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MEMORANDUM

To:	Bonnie Lavelle, Chris Weis
From:	Mary Goldade
Date:	November 10, 1999
Project:	Vasquez Boulevard & I-70 Site
RE:	Phase III Preliminary Results Summary Report
cc:	Project Files

Attached for your review is the Phase III Preliminary Results Summary Report. Data provided in this report represent XRF analyses performed through October 23, 1999. Unfortunately, summaries for several quality control samples are not provided due to database limitations. These include the ongoing method detection limit (MDL) studies and the blind performance standards. As soon as the database has been updated so that MDL samples are identified and the information about field ID assigned to the blind standards is provided, another results summary will be prepared. Note that the labels used for the NIST standards are not consistently identified in the database. For example, NIST standard 2710 is identified in 3 ways: a) NIST 2710; b) NIST 2710-A; and c) NIST 2710A. Information about the NIST samples should be normalized for like standards.

Vasquez Boulevard & I-70:

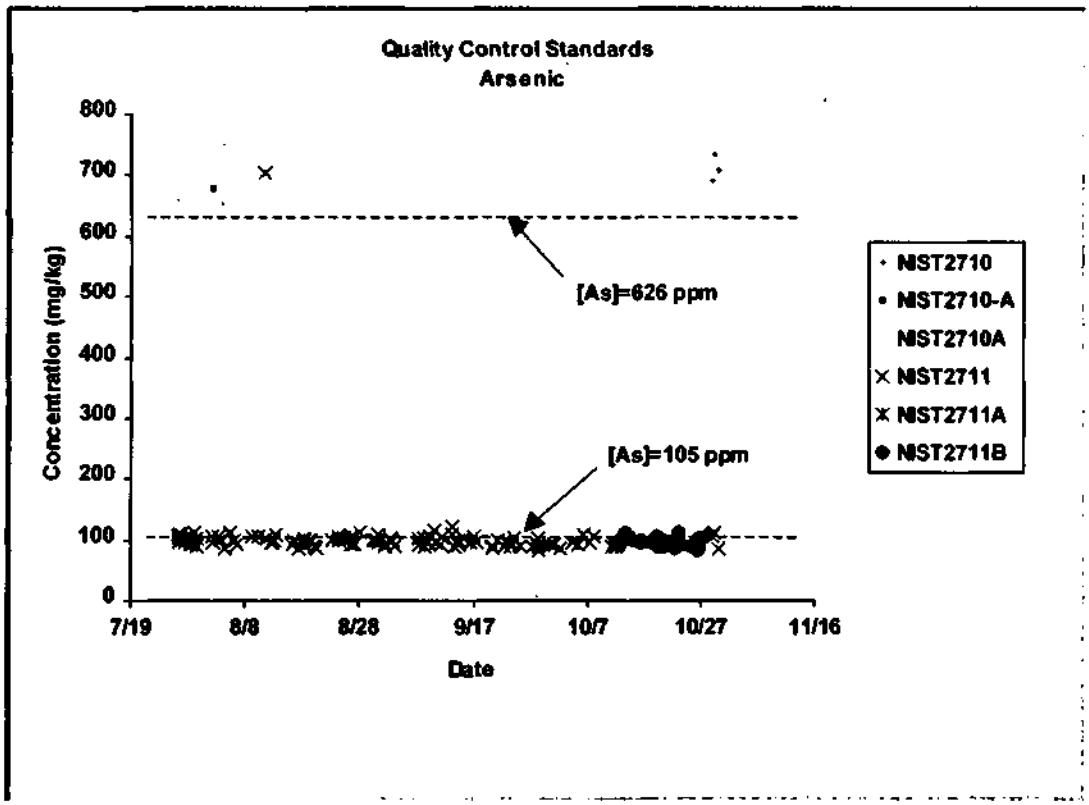
Phase III Preliminary Results Summary
November 10, 1999

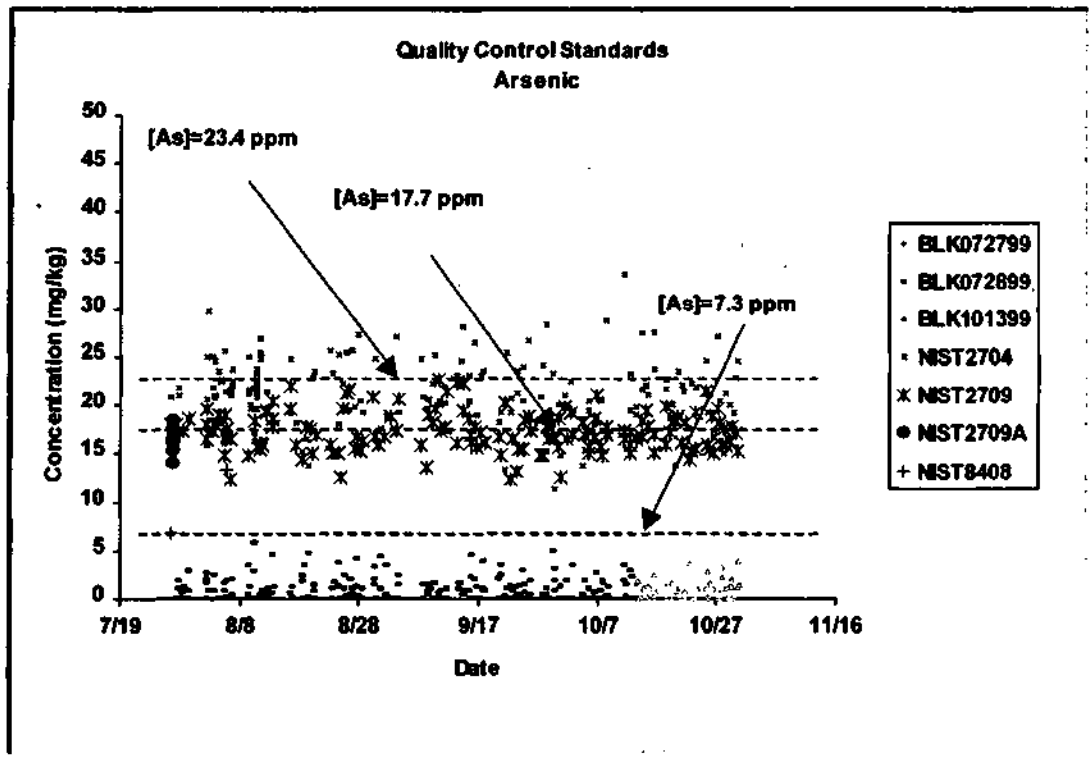
Quality Control Results

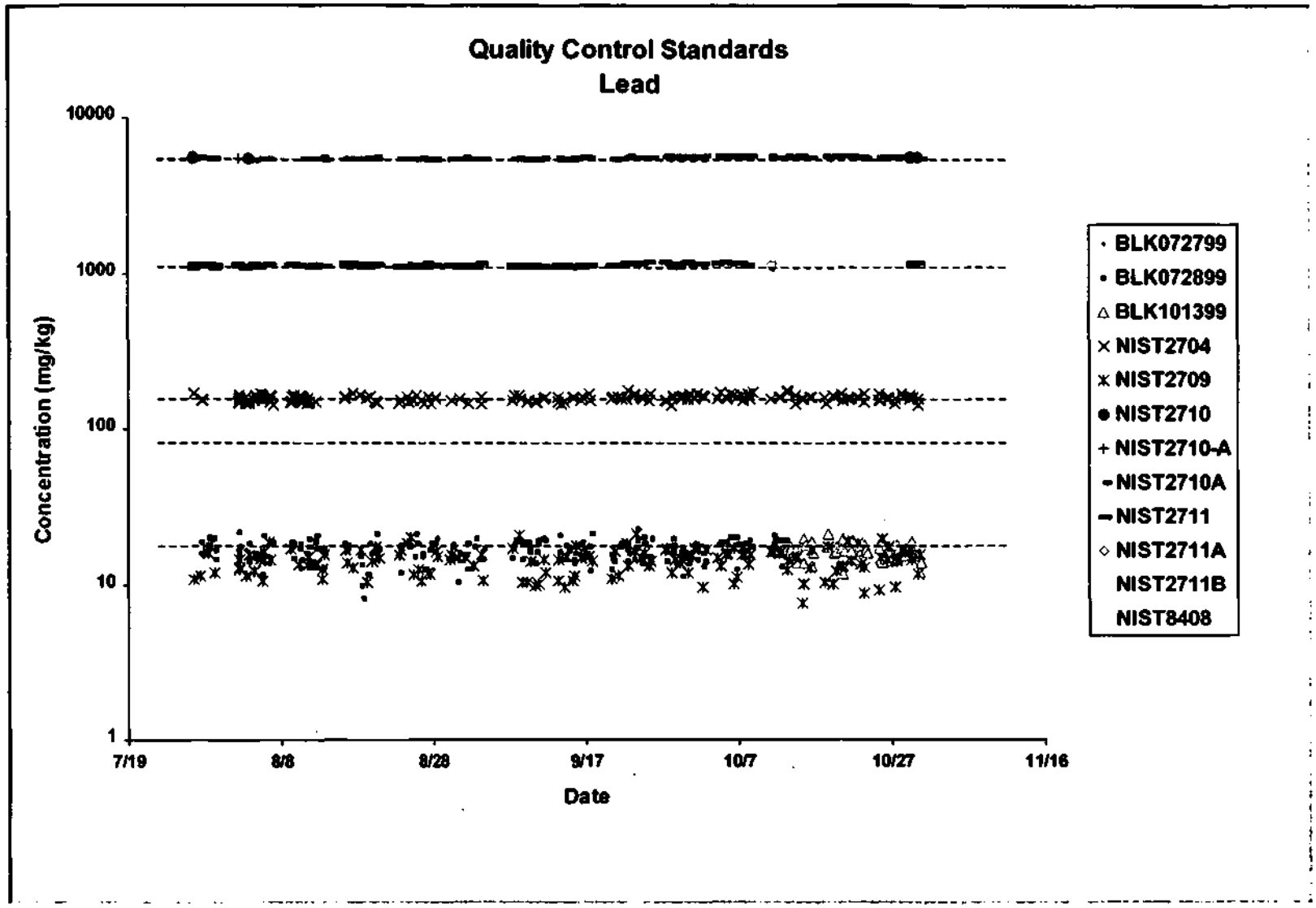
Color Chart(s)

The following pages contain color that does not appear in the scanned images.

