

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY
DAVID J. KEARS, Agency Director



RO# 832

ENVIRONMENTAL HEALTH SERVICES
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
(510) 337-9335 (FAX)

REMEDIAL ACTION COMPLETION CERTIFICATION

**StID 4871 - 1519 Franklin Street, Oakland, CA
(1-2K and 1-1K gallons tanks removed on June 3, 1994)**

October 7, 1998

Mr. John Carrillo
Pacific Bell
1587 Franklin Street, Room 1500
Oakland, CA 94612

Dear Mr. Carrillo:

This letter confirms the completion of site investigation and remedial action for the underground storage tanks formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tanks are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the underground tank release is required.

This notice is issued pursuant to a regulation contained in Title 23, Section 2721(e) of the California Code of Regulations.

Please contact our office if you have any questions regarding this matter.

Sincerely,


Mee Ling Tung, Director

cc: Richard Pantages, Chief of Division of Environmental Protection
Chuck Headlee, RWQCB
Dave Deaner, SWRCB
Leroy Griffin, OFD
files-ec (pacbell-3)

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StID 4871

October 7, 1998

Mr. John Carrillo
Pacific Bell
1587 Franklin Street, Room 1500
Oakland, CA 94612

Re: Fuel Leak Site Case Closure 1519 Franklin St, Oakland, CA

Dear Mr. Carrillo:

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with Chapter 6.75 (Article 4, Section 25299.37[h]). The State Water Resources Control Board adopted this letter on February 20, 1997. As of March 1, 1997, the Alameda County Environmental Protection Division is required to use this case closure letter for all UST leak sites. We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site. The subject fuel leak case is closed.

SITE INVESTIGATION AND CLEANUP SUMMARY

Please be advised that the following conditions exist at the site:

- up to 8,900ppm TPH as diesel exists in soil beneath the site;
- up to 8,800ppb TPH as diesel and 0.94ppb benzene exists in groundwater beneath the site; and,
- a site safety plan must be prepared for construction workers in the event excavation/trenching is proposed in the vicinity of residual soil and groundwater contamination.

If you have any questions, please contact me at (510) 567-6762.

eva chu
Hazardous Materials Specialist

enclosures: 1. Case Closure Letter 2. Case Closure Summary

c: Frank Kliewer, City of Oakland-Planning, 1330 Broadway, 2nd Fl, Oakland, CA 94612
files (pacbell-4)

Treatment and Disposal of Affected Material:

<u>Material</u>	<u>Amount (include units)</u>	<u>Action (Treatment or Disposal w/destination)</u>	<u>Date</u>
Tank	2 USTs	Scrapped at LMC Metals, in Richmond	12/94
Soil	42 cy	Disposed at Remco, in Richmond	
Groundwater	4,300 gal. & 9,000 gal.	Recycled at Petroleum Recycling Corp, in Patterson	12/94 3/95

Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Contaminant	Soil (ppm)		Water (ppb)	
	Before ¹	After ²	Before ³	After ⁴
TPH (Diesel)	5,600	8,900	60,000	8,800
Benzene	ND	ND	5.8	0.94
Toluene	ND	ND	6.5	0.92
Ethylbenzene	1.5	1.1	11.0	2.0
Xylenes	3.1	1.2	9.8	3.0
Oil & Grease (ppm)	31	17	2,800	11
Other PNAs	NA	NA	NA	see Note 5

- NOTE: 1 soil sample collected from boreholes drilled w/in 2K UST vault, 6/94
 2 soil sample collected after overexcavation, 11/94
 3 grab groundwater samples collected from borings advanced w/in 2K UST vault, 6/94
 4 most recent sampling event, 9/97
 5 23 ppb naphthalene, 32 ppb 2-Methylnaphthalene

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? _____

Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? _____

Does corrective action protect public health for current land use? **YES**

Site management requirements: **A site safety plan must be prepared for construction workers in the event excavation/trenching is proposed in the vicinity of residual soil and groundwater contamination.**

Should corrective action be reviewed if land use changes? **YES**

Monitoring wells Decommissioned: **None, pending site closure**

Number Decommissioned: **0** Number Retained: **1**


List enforcement actions taken: **None**

List enforcement actions rescinded: **NA**

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: Eva Chu

Title: Haz Mat Specialist

Signature: 

Date: 5/13/98

Reviewed by

Name: Madhulla Logan

Title: Haz Mat Specialist

Signature: 

Date: 5/14/98

Name: Thomas Peacock

Title: Supervisor

Signature: 

Date: 5-12-98

VI. RWQCB NOTIFICATION

Date Submitted to RB: 5/13/98

RB Response:

RWQCB Staff Name: Chuck Headlee

Title: AEG

Signature: 

Date: 5/29/98

VII. ADDITIONAL COMMENTS, DATA, ETC.

The site contained 2 USTs formerly containing diesel fuel. Each tank was individually contained in a sub-grade concrete vault. Both tanks had been abandoned-in-place. The 1,000 gallon UST was filled with sand, and the 2K UST was earth-filled. Both USTs were removed in 1994.

When the 1K UST was removed, soil samples collected from the fill material did not reveal detectable concentrations of petroleum hydrocarbons. This vault was subsequently backfilled with clean material. No further action was required for this tank excavation.

Analysis of soil samples collected from the fill material in the 2K UST vault revealed petroleum hydrocarbons ranging from 15,000 ppm to 19,000 ppm TPHd. Upon removal of the vault fill materials, an opening in the vault floor was discovered (measuring ~12' long x 2' wide). Two soil borings (SB north and SB south) were drilled through the opening in the vault floor to groundwater. Soil samples (SS-N-22, SS-S-22, SS-N-25, and SS-S-25) collected contained petroleum hydrocarbons ranging from 1,800 ppm to 5,600 ppm diesel. Groundwater contained TPHd ranging from 5,500 ppb to 60,000 ppb. A free phase layer was noted floating on the water table. (See Figs 1, 2, and Tables 1 and 3)

Soil overexcavation was performed. This was accomplished by drilling a series of overlapping boreholes (each ~2' wide) using a hollow stem auger drilling rig. As each borehole was completed, the void was filled with a clean cement grout. Approximately 42 cy of soil was removed. Confirmatory soil samples (PBF-1 through PBF-6) were collected from the sidewalls and floor of select boreholes before they were grouted. (See Figs 3 and 4)

A series of 5 temporary extraction wells were also emplaced in five select boreholes at the time of soil overexcavation (see Fig 5). Interim groundwater extraction removed ~4,300 gallons of groundwater. Analysis of groundwater samples collected following each day of groundwater extraction revealed detectable hydrocarbon concentrations. Hydrocarbon concentration, however, showed a significant decrease after each day of groundwater extraction. A second phase of groundwater extraction was conducted in February to March 1995, removing an additional 9,000 gallons of groundwater. Final groundwater analysis identified 1,700 ppb diesel and ND levels of oil and grease. (See Table 2)

In September 1995 installation of three groundwater monitoring wells was attempted. It was only possible to install one well (MW-1), which was adjacent to, and south of the former UST. Groundwater from wells MW-1 and extraction wells E-2, E-3, and E-5 has been sampled regularly. Detectable petroleum hydrocarbons (TPH as diesel and oil and grease) have been continuously encountered, however, none of the chemicals of concern, such as benzo(a)pyrene, naphthalene, or BTEX, have been present in excess of drinking water MCLs or risk based corrective action screening levels. (See fig 6, Table 3)

It appears source removal, along with groundwater extraction, removed most of the contaminants and has limited its migration in groundwater. Residual petroleum hydrocarbons will likely decrease by natural attenuation. Continued monitoring is not warranted.

