



INTERNATIONAL
TECHNOLOGY
CORPORATION

ALCO
HAZMAT

APR 14 PM 2:04

April 7, 1994

IT Project No. 151933

Mr. Scott Seery
Alameda County Department of Environmental Health
80 Swan Way, Room 350
Oakland, California 94621

SUBJECT: 2610 NORBRIDGE AV, CASTRO VALEY, CALIFORNIA

Dear Mr. Seery:

On behalf of Pacific Bell, IT Corporation is pleased to present the results of the Preliminary Site Investigation at 2610 Norbridge Avenue, Castro Valley, California. If you have any questions regarding the material presented in this report, please feel free to contact me at your convenience.

Respectfully,
IT CORPORATION

A handwritten signature in black ink, appearing to read 'M. D. Miller'.

Michael D. Miller, REA
Senior Project Geologist

cc: Ms. Irene Soto, Pacific Bell



**INTERNATIONAL
TECHNOLOGY
CORPORATION**

**PRELIMINARY SITE INVESTIGATION
PACIFIC BELL FACILITY
2610 NORBRIDGE AVENUE
CASTRO VALLEY, CALIFORNIA**

PREPARED FOR:

**PACIFIC BELL
2600 CAMINO RAMON
ROOM - 3E400Q
SAN RAMON, CALIFORNIA**

PREPARED BY:

**IT CORPORATION
2055 JUNCTION AVENUE
SAN JOSE, CALIFORNIA 95131**

IT PROJECT NO. 151933

MARCH 1994

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**Michael D. Miller
Senior Project Geologist**



**Matthew A. Hopwood
California Registered Geologist No. 5881**

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**INTERNATIONAL
TECHNOLOGY
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**PRELIMINARY SITE INVESTIGATION
PACIFIC BELL FACILITY
2610 NORBRIDGE AVENUE
CASTRO VALLEY, CALIFORNIA**

1.0 INTRODUCTION

This report presents the results of the installation of one groundwater monitoring well and the completion of three soil borings, performed by IT Corporation (IT) at the 2610 Norbridge Avenue site in Castro Valley, California (Figure 1). This report addresses the issues presented in the letter dated September 27, 1993, from the Alameda County Environmental Health Department, regarding a preliminary site assessment. Field work was performed during February, 1994 in response to the request and authorization of Ms. Rose Cassens of Pacific Bell. This work has been performed as a follow-up to previous work conducted by IT regarding underground storage tank (UST) replacement at the site.

1.1 Background

The site is a Pacific Bell equipment storage and maintenance yard (Figure 2). One 10,000 gallon fiberglass unleaded gasoline UST was used at the site primarily to supply fuel for Pacific Bell vehicles. This fiberglass UST was replaced with a 10,000 gallon double-wall glasteel tank manufactured by Modern Welding (Fresno, California).

On May 4, 1993, Balch Petroleum, a Pacific Bell contractor, removed the UST. The removal was observed by Pacific Bell, IT, the Eden Consolidated Fire Protection District (ECFPD, Inspector Tony Rocha), and the Alameda County Department of Environmental Health (ACDEH, Mr. Amir Gholami).

IT collected and analyzed three soil samples (SOIL-1, SOIL-2, and SOIL-3) from the original excavation sidewalls, approximately 6 feet below ground surface (BGS). Total petroleum hydrocarbons as gasoline (TPH-G) and benzene, toluene, ethyl benzene, and xylenes (BTEX) were not detected within the northern (SOIL-1) and northeastern (SOIL-2) excavation corners. The southern sidewall sample (SOIL-3) contained 12 parts per million (ppm) TPH-G (Figure 2).

A second round of over-excavation was initiated to remove hydrocarbon impacted soil adjacent to the southwest corner of the excavation. This over-excavated area is shown in the attached Figure 2. Three verification samples (SOIL-8, SOIL-9, and SOIL-10) were collected from this over-excavated area. Detectable TPH-G or BTEX were not found in soil sample SOIL-10. Soil sample SOIL-8 collected just above the groundwater interface (7.5 feet BGS) contained 31 ppm TPH-G. BTEX concentrations up to 0.35 ppm ethyl benzene (SOIL-8) were found in soil samples SOIL-8 and SOIL-9 (IT Corporation, 1993). This data is shown on Figure 2.

A groundwater grab sample GRABWATER-1 was collected from standing water within the excavation following the tank removal. This sample contained 7,900 parts per billion (ppb) TPH-G and BTEX concentrations up to 110 ppb ethyl benzene and total xylenes. Approximately 2,300-gallons of standing water within the excavation was pumped out and disposed of at the PRC recycling facility in Patterson, California (IT Corporation, 1993).

2.0 OBJECTIVE AND SCOPE OF WORK

The objective of work presented in this report was to assess the presence and distribution of petroleum hydrocarbons in soil and shallow groundwater beneath the site.

The scope of work developed to meet the objective included the following:

- Workplan preparation;
- Field investigation;
 - Three shallow soil borings and one monitoring well,
 - Soil sample collection from all borings,
 - Groundwater sample collection from the monitoring well,
- Laboratory analysis of soil and groundwater samples; and
- Report preparation.

3.0 FIELD INVESTIGATION

The field investigation was conducted in general accordance with the workplan dated January 3, 1994 (IT Corporation, 1994). The permit to install the borings and monitoring well was obtained from the Zone 7 Water Agency. The workplan to conduct well installation at the site was prepared by IT Corporation (IT Corporation, 1994) on behalf of Pacific Bell and was approved by Mr. Scott Seery of the Alameda County Division of Environmental Health, Division of Hazardous Materials (ACDEH) prior to the issuance of the permit. A copy of the soil boring and well permit is presented in Appendix A.

The field investigation was conducted between February 2 and 15, 1994, and involved the drilling and sampling of four borings with subsequent construction of a monitoring well within one of the borings. Monitoring wells were to be constructed in all borings but three encountered bedrock material and drill rig refusal prior to encountering groundwater. Therefore, one groundwater monitoring well was installed (MW-1). A groundwater sample was collected from the completed well approximately six days after well development. Permits for the project are presented in Appendix A. A description of the procedures used during field work are presented in Appendix B.

3.1 Summary of Soil Borings and Monitoring Well Installation

Four soil borings (SB-1, SB-2, SB-3, and MW-1) were drilled on February 2, 1994, at the locations shown in Figure 2, using a truck-mounted drill rig equipped with ten-inch hollow-stem

augers. The locations of SB-1, SB-2, and SB-3 were selected to obtain soil and groundwater data from the upgradient and downgradient groundwater direction. The fourth boring/well was drilled in the overexcavated area immediately downgradient of the tank pit for monitoring and extraction if necessary. The boring converted to a monitoring well was drilled to a depth of approximately 16 feet below ground surface (BGS). Pea gravel backfill material was encountered to the bottom of the boring and no soil samples were collected. Boring SB-1 was advanced to approximately 30 feet BGS, and soil was sampled at 2.5-foot intervals. The other soil borings (SB-2 and SB-3) were advanced to approximately 16 and 17 feet BGS respectively, and soil samples were collected at five-foot intervals beginning at five feet BGS. Soil samples were collected using a California modified split-barrel sampler for observation of soil lithology, field measurement of organic vapors, and laboratory analyses. Soil samples were retained on ice in an insulated chest for delivery to the laboratory. mw-1

The monitoring well was constructed using four-inch inner diameter, schedule 40 polyvinyl chloride (PVC) well casing with 0.020-inch width machine-slotted screen; a slot size judged appropriate for the material encountered. The monitoring well was screened between 6.0 and 16.0 feet BGS. The monitoring well was completed with blank casing to within 0.5 foot of the ground surface. The annular space around the screened interval in the well was backfilled with No. 3 Lonestar sand filter pack and capped with an approximate six-inch thick zone of hydrated granular bentonite. Neat portland cement grout was placed in the annulus above the bentonite zone, with a well housing and locking device set at ground surface. The monitoring well was developed by pumping and bailing to remove the fine-grained materials from the wells and to increase the hydraulic communication between the formation and the filter pack.

Drilling services were provided by Kvilhaug Well Drilling of Concord, California. During the drilling operations, a summary of the subsurface conditions encountered was recorded on a boring log. General procedures used to drill and log the borings, collect soil samples, and install/develop/sample the well are summarized in Appendix B.1. Boring logs and well construction diagrams are presented in Appendix B.2. The monitoring well construction data is presented on Table 1. The well development log is presented in Appendix B.3.

3.2 Subsurface Conditions

3.2.1 Stratigraphy

Based on the data collected from the soil borings, an assessment of the shallow stratigraphy of the site was performed. A tan, highly sheared, claystone bedrock material underlies the surface of the site from approximately 15 to 30 feet BGS. The bedrock unit was observed to be very hard and dry. The upper surface of this unit is irregular and is overlain by a thin veneer of fine-grained sedimentary cover of silt and clay which varies in thickness.

