Applied GeoSystems, Inc.
A RESNA Company

RESNA
Working To Restore Nature

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TRANSMITTAL

TO: MR. LARRY SETO
ACHCSA
DEPT. OF ENVIRONMENTAL HEALTH
80 SWAN WAY, ROOM 200
OAKLAND, CA 94621

FROM: JOEL COFFMAN
TITLE: PROJECT GEOLOGIST

DATE: 8/22/91
PROJECT NUMBER: 60006.02
SUBJECT: WORK PLAN AND ADDENDUM ONE TO WORK PLAN

WE ARE SENDING YOU [XX] Attached [ ] Under separate cover via _____ the following items:

[ ] Shop drawings [ ] Prints [XX] Reports [ ] Specifications

[ ] Letters [ ] Change Orders [ ] _____

COPIES	DATED	NO.	DESCRIPTION
1	8/22/91	60006.02	WORK PLAN FOR SUBSURFACE INVESTIGATIONS AND REMEDIATION AT ARCO STATION 6041, 7249 VILLAGE PARKWAY, DUBLIN, CA.
1	8/22/91	60006.02	ADDENDUM ONE TO WORK PLAN SUBSURFACE INVESTIGATION AT ARCO STATION 6041, 7249 VILLAGE PARKWAY, DUBLIN, CA.

THESE ARE TRANSMITTED as checked below:

[ ] For review and comment [ ] Approved as submitted [ ] Resubmit ___ copies for approval

[XX] As requested [ ] Approved as noted [ ] Submit___ copies for distribution

[ ] For approval [ ] Return for corrections [ ] Return ___ corrected prints

[ ] For your files [ ] _____

91 AUG 23 PM 12:03

REMARKS: PER ARCO'S REQUEST, COPIES OF THE WORK PLAN AND ADDENDUM ONE TO WORK PLAN HAVE BEEN FORWARDED FOR YOUR REVIEW.

Copies: 1 to AGS project file no. 60006.02

SAN JOSE READER'S FILE

*Revision Date: 10/15/90
*File Name: TRANSMT.PRJ

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ADDENDUM ONE TO WORK PLAN SUBSURFACE INVESTIGATION at ARCO Station 6041 7249 Village Parkway Dublin, California

60006.02

Prepared for
ARCO Products Company
P.O. Box 5811
San Mateo, California 94402

by 8/22/91

RESNA

August 22, 1991

(2)

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August 22, 1991
60006.02

Mr. Chuck Carmel
ARCO Products Company
P.O. Box 5811
San Mateo, California 94402

Subject: Addendum One to Work Plan to Perform an Initial Subsurface Investigation at ARCO Station 6041, 7249 Village Parkway, Dublin, California.

Mr. Carmel:

As you requested, this letter has been prepared to serve as an addendum to the Work Plan (RESNA/Applied GeoSystems [RESNA] 60006.02, August 1991) for the subject site. The location of the subject site is shown on the Site Vicinity Map, Plate 1. RESNA's approach and project tasks recommended to perform an initial subsurface investigation of gasoline hydrocarbons in soil and ground-water at this site include the following: drilling and sampling three soil borings, installing three 4-inch diameter ground-water monitoring wells in the borings, developing and sampling the monitoring wells, surveying the monitoring wells for top-of-casing elevations, performing laboratory analyses of soil and ground-water samples, and preparing a report of the findings and conclusions.

The following is a brief summary of previous work performed at the site by RESNA:

June 1990

On June 6 and 7, 1990, one 550-gallon waste-oil tank of single wall steel construction was excavated and removed from its location adjacent to the northern wall of the station building at the site. The tank appeared to be in good condition; the geologist observed light localized rusting on the surface of the tank, but no pitting, holes or cracks were observed. No signs of overfill staining were observed on the top and sides of the tank. The soil beneath the former waste-oil tank was excavated to a depth of approximately 10-½ feet beneath the ground surface. Ground water was not observed in the tank pit during excavation. Results of laboratory analysis of the samples collected from the waste-oil tank pit indicated nondetectable concentrations of total oil and grease (TOG), halogenated volatile organic compounds (HVOCs), total petroleum hydrocarbons as gasoline (TPHg),