In summary, case closure is recommended because:

- o the leak and ongoing sources have been removed;
- o the site has been adequately characterized;
- o the dissolved plume is not migrating;
- o no water wells, surface water, or other sensitive receptors are likely to be impacted; and,
- o the site presents no significant risk to human health or the environment.

DRAWING NUMBER 191316-A12
 CHECKED BY SJL 3/7/91
 APPROVED BY DO 3/7/91
 DRAWN BY SJZ 3-8-94

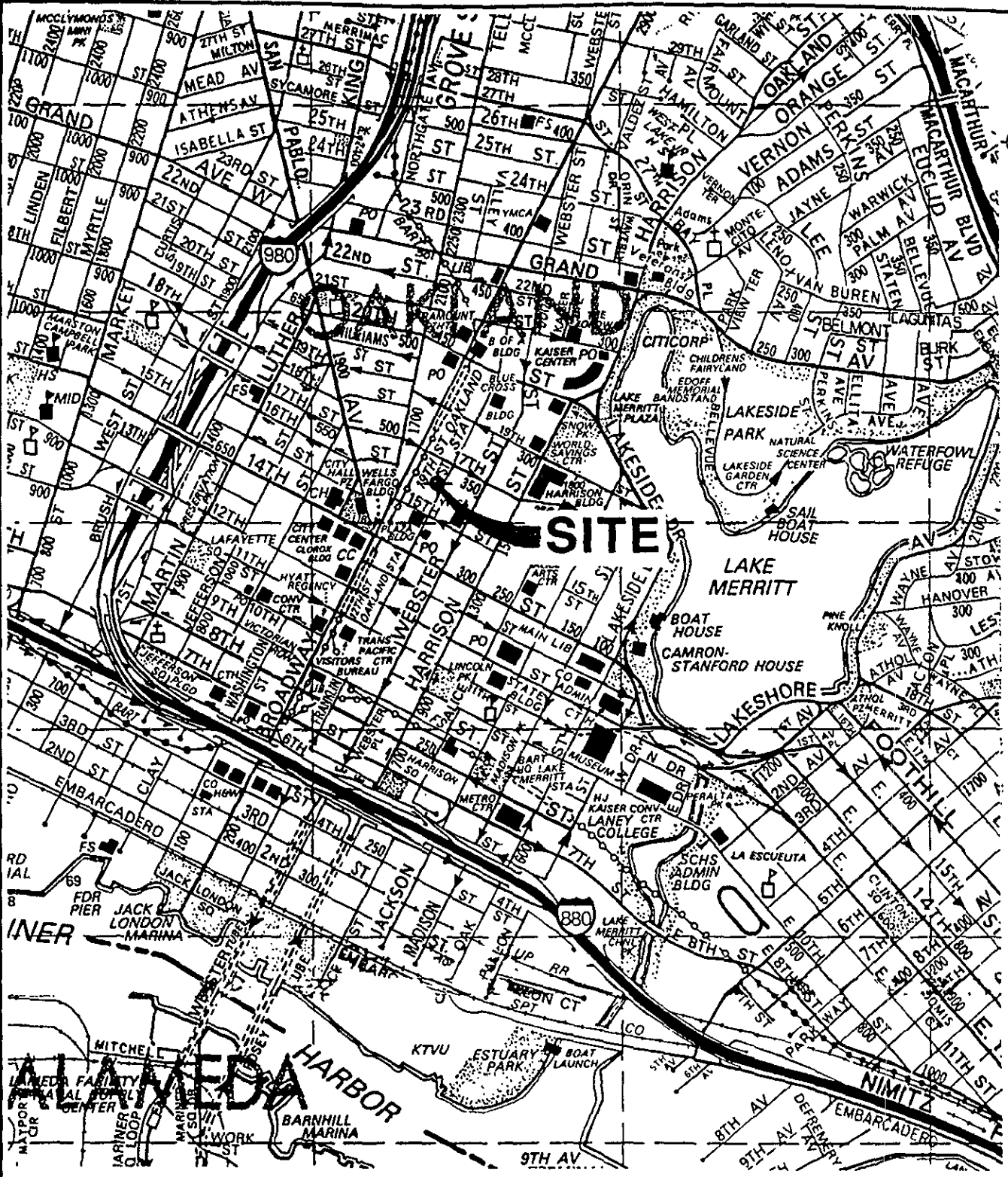
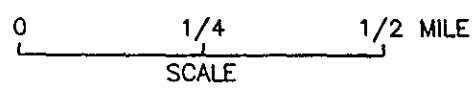


FIGURE 1
 SITE VICINITY MAP
 PACIFIC BELL
 1519 FRANKLIN STREET
 OAKLAND, CA 94612
 PREPARED FOR
 PACIFIC BELL
 OAKLAND, CALIFORNIA



REFERENCE: THE THOMAS GUIDE, ALAMEDA AND CONTRA COSTA COUNTIES, DATED 1992



191316-A1
DATE: 5/22/94
DRAWN BY: [signature]
CHECKED BY: [signature]
DATE: 6-22-94
PROJECT: [signature]

~ VERTICAL PROPORTIONING APPROXIMATE ~

NOTES:

- BOTTOM OF FORMER 2,000 GALLON UST VAULT IS 22 FEET BELOW THE SIDEWALK (GROUND SURFACE) LEVEL

EXISTING BUILDING

<RUBBLE FROM FORMER BUILDING>



FORMER 2,000 GALLON UST LOCATION (VAULT)

FRANKLIN STREET

SB-SOUTH

SB-NORTH

Groundwater Encountered at 25' Below Ground Surface on 6/21/94.

FIGURE 3

OBLIQUE VIEW OF FORMER UNDERGROUND STORAGE TANK VAULT AREA

1519 FRANKLIN STREET
OAKLAND, CALIFORNIA

PREPARED FOR

PACIFIC BELL
OAKLAND, CALIFORNIA



INTERNATIONAL
TECHNOLOGY
CORPORATION

TABLE 2
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS IN PPM
PACIFIC BELL - FRANKLIN STREET
IT PROJECT NO. 191316