No hydrocarbon odors were noted in any of the borings. Volatile organic compounds (VOCs) were not detected by the organic vapor meter while drilling. No stained soil cuttings or samples were observed during drilling.

3.2.2 Shallow Groundwater

In borings SB-1, SB-2, and SB-3, groundwater was not encountered during drilling. Standing water was observed within the tank pit bottom during the UST removal in May 1993. Depth to water within the tank pit was 7.5 feet BGS. Water was again encountered in the UST pit during drilling of MW-1. Prior to groundwater sample collection, one week following well installation, the depth to groundwater in MW-1 was measured at 5.2 feet below the top of the casing (Table 2).

3.3 Groundwater Sample Collection

A groundwater sample was collected from monitoring well MW-1 on February 15, 1994 after purging approximately 3 casing volumes of water. The groundwater sample was collected using a disposable bailer in general accordance with the procedures presented in Appendix B.4. The groundwater sample collection log is presented in Appendix B.5. The groundwater sample was placed into laboratory-supplied containers and retained on ice in an insulated chest for delivery to the laboratory on February 15, 1994.

4.0 LABORATORY ANALYSIS

Soil and groundwater samples were submitted to Superior Precision Analytical, Inc. of San Francisco, California, a State-certified hazardous waste laboratory. Chain of custody forms and laboratory reports are presented in Appendix D.

4.1 Analytical Program

The analytical program developed by IT Corporation was based on data obtained from the previous investigation. Selected soil and groundwater samples were analyzed for TPH-G and BTEX. In addition, one soil sample collected from the stockpile was analyzed for soluble lead by Method 6010. The analyses were performed in general accordance with guidelines established in the State Water Resources Control Board Leaking Underground Fuel Tank Manual (SWRCB, 1989).

4.2 Analytical Results

4.2.1 Soil Samples

Soil samples collected from borings SB-1, SB-2, and SB-3 at depths of approximately 7.5 feet BGS were analyzed. These samples were selected because they were thought to be near the water table depth. Laboratory analysis did not detect TPH-G/BTEX in these soil samples. Soluble lead was not detected in the sample from the soil pile. Table 3 summarizes the results of the laboratory analyses performed on soil samples. Laboratory reports are presented in Appendix D.2.

4.2.2 Groundwater Sample

A groundwater sample was collected and retained for laboratory analysis on February 15, 1994 from the newly installed monitoring well (MW-1). Laboratory analysis did not detect TPH-G or BTEX in the groundwater sample. These data are presented in Figure 4 and Table 4. Laboratory reports are presented in Appendix D.2.

5.0 SOIL DISPOSAL

Approximately 10 yards of soil cuttings and drilling material was temporarily stored onsite in a 20-yard³ roll-off bin. After profiling, the material transported by Erickson, Inc. to the Browning Ferris Industries (BFI) disposal facility in Livermore, California as a non-hazardous RCRA waste. The soil disposal receipts are provided in Appendix C.

6.0 DISCUSSION

Based on field and laboratory data, there is a high likelihood that soil containing petroleum hydrocarbons within the unsaturated zone has been removed. Remaining hydrocarbons are located below 7 feet within the capillary fringe. Within the excavation area, soil was removed below the water table. In our opinion, impacted soil removal action (source material) was effectively completed during overexcavation.

There were no petroleum hydrocarbon odors or stained soil noted while drilling of SB-1, SB-2, SB-3, and MW-1 during the preliminary site investigation. Petroleum hydrocarbon sheen was not observed during groundwater monitoring well development and purging. In addition, petroleum hydrocarbons were not detected in soil or groundwater samples.

7.0 CONCLUSIONS

Based on the information presented in this report, current regulatory guidelines, and the professional judgment of IT Corporation, the following conclusions have been made:

- The water within the UST excavation may be a natural expression of the shallow aquifer or an artificial sump collecting surface runoff. Water within MW-1 is approximately 5.2 feet below the ground surface.
- Petroleum hydrocarbons were not detected in the soil and water samples analyzed during this investigation.

8.0 REFERENCES

IT Corporation, 1993, Report of UST Removal, Pacific Bell Facility 2610 Norbridge Avenue, Castro Valley, California; dated July 16, 1993, 5 p.

IT Corporation, 1994, Work Plan for Subsurface Characterization, Pacific Bell Facility 2610 Norbridge Avenue, Castro Valley, California; dated January 3, 1994, 5 p.

SWRCB (State Water Resources Control Board), 1989, Leaking Underground Fuel Tank (LUFT) Field Manual; dated October 1989, 121 p.

TABLES

TABLE 1

MONITORING WELL CONSTRUCTION DATA

<u>Well No.</u>	<u>Borehole Depth (1)</u>	<u>Casing Depth (2)</u>	<u>Screened Interval (3)</u>	<u>FilterPack Depth (4)</u>	<u>Inner Dia. (5)</u>	<u>Install Date (6)</u>	<u>Drilling Method (7)</u>
MW-1	16.0	16.0	6.0-16.0	5.0-16.0	4	2-2-92	HSA

Notes:

1. Depth to bottom of borehole in feet below the ground surface.
2. Depth to bottom of casing in feet below the ground surface.
3. Depth to top and bottom of well screen in feet below ground surface.
4. Depth to top and bottom of sand filter pack in feet below ground surface.
5. Well casing inside diameter in inches.
6. Monitoring well installed on the date shown.
7. HSA = boring drilled by hollow-stem auger.

TABLE 2
GROUNDWATER GRADIENT DATA

<u>Well No.</u>	<u>DTW (1)</u>	<u>SWE (2)</u>	<u>Hydrocarbon Thickness</u>	<u>Groundwater Elevation (3)</u>
MW-1	5.20	NA	0	NA

Notes:

1. DTW = depth to water as measured from the top of the well casing with an electric water sensing probe.
2. SWE = surveyed wellhead elevation as measured at the top of the well casing in feet above mean sea level.
3. The groundwater elevation = SWE minus DTW.
4. Measurements were recorded prior to groundwater sample collection on 2-15-94.
5. NA = There was no need to survey the wellhead elevation.

TABLE 3

RESULTS OF LABORATORY ANALYSIS
OF SOIL SAMPLES (1)

<u>Sample No.</u>	<u>Depth (2)</u>	<u>Date</u> (ppm)	<u>TPH gasoline</u> (ppb)	<u>Benzene</u> (ppb)	<u>Ethylbenzene</u> (ppb)	<u>Toluene</u> (ppb)	<u>Xylenes</u> (ppb)
SB-1(7.5)	7.5	2-2-94	ND	ND	ND	ND	ND
SB-2(7.5)	7.5	2-2-94	ND	ND	ND	ND	ND
SB-3(7.5)	7.5	2-2-94	ND	ND	ND	ND	ND
SSC-1(2-94)	composite of drill cuttings	2-15-94	ND	ND	ND	ND	ND

Notes:

1. Soil samples analyzed for TPH (Total Petroleum Hydrocarbons) as gasoline by LUFT methods utilizing modified EPA Method No. 8015, for benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method No. 8020.
2. Depth given in approximate feet below ground surface.
3. ND = Not Detected above reporting limit.

TABLE 4

RESULTS OF LABORATORY ANALYSIS
OF GROUNDWATER SAMPLE (1)

