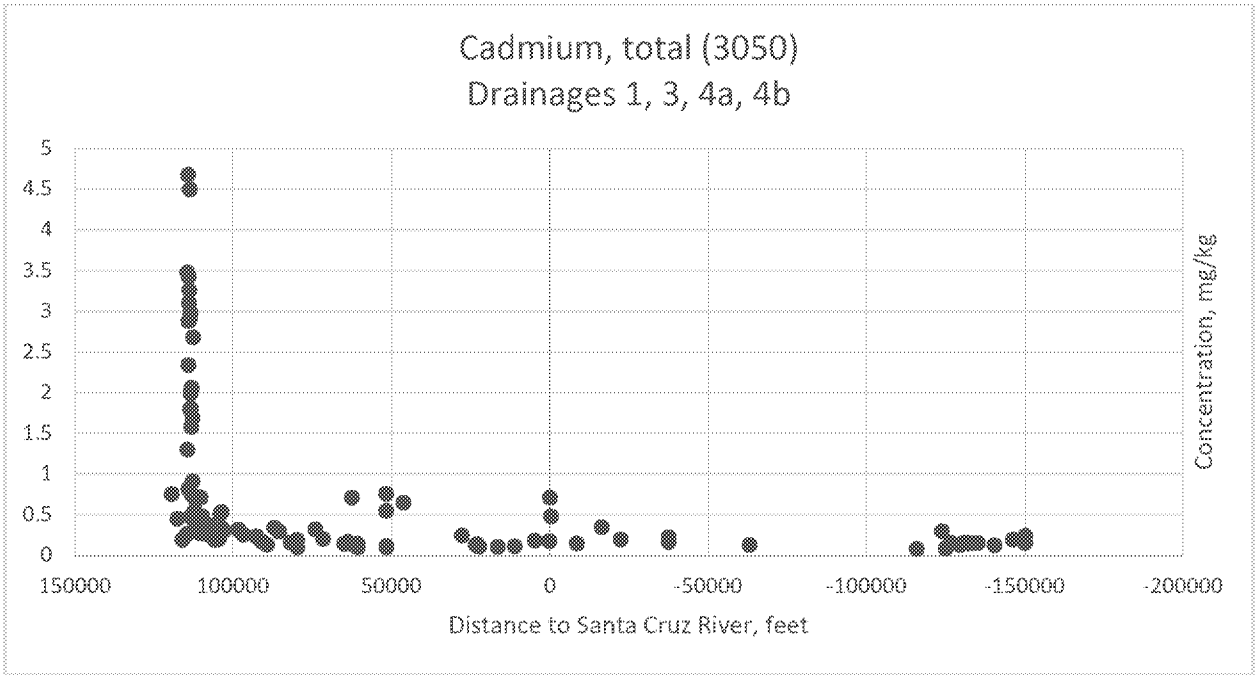
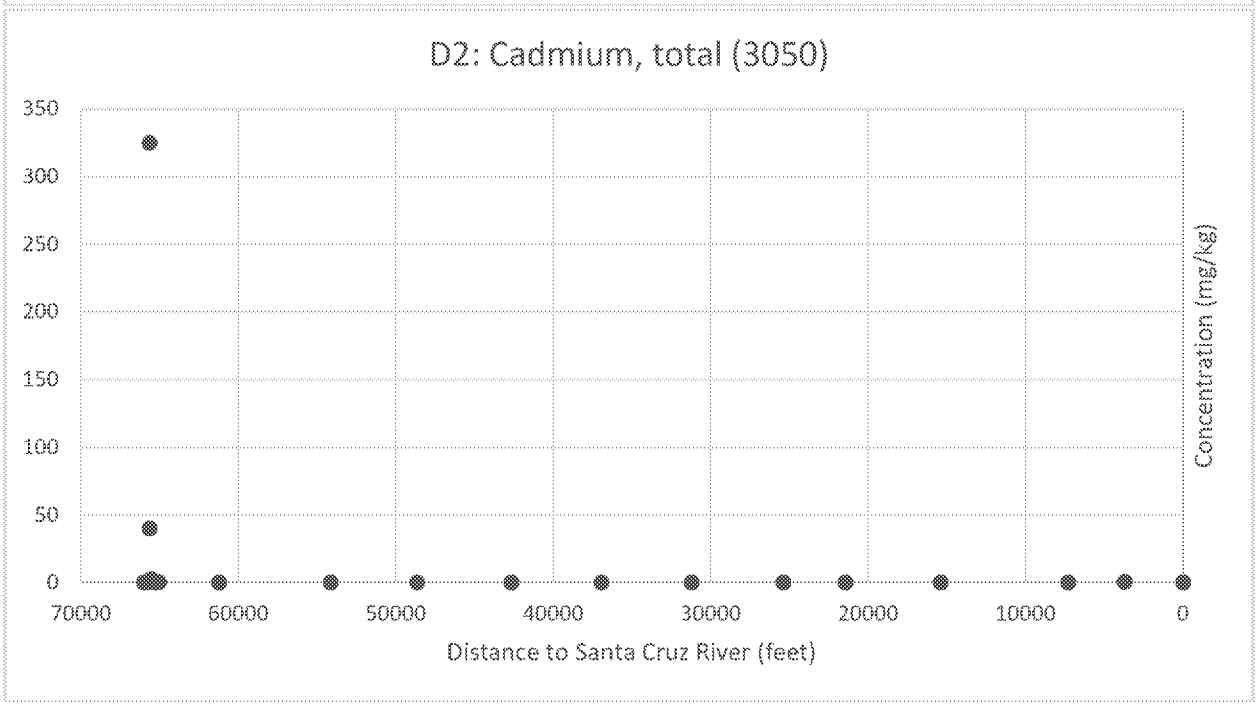
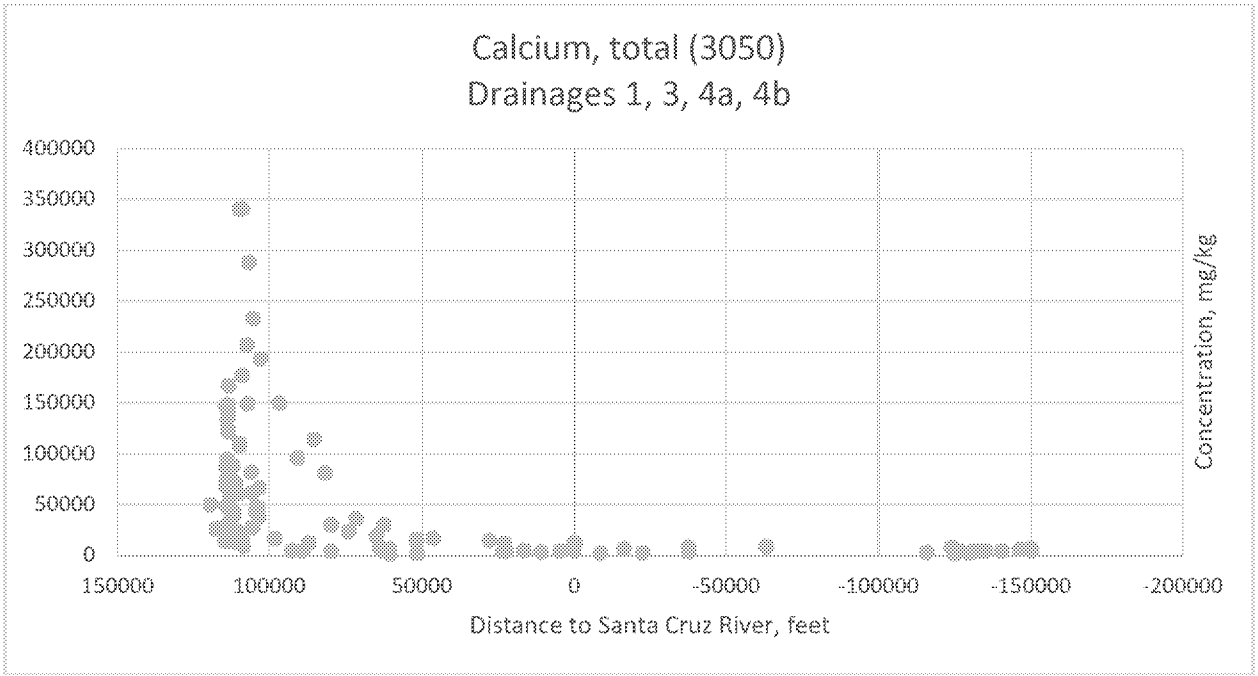
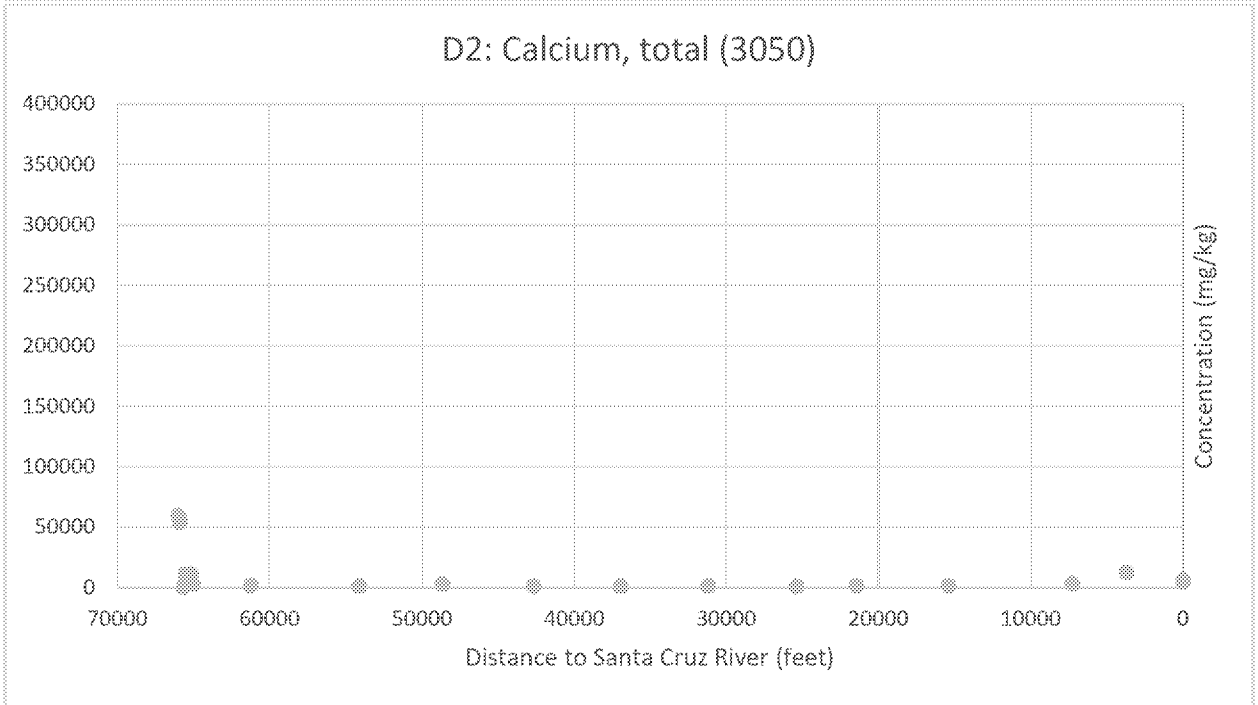
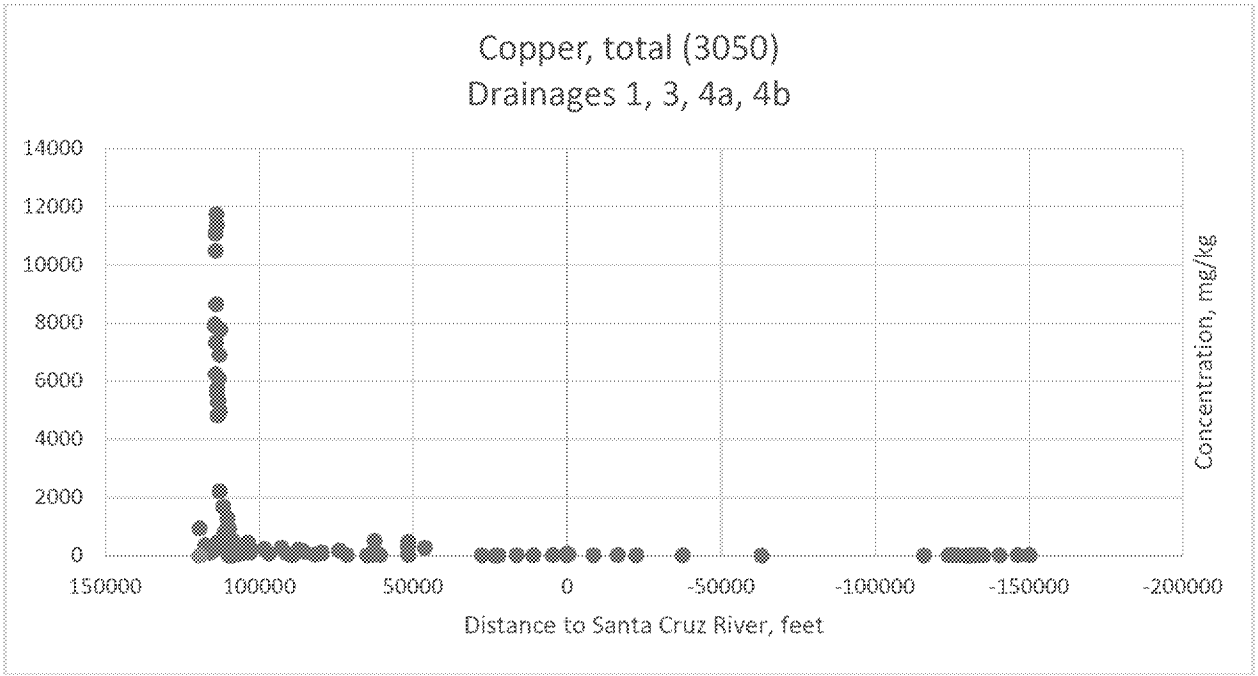
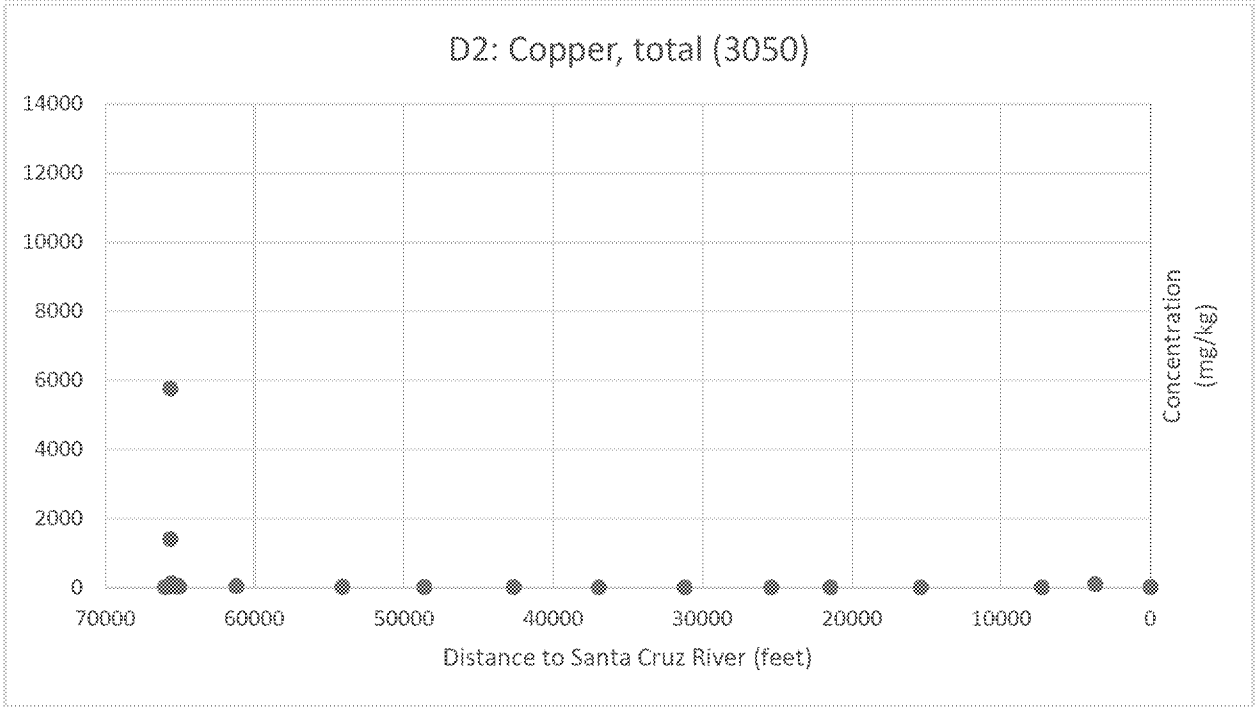

Cadmium, total (3050)
Drainages 1, 3, 4a, 4b
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
150000
100000
50000
0
-50000
-100000
-150000
-200000
Distance to Santa Cruz River, feet
Concentration, mg/kg

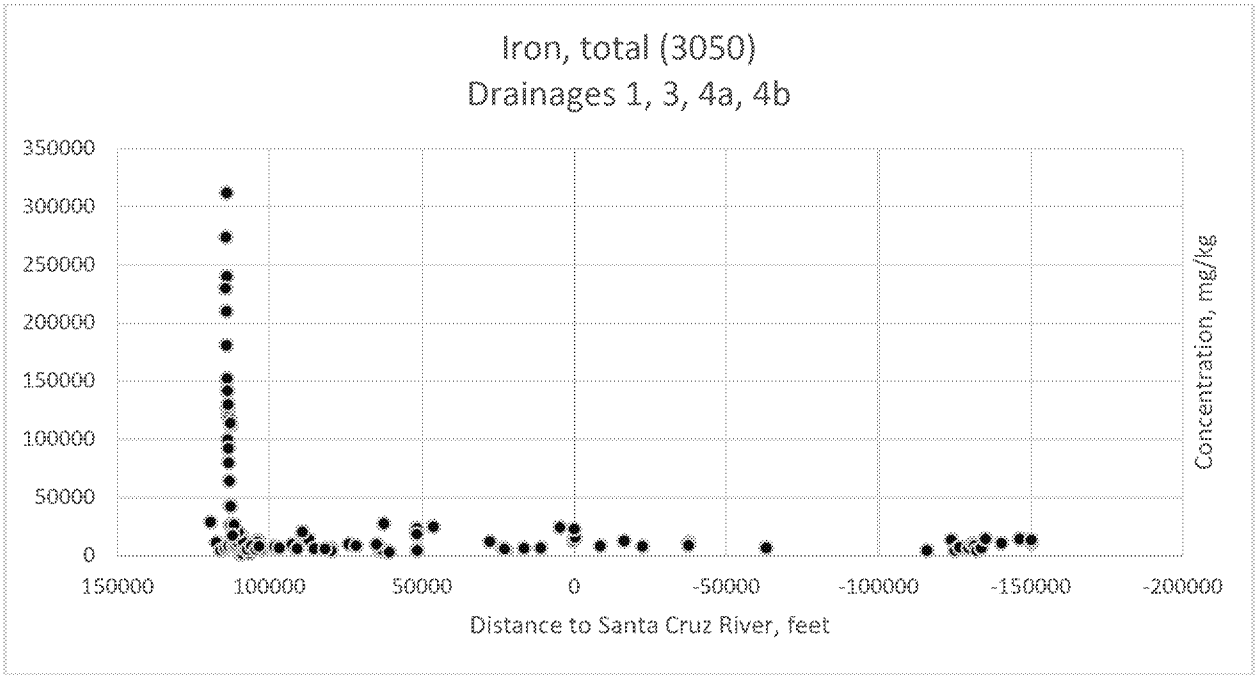

D2: Cadmium, total (3050)
350
300
250
200
150
100
50
0
70000
60000
50000
40000
30000
20000
10000
0
Distance to Santa Cruz River (feet)
Concentration (mg/kg)

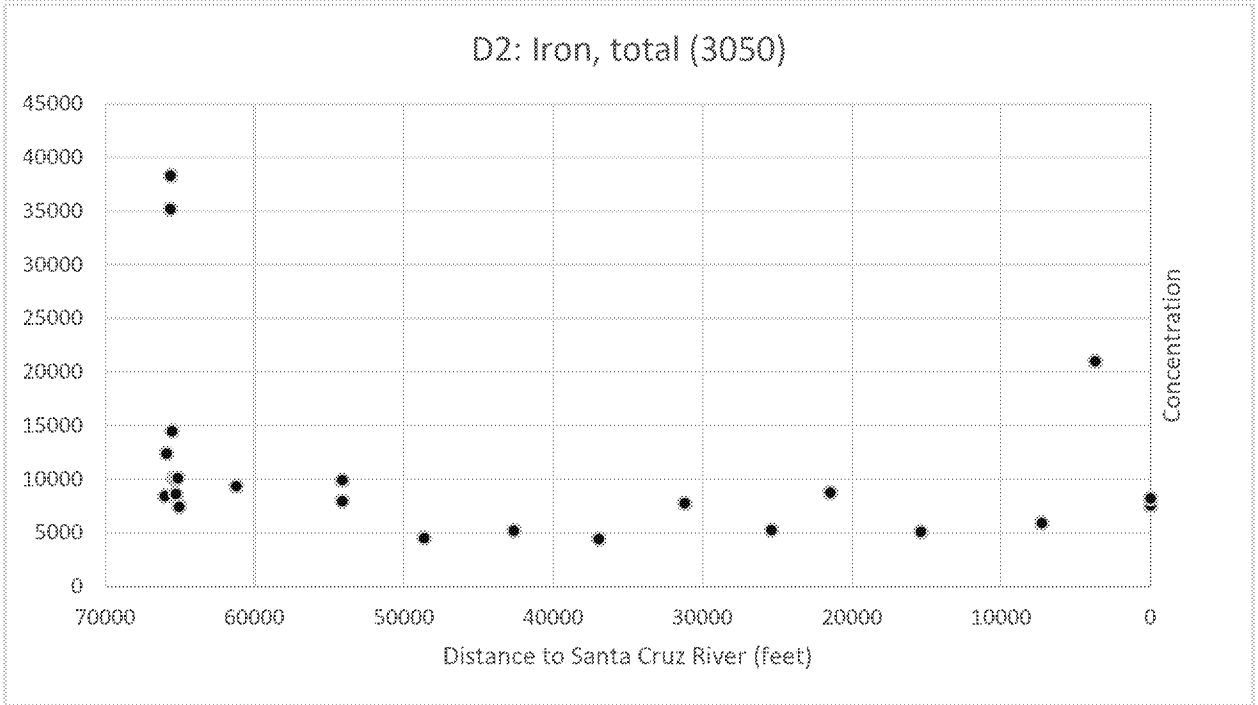

Calcium, total (3050)
Drainages 1, 3, 4a, 4b
400000
350000
300000
250000
200000
150000
100000
50000
0
150000
100000
50000
0
-50000
-100000
-150000
-200000
Distance to Santa Cruz River, feet
Concentration, mg/kg

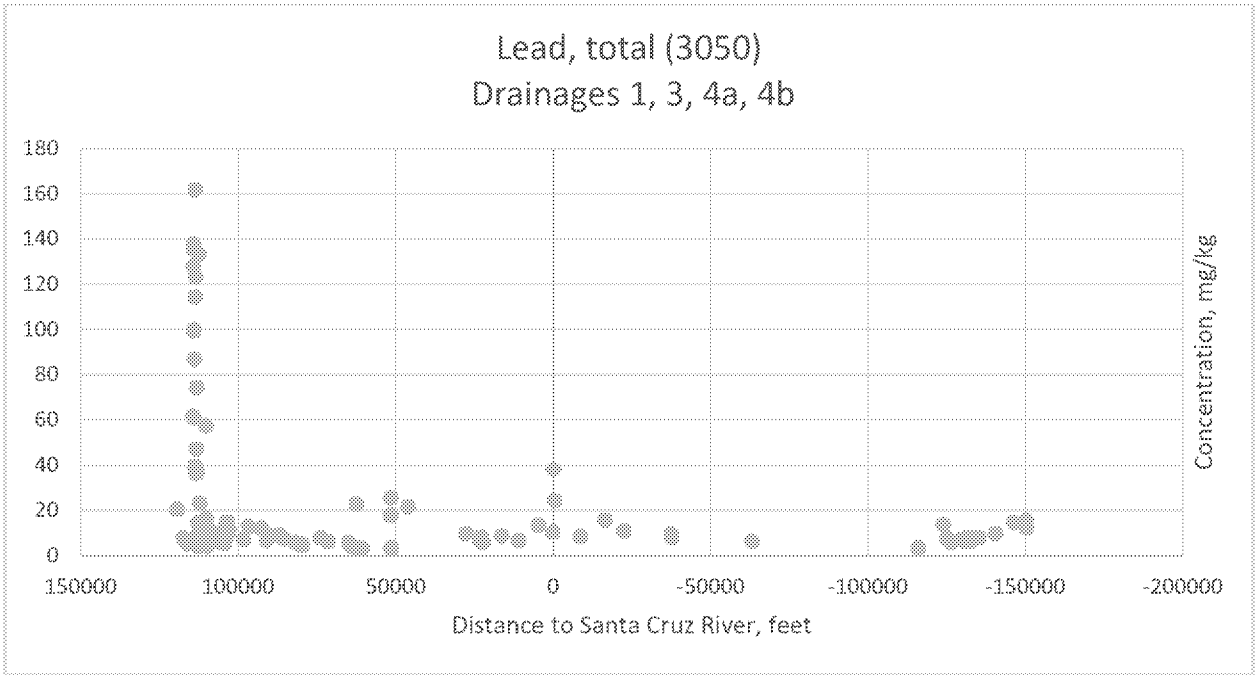

D2: Calcium, total (3050)
400000
350000
300000
250000
200000
150000
100000
50000
0
70000
60000
50000
40000
30000
20000
10000
0
Distance to Santa Cruz River (feet)
Concentration (mg/kg)

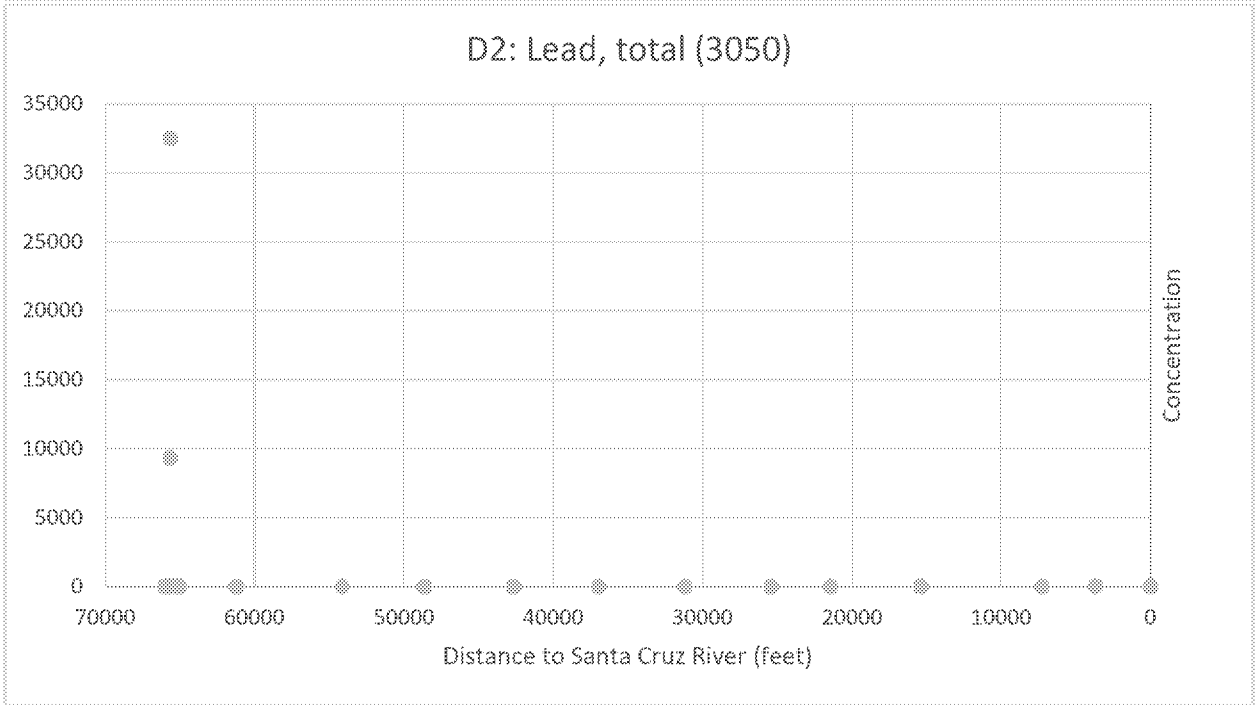

Copper, total (3050)
Drainages 1, 3, 4a, 4b
14000
12000
10000
8000
6000
4000
2000
0
150000
100000
50000
0
-50000
-100000
-150000
-200000
Distance to Santa Cruz River, feet
Concentration, mg/kg

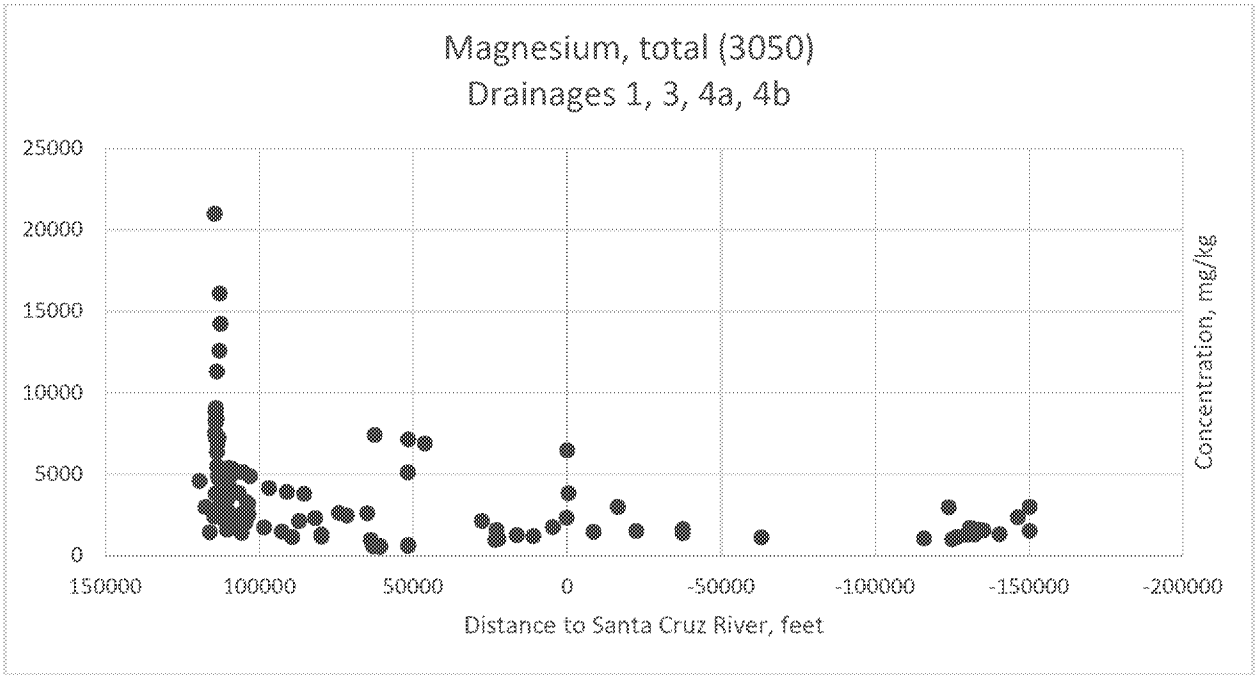

D2: Copper, total (3050)
14000
12000
10000
8000
6000
4000
2000
0
70000
60000
50000
40000
30000
20000
10000
0
Distance to Santa Cruz River (feet)
Concentration (mg/kg)

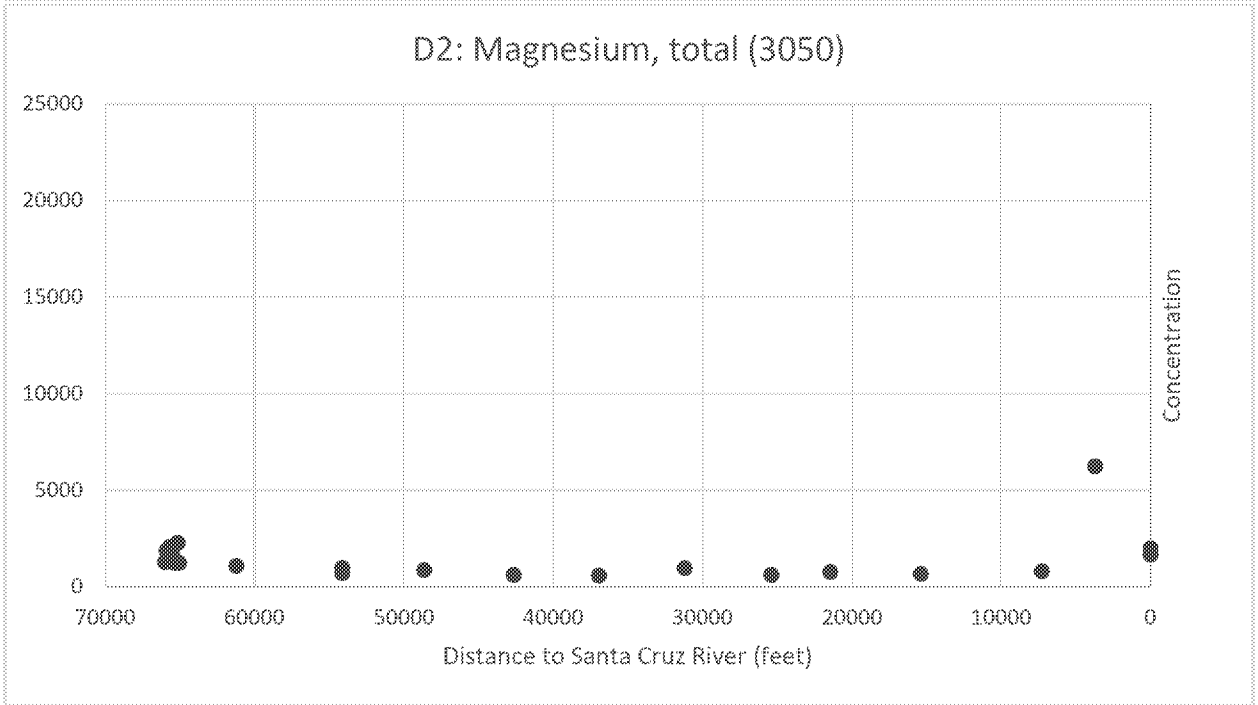

Iron, total (3050)
Drainages 1, 3, 4a, 4b
350000
300000
250000
200000
150000
100000
50000
0
150000
100000
50000
0
-50000
-100000
-150000
-200000
Distance to Santa Cruz River, feet
Concentration, mg/kg

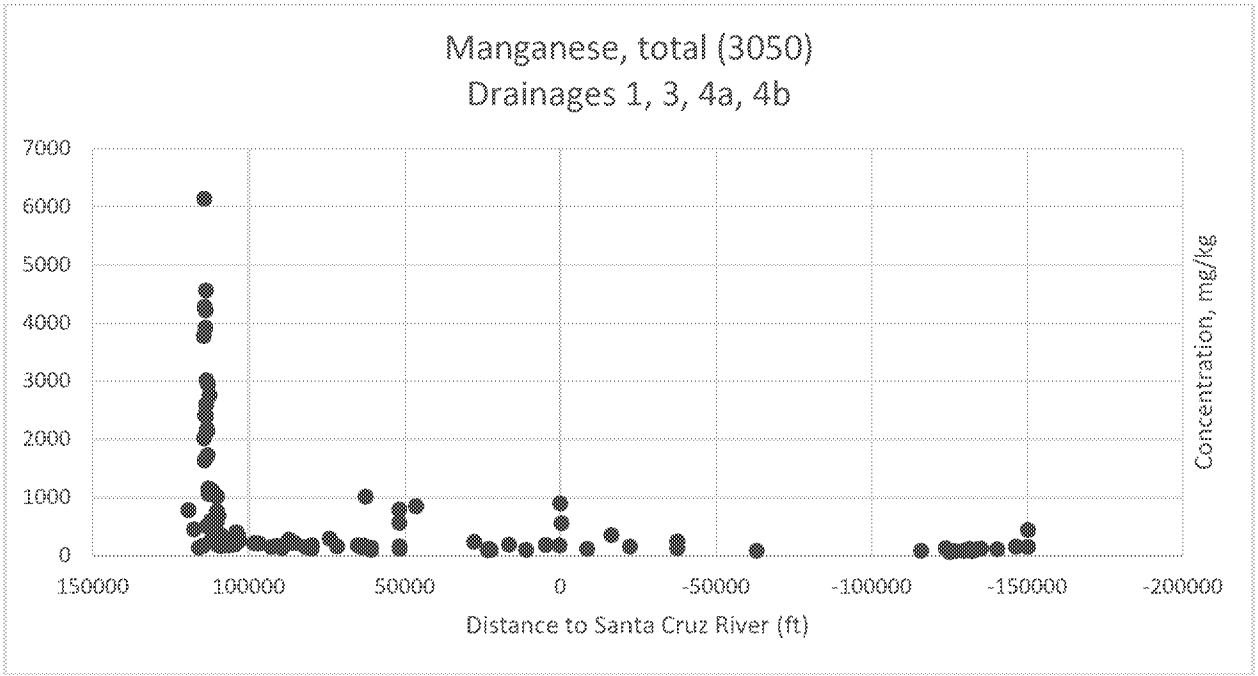

D2: Iron, total (3050)
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
70000
60000
50000
40000
30000
20000
10000
0
Distance to Santa Cruz River (feet)
Concentration

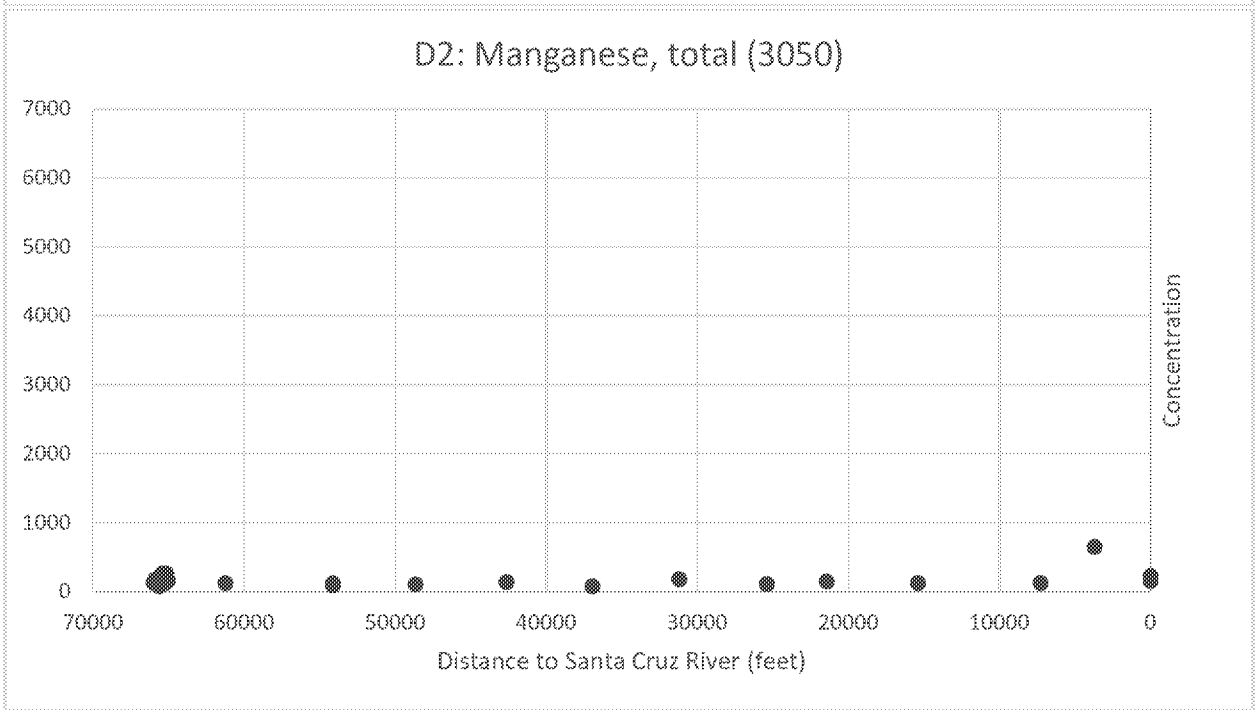

Lead, total (3050)
Drainages 1, 3, 4a, 4b
180
160
140
120
100
80
60
40
20
0
150000
100000
50000
0
-50000
-100000
-150000
-200000
Distance to Santa Cruz River, feet
Concentration, mg/kg

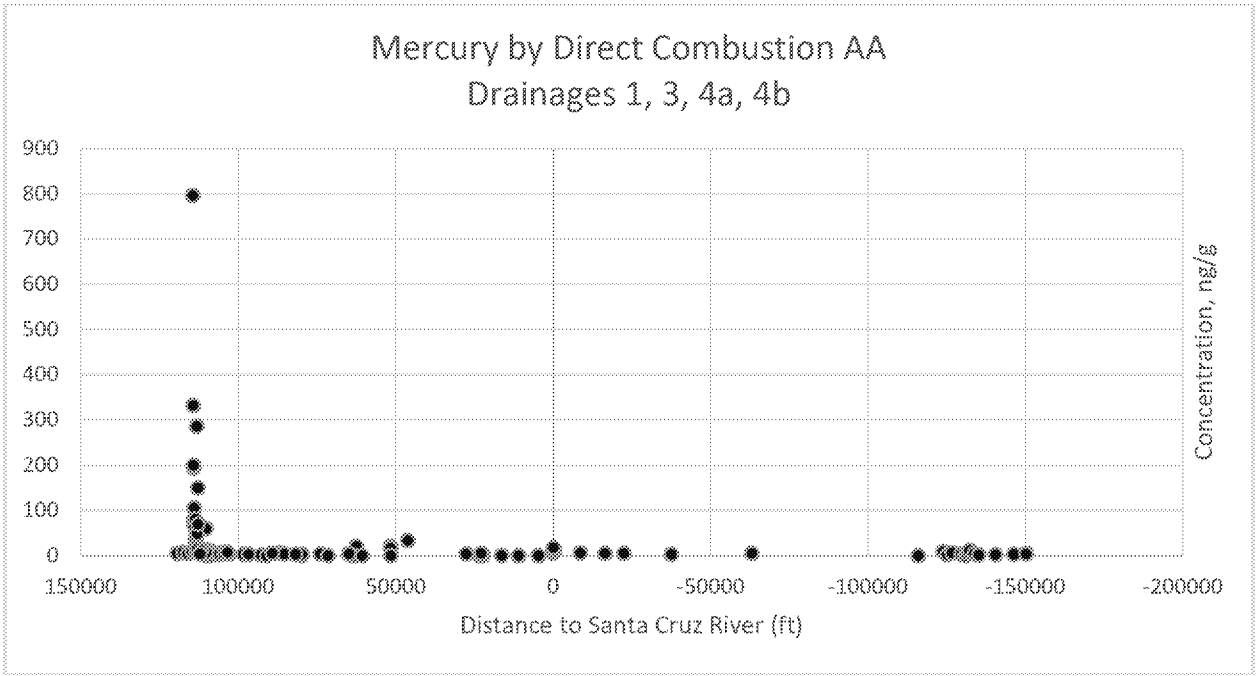

D2: Lead, total (3050)
35000
30000
25000
20000
15000
10000
5000
0
70000
60000
50000
40000
30000
20000
10000
0
Distance to Santa Cruz River (feet)
Concentration

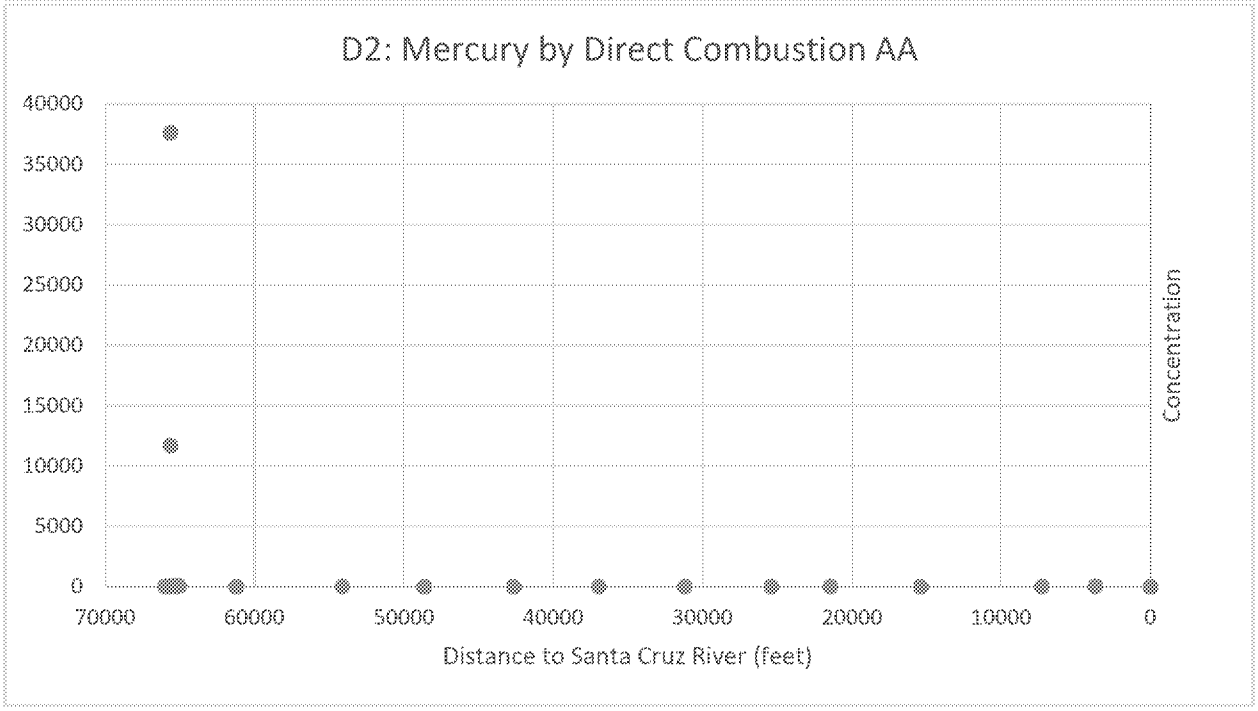

Magnesium, total (3050)
Drainages 1, 3, 4a, 4b
25000
20000
15000
10000
5000
0
150000
100000
50000
0
-50000
-100000
-150000
-200000
Distance to Santa Cruz River, feet
Concentration, mg/kg

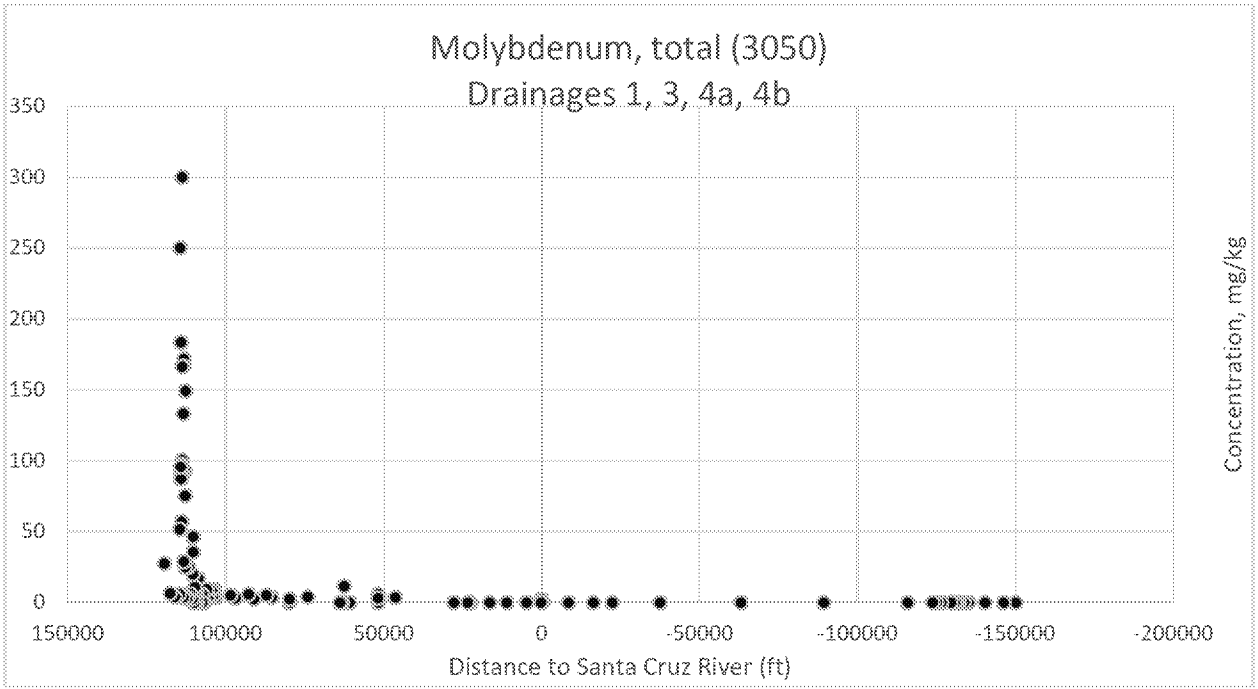

D2: Magnesium, total (3050)
25000
20000
15000
10000
5000
0
70000
60000
50000
40000
30000
20000
10000
0
Distance to Santa Cruz River (feet)
Concentration

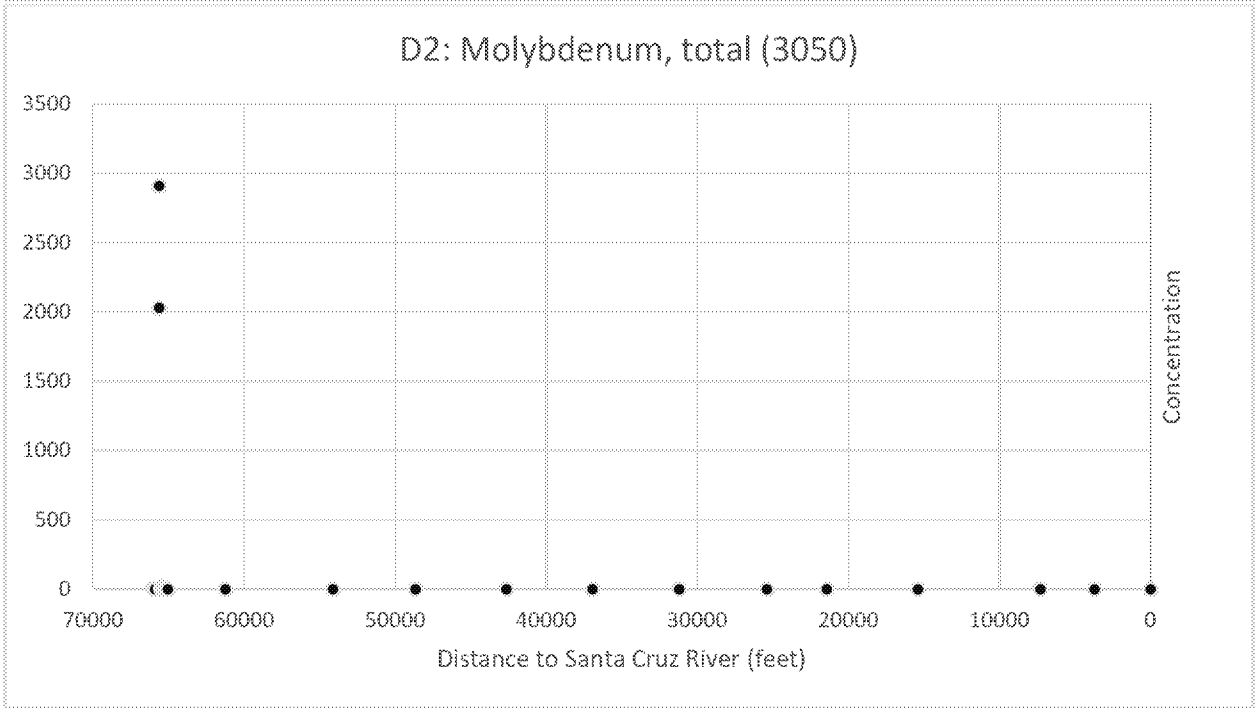

Manganese, total (3050)
Drainages 1, 3, 4a, 4b
7000
6000
5000
4000
3000
2000
1000
0
150000
100000
50000
0
-50000
-100000
-150000
-200000
Distance to Santa Cruz River (ft)
Concentration, mg/kg

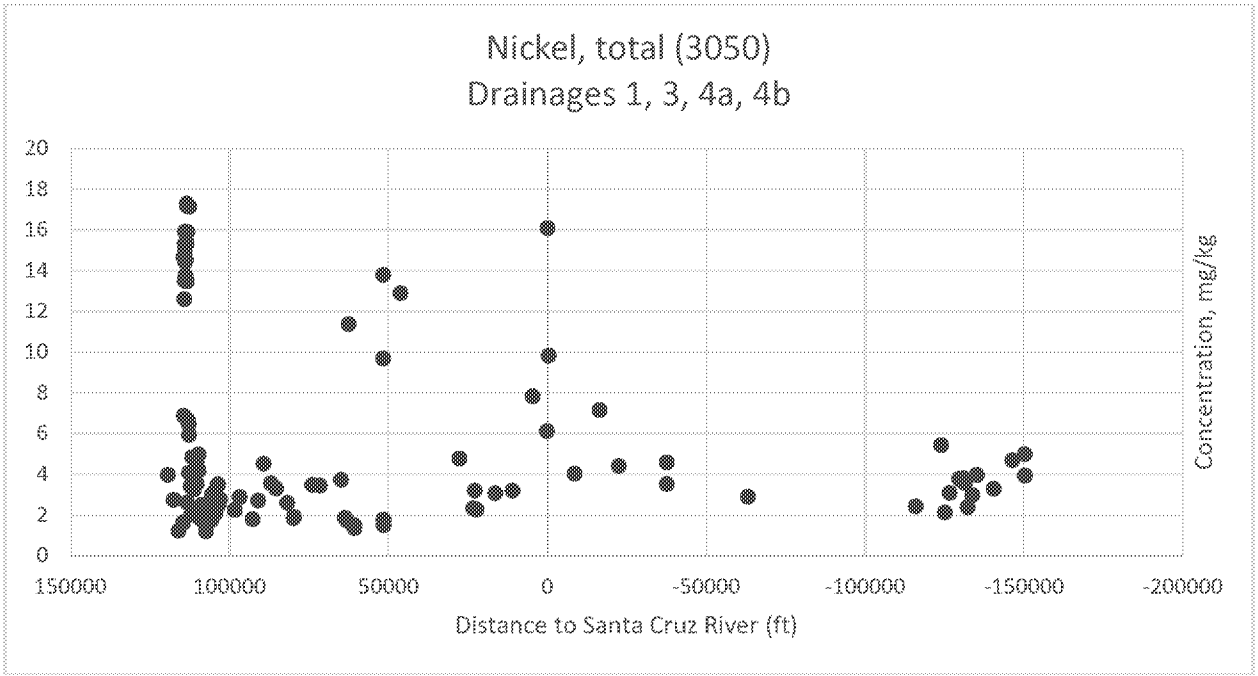

D2: Manganese, total (3050)
7000
6000
5000
4000
3000
2000
1000
0
70000
60000
50000
40000
30000
20000
10000
0
Distance to Santa Cruz River (feet)
Concentration

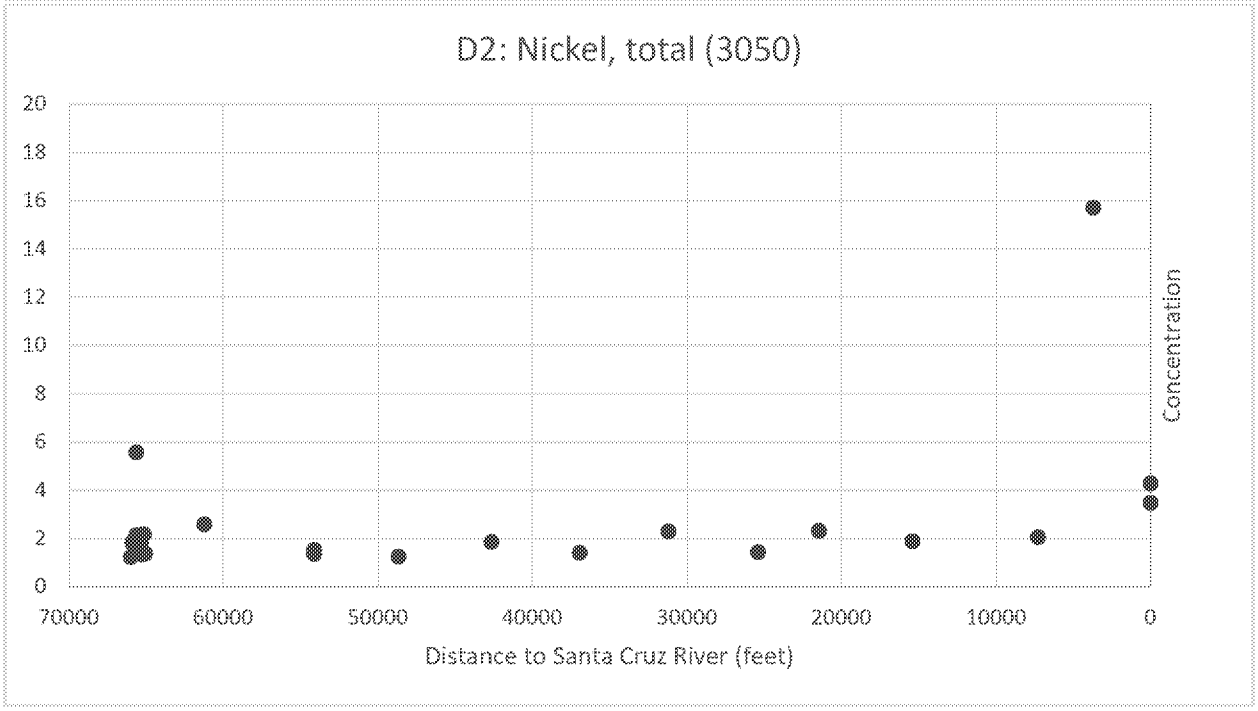

Mercury by Direct Combustion AA
Drainages 1, 3, 4a, 4b
900
800
700
600
500
400
300
200
100
0
150000
100000
50000
0
-50000
-100000
-150000
-200000
Distance to Santa Cruz River (ft)
Concentration, ng/g