Sample Number	Sample Location	Date Collected	Depth of Sample in Feet	TPH as Diesel	Oil and Grease	Benzene	Toluene	Ethyl Benzene	Xylenes
SS-N-22	soil boring SB-north, north end of hole in tank vault floor	06/20/94	22.0	5,600	20,000	ND	ND	1.0	2.7
SS-S-22	soil boring SB-south, south end of hole in tank vault floor	06/20/94	22.0	1,800	10,000	ND	ND	0.87	2.0
SS-N-25	soil boring SB-north, north end of hole in tank vault floor	06/20/94	25.0	5,600	31,000	ND	ND	1.5	3.1
SS-S-25	soil boring SB-south, south end of hole in tank vault floor	06/24/94	25.0	3,700	21,000	ND	ND	0.86	1.9
PBF-1	west side wall of excavation below vault	11/29/94	25.0	5,700	9,900	ND	ND	0.58	0.69
PBF-2	east side wall of excavation below vault	11/29/94	25.0	16	ND	ND	ND	ND	ND
PBF-3	south side wall of excavation below vault	11/30/94	25.0	2.2	ND	ND	ND	ND	ND
PBF-4	northwest side wall of excavation below vault	11/30/94	25.0	8,900	17,000	ND	ND	1.1	1.2
PBF-5	center floor of excavation below vault	12/01/94	26.0	4,900	7,200	ND	ND	0.25	0.35
PBF-6	northeast side wall of excavation below vault	12/01/94	25.0	ND	ND	ND	ND	ND	ND
MW1-5	monitoring well MW-1	09/28/95	.50	ND	ND	ND	ND	ND	ND
MW1-10	monitoring well MW-1	09/28/95	10.0	ND	ND	ND	ND	ND	ND
MW1-15	monitoring well MW-1	09/28/95	15.0	ND	ND	ND	ND	ND	ND
MW1-20	monitoring well MW-1	09/28/95	20.0	ND	ND	ND	ND	ND	ND
MW1-25	monitoring well MW-1	09/28/95	25.0	ND	ND	ND	ND	ND	ND

Notes:

ppm = parts per million

TPH = total petroleum hydrocarbons

ND = target analyte not detected above method detection limit

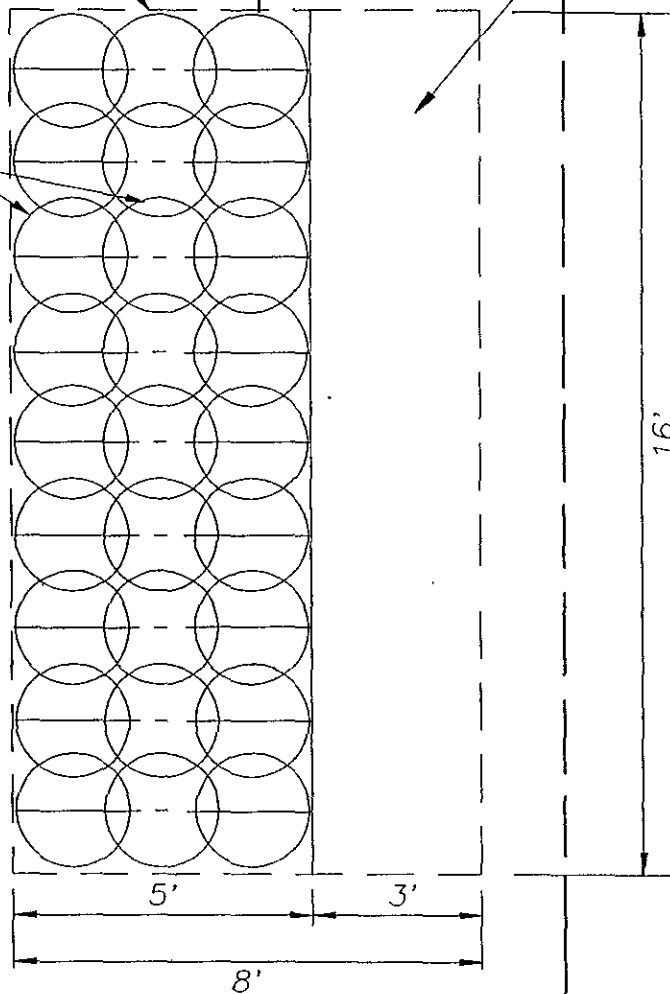
DRAWING NUMBER 191316-A6
 CHECKED BY D.BANNON 2-10-95
 APPROVED BY SF
 DRAWN BY SF

AREA EXCAVATED

<DEMOLISHED SIDEWALK>

FORMER UST VAULT
 (VAULT FLOOR RECESSED
 APPROXIMATELY 22 FEET
 FROM GRADE LEVEL)