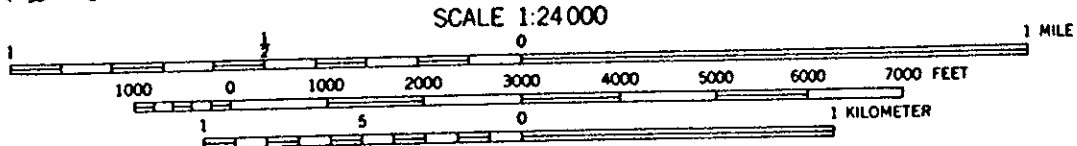
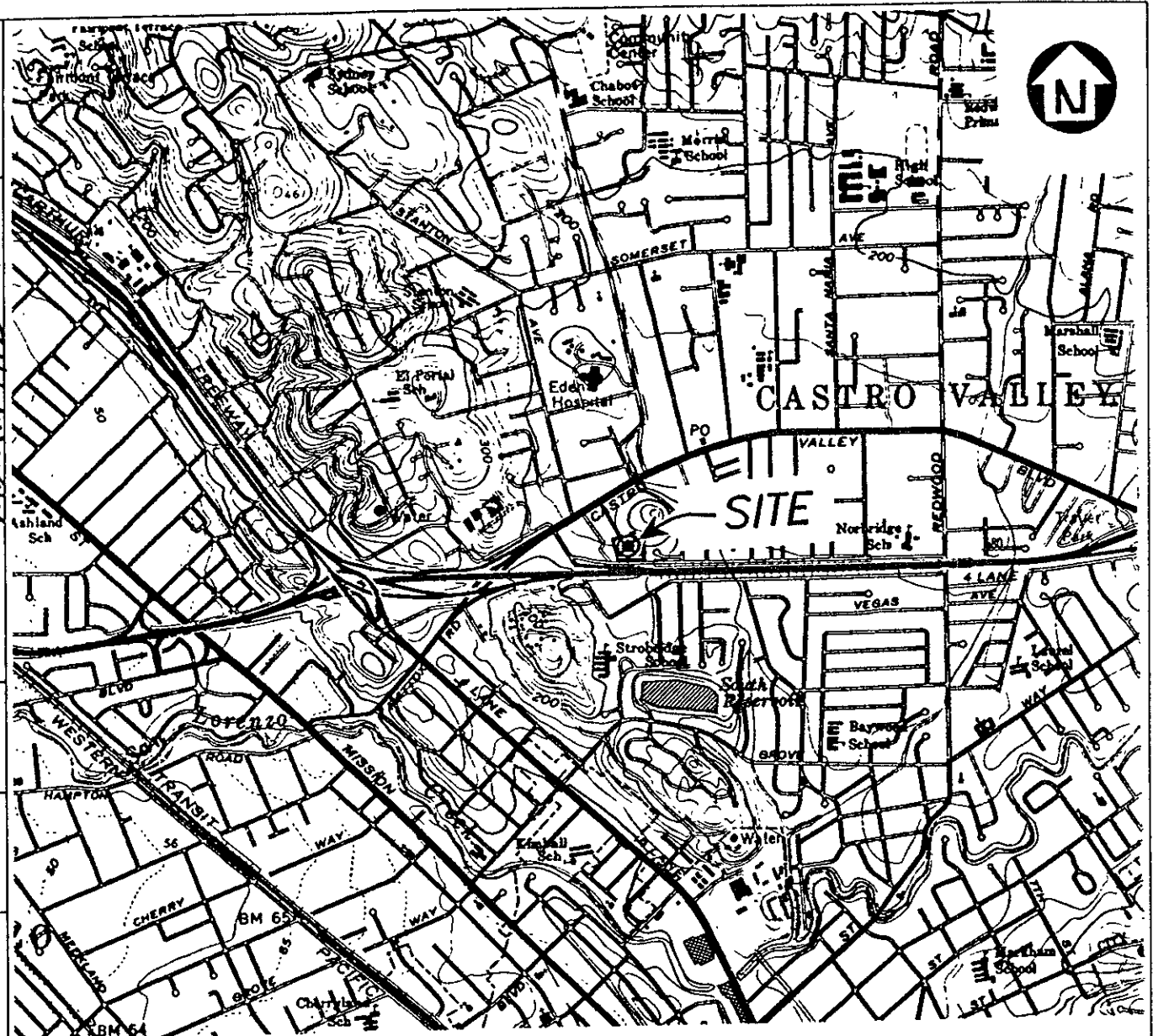
<u>Sample No.</u>	<u>Date</u>	<u>TPH gasoline</u> (ppm)	<u>Benzene</u> (ppb)	<u>Ethylbenzene</u> (ppb)	<u>Toluene</u> (ppb)	<u>Xylenes</u> (ppb)
MW-1(2-94)	2-15-94	ND	ND	ND	ND	ND

Notes:

1. Groundwater samples analyzed for TPH (Total Petroleum Hydrocarbons) as gasoline by LUFT methods utilizing modified EPA Method No. 8015, for benzene, toluene, ethylbenzene, and total xylenes by EPA Method No. 8020.

FIGURES

151933-VM
 SK009/151933VM
 DRAWING NO 151933-VM
 QA/QC BY J. Horak J. M. DRAWING NO 151933-VM
 APPROVED BY M. Miller 7-83 DISK/FILE
 07-08-93
 J.M.
 DRAWN BY



CONTOUR INTERVAL 20 FEET
 DOTTED LINES REPRESENT 5-FOOT CONTOURS
 NATIONAL GEODETIC VERTICAL DATUM OF 1929



REFERENCE
 UNITED STATES DEPT. OF THE INTERIOR, GEOLOGICAL SURVEY
 STATE OF CALIFORNIA, HAYWARD QUADRANGLE,
 7.5 MINUTE SERIES (TOPOGRAPHIC).

Figure 1
 VICINITY MAP
 IT PROJECT No. 151933
 PACIFIC BELL FACILITY
 2610 NORBRIDGE AVENUE
 CASTRO VALLEY, CALIFORNIA
 PREPARED FOR
 PACIFIC BELL
 SAN JOSE, CALIFORNIA





151933-SPA
 DRAWING NO
 FILE/DISK
 51933/GCD04

DATE 4/12/93
 APPROVED BY M. Miller 4/22/93

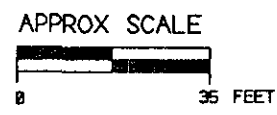
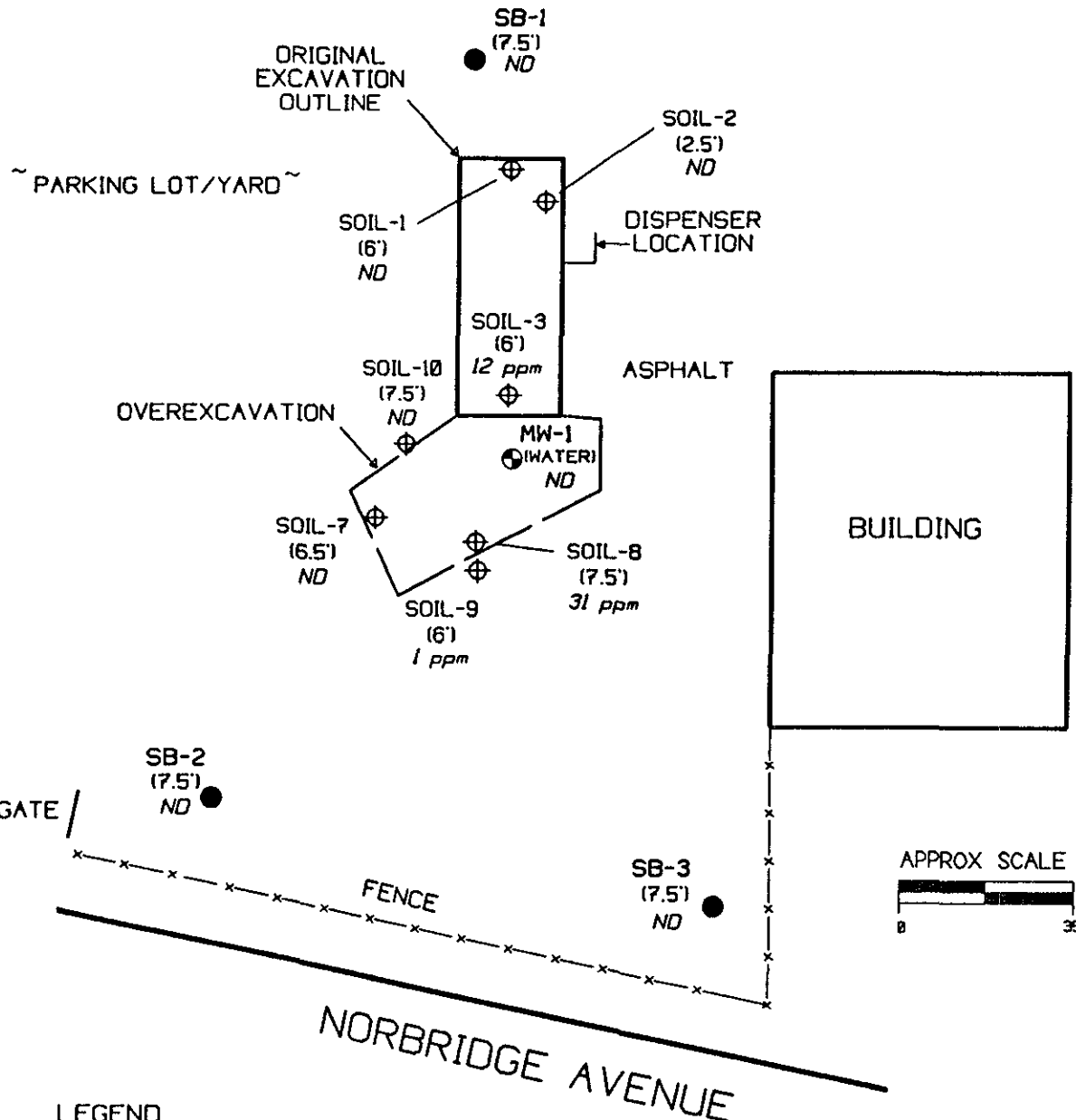
QA/QC BY
 APPROVED BY
 06-30-93