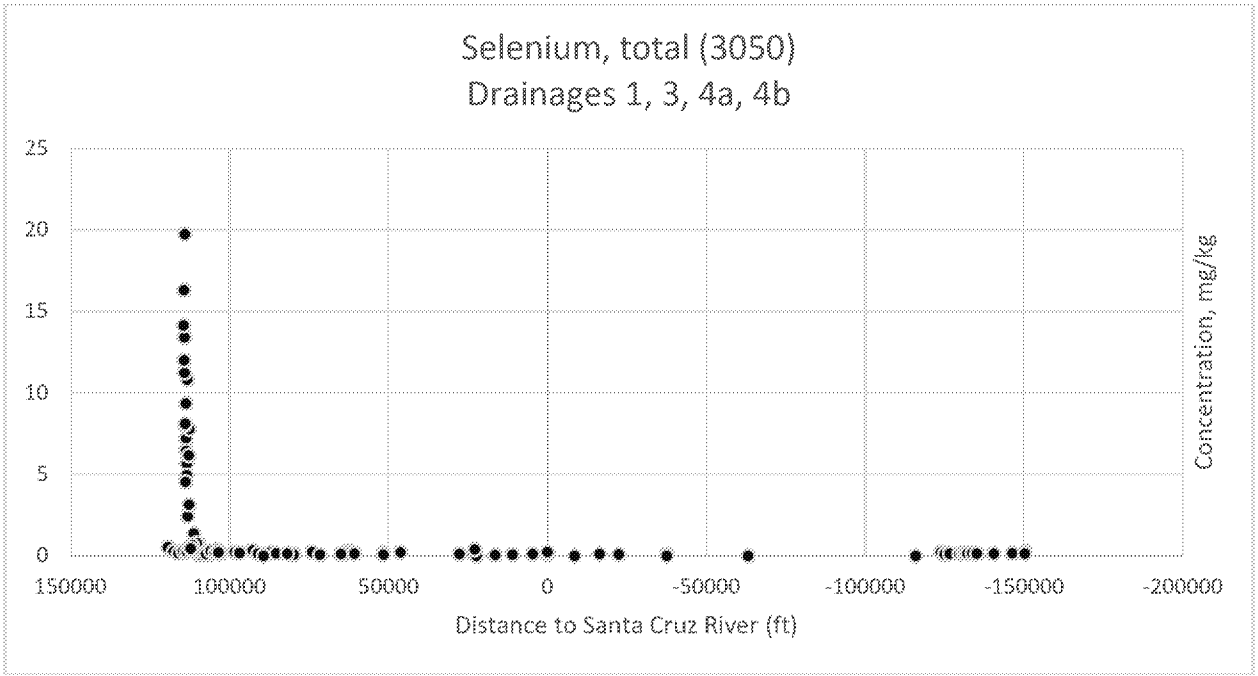

D2: Mercury by Direct Combustion AA
40000
35000
30000
25000
20000
15000
10000
5000
0
70000
60000
50000
40000
30000
20000
10000
0
Distance to Santa Cruz River (feet)
Concentration

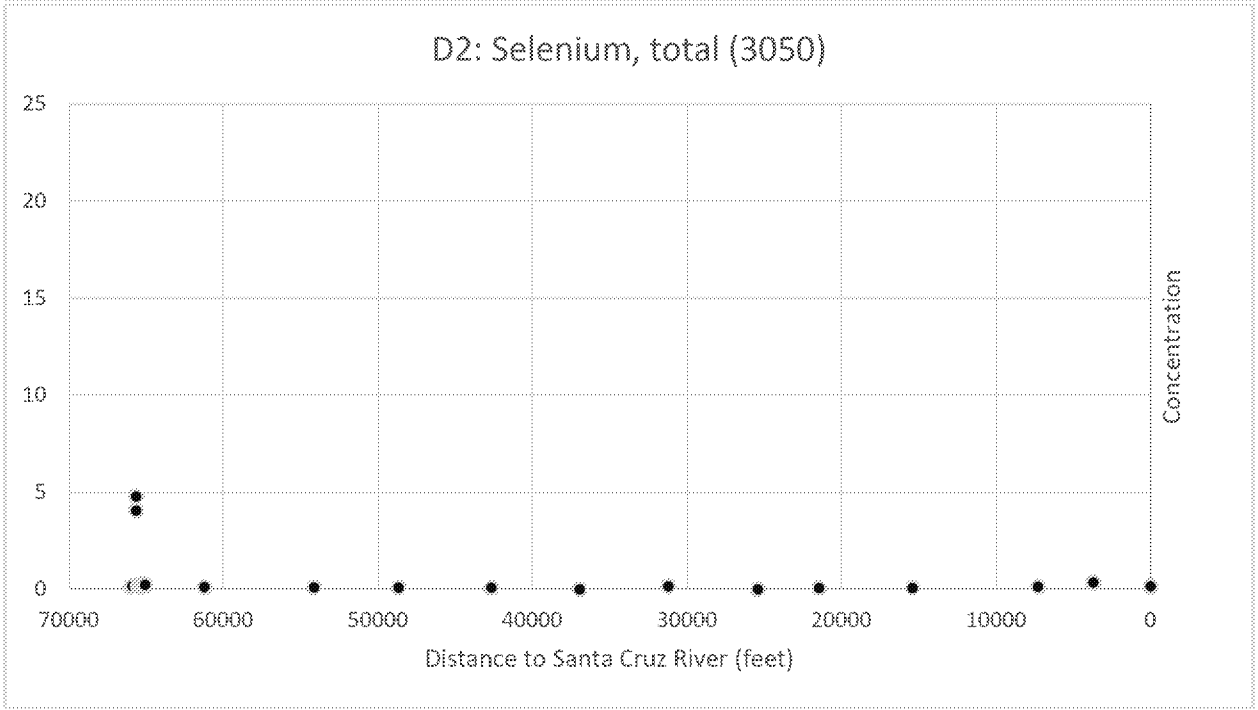

Molybdenum, total (3050)
Drainages 1, 3, 4a, 4b
350
300
250
200
150
100
50
0
150000
100000
50000
0
-50000
-100000
-150000
-200000
Distance to Santa Cruz River (ft)
Concentration, mg/kg

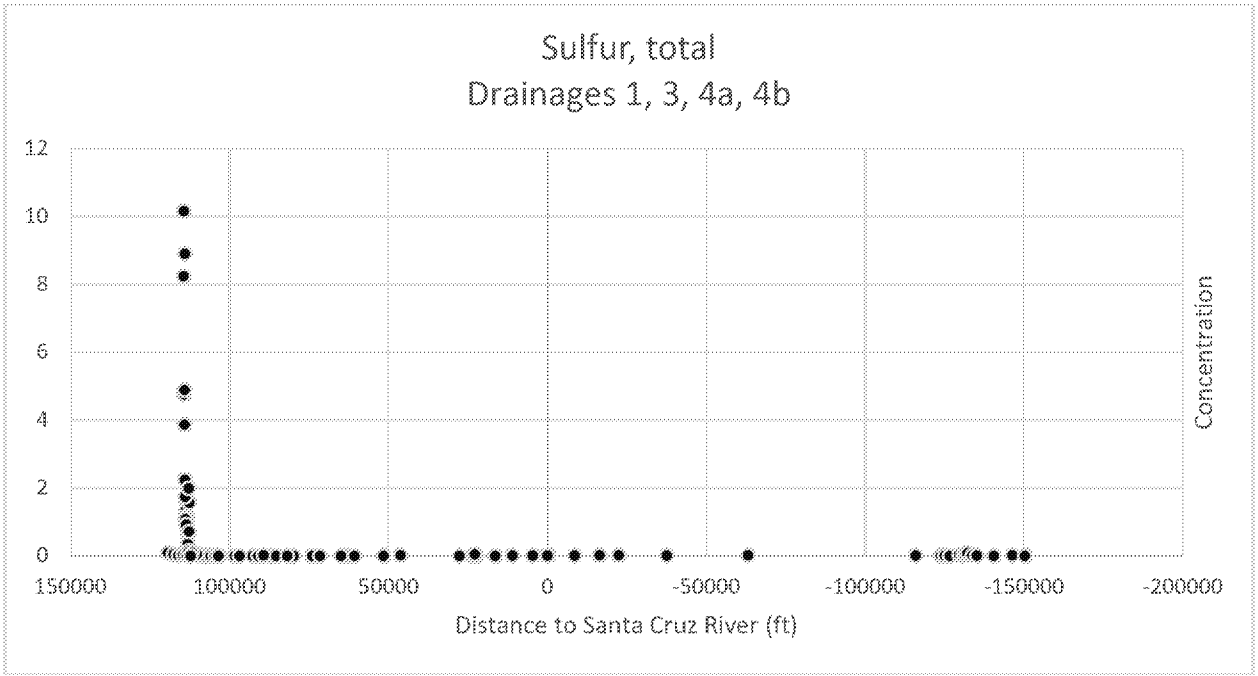

D2: Molybdenum, total (3050)
3500
3000
2500
2000
1500
1000
500
0
70000
60000
50000
40000
30000
20000
10000
0
Distance to Santa Cruz River (feet)
Concentration

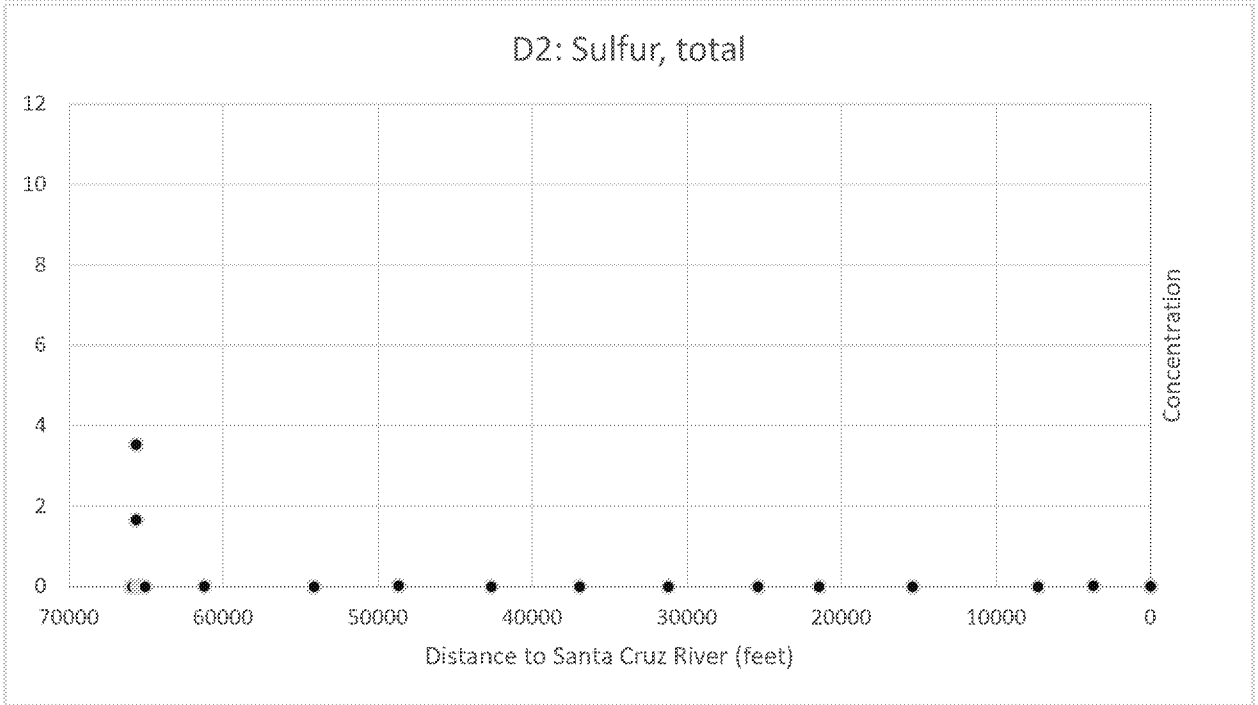

Nickel, total (3050)
Drainages 1, 3, 4a, 4b
20
18
16
14
12
10
8
6
4
2
0
150000
100000
50000
0
-50000
-100000
-150000
-200000
Distance to Santa Cruz River (ft)
Concentration, mg/kg

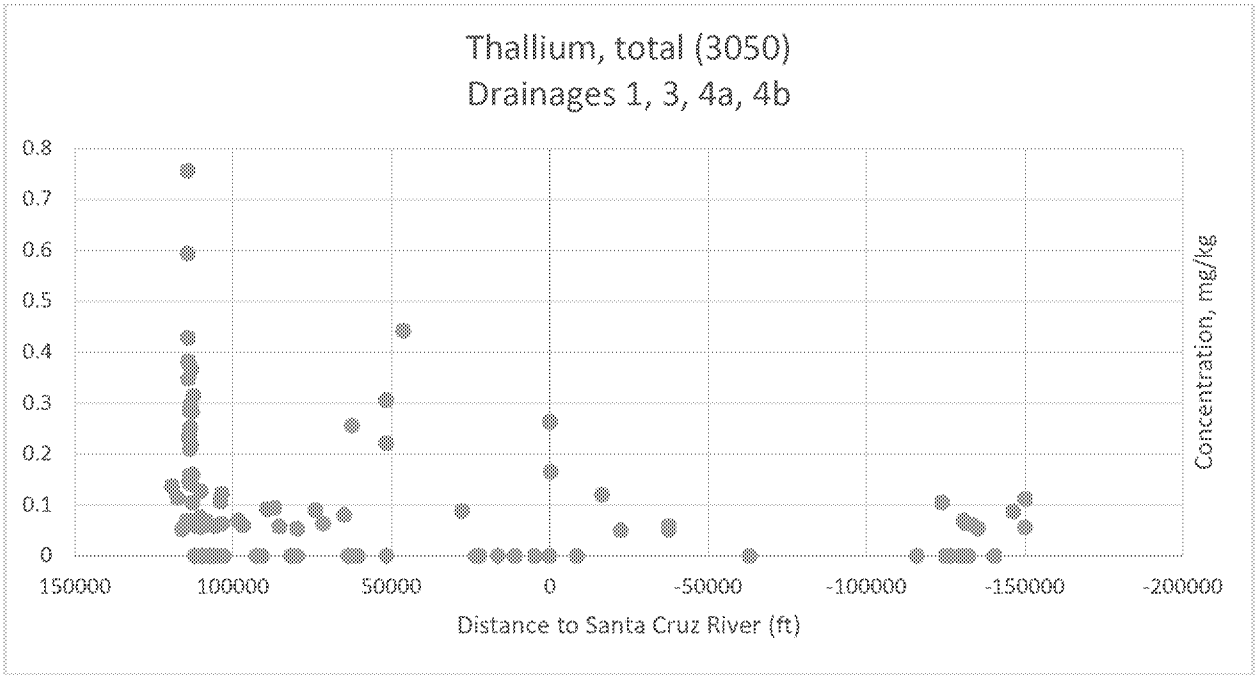

D2: Nickel, total (3050)
20
18
16
14
12
10
8
6
4
2
0
70000
60000
50000
40000
30000
20000
10000
0
Distance to Santa Cruz River (feet)
Concentration

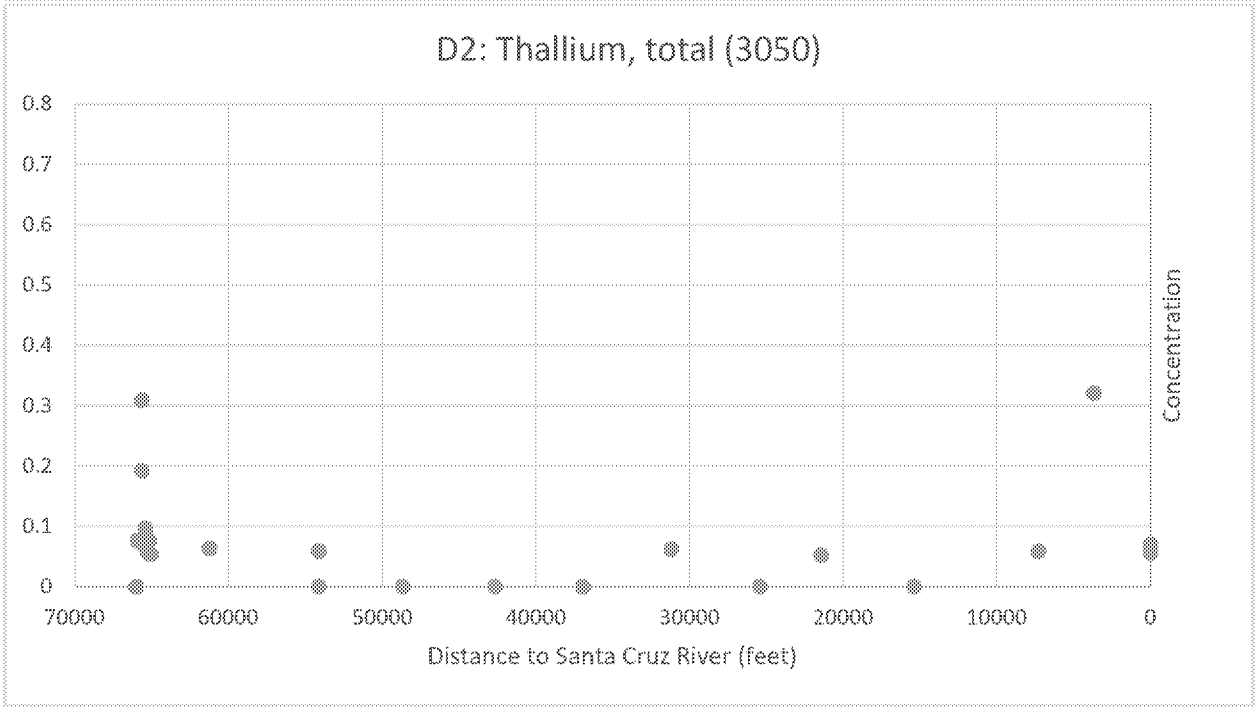

Selenium, total (3050)
Drainages 1, 3, 4a, 4b
25
20
15
10
5
0
150000
100000
50000
0
-50000
-100000
-150000
-200000
Distance to Santa Cruz River (ft)
Concentration, mg/kg

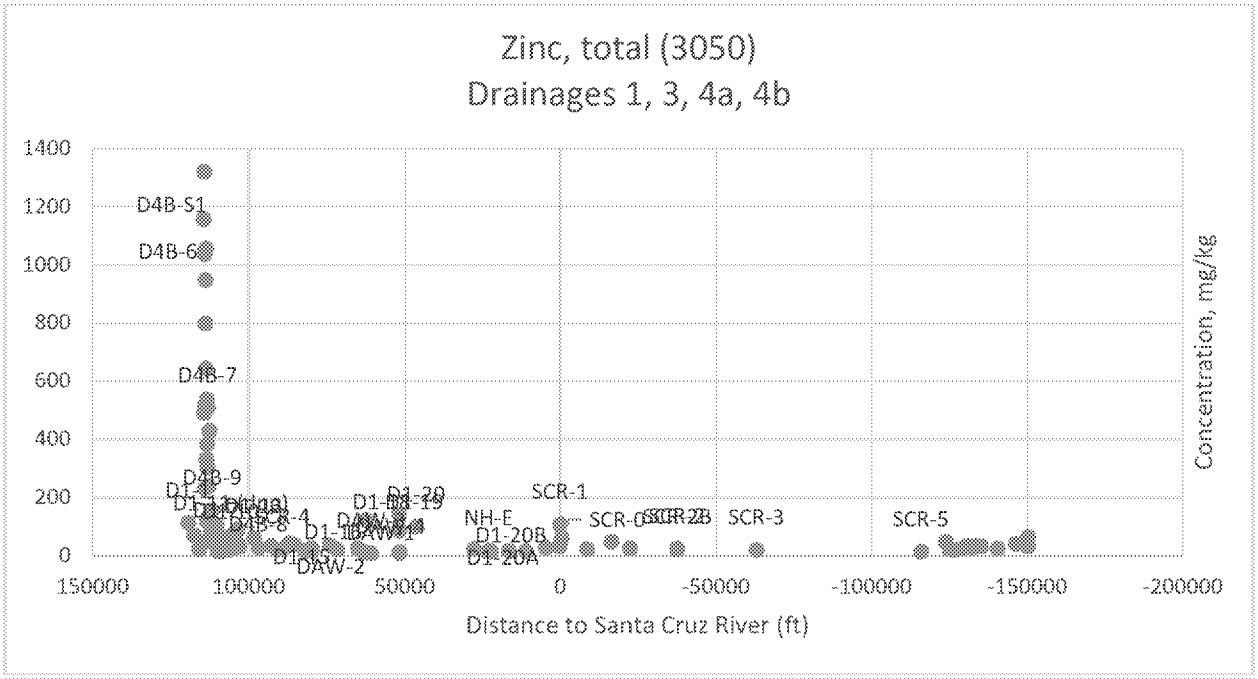

D2: Selenium, total (3050)
25
20
15
10
5
0
70000
60000
50000
40000
30000
20000
10000
0
Distance to Santa Cruz River (feet)
Concentration

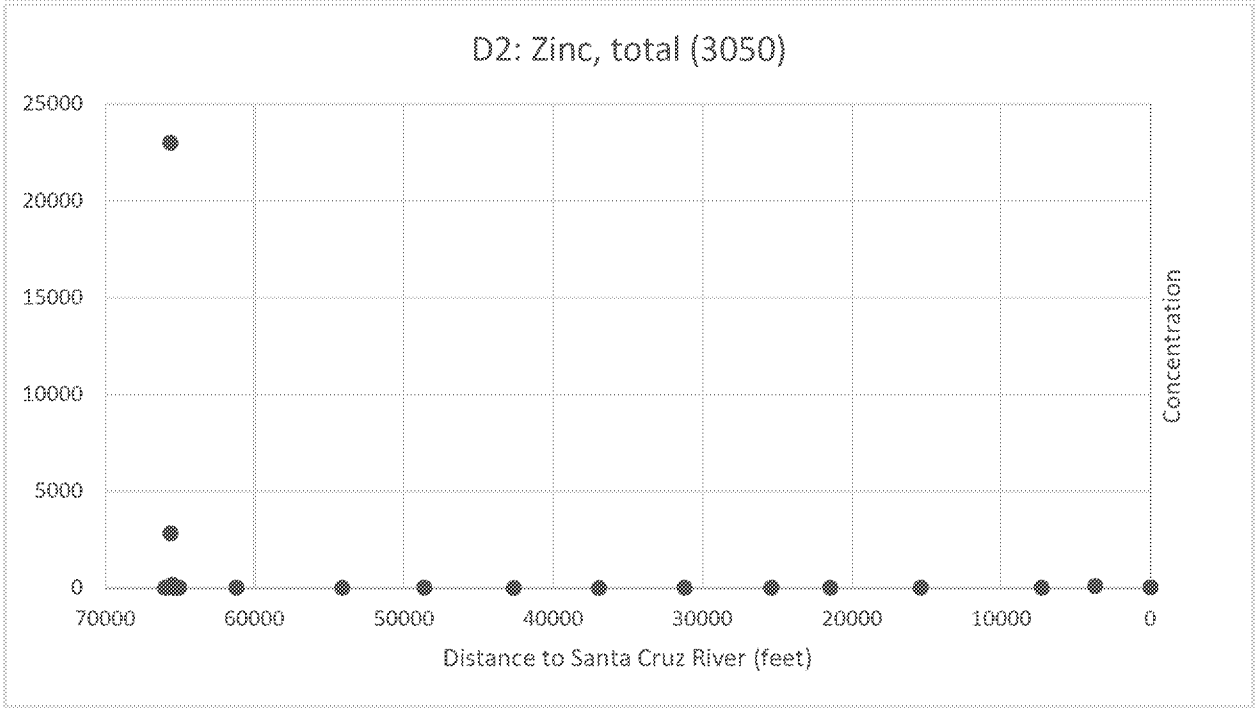

Sulfur, total
Drainages 1, 3, 4a, 4b
12
10
8
6
4
2
0
150000
100000
50000
0
-50000
-100000
-150000
-200000
Distance to Santa Cruz River (ft)
Concentration


D2: Sulfur, total
12
10
8
6
4
2
0
70000
60000
50000
40000
30000
20000
10000
0
Distance to Santa Cruz River (feet)
Concentration


Thallium, total (3050)
Drainages 1, 3, 4a, 4b
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
150000
100000
50000
0
-50000
-100000
-150000
-200000
Distance to Santa Cruz River (ft)
Concentration, mg/kg

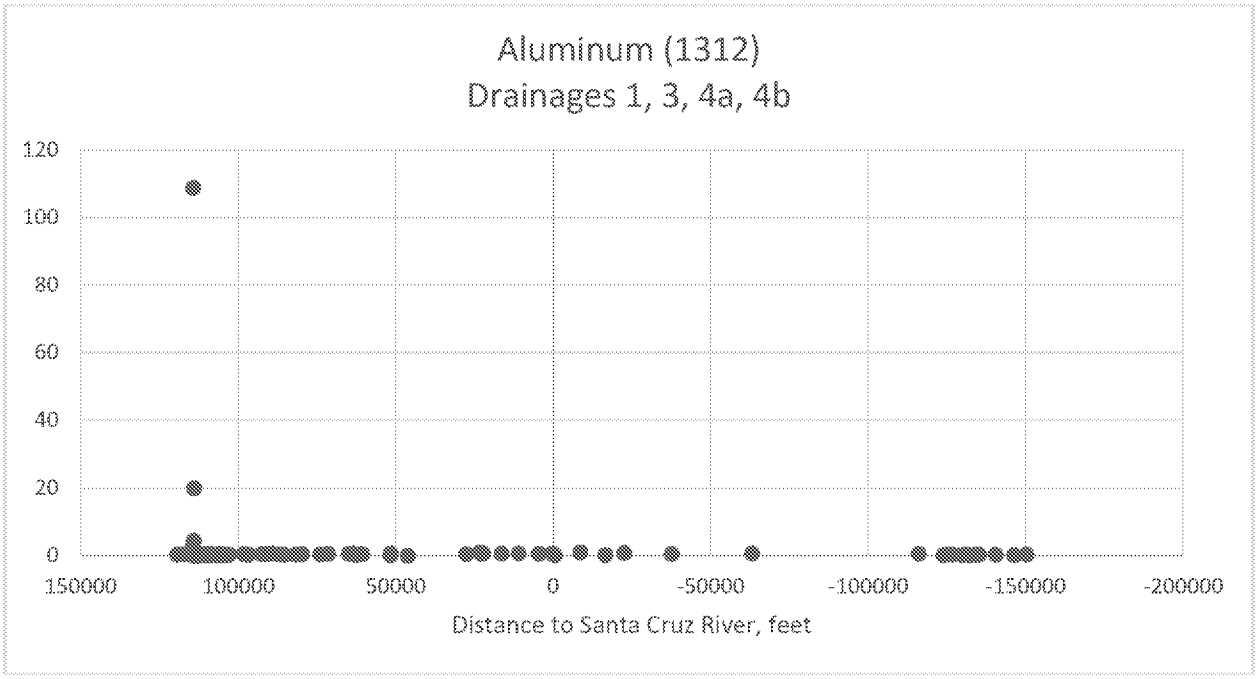

D2: Thallium, total (3050)
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
70000
60000
50000
40000
30000
20000
10000
0
Distance to Santa Cruz River (feet)
Concentration

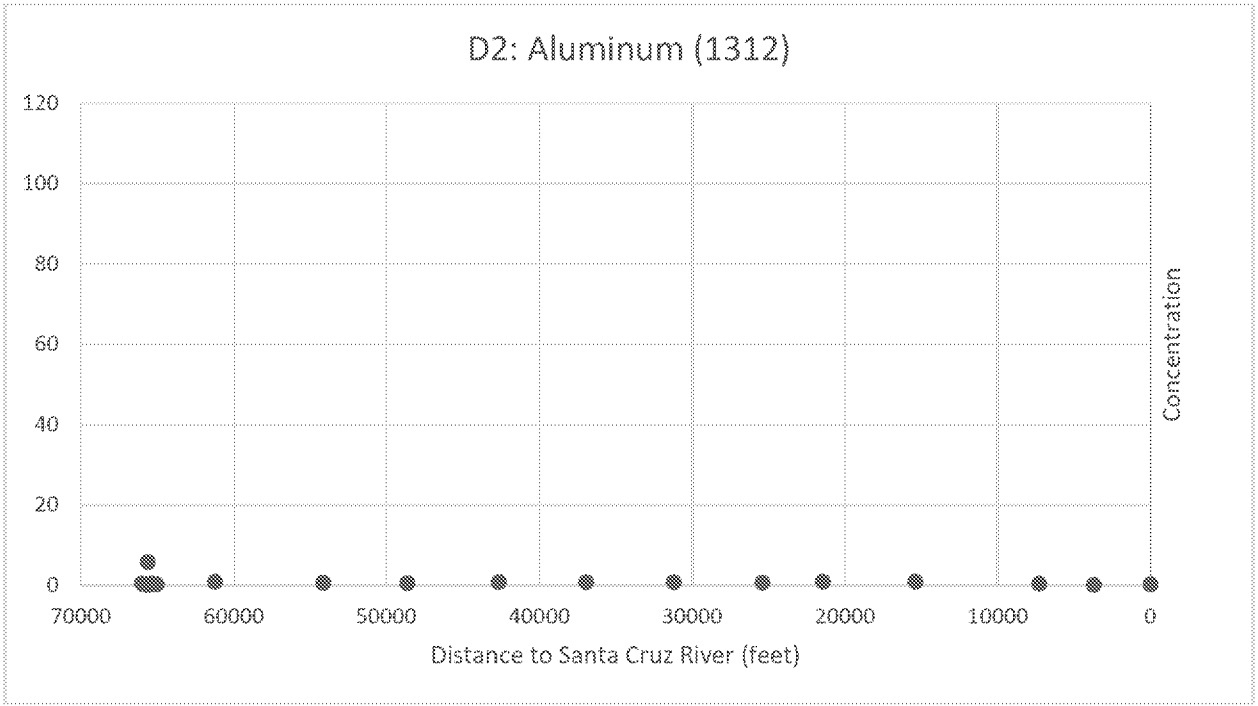

Zinc, total (3050)
Drainages 1, 3, 4a, 4b
1400
1200
1000
800
600
400
200
0
D4B-S1
D4B-6
D4B-7
D4B-9
D1-20
SCR-1
NH-E
D1-20B
D1-20A
SCR-3
SCR-5
DAW-2
150000
100000
50000
0
-50000
-100000
-150000
-200000
Distance to Santa Cruz River (ft)
Concentration, mg/kg

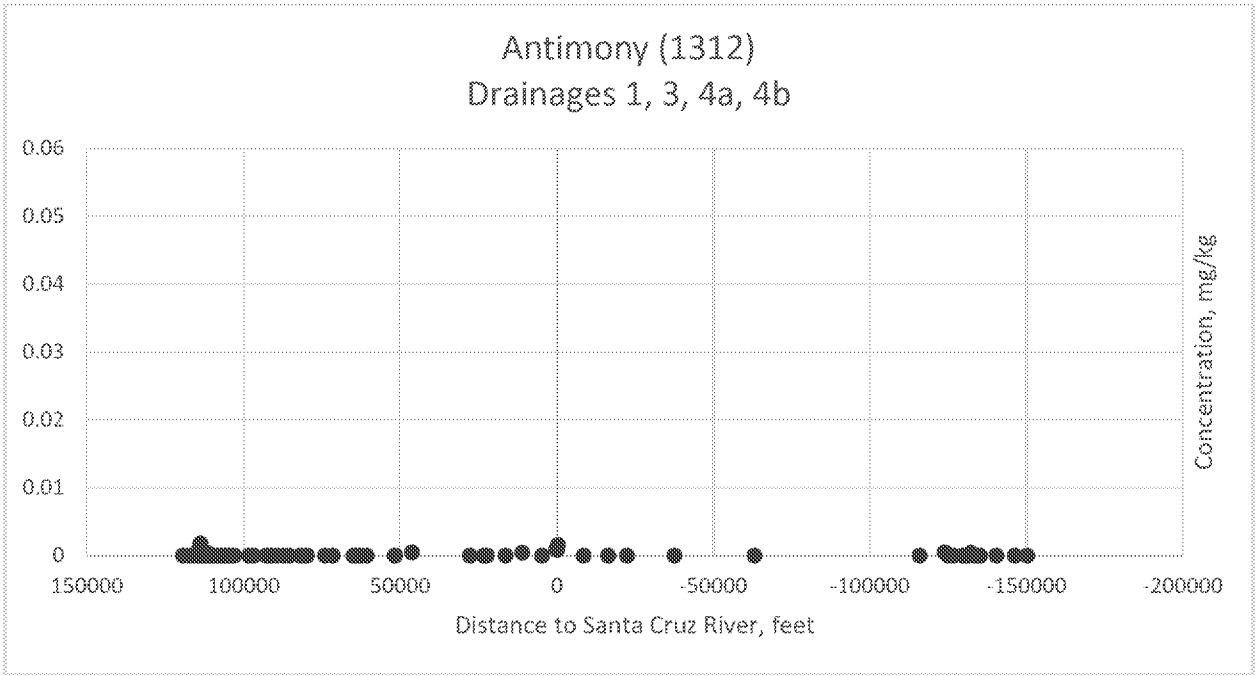

D2: Zinc, total (3050)
25000
20000
15000
10000
5000
0
70000
60000
50000
40000
30000
20000
10000
0
Distance to Santa Cruz River (feet)
Concentration

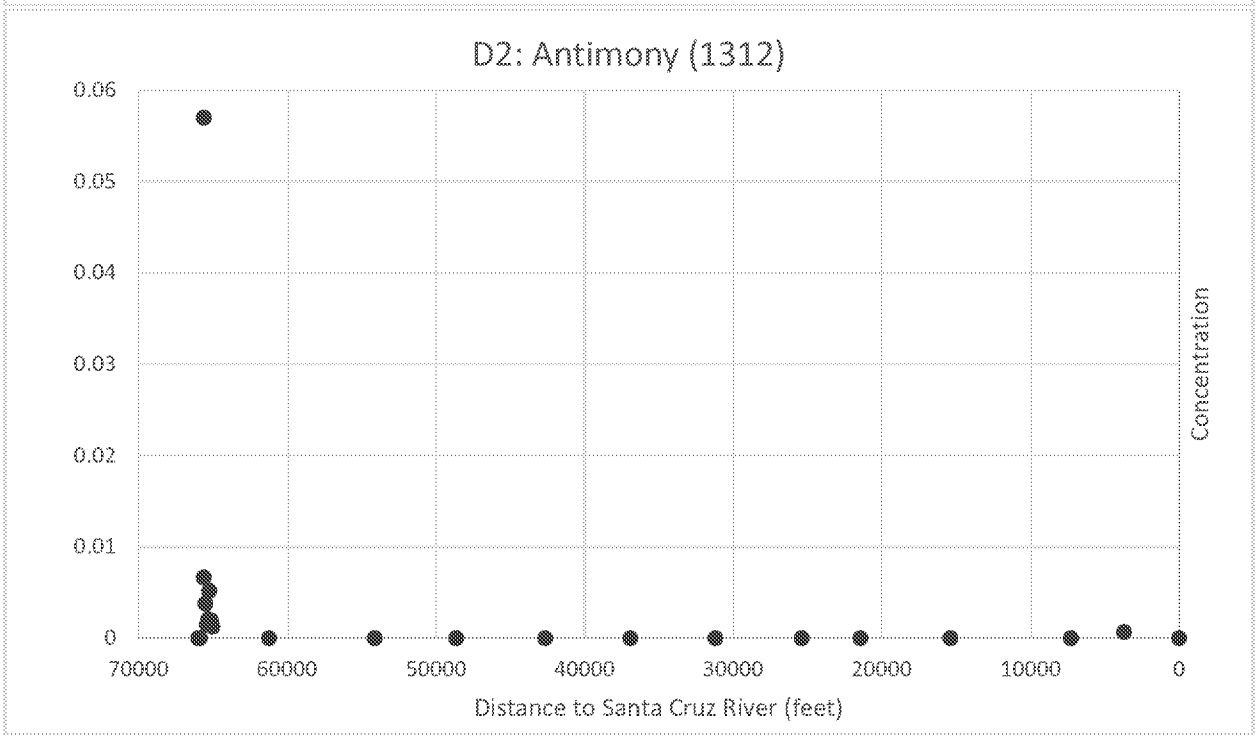
Synthetic Precipitation Leaching Procedure, Method 1312

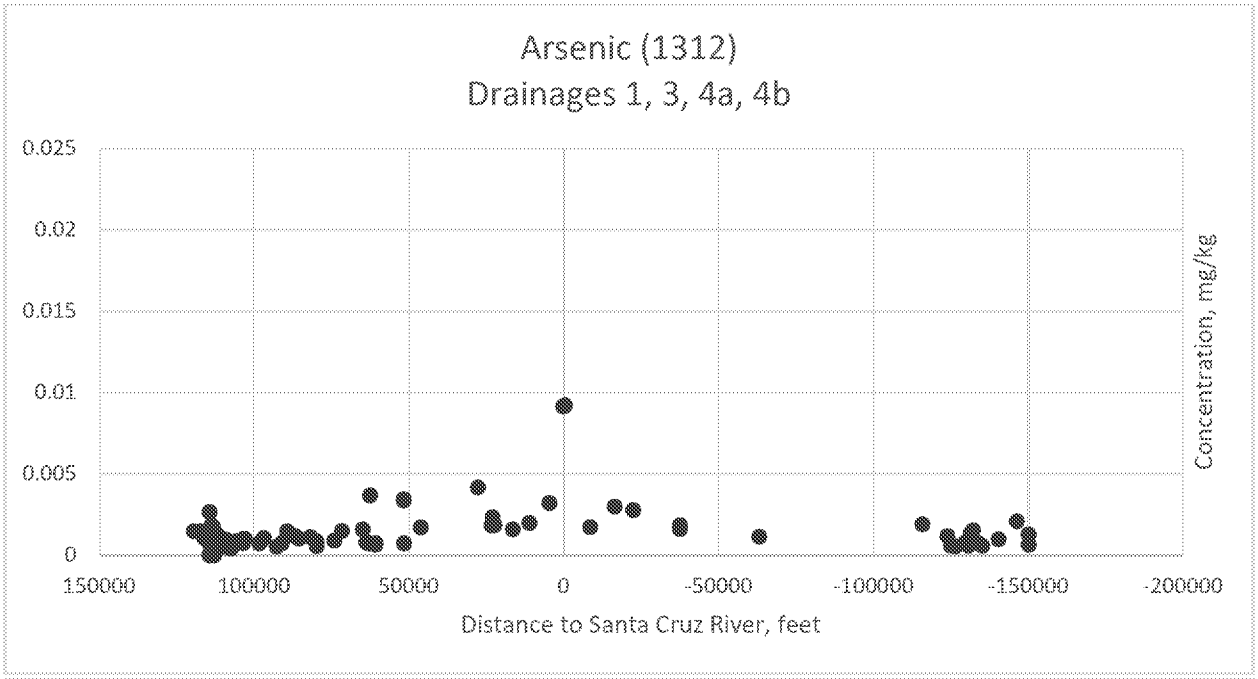
(Presented in milligrams per killigram)

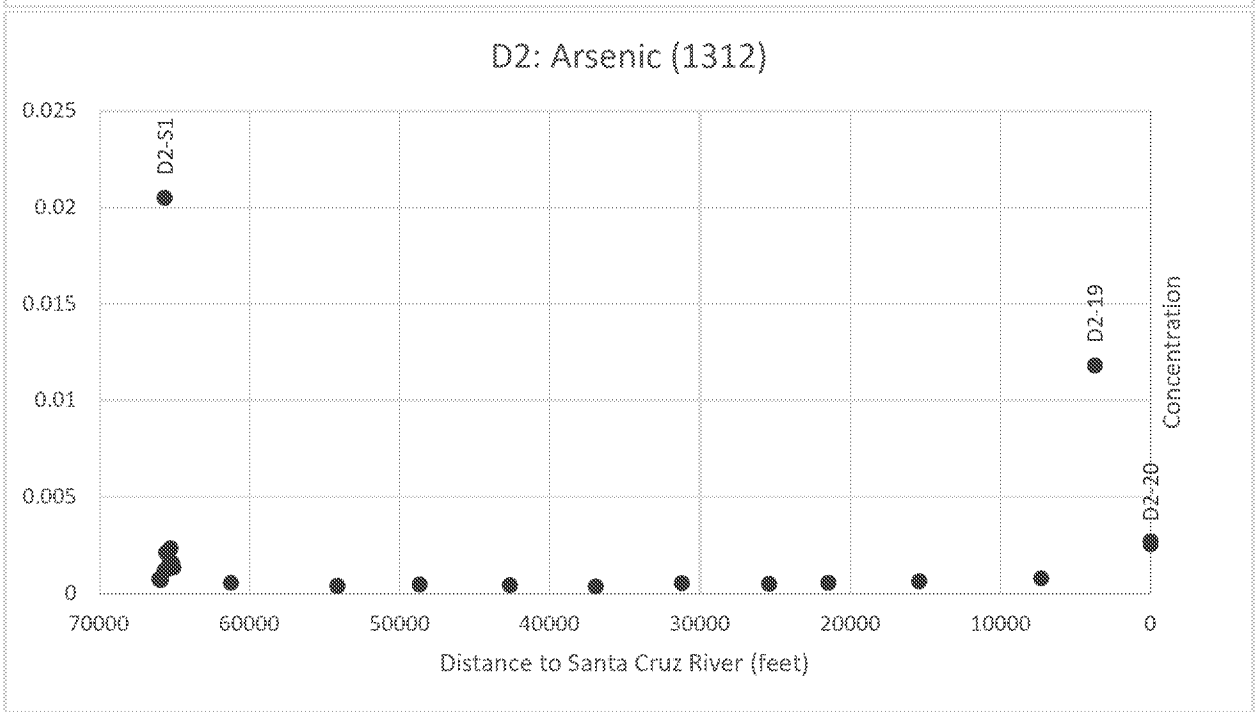


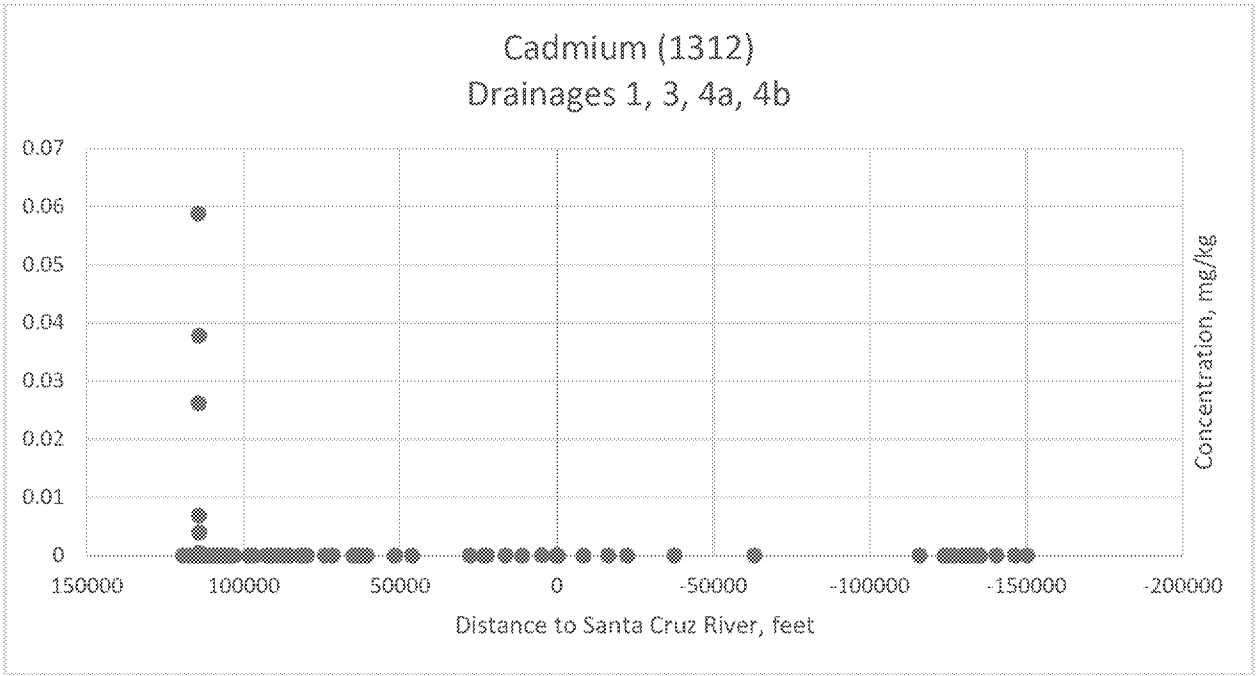


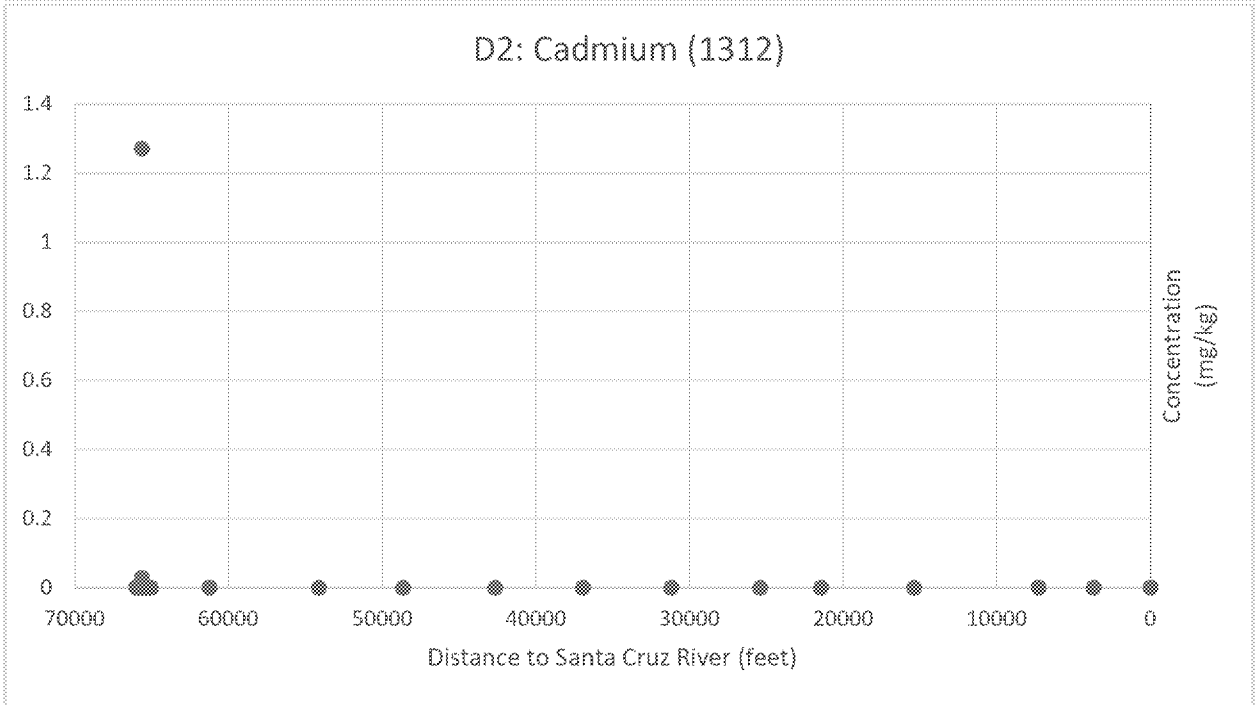

Antimony (1312)
Drainages 1, 3, 4a, 4b
0.06
0.05
0.04
0.03
0.02
0.01
0
150000
100000
50000
0
-50000
-100000
-150000
-200000
Distance to Santa Cruz River, feet
Concentration, mg/kg

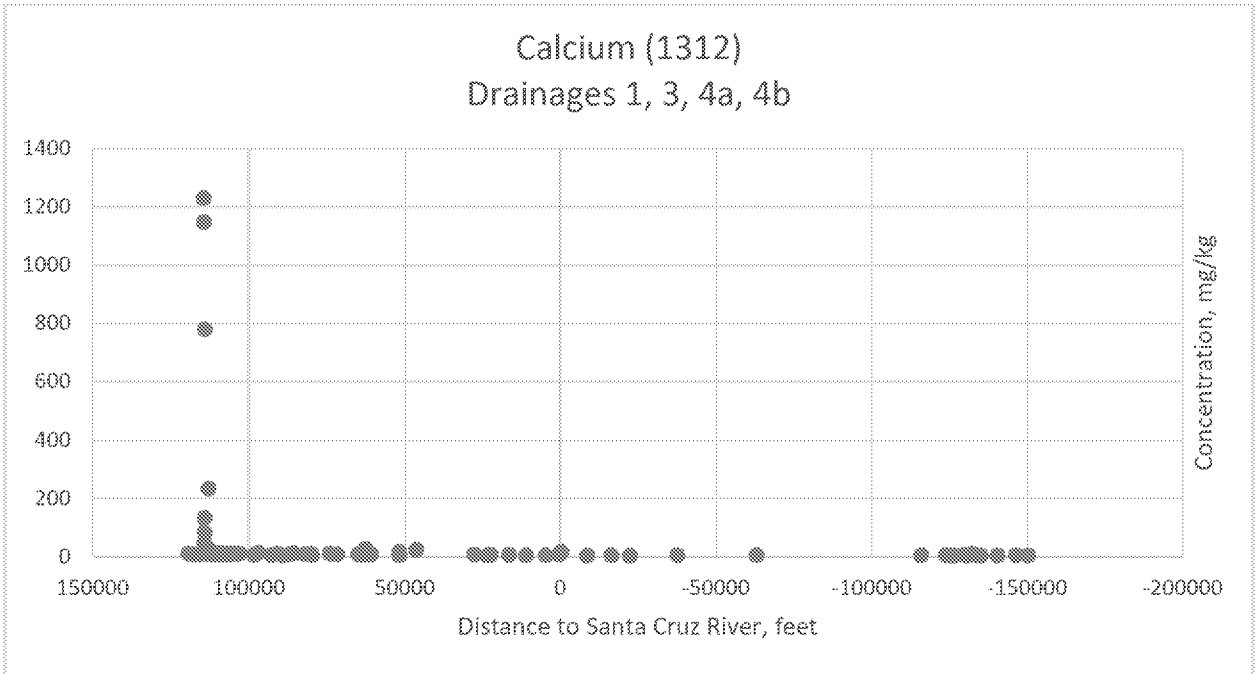

D2: Antimony (1312)
0.06
0.05
0.04
0.03
0.02
0.01
0
70000
60000
50000
40000
30000
20000
10000
0
Distance to Santa Cruz River (feet)
Concentration

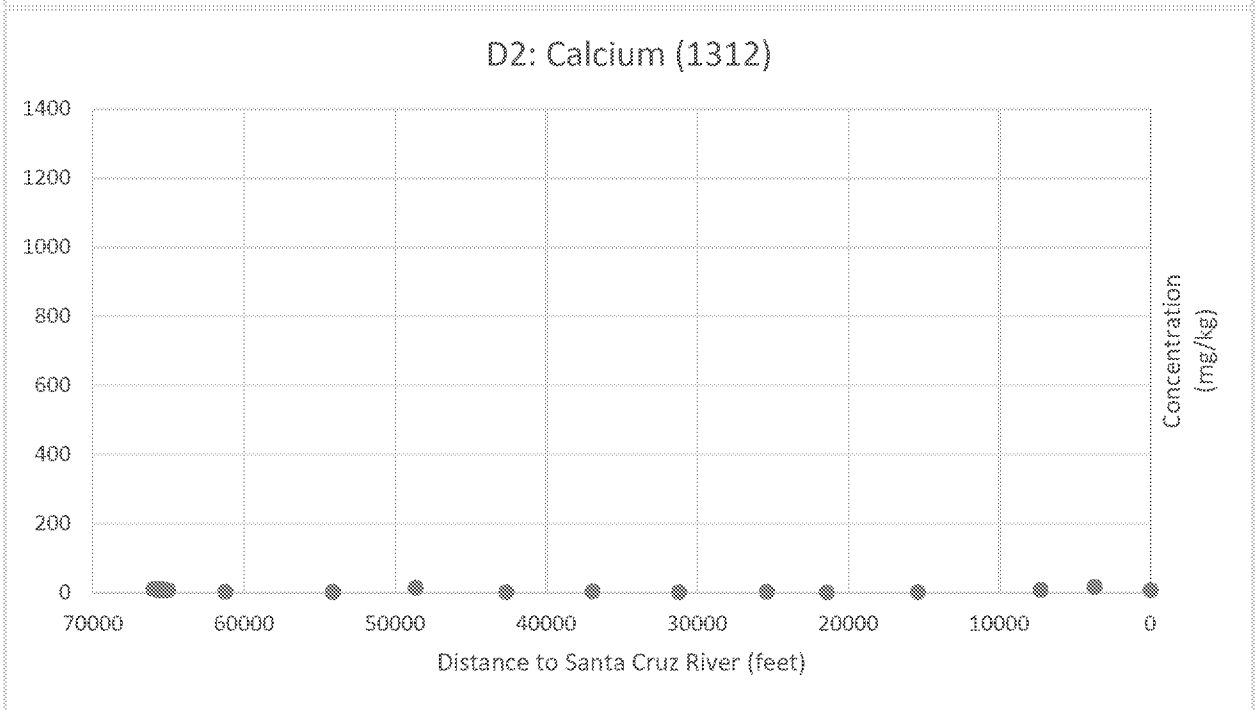

Arsenic (1312)
Drainages 1, 3, 4a, 4b
0.025
0.02
0.015
0.01
0.005
0
150000
100000
50000
0
-50000
-100000
-150000
-200000
Distance to Santa Cruz River, feet
Concentration, mg/kg

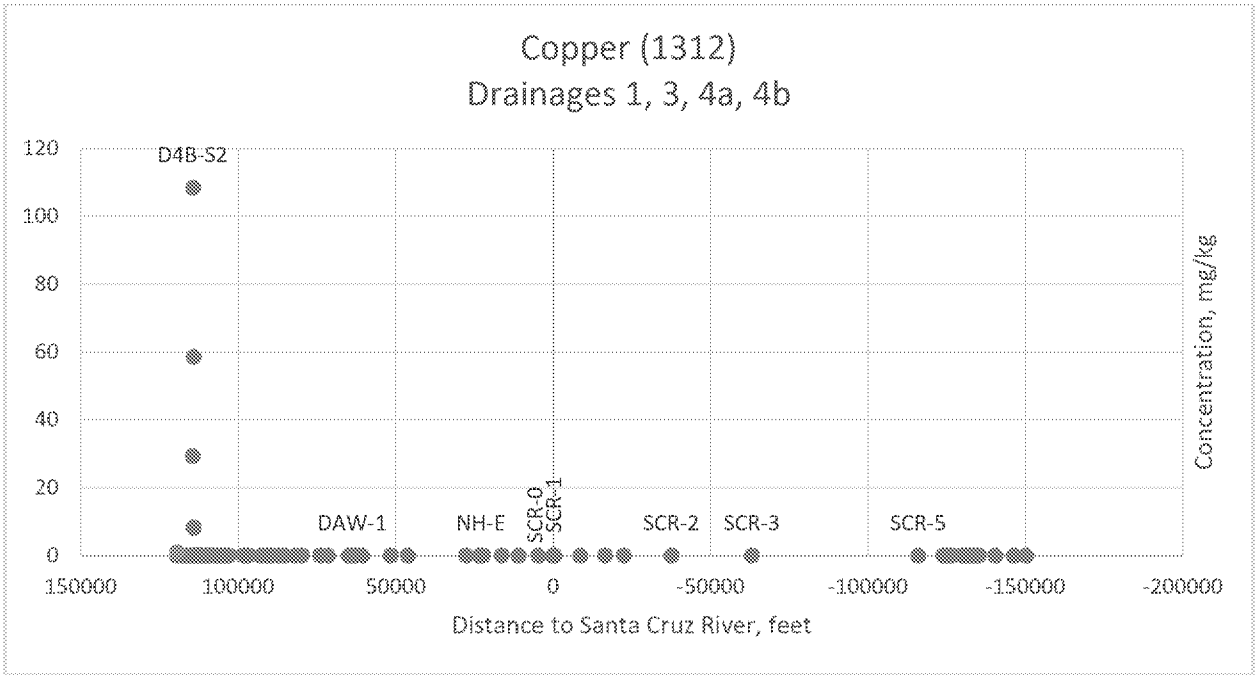

D2: Arsenic (1312)
0.025
0.02
0.015
0.01
0.005
0
D2-S1
D2-19
D2-20
70000
60000
50000
40000
30000
20000
10000
0
Distance to Santa Cruz River (feet)
Concentration

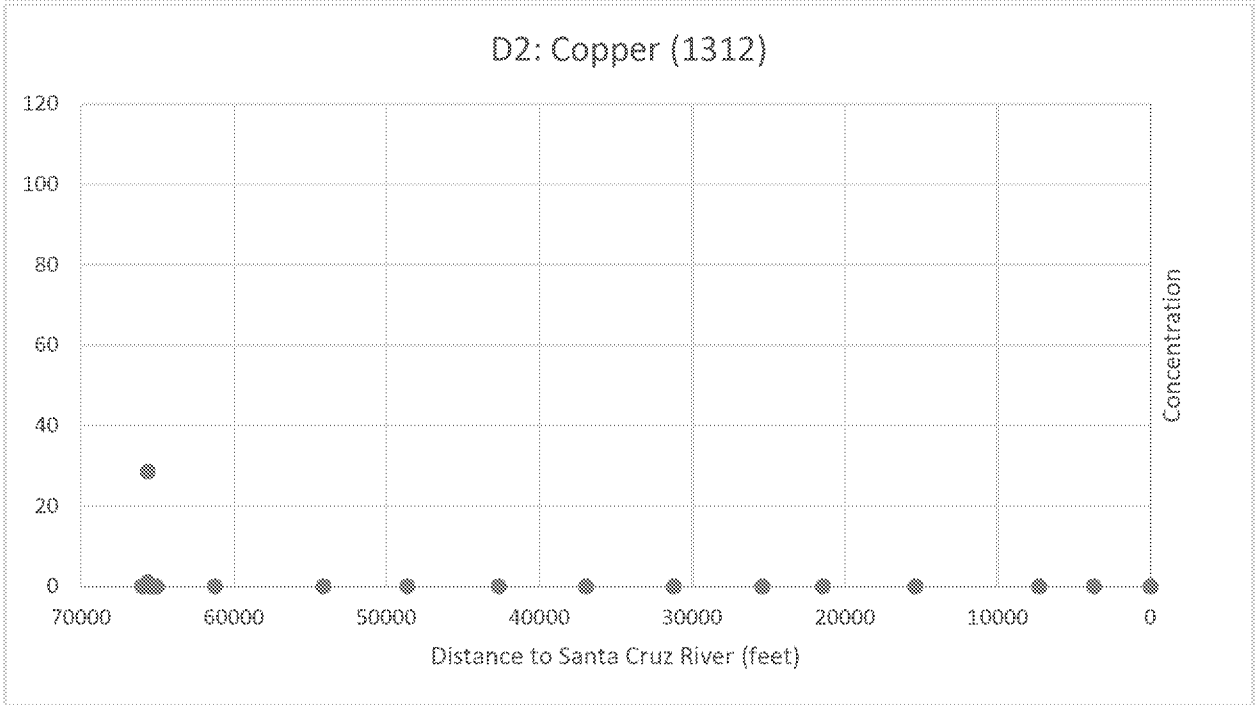

Cadmium (1312)
Drainages 1, 3, 4a, 4b
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
150000
100000
50000
0
-50000
-100000
-150000
-200000
Distance to Santa Cruz River, feet
Concentration, mg/kg