OVERLAPPING
 LARGE DIAMETER
 CORES TO 5' BELOW
 VAULT FLOOR



FRANKLIN STREET

FRANKLIN STREET

FIGURE 2

SOIL AUGERING
 EXCAVATION AREA

PACIFIC BELL
 1519 FRANKLIN STREET
 OAKLAND, CALIFORNIA 94612

PREPARED FOR

PACIFIC BELL
 OAKLAND, CALIFORNIA



INTERNATIONAL
 TECHNOLOGY
 CORPORATION

APPROXIMATE SCALE



0

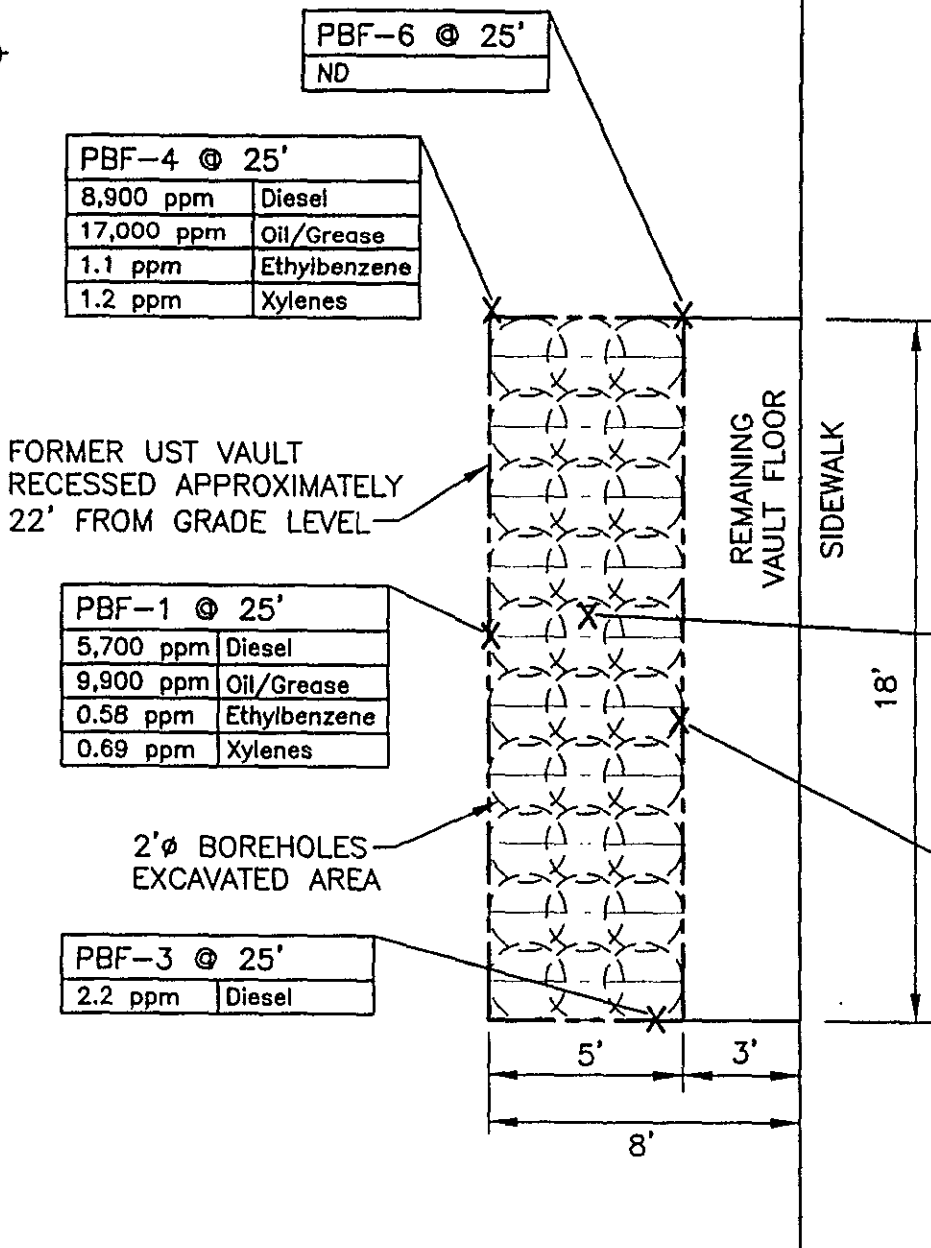
7.5 FEET

DRAWING NUMBER 191316-A20

CHECKED BY *SE* 4/2/98
APPROVED BY *MA* 11/8/98

BU 1-16-98

DRAWN BY



PBF-4 @ 25'

8,900 ppm	Diesel
17,000 ppm	Oil/Grease
1.1 ppm	Ethylbenzene
1.2 ppm	Xylenes

PBF-6 @ 25'

ND	
----	--

PBF-1 @ 25'

5,700 ppm	Diesel
9,900 ppm	Oil/Grease
0.58 ppm	Ethylbenzene
0.69 ppm	Xylenes

PBF-5 @ 25'

4,900 ppm	Diesel
7,200 ppm	Oil/Grease
0.25 ppm	Ethylbenzene
0.35 ppm	Xylenes

PBF-3 @ 25'

2.2 ppm	Diesel
---------	--------

PBF-2 @ 25'

16 ppm	Diesel
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LEGEND

- X SOIL SAMPLE LOCATION @ 3 FEET BELOW VAULT FLOOR -
- ## SOIL/GROUNDWATER INTERFACE

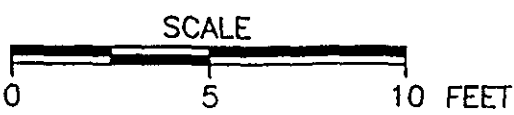


FIGURE 4
VERIFICATION SOIL SAMPLE LOCATIONS AND ANALYTICAL RESULTS IN PPM

PACIFIC BELL
1519 FRANKLIN STREET
OAKLAND, CA 94612

PREPARED FOR
PACIFIC BELL
OAKLAND, CALIFORNIA
ITT INTERNATIONAL TECHNOLOGY CORPORATION

DRAWING NUMBER 191316-A21

CHECKED BY JGF 1/15/97

APPROVED BY AA 1/15/97

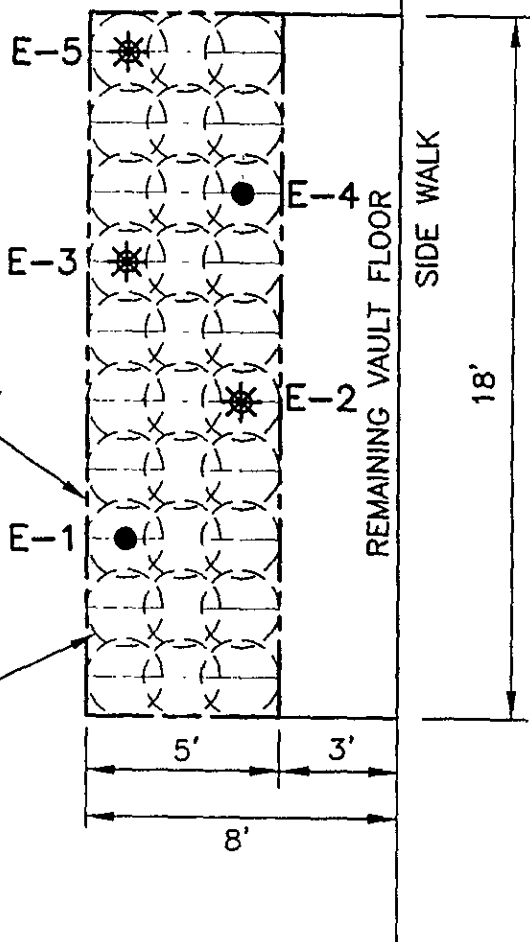
BJ 1-15-98

DRAWN BY



FORMER UST VAULT
 RECESSED APPROXIMATELY
 22' FROM GRADE LEVEL

2'Ø BOREHOLES
 EXCAVATED AREA



LEGEND

- TEMPORARY GROUNDWATER EXTRACTION POINT - ABANDONED
- ☀ TEMPORARY GROUNDWATER EXTRACTION WELLS COMPLETED AS PERMANENT IN DEC. 1994 STRUCTURES

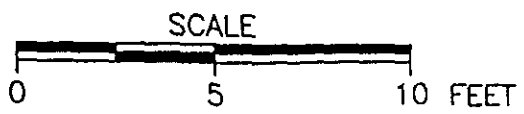


FIGURE 5
GROUNDWATER EXTRACTION
POINT LOCATIONS
 PACIFIC BELL
 1519 FRANKLIN STREET
 OAKLAND, CA 94612

PREPARED FOR
 PACIFIC BELL
 OAKLAND, CALIFORNIA

IT INTERNATIONAL
 TECHNOLOGY
 CORPORATION

TABLE 2
Groundwater Extraction Well Sample
Analytical Results in ppb
Pacific Bell
IT Project No. 191316

Sample Number	Sample Location	Collection Date	TPH Diesel	Oil and Grease	Benzene	Toluene	Ethyl Benzene	Xylenes
120594E3	E-3	12/05/94	5,800 ₅₀	88,000 _{5,000}	1.5 _{0.5}	36 _{0.5}	15 _{0.5}	16 _{0.5}
120694E3	E-3	12/06/94	3,700 ₅₀	21,000 _{5,000}	0.51 _{0.5}	1.4 _{0.5}	4.0 _{0.5}	5.0 _{0.5}
120794E3	E-3	12/07/94	2,700 ₅₀	11,000 _{5,000}	ND _{0.5}	1.3 _{0.5}	3.8 _{0.5}	4.4 _{0.5}
120894E3	E-3	12/08/94	2,400 ₅₀	13,000 _{5,000}	ND _{0.5}	1.4 _{0.5}	4.0 _{0.5}	5.3 _{0.5}
120994E3	E-3	12/09/94	2,400 ₅₀	13,000 _{5,000}	ND _{0.5}	0.81 _{0.5}	3.1 _{0.5}	3.6 _{0.5}
121594E3	E-3	12/15/94	2,300 ₅₀	6,800 _{5,000}	ND _{0.5}	1.1 _{0.5}	3.5 _{0.5}	4.4 _{0.5}
121694E3	E-3	12/16/94	1,700 ₅₀	9,500 _{5,000}	ND _{0.5}	0.84 _{0.5}	3.2 _{0.5}	5.0 _{0.5}

