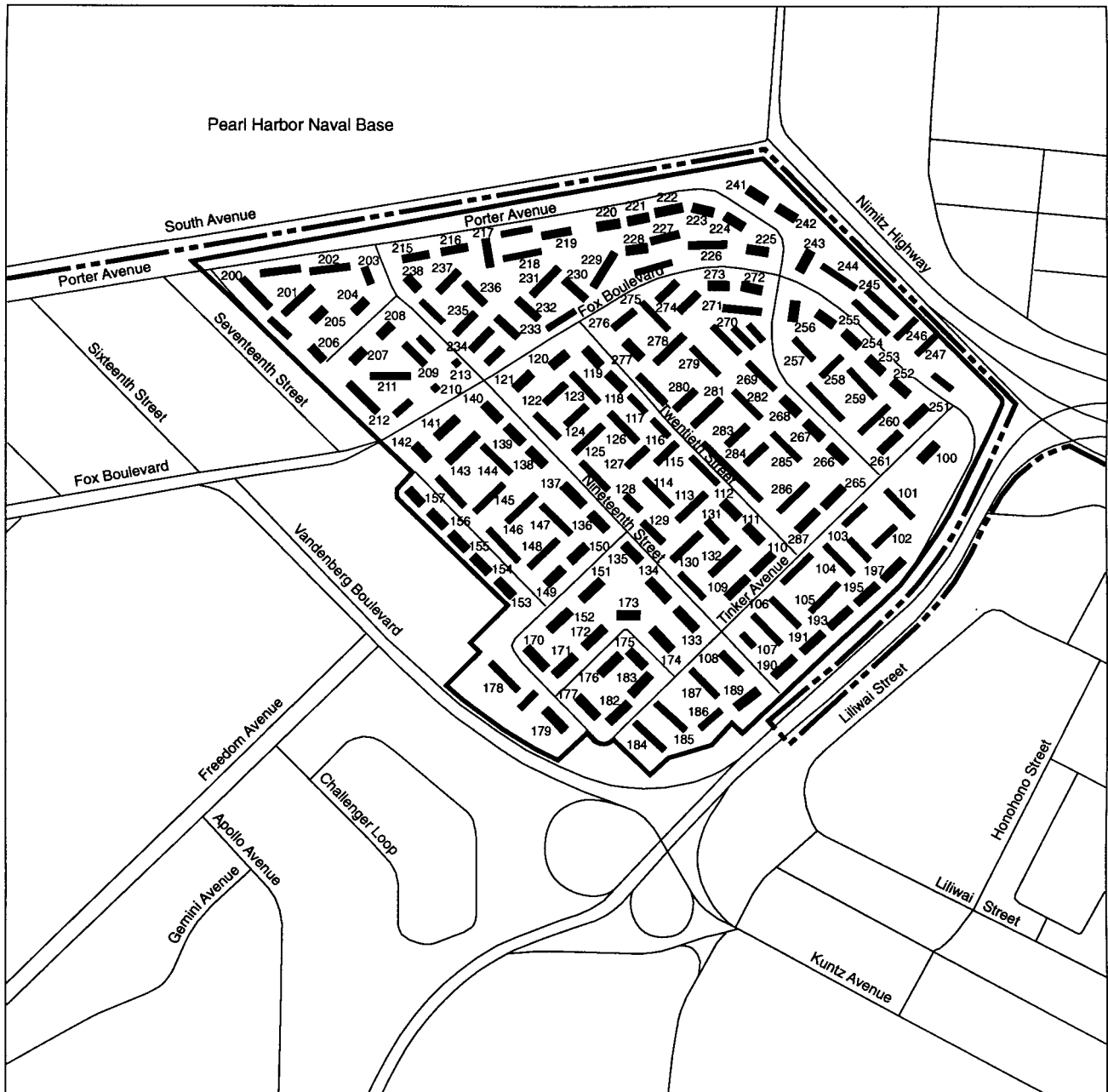


APPENDIX A

Previous Investigation Data



——— Capehart Property Boundary
 - - - Base Boundary



Figure 1-2
Capehart Housing Area Boundary

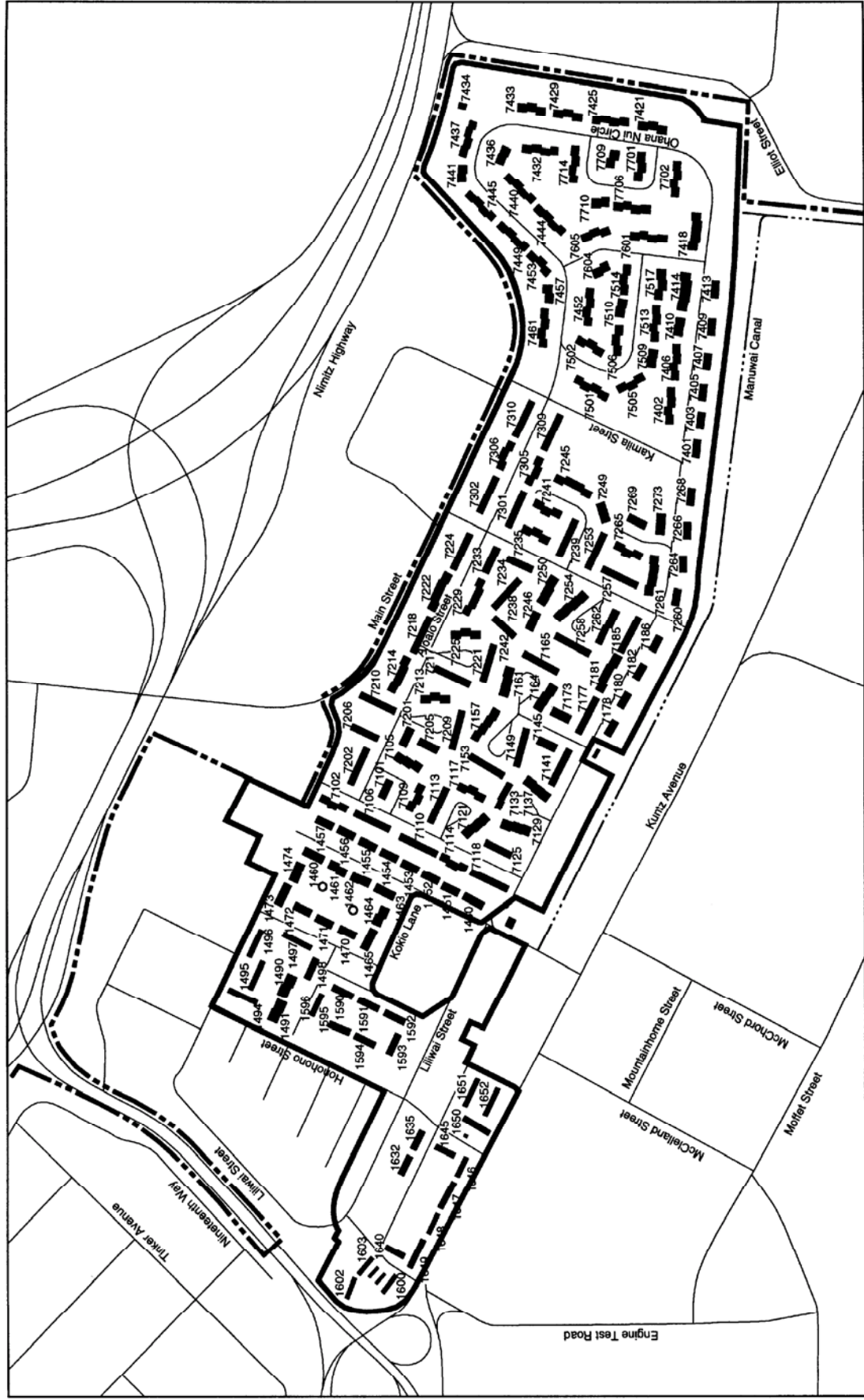


Figure 1-3
Earhart Village Housing Area Boundary

LEGEND

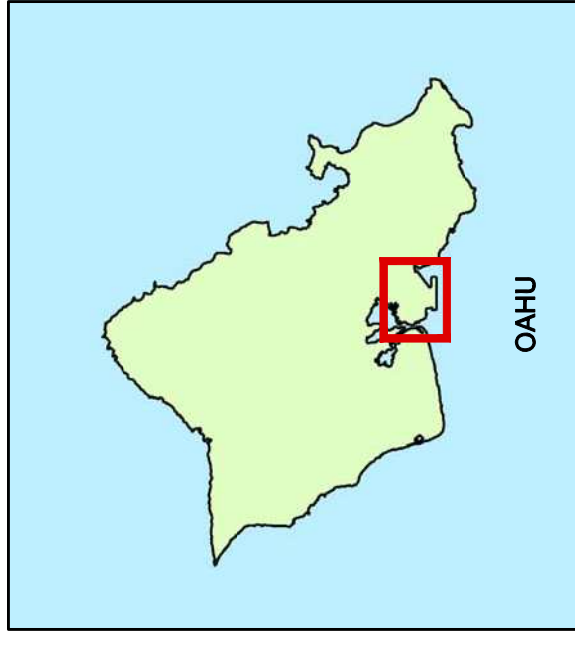
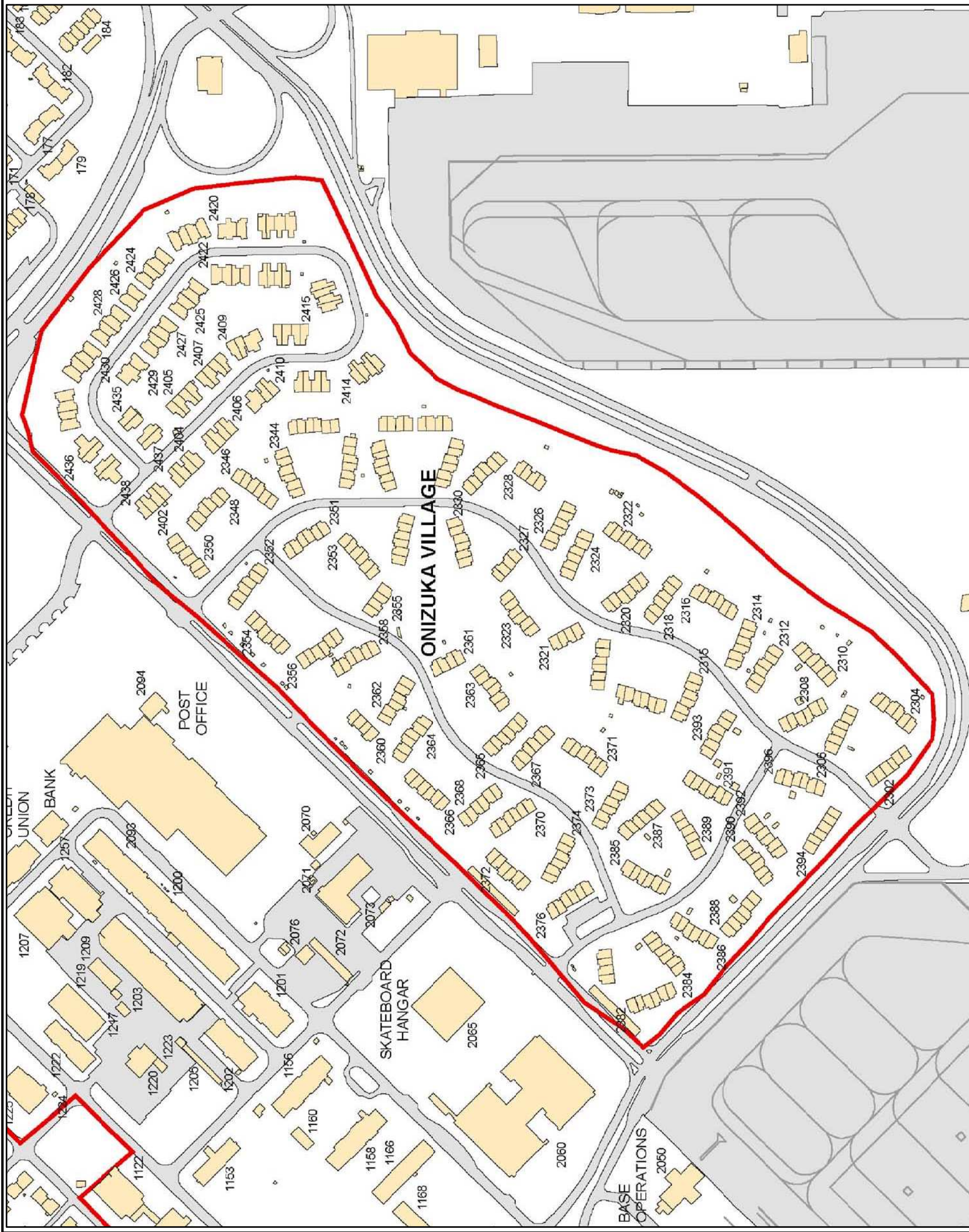
— Earhart Property Boundary

- - - Base Boundary




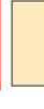

Scale

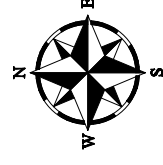
0 250 500 Feet



KEY MAP

Legend

-  Phase II Privatization Area
-  Building/Structure
-  Roads



**HICKAM PHASE II MILITARY FAMILY HOUSING
HONOLULU, HAWAII**

PREPARED BY:

TETRA TECH



**FIGURE 3-5
ONIZUKA VILLAGE MFH**

