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TREASURE ISLAND
SSIC NO. 5090.3

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N60028_000666
TREASURE ISLAND
SSIC NO. 5090.3.A

FINAL
WORK PLAN ADDENDUM
REMOVAL OF LEAD-CONTAMINATED SOIL AT BUILDING 240
YERBA BUENA ISLAND
NAVAL STATION TREASURE ISLAND
SAN FRANCISCO, CALIFORNIA

Environmental Remedial Action
Contract Number N62474-98-D-2076
Contract Task Order 0043

Document Control Number 3417
Revision 0

February 14, 2002

Submitted to:

U.S. Department of the Navy
Southwest Division
Naval Facilities Engineering Command
Environmental Division
1220 Pacific Highway
San Diego, California 92132-5190

Submitted by:

IT Corporation
4005 Port Chicago Highway
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IT CORPORATION
A Member of The IT Group

IT TRANSMITTAL/DELIVERABLE RECEIPT

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Base Realignment and Closure Operations
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Date : February 19, 2002

CTO : 0043

Location: NAVSTA, Treasure Island

FROM: P J Marini, for
Pete Bourgeois
Project Manager

DESCRIPTION OF ENCLOSURE ***Final Work Plan Addendum, Removal of Lead-Contaminated Soil at Building 240, Yerba Buena Island, Naval Station Treasure Island, Dated February 14, 2002***

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Project Quality Control Plan

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FINAL
WORK PLAN ADDENDUM
REMOVAL OF LEAD-CONTAMINATED SOIL AT BUILDING 240
YERBA BUENA ISLAND
NAVAL STATION TREASURE ISLAND
SAN FRANCISCO, CALIFORNIA

Environmental Remedial Action
Contract Number N62474-98-D-2076
Contract Task Order 0043

Document Control Number 3417
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February 14, 2002

Approved by: _____ Date: February 19, 2002
Peter Bourgeois
IT Project Manager

N60028_000666
TREASURE ISLAND
SSIC NO. 5090.3

FINAL
WORK PLAN
EXCAVATION OF LEAD-CONTAMINATED SOIL
YERBA BUENA ISLAND
BUILDING 66

DATED 17 AUGUST 2001

IS RECORD NO. N60028_000257

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Acronyms and Abbreviations

DTSC	Department of Toxic Substances Control
EPA	U.S. Environmental Protection Agency
FAS	Forensic Analytical Specialties, Inc.
IT	IT Corporation
mg/kg	milligrams per kilogram
NTE	North Tower Environmental
PRG	preliminary remediation goal
TTLC	Total Threshold Limit Concentration
YBI	Yerba Buena Island

1.0 Introduction

This document has been prepared by IT Corporation (IT) for the Department of the Navy, Southwest Division and includes results of soil lead characterization and a description of the proposed remediation activities at Building 240 on Yerba Buena Island (YBI), Naval Station Treasure Island, San Francisco, California.

Remediation activities will be conducted under Contract Task Order 0043 of Naval Facilities Engineering Command, Engineering Field Activity-West, Environmental Remedial Action Contract N62474-98-D-2076.

This document is an addendum to the approved Final Work Plan for Excavation of Lead-Contaminated Soil at Building 66 (IT, 2001a). The Final Work Plan included site preparation, mobilization, decontamination, site management, air monitoring, permitting, documentation of existing conditions, transportation and disposal of excavated soil, an Environmental Protection Plan, demobilization and post-construction submittals, and a schedule. This document includes details to remove and dispose of lead-contaminated soil and to backfill and restore the site that are specific to Building 240. This document also describes the proposed removal of approximately 200 linear feet of wooden fencing.

Final Project Plans for Characterization and Removal of Lead-Contaminated Soil at Building 240 (IT, 2001b), including the Quality Control Plan, the Sampling and Analysis Plan, and the Site Health and Safety Plan, will also be followed during this construction.

1.1 Site Location and Description

Figure 1, "Site Vicinity Map," presents a vicinity map of YBI and Treasure Island. YBI is a natural bedrock island joined by a causeway to the sand fill Treasure Island. YBI is accessible by the San Francisco-Oakland Bay Bridge. Building 240 is located on Macalla Road on YBI.

Figure 2, "Building 240 Site Plan with Soil Sample Locations and Lead Test Results," presents a site plan of Building 240. Building 240 is comprised of Units A to L. The property is approximately 1 acre. The terrain surrounding the building is relatively flat with some slope areas outside the exterior perimeter of the property. Vegetation consists primarily of large trees, bushes, and grass. Generally adjacent to the building and fences is a layer of wood chips underlain by clear plastic over bare soil.

1.2 Previous Soil Lead Test Results

In 1998, the building perimeter soil was sampled and analyzed by Forensic Analytical Specialties, Inc. (FAS), (1998) prior to lead-based paint abatement activities. Four of eight composite samples collected had lead results greater than 400 milligrams per kilogram (mg/kg):

- 7,100 mg/kg in sample S-240-4, taken from south of Units E and D
- 1,700 mg/kg in sample S-240-7, taken from east of Units G and H
- 590 mg/kg in sample S-240-8, taken from east of Unit L
- 460 mg/kg in sample S-240-3, taken from west of Unit A

FAS data and a sample location figure are included in Appendix A, "Building 240 Previous Soil Lead Test Results, Forensic Analytical Specialties, Inc., 1998."

In 2001, lead abatement of Building 240 interior and exterior surfaces was performed by Architectural Systems Corporation. The accompanying soil lead characterization was carried out by North Tower Environmental (NTE) (2001a). Up to five rounds of composite soil samples were collected from the top 0.5 inches of soil along the building perimeter dripline. Sample results were compared to lead concentrations in pre-abatement soil samples. If a soil sample tested 20% higher, the corresponding soil area was vacuumed or paint chips were removed manually (NTE, 2001b), and the area was resampled and tested for lead. Soil samples were analyzed for lead by atomic absorption using U.S. Environmental Protection Agency (EPA) Methods 3050B/7420. Two of 19 composite samples had lead results greater than the EPA Region 9 Residential preliminary remediation goal (PRG) of 400 mg/kg, used as the screening criteria at Treasure Island:

- 440 mg/kg in sample NT-728-050301-08S, taken from west of Unit E
- 420 mg/kg in sample NT-728-050301-13S, taken from northwest of Unit A

NTE data and the figure depicting sample locations are included in Appendix B, "Building 240 Previous Soil Lead Test Results, North Tower Environmental, 2001."

2.0 IT Soil Lead Characterization and Results

On November 27, 28, and 29, 2001, IT and Innovative Technical Solutions, Inc. (ITSI), an IT subcontractor, collected 825 samples of soil at Building 240 at 1 to 3 inches and at 12 inches below the soil surface, as shown in Figure 2. Soil samples were sent to Curtis & Tompkins, Ltd. where they were combined into 136 composite samples and tested for lead using the Total Threshold Limit Concentration (TTLC) preparation and EPA 6010B test methods. Included in the above were 12 duplicate composite samples. Samples were collected and tested in accordance with the Final Project Plans (IT, 2001b).

Analytical results indicated that lead concentrations in soil ranged from 14 to 620 mg/kg based on dry weight of soil. One composite sample tested above the EPA Region 9 Residential PRG of 400 mg/kg, used as the screening criteria for Treasure Island. Lead was reported at 620 mg/kg in sample 43-240-3-49(A-E), taken from 1 to 3 inches depth across a 20-foot length adjacent to the south wall of Unit A. Lead was also reported at 400 mg/kg in sample 43-240-3-46 (A-D), taken from 1 to 3 inch depth across a 15-foot length adjacent to the west wall between units B and C. This result was averaged in with the 110 mg/kg courtyard sample, per Department of Housing and Urban Development specifications and California Department of Toxic Substances Control (DTSC) approval, and the area averaged out lower then the 400 mg/kg criteria. Therefore the area of sample 43-240-3-46 (A-D) will not be remediated.

The Building 240 analytical results are presented in Table 1, "Building 240 Initial Soil Characterization Lead Test Results," and are shown on Figure 2. Original laboratory analytical results are presented in Appendix C, "Building 240 Laboratory Lead Test Data, December 2001."

3.0 Remediation Activities

Planned remediation activities at Building 240 include soil excavation, confirmation sampling, disposal of contaminated soil, excavation backfilling, and site restoration. The remediation will also include removal and disposal of approximately 200 linear feet of wooden fencing.

3.1 Soil Excavation

On December 18, 2001, the Navy, the DTSC, and IT reviewed the soil lead characterization results from the initial sampling at Building 240. A scope of work was decided upon for the remediation of lead-contaminated soil. Figure 3, "Building 240 Remediation Area and Confirmation Sample Locations," illustrates the soil remediation area. The approximately 4.3-by-22-foot soil area adjacent to the south wall of Unit A, where sample 43-240-3-49(A-E) (620 mg/kg lead) was taken, will be removed to a depth of one foot and replaced with clean soil. The estimated volume of soil to be excavated is approximately 3½ cubic yards. IT will also remove any plants and roots to a depth of one foot. The upper one foot of soil will be shoveled by hand and placed in a bin. If needed, Visqueen plastic sheeting will be placed around the bin and work area to allow complete clean up of any errant soil.

3.2 Confirmation Sampling

Confirmation samples will be collected at approximately the same location as initial characterization samples 43-240-3-49(A-E) at the base of the excavation and 3 to 6 inches below ground surface along the sidewalls of the excavation in accordance with the Building-240 Sampling and Analysis Plan (IT, 2001b). Confirmation sample locations are shown in Figure 3. The three 5-point composite samples and two 2-point composite samples will be analyzed for TTLC lead by EPA Method 6010B. All confirmation samples will be collected utilizing one-time-use disposable plastic sampling scoops, which is intended to eliminate equipment decontamination procedures and possible cross contamination.

If any of the confirmation samples fail the previously agreed upon 400 mg/kg criterion, further action may follow after discussions between IT, the Navy, and the DTSC.

3.3 Waste Transportation and Disposal of Excavated Soil

Based on the results of waste characterization analyses, soil disposal will be coordinated with both a Class 1 and a Class 2 disposal facility, which will issue IT letters of waste acceptance. After waste acceptance, contaminated soil will be loaded into bins and onto roll-off bin trucks for off-site disposal at the approved disposal facility.

A trucking and disposal coordinator will receive and dispatch trucks and manage waste shipment manifesting. The coordinator will direct and track shipments (i.e., to the Class 1 and Class 2 disposal facilities), track tonnage, and make necessary daily reports to the Construction Quality Control Manager.

