI

Site: 2277 7th St.
Sounding: CPT-07

Engineer: J. Anderson
Date: 01:29:02 09:43



Max. Depth: 20.01 (ft)

Depth Inc.: 0.164 (ft)

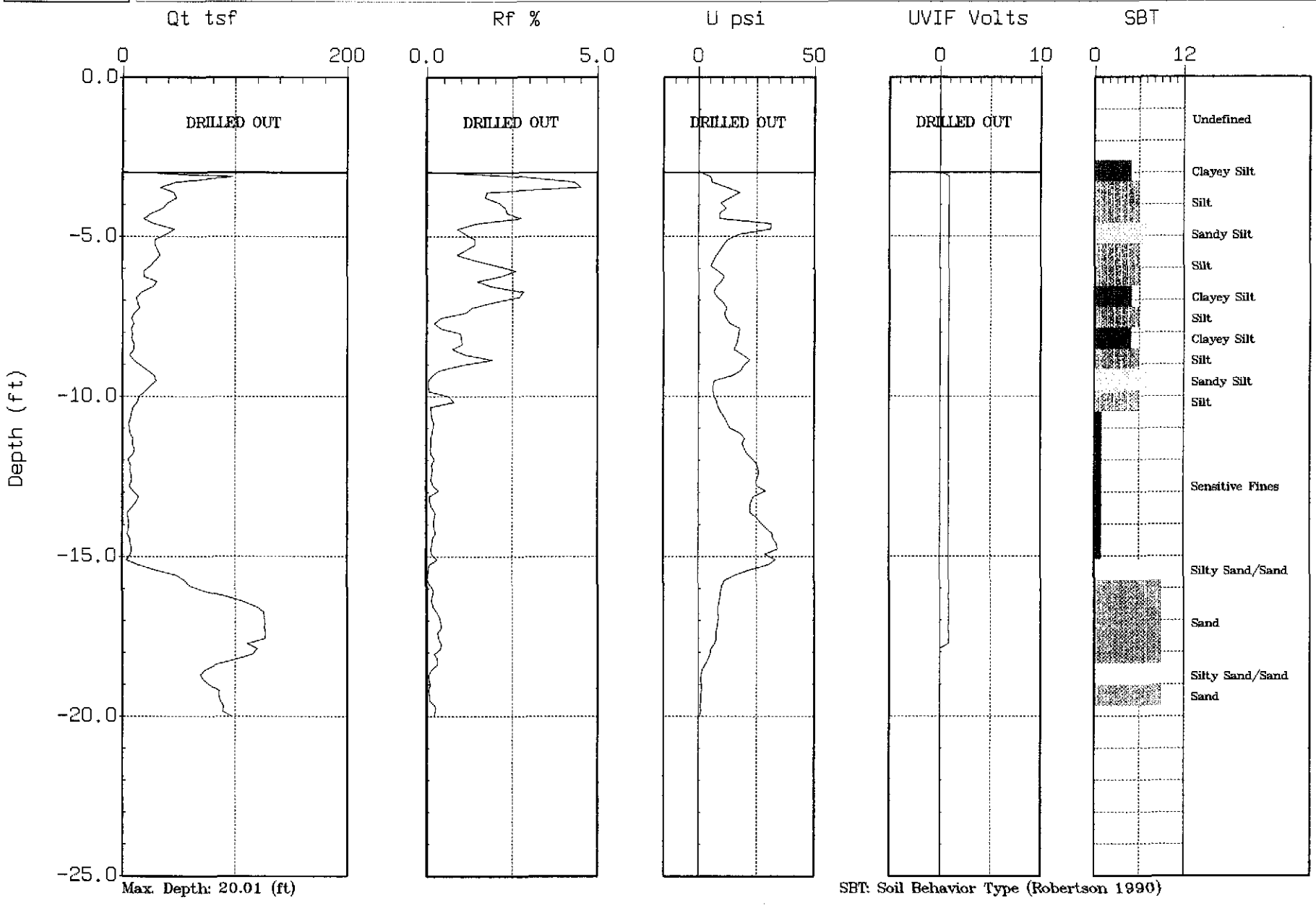
SBT: Soil Behavior Type (Robertson 1990)

GREGG

ITSI

Site: 2277 7th St.
Sounding: CPT-08

Engineer: J. Anderson
Date: 01:29:02



Max. Depth: 20.01 (ft)

Depth Inc.: 0.164 (ft)

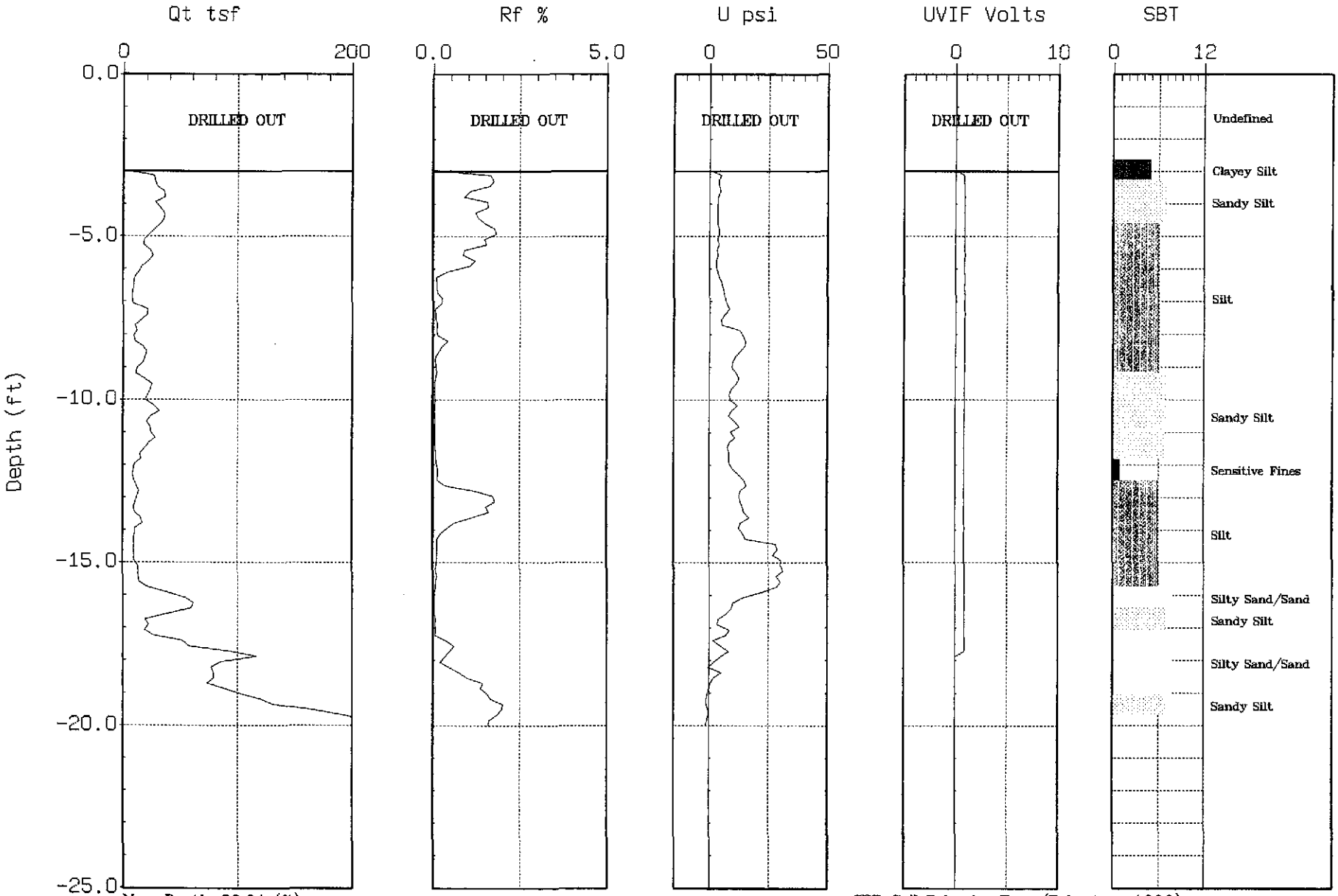
SBT: Soil Behavior Type (Robertson 1990)

GREGG

ITSI

Site: 2277 7th St.
Sounding: CPT-09

Engineer: J. Anderson
Date: 01:29:02 14:26



Max. Depth: 20.01 (ft)

Depth Inc.: 0.164 (ft)

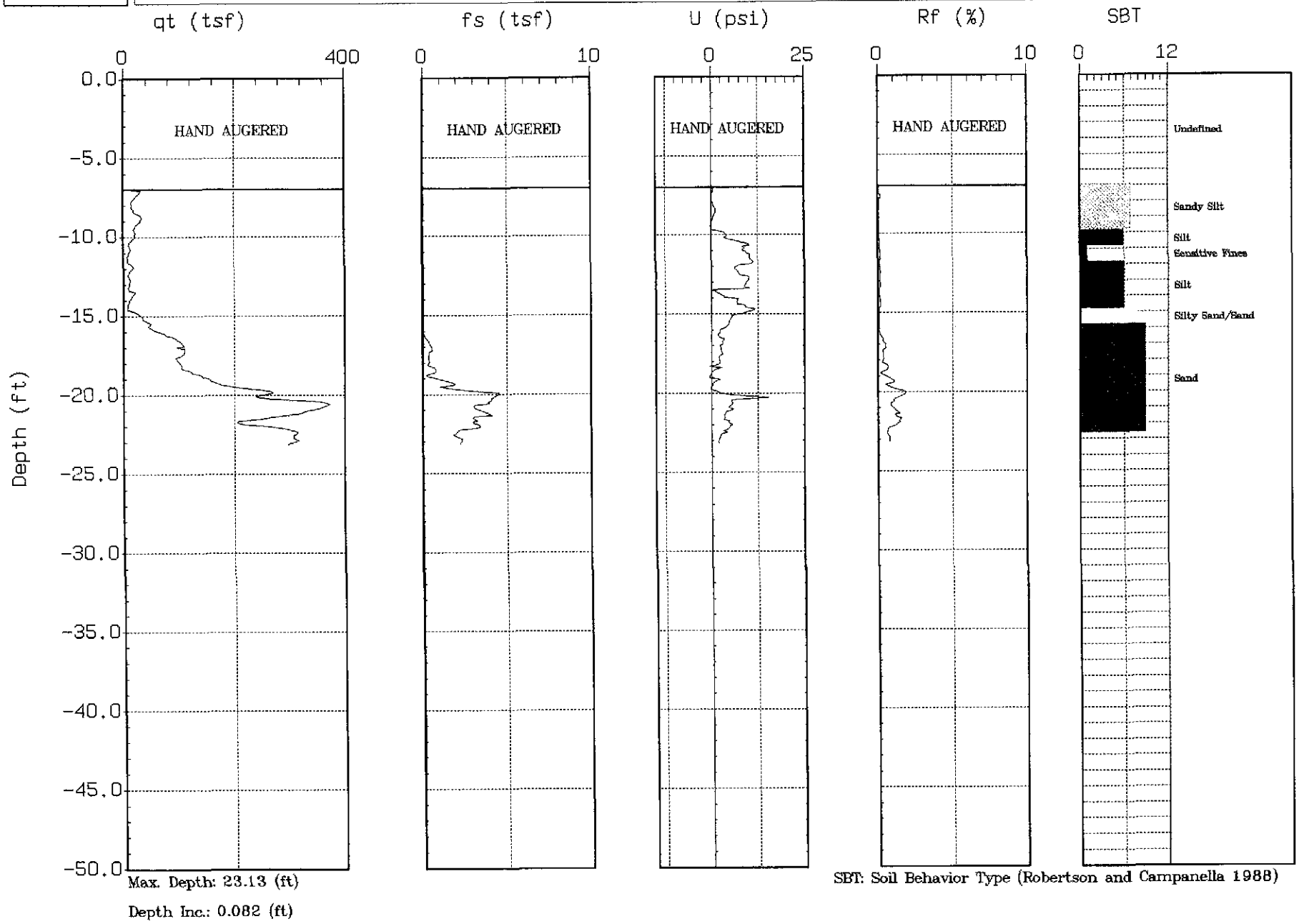
SBT: Soil Behavior Type (Robertson 1990)

GREGG

ITSI

Site : 2277 7th St.
Location : RCPT-10

Engineer : J. Anderson
Date : 01:28:02 19:03



Max. Depth: 23.13 (ft)

Depth Inc.: 0.082 (ft)

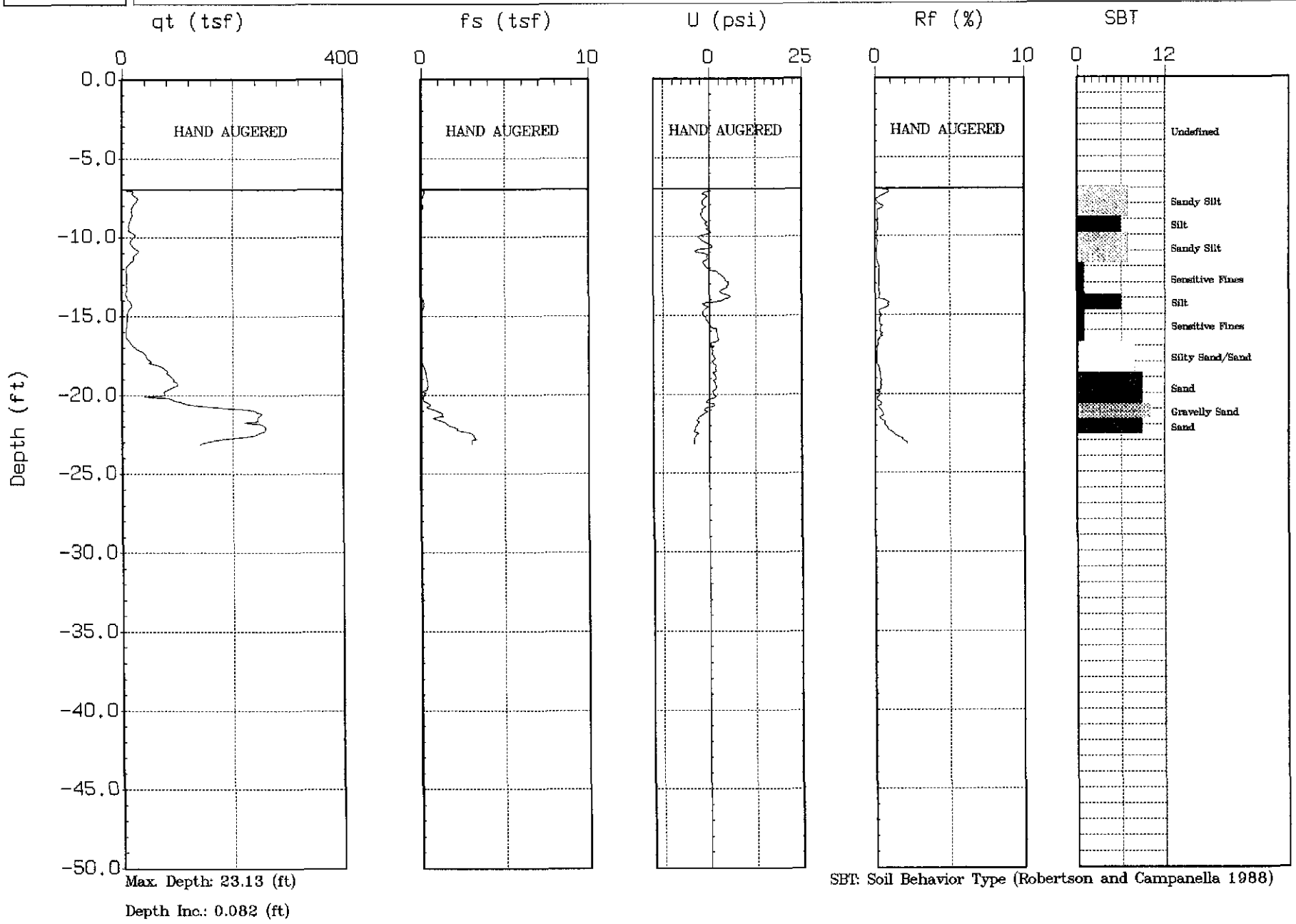
SBT: Soil Behavior Type (Robertson and Campanella 1988)

GREGG

ITSI

Site : 2277 7th St.
Location : RCPT-11

Engineer : J. Anderson
Date : 01:28:02 18:02



Max. Depth: 23.13 (ft)

Depth Inc.: 0.082 (ft)

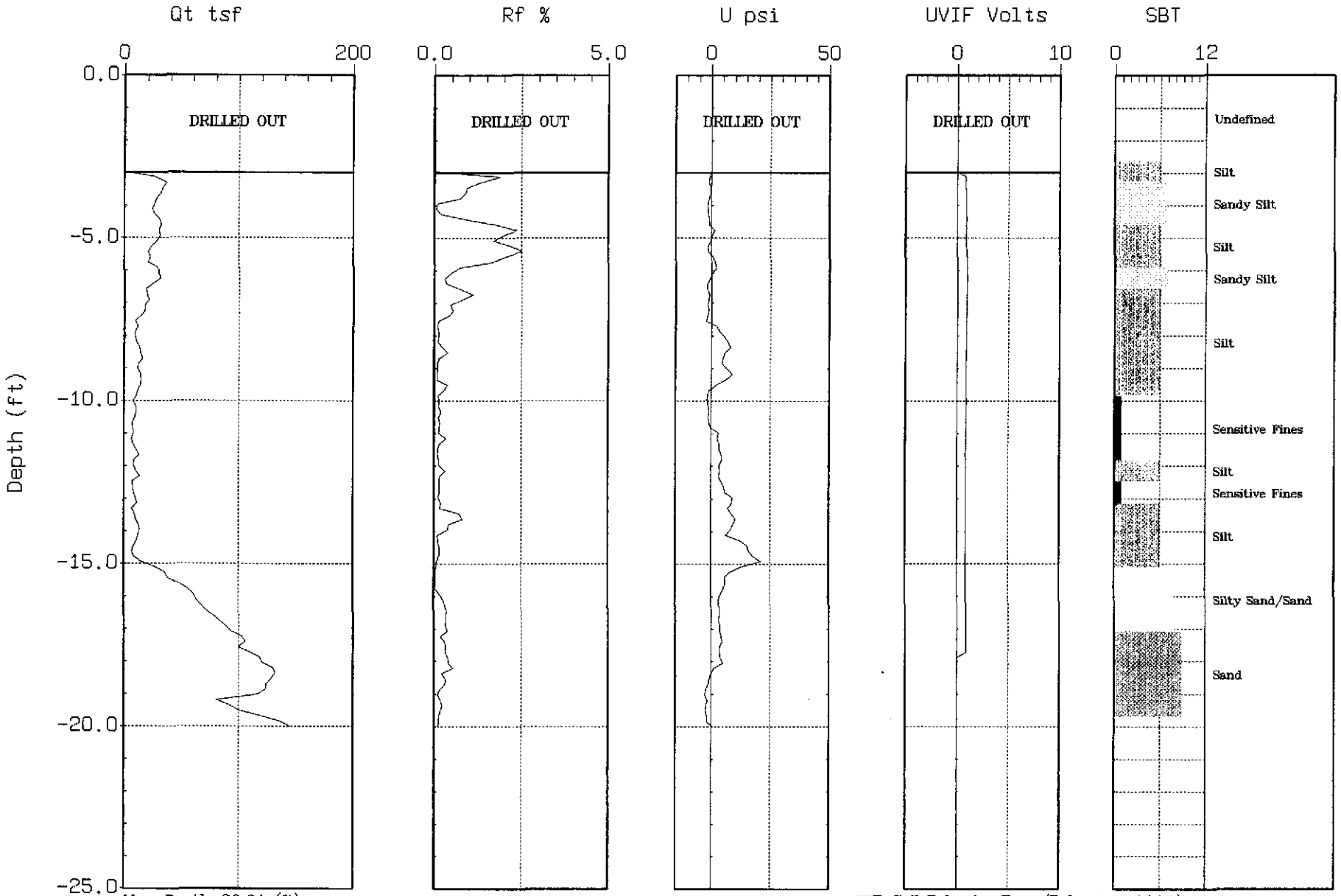
SBT: Soil Behavior Type (Robertson and Campanella 1988)

GREGG

ITSI

Site: 2277 7th St.
Sounding: CPT-12

Engineer: J. Anderson
Date: 01:29:02 11:10



Max. Depth: 20.01 (ft)

Depth Inc.: 0.164 (ft)