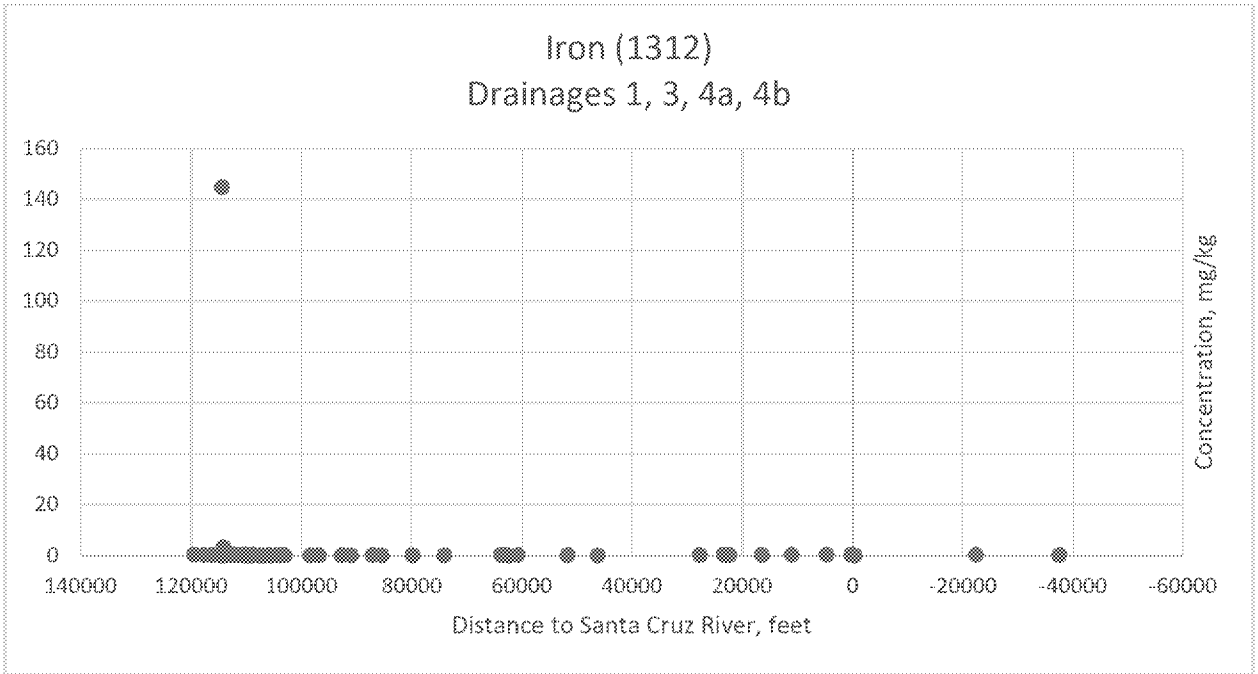

D2: Cadmium (1312)
1.4
1.2
1
0.8
0.6
0.4
0.2
0
70000
60000
50000
40000
30000
20000
10000
0
Distance to Santa Cruz River (feet)
Concentration (mg/kg)

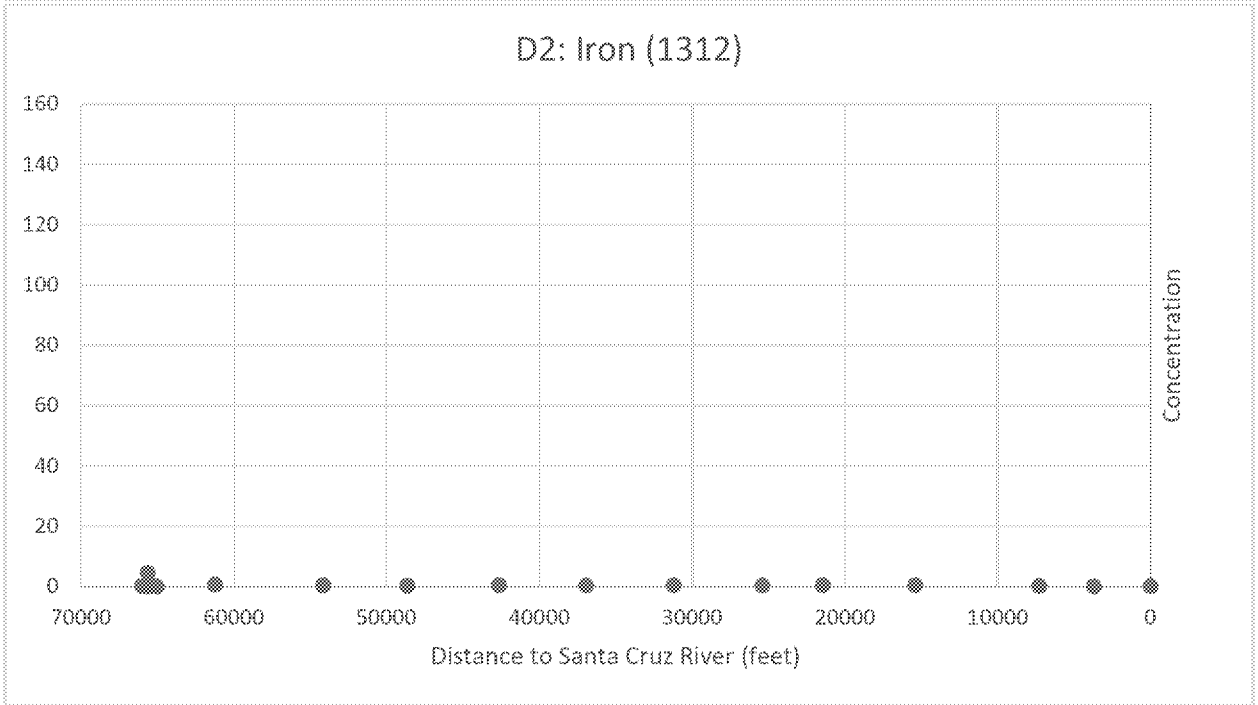

Calcium (1312)
Drainages 1, 3, 4a, 4b
1400
1200
1000
800
600
400
200
0
150000
100000
50000
0
-50000
-100000
-150000
-200000
Distance to Santa Cruz River, feet
Concentration, mg/kg

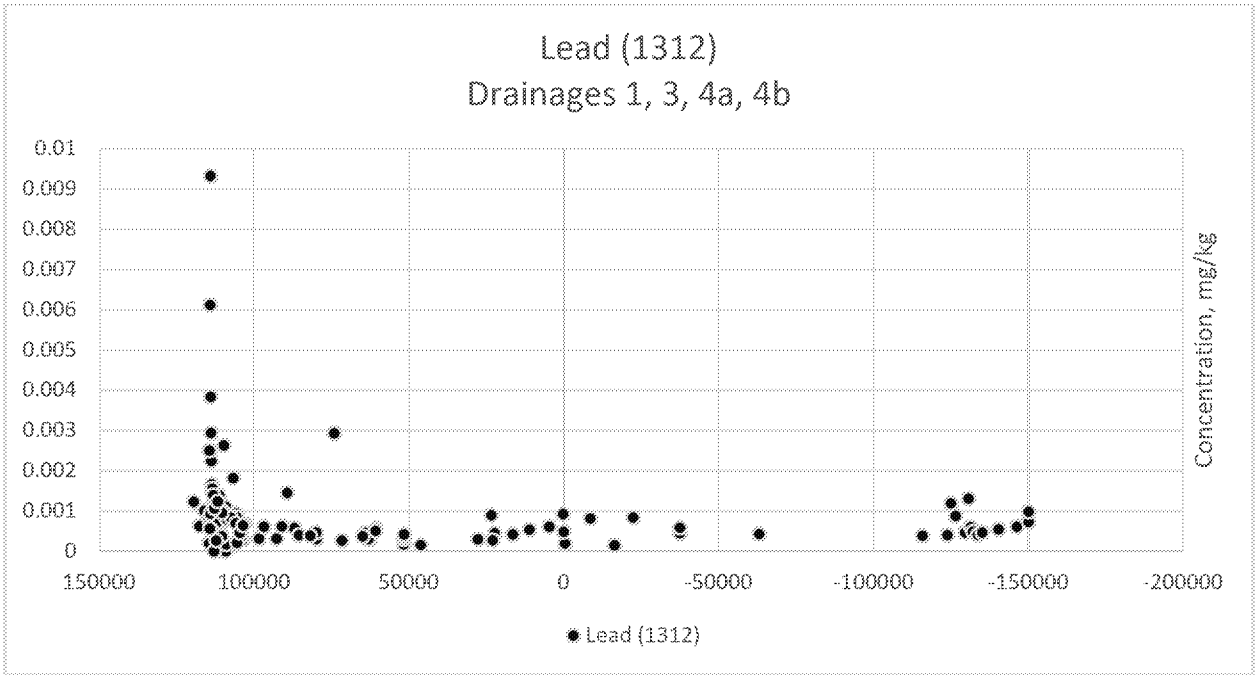

D2: Calcium (1312)
1400
1200
1000
800
600
400
200
0
70000
60000
50000
40000
30000
20000
10000
0
Distance to Santa Cruz River (feet)
Concentration (mg/kg)

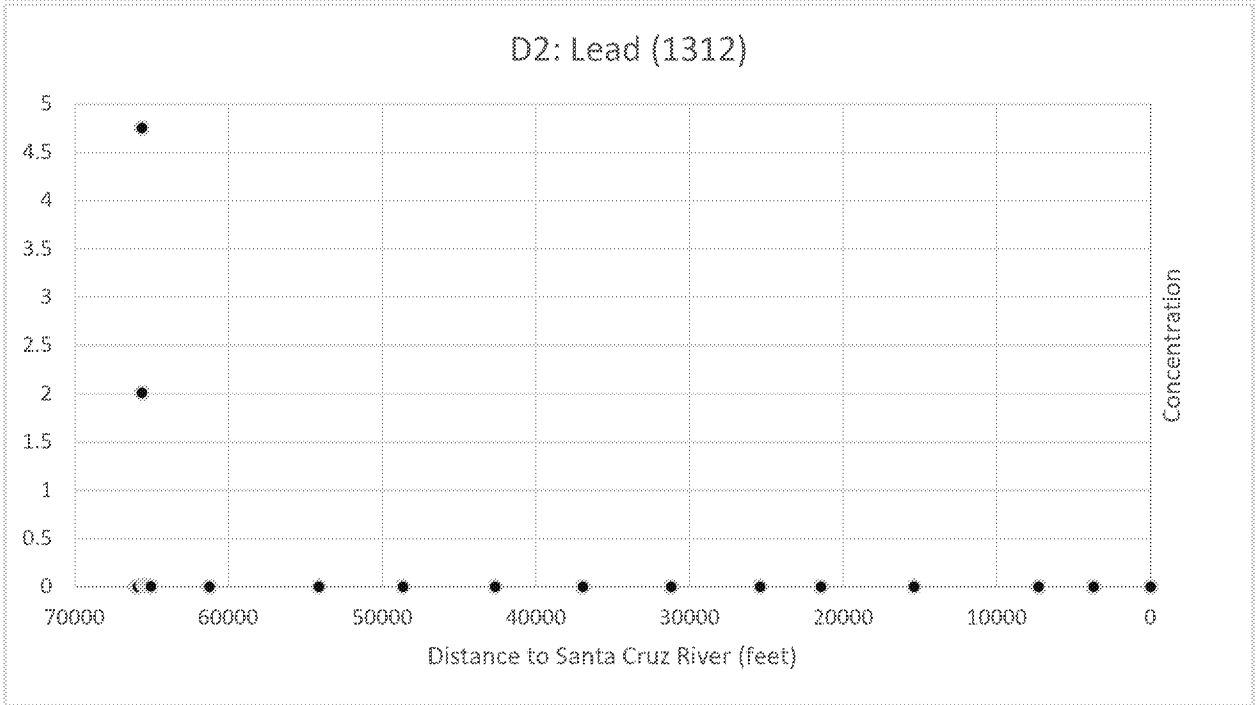

Copper (1312)
Drainages 1, 3, 4a, 4b
120
100
80
60
40
20
0
D4B-S2
DAW-1
NH-E
SCR-0
SCR-1
SCR-2
SCR-3
SCR-5
150000
100000
50000
0
-50000
-100000
-150000
-200000
Distance to Santa Cruz River, feet
Concentration, mg/kg

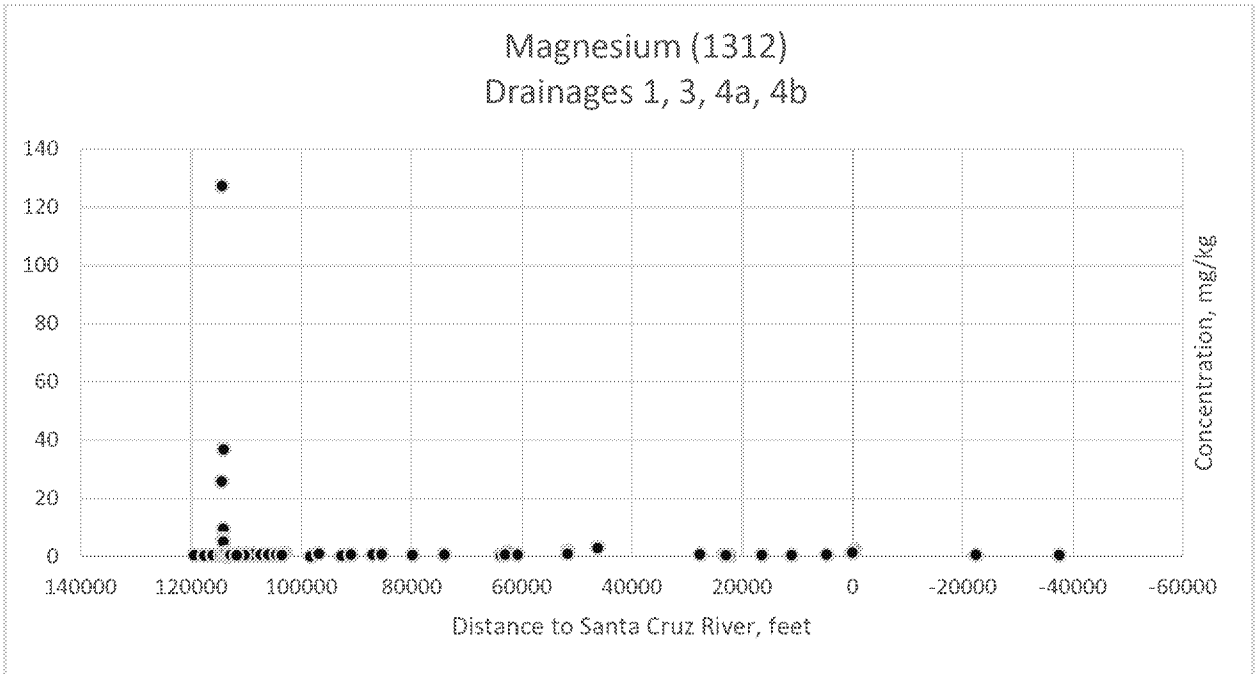

D2: Copper (1312)
120
100
80
60
40
20
0
70000
60000
50000
40000
30000
20000
10000
0
Distance to Santa Cruz River (feet)
Concentration

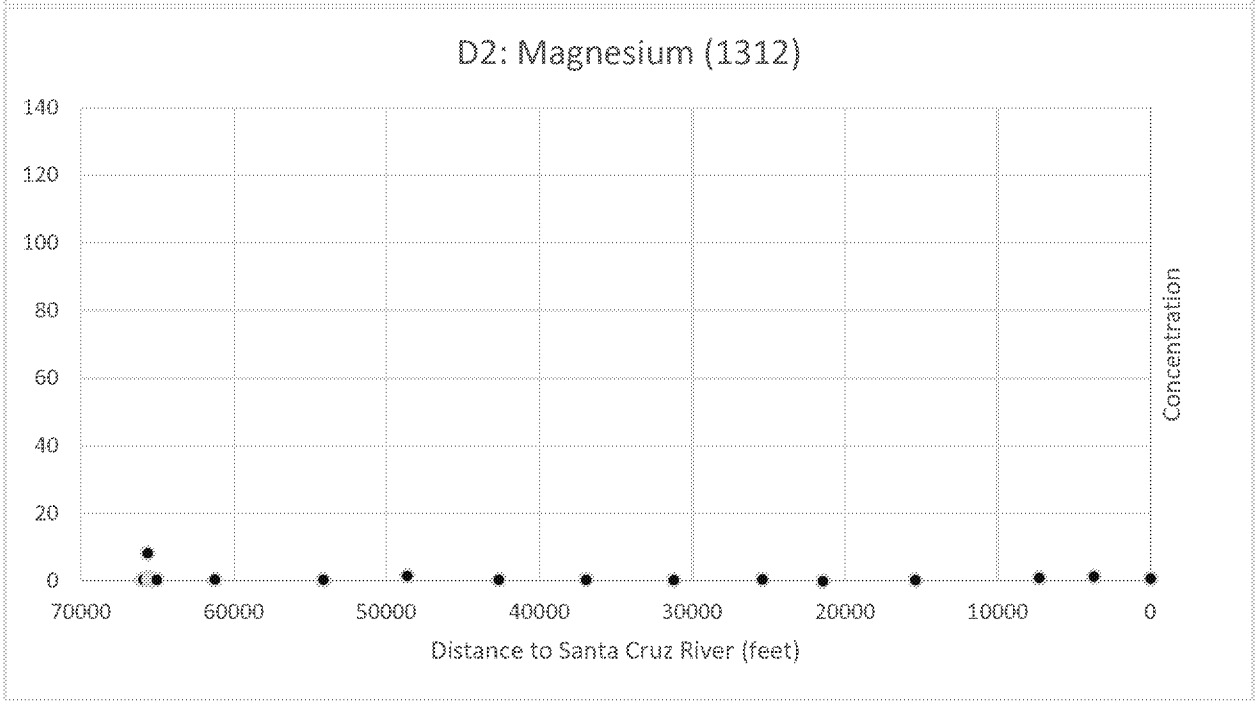

Iron (1312)
Drainages 1, 3, 4a, 4b
160
140
120
100
80
60
40
20
0
140000
120000
100000
80000
60000
40000
20000
0
-20000
-40000
-60000
Distance to Santa Cruz River, feet
Concentration, mg/kg

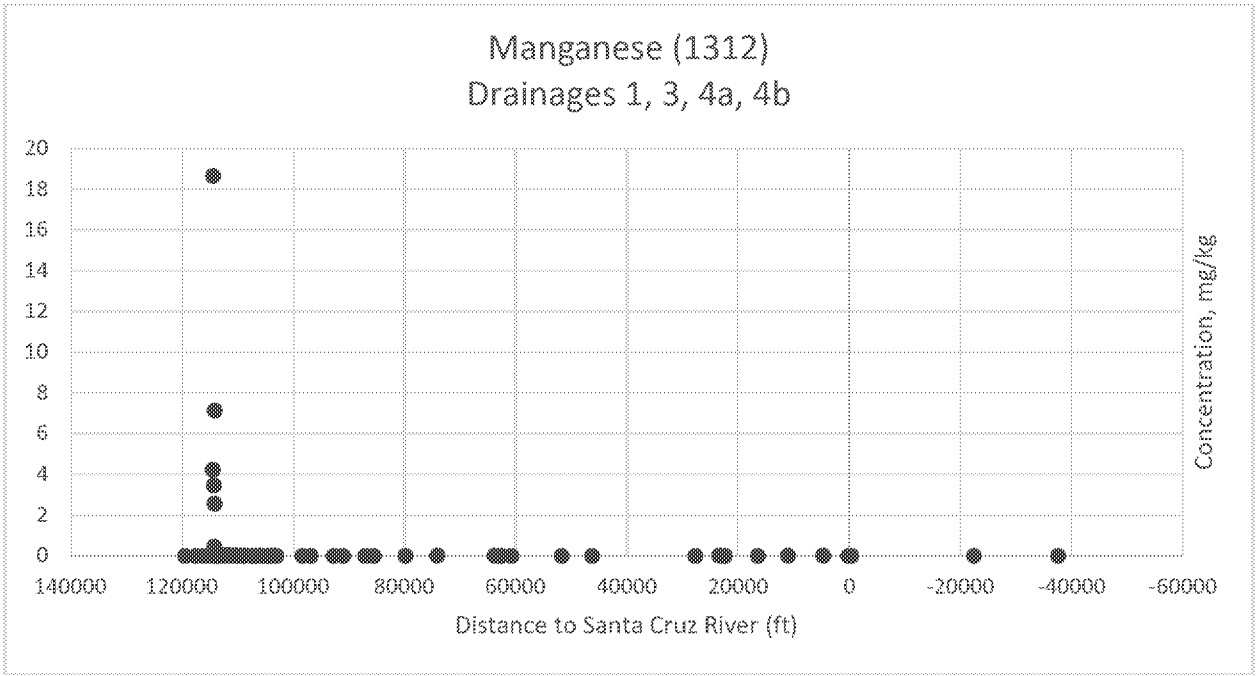

D2: Iron (1312)
160
140
120
100
80
60
40
20
0
70000
60000
50000
40000
30000
20000
10000
0
Distance to Santa Cruz River (feet)
Concentration

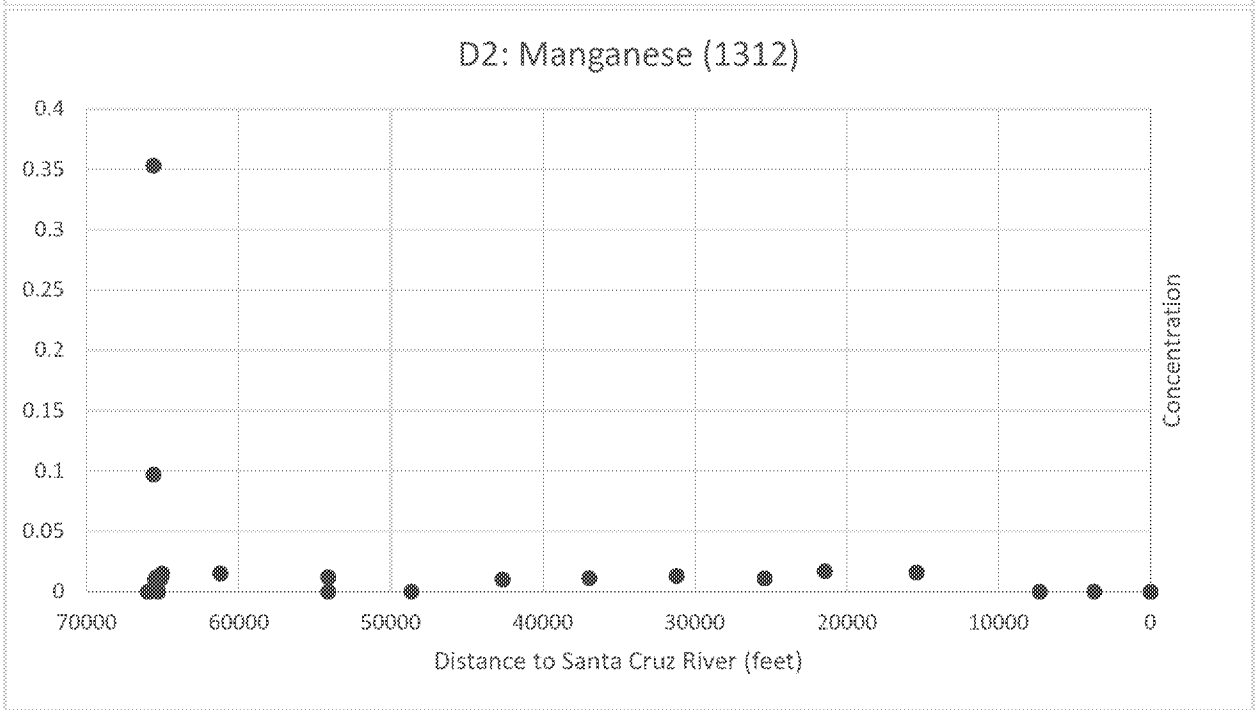

Lead (1312)
Drainages 1, 3, 4a, 4b
0.01
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002
0.001
0
150000
100000
50000
0
-50000
-100000
-150000
-200000
Concentration, mg/kg
Lead (1312)

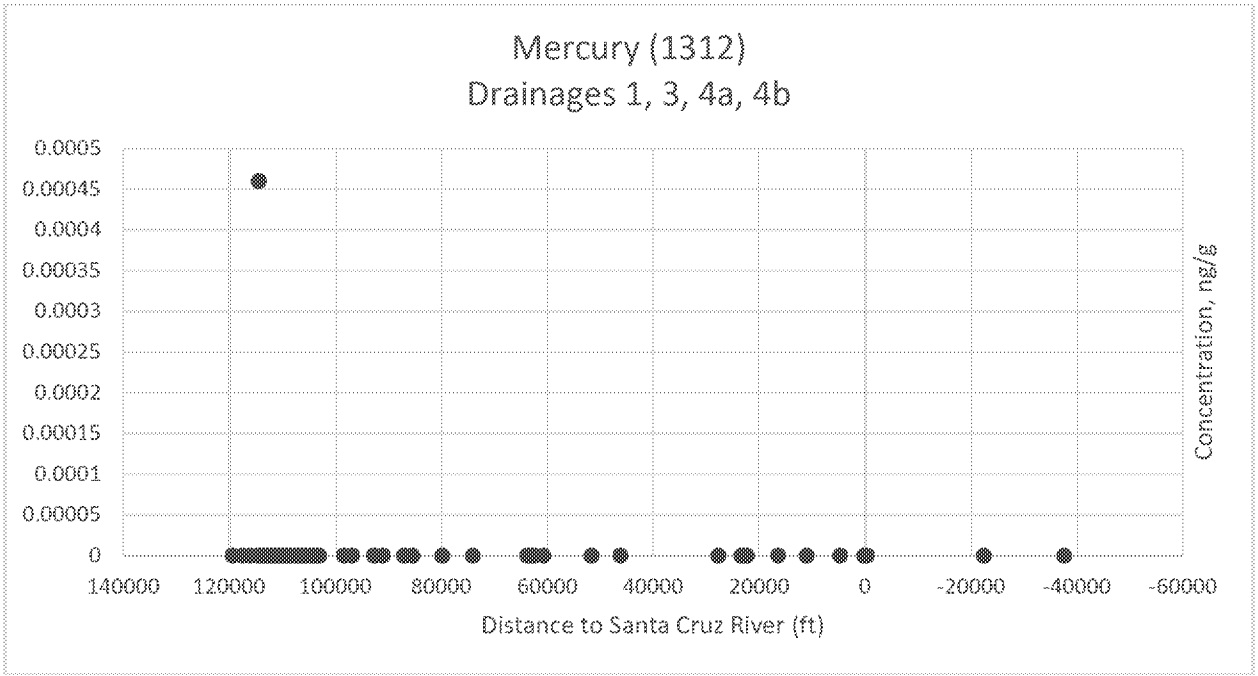

D2: Lead (1312)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
70000
60000
50000
40000
30000
20000
10000
0
Concentration
Distance to Santa Cruz River (feet)

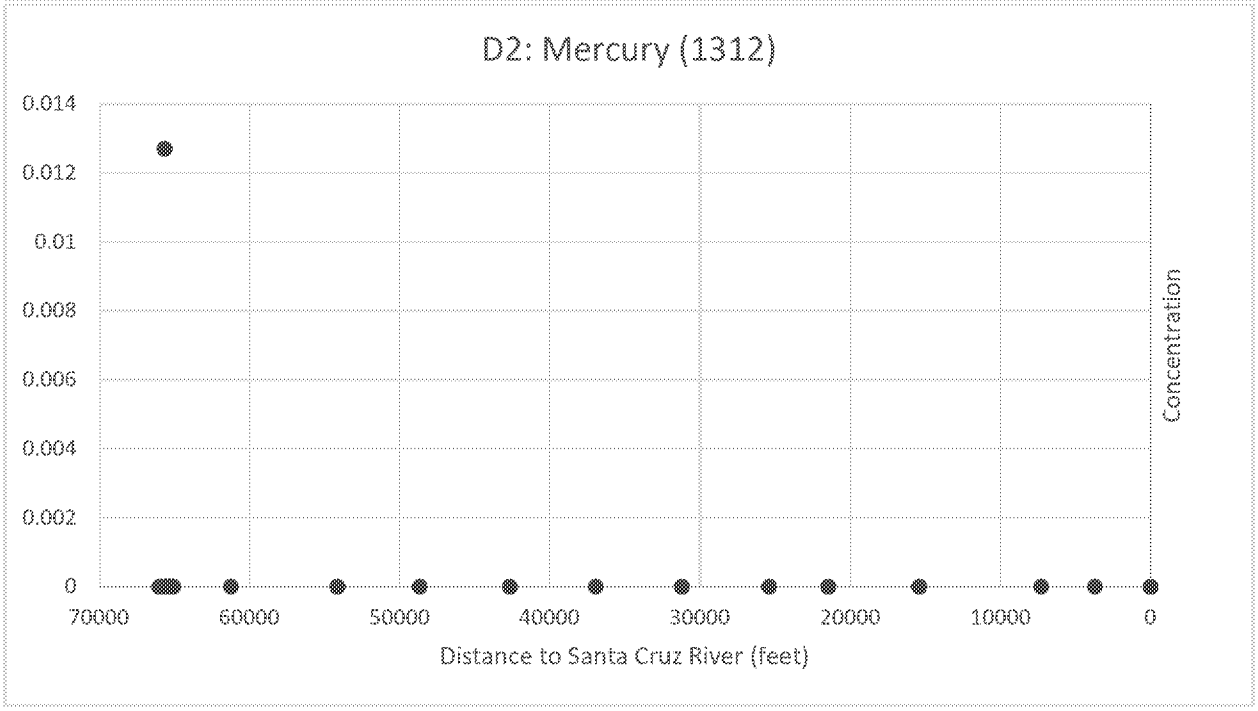

Magnesium (1312)
Drainages 1, 3, 4a, 4b
140
120
100
80
60
40
20
0
140000
120000
100000
80000
60000
40000
20000
0
-20000
-40000
-60000
Distance to Santa Cruz River, feet
Concentration, mg/kg

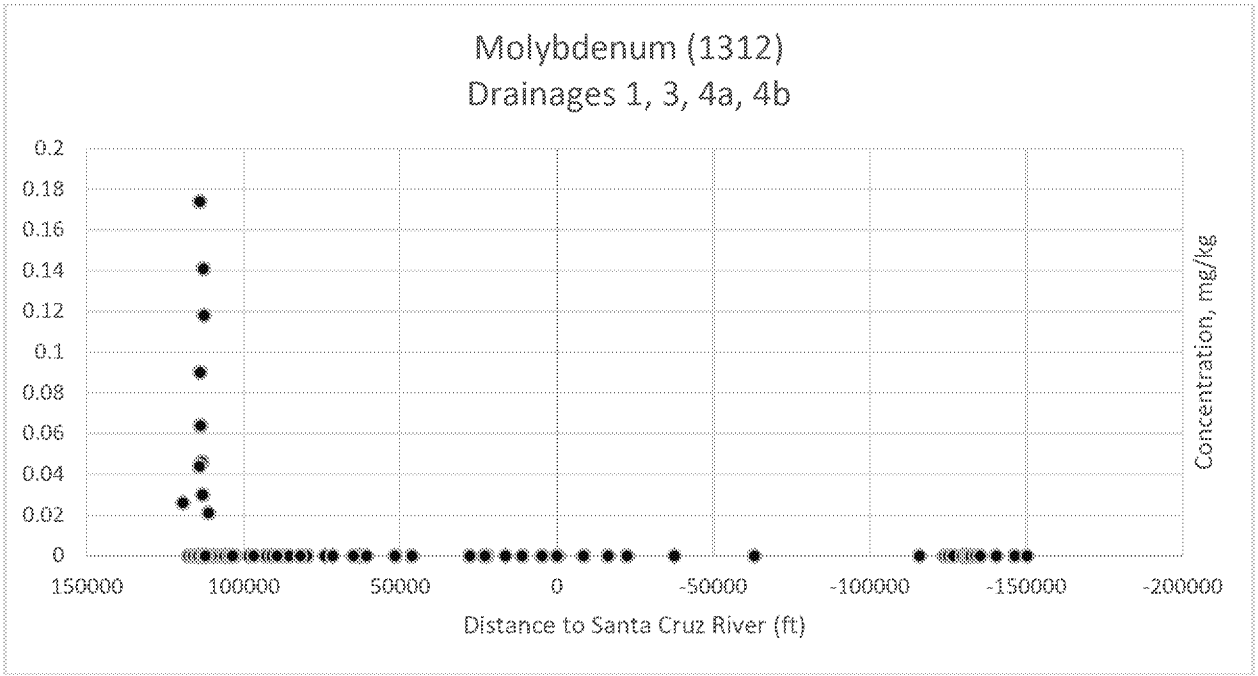

D2: Magnesium (1312)
140
120
100
80
60
40
20
0
70000
60000
50000
40000
30000
20000
10000
0
Distance to Santa Cruz River (feet)
Concentration

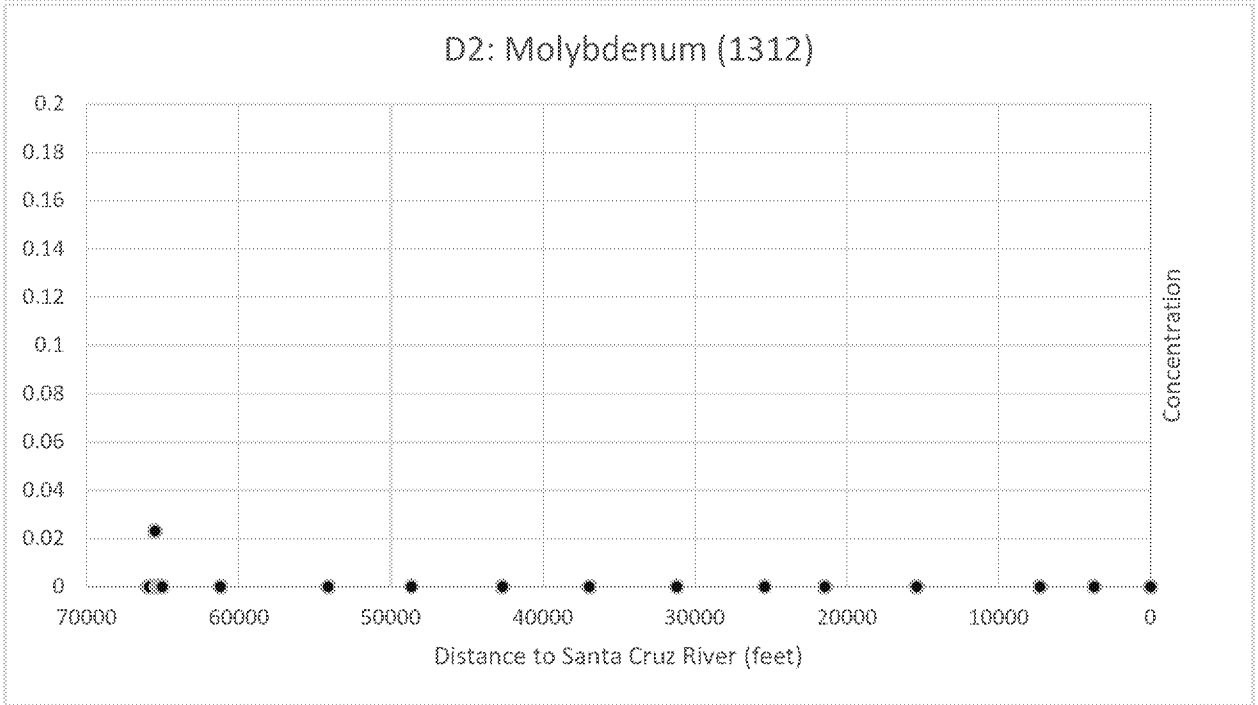

Manganese (1312)
Drainages 1, 3, 4a, 4b
20
18
16
14
12
10
8
6
4
2
0
140000
120000
100000
80000
60000
40000
20000
0
-20000
-40000
-60000
Distance to Santa Cruz River (ft)
Concentration, mg/kg

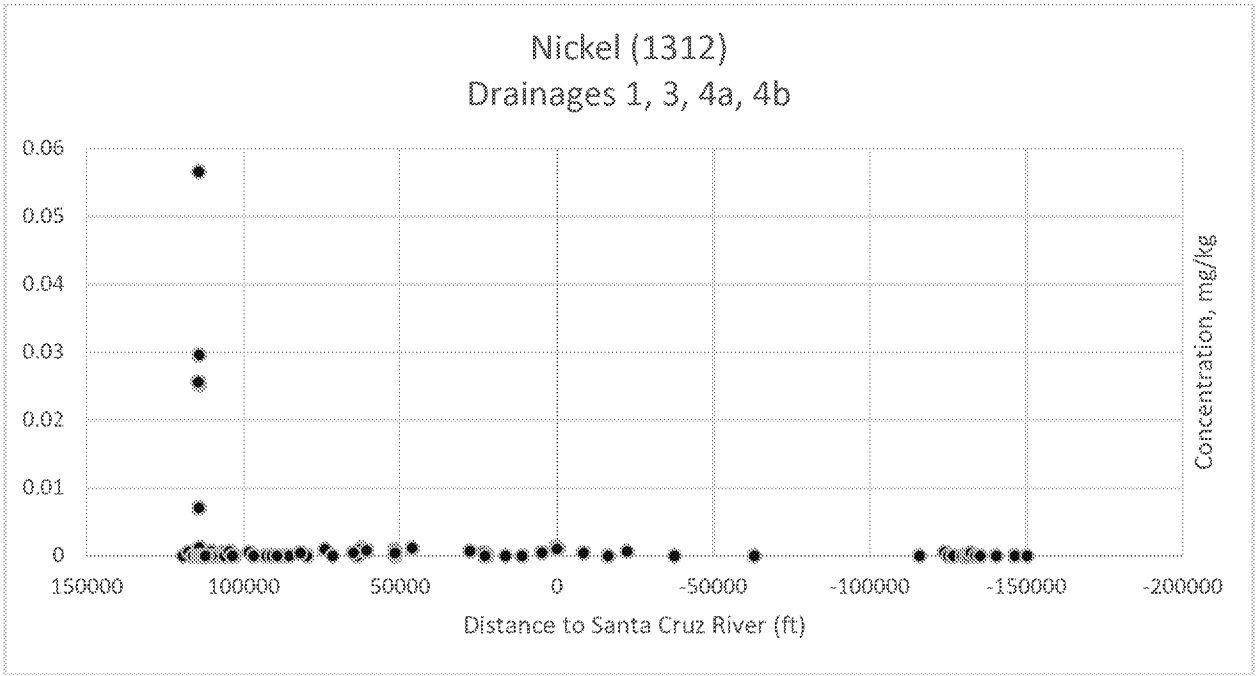

D2: Manganese (1312)
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
70000
60000
50000
40000
30000
20000
10000
0
Distance to Santa Cruz River (feet)
Concentration

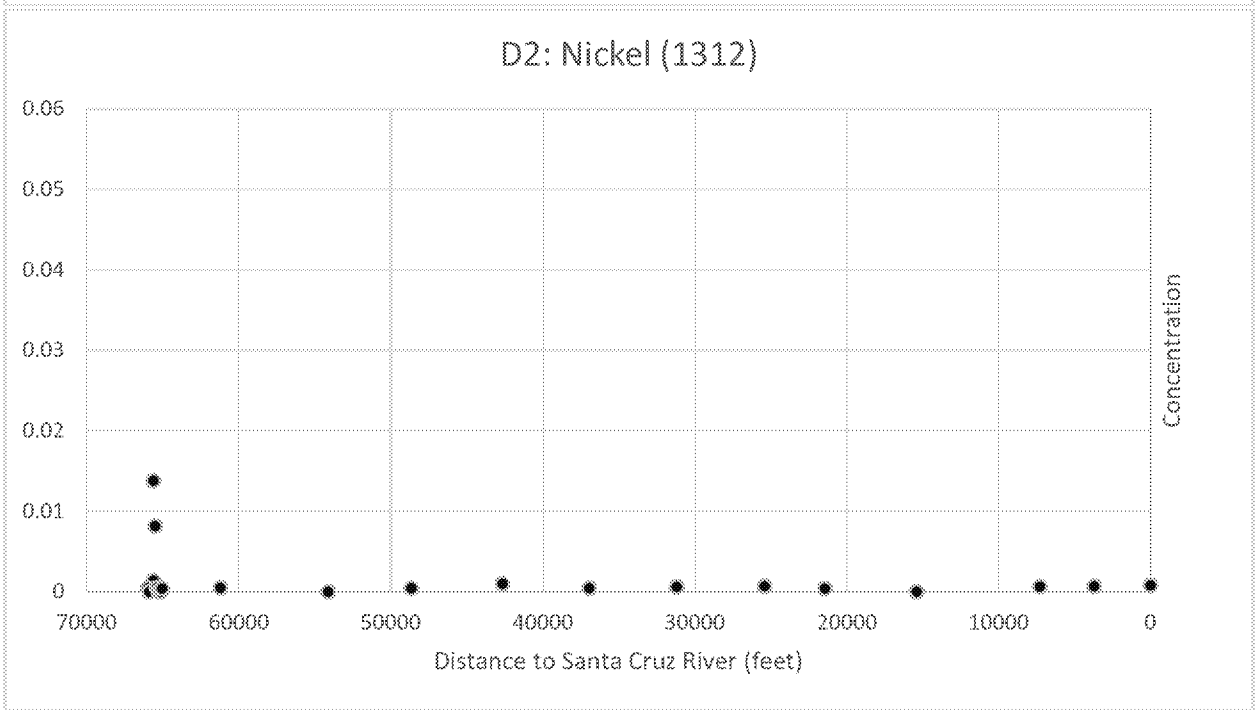

Mercury (1312)
Drainages 1, 3, 4a, 4b
0.0005
0.00045
0.0004
0.00035
0.0003
0.00025
0.0002
0.00015
0.0001
0.00005
0
140000
120000
100000
80000
60000
40000
20000
0
-20000
-40000
-60000
Distance to Santa Cruz River (ft)
Concentration, mg/g

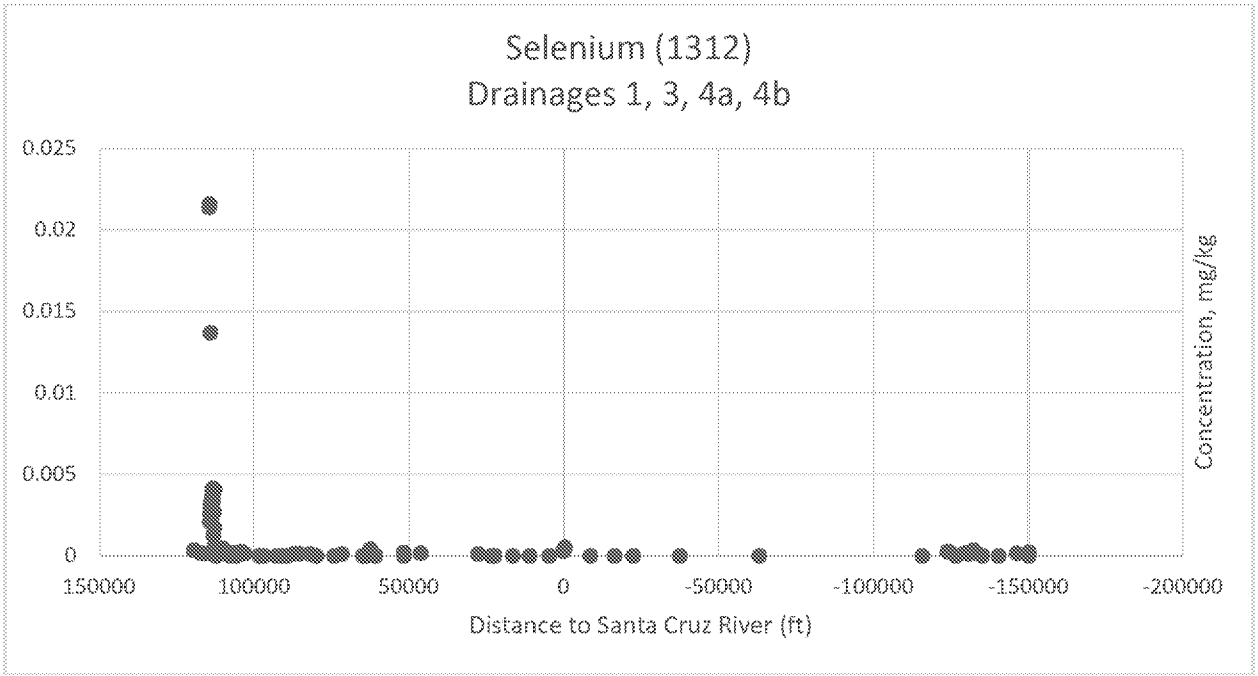

D2: Mercury (1312)
0.014
0.012
0.01
0.008
0.006
0.004
0.002
0
70000
60000
50000
40000
30000
20000
10000
0
Distance to Santa Cruz River (feet)
Concentration

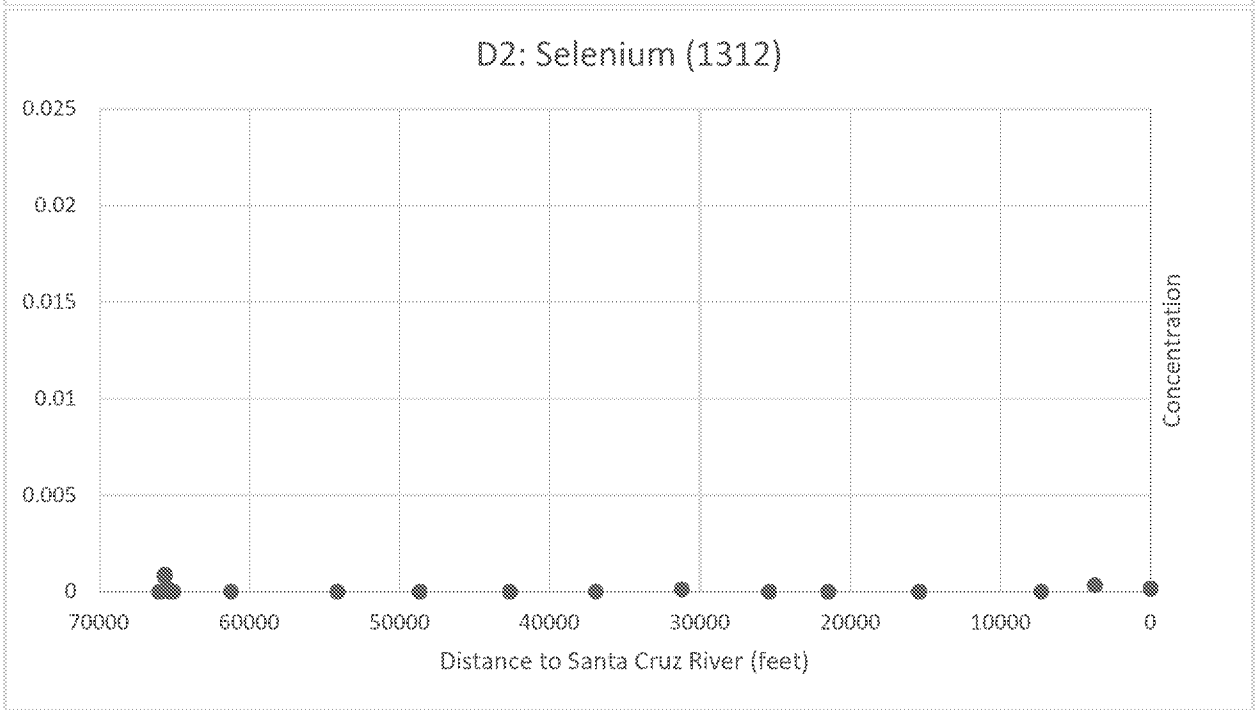

Molybdenum (1312)
Drainages 1, 3, 4a, 4b
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
150000
100000
50000
0
-50000
-100000
-150000
-200000
Distance to Santa Cruz River (ft)
Concentration, mg/kg

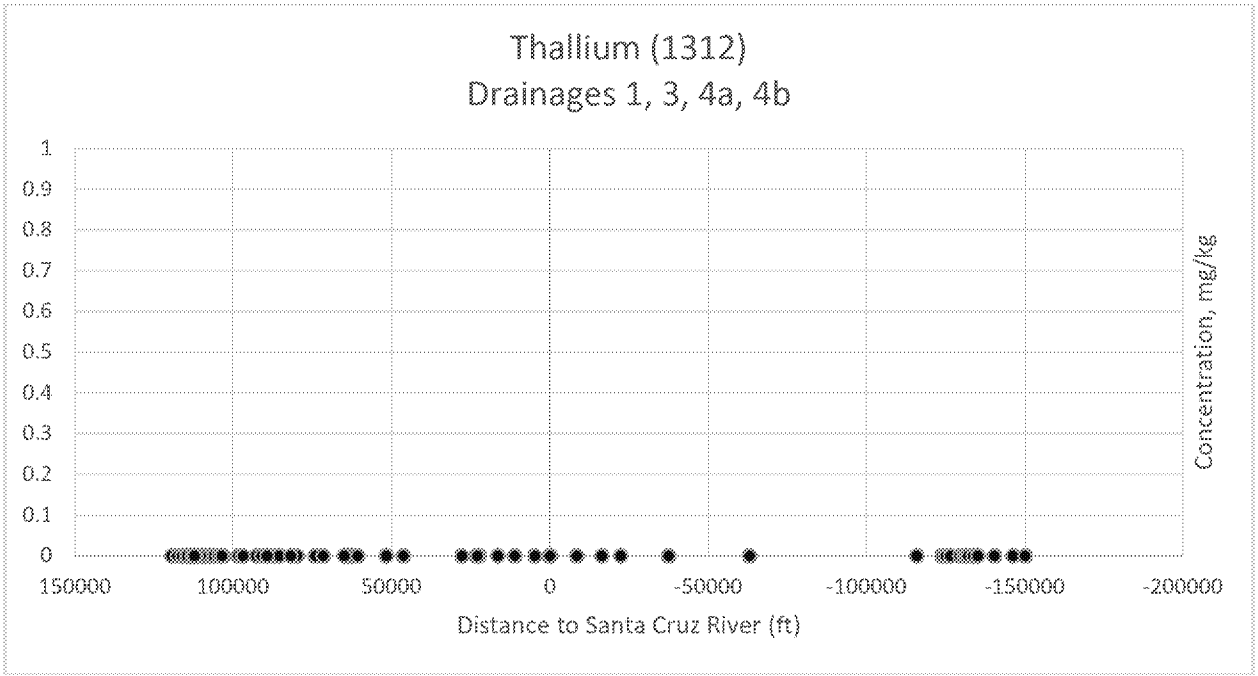

D2: Molybdenum (1312)
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
70000
60000
50000
40000
30000
20000
10000
0
Distance to Santa Cruz River (feet)
Concentration

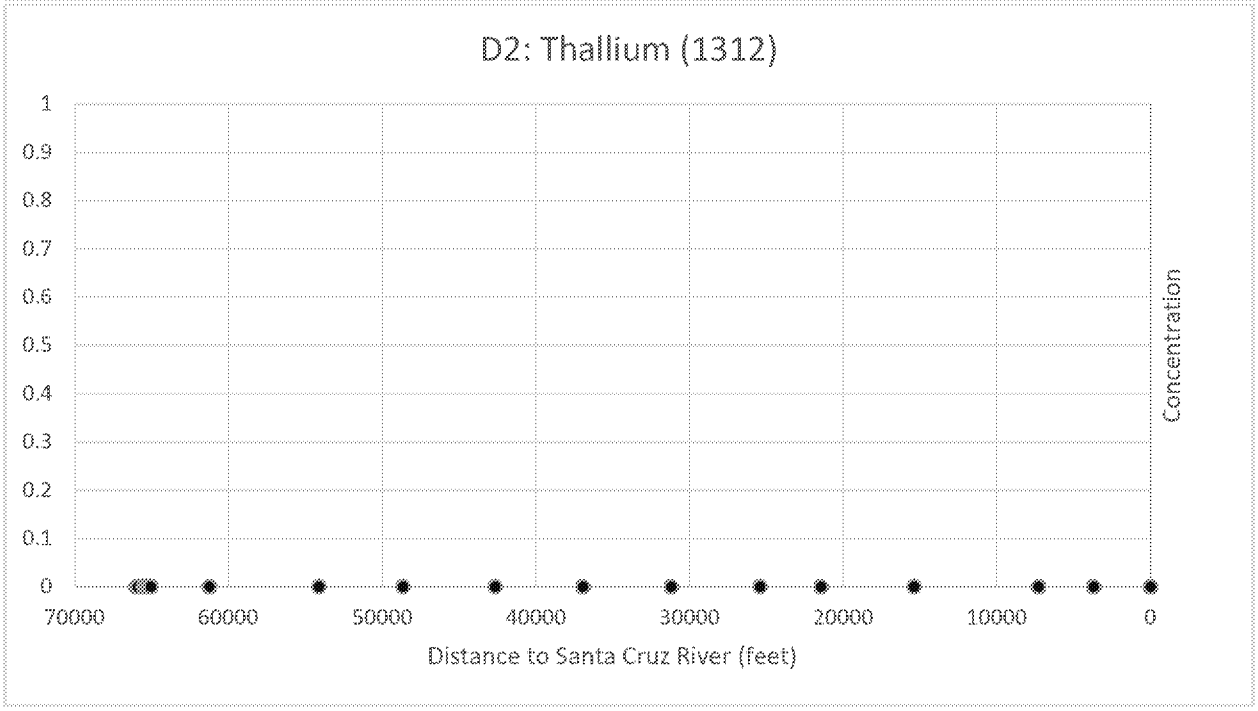

Nickel (1312)
Drainages 1, 3, 4a, 4b
0.06
0.05
0.04
0.03
0.02
0.01
0
150000
100000
50000
0
-50000
-100000
-150000
-200000
Distance to Santa Cruz River (ft)
Concentration, mg/kg

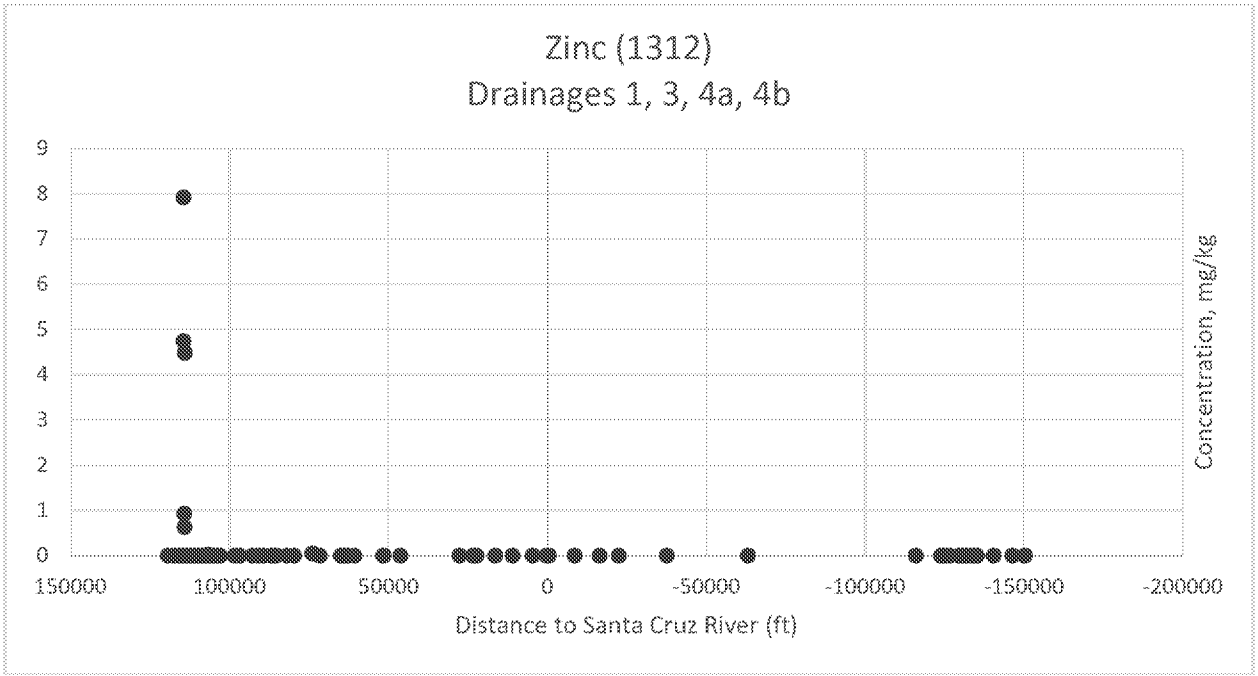

D2: Nickel (1312)
0.06
0.05
0.04
0.03
0.02
0.01
0
70000
60000
50000
40000
30000
20000
10000
0
Distance to Santa Cruz River (feet)
Concentration

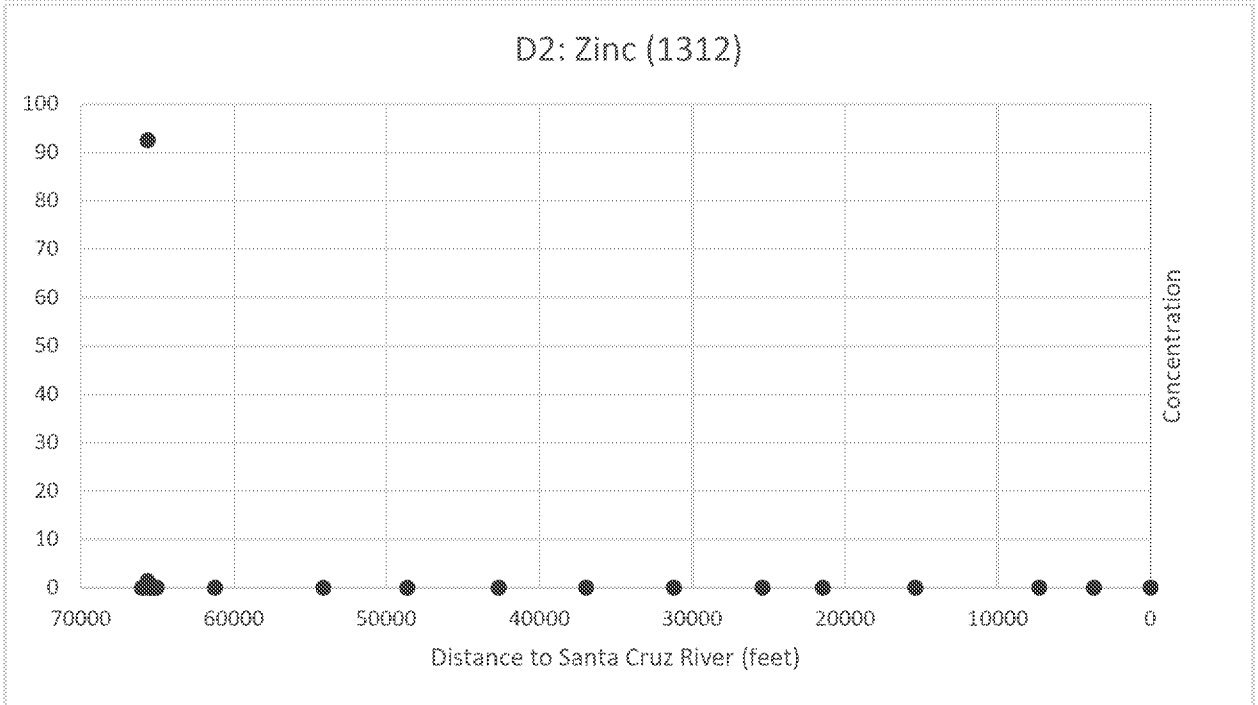

Selenium (1312)
Drainages 1, 3, 4a, 4b
0.025
0.02
0.015
0.01
0.005
0
150000
100000
50000
0
-50000
-100000
-150000
-200000
Distance to Santa Cruz River (ft)
Concentration, mg/kg