Notes:

TPH = total petroleum hydrocarbons

ppb = parts per billion

ND_x = none detected above "x" method detection limit

5,000_x = concentration detected at "x" method detection limit

DRAWING NUMBER
191316-A15

CHECKED BY
9/11/96

APPROVED BY
9/11/96

T.R.S.
9/11/96

DRAWN BY

1587 FRANKLIN STREET
PACIFIC BELL
BUILDING
UNDERGOING RENOVATION

<SIDEWALK, COVERED>

DRIVEWAY

1519 FRANKLIN STREET
PACIFIC BELL
BUILDING
UNDERGOING DEMOLITION

FORMER UST
LOCATION/Vault
WITH EXTRACTION
WELLS

FRANKLIN STREET

E-5
E-3
E-2

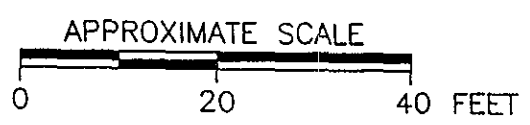
SMOKE SHOP

MW-1

PAT'S PLACE

SIDEWALK

AUGGIE DOGGIE



LEGEND

- EXTRACTION WELL
- ⊙ EXTRACTION WELL ABANDONED
- ⊕ MONITORING WELL LOCATION

FIGURE 2
SITE PLAN
1519 FRANKLIN STREET
OAKLAND, CALIFORNIA
PREPARED FOR
PACIFIC BELL
OAKLAND, CALIFORNIA



INTERNATIONAL
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CORPORATION

TABLE 3
SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS IN PPB
PACIFIC BELL - FRANKLIN STREET
IT PROJECT NO. 191316

Sample Number	Sample Location	Collection Date	TPH Diesel	Oil and Grease	PNA	Benzene	Toluene	Ethyl Benzene	Xylenes
062094SBN	boring SB-North	06/20/94	60,000	2,800,000	NA	3.8	6.5	11.0	9.8
062094SBS	boring SB-south	06/20/94	5,500	1,900,000	NA	5.8	5.8	9.5	ND
052196E2	E-2	05/21/96	3,600	ND	NA	ND	ND	ND	ND
E-2(8-96)	E-2	08/28/96	5,700	12,000	NA	ND	ND	ND	0.84
121196E2	E-2	12/11/96	3,600	ND	NA	ND	ND	ND	ND
NS	E-2	03/19/97	NS	NS	NS	NS	NS	NS	NS
NS	E-2	06/26/97	NS	NS	NS	NS	NS	NS	NS
NS	E-2	09/24/97	NS	NS	NS	NS	NS	NS	NS
120594E3	E-3	12/05/94	5,800	88,000	NA	1.5	36	15	16
120694E3	E-3	12/06/94	3,700	21,000	NA	0.51	1.4	4.0	5.0
120794E3	E-3	12/07/94	2,700	11,000	NA	ND	1.3	3.8	4.4
120894E3	E-3	12/08/94	2,400	13,000	NA	ND	1.4	4.0	5.3
120994E3	E-3	12/09/94	2,400	13,000	NA	ND	0.81	3.1	3.6
121594E3	E-3	12/15/94	2,300	6,800	NA	ND	1.1	3.5	4.4
121694E3	E-3	12/16/94	1,700	9,500	NA	ND	0.84	3.2	5.0
022795E3	E-3	02/27/95	2,200	6,500	NA	0.66	0.81	2.2	3.4
022895E3	E-3	02/28/95	2,300	6,800	NA	0.94	0.92	2.0	3.0

TABLE 3 (continued)

SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS IN PPB
PACIFIC BELL FRANKLIN STREET
IT PROJECT NO. 191316

Sample Number	Sample Location	Collection Date	TPH Diesel	Oil and Grease	PNA	Benzene	Toluene	Ethyl Benzene	Xylenes
030195E3	E-3	03/01/95	2,400	5,800	NA	ND	ND	4.0	2.7
030295E3	E-3	03/02/95	1,700	ND	NA	0.54	0.68	1.8	2.7
030395E3	E-3	03/03/95	2,500	16,000	NA	ND	ND	1.6	2.1
101695EW3	E-3	10/16/95	4,000	ND	NA	0.78	0.56	1.1	1.6
022196E3	E-3	02/21/96	8,100	ND	NA	0.78	ND	0.84	ND
052196E3	E-3	05/21/96	8,900	ND	NA	0.79	ND	0.84	1.2
E-3(8-96)	E-3	08/28/96	6,100	7,400	NA	0.63	0.55	1.2	2.4
121196E3	E-3	12/11/96	4,900	ND	NA	0.63	ND	1.2	1.5
NS	E-3	03/19/97	NS	NS	NS	NS	NS	NS	NS
062697E3	E-3	06/19/97	6,200	ND	ND	ND	ND	ND	1.0
092497E3	E-3	09/24/97	8,800	11,000	ND	ND	ND	ND	0.88
052196E5	E-5	05/21/96	5,600	8,600	NA	ND	ND	2.2	3.2
E-5(8-96)	E-5	08/28/96	6,100	6,900	NA	ND	ND	1.4	1.3
121196E5	E-5	12/11/96	6,700	ND	23 NAP 32 2MN	ND	ND	1.3	1.2
NS	E-5	03/19/97	NS	NS	NS	NS	NS	NS	NS
NS	E-5	06/26/97	NS	NS	NS	NS	NS	NS	NS

TABLE 3 (continued)

SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS IN PPB
 PACIFIC BELL FRANKLIN STREET
 IT PROJECT NO. 191316

Sample Number	Sample Location	Collection Date	TPH Diesel	Oil and Grease	PNA	Benzene	Toluene	Ethyl Benzene	Xylenes
NS	E-5	09/24/97	NS	NS	NS	NS	NS	NS	NS
101695MW1	MW-1	10/16/95	130	ND	NA	ND	0.91	ND	ND
022196MW1	MW-1	02/21/96	ND	ND	NA	ND	ND	ND	ND
052196MW1	MW-1	05/21/96	120	ND	NA	ND	2.4	ND	ND
MW-1(8-96)	MW-1	08/28/96	ND	ND	NA	ND	ND	ND	ND
121196MW1	MW-1	12/11/96	ND	ND	NA	ND	ND	ND	ND
031997MW1	MW-1	03/19/97	ND	ND	NA*	ND	ND	ND	ND
062697MW1	MW-1	06/26/97	ND	ND	NA*	ND	ND	ND	ND
092497MW1	MW-1	09/24/97	120	ND	ND	ND	ND	ND	ND

Notes:

TPH = total petroleum hydrocarbons

ppb = parts per billion

NAP = Napthalene

NA = Not Analyzed

NA* = This sample was not analyzed for PNA concentrations as no detectable TPH as diesel was encountered upon analysis