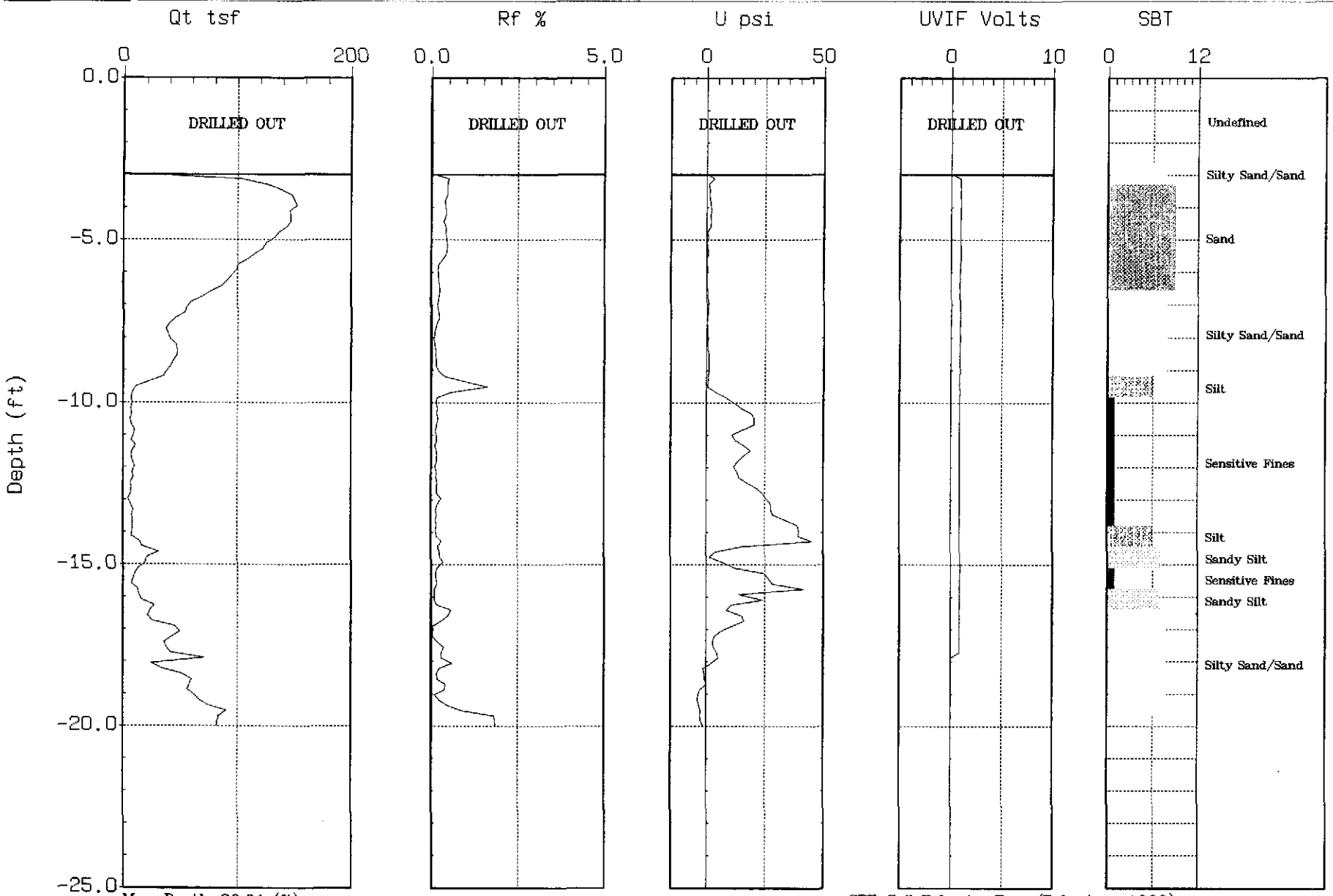
SBT: Soil Behavior Type (Robertson 1990)

GREGG

ITSI

Site: 2277 7th St.
Sounding: CPT-13

Engineer: J. Anderson
Date: 01:29:02 13:53



Max. Depth: 20.01 (ft)

Depth Inc.: 0.164 (ft)

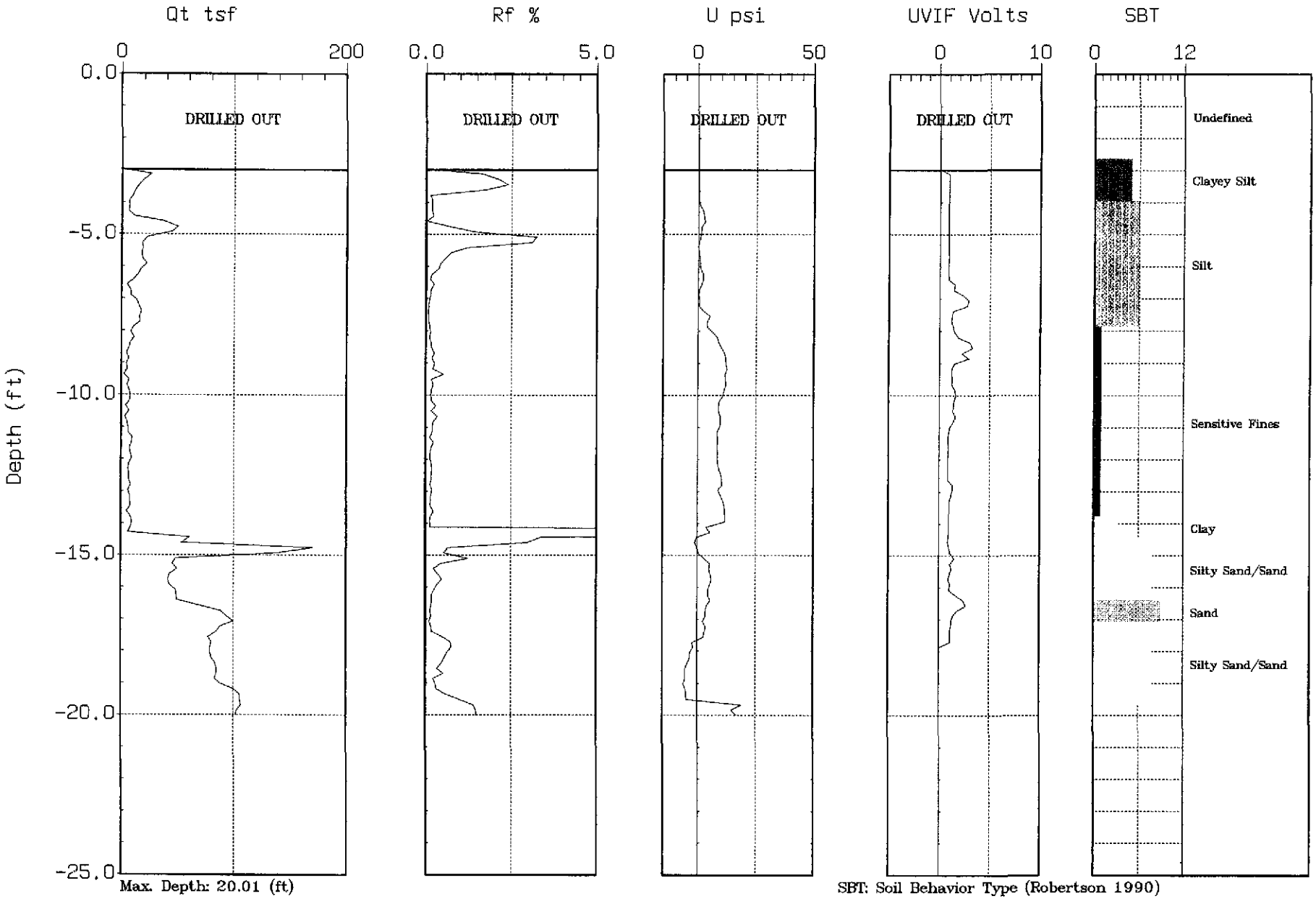
SBT: Soil Behavior Type (Robertson 1990)

GREGG

ITSI

Site: 2277 7th St.
Sounding: CPT-14

Engineer: J. Anderson
Date: 01:29:02 13:06



Max. Depth: 20.01 (ft)

Depth Inc.: 0.164 (ft)

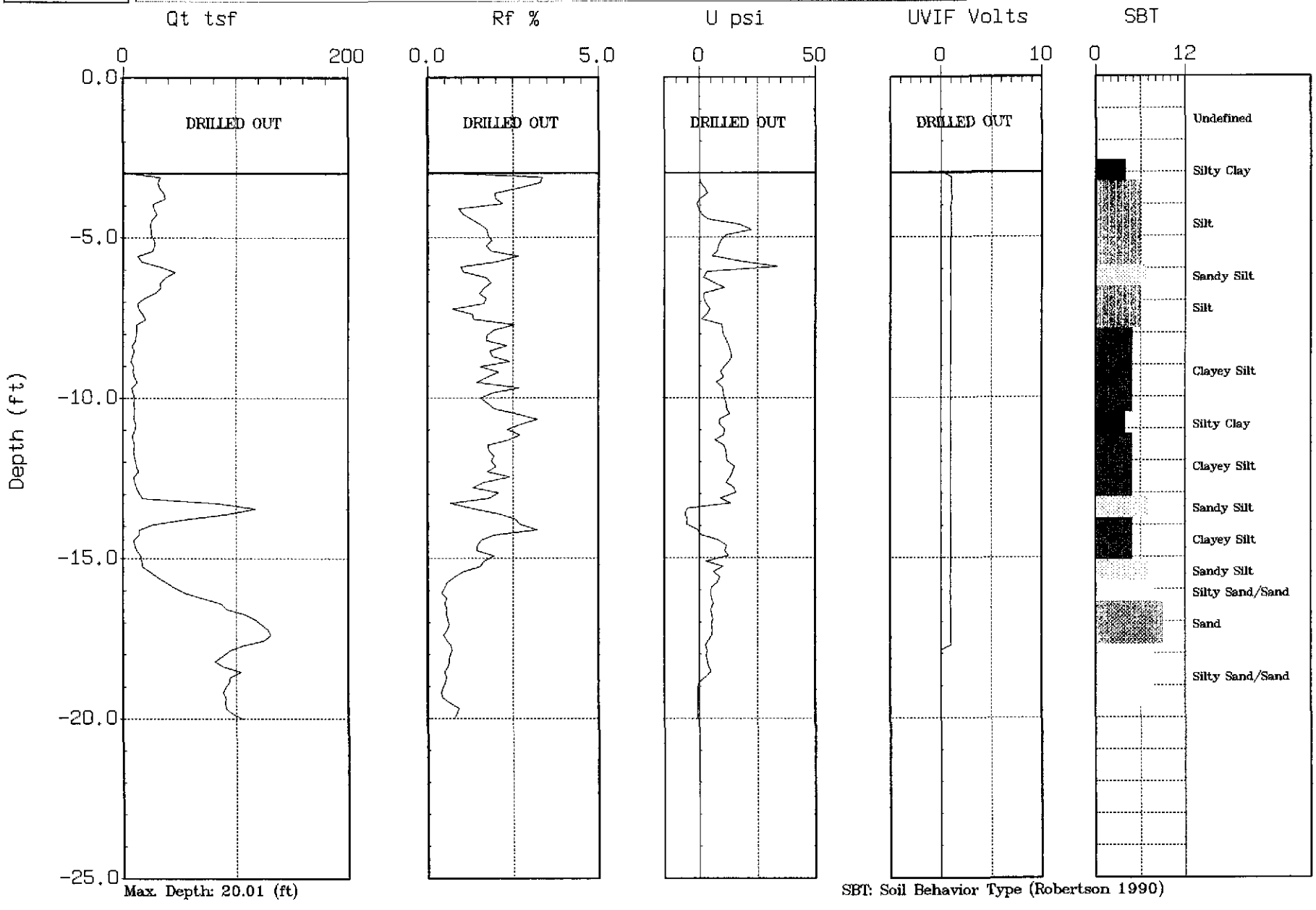
SBT: Soil Behavior Type (Robertson 1990)

GREGG

ITSI

Site: 2277 7th St.
Sounding: CPT-15

Engineer: J. Anderson
Date: 01:30:02 15:32



Max. Depth: 20.01 (ft)

Depth Inc.: 0.164 (ft)

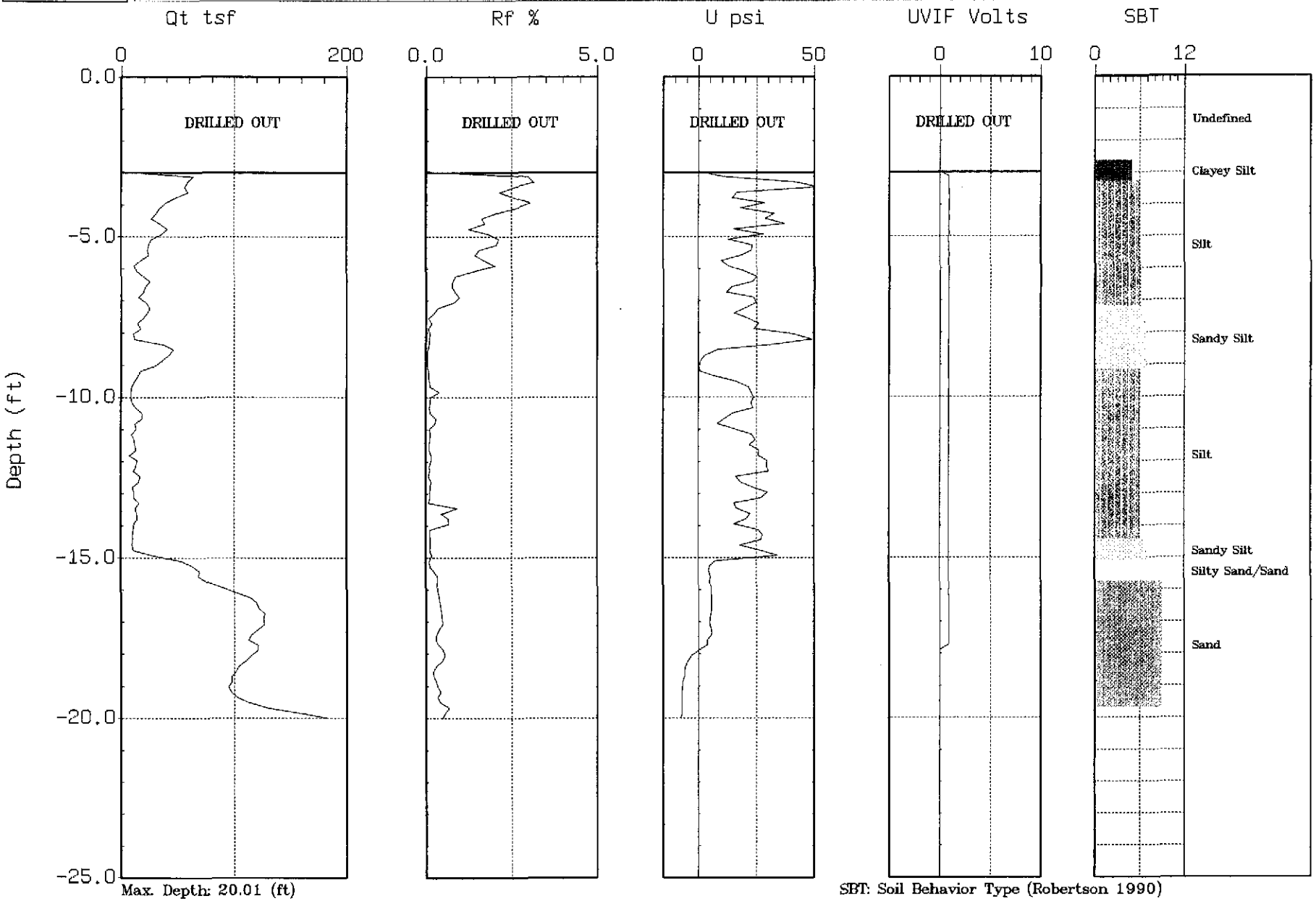
SBT: Soil Behavior Type (Robertson 1990)

GREGG

ITSI

Site: 2277 7th St.
Sounding: CPT-16

Engineer: J. Anderson
Date: 01:29:02 11:51



Max. Depth: 20.01 (ft)

Depth Inc.: 0.164 (ft)

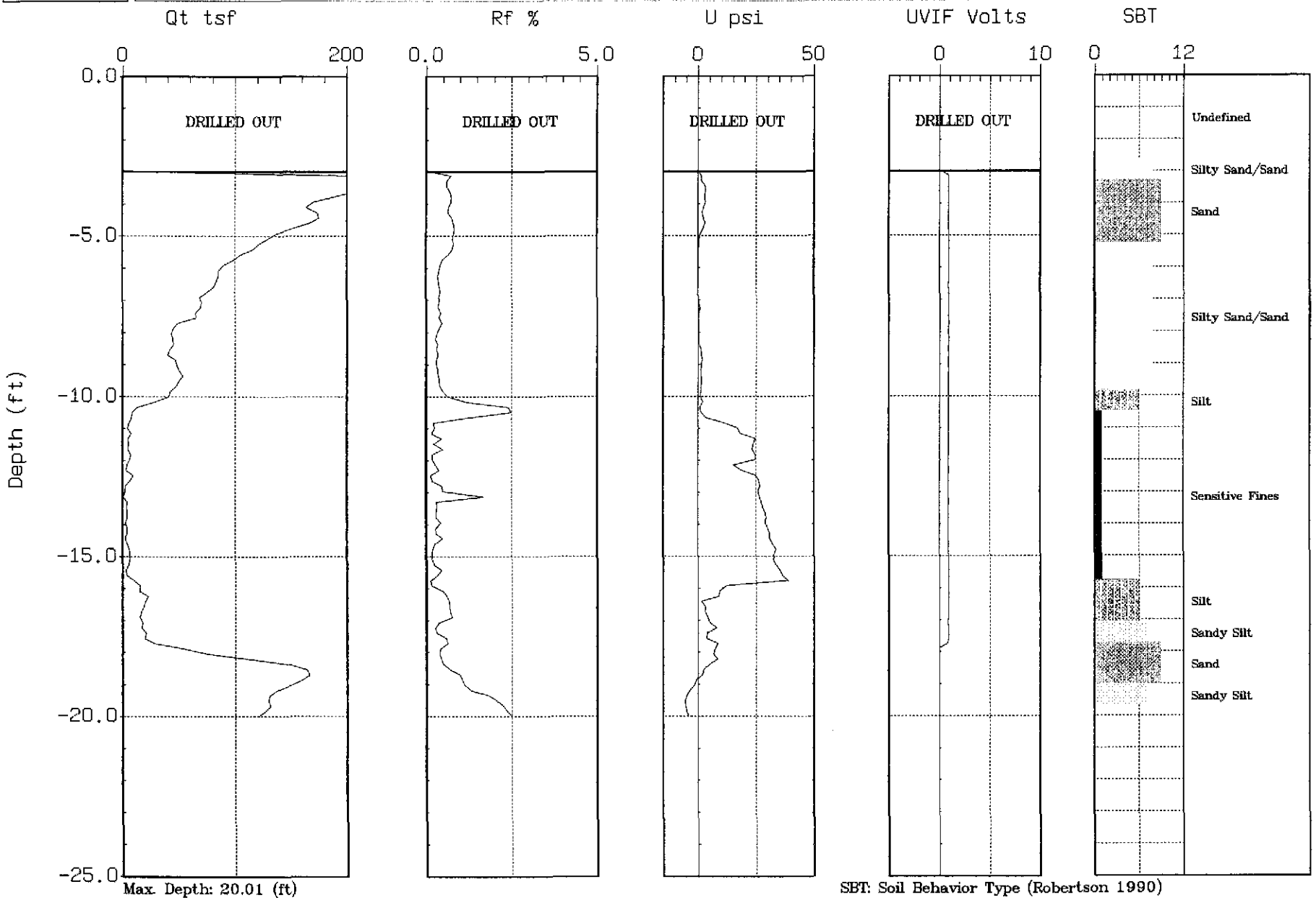
SBT: Soil Behavior Type (Robertson 1990)

GREGG

ITSI

Site: 2225 7th St.
Sounding: CPT-17

Engineer: J. Anderson
Date: 01:30:022 10:48



Max. Depth: 20.01 (ft)

Depth Inc.: 0.164 (ft)