D2: Selenium (1312)
0.025
0.02
0.015
0.01
0.005
0
70000
60000
50000
40000
30000
20000
10000
0
Distance to Santa Cruz River (feet)
Concentration

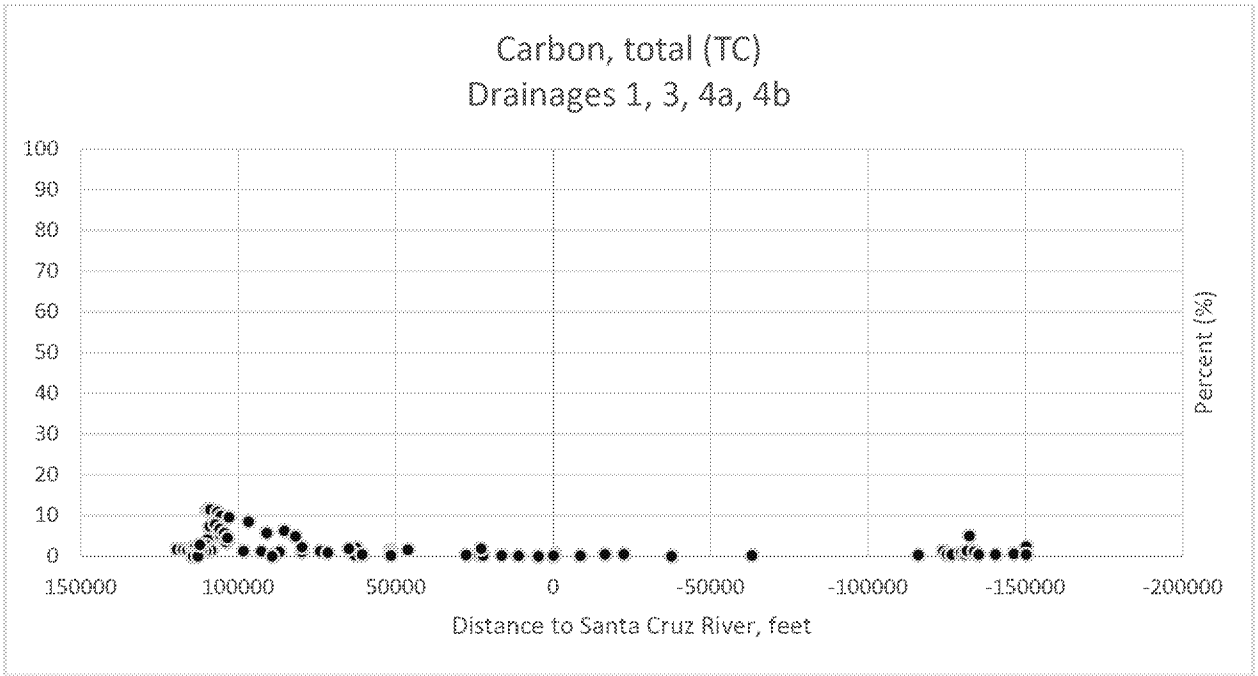

Thallium (1312)
Drainages 1, 3, 4a, 4b
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
150000
100000
50000
0
-50000
-100000
-150000
-200000
Distance to Santa Cruz River (ft)
Concentration, mg/kg

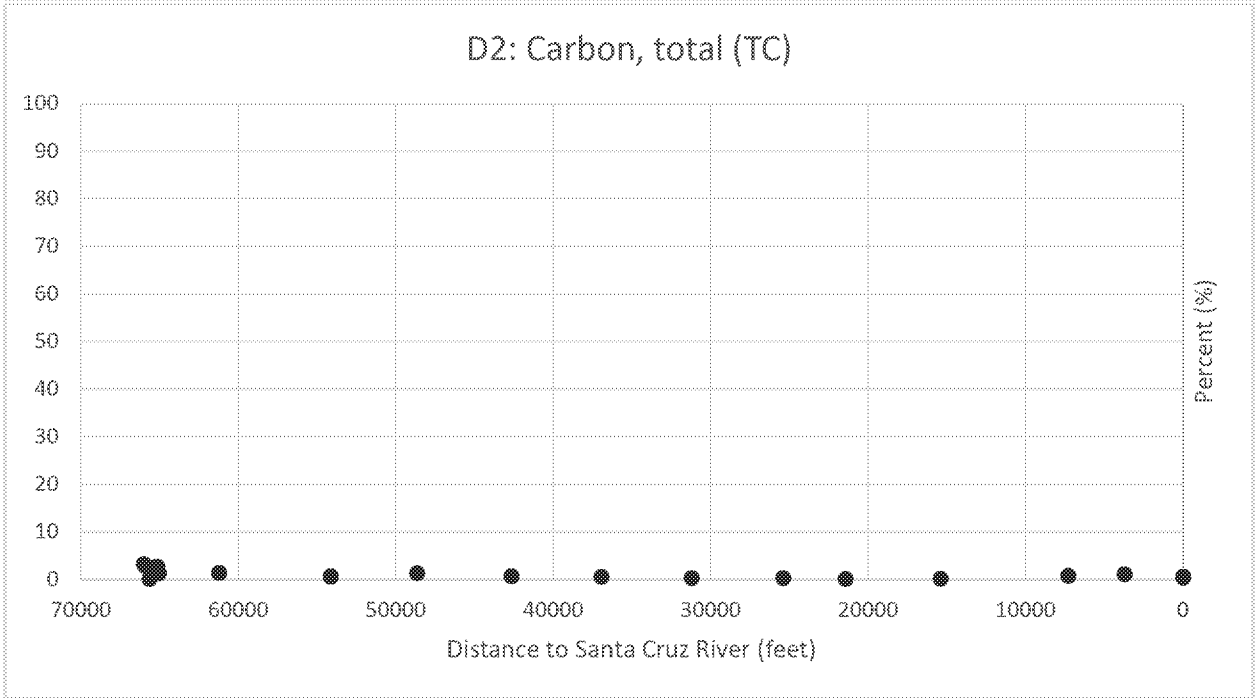

D2: Thallium (1312)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
70000
60000
50000
40000
30000
20000
10000
0
Distance to Santa Cruz River (feet)
Concentration

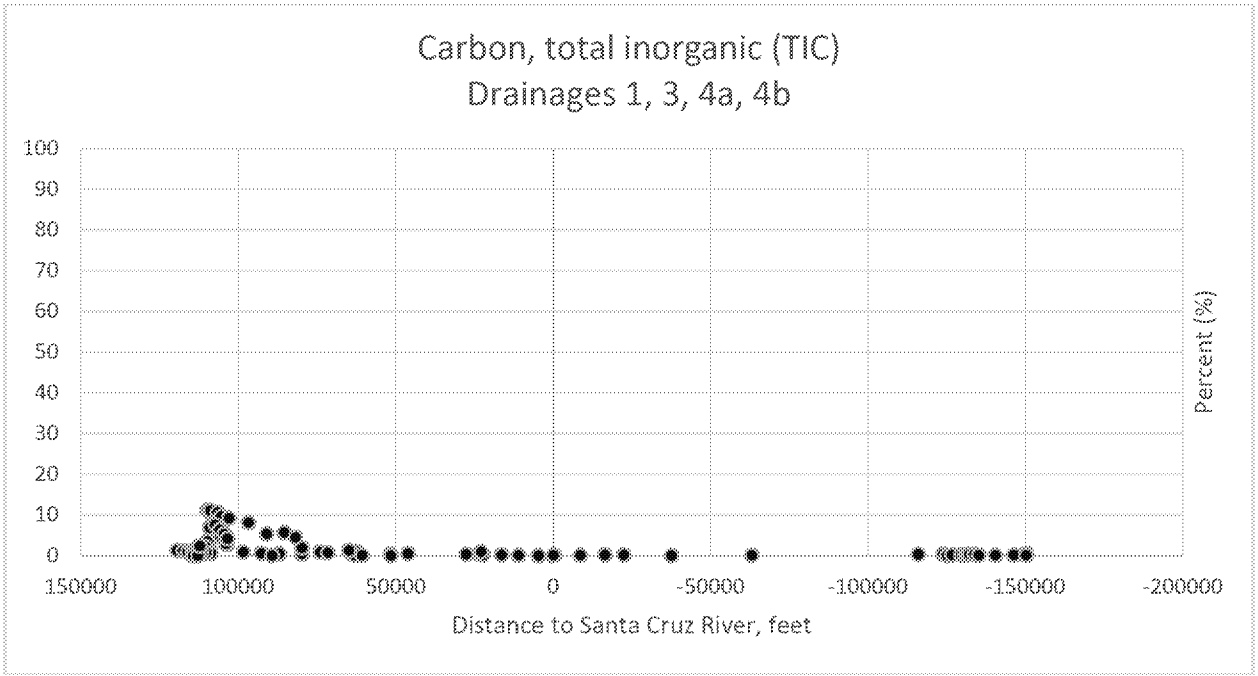

Zinc (1312)
Drainages 1, 3, 4a, 4b
9
8
7
6
5
4
3
2
1
0
150000
100000
50000
0
-50000
-100000
-150000
-200000
Distance to Santa Cruz River (ft)
Concentration, mg/kg

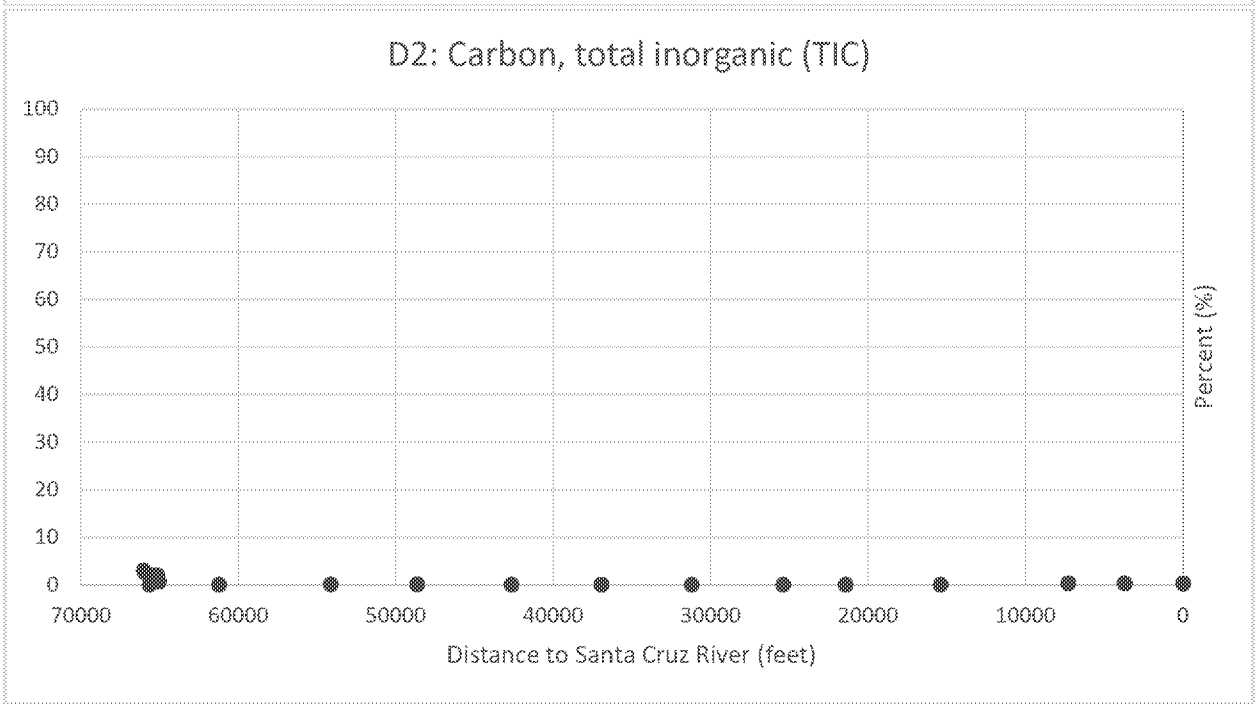

D2: Zinc (1312)
100
90
80
70
60
50
40
30
20
10
0
70000
60000
50000
40000
30000
20000
10000
0
Distance to Santa Cruz River (feet)
Concentration

Other Analyses






Carbon, total inorganic (TIC)
Drainages 1, 3, 4a, 4b
100
90
80
70
60
50
40
30
20
10
0
Percent (%)
150000
100000
50000
0
-50000
-100000
-150000
-200000
Distance to Santa Cruz River, feet


D2: Carbon, total inorganic (TIC)
100
90
80
70
60
50
40
30
20
10
0
Percent (%)
70000
60000
50000
40000
30000
20000
10000
0
Distance to Santa Cruz River (feet)

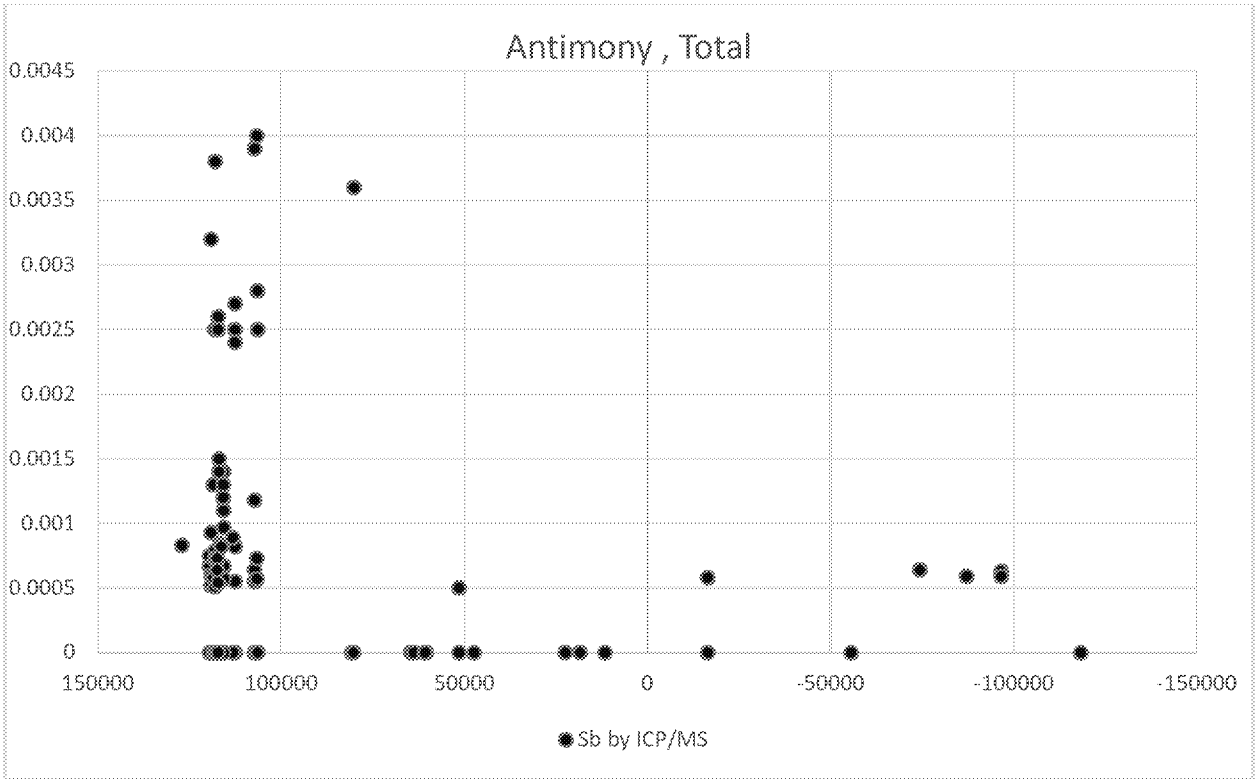
ATTACHMENT D

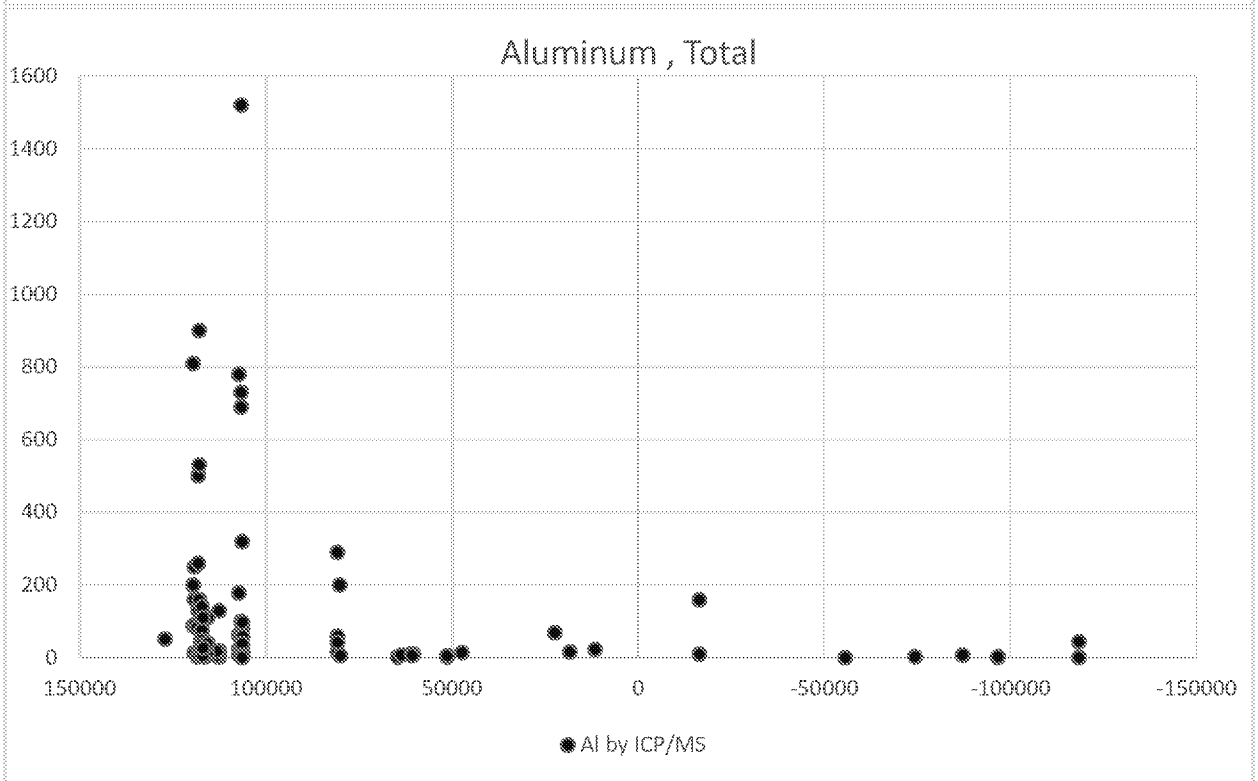
Stormwater Graphs

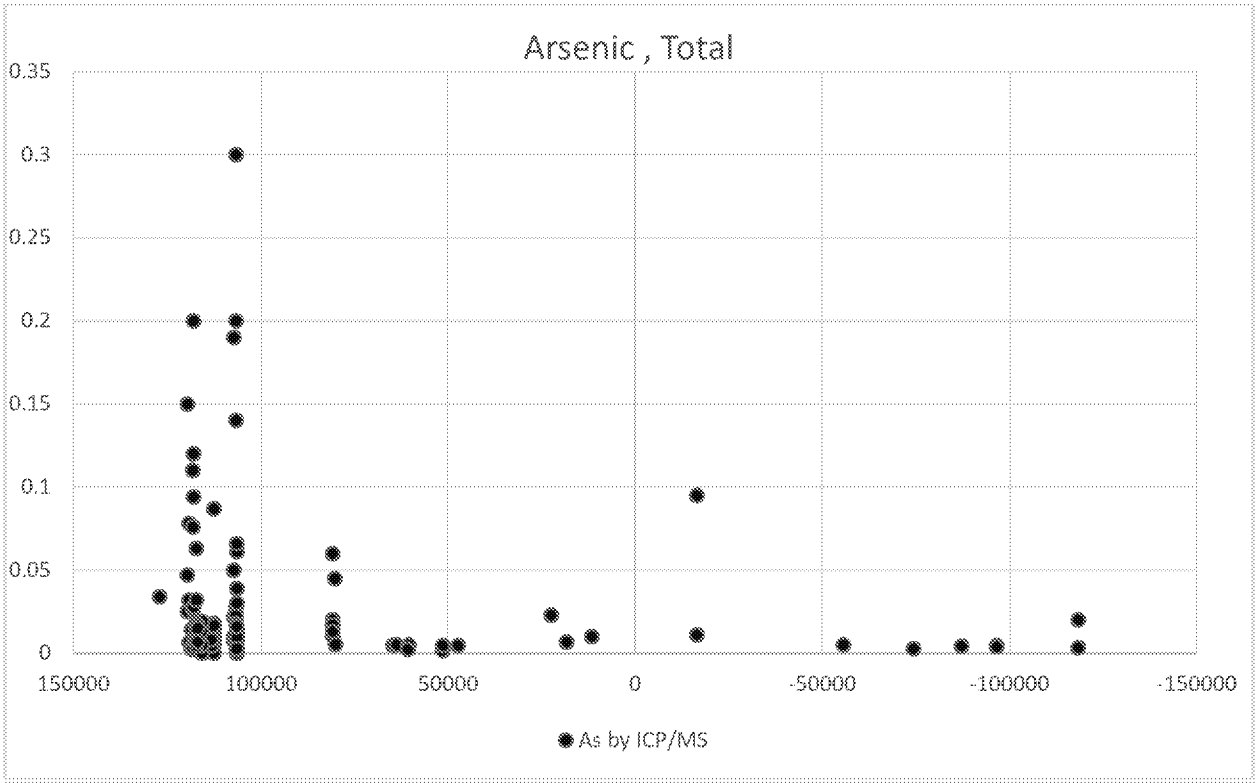
Stormwater Sample Graphs

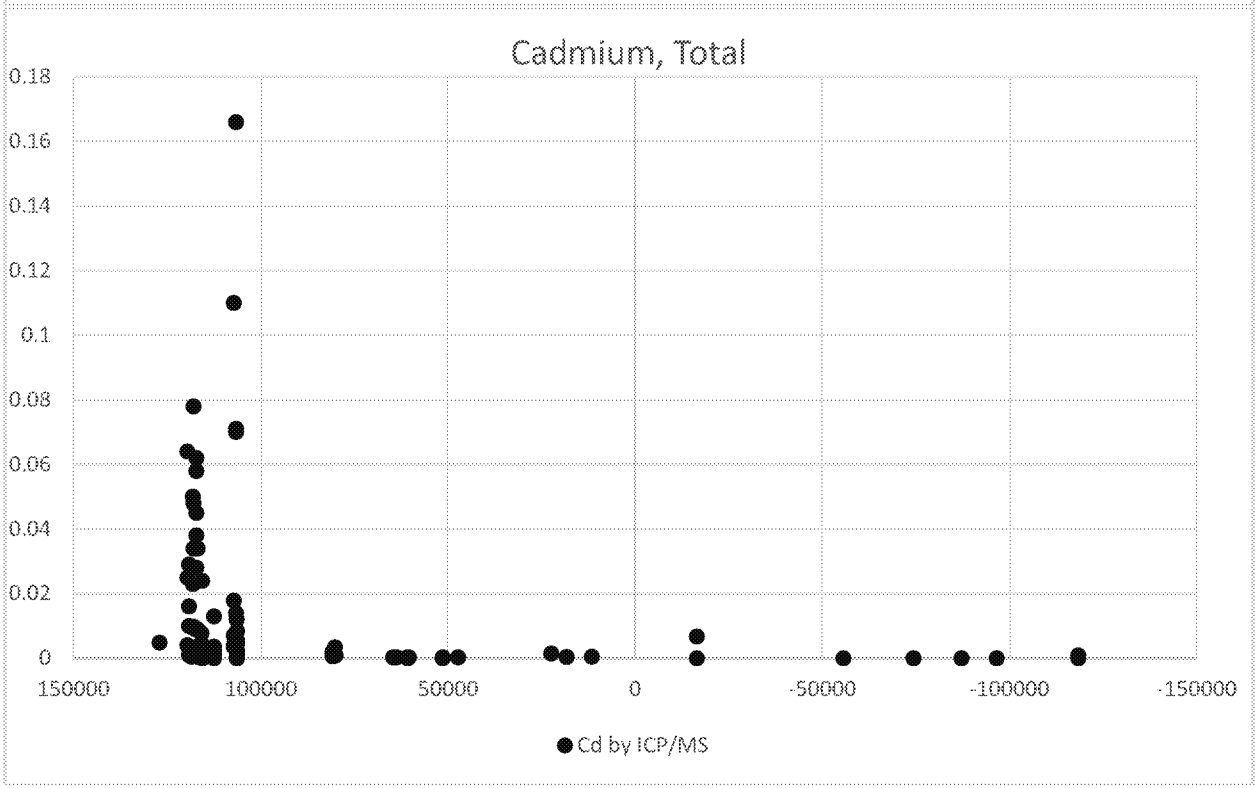
Total Metals

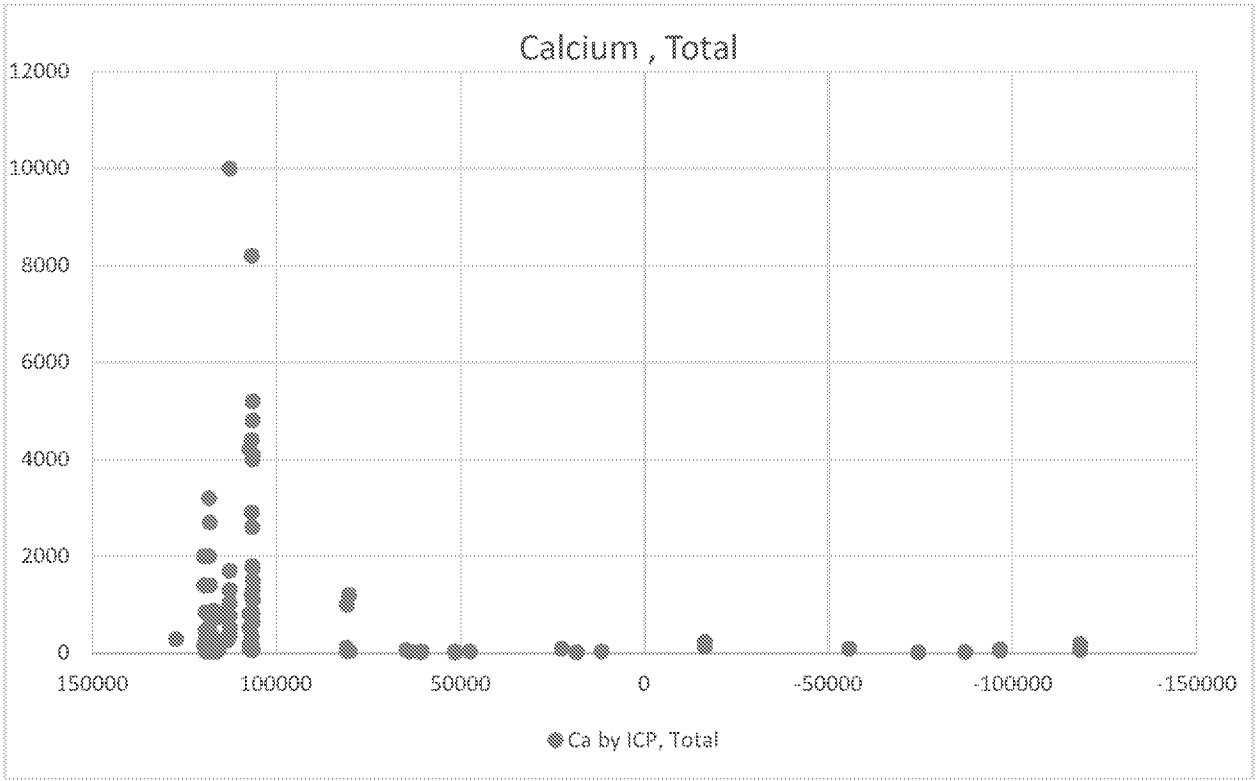
Presented in milligrams per liter, includes Drainages 1, 2, 3, 4a, 4b, Santa Cruz River. Distance 0 refers to the confluence of the Santa Cruz River. Negative distances refer to the distance downstream from the confluence in the Santa Cruz River.

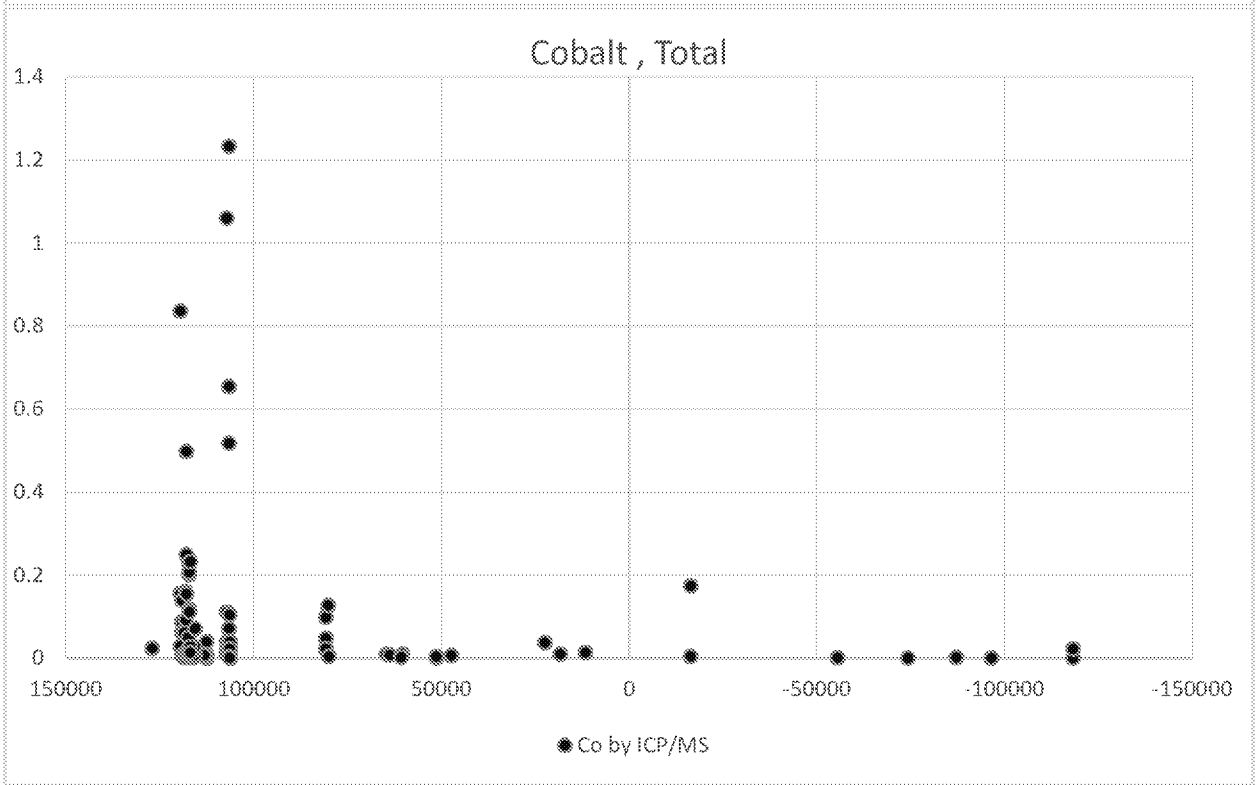


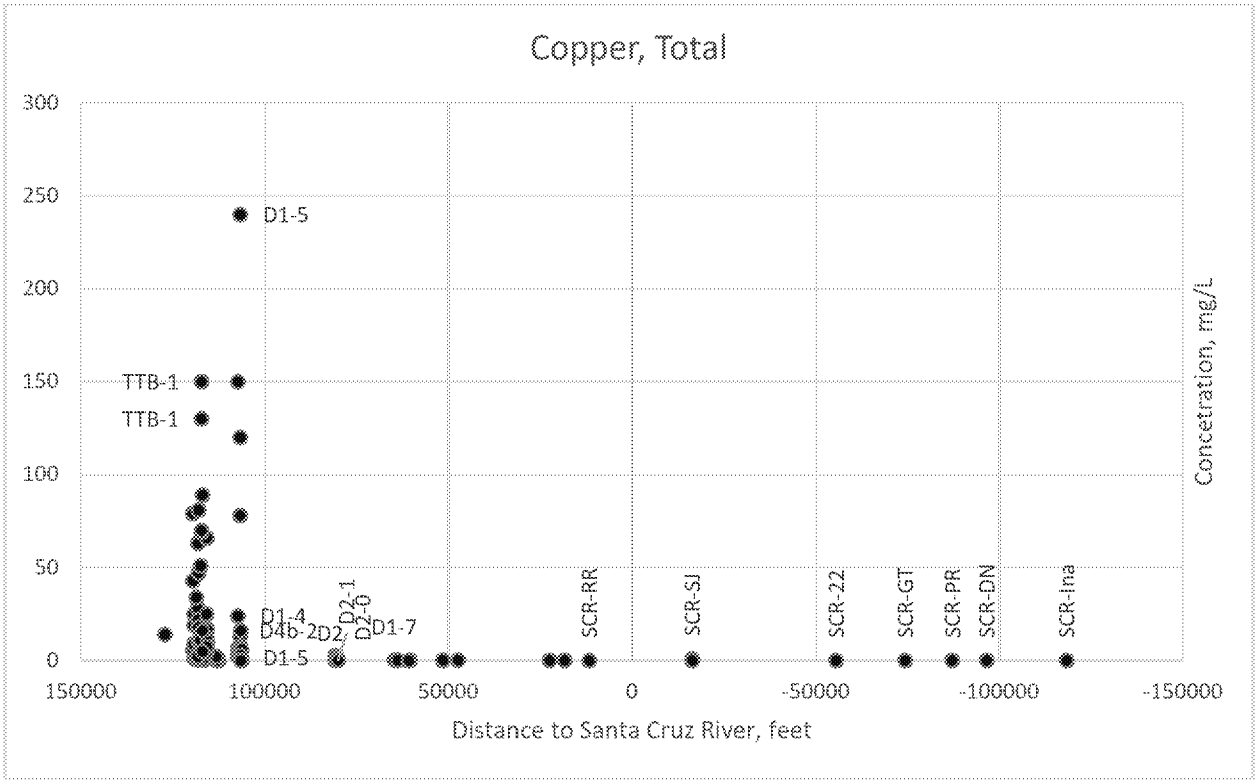


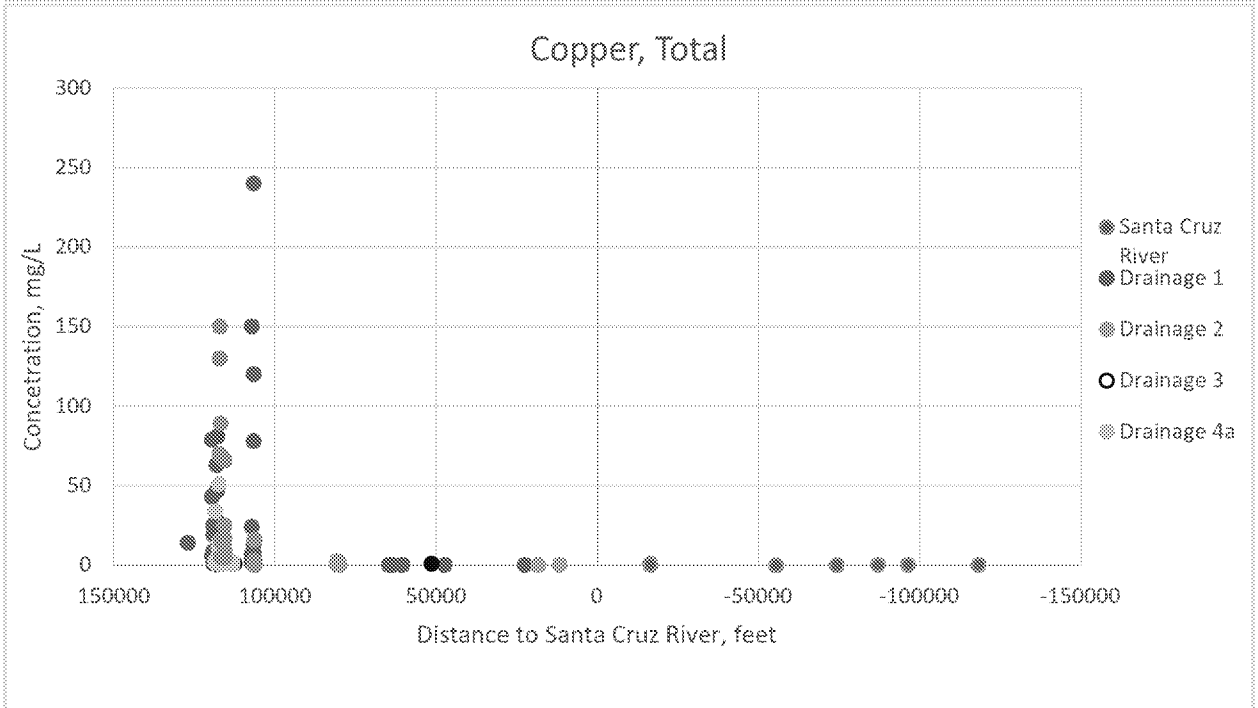

Arsenic , Total
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
150000
100000
50000
0
-50000
-100000
-150000
As by ICP/MS


Cadmium, Total
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
150000
100000
50000
0
-50000
-100000
-150000
Cd by ICP/MS

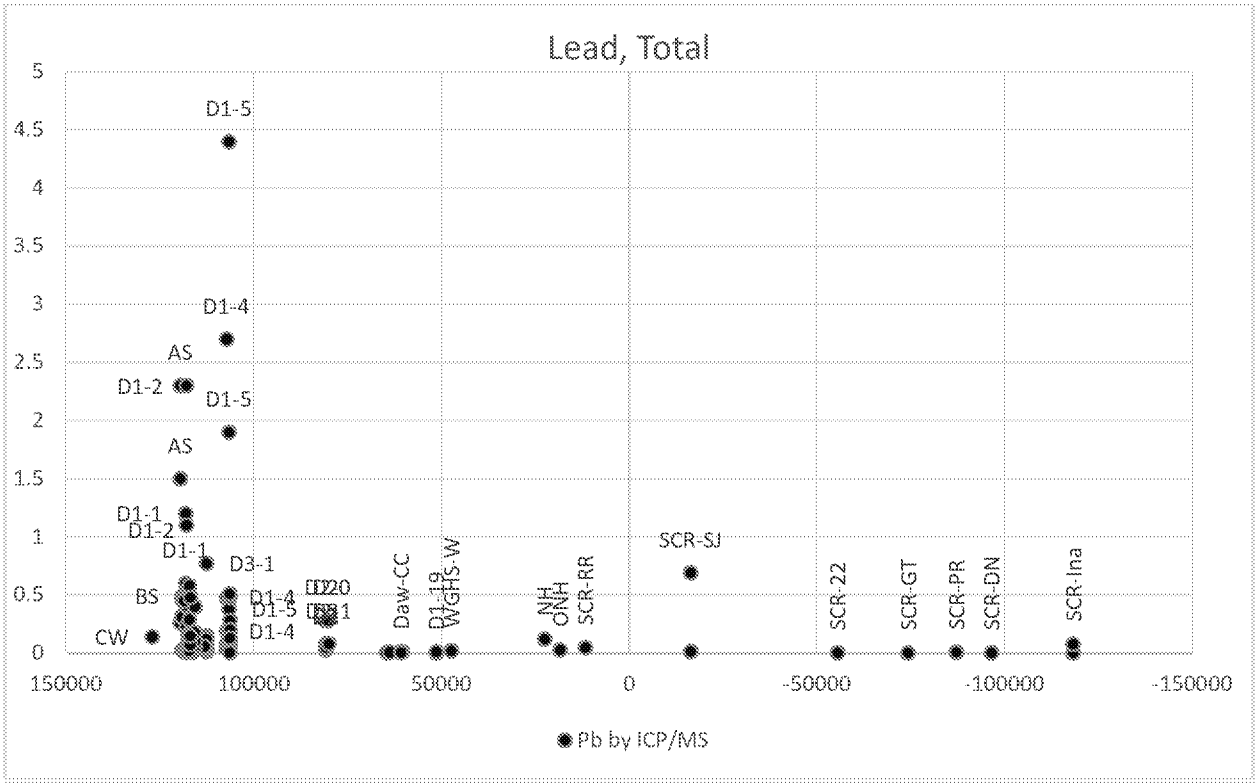

Calcium , Total
12000
10000
8000
6000
4000
2000
0
150000
100000
50000
0
-50000
-100000
-150000
Ca by ICP, Total

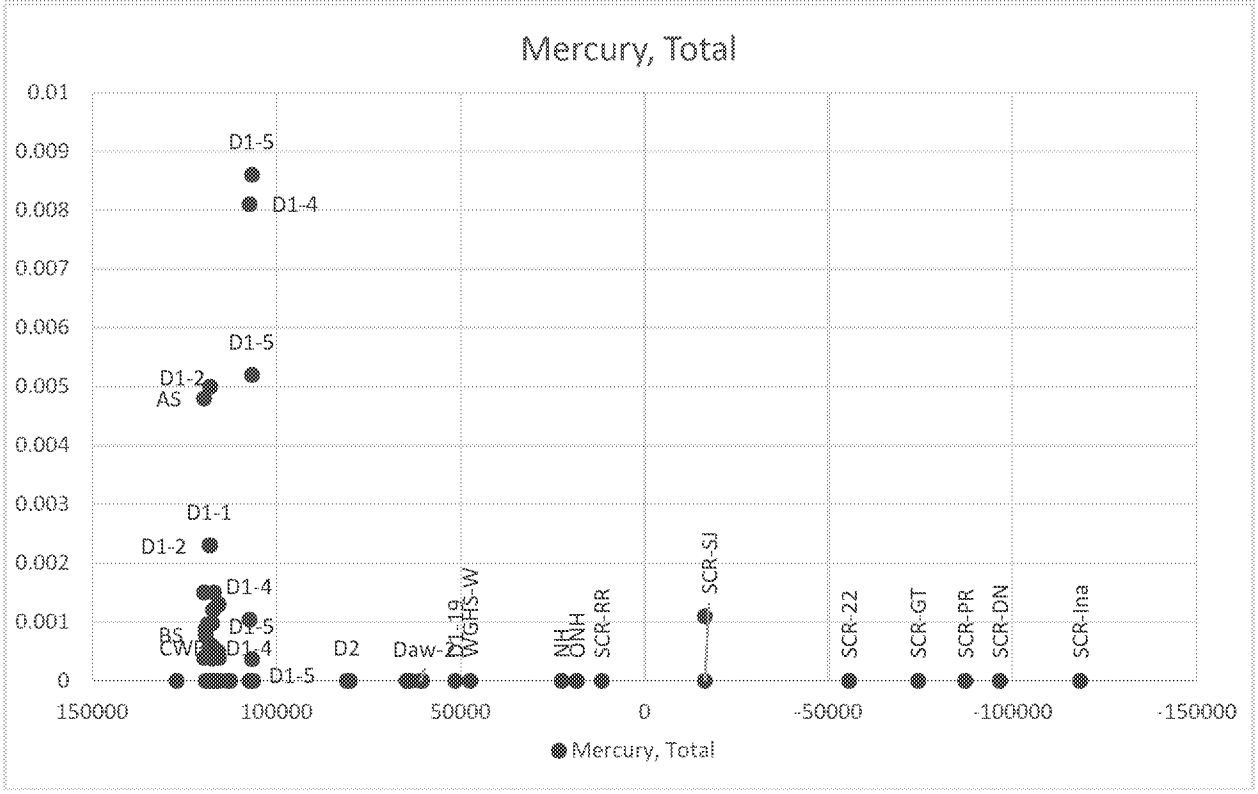

Cobalt , Total
1.4
1.2
1
0.8
0.6
0.4
0.2
0
150000
100000
50000
0
-50000
-100000
-150000
Co by ICP/MS



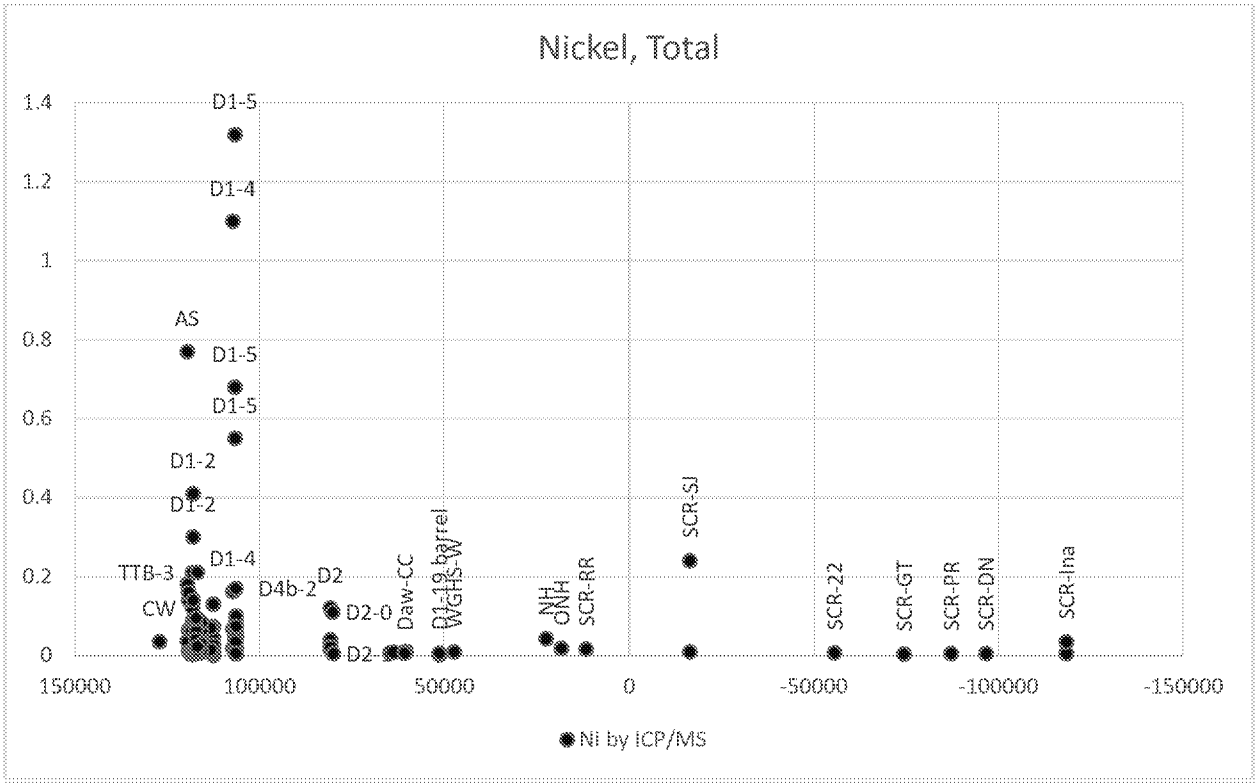


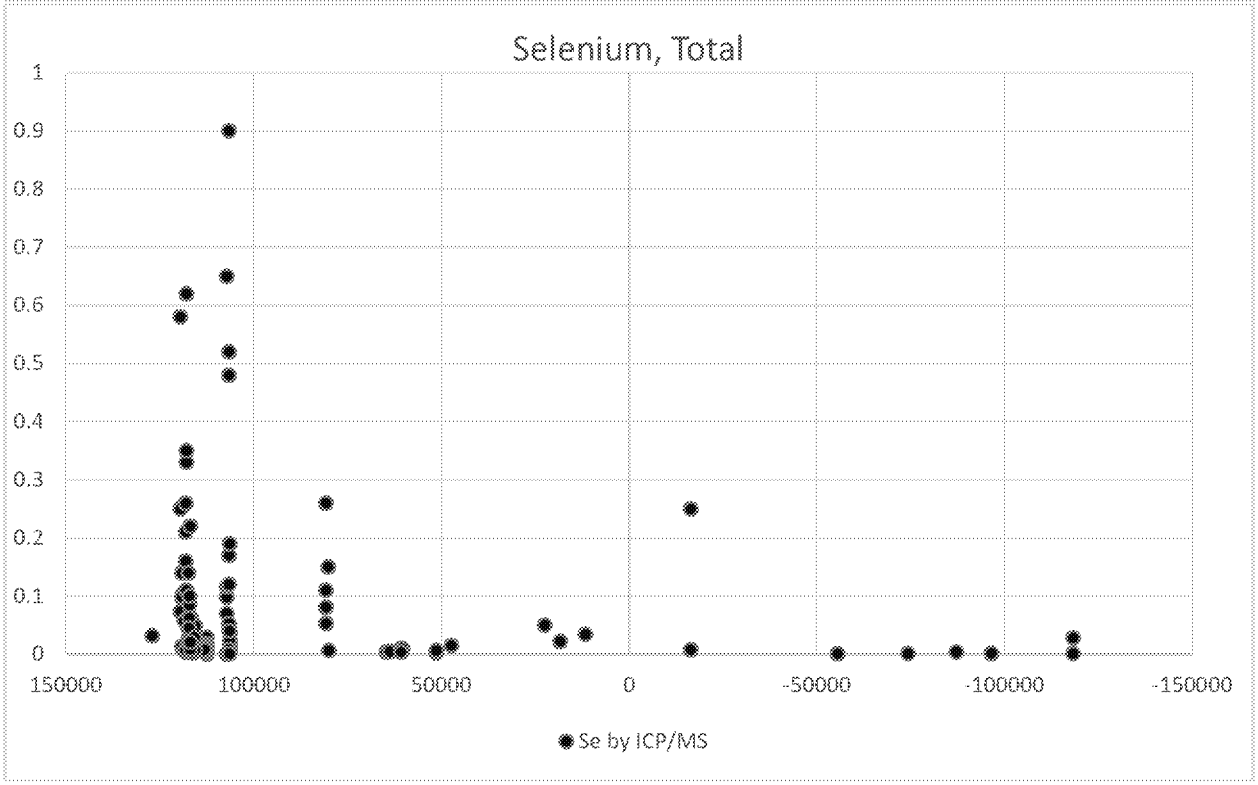
Stormwater Sample Graphs

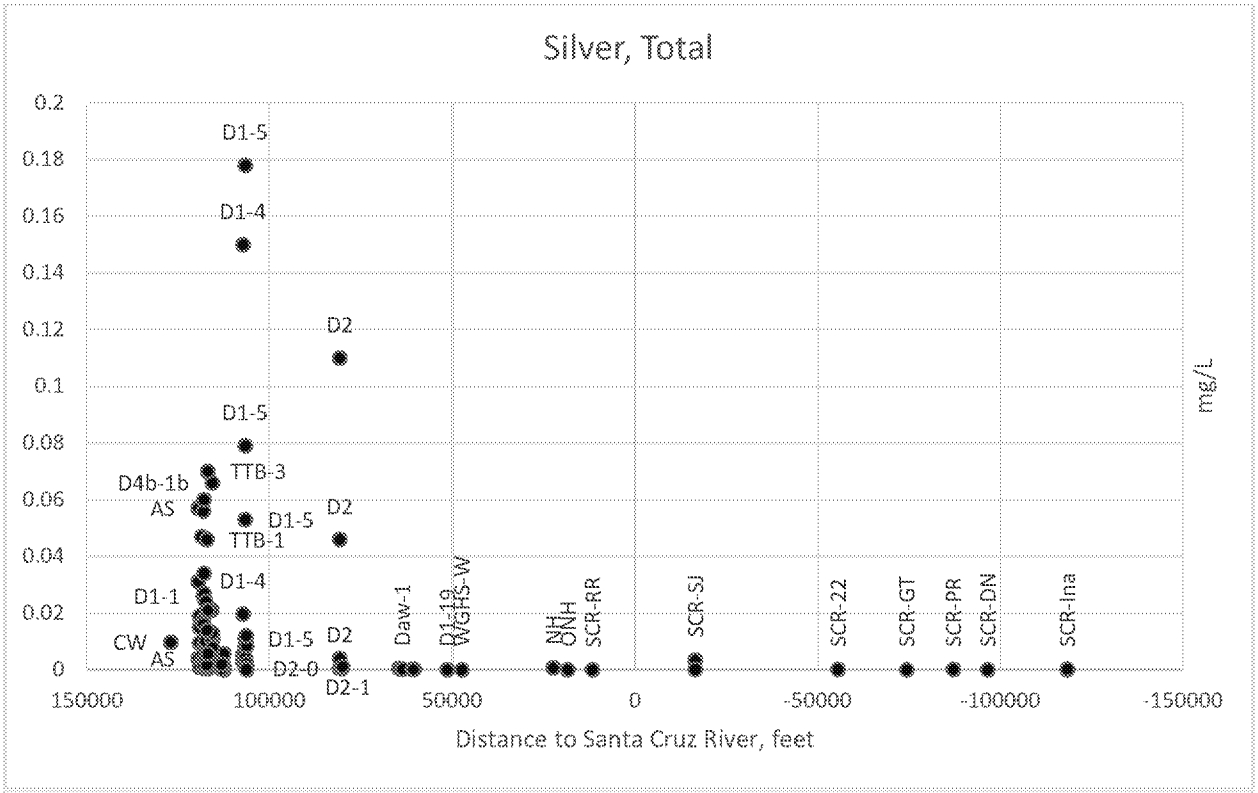


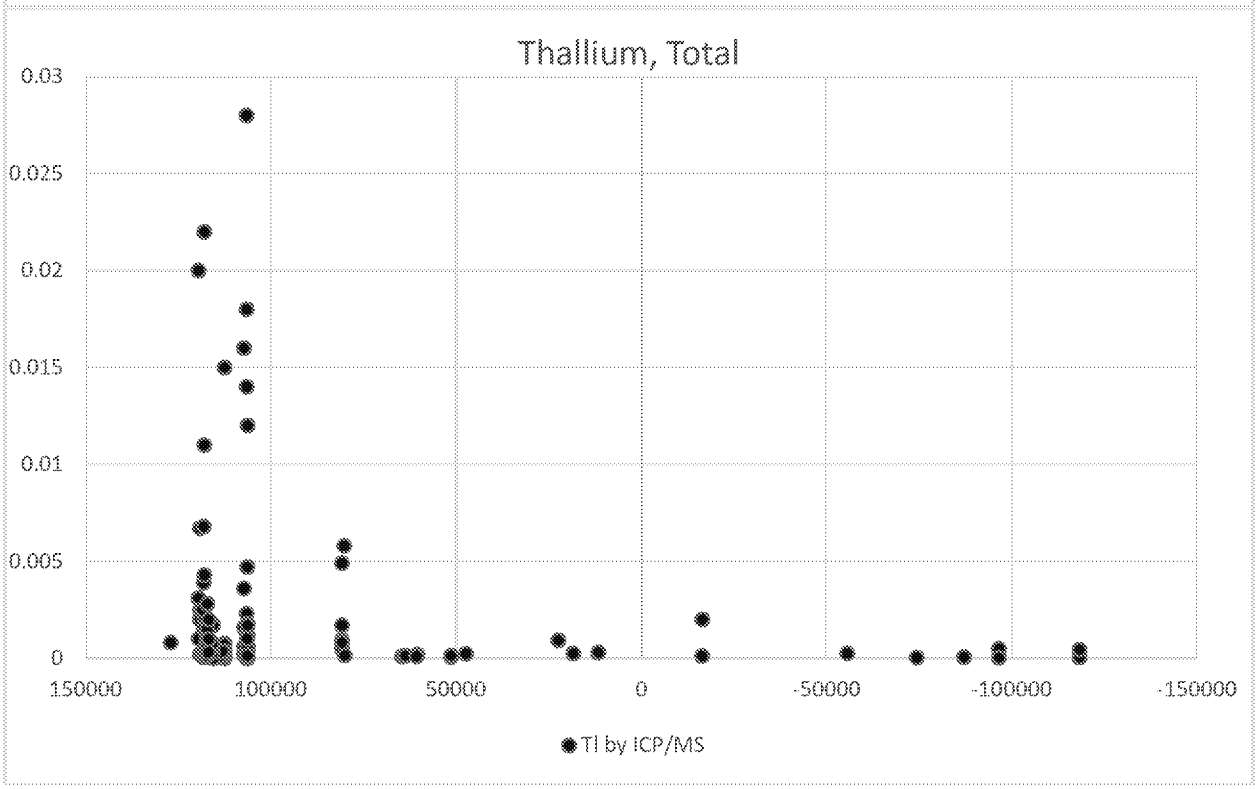


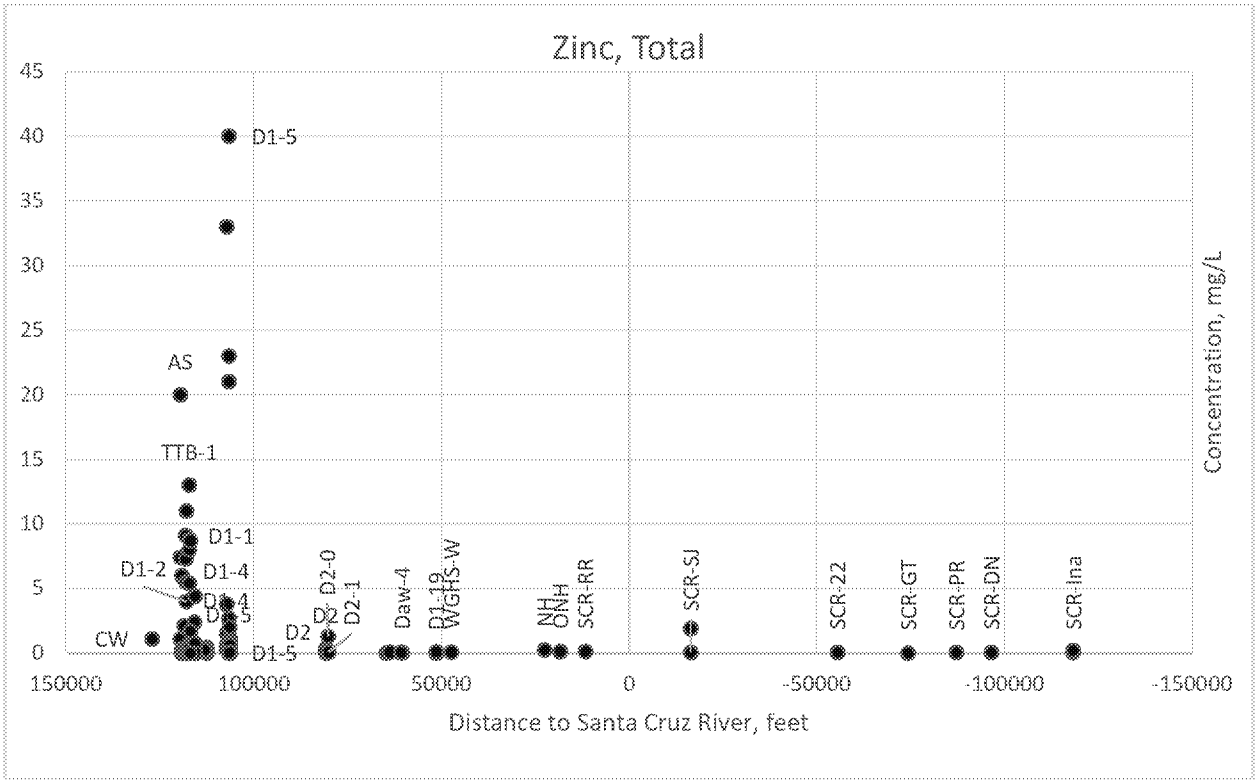
Stormwater Sample Graphs


Nickel, Total
1.4
1.2
1
0.8
0.6
0.4
0.2
0
D1-5
D1-4
AS
D1-5
D1-5
D1-2
D1-2
TTB-3
D1-4
CW
D4b-2
D2
D2-0
D2-
Daw-CC
D1-19 barrel
WGHS-W
NH
ONH
SCR-RR
SCR-SJ
SCR-22
SCR-GT
SCR-PR
SCR-DN
SCR-Ina
150000
100000
50000
0
-50000
-100000
-150000
Ni by ICP/MS