total petroleum hydrocarbons as diesel (TPHd), and the gasoline constituents benzene, toluene, ethylbenzene, and total xylenes (BTEX). The analysis of the composite sample collected from the stockpiled soil indicated TOG at 110 ppm, TPHd at 180 ppm, TPHg at 10 ppm, total xylene at 0.25 ppm, and nondetectable concentrations of organic lead, benzene, toluene and ethylbenzene. Approximately 15 to 20 cubic yards of soil was excavated from the tank pit. On the basis of field observation and the results of analysis of tank pit soil samples RESNA concluded that no further excavation in the vicinity of the former waste-oil tank pit was necessary.

September 1990

On September 26, 1990, a RESNA geologist collected a soil sample at the location of a fuel spill beneath a dispenser pump on the subject site. The Organic Vapor Meter (OVM) reading for the pea gravel sample collected from the depth of ½-foot beneath the pump, where the occurred happened was 750 ppm. Tom Hathcox of Dogherty Regional Fire Department estimated that approximately 10 gallons of fuel spilled on the ground.

PROPOSED WORK

RESNA recommends the following work at the site based on the results of previous investigations:

Step 1 — Prepare a Site Safety Plan, and obtain permits for installation of monitoring wells at the site.

Step 2 — Drill and obtain soil samples for soil classification and laboratory analysis from three onsite soil borings (B-1 through B-3) as shown on Plate 2, Proposed Borings/Monitoring Wells. Drill borings B-1 through B-3 up to 5 feet into a possible perching or confining layer beneath first encountered ground water (total depths of approximately 55 to 75 feet below the ground surface). Collect and describe relatively undisturbed soil samples at 5-foot intervals from the ground surface to the total depths of the borings. Install three ground-water monitoring wells (MW-1 through MW-3) with 4-inch diameter well casing in borings B-1 through B-3. The purpose of these proposed borings/monitoring wells is to evaluate the presence and extent of gasoline hydrocarbons in soil beneath the site; to evaluate potential impact to ground water; and to calculate the gradient of first ground water beneath the site. Submit selected soil samples from borings B-1 through B-3 to a State-certified

laboratory for analysis for TPHg and BTEX analyses by modified Environmental Protection Agency (EPA) method 5030/8015/8020.

Step 3 Survey the monitoring wells to a National Geodetic Vertical Datum relative to mean sea level.

Step 4 Develop the monitoring wells.

Step 5 Measure depths-to-water, record visual evidence of floating product in initial ground-water samples, and purge wells and collect ground water samples for laboratory analysis from wells MW-1 through MW-3. Submit ground-water samples to a State-certified laboratory for analysis for TPHg and BTEX by EPA method 5030/8015/8020.

Step 6 Prepare a report to include results of the investigation and conclusions.

Field work proposed in this Addendum to Work Plan will be performed according to the Field Methods included in Appendix A of the Work Plan for Subsurface Investigations and Remediation for the subject site, dated August 22, 1991. A preliminary time schedule to perform Steps 1 through 6 is shown on the Preliminary Time Schedule, Plate 3. Subsequent addenda to the Work Plan will be prepared and submitted to ARCO and appropriate regulatory agencies as necessary to describe future work proposed at the site.

Copies of this Addendum should be forwarded to:

Mr. Lester Feldman
Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, California 94612

Mr. Larry Seto
Alameda County Health Care Services Agency
Department of Environmental Health
80 Swan Way, Room 200
Oakland, California 94621

Mr. Howard Hatayama
Department of Environmental Health
470 27th Street
Oakland, California 94621

Please call us at (408) 264-7723 if you have any questions regarding this Addendum.