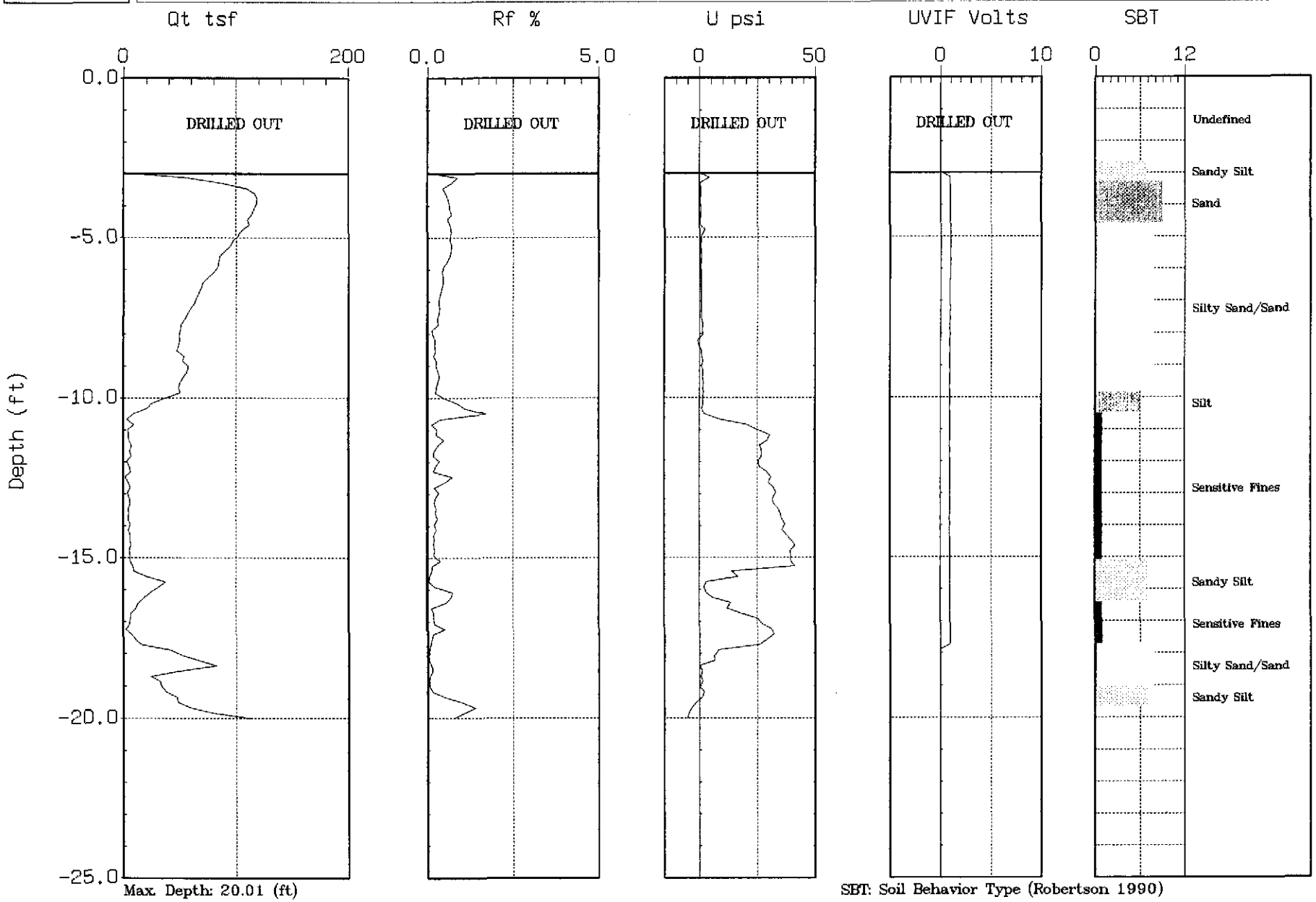
SBT: Soil Behavior Type (Robertson 1990)

GREGG

ITSI

Site: 2225 7th St.
Sounding: CPT-18

Engineer: J. Anderson
Date: 01:30:02 13:22



Max. Depth: 20.01 (ft)

Depth Inc.: 0.164 (ft)

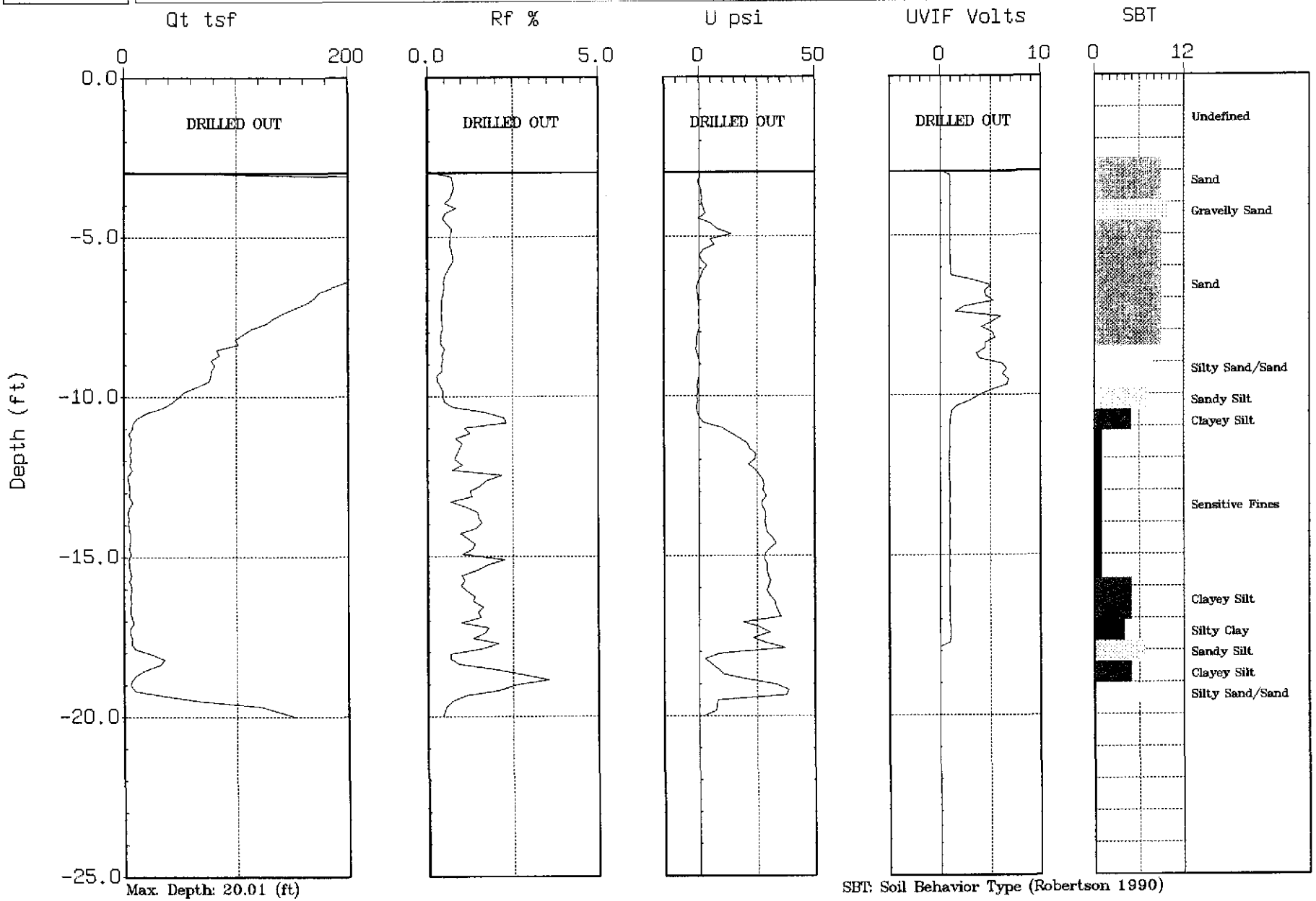
SBT: Soil Behavior Type (Robertson 1990)

GREGG

ITSI

Site: 2225 7th St.
Sounding: CPT-19

Engineer: J.Anderson
Date: 01:30:02 13:58



Max. Depth: 20.01 (ft)

Depth Inc.: 0.164 (ft)

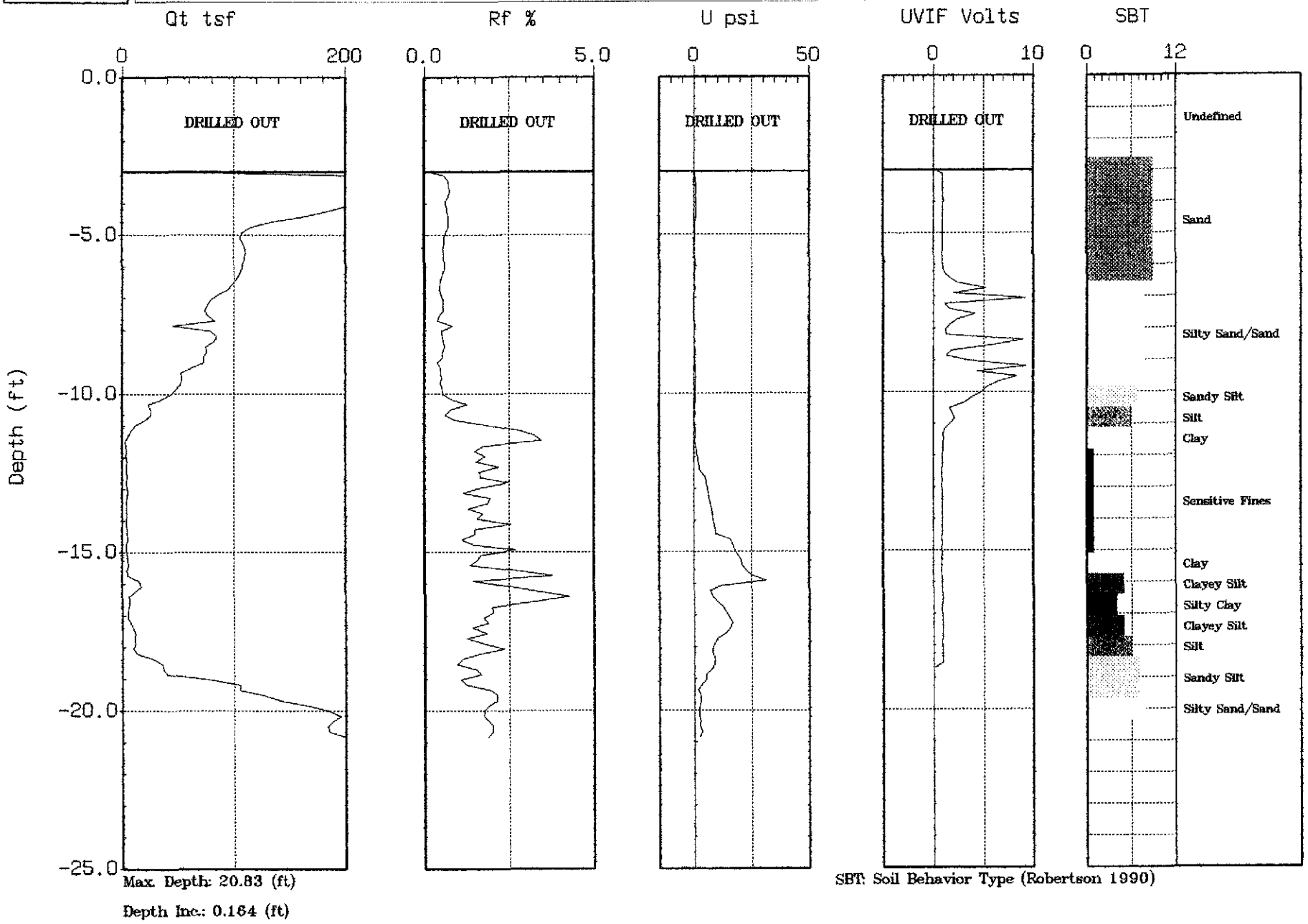
SBT: Soil Behavior Type (Robertson 1990)

GREGG

ITSI

Site: 2225 7th St.
Sounding: CPT-20

Engineer: J. Anderson
Date: 01:28:02 13:28



Max. Depth: 20.83 (ft)

Depth Inc.: 0.164 (ft)

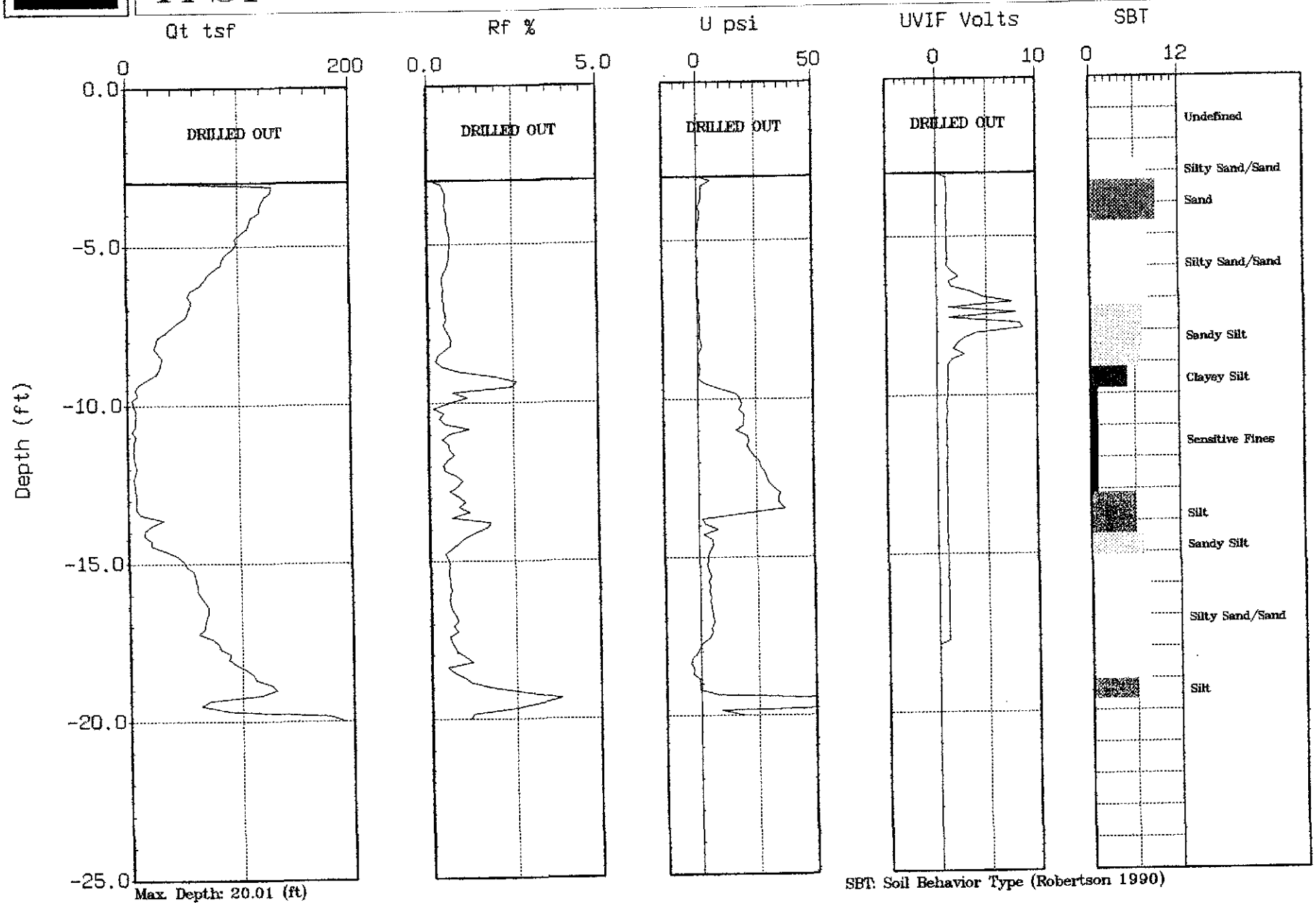
SBT: Soil Behavior Type (Robertson 1990)

GREGG

ITSI

Site: 2225 7th St.
Sounding: CPT-21

Engineer: J. Anderson
Date: 01:30:02 14:37



Max. Depth: 20.01 (ft)

Depth Inc.: 0.164 (ft)

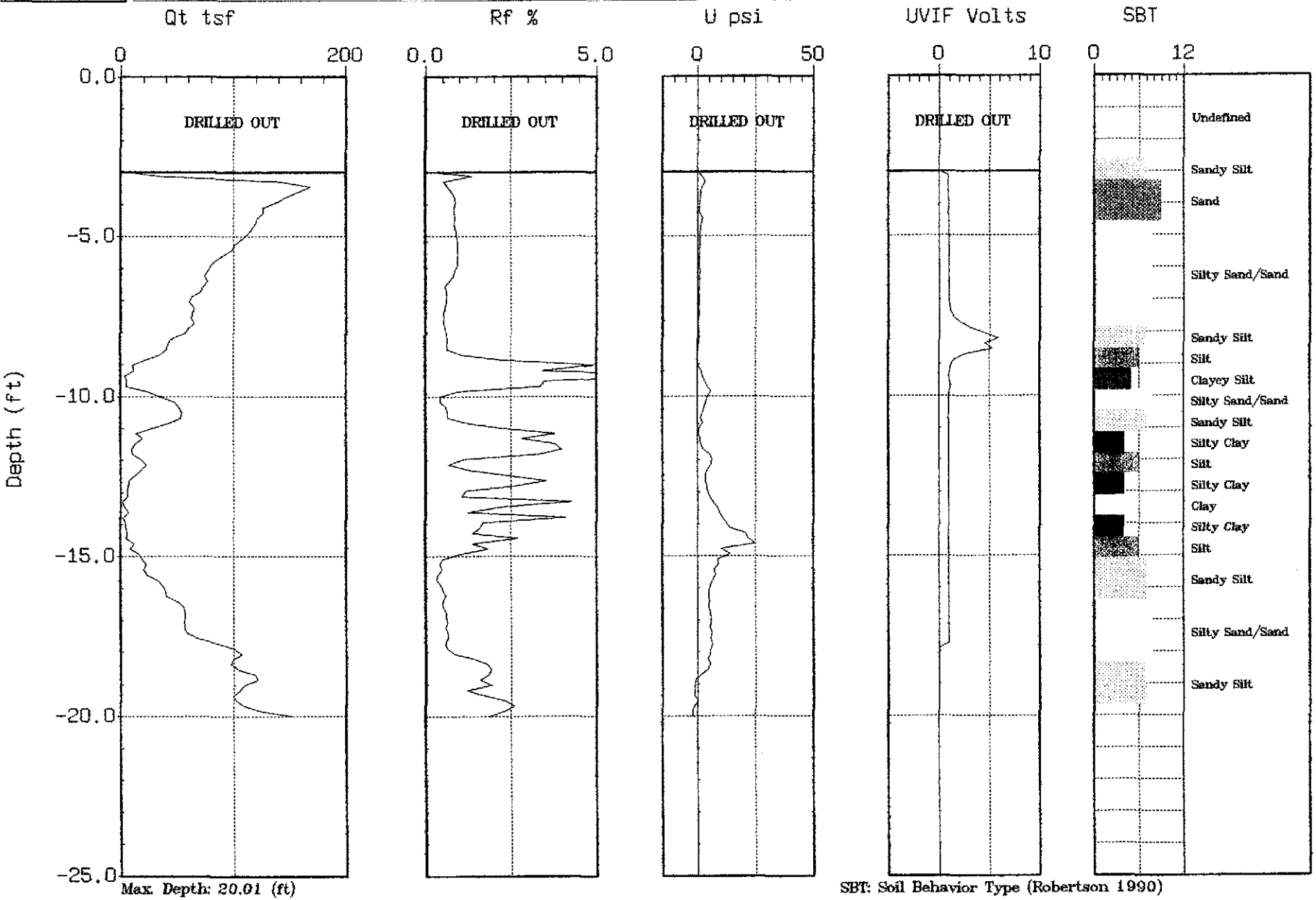
SBT: Soil Behavior Type (Robertson 1990)

GREGG

ITSI

Site: 2225 7th St.
Sounding: CPT-22

Engineer: J. Anderson
Date: 01:31:02 09:09



Max. Depth: 20.01 (ft)

Depth Inc.: 0.164 (ft)

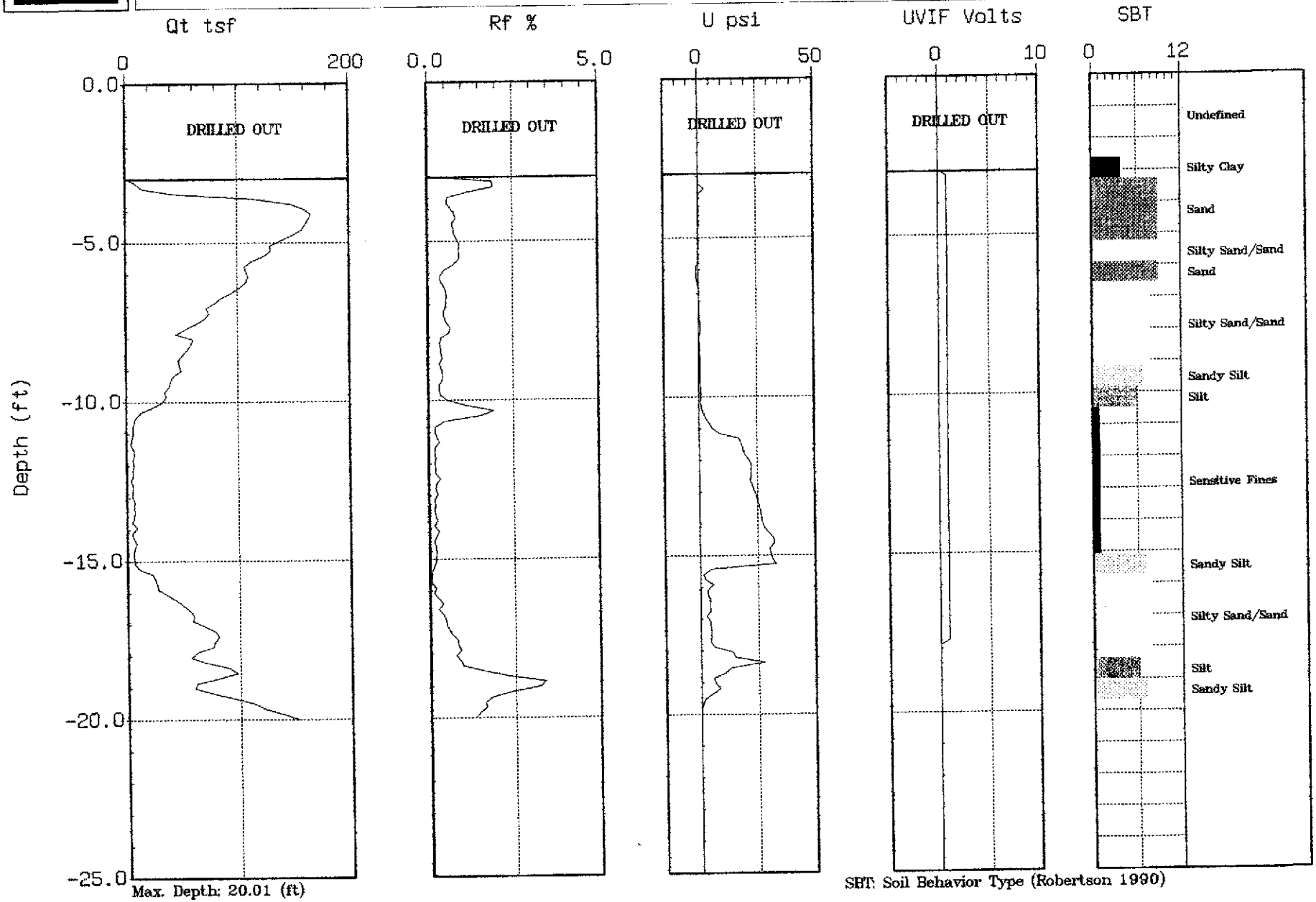
SBT: Soil Behavior Type (Robertson 1990)