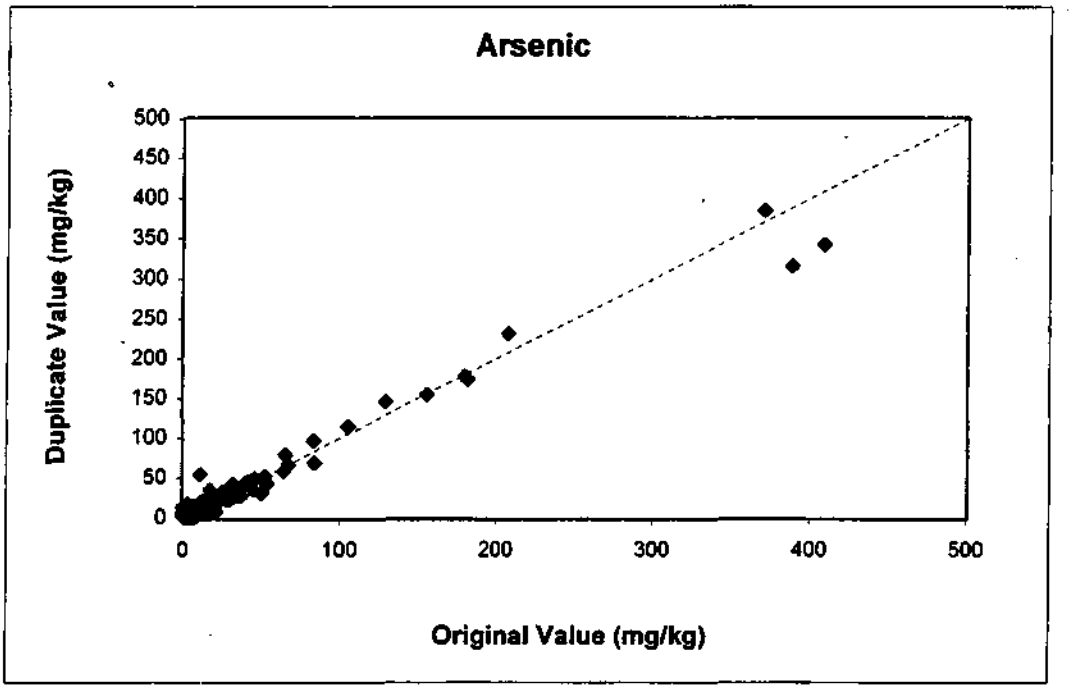
To view the actual images, please contact the Superfund Records Center at (303) 312-6473.

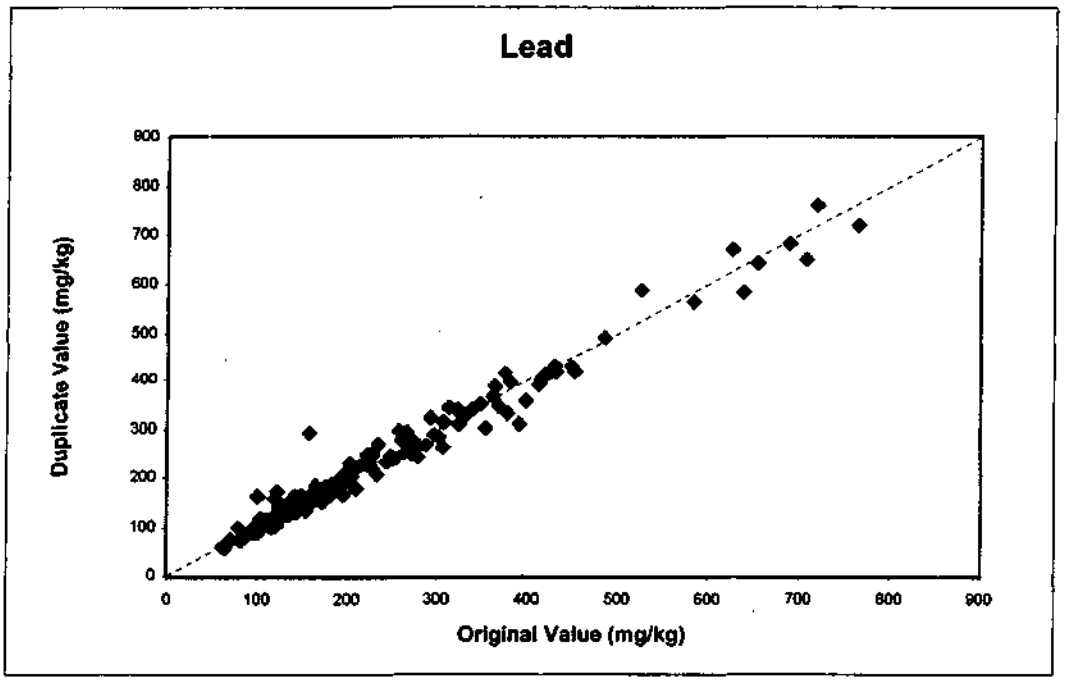

Quality Control Standards
Arsenic
Concentration (mg/kg)
800
700
600
500
400
300
200
100
0
[As]=626 ppm
[As]=105 ppm
7/19
8/8
8/28
9/17
10/7
10/27
11/16
Date
NIST2710
NIST2710-A
NIST2710A
NIST2711
NIST2711A
NIST2711B


Quality Control Standards
Arsenic
Concentration (mg/kg)
50
45
40
35
30
25
20
15
10
5
0
[As]=23.4 ppm
[As]=17.7 ppm
[As]=7.3 ppm
7/19
8/8
8/28
9/17
10/7
10/27
11/16
Date
BLK072799
BLK072899
BLK101399
NIST2704
NIST2709
NIST2709A
NIST8408

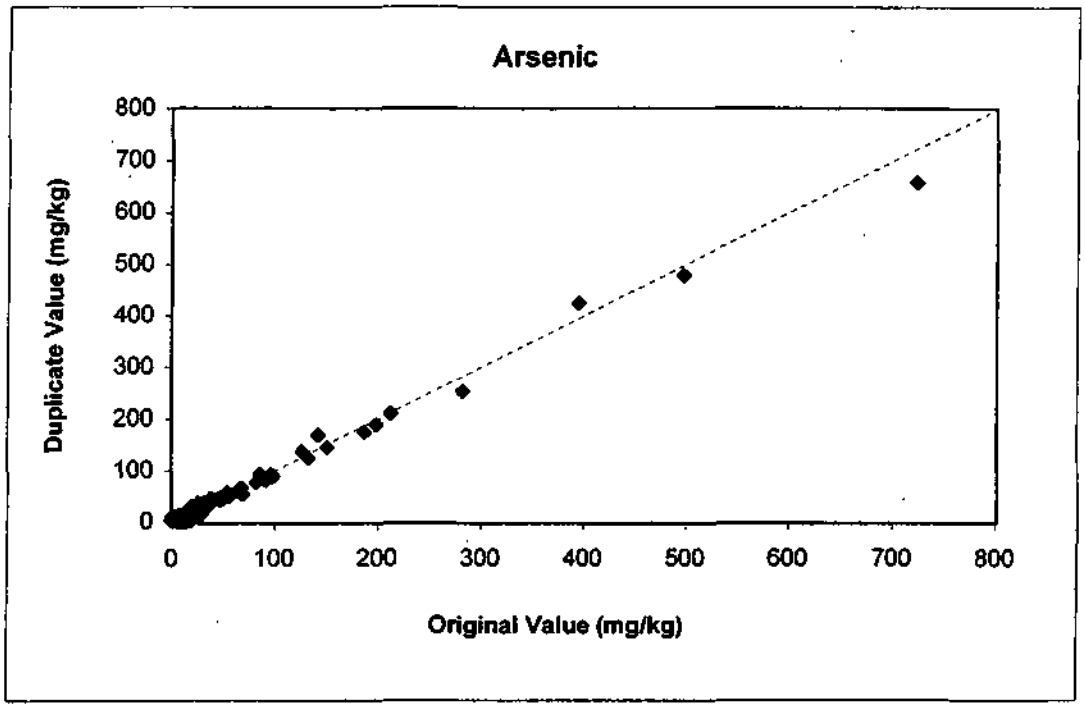

Quality Control Standards
Lead
10000
1000
100
10
1
Concentration (mg/kg)
7/19
8/8
8/28
9/17
10/7
10/27
11/16
Date
BLK072799
BLK072899
BLK101399
NIST2704
NIST2709
NIST2710
NIST2710-A
NIST2710A
NIST2711
NIST2711A
NIST2711B
NIST8408