3.4 Fence Removal

Approximately 3-½ foot high wooden fencing is located at various areas surrounding Building 240 (Figure 2). Based on the current condition of the fencing, and the costs to abate and maintain these fences, it has been determined that these fences will be removed. This removal will include the following:

- 88 linear feet between Units A and E
- 53 feet between Units E and K
- 50 feet on the north side of Unit L
- 8 feet between Units C and F

The wooden fences will be removed after first disconnecting from building walls and posts as necessary. The posts, which are either directly set in soil or concrete, will be pulled out by jack or hydraulic equipment. Clean soil will be placed in the fence postholes. The construction debris will be disposed of with the excavated soil. Surrounding bushes, plants, wood chips and plastic will only be disturbed if necessary.

3.5 Restoration

The backfilled area will not be relandscaped. Landscaping features, such as the fencing and plants, will not be replaced. Grassed areas, if damaged, will be reseeded or repaired with sod. Lawn maintenance responsibilities, including watering, will be left to the Navy Caretaker Site Office or the City's landscape maintenance contractor.

4.0 Field Activity Report

IT will submit a Draft Field Activity Report to the Navy to document this work. The report will detail the removal activities performed, present the confirmation sampling and testing results, and describe the site restoration activities. The report will also include copies of disposal records, waste profiles, and waste manifests.

Once comments have been received from the Navy, the Draft Field Activity Report will be produced and distributed for regulatory agency comments. Based on resolution of any agency comments, a Final Field Activity Report will be prepared and submitted.

5.0 Schedule

Excavation activities at Building 240 will begin after acceptance of this Work Plan Addendum by the Navy and regulatory agencies, following response to comments.

On-site work hours will be limited to Monday through Friday, 8:00 a.m. to 6:30 p.m. These hours do not apply to off-site activities such as office work, morning safety meetings, or off-hours trucking and disposal.

Excavation, backfilling, confirmation sampling, and trucking and disposal of contaminated soil will begin within about two weeks of the notice to proceed. Site restoration activities, including debris disposal, will begin within about 3 weeks of the notice to proceed.

6.0 References

Forensic Analytical Specialities, Inc., 1998, *Lead-Based Paint Risk Assessment, 36 Residential and 5 Non-Residential Units*, September 11.

IT Corporation, 2001a, *Work Plan, Excavation of Lead-Contaminated Soil at Building 66, Yerba Buena Island, Naval Station Treasure Island, California*, August.

IT Corporation, 2001b, *Final Project Plans, Characterization and Removal of Lead-Contaminated Soil at Building 240, Yerba Buena Island, Naval Station Treasure Island, San Francisco, California*, November.

North Tower Environmental, 2001a, *Clearance Soil and Wipe Sampling Results, Building Number 240, Yerba Buena Island, California*, June.

North Tower Environmental, 2001b, personal communication from Eric Zamb (NTE) to Stan Clark (IT) by telephone, October 8.

FIGURES

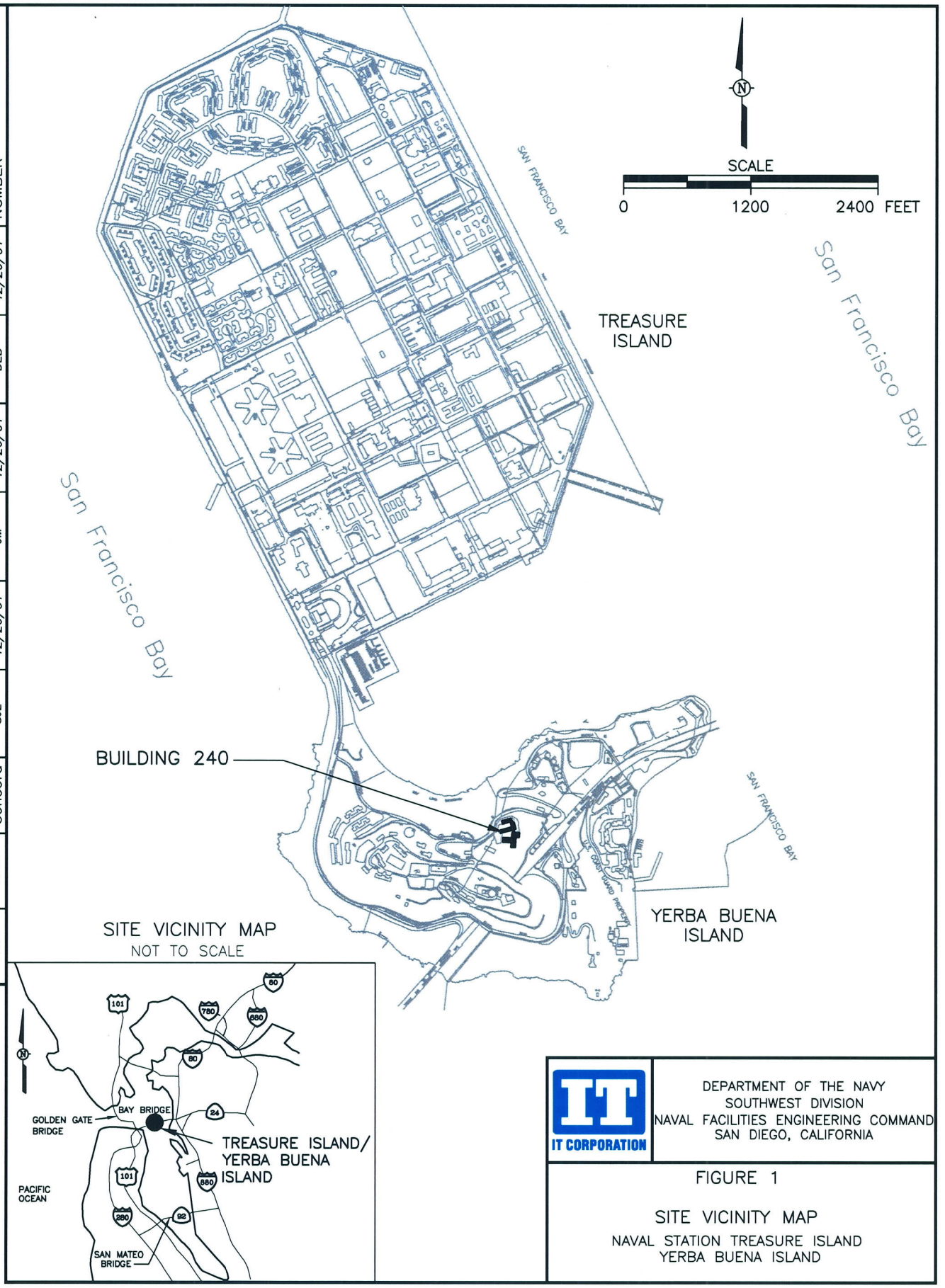


IMAGE	X-REF	OFFICE	DRAWN BY		CHECKED BY		APPROVED BY		DRAWING NUMBER
---	---	Concord	SJZ	12/26/01	JM	12/26/01	DEB	12/26/01	819853-A7

IT CORPORATION

DEPARTMENT OF THE NAVY
SOUTHWEST DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
SAN DIEGO, CALIFORNIA

FIGURE 1

SITE VICINITY MAP

NAVAL STATION TREASURE ISLAND
YERBA BUENA ISLAND

IMAGE	X-REF	OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
---	---	CONCORD	SCHAEFFER 1/4/02	JGM 2/18/02	PB 2/18/02	819853-B5