JM
 06-30-93

DRAWN BY

WAREHOUSE

TRUCK PORTS



LEGEND

- MW-1 MONITORING WELL
 - SB-3 SOIL BORING
 - SOIL-2 SIDEWALL SOIL SAMPLE
 - (7.5')
 - 1 ppm
 - ND
- SAMPLE DEPTH
- SAMPLE RESULTS
- NOT DETECTED AT/OR ABOVE LABORATORY DETECTION LIMITS

FIGURE 2
 SITE PLAN
 IT PROJECT NO. 151933
 PACIFIC BELL FACILITY
 2612 NORBRIDGE AVENUE
 CASTRO VALLEY, CALIFORNIA

PREPARED FOR

PACIFIC BELL
 SAN RAMON, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

APPENDIX A
SOIL BORING/MONITORING WELL
PERMIT



ZONE 7 WATER AGENCY

5997 PARKSIDE DRIVE

PLEASANTON, CALIFORNIA 94588

VOICE (510) 484-2600

FAX (510) 462-3914

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT 2610 MORBRIDGE AVE.
CAPITOL VALLEY, CA

PERMIT NUMBER 93455
LOCATION NUMBER _____

CLIENT
Name PACIFIC BELL
Address 2600 CARINO RD, SE 400 Voice _____
City SAN RAMON, CA Zip 94583

PERMIT CONDITIONS

Circled Permit Requirements Apply

APPLICANT
Name IT CORP. Frank HORATH
Address 255 JUNCTION AVE Voice 408-231-9032
City SAN JOSE, CA Zip 95131

A. GENERAL

1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date.
2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well Projects, or drilling logs and location sketch for geotechnical projects.
3. Permit is void if project not begun within 90 days of approval date.

B. WATER WELLS, INCLUDING PIEZOMETERS

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. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

C. GEOTECHNICAL. Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.

D. CATHODIC. Fill hole above anode zone with concrete placed by tremie.

E. WELL DESTRUCTION. See attached.

TYPE OF PROJECT
Well Construction _____ Geotechnical Investigation _____
Cathodic Protection _____ General _____
Water Supply _____ Contamination
Monitoring Well Destruction _____

PROPOSED WATER SUPPLY WELL USE
Domestic _____ Industrial _____ Other _____
Municipal _____ Irrigation _____

DRILLING METHOD:
Mud Rotary _____ Air Rotary _____ Auger
Cable _____ Other _____

DRILLER'S LICENSE NO. CS7 Bayland Drilling

WELL PROJECTS
Drill Hole Diameter 8 in. Maximum _____
Casing Diameter 2 in. Depth 20 ft.
Surface Seal Depth 4 ft. Number 4

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

ESTIMATED STARTING DATE 8/31/93
ESTIMATED COMPLETION DATE 8/31/93

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

Approved Wyman Hong Date 16 Aug 93

Wyman Hong

APPLICANT'S SIGNATURE Frank Horath Date 8/11/93
(IT)

**ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY**

DAVID J. KEARS, Agency Director



RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
State Water Resources Control Board
Division of Clean Water Programs
UST Local Oversight Program
80 Swan Way, Rm 200
Oakland, CA 94621
510) 271-4530

STID 4092

January 21, 1994

Post-It™ brand fax transmittal memo 7871		# of pages > 1
To: Mike Miller	From: Scott Seery	
Co: IT Corp	Co: ACDEH	
Dept:	Phone: 510/271-4530	
Fax #: 408/884-0701	Fax #	

Mr. Duane Wallace
Pacific Bell
2600 Camino Ramon
San Ramon, CA 94583

RE: 2610 NORBRIDGE AVENUE, CASTRO VALLEY

Dear Mr. Wallace:

This office is in receipt and has completed review of the Revised Subsurface Investigation Work Plan submitted under IT Corporation cover dated January 3, 1994. This revised work plan has been accepted as submitted.

Please contact this office at 510/271-4530 when field work is slated to begin.

Sincerely,

Scott O. Seery, CHMM
Senior Hazardous Materials Specialist

cc: Rafat A. Shahid, Assistant Agency Director
Gil Jensen, Alameda County District Attorney's Office
Mike Miller, IT Corporation, 2055 Junction Avenue
San Jose, CA 95131

APPENDIX B

SUMMARY OF DRILLING PROGRAM

APPENDIX B.1

SOIL BORING/MONITORING WELL INSTALLATION PROCEDURES

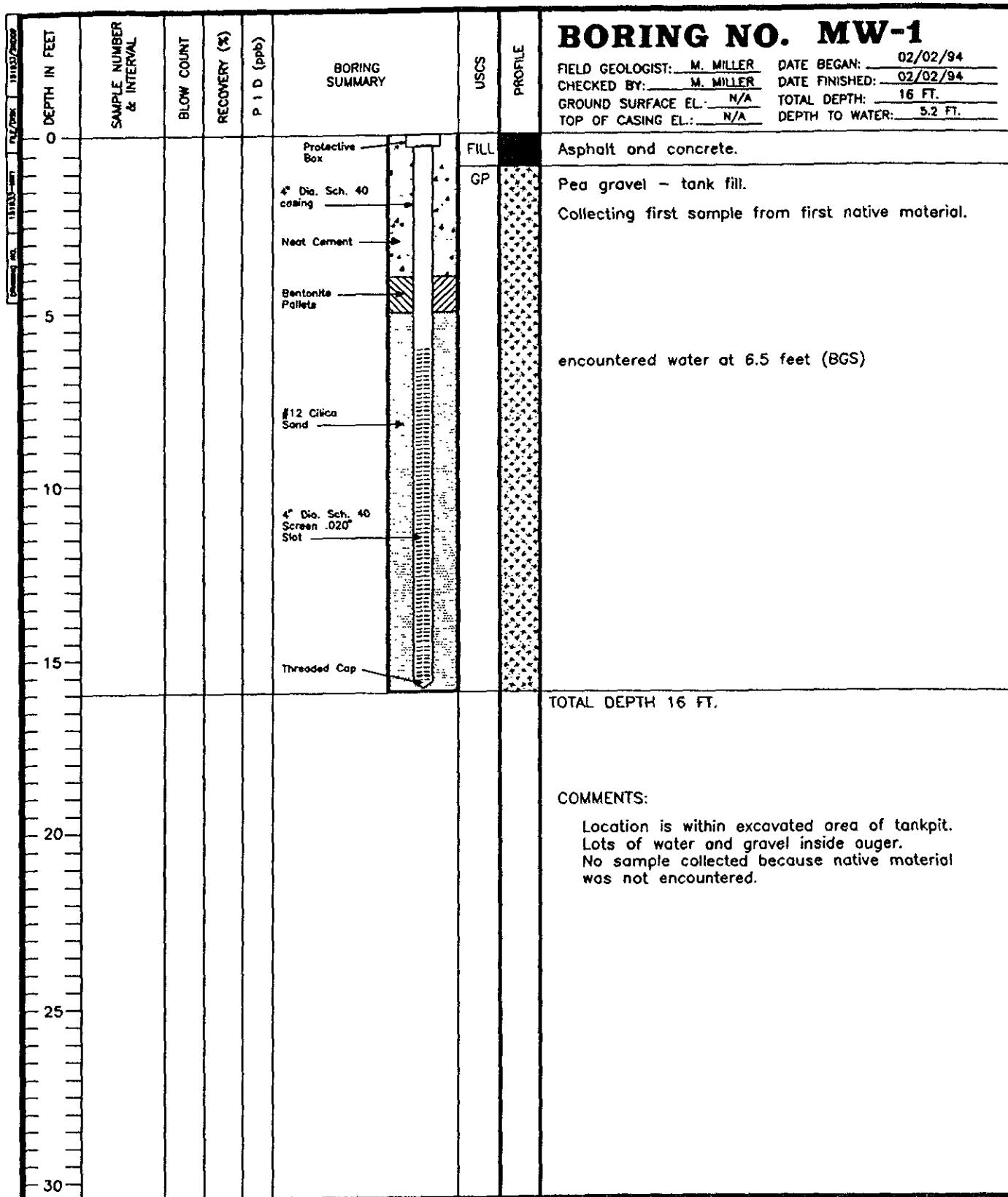
SOIL BORING/MONITORING WELL INSTALLATION PROCEDURES

The procedures that were used for drilling the borings, collecting soil samples, and installing the groundwater monitoring wells were as follows:

- The borings were advanced to a depths ranging from approximately 16 to 30 feet below the ground surface using ten-inch hollow-stem augers; augers were steam cleaned prior to drilling;
- Soil samples were collected using a modified California split-barrel sampler lined with six-inch long stainless steel tubes at approximately 2.5 feet depth intervals;
- The samplers were washed between sampling intervals in a soapy water wash, two tap water rinses, and a final deionized water rinse;
- Stainless steel sample tubes were end-wrapped with teflon and capped with PVC end caps, and retained for laboratory analysis by storing in an insulated chest;
- Soil samples were assigned identification numbers such as SB-1(7.5), where SB-1 indicates soil boring number 1, and (7.5) indicates the sample interval depth, in feet;
- Chain-of-Custody procedures, including the use of Chain-of-Custody forms, were used to document sample handling and transportation to the laboratory;
- An Hnu Systems organic vapor meter (OVM) was used to monitor VOCs during drilling. The monitoring involved "sniffing" the annulus of the hollow-stem augers at the surface at selected depth intervals and also measuring the VOC concentration associated with the soil sample from that depth interval. From each sampling interval, a partially-filled sample tube was capped and set aside to allow for VOCs to accumulate in the headspace above the soil. After approximately 15 to 30 minutes, the VOC concentration was measured with the OVM;
- Four-inch (inside-diameter) threaded, machine-slotted PVC screen and casing were installed in the boring for well construction;
- The monitoring wells were developed by removing approximately ten well casing volumes of water to remove silt from the formation and that had accumulated in the wells during installation; and
- The annular space around the screened interval in the well was backfilled with an appropriately graded sand filter pack (No. 3 Lonestar) and capped with an approximate six-inch thick zone of hydrated granular bentonite. Neat portland cement grout was placed in the annulus above the bentonite zone, with an at-grade well housing and locking device.

APPENDIX B.2

BORING LOGS



DRILLING CO.: Kvilhaug Drilling
 DRILL METHOD: Hollow Stem Auger
 SAMPLING METHOD: Modified California Split Spoon Sampler

PROJECT NO.: 151933
 CLIENT: Pacific Bell
 LOCATION: 2610 Norbridge Avenue, Castro Valley, California.



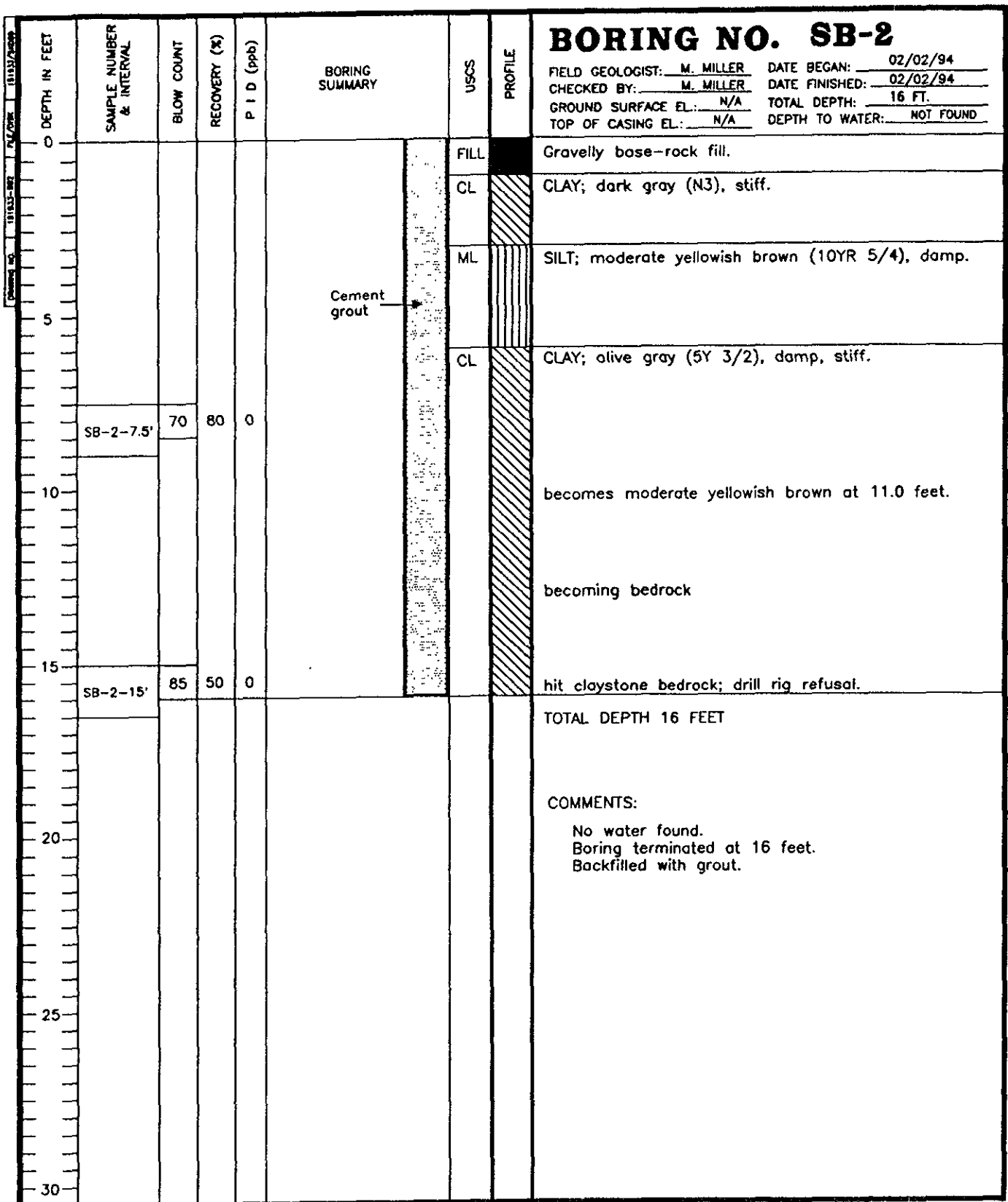
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DEPTH IN FEET		SAMPLE NUMBER & INTERVAL	BLOW COUNT	RECOVERY (%)	P I D (ppb)	BORING SUMMARY	USCS	PROFILE
0							FILL	2" Asphalt, 10" Roadbase fill.
0 - 5		SB-1-5'	27	85	0		ML	Silt: moderate yellowish brown (10YR 5/4), dry.
5 - 10		SB-1-7.5'	65	90	0		CL	CLAY; olive gray (5Y 3/2), damp, very silty. becomes grayish olive (10YR 4/2) at 7.0 feet.
10 - 15		SB-1-10'	85	0	0		CL	CLAYSTONE; moderate yellowish brown (10YR 5/4), dry hard, highly sheared.
15 - 20		SB-1-12.5'	65	0	0		CL	
20 - 25		SB-1-15'	72	0	0		CL	becoming bedrock, very hard drilling, very dry.
25 - 30							CL	COMMENTS: No water found. Boring terminated at 30 feet. Backfilled with grout. Hit bedrock - Refusal
								TOTAL DEPTH 30 FEET

DRILLING CO.: Kvilhaug Drilling
 DRILL METHOD: Hollow Stem Auger
 SAMPLING METHOD: Modified California Split Spoon Sampler

PROJECT NO.: 151933
 CLIENT: Pacific Bell
 LOCATION: 2610 Norbridge Avenue, Castro Valley, California.





DRILLING CO.: Kvilhaug Drilling
 DRILL METHOD: Hollow Stem Auger
 SAMPLING METHOD: Modified California Split Spoon Sampler

PROJECT NO.: 151933
 CLIENT: Pacific Bell
 LOCATION: 2610 Norbridge Avenue, Castro Valley, California.



					BORING NO. SB-3	
					FIELD GEOLOGIST: <u>M. MILLER</u>	DATE BEGAN: <u>02/02/94</u>
					CHECKED BY: <u>M. MILLER</u>	DATE FINISHED: <u>02/02/94</u>
					GROUND SURFACE EL.: <u>N/A</u>	TOTAL DEPTH: <u>17 FT.</u>
					TOP OF CASING EL.: <u>N/A</u>	DEPTH TO WATER: <u>NOT FOUND</u>
DEPTH IN FEET	SAMPLE NUMBER & INTERVAL	BLOW COUNT	RECOVERY (%)	P I D (ppb)	BORING SUMMARY	USCS PROFILE
0						FILL Asphalt and fill.
0 - 7.5	SB-3-7.5'	71	80	0		CL CLAY; dark gray (N3), damp, stiff.
7.5 - 15	SB-3-15'	50	50	0	Cement grout	CLAY; olive gray (5Y 3/2), damp, very stiff. becomes moderate brown at 12 ft. hard drilling, becomes bedrock.
15 - 17						hit claystone bedrock; drill rig refusal.
TOTAL DEPTH 17 FEET						
COMMENTS: No water found. Boring terminated at 17 feet. Backfilled with grout.						

