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DATA TRANSMITTAL MEMORANDUM FOR SITES 4 AND 5 CHLORINATED SOLVENT PLUME DEFINITION AND SITE 14 SUMP INVESTIGATION AT ALAMEDA POINT ALAMEDA, CALIFORNIA

June 26, 1998

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APPENDICES A THROUGH F

DATA TRANSMITTAL MEMORANDUM FOR SITES 4 AND 5 CHLORINATED SOLVENT PLUME DEFINITION AND SITE 14 SUMP INVESTIGATION

DATED 26 JUNE 1998

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CONTENTS

	Page
1.0 INTRODUCTION	1
1.1 INVESTIGATION OBJECTIVES	1
1.2 SCOPE OF WORK	2
1.2.1 Site 4 and Site 5	2
1.2.2 Site 14	3
2.0 INVESTIGATION PROCEDURES AND METHODS	4
2.1 SITES 4 AND 5 DEPTH DISCRETE GROUNDWATER SAMPLING	4
2.1.1 Waterloo Profiler	5
2.1.2 Slotted Screen Sampler	6
2.1.3 Temporary Piezometer	7
2.2 SITE 14 INVESTIGATION METHODS	8
2.2.1 Sump Clean Out	8
2.2.2 Soil and Groundwater Sampling	8
2.3 GROUTING AND FINISHING METHODS	8
2.4 EQUIPMENT DECONTAMINATION	9
2.5 WASTE MANAGEMENT	9
2.6 ANALYTICAL METHODS	9
2.6.1 Mobile Laboratory Sample Analyses	10
2.6.2 Fixed-Base Laboratory Sample Analyses	10
2.7 SURVEYING	11
3.0 SUMMARY OF RESULTS	12
3.1 SITES 4 AND 5	12
3.1.1 Isoconcentration Maps and Cross Sections	12
3.1.2 Summary of Findings	13
3.2 SITE 14 SUMP INVESTIGATON FINDINGS	15

CONTENTS (continued)

Tables

Table 1 – Site 4 - Summary of Analytical Results – 1,1 Dichloroethene
Table 2 – Site 4 - Summary of Analytical Results – cis 1,2 Dichloroethene
Table 3 – Site 4 - Summary of Analytical Results – trans 1,2 Dichloroethene
Table 4 – Site 4 - Summary of Analytical Results – Trichloroethene
Table 5 – Site 4 - Summary of Analytical Results – Vinyl Chloride
Table 6 – Site 4 - Sample Identification
Table 7 – Site 4 – Sample Identification Rinsate, Field, and Trip Blank
Table 8 – Site 4 - Field Parameters
Table 9 – Site 5 - Summary of Analytical Results – 1,1,1 Trichloroethane
Table 10 – Site 5 - Summary of Analytical Results – 1,1 Dichloroethane
Table 11 – Site 5 - Summary of Analytical Results – 1,1 Dichloroethene
Table 12 – Site 5 - Summary of Analytical Results – cis 1,2 Dichloroethene
Table 13 – Site 5 - Summary of Analytical Results – trans 1,2 Dichloroethene
Table 14 – Site 5 - Summary of Analytical Results – Chloroethane
Table 15 – Site 5 - Summary of Analytical Results – Trichloroethene
Table 16 – Site 5 - Summary of Analytical Results – Vinyl Chloride
Table 17 – Site 5 - Sample Identification
Table 18 – Site 5 - Sample Identification Rinsate, Field, and Trip Blank
Table 19 – Site 5 - Field Parameters

Figures

Figure 1 – Site Map

Sites 4 and 5 Plume Maps and Cross Sections
Figure 2 – Site 4 - 1,1 DCE
Figure 3 – Site 4 - 1,2 DCE
Figure 4 – Site 4 - TCE
Figure 5 – Site 4 - Vinyl Chloride
Figure 6 – Site 4 - Dissolved Oxygen and Redox Potential
Figure 7 – Site 5 - 1,1,1 TCA
Figure 8 – Site 5 - 1,1 DCA
Figure 9 – Site 5 - 1,1 DCE
Figure 10 – Site 5 - 1,2 DCE
Figure 11 – Site 5 - Chloroethane
Figure 12 – Site 5 - TCE
Figure 13 – Site 5 - Vinyl Chloride
Figure 14 – Site 5 - Dissolved Oxygen and Redox Potential

Site 14 Figures
Figure 15 – Site 14 - Area Map
Figure 16 – Site 14 - Sump Area with Analytical Data

CONTENTS (continued)

Appendices

Appendix A – Investigation Derived Waste Manifests
Appendix B – Certified Analytical Reports - Onsite Environmental Laboratories, Inc.
Appendix C – Certified Analytical Reports - Applied P & Ch Laboratory
Appendix D – Certified Analytical Reports - Mobile One Laboratories, Inc.
Appendix E – Exploratory Location Survey Data - G. Wade Hammond Land Surveyor and Ogiso Environmental
Appendix F – Site 14 TCDD Toxic Equivalents

1.0 INTRODUCTION

This document transmits the data generated from two investigations directed toward definition of known chlorinated solvent plumes (Sites 4 and 5), and one soil and groundwater investigation of a sump area (Site 14) at Alameda Point, Alameda, California (Figure 1). This report was prepared by Einarson, Fowler & Watson (EFW) for Tetra Tech EM Inc. (TtEMI) in response to a request for proposal dated December 4, 1997 and in accordance with Subcontract Number S7609-98-122-625 dated January 8, 1998.

This document includes a brief description of (1) the project objectives, (2) the scope of work performed for each investigation, (3) the investigation methods and field procedures, and (4) the findings of each investigation. The findings are presented in the form of a series of tables summarizing the analytical results and detailed isoconcentration maps and accompanying cross sections. Appendices to the document contain investigation derived waste (IDW) manifests, Certified Analytical Reports of all laboratory data generated from the investigation, survey data for each boring location, and dioxin toxicity equivalency information and summary tables for Site 14.

1.1 INVESTIGATION OBJECTIVES

Focused groundwater investigations at Sites 4 and 5 (Building 360 and Building 5, respectively) were conducted by EFW from January 21 to April 6, 1998. Each investigation involved collection of discrete groundwater chemical data to evaluate the nature and extent of chlorinated solvent plumes caused by past releases at these sites. A separate soil and groundwater investigation was conducted January 19 and 20, 1998, at the former Fire Training Area (Site 14). This investigation was conducted to assess the extent of soil and groundwater contamination in the vicinity of a sump used for the collection of runoff from the fire training activities conducted in the area.

1.2 SCOPE OF WORK

The general scope of work performed for this investigation included pre-field preparations, site reconnaissance and utility clearing, mobilization, site investigative activities, demobilization, data compilation and analysis, and preparation of this data submittal. The specific tasks performed for each site are outlined below.

1.2.1 Site 4 and Site 5

The work tasks performed for Site 4 and Site 5 were generally the same and included:

- Pre-field coordination and scheduling with TtEMI and all subcontractors
- Site reconnaissance with TtEMI representatives of proposed exploratory locations
- Coordination of clearance of underground utilities for all proposed exploratory locations
- Advancement of groundwater sampling devices and collection of 186 depth-discrete groundwater samples from 45 exploratory locations at Site 4, and 125 samples from 31 locations at Site 5.
- Grouting of all exploratory boreholes following completion of sampling activities
- Measurement of field parameters (dissolved oxygen and oxidation-reduction potential) for all groundwater samples
- Labeling, preparation of chain-of-custody, and transport of all samples to the on-site mobile laboratory or fixed-base laboratory
- Coordination of surveying of all exploratory locations
- Detailed record keeping of all daily activities and measurements
- Coordination of removal of the investigative derived waste from the site and disposal at an approved facility
- Compilation and review of all data generated from the investigation
- Plotting and contouring of all analytical data in plan view and cross

sectional format

- Preparation of this report including all supporting tables, figures and appendices

1.2.2 Site 14

The work tasks performed for Site 14 included:

- Pre-field coordination and scheduling with TtEMI and all subcontractors
- Site reconnaissance with TtEMI representatives of the training area, sump, and proposed exploratory locations
- Pumping and containment of 3,200 gallons of accumulated water from the training area pad and sump
- Excavation and containment of 444 gallons of sludge from the concrete sump
- Advancement of six hand-augered exploratory boreholes (four locations around the sump and two locations through the floor of the sump) and collection of six soil samples and one groundwater sample
- Grouting of all exploratory boreholes and patching of the floor of the concrete sump following completion of sampling activities
- Labeling, preparation of chain-of-custody, and transport of all samples to a fixed-base laboratory
- Coordination of surveying of all exploratory locations
- Detailed record keeping of all daily activities and measurements
- Coordination of removal of the investigation-derived waste from the site and disposal at an approved facility
- Coordination of surveying of all exploratory locations

2.0 INVESTIGATION PROCEDURES AND METHODS

The procedures and methods used for groundwater profiling at Sites 4 and 5, soil and groundwater sampling at Site 14, borehole abandonment, equipment decontamination and waste management are described in the following sections. The analytical methods used for analysis of the samples are also presented. In general, all methods and procedures used in the investigations were in accordance with those specified in the TtEMI work plan for the project.[1]

2.1 SITES 4 AND 5 DEPTH DISCRETE GROUNDWATER SAMPLING

During the groundwater investigations at Sites 4 and 5, several methods were used to collect sub-surface depth discrete groundwater chemical data. All groundwater samples were collected by Precision Sampling, Inc. (PSI) under the supervision of an EFW geologist. Depth discrete groundwater samples were collected using a PSI Vibra-Push™ rig to advance one of three types of groundwater sampling devices. Prior to sampling at each location, if needed, a concrete coring device was used to remove 6 to 24 inches of concrete. Sampling devices were then pushed and/or hammered to a pre-determined target depth at each sampling location.

Groundwater samples from the selected depth intervals were collected in 40 milliliter VOA sample containers, labeled, and transported under chain of custody to mobile and/or fixed-base laboratories for analyses of select Volatile Organic Compounds (VOCs). After collecting a lab sample, additional sample volume at each depth interval was collected for field instrumentation measurements. Dissolved oxygen and oxidation-reduction potential (redox) were measured using a YSI™ dissolved oxygen meter and an Orion™ Redox meter, respectively.[2] Values were recorded in a field notebook.

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[1] Tetra Tech EM Inc., 1997. Draft Field Sampling Plan for Site 4 and 5 Chlorinated Solvent Plume Definition and Site 14 Sump Investigation at Alameda Point, Alameda, California. Work plan dated September 16, 1997.

[2] Note that the field measurements were obtained from formation water transferred to an open beaker following sample collection. Since the formation water was exposed to the atmosphere, as opposed to

Initial sampling locations and depths were selected by TtEMI. The target depths, or sampling intervals, as measured below ground surface (bgs) for the investigation were: 5.5-7.5', 7.5-9.5', 9.5-11.5', 11.5-13.5', 13.5-15.5', 15.5-20.0', 20.0-25.0', 25.0-30.0', 30.0-35.0', 40.0-45.0', 45.0-50.0', 50.0-55.0', and 55.0-60.0'. Additional sampling locations and depths were selected in the field by the TtEMI field representative and were based on a decision making matrix set forth by TtEMI.[3] The decision matrix incorporated new chemical groundwater data from the ongoing investigation to determine appropriate "step-out" sample locations and depths.

The various sampling methods used to collect depth discrete groundwater samples are described below.

2.1.1 Waterloo Profiler

The Waterloo Profiler™ depth-discrete groundwater sampling system uses a hollow stainless steel tip adapted to a 1¾-inch-diameter drive casing. The tip and casing are advanced by the PSI Vibra-Push™ rig. The Waterloo Profiler tip is equipped with six ¼-inch-diameter screened ports that connect to 1/8-inch-diameter Teflon tubing within the tip. Groundwater is conveyed through the Teflon tubing (which runs along the center of the drive casing) to the surface via a reversible-flow peristaltic pump. To prevent the ports from clogging as the tool is pushed through the soil, deionized (DI) water is slowly pumped down through the inner tube and out of the sampling ports. After the sampling tool reaches the targeted sampling depth, pump flow is reversed and groundwater is drawn in through the ports to the surface through the tubing.

Purging of the system is required since the tubing and ports contain DI water that had been pumped down through the system during the advancement of the tool. Prior to collecting a sample at each depth interval, a calculation is performed to estimate the volume of DI water in the sampling line and the volume introduced to the surrounding

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being measured *in situ*, the measurements may be biased and therefore should be considered approximate values.

[3] Tetra Tech EM Inc., 1997.

formation at the target interval. Three times the calculated volume is then purged from the system. Additionally, purge water is tested for electrical conductivity using a hand-held Horiba™ conductivity meter. Once the electrical conductivity readings have stabilized, and the appropriate purge volume is removed from the system, samples are collected in standard 40 milliliter VOA containers. The VOA sample containers are filled by fitting them to a bottle holder which is placed in the sampling line before the pump. After collecting a sample, the pump is reversed and DI water is again injected as the tip is driven to the next target depth.

The Waterloo Profiler was unsuccessful at efficiently collecting depth discrete groundwater samples within the fine-grained Bay Mud sediments (i.e., beyond approximately 7 to 15 feet bgs) underlying Sites 4 and 5. The small screened ports on the tip of the tool would become plugged with fines drawn in from the units being sampled, significantly increasing the purge time needed to collect each sample. Often, the sample flow was insignificant and the sample could not be collected, regardless of the purge time allotted.

The Waterloo Profiler was generally more successful at collecting samples within the sandy fill above the Bay Mud sediments, however, sample zones within fine-grained units of the fill resulted in purge times similar to those within the Bay Mud sediments.

2.1.2 Slotted Screen Sampler

To collect depth discrete groundwater samples at locations where the Waterloo Profiler would not obtain a sample, a second tool, the slotted screen sampler, was used. The slotted screen sampling device has a larger screen section than the Waterloo Profiler, allowing for a greater sample volume to quickly enter the sampler casing. The sampling device is approximately two feet in length and composed of a 1¾-inch-diameter outer casing which houses a retractable two-foot-long, 1-inch-diameter slotted stainless steel inner casing (i.e., screen) attached to a drive point.

To collect a groundwater sample the slotted screen sampler is driven to the target depth

and then pulled back approximately two feet. The drive point catches, holding the screen section in place while the sampler casing is pulled back to expose the screened inner casing to the aquifer. Groundwater enters through the screen section and rises up into the drive casing as it equilibrates with the piezometric head in the formation. Samples are collected from the drive casing using either a small diameter stainless steel bailer, or disposable 1/8-inch-diameter polyethylene tubing, attached to a small stainless steel check-ball fitting.

The slotted screen sampler was effective at collecting groundwater samples in the fine units underlying Sites 4 and 5 where the Waterloo Profiler could not collect a sample. At some sample locations, however, recharge to the slotted screen sampler was too slow (i.e., greater than ½ hour). At these locations it was necessary to install a temporary piezometer to collect a sample. The larger screen section of the piezometer and the additional time allowed for groundwater recharge to the piezometer ensured sample collection from some of the less permeable units underlying Sites 4 and 5. A discussion of this sampling method is presented below.

2.1.3 Temporary Piezometer

Where groundwater recharge to the slotted screen sampler was slow a temporary piezometer was installed and left overnight. Temporary piezometers were constructed with 1-inch-diameter polyvinyl chloride (PVC) casing and two-foot-long, 0.01-inch slotted screen sections. Piezometers were installed by advancing a 1¾-inch drive casing, fitted with a disposable aluminum drive point, to the target interval. To sample, the drive casing was pulled back approximately two feet, releasing the drive point and exposing the slotted PVC casing to the aquifer. The drive casing was left in place to seal the borehole above the screened interval. Samples were collected the next day using a bailer or check-ball tubing as described above.

2.2 SITE 14 INVESTIGATION METHODS

2.2.1 Sump Clean Out

Water accumulated on the concrete training pad and in the sump was removed using submersible pumps. Approximately 3,200 gallons of water was pumped to an on-site Baker Tank™ for temporary storage. After the extent of the sump was defined, a small front-end loader was used to scrape away earth fill surrounding the perimeter of the sump. The sump grates were then removed and the remaining water within the sump was pumped into the Baker Tank. Approximately 444 gallons of sludge within the sump was shoveled into 55-gallon drums and temporarily stored on site.

2.2.2 Soil and Groundwater Sampling

After cleaning out the sump, shallow soil samples were obtained using a 3-inch-diameter stainless steel hand auger and sliding hammer-sampling device. Four samples were obtained around the perimeter of the sump and two samples were obtained from beneath the floor of the sump. Prior to hand augering beneath the base of the sump, a concrete coring device was used to remove approximately 6 inches of concrete from the base of the sump. Samples were contained in six-inch-long, 2-inch-diameter stainless steel sleeves. Sample sleeve ends were fitted with Teflon liners and plastic caps. Samples were labeled and stored in a cooler for transport to Applied P & Ch Laboratory. One grab groundwater sample was collected from a hand auger boring. A disposable polyethylene bailer was used to collect the sample. Sample water was contained in appropriate containers, labeled and stored in a cooler for transport to Applied P & Ch Laboratory.

2.3 GROUTING AND FINISHING METHODS

All borings were tremie grouted from the bottom of the hole to the surface using Portland Type II cement. Asphalt and cement patches were used to create a flush finish where appropriate. Where temporary piezometers were used, they were removed from the

borehole prior to grouting, and removed from the site by the drilling subcontractor for proper disposal.

2.4 EQUIPMENT DECONTAMINATION

All drilling and sampling equipment used in the investigation was decontaminated using a high pressure steam cleaner and/or brushes and Alconox cleaning solution. All groundwater sampling tools including drill rods and sampling devices were decontaminated between each sample collection sequence. All decontamination fluids were collected and containerized in Department of Transportation approved 55-gallon drums for proper disposal. Rinsate blanks were collected at regular intervals (approximately one rinsate sample per day) to verify the adequacy of the decontamination procedures.

2.5 WASTE MANAGEMENT

All IDW, including drill cuttings, decontamination fluids and waste fluids/sludges from dewatering operations (Site 14 sump) were containerized by PSI personnel in drums or Baker Tanks. Following testing, all IDW water was transported by NG Chemical for treatment (as necessary) and disposal at Seaport Environmental in Redwood City, California. Following testing, all IDW soil was transported to PSI's holding facility and will be transferred to TPS Technologies in Richmond, California for treatment (as necessary) and disposal. All waste manifests are included in Appendix A.

2.6 ANALYTICAL METHODS

Both mobile and fixed-base laboratories were used during these investigations. Laboratory methods and procedures are outlined in the investigation Quality Assurance Project Plan.[4] Certified laboratory analytical results for all samples collected during this investigation are included in Appendices B and C. Analytical results from a previous investigation conducted by OGISO Environmental are included in Appendix D.

2.6.1 Mobile Laboratory Sample Analyses

Depth discrete groundwater samples collected at Sites 4 and 5 were analyzed by ONSITE Environmental Laboratories, Inc. at their on site mobile laboratory during these investigations. Samples were analyzed for the following constituents using EPA Method 8260:

- **Volatile Aromatic Hydrocarbons:** Benzene, toluene, ethylbenzene, and total xylenes
- **Volatile Chlorinated Hydrocarbons:** Tetrachloroethene, trichloroethene, 1,1,1-trichloroethane, 1,1-dichloroethene, cis and trans-1,2-dichloroethene, 1,2-dichloroethane, chloroethane, and vinyl chloride

Additionally, at the request of TtEMI, the mobile laboratory chromatograms for samples collected at Site 5 were reviewed following the completion of the investigation for the presence of 1,1-dichloroethane.

2.6.2 Fixed-Base Laboratory Sample Analyses

A TtEMI field representative collected duplicate samples for every tenth mobile laboratory sample (10%) at Sites 4 and 5. Duplicate samples were analyzed by Applied P & Ch Laboratory for the same volatile aromatic and chlorinated hydrocarbons analyzed by the mobile lab (excluding 1,1-dichloroethane) using EPA Method 8260. All results were provided directly to TtEMI for data validation. Mobile laboratory results were found to be valid based on review of mobile versus fixed-base laboratory analytical results.

Site 14 soil and groundwater samples were provided to a TtEMI field representative and transported to Applied P & Ch Laboratory. Samples were analyzed for the following constituent groups:

- Volatile and semivolatile organic compounds, total purgeable and

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[4] TtEMI, 1997.

extractable petroleum hydrocarbons

- Organochlorine pesticides and polychlorinated biphenyls
- Total Metals
- Polychlorinated dioxins and furans

The Certified Analytical Results for Site 14 are included in Appendix C.

2.7 SURVEYING

G. Wade Hammond Land Surveyor (Hammond), a licensed Professional Land Surveyor, surveyed all exploratory locations to Benchmark NAD-27. Hammond provided digital data files (i.e., Autocad maps) to EFW with the plotted locations of each boring and a table providing coordinates and elevation data (Appendix E).

3.0 SUMMARY OF RESULTS

3.1 SITES 4 AND 5

3.1.1 Isoconcentration Maps and Cross Sections

All data from the chlorinated solvent plume investigations at Sites 4 and 5 are presented in table format by constituent and by site (Tables 1 through 19). The analytical data from the tables are presented in graphical form on a total of thirteen figures (Figures 2 through 14). Each of the figures presents four plan view isoconcentration maps and four isoconcentration cross sections for one analytical constituent. Data from a previous investigation conducted by OGISO Environmental was also used in the development of the maps and cross sections to supplement the data from the current investigation.[5]

The four plume maps shown on each figure present the data for four separate depth discrete intervals. For Site 4 the depth intervals are 5.5-15.5', 15.5-25.0', 25.0- 35.0', and greater than 35'bgs. For Site 5 the depth intervals are 5.5-9.5', 9.5-13.5', 13.5- 20.0', and greater than 20' bgs.

Where there was more than one sample result in a given interval, the highest analytical result was used for contouring. The contour intervals are <0.5 micrograms per liter (ug/L), 0.5-<50 ug/L, 50-<100 ug/L, 100-<500 ug/L, 500-<1000 ug/L, 1000-<10,000 ug/L, 10,000-<100,000 ug/L and >100,000 ug/L. Each map shows all four transect lines of the cross sections for reference.

Four cross sections were constructed for each site through the areas of highest concentration. Each cross section presents all the analytical data from a given boring located along the cross section line. All the borings, and the sample intervals, have been plotted at the correct elevation in the cross section views as determined from the site survey. The analytical data on the cross sections is contoured to the same concentration

[5]OGISO Environmental. 1997. Geochemical Profiling for Chlorinated Solvent Plume, Sites 4 and 5. Final. May 27, 1997.

intervals as the plume maps.

Five figures (Figures 2 through 6) present the findings of the investigation at Site 4. Four constituents, (1,1 DCE, 1,2 DCE, TCE, and Vinyl Chloride) are presented in four of the five figures (Figures 2 through 5). Note that Sites 4 and 5 1, 2 DCE concentrations represent the sum of cis and trans - 1, 2 DCE concentrations measured at each sample location. The fifth figure (Figure 6) for Site 4 shows the distribution of Dissolved Oxygen and Redox Potential as measured in the field. This figure includes one plan view map with data presented at each location. Four cross sections are included in this figure with analytical data at each sampled interval. No contouring of the field parameter data was done on the plan view or the cross sections.

Eight figures (Figures 7 through 14) present the results of the investigation at Site 5. Seven constituents, (1,1,1 TCA, 1,1 DCA, 1,1 DCE, 1,2 DCE, Chloroethane, TCE, and Vinyl Chloride) are presented in seven of the eight figures (Figures 7 through 13). The eighth figure (Figure 14) for Site 5 shows the distribution of Dissolved Oxygen and Redox Potential as measured in the field. This figure includes one plan view map with data presented at each location. Four cross sections are included in this figure with analytical data at each sampled interval. No contouring of the field parameter data was done on the plan view or the cross sections.

3.1.2 Summary of Findings

The cross sections and plume maps of the Site 4 and Site 5 areas increase the level of definition of the chlorinated solvent plumes at each site. Although spacing between boring locations is relatively large (approximately 150'), a good definition of the plumes is achieved both laterally and vertically. Overall, contaminants were found to be more extensive than previously thought, especially at Site 4 where a new possible source area may have been discovered.

3.1.2.1 Site 4

Three distinct plumes have been defined at Site 4 (Figures 2 through 5). The plume generated from the northwest corner of Building 360 was the focus of the previous OGISO Environmental investigation.[6] The lateral and vertical extent of this plume has been further defined in this investigation. A second area (previously undiscovered) with significant levels of contamination is located at the western side of Building 360 and is the likely source of a plume extending to the west. A third area with significant levels of contamination is located near the southwest corner of Building 160 (Site 22) and appears to be the source of a plume extending to the west toward the Seaplane Lagoon.

The most extensive contaminant at Site 4 appears to be Trichloroethene (Figure 4). Trichloroethene is found at levels ranging from 2,000 to 24,000 ug/L in the high concentration areas (i.e., cores) of all three plumes. The contaminant with the highest concentration is 1,1 Dichloroethene, which is detected at concentrations up to 84,000 ug/L at exploratory location 1-4 (Figure 2).

Generally the depth intervals with the highest levels of contamination at Site 4 are the two uppermost intervals—5.5'-15.5' and 15.5'-25.0' bgs. Below 25.0' bgs, contamination is less prominent although significant levels of some constituents can be found. Below 35.0' bgs contamination is scarce and levels drop off considerably.

3.1.2.2 Site 5

Four distinct plumes have been defined at Site 5 (Figures 7 through 13). The plumes are generally located within Building 5 and have for the most part been located by the previous OGISO Environmental investigation.[7] The extent and concentration levels of these plumes have been further defined laterally and vertically by this investigation.. In particular, the westernmost plume was not well characterized by the previous investigations, however, this plume is now defined.

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[6] OGISO Environmental. 1997.
[7] Ibid.

The most extensive contaminant at Site 5 appears to be 1,1 Dichloroethane (Figure 8). 1,1 Dichloroethane is found at levels from 2,200 ug/L to 34,000 ug/L in the four separate plumes. The contaminant with the highest concentration is 1,1,1-TCA at 100,000 ug/L, however, this result is from the previous OGISO investigation. The highest concentration detected in this investigation was the >34,000 ug/L 1,1 DCA at exploratory location 4-5.

Generally the depth intervals with the highest levels of contamination at Site 5 are 5.5' to 9.5' bgs and 9.5' to 13.5' bgs. Below 13.5' bgs, contamination is less prominent although significant levels of some constituents can be found. Below 20' bgs contamination is scarce and levels drop off considerably.

3.2 SITE 14 SUMP INVESTIGATON FINDINGS

On January 19 and 20, 1998, PSI under the supervision of EFW, de-watered the concrete fire training pad and cleaned out the Site 14 sump (Figure 15). 444 gallons of sludge and 3,200 gallons of water were removed from the sump and sump pad area. The concrete sump at the corner of the pad was found to have dimensions of 10'x 5' x 2' deep and contained no visible drain. The sump was steam-cleaned and the water removed and contained. Four soil samples were collected from around the perimeter of the sump (designated Sump-SW, Sump-NW, Sump-WW, and Sump-EW), and two soil samples were collected beneath the sump after coring through the concrete floor (designated Sump Bottom South and Sump Bottom North). One water sample was also obtained from the Sump-EW exploratory boring. Analytical data and sample locations are shown on Figure 16. Certified Analytical Reports are included in Appendix C.

Detectable levels of diesel, motor oil, dioxins, furans, volatiles, semi-volatiles, organochlorine pesticides, and PCBs were found in the soil and water samples collected in and around the sump. Diesel was found in a sample from beneath the sump at 100 milligrams per kilogram (mg/kg). Motor oil was found in all six soil samples from 10-760 mg/kg and in the water sample at 2.6 mg/kg. Dioxins and furans were detected in all six soil samples from 0.010 – 8.427 micrograms per kilogram (ug/kg), and in the

water sample from 4.237- 260.900 nanograms per liter (ng/L). Dioxin and furan constituent concentrations for Site 14 soil and water samples were used to calculate toxicities relative to the dioxin 2,3,7,8 - Tetrachlorodibenzo-p-Dioxin (TCDD). A discussion of this calculation and the resulting TCDD toxic equivalents for soil and water samples collected from Site 14 are presented in Appendix F. Calculated TCDD toxic equivalents for Site 14 soil range from 0.0027 - 0.058 ug/kg. The TCDD toxic equivalent calculated for the Site 14 water sample is 0.79 ng/L. Low levels of volatiles, semi-volatiles, organochlorine pesticides, and PCBs were also found in soil and water samples.

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TABLES

DATA TRANSMITTAL MEMORANDUM FOR SITES 4 AND 5 CHLORINATED SOLVENT PLUME DEFINITION AND SITE 14 SUMP INVESTIGATION

DATED 26 JUNE 1998

TABLE 1
SITE 4-SUMMARY OF ANALYTICAL RESULTS
1,1 DICHLOROETHENE (ug/l)

Sample Location Number	Sample Intervals (ft.bgs)											
	5.5-7.5	7.5-9.5	9.5-11.5	11.5-13.5	13.5-15.5	15.5-20.0	20.0-25.0	25.0-30.0	30.0-35.0	40.0-45.0	45.0-50.0	55.0-60.0
0-4				0.9	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	
1-2	<0.5											
1-3					32		35	1.4				
1-4			33	2,200	16,000		29,000	84,000	2,500	3,800	1,900	7.1
1-6				1.4	0.7		1.2*	2.3*	<0.5	<0.5	<0.5	
2-1	<0.5											
2-2				<0.5								
2-3	35		<0.5	<0.5					<0.5			
2-4						8.4	490	80	240	<0.5		
2-5				<0.5		9.7	110	120	140	<0.5		
2-6				<0.5	2.7	76	120	18	1.1			
2-7					<0.5	<0.5	1.4	6.3	34			
2-8							<0.5	<0.5	<0.5			
3-1	<0.5			1.1*	<0.5	<0.5						
3-2		<0.5	<0.5	1.0			0.6	<0.5	<0.5			
3-3	0.5	<0.5		3.2			<0.5	<0.5	<0.5	15		
3-4	<0.5		<0.5	<0.5	<0.5				<0.5	<0.5		
3-5						1.8	47	17	1.9			
3-6				<0.5	2	6.3	22*	9.7	20	<0.5		
3-7				0.62	1.7	14	3.0	4.1	0.9	<0.5		
3-8				<0.5	<0.5	<0.5	2.1	<0.5	3.1	<0.5		
3-9							<0.5	<0.5	<0.5			
4-1		<0.5		<0.5	<0.5							
4-2				<0.5			<0.5		<0.5			
4-3	<0.5		3.8	4.6			4.3		<0.5			
4-4							5.7		<0.5	<0.5		
4-5			<0.5	<0.5	<0.5		<0.5					
4-6				<0.5		1,000	48	3.5	<0.5			
4-7				<0.5	<0.5	3.6	6.3	<0.5	<0.5			
4-8						<0.5	<0.5	<0.5	<0.5			
5-3			<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5		
5-4							<0.5	<0.5	<0.5			
5-6				<0.5		<0.5						
5-7					<0.5	5.3	<0.5					
5-8						<0.5						
5-9						<0.5						
5-10								<0.5				
6-6						<0.5						
6-8				<0.5		<0.5						
6-9			<0.5	<0.5	<0.5	1.2		<0.5	<0.5			
6-10			<0.5	<0.5	<0.5	<0.5		1.0		<0.5		
6-10A				<0.5		1.2		<0.5		<0.5		
7-7						<0.5						
7-8						<0.5						
7-9			<0.5	<0.5	<0.5	<0.5		<0.5				

Note: Concentrations are taken directly from the Onsite Lab Certified Analytical Reports

* Analyte found in the method blank at 1 ppb

ft. bgs = feet below ground surface

TABLE 2
SITE 4-SUMMARY OF ANALYTICAL RESULTS
cis 1,2 DICHLOROETHENE (ug/l)

Sample Location Number	Sample Intervals (ft.bgs)											
	5.5-7.5	7.5-9.5	9.5-11.5	11.5-13.5	13.5-15.5	15.5-20.0	20.0-25.0	25.0-30.0	30.0-35.0	40.0-45.0	45.0-50.0	55.0-60.0
0-4				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	
1-2	<0.5											
1-3					1.3		<0.5	<0.5				
1-4			5.3	8.0	220		330	580	26	42	21	<0.5
1-6				<0.5	<0.5		<0.5	0.9	<0.5	<0.5	<0.5	
2-1	<0.5											
2-2				<0.5								
2-3	<0.5		<0.5	<0.5					<0.5			
2-4						1.1	5.0	1.6	4.7	<0.5		
2-5				120		190	250	21	7.7	3.1		
2-6				1.9	230E	490	620**	16	<0.5			
2-7					<0.5	<0.5	<0.5	<0.5	<0.5			
2-8							<0.5	<0.5	<0.5			
3-1	<0.5			<0.5	<0.5	<0.5						
3-2		<0.5	<0.5	4.8			11	<0.5	<0.5			
3-3	150	1.5		55			4.5	<0.5	<0.5	<0.5		
3-4	<0.5		<0.5	<0.5	<0.5				<0.5	<0.5		
3-5						3.2	0.6	<0.5	<0.5			
3-6				8.2	35	68	310	400	210	<0.5		
3-7				13	65	960	97	300	63	<0.5		
3-8				<0.5	<0.5	<0.5	4.4	4.5	11	<0.5		
3-9							<0.5	<0.5	<0.5			
4-1		<0.5		<0.5	<0.5							
4-2				<0.5			<0.5		<0.5			
4-3	3.4		4,400	340			390		13			
4-4							6.6		6.2	<0.5		
4-5			<0.5	<0.5	<0.5		<0.5					
4-6				<0.5		38	0.7	<0.5	<0.5			
4-7				<0.5	<0.5	350	670	11	<0.5			
4-8						<0.5	<0.5	<0.5	<0.5			
5-3			<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5		
5-4							<0.5	<0.5	<0.5			
5-6				1.3		<0.5						
5-7					25	400	<0.5					
5-8						<0.5						
5-9						0.8						
5-10								<0.5				
6-6						<0.5						
6-8				<0.5		4.8						
6-9			<0.5	53	<0.5	40		2.6	<0.5			
6-10			<0.5	<0.5	6.8	37		15		<0.5		
6-10A				<0.5		45		<0.5		<0.5		
7-7						<0.5						
7-8						4.4						
7-9			<0.5	24	21	27		<0.5				