Drawing Source: J.M. Waller. 2007. Revised Final EBS, Military Family Housing Privatization Phase II, Hickam AFB.

Memorandum

To: Kelly Chuck

From: Steffany Toma

Date: September 1, 2006

Pages: 5

Re: Hickam Community Housing Earhart Village 1-Acre Sampling Protocol

Urgent **For Review** **Please Comment** **Please Reply** **Please Recycle**

Tetra Tech EM Inc. (Tetra Tech) performed multi-increment soil sampling to characterize the total chlordane, aldrin, and dieldrin concentrations within the Earhart Housing Area (Phases I-2 through I-4) of the Hickam Community Housing project at Hickam Air Force Base during August 2006. Consistent with the Soil Sampling Summary Report prepared by Tetra Tech on June 5, 2006, the following protocol was followed:

Each phase was divided into decision units measuring approximately 1 acre. Decision units were designed to distinguish a 10-foot zone of soil around each building that was most likely to be contaminated. Prior to sampling, a field crew used survey flags to mark the boundaries of each decision unit. Global positioning system (GPS) equipment was used to log the coordinates of each flag so the decision units could be accurately mapped upon the completion of sampling. A total of 59 decision units were sampled: 32 from I-2, 14 from I-3, and 13 from I-4 (see attached figure).

The multi-increment sample from each decision unit consisted of a minimum of 40 random aliquots collected from 0 to 6 inches bgs with a hand pick and a stainless-steel spoon and placed into a disposable paper bag. The 40 aliquots were combined in a disposable mixing pan and air dried.