DRILLING CO.: Kvilhaug Drilling
 DRILL METHOD: Hollow Stem Auger
 SAMPLING METHOD: Modified California Split Spoon Sampler

PROJECT NO.: 151933
 CLIENT: Pacific Bell
 LOCATION: 2610 Norbridge Avenue, Castro Valley, California.



INTERNATIONAL
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APPENDIX B.3
WELL DEVELOPMENT LOGS

WELL DEVELOPING LOG

Project Name: PACIFIC BELL
 Project No.: 151933
 Request-for-Analysis Control No.: _____
 Chain-of-Custody Control No.: _____
 Sample No.: N/A

Sample Location or: MW-1
 Well ID (attach map if necessary): _____
 Date and Time 2-9-94
 Checked by (Office)/Date: _____

EQUIPMENT

Purging Method/Equipment: ELECT. PUMP AND D.S.P. TUBING

6" Diameter = 1.5 gal/ft

4" Diameter = 0.67 gal/ft

2" Diameter = 0.17 gal/ft

DEVELOPING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) .67 (.67)
 Depth to Well Bottom (c) 15.45 (15.45) Depth to Water (d) 5.20 (5.2)
 Length of Static Water Column in Casing (e) = (c) - (d) = 15.45 - 5.2 = 10.25 (10.25)
 Casing Water Volume (f) = (b) x (e) = .67 x 10.25 = 6.86 (6.86)
 Casing Volumes = 8 x (f) = 54.94 ()

Volume Purged (GAL.)	Temp. (F.)	Conductance (X1000)	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
.25	58.9	1.57	10:58	BROWN, SLTY, ODOR-LESS	8.13
10.0	59.8	1.73	11:05	NO SHEEN	8.48
20.0	62.1	1.89	11:09	TAN, " "	8.66
30.0	62.7	1.97	11:14	SLIGHTLY TAN, "	8.60
40.0	63.1	1.96	11:19	CLEAR, SLIGHTLY YELLOWISH	8.40
55.0	63.2	1.97	11:25	CLEAR, NO SHEEN, ODOR-LESS	8.50

Total Volume Purged: 55.0 Time: 11:25 Purged Dry (Y/N): NO

NOTES:

APPENDIX B.4

**WATER LEVEL MEASUREMENT AND GROUNDWATER
SAMPLING PROCEDURES**

WATER LEVEL MEASUREMENT AND GROUNDWATER SAMPLING PROCEDURES

The procedures used to measure water levels and collect the groundwater samples are presented below:

- Field activities and equipment utilization were recorded on field report forms;
- The water level and depth to the bottom of the well were measured using an electrical conductance probe to approximately 0.01 foot. The probe was rinsed in a solution of Alconox followed by a deionized water rinse prior to each use;
- The volume of water contained in the well casing was estimated using the following equation: $\text{Casing Volume} = \pi r^2 h$, where r equals the radius of the well casing, and h equals the height of the water column in the well;
- Measurement of the electrical conductivity and pH were performed on samples of the groundwater utilizing a "Hydac" digital temperature/electrical conductivity/pH meter;
- Groundwater recovered from the wells was placed in labeled drums for on-site storage;
- A disposable bailer was used for collecting the groundwater samples;
- Nylon rope was used to lower the bailer into the monitoring well for sampling. The nylon rope was discarded after use;
- Groundwater samples were discharged from the bailer to laboratory-supplied sample vials at a controlled rate intended to minimize bubbling and agitation of the liquid. The container was filled to the top to minimize the headspace;
- Groundwater samples were capped and secured with evidence tape, and placed on ice in an insulated chest cooled to a temperature of approximately 40 to 50 degrees Fahrenheit; and
- Groundwater samples were delivered to the laboratory immediately after collection. Sample handling, transport, and delivery to the laboratory were documented using Chain-of-Custody forms.

APPENDIX B.5

GROUNDWATER SAMPLE COLLECTION LOG

GROUND WATER SAMPLE COLLECTION LOG

Project Name: PACIFIC BELL
 Project No.: 151933
 Request-for-Analysis Control No.: 355009
 Chain-of-Custody Control No.: "
 Sample No.: MW-1(2-94)

Sample Location or: _____
 Well ID (attach map if necessary): MW-1
 Date and Time Collected: 2-15-94 @ 11:10
 Sample Collected by: J.M.
 Checked by (Office)/Date: _____

EQUIPMENT

Purging Method/Equipment: ELECTRICAL PUMP AND DISP BAILER TUBING
 Sampling Equipment/ID No.: DISP. BAILER AND DISP. TWINE

6" Diameter = 1.5 gal/ft 4" Diameter = 0.67 gal/ft 2" Diameter = 0.17 gal/ft

PURGING INFORMATION

Casing ID (a) (in.) 4" Unit Casing Volume (b) .67 (.67)
 Depth to Well Bottom (c) 15.43 (15.43) Depth to Water (d) 5.12 (5.12)
 Length of Static Water Column in Casing (e) = (c) - (d) = 15.43 - 5.12 = 10.31 (10.31)
 Casing Water Volume (f) = (b) x (e) = .67 x 10.31 = 6.907 (6.907)
 Casing Volumes = 3 x (f) = 20.72 (20.92)

Volume Purged (GAL.)	Temp. (F.)	Conductance (X1000)	Time	Water Description (Color, Turbidity, Odor, Oil)	pH
.25	62.6	369	10:40	BROWNISH TAN, ODORLESS	6.57
4.0	64.7	2.59	10:43	NO SWEEN, SLIGHTLY SLTY	7.29
8.0	64.1	2.32	10:49	" "	8.00
12.0	63.8	2.24	10:53	SLIGHTLY TAN, "	8.10
16.0	63.6	2.23	10:57	" "	8.17
21.0	63.7	2.26	11:00	CLEAR, ODORLESS, "	8.20

Total Volume Purged: 21.0 Time: 11:00 Purged Dry (Y/N): NO

SAMPLE PACKAGING

Container(s) Type and Volume	Filtered (Y/N)	Preservatives	Parameters
<u>3 X 40ml VOA</u>	<u>NO</u>	<u>HCL</u>	<u>TPH-G/BTEX</u>

APPENDIX C
SOIL DISPOSAL



Erickson Inc.

CUSTOMER SERVICE ORDER

Job No. 84120-0-00-01

255 Park Blvd., Richmond, CA 94801 (510) 235-1388

Driver Daily Time Sheet

13738 Glover Ave., Fontana, CA 92335 (909) 355-0801

Date: 94/03/11

1390 E. Greg St., Ste 3, Sparks, NV 89431 (702) 308-0581

Milkrun No Yes

M T W T F SAT SUN

803 W. 400 South, Salt Lake City, UT 84101 (801) 359-8881

SHR: GY D S

Driver Name: CHARLEY ELMORE Emp. No. 70068

Manifest No.: BL 730144

Customer Name: 1941- I.T. CORP

Customer Order No. 248958

Job Site Name & Address: JOBSITE-2610 NORBRIDGE AVE
PACIFIC BELL
CASTRO VALLEY, CA 94546

Release No.:
Contact Name: MIKE MILLER

0900 ONSITE

Contact Phone: (408) 896-1200

Services Performed: SERVICES TO PROVIDE A ROLLOFF BOX

Additional Information: Haul loaded bin (5 yards) to Keller Canyon for disposal
R/O, 20 CU YD OPEN TOP W/LINER

Driver's Comments:

Waste Material: Profile/W.S.#:

Today's Origin: Today's Destination: Our P.O.#

Disposal Site: Keller Canyon Appointment Date & Time: No. of Loads: No. of Drums:

Truck No. 3R32 Trailer No. -				OFFICE USE ONLY										
Hub Reading:				Payroll					Billing - Only Different From Payroll					
Begin	Ending	Total	Truck EMS #	Mileage	Class	ST	OT	DT	Mileage	Class	ST	OT	DT	
0730	AM	AM												
915	PM	930												
TOTAL PAY - THIS JOB: hrs. ST OT DT miles				Dispatcher's Approval										
Did you perform your pre-trip equipment inspection? <input type="checkbox"/> yes <input type="checkbox"/> no														

ROLL OFF CONTAINER INFORMATION				ADDITIONAL INFORMATION			
Container No.	Container Pick Up Point	Disposal Site	Container Drop Off Point	EMS #	Qty.	Amount	
204N	PAC BELL	BFE VASPORU	OBYARD.	85010	Tyvek		
				97200	Subistence		
				99152	Washouts		
				99200	Neutralizations		
				2018	Box Liners		
				2017	End Dump Liner		
CUSTOMER SIGNATURE ACKNOWLEDGES WORK PERFORMED AT JOB SITE ONLY				Customer Representative Signature			
Erickson Driver Signature				Customer Representative - Please Print Name			

WHITE - Payroll Copy YELLOW - Billing Copy PINK - Dispatch Copy GOLDENROD - Customer Copy

NON-HAZARDOUS SPECIAL WASTE MANIFEST

GENERATOR

Generator Name Pacific Basin Generating Location San Ramon, CA

Address 2600 Camino Ramon, RA 51009 Address 2600 Camino Ramon, RA 51009

San Ramon, CA 94583 San Ramon, CA 94583

Phone No. 510-823-0923 Phone No. 510-235-1393

BFI Waste Code CA 405 031099 22740 Description of Waste Soil contaminated with gasoline

Quantity	Units	No.	Type
<u>10</u>	<u>4</u>	<u>7</u>	<u>0</u>

- Drum
- Carton
- Bag
- Truck
- Pounds
- Yards
- Other
- S.A.