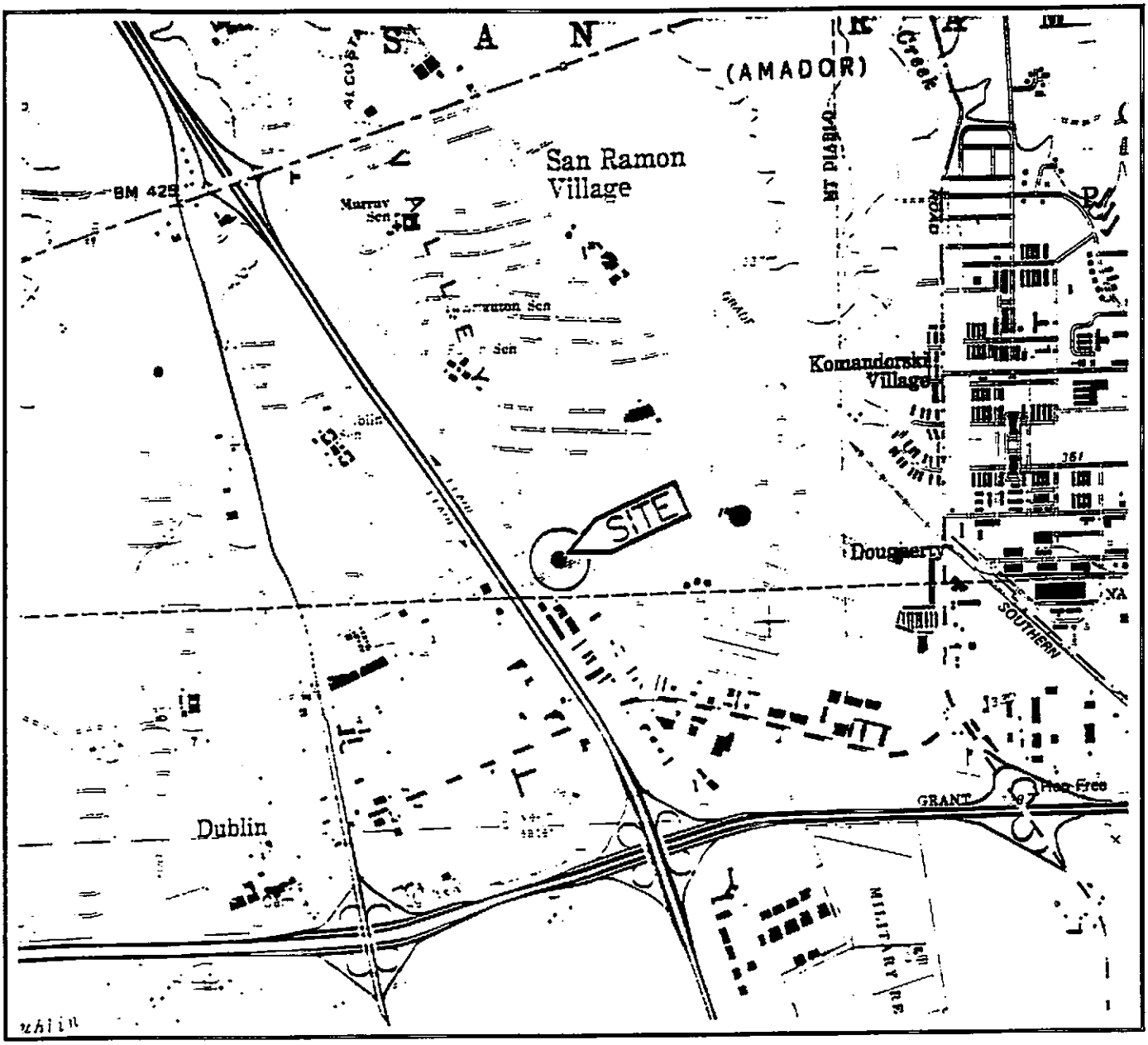
Sincerely,
RESNA

Barbara Sieminski
Staff Geologist

Joel Coffman
Project Geologist

Enclosures: Plate 1, Site Vicinity Map
Plate 2, Proposed Borings/ Monitoring Wells
Plate 3, Preliminary Time Schedule

cc: H.C. Winsor, ARCO Products Company



Source: U.S. Geological Survey
7.5-Minute Quadrangle
Dublin, California
Photorevised 1980