To minimize cross contamination, a new paper bag and drying pan were used for each sample and disposed after a single use. Additionally, all metal hand tools (such as hand picks, spoons, sieves) contacting the soil were decontaminated using a non-phosphate soap wash, scrub brush, isopropyl alcohol, and triple rinse protocol. The final two rinses consisted of distilled water. Plastic surfaces can retain pesticides and can introduce chemical plastimers that may interfere with analytical efficiency; therefore, plastic equipment was not used during sample collection and processing.

The dry samples were sieved through a Number 10 sieve, subsampled (40 aliquots collected randomly within the mixing pan), and placed in a precleaned 4-ounce glass jar. Each sample was uniquely labeled with its corresponding decision unit number. Each jar was placed into a cooler filled with ice to maintain the temperature at or below 4°C, logged on a chain of custody, shipped to an off-site laboratory, and analyzed for pesticides via U.S. EPA Method 8081. One sample per every 20 samples contained extra material for MS/MSD analysis. Two field duplicate samples were collected from Phase I-2, and one field duplicate was collected from each Phase I-3 and Phase I-4. The field duplicate was collected using the same incremental sampling technique as the original sample from that decision unit and was labeled with a "D" after the original sample number (for example, the duplicate of multi-increment sample 1-2-10 was labeled 1-2-10D).

Sample results are attached. Please contact me at (808) 441-6641 if you have any questions regarding this submittal.

Sincerely,

A handwritten signature in black ink that reads "Steffany M. Toma". The signature is written in a cursive, flowing style.

Steffany Toma
Project Manager

Attachment 1: Phase I-2 through I-4 Decision Unit Location Map

Attachment 2: Soil Sampling Results

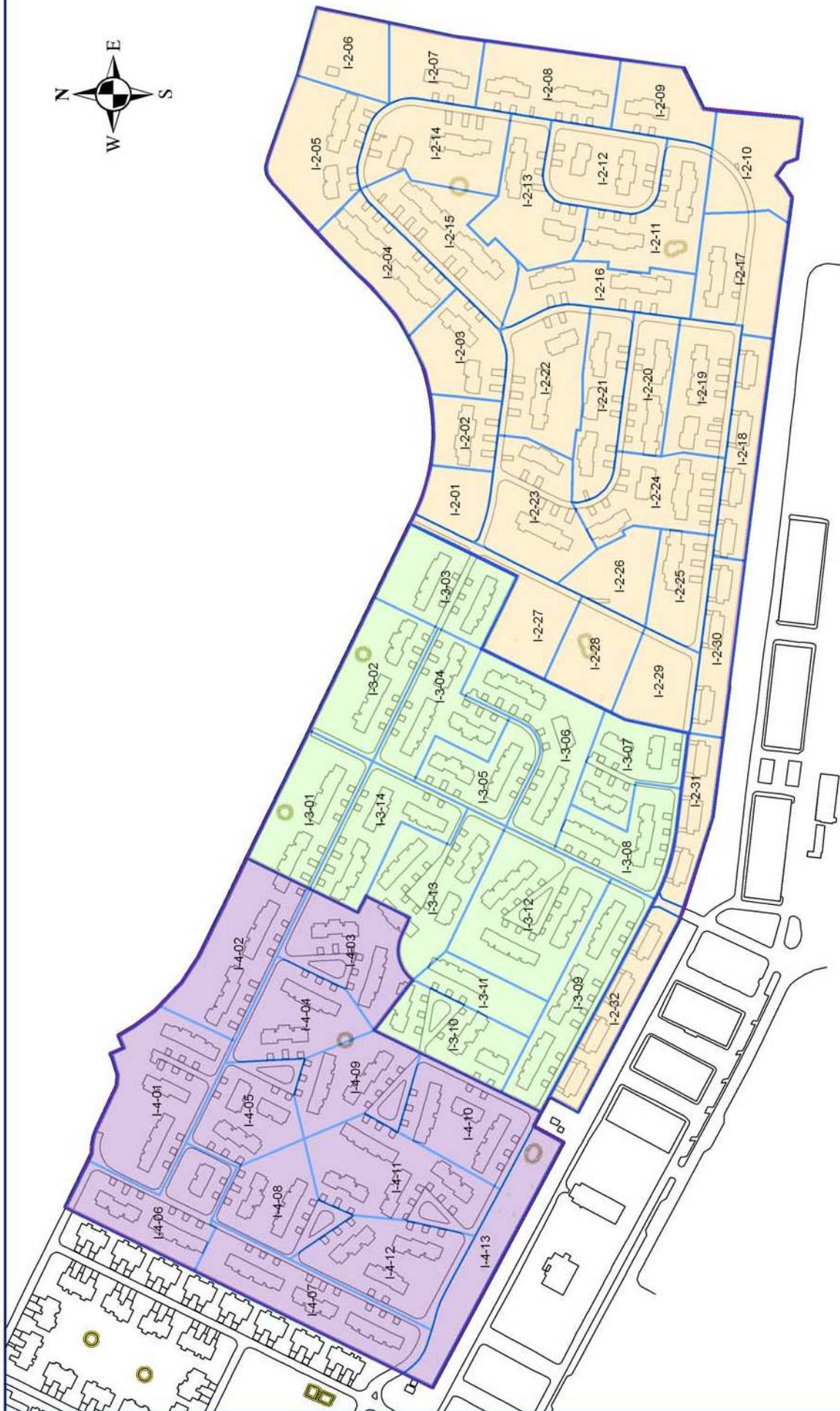


Table 1
Hickam Community Housing Phase I-2 to Phase I-4 Soil Analytical Data Summary
July 2006