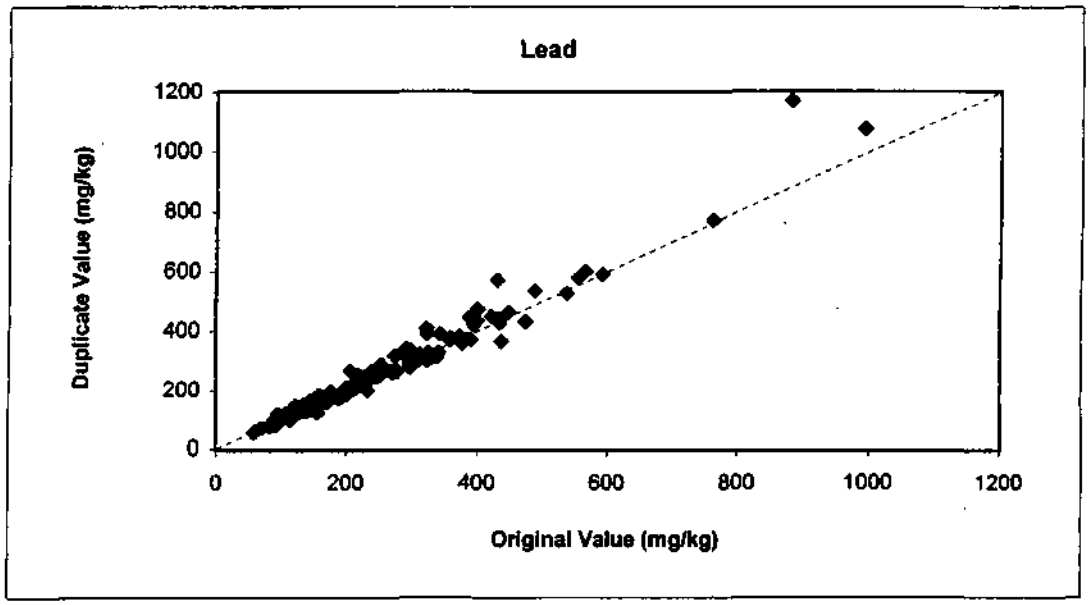
Blind Duplicate Samples: XRF





XRF Laboratory Duplicates

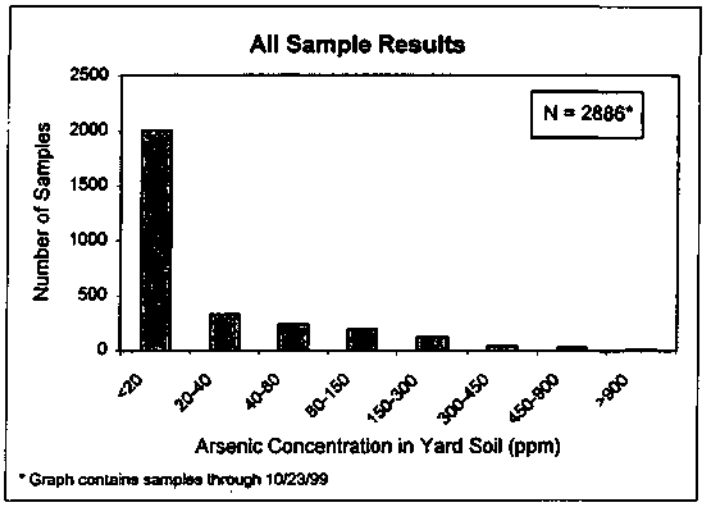


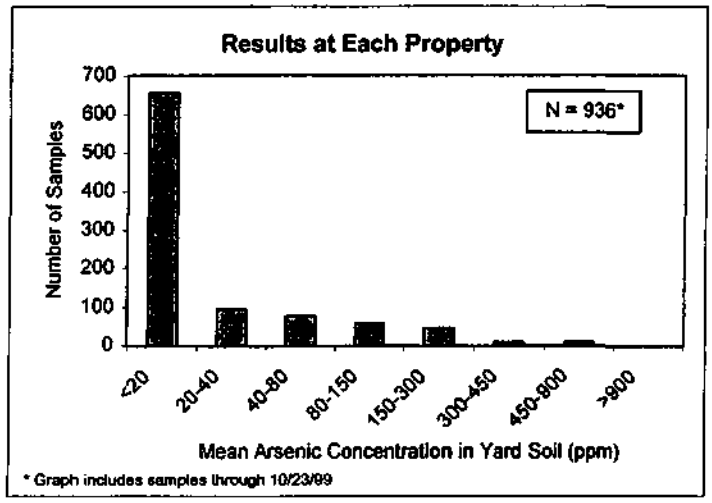


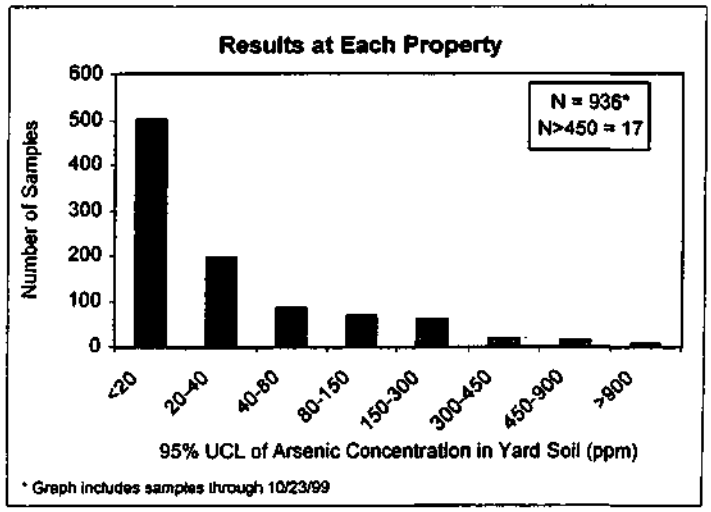
Property Results

Preliminary Unvalidated Data - DO NOT CITE OR QUOTE

Distribution of Arsenic Levels at Residential Properties

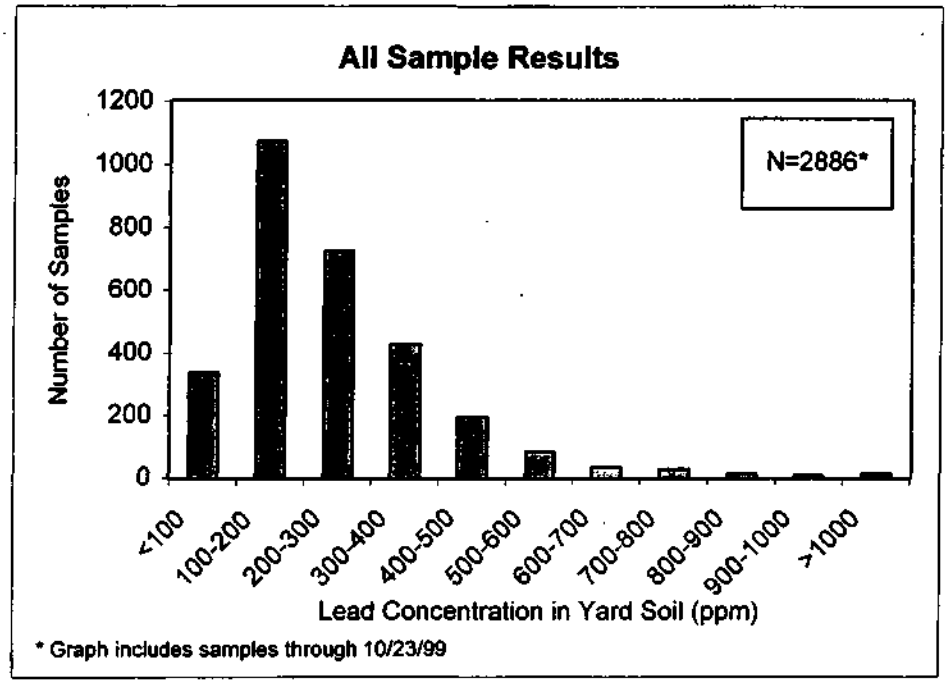


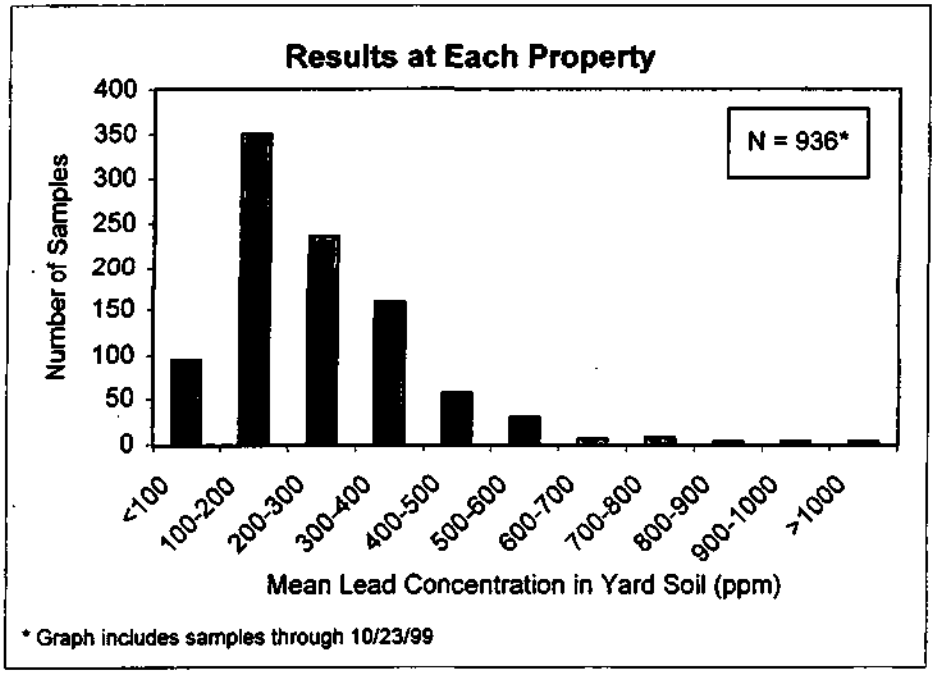




Preliminary Unvalidated Data - DO NOT CITE OR QUOTE

Distribution of Lead Levels at Residential Properties





List of Properties Where the 95%UCL is Greater than 900 ppm [a]