Note: Concentrations are taken directly from the Onsite Lab Certified Analytical Reports
** Estimated value, over calibration range
ft. bgs = feet below ground surface

TABLE 3
SITE 4-SUMMARY OF ANALYTICAL RESULTS
trans 1,2 DICHLOROETHENE (ug/l)

Sample Location Number	Sample Intervals (ft.bgs)											
	5.5-7.5	7.5-9.5	9.5-11.5	11.5-13.5	13.5-15.5	15.5-20.0	20.0-25.0	25.0-30.0	30.0-35.0	40.0-45.0	45.0-50.0	55.0-60.0
0-4				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	
1-2	<0.5											
1-3					1.7		0.7	<0.5				
1-4			<0.5	2.1	120		300	350	22	30	18	<0.5
1-6				<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	
2-1	<0.5											
2-2				<0.5								
2-3	<0.5		<0.5	<0.5					<0.5			
2-4						<0.5	2.2	<0.5	0.6	<0.5		
2-5				7.7		17	25	6.8	<0.5	<0.5		
2-6				<0.5	12	14	27	5.6	<0.5			
2-7					<0.5	<0.5	<0.5	<0.5	<0.5			
2-8							<0.5	<0.5	<0.5			
3-1	<0.5			<0.5	<0.5	<0.5						
3-2		<0.5	<0.5	<0.5			0.9	<0.5	<0.5			
3-3	1.9	<0.5		5.2			<0.5	<0.5	<0.5	<0.5		
3-4	<0.5		<0.5	<0.5	<0.5				<0.5	<0.5		
3-5						<0.5	8.1	<0.5	<0.5			
3-6				<0.5	4.1	10	48	100	55	<0.5		
3-7				0.6	2.4	35	78	600	50	<0.5		
3-8				<0.5	<0.5	<0.5	<0.5	<0.5	1.4	<0.5		
3-9							<0.5	<0.5	<0.5			
4-1		<0.5		<0.5	<0.5							
4-2				<0.5			<0.5		<0.5			
4-3	<0.5		17	3.0			8.0		<0.5			
4-4							<0.5		<0.5	<0.5		
4-5			<0.5	<0.5	<0.5		<0.5					
4-6				<0.5		12	<0.5	<0.5	<0.5			
4-7				<0.5	<0.5	420	990	8.5	0.6			
4-8						<0.5	<0.5	<0.5	<0.5			
5-3			<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5		
5-4							<0.5	<0.5	<0.5			
5-6				<0.5		<0.5						
5-7					8.0	560	<0.5					
5-8						<0.5						
5-9						<0.5						
5-10								<0.5				
6-6						<0.5						
6-8				<0.5		<0.5						
6-9			<0.5	1.9	<0.5	0.9		<0.5	<0.5			
6-10			<0.5	<0.5	<0.5	0.7		0.7		<0.5		
6-10A				<0.5		1.7		<0.5		<0.5		
7-7						<0.5						
7-8						<0.5						
7-9			<0.5	<0.5	<0.5	<0.5		<0.5				

Note: Concentrations are taken directly from the Onsite Lab Certified Analytical Reports
ft. bgs = feet below ground surface

TABLE 4
SITE 4-SUMMARY OF ANALYTICAL RESULTS
TRICHLOROETHENE (ug/l)

Sample Location Number	Sample Intervals (ft.bgs)											
	5.5-7.5	7.5-9.5	9.5-11.5	11.5-13.5	13.5-15.5	15.5-20.0	20.0-25.0	25.0-30.0	30.0-35.0	40.0-45.0	45.0-50.0	55.0-60.0
0-4				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	
1-2	<0.5											
1-3					<0.5		<0.5	<0.5				
1-4			<0.5	8.4	<0.5		<0.5	62	2	<0.5	<0.5	<0.5
1-6				<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	
2-1	<0.5											
2-2				<0.5								
2-3	<0.5		<0.5	<0.5					<0.5			
2-4						<0.5	0.80	<0.5	<0.5	<0.5		
2-5				<0.5		81	56	<0.5	<0.5	<0.5		
2-6				<0.5	31	310	520**	18	<0.5			
2-7					<0.5	<0.5	<0.5	<0.5	<0.5			
2-8							<0.5	<0.5	<0.5			
3-1	<0.5			<0.5	<0.5	<0.5						
3-2		<0.5	<0.5	200			81	14	0.9			
3-3	120	2.4		790			2,800	1,500	760	<0.5		
3-4	<0.5		0.6	<0.5	<0.5				<0.5	1.6		
3-5						<0.5	<0.5	<0.5	<0.5			
3-6				<0.5	3.9	17	130	180	59	<0.5		
3-7				2.6	29	840	170	450	6.9	<0.5		
3-8				<0.5	<0.5	<0.5	150	120	260	<0.5		
3-9							<0.5	<0.5	<0.5			
4-1		<0.5		<0.5	<0.5							
4-2				<0.5			<0.5		<0.5			
4-3	<0.5		20,000	11,000			3,600		103			
4-4							580		2,600	8.5		
4-5			<0.5	<0.5	<0.5		<0.5					
4-6				<0.5		3.2	<0.5	<0.5	<0.5			
4-7				<0.5	<0.5	56	180	1	<0.5			
4-8						<0.5	<0.5	<0.5	<0.5			
5-3			<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5		
5-4							<0.5	<0.5	<0.5			
5-6				<0.5		6.5						
5-7					<0.5	99	<0.5					
5-8						<0.5						
5-9						<0.5						
5-10								<0.5				
6-6						<0.5						
6-8				0.9		200						
6-9			2.4	480	<0.5	2,300		130	<0.5			
6-10			<0.5	<0.5	2.9	7.7		2,100		6.2		
6-10A				<0.5		1,100		2,300		8.8		
7-7						<0.5						
7-8						<0.5						
7-9			<0.5	<0.5	<0.5	<0.5		<0.5				

Note: Concentrations are taken directly from the Onsite Lab Certified Analytical Reports
** Estimated value, over calibration range
ft. bgs = (feet below ground surface)

TABLE 5
SITE 4-SUMMARY OF ANALYTICAL RESULTS
VINYL CHLORIDE (ug/l)

Sample Location Number	Sample Intervals (ft.bgs)											
	5.5-7.5	7.5-9.5	9.5-11.5	11.5-13.5	13.5-15.5	15.5-20.0	20.0-25.0	25.0-30.0	30.0-35.0	40.0-45.0	45.0-50.0	55.0-60.0
0-4				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	
1-2	<0.5											
1-3					<0.5		<0.5	<0.5				
1-4			<0.5	<0.5	7.4		4.4	7.3	<0.5	<0.5	<0.5	<0.5
1-6				<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	
2-1	<0.5											
2-2				<0.5								
2-3	<0.5		<0.5	<0.5					<0.5			
2-4						<0.5	0.6	<0.5	<0.5	<0.5		
2-5				1.8		<0.5	3.0	<0.5	<0.5	<0.5		
2-6				<0.5	11	46	94	1.7	<0.5			
2-7					<0.5	<0.5	<0.5	<0.5	<0.5			
2-8							<0.5	<0.5	<0.5			
3-1	<0.5			<0.5	<0.5	<0.5						
3-2		<0.5	<0.5	<0.5			<0.5	<0.5	<0.5			
3-3	3.0	<0.5		<0.5			<0.5	<0.5	<0.5	<0.5		
3-4	<0.5		<0.5	<0.5	<0.5				<0.5	<0.5		
3-5						<0.5	0.6	<0.5	<0.5			
3-6				0.73	0.81	2.2	22	13	5.7	<0.5		
3-7				3.2	9.7	99	21	51	7.9	<0.5		
3-8				<0.5	<0.5	<0.5	<0.5	<0.5	1.3	<0.5		
3-9							<0.5	<0.5	<0.5			
4-1		<0.5		<0.5	<0.5							
4-2				<0.5			<0.5		<0.5			
4-3	<0.5		17	26			160		<0.5			
4-4							<0.5		<0.5	<0.5		
4-5			<0.5	<0.5	<0.5		<0.5					
4-6				<0.5		8.6	<0.5	<0.5	<0.5			
4-7				<0.5	<0.5	56	100	1.2	<0.5			
4-8						<0.5	<0.5	<0.5	<0.5			
5-3			<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5		
5-4							<0.5	<0.5	<0.5			
5-6				<0.5		<0.5						
5-7					1.5	37	<0.5					
5-8						<0.5						
5-9						<0.5						
5-10								<0.5				
6-6						<0.5						
6-8				4.4		<0.5						
6-9			<0.5	0.9	<0.5	0.7		<0.5	<0.5			
6-10			<0.5	<0.5	<0.5	<0.5		<0.5		<0.5		
6-10A				<0.5		1.4		<0.5		<0.5		
7-7						<0.5						
7-8						<0.5						
7-9			<0.5	34	37	<0.5		<0.5				

Note: Concentrations are taken directly from the Onsite Lab Certified Analytical Reports
ft. bgs = feet below ground surface

TABLE 6
SITE 4-SAMPLE IDENTIFICATION

Location Number	Depth (ft.bgs)	Field ID Number	Lab ID Number	Date sampled	Onsite Lab Dup	Fixed Lab Dup
0-4	11.5-13.5	SO4-0-4-11.5	122-SO4-155	02/17/98		
0-4	13.5-15.5	SO4-0-4-13.5	122-SO4-156	02/17/98		
0-4	15.5-20.0	SO4-0-4-15.5	122-SO4-130	02/12/98		
0-4	20.0-25.0	SO4-0-4-20	122-SO4-131	02/12/98		
0-4	25.0-30.0	SO4-0-4-25	122-SO4-132	02/12/98	122-SO4-133	
0-4	30.0-35.0	SO4-0-4-30	122-SO4-134	02/12/98		
0-4	45.0-50.0	SO4-0-4-45	122-SO4-136	02/12/98		
1-2	5.5-7.5	SO4-1-2-5.5	122-SO4-070	01/28/98		
1-3	13.5-15.5	SO4-1-3-13.5	122-SO4-071	01/28/98		
1-3	20.0-25.0	SO4-1-3-20	122-SO4-072	01/28/98		
1-3	25.0-30.0	SO4-1-3-25	122-SO4-073	01/28/98		
1-4	9.5-11.5	SO4-1-4-9.5	122-SO4-144	02/16/98		
1-4	11.5-13.5	SO4-1-4-11.5	122-SO4-145	02/16/98		
1-4	13.5-15.5	SO4-1-4-13.5	122-SO4-146	02/16/98		
1-4	20.0-25.0	SO4-1-4-20	122-SO4-074	01/29/98		
1-4	25.0-30.0	SO4-1-4-25	122-SO4-075	01/29/98		
1-4	30.0-35.0	SO4-1-4-30	122-SO4-076	01/29/98		
1-4	40.0-45.0	SO4-1-4-40	122-SO4-092	01/30/98		
1-4	45.0-50.0	SO4-1-4-45	122-SO4-094	01/30/98		
1-4	55.0-60.0	SO4-1-4-55	122-SO4-122	02/11/98	122-SO4-123	
1-6	11.5-13.5	SO4-1-6-11.5	122-SO4-153	02/17/98		
1-6	13.5-15.5	SO4-1-6-13.5	122-SO4-154	02/18/98	122-SO4-158	
1-6	20.0-25.0	SO4-1-6-20	122-SO4-103	02/02/98		
1-6	25.0-30.0	SO4-1-6-25	122-SO4-105	02/02/98		
1-6	30.0-35.0	SO4-1-6-30	122-SO4-107	02/02/98		
1-6	40.0-45.0	SO4-1-6-40	122-SO4-141	02/13/98		
1-6	45.0-50.0	SO4-1-6-45	122-SO4-142	02/13/98		
2-1	5.5-7.5	SO4-2-1-5.5	122-SO4-003	01/21/98		
2-2	11.5-13.5	SO4-2-2-11.5	122-SO4-106	02/02/98		
2-3	5.5-7.5	SO4-2-3-5.5	122-SO4-005	01/27/98		
2-3	9.5-11.5	SO4-2-3-9.5	122-SO4-007	01/27/98		
2-3	11.5-13.5	SO4-2-3-11.5	122-SO4-061	01/27/98		
2-3	30.0-35.0	SO4-2-3-30	122-SO4-069	01/28/98		
2-4	15.5-20.0	SO4-2-4-15.5	122-SO4-008	01/23/98		
2-4	20.0-25.0	SO4-2-4-20	122-SO4-009	01/23/98		
2-4	25.0-30.0	SO4-2-4-25	122-SO4-010	01/23/98		122-SO4-010
2-4	30.0-35.0	SO4-2-4-30	122-SO4-011	01/23/98	122-SO4-053	
2-4	40.0-45.0	SO4-2-4-40	122-SO4-060	01/26/98		
2-5	11.5-13.5	SO4-2-5-11.5	122-SO4-168	03/02/98		
2-5	15.5-20.0	SO4-2-5-15.5	122-SO4-170	03/02/98		
2-5	20.0-25.0	SO4-2-5-20	122-SO4-077	01/29/98		
2-5	25.0-30.0	SO4-2-5-25	122-SO4-078	01/29/98		
2-5	30.0-35.0	SO4-2-5-30	122-SO4-079	01/29/98		
2-5	40.0-45.0	SO4-2-5-40	122-SO4-109	02/02/98	122-SO4-110	
2-6	11.5-13.5	SO4-2-6-11.5	122-SO4-173	03/03/98		
2-6	13.5-15.5	SO4-2-6-13.5	122-SO4-174	03/03/98		
2-6	15.5-20.0	SO4-2-6-15.5	122-SO4-175	03/03/98		
2-6	20.0-25.0	SO4-2-6-20	122-SO4-086	01/30/98		
2-6	25.0-30.0	SO4-2-6-25	122-SO4-087	01/30/98		
2-6	30.0-35.0	SO4-2-6-30	122-SO4-090	01/30/98		
2-7	13.5-15.5	SO4-2-7-13.5	122-SO4-202	03/11/98		
2-7	15.5-20.0	SO4-2-7-15.5	122-SO4-197	03/10/98		
2-7	20.0-25.0	SO4-2-7-20	122-SO4-127	02/11/98		
2-7	20.0-25.0	SO4-2-7-20-R	122-SO4-150	02/17/98		
2-7	25.0-30.0	SO4-2-7-25	122-SO4-151	02/17/98		
2-7	30.0-35.0	SO4-2-7-30	122-SO4-152	02/17/98		122-SO4-152
2-8	20.0-25.0	SO4-2-8-20	122-SO4-198	03/10/98	122-SO4-199	
2-8	25.0-30.0	SO4-2-8-25	122-SO4-207	03/11/98		122-SO4-207
2-8	30.0-35.0	SO4-2-8-30	122-SO4-200	03/10/98		122-SO4-200
3-1	5.5-7.5	SO4-3-1-5.5	122-SO4-012	01/22/98		
3-1	11.5-13.5	SO4-3-1-11.5	122-SO4-108	02/02/98		
3-1	11.5-13.5	SO4-3-1-11.5	122-SO4-101	02/02/98		
3-1	13.5-15.5	SO4-3-1-13.5	122-SO4-013	01/22/98		
3-1	15.5-20.0	SO4-3-1-15.5	122-SO4-014	01/22/98		
3-2	7.5-9.5	SO4-3-2-7.5	122-SO4-015	01/21/98		
3-2	9.5-11.5	SO4-3-2-9.5	122-SO4-016	01/21/98		
3-2	11.5-13.5	SO4-3-2-11.5	122-SO4-017	01/21/98		
3-2	20.0-25.0	SO4-3-2-20.0	122-SO4-018	01/21/98		
3-2	25.0-30.0	SO4-3-2-25	122-SO4-019	01/21/98		
3-2	30.0-35.0	SO4-3-2-30	122-SO4-020	01/21/98		122-SO4-020

TABLE 6
SITE 4-SAMPLE IDENTIFICATION

Location Number	Depth (ft.bgs)	Field ID Number	Lab ID Number	Date sampled	Onsite Lab Dup	Fixed Lab Dup
3-3	5.5-7.5	SO4-3-3-5.5	122-SO4-021	01/22/98	122-SO4-052	
3-3	7.5-9.5	SO4-3-3-7.5	122-SO4-022	01/22/98		
3-3	11.5-13.5	SO4-3-3-11.5	122-SO4-023	01/22/98		
3-3	20.0-25.0	SO4-3-3-20	122-SO4-024	01/22/98		
3-3	25.0-30.0	SO4-3-3-25	122-SO4-025	01/22/98		
3-3	30.0-35.0	SO4-3-3-30	122-SO4-026	01/22/98		
3-3	40.0-45.0	SO4-3-3-40	122-SO4-093	01/30/98		122-SO4-093
3-4	5.5-7.5	SO4-3-4-5.5	122-SO4-054	01/23/98		
3-4	9.5-11.5	SO4-3-4-9.5	122-SO4-027	01/23/98		
3-4	11.5-13.5	SO4-3-4-11.5	122-SO4-056	01/23/98		
3-4	13.5-15.5	SO4-3-4-13.5	122-SO4-057	01/23/98		
3-4	30.0-35.0	SO4-3-4-30	122-SO4-030	01/23/98		122-SO4-030
3-4	40.0-45.0	SO4-3-4-40	122-SO4-058	01/26/98		
3-5	15.5-20.0	SO4-3-5-15.5	122-SO4-032	01/29/98	122-SO4-080	
3-5	20.0-25.0	SO4-3-5-20	122-SO4-081	01/29/98		
3-5	25.0-30.0	SO4-3-5-25	122-SO4-082	01/29/98		
3-5	30.0-35.0	SO4-3-5-30	122-SO4-083	01/29/98		
3-6	11.5-13.5	SO4-3-6-11.5	122-SO4-179	03/04/98	122-SO4-180	
3-6	13.5-15.5	SO4-3-6-13.5	122-SO4-181	03/04/98		
3-6	15.5-20.0	SO4-3-6-15.5	122-SO4-182	03/04/98		
3-6	20.0-25.0	SO4-3-6-20	122-SO4-102	02/02/98		
3-6	25.0-30.0	SO4-3-6-25	122-SO4-111	02/02/98		122-SO4-111
3-6	30.0-35.0	SO4-3-6-30	122-SO4-128	02/11/98		
3-6	40.0-45.0	SO4-3-6-40	122-SO4-147	02/16/98		
3-7	11.5-13.5	SO4-3-7-11.5	122-SO4-177	03/03/98		122-SO4-177
3-7	13.5-15.5	SO4-3-7-13.5	122-SO4-178	03/03/98	122-SO4-183	
3-7	15.5-20.0	SO4-3-7-15.5	122-SO4-184	03/04/98		
3-7	20.0-25.0	SO4-3-7-20	122-SO4-124	02/11/98		122-SO4-124
3-7	25.0-30.0	SO4-3-7-25	122-SO4-125	02/11/98		
3-7	30.0-35.0	SO4-3-7-30	122-SO4-144	02/13/98		
3-7	40.0-45.0	SO4-3-7-40	122-SO4-148	02/17/98		
3-8	11.5-13.5	SO4-3-8-11.5	122-SO4-187	03/04/98		
3-8	13.5-15.5	SO4-3-8-13.5	122-SO4-189	03/05/98		
3-8	15.5-20.0	SO4-3-8-15.5	122-SO4-190	03/05/98	122-SO4-191	
3-8	20.0-25.0	SO4-3-8-20	122-SO4-161	02/19/98	122-SO4-162	
3-8	25.0-30.0	SO4-3-8-25	122-SO4-163	02/19/98		
3-8	30.0-35.0	SO4-3-8-30	122-SO4-164	02/19/98		122-SO4-164
3-8	40.0-45.0	SO4-3-8-40	122-SO4-167	02/20/98		
3-9	20.0-25.0	SO4-3-9-20	122-SO4-203	03/11/98	122-SO4-204	
3-9	25.0-30.0	SO4-3-9-25	122-SO4-205	03/11/98		
3-9	30.0-35.0	SO4-3-9-30	122-SO4-206	03/11/98		
4-1	7.5-9.5	SO4-4-1-7.5	122-SO4-098	01/30/98		
4-1	11.5-13.5	SO4-4-1-11.5	122-SO4-099	01/30/98		
4-1	13.5-15.5	SO4-4-1-13.5	122-SO4-100	01/30/98		
4-2	11.5-13.5	SO4-4-2-11.5	122-SO4-213/034*	03/11/98		
4-2	20.0-25.0	SO4-4-2-20	122-SO4-214	03/12/98	122-SO4-215	
4-2	30.0-35.0	SO4-4-2-30	122-SO4-104	02/02/98		
4-3	5.5-7.5	SO4-4-3-5.5	122-SO4-059	01/26/98		
4-3	9.5-11.5	SO4-4-3-9.5	122-SO4-035	01/26/98		
4-3	11.5-13.5	SO4-4-3-11.5	122-SO4-036	01/26/98		
4-3	20.0-25.0	SO4-4-3-20	122-SO4-129/037*	02/11/98		
4-3	30.0-35.0	SO4-4-3-30	122-SO4-039	01/26/98		
4-4	20.0-25.0	SO4-4-4-20	122-SO4-095	01/30/98	122-SO4-096	
4-4	30.0-35.0	SO4-4-4-30	122-SO4-097	01/30/98		
4-4	40.0-45.0	SO4-4-4-40	122-SO4-112	02/04/98		
4-5	9.5-11.5	SO4-4-5-9.5	122-SO4-085	01/30/98		
4-5	11.5-13.5	SO4-4-5-11.5	122-SO4-088	01/30/98	122-SO4-089	
4-5	13.5-15.5	SO4-4-5-13.5	122-SO4-091	01/30/98		
4-5	20.0-25.0	SO4-4-5-20	122-SO4-121	02/05/98		
4-6	11.5-13.5	SO4-4-6-11.5	122-SO4-208	03/11/98		
4-6	15.5-20.0	SO4-4-6-15.5	122-SO4-192	03/10/98		
4-6	20.0-25.0	SO4-4-6-20	122-SO4-113	02/04/98	122-SO4-114	122-SO4-113
4-6	25.0-30.0	SO4-4-6-25	122-SO4-115	02/04/98		
4-6	30.0-35.0	SO4-4-6-30	122-SO4-116	02/04/98		
4-7	11.5-13.5	SO4-4-7-11.5	122-SO4-185	03/04/98		
4-7	13.5-15.5	SO4-4-7-13.5	122-SO4-188	03/04/98		
4-7	15.5-20.0	SO4-4-7-15.5	122-SO4-186	03/04/98		
4-7	20.0-25.0	SO4-4-7-20	122-SO4-137	02/13/98		122-SO4-137
4-7	25.0-30.0	SO4-4-7-25	122-SO4-138	02/13/98	122-SO4-139	
4-7	30.0-35.0	SO4-4-7-30	122-SO4-140	02/13/98		

TABLE 6
SITE 4-SAMPLE IDENTIFICATION

Location Number	Depth (ft.bgs)	Field ID Number	Lab ID Number	Date sampled	Onsite Lab Dup	Fixed Lab Dup
4-8	15.5-20.0	SO4-4-8-15.5	122-SO4-193	03/10/98		
4-8	20.0-25.0	SO4-4-8-20	122-SO4-165	02/19/98		
4-8	25.0-30.0	SO4-4-8-25	122-SO4-194	03/10/98		
4-8	30.0-35.0	SO4-4-8-30	122-SO4-196	03/10/98		
5-3	9.5-11.5	SO4-5-3-9.5	122-SO4-062	01/27/98		
5-3	11.5-13.5	SO4-5-3-11.5	122-SO4-063	01/27/98		
5-3	15.5-20.0	SO4-5-3-15.5	122-SO4-041	01/27/98	122-SO4-064	122-SO4-041
5-3	20.0-25.0	SO4-5-3-20	122-SO4-065	01/27/98		
5-3	25.0-30.0	SO4-5-3-25	122-SO4-066	01/27/98		
5-3	30.0-35.0	SO4-5-3-30	122-SO4-067	01/27/98		
5-3	40.0-45.0	SO4-5-3-40	122-SO4-068	01/28/98		
5-4	20.0-25.0	SO4-5-4-20	122-SO4-019	02/05/98		
5-4	25.0-30.0	SO4-5-4-25	122-SO4-017	02/05/98		
5-4	30.0-35.0	SO4-5-4-30	122-SO4-018	02/05/98		
5-6	11.5-13.5	SO4-5-6-11.5	122-SO4-209	03/11/98		
5-6	15.5-20.0	SO4-5-6-15.5	122-SO4-210	03/11/98		
5-7	13.5-15.5	SO4-5-7-13.5	122-SO4-216	03/17/98		
5-7	15.5-20.0	SO4-5-7-15.5	122-SO4-211	03/11/98		
5-7	20.0-25.0	SO4-5-7-20	122-SO4-166	02/20/98		
5-8	15.5-20.0	SO4-5-8-15.5	122-SO4-218	03/23/98		
5-9	15.5-20.0	SO4-5-9-15.5	122-SO4-219	03/23/98		
5-10	25.0-30.0	SO4-5-10-25	122-SO4-249	04/02/98		
6-6	15.5-20.0	SO4-6-6-15.5	122-SO4-217	03/23/98		
6-8	11.5-13.5	SO4-6-8-11.5	122-SO4-231	03/26/98		
6-8	15.5-20.0	SO4-6-8-15.5	122-SO4-232	03/26/98		
6-9	9.5-11.5	SO4-6-9-9.5	122-SO4-239	03/27/98		
6-9	11.5-13.5	SO4-6-9-11.5	122-SO4-227	03/26/98		
6-9	13.5-15.5	SO4-6-9-13.5	122-SO4-241	03/27/98		
6-9	15.5-20.0	SO4-6-9-15.5	122-SO4-220	03/23/98		122-SO4-220
6-9	25.0-30.0	SO4-6-9-25	122-SO4-226	03/26/98		
6-9	30.0-35.0	SO4-6-9-30	122-SO4-243	04/01/98	122-SO4-244	122-SO4-243
6-10	9.5-11.5	SO4-6-10-9.5	122-SO4-236	03/27/98		
6-10	11.5-13.5	SO4-6-10-11.5	122-SO4-237	03/27/98		
6-10	13.5-15.5	SO4-6-10-13.5	122-SO4-238	03/27/98		
6-10	15.5-20.0	SO4-6-10-15.5	122-SO4-228	03/23/98		
6-10	25.0-30.0	SO4-6-10-25	122-SO4-245	04/01/98		
6-10	40.0-45.0	SO4-6-10-40	122-SO4-250	04/02/98		
6-10A	11.5-13.5	SO4-6-10A-11.5	122-SO4-251	04/03/98	122-SO4-252	122-SO4-251
6-10A	15.5-20.0	SO4-6-10A-15.5	122-SO4-253	04/03/98		
6-10A	25.0-30.0	SO4-6-10A-25	122-SO4-254	04/03/98		
6-10A	40.0-45.0	SO4-6-10A-40	122-SO4-255	04/06/98	122-SO4-256	
7-7	15.5-20.0	SO4-7-7-15.5	122-SO4-223	03/23/98		
7-8	15.5-20.0	SO4-7-8-15.5	122-SO4-221	03/23/98	122-SO4-222	
7-9	9.5-11.5	SO4-7-9-9.5	122-SO4-233	03/27/98		
7-9	11.5-13.5	SO4-7-9-13.5	122-SO4-234	03/27/98		
7-9	13.5-15.5	SO4-7-9-11.5	122-SO4-235	03/27/98		
7-9	15.5-20.0	SO4-7-9-15.5	122-SO4-229	03/26/98	122-SO4-230	122-SO4-229
7-9	25.0-30.0	SO4-7-9-25	122-SO4-248	04/02/98		

* Duplicate sample taken

ft. bgs = feet below ground surface

TABLE 7
SITE 4-SAMPLE IDENTIFICATION
RINSATE, FIELD, AND TRIP BLANK

Field ID Number	Lab ID Number	Date sampled
Rinsate-01	122-SO4-042	1/21/98
Rinsate-02	122-SO4-043	1/22/98
Rinsate-03	122-SO4-044	1/23/98
Rinsate-04	122-SO4-045	1/23/98
Rinsate-05	122-SO4-046	1/27/98
Rinsate-05	122-SO4-046	1/28/98
Rinsate-06	122-SO4-084	1/29/98
Rinsate-07	122-SO4-120	2/5/98
Rinsate-08	122-SO4-126	2/11/98
Rinsate-09	122-SO4-143	2/13/98
Rinsate-10	122-SO4-149	2/16/98
Rinsate-11	122-SO4-157	2/17/98
Rinsate-12	122-SO4-159	2/19/98
Rinsate-13	122-SO4-160	2/19/98
Rinsate-14	122-SO4-172	3/2/98
Rinsate-15	122-SO4-201	3/10/98
Rinsate-16	122-SO4-212	3/11/98
Rinsate-17	122-SO4-224	3/23/98
Rinsate-18	122-SO4-225	3/24/98
Rinsate-19	122-SO4-242	3/27/98
Rinsate-20	122-SO4-246	4/1/98
Rinsate-21	122-SO4-247	4/2/98
Rinsate-22	122-SO4-257	4/6/98
FB-01	122-SO4-051	1/21/98
FB-02	122-SO4-055	1/21/98
FB-03	122-SO4-135	2/12/98
FB-04	122-SO4-171	3/2/98
FB-05	122-SO4-176	3/3/98
FB-06	122-SO4-240	3/27/98

TABLE 8
SITE-4 FIELD PARAMETERS

Location Number	Depth (ft. bgs)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Conductivity (umhos@25^{0}C)
0-4	11.5-13.5	---	---	---
0-4	13.5-15.5	3.4	57	3,840
0-4	15.5-20.0	7.9	297	3,210
0-4	20.0-25.0	1.9	76	1,700
0-4	25.0-30.0	0.2	-490	2,370
0-4	30.0-35.0	3.1	-275	3,580
0-4	45.0-50.0	5.0	46	5,190
1-2	5.5-7.5	5.8	15	1,621
1-3	13.5-15.5	7.3	-47	1,570
1-3	20.0-25.0	0.9	-535	7370
1-3	25.0-30.0	0.1	-540	5940
1-4	9.5-11.5	7.9	252	1,562
1-4	11.5-13.5	4.9	227	791
1-4	13.5-15.5	1.0	-233	1,240
1-4	20.0-25.0	5.4	-70	4,600
1-4	25.0-30.0	5.4	44	5,020
1-4	30.0-35.0	0.3	-597	5,130
1-4	40.0-45.0	6.1	-167	6,040
1-4	45.0-50.0	0.1	-568	9,050
1-4	55.0-60.0	0.2	-97	1,047
1-6	11.5-13.5	5.9	-90	1,025
1-6	13.5-15.5	---	---	---
1-6	20.0-25.0	0.3	-496	4,350
1-6	25.0-30.0	0.2	-533	4,440
1-6	30.0-35.0	0.2	-664	64.8
1-6	40.0-45.0	1.3	-59	11,630
1-6	45.0-50.0	0.1	-336	8,840
2-1	5.5-7.5	---	---	---
2-2	11.5-13.5	2.7	-460	2,820
2-3	5.5-7.5	1.9	-97	932
2-3	9.5-11.5	6.2	-25	739
2-3	11.5-13.5	0.4	---	953
2-3	30.0-35.0	0.1	-483	6,740
2-4	15.5-20.0	---	---	---
2-4	20.0-25.0	---	---	---
2-4	25.0-30.0	3.1	19	---
2-4	30.0-35.0	0.0	-130	---
2-4	40.0-45.0	2.4	15	---
2-5	11.5-13.5	1.2	78	2,730
2-5	15.5-20.0	2.5	107	3,180
2-5	20.0-25.0	6.0	199	2,880
2-5	25.0-30.0	4.8	96	4950
2-5	30.0-35.0	0.6	-88	5,620
2-5	40.0-45.0	0.2	-555	26,400
2-6	11.5-13.5	1.6	142	2,360
2-6	13.5-15.5	0.4	-30	2,150
2-6	15.5-20.0	0.2	-550	3,330
2-6	20.0-25.0	1.4	-242	4,800
2-6	25.0-30.0	0	-250	5,120
2-6	30.0-35.0	2.3	-20	6,480
2-7	13.5-15.5	---	---	---
2-7	15.5-20.0	1.6	82	1105
2-7	20.0-25.0	5.2	105	---
2-7	20.0-25.0	2.9	-89	3,500
2-7	25.0-30.0	3.8	-70	1,720
2-7	30.0-35.0	0.2	-66	6,170
2-8	20.0-25.0	2.1	63	1,847
2-8	25.0-30.0	0.2	-419	3,450
2-8	30.0-35.0	1.6	45	7,220
3-1	5.5-7.5	---	---	---
3-1	11.5-13.5	9.0	27	1,381
3-1	11.5-13.5	5.3	-17	1,201
3-1	15.5-20.0	---	---	---