Sample ID	Sample Date	Method	Aldrin (mg/kg)		Technical Chlordane (mg/kg)		Dieldrin (mg/kg)		Heptachlor (mg/kg)		Heptachlor Epoxide (mg/kg)			
			Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL		
I-2-01	7/6/06	EPA 8081	0.0013	JD	0.0010	1.340	0.0538	0.0037	J	0.0007	ND	0.0007	0.030	0.0010
I-2-01D	7/6/06	EPA 8081	0.0011	JD	0.0010	0.903	0.0537	0.0028	JD	0.0007	ND	0.0007	0.0204	0.0010
I-2-02	7/6/06	EPA 8081	0.0010	ND	0.0010	0.0678	0.0107	0.0044	J	0.0007	ND	0.0007	0.0010	ND
I-2-03	7/6/06	EPA 8081	0.0010	ND	0.0010	0.0550	0.0107	0.0091	J	0.0007	ND	0.0007	0.0018	J
I-2-04	7/6/06	EPA 8081	0.0010	ND	0.0010	0.0299	0.0106	0.0020	J	0.0007	ND	0.0007	0.0017	J
I-2-05	7/6/06	EPA 8081	0.0010	ND	0.0010	0.0233	0.0110	0.0021	J	0.0007	ND	0.0007	0.0010	ND
I-2-06	7/10/06	EPA 8081	0.0010	ND	0.0010	0.0412	0.0104	0.0010	J	0.0007	ND	0.0007	0.0010	ND
I-2-07	7/10/06	EPA 8081	0.0010	ND	0.0010	0.0308	0.0106	0.0015	J	0.0007	ND	0.0007	0.0010	ND
I-2-08	7/10/06	EPA 8081	0.0015	JD	0.0010	0.0980	0.0102	0.0202		0.0006	ND	0.0007	0.0009	ND
I-2-09	7/10/06	EPA 8081	0.0010	ND	0.0010	0.0513	0.0105	0.0058	J	0.0007	ND	0.0007	0.0010	ND
I-2-10	7/10/06	EPA 8081	0.0009	ND	0.0009	0.2820	0.0101	0.0124		0.0006	ND	0.0007	0.0021	JD
I-2-10D	7/10/06	EPA 8081	0.0093	ND	0.0093	0.0100	ND	0.0864	JD	0.0062	ND	0.0065	0.0140	JD
I-2-11	7/10/06	EPA 8081	0.0011	JD	0.0009	0.0748	0.0099	0.0097	J	0.0006	ND	0.0007	0.0009	ND
I-2-12	7/10/06	EPA 8081	0.0019	J	0.0010	0.109	0.0108	0.0075	J	0.0007	ND	0.0007	0.0021	J
I-2-13	7/10/06	EPA 8081	0.0010	ND	0.0010	0.137	0.0104	0.0036	J	0.0007	ND	0.0007	0.0010	ND
I-2-14	7/10/06	EPA 8081	0.0010	ND	0.0010	0.0848	0.0112	0.0042	J	0.0007	ND	0.0007	0.0010	ND
I-2-15	7/10/06	EPA 8081	0.0009	ND	0.0009	0.118	0.0101	0.0010	J	0.0006	ND	0.0007	0.0009	J
I-2-16	7/10/06	EPA 8081	0.0010	ND	0.0010	0.0108	ND	0.0035	J	0.0007	ND	0.0007	0.0010	ND
I-2-17	7/7/06	EPA 8081	0.0010	ND	0.0010	0.0237	0.0108	0.0028	JD	0.0007	ND	0.0007	0.0010	ND
I-2-17D	7/7/06	EPA 8081	0.0508	ND	0.0508	1.390	0.5460	1.640		0.0341	ND	0.0358	0.0499	ND
I-2-18	7/11/06	EPA 8081	0.0010	ND	0.0010	0.0707	0.0106	0.0022	J	0.0007	ND	0.0007	0.0010	ND
I-2-19	7/7/06	EPA 8081	0.0013	J	0.0010	0.244	0.0104	0.0082	J	0.0007	ND	0.0007	0.0037	J
I-2-20	7/7/06	EPA 8081	0.0010	ND	0.0010	0.0939	0.0108	0.0085	J	0.0007	ND	0.0007	0.0010	ND
I-2-21	7/7/06	EPA 8081	0.0010	ND	0.0010	0.624	0.0109	0.0026	JD	0.0007	ND	0.0007	0.0010	ND
I-2-22	7/7/06	EPA 8081	0.0102	ND	0.0010	0.0222	0.0110	0.0051	J	0.0007	ND	0.0007	0.0010	ND
I-2-23	7/6/06	EPA 8081	0.0016	ND	0.0016	0.111	0.0168	0.0014	JD	0.0011	ND	0.0011	0.0015	ND
I-2-24	7/7/06	EPA 8081	0.0102	ND	0.0102	0.2660	0.1100	0.0069	ND	0.0069	ND	0.0072	0.0100	ND
I-2-25	7/6/06	EPA 8081	0.0102	ND	0.0102	0.191	0.1100	0.0579	J	0.0069	ND	0.0072	0.0100	ND
I-2-26	7/7/06	EPA 8081	0.0104	ND	0.0104	0.1120	ND	0.0070	ND	0.0070	ND	0.0073	0.0102	ND
I-2-27	7/6/06	EPA 8081	0.0016	JD	0.0011	1.260	0.0601	0.0073	J	0.0008	ND	0.0008	0.0130	0.0011
I-2-28	7/6/06	EPA 8081	0.0058	ND	0.0058	0.580	0.0626	0.0053	J	0.0039	ND	0.0041	0.0057	ND
I-2-29	7/6/06	EPA 8081	0.0021	JD	0.0012	0.803	0.0211	0.0054	JD	0.0008	ND	0.0008	0.0050	JD
I-2-30	7/7/06	EPA 8081	0.0010	ND	0.0010	0.255	0.0105	0.0184		0.0007	ND	0.0007	0.0015	JD
I-2-31	7/7/06	EPA 8081	0.0009	ND	0.0009	0.0691	0.0101	0.0017	JD	0.0006	ND	0.0007	0.0009	ND
I-2-32	7/7/06	EPA 8081	0.0010	ND	0.0010	0.0309	0.0104	0.0007	ND	0.0007	ND	0.0007	0.0010	ND
I-3-01	7/11/06	EPA 8081	0.0049	ND	0.0049	0.0751	0.0105	0.0143	J	0.0033	ND	0.0035	0.0053	JD