Property Address	Min	Max	Mean	95% UCL
3223 GILPIN ST	272.3	723.0	518.9	904.8
3339 GAYLORD ST	441.1	838.8	628.7	966.4
3725 MADISON ST	142.8	926.6	488.0	1164.3
3421 BRUCE RANDOLPH AVE	207.6	1356.0	609.6	1703.1

a - For samples analyzed through 10-23-99

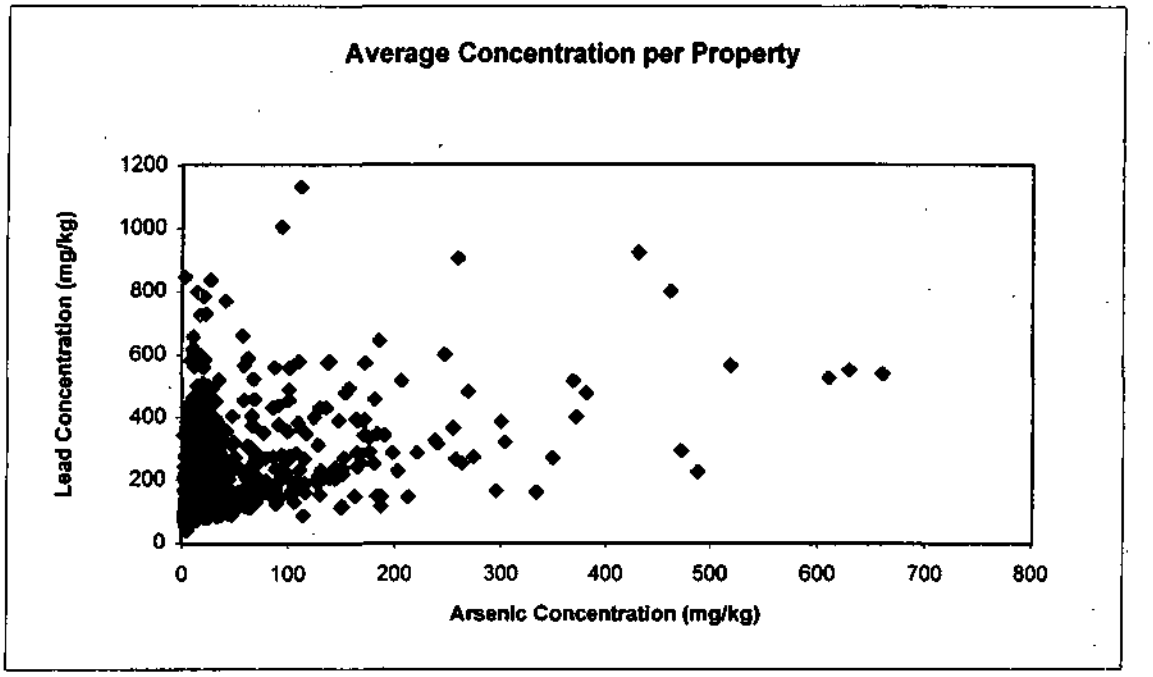
RBA	[illegible]
RBC	[illegible]
MTCV	[illegible]

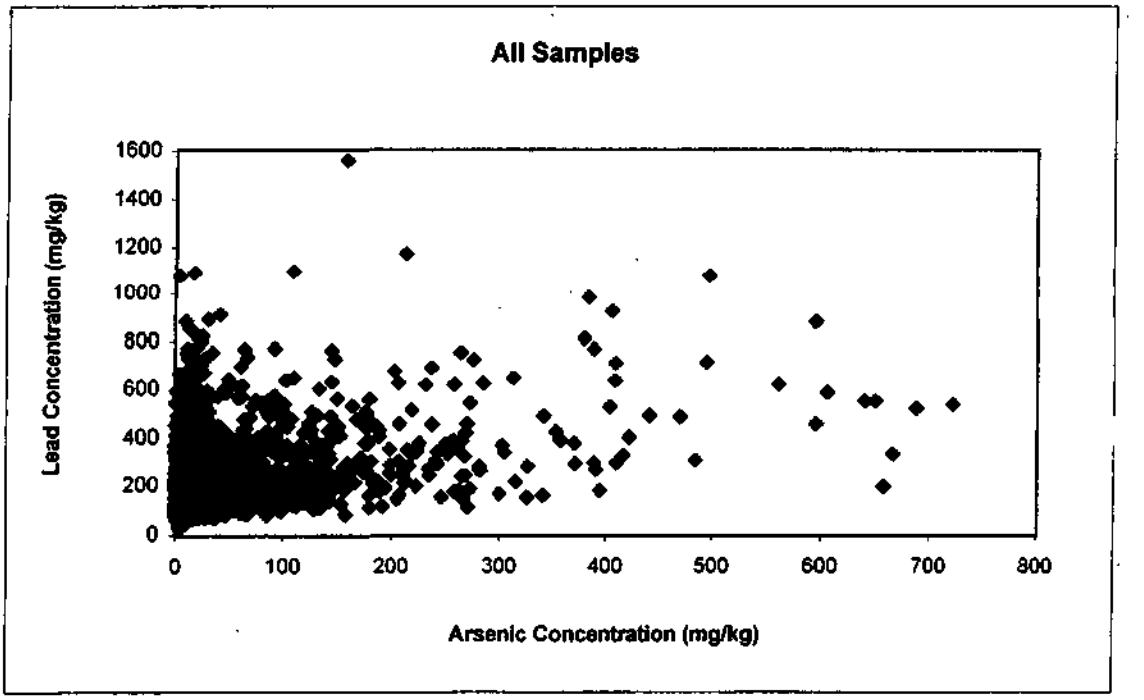
	FAIL	TOTAL	Percent
OVERALL	224	936	23.9%
Test 1	133	936	14.2%
Test 2	224	936	23.9%
Retest	111	936	11.9%