GREGG

ITSI

Site: 2225 7th St.
Sounding: CPT-23

Engineer: J. Anderson
Date: 01:30:02 09:43



Max. Depth: 20.01 (ft)

Depth Inc.: 0.164 (ft)

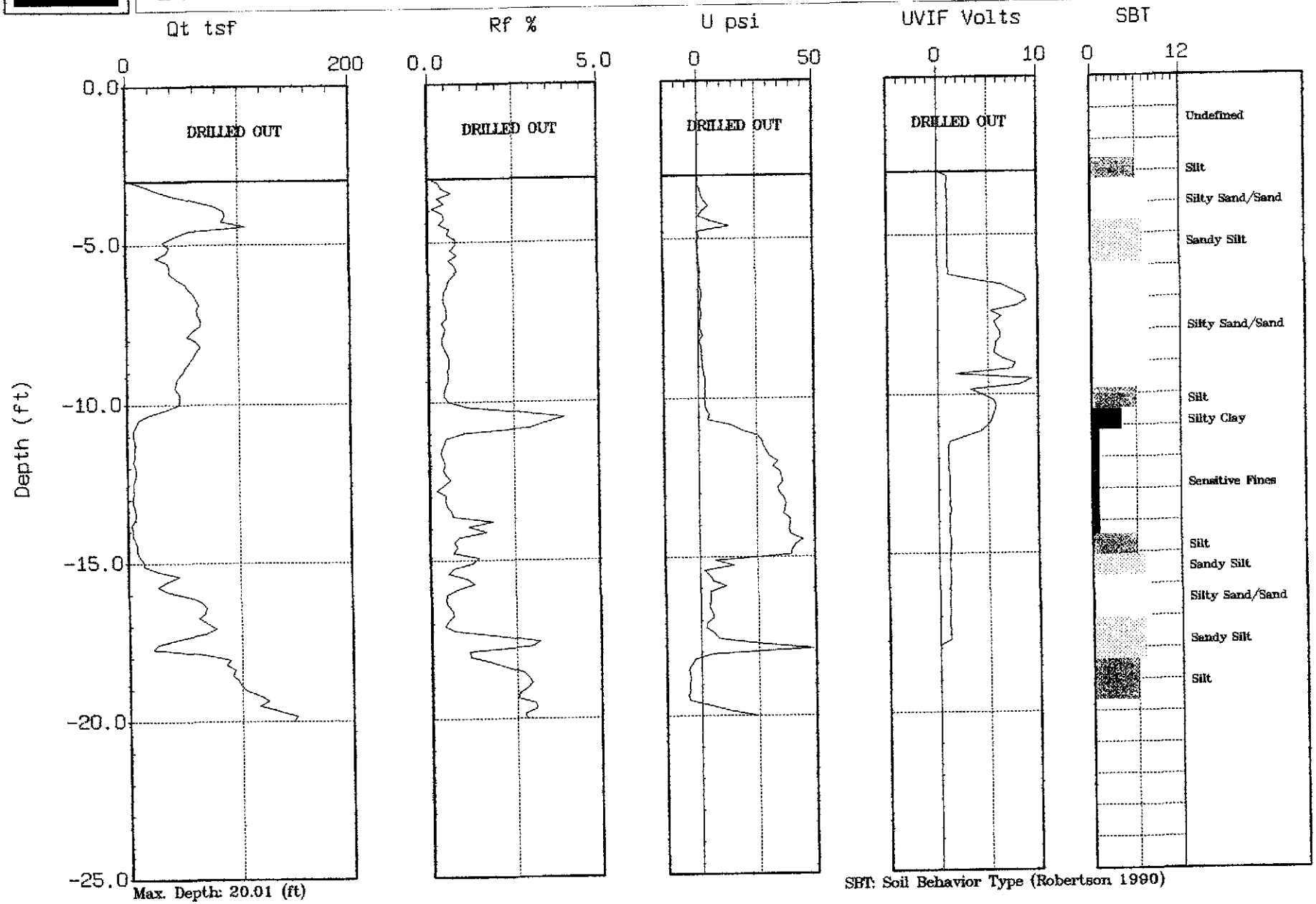
SBT: Soil Behavior Type (Robertson 1990)

GREGG

ITSI

Site: 2225 7th St.
Sounding: CPT-24

Engineer: J. Anderson
Date: 01:31:02 09:42



Max. Depth: 20.01 (ft)

Depth Inc.: 0.164 (ft)

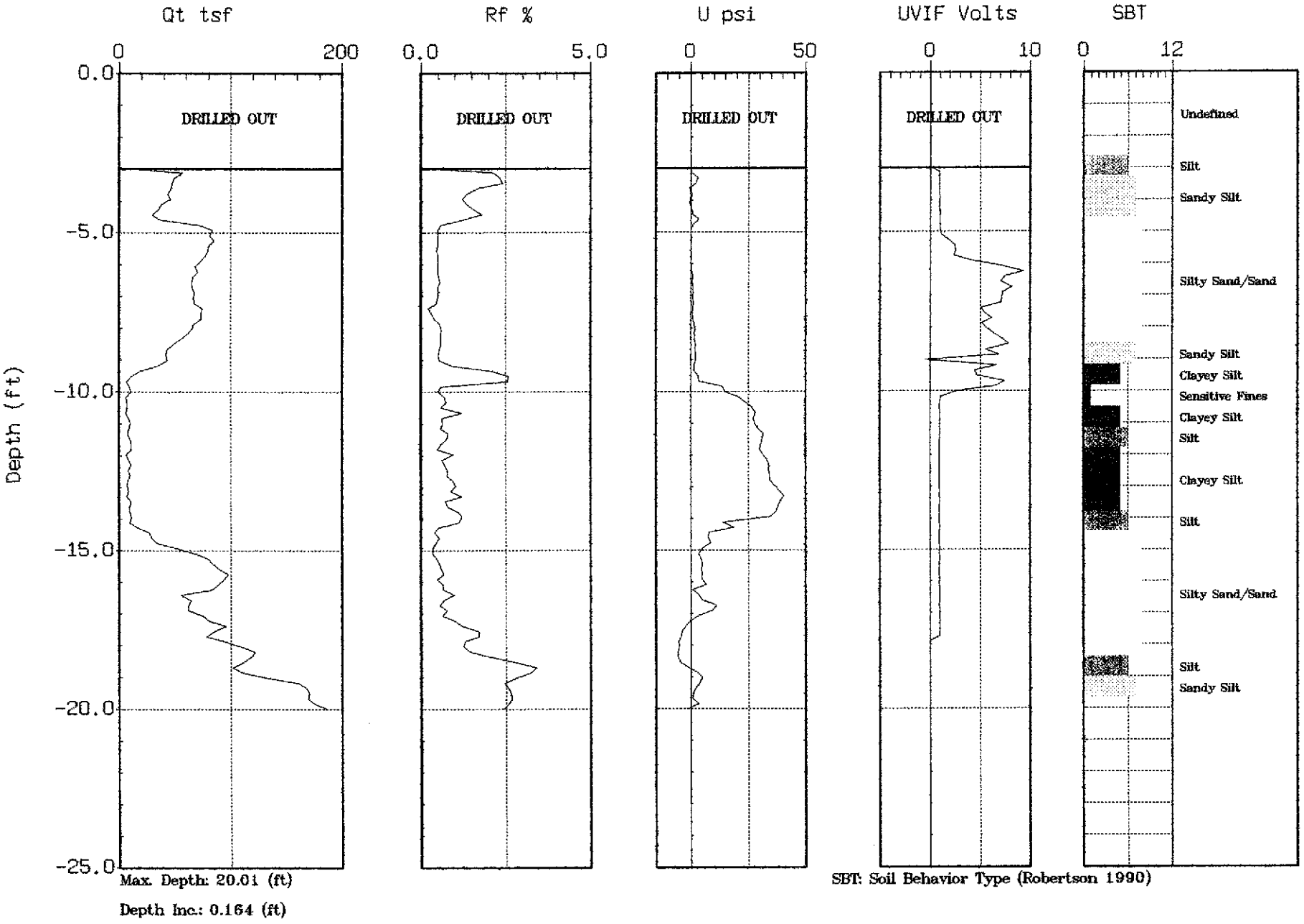
SBT: Soil Behavior Type (Robertson 1990)

GREGG

ITSI

Site: 2225 th St.
Sounding: CPT-25

Engineer: J. Anderson
Date: 01:31:02 10:59



Max. Depth: 20.01 (ft)

Depth Inc.: 0.164 (ft)

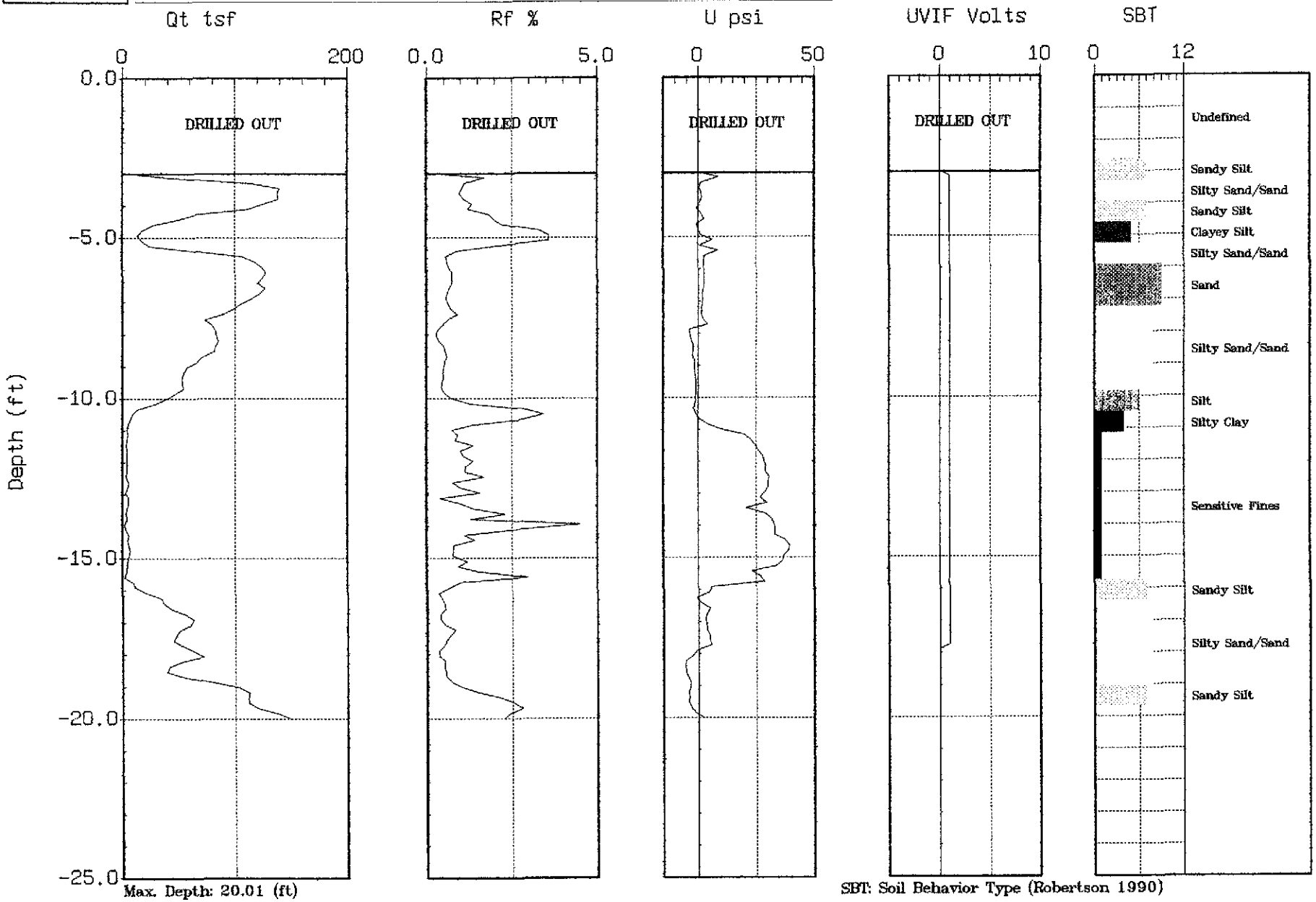
SBT: Soil Behavior Type (Robertson 1990)

GREGG

ITSI

Site: 2225 7th St.
Sounding: CPT-26

Engineer: J. Anderson
Date: 01:31:02 10:14



Max. Depth: 20.01 (ft)

Depth Inc.: 0.164 (ft)

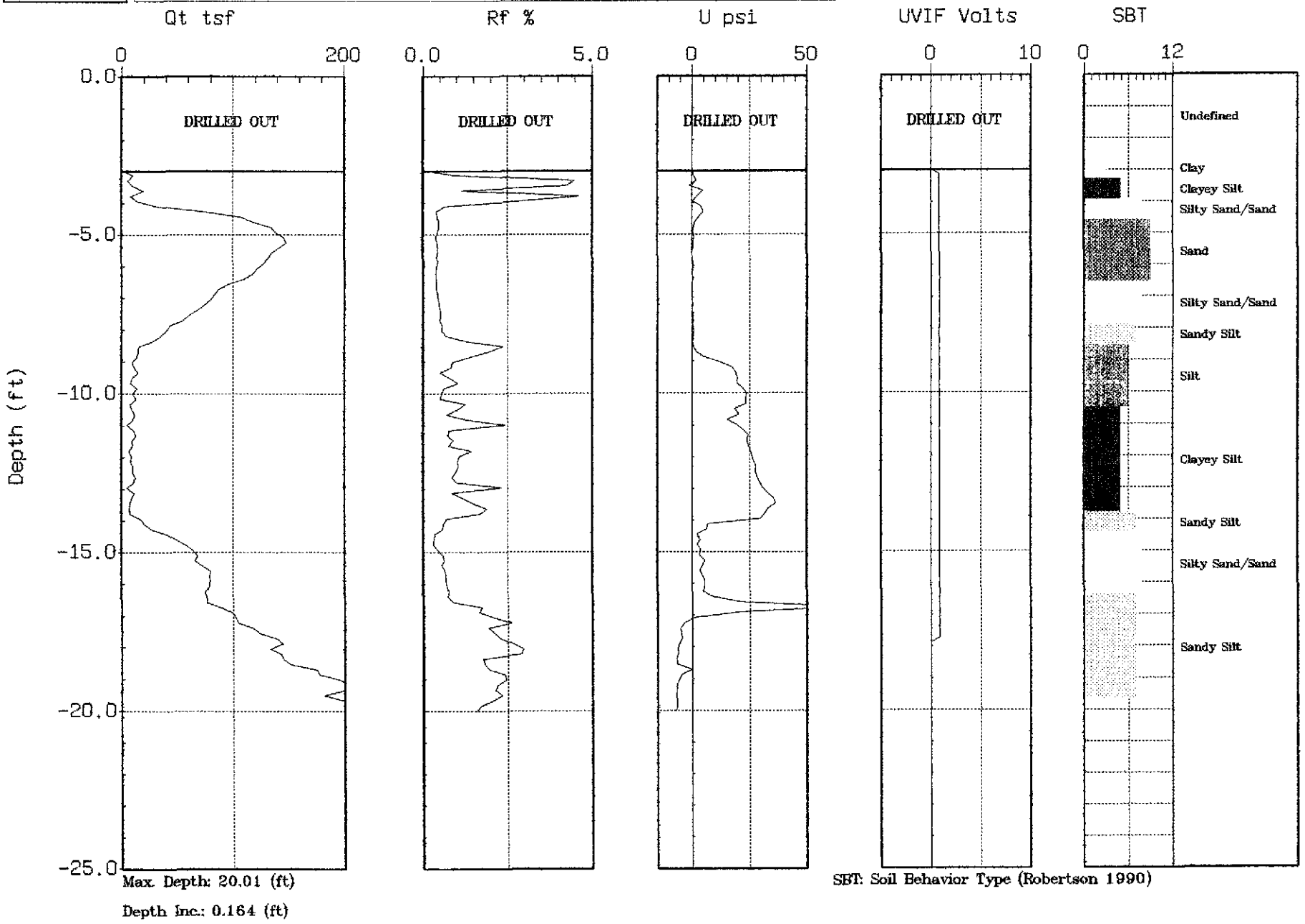
SBT: Soil Behavior Type (Robertson 1990)

GREGG

ITSI

Site: 2225 7th St.
Sounding: CPT-27

Engineer: J. Anderson
Date: 01:30:02 09:03



Max. Depth: 20.01 (ft)

Depth Inc.: 0.164 (ft)

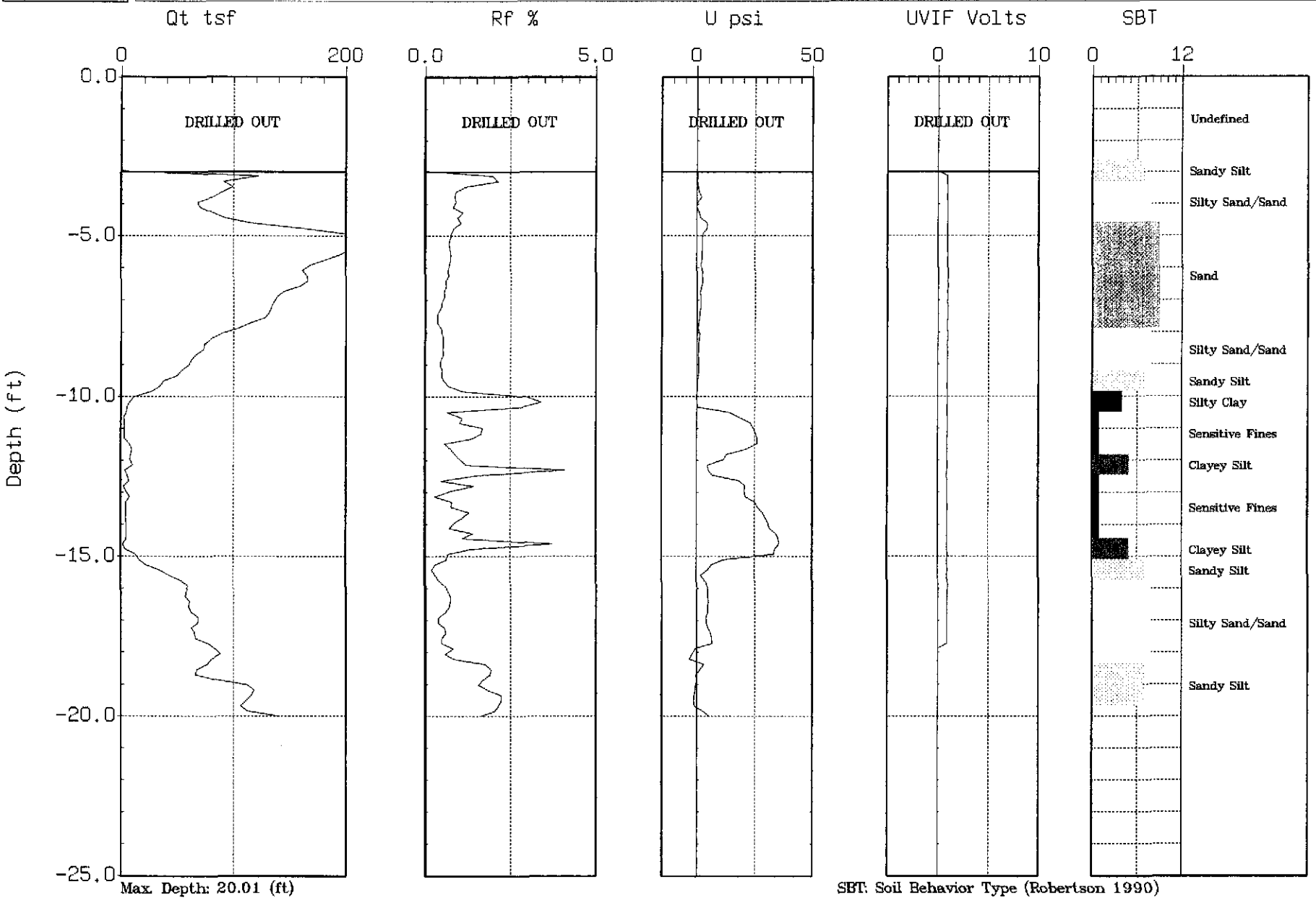
SBT: Soil Behavior Type (Robertson 1990)