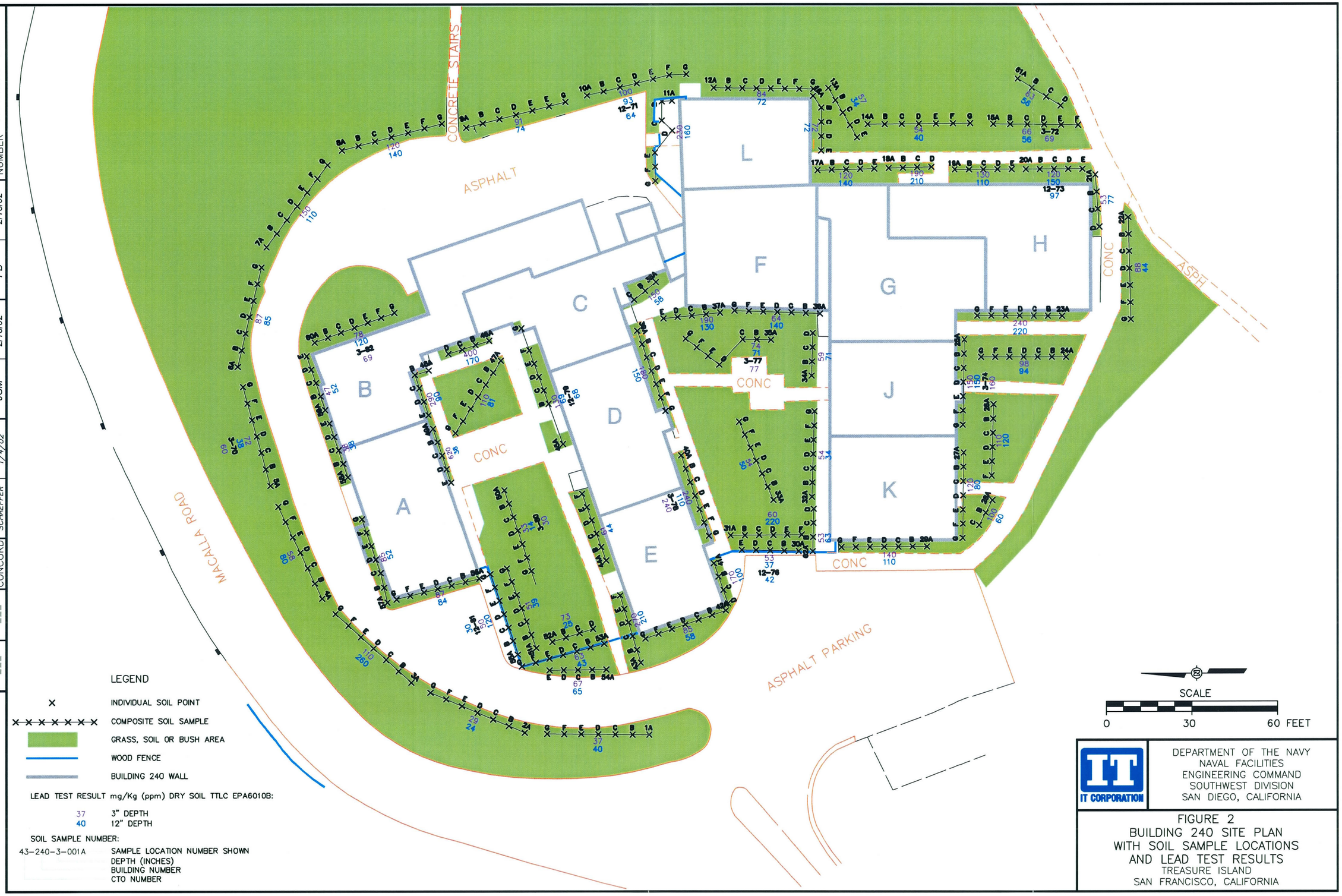
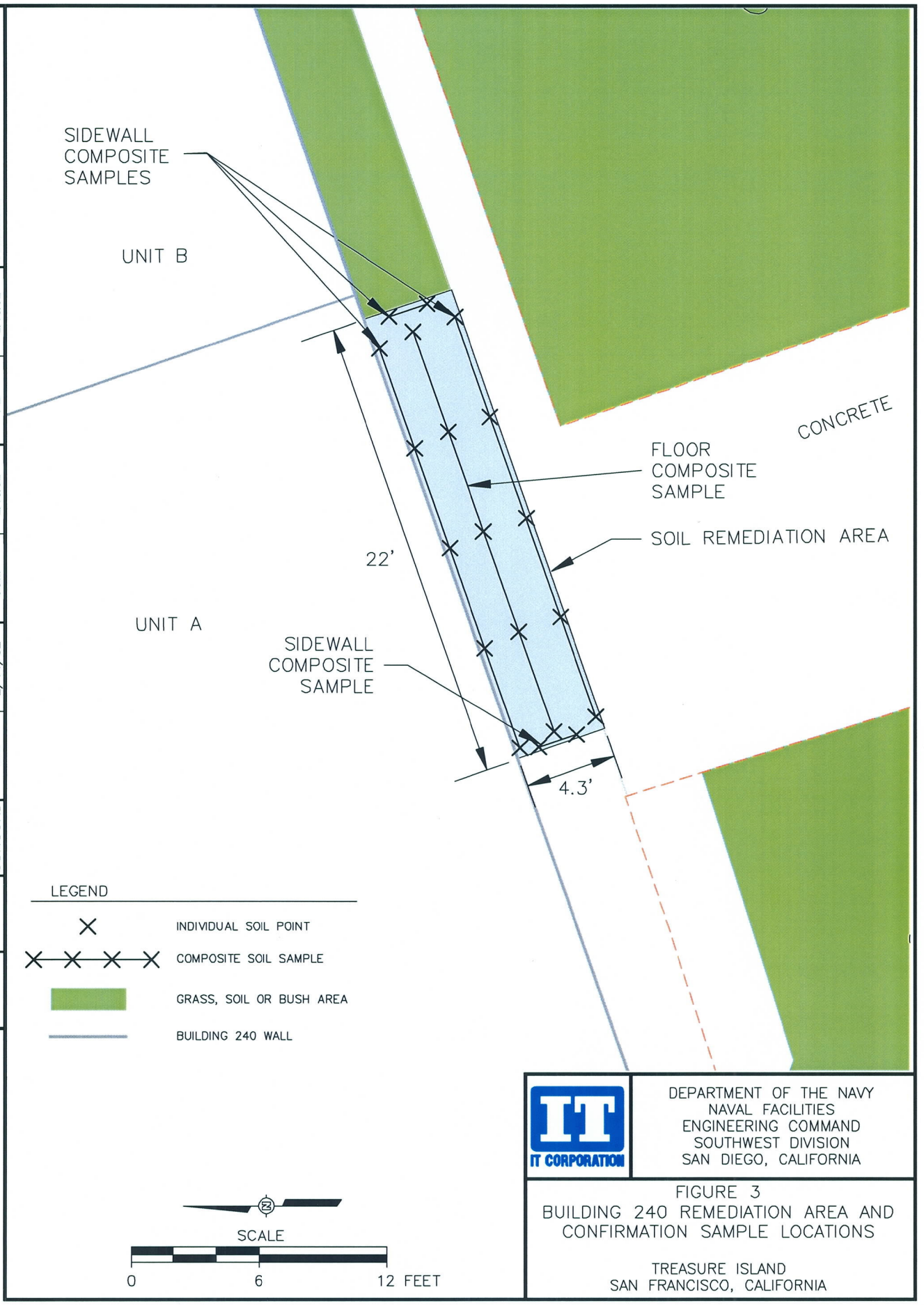


FIGURE 2
BUILDING 240 SITE PLAN
WITH SOIL SAMPLE LOCATIONS
AND LEAD TEST RESULTS
TREASURE ISLAND
SAN FRANCISCO, CALIFORNIA



DRAWING NUMBER	APPROVED BY		CHECKED BY		DRAWN BY		OFFICE	X-REF	IMAGE
819853-A8	PB	2/18/02	JGM	2/18/02	SJZ	2/14/02	CONCORD	---	---

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DEPARTMENT OF THE NAVY
NAVAL FACILITIES
ENGINEERING COMMAND
SOUTHWEST DIVISION
SAN DIEGO, CALIFORNIA

FIGURE 3
BUILDING 240 REMEDIATION AREA AND CONFIRMATION SAMPLE LOCATIONS

TREASURE ISLAND
SAN FRANCISCO, CALIFORNIA

TABLES

Table 1
Building 240 Initial Soil Characterization Lead Test Results

Date Sampled	Sample Number CTO	Building	Depth (inches)	Location Number		Lead (mg/kg)	Duplicate
27-Nov-01	43	240	3	1	(A - G)	37	
27-Nov-01	43	240	12	1	(A - G)	40	
27-Nov-01	43	240	3	2	(A - G)	29	
27-Nov-01	43	240	12	2	(A - G)	24	
27-Nov-01	43	240	3	3	(A - G)	110	
27-Nov-01	43	240	12	3	(A - G)	260	
27-Nov-01	43	240	3	4	(A - G)	58	
27-Nov-01	43	240	12	4	(A - G)	80	
27-Nov-01	43	240	3	5	(A - G)	72	
27-Nov-01	43	240	12	5	(A - G)	38	
27-Nov-01	*43*	*240*	*3*	*70*	*(A - G)*	*60*	*duplicate*
27-Nov-01	43	240	3	6	(A - G)	87	
27-Nov-01	43	240	12	6	(A - G)	85	
27-Nov-01	43	240	3	7	(A - G)	150	
27-Nov-01	43	240	12	7	(A - G)	110	
27-Nov-01	43	240	3	8	(A - G)	120	
27-Nov-01	43	240	12	8	(A - G)	140	
27-Nov-01	43	240	3	9	(A - G)	91	
27-Nov-01	43	240	12	9	(A - G)	74	
27-Nov-01	43	240	3	10	(A - G)	100	
27-Nov-01	43	240	12	10	(A - G)	93	
27-Nov-01	*43*	*240*	*12*	*71*	*(A - G)*	*64*	*duplicate*
27-Nov-01	43	240	3	11	(A - G)	230	
27-Nov-01	43	240	12	11	(A - G)	160	
27-Nov-01	43	240	3	12	(A - G)	84	
27-Nov-01	43	240	12	12	(A - G)	72	
27-Nov-01	43	240	3	13	(A - E)	57	
27-Nov-01	43	240	12	13	(A - E)	34	
27-Nov-01	43	240	3	14	(A - G)	54	
27-Nov-01	43	240	12	14	(A - G)	40	
27-Nov-01	43	240	3	15	(A - F)	66	
27-Nov-01	*43*	*240*	*3*	*72*	*(A - F)*	*69*	*duplicate*
27-Nov-01	43	240	12	15	(A - F)	56	
28-Nov-01	43	240	3	61	(A - D)	63	
28-Nov-01	43	240	12	61	(A - D)	56	
27-Nov-01	43	240	3	16	(A - E)	72	
27-Nov-01	43	240	12	16	(A - E)	72	
27-Nov-01	43	240	3	17	(A - E)	120	
27-Nov-01	43	240	12	17	(A - E)	140	
28-Nov-01	43	240	3	18	(A - D)	190	
28-Nov-01	43	240	12	18	(A - D)	210	
28-Nov-01	43	240	3	19	(A - E)	130	
28-Nov-01	43	240	12	19	(A - E)	110	
28-Nov-01	43	240	3	20	(A - E)	120	
28-Nov-01	43	240	12	20	(A - E)	150	
28-Nov-01	*43*	*240*	*12*	*73*	*(A - E)*	*97*	*duplicate*