Selenium, Total
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
150000
100000
50000
0
-50000
-100000
-150000
Se by ICP/MS

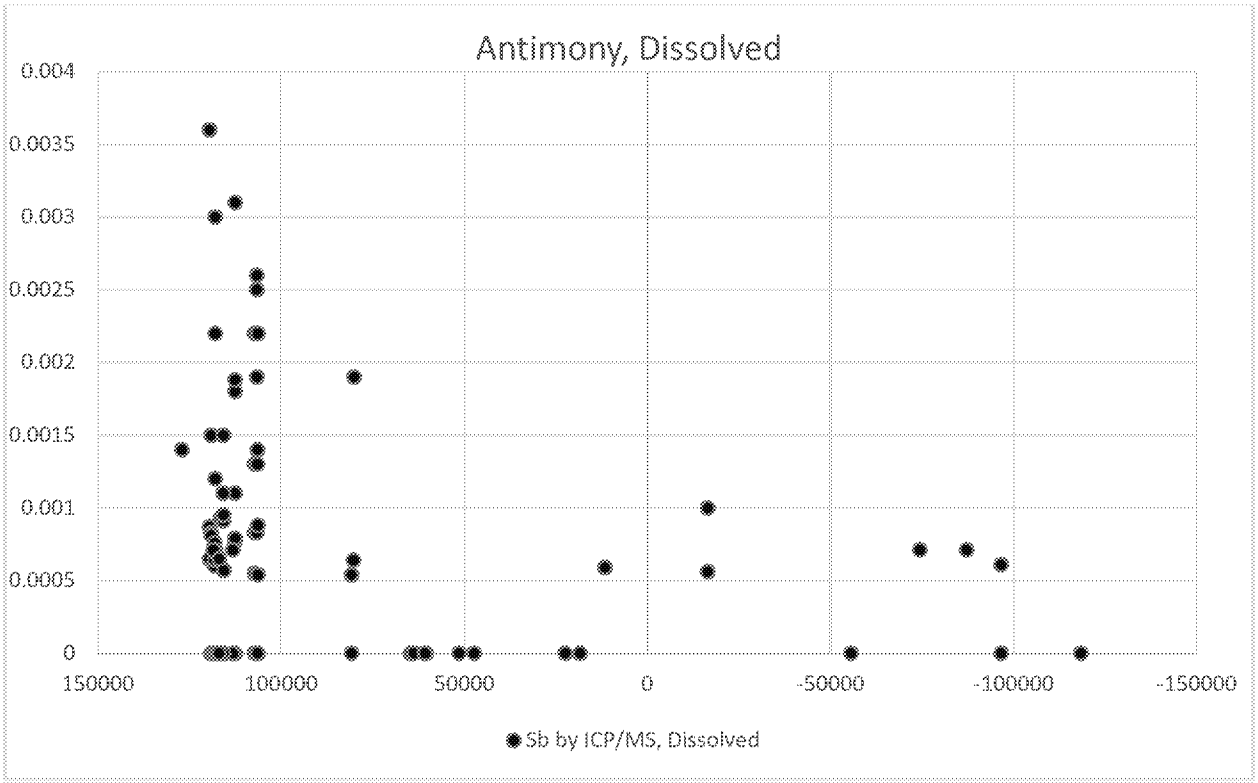

Silver, Total
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
mg/L
D1-5
D1-4
D2
D1-5
TTB-3
D4b-1b
AS
D1-5
D2
TTB-1
D1-1
D1-4
CW
AS
D1-5
D2
D2-0
D2-1
Daw-1
R1-19
WGHS-W
NH
ONH
SCR-RR
SCR-SJ
SCR-22
SCR-GT
SCR-PR
SCR-DN
SCR-Ina
150000
100000
50000
0
-50000
-100000
-150000
Distance to Santa Cruz River, feet

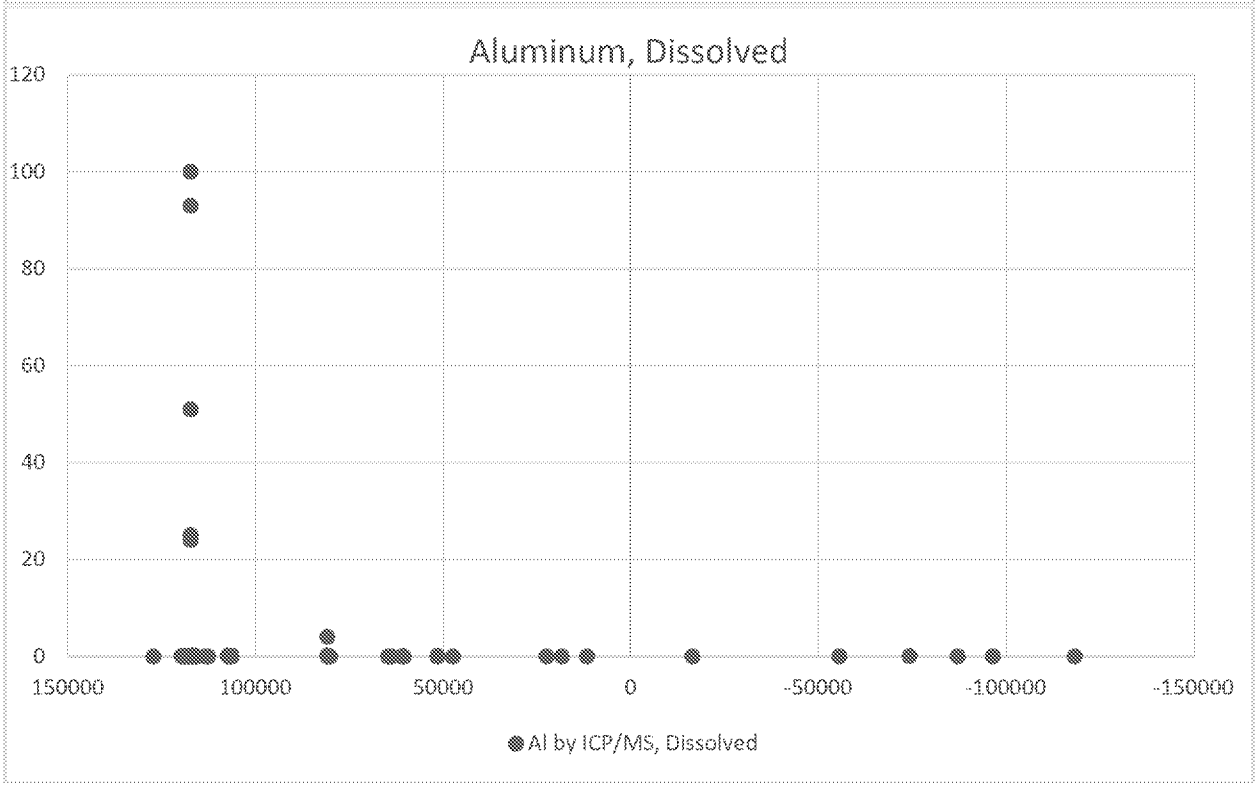

Thallium, Total
0.03
0.025
0.02
0.015
0.01
0.005
0
150000
100000
50000
0
-50000
-100000
-150000
Tl by ICP/MS

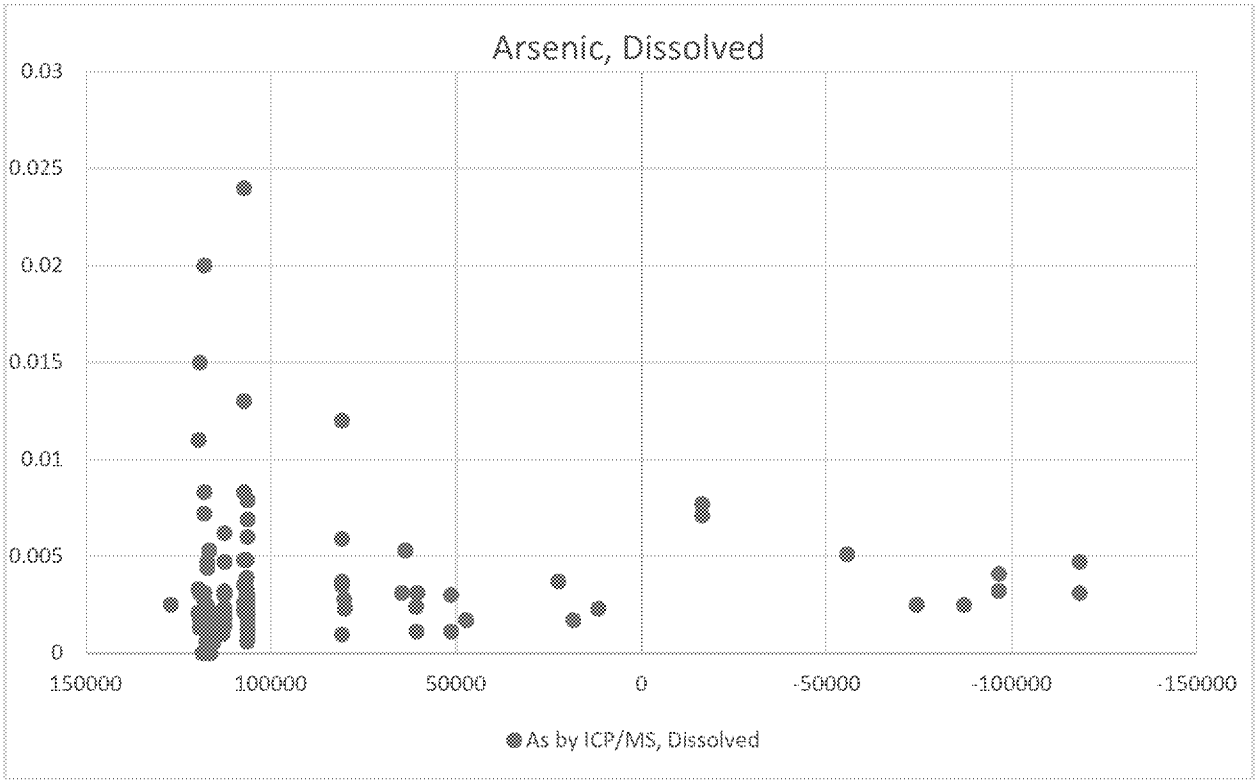

Zinc, Total
45
40
35
30
25
20
15
10
5
0
D1-5
AS
TTB-1
D1-1
D1-2
D1-4
D1-4
D1-5
CW
D1-5
D2
D2-0
D2
D2-1
Daw-4
D1-19
WGHS-W
NH
ONH
SCR-RR
SCR-SJ
SCR-22
SCR-GT
SCR-PR
SCR-DN
SCR-Ina
150000
100000
50000
0
-50000
-100000
-150000
Distance to Santa Cruz River, feet
Concentration, mg/L

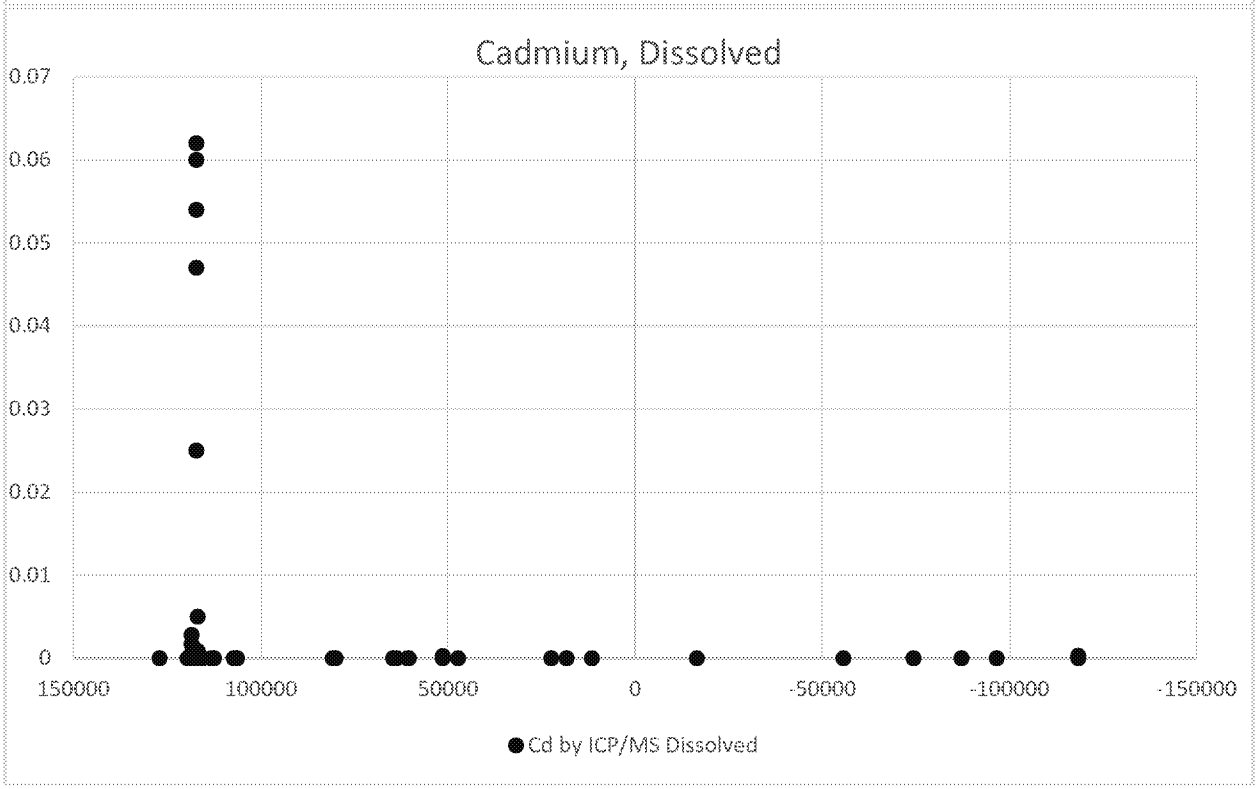
Dissolved Metals

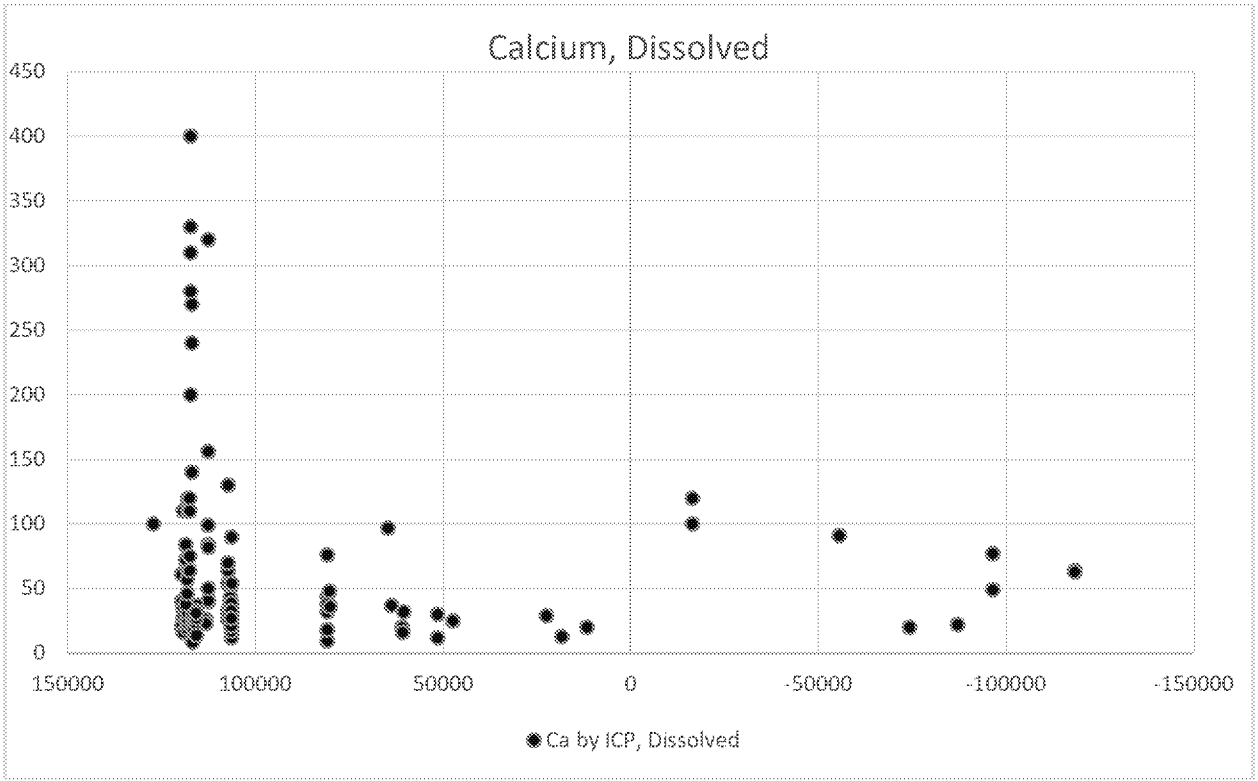
(Presented in milligrams per liter)

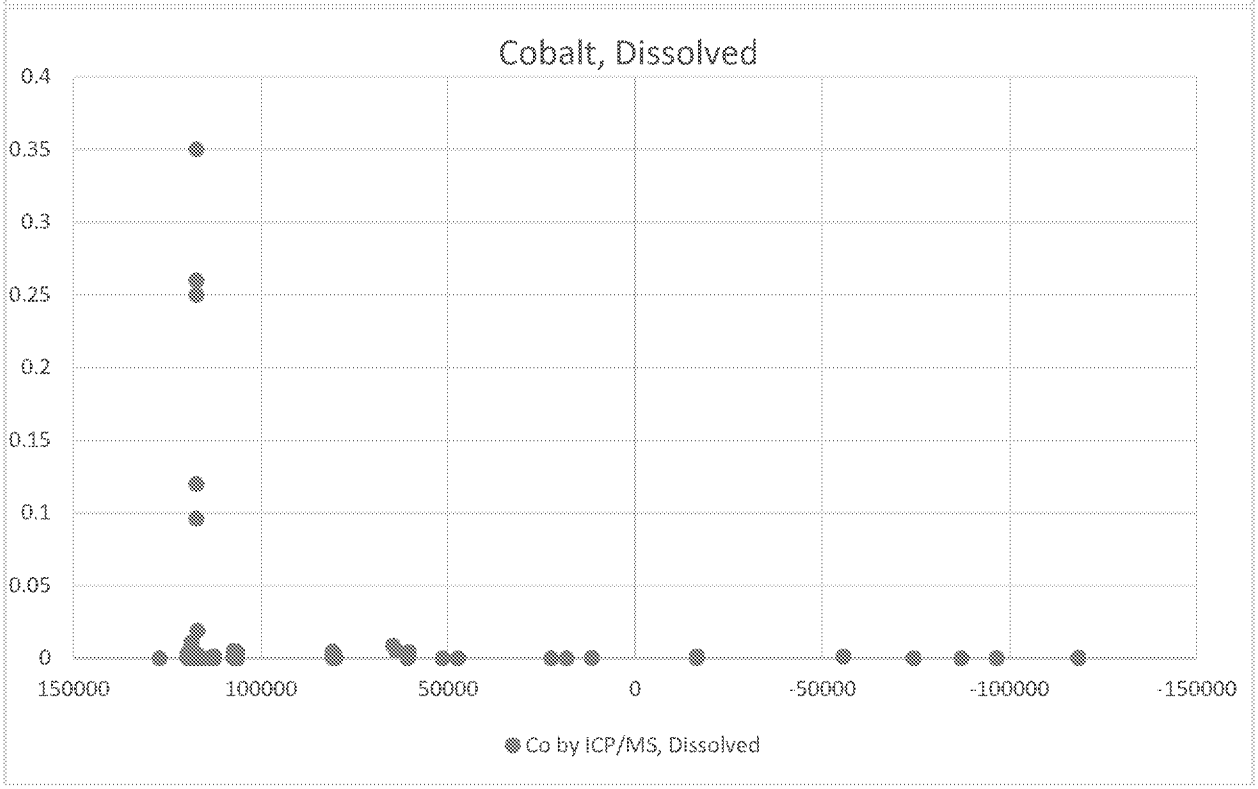




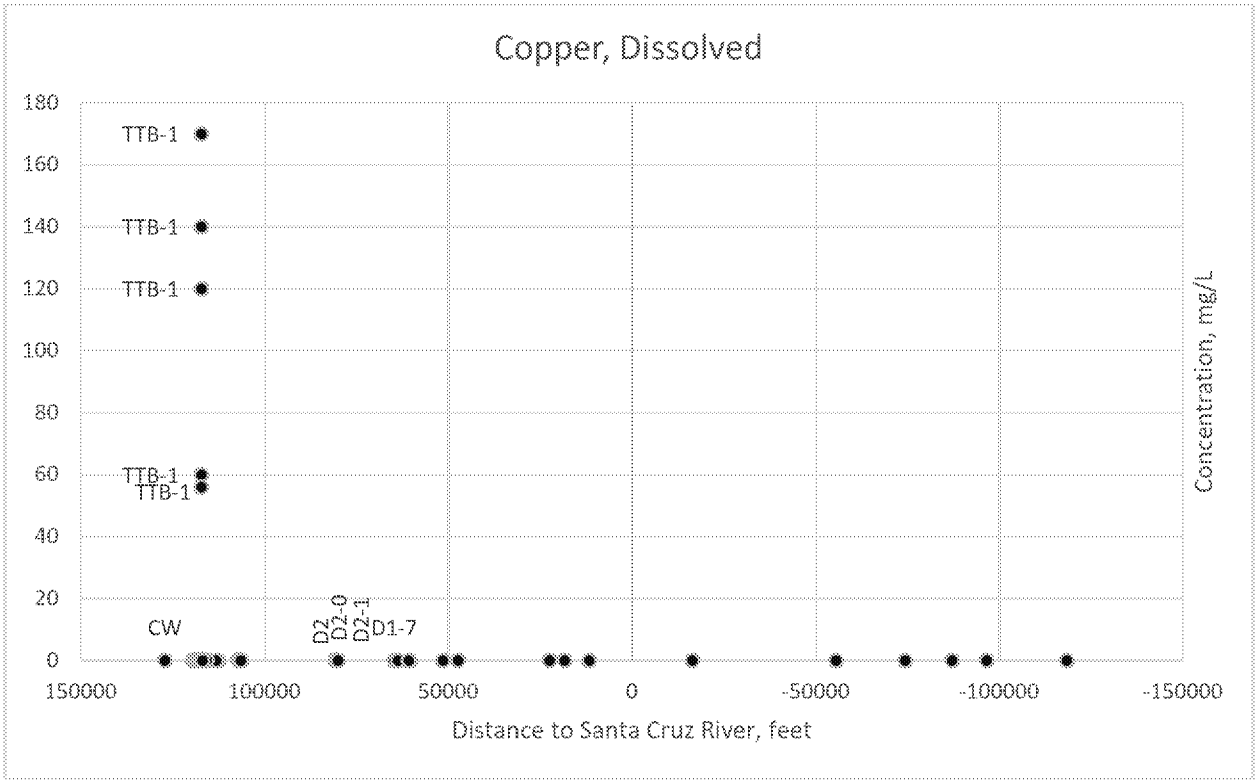

Arsenic, Dissolved
0.03
0.025
0.02
0.015
0.01
0.005
0
150000
100000
50000
0
-50000
-100000
-150000
As by ICP/MS, Dissolved

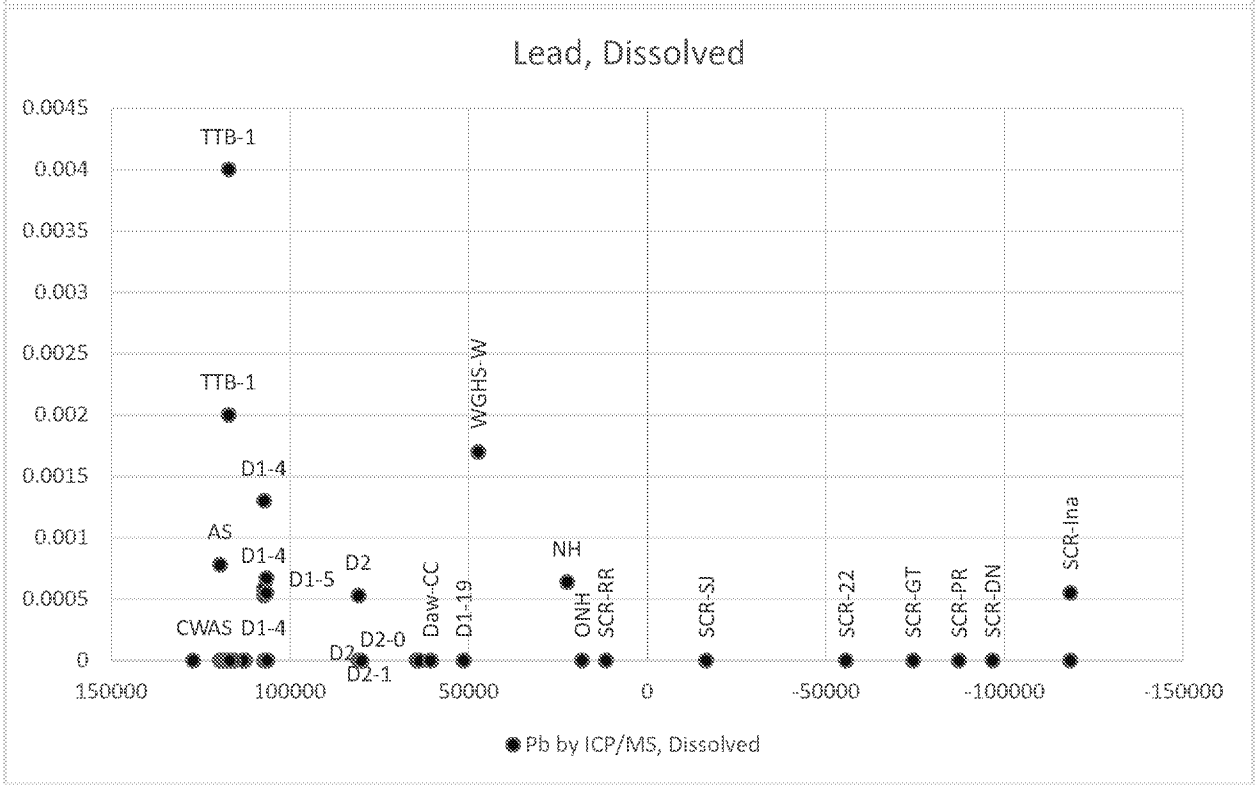

Cadmium, Dissolved
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
150000
100000
50000
0
-50000
-100000
-150000
Cd by ICP/MS Dissolved

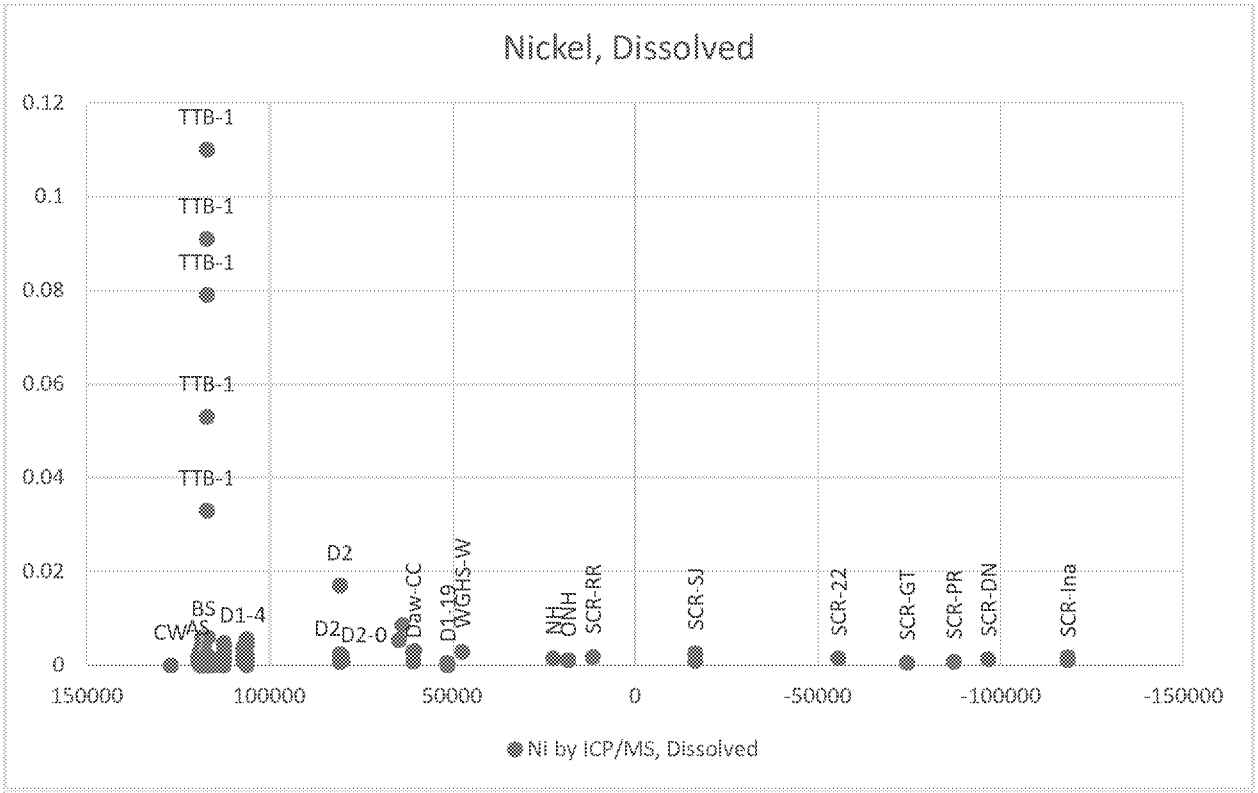


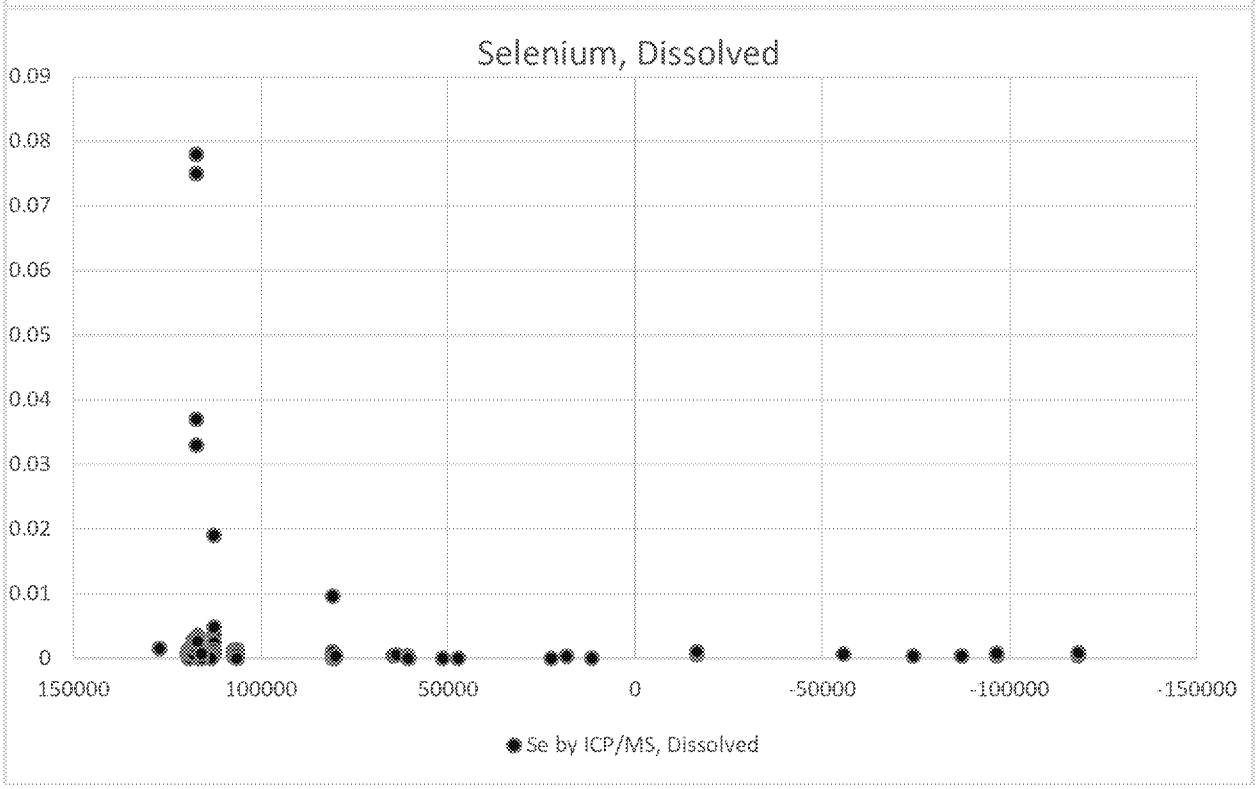


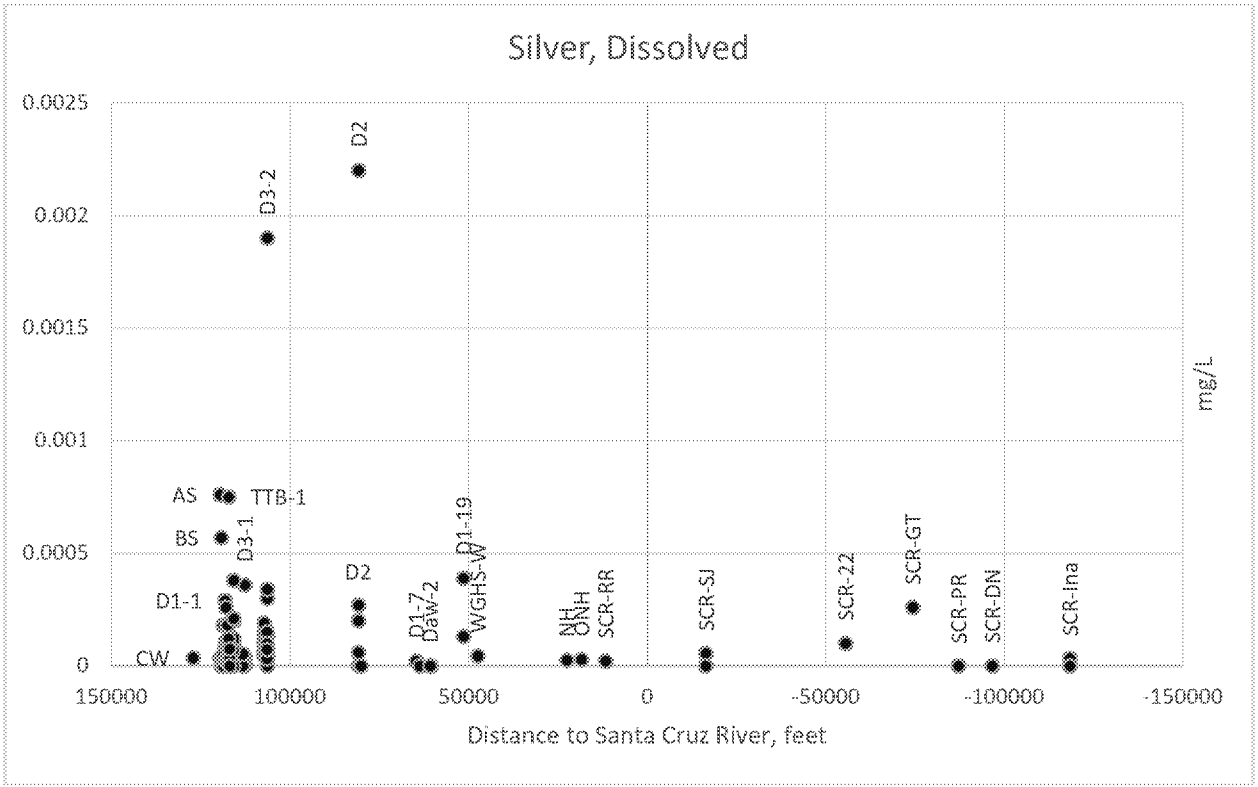
Stormwater Sample Graphs

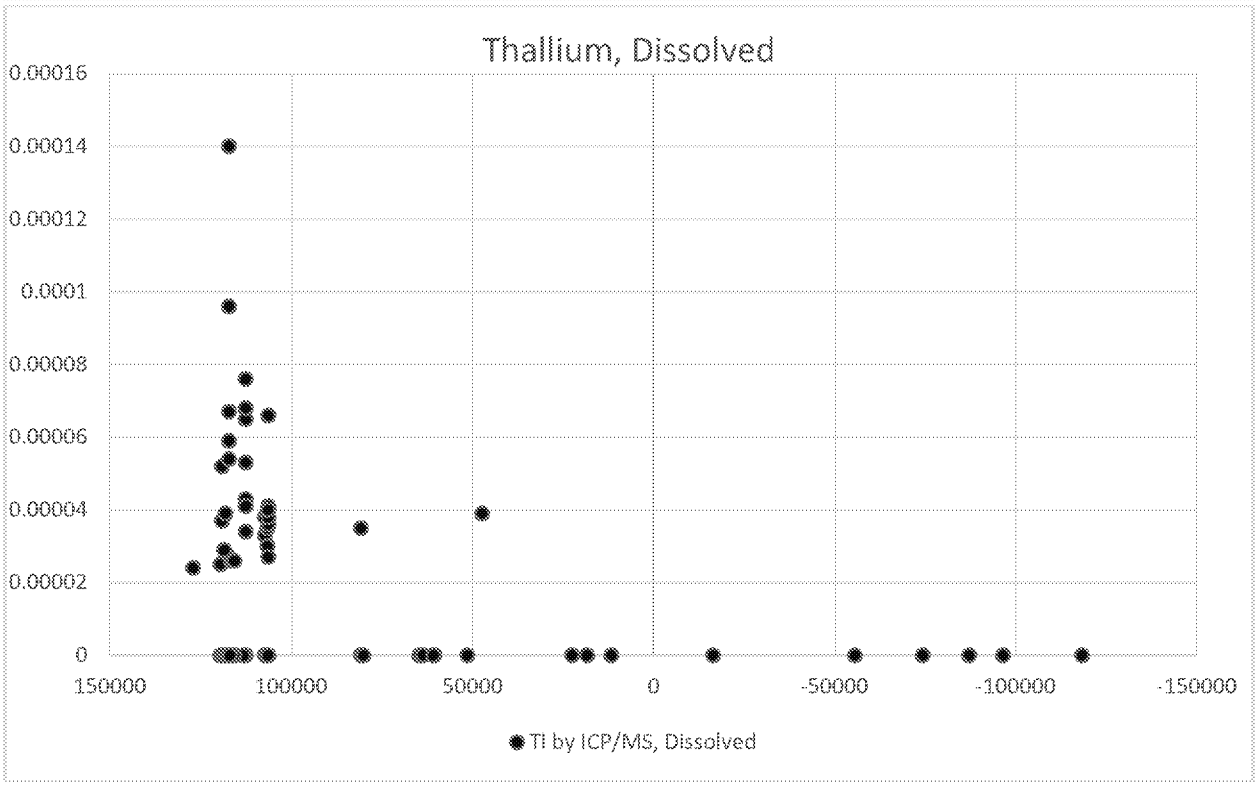

Copper, Dissolved
180
160
140
120
100
80
60
40
20
0
TTB-1
TTB-1
TTB-1
TTB-1
TTB-1
CW
D2
D2-0
D2-1
D1-7
150000
100000
50000
0
-50000
-100000
-150000
Distance to Santa Cruz River, feet
Concentration, mg/L

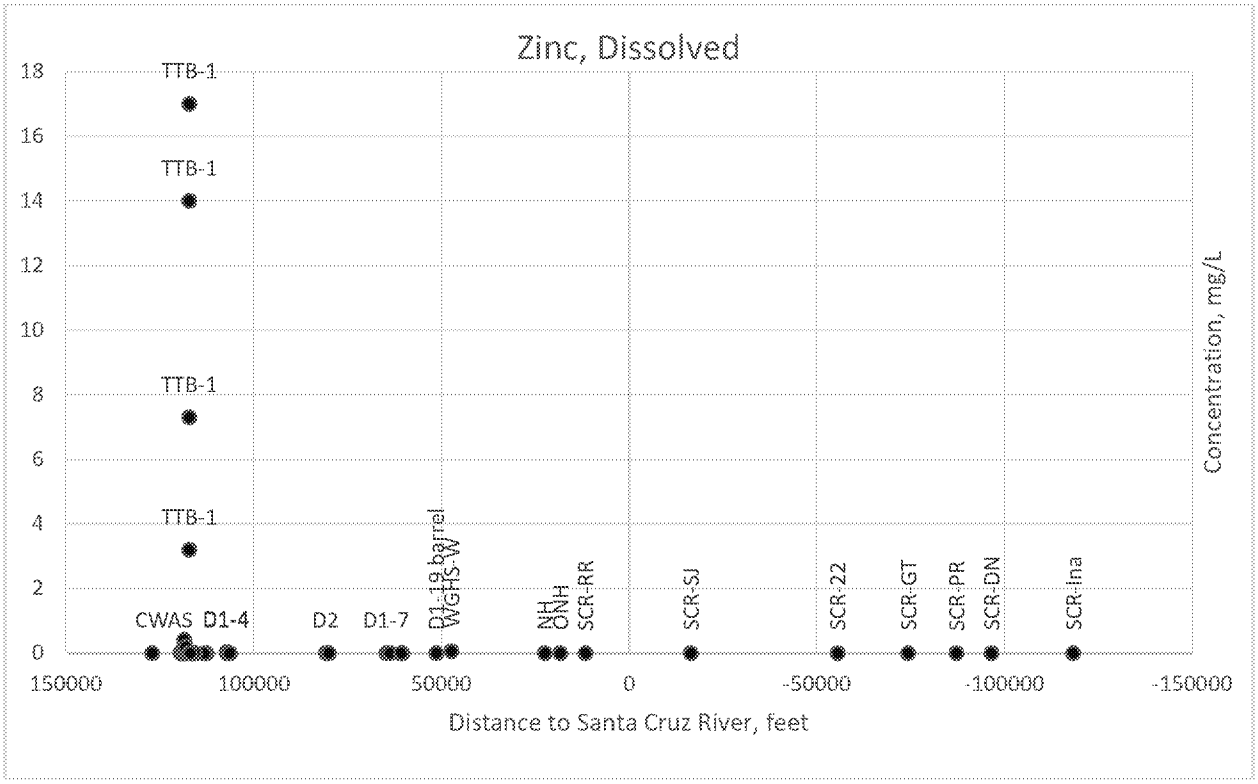

Lead, Dissolved
0.0045
0.004
0.0035
0.003
0.0025
0.002
0.0015
0.001
0.0005
0
TTB-1
TTB-1
WGHS-W
D1-4
AS
D1-4
D1-5
D2
Daw-CC
D1-19
NH
ONH
SCR-RR
SCR-SJ
SCR-22
SCR-GT
SCR-PR
SCR-DN
SCR-Ina
CWAS
D1-4
D2
D2-0
D2-1
150000
100000
50000
0
-50000
-100000
-150000
Pb by ICP/MS, Dissolved


Nickel, Dissolved
0.12
0.1
0.08
0.06
0.04
0.02
0
TTB-1
TTB-1
TTB-1
TTB-1
TTB-1
D2
CW
BS
AS
D1-4
D2
D2-0
Daw-CC
D1-19
WGHS-W
NH
ONH
SCR-RR
SCR-SJ
SCR-22
SCR-GT
SCR-PR
SCR-DN
SCR-Ina
150000
100000
50000
0
-50000
-100000
-150000
Ni by ICP/MS, Dissolved


Selenium, Dissolved
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
150000
100000
50000
0
-50000
-100000
-150000
Se by ICP/MS, Dissolved


Silver, Dissolved
0.0025
0.002
0.0015
0.001
0.0005
0
mg/L
D2
D3-2
AS
TTB-1
BS
D3-1
D1-19
D1-1
D2
D1-7
BaW-2
WGHS-W
NH
ONH
SCR-RR
SCR-SJ
SCR-22
SCR-GT
SCR-PR
SCR-DN
SCR-Ina
CW
150000
100000
50000
0
-50000
-100000
-150000
Distance to Santa Cruz River, feet

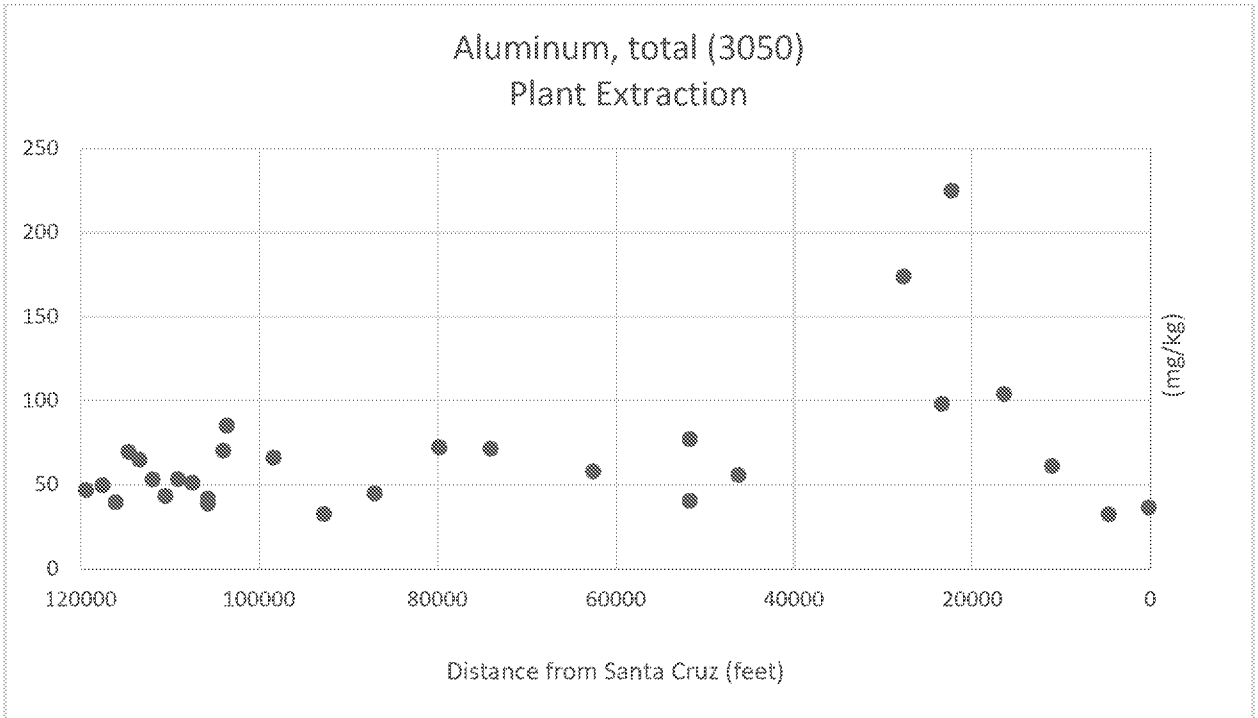

Thallium, Dissolved
0.00016
0.00014
0.00012
0.0001
0.00008
0.00006
0.00004
0.00002
0
150000
100000
50000
0
-50000
-100000
-150000
Tl by ICP/MS, Dissolved

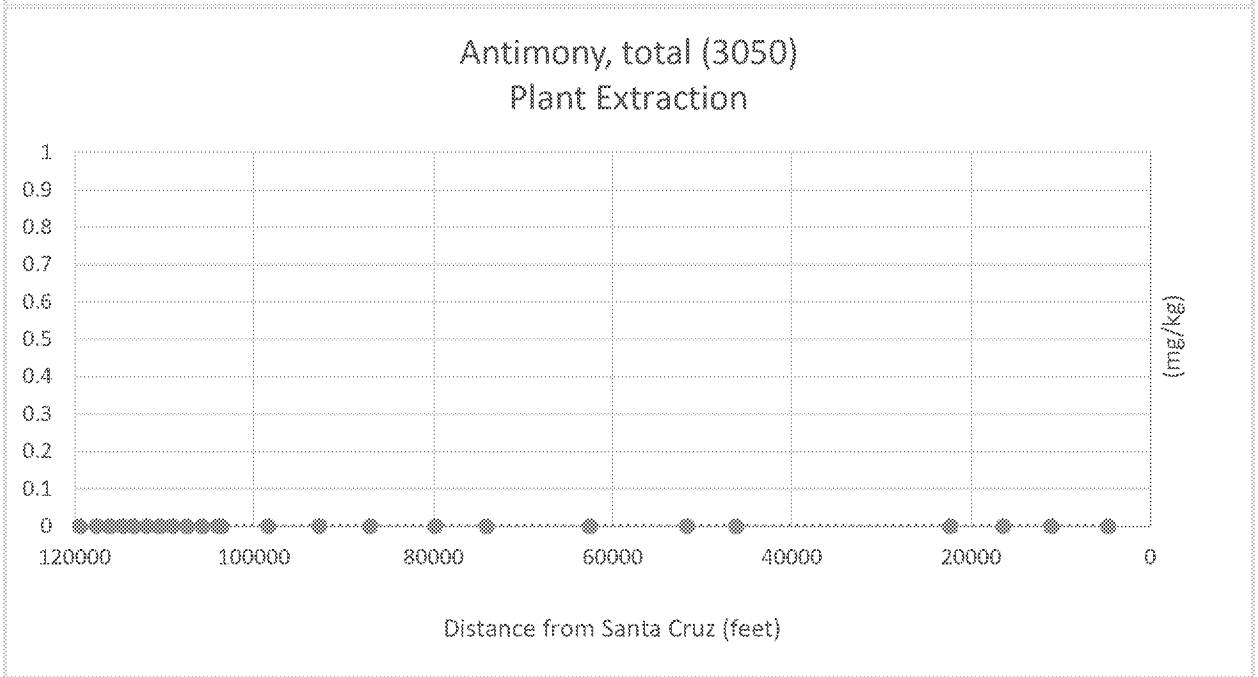


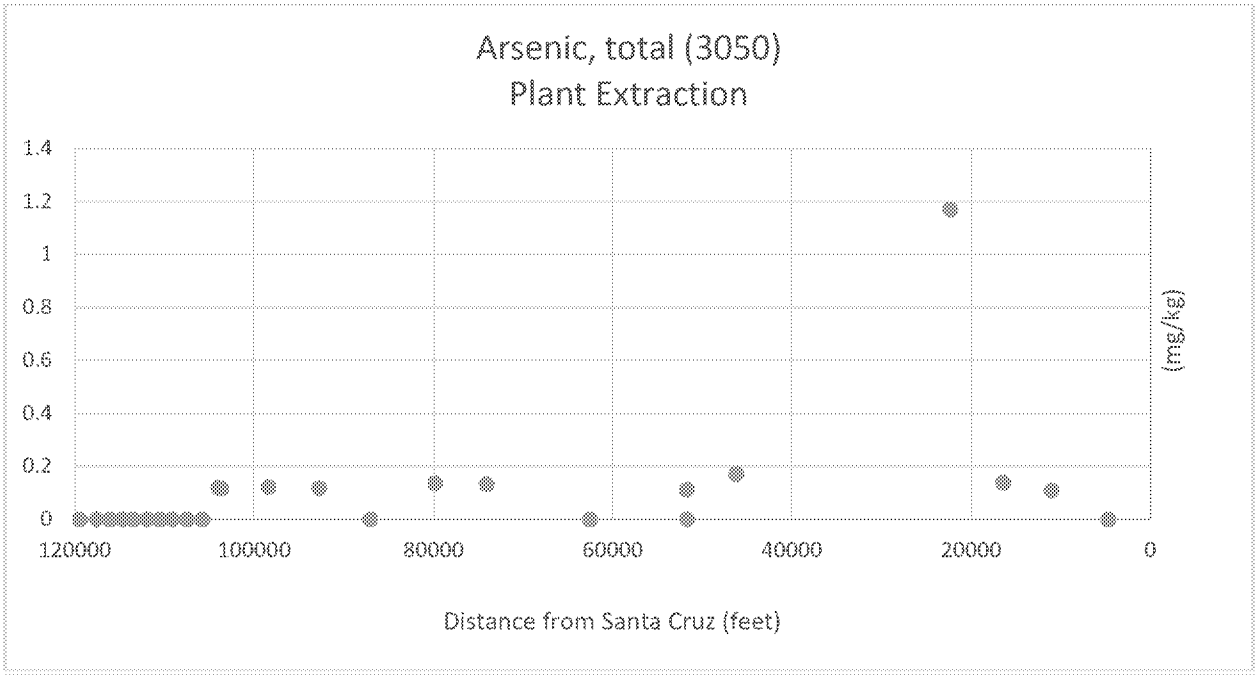
Stormwater Sample Graphs

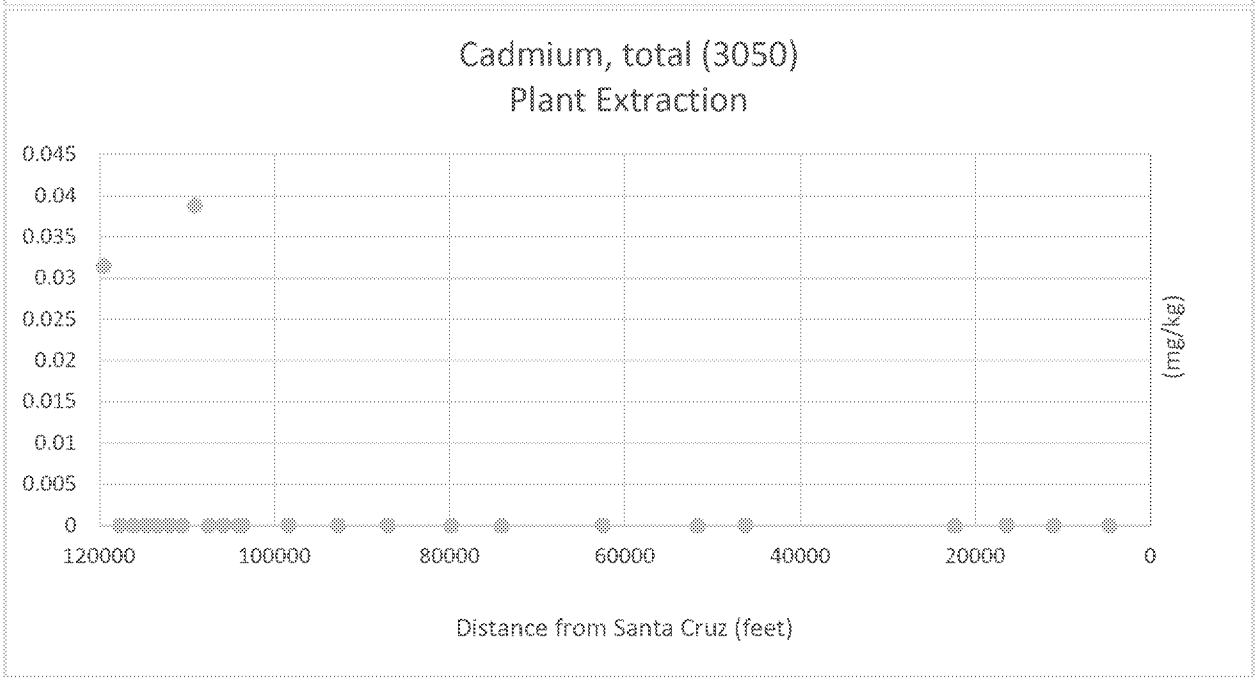
ATTACHMENT E

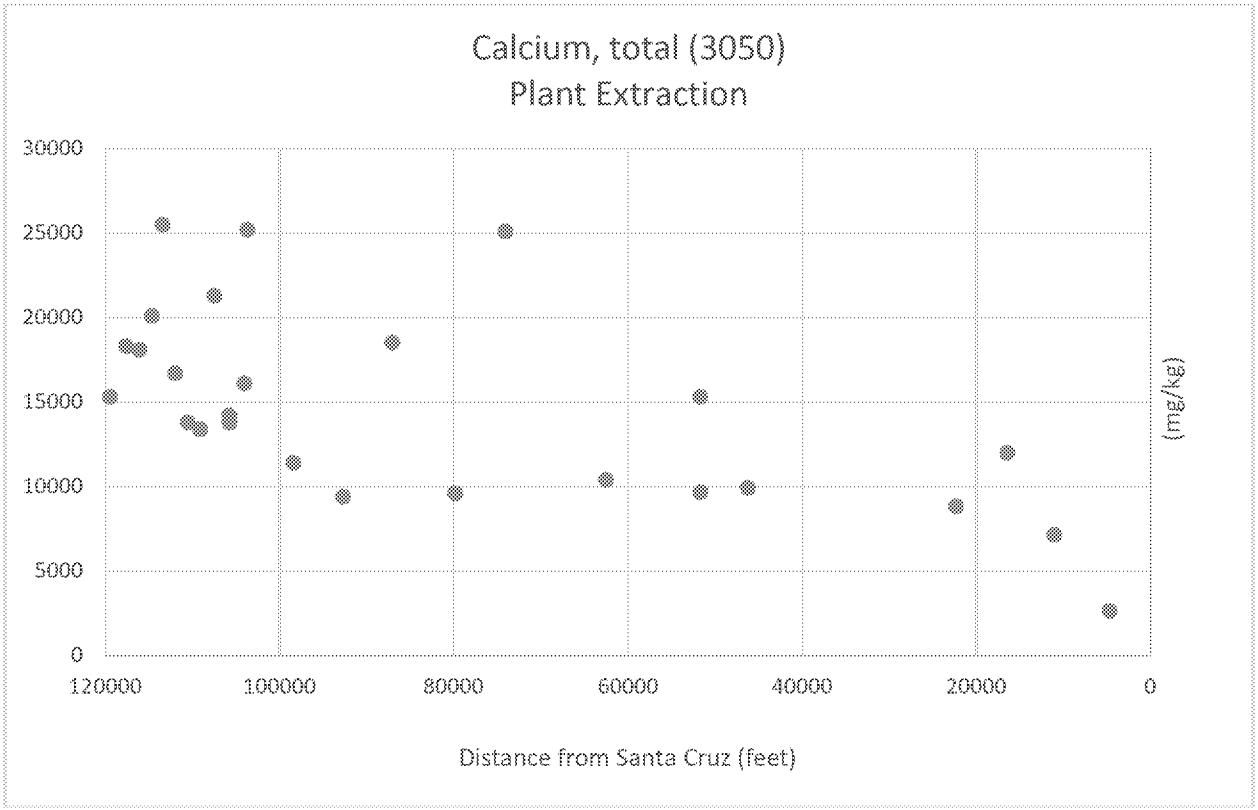
Biological Graphs

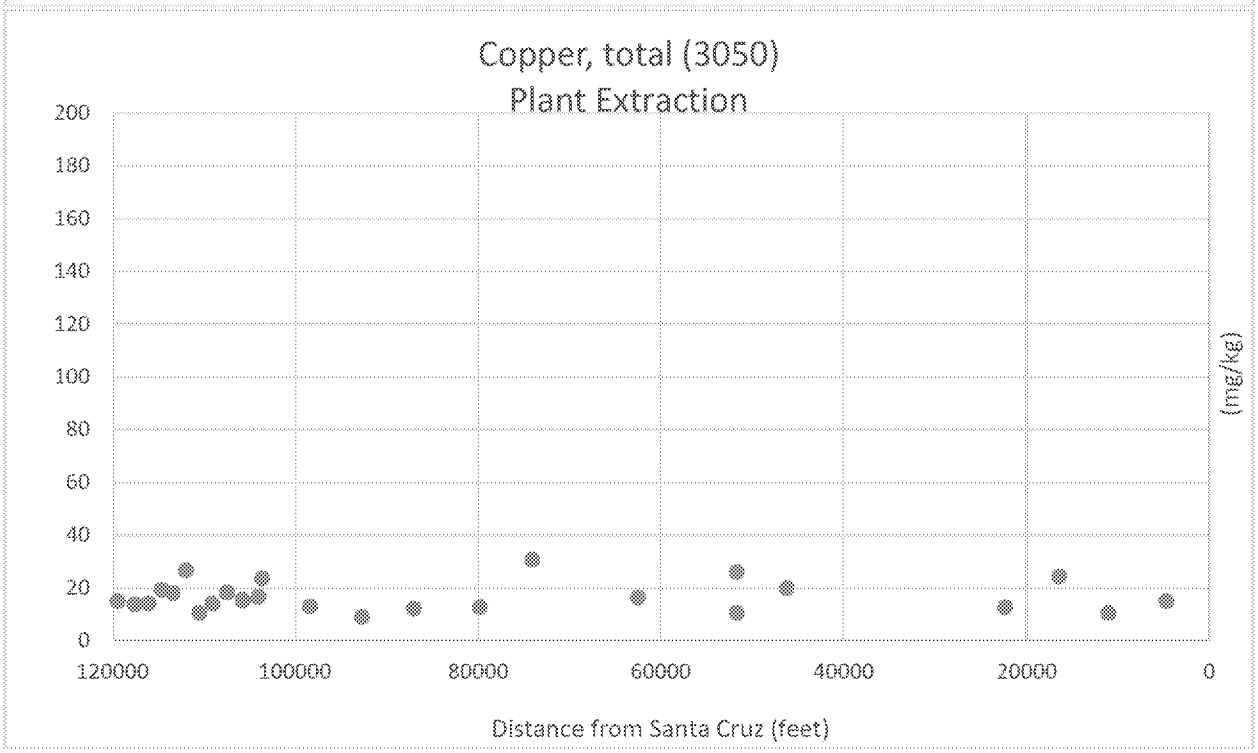

Aluminum, total (3050)
Plant Extraction
250
200
150
100
50
0
120000
100000
80000
60000
40000
20000
0
(mg/kg)
Distance from Santa Cruz (feet)