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

Generator Authorized Agent Name Walter Joseph Signature Walter J Shipment Date 031194

TRANSPORTER

Truck No. 3R32 Phone No. 510-235-1393

Transporter Name ERICKSON INC. Driver Name (Print) CHARLEY ELMORE

Address 255 PARR BLVD Vehicle License No./State 3C56808

RICHMOND CALIF Vehicle Certification 402971

I hereby certify that the above named material was picked up at the generator site listed above.

I hereby certify that the above named material was delivered without incident to the destination listed below.

Driver Signature Charley Elmore Shipment Date 031194 Driver Signature Charley Elmore Delivery Date 031194

DESTINATION

Site Name _____ Phone No. _____

Address _____

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent _____ Signature _____ Receipt Date _____

PASS CODE _____

APPENDIX D
LABORATORY ANALYSES

APPENDIX D.1
CHAIN-OF-CUSTODY



ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD*

Reference Document No. 355009
Page 1 of L

Project Name/No. ¹ 151432
 Sample Team Members ² J.M.
 Profit Center No. ³ 2724
 Project Manager ⁴ MIKE MILLER
 Purchase Order No. ⁶ 242073
 Required Report Date ¹¹ NORMAL

Samples Shipment Date ⁷ 2-15-94
 Lab Destination ⁸ SUPERIOR
 Lab Contact ⁹ KRISTIN CURTIS
 Project Contact/Phone ¹² MIKE MILLER (415) 244-1200
 Carrier/Waybill No. ¹³ FEDEX

Bill to: ⁵ IT CORP.
4545 POCULOC BLVD.
MARTINEZ, CA 94553
 Report to: ¹⁰ IT CORP.
2055 JUNCTION AVE
SAN JOSE, CA 95131
ATTN: MIKE MILLER

ONE CONTAINER PER LINE

Sample ¹⁴ Number	Sample ¹⁵ Description/Type	Date/Time ¹⁶ Collected	Container ¹⁷ Type	Sample ¹⁸ Volume	Pre- ¹⁹ servative	Requested Testing ²⁰ Program	Condition on ²¹ Receipt	Disposal ²² Record No.
MW-1(2-14)	GROUNDMATER	2-15-94 @ 11:10	3x40ml. VOA	120ml	HCL	TPH-G/BTEX		
SSC-1(2-14)	SXIL	2-15-94 @ 10:10	2x3.0" BRASS	-	NONE	TPH-G/BTEX		
X	X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X	X

Special Instructions: ²³

Possible Hazard Identification: ²⁴
 Non-hazard Flammable Skin Irritant Poison B Unknown

Sample Disposal: ²⁵
 Return to Client Disposal by Lab Archive (mos.)

Turnaround Time Required: ²⁶
 Normal Rush

QC Level: ²⁷
 I. II. III. Project Specific (specify):

1. Relinquished by ²⁸ Ann M. M/eto Date: 2-15-94 @
 (Signature/Affiliation) Time:
 2. Relinquished by Stephen Jones Aseo Date: 2-15-94
 (Signature/Affiliation) Time: 4:40p
 3. Relinquished by _____ Date: _____
 (Signature/Affiliation) Time: _____

1. Received by ²⁸ Stephen Jones Aseo Date: 2/15/94
 (Signature/Affiliation) Time: 2:45p
 2. Received by _____ Date: _____
 (Signature/Affiliation) Time: _____
 3. Received by Mike Miller Date: 2/15/94
 (Signature/Affiliation) Time: 4:40pm

Comments: ²⁹

Write: To accompany samples
Yellow: Field copy
* See back of form for special instructions.



INTERNATIONAL
TECHNOLOGY
CORPORATION

57649

**ANALYSIS REQUEST AND
CHAIN OF CUSTODY RECORD***

Reference Document No. 355008

Page 1 of 1

Project Name/No. ¹ PACIFIC BELL
151933
Sample Team Members ² JM/MM
Profit Center No. ³ 2224
Project Manager ⁴ MIKE MILLER
Purchase Order No. ⁶ 248979
Required Report Date ¹¹ NORMAL

Samples Shipment Date ⁷ 2-9-94
Lab Destination ⁸ SUPERIOR
Lab Contact ⁹ KRISTEN KURTIS
Project Contact/Phone ¹² MIKE MILLER
(408) 844-1200
Carrier/Waybill No. ¹³ VENDOR

Bill to: ⁵ IT CORPORATION
4585 PACHECO BLVD.
MARTINEZ, CA 94553

Report to: ¹⁰ IT CORPORATION
2055 JUNCTION AV
SAN JOSE, CA 95131
ATTN: MIKE MILLER

ONE CONTAINER PER LINE

Sample Number ¹⁴	Sample Description/Type ¹⁵	Date/Time Collected ¹⁶	Container Type ¹⁷	Sample Volume ¹⁸	Pre-servative ¹⁹	Requested Testing Program ²⁰	Condition on Receipt ²¹	Disposal Record No. ²²
SB-1 (7.5)	SOIL	2-2-94 @ 11:15	3X6 IN BRASS		NONE	TPH-G/BTEX		
SB-2 (7.5)	SOIL	2-2-94 @ 13:00	"		"	"		
SB-3 (7.5)	SOIL	2-2-94 @ 14:00	"		"	"		
<p><i>For Lab Use Only</i></p> <p><i>For Lab Use Only</i></p>								

Special Instructions: ²³

Possible Hazard Identification: ²⁴
 Non-hazard Flammable Skin Irritant Poison B Unknown

Sample Disposal: ²⁵
 Return to Client Disposal by Lab Archive (mos.)

Turnaround Time Required: ²⁶
 Normal Rush

QC Level: ²⁷
 I. II. III. Project Specific (specify):

1. Relinquished by ²⁸ Jan M. Molo Date: 2-9-94 @
 (Signature/Affiliation) Time:
 2. Relinquished by [Signature] Date: 2/10/94
 (Signature/Affiliation) Time: 1750
 3. Relinquished by _____ Date: _____
 (Signature/Affiliation) Time: _____

1. Received by ²⁸ [Signature] Date: 2/9/94
 (Signature/Affiliation) Time: 1723
 2. Received by _____ Date: _____
 (Signature/Affiliation) Time: _____
 3. Received by [Signature] Date: 2/10/94
 (Signature/Affiliation) Time: 5:30

Comments: ²⁹

Superior

* See back of form for special instructions.
 Yellow: Field copy



INTERNATIONAL
TECHNOLOGY
CORPORATION

Pacific Bell

**ANALYSIS REQUEST AND
CHAIN OF CUSTODY RECORD***

Reference Document No. 397285

Page 1 of 1

Project Name/No. ¹ 151933

Samples Shipment Date ⁷ 2-15-94

Bill to: ⁵ IT Corp

Sample Team Members ² MILLER

Lab Destination ⁸ SUPERIOR

4585 Pacheco Blvd

Martinez, CA

94553

Profit Center No. ³ 2224

Lab Contact ⁹ RICH PHALER

Project Manager ⁴ M. MILLER

Project Contact/Phone ¹² MIKE MILLER
408-894-1200

Report to: ¹⁰ IT Corp

Purchase Order No. ⁶

Carrier/Waybill No. ¹³ VANDOR

2055 Junction Ave

San Jose CA

95131

Required Report Date ¹¹ NORMAL

ONE CONTAINER PER LINE

Sample Number ¹⁴	Sample Description/Type ¹⁵	Date/Time Collected ¹⁶	Container Type ¹⁷	Sample Volume ¹⁸	Preservative ¹⁹	Requested Testing Program ²⁰	Condition on Receipt ²¹	Disposal Record No. ²²
SSC-1(2-94)	SOIL	2-15-94	2x3 GLASS	-	NONE	STLC; Pb		
57664-2						yes yes YSLA	yes yes YSLA	

Special Instructions: ²³ SAMPLE IS AT LABORATORY

Possible Hazard Identification: ²⁴

Non-hazard Flammable Skin Irritant Poison B Unknown

Sample Disposal: ²⁵

Return to Client Disposal by Lab Archive (mos.)