Table 1
Building 240 Initial Soil Characterization Lead Test Results

Date Sampled	Sample Number CTO	Building	Depth (inches)	Location Number		Lead (mg/kg)	Duplicate
28-Nov-01	43	240	3	21	(A - D)	53	
28-Nov-01	43	240	12	21	(A - D)	77	
28-Nov-01	43	240	3	22	(A - G)	88	
28-Nov-01	43	240	12	22	(A - G)	44	
28-Nov-01	43	240	3	23	(A - G)	240	
28-Nov-01	43	240	12	23	(A - G)	220	
28-Nov-01	43	240	3	24	(A - G)	98	
28-Nov-01	43	240	12	24	(A - G)	94	
28-Nov-01	43	240	3	25	(A - G)	150	
28-Nov-01	*43*	*240*	*3*	*74*	*(A - G)*	*160*	*duplicate*
28-Nov-01	43	240	12	25	(A - G)	150	
28-Nov-01	43	240	3	26	(A - F)	110	
28-Nov-01	43	240	12	26	(A - F)	120	
28-Nov-01	43	240	3	27	(A - G)	120	
28-Nov-01	43	240	12	27	(A - G)	80	
28-Nov-01	43	240	3	28	(A - C)	100	
28-Nov-01	43	240	12	28	(A - C)	60	
28-Nov-01	43	240	3	29	(A - G)	140	
28-Nov-01	43	240	12	29	(A - G)	110	
28-Nov-01	43	240	3	30	(A - E)	53	
28-Nov-01	43	240	12	30	(A - E)	37	
28-Nov-01	*43*	*240*	*12*	*76*	*(A - E)*	*42*	*duplicate*
28-Nov-01	43	240	3	31	(A - F)	60	
28-Nov-01	43	240	12	31	(A - F)	220	
28-Nov-01	43	240	3	62	(A - D)	53	
28-Nov-01	43	240	12	62	(A - D)	63	
28-Nov-01	43	240	3	32	(A - G)	54	
28-Nov-01	43	240	12	32	(A - G)	34	
28-Nov-01	43	240	3	33	(A - G)	54	
28-Nov-01	43	240	12	33	(A - G)	50	
28-Nov-01	43	240	3	34	(A - D)	59	
28-Nov-01	43	240	12	34	(A - D)	71	
28-Nov-01	43	240	3	35	(A - G)	74	
28-Nov-01	*43*	*240*	*3*	*77*	*(A - G)*	*77*	*duplicate*
28-Nov-01	43	240	12	35	(A - G)	71	
28-Nov-01	43	240	3	36	(A - G)	64	
28-Nov-01	43	240	12	36	(A - G)	140	
28-Nov-01	43	240	3	37	(A - E)	190	
28-Nov-01	43	240	12	37	(A - E)	130	
28-Nov-01	43	240	3	38	(A - C)	150	
28-Nov-01	43	240	12	38	(A - C)	58	
28-Nov-01	43	240	3	39	(A - G)	180	
28-Nov-01	43	240	12	39	(A - G)	150	
28-Nov-01	43	240	3	40	(A - G)	240	
28-Nov-01	*43*	*240*	*3*	*78*	*(A - G)*	*240*	*duplicate*
28-Nov-01	43	240	12	40	(A - G)	110	
29-Nov-01	43	240	3	41	(A - D)	170	
29-Nov-01	43	240	12	41	(A - D)	100	
29-Nov-01	43	240	3	42	(A - G)	85	

Table 1
Building 240 Initial Soil Characterization Lead Test Results

Date Sampled	Sample Number CTO	Building	Depth (inches)	Location Number		Lead (mg/kg)	Duplicate
29-Nov-01	43	240	12	42	(A - G)	58	
29-Nov-01	43	240	3	43	(A - F)	270	
29-Nov-01	43	240	12	43	(A - F)	210	
29-Nov-01	43	240	3	44	(A - F)	61	
29-Nov-01	43	240	12	44	(A - F)	44	
29-Nov-01	43	240	3	45	(A - G)	130	
29-Nov-01	43	240	12	45	(A - G)	69	
29-Nov-01	*43*	*240*	*12*	*79*	*(A - G)*	*68*	*duplicate*
29-Nov-01	43	240	3	46	(A - D)	400	
29-Nov-01	43	240	12	46	(A - D)	170	
29-Nov-01	43	240	3	47	(A - G)	110	
29-Nov-01	43	240	12	47	(A - G)	81	
29-Nov-01	43	240	3	48	(A - E)	290	
29-Nov-01	43	240	12	48	(A - E)	90	
29-Nov-01	43	240	3	49	(A - E)	**620**	
29-Nov-01	43	240	12	49	(A - E)	38	
29-Nov-01	43	240	3	50	(A - G)	33	
29-Nov-01	*43*	*240*	*3*	*80*	*(A - G)*	*30*	*duplicate*
29-Nov-01	43	240	12	50	(A - G)	14	
29-Nov-01	43	240	3	51	(A - G)	51	
29-Nov-01	43	240	12	51	(A - G)	39	
29-Nov-01	43	240	3	52	(A - D)	73	
29-Nov-01	43	240	12	52	(A - D)	25	
29-Nov-01	43	240	3	53	(A - G)	63	
29-Nov-01	43	240	12	53	(A - G)	43	
29-Nov-01	43	240	3	54	(A - E)	67	
29-Nov-01	43	240	12	54	(A - E)	65	
29-Nov-01	43	240	3	55	(A - G)	50	
29-Nov-01	43	240	12	55	(A - G)	120	
29-Nov-01	*43*	*240*	*12*	*81*	*(A - G)*	*30*	*duplicate*
29-Nov-01	43	240	3	56	(A - G)	87	
29-Nov-01	43	240	12	56	(A - G)	84	
29-Nov-01	43	240	3	57	(A - G)	85	
29-Nov-01	43	240	12	57	(A - G)	52	
29-Nov-01	43	240	3	58	(A - E)	38	
29-Nov-01	43	240	12	58	(A - E)	38	
29-Nov-01	43	240	3	59	(A - E)	47	
29-Nov-01	43	240	12	59	(A - E)	52	
29-Nov-01	43	240	3	60	(A - G)	78	
29-Nov-01	*43*	*240*	*3*	*82*	*(A - G)*	*69*	*duplicate*
29-Nov-01	43	240	12	60	(A - G)	120	
Totals	136						

Notes:
CTO denotes Contract Task Order.
TTLC denotes Total Threshold Limit Concentration.
STLC denotes Soluble Threshold Limit Concentration.
All tests TTLC EPA 6010B
Laboratory: Curtis & Tompkins of Berkeley, CA
Lead concentration in units of milligrams per kilogram (mg/kg) dry soil.
See Figure 2, "Building 240 Site Plan with Soil Sample Locations and Lead Test Results," for sample locations.