N

Approximate Scale

2000 1000 0 2000 4000

feet

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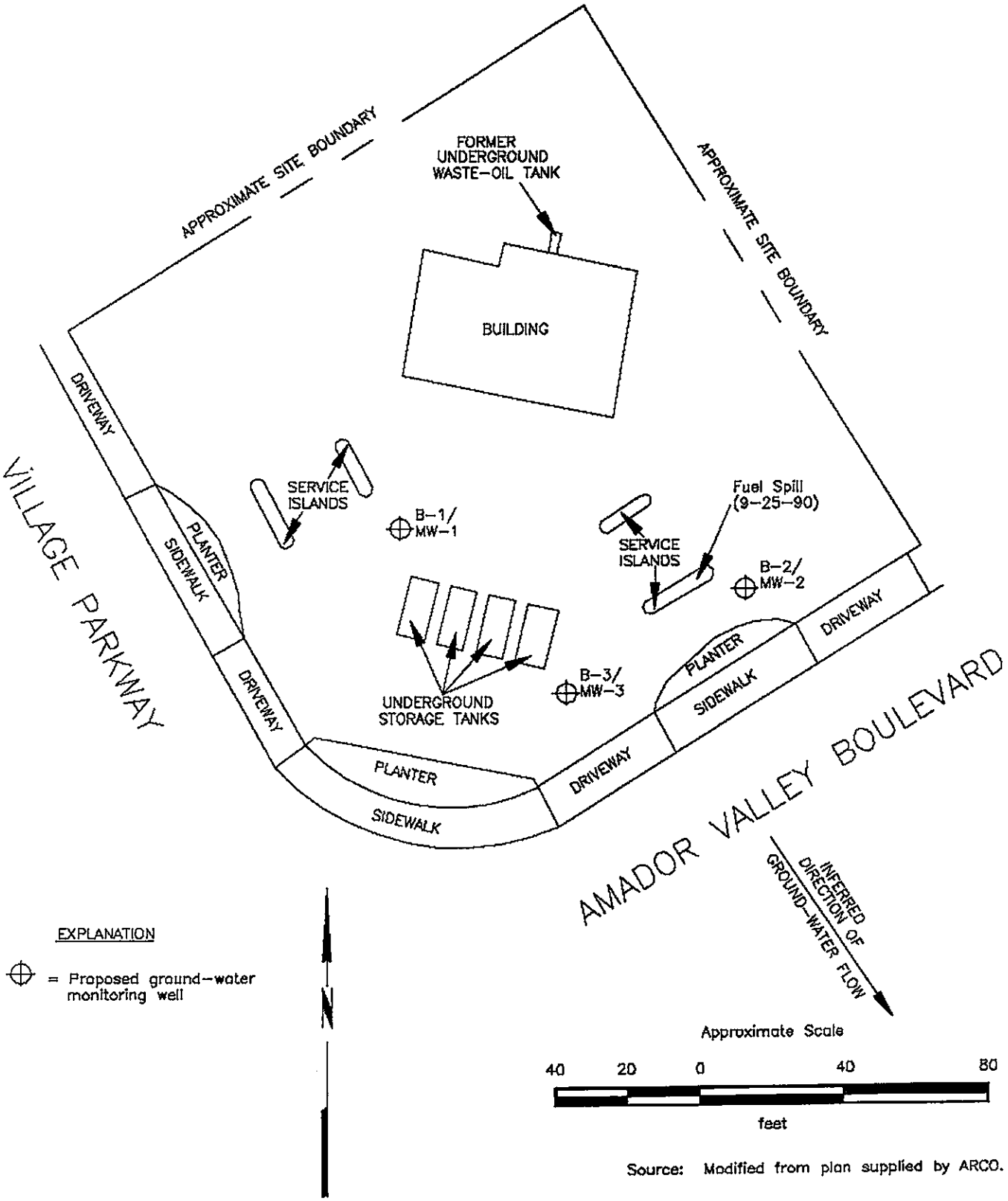
PROJECT 60006.02

SITE VICINITY MAP
ARCO Service Station 6041
7249 Village Parkway
Dublin, California

PLATE
1



Source: Modified from plan supplied by ARCO.