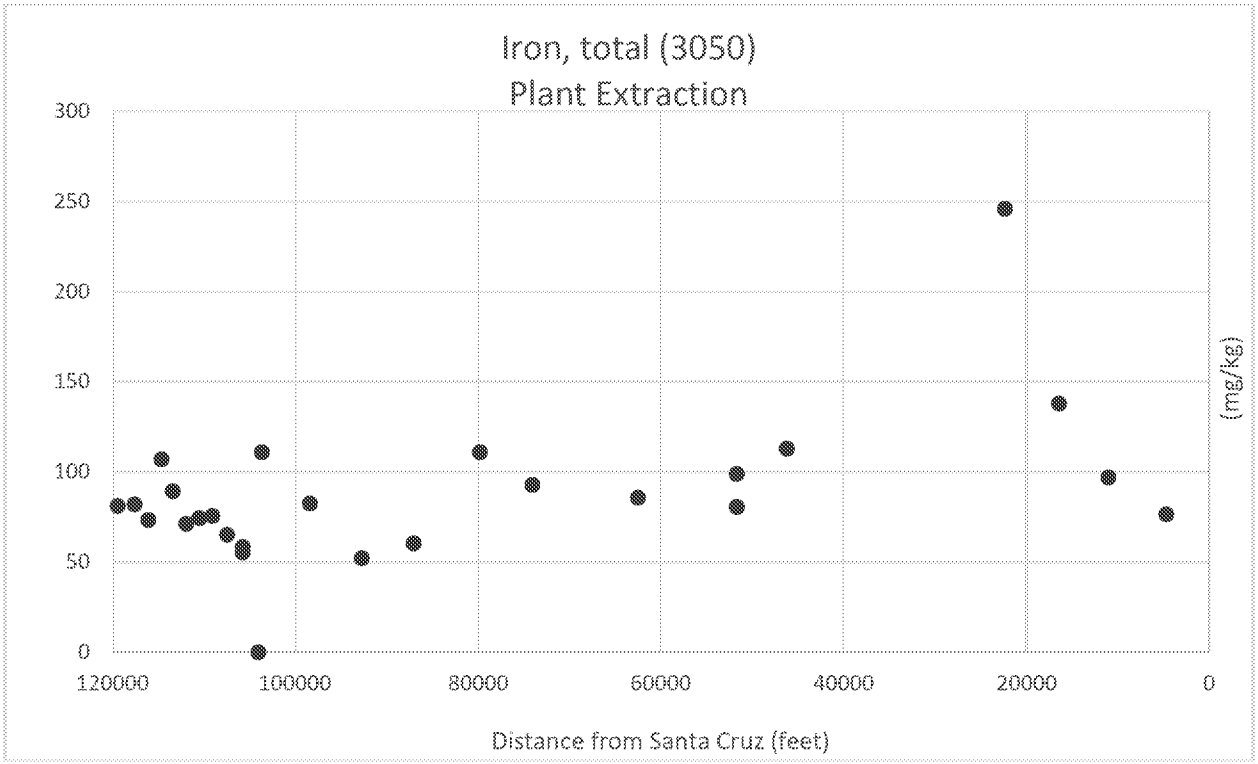

Antimony, total (3050)
Plant Extraction
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
120000
100000
80000
60000
40000
20000
0
(mg/kg)
Distance from Santa Cruz (feet)

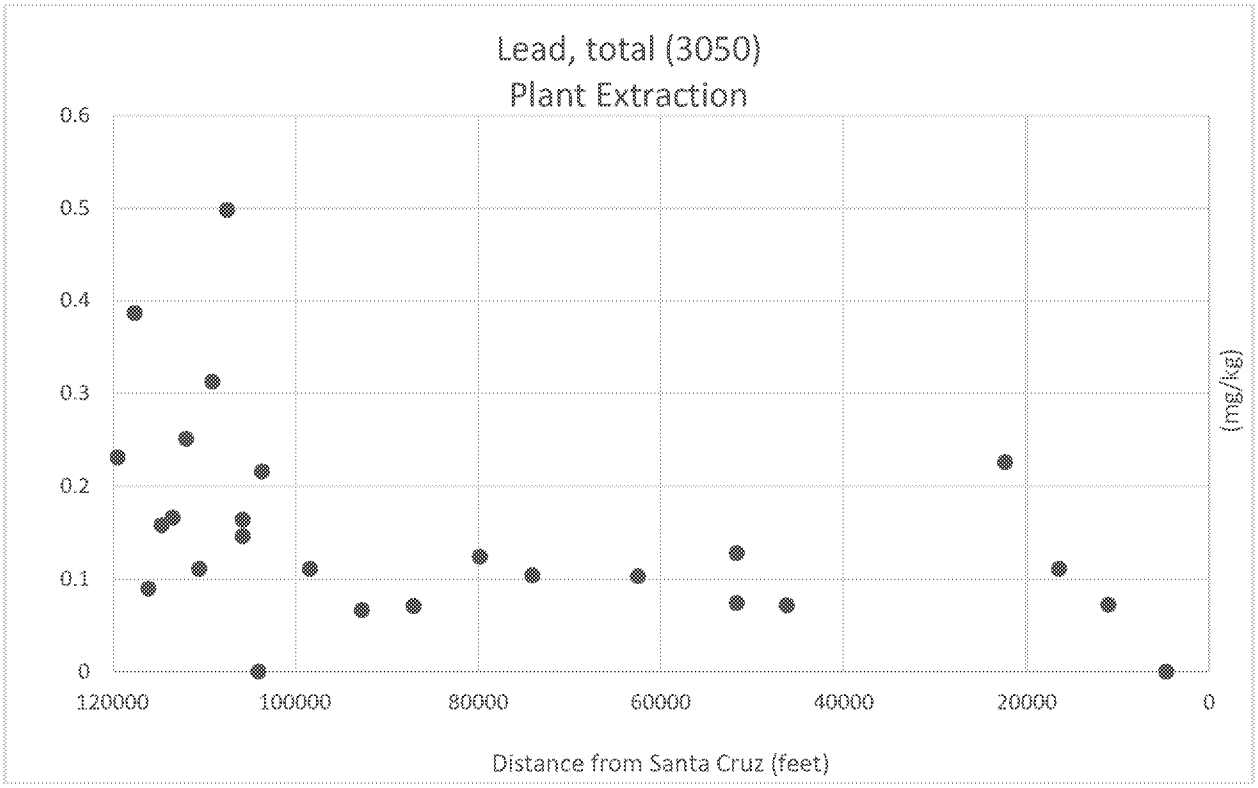

Arsenic, total (3050)
Plant Extraction
1.4
1.2
1
0.8
0.6
0.4
0.2
0
120000
100000
80000
60000
40000
20000
0
(µg/kg)
Distance from Santa Cruz (feet)

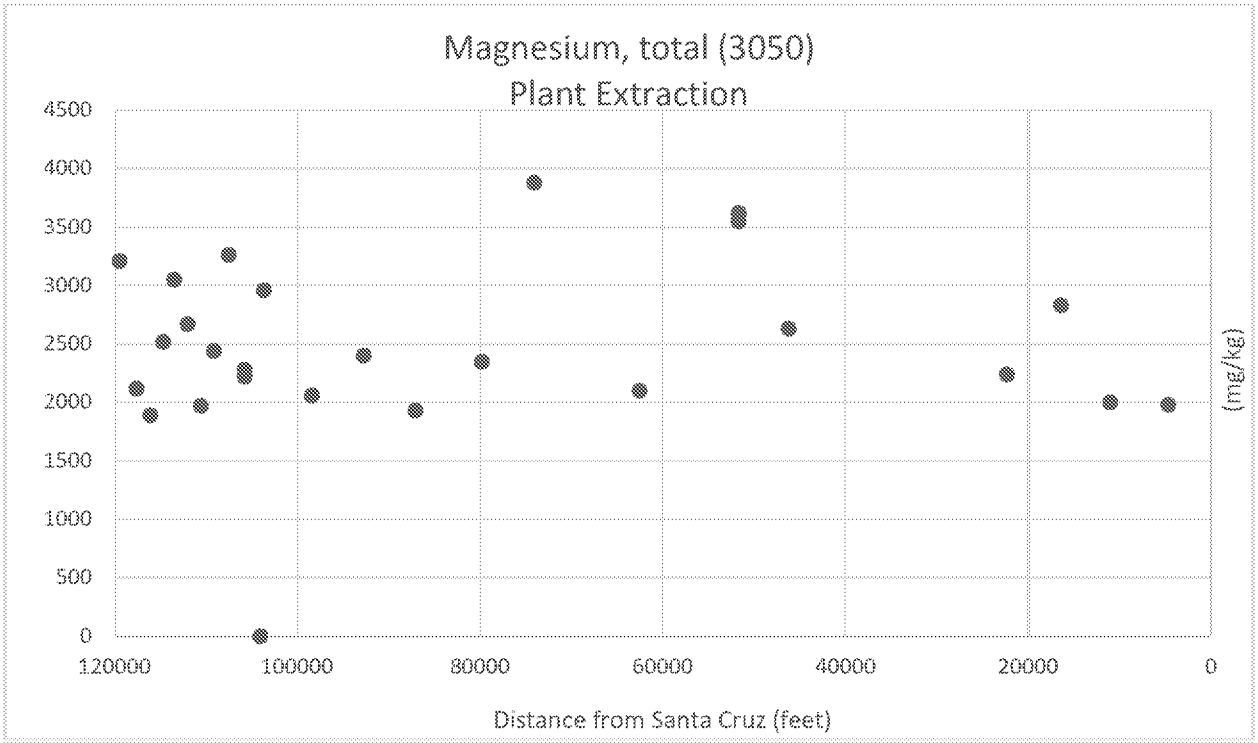

Cadmium, total (3050)
Plant Extraction
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
120000
100000
80000
60000
40000
20000
0
(µg/kg)
Distance from Santa Cruz (feet)

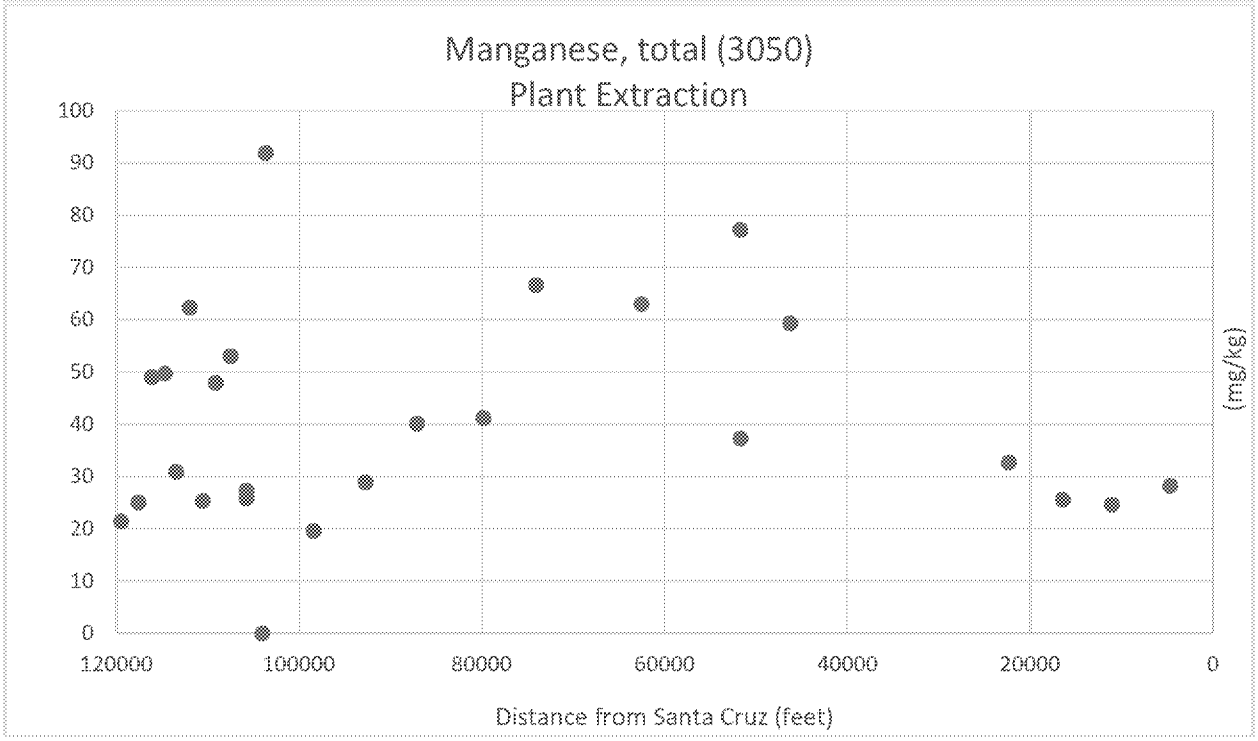

Calcium, total (3050)
Plant Extraction
30000
25000
20000
15000
10000
5000
0
120000
100000
80000
60000
40000
20000
0
(mg/kg)
Distance from Santa Cruz (feet)

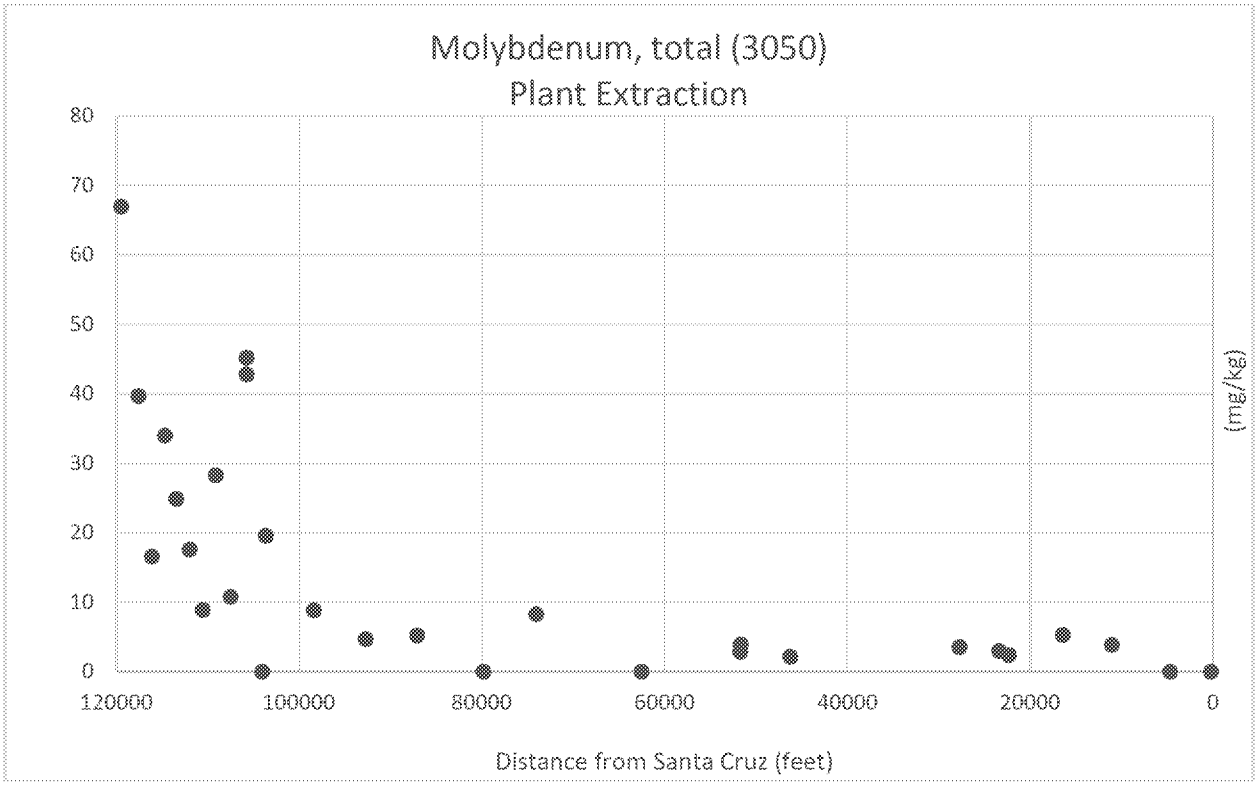

Copper, total (3050)
Plant Extraction
200
180
160
140
120
100
80
60
40
20
0
120000
100000
80000
60000
40000
20000
0
(mg/kg)
Distance from Santa Cruz (feet)

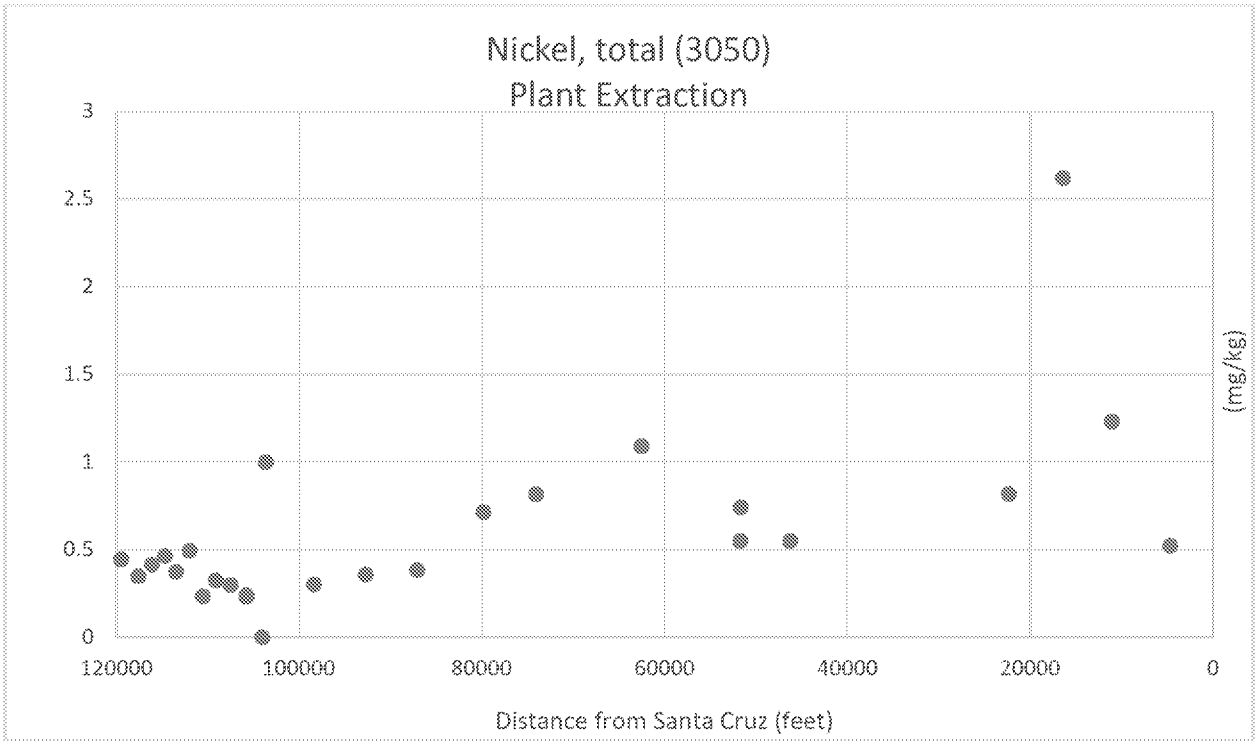

Iron, total (3050)
Plant Extraction
300
250
200
150
100
50
0
120000
100000
80000
60000
40000
20000
0
(mg/kg)
Distance from Santa Cruz (feet)

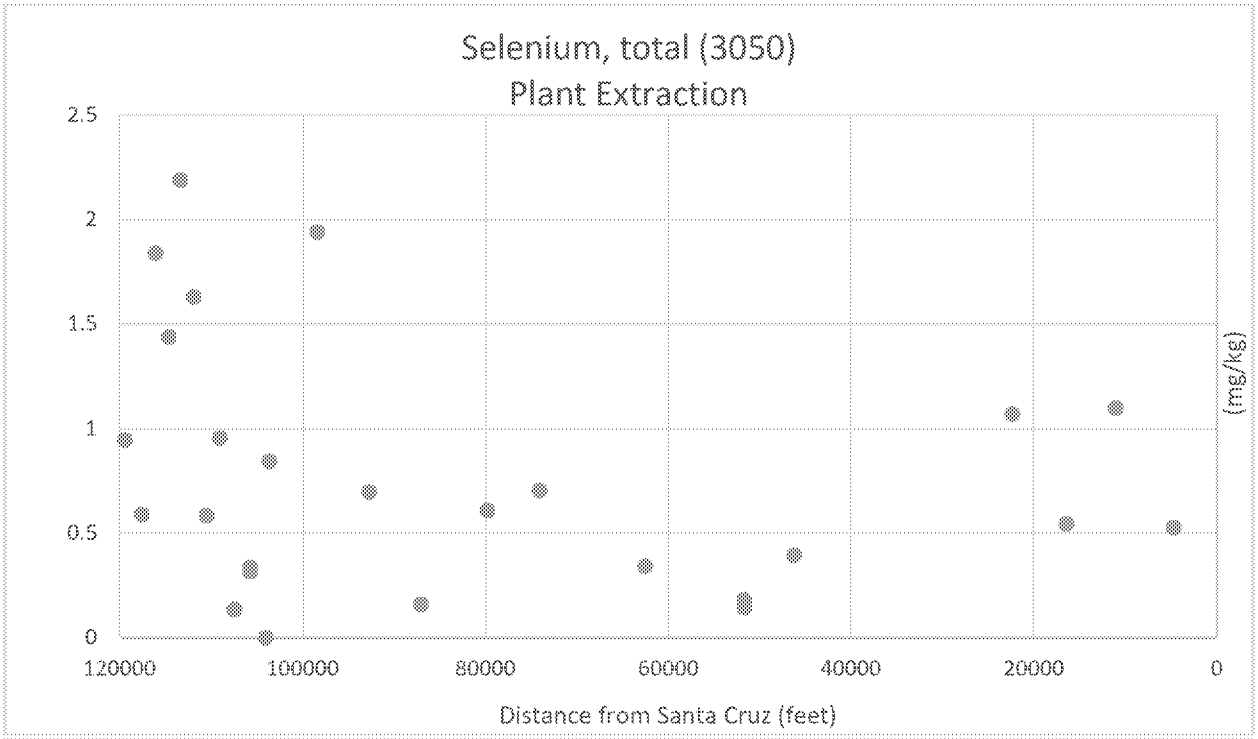

Lead, total (3050)
Plant Extraction
0.6
0.5
0.4
0.3
0.2
0.1
0
120000
100000
80000
60000
40000
20000
0
(mg/kg)
Distance from Santa Cruz (feet)

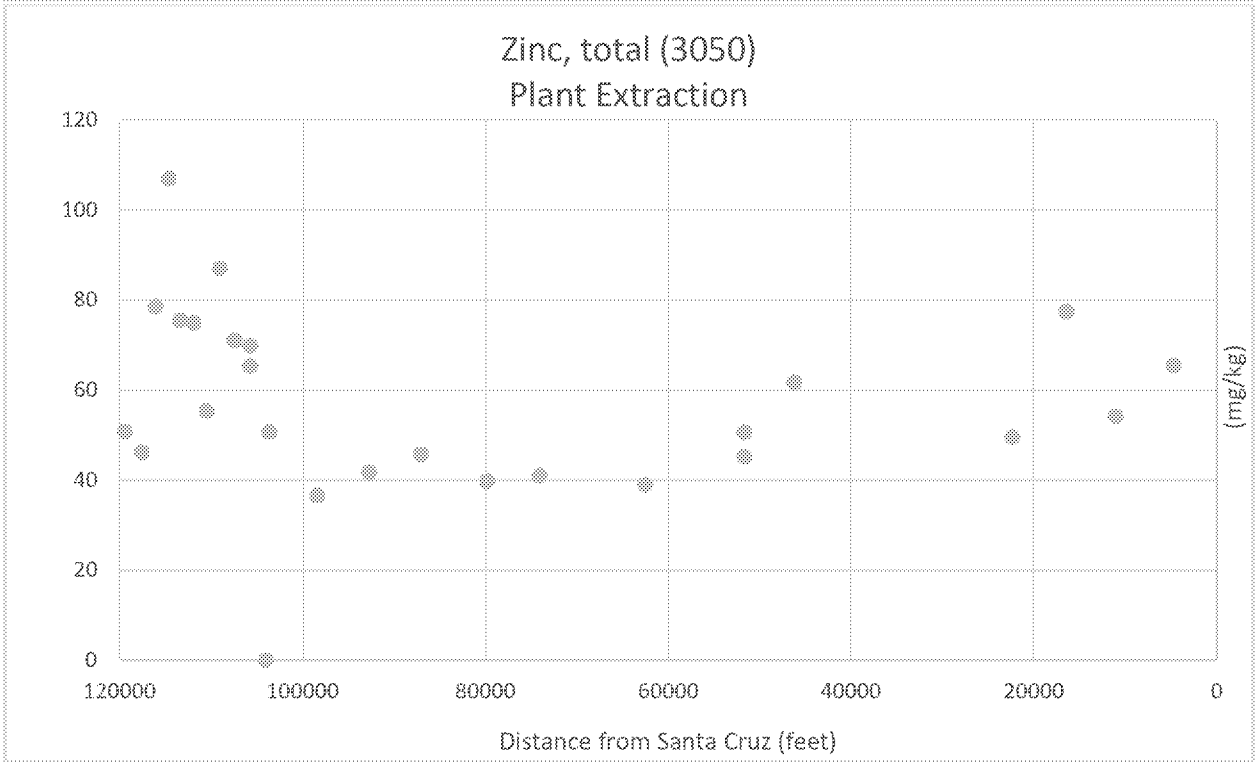

Magnesium, total (3050)
Plant Extraction
4500
4000
3500
3000
2500
2000
1500
1000
500
0
120000
100000
80000
60000
40000
20000
0
(mg/kg)
Distance from Santa Cruz (feet)


Manganese, total (3050)
Plant Extraction
100
90
80
70
60
50
40
30
20
10
0
120000
100000
80000
60000
40000
20000
0
(mg/kg)
Distance from Santa Cruz (feet)


Molybdenum, total (3050)
Plant Extraction
80
70
60
50
40
30
20
10
0
120000
100000
80000
60000
40000
20000
0
(mg/kg)
Distance from Santa Cruz (feet)

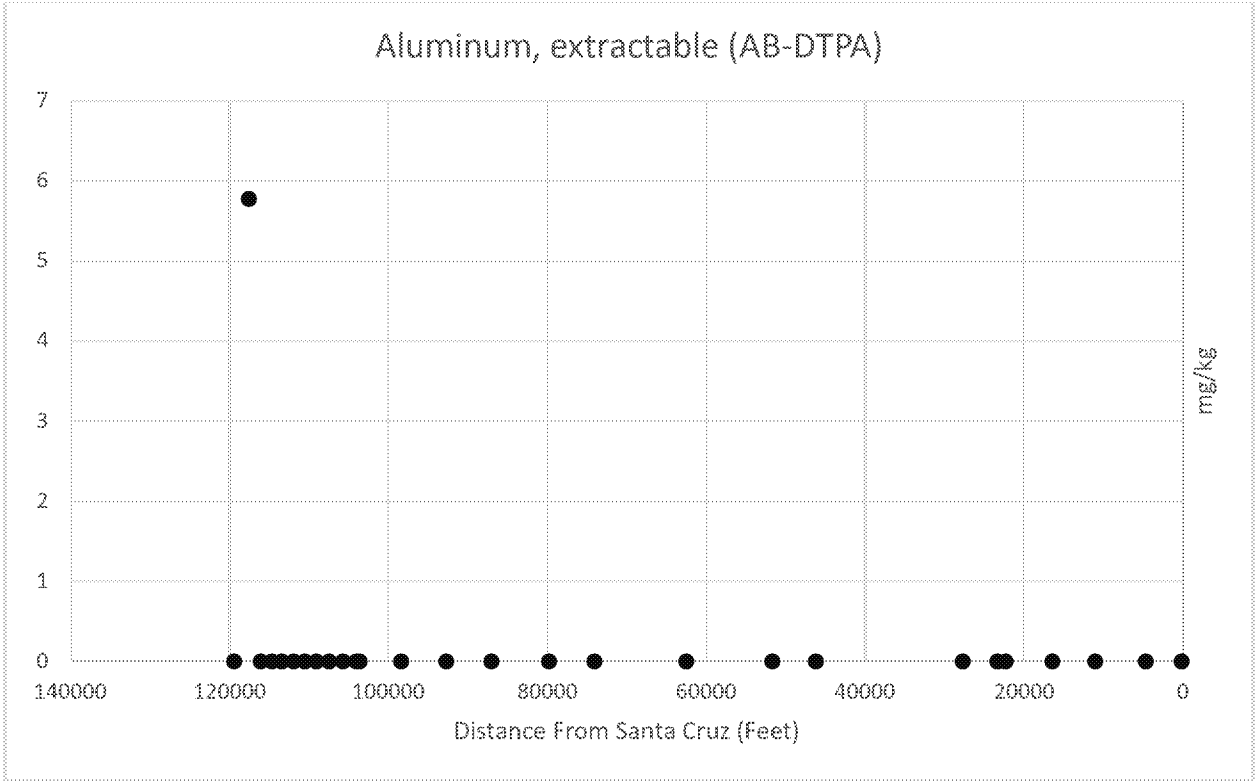

Nickel, total (3050)
Plant Extraction
3
2.5
2
1.5
1
0.5
0
120000
100000
80000
60000
40000
20000
0
(mg/kg)
Distance from Santa Cruz (feet)

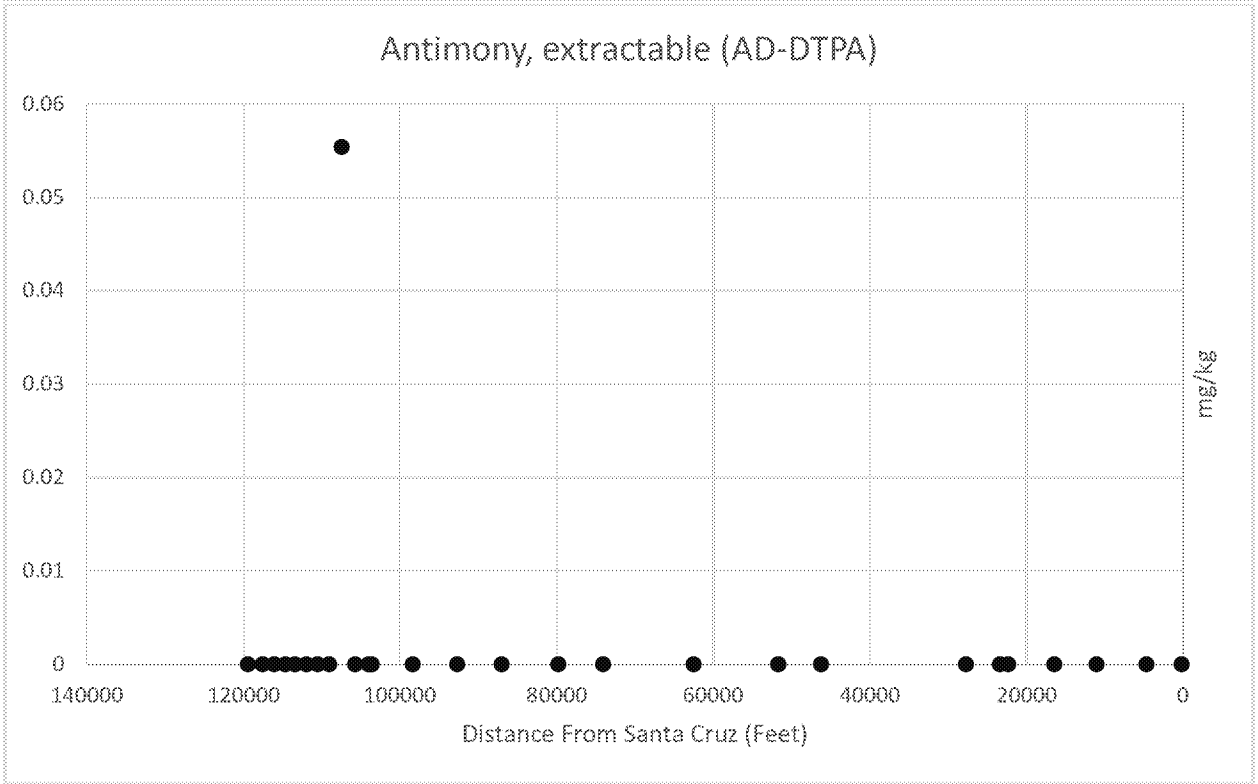

Selenium, total (3050)
Plant Extraction
2.5
2
1.5
1
0.5
0
120000
100000
80000
60000
40000
20000
0
(mg/kg)
Distance from Santa Cruz (feet)

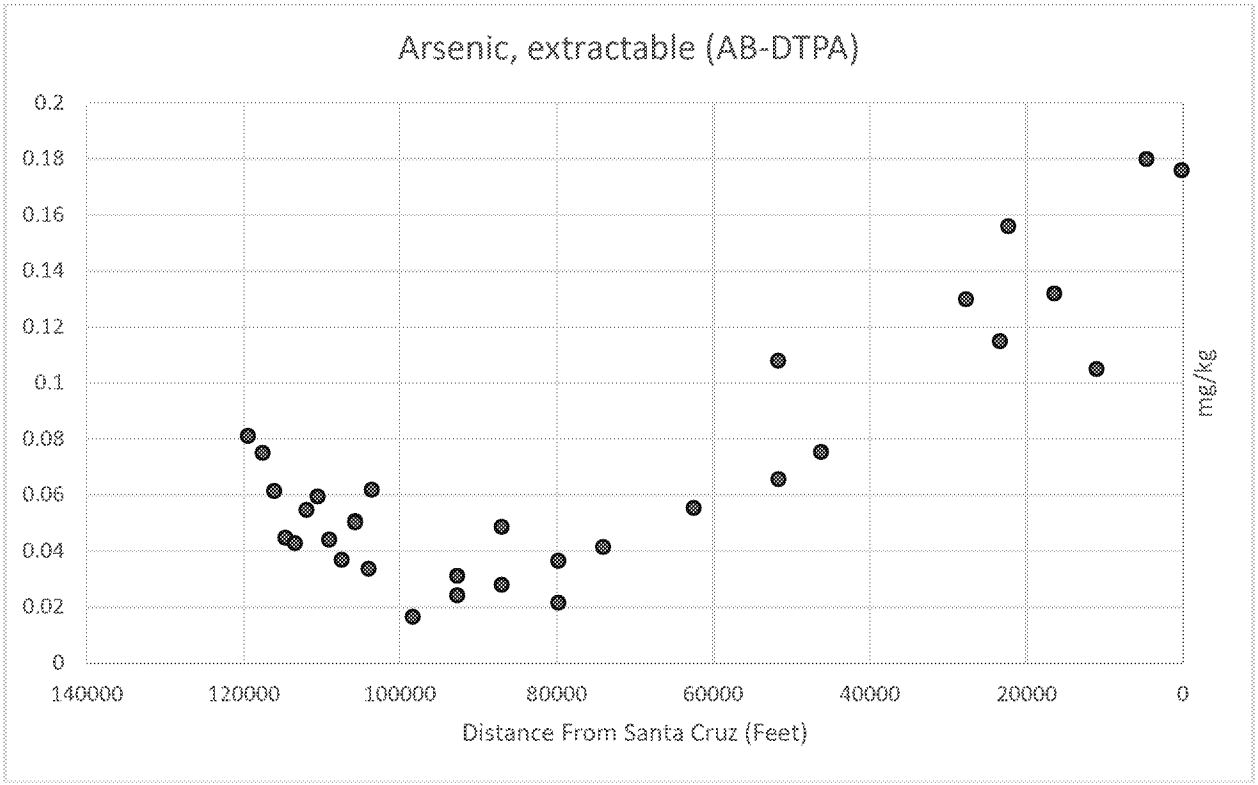

Zinc, total (3050)
Plant Extraction
120
100
80
60
40
20
0
120000
100000
80000
60000
40000
20000
0
(mg/kg)
Distance from Santa Cruz (feet)

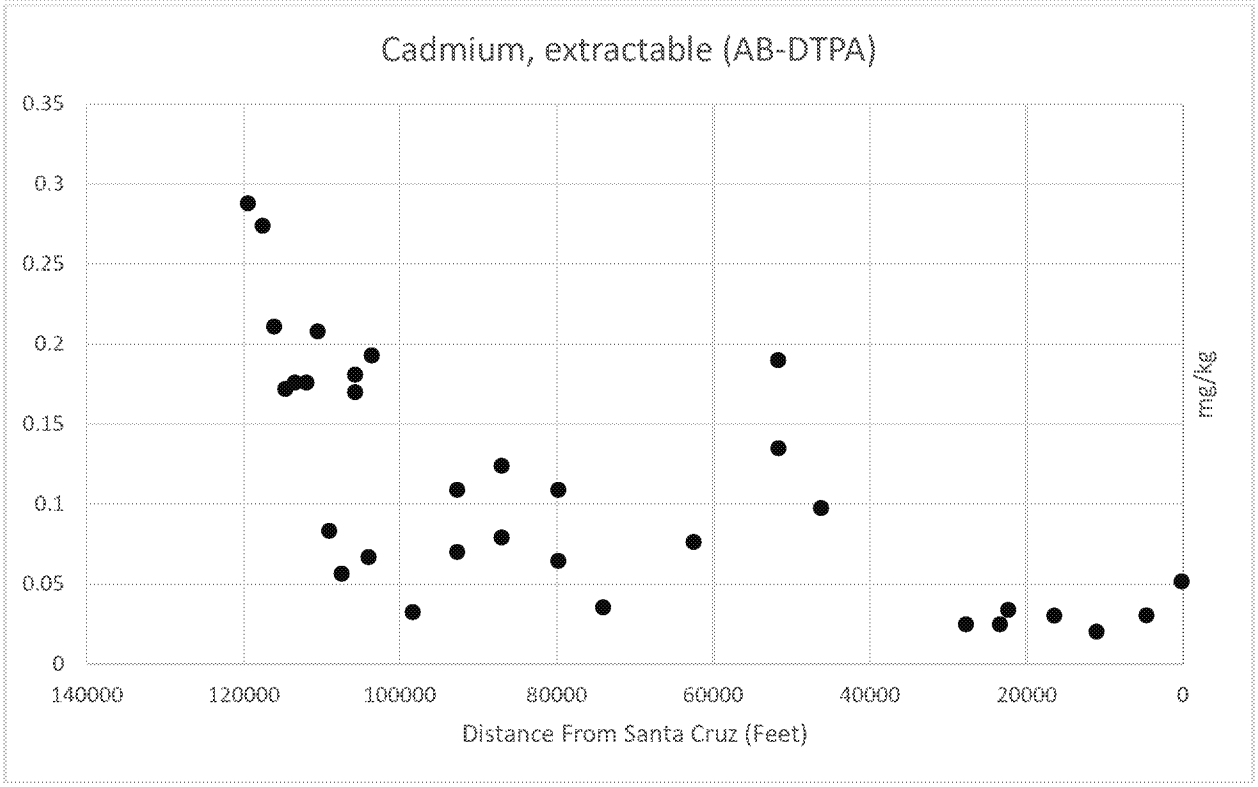
Soil Samples
Taken Under Tree
Graphs

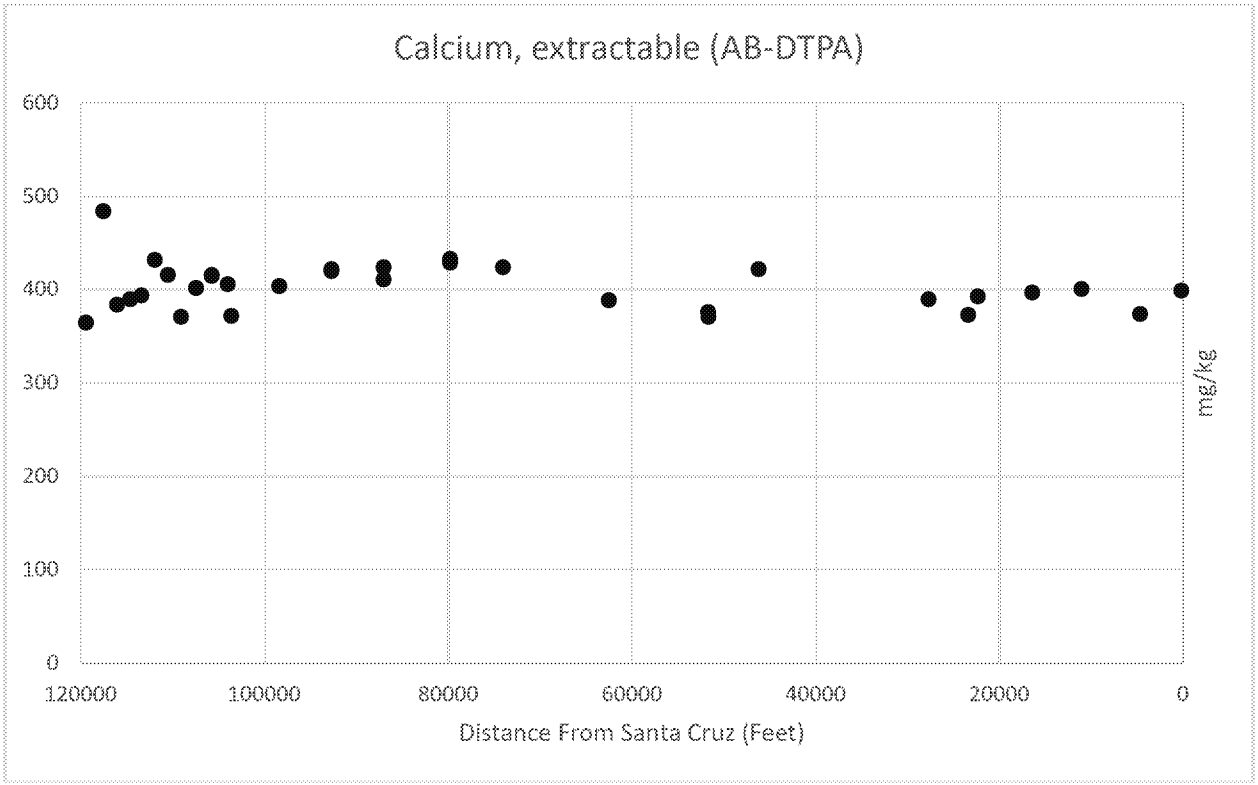
AB-DTPA (Plant Available)

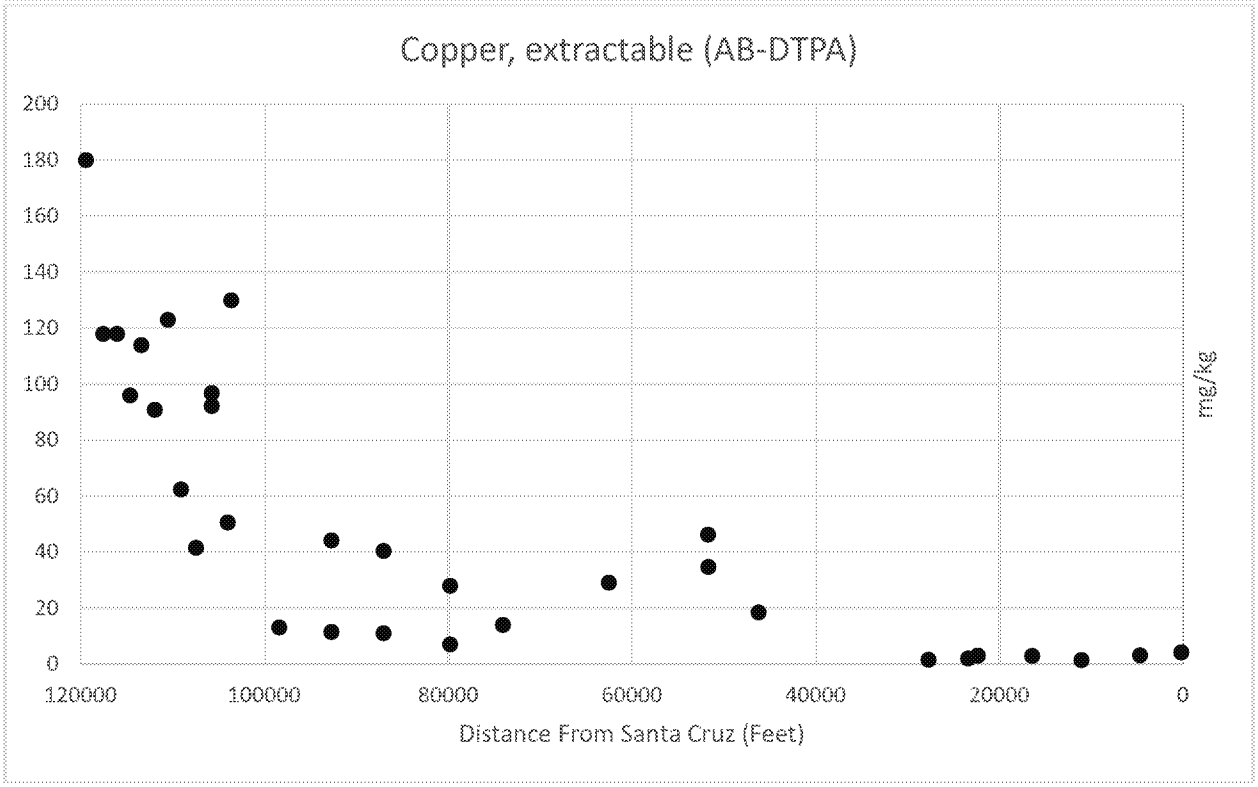


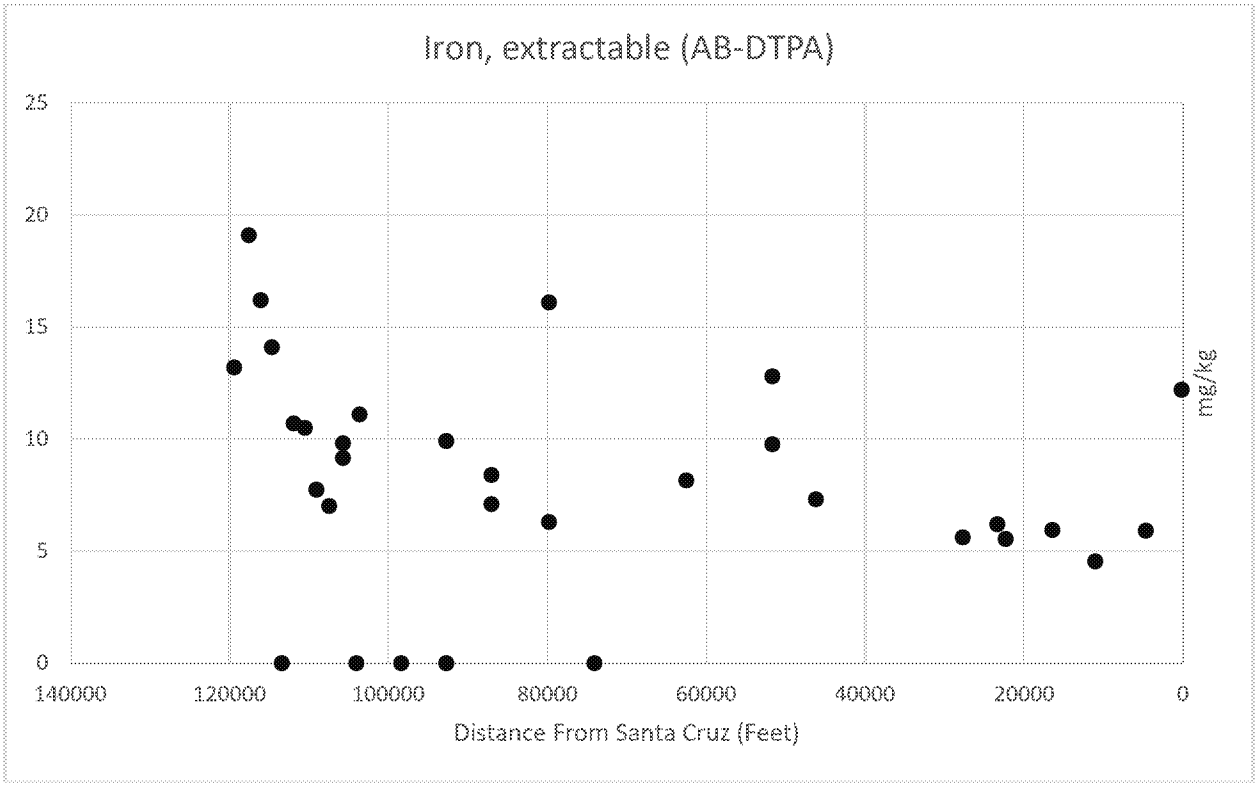


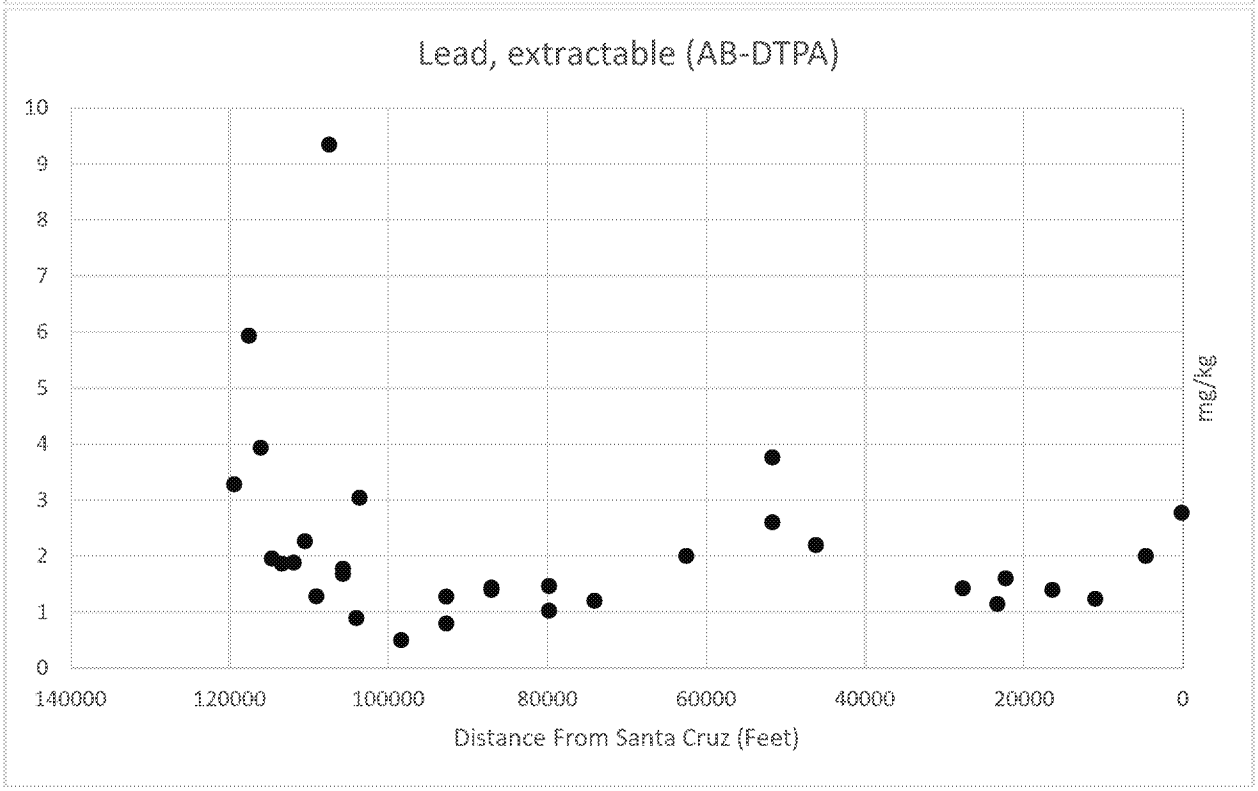

Arsenic, extractable (AB-DTPA)
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
140000
120000
100000
80000
60000
40000
20000
0
Distance From Santa Cruz (Feet)
mg/kg

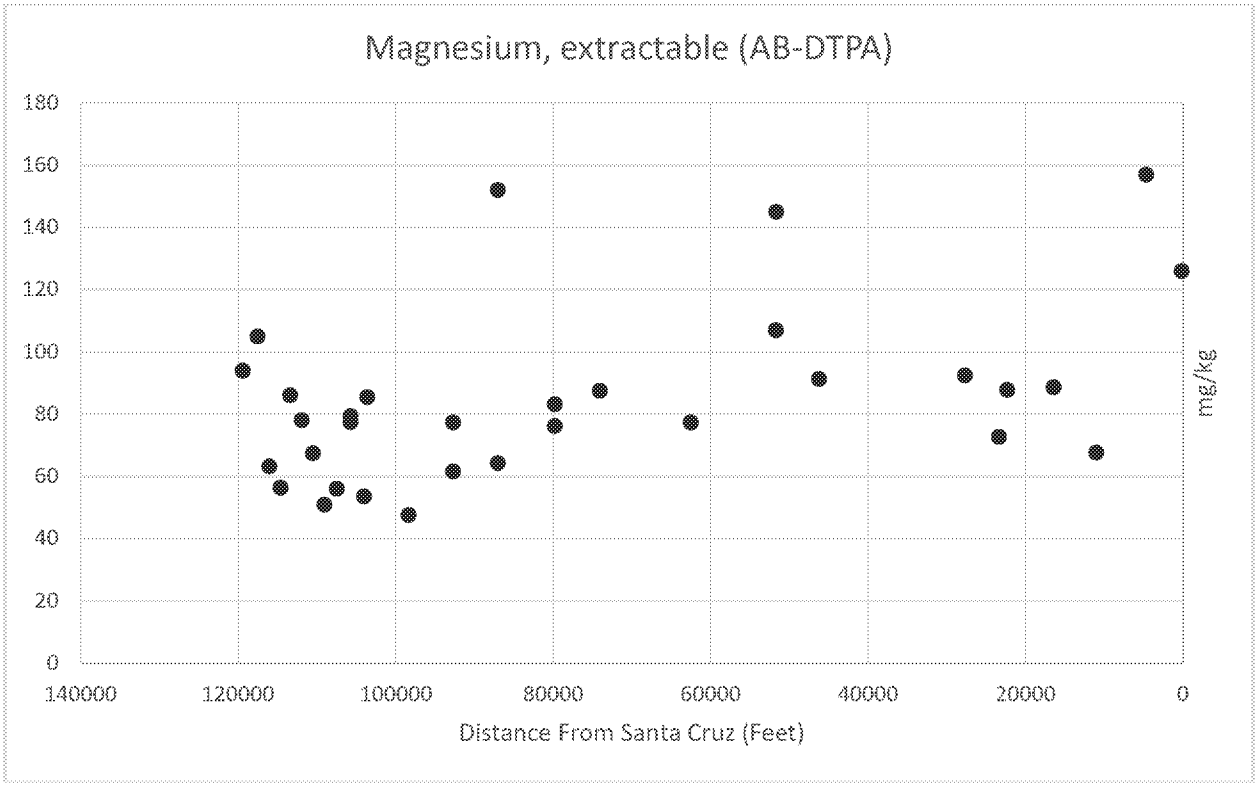

Cadmium, extractable (AB-DTPA)
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
140000
120000
100000
80000
60000
40000
20000
0
Distance From Santa Cruz (Feet)
mg/kg