GREGG

ITSI

Site: 2225 7th St.
Sounding: CPT-28

Engineer: J. Anderson
Date: 01:31:02 11:25



Max. Depth: 20.01 (ft)

Depth Inc.: 0.164 (ft)

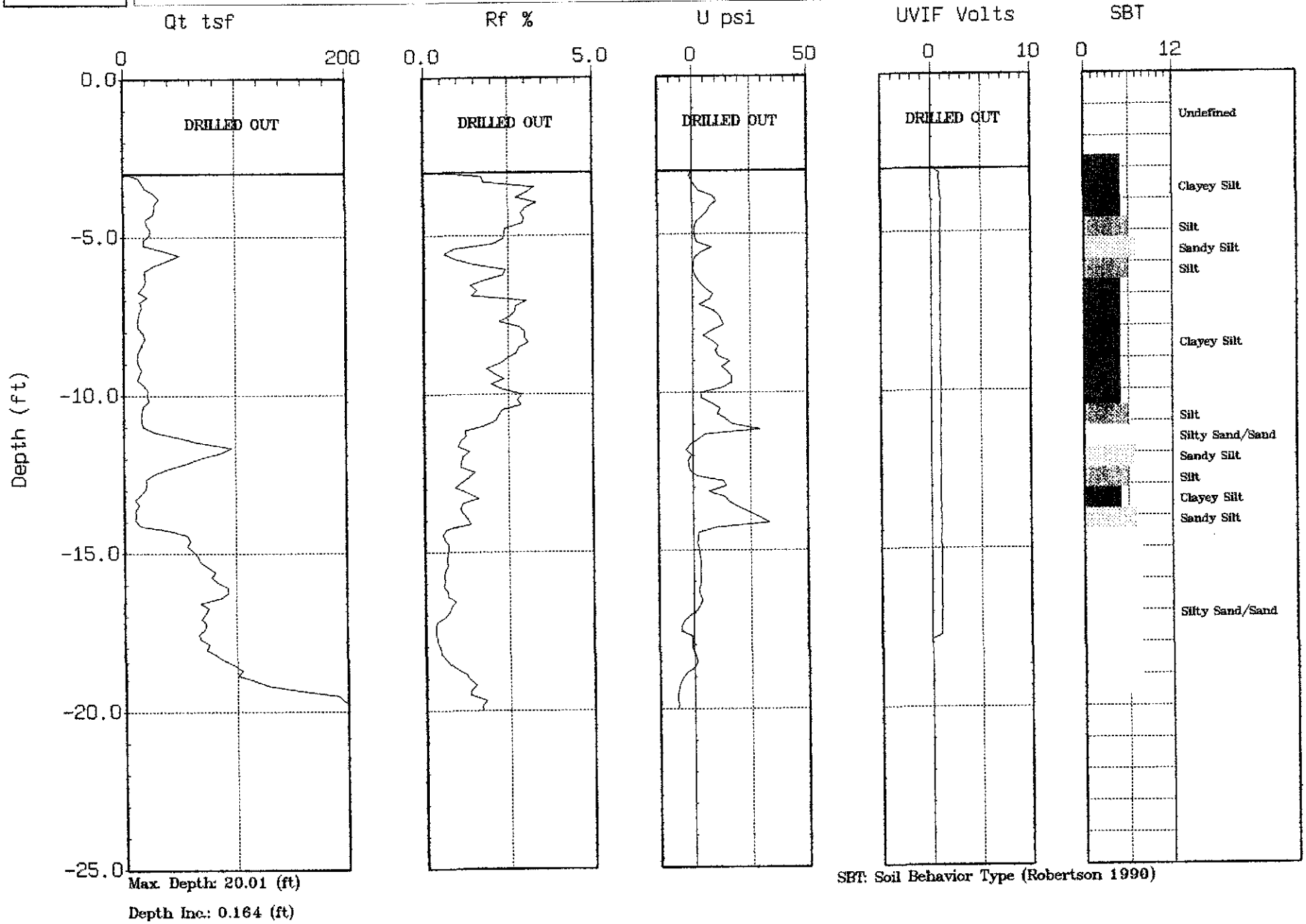
SBT: Soil Behavior Type (Robertson 1990)

GREGG

ITSI

Site: 2225 7th St.
Sounding: CPT-29

Engineer: J. Anderson
Date: 01:31:02 08:37



Max. Depth: 20.01 (ft)

Depth Inc.: 0.164 (ft)

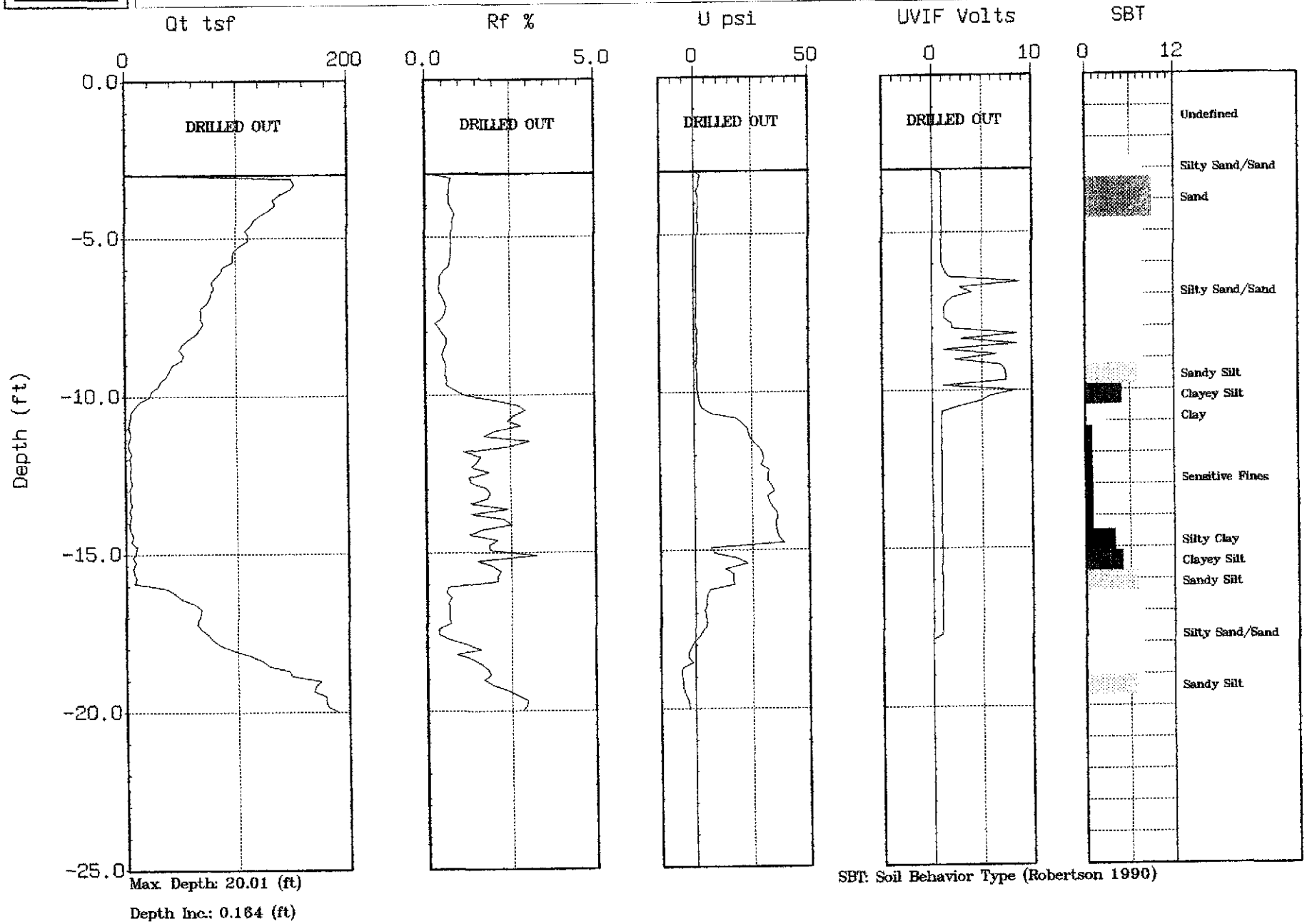
SBT: Soil Behavior Type (Robertson 1990)

GREGG

ITSI

Site: 2225 7th St.
Sounding: CPT-30

Engineer: J. Anderson
Date: 02:01:02 09:55



Max. Depth: 20.01 (ft)

Depth Inc.: 0.164 (ft)

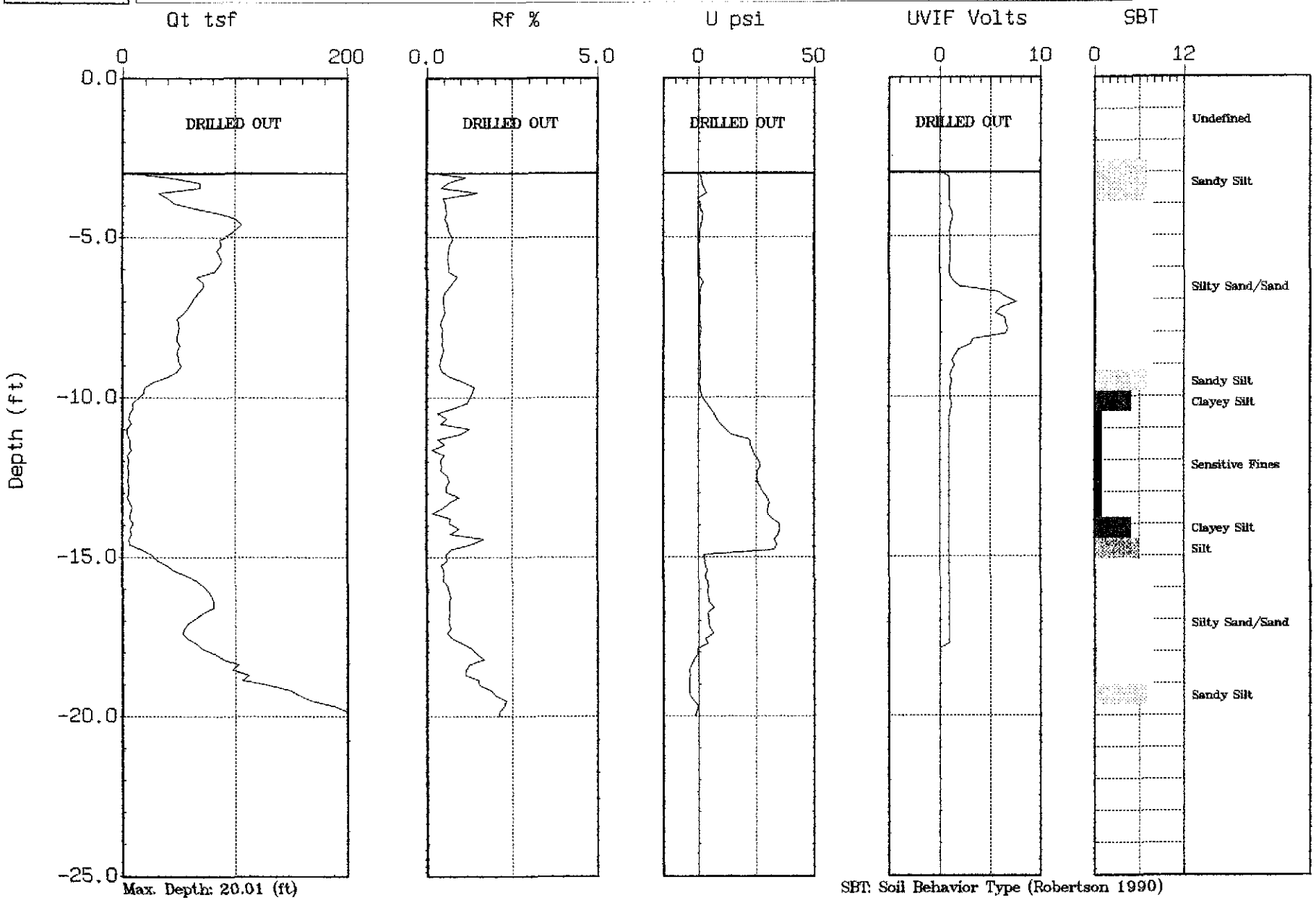
SBT: Soil Behavior Type (Robertson 1990)

GREGG

ITSI

Site: 2225 7th St.
Sounding: CPT-32

Engineer: J. Anderson
Date: 02:01:02 10:37



Max. Depth: 20.01 (ft)

Depth Inc.: 0.164 (ft)

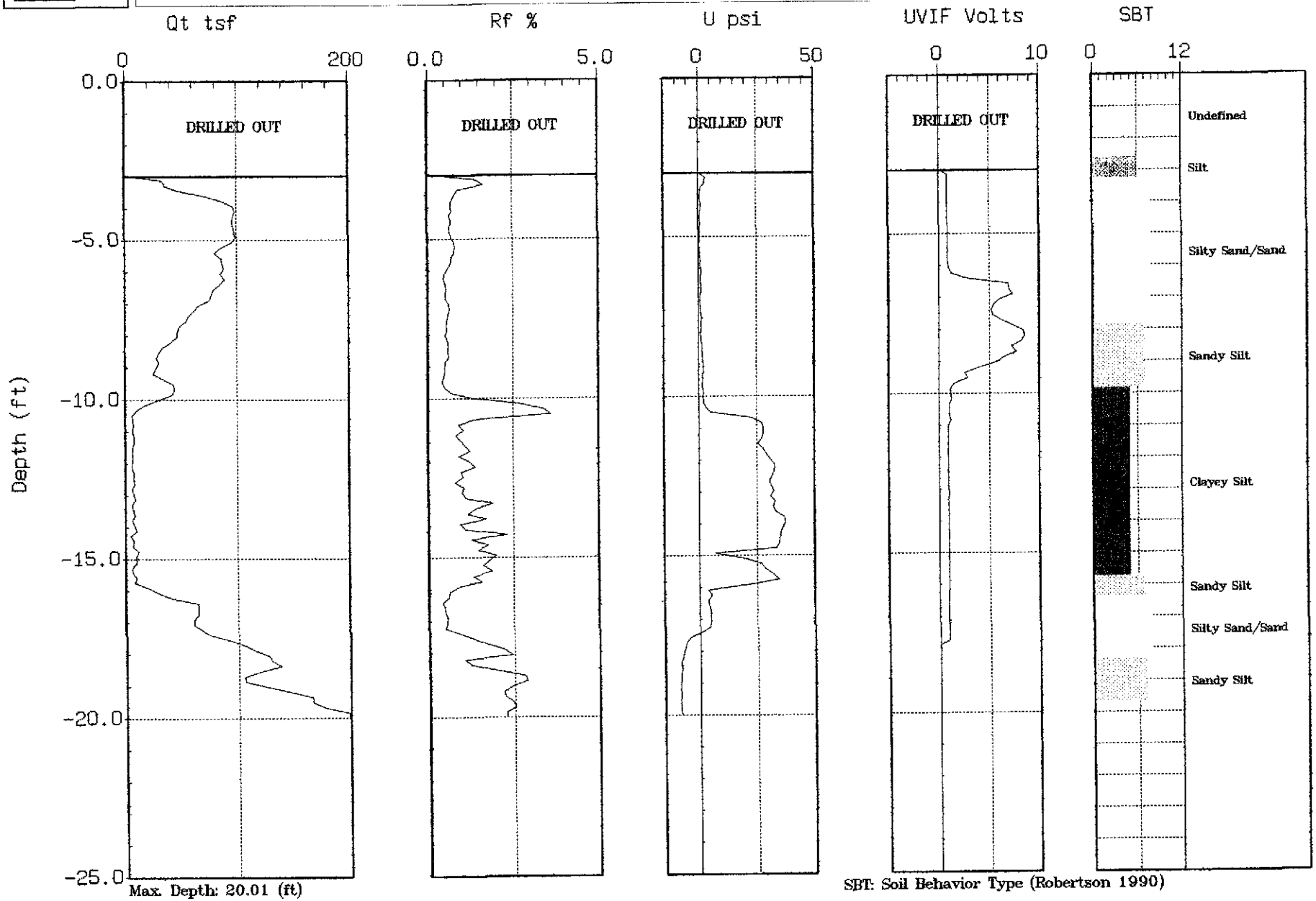
SBT: Soil Behavior Type (Robertson 1990)

GREGG

ITSI

Site: 2225 7th St.
Sounding: CPT-31

Engineer: J. Anderson
Date: 02:01:02 09:22



Max. Depth: 20.01 (ft)

Depth Inc.: 0.164 (ft)

SBT: Soil Behavior Type (Robertson 1990)

APPENDIX B

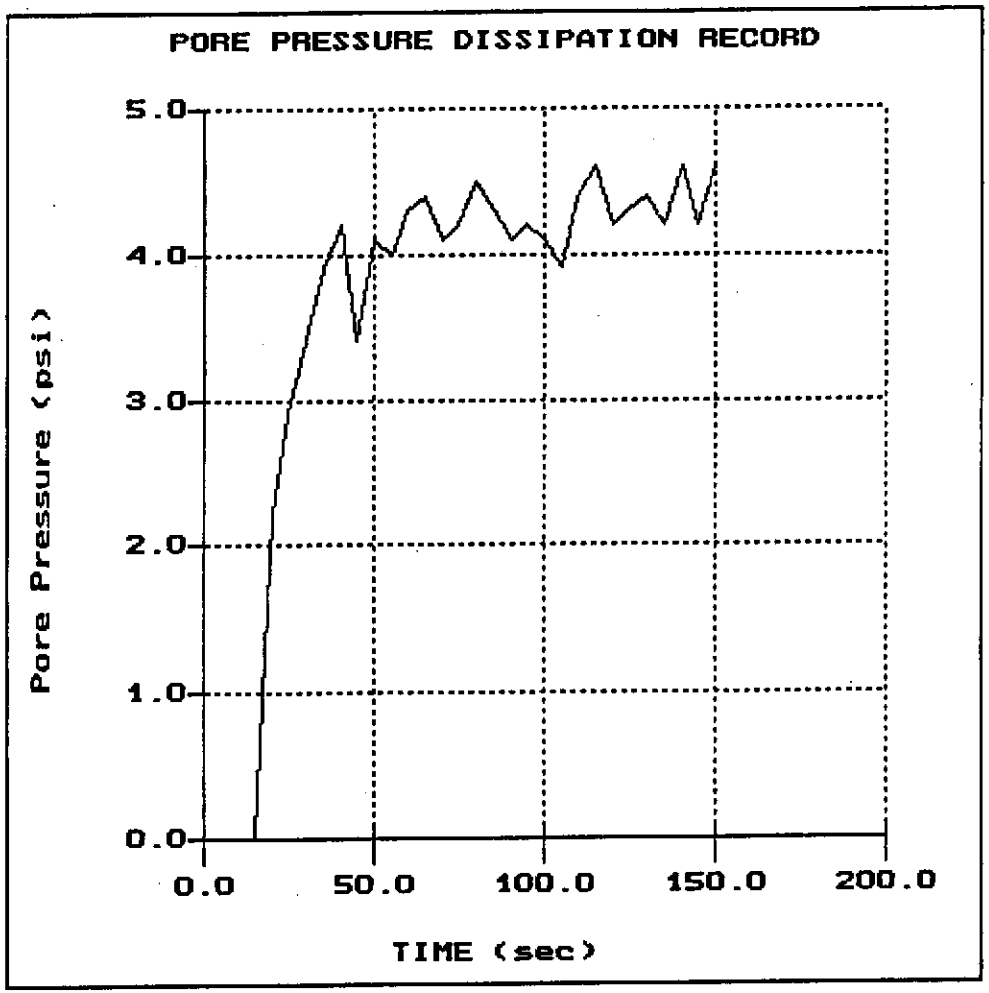
PORE PRESSURE DISSIPATIONS

GREGG

ITSI

Site:05
Sounding:CPT-01

Field Rep:20 TON A AD056
Date:01:29:102 08:23

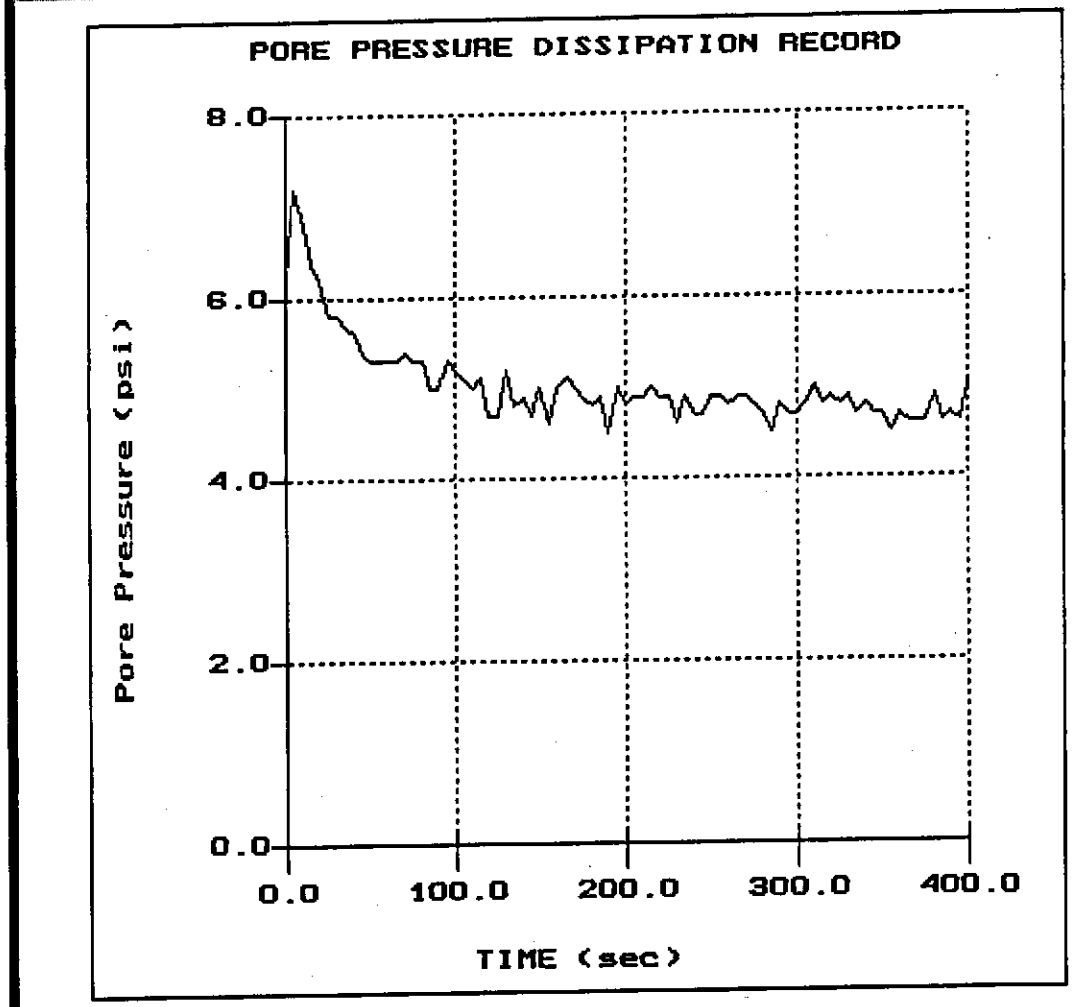


File: 009C01.PPD
Depth (m): 6.10
(ft): 20.01
Duration : 150.0s
U-min: -5.10 0.0s
U-max: 4.60 150.0s