20	
40	936
80	L10:L945
150	
300	
450	
900	0.8

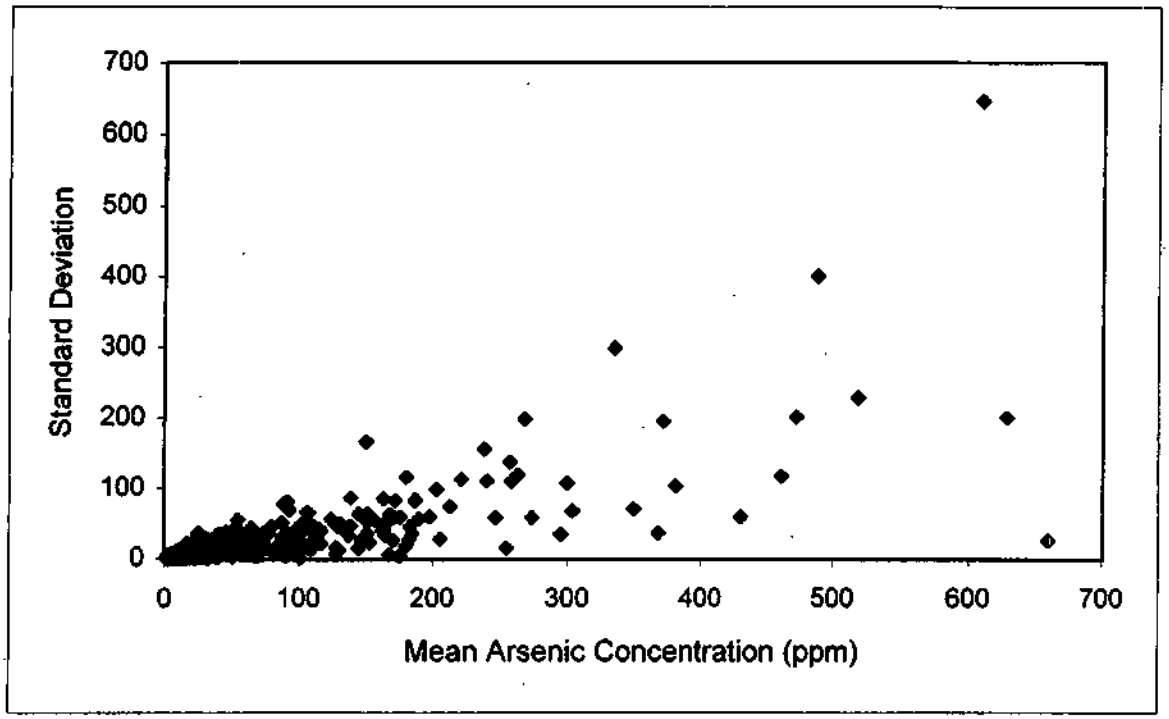
strPropAddress	MinOfAS	MaxOfAS	AvgOfAS	StDevOfAS	Count	UCL	Test 1	Test 2	Overall	Mean < k*RBC	Retest?
4551 COLUMBINE ST	0.491	1.991	1.414333333	0.807857248	3	2.8	PASS	PASS	PASS	Yes	No
3440 MONROE ST	2.376	3.242	2.851	0.439068332	3	3.6	PASS	PASS	PASS	Yes	No
3452 HARRISON ST	3.073	3.455	3.305333333	0.203976306	3	3.7	PASS	PASS	PASS	Yes	No
3995 HARRISON ST	1.764	3.383	2.336	0.908024779	3	3.9	PASS	PASS	PASS	Yes	No
5138 MILWAUKEE ST	3.568	3.848	3.681333333	0.147422296	3	3.9	PASS	PASS	PASS	Yes	No
3831 HIGH ST	2.394	4.026	3.169666667	0.818984941	3	4.6	PASS	PASS	PASS	Yes	No
3427 MONROE ST	2.679	4.276	3.459333333	0.799119724	3	4.8	PASS	PASS	PASS	Yes	No
3414 SAINT PAUL ST	2.121	4.06	3.273333333	1.019908983	3	5.0	PASS	PASS	PASS	Yes	No
4965 FILLMORE ST	3.744	4.768	4.091333333	0.586079631	3	5.1	PASS	PASS	PASS	Yes	No
3755 JACKSON ST	1.61	4.241	2.915666667	1.315610251	3	5.1	PASS	PASS	PASS	Yes	No
5096 ADAMS ST	0.853	3.937	2.513333333	1.555561742	3	5.1	PASS	PASS	PASS	Yes	No
3332 VINE ST	4.675	5.002	4.875	0.175296891	3	5.2	PASS	PASS	PASS	Yes	No
3735 MADISON ST	4.108	5.041	4.560666667	0.467114904	3	5.4	PASS	PASS	PASS	Yes	No
3616 ELIZABETH ST	3.466	4.907	4.261	0.731963797	3	5.5	PASS	PASS	PASS	Yes	No
4065 MILWAUKEE ST	0.348	3.832	2.483333333	1.870480509	3	5.6	PASS	PASS	PASS	Yes	No
3458 CLAYTON ST	5.165	5.56	5.322	0.206898526	3	5.7	PASS	PASS	PASS	Yes	No
3214 RACE ST	2.883	4.658	4.066	1.024508175	3	5.8	PASS	PASS	PASS	Yes	No
3409 GILPIN ST	4.55	5.564	4.923	0.557599319	3	5.9	PASS	PASS	PASS	Yes	No
3460 JACKSON ST	2.711	5.075	3.964	1.18837999	3	6.0	PASS	PASS	PASS	Yes	No
3202 WILLIAMS ST	5.275	5.837	5.558333333	0.281029061	3	6.0	PASS	PASS	PASS	Yes	No
3965 ADAMS ST	3.752	5.518	4.378	0.988855905	3	6.0	PASS	PASS	PASS	Yes	No
3703 BRUCE RANDOLPH AVE	3.638	5.636	4.548333333	1.010735541	3	6.3	PASS	PASS	PASS	Yes	No
3249 RACE ST	1.281	5.155	3.122	1.94412371	3	6.4	PASS	PASS	PASS	Yes	No

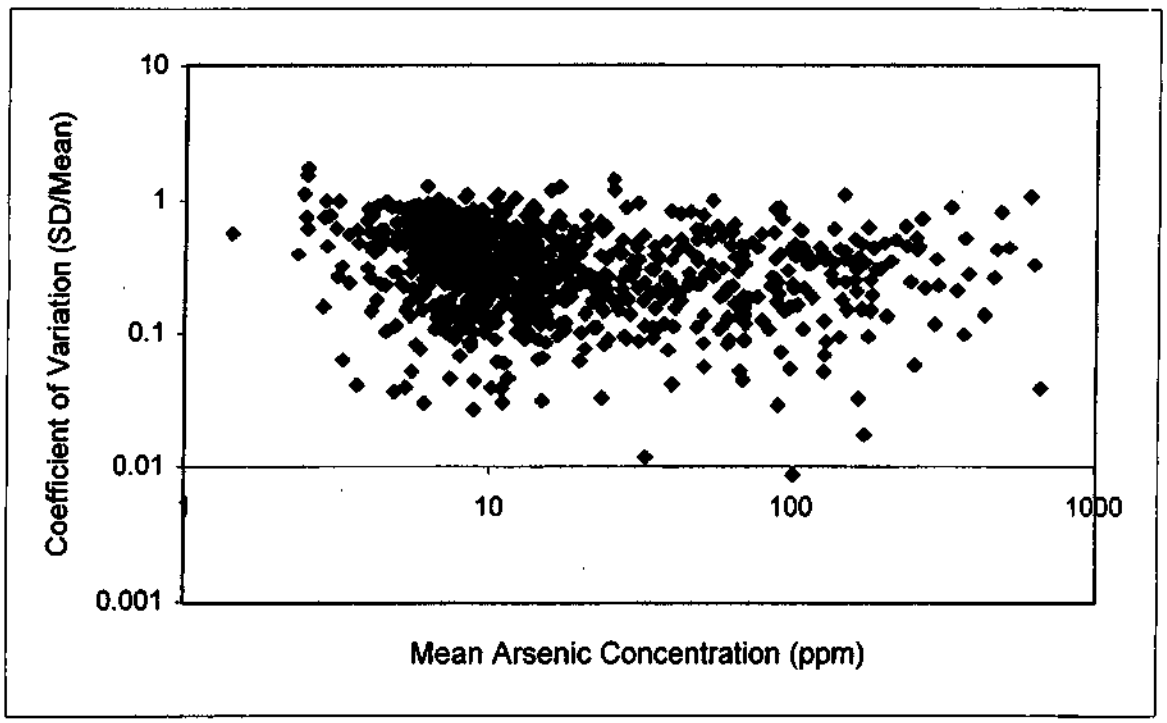
Comparison of Arsenic and Lead Concentration

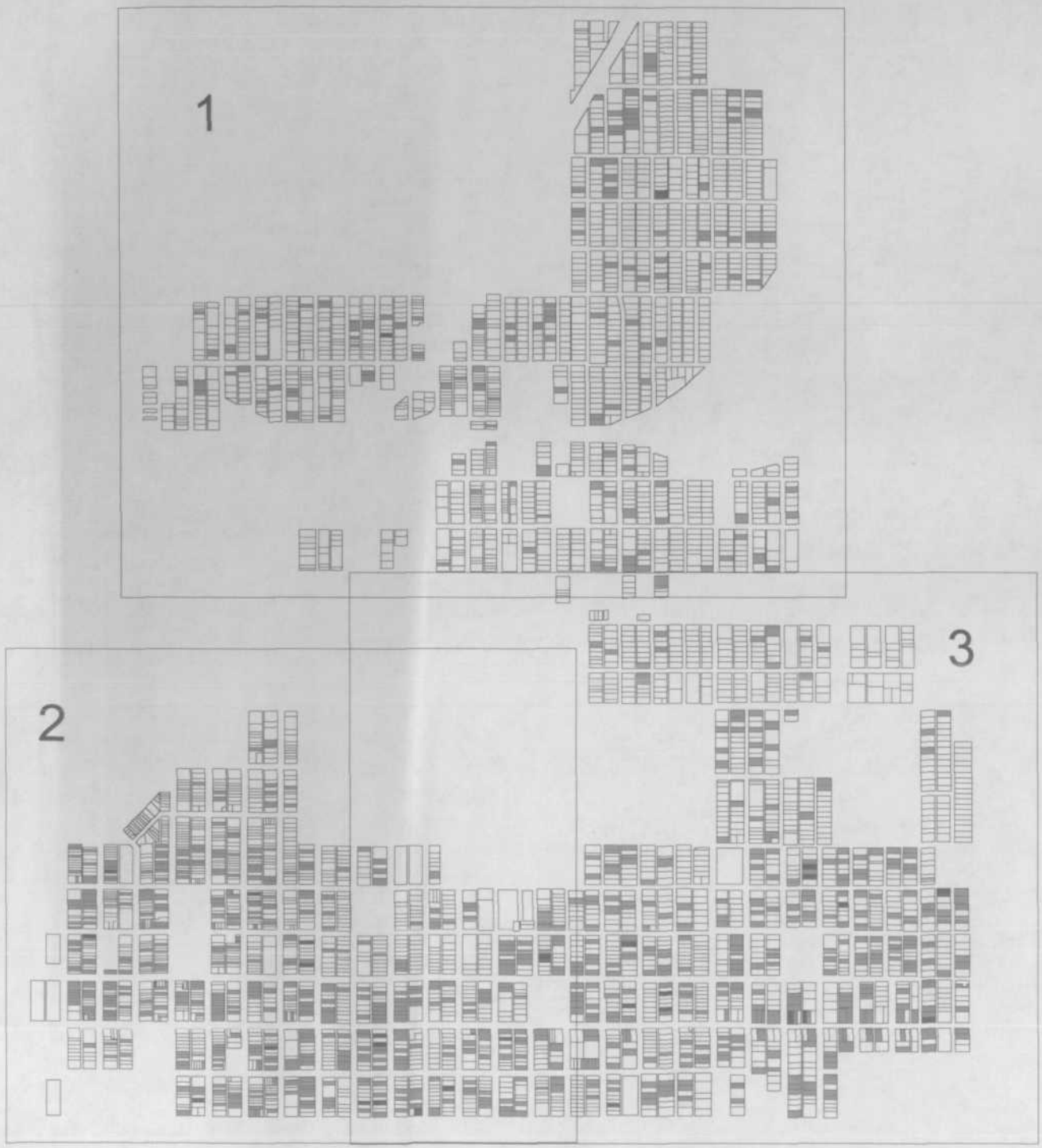




Observed Variability in Composite Samples (by Property)