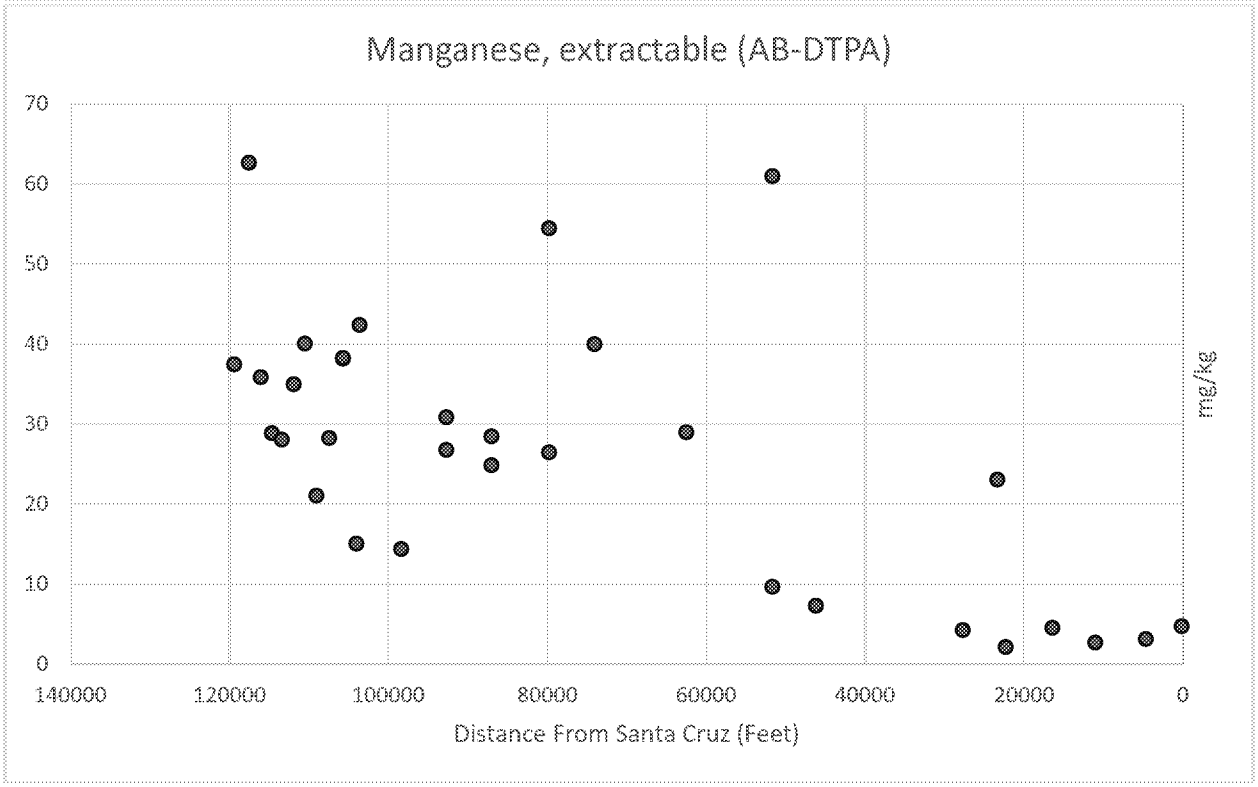

Calcium, extractable (AB-DTPA)
600
500
400
300
200
100
0
120000
100000
80000
60000
40000
20000
0
Distance From Santa Cruz (Feet)
mg/kg

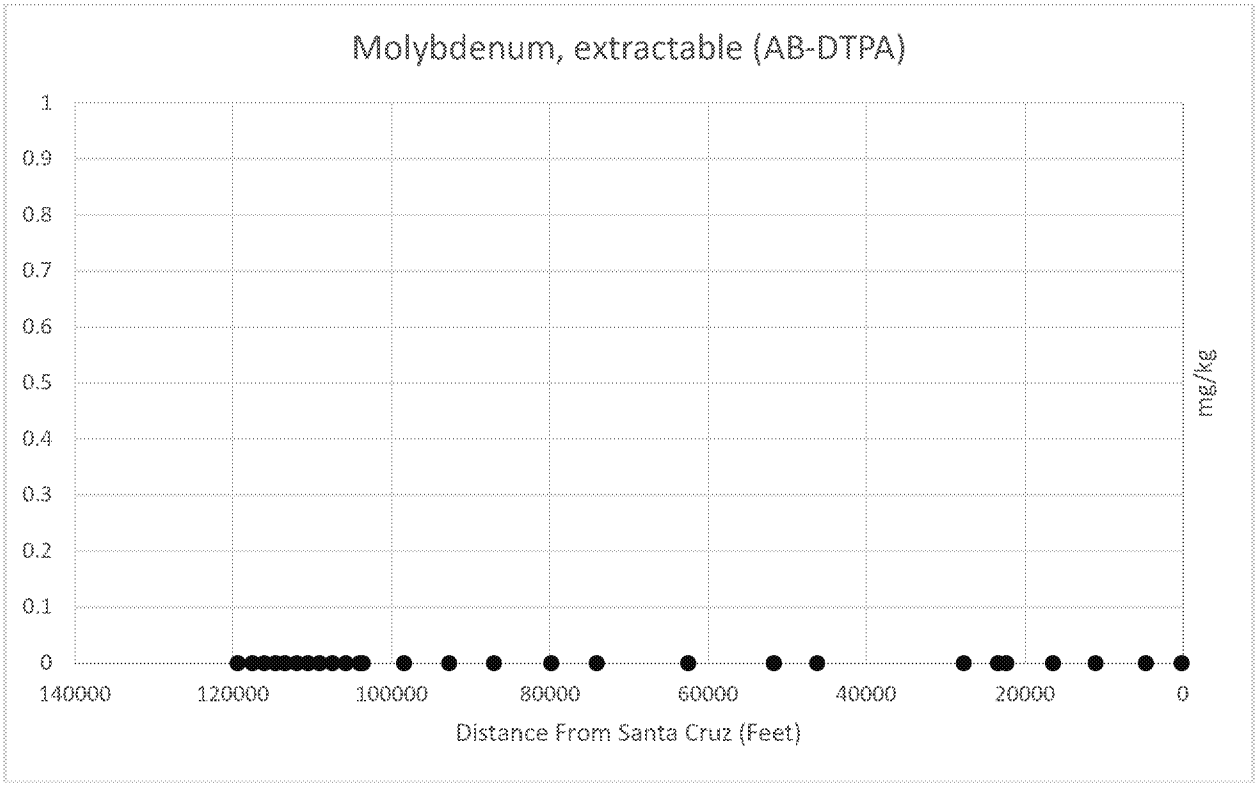

Copper, extractable (AB-DTPA)
200
180
160
140
120
100
80
60
40
20
0
120000
100000
80000
60000
40000
20000
0
Distance From Santa Cruz (Feet)
mg/kg

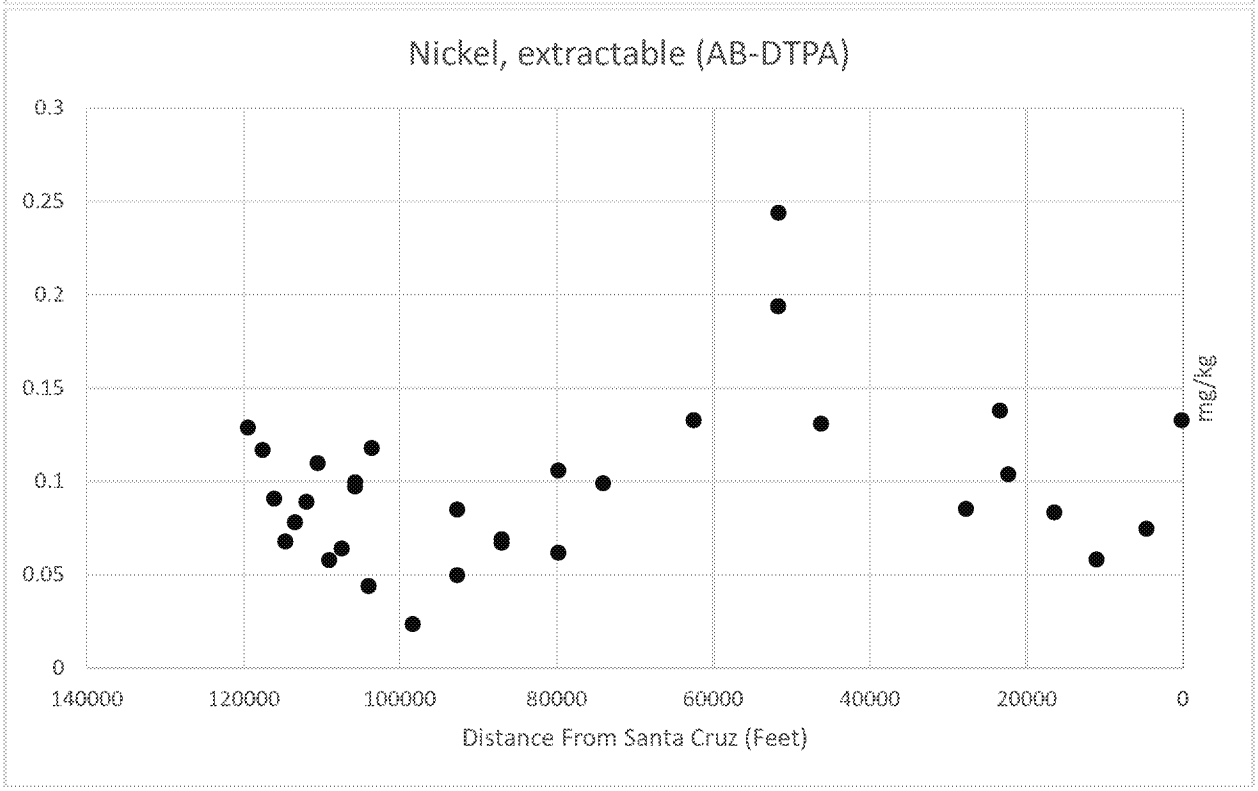

Iron, extractable (AB-DTPA)
25
20
15
10
5
0
140000
120000
100000
80000
60000
40000
20000
0
Distance From Santa Cruz (Feet)
mg/kg

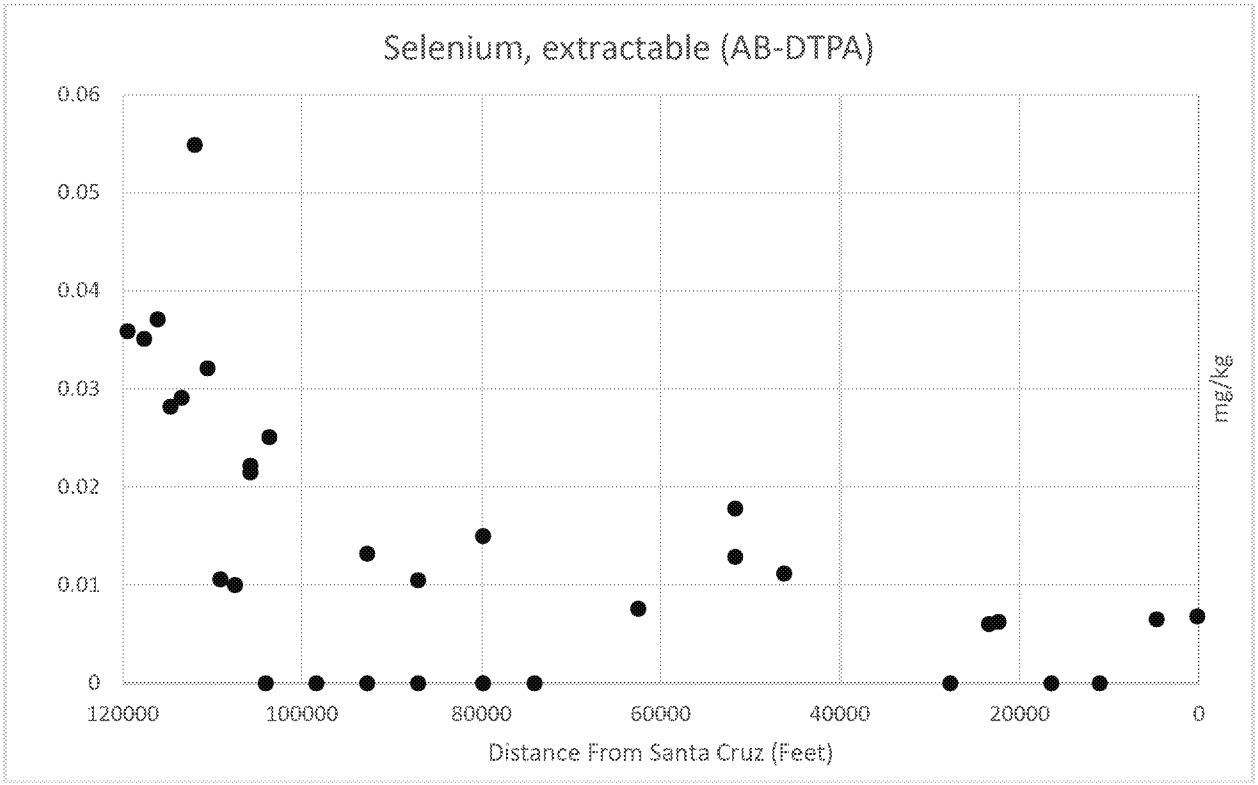

Lead, extractable (AB-DTPA)
10
9
8
7
6
5
4
3
2
1
0
140000
120000
100000
80000
60000
40000
20000
0
Distance From Santa Cruz (Feet)
mg/kg

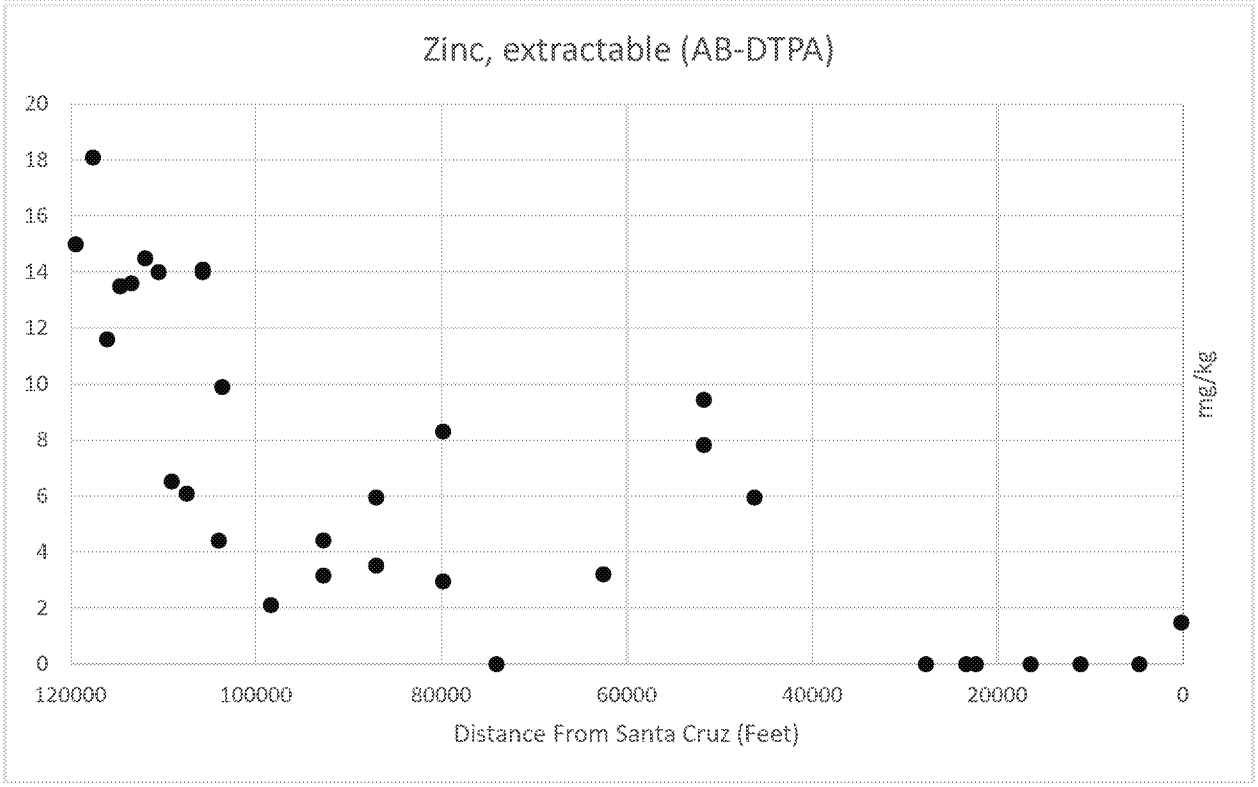

Magnesium, extractable (AB-DTPA)
180
160
140
120
100
80
60
40
20
0
140000
120000
100000
80000
60000
40000
20000
0
Distance From Santa Cruz (Feet)
mg/kg


Manganese, extractable (AB-DTPA)
70
60
50
40
30
20
10
0
140000
120000
100000
80000
60000
40000
20000
0
Distance From Santa Cruz (Feet)
mg/kg

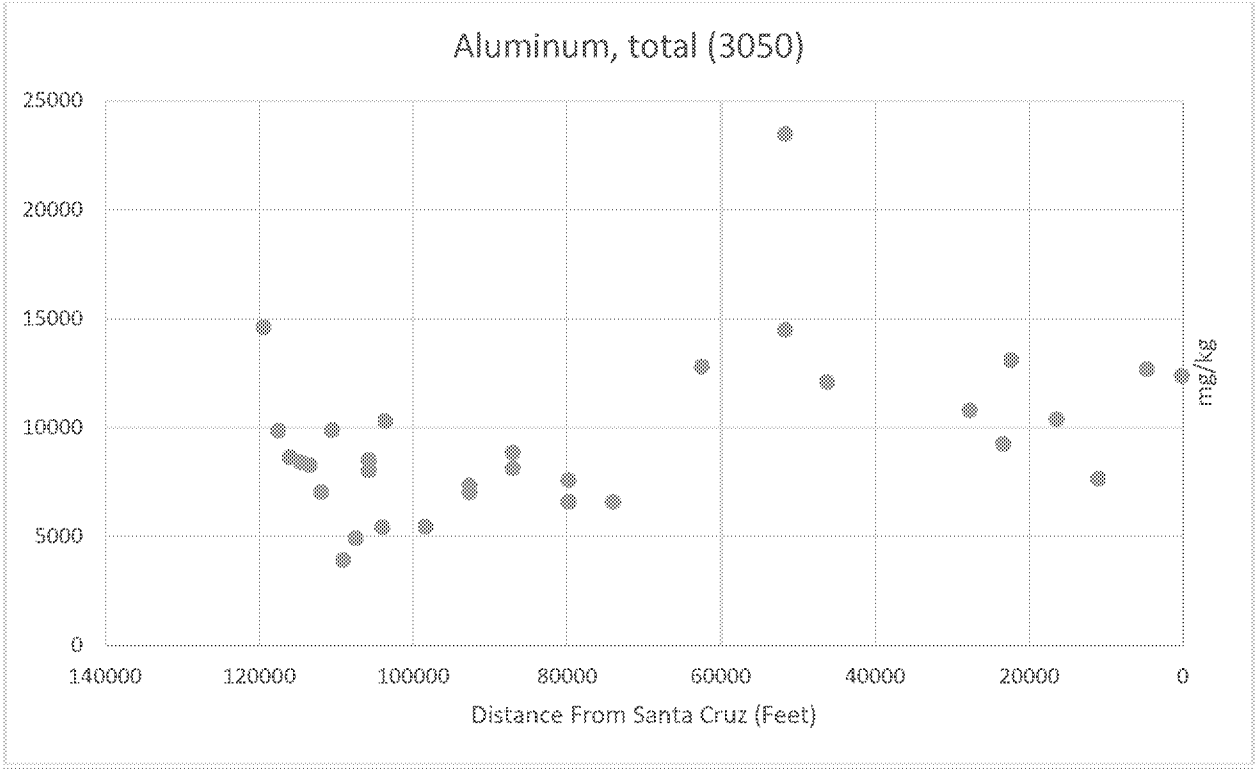

Molybdenum, extractable (AB-DTPA)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
mg/kg
140000
120000
100000
80000
60000
40000
20000
0
Distance From Santa Cruz (Feet)

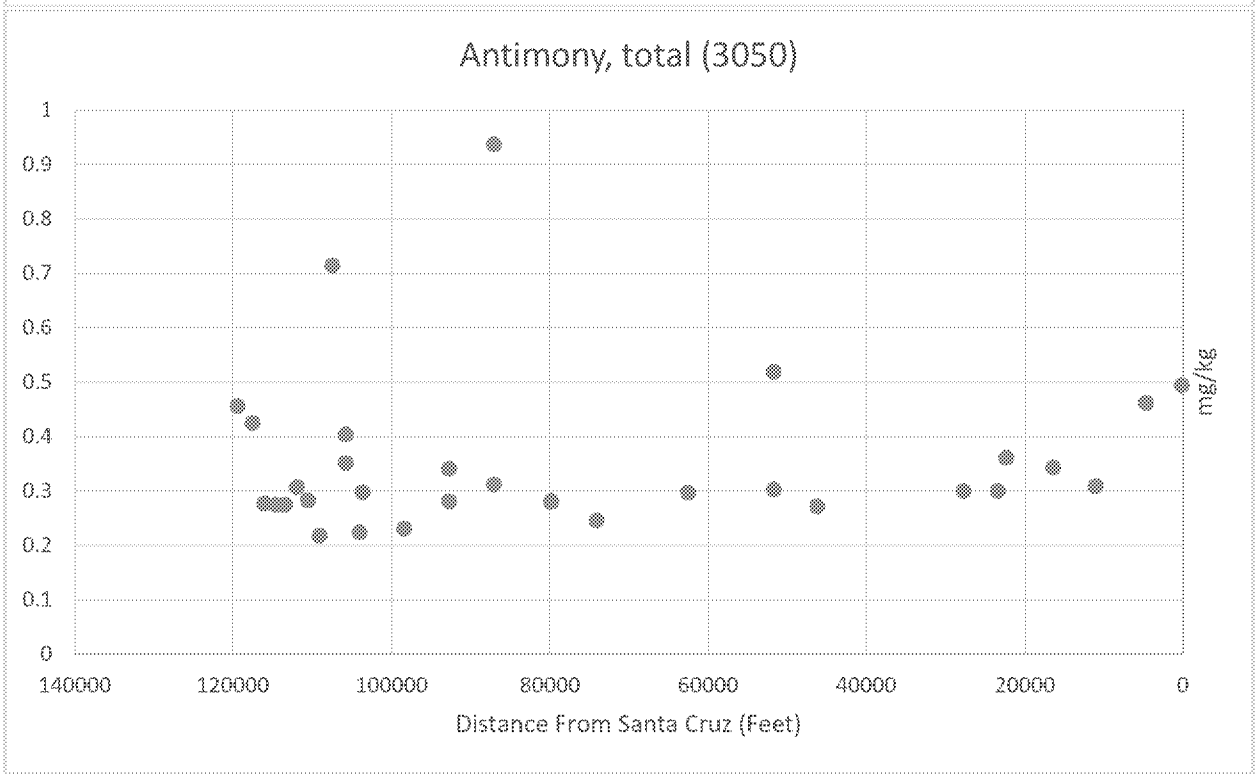

Nickel, extractable (AB-DTPA)
0.3
0.25
0.2
0.15
0.1
0.05
0
mg/kg
140000
120000
100000
80000
60000
40000
20000
0
Distance From Santa Cruz (Feet)

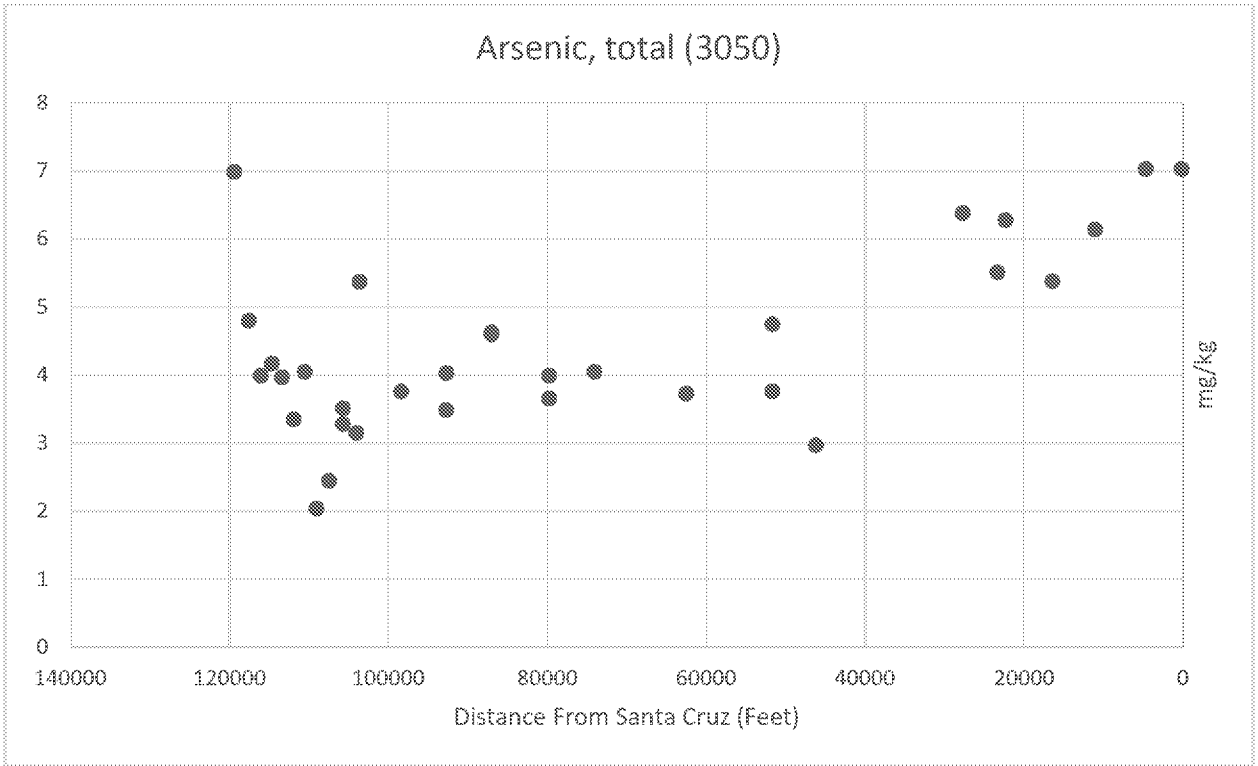

Selenium, extractable (AB-DTPA)
0.06
0.05
0.04
0.03
0.02
0.01
0
120000
100000
80000
60000
40000
20000
0
Distance From Santa Cruz (Feet)
mg/kg

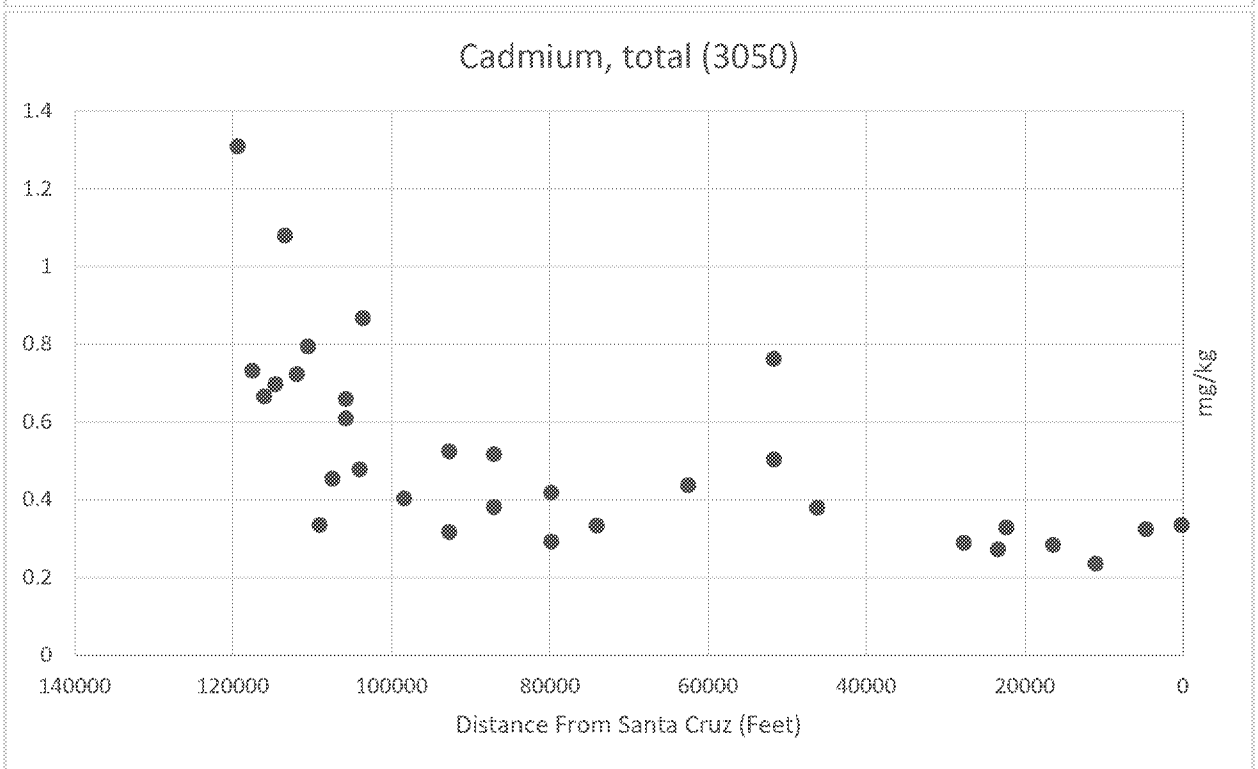

Zinc, extractable (AB-DTPA)
20
18
16
14
12
10
8
6
4
2
0
120000
100000
80000
60000
40000
20000
0
Distance From Santa Cruz (Feet)
mg/kg

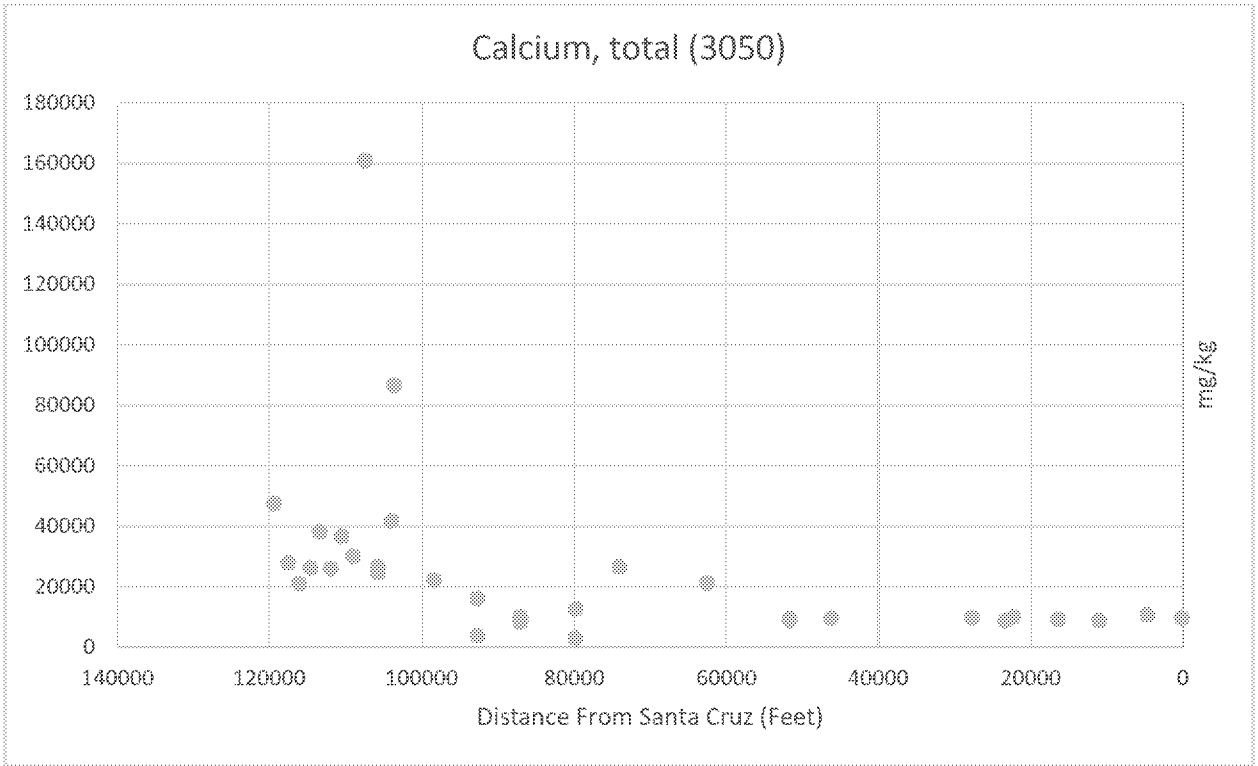
Total Digestion (Method 3050)

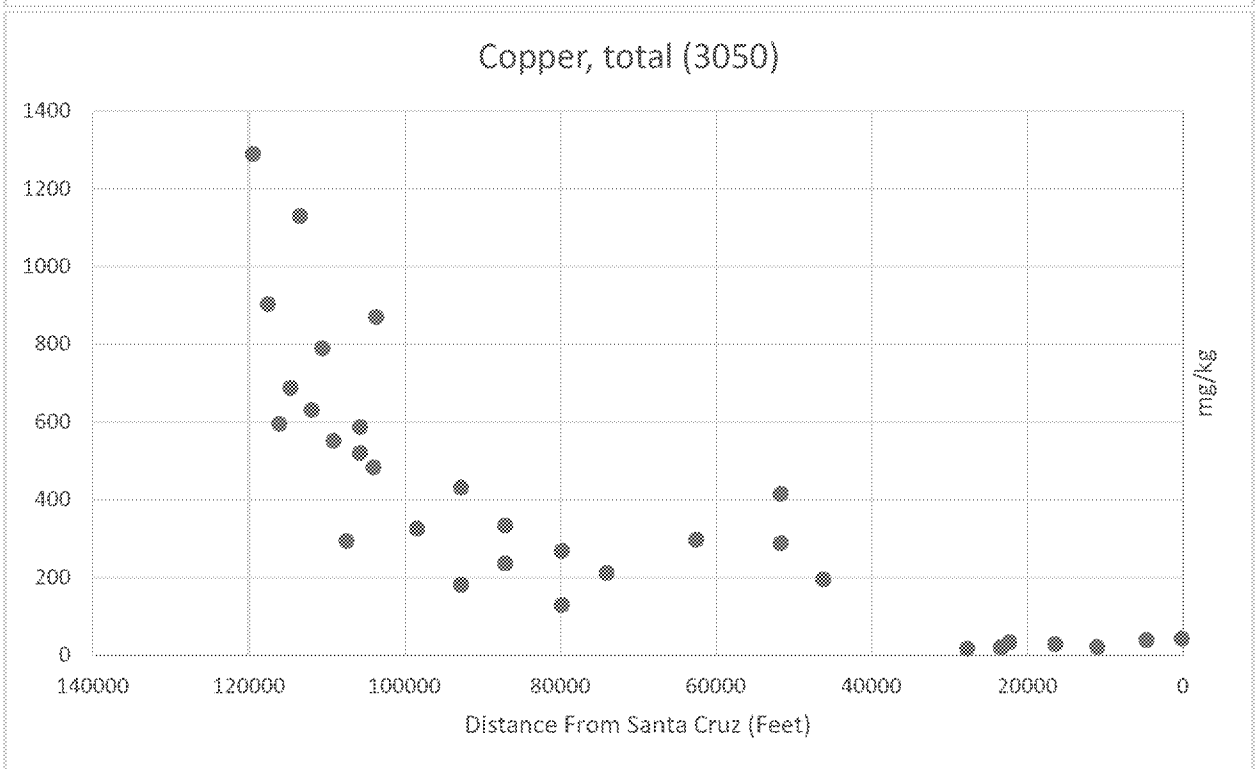


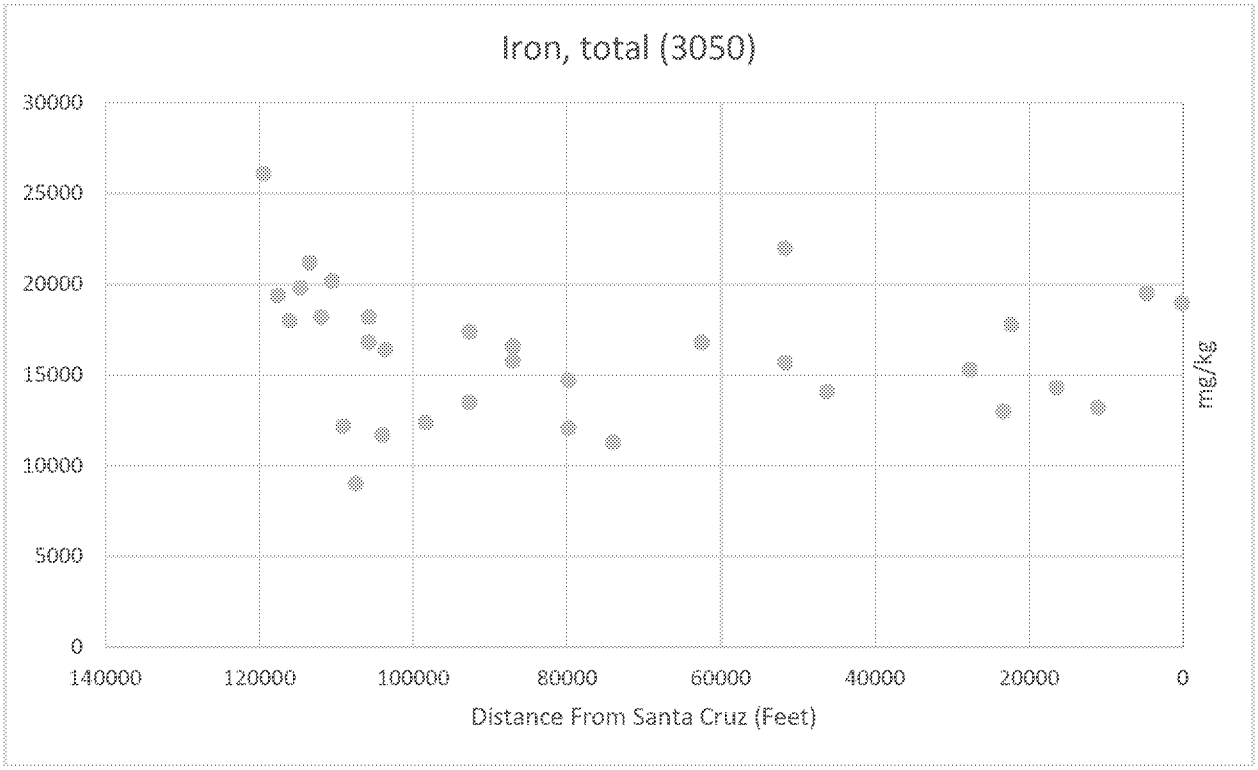


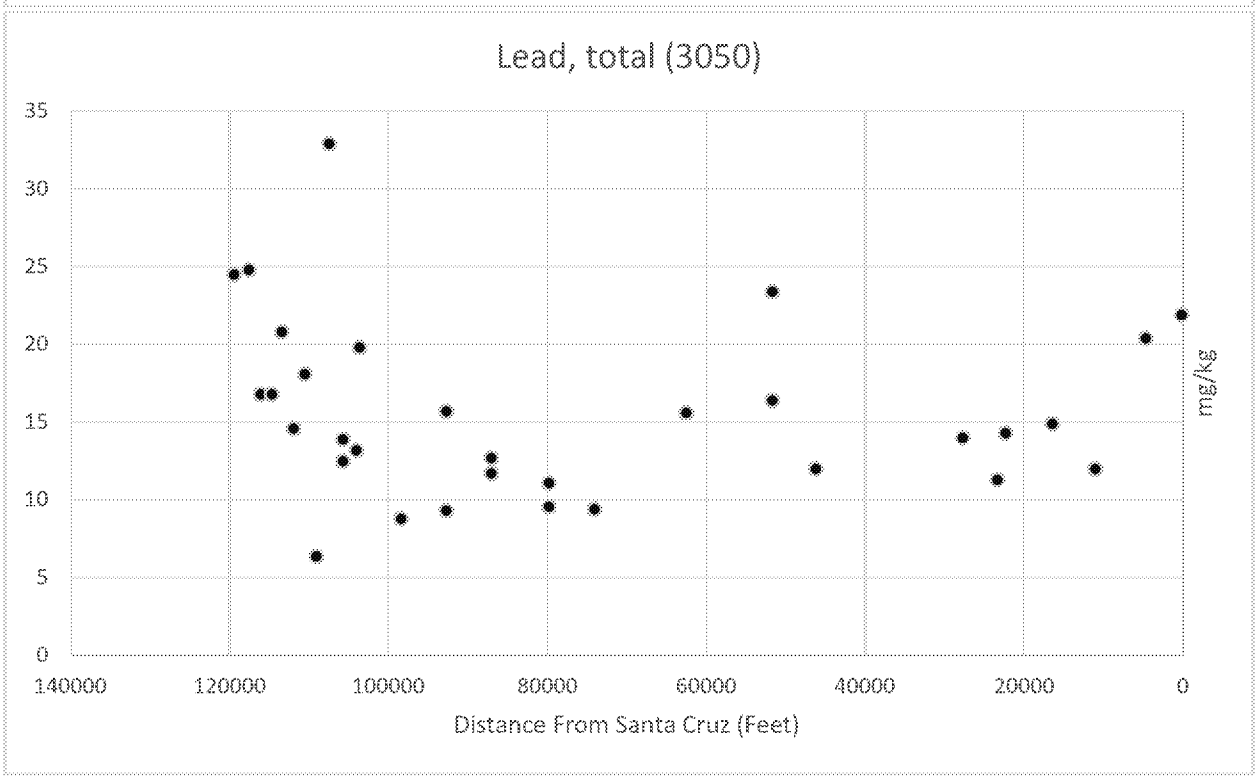

Arsenic, total (3050)
8
7
6
5
4
3
2
1
0
140000
120000
100000
80000
60000
40000
20000
0
Distance From Santa Cruz (Feet)
mg/kg

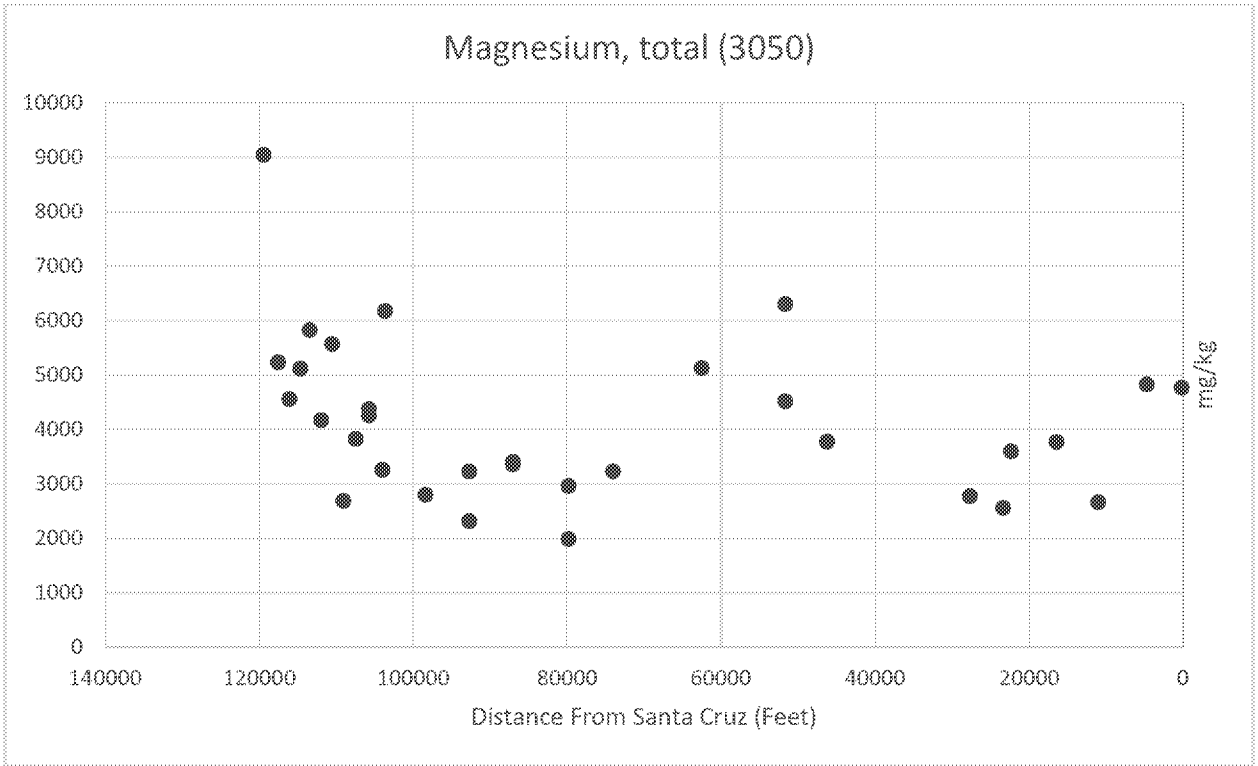

Cadmium, total (3050)
1.4
1.2
1
0.8
0.6
0.4
0.2
0
140000
120000
100000
80000
60000
40000
20000
0
Distance From Santa Cruz (Feet)
mg/kg

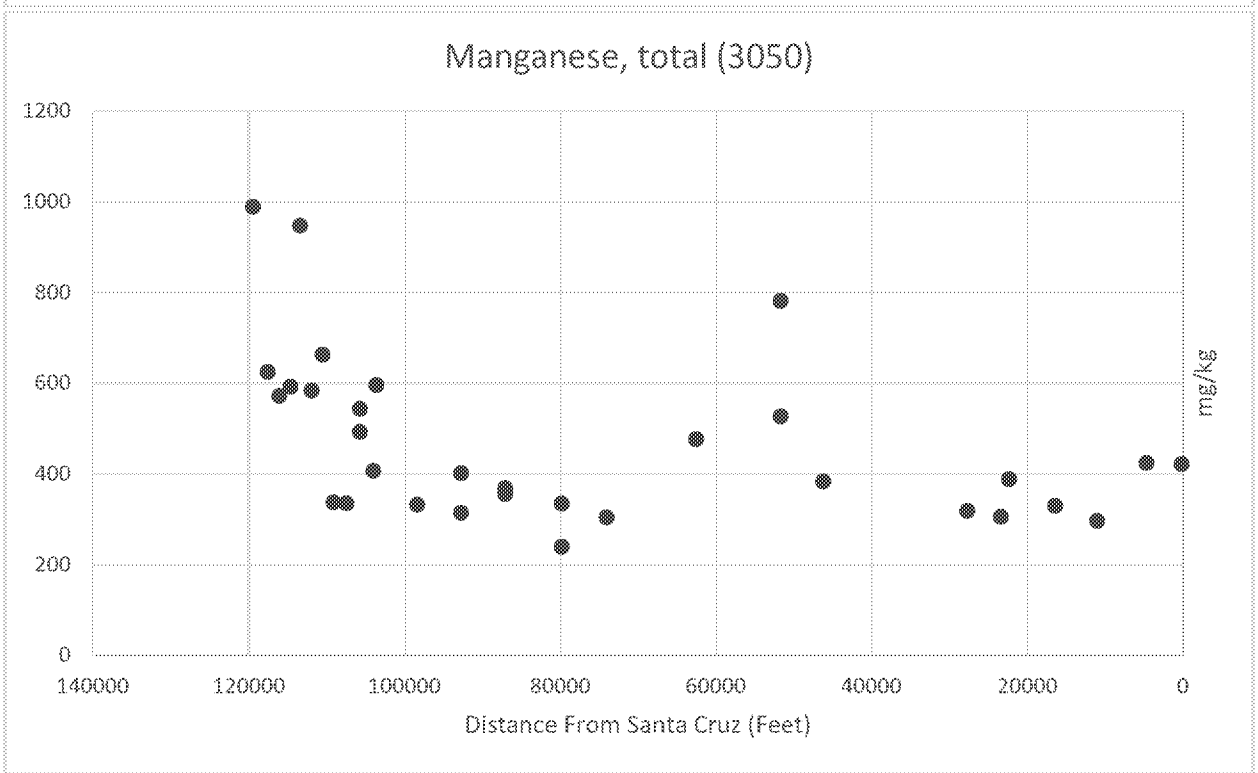

Calcium, total (3050)
180000
160000
140000
120000
100000
80000
60000
40000
20000
0
mg/kg
140000
120000
100000
80000
60000
40000
20000
0
Distance From Santa Cruz (Feet)

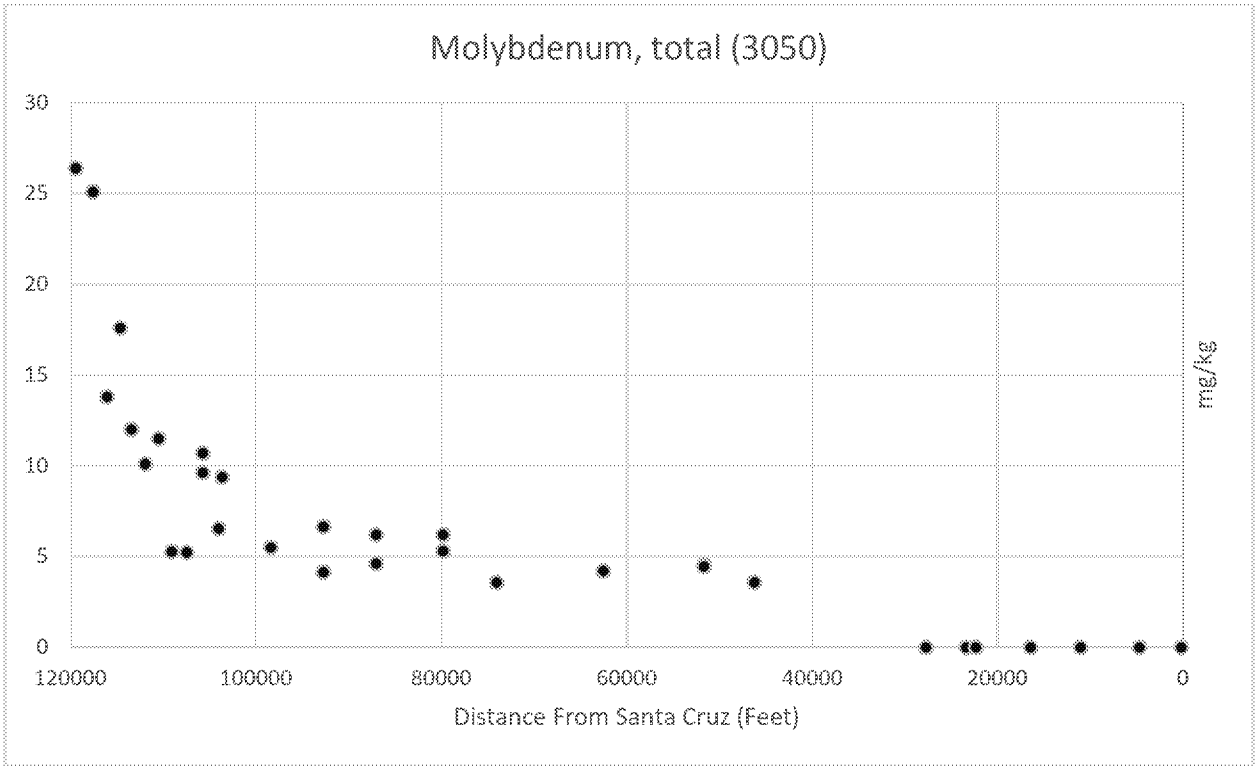

Copper, total (3050)
1400
1200
1000
800
600
400
200
0
mg/kg
140000
120000
100000
80000
60000
40000
20000
0
Distance From Santa Cruz (Feet)

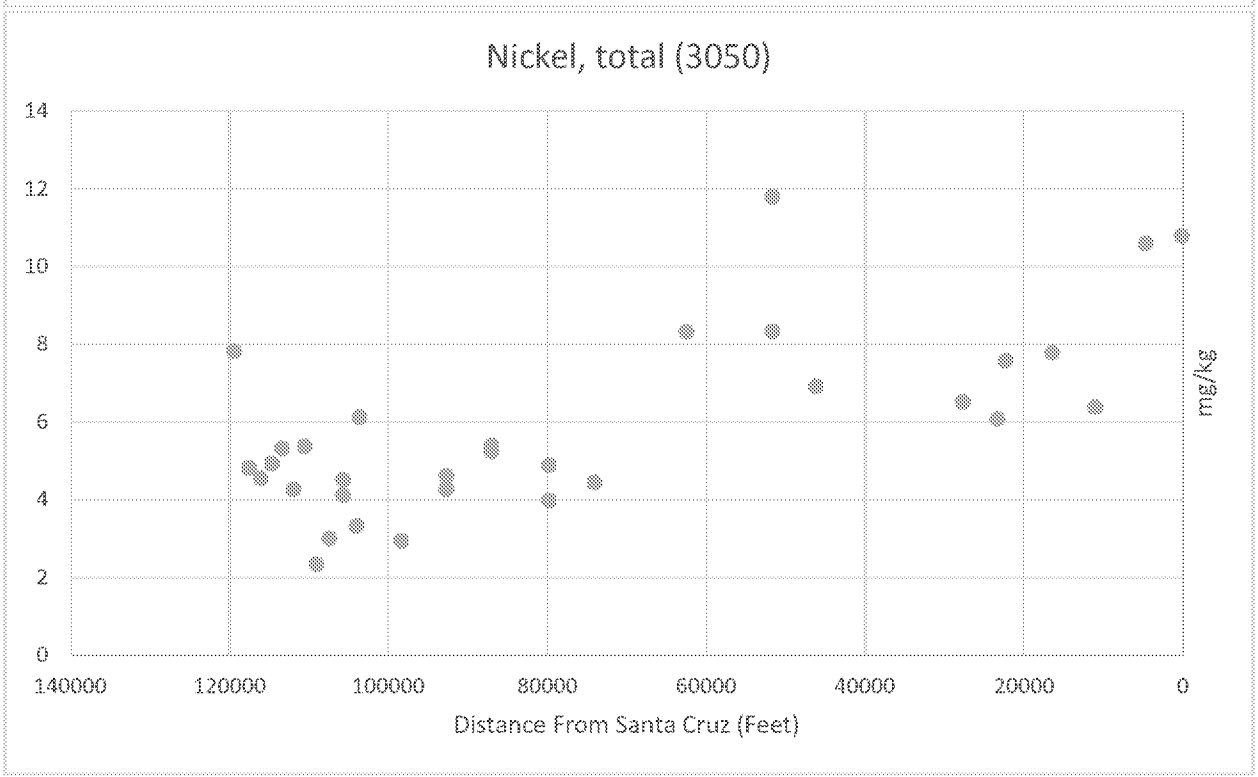

Iron, total (3050)
30000
25000
20000
15000
10000
5000
0
140000
120000
100000
80000
60000
40000
20000
0
Distance From Santa Cruz (Feet)
mg/kg

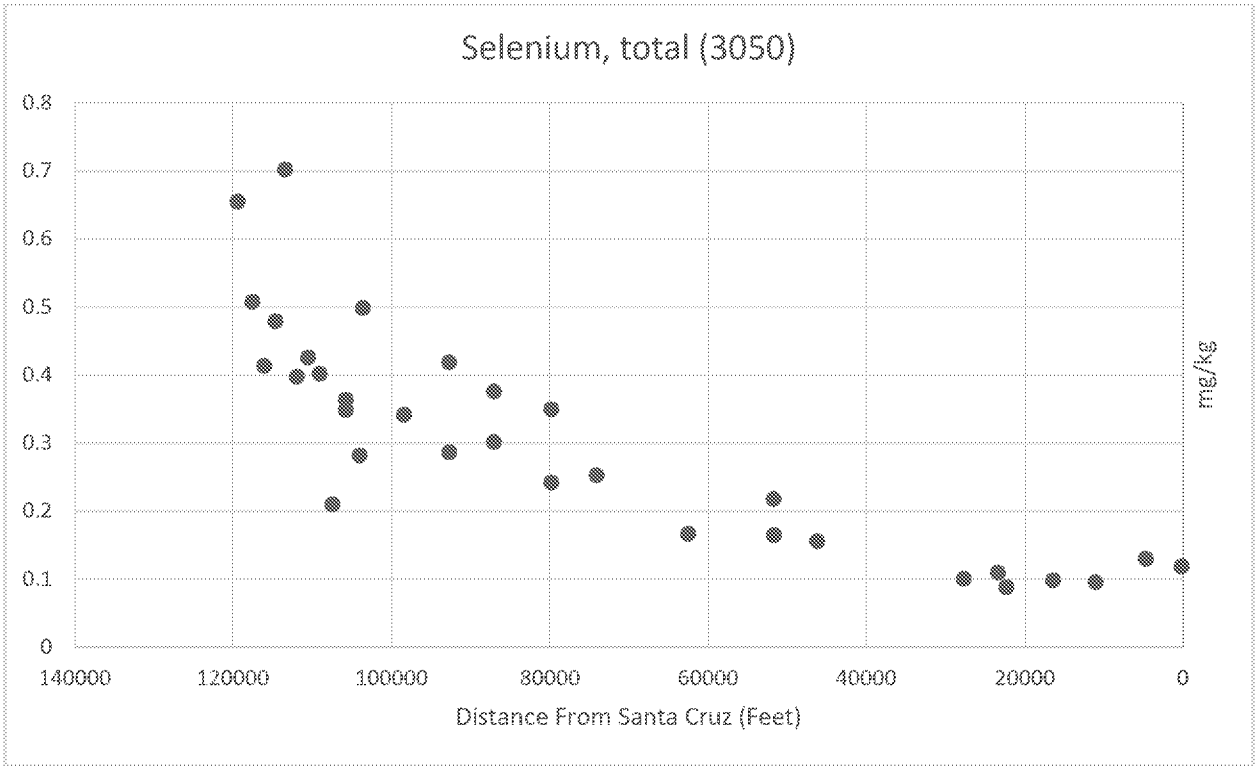

Lead, total (3050)
35
30
25
20
15
10
5
0
140000
120000
100000
80000
60000
40000
20000
0
Distance From Santa Cruz (Feet)
mg/kg

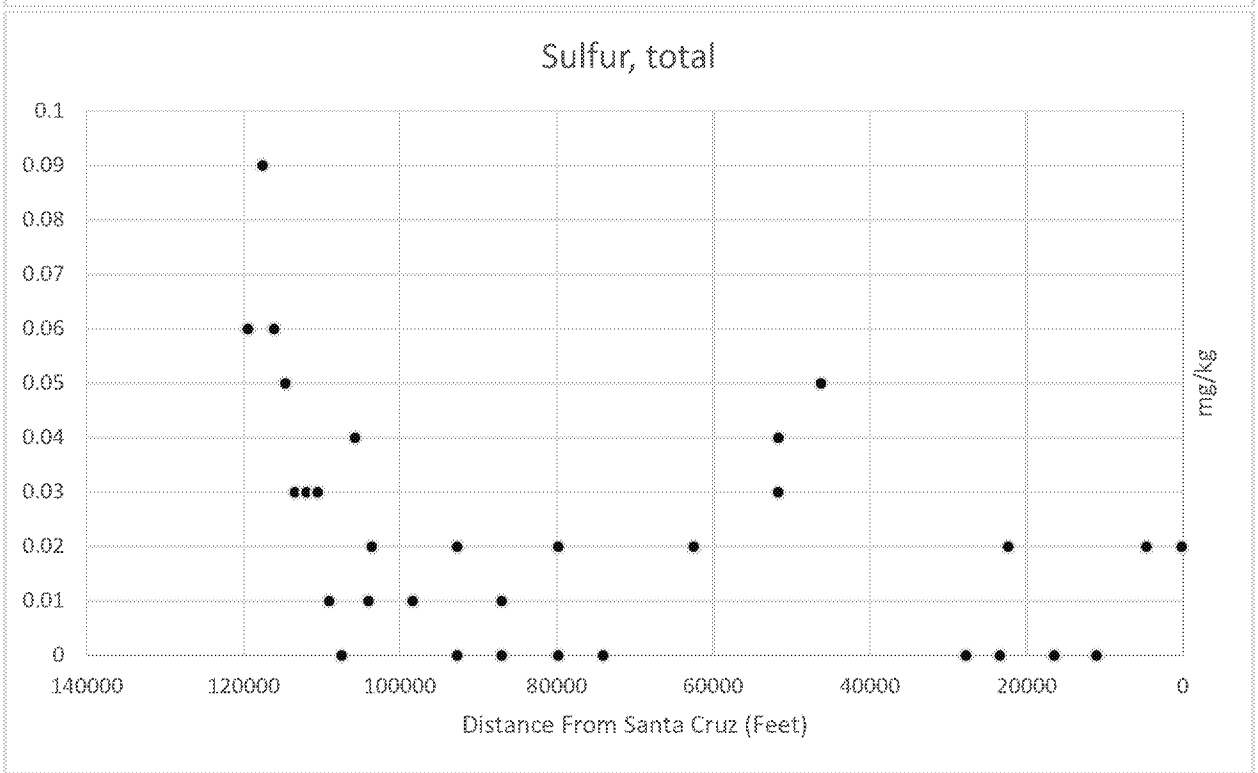

Magnesium, total (3050)
10000
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
140000
120000
100000
80000
60000
40000
20000
0
Distance From Santa Cruz (Feet)
mg/kg