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PROPOSED BORING/ MONITORING WELL LOCATIONS
ARCO Service Station 6041
7249 Village Parkway
Dublin, California

PLATE 2

STEP 1:
Prepare Site Safety Plan

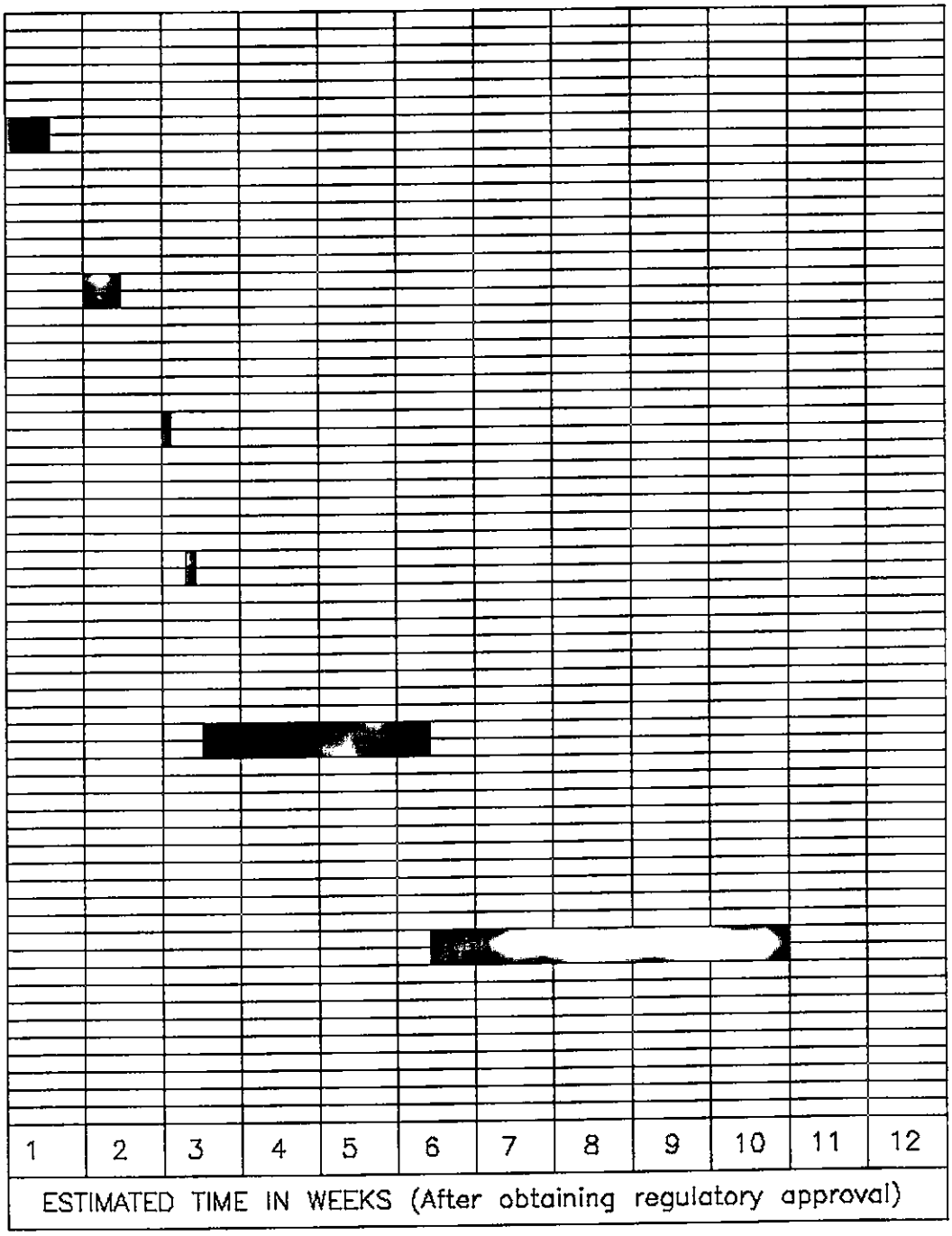
STEP 2:
Drill borings, install monitoring wells

STEP 3:
Survey monitoring wells

STEP 4:
Develop monitoring wells

STEP 5:
Measure depth-to-water, purge, and sample monitoring wells and laboratory analyses

STEP 6:
Prepare Draft Report



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PRELIMINARY TIME SCHEDULE
ARCO Service Station 6041
7249 Village Parkway
Dublin, California

PLATE
3