**Table 1
Hickam Community Housing Phase I-2 to Phase I-4 Soil Analytical Data Summary
July 2006**

Sample ID	Sample Date	Method	Aldrin (mg/kg)		Technical Chlordane (mg/kg)		Dieldrin (mg/kg)		Heptachlor (mg/kg)		Heptachlor Epoxide (mg/kg)				
			Result	MDL	Result	MDL	Result	MDL	Result	MDL	Result	MDL			
I-3-02	7/11/06	EPA 8081	0.0050	ND	0.0050	0.0107	0.0045	J	0.0033	0.0035	ND	0.0035	0.0049	ND	0.0049
I-3-02D	7/11/06	EPA 8081	0.0040	JD	0.0010	0.0102	0.0218		0.0006	0.0024	JD	0.0007	0.0011	JD	0.0009
I-3-03	7/11/06	EPA 8081	0.0202	ND	0.0202	ND	0.0109	ND	0.0136	0.0143	ND	0.0143	0.0199	ND	0.0199
I-3-04	7/11/06	EPA 8081	0.0009	ND	0.0009	0.0102	0.294		0.0006	0.0007	ND	0.0007	0.0044	J	0.0009
I-3-05	7/11/06	EPA 8081	0.0019	J	0.0009	0.0102	0.240		0.0006	0.0007	ND	0.0007	0.0040	JD	0.0009
I-3-06	7/11/06	EPA 8081	0.0050	ND	0.0050	0.0539	0.817		0.0034	0.0035	ND	0.0035	0.0064	J	0.0049
I-3-07	7/11/06	EPA 8081	0.0198	ND	0.0198	0.5320	2.820		0.0133	0.0140	ND	0.0140	0.0195	ND	0.0195
I-3-08	7/11/06	EPA 8081	0.0099	ND	0.0099	0.1060	0.559		0.0664	0.0070	ND	0.0070	0.0097	ND	0.0097
I-3-09	7/11/06	EPA 8081	0.0050	ND	0.0050	0.0532	0.710		0.0033	0.0035	ND	0.0035	0.0049	ND	0.0049
I-3-10	7/11/06	EPA 8081	0.0051	ND	0.0051	0.0110	0.714		0.0034	0.0036	ND	0.0036	0.0052	JD	0.0050
I-3-11	7/11/06	EPA 8081	0.0049	ND	0.0049	0.0524	0.550		0.0033	0.0034	ND	0.0034	0.0048	ND	0.0048
I-3-12	7/11/06	EPA 8081	0.0196	ND	0.0196	0.2100	0.694		0.0131	0.0138	ND	0.0138	0.0192	ND	0.0192
I-3-13	7/11/06	EPA 8081	0.0010	ND	0.0010	0.0102	0.546		0.0006	0.0007	ND	0.0007	0.0080	J	0.0009
I-3-14	7/11/06	EPA 8081	0.0048	ND	0.0048	0.0512	0.451		0.0032	0.0042	J	0.0034	0.0047	ND	0.0047
I-4-01	7/11/06	EPA 8081	0.0089	J	0.0050	0.107	0.7300		0.0034	0.0035	ND	0.0035	0.0080	J	0.0049
I-4-01D	7/11/06	EPA 8081	0.0475	ND	0.0475	1.0200	15.400		0.0319	0.0335	ND	0.0335	0.186	JD	0.0467
I-4-02	7/11/06	EPA 8081	0.0186	ND	0.0186	0.2000	1.1300		0.0125	0.0131	ND	0.0131	0.0225	JD	0.0183
I-4-03	7/11/06	EPA 8081	0.0013	J	0.0010	0.0519	0.2240		0.0006	0.0007	ND	0.0007	0.0017	J	0.0009
I-4-04	7/11/06	EPA 8081	0.0049	ND	0.0049	0.0529	0.5700		0.0033	0.0035	ND	0.0035	0.0048	ND	0.0048
I-4-05	7/11/06	EPA 8081	0.0093	ND	0.0093	0.2000	2.7200		0.0062	0.0066	ND	0.0066	0.0091	ND	0.0091
I-4-06	7/11/06	EPA 8081	0.0011	JD	0.0010	0.0105	0.108		0.0007	0.0007	ND	0.0007	0.0019	JD	0.0010
I-4-07	7/11/06	EPA 8081	0.0081	JD	0.0019	0.0504	0.545		0.0013	0.0013	ND	0.0013	0.0040	J	0.0018
I-4-08	7/11/06	EPA 8081	0.0010	ND	0.0010	0.0109	0.0672		0.0007	0.0007	ND	0.0007	0.0010	ND	0.0010
I-4-09	7/11/06	EPA 8081	0.0033	J	0.0009	0.0101	0.2470		0.0006	0.0007	ND	0.0007	0.0018	J	0.0009
I-4-10	7/11/06	EPA 8081	0.0019	JD	0.0009	0.0102	0.2890		0.0006	0.0007	ND	0.0007	0.0009	ND	0.0009
I-4-11	7/11/06	EPA 8081	0.0049	ND	0.0049	0.0529	0.9520		0.0033	0.0035	ND	0.0035	0.0048	ND	0.0048
I-4-12	7/11/06	EPA 8081	0.0051	ND	0.0051	0.0544	0.5600		0.0034	0.0036	ND	0.0036	0.0050	ND	0.0050
I-4-13	7/11/06	EPA 8081	0.0104	ND	0.0104	0.224	3.420		0.007	0.0073	ND	0.0073	0.0291	JD	0.0102