ITSI

Site:15
Sounding:CPT-01A

Field Rep:20 TON A AD056
Date:01:29:102 15:14

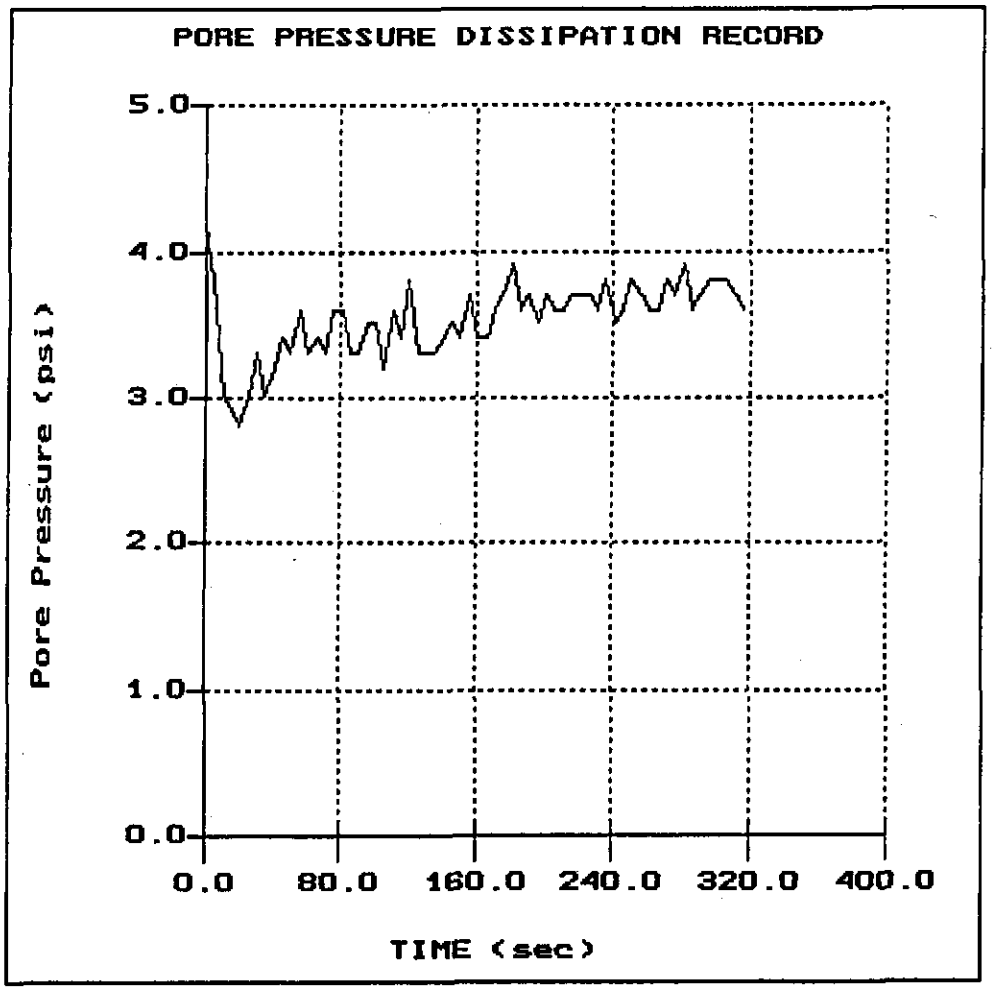


File: 009C01A.PPD
Depth (m): 5.45
(ft): 17.88
Duration : 400.0s
U-min: 4.50 355.0s
U-max: 7.20 5.0s

ITSI

Site:04
Sounding:CPT-02

Field Rep:20 TON A AD046
Date:01:28:102 15:29

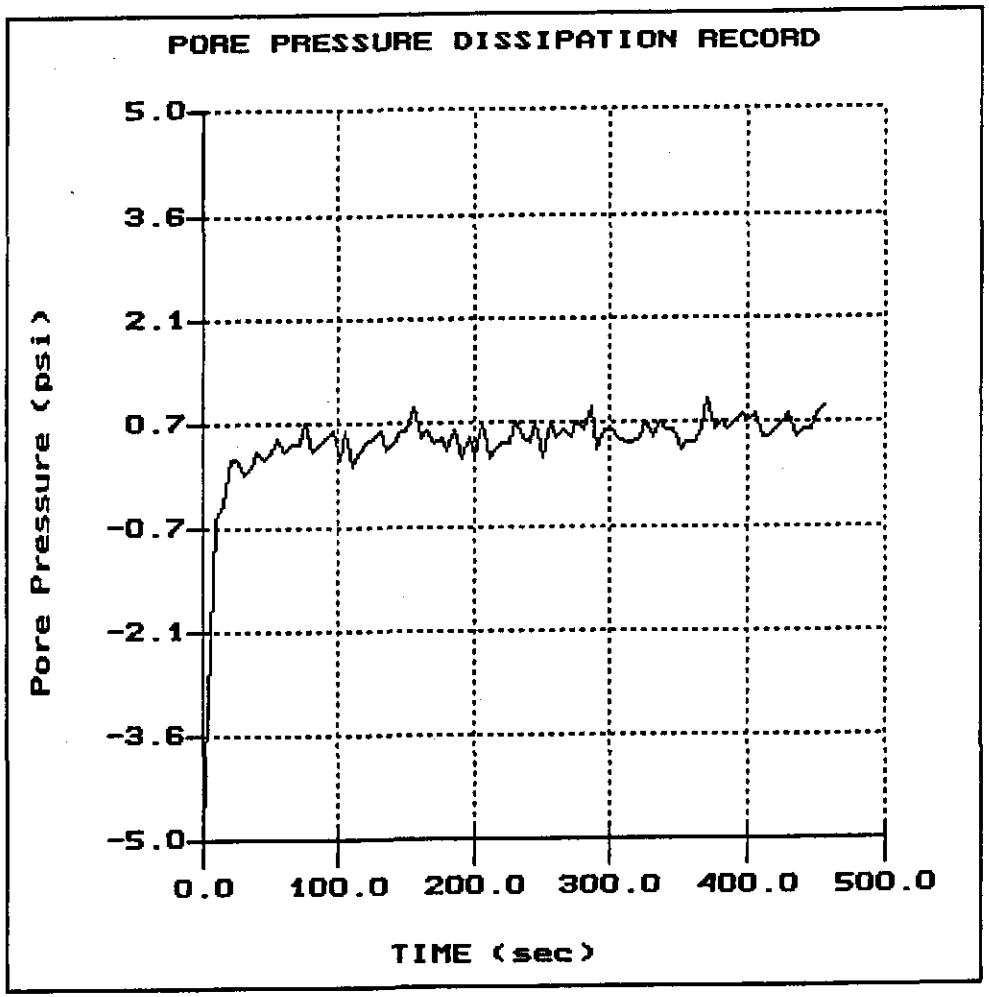


File: 009C02.PPD
Depth (m): 5.00
(ft): 16.40
Duration : 315.0s
U-min: 2.80 20.0s
U-max: 4.20 0.0s

ITSI

Site:01
Sounding:CPT-04

Field Rep:20 TON A AD088
Date:01:28:102 10:38

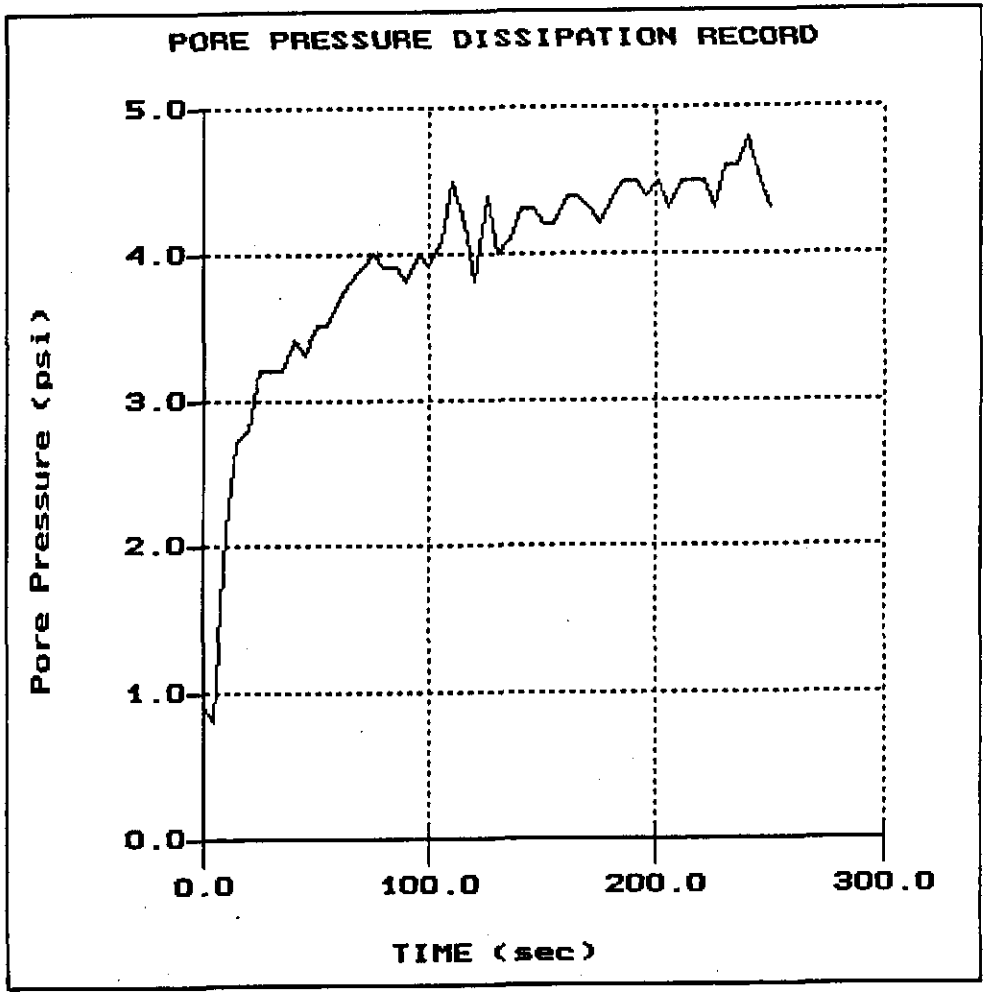


File: 009C04.PPD
Depth (m): 3.75
(ft): 12.30
Duration : 455.0s
U-min: -5.40 0.0s
U-max: 1.00 370.0s

ITSI

Site:06
Sounding:CPT-05

Field Rep:20 TON A AD046
Date:01:29:102 09:10

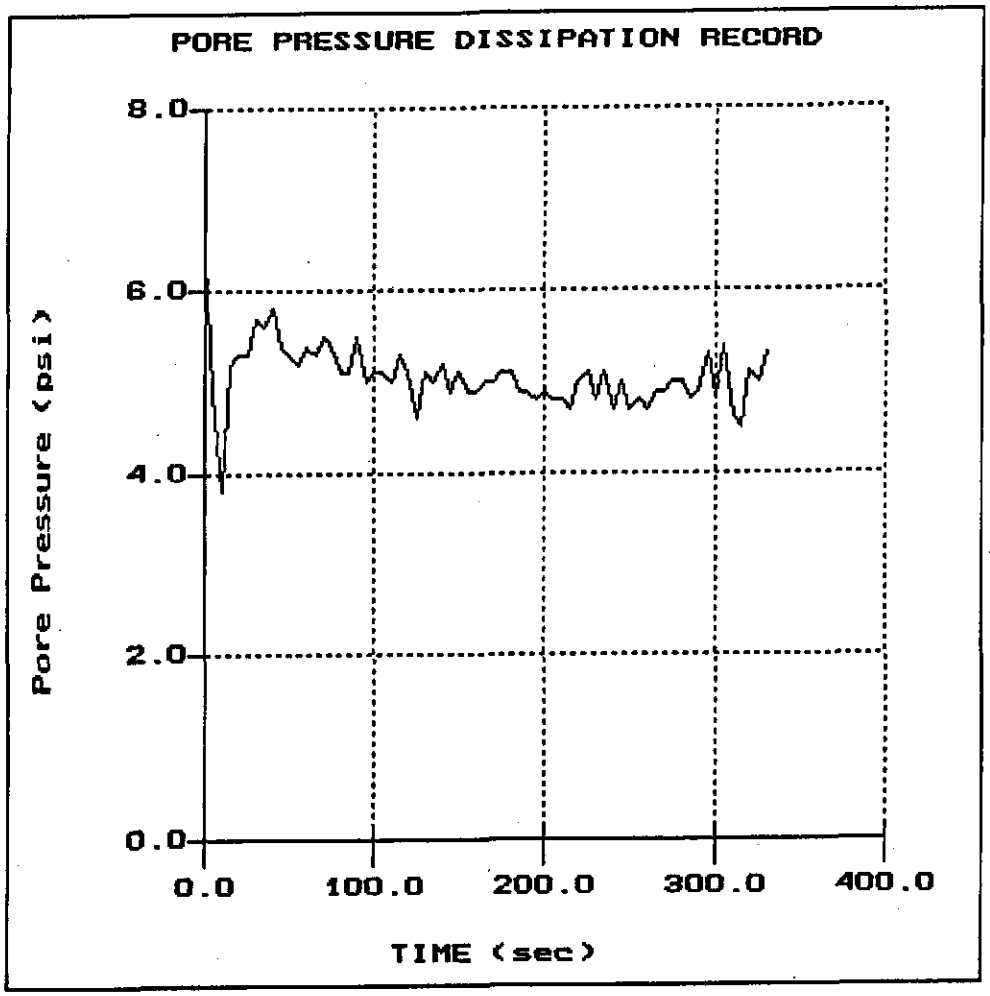


File: 009C05.PPD
Depth (m): 5.80
(ft): 19.03
Duration : 250.0s
U-min: 0.80 5.0s
U-max: 4.80 240.0s

ITSI

Site:07
Sounding:CPT-06

Field Rep:20 TON A AD056
Date:01:29:102 09:09

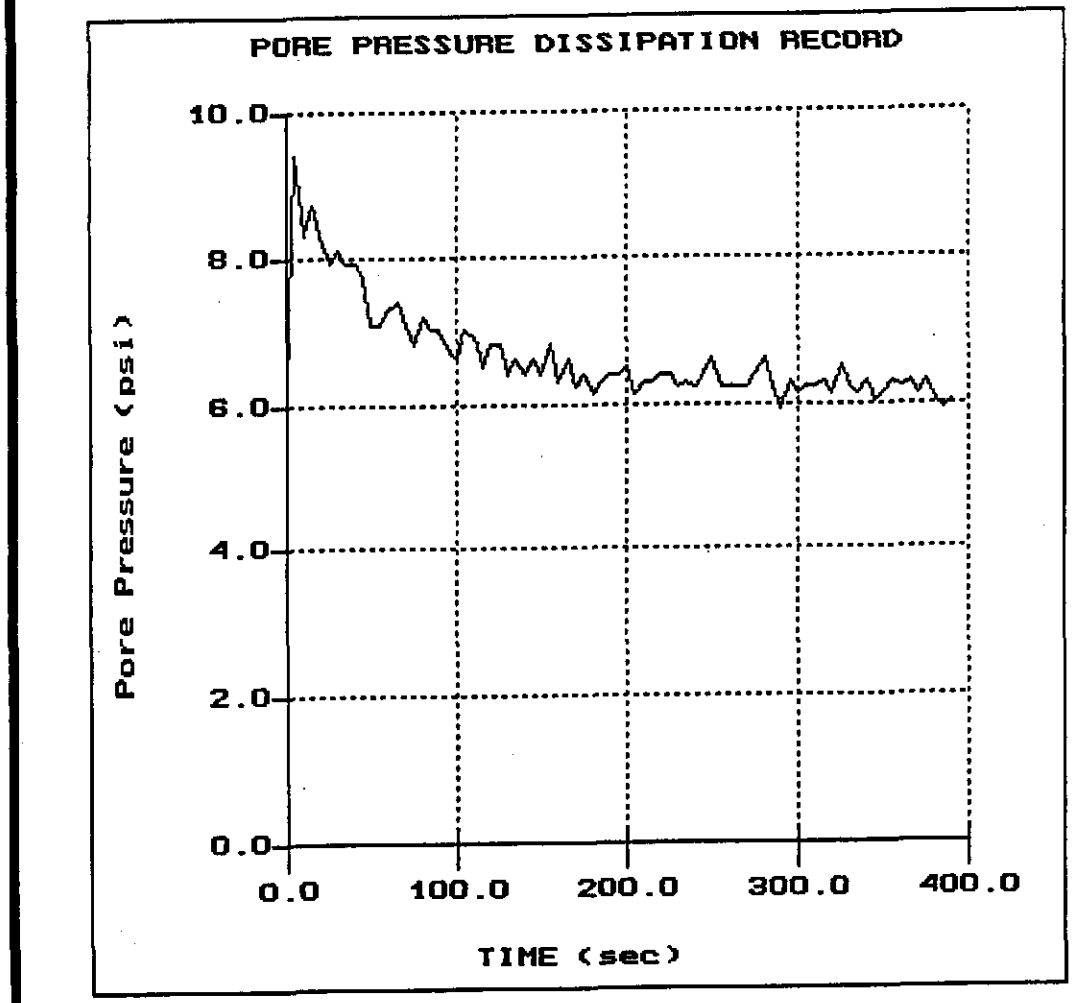


File: 009C06.PPD
Depth (m): 5.45
(ft): 17.88
Duration : 330.0s
U-min: 3.80 10.0s
U-max: 6.40 0.0s