APPENDIX A
BUILDING 240 PREVIOUS SOIL LEAD TEST RESULTS
FORENSIC ANALYTICAL SPECIALITIES, INC., 1998

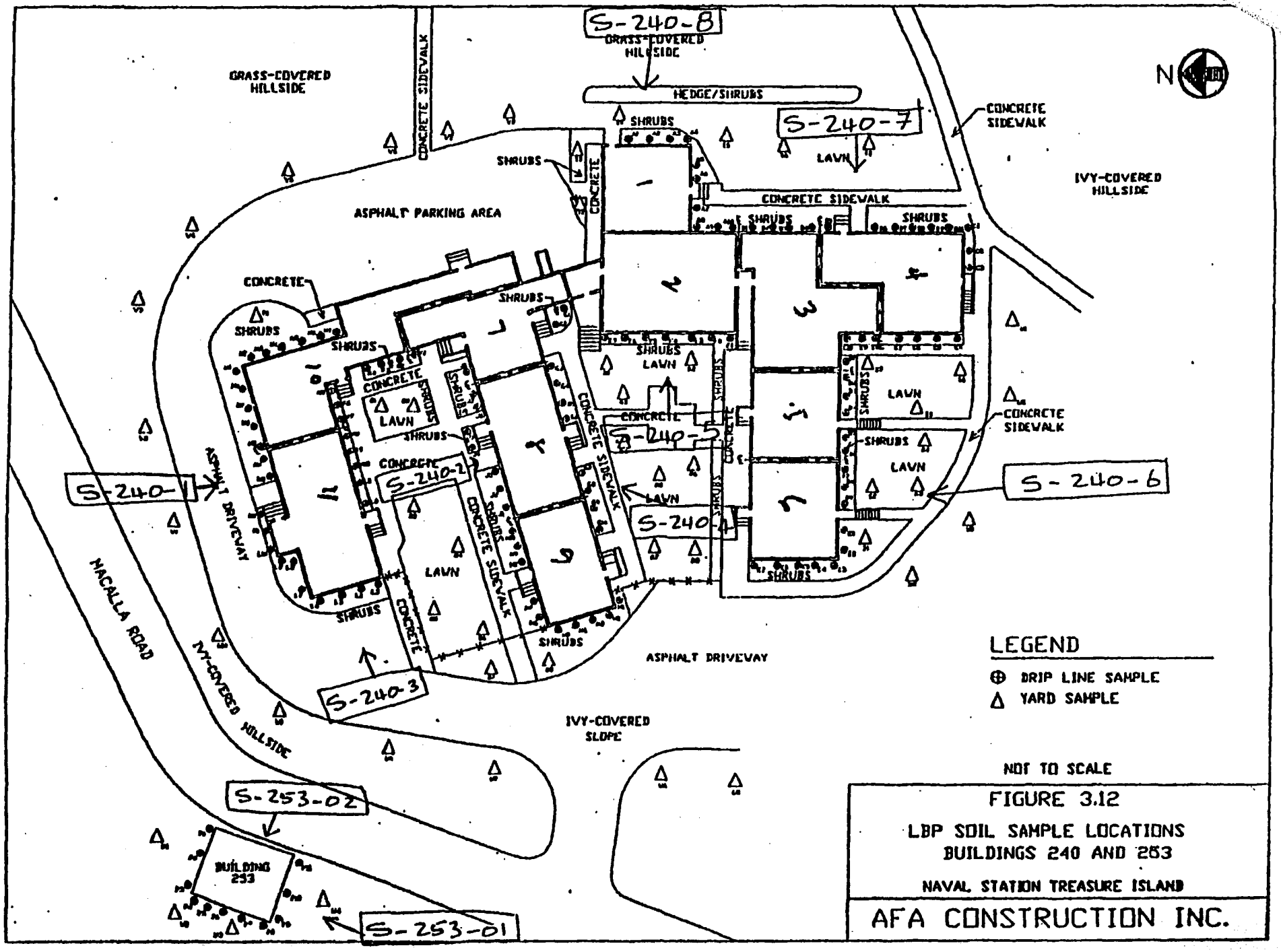


FIGURE 3.12

LBP SOIL SAMPLE LOCATIONS
BUILDINGS 240 AND 253

NAVAL STATION TREASURE ISLAND

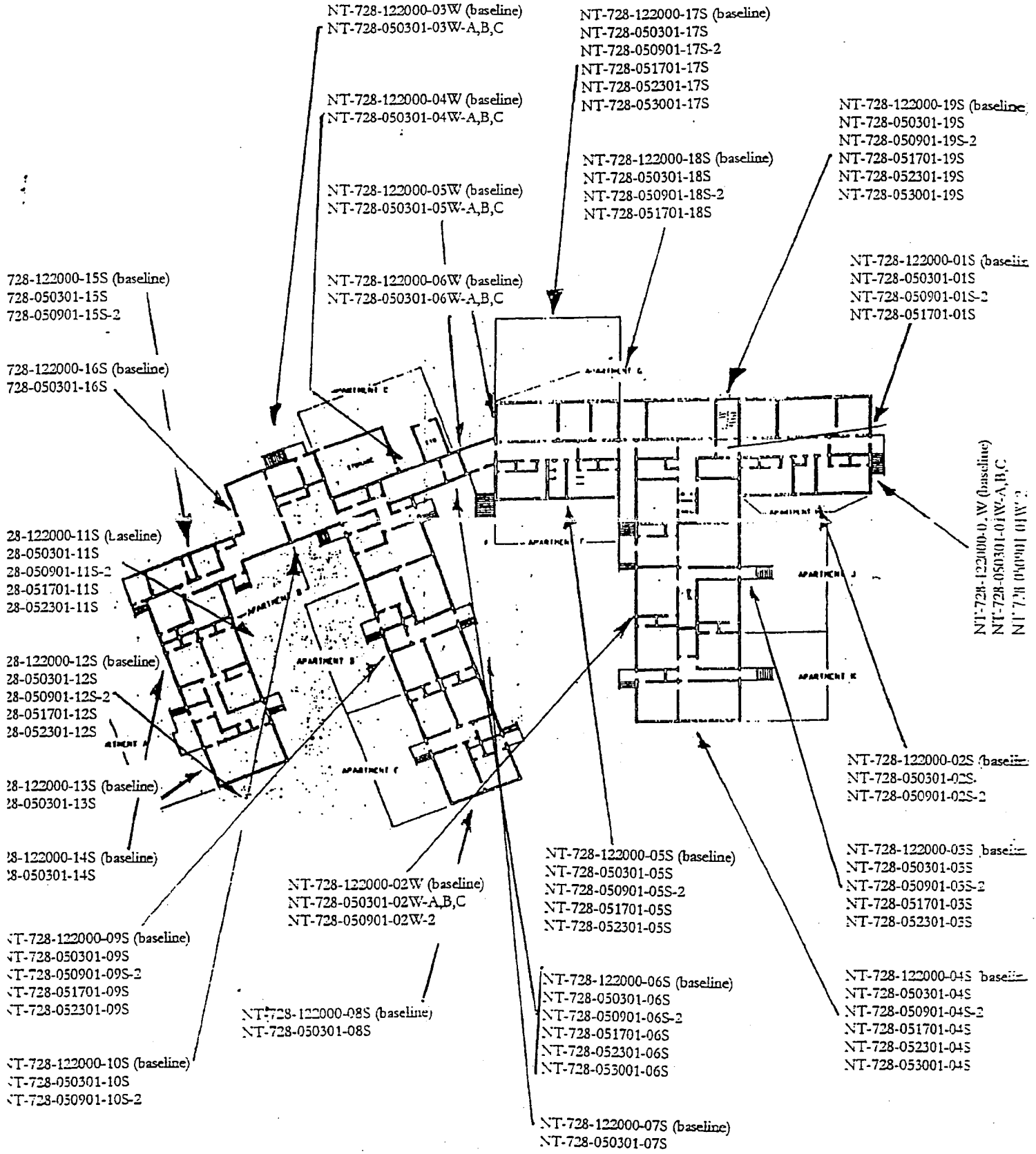
AFA CONSTRUCTION INC.

C:\ACAD\[illegible]

Building	Sample#	Sample Type	Location	Result (ppm)	Exceed HUD?	Exceed 5,000 ppm?
113 Forest	S-113-2	Soil	Exterior, west	1000	Yes	No
113 Forest	S-113-3	Soil	Exterior, north	280	No	No
113 Forest	S-113-4	Soil	Exterior, east	610	Yes	No
115 Forest	S-115-1	Soil	Exterior, south	570	Yes	No
115 Forest	S-115-2	Soil	Exterior, west	480	Yes	No
115 Forest	S-115-3	Soil	Exterior, north	97	No	No
115 Forest	S-115-4	Soil	Exterior, east	230	No	No
240 Macalla	S-240-1	Soil	Exterior, north - north of Units A and B	230	No	No
240 Macalla	S-240-2	Soil	Exterior, north - north of Units C, D and E	120	No	No
240 Macalla	S-240-3	Soil	Exterior, west - west of Unit A	460	Yes	No
240 Macalla	S-240-4	Soil	Exterior, south - south of Units E and D	7100	Yes	No
240 Macalla	S-240-5	Soil	Exterior, west - west of Unit F	87	No	No
240 Macalla	S-240-6	Soil	Exterior, south - south of Unit K	120	No	No
240 Macalla	S-240-7	Soil	Exterior, east - east of Units M, G and F	1700	Yes	No
240 Macalla	S-240-8	Soil	Exterior, east - east of Unit L	590	Yes	No
221 Yerba Buena	S-221-1	Soil	Exterior, south	190	No	No
221 Yerba Buena	S-221-2	Soil	Exterior, southwest	640	Yes	No
253 Macalla	S-253-1	Soil	Exterior, southwest	1400	Yes	No
253 Macalla	S-253-2	Soil	Exterior, southeast	120	No	No
276 Macalla	S-276-1	Soil	Exterior, north	370	No	No
276 Macalla	S-276-2	Soil	Exterior, west	220	No	No
162T Yerba Buena	S-162T-1	Soil	Exterior, north	1400	Yes	No
162T Yerba Buena	S-162T-2	Soil	Exterior, west	38	No	No
162T Yerba Buena	S-162T-3	Soil	Exterior, east	150	No	No
162T Yerba Buena	S-162T-4	Soil	Exterior, south	130	No	No
Playground #1	S-PG1-1	Soil	Exterior, under swing	8.3	No	No
Playground #1	S-PG1-2	Soil	Exterior, under slide	<6	No	No
Playground #1	S-PG1-3	Soil	Exterior, sand box under climbing structure	9.5	No	No
Playground #1	S-PG1-4	Soil	Exterior, along east fence	74	No	No
Playground #1	S-PG1-5	Soil	Exterior, along north fence	110	No	No
Playground #2	S-PG2-1	Soil	Exterior, beneath climbing structure	20	No	No

Soil Sample Results

APPENDIX B
BUILDING 240 PREVIOUS SOIL LEAD TEST RESULTS
NORTH TOWER ENVIRONMENTAL, 2001



NORTH TOWER
ENVIRONMENTAL

PROJECT #: NT-728
DATE: 6/11/01

FIGURE 1
SAMPLE LOCATION PLAN

TABLE 1
CLEARANCE SOIL AND DUST WIPE SAMPLE RESULTS

Building Number 240
Yerba Buena Island - San Francisco, California
Testing Date: 05/03/01 - 1st Round

Sample No.	Material Description	Sample location	Soil Result (ppm)	Wipe Result (µg/ft²)	Clearance Level	Accepted?
NT-728-050301-01S	Soil Composite	Northwest Side of Building	690.0	N/A	256.8	***No***
NT-728-050301-02S	Soil Composite	Northwest Side of Building	570.0	N/A	363.6	***No***
NT-728-050301-03S	Soil Composite	Northwest Side of Building	370.0	N/A	178.8	***No***
NT-728-050301-04S	Soil Composite	Northwest Side of Building	290.0	N/A	69.5	***No***
NT-728-050301-05S	Soil Composite	Northwest Side of Building	830.0	N/A	128.4	***No***
NT-728-050301-06S	Soil Composite	Northwest Side of Building	410.0	N/A	96.2	***No***
NT-728-050301-07S	Soil Composite	Northwest Side of Building	320.0	N/A	331.2	Yes
NT-728-050301-08S	Soil Composite	Northwest Side of Building	440.0	N/A	459.6	Yes
NT-728-050301-09S	Soil Composite	Northwest Side of Building	820.0	N/A	265.2	***No***
NT-728-050301-10S	Soil Composite	Northeast Side of Building	390.0	N/A	1368.0	***No***
NT-728-050301-11S	Soil Composite	Northeast Side of Building	410.0	N/A	174.0	***No***
NT-728-050301-12S	Soil Composite	Southeast Side of Building	420.0	N/A	174.0	***No***

Sample No.	Material Description	Sample location	Soil Result (ppm)	Wipe Result (µg/ft²)	Clearance Level	Accepted?
NT-728-050301-13S	Soil Composite	Southeast Side of Building	420.0	N/A	3264.0	Yes
NT-728-050301-14S	Soil Composite	Southeast Side of Building	250.0	N/A	544.8	Yes
NT-728-050301-15S	Soil Composite	Southeast Side of Building	920.0	N/A	536.4	***No***
NT-728-050301-16S	Soil Composite	Southeast Side of Building	190.0	N/A	1776.0	Yes
NT-728-050301-17S	Soil Composite	Southwest Side of Building	430.0	N/A	91.1	***No***
NT-728-050301-18S	Soil Composite	Northwest Side of Building	500.0	N/A	286.8	***No***
NT-728-050301-19S	Soil Composite	Northwest Side of Building	440.0	N/A	163.2	***No***
NT-728-050301-01W-A,B,C	Wipe Composite	Northwest Side of Building	N/A	220.0	36.0	***No***
NT-728-050301-02W-A,B,C	Wipe Composite	Southeast Side of Building	N/A	623.0	331.0	***No***
NT-728-050301-03W-A,B,C	Wipe Composite	Southeast Side of Building	N/A	336.7	1500.0	Yes
NT-728-050301-04W-A,B,C	Wipe Composite	Southeast Side of Building	N/A	516.7	533.0	Yes
NT-728-050301-05W-A,B,C	Wipe Composite	Southeast Side of Building	N/A	303.3	589.0	Yes
NT-728-050301-06W-A,B,C	Wipe Composite	Southwest Side of Building	N/A	120.0	135.0	Yes

TABLE 2
CLEARANCE SOIL AND DUST WIPE SAMPLE RESULTS

Building Number 240
Yerba Buena Island - San Francisco, California
Testing Date: 05/09/01 - 2nd Round

Sample No.	Material Description	Sample location	Soil Result (ppm)	Wipe Result (µg/ft²)	Clearance Level	Accepted?
NT-728-050901-01S-2	Soil Composite	Northwest Side of Building	339.0	N/A	256.8	***No***
NT-728-050901-02S-2	Soil Composite	Northwest Side of Building	307.0	N/A	363.6	Yes
NT-728-050901-03S-2	Soil Composite	Northwest Side of Building	261.0	N/A	178.8	***No***
NT-728-050901-04S-2	Soil Composite	Northwest Side of Building	832.0	N/A	69.5	***No***
NT-728-050901-05S-2	Soil Composite	Northwest Side of Building	305.0	N/A	128.4	***No***
NT-728-050901-06S-2	Soil Composite	Northwest Side of Building	333.0	N/A	96.2	***No***
NT-728-050901-09S-2	Soil Composite	Northwest Side of Building	283.0	N/A	265.2	***No***
NT-728-050901-10S-2	Soil Composite	Northeast Side of Building	300.0	N/A	1368.0	Yes
NT-728-050901-11S-2	Soil Composite	Northeast Side of Building	237.0	N/A	174.0	***No***
NT-728-050901-12S-2	Soil Composite	Southeast Side of Building	440.0	N/A	174.0	***No***
NT-728-050901-15S-2	Soil Composite	Southeast Side of Building	229.0	N/A	536.4	Yes