TABLE 8
SITE-4 FIELD PARAMETERS

Location Number	Depth (ft. bgs)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Conductivity (umhos@25^{0}C)
3-2	7.5-9.5	---	---	---
3-2	9.5-11.5	---	---	---
3-2	11.5-13.5	---	---	---
3-2	20.0-25.0	---	---	---
3-2	25.0-30.0	---	---	---
3-2	30.0-35.0	---	---	---
3-3	5.5-7.5	---	---	---
3-3	7.5-9.5	---	---	---
3-3	11.5-13.5	---	---	---
3-3	20.0-25.0	---	---	---
3-3	25.0-30.0	---	---	---
3-3	30.0-35.0	---	---	---
3-3	40.0-45.0	1.1	-439	34,000
3-4	5.5-7.5	0.7	-65	---
3-4	9.5-11.5	4.3	-6.9	---
3-4	11.5-13.5	1.5	-54	---
3-4	13.5-15.5	0.6	8.0	---
3-4	30.0-35.0	0.0	-121	---
3-4	40.0-45.0	0.5	-156	---
3-5	15.5-20.0	0.5	-216	1,876
3-5	20.0-25.0	2.6	-190	2,000
3-5	25.0-30.0	0.1	-575	3,410
3-5	30.0-35.0	0.6	-271	3,320
3-6	11.5-13.5	3.1	-227	6,340
3-6	13.5-15.5	5.1	-219	4,270
3-6	15.5-20.0	3.2	-335	3,720
3-6	20.0-25.0	3.6	9	3,340
3-6	25.0-30.0	4.1	-19	6,600
3-6	30.0-35.0	4.3	93	5,800
3-6	40.0-45.0	0.6	-127	32,800
3-7	11.5-13.5	0.5	-419	2,580
3-7	13.5-15.5	5.0	-114	3,630
3-7	15.5-20.0	4.6	-434	4,000
3-7	20.0-25.0	2.1	-23	5,420
3-7	25.0-30.0	4.2	-33	6,900
3-7	30.0-35.0	1.9	-143	10,470
3-7	40.0-45.0	0.2	-254	32,000
3-8	11.5-13.5	0.2	-314	2,260
3-8	13.5-15.5	0.9	-81	3,340
3-8	15.5-20.0	1.1	-540	2,000
3-8	20.0-25.0	7.3	22	3,250
3-8	25.0-30.0	5.9	23	4,380
3-8	30.0-35.0	5.3	30	6,060
3-8	40.0-45.0	1.9	-27	33,400
3-9	20.0-25.0	2.4	118	3,700
3-9	25.0-30.0	1.6	46	3,950
3-9	30.0-35.0	0.5	33	10,530
4-1	7.5-9.5	0.1	-467	5,520
4-1	11.5-13.5	0.2	-569	11,370
4-1	13.5-15.5	0.1	-557	11,420
4-2	11.5-13.5	0.2	-355	18,880
4-2	20.0-25.0	3.3	-51	18,860
4-2	30.0-35.0	8.6	-9	67,500
4-3	5.5-7.5	0.0	-224	---
4-3	9.5-11.5	5.1	23	---
4-3	11.5-13.5	0.0	-144	---
4-3	20.0-25.0	5.0	37	12,720
4-3	30.0-35.0	0.0	-190	---
4-4	20.0-25.0	1.7	-523	14,100
4-4	30.0-35.0	0.1	500	62,700
4-4	40.0-45.0	0.7	-549	55,800
4-5	9.5-11.5	2.0	51	5390
4-5	11.5-13.5	5.4	-49	7,570
4-5	13.5-15.5	1.0	-88	6,800
4-5	20.0-25.0	0.2	-520	5,960

TABLE 8
SITE-4 FIELD PARAMETERS

Location Number	Depth (ft. bgs)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Conductivity (umhos@25^{0}C)
4-6	11.5-13.5	2.2	-167	5,260
4-6	15.5-20.0	2.8	64	4,640
4-6	20.0-25.0	4.3	-72	7,140
4-6	25.0-30.0	0.2	-542	8,240
4-6	30.0-35.0	0.3	-453	11,560
4-7	11.5-13.5	1.4	-432	3,505
4-7	13.5-15.5	9.3	-35	6,970
4-7	15.5-20.0	3.1	-105	4,270
4-7	20.0-25.0	0.2	105	5,070
4-7	25.0-30.0	7.2	54	6,150
4-7	30.0-35.0	1.2	-189	9,130
4-8	15.5-20.0	2.3	48	2,160
4-8	20.0-25.0	3.8	38	4,260
4-8	25.0-30.0	2.9	52	6,700
4-8	30.0-35.0	1.4	125	12,190
5-3	9.5-11.5	5.1	58	909
5-3	11.5-13.5	1.5	-195	1,509
5-3	15.5-20.0	2.0	-165	2,190
5-3	20.0-25.0	7.5	-27	4,490
5-3	25.0-30.0	1.4	-129	8,830
5-3	30.0-35.0	0.1	-264	44,000
5-3	40.0-45.0	1.8	-280	53,100
5-4	20.0-25.0	2.4	-93	8,510
5-4	25.0-30.0	0.2	-506	68,800
5-4	30.0-35.0	0.7	-442	74,700
5-6	11.5-13.5	0.7	-298	9,150
5-6	15.5-20.0	1.4	-368	9,400
5-7	13.5-15.5	0.3	-332	8,370
5-7	15.5-20.0	0.4	-393	5,190
5-7	20.0-25.0	4.3	159	13,230
5-8	15.5-20.0	2.6	52	13,830
5-9	15.5-20.0	1.7	-71	12,130
5-10	25.0-30.0	2.4	-27	43,300
6-6	15.5-20.0	0.2	-348	39,800
6-8	11.5-13.5	0.1	-290	14,500
6-8	15.5-20.0	0.4	-438	35,300
6-9	9.5-11.5	4.8	-42	937
6-9	11.5-13.5	0.1	-261	10,280
6-9	13.5-15.5	0.5	-119	27,300
6-9	15.5-20.0	0.2	-161	24,400
6-9	25.0-30.0	0.1	-542	52,000
6-9	30.0-35.0	0.4	-18	>100,000
6-10	9.5-11.5	4.5	-84	7,740
6-10	11.5-13.5	---	---	---
6-10	13.5-15.5	0.3	-105	8,830
6-10	15.5-20.0	0.1	-393	14,280
6-10	25.0-30.0	4.8	75	>100,000
6-10	40.0-45.0	2.6	67	>100,000
6-10A	11.5-13.5	3.3	-12	58,100
6-10A	15.5-20.0	2.6	5.6	47,500
6-10A	25.0-30.0	0.5	347	>100,000
6-10A	40.0-45.0	1.6	-37	---
7-7	15.5-20.0	0.4	-200	29,000
7-8	15.5-20.0	0.3	-103	32,600
7-9	9.5-11.5	1.8	34	10,610
7-9	11.5-13.5	0.3	-104	14,110
7-9	13.5-15.5	0.3	-232	12,950
7-9	15.5-20.0	0.6	-508	35,500
7-9	25.0-30.0	3.3	36	>100,000

Note: Higher Dissolved Oxygen and Redox numbers may be due to aeration associated with purge method
ft. bgs = feet below ground surface

TABLE 9
SITE 5-SUMMARY OF ANALYTICAL RESULTS
1,1,1 TRICHLOROETHANE (ug/l)

Sample Location Number	Sample Intervals (ft.bgs)								
	5.5-7.5	7.5-9.5	9.5-11.5	11.5-13.5	13.5-15.5	15.5-20.0	20.0-25.0	25.0-30.0	30.0-35.0
1-2	<0.5								
1-3	<0.5	<0.5	<0.5	<0.5	<0.5				
2-1	1.7		5.9	1.4	<0.5	<0.5			
2-2	105	4.8	<0.5	<0.5	<0.5				
2-3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			
2-4	<0.5	1.4	0.8	<0.5	<0.5				
3-1	<0.5			<0.5	<0.5				
3-2	16	100		4.8	<0.5	200	<0.5		
3-3	2.9	<0.5	<0.5	<0.5	<0.5	<0.5			
3-4	4.3	1.9	<0.5	<0.5	<0.5	<0.5			
3-5	<0.5	<0.5	<0.5	<0.5	<0.5				
4-1	0.8	1.2	1.2			<0.5			
4-2		<0.5	<0.5	<0.5	<0.5	<0.5			
4-3	66	1.3	<0.5	<0.5	<0.5	0.5		<0.5	<0.5
4-4	35	3.4	<0.5	<0.5	<0.5	2.2		<0.5	<0.5
4-5		<0.5		130**		<0.5			
4-6	<0.5	<0.5	<0.5	<0.5					
5-1	0.5		<0.5	<0.5	<0.5				
5-2				<0.5	11	<0.5			
5-3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		
5-4	18	0.7	4.3		<0.5	<0.5			
5-5		<0.5	<0.5	<0.5					
6-1				<0.5	<0.5		<0.5		
6-2	<0.5			0.7		<0.5	<0.5		
6-3	<0.5			<0.5	<0.5	<0.5			
6-4	<0.5	<0.5							
6-5	<0.5		<0.5						
7-1					<0.5				
7-2					<0.5				
7-3					<0.5				
7-4	<0.5								

Note: Concentrations are taken directly from the Onsite Lab Certified Analytical Reports
** Estimated value, over calibration range
ft. bgs = feet below ground surface

TABLE 10
SITE 5-SUMMARY OF ANALYTICAL RESULTS
1,1 DICHLOROETHANE (ug/l)

Sample Location Number	Sample Intervals (ft.bgs)								
	5.5-7.5	7.5-9.5	9.5-11.5	11.5-13.5	13.5-15.5	15.5-20.0	20.0-25.0	25.0-30.0	30.0-35.0
1-2	<0.5								
1-3	<0.5	<0.5	<0.5	<0.5					
2-1	11		36	6.9	<0.5	<0.5			
2-2	7.9	13	8.1	7.5	3.9				
2-3	220**	170	310**	290**	2.7	4.9			
2-4	<0.5	1.2	16	78	19				
3-1	1.5			<0.5	<0.5				
3-2	140	44		1300**	670**	0.7	<0.5		
3-3	67	130	21	220**	13	48			
3-4	100	46	9.2	2200**	2900**	2			
3-5	15	47	100	1.7	<0.5				
4-1	11	6.6	13			<0.5			
4-2		1.8	3	1.2	<0.5	<0.5			
4-3	6.2	3.7	5.2	2.8	1.7	<0.5		<0.5	<0.5
4-4	180	54	210**	240	4.1	6.7		<0.5	<0.5
4-5		4400		34,000**		<0.5			
4-6	13	12	13	21					
5-1	<0.5		<0.5	<0.5	<0.5				
5-2				34	15	<0.5			
5-3	7.3	13	190**	8.4	<0.5	<0.5	<0.5		
5-4	850**	2600**	2400**		<0.5	<0.5			
5-5		<0.5	<0.5	<0.5					
6-1				<0.5	<0.5		<0.5		
6-2	2.2			170		820**	0.7		
6-3	1.3			<0.5	0.8	<0.5			
6-4	<0.5	0.5							
6-5	<0.5		<0.5						
7-1					<0.5				
7-2					<0.5				
7-3					<0.5				
7-4	<0.5								

Note: Concentrations are taken directly from the Onsite Lab Certified Analytical Reports
** Estimated value, over calibration range
ft. bgs = feet below ground surface

TABLE 11
SITE 5-SUMMARY OF ANALYTICAL RESULTS
1,1 DICHLOROETHENE (ug/l)

Sample Location Number	Sample Intervals (ft.bgs)								
	5.5-7.5	7.5-9.5	9.5-11.5	11.5-13.5	13.5-15.5	15.5-20.0	20.0-25.0	25.0-30.0	30.0-35.0
1-2	<0.5								
1-3	<0.5	<0.5	<0.5	<0.5					
2-1	<0.5		<0.5	<0.5	<0.5	<0.5			
2-2	13	6.7	<0.5	<0.5	<0.5				
2-3	3.8	<0.5	<0.5	<0.5	<0.5	<0.5			
2-4	<0.5	<0.5	<0.5	1.5	<0.5				
3-1	<0.5			<0.5	<0.5				
3-2	94	32		62	<0.5	<0.5	<0.5		
3-3	0.5	5.2	<0.5	26	<0.5	<0.5			
3-4	1.1	0.6	<0.5	<0.5	<0.5	<0.5			
3-5	<0.5	<0.5	<0.5	<0.5	<0.5				
4-1	0.62	1.4	<0.5			<0.5			
4-2		<0.5	<0.5	<0.5	<0.5	<0.5			
4-3	2.3	1.4	0.64	<0.5	<0.5	<0.5		<0.5	<0.5
4-4	10	5.8	8.5	11	<0.5	0.51		<0.5	<0.5
4-5		370		1400		<0.5			
4-6	3	2.9	2.9	0.8					
5-1	<0.5		<0.5	<0.5	<0.5				
5-2				0.67	<0.5	<0.5			
5-3	<0.5	<0.5	<0.5	1.3	<0.5	2.8	<0.5		
5-4	46	150	57		<0.5	<0.5			
5-5		<0.5	<0.5	<0.5					
6-1				<0.5	<0.5		<0.5		
6-2	<0.5			4.0		<0.5	<0.5		
6-3	<0.5			<0.5	<0.5	<0.5			
6-4	<0.5	<0.5							
6-5	<0.5		<0.5						
7-1					<0.5				
7-2					<0.5				
7-3					<0.5				
7-4	<0.5								

Note: Concentrations are taken directly from the Onsite Lab Certified Analytical Reports
ft. bgs = feet below ground surface

TABLE 12
SITE 5-SUMMARY OF ANALYTICAL RESULTS
cis 1,2 DICHLOROETHENE (ug/l)

Sample Location Number	Sample Intervals (ft.bgs)								
	5.5-7.5	7.5-9.5	9.5-11.5	11.5-13.5	13.5-15.5	15.5-20.0	20.0-25.0	25.0-30.0	30.0-35.0
1-2	<0.5								
1-3	<0.5	<0.5	<0.5	<0.5					
2-1	<0.5		17	1.6	<0.5	<0.5			
2-2	3.3	3.2	4.0	<0.5	<0.5				
2-3	72	4.3	33	42	<0.5	<0.5			
2-4	<0.5	<0.5	37	38	6.8				
3-1	<0.5			<0.5	<0.5				
3-2	9.0	6.0		136	3.6	<0.5	<0.5		
3-3	<0.5	1	3.5	38	<0.5	13			
3-4	28	28	2.8	0.83	<0.5	<0.5			
3-5	9.7	4.5	2.9	<0.5	<0.5				
4-1	1.2	1.4	0.64			<0.5			
4-2		1.0	4.0	<0.5	<0.5	<0.5			
4-3	<0.5	1.1	21	2.0	1.1	<0.5		<0.5	<0.5
4-4	<0.5	0.9	16	21	0.5	<0.5		<0.5	<0.5
4-5		<0.5		62		<0.5			
4-6	2.4	3.4	3.6	22					
5-1	<0.5		<0.5	<0.5	<0.5				
5-2				6.0	9.8	<0.5			
5-3	1.2	0.84	1.1	820	<0.5	64	17		
5-4	1.6	10	7.6		<0.5	<0.5			
5-5		<0.5	<0.5	<0.5					
6-1				<0.5	<0.5		<0.5		
6-2	3.3			15		1.4	<0.5		
6-3	<0.5			<0.5	<0.5	<0.5			
6-4	<0.5	1.0							
6-5	<0.5		<0.5						
7-1					<0.5				
7-2					<0.5				
7-3					<0.5				
7-4	<0.5								

Note: Concentrations are taken directly from the Onsite Lab Certified Analytical Reports
ft. bgs = feet below ground surface

TABLE 13
SITE 5-SUMMARY OF ANALYTICAL RESULTS
trans 1,2 DICHLOROETHENE (ug/l)

Sample Location Number	Sample Intervals (ft.bgs)								
	5.5-7.5	7.5-9.5	9.5-11.5	11.5-13.5	13.5-15.5	15.5-20.0	20.0-25.0	25.0-30.0	30.0-35.0
1-2	<0.5								
1-3	<0.5	<0.5	<0.5	<0.5					
2-1	<0.5		<0.5	<0.5	<0.5	<0.5			
2-2	<0.5	<0.5	<0.5	<0.5	<0.5				
2-3	18	15	<0.5	6.8	<0.5	<0.5			
2-4	<0.5	<0.5	<0.5	<0.5	<0.5				
3-1	<0.5			<0.5	<0.5				
3-2	<0.5	<0.5		37	11	<0.5	<0.5		
3-3	<0.5	<0.5	<0.5	7.7	1.5	<0.5			
3-4	<0.5	1.6	5.5	17	18	<0.5			
3-5	<0.5	0.63	<0.5	<0.5	<0.5				
4-1	<0.5	<0.5	0.59			<0.5			
4-2		<0.5	<0.5	1.3	<0.5	<0.5			
4-3	<0.5	<0.5	10	11	7.1	<0.5		<0.5	<0.5
4-4	<0.5	<0.5	5.1	8.4	<0.5	<0.5		<0.5	<0.5
4-5		<0.5		4.8		<0.5			
4-6	<0.5	0.6	0.6	7.6					
5-1	<0.5		<0.5	<0.5	<0.5				
5-2				3.4	<0.5	<0.5			
5-3	<0.5	<0.5	2.4	10	62	7.7	2.6		
5-4	<0.5	2.4	5.1		<0.5	<0.5			
5-5		<0.5	<0.5	<0.5					
6-1				<0.5	<0.5		<0.5		
6-2	<0.5			<0.5		<0.5	<0.5		
6-3	<0.5			<0.5	<0.5	<0.5			
6-4	<0.5	1.4							
6-5	<0.5		<0.5						
7-1					<0.5				
7-2					<0.5				
7-3					<0.5				
7-4	<0.5								

Note: Concentrations are taken directly from the Onsite Lab Certified Analytical Reports
ft. bgs = feet below ground surface

TABLE 14
SITE 5-SUMMARY OF ANALYTICAL RESULTS
CHLOROETHANE (ug/l)

Sample Location Number	Sample Intervals (ft.bgs)								
	5.5-7.5	7.5-9.5	9.5-11.5	11.5-13.5	13.5-15.5	15.5-20.0	20.0-25.0	25.0-30.0	30.0-35.0
1-2	<0.5								
1-3	<0.5	<0.5	<0.5	<0.5					
2-1	<0.5		2.7	<0.5	<0.5	<0.5			
2-2	<0.5	<0.5	0.8	<0.5	<0.5				
2-3	0.8	91	45	5.2	<0.5	<0.5			
2-4	<0.5	<0.5	<0.5	<0.5	14				
3-1	<0.5			<0.5	<0.5				
3-2	1.2	<0.5		17	10	<0.5	0.5		
3-3	<0.5	<0.5	<0.5	0.7	0.61	7.8			
3-4	22	290	840	1100	77	1.9			
3-5	<0.5	<0.5	<0.5	<0.5	<0.5				
4-1	<0.5	<0.5	0.58			<0.5			
4-2		<0.5	<0.5	0.84	<0.5	<0.5			
4-3	<0.5	<0.5	<0.5	0.6	0.6	<0.5		<0.5	<0.5
4-4	43	0.9	<0.5	6.3	48	1.7		<0.5	<0.5
4-5		230		200		<0.5			
4-6	<0.5	<0.5	<0.5	<0.5					
5-1	<0.5		<0.5	<0.5	<0.5				
5-2				<0.5	0.9	<0.5			
5-3	<0.5	<0.5	32	<0.5	<0.5	<0.5	<0.5		
5-4	4.8	<0.5	50		<0.5	<0.5			
5-5		<0.5	<0.5	<0.5					
6-1				<0.5	<0.5		<0.5		
6-2	<0.5			29		8.9	0.94		
6-3	<0.5			10	<0.5	<0.5			
6-4	<0.5	<0.5							
6-5	<0.5		<0.5						
7-1					<0.5				
7-2					<0.5				
7-3					<0.5				
7-4	<0.5								

Note: Concentrations are taken directly from the Onsite Lab Certified Analytical Reports
ft. bgs = feet below ground surface

TABLE 15
SITE 5-SUMMARY OF ANALYTICAL RESULTS
TRICHLOROETHENE (ug/l)

Sample Location Number	Sample Intervals (ft.bgs)								
	5.5-7.5	7.5-9.5	9.5-11.5	11.5-13.5	13.5-15.5	15.5-20.0	20.0-25.0	25.0-30.0	30.0-35.0
1-2	<0.5								
1-3	<0.5	<0.5	<0.5	<0.5					
2-1	<0.5		1.3	<0.5	<0.5	<0.5			
2-2	23	15	7.0	<0.5	<0.5				
2-3	3.6	<0.5	<0.5	<0.5	<0.5	<0.5			
2-4	<0.5	<0.5	<0.5	<0.5	<0.5				
3-1	<0.5			<0.5	<0.5				
3-2	36	24		61	0.75	<0.5	<0.5		
3-3	<0.5	<0.5	<0.5	14	<0.5	<0.5			
3-4	4.3	0.6	<0.5	0.56	<0.5	<0.5			
3-5	1.3	1.2	<0.5	<0.5	<0.5				
4-1	7.4	10	4.5			<0.5			
4-2		0.96	9.5	<0.5	<0.5	<0.5			
4-3	3.9	5.0	7.3	<0.5	<0.5	<0.5		<0.5	<0.5
4-4	1.7	0.7	8.4	11	<0.5	<0.5		<0.5	<0.5
4-5		<0.5		42		<0.5			
4-6	<0.5	<0.5	<0.5	0.8					
5-1	0.72		<0.5	<0.5	<0.5				
5-2				0.77	18	<0.5			
5-3	1.2	<0.5	0.7	1.5	<0.5	77	13		
5-4	8.1	27	7.8		<0.5	<0.5			
5-5		<0.5	<0.5	<0.5					
6-1				<0.5	<0.5		<0.5		
6-2	4.3			7.0		<0.5	<0.5		
6-3	<0.5			<0.5	<0.5	<0.5			
6-4	<0.5	0.72							
6-5	<0.5		<0.5						
7-1					<0.5				
7-2					<0.5				
7-3					<0.5				
7-4	<0.5								

Note: Concentrations are taken directly from the Onsite Lab Certified Analytical Reports
ft. bgs = feet below ground surface

TABLE 16
SITE 5-SUMMARY OF ANALYTICAL RESULTS
VINYL CHLORIDE (ug/l)

Sample Location Number	Sample Intervals (ft.bgs)								
	5.5-7.5	7.5-9.5	9.5-11.5	11.5-13.5	13.5-15.5	15.5-20.0	20.0-25.0	25.0-30.0	30.0-35.0
1-2	<0.5								
1-3	<0.5	<0.5	<0.5	<0.5					
2-1	<0.5		3.8	<0.5	<0.5	<0.5			
2-2	<0.5	<0.5	0.8	<0.5	<0.5				
2-3	76	5.2	81	93	<0.5	<0.5			
2-4	<0.5	<0.5	2.5	5.5	8.9				
3-1	<0.5			<0.5	<0.5				
3-2	1.8	<0.5		490	180	<0.5	<0.5		
3-3	<0.5	2	3.1	79	0.9	15			
3-4	4.5	12	1.7	1.5	2.4	<0.5			
3-5	<0.5	0.68	1.4	<0.5	<0.5				
4-1	<0.5	<0.5	0.52			<0.5			
4-2		<0.5	<0.5	<0.5	<0.5	<0.5			
4-3	<0.5	<0.5	<0.5	3.1	<0.5	<0.5		<0.5	<0.5
4-4	<0.5	1.3	4.4	7.3	<0.5	<0.5		<0.5	<0.5
4-5		200		230		<0.5			
4-6	<0.5	<0.5	<0.5	1.2					
5-1	<0.5		<0.5	<0.5	<0.5				
5-2				3.6	1.0	<0.5			
5-3	<0.5	<0.5	0.8	190	20	11	2.3		
5-4	1.8	39	21		<0.5	<0.5			
5-5		<0.5	<0.5	<0.5					
6-1				<0.5	<0.5		<0.5		
6-2	<0.5			18		4.0	<0.5		
6-3	<0.5			<0.5	<0.5	<0.5			
6-4	<0.5	1.9							
6-5	<0.5		<0.5						
7-1					<0.5				
7-2					3				
7-3					0.7				
7-4	<0.5								

Note: Concentrations are taken directly from the Onsite Lab Certified Analytical Reports
ft. bgs = feet below ground surface

TABLE 17
SITE 5-SAMPLE INDENTIFICATION

Location Number	Depth (ft.bgs)	Field ID Number	Lab ID Number	Date sampled	Onsite Lab Dup	Fixed Lab Dup
1-2	5.5-7.5	SO5-1-2-5.5	122-SO5-072	02/10/98		
1-3	5.5-7.5	SO5-1-3-5.5	122-SO5-088	02/20/98		
1-3	7.5-9.5	SO5-1-3-7.5	122-SO5-089	02/20/98		
1-3	9.5-11.5	SO5-1-3-9.5	122-SO5-090	02/20/98		
1-3	9.5-11.5	SO5-1-3-9.5	122-SO5-117	03/09/98		
1-3	11.5-13.5	SO5-1-3-11.5	122-SO5-118	03/09/98		
2-1	5.5-7.5	SO5-2-1-5.5	122-SO5-070	02/10/98		
2-1	9.5-11.5	SO5-2-1-9.5	122-SO5-103	03/06/98		
2-1	11.5-13.5	SO5-2-1-11.5	122-SO5-014	03/06/98		
2-1	13.5-15.5	SO5-2-1-13.5	122-SO5-015	02/10/98		
2-1	15.5-20.0	SO5-2-1-15.5	122-SO5-016	02/10/98		
2-2	5.5-7.5	SO5-2-2-5.5	122-SO5-062	02/10/98		
2-2	7.5-9.5	SO5-2-2-7.5	122-SO5-063	02/10/98		
2-2	9.5-11.5	SO5-2-2-9.5	122-SO5-064	02/10/98		
2-2	11.5-13.5	SO5-2-2-11.5	122-SO5-065	02/10/98		
2-2	13.5-15.5	SO5-2-2-13.5	122-SO5-066	02/10/98	122-SO5-067	
2-3	5.5-7.5	SO5-2-3-5.5	122-SO5-057	02/09/98		
2-3	7.5-9.5	SO5-2-3-7.5	122-SO5-017	02/09/98		
2-3	9.5-11.5	SO5-2-3-9.5	122-SO5-076	02/18/98		
2-3	11.5-13.5	SO5-2-3-11.5	122-SO5-018	02/09/98		
2-3	13.5-15.5	SO5-2-3-13.5	122-SO5-019	02/18/98		
2-3	15.5-20.0	SO5-2-3-15.5	122-SO5-020	02/09/98		122-SO5-120
2-4	5.5-7.5	SO5-2-4-5.5	122-SO5-082	02/19/98		
2-4	7.5-9.5	SO5-2-4-7.5	122-SO5-083	02/19/98		
2-4	9.5-11.5	SO5-2-4-9.5	122-SO5-084	02/19/98		
2-4	11.5-13.5	SO5-2-4-11.5	122-SO5-085	02/19/98		
2-4	13.5-15.5	SO5-2-4-13.5	122-SO5-126	03/12/98		
3-1	5.5-7.5	SO5-3-1-5.5	122-SO5-058	02/09/98		
3-1	11.5-13.5	SO5-3-1-11.5	122-SO5-059	02/09/98		
3-1	13.5-15.5	SO5-3-1-13.5	122-SO5-060	02/09/98		
3-2	5.5-7.5	SO5-3-2-5.5	122-SO5-021	03/06/98	122-SO5-021	
3-2	7.5-9.5	SO5-3-2-7.5	122-SO5-022	03/09/98		
3-2	11.5-13.5	SO5-3-2-11.5	122-SO5-023	03/09/98		
3-2	13.5-15.5	SO5-3-2-13.5	122-SO5-116	03/09/98		
3-2	15.5-20.0	SO5-3-2-15.5	122-SO5-024	03/13/98		
3-2	20.0-25.0	SO5-3-2-20.0	122-SO5-127	03/13/98		
3-3	5.5-7.5	SO5-3-3-5.5	122-SO5-026	02/19/98		
3-3	7.5-9.5	SO5-3-3-7.5	122-SO5-027	02/19/98		
3-3	9.5-11.5	SO5-3-3-9.5	122-SO5-028	02/19/98	122-SO5-086	
3-3	11.5-13.5	SO5-3-3-11.5	122-SO5-087	02/19/98		122-SO5-087
3-3	13.5-15.5	SO5-3-3-13.5	122-SO5-029	02/20/98	122-SO5-029	
3-3	15.5-20.0	SO5-3-3-15.5	122-SO5-100	03/06/98		
3-4	5.5-7.5	SO5-3-4-5.5	122-SO5-142	03/16/98		
3-4	7.5-9.5	SO5-3-4-7.5	122-SO5-143	03/16/98		
3-4	9.5-11.5	SO5-3-4-9.5	122-SO5-160	03/17/98		
3-4	11.5-13.5	SO5-3-4-11.5	122-SO5-144	03/16/98		
3-4	13.5-15.5	SO5-3-4-13.5	122-SO5-061	02/09/98		
3-4	15.5-20.0	SO5-3-4-15.5	122-SO5-145	03/16/98		

TABLE 17
SITE 5-SAMPLE INDENTIFICATION

Location Number	Depth (ft.bgs)	Field ID Number	Lab ID Number	Date sampled	Onsite Lab Dup	Fixed Lab Dup
3-5	5.5-7.5	SO5-3-5-5.5	122-SO5-154	03/17/98		
3-5	7.5-9.5	SO5-3-5-7.5	122-SO5-156	03/17/98		
3-5	9.5-11.5	SO5-3-5-9.5	122-SO5-071	02/10/98		
3-5	11.5-13.5	SO5-3-5-11.5	122-SO5-157	03/17/98		
3-5	13.5-15.5	SO5-3-5-13.5	122-SO5-158	03/17/98	122-SO5-159	
4-1	5.5-7.5	SO5-4-1-5.5	122-SO5-113	03/09/98		
4-1	7.5-9.5	SO5-4-1-7.5	122-SO5-068	02/10/98		
4-1	9.5-11.5	SO5-4-1-9.5	122-SO5-114	03/09/98		
4-1	15.5-20.0	SO5-4-1-15.5	122-SO5-069	02/10/98		
4-2	7.5-9.5	SO5-4-2-7.5	122-SO5-032	03/09/98		
4-2	9.5-11.5	SO5-4-2-9.5	122-SO5-033	02/06/98		122-SO5-033
4-2	11.5-13.5	SO5-4-2-11.5	122-SO5-108	03/09/98		
4-2	13.5-15.5	SO5-4-2-13.5	122-SO5-034	02/06/98		
4-2	15.5-20.0	SO5-4-2-15.5	122-SO5-109	03/09/98		
4-3	5.5-7.5	SO5-4-3-5.5	122-SO5-096	03/05/98		
4-3	7.5-9.5	SO5-4-3-7.5	122-SO5-097	03/05/98		
4-3	9.5-11.5	SO5-4-3-9.5	122-SO5-098	03/06/98		122-SO5-098
4-3	11.5-13.5	SO5-4-3-11.5	122-SO5-099	03/06/98		
4-3	13.5-15.5	SO5-4-3-13.5	122-SO5-128	03/13/98		
4-3	15.5-20.0	SO5-4-3-15.5	122-SO5-039	02/06/98		
4-3	25.0-30.0	SO5-4-3-25	122-SO5-040	03/13/98		122-SO5-040
4-3	30.0-35.0	SO5-4-3-30	122-SO5-129	03/13/98	122-SO5-130	
4-4	5.5-7.5	SO5-4-4-5.5	122-SO5-104	03/09/98		
4-4	7.5-9.5	SO5-4-4-7.5	122-SO5-055	02/06/98	122-SO5-056	
4-4	9.5-11.5	SO5-4-4-9.5	122-SO5-105	03/09/98		
4-4	11.5-13.5	SO5-4-4-11.5	122-SO5-161	03/24/98		
4-4	13.5-15.5	SO5-4-4-13.5	122-SO5-106	03/09/98		
4-4	15.5-20.0	SO5-4-4-15.5	122-SO5-107	03/09/98		
4-4	25.0-30.0	SO5-4-4-25	122-SO5-131	03/13/98		
4-4	30.0-35.0	SO5-4-4-30	122-SO5-135	03/16/98	122-SO5-136	
4-5	7.5-9.5	SO5-4-5-7.5	122-SO5-168	04/06/98		
4-5	11.5-13.5	SO5-4-5-11.5	122-SO5-167	04/03/98		122-SO5-167
4-5	15.5-20.0	SO5-4-5-15.5	122-SO5-170	04/06/98		
4-6	5.5-7.5	SO5-4-6-5.5	122-SO5-171	04/06/98		
4-6	7.5-9.5	SO5-4-6-7.5	122-SO5-172	04/06/98		
4-6	9.5-11.5	SO5-4-6-9.5	122-SO5-173	04/06/98	122-SO5-174	
4-6	11.5-13.5	SO5-4-6-11.5	122-SO5-175	04/06/98		
5-1	5.5-7.5	SO5-5-1-5.5	122-SO5-110	03/09/98		
5-1	9.5-11.5	SO5-5-1-9.5	122-SO5-073	02/18/98		
5-1	11.5-13.5	SO5-5-1-11.5	122-SO5-111	03/09/98	122-SO5-112	122-SO5-111
5-1	13.5-15.5	SO5-5-1-13.5	122-SO5-074	02/18/98		
5-2	11.5-13.5	SO5-5-2-11.5	122-SO5-149	03/17/98		
5-2	13.5-15.5	SO5-5-2-13.5	122-SO5-150	03/17/98		
5-2	15.5-20.0	SO5-5-2-15.5	122-SO5-093	03/05/98		122-SO5-093