Notes:

Sample concentrations exceeding the screening criteria are indicated in boldface.

EAL = State of Hawaii Department of Health Environmental Action Levels

J = Estimated quantitation, below the calibration range and above MDL.

D = Detected, but RPD is >40% between results in dual column method.

mg/kg = milligrams/kilogram

ND = Indicates the analyte is not detected (above the MDL)

MDL = method detection limit

**Table 1
Hickam Community Housing Soil Samples Data Summary as of April 17, 2007**

Sample ID	Sample Location	Sample Depth (inches)	Sample Date	Method	Aldrin (mg/kg) Tier 2 EAL: 0.42			Technical Chlordane (mg/kg) Tier 2 EAL: 23.4			Dieldrin (mg/kg) Tier 2 EAL: 0.45			Combined Risk
					Result	Qual	PQL	Result	Qual	PQL	Result	Qual	PQL	
ER7433C-S1	Unit 7433C	0 to 6	12/28/06	EPA 8081	10.7000	ND	2.0000	0.6690	J	0.6690	3.7000	ND	2.7000	3.37E-04
ER7429C-S1	Unit 7429C	0 to 6	12/28/06	EPA 8081	4.2300	ND	1.1000	0.7370	ND	0.7370	3.8100	ND	1.5000	1.86E-04
ER7425D-S1	Unit 7425D	0 to 6	12/28/06	EPA 8081	68.2000	ND	3.8000	0.6290	ND	0.6290	44.7000	ND	5.0000	2.62E-03
ER7421B-S1	Unit 7421B	0 to 6	12/28/06	EPA 8081	58.7000	ND	3.8000	0.6250	ND	0.6250	13.2000	ND	5.0000	1.69E-03
ER7186-S1-06	Unit 7186	0 to 6	2/27/07	EPA 8081	0.0860	ND	0.0860	0.8680	J	2.8800	0.1200	ND	0.1200	5.09E-06
ER7186-S2-12	Unit 7186	6 to 12	2/27/07	EPA 8081	0.0860	ND	0.0860	0.8680	ND	2.8700	0.1100	ND	0.1100	5.72E-06
ER7186-S3-18	Unit 7186	12 to 18	2/27/07	EPA 8081	0.1800	ND	0.1800	5.8300	ND	5.8300	0.2300	ND	0.2300	1.19E-05
ER7186-S4-24	Unit 7186	18 to 24	4/16/07	EPA 8081	0.3800	ND	0.3800	12.8000	ND	12.8000	0.5100	ND	0.5100	2.59E-05
ER7186-S5-30	Unit 7186	24 to 30	4/16/07	EPA 8081	0.4600	ND	0.4600	15.3000	ND	15.3000	0.6100	ND	0.6100	3.10E-05
ER7403-S1-06	Unit 7403	0 to 6	2/27/07	EPA 8081	0.0361	ND	0.0340	2.1600	ND	1.1400	0.0023	ND	0.0023	1.83E-06
ER7403-S2-12	Unit 7403	6 to 12	2/27/07	EPA 8081	0.0340	ND	0.0340	0.7290	J	1.1400	0.0460	ND	0.0460	2.14E-06
ER7403-S3-18	Unit 7403	12 to 18	2/27/07	EPA 8081	0.0330	ND	0.0330	0.7130	J	1.1100	0.0450	ND	0.0450	2.09E-06
ER7403-S4-24	Unit 7403	18 to 24	4/11/07	EPA 8081	0.0890	ND	0.0890	2.980	ND	2.980	0.1200	ND	0.1200	6.06E-06
ER7403-S5-30	Unit 7403	24 to 30	4/12/07	EPA 8081	0.0870	ND	0.0870	1.160	J	2.900	0.120	ND	0.120	5.23E-06
ER7406-S1-06	Unit 7406	0 to 6	2/28/07	EPA 8081	1.7300	ND	0.0920	3.0800	ND	3.0800	2.5800	ND	0.1200	9.98E-05
ER7406-S2-12	Unit 7406	6 to 12	2/28/07	EPA 8081	0.7180	ND	0.0940	3.1300	ND	3.1300	0.7070	ND	0.1300	3.41E-05