Vasquez Boulevard and I-70 Site

November 10, 1999

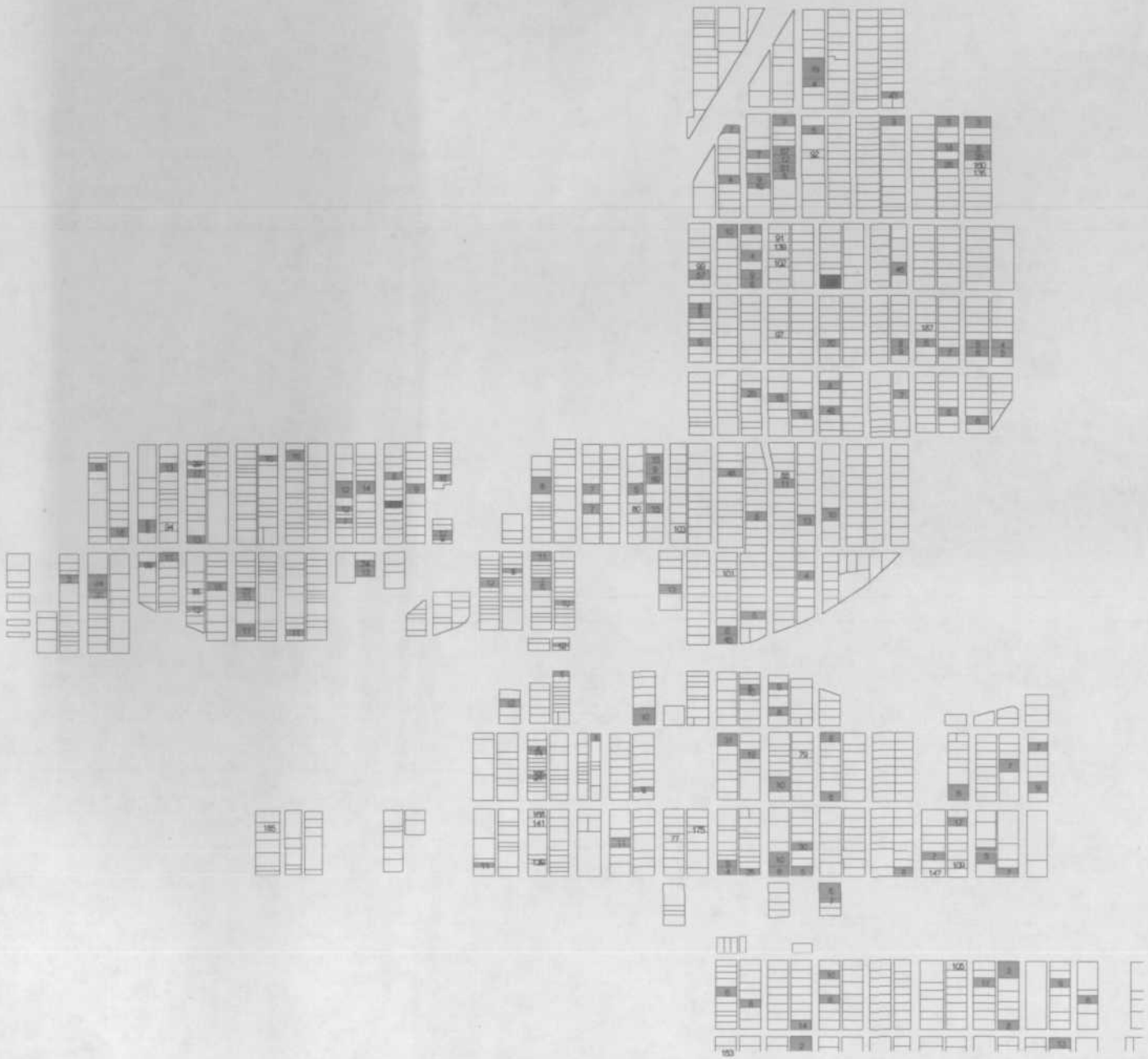
Panel Index

Arsenic (mg/kg)

N

Average Arsenic (mg/kg)
- 0 - 70
- 70 - 200
- >200
- Not Sampled

November 10, 1999



Vasquez Boulevard and I-70 Site

Panel 1 of 3

Arsenic (mg/kg)

N

Average Arsenic (mg/kg)
- 0 - 70
- 70 - 200
- >200
- Not Sampled

November 10, 1999

Vasquez Boulevard and I-70 Site

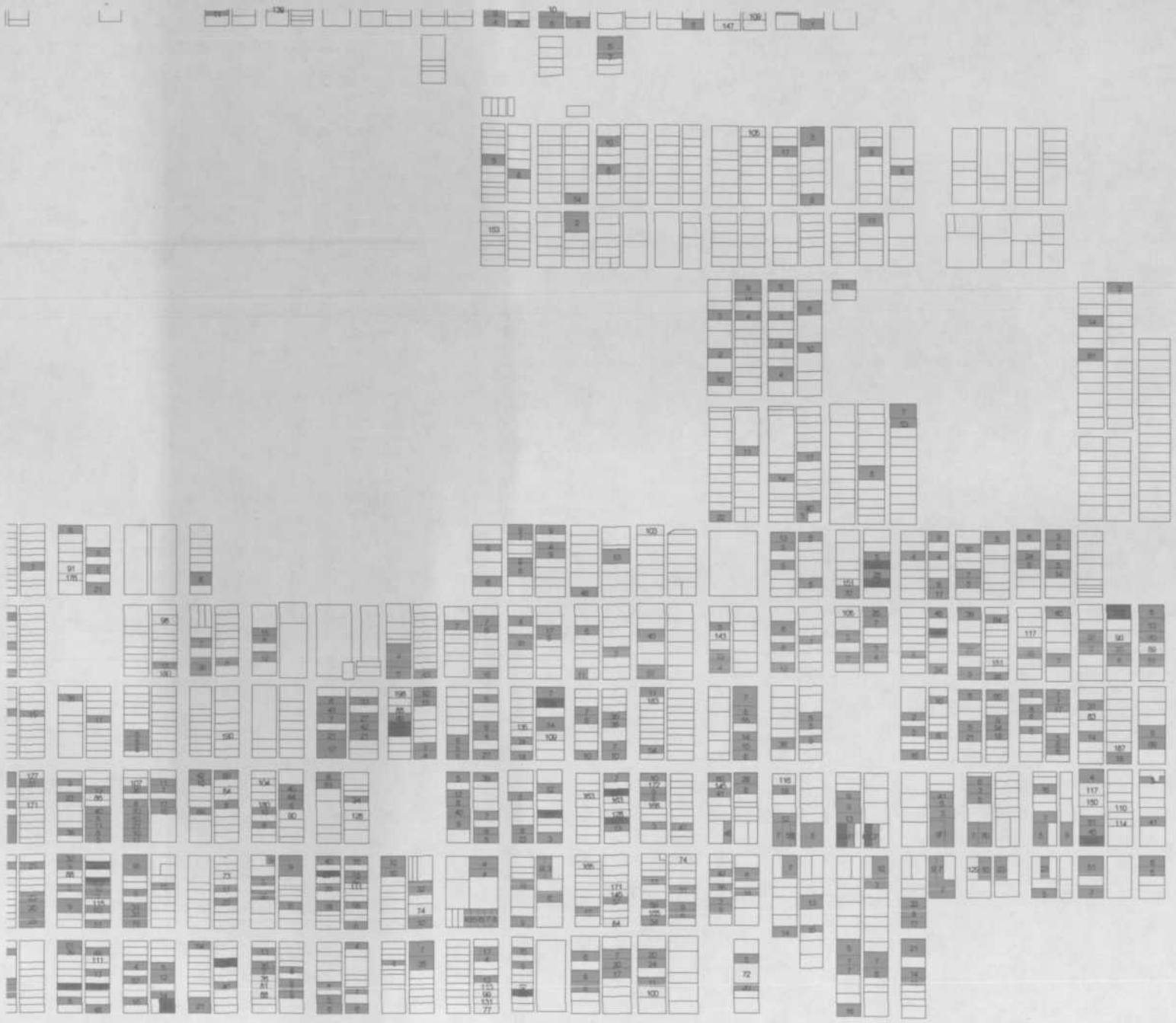
Panel 2 of 3

Arsenic (mg/kg)