Sample No.	Material Description	Sample location	Soil Result (ppm)	Wipe Result (µg/ft²)	Clearance Level	Accepted?
NT-728-050901-17S-2	Soil Composite	Southwest Side of Building	308.0	N/A	91.1	***No***
NT-728-050901-18S-2	Soil Composite	Northwest Side of Building	300.0	N/A	286.8	***No***
NT-728-050901-19S-2	Soil Composite	Northwest Side of Building	308.0	N/A	163.2	***No***
NT-728-050901-01W-2	Wipe Composite	Northwest Side of Building	N/A	29.8	36.0	Yes
NT-728-050901-02W-2	Wipe Composite	Southeast Side of Building	N/A	37.8	331.0	Yes

TABLE 3
CLEARANCE SOIL SAMPLE RESULTS

Building Number 240
Yerba Buena Island - San Francisco, California
Testing Date: 05/17/01 - 3rd Round

Sample No.	Material Description	Sample location	Soil Result (ppm)	Wipe Result (µg/ft²)	Clearance Level	Accepted?
NT-728-051701-01S	Soil Composite	Northwest Side of Building	256.0	N/A	256.8	Yes
NT-728-051701-03S	Soil Composite	Northwest Side of Building	257.0	N/A	178.8	***No***
NT-728-051701-04S	Soil Composite	Northwest Side of Building	205.0	N/A	69.5	***No***
NT-728-051701-05S	Soil Composite	Northwest Side of Building	253.0	N/A	128.4	***No***
NT-728-051701-06S	Soil Composite	Northwest Side of Building	216.0	N/A	96.2	***No***
NT-728-051701-09S	Soil Composite	Northwest Side of Building	321.0	N/A	265.2	***No***
NT-728-051701-11S	Soil Composite	Northeast Side of Building	245.0	N/A	174.0	***No***
NT-728-051701-12S	Soil Composite	Southeast Side of Building	205.0	N/A	174.0	***No***
NT-728-051701-17S	Soil Composite	Southwest Side of Building	255.0	N/A	91.1	***No***
NT-728-051701-18S	Soil Composite	Northwest Side of Building	256.0	N/A	286.8	Yes
NT-728-051701-19S	Soil Composite	Northwest Side of Building	236.0	N/A	163.2	***No***

TABLE 4
CLEARANCE SOIL SAMPLE RESULTS

Building Number 240
Yerba Buena Island - San Francisco, California
Testing Date: 05/23/01 - 4th Round

Sample No.	Material Description	Sample location	Soil Result (ppm)	Wipe Result (µg/ft²)	Clearance Level	Accepted?
NT-728-052301-03S	Soil Composite	Northwest Side of Building	103.0	N/A	178.8	Yes
NT-728-052301-04S	Soil Composite	Northwest Side of Building	102.0	N/A	69.5	***No***
NT-728-052301-05S	Soil Composite	Northwest Side of Building	106.0	N/A	128.4	Yes
NT-728-052301-06S	Soil Composite	Northwest Side of Building	106.0	N/A	96.2	***No***
NT-728-052301-09S	Soil Composite	Northwest Side of Building	157.0	N/A	265.2	Yes
NT-728-052301-11S	Soil Composite	Northeast Side of Building	105.0	N/A	174.0	Yes
NT-728-052301-12S	Soil Composite	Southeast Side of Building	163.0	N/A	174.0	Yes
NT-728-052301-17S	Soil Composite	Southwest Side of Building	105.0	N/A	91.1	***No***
NT-728-052301-19S	Soil Composite	Northwest Side of Building	178.0	N/A	163.2	***No***

TABLE 5
CLEARANCE SOIL SAMPLE RESULTS

Building Number 240
Yerba Buena Island - San Francisco, California
Testing Date: 05/30/01 - 5th Round

Sample No.	Material Description	Sample location	Soil Result (ppm)	Wipe Result (µg/ft²)	Clearance Level	Accepted?
NT-728-053001-04S	Soil Composite	Northwest Side of Building	15.0	N/A	69.5	Yes
NT-728-053001-06S	Soil Composite	Northwest Side of Building	95.0	N/A	96.2	Yes
NT-728-053001-17S	Soil Composite	Southwest Side of Building	10.0	N/A	91.1	Yes
NT-728-053001-19S	Soil Composite	Northwest Side of Building	41.0	N/A	163.2	Yes

APPENDIX C
BUILDING 240 LABORATORY LEAD TEST DATA
DECEMBER 2001

Curtis & Tompkins, Ltd.

Lead

Lab #:	155653	Location:	CTO-43
Client:	IT Corporation	Prep:	EPA 3050
Project#:	819853	Analysis:	EPA 6010B
Analyte:	Lead	Sampled:	11/27/01
Matrix:	Soil	Received:	11/27/01
Units:	mg/Kg	Prepared:	11/29/01
Diln Fac:	1.000	Analyzed:	12/04/01
Batch#:	58362		

Field ID	Type	Lab ID	Result	RL	Basis	Moisture
43-240-3-001	SAMPLE	155653-001	37	0.15	dry	9%
43-240-12-001	SAMPLE	155653-002	40	0.15	dry	9%
43-240-3-002	SAMPLE	155653-003	29	0.15	dry	6%
43-240-12-002	SAMPLE	155653-004	24	0.15	dry	6%
43-240-3-003	SAMPLE	155653-005	110	0.15	dry	4%
43-240-12-003	SAMPLE	155653-006	260	0.14	dry	5%
43-240-3-004	SAMPLE	155653-007	58	0.16	dry	5%
43-240-12-004	SAMPLE	155653-008	80	0.15	dry	7%
43-240-3-005	SAMPLE	155653-009	72	0.14	dry	3%
43-240-12-005	SAMPLE	155653-010	38	0.14	dry	3%
43-240-3-006	SAMPLE	155653-011	60	0.15	dry	8%
43-240-3-006	SAMPLE	155653-012	87	0.13	dry	5%
43-240-12-006	SAMPLE	155653-013	85	0.13	dry	5%
43-240-3-007	SAMPLE	155653-014	150	0.15	dry	4%
43-240-12-007	SAMPLE	155653-015	110	0.15	dry	5%
43-240-3-008	SAMPLE	155653-016	120	0.15	dry	7%
43-240-12-008	SAMPLE	155653-017	140	0.15	dry	8%
43-240-3-009	SAMPLE	155653-018	91	0.13	dry	11%
43-240-12-009	SAMPLE	155653-019	74	0.16	dry	7%
	BLANK	QC163689	ND	0.15	as received	

ND= Not Detected
RL= Reporting Limit

Lead

Lab #:	155652	Location:	CTO-43
Client:	IT Corporation	Prep:	EPA 3050
Project#:	819853	Analysis:	EPA 6010B
Analyte:	Lead	Batch#:	68344
Matrix:	Soil	Sampled:	11/27/01
Units:	mg/Kg	Received:	11/27/01
Diln Fac:	1.000	Prepared:	11/29/01

Field ID	Type	Lab ID	Result	RL	Basis	Moisture	Analyzed
43-240-3-010	SAMPLE	155652-001	100	0.16	dry	9%	12/01/01
43-240-12-010	SAMPLE	155652-002	93	0.17	dry	14%	12/01/01
43-240-3-011	SAMPLE	155652-003	230	0.16	dry	12%	12/01/01
43-240-12-011	SAMPLE	155652-004	160	0.17	dry	10%	12/01/01
43-240-3-012	SAMPLE	155652-005	84	0.15	dry	9%	12/03/01
43-240-12-012	SAMPLE	155652-006	72	0.15	dry	13%	12/03/01
43-240-3-013	SAMPLE	155652-007	57	0.18	dry	19%	12/03/01
43-240-12-013	SAMPLE	155652-008	34	0.15	dry	11%	12/03/01
43-240-3-014	SAMPLE	155652-009	54	0.17	dry	14%	12/03/01
43-240-12-014	SAMPLE	155652-010	40	0.17	dry	14%	12/03/01
43-240-3-015	SAMPLE	155652-011	66	0.17	dry	13%	12/03/01
43-240-12-015	SAMPLE	155652-012	56	0.15	dry	11%	12/03/01
43-240-3-016	SAMPLE	155652-013	72	0.16	dry	12%	12/03/01
43-240-12-016	SAMPLE	155652-014	72	0.17	dry	17%	12/03/01
43-240-3-017	SAMPLE	155652-015	120	0.17	dry	12%	12/03/01
43-240-12-017	SAMPLE	155652-016	140	0.16	dry	14%	12/03/01
43-240-12-071	SAMPLE	155652-017	64	0.16	dry	12%	12/03/01
43-240-2-072	SAMPLE	155652-018	69	0.16	dry	9%	12/03/01
	BLANK	QC163619	ND	0.15	as received		12/01/01

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins, Ltd.