ER7406-S1-18	Unit 7406	12 to 18	2/28/07	EPA 8081	0.5240	ND	0.0990	3.2900	ND	3.2900	0.4250	ND	0.1300	2.33E-05
ER7406-S4-24	Unit 7406	18 to 24	4/11/07	EPA 8081	21.300	ND	3.500	2.900	ND	2.900	3.680	J	4.600	5.90E-04
ER7406-S5-30	Unit 7406	24 to 30	4/16/07	EPA 8081	8.530	J	17.000	11.600	ND	11.600	4.390	ND	0.470	3.06E-04
ER7421-S1-24	Unit 7421	18 to 24	4/17/07	EPA 8081	24.600	ND	17.000	11.500	ND	11.500	6.360	ND	0.460	7.32E-04
ER7421-S2-30	Unit 7421	24 to 30	4/17/07	EPA 8081	21.000	ND	17.000	11.500	ND	11.500	3.360	ND	0.460	5.80E-04
ER7433-S1-06	Unit 7433	0 to 6	2/28/07	EPA 8081	1.0700	ND	0.1000	3.3900	ND	3.3900	0.5420	ND	0.1400	3.90E-05
ER7433-S2-12	Unit 7433	6 to 12	2/28/07	EPA 8081	0.1670	ND	0.1000	3.3800	ND	3.3800	0.1750	ND	0.1400	9.31E-06
ER7433-S3-18	Unit 7433	12 to 18	2/28/07	EPA 8081	1.0300	ND	0.1900	6.2500	ND	6.2500	2.1100	ND	0.2500	7.41E-05
ER7453-S1-06	Unit 7453	0 to 6	2/26/07	EPA 8081	271.000	ND	150.000	2.5800	ND	2.5800	12.6000	ND	10.0000	6.73E-03
ER7453-S2-12	Unit 7453	6 to 12	2/26/07	EPA 8081	51.300	ND	9.5000	0.0634	ND	0.0634	2.6300	ND	2.5000	1.28E-03
ER7453-S3-18	Unit 7453	12 to 18	2/26/07	EPA 8081	1.4700	ND	0.1900	0.0632	ND	0.0632	0.5960	ND	0.2500	4.83E-05
ER7453-S4-24	Unit 7453	18 to 24	4/10/07	EPA 8081	3.100	ND	0.380	3.1600	ND	3.1600	0.130	ND	0.130	7.80E-05
ER7453-S4-30	Unit 7453	24 to 30	4/10/07	EPA 8081	2.010	ND	0.380	3.1600	ND	3.1600	0.237	ND	0.130	5.45E-05
ER7701-S1-06	Unit 7701	0 to 6	2/26/07	EPA 8081	9.1700	ND	1.9000	0.0648	ND	0.0648	2.2400	J	2.6000	2.68E-04
ER7701-S2-12	Unit 7701	6 to 12	2/26/07	EPA 8081	5.8500	ND	1.9000	0.0635	ND	0.0635	1.3500	ND	0.2500	1.69E-04
ER7701-S3-18	Unit 7701	12 to 18	2/26/97	EPA 8081	18.3000	ND	1.9000	0.0640	ND	0.0640	2.6800	ND	0.0260	4.95E-04
ER7701-S4-24	Unit 7701	18 to 24	4/10/07	EPA 8081	2.190	ND	0.380	3.140	ND	3.140	0.252	ND	0.130	5.91E-05
ER7701-S5-30	Unit 7701	24 to 30	4/10/07	EPA 8081	1.450	ND	0.360	2.990	ND	2.990	0.130	ND	0.120	3.87E-05

Notes:

Sample concentrations exceeding the screening criteria are indicated in boldface.

EAL = State of Hawaii Department of Health Environmental Action Levels

J = The quantitation is an estimation, below the practical quantitation limit (reporting limit) and above the method detection limit.

D = Detected, but RPD is >40% between results in dual column method.

ND = Indicates the analyte is not detected

PQL = practical quantitation limit (reporting limit)