TABLE 17
SITE 5-SAMPLE INDENTIFICATION

Location Number	Depth (ft.bgs)	Field ID Number	Lab ID Number	Date sampled	Onsite Lab Dup	Fixed Lab Dup
5-3	5.5-7.5	SO5-5-3-5.5	122-SO5-119	03/12/98		
5-3	7.5-9.5	SO5-5-3-7.5	122-SO5-120	03/12/98		
5-3	9.5-11.5	SO5-5-3-9.5	122-SO5-121	03/12/98		
5-3	11.5-13.5	SO5-5-3-11.5	122-SO5-122	03/12/98	122-SO5-123	
5-3	13.5-15.5	SO5-5-3-13.5	122-SO5-124	03/12/98		
5-3	15.5-20.0	SO5-5-3-15.5	122-SO5-125	03/12/98		
5-3	20.0-25.0	SO5-5-3-20	122-SO5-147	03/16/98	122-SO5-148	122-SO5-147
5-4	5.5-7.5	SO5-5-4-5.5	122-SO5-137	03/16/98		
5-4	7.5-9.5	SO5-5-4-7.5	122-SO5-138	03/16/98		
5-4	9.5-11.5	SO5-5-4-9.5	122-SO5-139	03/16/98		
5-4	13.5-15.5	SO5-5-4-13.5	122-SO5-140	03/16/98		
5-4	15.5-20.0	SO5-5-4-15.5	122-SO5-141	03/16/98		
5-5	7.5-9.5	SO5-5-5-7.5	122-SO5-162	03/24/98		
5-5	9.5-11.5	SO5-5-5-9.5	122-SO5-164	03/24/98	122-SO5-165	122-SO5-164
5-5	11.5-13.5	SO5-5-5-11.5	122-SO5-176	04/06/98		
6-1	11.5-13.5	SO5-6-1-11.5	122-SO5-077	02/18/98	122-SO5-078	122-SO5-077
6-1	13.5-15.5	SO5-6-1-13.5	122-SO5-079	02/18/98		
6-1	20.0-25.0	SO5-6-1-20	122-SO5-133	03/13/98		
6-2	5.5-7.5	SO5-6-2-5.5	122-SO5-052	02/05/98		
6-2	11.5-13.5	SO5-6-2-11.5	122-SO5-053	02/05/98		
6-2	15.5-20.0	SO5-6-2-15.5	122-SO5-054	02/05/98		
6-2	20.0-25.0	SO5-6-2-20	122-SO5-094	03/05/98		
6-3	5.5-7.5	SO5-6-3-5.5	122-SO5-050	02/05/98		
6-3	11.5-13.5	SO5-6-3-11.5	122-SO5-056	02/05/98		
6-3	13.5-15.5	SO5-6-3-13.5	122-SO5-095	03/05/98		
6-3	15.5-20.0	SO5-6-3-15.5	122-SO5-151	03/17/98		
6-4	5.5-7.5	SO5-6-4-5.5	122-SO5-081	02/20/98		
6-4	7.5-9.5	SO5-6-4-7.5	122-SO5-146	03/16/98		
6-5	5.5-7.5	SO5-6-5-5.5	122-SO5-166	03/24/98		
6-5	9.5-11.5	SO5-6.5-9.5	122-SO5-167	03/24/98	122-SO5-168	
7-1	13.5-15.5	SO5-7-1-13.5	122-SO5-092	03/05/98		
7-2	13.5-15.5	SO5-7-2-13.5	122-SO5-080	02/19/98		
7-3	13.5-15.5	SO5-7-3-13.5	122-SO5-075	02/18/98		
7-4	5.5-7.5	SO5-7-4-5.5	122-SO5-152	03/17/98	122-SO5-153	

ft. bgs = feet below ground surface

TABLE 18
SITE 5-SAMPLE IDENTIFICATION
RINSATE, FIELD, AND TRIP BLANK

Field ID Number	Lab ID Number	Date sampled
Rinsate-01	122-SO5-042	2/6/98
Rinsate-02	122-SO5-043	2/9/98
Rinsate-03	122-SO5-044	2/10/98
Rinsate-04	122-SO5-045	2/18/98
Rinsate-05	122-SO5-046	2/20/98
Rinsate-06	122-SO5-091	2/20/98
Rinsate-07	122-SO5-102	3/6/98
Rinsate-08	122-SO5-115	3/9/98
Rinsate-09	122-SO5-134	3/13/98
Rinsate-10	122-SO5-155	3/17/98
Rinsate-11	122-SO5-169	4/6/98
FB-01	122-SO5-101	3/6/98
FB-02	122-SO5-163	3/24/98
TB-01	122-SO5-046	2/5/98

TABLE 19
SITE-5 FIELD PARAMETERS

Location Number	Depth (ft. bgs)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Conductivity (umhos@25^{0}C)
1-2	5.5-7.5	4.8	-28	2,550
1-3	5.5-7.5	5.6	58	1,600
1-3	7.5-9.5	3.3	66	1,556
1-3	9.5-11.5	2.9	59	1,999
1-3	9.5-11.5	1.5	-102	4,400
1-3	11.5-13.5	0.2	-177	13,270
2-1	5.5-7.5	5.9	-90	1,025
2-1	9.5-11.5	0.2	-206	6,600
2-1	11.5-13.5	---	---	---
2-1	13.5-15.5	0.2	-137	16,830
2-1	15.5-20.0	---	---	---
2-2	5.5-7.5	6.7	49	713
2-2	7.5-9.5	4.2	13	1,133
2-2	9.5-11.5	2.6	63	1,739
2-2	11.5-13.5	3.4	-30	12,700
2-2	13.5-15.5	0.1	-200	6,750
2-3	5.5-7.5	3.6	-26	606
2-3	7.5-9.5	4.9	-36	900
2-3	9.5-11.5	---	---	---
2-3	11.5-13.5	0.6	-219	1,749
2-3	13.5-15.5	---	---	---
2-3	15.5-20.0	0.2	-231	31,300
2-4	5.5-7.5	4.4	146	622
2-4	7.5-9.5	4.1	102	257
2-4	9.5-11.5	4.1	77	1,437
2-4	11.5-13.5	5.4	80	3,100
2-4	13.5-15.5	1.6	-303	5,420
3-1	5.5-7.5	5.5	-6	915
3-1	11.5-13.5	0.6	-105	3,190
3-1	13.5-15.5	2.0	-44	4,620
3-2	5.5-7.5	4.4	-213.0	502
3-2	7.5-9.5	2.2	-226	653
3-2	11.5-13.5	0.2	-454	4,040
3-2	13.5-15.5	---	-295	4,940
3-2	15.5-20.0	0.6	-188	13,190
3-2	20.0-25.0	1.6	-126	19,650
3-3	5.5-7.5	3.6	148	506
3-3	7.5-9.5	3.1	-47	425
3-3	9.5-11.5	3.0	-63	630
3-3	11.5-13.5	3.3	-70	742
3-3	13.5-15.5	5.4	-108	3,970
3-3	15.5-20.0	2.3	-151	17,630
3-4	5.5-7.5	0.1	-250	1,620
3-4	7.5-9.5	0.1	-327	1,553
3-4	9.5-11.5	0.1	-410	1,120
3-4	11.5-13.5	0.1	-314	3,210
3-4	13.5-15.5	0.2	-223	3,490
3-4	15.5-20.0	0.1	-313	9,450
3-5	5.5-7.5	0.1	-373	1,258
3-5	7.5-9.5	0.4	-324	3,590
3-5	9.5-11.5	1.5	-116	6,150
3-5	11.5-13.5	0.7	-251	17,360
3-5	13.5-15.5	0.5	-225	17,360

TABLE 19
SITE-5 FIELD PARAMETERS

Location Number	Depth (ft. bgs)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Conductivity (umhos@25^{0}C)
4-1	5.5-7.5	0.3	-77	1,888
4-1	7.5-9.5	2.5	-27	1,566
4-1	9.5-11.5	0.2	-234	4,000
4-1	15.5-20.0	---	---	---
4-2	7.5-9.5	2.3	-212	2,190
4-2	9.5-11.5	2.3	83	1,200
4-2	11.5-13.5	1.2	-147	10,630
4-2	13.5-15.5	1.3	86	23,500
4-2	15.5-20.0	2.8	-148	10,420
4-3	5.5-7.5	4.3	56	544
4-3	7.5-9.5	4.7	47	347
4-3	9.5-11.5	2.6	-44	2,580
4-3	11.5-13.5	1.7	-132	7,900
4-3	13.5-15.5	0.1	-287	11,420
4-3	15.5-20.0	0.1	-211	25,400
4-3	25.0-30.0	0.1	-225	30,200
4-3	30.0-35.0	0.1	-355	30,900
4-4	5.5-7.5	---	---	---
4-4	7.5-9.5	3.3	33.0	453
4-4	9.5-11.5	0.5	-95	1,270
4-4	11.5-13.5	0.7	-153	1,913
4-4	13.5-15.5	0.2	-204	7,070
4-4	15.5-20.0	0.3	-238	15,320
4-4	25.0-30.0	0.3	-206	25,800
4-4	30.0-35.0	0.3	-222	17,430
4-5	7.5-9.5	0.7	-31	---
4-5	11.5-13.5	2.5	-1	4,720
4-5	15.5-20.0	1.1	-96	---
4-6	5.5-7.5	0.7	-259	---
4-6	7.5-9.5	---	---	---
4-6	9.5-11.5	2.3	-137	---
4-6	11.5-13.5	3.2	-146	---
5-1	5.5-7.5	3.2	-48	725
5-1	9.5-11.5	---	---	---
5-1	11.5-13.5	0.5	-225	8,650
5-1	13.5-15.5	1.5	-191	13,740
5-2	11.5-13.5	0.3	-192	10,020
5-2	13.5-15.5	---	---	---
5-2	15.5-20.0	0.1	-390	42,230
5-3	5.5-7.5	5.4	55	862
5-3	7.5-9.5	6.2	53	196
5-3	9.5-11.5	0.7	-150	10,810
5-3	11.5-13.5	---	---	---
5-3	13.5-15.5	0.6	-156	30,700
5-3	15.5-20.0	1.2	-299	42,100
5-3	20.0-25.0	0.1	-351	43,600
5-4	5.5-7.5	0.1	-280	2,130
5-4	7.5-9.5	0.5	-338	1,049
5-4	9.5-11.5	0.1	-264	2,020
5-4	13.5-15.5	0.1	-269	13,980
5-4	15.5-20.0	0.2	-260	26,500
5-5	7.5-9.5	0.2	-414	390
5-5	9.5-11.5	0.1	-248	3,000
5-5	11.5-13.5	1.6	-176	---

TABLE 19
SITE-5 FIELD PARAMETERS

Location Number	Depth (ft. bgs)	Dissolved Oxygen (mg/L)	Redox Potential (mV)	Conductivity (umhos@25^{0}C)
6-1	11.5-13.5	0.7	-292	3,290
6-1	13.5-15.5	---	---	---
6-1	20.0-25.0	0.4	-222	17,990
6-2	5.5-7.5	8.8	-6	633
6-2	11.5-13.5	5.5	-48	1,092
6-2	15.5-20.0	0.3	-159	29,400
6-2	20.0-25.0	8.8	-46	40,800
6-3	5.5-7.5	6.9	-37	500
6-3	11.5-13.5	0.1	-380	9,100
6-3	13.5-15.5	---	---	---
6-3	15.5-20.0	0.4	-215	31,900
6-3	15.5-20.0	0.1	-163	36,900
6-4	7.5-9.5	0.1	-477	1,870
6-5	5.5-7.5	3.2	-433	1,154
6-5	9.5-11.5	0.3	-525	3,270
7-1	13.5-15.5	0.5	-347	16,510
7-2	13.5-15.5	---	---	---
7-3	13.5-15.5	1.8	-149	7,860
7-4	5.5-7.5	5.2	-178	4,790

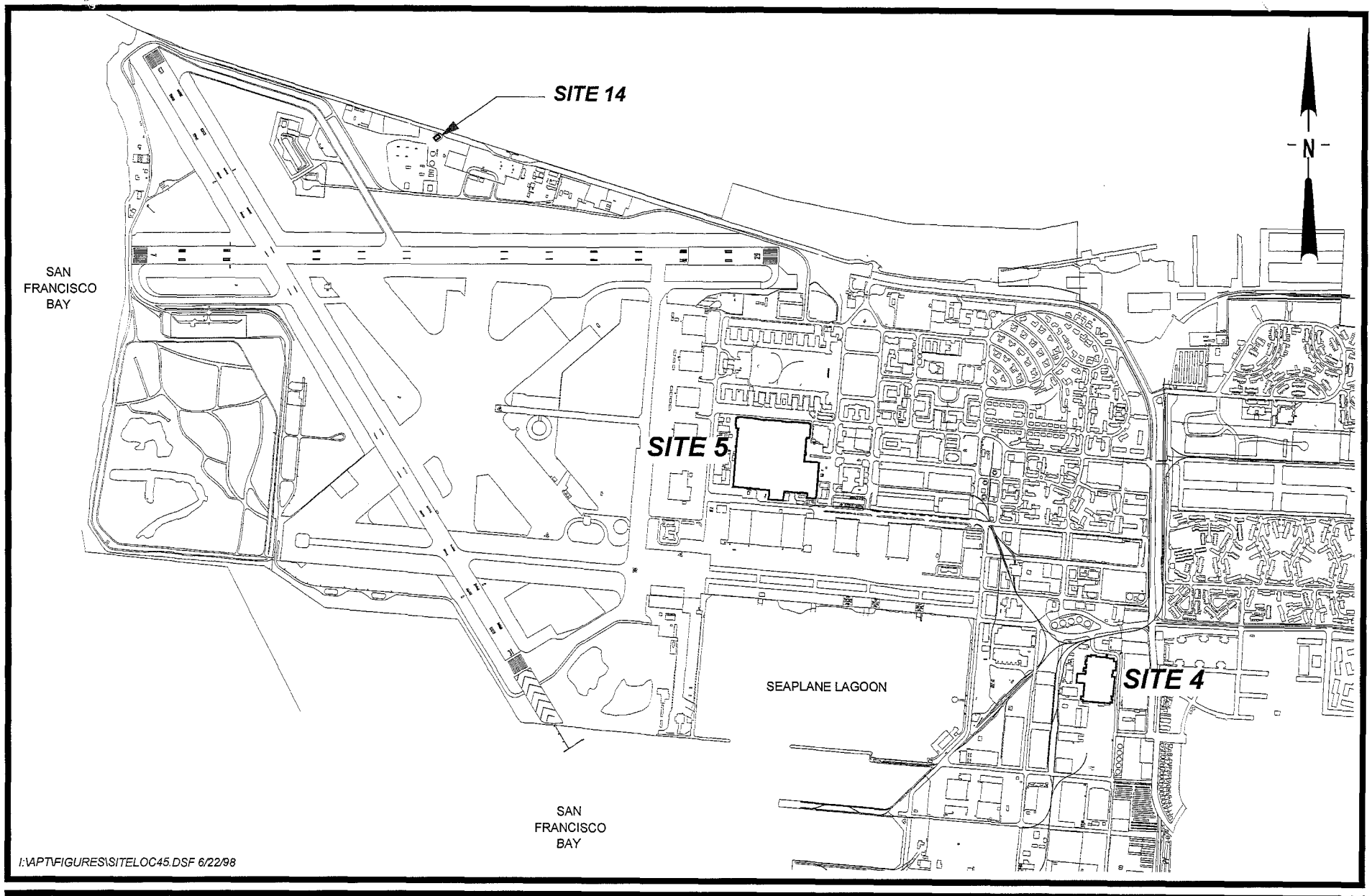
Note: Higher Dissolved Oxygen and Redox numbers may be due to aeration associated with purge method
ft. bgs = feet below ground surface

N00236.001534
ALAMEDA POINT
SSIC NO. 5090.3

FIGURES

DATA TRANSMITTAL MEMORANDUM FOR SITES 4 AND 5 CHLORINATED SOLVENT PLUME DEFINITION AND SITE 14 SUMP INVESTIGATION

DATED 26 JUNE 1998



SCALE: 0 2,000 4,000 FEET

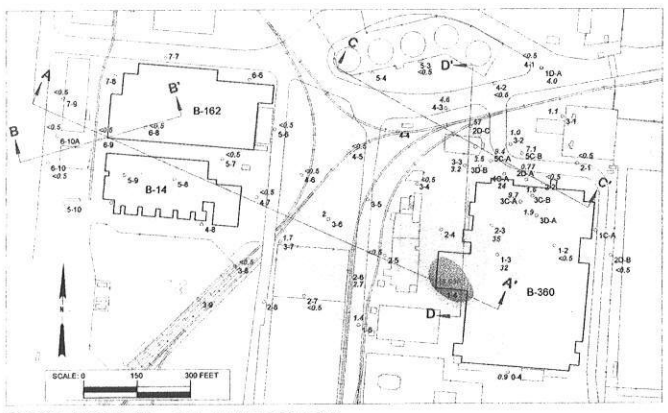
ALAMEDA POINT
ALAMEDA COUNTY, CALIFORINA

SITE MAP

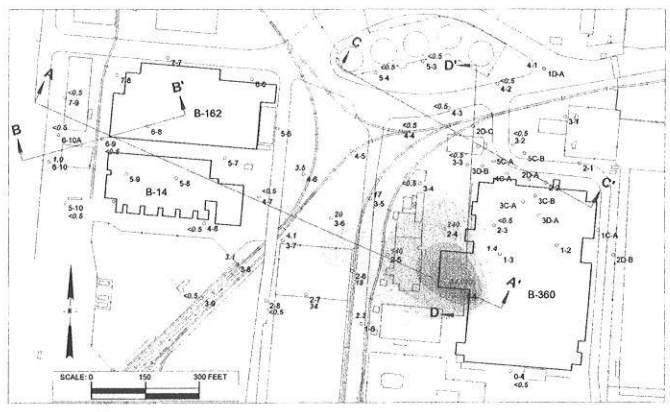
FIGURE
1

PROJECT NO.
APT102

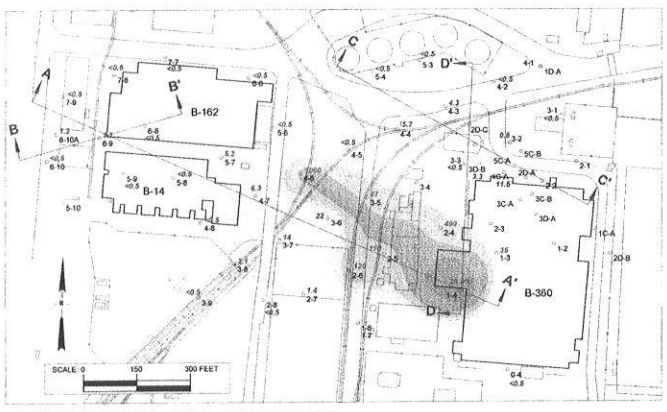
SITE 4 - 1,1-DCE



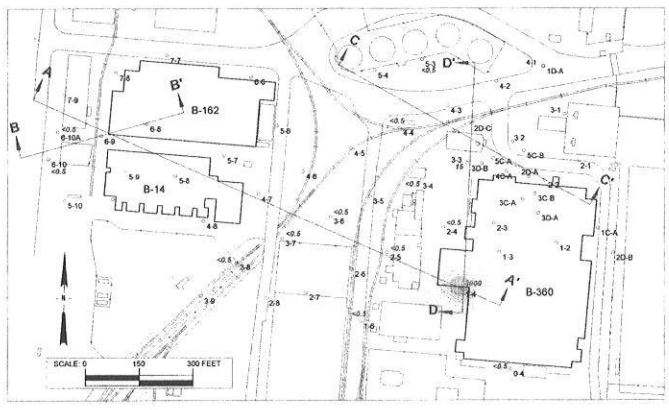
DEPTH INTERVAL: 5.5 - 15.5 FEET-BGS



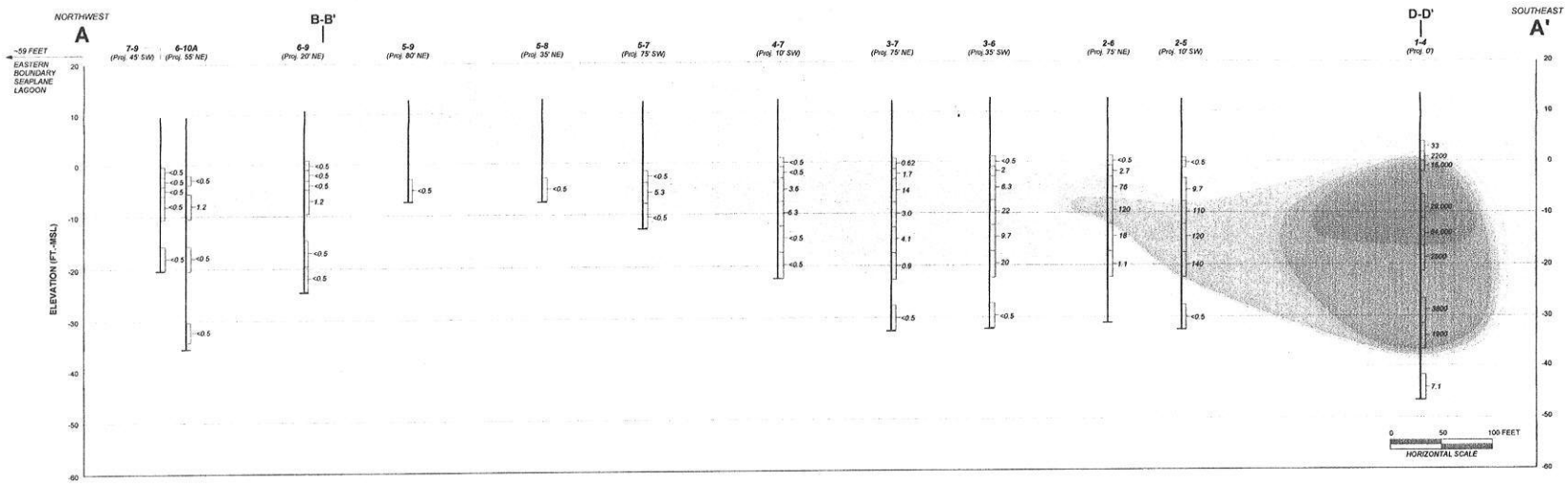
DEPTH INTERVAL: 25 - 35 FEET-BGS

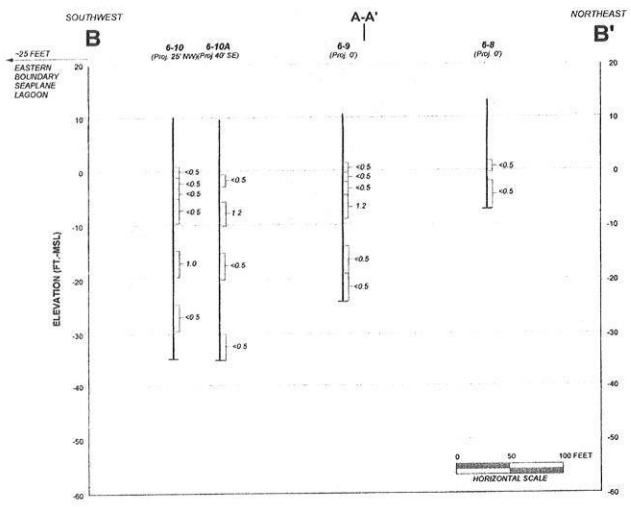


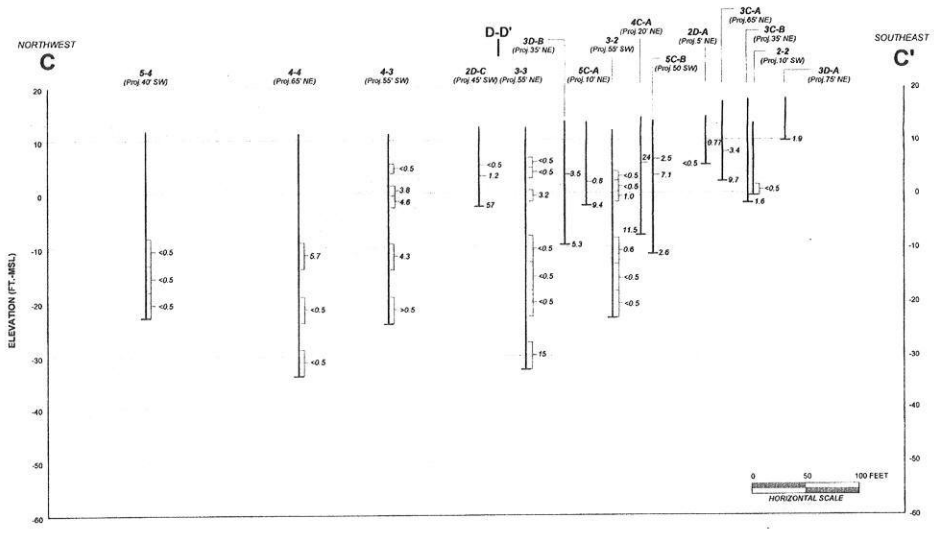
DEPTH INTERVAL: 15.5 - 25 FEET-BGS

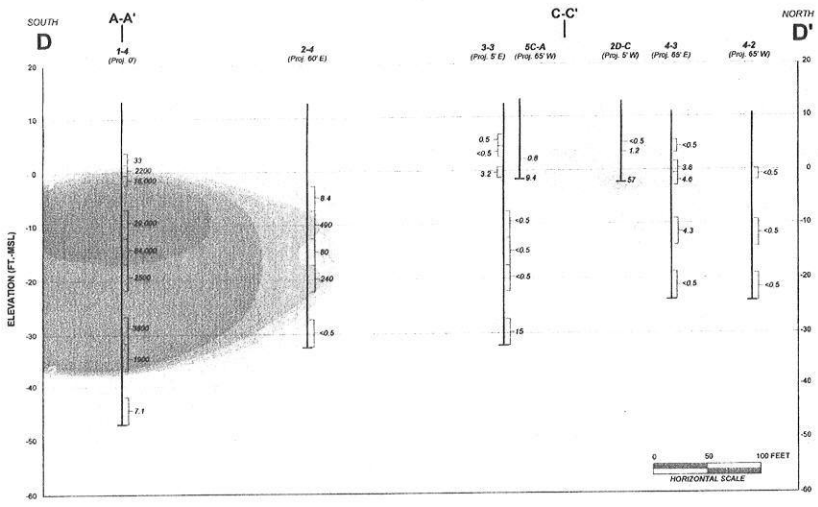


DEPTH INTERVAL: >35 FEET-BGS









EXPLANATION

1-3 Groundwater sampling location

34 1,1-DCE concentration (ug/L)

4-2 (Proj. 65' W) Boring designation showing projected perpendicular distance to line of section

Borehole

103 Sample interval showing concentration of 1,1-DCE in ug/L

<0.5

Bottom of boring

D D' Line of section

1,1-DCE isoconcentration contours

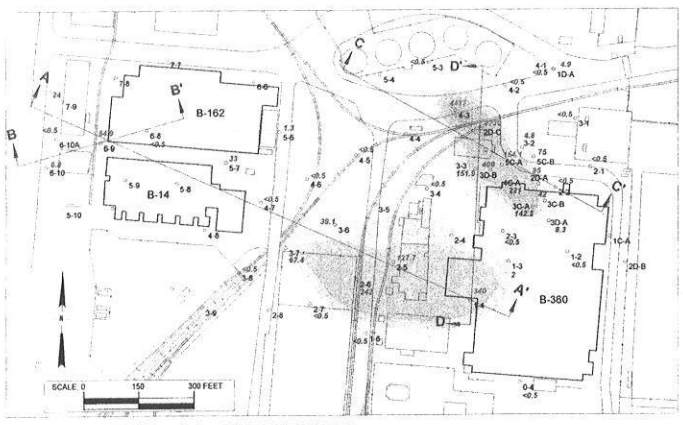
- <0.5 ug/L
- 0.5 - <50 ug/L
- 50 - <100 ug/L
- 100 - <500 ug/L
- 500 - <1000 ug/L
- 1000 - <10,000 ug/L
- 10,000 - <100,000 ug/L
- ≥100,000 ug/L

~59 FEET Approximate distance between eastern boundary of seaplane lagoon and western edge of cross sections A-A' and B-B'. Groundwater samples were not collected in this zone due to the presence of concrete rip-rap and buried utilities

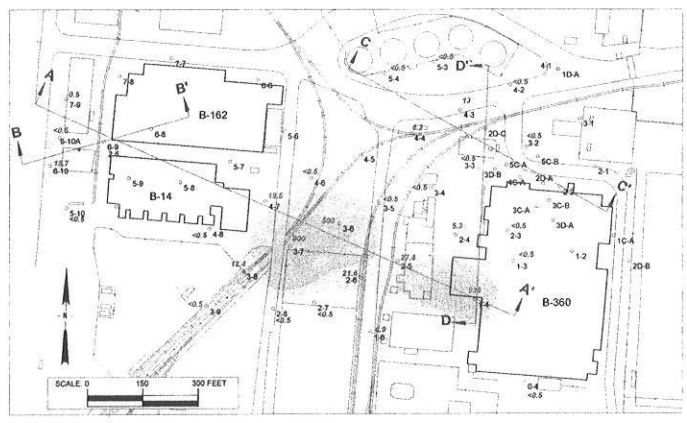
NOTE:
EFW boring locations and elevations determined by L. Wade Hammond, Land Surveyor.
OGISO boring locations and elevations provided to EFW by Tetra Tech, EM Inc.

ALAMEDA POINT ALAMEDA COUNTY, CALIFORNIA	FIGURE 2
SITE 4 - 1,1-DCE	PROJECT APT 102

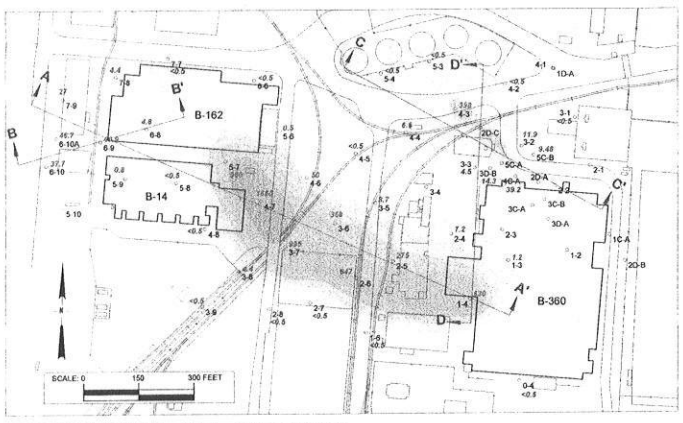
SITE 4 - 1,2-DCE



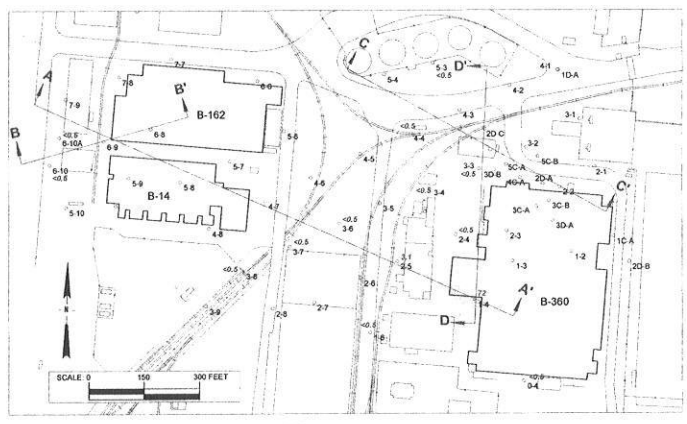
DEPTH INTERVAL: 5.5 - 15.5 FEET-BGS



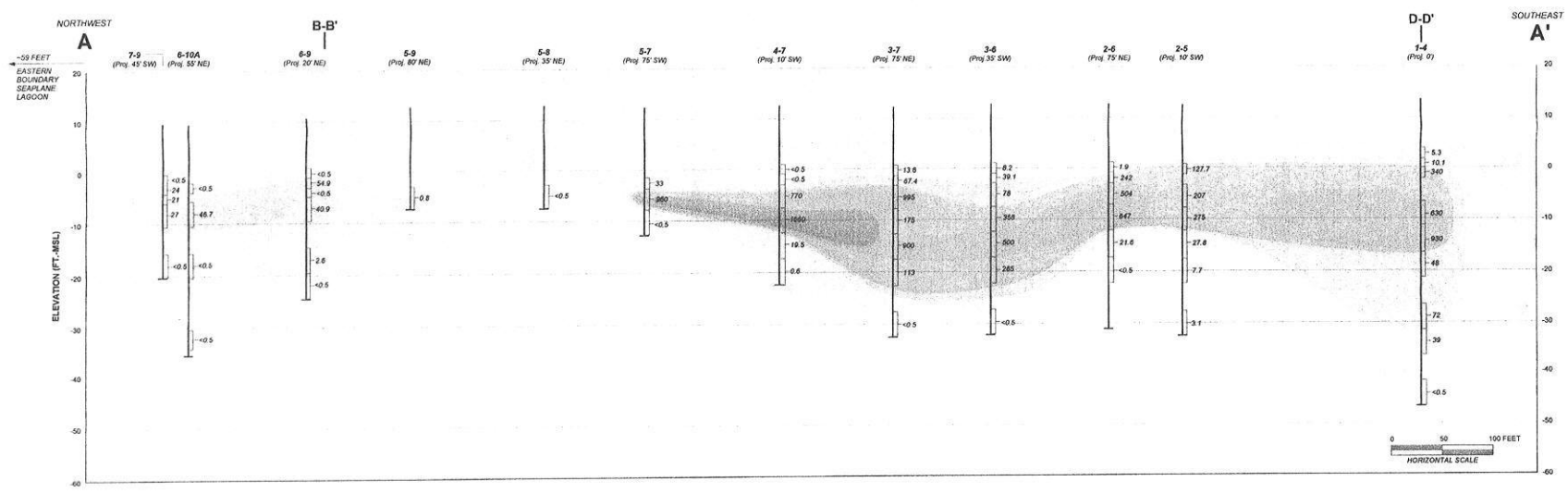
DEPTH INTERVAL: 25 - 35 FEET-BGS

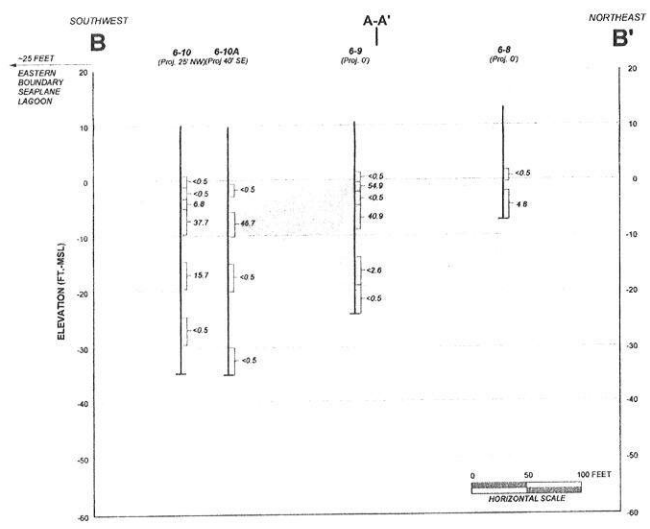


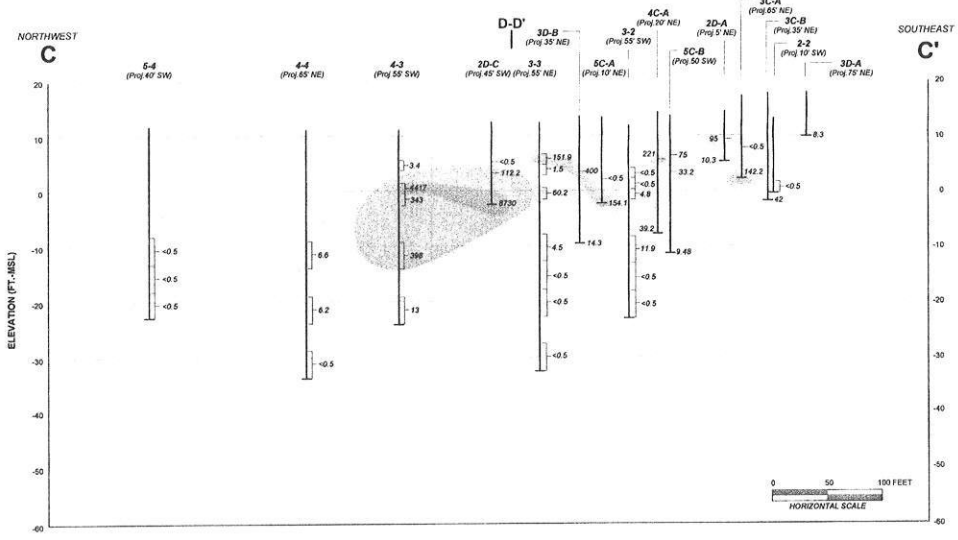
DEPTH INTERVAL: 15.5 - 25 FEET-BGS

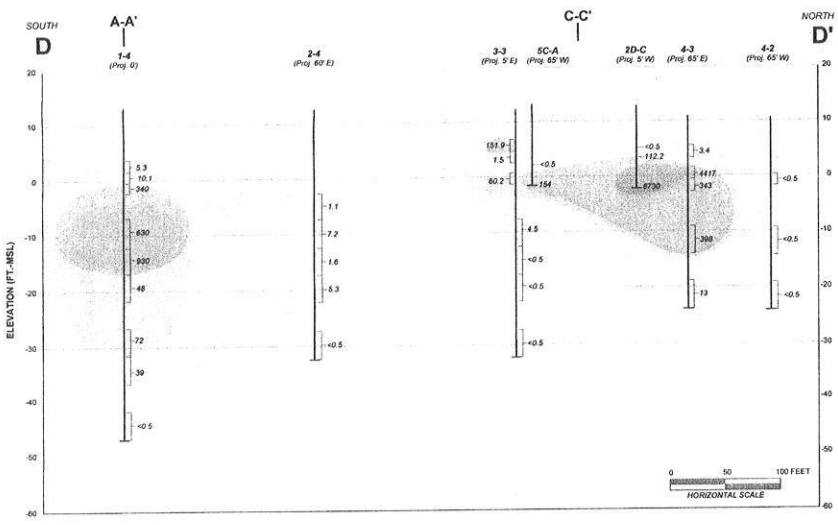


DEPTH INTERVAL: >35 FEET-BGS









EXPLANATION

- Groundwater sampling location
- 1,2-DCE concentration (ug/L)
- Boring designation showing projected perpendicular distance to line of section
- Borehole
- Sample interval showing concentration of 1,2-DCE in ug/L
- Bottom of boring
- Line of section