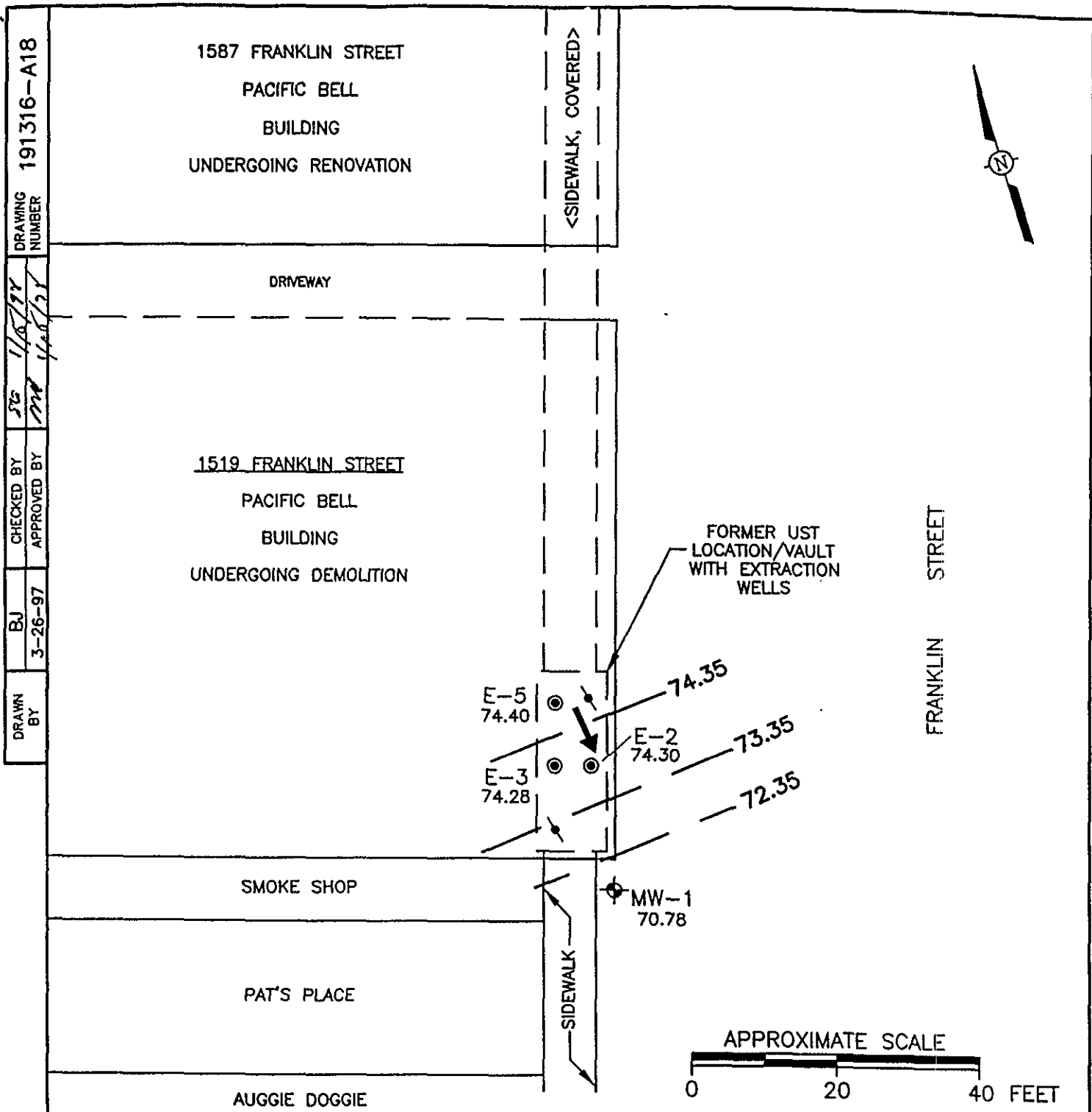
ND = none detected above method detection limit

PNA = Poly Nuclear Aromatic compounds

2MN = 2 - Methylnapthalene

NS = no sample collected

c:\sydney\frankcls.132



DRAWING NUMBER
191316-A18

CHECKED BY
BJ

APPROVED BY
3-26-97

DRAWN BY

- LEGEND**
- EXTRACTION WELL
 - ⤵ EXTRACTION WELL ABANDONED
 - ⊕ MONITORING WELL LOCATION
 - - - WATER TABLE CONTOUR IN FEET ABOVE MEAN SEA LEVEL
 - ➔ GROUNDWATER FLOW DIRECTION
 - 74.40 GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL

FIGURE 6E
GROUNDWATER GRADIENT MAP
MARCH 19, 1997
1519 FRANKLIN STREET
OAKLAND, CALIFORNIA
PREPARED FOR
PACIFIC BELL
OAKLAND, CALIFORNIA