Lead

Lab #:	155709	Location:	CTO-43
Client:	IT Corporation	Prep:	EPA 3050
Project#:	819853	Analysis:	EPA 6010B
Analyte:	Lead	Sampled:	11/28/01
Matrix:	Soil	Received:	11/28/01
Units:	mg/Kg	Prepared:	12/04/01
Diln Fac:	1.000	Analyzed:	12/05/01
Batch#:	69464		

Field ID	Type	Lab ID	Result	RL	Basis	Moisture
43-240-3-061 (A-D)	SAMPLE	155709-001	63	0.16	dry	13%
43-240-12-061 (A-D)	SAMPLE	155709-002	56	0.15	dry	11%
43-240-3-018 (A-D)	SAMPLE	155709-003	190	0.15	dry	11%
43-240-12-018 (A-D)	SAMPLE	155709-004	210	0.15	dry	9%
43-240-3-019 (A-E)	SAMPLE	155709-005	130	0.14	dry	11%
43-240-12-019 (A-E)	SAMPLE	155709-006	110	0.17	dry	12%
43-240-3-020 (A-E)	SAMPLE	155709-007	120	0.16	dry	10%
43-240-12-020 (A-E)	SAMPLE	155709-008	150	0.14	dry	8%
43-240-3-021 (A-D)	SAMPLE	155709-009	53	0.15	dry	7%
43-240-12-021 (A-D)	SAMPLE	155709-010	77	0.14	dry	6%
43-240-3-022 (A-G)	SAMPLE	155709-011	88	0.18	dry	18%
43-240-12-022 (A-G)	SAMPLE	155709-012	44	0.15	dry	5%
43-240-3-023 (A-G)	SAMPLE	155709-013	240	0.13	dry	5%
43-240-12-023 (A-G)	SAMPLE	155709-014	220	0.16	dry	9%
45-240-12-073 (A-G)	SAMPLE	155709-015	97	0.15	dry	10%
45-240-3-074 (A-G)	SAMPLE	155709-016	160	0.14	dry	10%
	BLANK	QC164095	ND	0.15	as received	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Lead

Lab #:	155710	Location:	CTO-43
Client:	IT Corporation	Prep:	EPA 3050
Project#:	819853	Analysis:	EPA 6010B
Analyte:	Lead	Sampled:	11/28/01
Matrix:	Soil	Received:	11/28/01
Units:	mg/Kg	Prepared:	12/04/01
Diln Fac:	1.000	Analyzed:	12/05/01
Batch#:	68476		

Field ID	Type	Lab ID	Result	RL	Basis	Moisture
43-240-3-024 (A-G)	SAMPLE	155710-001	98	0.14	dry	4%
43-240-12-024 (A-G)	SAMPLE	155710-002	94	0.15	dry	7%
43-240-3-025 (A-G)	SAMPLE	155710-003	150	0.14	dry	5%
43-240-12-025 (A-G)	SAMPLE	155710-004	150	0.16	dry	8%
43-240-3-026 (A-F)	SAMPLE	155710-005	110	0.16	dry	8%
43-240-12-026 (A-F)	SAMPLE	155710-006	120	0.15	dry	8%
43-240-3-027 (A-G)	SAMPLE	155710-007	120	0.17	dry	10%
43-240-12-027 (A-G)	SAMPLE	155710-008	80	0.16	dry	6%
43-240-3-028 (A-C)	SAMPLE	155710-009	100	0.15	dry	8%
43-240-12-028 (A-C)	SAMPLE	155710-010	60	0.16	dry	8%
43-240-3-029 (A-G)	SAMPLE	155710-011	140	0.13	dry	3%
43-240-12-029 (A-G)	SAMPLE	155710-012	110	0.16	dry	12%
43-240-12-076 (A-E)	SAMPLE	155710-013	42	0.16	dry	11%
	BLANK	QC164141	ND	0.15	as received	

ND= Not Detected
RL= Reporting Limit

Lead

Lab #:	155688	Location:	CTO-43
Client:	IT Corporation	Prep:	EPA 3050
Project#:	813853	Analysis:	EPA 6010B
Analyte:	Lead	Batch#:	68446
Matrix:	Soil	Sampled:	11/28/01
Units:	mg/Kg	Received:	11/28/01
Dilu Fac:	1.000	Prepared:	12/03/01

Field ID	Type	Lab ID	Result	RL	Basis	Moisture	Analyzed
43-240-3-062	SAMPLE	155688-001	52	0.19	dry	23%	12/04/01
43-240-12-062	SAMPLE	155688-002	63	0.18	dry	23%	12/04/01
43-240-3-030	SAMPLE	155688-003	53	0.18	dry	23%	12/04/01
43-240-12-030	SAMPLE	155688-004	37	0.16	dry	13%	12/04/01
43-240-3-031	SAMPLE	155688-005	60	0.19	dry	27%	12/04/01
43-240-12-031	SAMPLE	155688-006	220	0.16	dry	12%	12/04/01
43-240-3-032	SAMPLE	155688-007	54	0.19	dry	33%	12/04/01
43-240-12-032	SAMPLE	155688-008	34	0.15	dry	18%	12/04/01
43-240-3-034	SAMPLE	155688-009	59	0.19	dry	22%	12/04/01
43-240-12-034	SAMPLE	155688-010	71	0.17	dry	31%	12/04/01
43-240-3-033	SAMPLE	155688-011	54	0.19	dry	28%	12/04/01
43-240-12-033	SAMPLE	155688-012	50	0.19	dry	24%	12/04/01
43-240-3-035	SAMPLE	155688-013	74	0.17	dry	25%	12/04/01
43-240-12-035	SAMPLE	155688-014	71	0.18	dry	19%	12/04/01
43-240-3-077	SAMPLE	155688-015	77	0.16	dry	21%	12/06/01
	BLANK	QC164011	ND	0.15	as received		12/04/01

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd

Lead

Lab #:	155711	Location:	CTO-43
Client:	IT Corporation	Prep:	EPA 3050
Project#:	819853	Analysis:	EPA 6010B
Analyte:	Lead	Batch#:	69481
Matrix:	Soil	Received:	12/29/01
Units:	mg/Kg	Prepared:	12/04/01
Dilu Fac:	1.000	Analyzed:	12/05/01

Field ID	Type	Lab ID	Result	RL	Basis	Moisture	Sampled
43-240-3-036	SAMPLE	155711-001	64	0.19	dry	26%	11/28/01
43-240-12-036	SAMPLE	155711-002	140	0.18	dry	21%	11/28/01
43-240-3-037	SAMPLE	155711-003	190	0.21	dry	31%	11/28/01
43-240-12-037	SAMPLE	155711-004	130	0.19	dry	26%	11/28/01
43-240-3-038	SAMPLE	155711-005	150	0.16	dry	9%	11/28/01
43-240-12-038	SAMPLE	155711-006	58	0.15	dry	10%	11/28/01
43-240-3-039	SAMPLE	155711-007	180	0.16	dry	16%	11/28/01
43-240-12-039	SAMPLE	155711-008	150	0.17	dry	13%	11/28/01
43-240-3-040	SAMPLE	155711-009	240	0.17	dry	12%	11/28/01
43-240-12-040	SAMPLE	155711-010	110	0.17	dry	10%	11/28/01
43-240-3-041	SAMPLE	155711-011	170	0.17	dry	15%	11/29/01
43-240-12-041	SAMPLE	155711-012	100	0.17	dry	13%	11/29/01
43-240-3-042	SAMPLE	155711-013	85	0.16	dry	8%	11/29/01
43-240-12-042	SAMPLE	155711-014	58	0.16	dry	11%	11/29/01
43-240-3-078	SAMPLE	155711-015	240	0.15	dry	14%	11/28/01
	BLANK	QC164154	ND	0.15	as received		

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

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Lead

Lab #:	155712	Location:	CTO-43
Client:	IT Corporation	Prep:	EPA 3050
Project#:	819853	Analysis:	EPA 6010B
Analyte:	Lead	Sampled:	11/29/01
Matrix:	Soil	Received:	11/29/01
Units:	mg/Kg	Prepared:	12/06/01
Diln Fac:	1.000	Analyzed:	12/07/01
Batch#:	68555		

Field ID	Type	Lab ID	Result	RL	Basis	Moisture
43-240-3-043	SAMPLE	155712-001	270	0.16	dry	9%
43-240-12-043	SAMPLE	155712-002	210	0.16	dry	12%
43-240-3-044	SAMPLE	155712-003	61	0.17	dry	15%
43-240-12-044	SAMPLE	155712-004	44	0.16	dry	15%
43-240-3-045	SAMPLE	155712-005	130	0.17	dry	13%
43-240-12-045	SAMPLE	155712-006	69	0.17	dry	14%
43-240-3-046	SAMPLE	155712-007	400	0.16	dry	5%
43-240-12-046	SAMPLE	155712-008	170	0.14	dry	11%
43-240-12-079	SAMPLE	155712-009	68	0.16	dry	13%
	BLANK	QC164432	ND	0.15	as received	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Lead

Lab #:	155714	Location:	CTO-43
Client:	IT Corporation	Prep:	EPA 3050
Project#:	819882	Analysis:	EPA 6010B
Analyte:	Lead	Sampled:	11/29/01
Matrix:	Soil	Received:	11/29/01
Units:	mg/Kg	Prepared:	12/07/01
Diln Fac:	1.000	Analyzed:	12/10/01
Batch#:	88978		

Field ID	Type	Lab ID	Result	RL	Basis	Moisture
43-240-3-047	SAMPLE	155714-001	110	0.16	dry	13%
43-240-12-047	SAMPLE	155714-002	81	0.17	dry	12%
43-240-3-048	SAMPLE	155714-003	290	0.16	dry	11%
43-240-12-048	SAMPLE	155714-004	90	0.14	dry	11%
43-240-3-049	SAMPLE	155714-005	620	0.16	dry	7%
43-240-12-049	SAMPLE	155714-006	38	0.15	dry	11%
43-240-3-050	SAMPLE	155714-007	33	0.18	dry	18%
43-240-12-050	SAMPLE	155714-008	14	0.16	dry	14%
43-240-3-051	SAMPLE	155714-009	51	0.14	dry	12%
43-240-12-051	SAMPLE	155714-010	39	0.17	dry	12%
43-240-3-052	SAMPLE	155714-011	73	0.16	dry	8%
43-240-12-052	SAMPLE	155714-012	25	0.16	dry	8%
43-240-3-053	SAMPLE	155714-013	63	0.16	dry	9%
43-240-12-053	SAMPLE	155714-014	43	0.15	dry	11%
43-240-3-080	SAMPLE	155714-015	30	0.17	dry	19%
	BLANK	QC164519	ND	0.15	as received	

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Lead

Lab #:	155713	Location:	CTO-43
Client:	IT Corporation	Prep:	EPA 3050
Project#:	819853	Analysis:	EPA 6010B
Analyte:	Lead	Sampled:	11/29/01
Matrix:	Soil	Received:	11/29/01
Units:	mg/Kg	Prepared:	12/06/01
Diln Fac:	1.000	Analyzed:	12/07/01
Batch#:	58556		