1,2-DCE isoconcentration contours

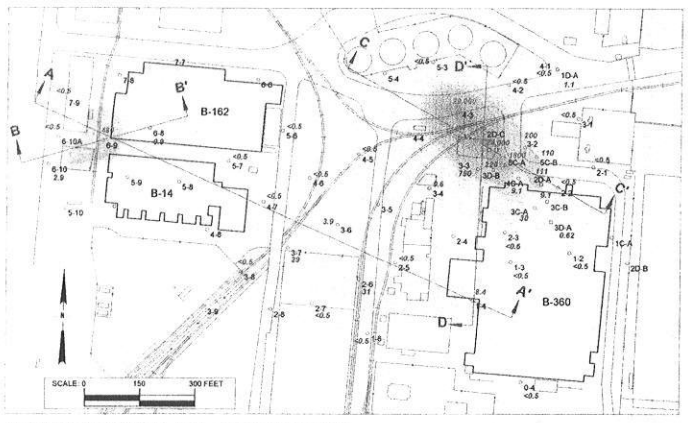
- <0.5 ug/L
- 0.5 - <50 ug/L
- 50 - <100 ug/L
- 100 - <500 ug/L
- 500 - <1000 ug/L
- 1000 - <10,000 ug/L
- 10,000 - <100,000 ug/L
- ≥100,000 ug/L

~59 FEET — Approximate distance between eastern boundary of seaplane lagoon and western edge of cross sections A-A' and B-B'. Groundwater samples were not collected in this zone due to the presence of concrete rip-rap and buried utilities

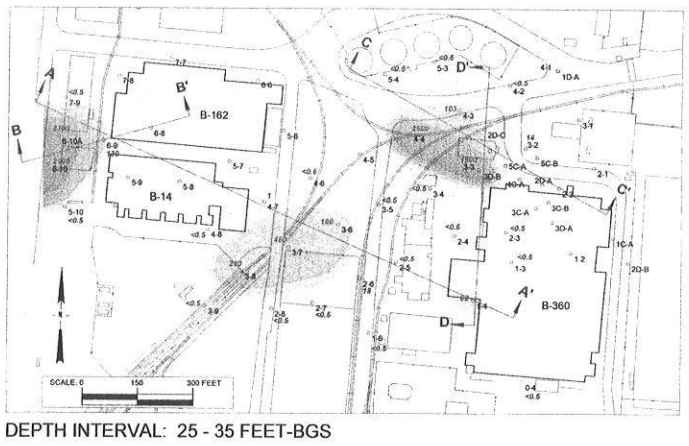
NOTE:
EFW borings locations and elevations determined by L. Wade Hammond, Land Surveyor
OGISO boring locations and elevations provided to EFW by Tetra Tech, EM Inc

ALAMEDA POINT ALAMEDA COUNTY, CALIFORNIA	FIGURE 3
SITE 4 - 1,2-DCE	PROJECT APT 102

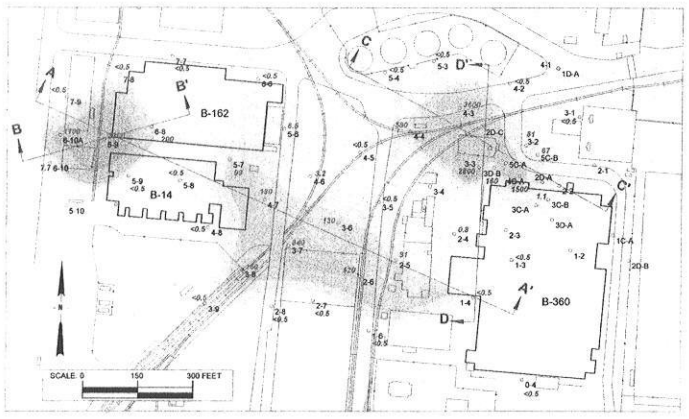
SITE 4 - TCE



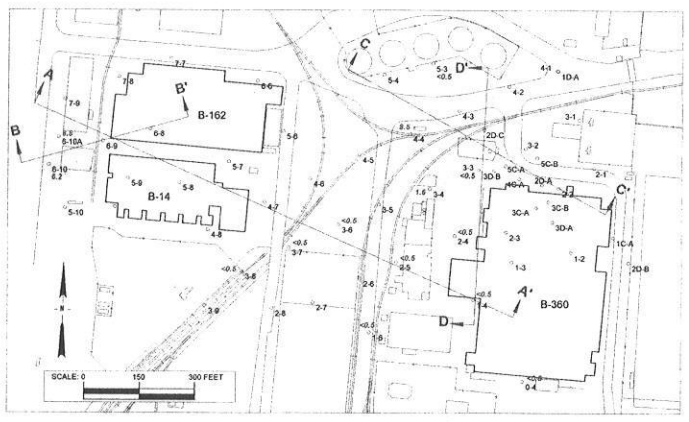
DEPTH INTERVAL: 5.5 - 15.5 FEET-BGS



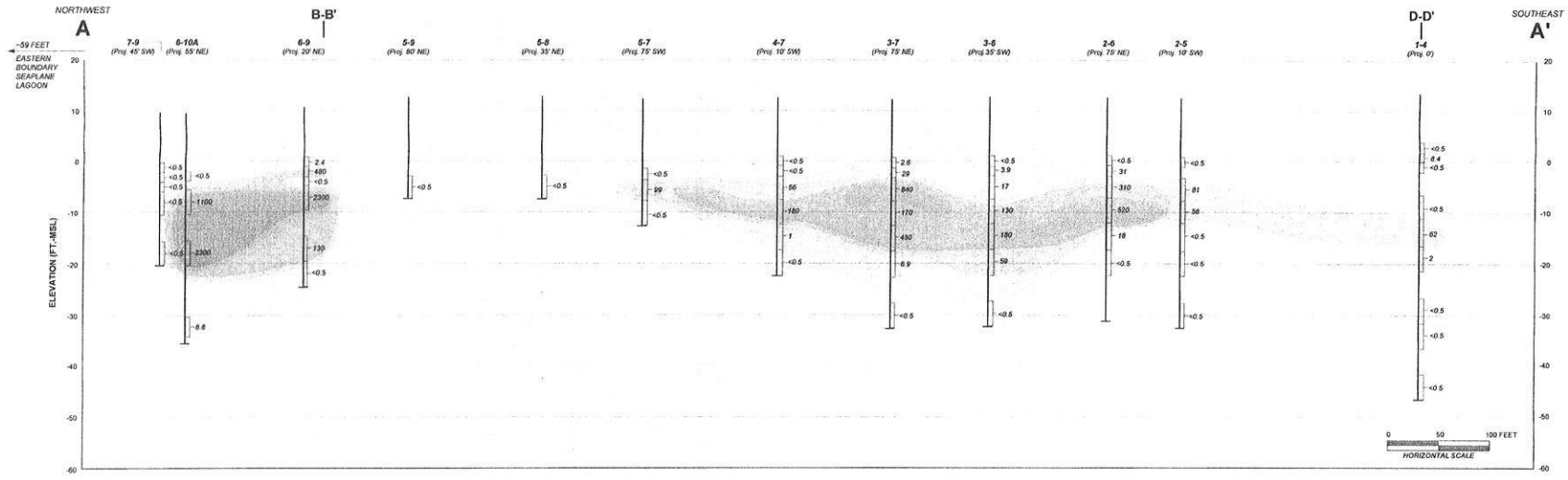
DEPTH INTERVAL: 25 - 35 FEET-BGS

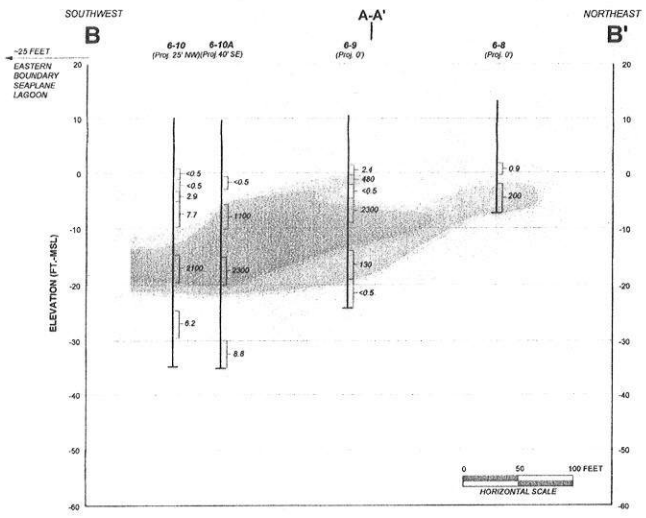


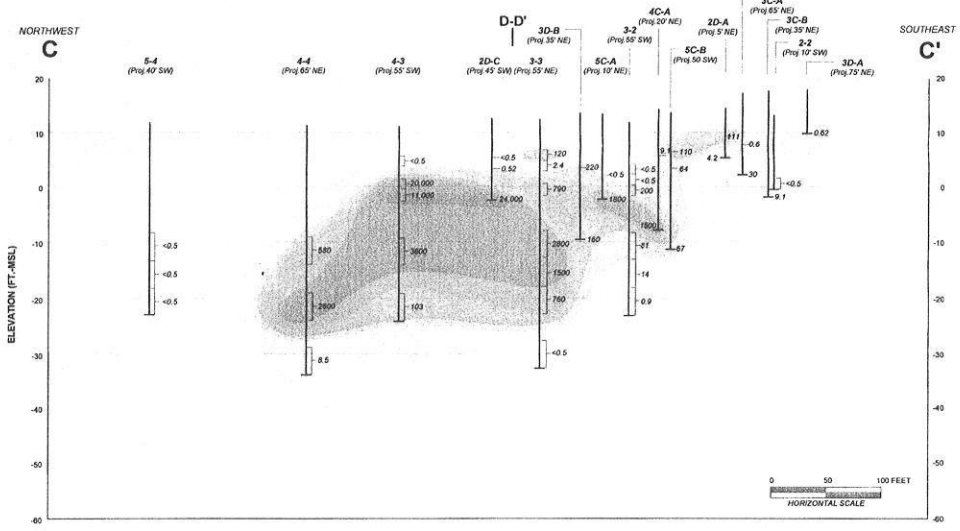
DEPTH INTERVAL: 15.5 - 25 FEET-BGS

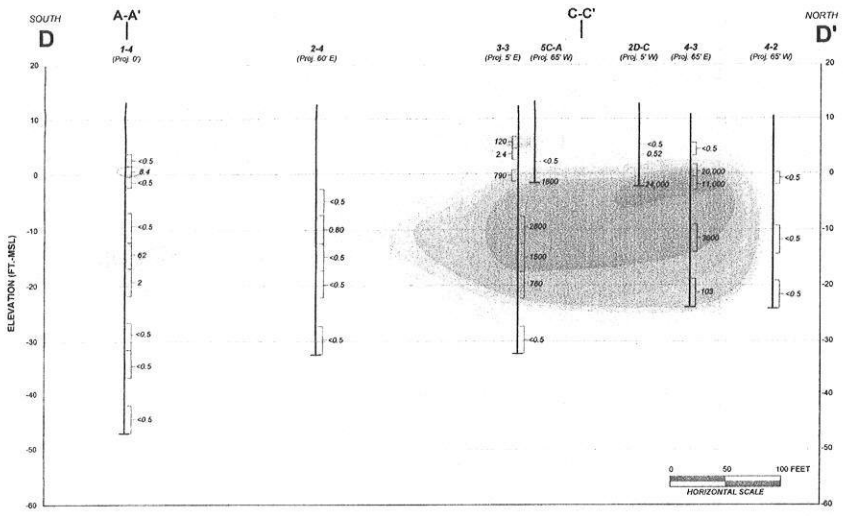


DEPTH INTERVAL: >35 FEET-BGS









EXPLANATION

1-3 — Groundwater sampling location

34 — TCE concentration (ug/L)

4-2 (Proj. 65' W) — Boring designation showing projected perpendicular distance to line of section

Borehole

103 — Sample interval showing concentration of TCE in ug/L

<0.5

Bottom of boring

D D' — Line of section

TCE isoconcentration contours

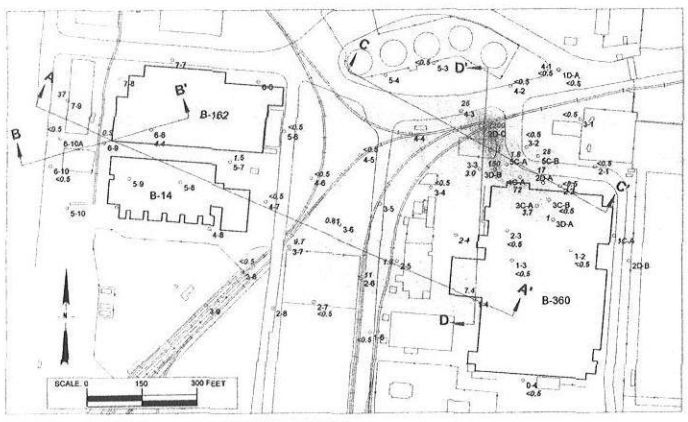
- <0.5 ug/L
- 0.5 - <50 ug/L
- 50 - <100 ug/L
- 100 - <500 ug/L
- 500 - <1000 ug/L
- 1000 - <10,000 ug/L
- 10,000 - <100,000 ug/L
- ≥100,000 ug/L

~59 FEET — Approximate distance between eastern boundary of seaplane lagoon and western edge of cross sections A-A' and B-B'. Groundwater samples were not collected in this zone due to the presence of concrete rip-rap and buried utilities

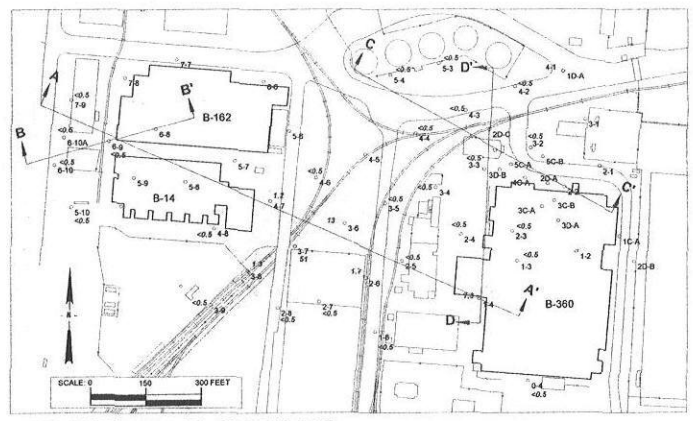
NOTE:
EFW boring locations and elevations determined by L. Wade Hammond, Land Surveyor.
OGISO boring locations and elevations provided to EFW by Tetra Tech, EM Inc.

ALAMEDA POINT ALAMEDA COUNTY, CALIFORNIA	FIGURE 4
SITE 4 - TCE	PROJECT APT 102

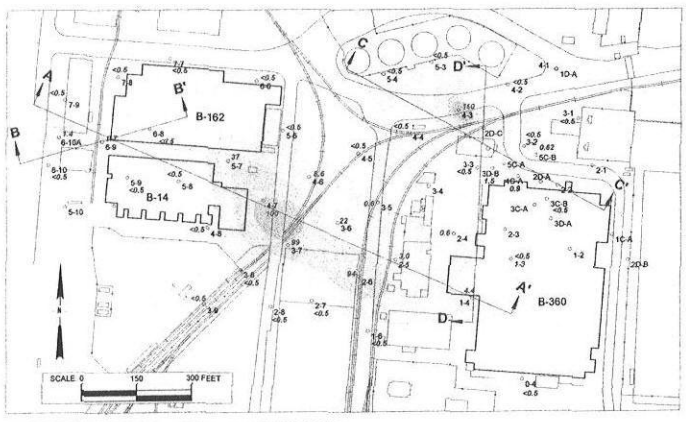
SITE 4 - VINYL CHLORIDE



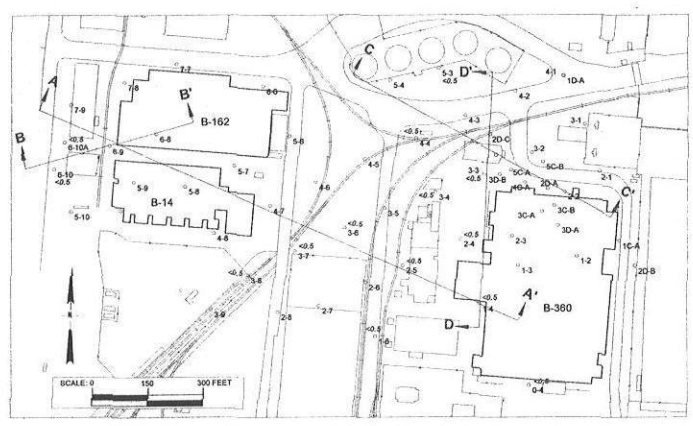
DEPTH INTERVAL: 5.5 - 15.5 FEET-BGS



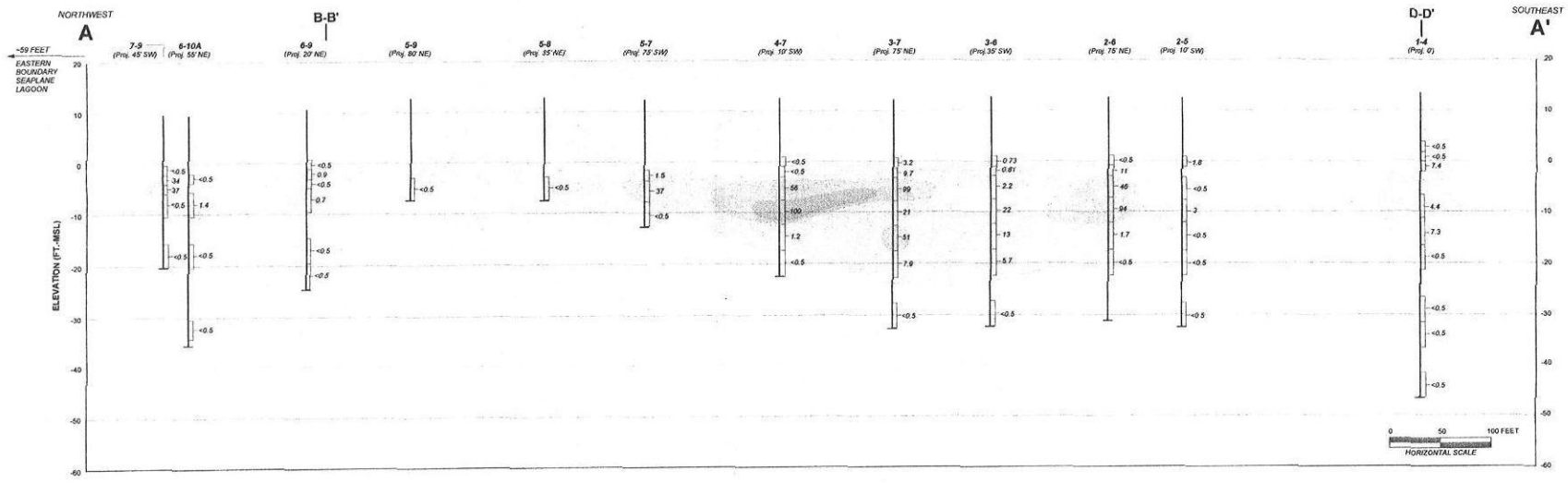
DEPTH INTERVAL: 25 - 35 FEET-BGS

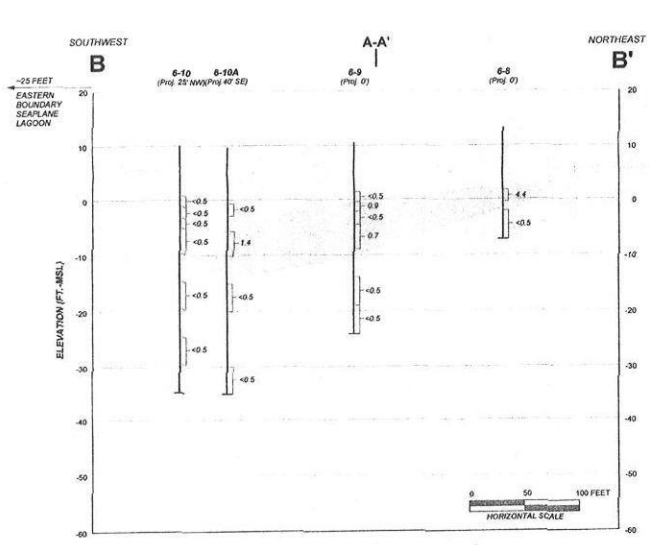


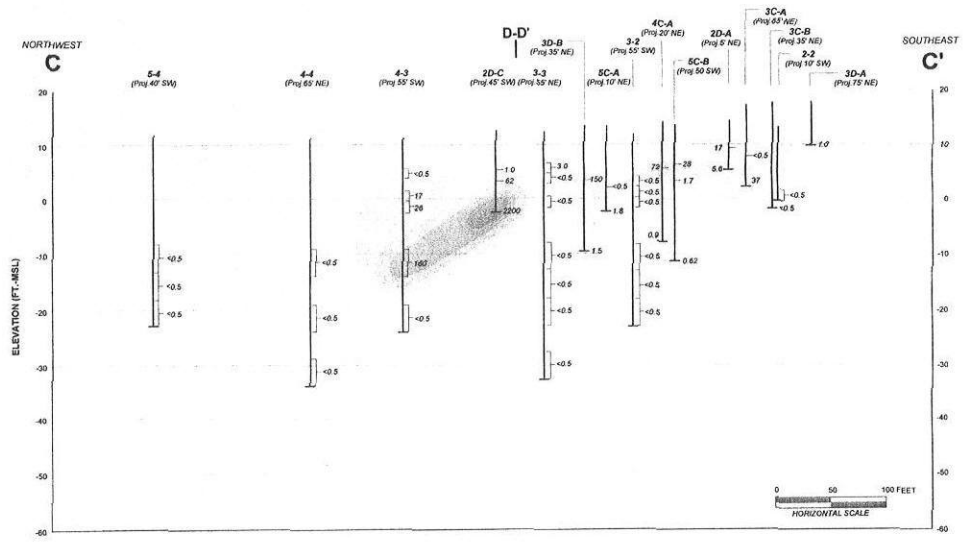
DEPTH INTERVAL: 15.5 - 25 FEET-BGS

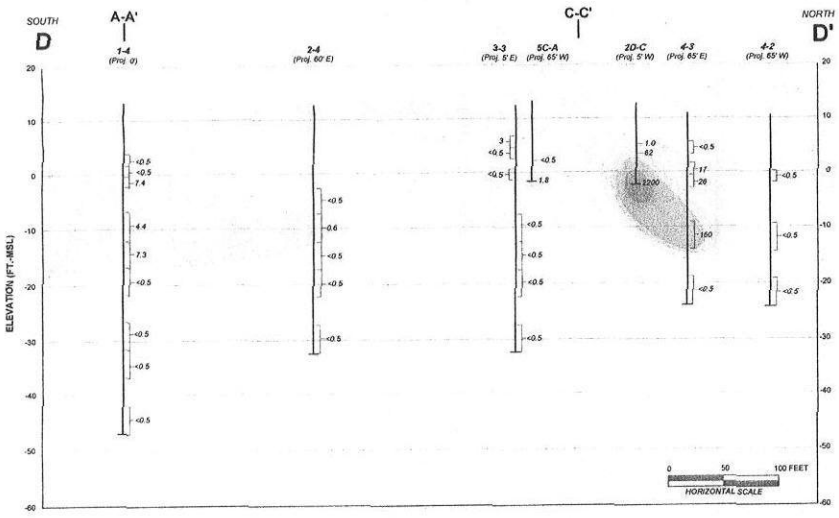


DEPTH INTERVAL: >35 FEET-BGS









EXPLANATION

- 1-3 — Groundwater sampling location
- 34 — Vinyl chloride concentration (ug/L)
- 4-2 (Proj. 65' W) — Boring designation showing projected perpendicular distance to line of section
- Borehole
- 103 — Sample interval showing concentration of vinyl chloride in ug/L
- <0.5
- Bottom of boring
- D — D' — Line of section

Vinyl chloride isoconcentration contours

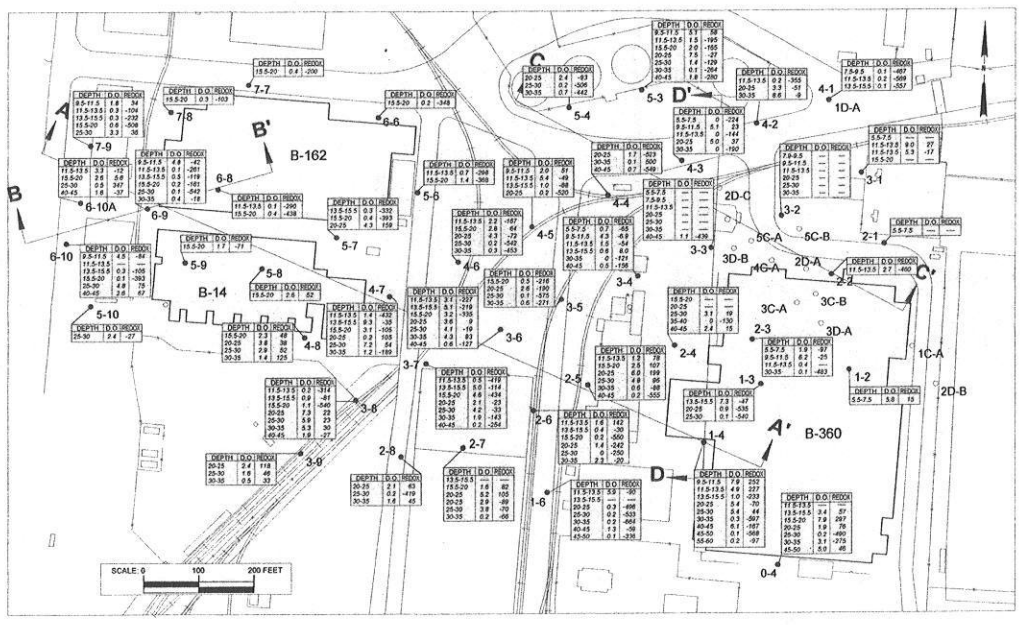
- <0.5 ug/L
- 0.5 - <50 ug/L
- 50 - <100 ug/L
- 100 - <500 ug/L
- 500 - <1000 ug/L
- 1000 - <10,000 ug/L
- 10,000 - <100,000 ug/L
- >100,000 ug/L

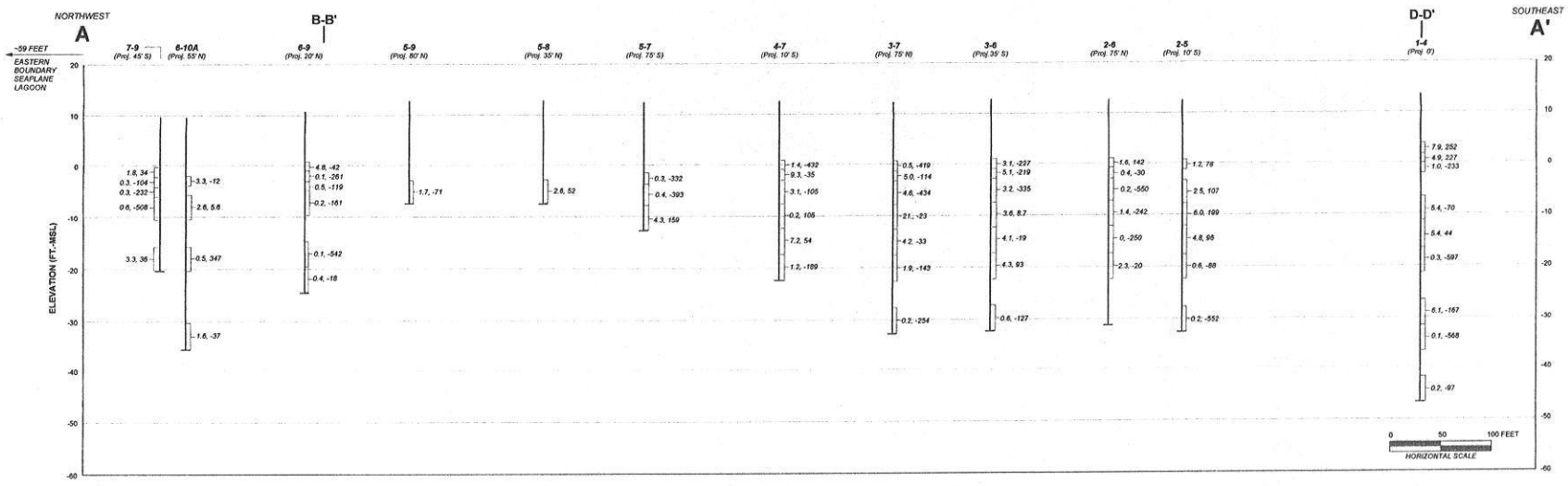
~59 FEET — Approximate distance between eastern boundary of seaplane lagoon and western edge of cross sections A-A' and B-B'. Groundwater samples were not collected in this zone due to the presence of concrete rip-rap and buried utilities.

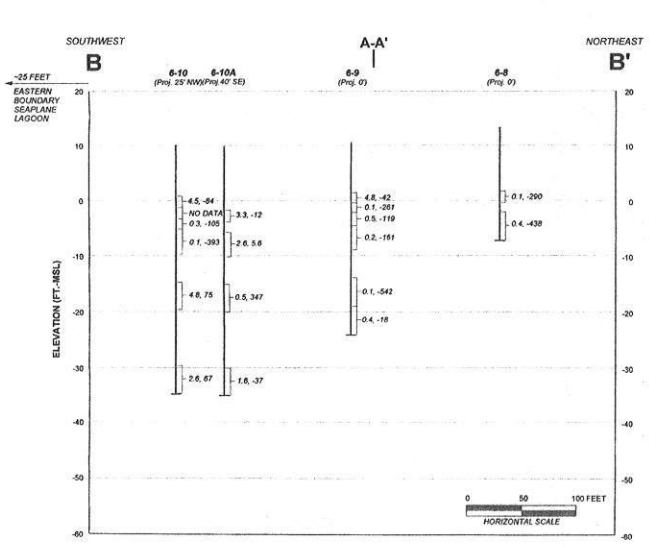
NOTE:
EFW borings locations and elevations determined by L. Wade Hammond, Land Surveyor.
OGISO boring locations and elevations provided to EFW by Tetra Tech, EM Inc.