ITSI

Site:08
Sounding:CPT-07

Field Rep:20 TON A AD056
Date:01:29:102 09:43

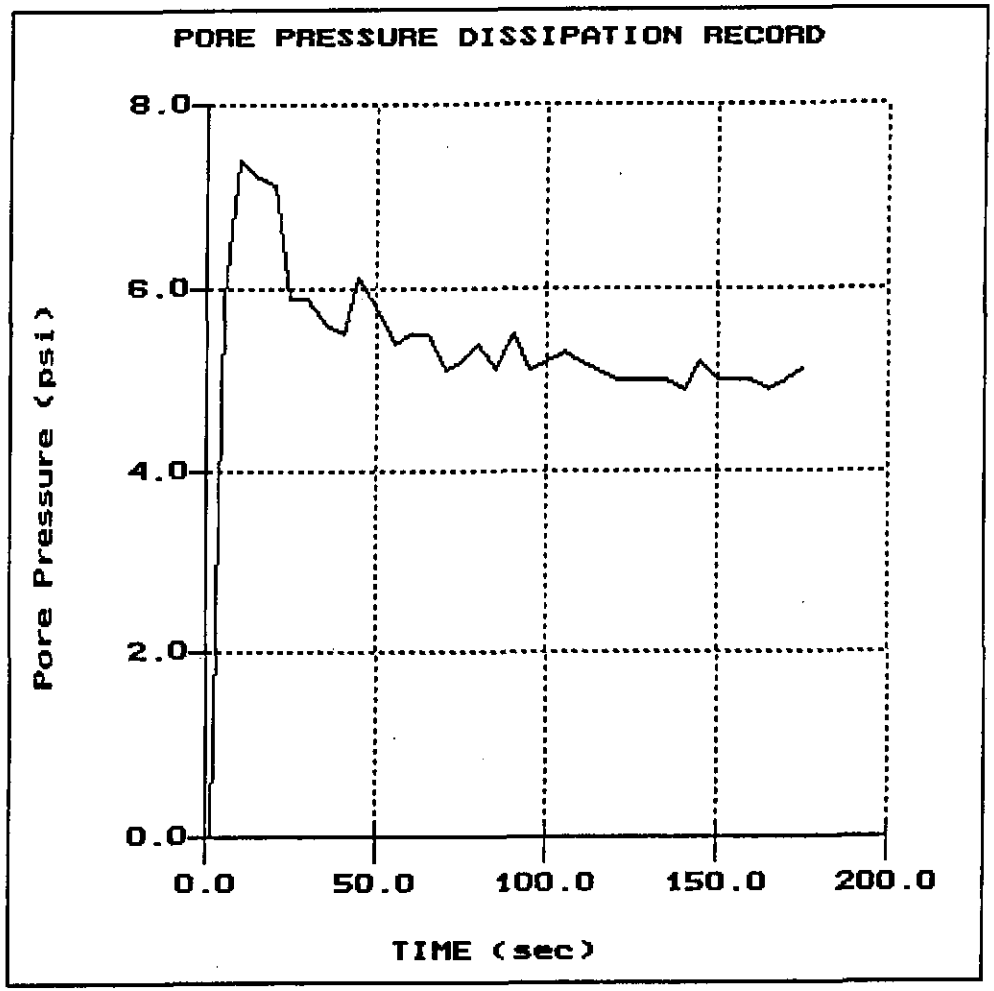


File: 009C07.PPD
Depth (m): 5.15
(ft): 16.90
Duration : 390.0s
U-min: 5.90 385.0s
U-max: 9.40 5.0s

ITSI

Site:08
Sounding:CPT-07

Field Rep:20 TON A AD056
Date:01:29:102 09:43

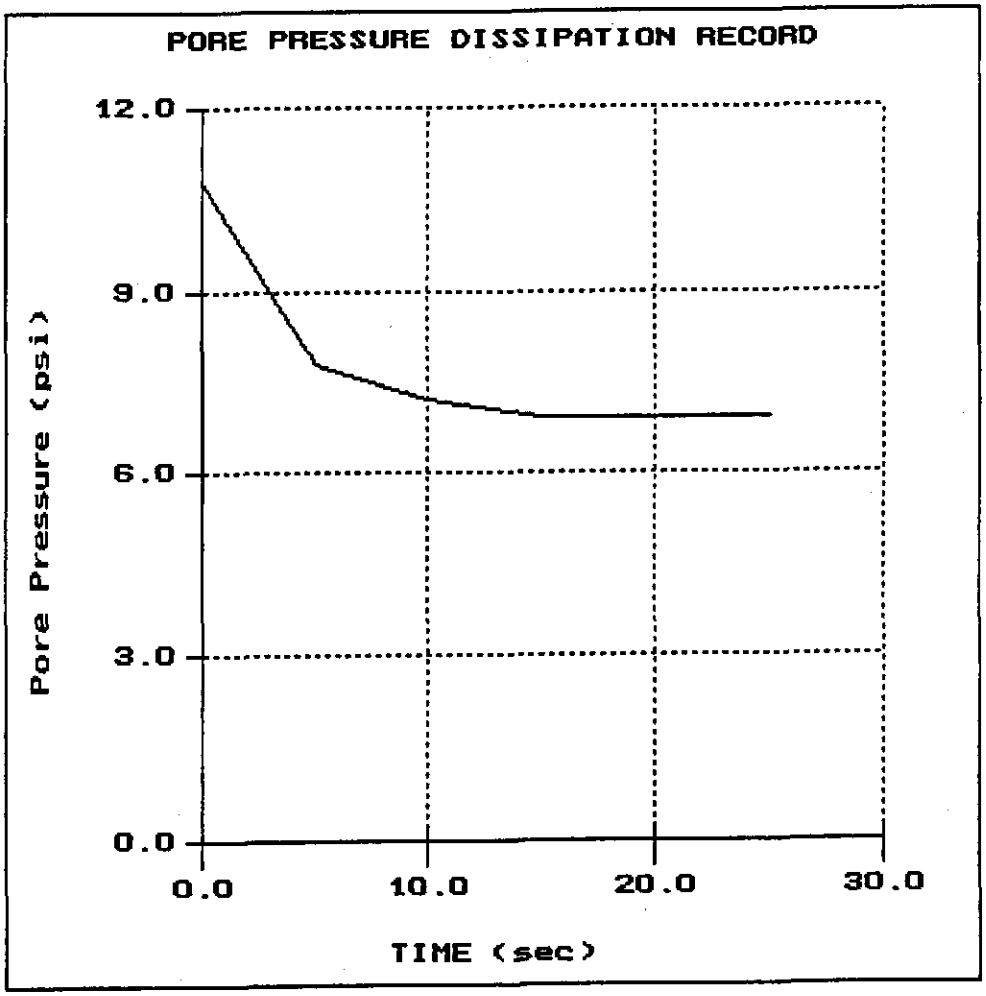


File: 009C07.PPD
Depth (m): 5.55
(ft): 18.21
Duration : 175.0s
U-min: -2.40 0.0s
U-max: 7.40 10.0s

ITSI

Site:09
Sounding:CPT-08

Field Rep:20 TON A AD056
Date:01:29:102 10:22



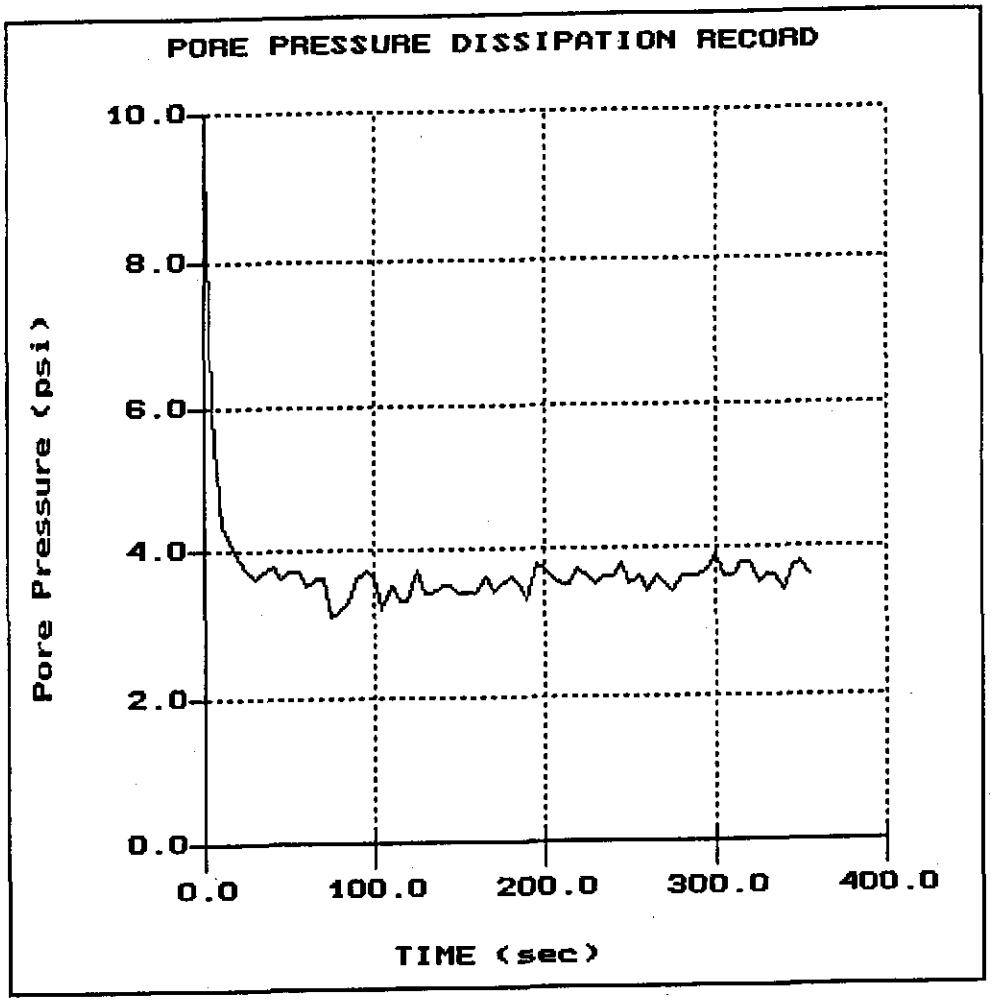
File: 009C08.PPD
Depth (m): 2.85
(ft): 9.35
Duration : 25.0s
U-min: 6.90 25.0s
U-max: 10.80 0.0s

ITSI

Site:09
Sounding:CPT-08

Field Rep:20 TON A AD056
Date:01:29:102 10:22

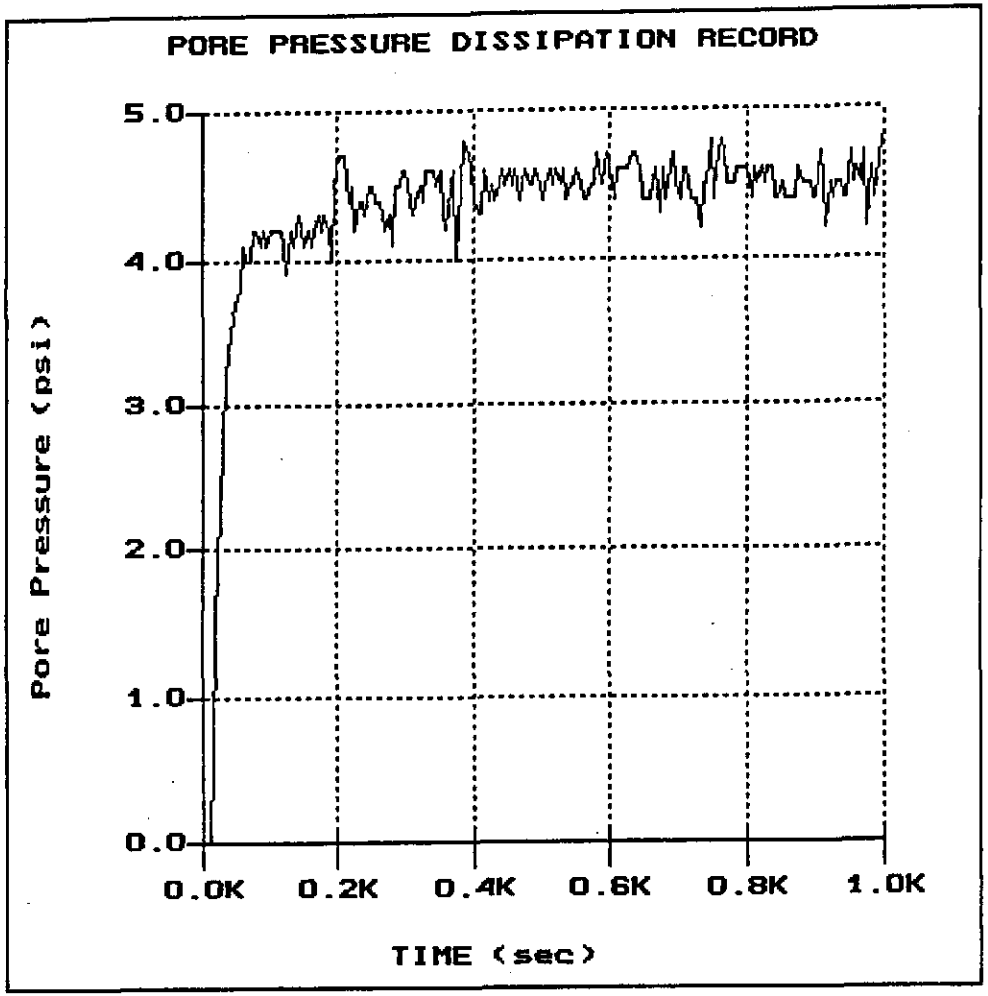
File: 009C08.PPD
Depth (m): 5.55
(ft): 18.21
Duration : 355.0s
U-min: 3.10 75.0s
U-max: 9.60 0.0s



ITSI

Site:14
Sounding:CPT-09

Field Rep:20 TON A AD056
Date:01:29:102 14:26



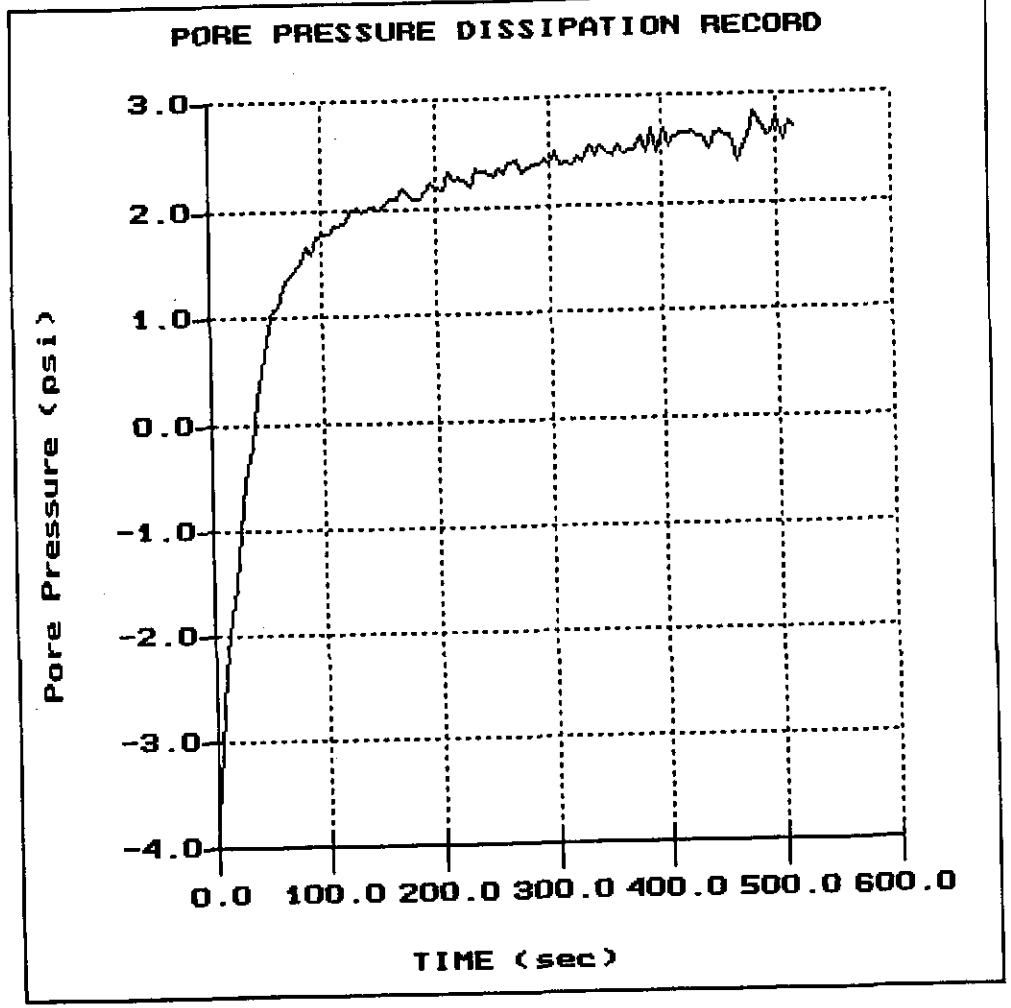
File: 009C09.PPD
Depth (m): 5.55
(ft): 18.21
Duration : 995.0s
U-min: -2.30 5.0s
U-max: 4.80 995.0s

ITSI

Site: 2277 7th St.
Location: RCPT-10

Engineer: J. Anderson
Date:01:28:02 19:03

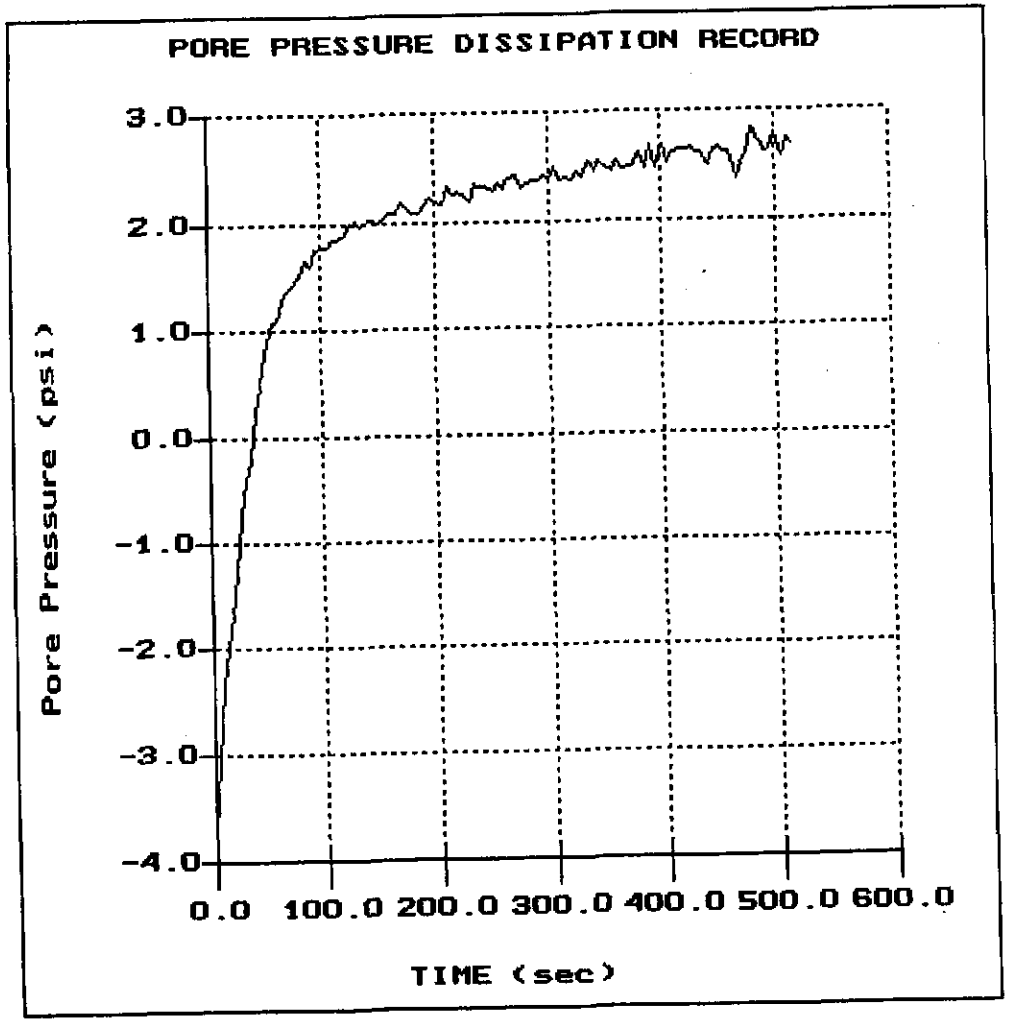
File: 009R10.PPC
Depth (m): 5.58
(ft): 18.31
Duration : 515.0s
U-min: -3.74 0.0s
U-max: 2.83 480.0s