N

Average Arsenic (mg/kg)
- 0 - 70
- 70 - 200
- >200
- Not Sampled

November 10, 1999



Vasquez Boulevard and I-70 Site

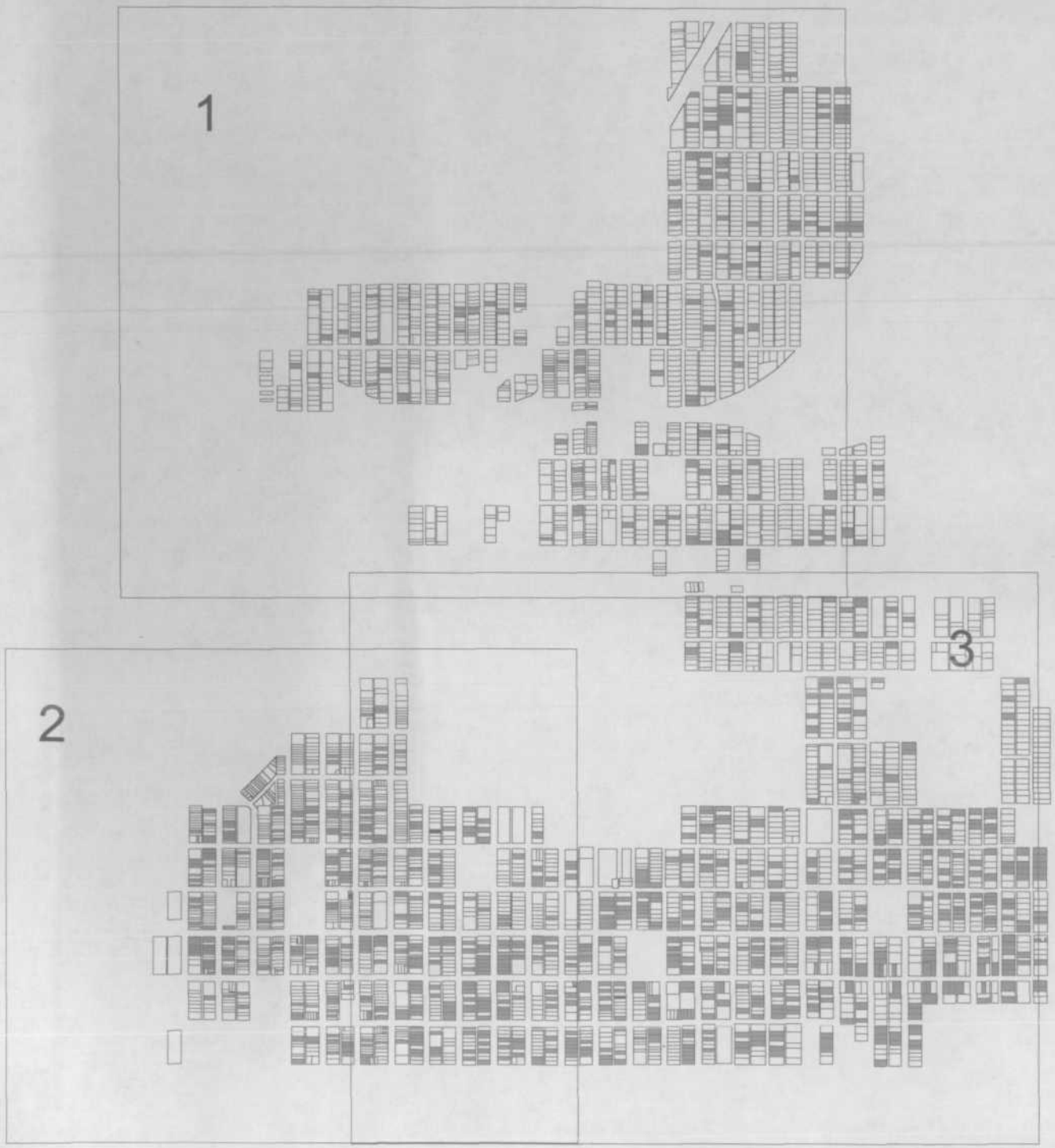
Panel 3 of 3

Arsenic (mg/kg)

N

Average Arsenic (mg/kg)
- 0 - 70
- 70 - 200
- >200
- Not Sampled

November 10, 1999



Vasquez Boulevard and I-70 Site

November 10, 1999

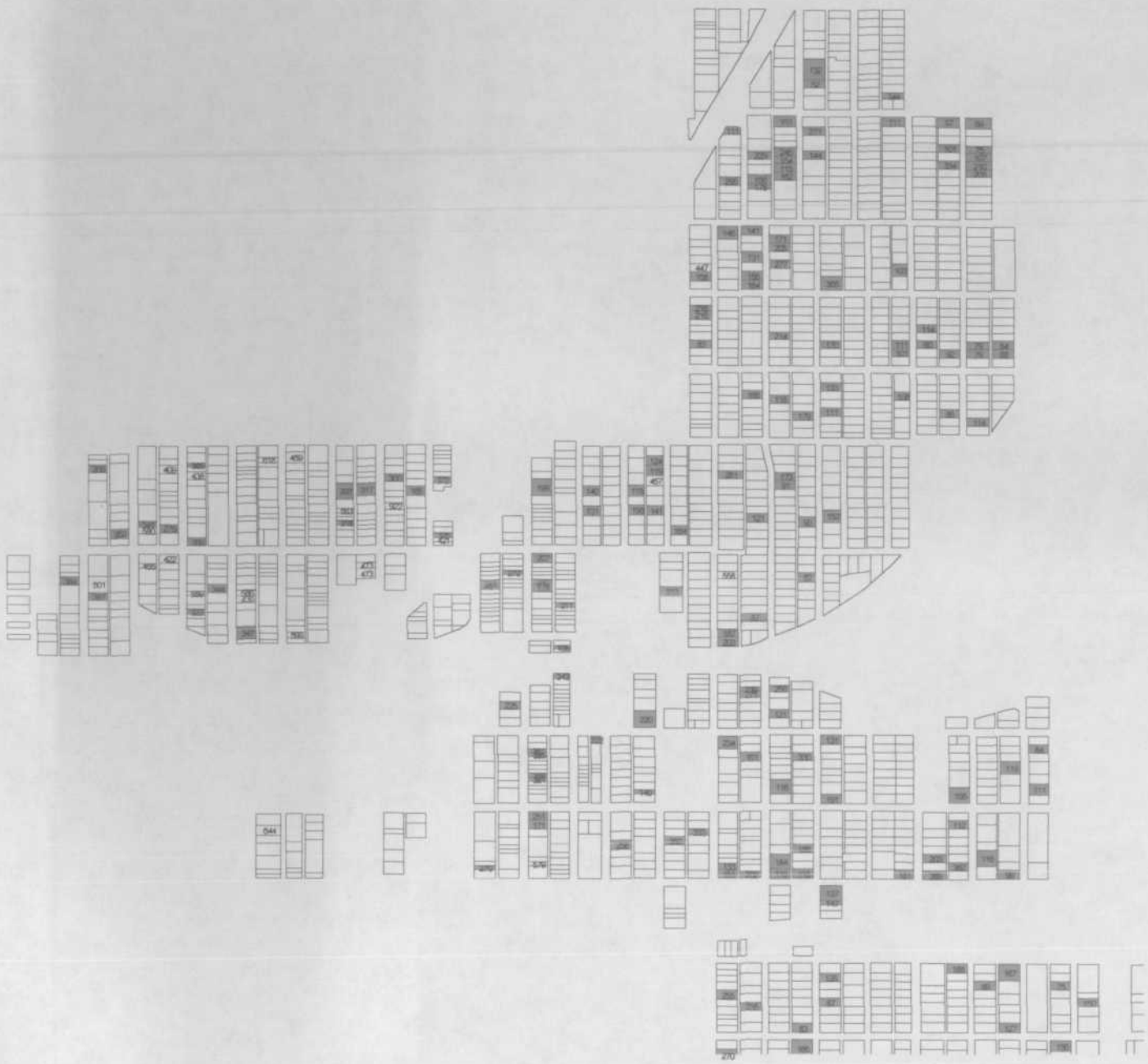
Panel Index

Lead (mg/kg)