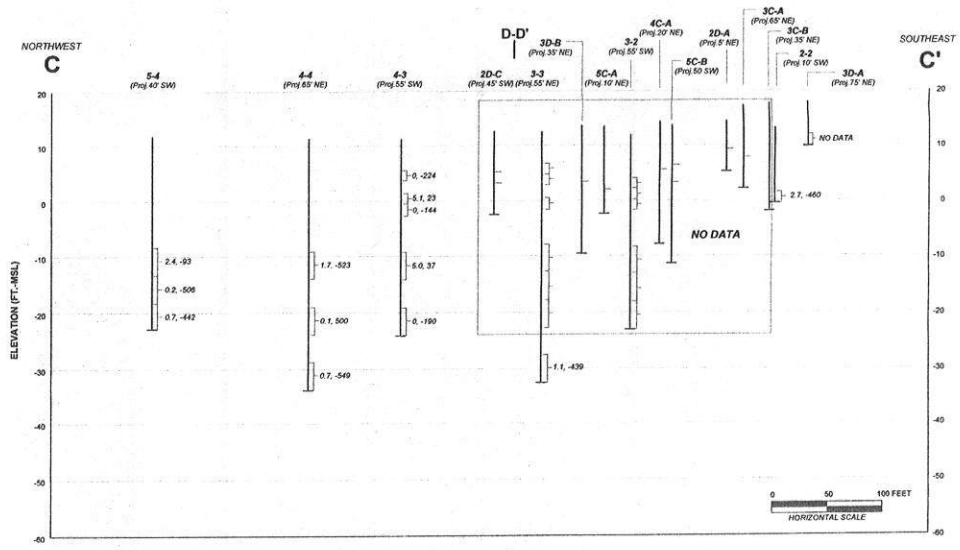
ALAMEDA POINT ALAMEDA COUNTY, CALIFORNIA	FIGURE 5
SITE 4 - VINYL CHLORIDE	PROJECT APT 102

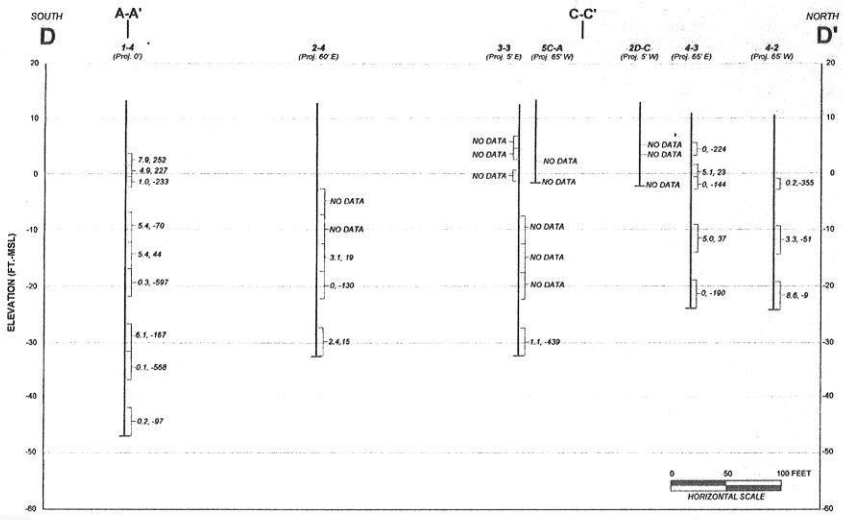
SITE 4
DISSOLVED OXYGEN AND REDOX POTENTIAL











EXPLANATION

1-3 — Groundwater sampling location

Sample interval (Ft-BGS)

D.O. (Dissolved Oxygen, mg/L)

Redox Potential (mV)

DEPTH	D.O.	REDOX
11.5-13.5	2.9	-30
13.5-15.5	---	---
20-25	0.3	-498
25-30	0.2	-533
30-35	0.2	-664
40-45	1.3	-59
45-50	0.1	-335

4-2 (Proj. 65' W) — Boring designation showing projected perpendicular distance to line of section

Borehole

3.4, -130 — Sample interval showing D.O. and Redox values

7.9, 297 — Bottom of boring

D — D' Line of section

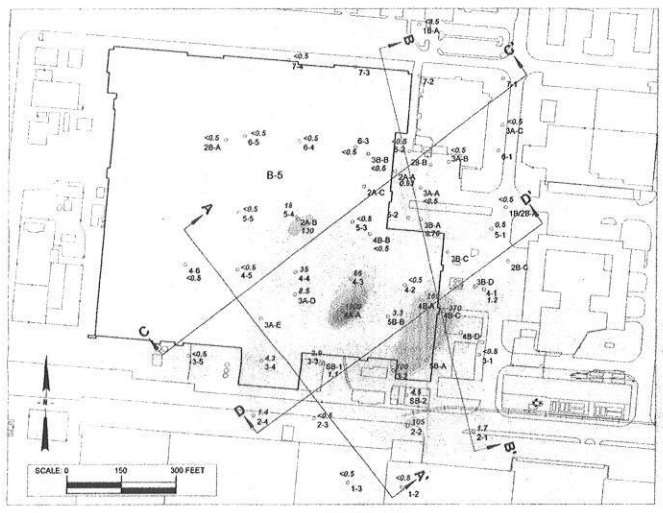
~59 FEET — Approximate distance between eastern boundary of seaplane lagoon and western edge of cross sections A-A' and B-B'. Groundwater samples were not collected in this zone due to the presence of concrete rip-rap and buried utilities.

NOTE:
EFW boring locations and elevations determined by L. Wade Hammond, Land Surveyor.
OGISO boring locations and elevations provided to EFW by Tetra Tech, EM Inc.

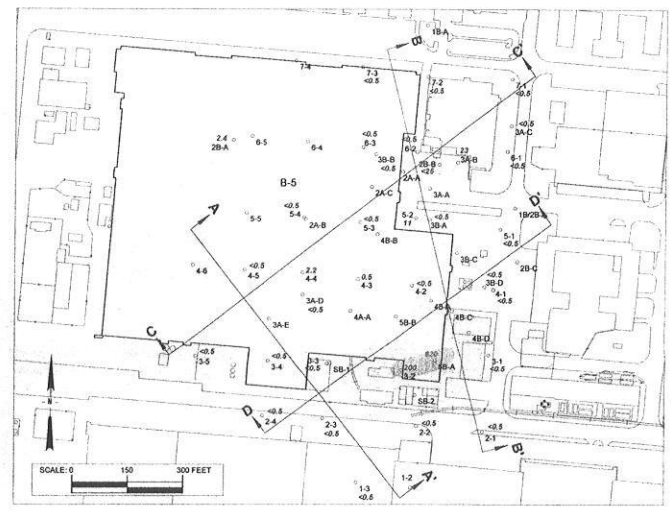
ALAMEDA POINT ALAMEDA COUNTY, CALIFORNIA	FIGURE 6
SITE 4 - DISSOLVED OXYGEN AND REDOX POTENTIAL	PROJECT APT 102

I:\APT\FIGURES\SITE4\REDOX.DSF 9/16/99

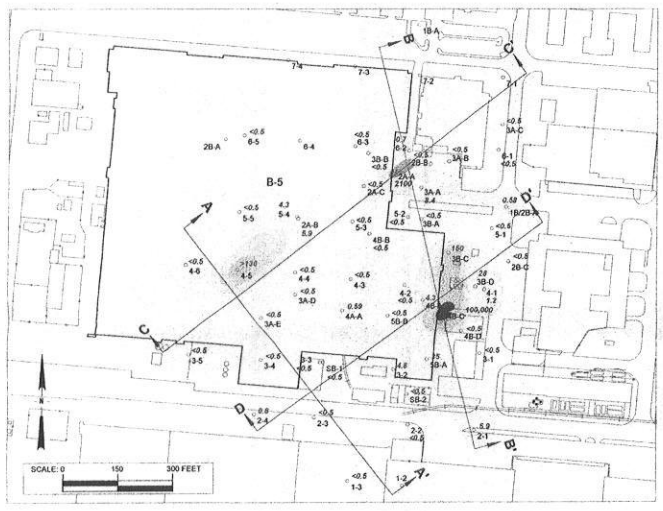
SITE 5 - 1,1,1-TCA



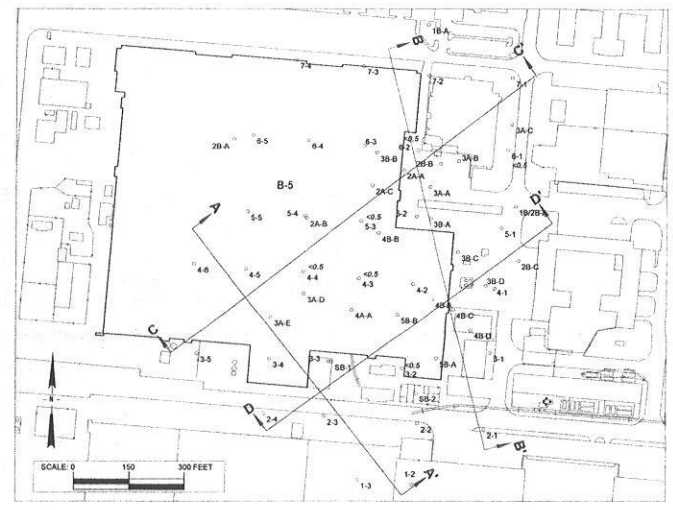
DEPTH INTERVAL: 5.5 - 9.5 FEET-BGS



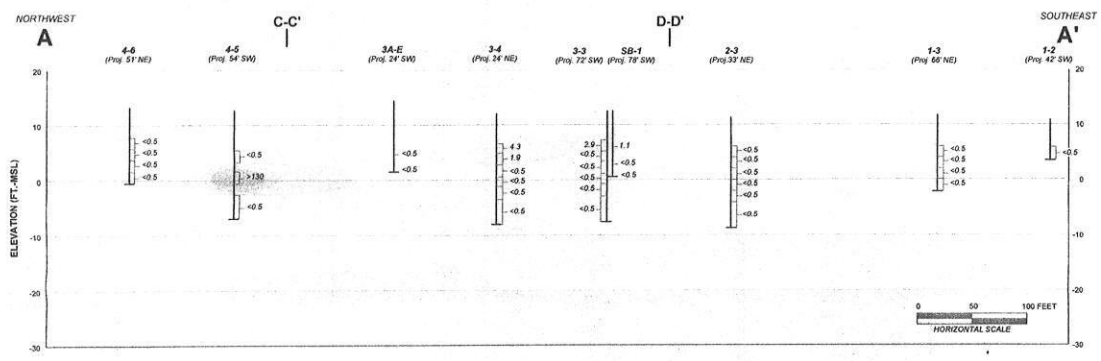
DEPTH INTERVAL: 13.5 - 20 FEET-BGS

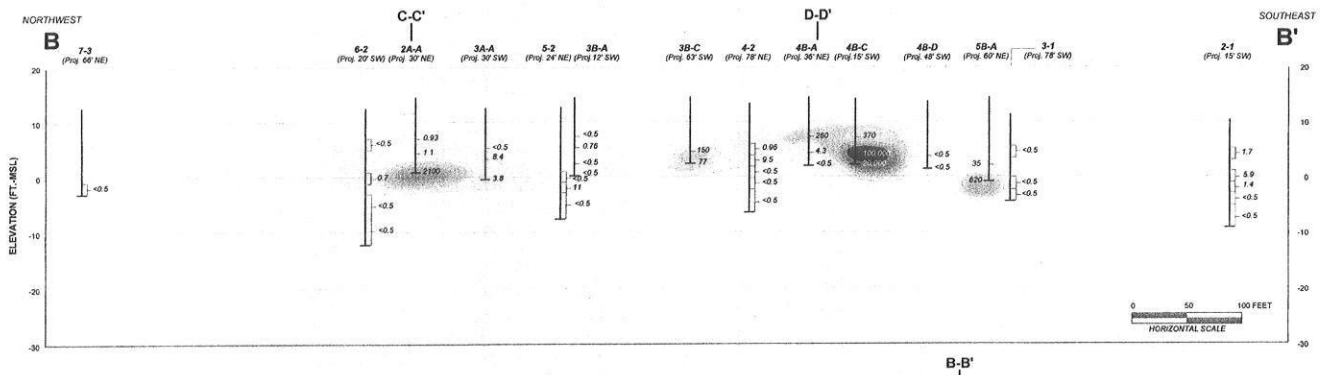


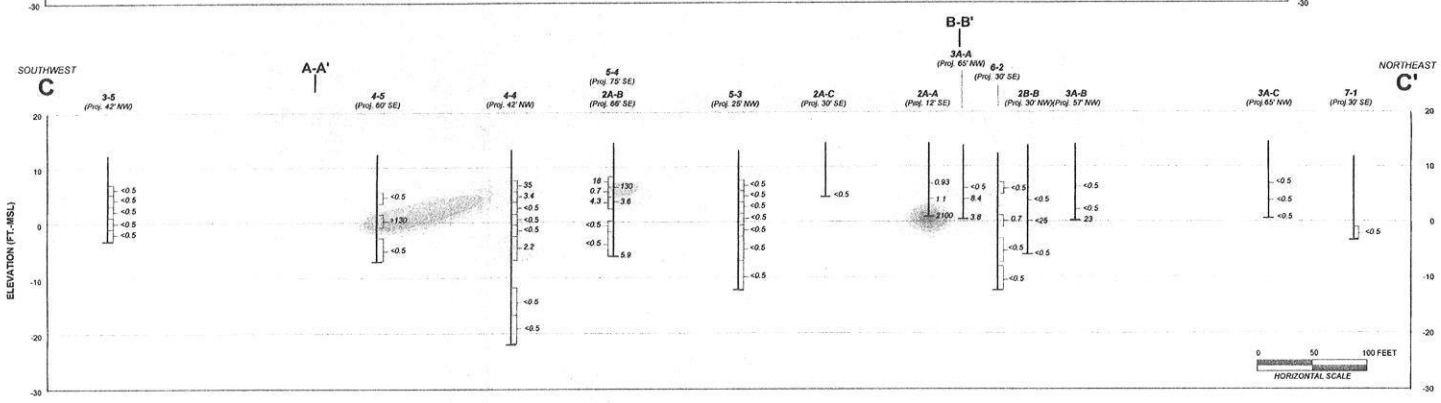
DEPTH INTERVAL: 9.5 - 13.5 FEET-BGS

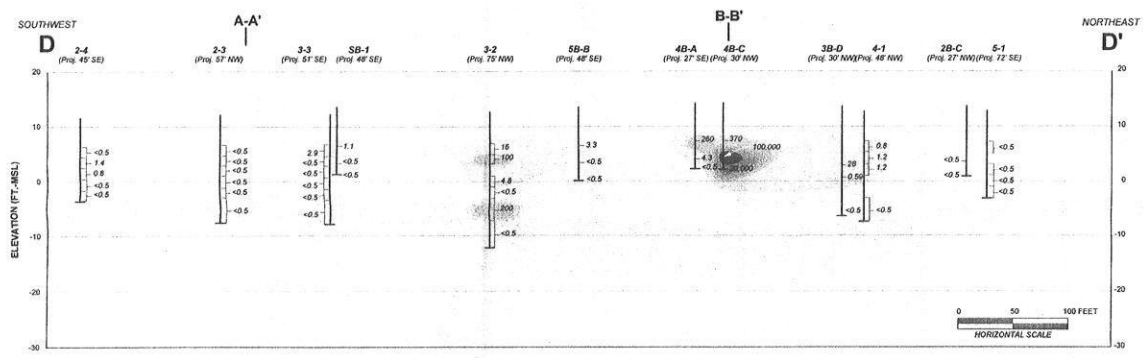


DEPTH INTERVAL: >20 FEET-BGS









EXPLANATION

1-3 Groundwater sampling location

34 1,1,1-TCA concentration (ug/L)

4-2 (Proj. 65' W) Boring designation showing projected perpendicular distance to line of section

Borehole

103 Sample interval showing concentration of 1,1,1-TCA in ug/L

<0.5

Bottom of boring

D D' Line of section

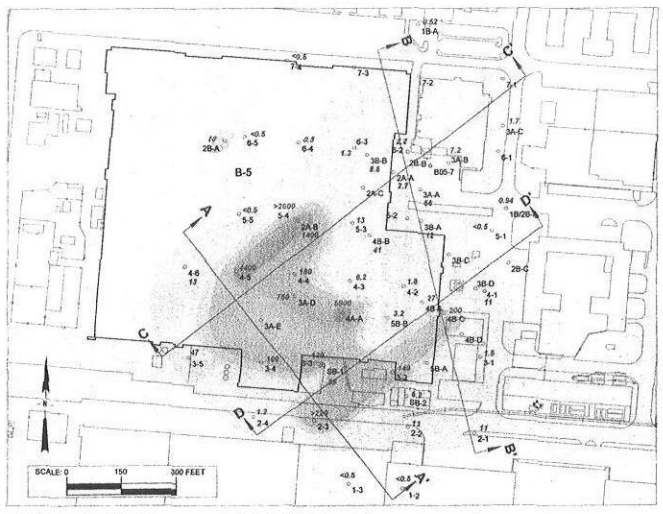
1,1,1-TCA isoconcentration contours

- <0.5 ug/L
- 0.5 - <50 ug/L
- 50 - <100 ug/L
- 100 - <500 ug/L
- 500 - <1000 ug/L
- 1000 - <10,000 ug/L
- 10,000 - <100,000 ug/L
- ≥100,000 ug/L

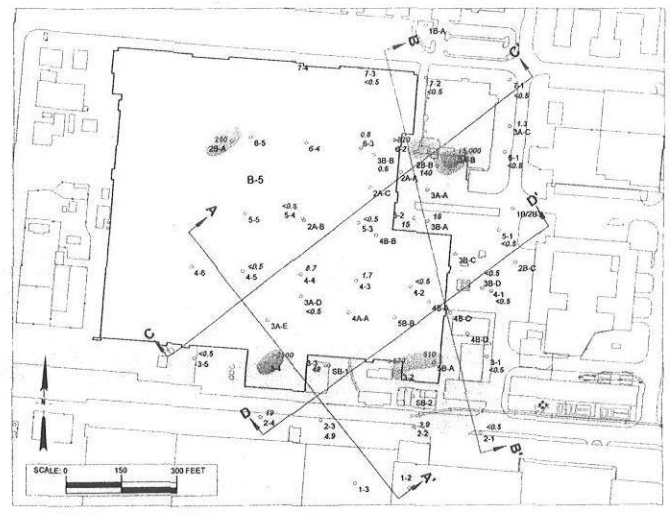
NOTE:
EFW boring locations and elevations determined by L. Wade Hammond, Land Surveyor
OGISO boring locations and elevations provided to EFW by Tetra Tech, EM Inc.

ALAMEDA POINT ALAMEDA COUNTY, CALIFORNIA	FIGURE 7
SITE 5 - 1,1,1-TCA	PROJECT APT 103

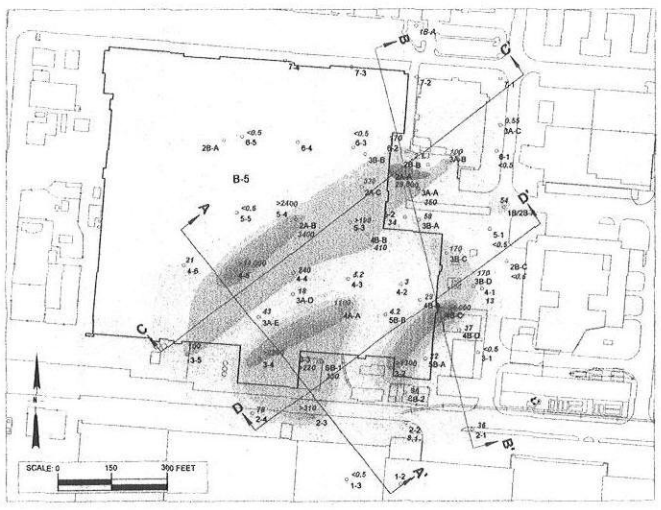
SITE 5 - 1,1-DCA



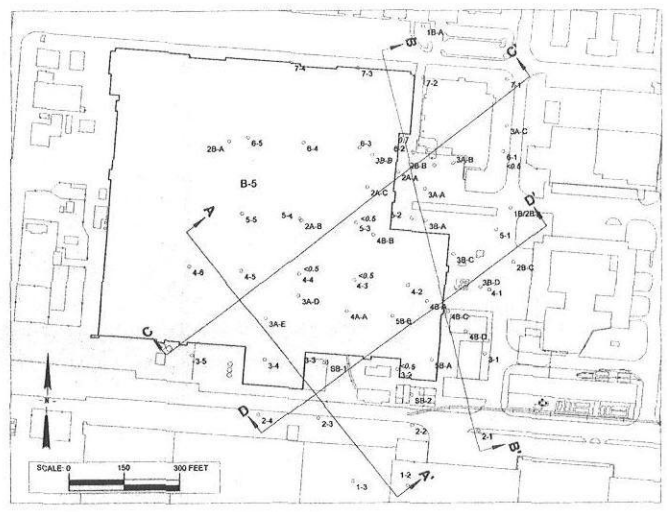
DEPTH INTERVAL: 5.5 - 9.5 FEET-BGS



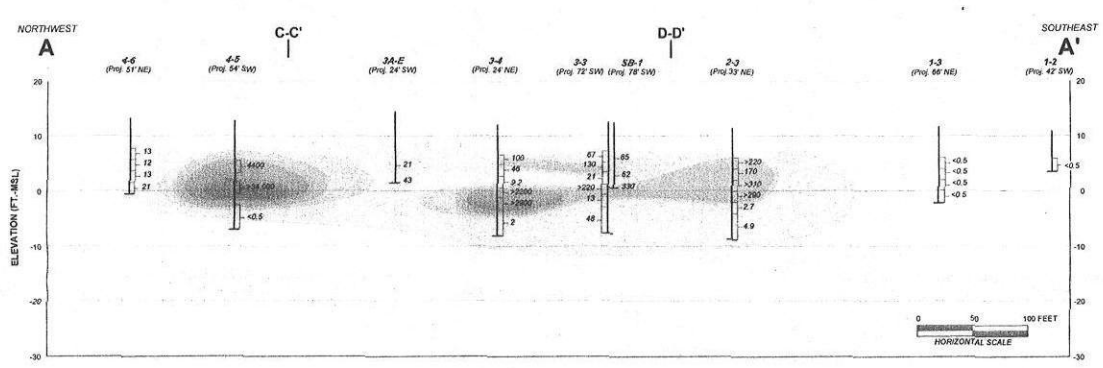
DEPTH INTERVAL: 13.5 - 20 FEET-BGS

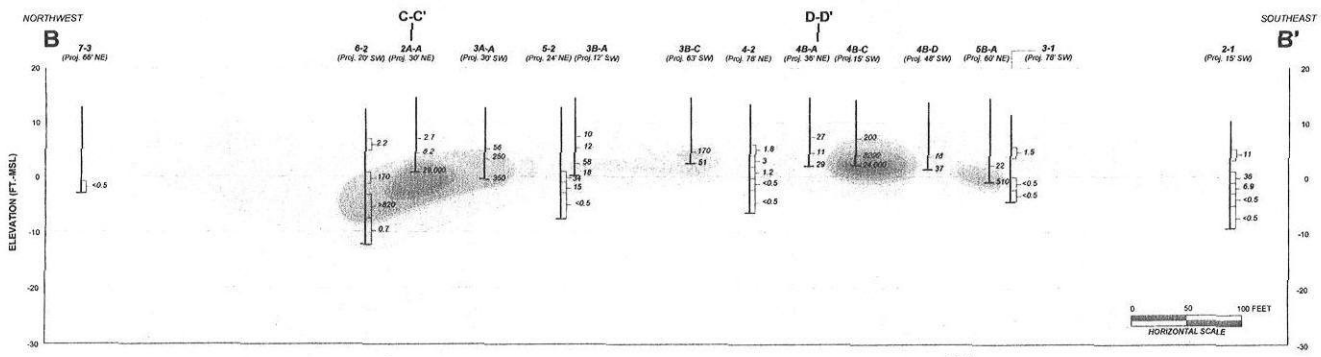


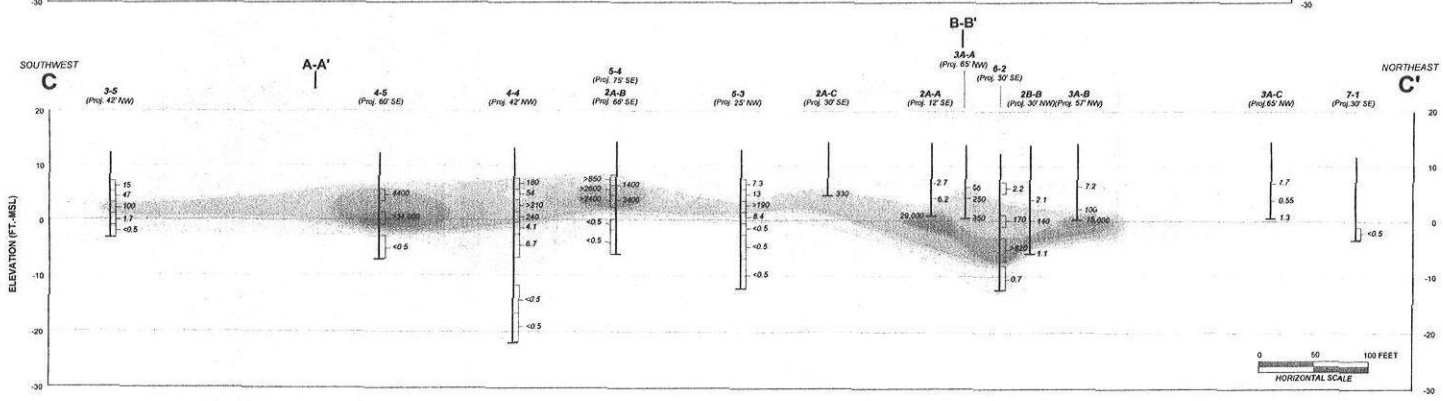
DEPTH INTERVAL: 9.5 - 13.5 FEET-BGS

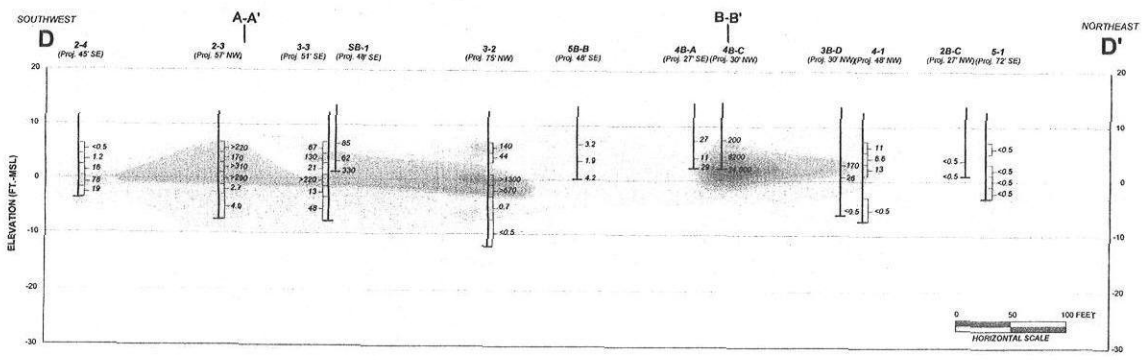


DEPTH INTERVAL: >20 FEET-BGS









EXPLANATION

1-3 Groundwater sampling location

34 1,1-DCA concentration (ug/L)

4-2 (Proj. 65' W) Boring designation showing projected perpendicular distance to line of section

Borehole

103 Sample interval showing concentration of 1,1-DCA in ug/L

<0.5

Bottom of boring

D D' Line of section

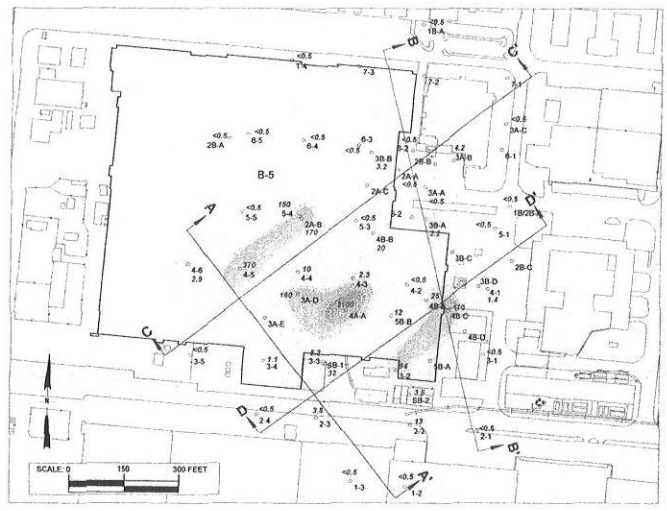
1,1-DCA isoconcentration contours

- <0.5 ug/L
- 0.5 - <50 ug/L
- 50 - <100 ug/L
- 100 - <500 ug/L
- 500 - <1000 ug/L
- 1000 - <10,000 ug/L
- 10,000 - <100,000 ug/L
- ≥100,000 ug/L

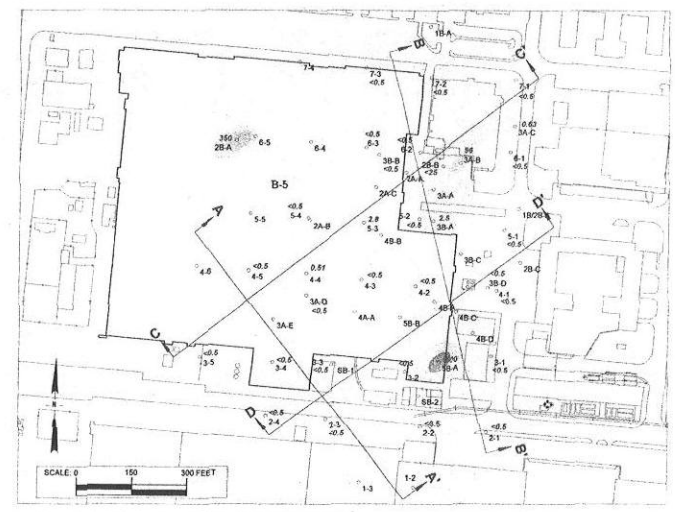
NOTE
EFW boring locations and elevations determined by L. Wade Hammond, Land Surveyor.
OGISO boring locations and elevations provided to EFW by Tetra Tech, EM Inc

ALAMEDA POINT ALAMEDA COUNTY, CALIFORNIA	FIGURE 8
SITE 5 - 1,1-DCA	PROJECT APT 103

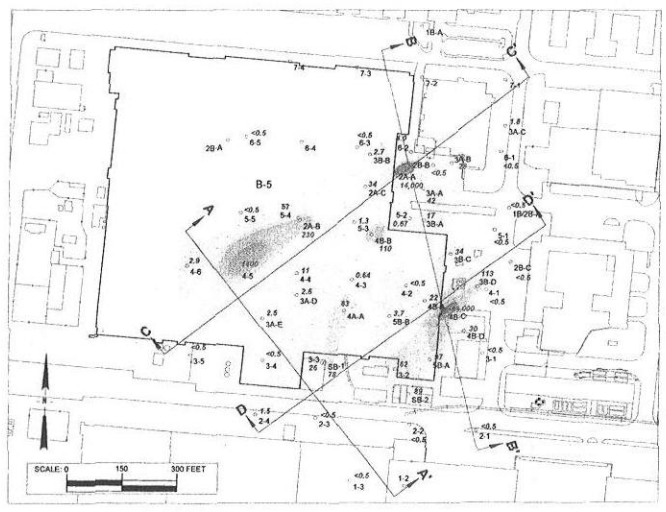
SITE 5 - 1,1-DCE



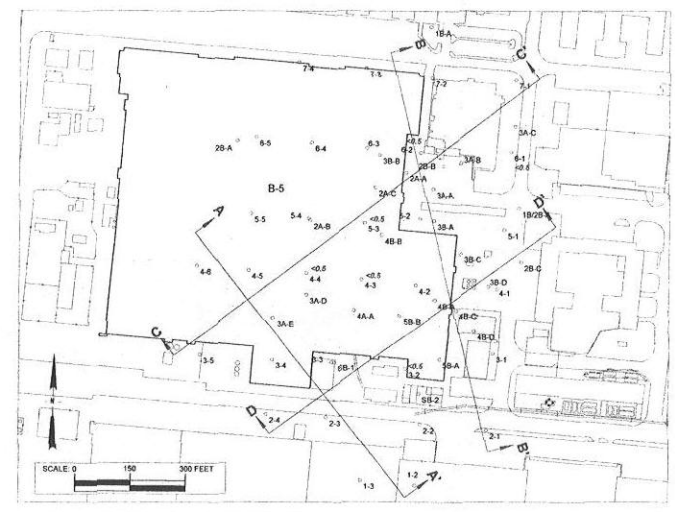
DEPTH INTERVAL: 5.5 - 9.5 FEET-BGS



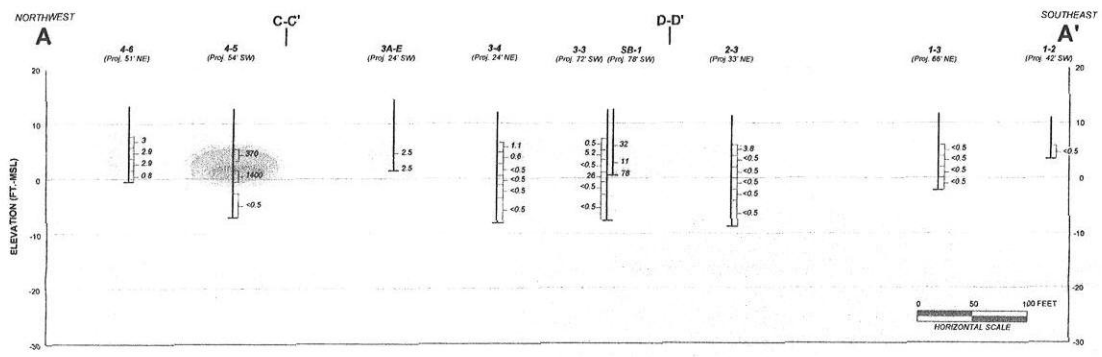
DEPTH INTERVAL: 13.5 - 20 FEET-BGS

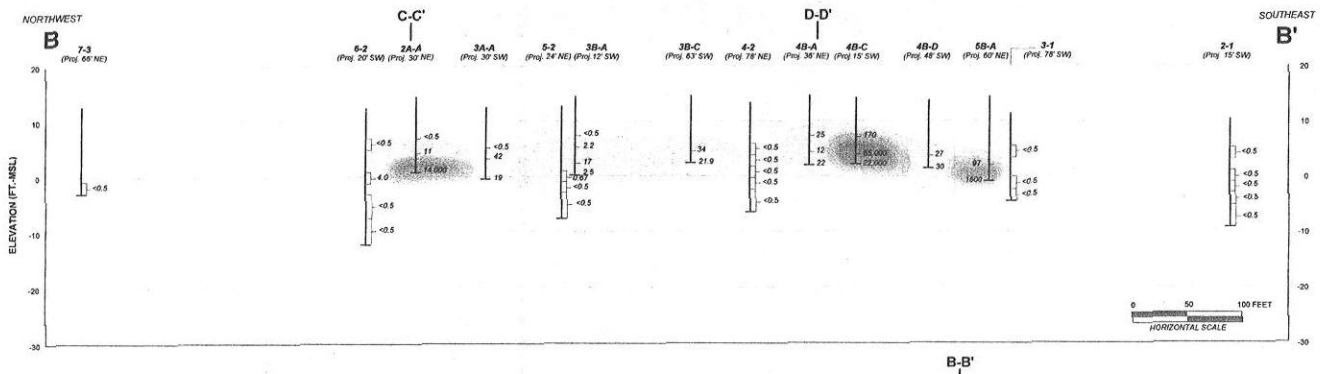


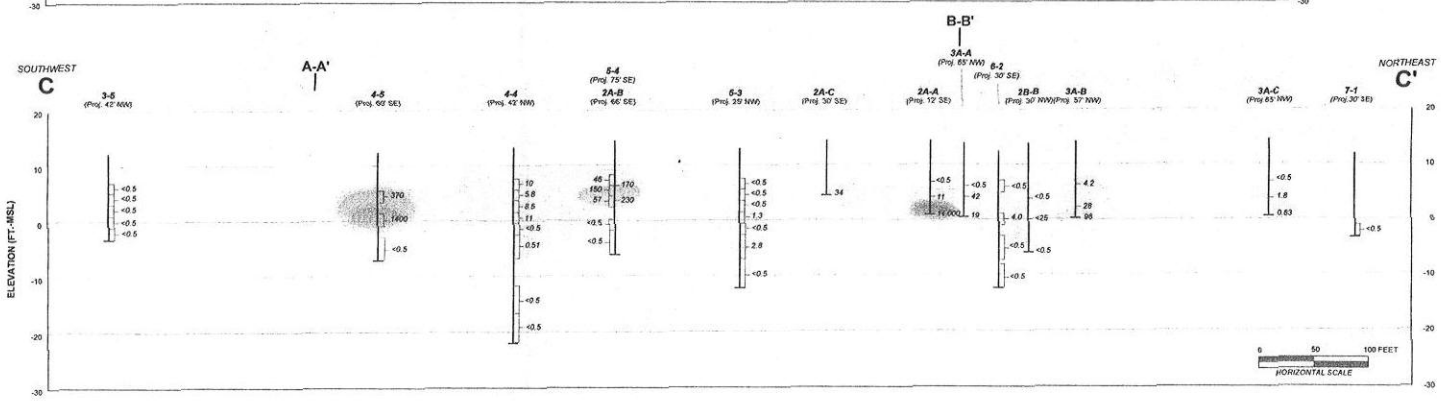
DEPTH INTERVAL: 9.5 - 13.5 FEET-BGS

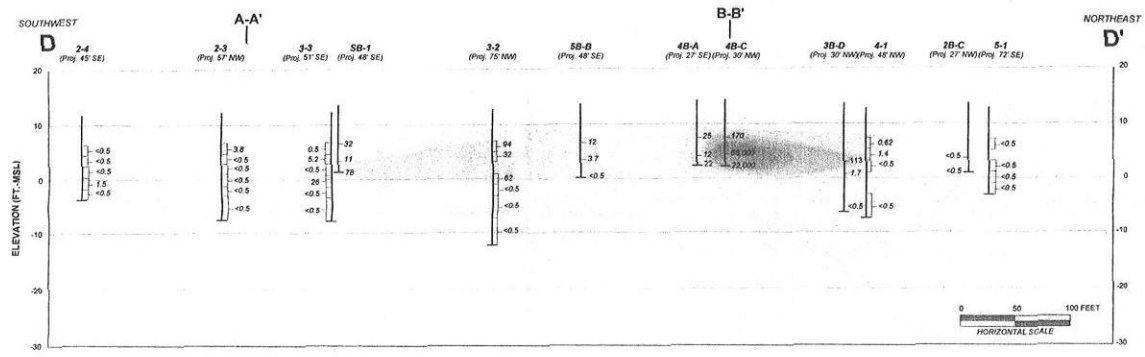


DEPTH INTERVAL: >20 FEET-BGS









EXPLANATION

1-3 — Groundwater sampling location

34 — 1,1-DCE concentration (ug/L)