DRAWING NUMBER 191316-A17

35 1/6/98
2/11/98

CHECKED BY
APPROVED BY
T.R.S.
12/19/96

DRAWN BY

1587 FRANKLIN STREET
PACIFIC BELL
BUILDING
UNDERGOING RENOVATION

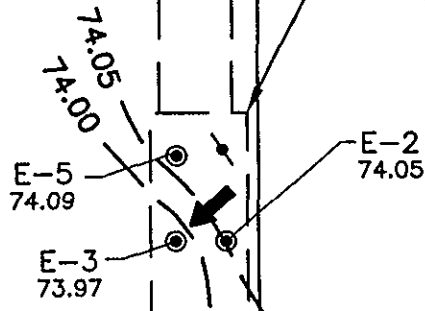
<SIDEWALK, COVERED>

DRIVEWAY

1519 FRANKLIN STREET
PACIFIC BELL
BUILDING
UNDERGOING DEMOLITION

FORMER UST
LOCATION/Vault
WITH EXTRACTION
WELLS

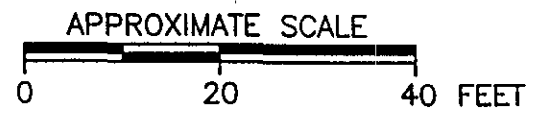
FRANKLIN STREET



SMOKE SHOP

PAT'S PLACE

SIDEWALK



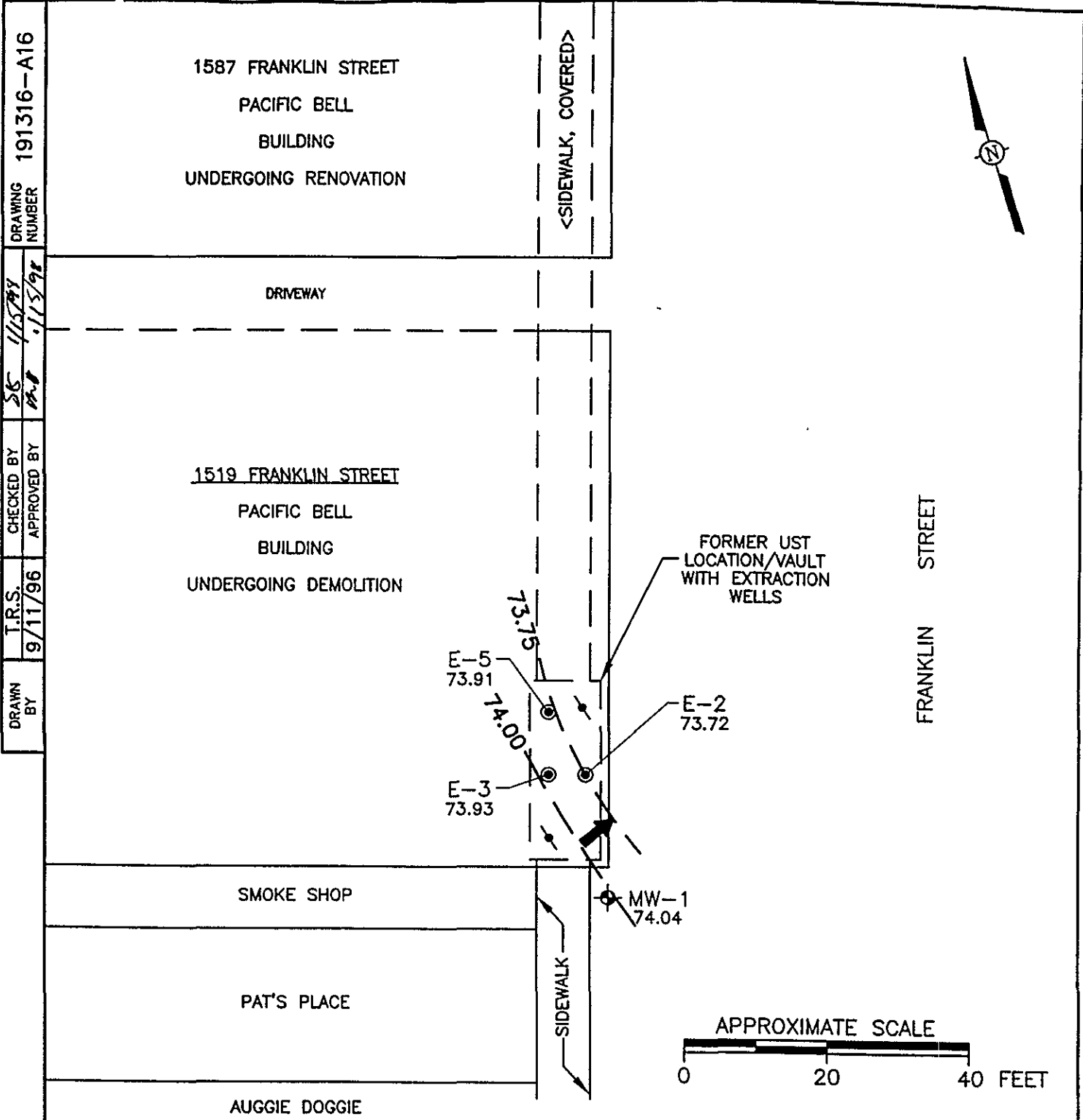
AUGGIE DOGGIE

LEGEND

- EXTRACTION WELL
- ⊗ EXTRACTION WELL ABANDONED
- ⊕ MONITORING WELL LOCATION
- GROUNDWATER CONTOUR IN FEET ABOVE MEAN SEA LEVEL
- ➔ GROUNDWATER FLOW DIRECTION (ASSUMED)
- 73.79 GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL

FIGURE 6D
GROUNDWATER GRADIENT MAP
DECEMBER 11, 1996
1519 FRANKLIN STREET
OAKLAND, CALIFORNIA
PREPARED FOR
PACIFIC BELL
OAKLAND, CALIFORNIA





DRAWING NUMBER 191316-A16

CHECKED BY *SG* 1/15/98

APPROVED BY *DR* 1/15/98

I.R.S. 9/11/96

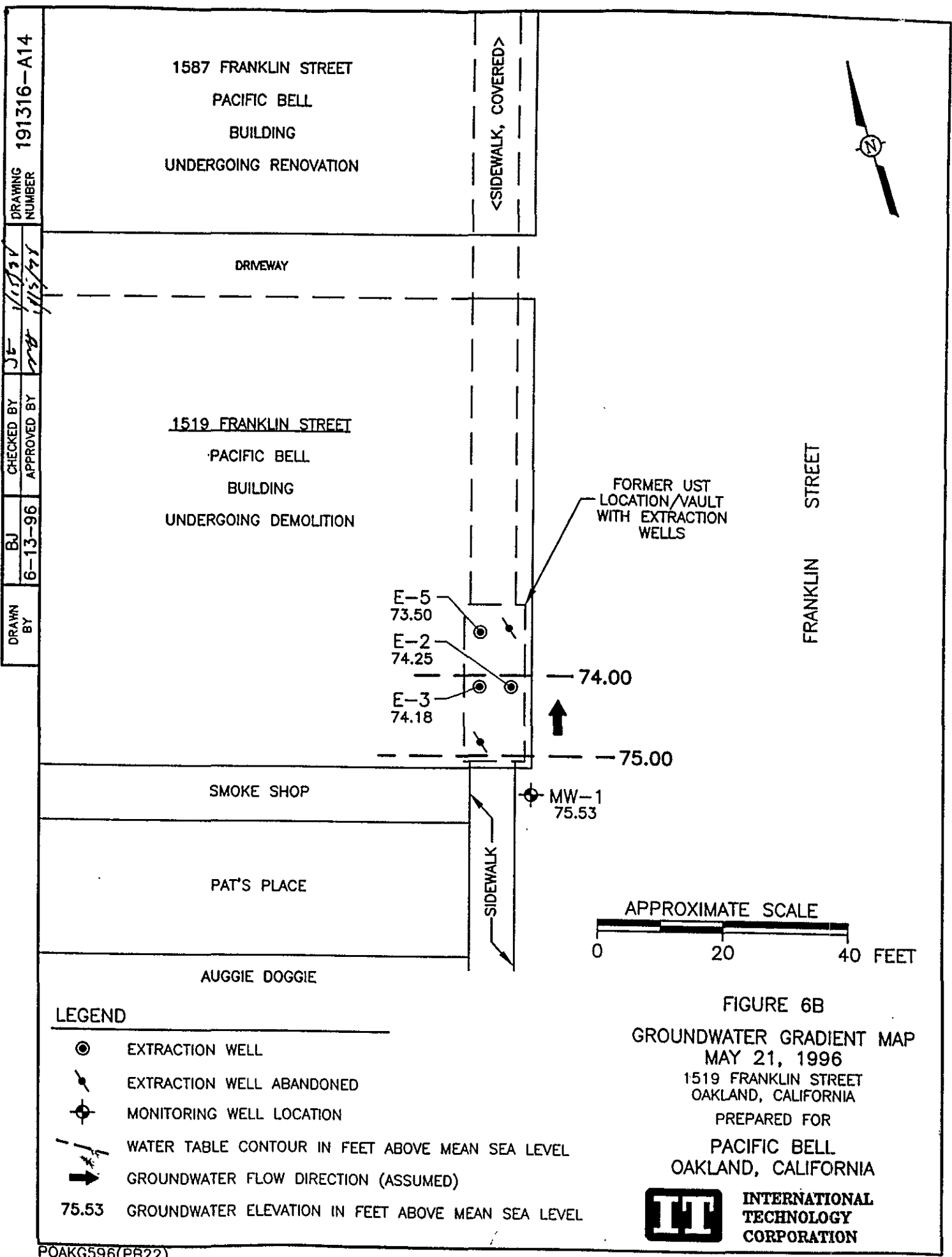
DRAWN BY

LEGEND

- ⊙ EXTRACTION WELL
- ⊙ EXTRACTION WELL ABANDONED
- ⊕ MONITORING WELL LOCATION
- - - WATER TABLE CONTOUR IN FEET ABOVE MEAN SEA LEVEL
- GROUNDWATER FLOW DIRECTION (ASSUMED)
- 74.04 GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL

FIGURE 6C
GROUNDWATER GRADIENT MAP
AUGUST 28, 1996
1519 FRANKLIN STREET
OAKLAND, CALIFORNIA
PREPARED FOR
PACIFIC BELL
OAKLAND, CALIFORNIA





DRAWING NUMBER 191316-A14

1/17/96
1/15/96

JE
AB

CHECKED BY
APPROVED BY

BJ
6-13-96

DRAWN BY



DRAWING NUMBER 191316-A13
 CHECKED BY EB 1/15/96
 APPROVED BY mt 1/15/96
 DRAWN BY BJ 2-27-96

1587 FRANKLIN STREET
 PACIFIC BELL
 BUILDING
 UNDERGOING RENOVATION

<SIDEWALK, COVERED>

1519 FRANKLIN STREET
 PACIFIC BELL
 BUILDING
 UNDERGOING DEMOLITION

PLANNED
 MW-2

PLANNED
 MW-3

E-5
 75.24
 E-2
 75.19
 E-3
 75.22

FORMER UST
 LOCATION/Vault
 WITH EXTRACTION
 WELLS

FRANKLIN STREET

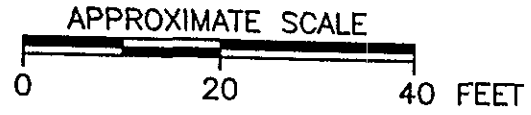
SMOKE SHOP

MW-1
 75.17

PAT'S PLACE

SIDEWALK

AUGGIE DOGGIE



LEGEND

- ⊙ EXTRACTION WELL
- ⊙ EXTRACTION WELL ABANDONED
- ⊕ MONITORING WELL LOCATION
- ⊙ FAILED BORING LOCATION, 9/95
- - - WATER TABLE CONTOUR IN FEET ABOVE MEAN SEA LEVEL
- ➔ GROUNDWATER FLOW DIRECTION (ASSUMED)
- 75.24 GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL

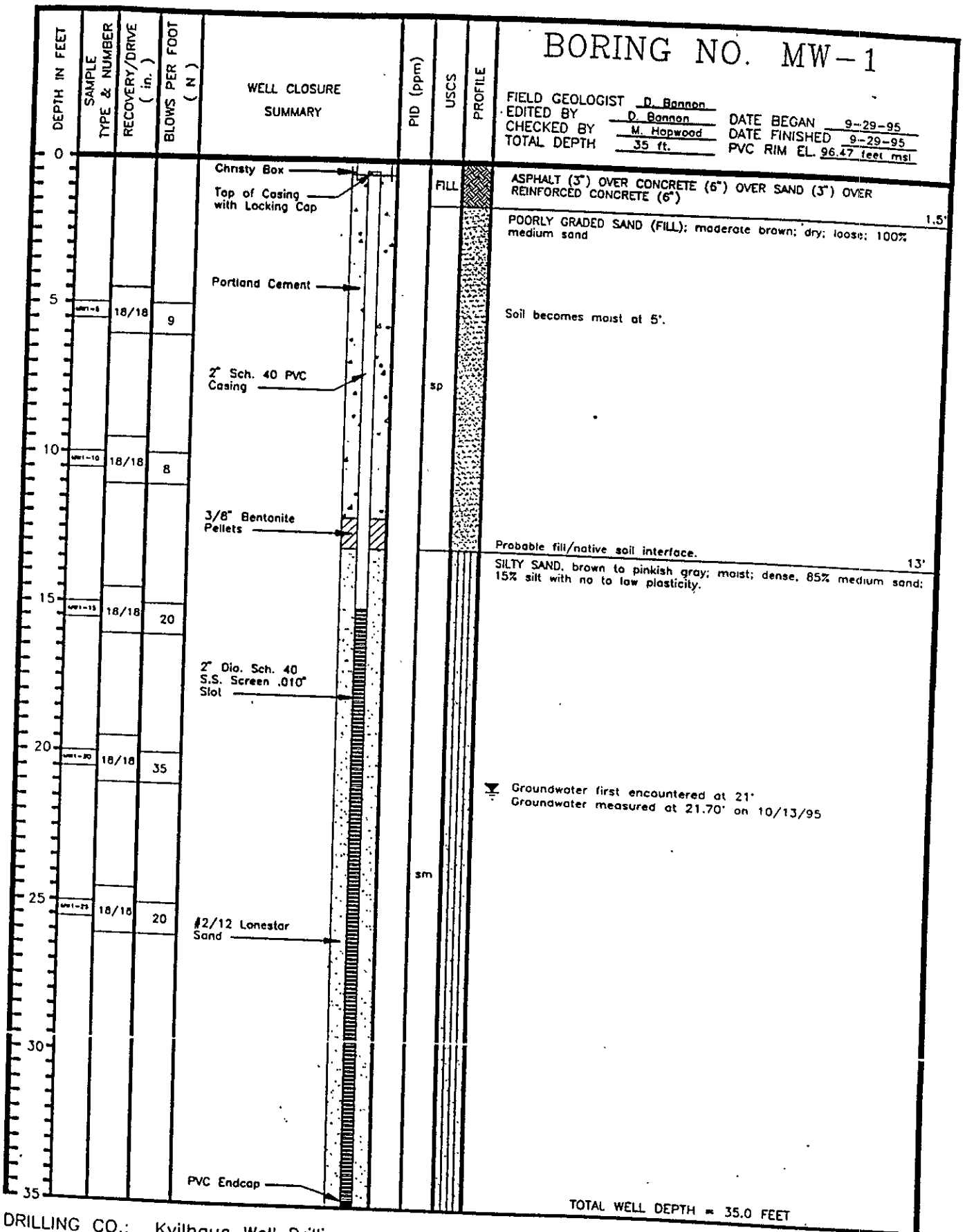
FIGURE 6A
 GROUNDWATER GRADIENT MAP
 FEBRUARY 21, 1996
 1519 FRANKLIN STREET
 OAKLAND, CALIFORNIA
 PREPARED FOR
 PACIFIC BELL
 OAKLAND, CALIFORNIA



**INTERNATIONAL
 TECHNOLOGY
 CORPORATION**

BORING NO. MW-1

FIELD GEOLOGIST D. Bannon
 EDITED BY D. Bannon DATE BEGAN 9-29-95
 CHECKED BY M. Hopwood DATE FINISHED 9-29-95
 TOTAL DEPTH 35 ft. PVC RIM EL. 96.47 feet msl



TOTAL WELL DEPTH = 35.0 FEET

DRILLING CO.: Kvilhaug Well Drilling
 DRILLER: Rod Furlow
 DRILL METHOD: 8 in. O.D. Hollow Stem Auger, B-57 Rig
 SAMPLING METHOD: 18 in. California Modified Split Spoon Sampler
 PROJECT NO.: 191316
 CLIENT: Pacific Bell
 LOCATION: 1519 Franklin Street, Oakland, California