N

Average Lead (mg/kg)
- 0 - 400
- 400 - 1000
- >1000
- Not Sampled

November 10, 1999



Vasquez Boulevard and I-70 Site

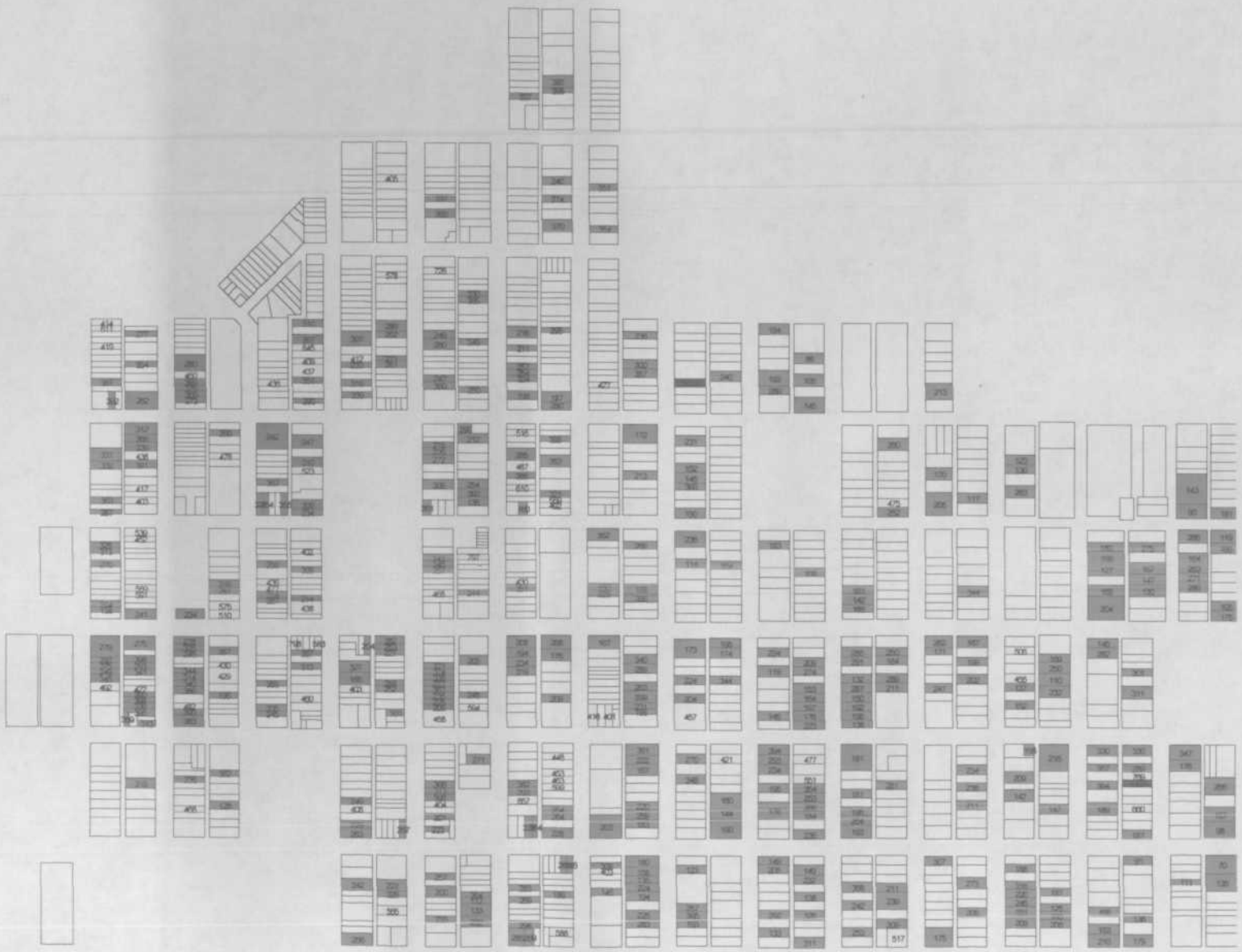
Panel 1 of 3

Lead (mg/kg)

N

Average Lead (mg/kg)
- 0 - 400
- 400 - 1000
- >1000
- Not Sampled

November 10, 1999



Vasquez Boulevard and I-70 Site

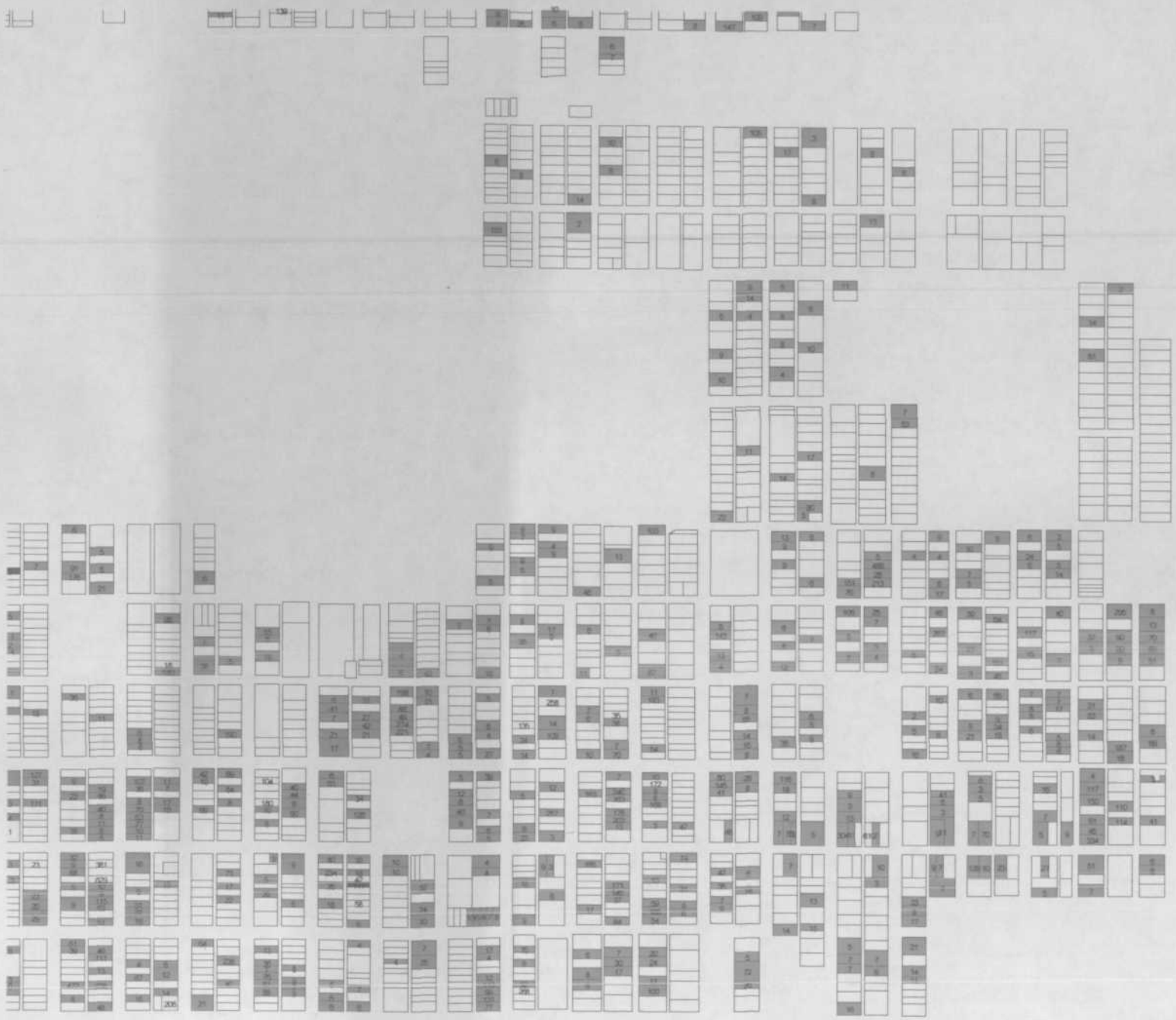
Panel 2 of 3

Lead (mg/kg)

N

Average Lead (mg/kg)
- 0 - 400
- 400 - 1000
- >1000
- Not Sampled

November 10, 1999



Vasquez Boulevard and I-70 Site

Panel 3 of 3

Lead (mg/kg)

N

Average Lead (mg/kg)
- 0 - 400
- 400 - 1000
- >1000
- Not Sampled

November 10, 1999

Vasquez Boulevard / I-70 Superfund Site

Property Results Not Depicted for November 10, 1999

Address	*Avg As (mg/kg)*	*Avg Pb (mg/kg)*	*# Samp*	*Neighborhood*
3260 STEELE ST	6	117	3	CLAYTON
3517 DELGANY ST	14	501	3	FIVE POINTS
3521 DELGANY ST	26	835	3	FIVE POINTS
3531 WYNKOOP ST	18	382	3	FIVE POINTS
3536 DELGANY ST	7	248	3	FIVE POINTS
3543 BRIGHTON BLVD	11	398	3	FIVE POINTS
3624 DELGANY ST	18	395	3	FIVE POINTS
3636 DELGANY ST	12	339	3	FIVE POINTS
3646 DELGANY ST	17	725	3	FIVE POINTS
3721 MARION ST	51	102	3	FIVE POINTS
3728 ARKINS CT	15	386	6	FIVE POINTS
3736 BRIGHTON BLVD	5	38	3	FIVE POINTS
3742 BRIGHTON BLVD	23	475	3	FIVE POINTS
3746 BRIGHTON BLVD	59	565	3	FIVE POINTS
406 W 43RD AVE	15	329	3	GLOBEVILLE
4120 MONROE ST	11	96	3	SWANSEA
4143 FOX ST	20	782	3	GLOBEVILLE
4143 FOX ST	20	782	3	GLOBEVILLE
418 W 43RD AVE	12	290	3	GLOBEVILLE
4201 DELAWARE ST	6	154	3	GLOBEVILLE
4365 CHEROKEE ST	10	208	3	GLOBEVILLE
4408 CHEROKEE ST	45	256	3	GLOBEVILLE
4415 CAHITA CT	11	323	3	GLOBEVILLE
4421 CAHITA CT	10	240	3	GLOBEVILLE
4427 CAHITA CT	22	332	3	GLOBEVILLE
4427 CHEROKEE ST	11	292	3	GLOBEVILLE
4449 CHEROKEE ST	9	332	3	GLOBEVILLE
4451 CAHITA CT	13	221	3	GLOBEVILLE
4451 CHEROKEE ST	7	261	3	GLOBEVILLE
4469 CHEROKEE ST	14	275	3	GLOBEVILLE
4478 DELAWARE ST	13	344	3	GLOBEVILLE
4488 DELAWARE ST	15	387	3	GLOBEVILLE
4495 CHEROKEE ST	27	258	3	GLOBEVILLE