4-2 (Proj. 65' W) — Boring designation showing projected perpendicular distance to line of section

Borehole

103 — Sample interval showing concentration of 1,1-DCE in ug/L

<0.5

Bottom of boring

D — D' Line of section

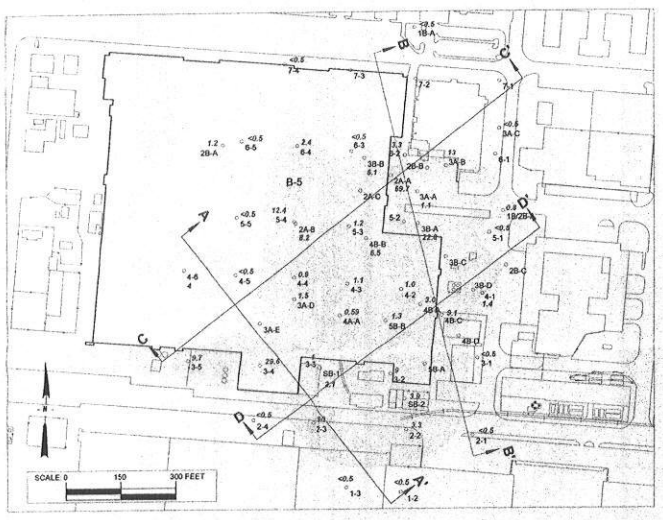
1,1-DCE isoconcentration contours

- <0.5 ug/L
- 0.5 - <50 ug/L
- 50 - <100 ug/L
- 100 - <500 ug/L
- 500 - <1000 ug/L
- 1000 - <10,000 ug/L
- 10,000 - <100,000 ug/L
- ≥100,000 ug/L

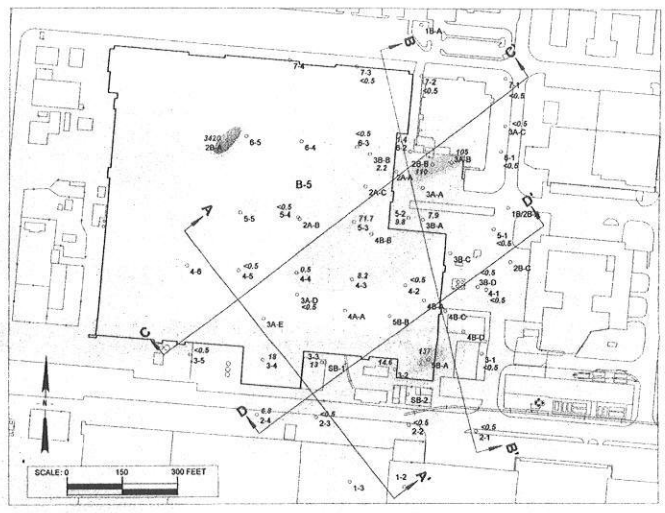
NOTE:
EFW boring locations and elevations determined by L. Wade Hammond, Land Surveyor.
OGISO boring locations and elevations provided to EFW by Tetra Tech, EM Inc.

ALAMEDA POINT ALAMEDA COUNTY, CALIFORNIA	FIGURE 9
SITE 5 - 1,1-DCE	PROJECT APT 103

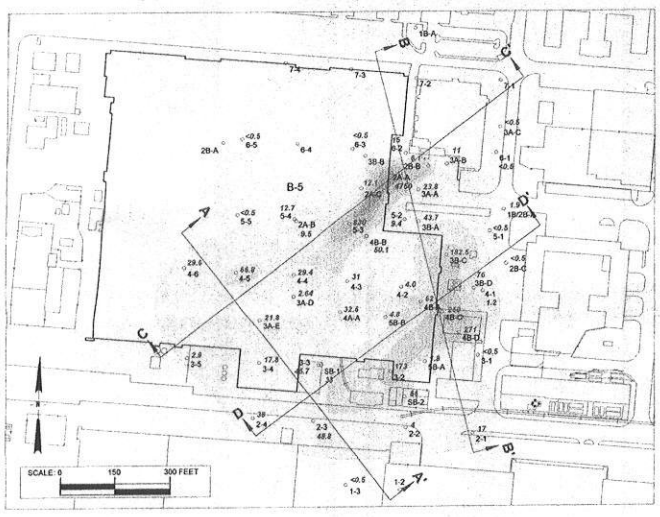
SITE 5 - 1,2-DCE



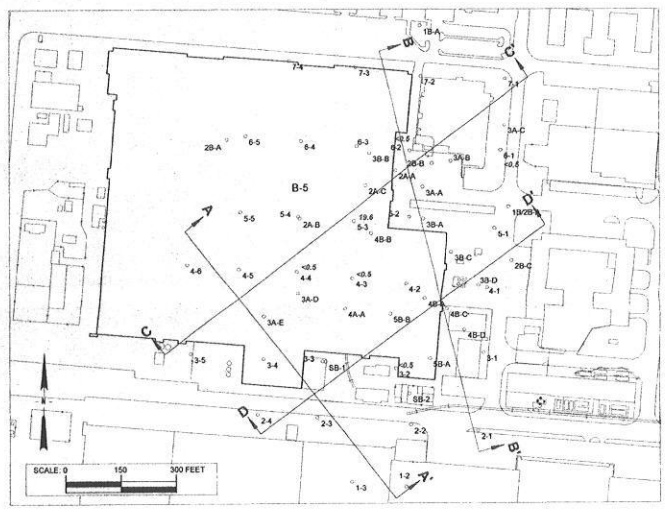
DEPTH INTERVAL: 5.5 - 9.5 FEET-BGS



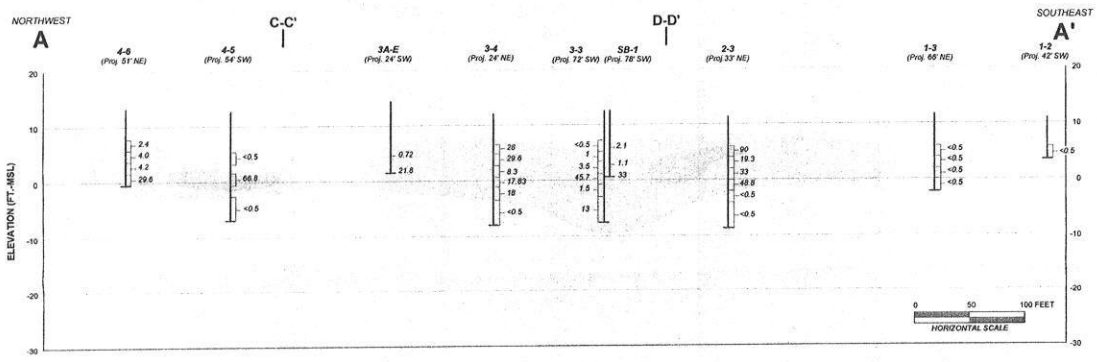
DEPTH INTERVAL: 13.5 - 20 FEET-BGS

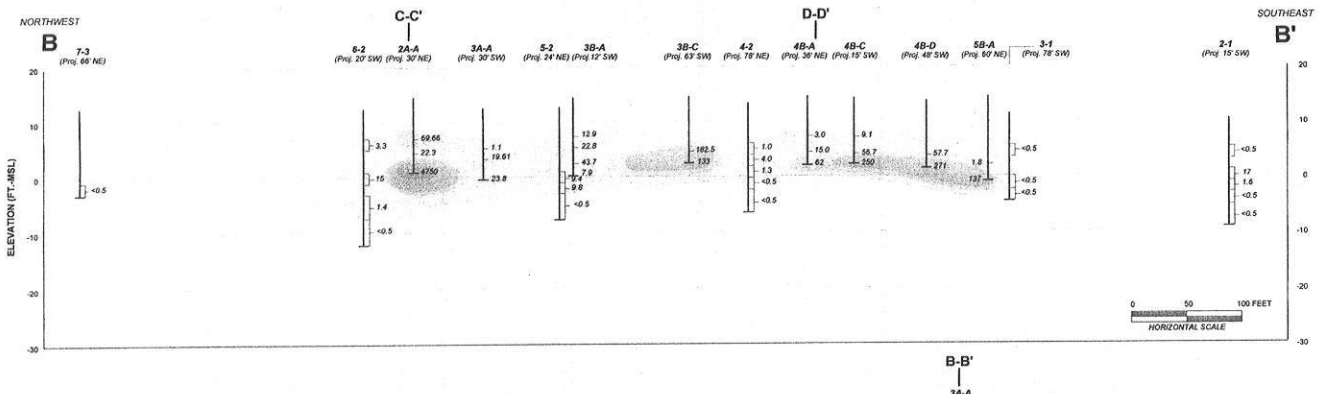


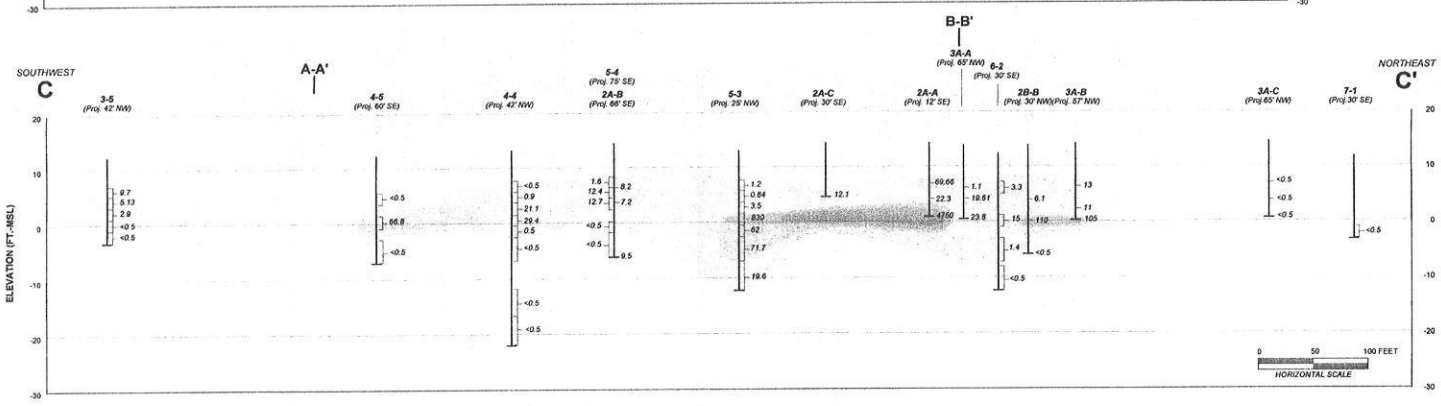
DEPTH INTERVAL: 9.5 - 13.5 FEET-BGS

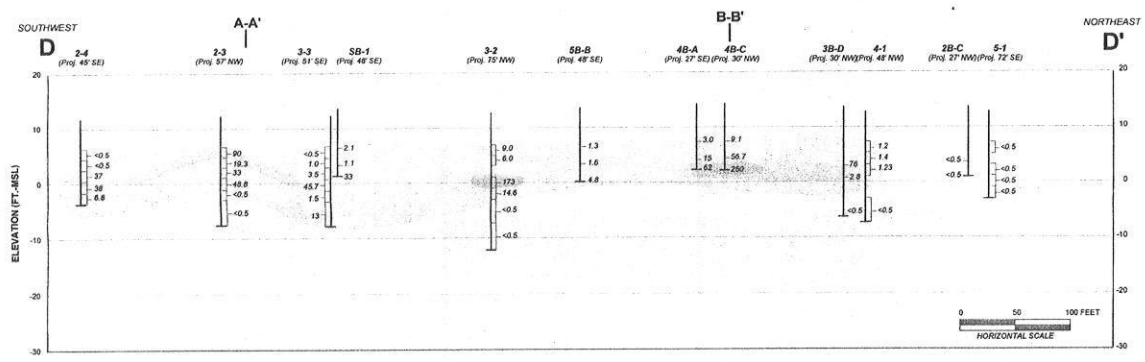


DEPTH INTERVAL: >20 FEET-BGS









EXPLANATION

1-3 — Groundwater sampling location

34 — 1,2-DCE concentration (ug/L)

4-2 (Proj. 65' W) — Boring designation showing projected perpendicular distance to line of section

Borehole

103 — Sample interval showing concentration of 1,2-DCE in ug/L

<0.5

Bottom of boring

D — D' Line of section

1,2-DCE isoconcentration contours

- <0.5 ug/L
- 0.5 - <50 ug/L
- 50 - <100 ug/L
- 100 - <500 ug/L
- 500 - <1000 ug/L
- 1000 - <10,000 ug/L
- 10,000 - <100,000 ug/L
- ≥100,000 ug/L

ALAMEDA POINT ALAMEDA COUNTY, CALIFORNIA	FIGURE 10
SITE 5 - 1,2-DCE	PROJECT APT 103

NOTE:
EFW boring locations and elevations determined by L. Wade Hammond, Land Surveyor.
OGISD boring locations and elevations provided to EFW by Tetra Tech, EM Inc.

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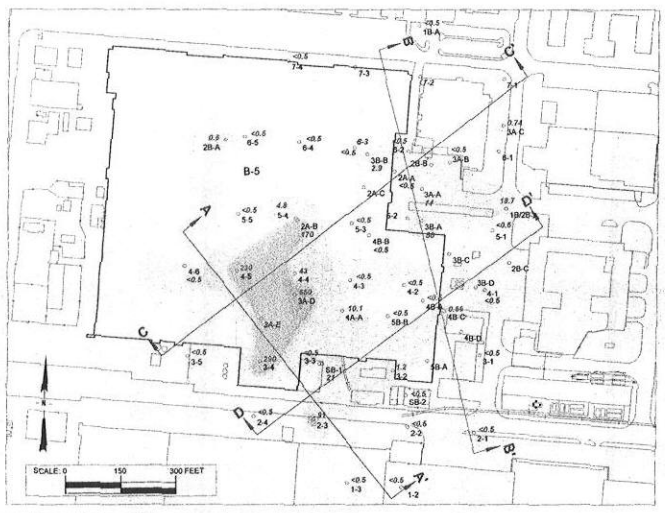
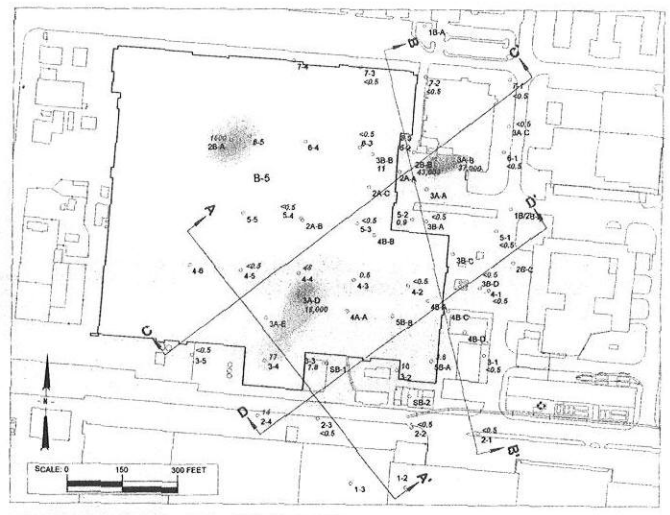
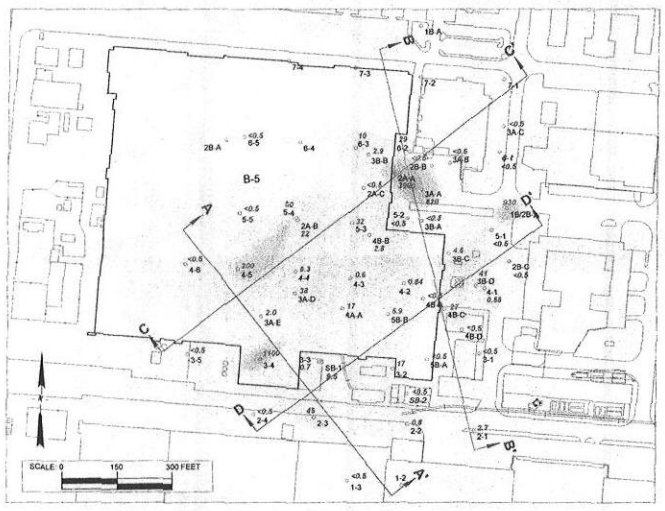
SITE 5 - CHLOROETHANE



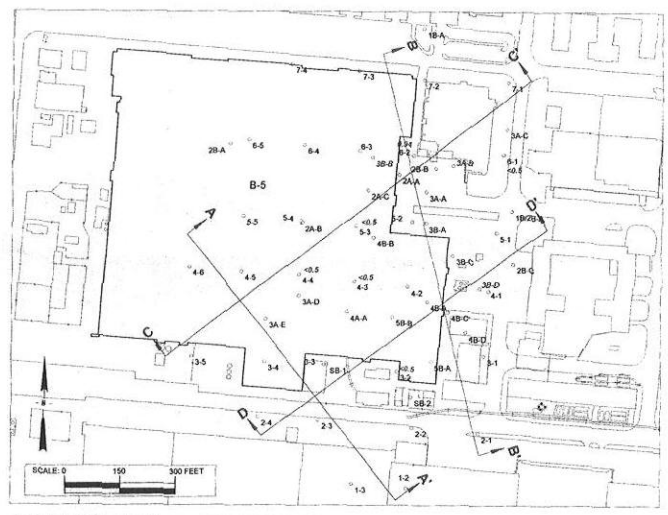
DEPTH INTERVAL: 5.5 - 9.5 FEET-BGS



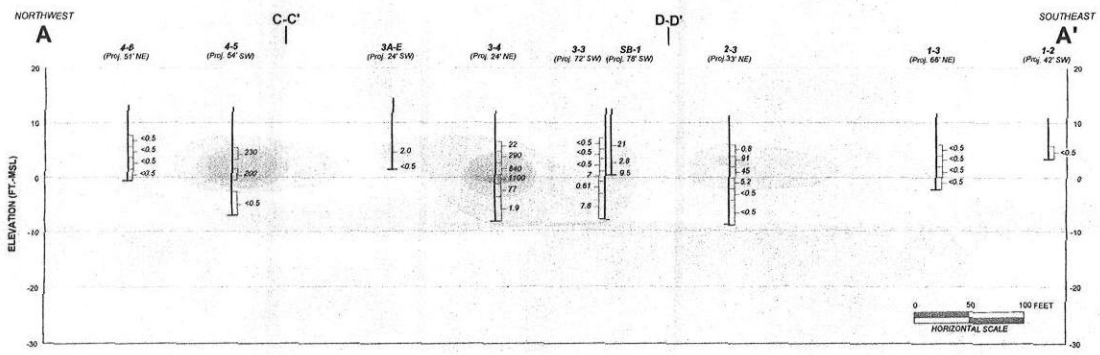
DEPTH INTERVAL: 13.5 - 20 FEET-BGS

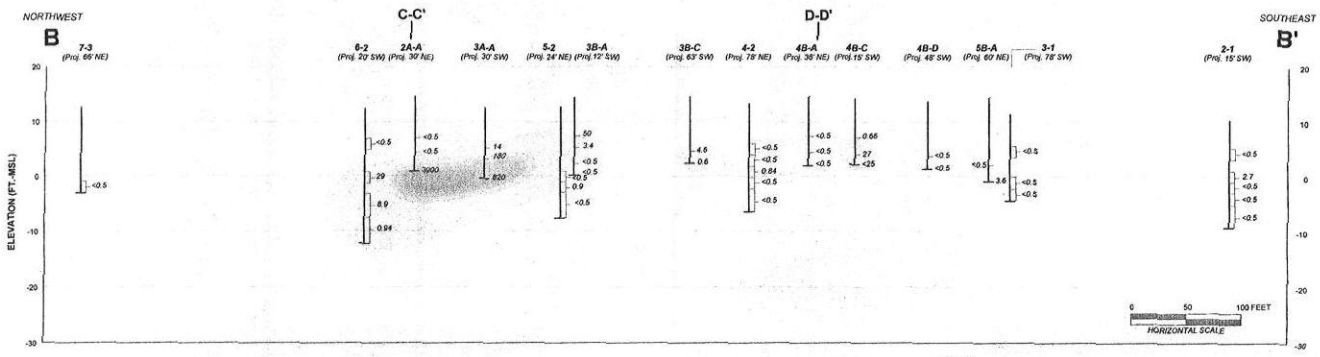


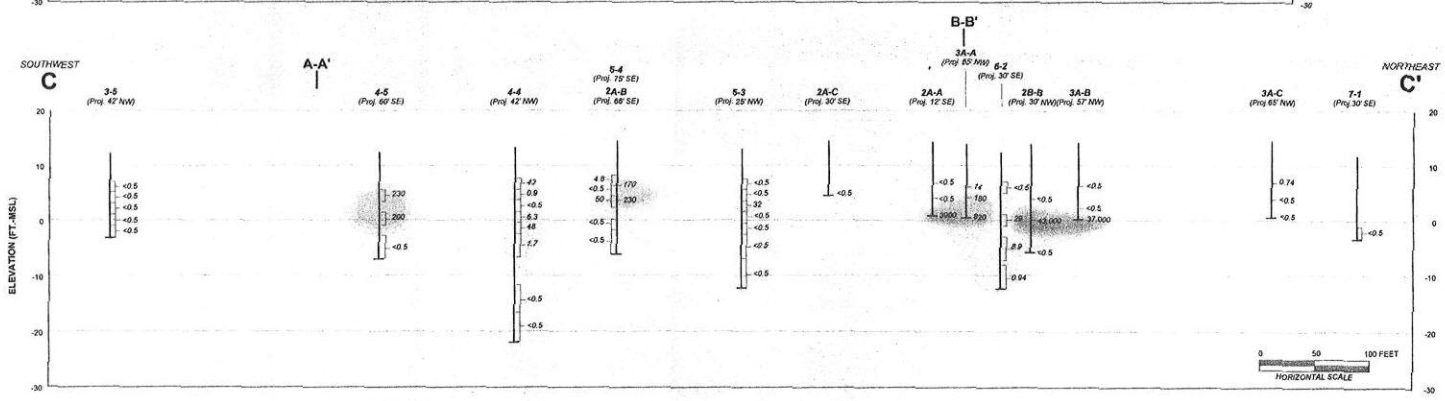
DEPTH INTERVAL: 9.5 - 13.5 FEET-BGS

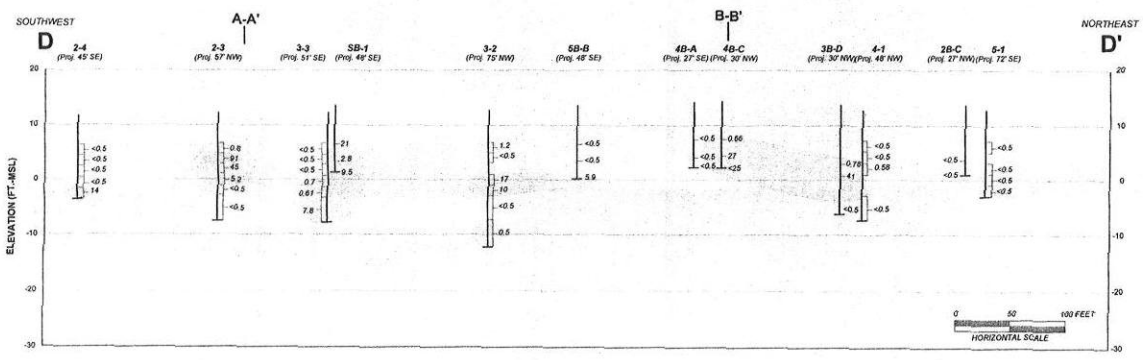


DEPTH INTERVAL: >20 FEET-BGS









EXPLANATION

1-3 — Groundwater sampling location

34 — Chloroethane concentration (ug/L)

4-2 (Proj. 65' W) — Boring designation showing projected perpendicular distance to line of section

Borehole

103 — Sample interval showing concentration of Chloroethane in ug/L

<0.5

Bottom of boring

D D' — Line of section

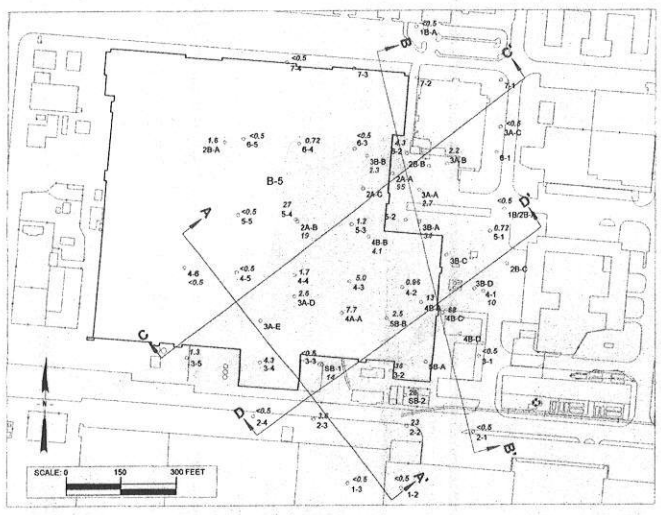
Chloroethane isoconcentration contours

- <0.5 ug/L
- 0.5 - <50 ug/L
- 50 - <100 ug/L
- 100 - <500 ug/L
- 500 - <1000 ug/L
- 1000 - <10,000 ug/L
- 10,000 - <100,000 ug/L
- ≥100,000 ug/L

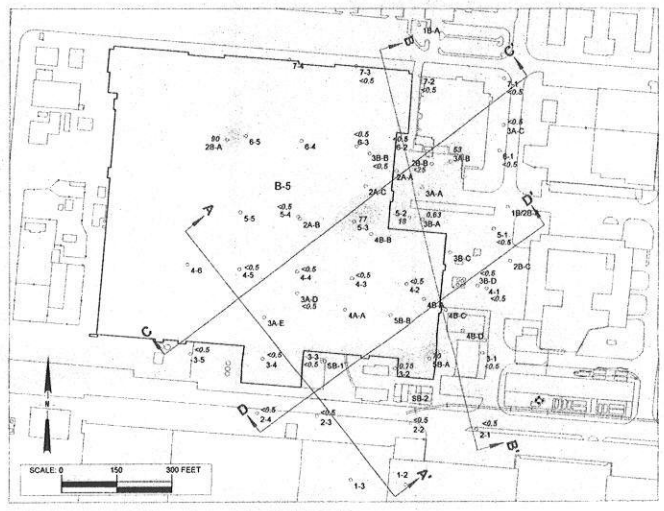
NOTE:
EFW boring locations and elevations determined by L. Wade Hammond, Land Surveyor.
OGISO boring locations and elevations provided to EFW by Tetra Tech, EM Inc.