Field ID	Type	Lab ID	Result	RL	Basis	Moisture
43-240-3-054	SAMPLE	155713-001	67	0.16	dry	9%
43-240-12-054	SAMPLE	155713-002	65	0.16	dry	11%
43-240-3-055	SAMPLE	155713-003	50	0.16	dry	9%
43-240-12-055	SAMPLE	155713-004	120	0.16	dry	8%
43-240-3-056	SAMPLE	155713-005	87	0.15	dry	9%
43-240-12-056	SAMPLE	155713-006	84	0.15	dry	7%
43-240-3-057	SAMPLE	155713-007	85	0.15	dry	1%
43-240-12-057	SAMPLE	155713-008	52	0.16	dry	9%
43-240-3-058	SAMPLE	155713-009	38	0.16	dry	14%
43-240-12-058	SAMPLE	155713-010	38	0.17	dry	13%
43-240-3-059	SAMPLE	155713-011	47	0.16	dry	10%
43-240-12-059	SAMPLE	155713-012	52	0.16	dry	11%
43-240-3-060	SAMPLE	155713-013	78	0.15	dry	7%
43-240-12-060	SAMPLE	155713-014	120	0.16	dry	9%
43-240-12-081	SAMPLE	155713-015	30	0.16	dry	9%
43-240-3-082	SAMPLE	155713-016	69	0.14	dry	7%
	BLANK	QC164438	ND	0.15	as received	

ND= Not Detected
RL= Reporting Limit

FINAL
QUALITY CONTROL PLAN ADDENDUM
REMOVAL OF LEAD-CONTAMINATED SOIL AT BUILDING 240
YERBA BUENA ISLAND
NAVAL STATION TREASURE ISLAND
SAN FRANCISCO, CALIFORNIA

Environmental Remedial Action
Contract Number N62474-98-D-2076
Contract Task Order 0043

Document Control Number 3417
Revision 0

February 14, 2002

Submitted to:

U.S. Department of the Navy
Southwest Division
Naval Facilities Engineering Command
Environmental Division
1220 Pacific Highway
San Diego, California 92132-5190

Submitted by:

IT Corporation
4005 Port Chicago Highway
Concord, California 94520-1120

FINAL
QUALITY CONTROL PLAN ADDENDUM
REMOVAL OF LEAD-CONTAMINATED SOIL AT BUILDING 240
YERBA BUENA ISLAND
NAVAL STATION TREASURE ISLAND
SAN FRANCISCO, CALIFORNIA

Environmental Remedial Action
Contract Number N62474-98-D-2076
Contract Task Order 0043

Document Control Number 3417
Revision 0

February 14, 2002

Approved by: _____ Date: February 19, 2002
Peter Bourgeois
IT Project Manager

Approved by: _____ Date: February 19, 2002
Stephen Massey
IT Program Quality Control Manager

N60028_000666
TREASURE ISLAND
SSIC NO. 5090.3

FINAL
PROJECT PLANS
CHARACTERIZATION AND REMOVAL OF LEAD-CONTAMINATED SOIL
YERBA BUENA ISLAND
BUILDING 240

DATED 26 NOVEMBER 2001

IS RECORD NO. N60028_000644

Table of Contents

Introduction 1
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Introduction

This Quality Control (QC) Plan Addendum has been prepared for Contract Task Order (CTO) 0043 to describe those QC actions that will be implemented during soil excavations at Building 240 on Yerba Buena Island.

The IT Project QC Manager on CTO 0043 is Mr. Lee Laws, who is supported by Mr. Ray Spencer. Mr. Laws will manage and coordinate the task-specific QC responsibilities described in the Definable Features of Work Matrix. Mr. Laws will provide QC guidance to CTO 0043 Task Leaders (Mr. John McKay, Mr. Mark Egan, and Ms. Karen Ruffin) and coordinate Resident Officer in Charge of Construction quality assurance interfaces. A Testing Plan Log and Submittal Register will be periodically updated and maintained at the project site. This QC Plan Addendum supplements the *Naval Station Treasure Island Characterization and Removal of Lead-Contaminated Soil at Building 240, Standard Operating Procedures and Standard Quality Procedures.*

DEFINABLE FEATURES OF WORK MATRIX
WORK PLAN ADDENDUM FOR REMOVAL OF LEAD-CONTAMINATED SOIL AT BUILDING 240
CONTRACT NUMBER N62474-98-D-2076
CONTRACT TASK ORDER 0043
YERBA BUENA ISLAND
NAVAL STATION TREASURE ISLAND
SAN FRANCISCO, CALIFORNIA

Specification Section	Section No.	Feature of Work	Task Lead	Preparatory Meeting	Preparatory Inspection	Initial Inspection	Follow-Up Inspection	Completion Inspection
Supplemental Plan	2.1	Excavation	John McKay	John McKay	Lee Laws Ray Spencer	John McKay	Lee Laws Ray Spencer	Lee Laws Ray Spencer
Supplemental Plan	2.1	Backfill	John McKay	John McKay	Lee Laws Ray Spencer	John McKay	Lee Laws Ray Spencer	Lee Laws Ray Spencer
Supplemental Plan/ Field Sampling Plan (FSP)	2.1/3.2	Confirmation Sampling	John McKay	John McKay	Lee Laws Ray Spencer	John McKay	Lee Laws Ray Spencer	Lee Laws Ray Spencer
Supplemental Plan/ FSP	2.1/3.3	Waste Profile Sampling	John McKay	John McKay	Lee Laws Ray Spencer	John McKay	Lee Laws Ray Spencer	Lee Laws Ray Spencer
Supplemental Plan	2.1	Fence Removal	John McKay	John McKay	Lee Laws Ray Spencer	John McKay	Lee Laws Ray Spencer	Lee Laws Ray Spencer
Supplemental Plan	2.1	Site Restoration	John McKay	John McKay	Lee Laws Ray Spencer	John McKay	Lee Laws Ray Spencer	Lee Laws Ray Spencer
Supplemental Plan	2.1	Transportation and Disposal	Karen Ruffin	Karen Ruffin	Lee Laws Ray Spencer	Karen Ruffin	Lee Laws Ray Spencer	Lee Laws Ray Spencer
Health and Safety Plan/FSP	7.0/4.3	Decontamination	Mark Egan	Mark Egan	Lee Laws Ray Spencer	Mark Egan	Lee Laws Ray Spencer	Lee Laws Ray Spencer

TESTING PLAN AND LOG

CONTRACT NUMBER N62474-98-D-2076 CONTRACT TASK ORDER 0043			QUALITY CONTROL PLAN REMOVAL OF LEAD-CONTAMINATED SOIL AT BUILDING 240 YERBA BUENA ISLAND NAVAL STATION TREASURE ISLAND SAN FRANCISCO, CALIFORNIA					CONTRACTOR IT CORPORATION	
Specification Section and Paragraph Number	Test Procedure	Test Name	Accredited/ Approved Lab Yes No	Sampled By	Location of Test On Site Off Site	Frequency of Test	Date Complete	Date Forwarded to Contr. Off.	Remarks
*									

* *There are no testing requirements established for this contract task order.*

SUBMITTAL REGISTER	Contract Number N62474-98-D-2076 CTO 0043
Title and Location **Removal of Lead-Contaminated Soil at Building 240** **Yerba Buena Island, Naval Station Treasure Island** **San Francisco, California**	**Contractor** **IT Corporation**	**Specification Section** **Base Contract**

Transmittal No.	Item No.	Specific Paragraph No.	Description of Item Submitted	Type of Submittal									Classification		Reviewer	Contractor Schedule Dates			Contractor Action			Government Action		Remarks[1]
				Data	Drawings	Instructions	Schedules	Statements	Reports	Certification	Samples	Records	Information Only	Government Approved		Submit	Approval Needed	Material Needed By	Code	Date	Submit to Government	Code	Date	
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
1			Supplemental Work Plan										X											
2			Supplementary Quality Control Plan											X										
3			Closure Report																					

[1]Days are based on five-day work week.

Response to Comments on the Draft Work Plan Addendum
Removal of Lead-Contaminated Soil at Building 240, Yerba Buena Island, Naval Station Treasure Island
San Francisco, California, Environmental Remedial Action, Contract Number N62474-98-D-2076
Contract Task Order 0043, Document Control Number 3375, Revision 0—January 31, 2002

Comments by: Gary Foote (Geomatrix). Received by email on February 7, 2002

Comment No.	Page No.	Section, Figure, Table	Comments	Response
1		Section 1.2	I would like to better understand why two of the FSA composite samples contained significantly elevated lead concentrations (7100 and 1700 mg/kg), but subsequent composite samples collected in the same areas had significantly lower concentrations. Were the sample depths the same? FSA sample depths were not specified in the report. Were the locations the same? The locations of FSA samples are very difficult to discern from the figure in Appendix A. It is possible that the lead abatement activities performed by Architectural Systems Corporation (ASC) in 2001 would have removed affected surface soil in these two areas, but it is difficult to come to this conclusion from the information in this report. In short, we need to have a higher level of confidence that soil containing significantly elevated lead is no longer present at this building.	Comment Noted, no change to text. Samples collected by Forensic Analytical Specialists, Inc. were taken prior to any abatement of the area. The elevated concentrations of lead were probably from the paint that had fallen from the building over the years. These areas were tested again by North Tower Environmental after the abatement of the building. If any area showed elevated results it was remediated using a vacuum to remove the top layer of soil and any remaining paint chips from the ground.
2		Sections 1.2 and 2.0	These sections describe past sample results that were above 400 milligram per kilogram (mg/kg), but do not explain the significance of that threshold. The document should explain that 400 mg/kg is the EPA Region 9 Residential PRG that has been used as a screening criteria at Treasure Island.	Section 1.2 change in text: "Two of nineteen composite samples had lead results greater then the EPA Region 9 Residential PRG of 400 mg/kg, used as the screening criteria at Treasure Island." Section 2.0 change in text: "One composite sample tested above the EPA Region 9 Residential PRG of 400 mg/kg, used as the screening criteria for Treasure Island."

Comments by: Gary Foote (Geomatrix). Received by email on February 7, 2002				
Comment No.	**Page No.**	**Section, Figure, Table**	**Comments**	**Response**
3		Section 3.2	At what depth will the sidewall composite confirmation samples be collected? Also, we recommend collecting a confirmation composite sidewall sample at a depth of 3 inches from the east (short) sidewall. The two proposed north and south sidewall samples are beneath concrete, where no future exposure is likely and where lead-based paint is not likely to have affected soil. However, the east sidewall is beneath grass, where future exposure could occur and where lead-based paint is most likely to have affected soil.	Section 3.2 change to text: "Confirmation samples will be collected at approximately the same location as initial characterization samples 43-240-3-49 (A-E) at the base of the excavation and 3 to 6 inches below ground surface along the sidewalls of the excavation in accordance with the Building-240 Sampling and Analysis Plan (IT, 2001b). The three 5-point composite and two 2-point composite samples will be analyzed for TTLC lead by EPA Method 6010B."