ITSI

Site: 2277 7th St.
Location: RCPT-10

Engineer: J. Anderson
Date:01:28:02 19:03

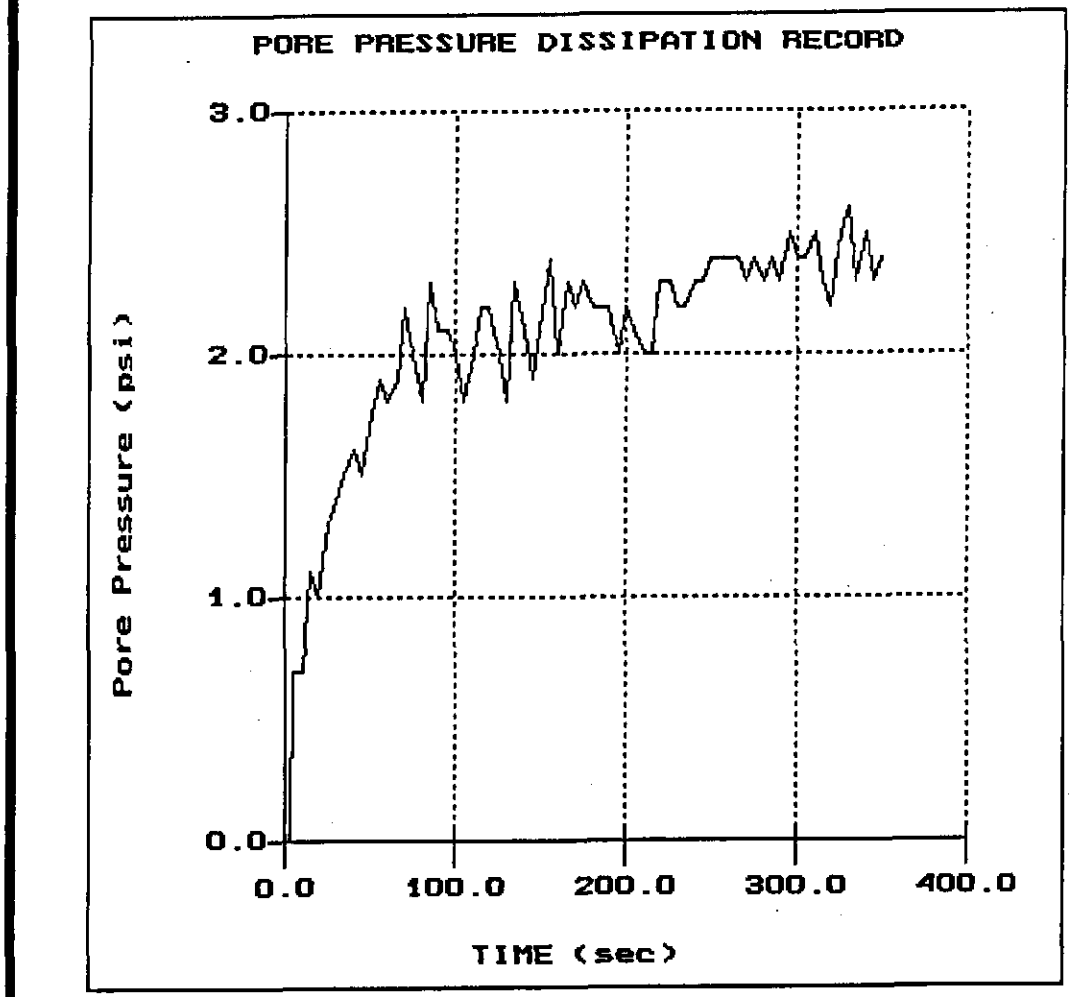


File: 009R10.PPC
Depth (m): 5.58
(ft): 18.31
Duration : 515.0s
U-min: -3.74 0.0s
U-max: 2.83 480.0s

ITSI

Site:10
Sounding:CPT-12

Field Rep:20 TON A AD056
Date:01:29:102 11:10

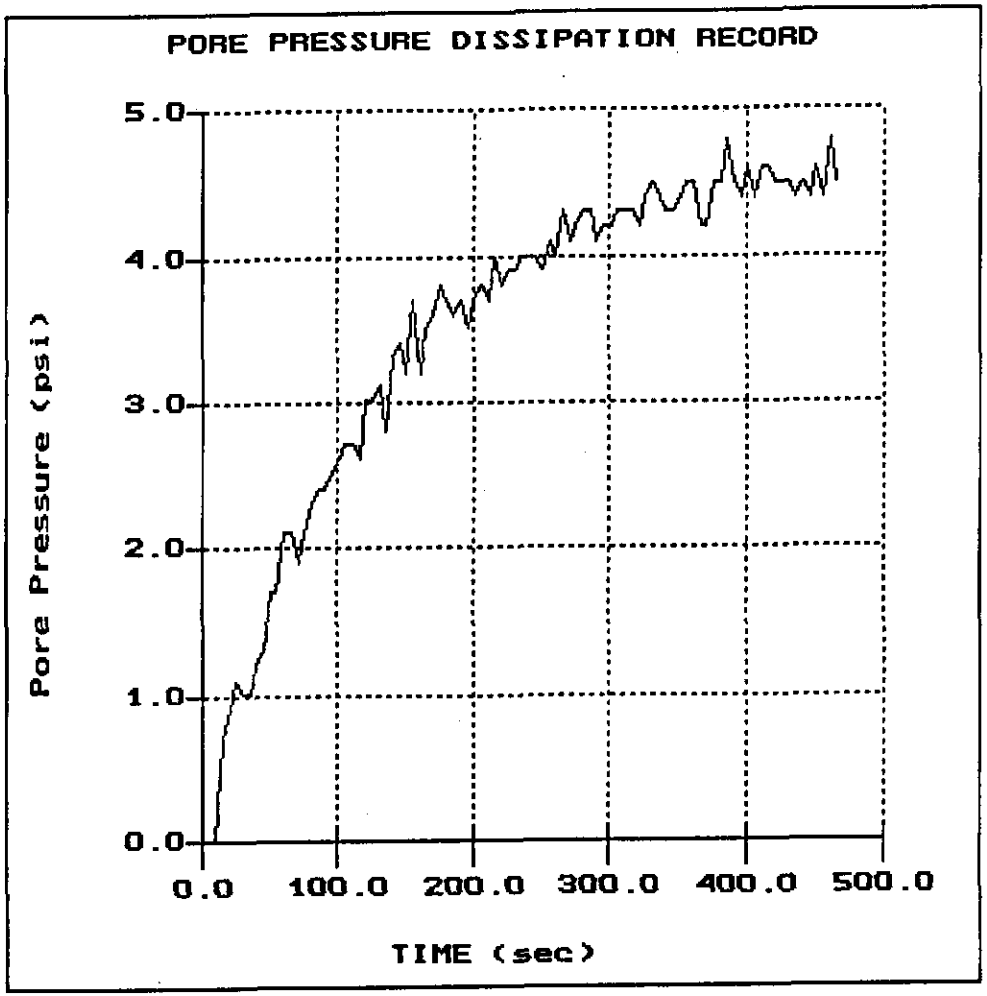


File: 009C12.PPD
Depth (m): 5.65
(ft): 18.54
Duration : 350.0s
U-min: -1.50 0.0s
U-max: 2.60 330.0s

ITSI

Site:13
Sounding:CPT-13

Field Rep:20 TON A AD056
Date:01:29:102 13:53

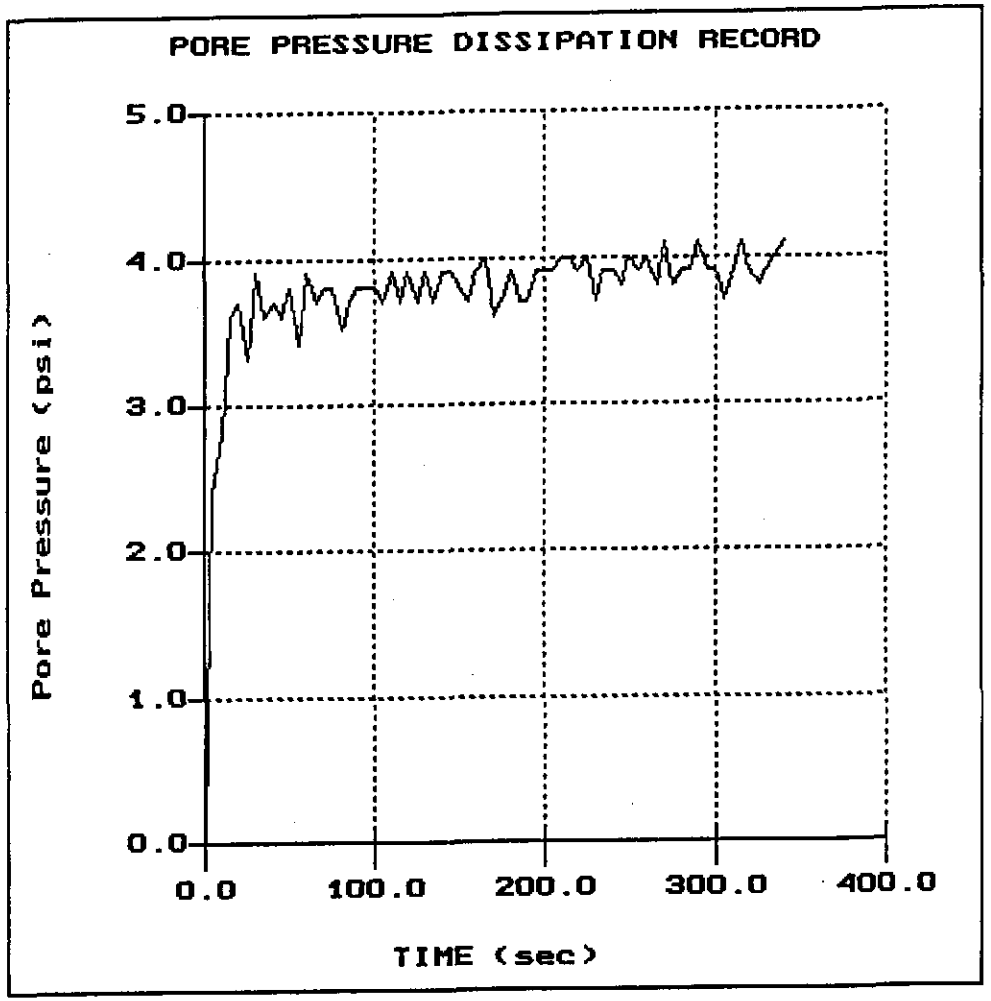


File: 009C13.PPD
Depth (m): 6.10
(ft): 20.01
Duration : 465.0s
U-min: -2.30 5.0s
U-max: 4.80 460.0s

ITSI

Site:12
Sounding:CPT-14

Field Rep:20 TON A ADOS6
Date:01:29:102 13:06

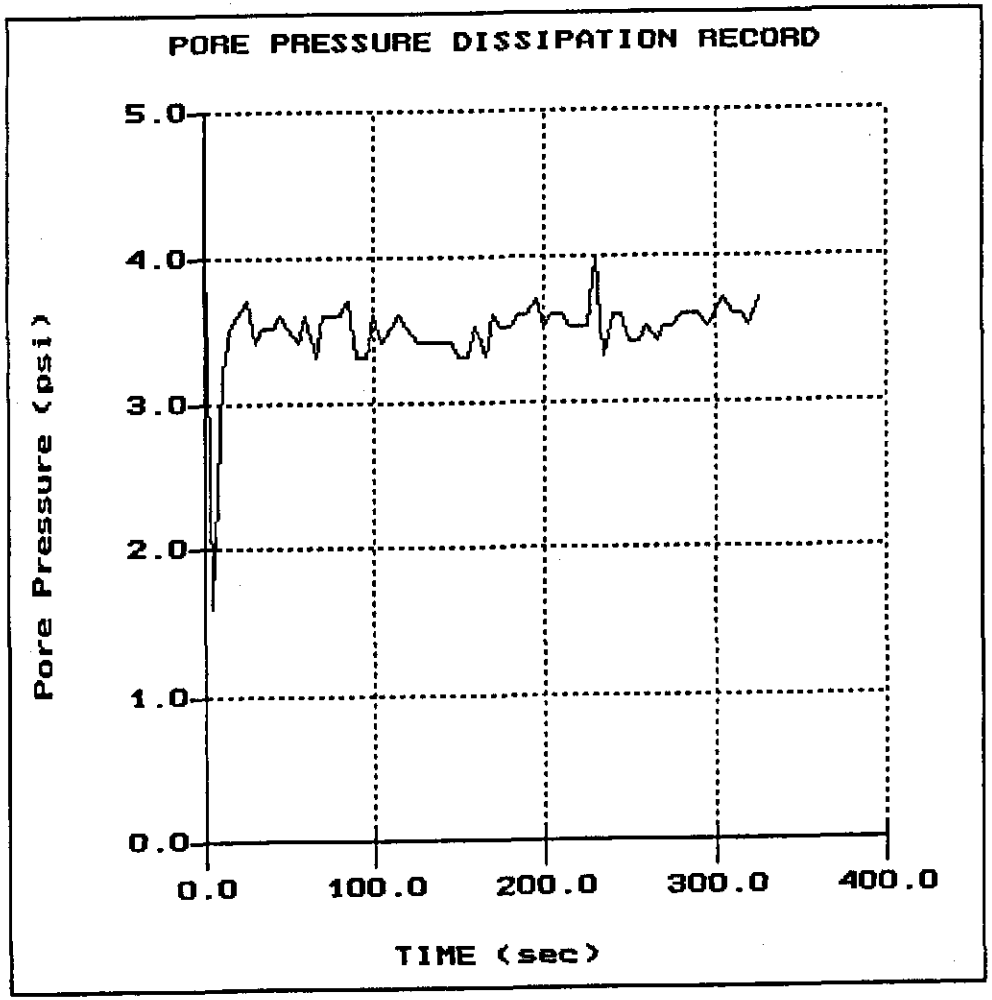


File: 009C14.PPD
Depth (m): 5.35
(ft): 17.55
Duration : 340.0s
U-min: -0.10 0.0s
U-max: 4.10 340.0s

ITSI

Site:22
Sounding:CPT-15

Field Rep:20 TON A ADOS6
Date:01:30:102 15:32

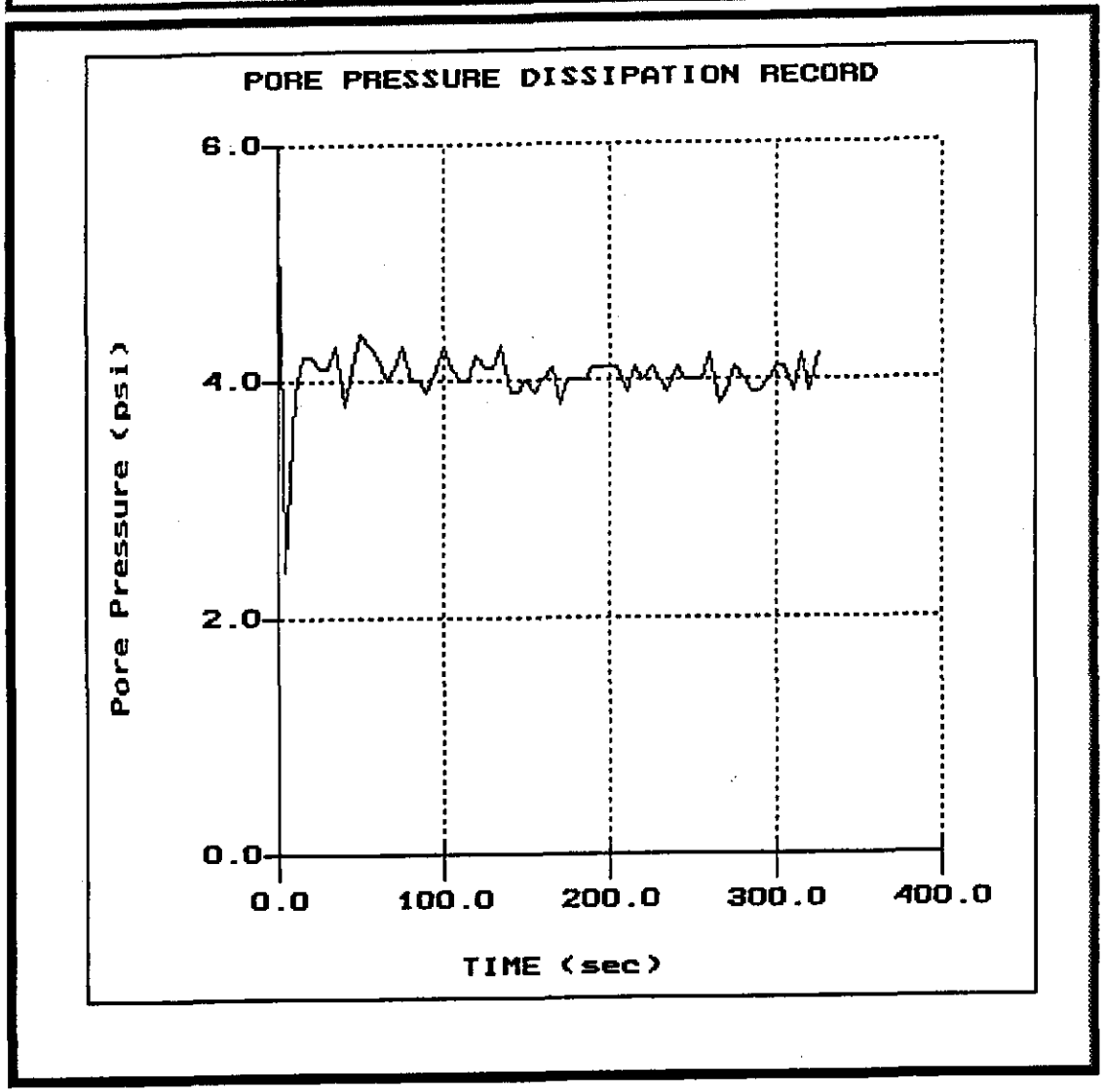


File: 009C15.PPD
Depth (m): 5.35
(ft): 17.55
Duration : 325.0s
U-min: 1.60 5.0s
U-max: 4.20 0.0s

ITSI

Site:11
Sounding:CPT-16

Field Rep:20 TON A AD056
Date:01:29:102 11:51

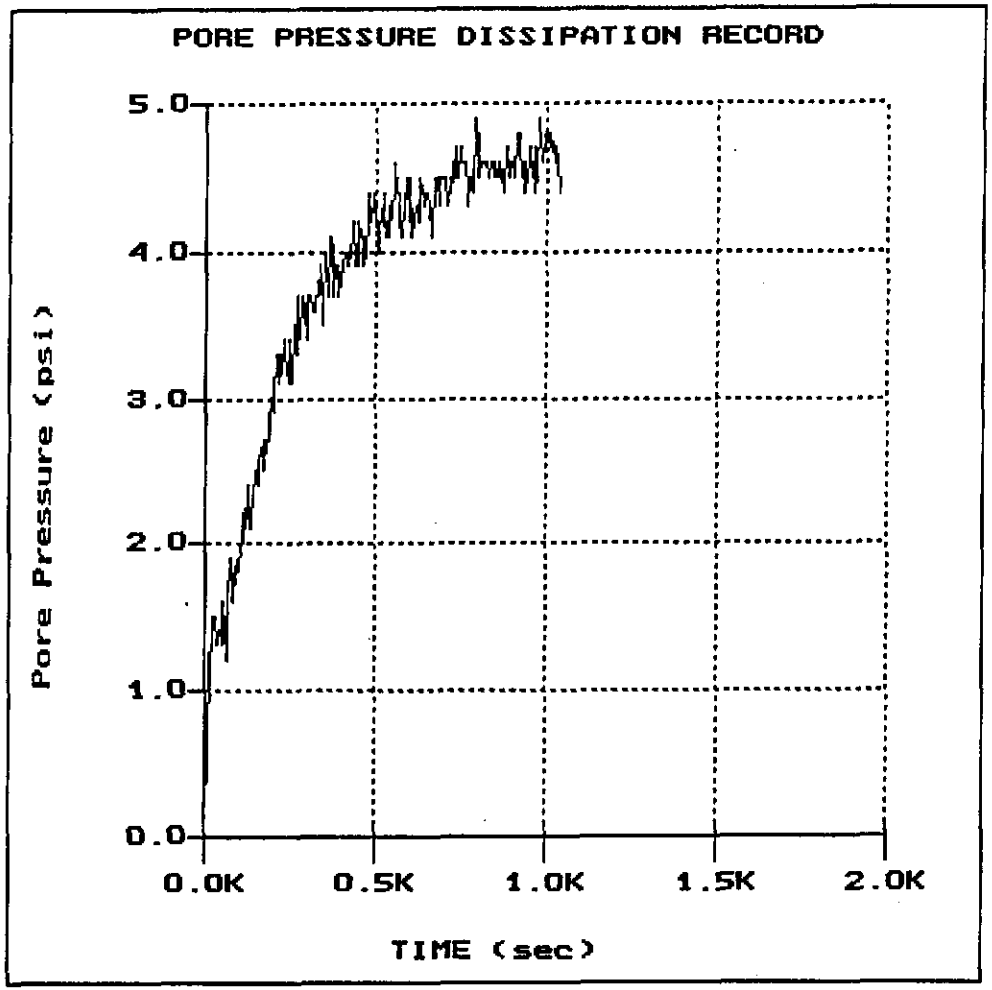


File: 009C16.PPD
Depth (m): 5.30
(ft): 17.39
Duration : 325.0s
U-min: 2.40 5.0s
U-max: 5.50 0.0s

ITSI

Site:18
Sounding:CPT-17

Field Rep:20 TON A AD056
Date:01:30:102 10:48



File: 009C17.PPD
Depth (m): 5.80
(ft): 19.03
Duration : 1035.0s
U-min: -2.00 0.0s
U-max: 4.90 975.0s