ALAMEDA POINT ALAMEDA COUNTY, CALIFORNIA	FIGURE 11
SITE 5 - CHLOROETHANE	PROJECT APT 103

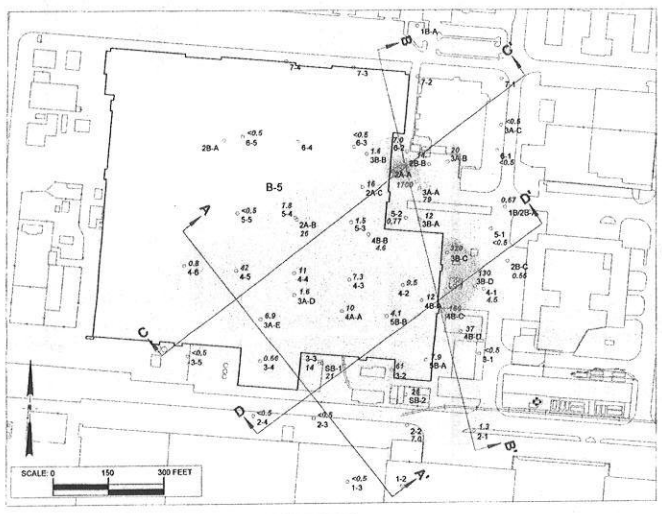
SITE 5 - TCE



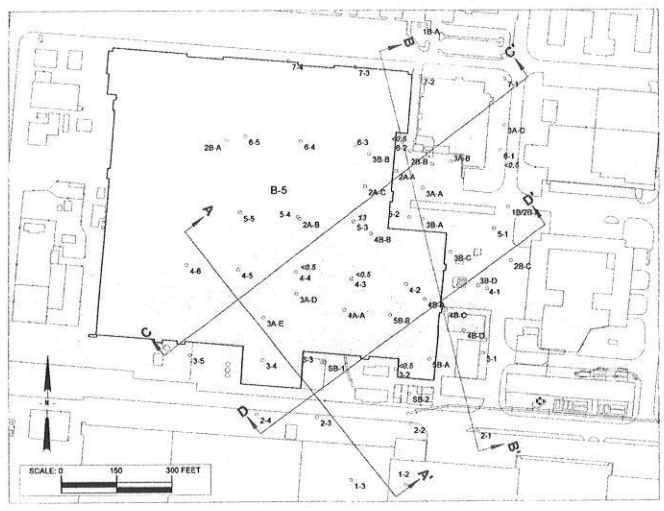
DEPTH INTERVAL: 5.5 - 9.5 FEET-BGS



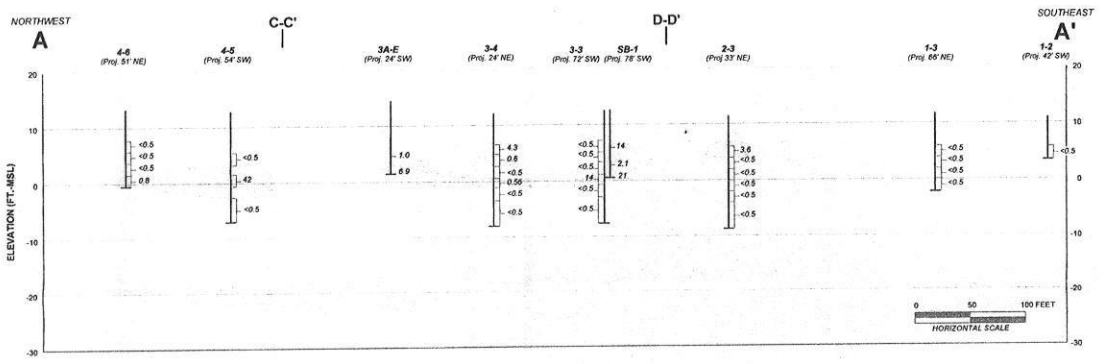
DEPTH INTERVAL: 13.5 - 20 FEET-BGS

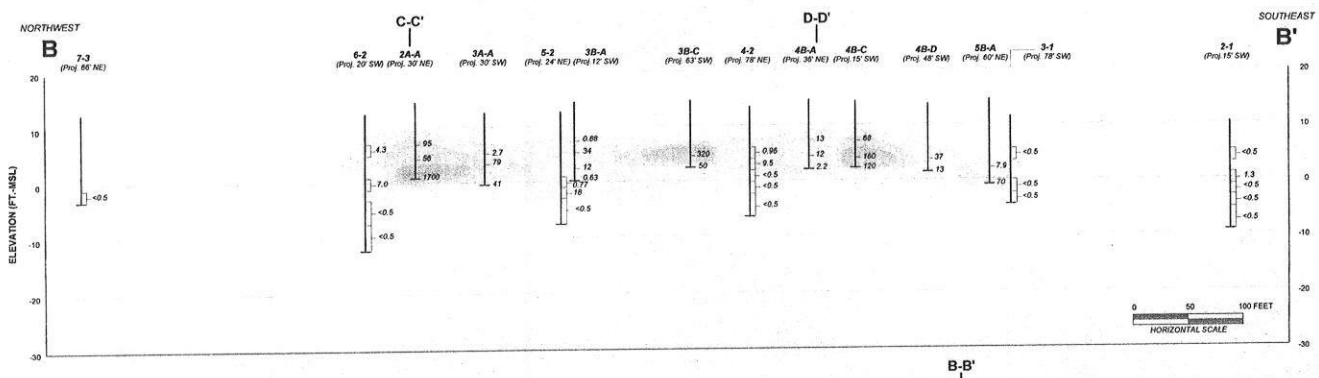


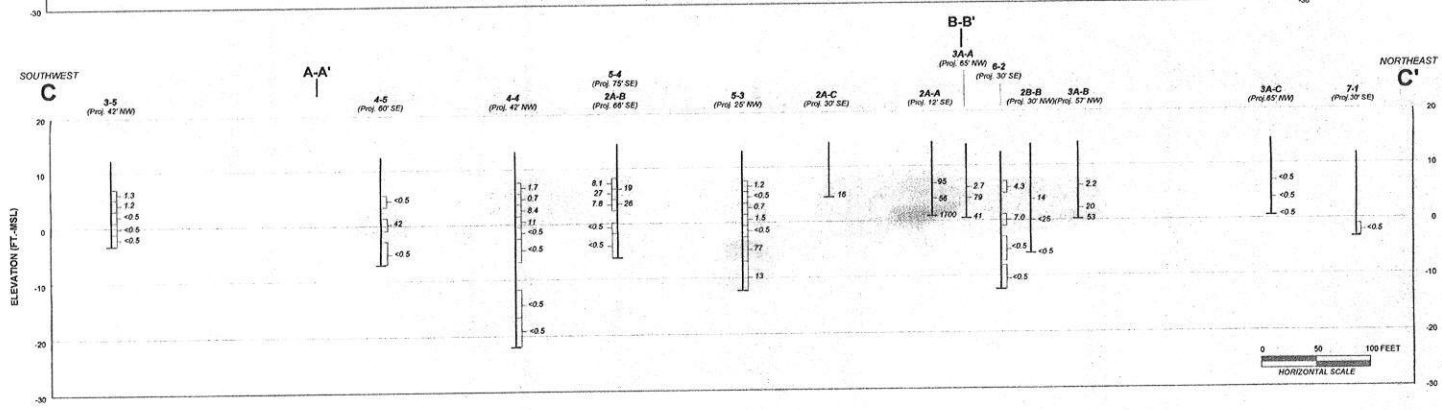
DEPTH INTERVAL: 9.5 - 13.5 FEET-BGS

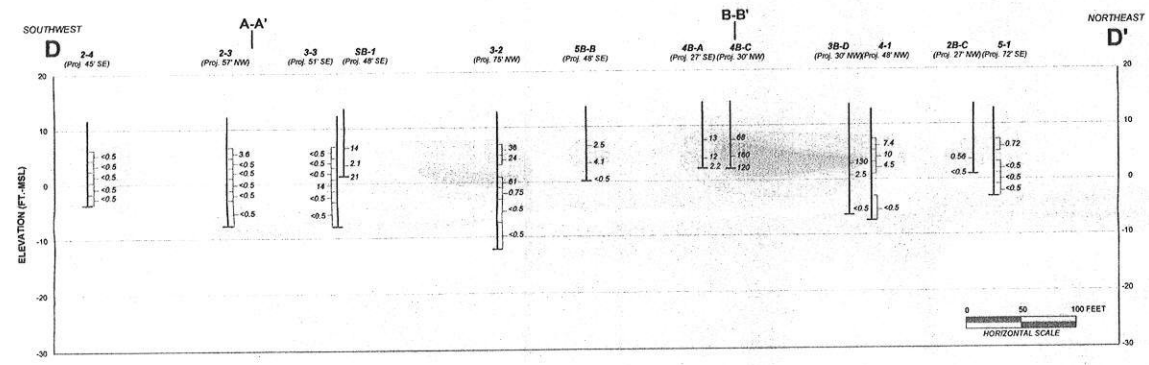


DEPTH INTERVAL: >20 FEET-BGS









EXPLANATION

1-3 Groundwater sampling location

34 TCE concentration (ug/L)

4-2 (Proj. 45' W) Boring designation showing projected perpendicular distance to line of section

Borehole

103 Sample interval showing concentration of TCE in ug/L

<0.5

Bottom of boring

D D' Line of section

TCE isoconcentration contours

- <0.5 ug/L
- 0.5 - <50 ug/L
- 50 - <100 ug/L
- 100 - <500 ug/L
- 500 - <1000 ug/L
- 1000 - <10,000 ug/L
- 10,000 - <100,000 ug/L
- ≥100,000 ug/L

NOTE:
EFW boring locations and elevations determined by L. Wade Hammond, Land Surveyor
OGISO boring locations and elevations provided to EFW by Tetra Tech, EM Inc.

ALAMEDA POINT ALAMEDA COUNTY, CALIFORNIA	FIGURE 12
SITE 5 - TCE	PROJECT APT 103

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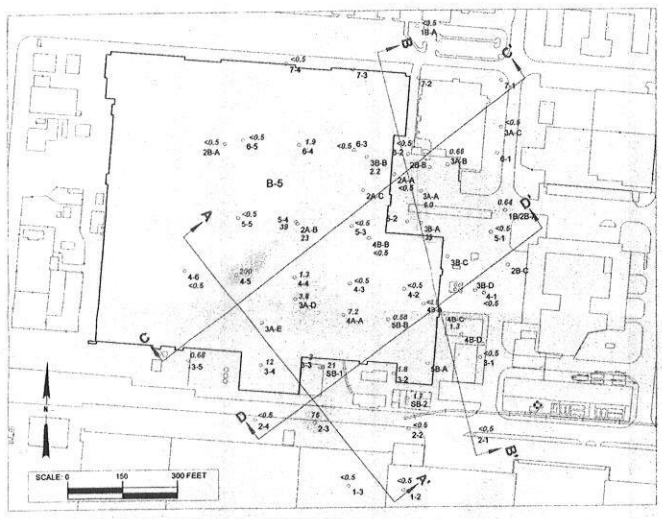
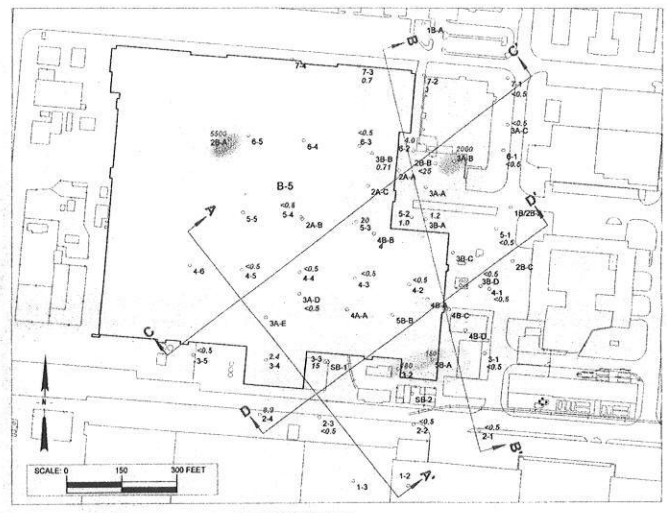
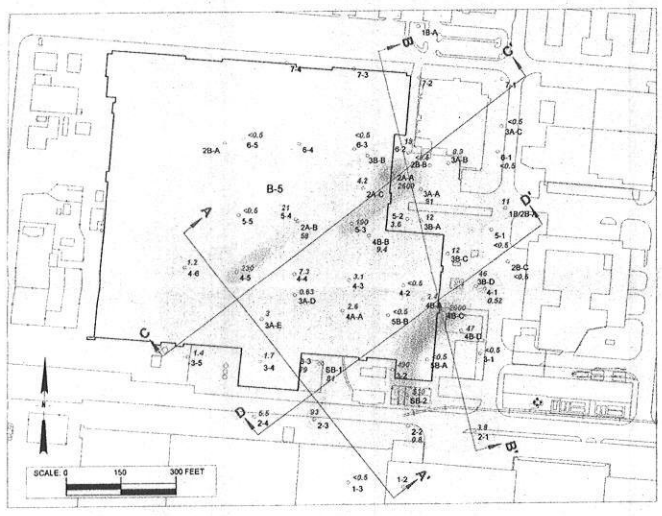
SITE 5 - VINYL CHLORIDE



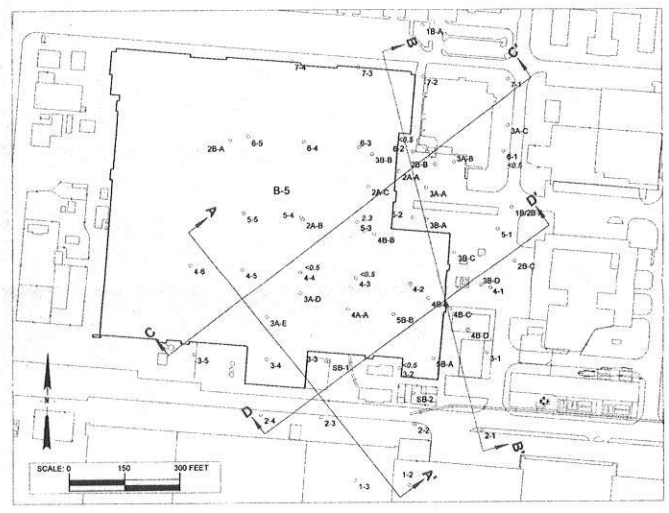
DEPTH INTERVAL: 5.5 - 9.5 FEET-BGS



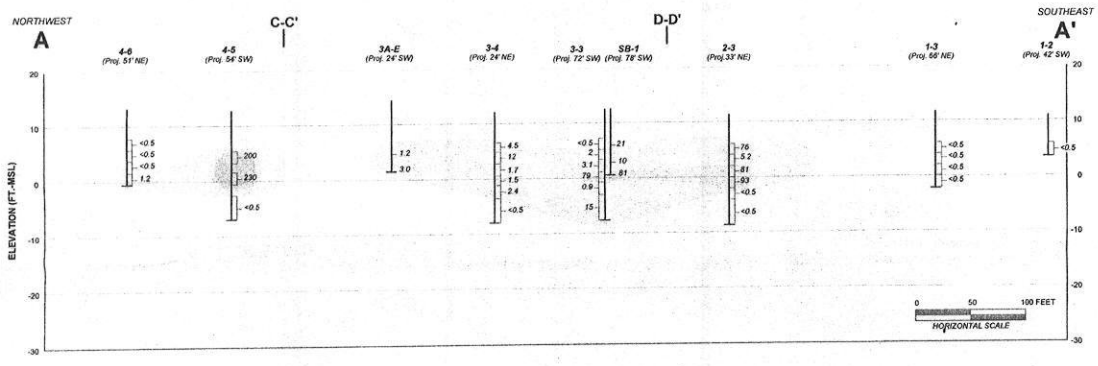
DEPTH INTERVAL: 13.5 - 20 FEET-BGS

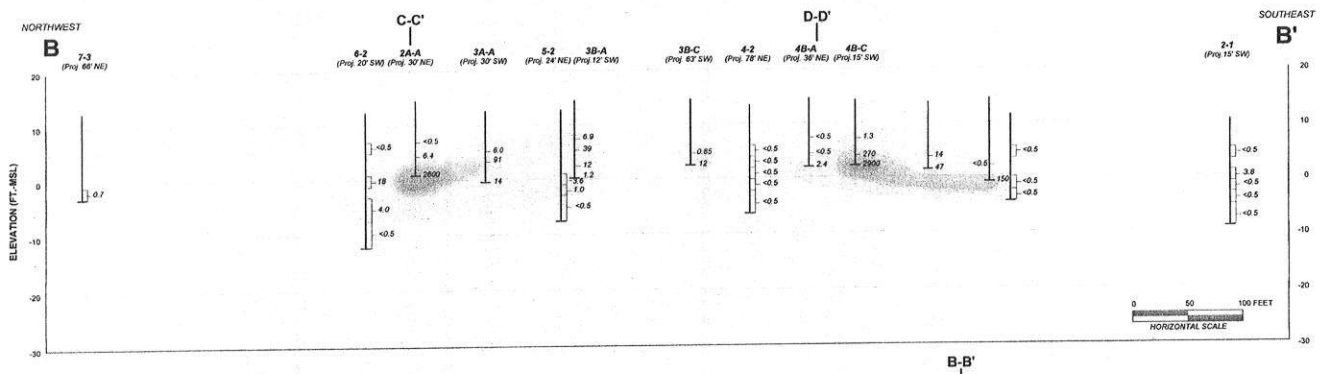


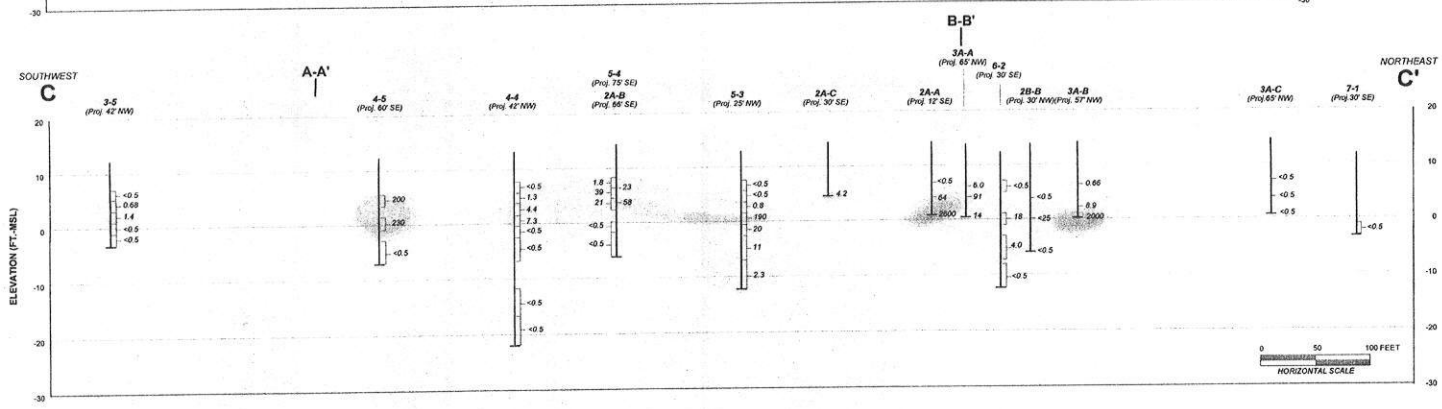
DEPTH INTERVAL: 9.5 - 13.5 FEET-BGS

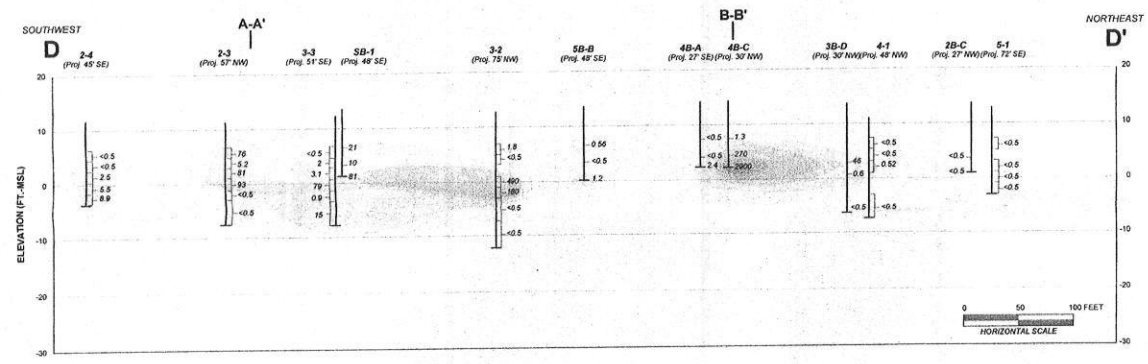


DEPTH INTERVAL: >20 FEET-BGS









EXPLANATION

1-3 — Groundwater sampling location

34 — Vinyl Chloride concentration (ug/L)

4-2 (Proj. 65' W) — Boring designation showing projected perpendicular distance to line of section

Borehole

103 — Sample interval showing concentration of Vinyl Chloride in ug/L

<0.5

Bottom of boring

D D' — Line of section

Vinyl Chloride isoconcentration contour

- <0.5 ug/L
- 0.5 - <50 ug/L
- 50 - <100 ug/L
- 100 - <500 ug/L
- 500 - <1000 ug/L
- 1000 - <10,000 ug/L
- 10,000 - <100,000 ug/L
- ≥100,000 ug/L

ALAMEDA POINT ALAMEDA COUNTY, CALIFORNIA	FIGURE 13
SITE 5 - VINYL CHLORIDE	PROJECT APT 103

NOTE:
EFW boring locations and elevations determined by L. Wade Hammond, Land Surveyor
OGISO boring locations and elevations provided to EFW by Tetra Tech, EM Inc.

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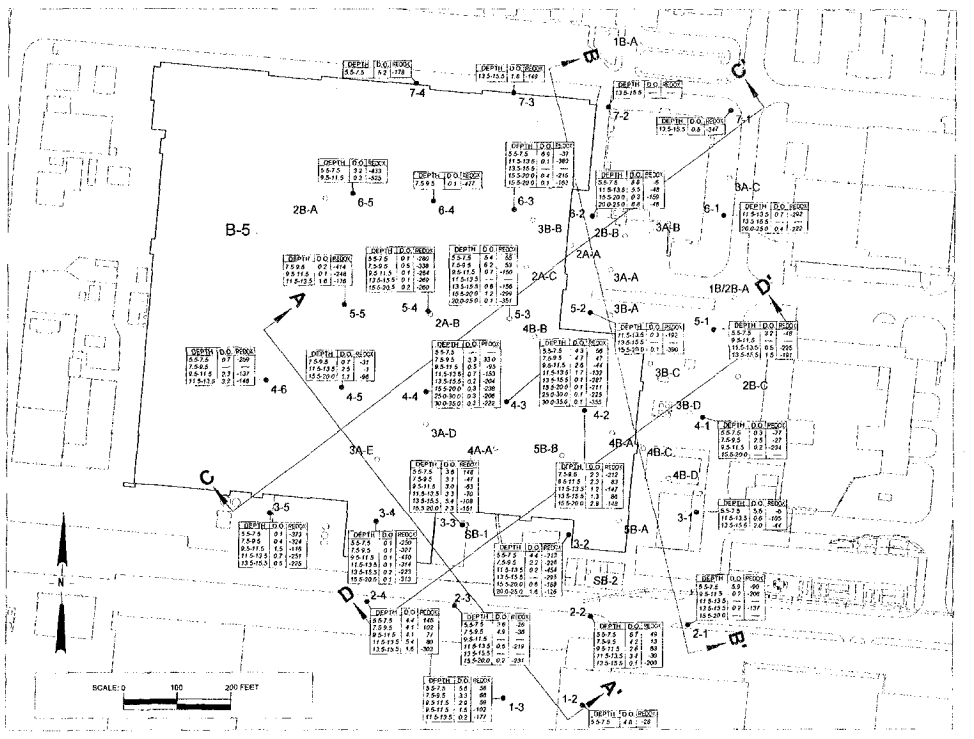
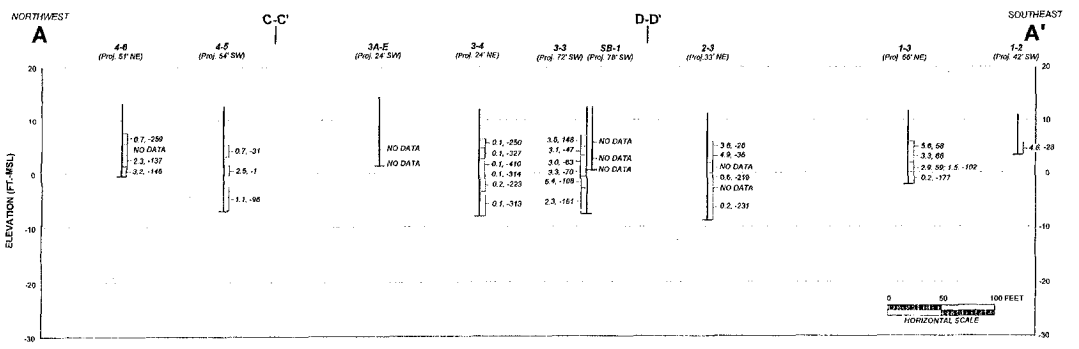
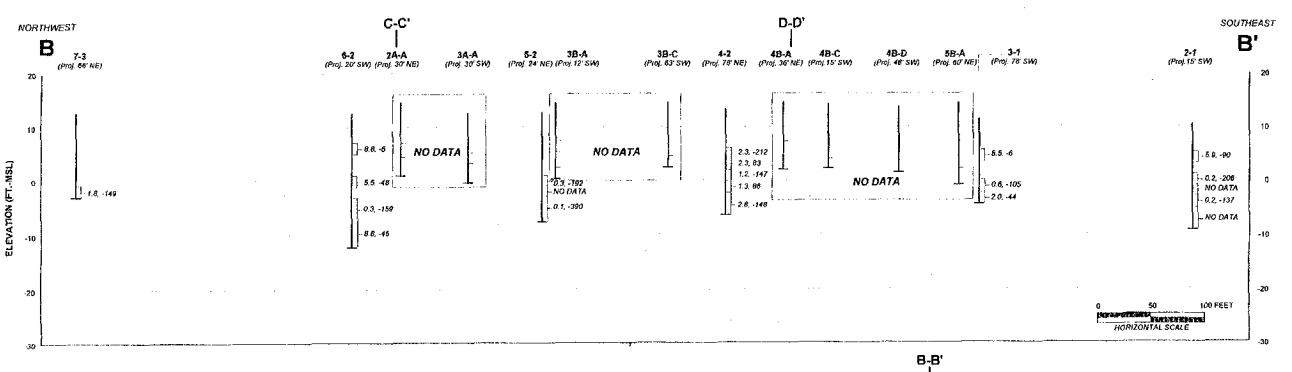
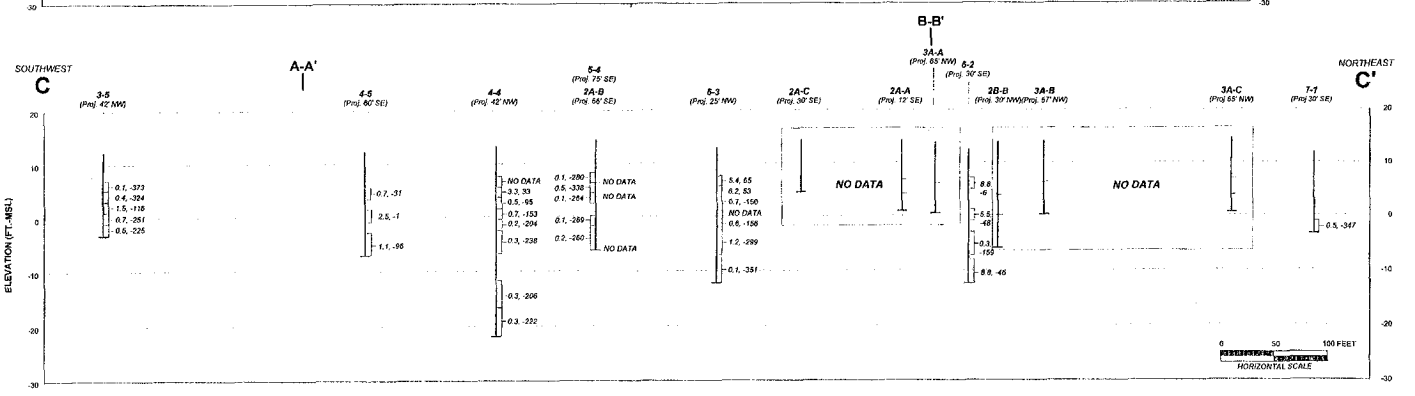
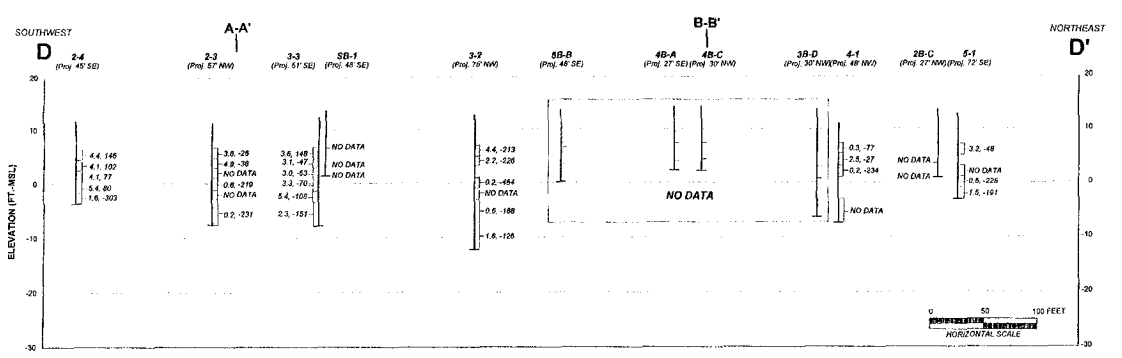
SITE 5
DISSOLVED OXYGEN AND REDOX POTENTIAL











EXPLANATION

1-3 — Groundwater sampling location

Sample interval (Ft-BGS)

D.O. (Dissolved Oxygen, mg/L)

Redox Potential (mV)

DEPTH	D.O.	REDOX
11.5-13.5	5.9	-90
13.5-15.5	--	--
20-25	0.3	-496
25-30	0.2	-533
30-35	0.2	-564
40-45	1.3	-86
55-60	0.1	-326

D D' — Line of section

4-2 (Proj. 68' W) — Boring designation showing projected perpendicular distance to line of section

Borehole

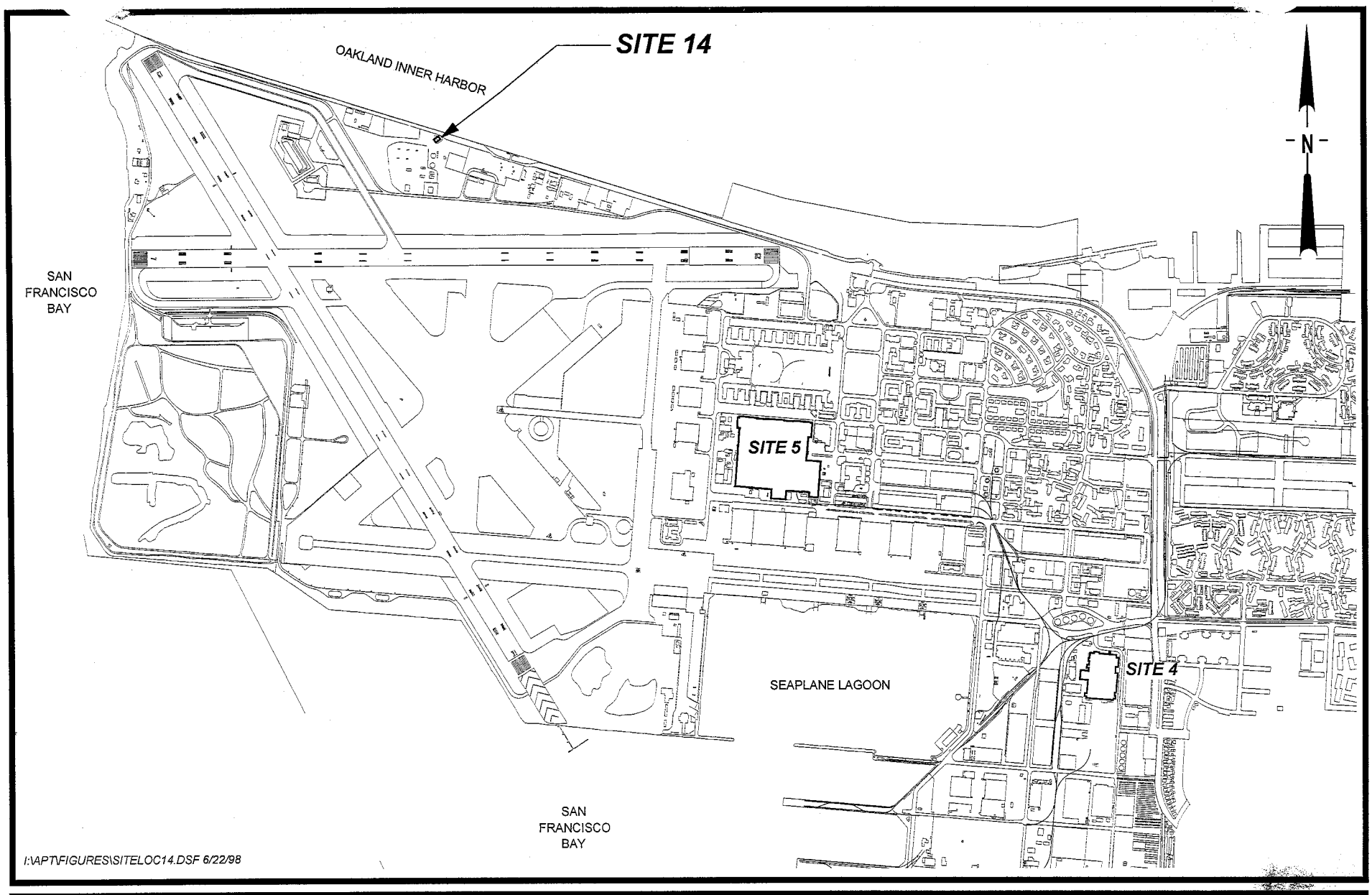
3.4, -130 — Sample interval showing D.O. and Redox values

7.9, 297

Bottom of boring

NOTE:
EFW boring locations and elevations determined by L. Wade Hammond, Land Surveyor.
OGRSO boring locations and elevations provided to EFW by Tetra Tech, EM Inc.

ALAMEDA POINT ALAMEDA COUNTY, CALIFORNIA	FIGURE 14
SITE 5 - DISSOLVED OXYGEN AND REDOX POTENTIAL	PROJECT APT 103



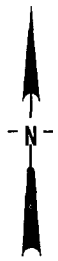
SCALE: 0 2,000 4,000 FEET

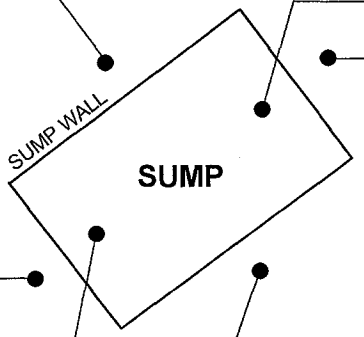
ALAMEDA POINT
ALAMEDA COUNTY, CALIFORINA

SITE 14 - AREA MAP

FIGURE
15

PROJECT NO.
APT102





SUMP BOTTOM - NORTH (SOIL)

ACETONE	6J
BIS (2-ETHYLHEXYL) PHTHALATE	86J
123478-HxCDF	0.038J
123478-HxCDD	0.034J
123678-HxCDD	0.077J
123789-HxCDD	0.079J
1234678-HpCDF	0.097J
1234678-HpCDD	1.892
1234789-HpCDF	0.010J
OCDD	8.427
OCDF	0.100J
MOTOR OIL RANGE ORGANICS	10JY

SUMP - WW (SOIL)

ACETONE	8J
ALPHA-CHLORDANE	1.6J
GAMMA-CHLORDANE	2.1
OCDD	0.296J
MOTOR OIL RANGE ORGANICS	340Y

SUMP - NW (SOIL)

ACETONE	6J
BIS (2-ETHYLHEXYL) PHTHALATE	510J
4,4'-DDT	2.6J
ALPHA-CHLORDANE	1.6J
GAMMA-CHLORDANE	2.8
123789-HxCDD	0.024J
1234678-HpCDF	0.047J
1234678-HpCDD	0.550
OCDD	3.372
OCDF	0.123J
MOTOR OIL RANGE ORGANICS	390Y

SUMP - SW (SOIL)

ACETONE	7J
ALPHA-CHLORDANE	2.2
GAMMA-CHLORDANE	3.1
123789-HxCDD	0.040J
1234678-HpCDF	0.037J
1234678-HpCDD	0.730
OCDD	3.229
OCDF	0.047J
MOTOR OIL RANGE ORGANICS	380Y

SUMP BOTTOM - SOUTH (SOIL)

ACETONE	6J
PYRENE	62J
ALPHA-CHLORDANE	5.1
GAMMA-CHLORDANE	7.6
123678-HxCDD	0.025J
123789-HxCDD	0.025J
1234678-HpCDF	0.034J
1234678-HpCDD	0.472
OCDD	2.646
OCDF	0.026J
DIESEL RANGE ORGANICS	100 (b)
MOTOR OIL RANGE ORGANICS	340Y

SUMP - EW (SOIL)

ACETONE	4J
BIS (2-ETHYLHEXYL) PHTHALATE	350J
ALPHA-CHLORDANE	1.5J
GAMMA-CHLORDANE	1.8J
OCDD	0.096J
MOTOR OIL RANGE ORGANICS	760Y

SUMP - EW (WATER)

ACETONE	2J
BIS (2-ETHYLHEXYL) PHTHALATE	3J
1234678-HpCDF	0.004237J
1234678-HpCDD	0.048430
OCDD	0.260900
OCDF	0.003915J
MOTOR OIL RANGE ORGANICS	2.6Y

EXPLANATION

(b) Mixture of JP-5 diesel
J Reported between PQL and MDL
Y Good match (>=90% match to fingerprint standard)

NOTE:
This figure presents only detected results for gasoline, diesel, motor oil, VOC, SVOC, pesticides, and dioxins (soil in ug/kg, water in ug/L)

SCALE - FEET

ALAMEDA POINT
ALAMEDA COUNTY, CALIFORINA

SITE 14 - SUMP AREA WITH ANALYTICAL DATA

FIGURE
16

PROJECT NO.
APT101

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