Turnaround Time Required: ²⁶

Normal Rush

QC Level: ²⁷

I. II. III.

Project Specific (specify):

1. Relinquished by ²⁸ Mike Miller
(Signature/Affiliation)

Date: _____
Time: _____

1. Received by ²⁸
(Signature/Affiliation)

Date: _____
Time: _____

2. Relinquished by
(Signature/Affiliation)

Date: _____
Time: _____

2. Received by
(Signature/Affiliation)

Date: _____
Time: _____

3. Relinquished by
(Signature/Affiliation)

Date: _____
Time: _____

3. Received by
(Signature/Affiliation)

Hal Taylor

Date: 3/2/94
Time: 10:00 AM

Comments: ²⁹

APPENDIX D.2
LABORATORY REPORTS



Superior Precision Analytical, Inc.

1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

IT Corp (SJ)
Attn: MICHAEL MILLER

Project PACIFIC BELL 151933
Reported 15-February-1994

ANALYSIS FOR GASOLINE, BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES
by EPA SW-846 Methods 5030/8015M/8020.

Chronology

Laboratory Number 57649

Identification	Sampled	Received	Extracted	Analyzed	Run #	Lab #
SB-1(7.5)	02/02/94	02/10/94	02/14/94	02/14/94		1
SB-2(7.5)	02/02/94	02/10/94	02/15/94	02/15/94		2
SB-3(7.5)	02/02/94	02/10/94	02/15/94	02/15/94		3



Superior Precision Analytical, Inc.

1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

IT Corp (SJ)
Attn: MICHAEL MILLER

Project PACIFIC BELL 151933
Reported 15-February-1994

ANALYSIS FOR GASOLINE, BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES

Laboratory Number	Sample Identification	Matrix
57649- 1	SB-1(7.5)	Soil
57649- 2	SB-2(7.5)	Soil
57649- 3	SB-3(7.5)	Soil

RESULTS OF ANALYSIS

Laboratory Number: 57649- 1 57649- 2 57649- 3

Gasoline:	ND<1	ND<1	ND<1
Benzene:	ND<.005	ND<.005	ND<.005
Toluene:	ND<.005	ND<.005	ND<.005
Ethyl Benzene:	ND<.005	ND<.005	ND<.005
Total Xylenes:	ND<.005	ND<.005	ND<.005
Concentration:	mg/kg	mg/kg	mg/kg
-- Surrogate % Recoveries --			
Trifluorotoluene (SS):	122	119	113



Superior Precision Analytical, Inc.

1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

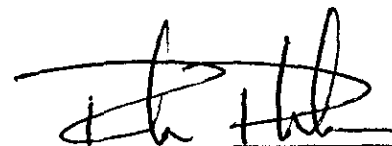
ANALYSIS FOR GASOLINE, BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES Quality Assurance and Control Data - Soil

Laboratory Number 57649

Compound	Method		Spike Recovery (%)	Limits (%)	RPD (%)
	Blank (mg/kg)	RL (mg/kg)			
Gasoline:	ND<1	1	89/89	75-125	0%
Benzene:	ND<.005	.005	125/125	75-125	0%
Toluene:	ND<.005	.005	95/92	75-125	3%
Ethyl Benzene:	ND<.005	.005	95/95	75-125	0%
Total Xylenes:	ND<.005	.005	92/95	75-125	3%

Definitions:

ND = Not Detected
 RPD = Relative Percent Difference
 RL = Reporting Limit
 mg/kg = Parts per million (ppm)
 QC File No. 57649

 2/16/94
 Senior Chemist
 Account Manager



Superior Precision Analytical, Inc.

1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

IT Corp
Attn: MICHAEL MILLER

Project PACIFIC BELL 151933
Reported 21-February-1994

ANALYSIS FOR GASOLINE, BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES
by EPA SW-846 Methods 5030/8015M/8020.

Chronology

Laboratory Number 57664

Identification	Sampled	Received	Extracted	Analyzed	Run #	Lab #
MW-1 (2-94)	02/15/94	02/15/94	02/16/94	02/16/94		1
SSB-1 (2-94)	02/15/94	02/15/94	02/21/94	02/21/94		2



Superior Precision Analytical, Inc.

1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

IT Corp
Attn: MICHAEL MILLER

Project PACIFIC BELL 151933
Reported 21-February-1994

ANALYSIS FOR GASOLINE, BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES

Laboratory Number	Sample Identification	Matrix
57664- 1	MW-1 (2-94)	Water
57664- 2	SSB-1 (2-94)	Soil

RESULTS OF ANALYSIS

Laboratory Number: 57664- 1 57664- 2

Gasoline:	ND<50	ND<1
Benzene:	ND<0.5	ND<.005
Toluene:	ND<0.5	ND<.005
Ethyl Benzene:	ND<0.5	ND<.005
Total Xylenes:	ND<0.5	ND<.005

Concentration: ug/L mg/kg

-- Surrogate % Recoveries --

Trifluorotoluene (SS): 96 113



Superior Precision Analytical, Inc.

1555 Burke, Unit I ▪ San Francisco, California 94124 ▪ (415) 647-2081 / fax (415) 821-7123

ANALYSIS FOR GASOLINE, BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES Quality Assurance and Control Data - Water

Laboratory Number 57664

Compound	Method Blank (ug/L)	RL (ug/L)	Spike Recovery (%)	Limits (%)	RPD (%)
Gasoline:	ND<50	50	94/98	60-134	4%
Benzene:	ND<0.5	0.5	76/82	60-140	8%
Toluene:	ND<0.5	0.5	85/94	75-125	10%
Ethyl Benzene:	ND<0.5	0.5	89/96	75-125	8%
Total Xylenes:	ND<0.5	0.5	96/105	75-125	9%

Definitions:

ND = Not Detected

RPD = Relative Percent Difference

RL = Reporting Limit

ug/L = Parts per billion (ppb)

QC File No. 57664



Superior Precision Analytical, Inc.

1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

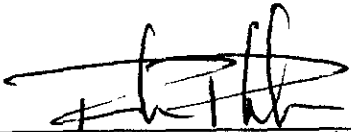
ANALYSIS FOR GASOLINE, BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES Quality Assurance and Control Data - Soil

Laboratory Number 57664

Compound	Method Blank (mg/kg)	RL (mg/kg)	Spike Recovery (%)	Limits (%)	RPD (%)
Gasoline:	ND<1	1	108/110	59-141	2%
Benzene:	ND<.005	.005	105/100	68-133	5%
Toluene:	ND<.005	.005	100/113	75-125	12%
Ethyl Benzene:	ND<.005	.005	100/110	75-125	10%
Total Xylenes:	ND<.005	.005	104/115	75-125	10%

Definitions:

ND = Not Detected
 RPD = Relative Percent Difference
 RL = Reporting Limit
 mg/kg = Parts per million (ppm)
 QC File No. 57664

 2/22/94
 Senior Chemist
 Account Manager



Superior Precision Analytical, Inc.

825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

IT Corp (SJ)
Attn: MICHAEL MILLER

Project 151933
Reported 08-March-1994

ANALYSIS FOR SOLUBLE LEAD
by California Administrative Code Title 22 & SW-846 Method 6010

Chronology

Laboratory Number 91226

Identification	Sampled	Received	Extracted	Analyzed	Run #	Lab #
SSC-1(2-94)	02/15/94	03/02/94	03/03/94	03/08/94		1



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Project 151933
Reported 08-March-1994

ANALYSIS FOR SOLUBLE LEAD

Laboratory Number	Sample Identification	Matrix
91226- 1	SSC-1(2-94)	Soil

RESULTS OF ANALYSIS

Laboratory Number: 91226- 1

Soluble Lead (Pb): ND<0.5

Concentration: mg/L



ANALYSIS FOR SOLUBLE LEAD
Quality Assurance and Control Data - Extract

Laboratory Number 91226

Compound	Method Blank (mg/L)	RL (mg/L)	Spike Recovery (%)	Limits (%)	RPD (%)
Soluble Lead (Pb):	ND<0.5	0.5	102/101	75-125	1%

Definitions:

- ND = Not Detected
- RPD = Relative Percent Difference
- RL = Reporting Limit
- mg/L = Parts per million (ppm)
- QC File No. 91226

Ahsanah Sahip
 Senior Chemist
 Account Manager