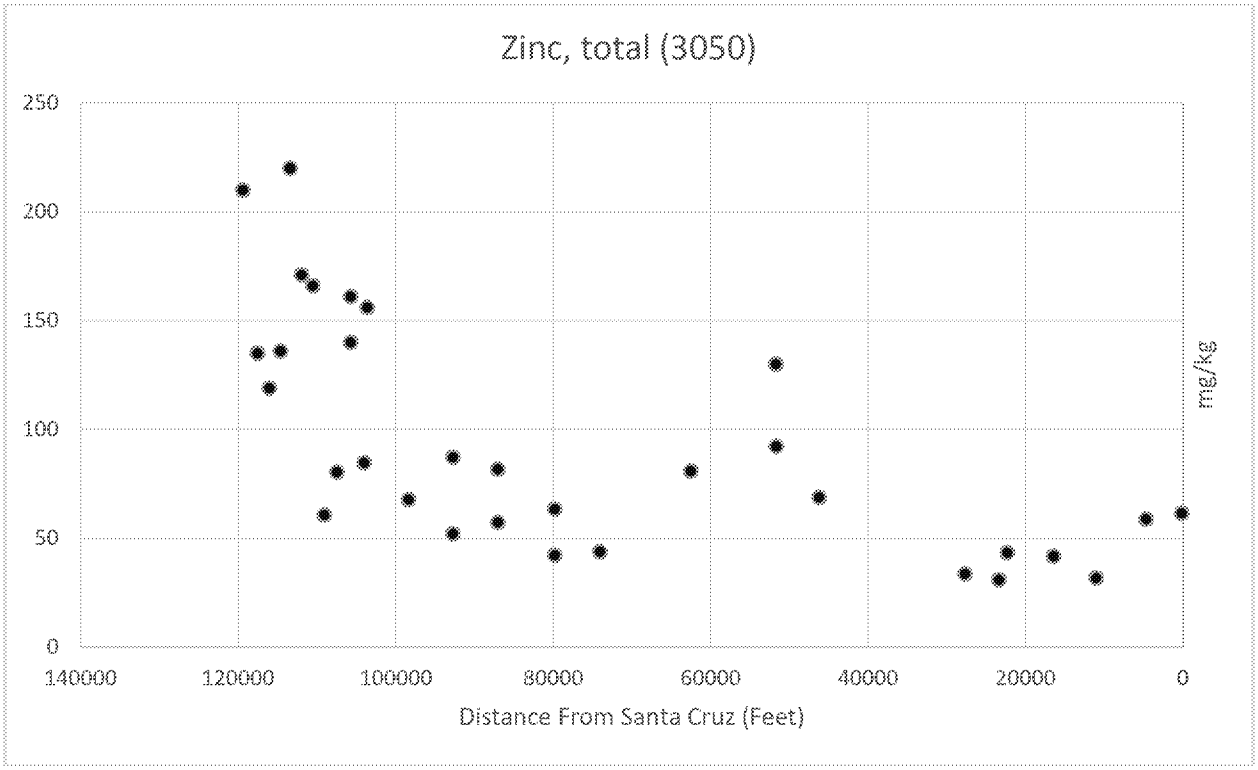

Manganese, total (3050)
1200
1000
800
600
400
200
0
140000
120000
100000
80000
60000
40000
20000
0
Distance From Santa Cruz (Feet)
mg/kg


Molybdenum, total (3050)
30
25
20
15
10
5
0
120000
100000
80000
60000
40000
20000
0
Distance From Santa Cruz (Feet)
mg/kg

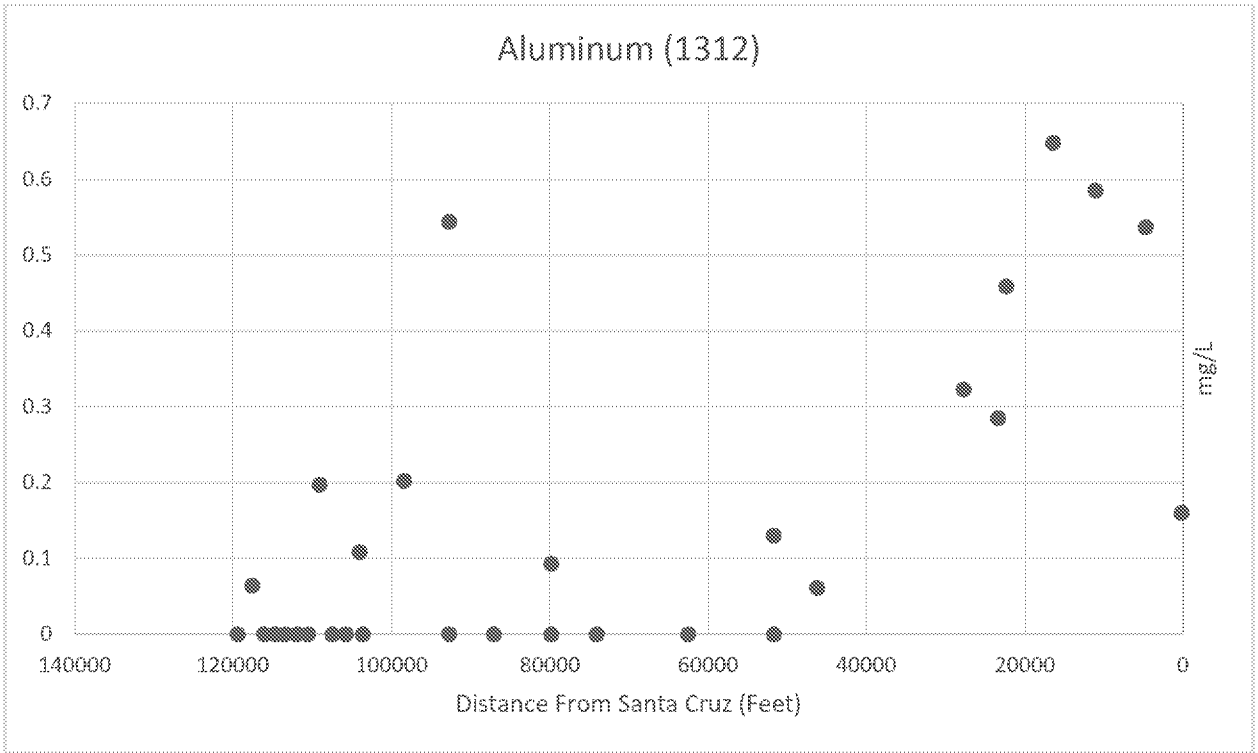

Nickel, total (3050)
14
12
10
8
6
4
2
0
140000
120000
100000
80000
60000
40000
20000
0
Distance From Santa Cruz (Feet)
mg/kg

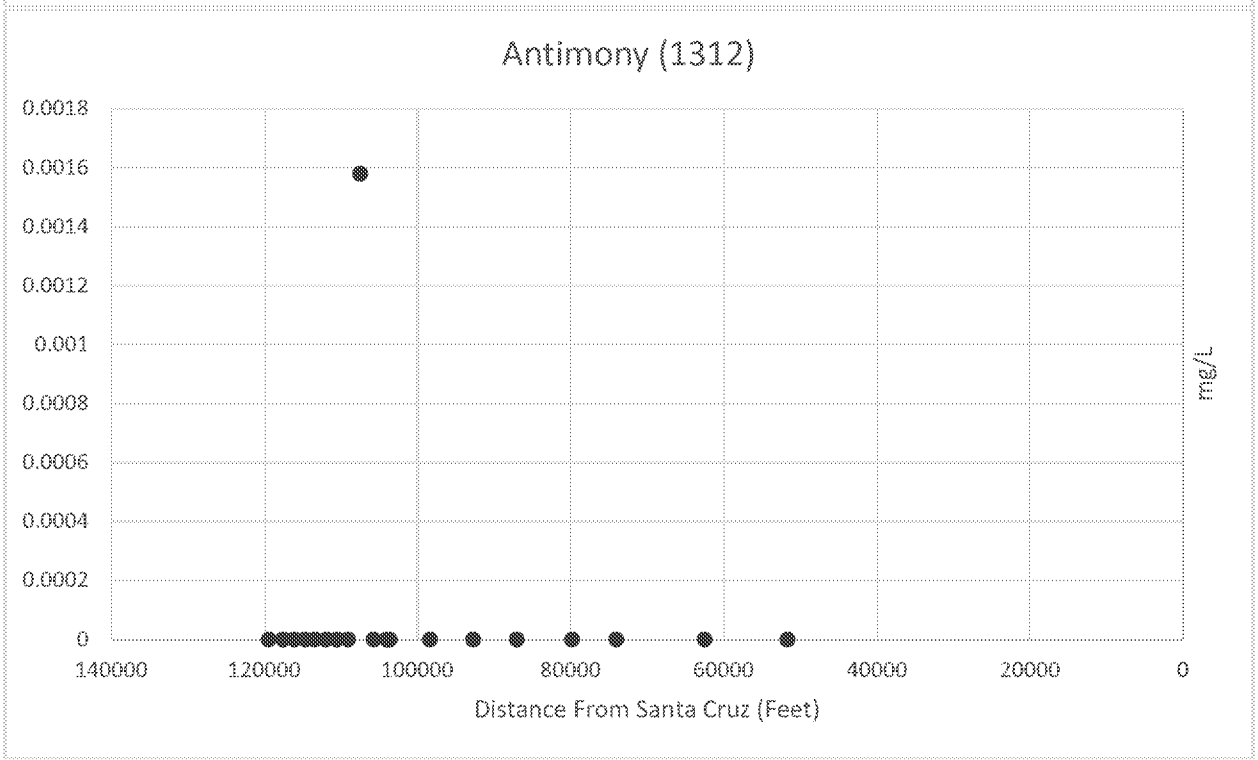

Selenium, total (3050)
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
140000
120000
100000
80000
60000
40000
20000
0
Distance From Santa Cruz (Feet)
mg/kg

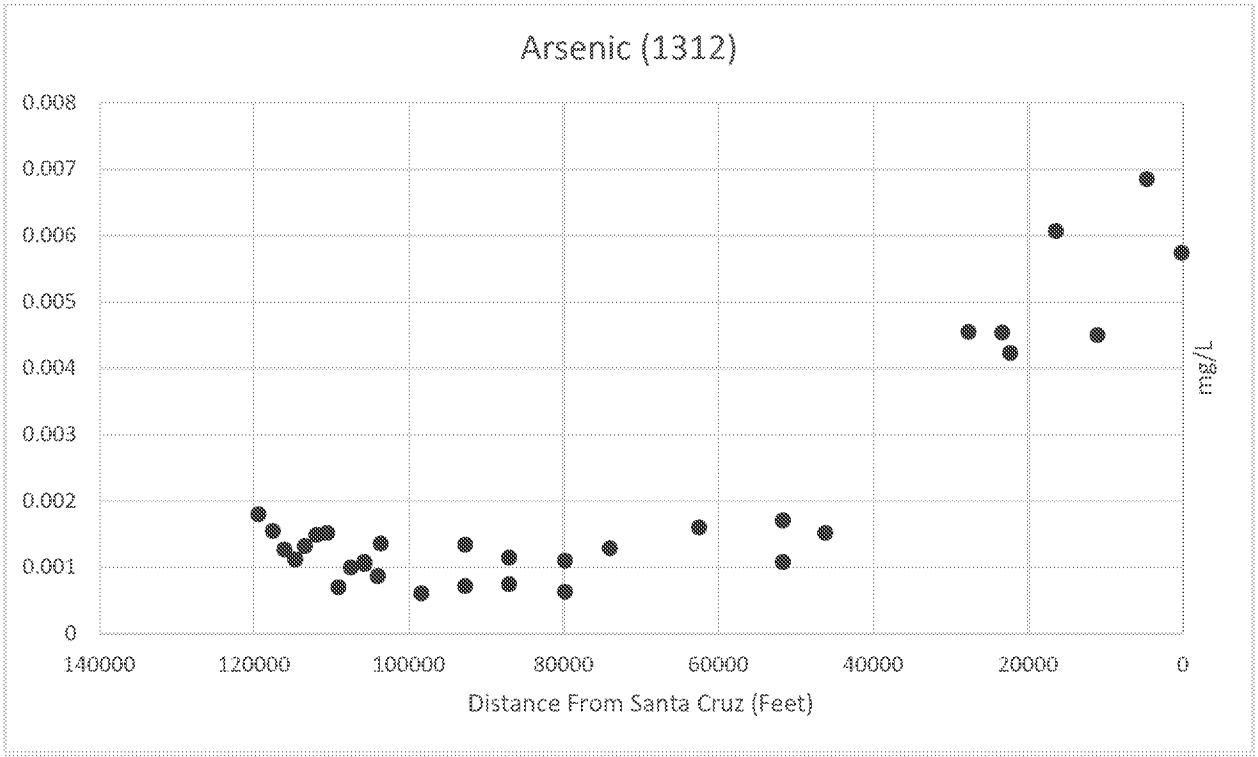

Sulfur, total
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
140000
120000
100000
80000
60000
40000
20000
0
Distance From Santa Cruz (Feet)
mg/kg

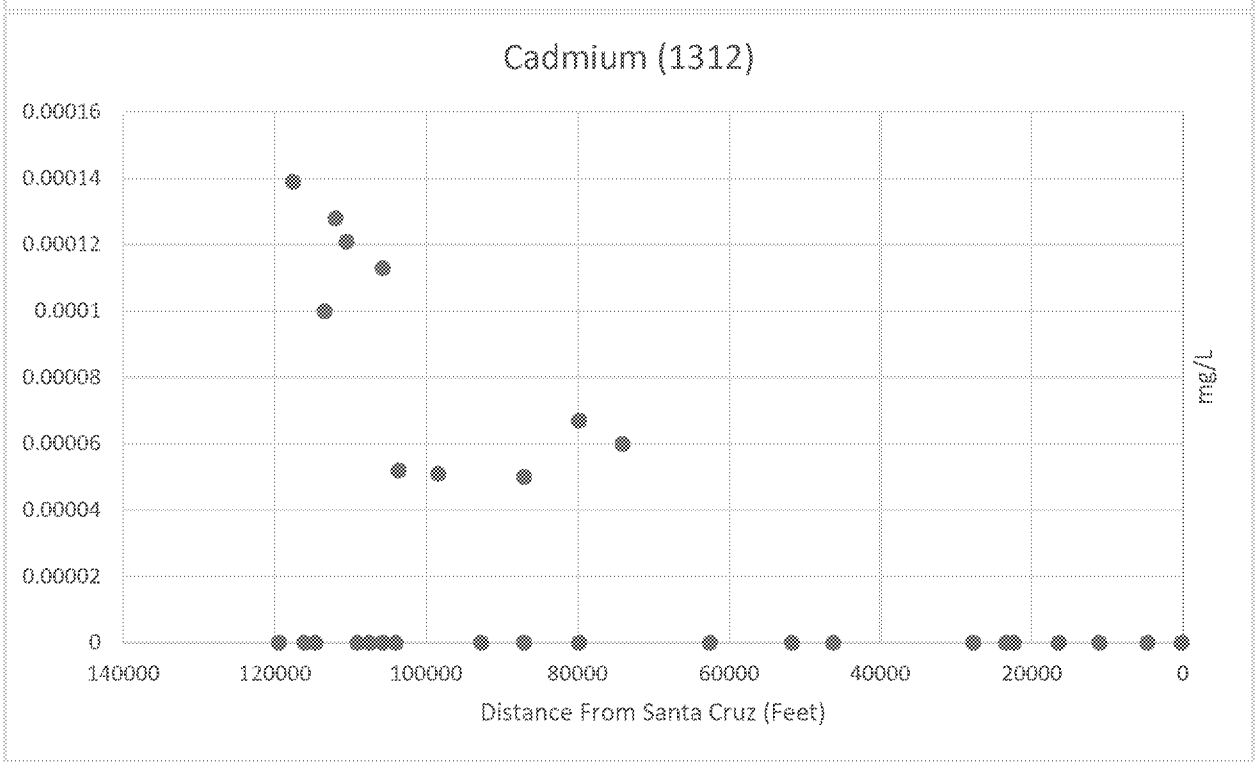

Zinc, total (3050)
250
200
150
100
50
0
mg/kg
140000
120000
100000
80000
60000
40000
20000
0
Distance From Santa Cruz (Feet)

Leachable Constituents (Method 1312)

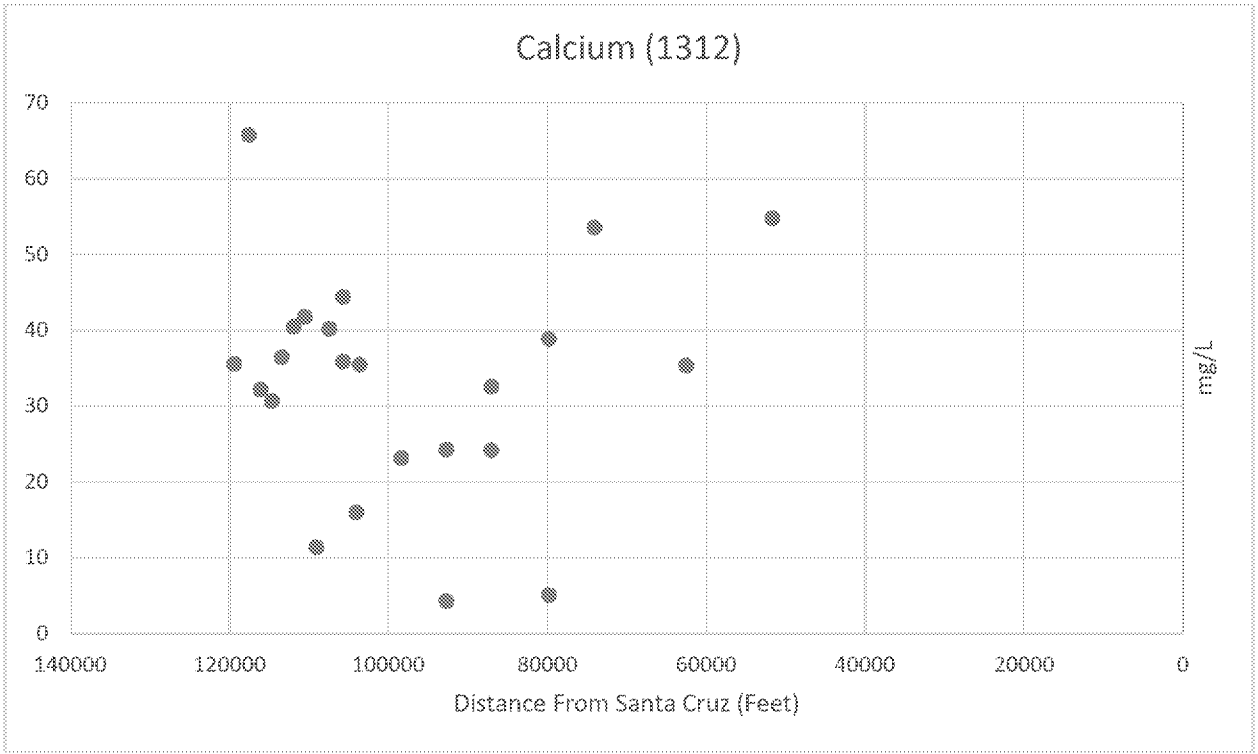


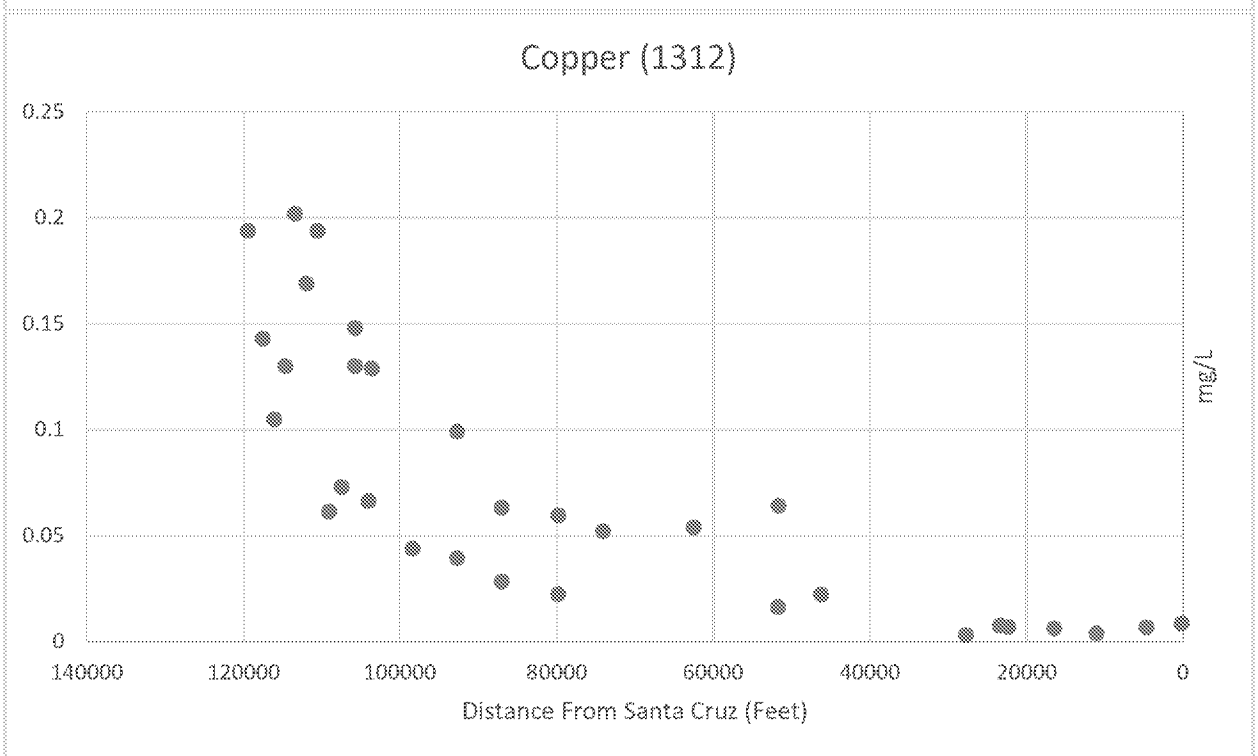




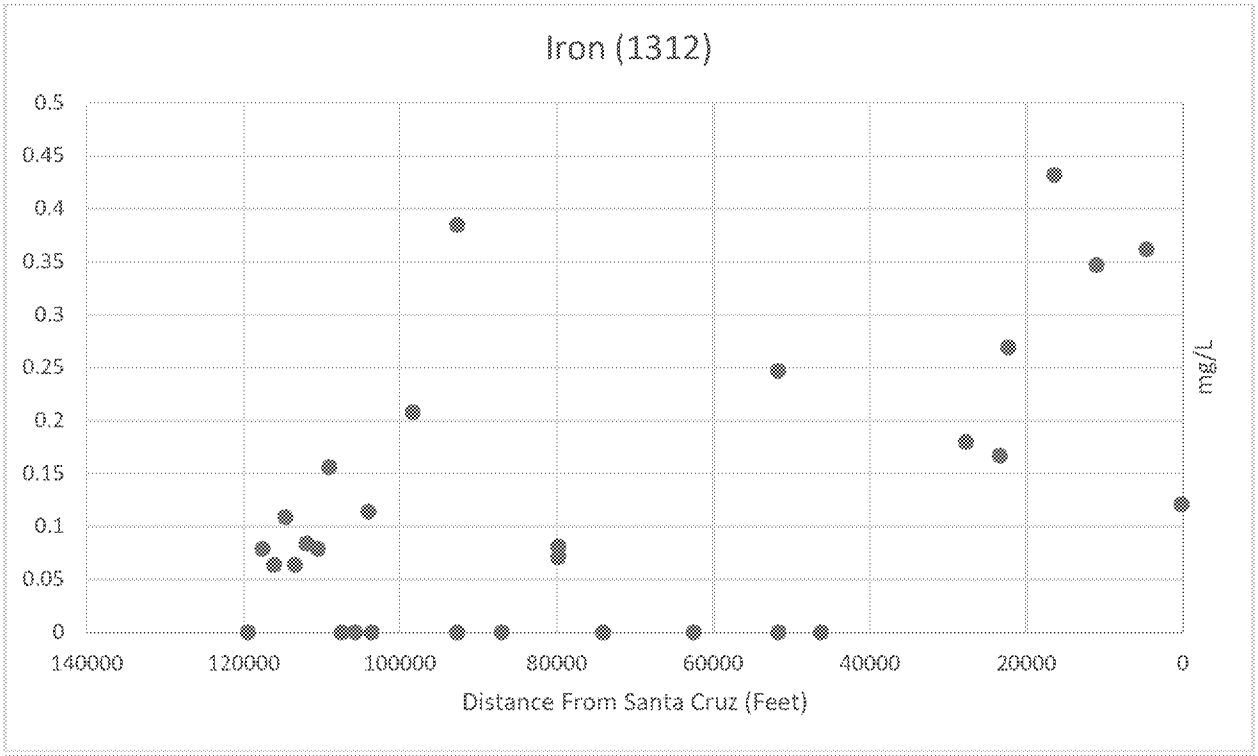


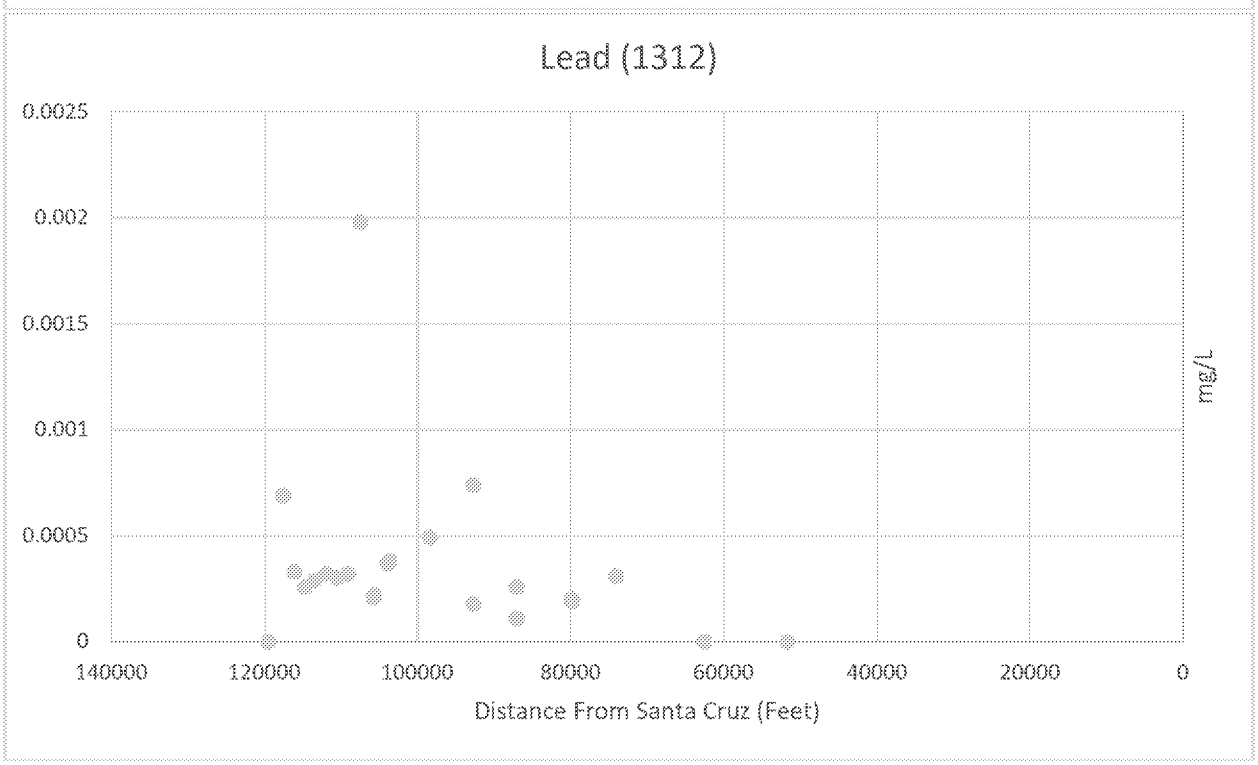
Biological Graphs – Soil Under Tree



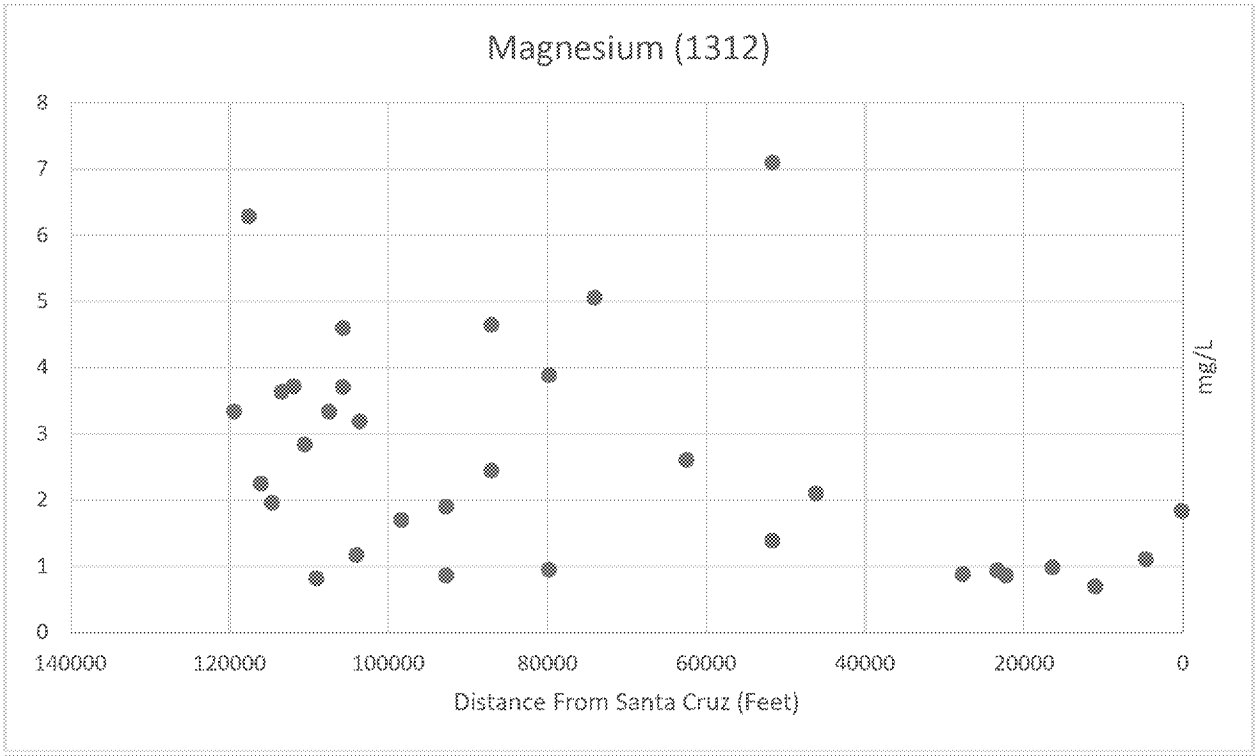


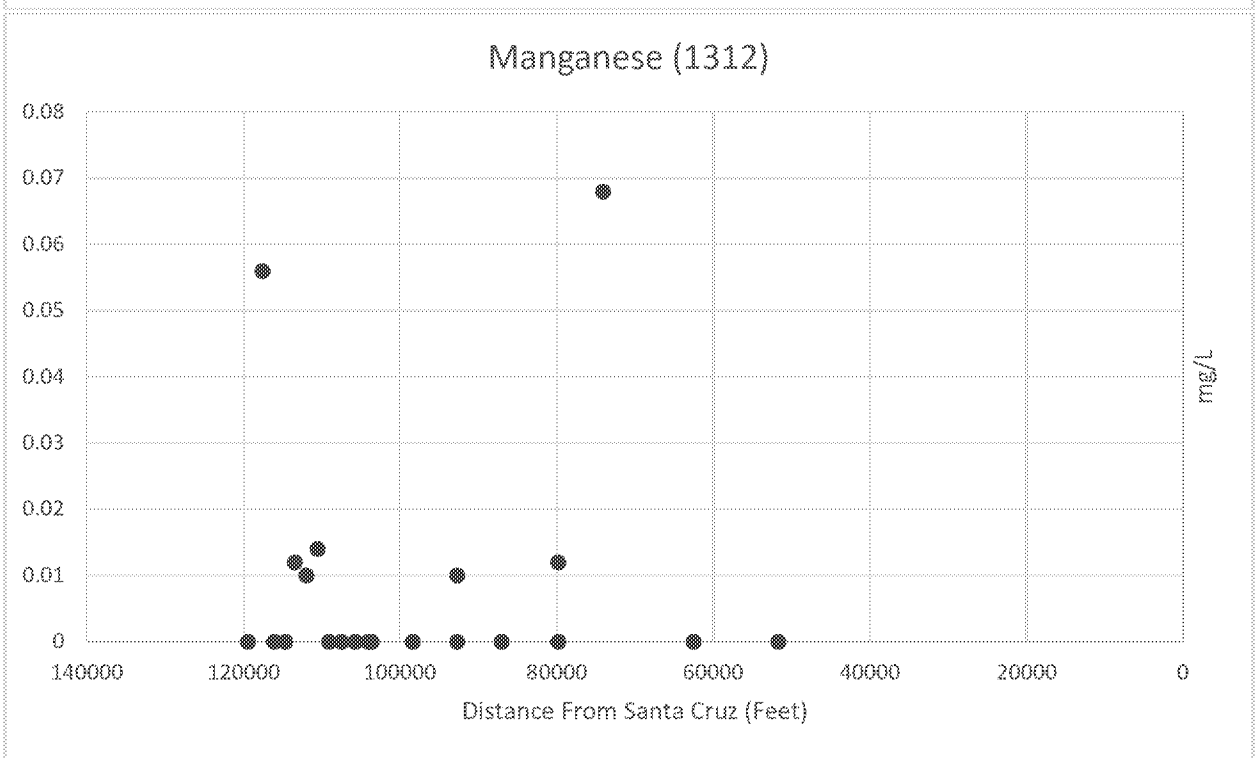
Biological Graphs – Soil Under Tree

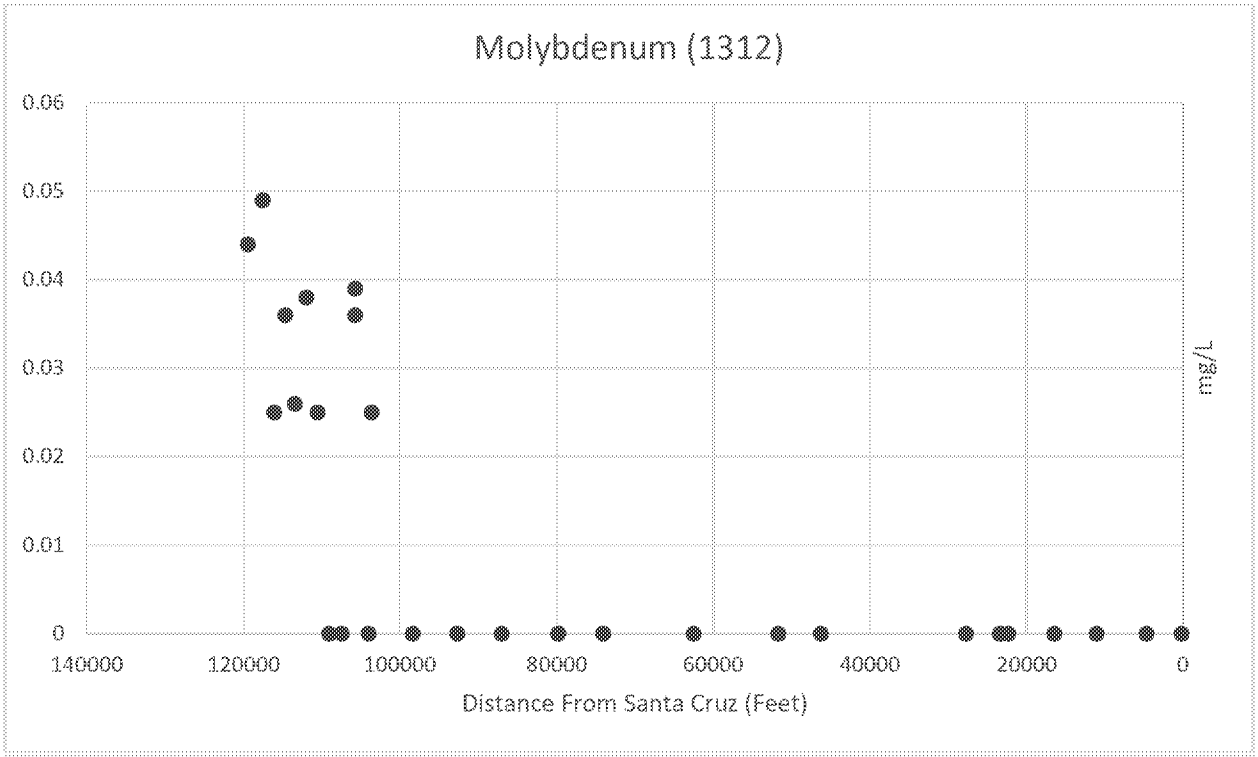


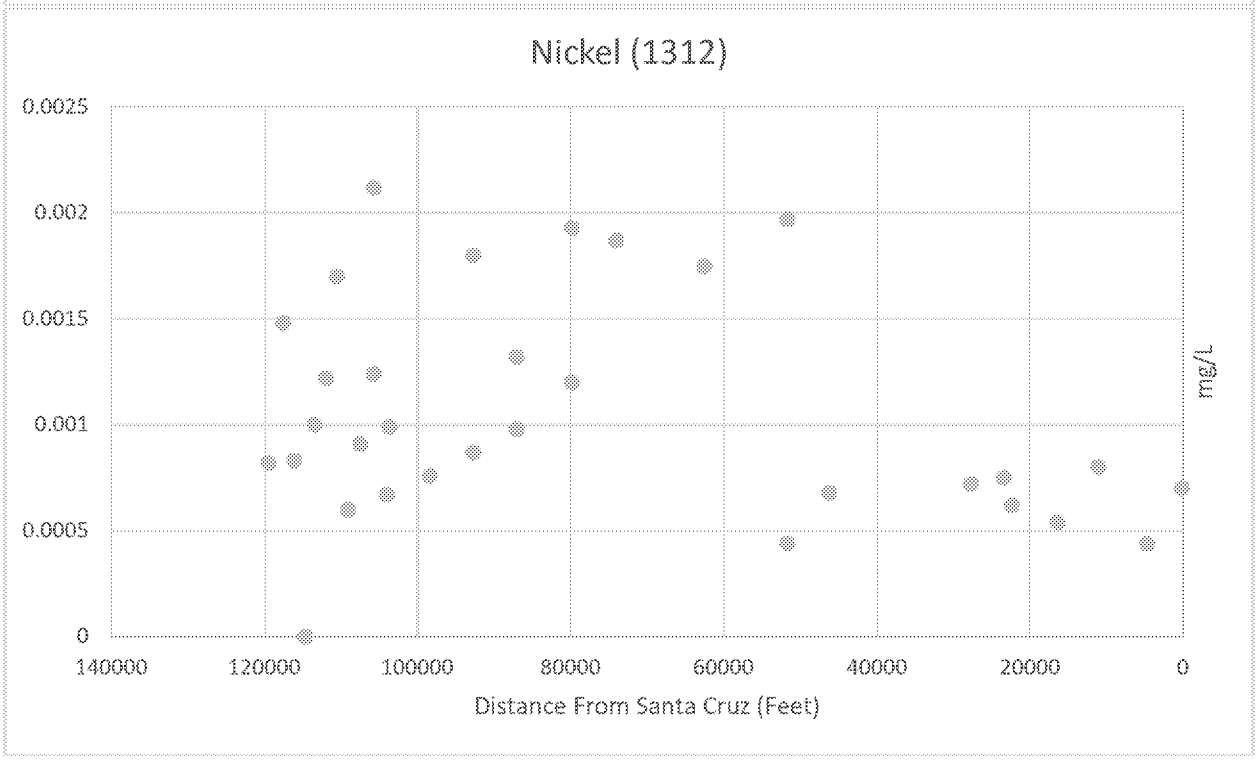


Biological Graphs – Soil Under Tree

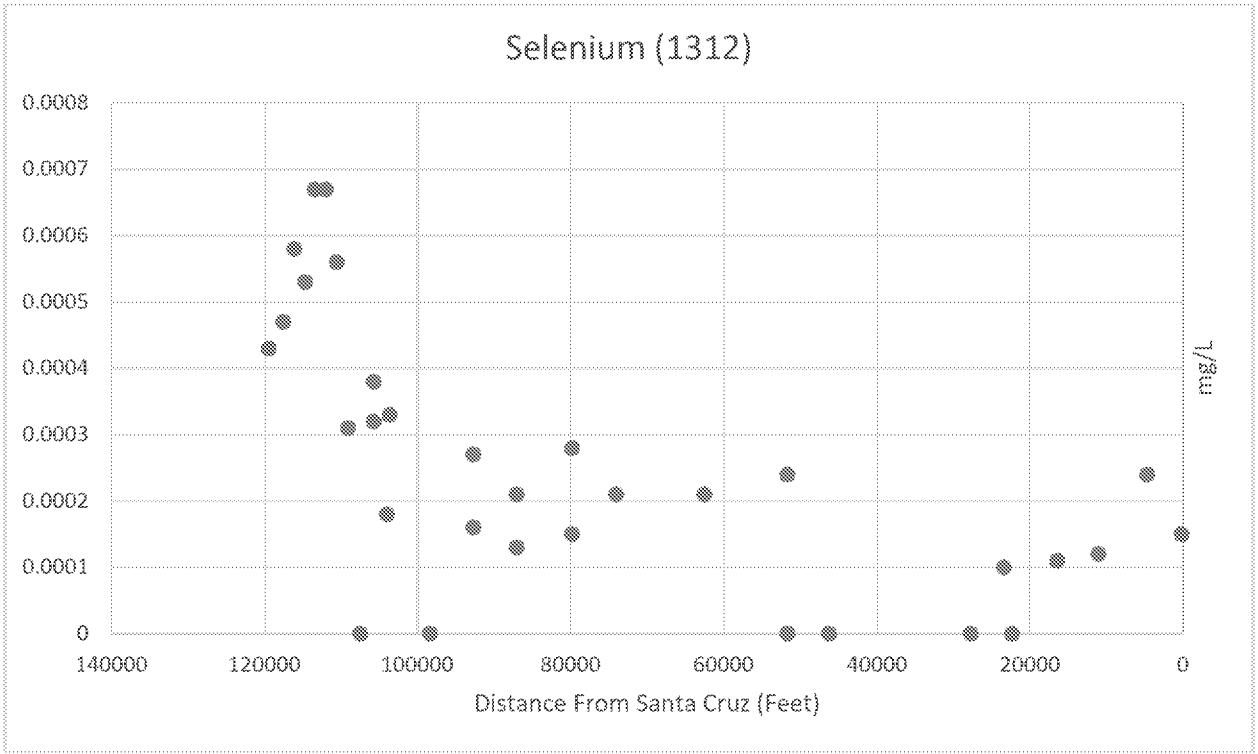

Magnesium (1312)
8
7
6
5
4
3
2
1
0
140000
120000
100000
80000
60000
40000
20000
0
Distance From Santa Cruz (Feet)
mg/L

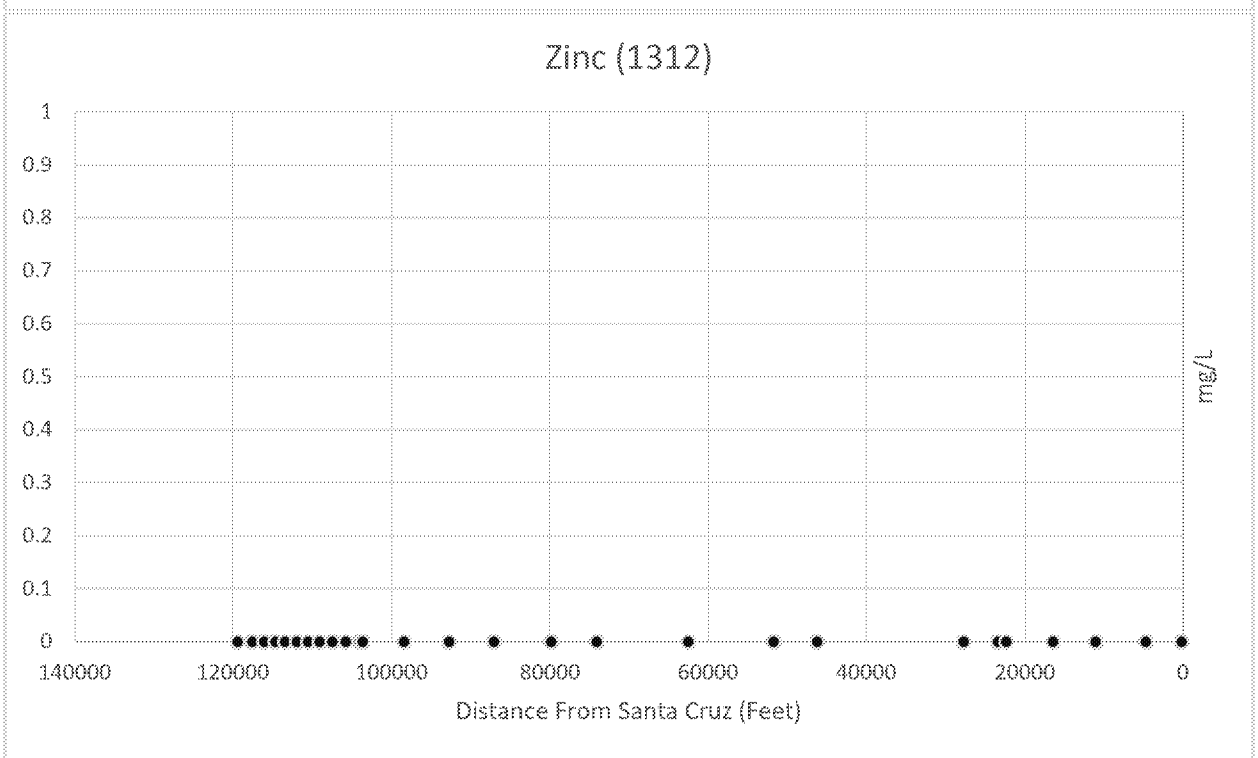

Manganese (1312)
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
140000
120000
100000
80000
60000
40000
20000
0
Distance From Santa Cruz (Feet)
mg/L





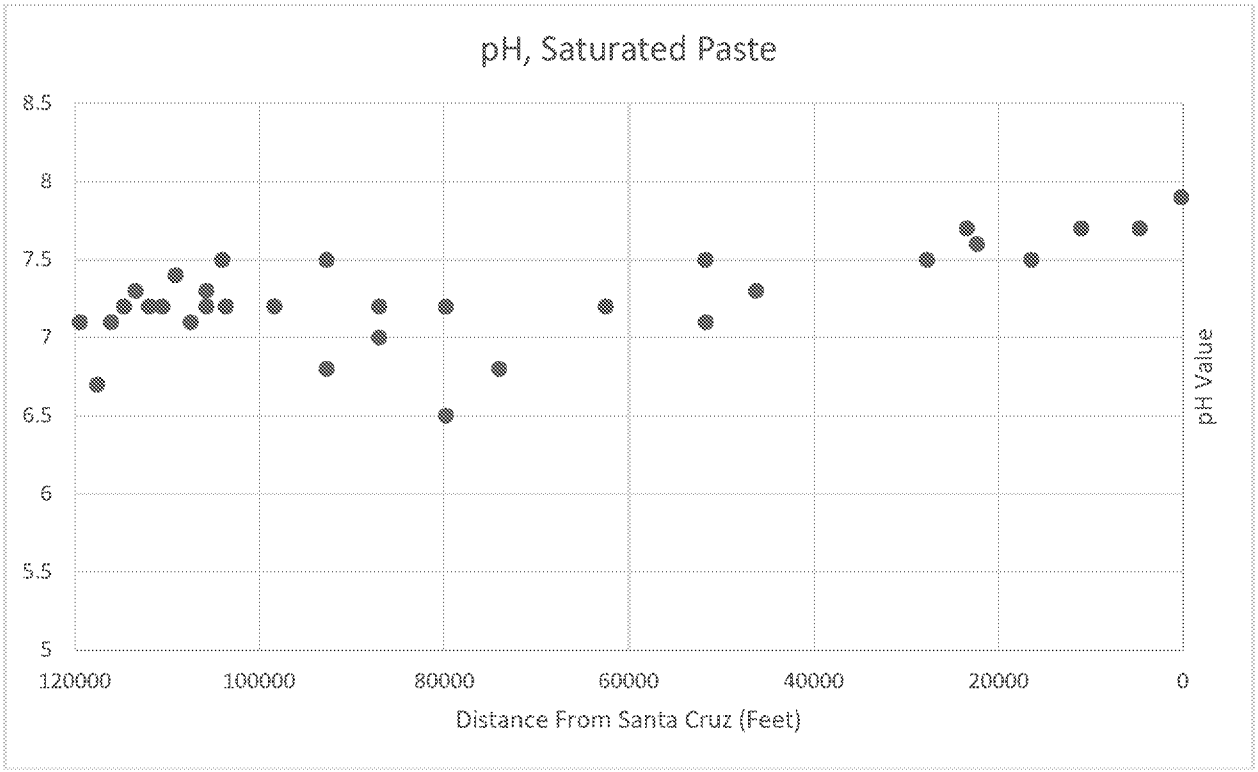
Biological Graphs – Soil Under Tree

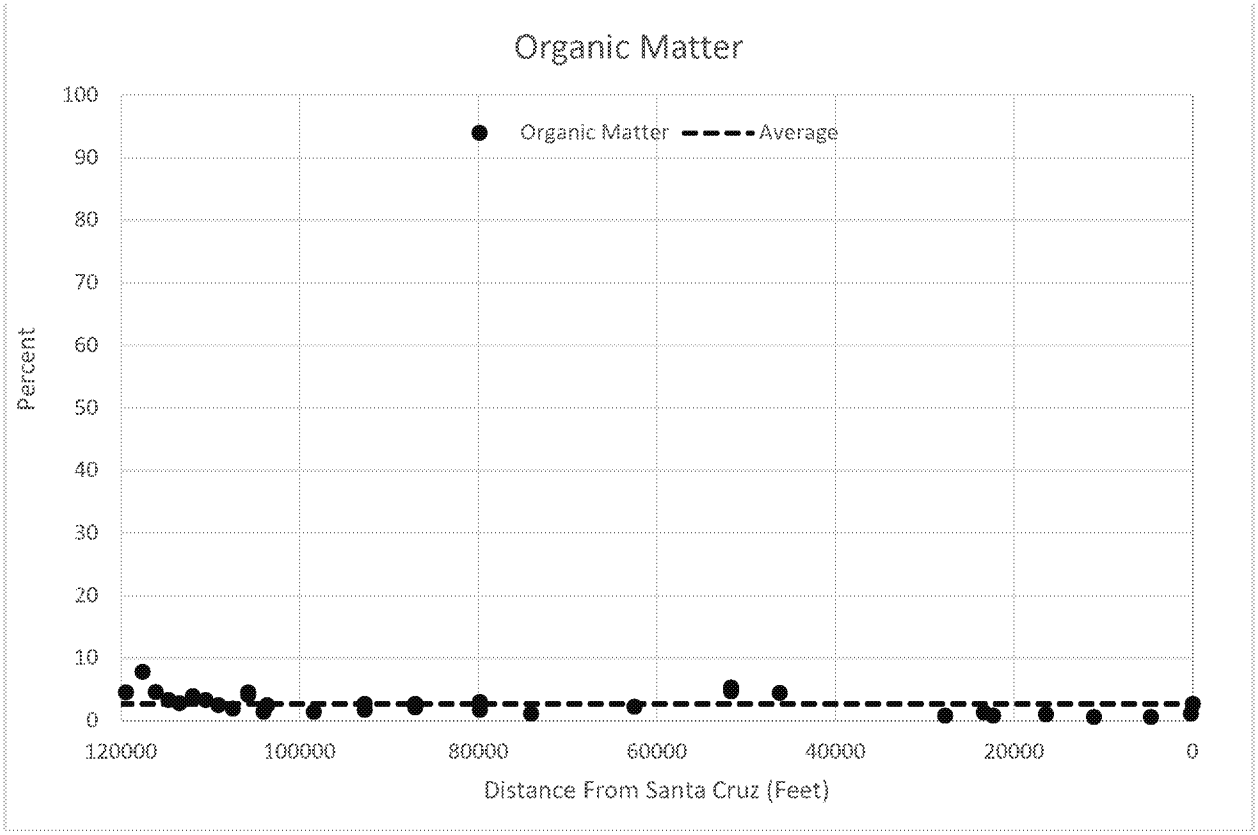




Biological Graphs – Soil Under Tree

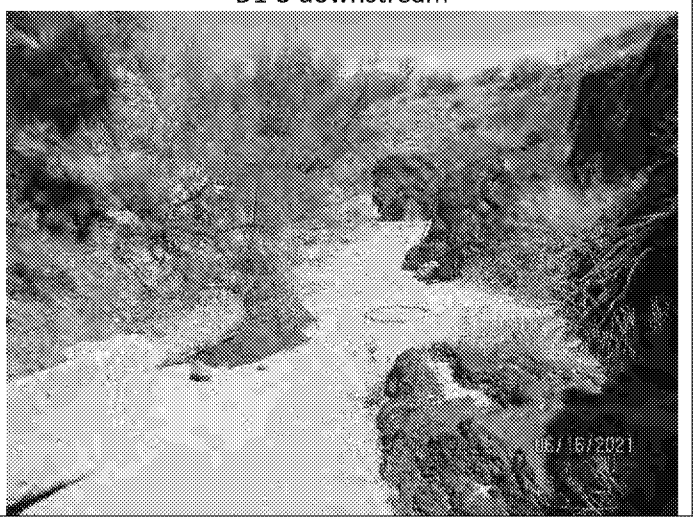
Other Graphs

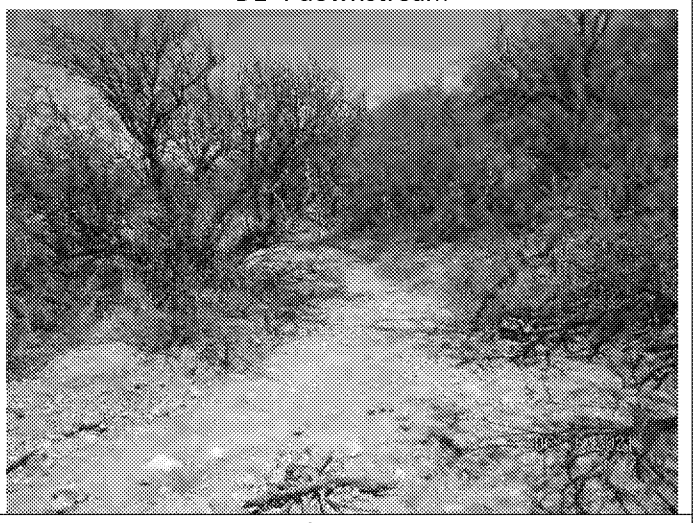
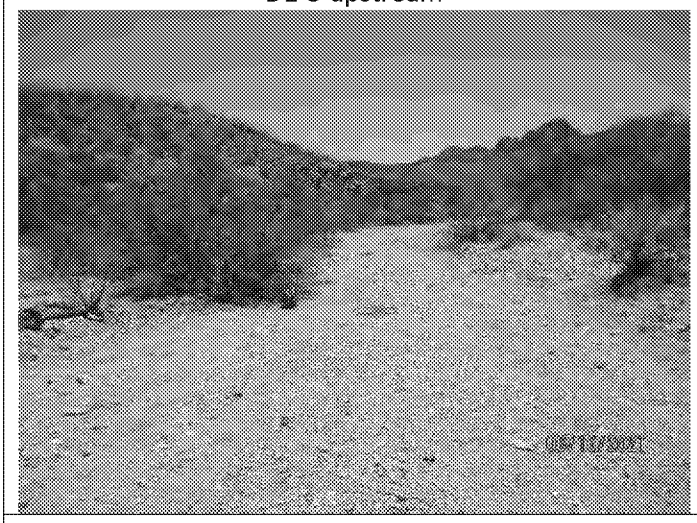
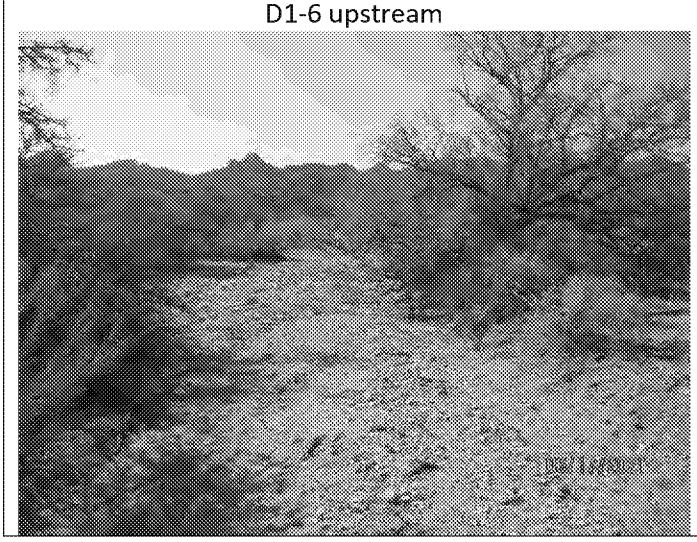




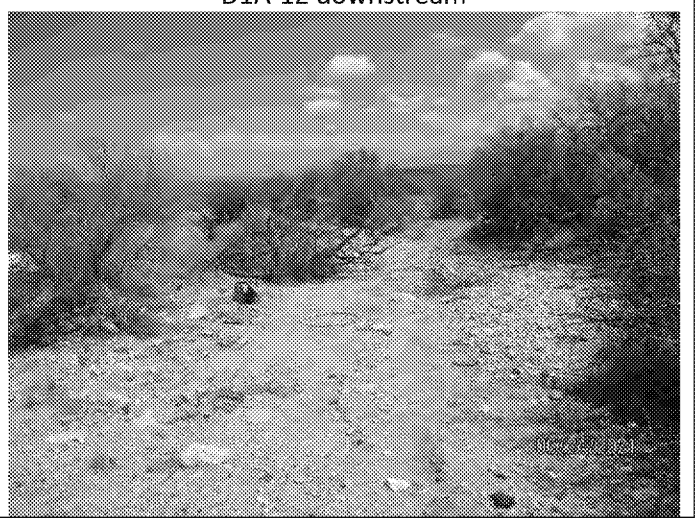
ATTACHMENT F

Sediment Sample Photo Log

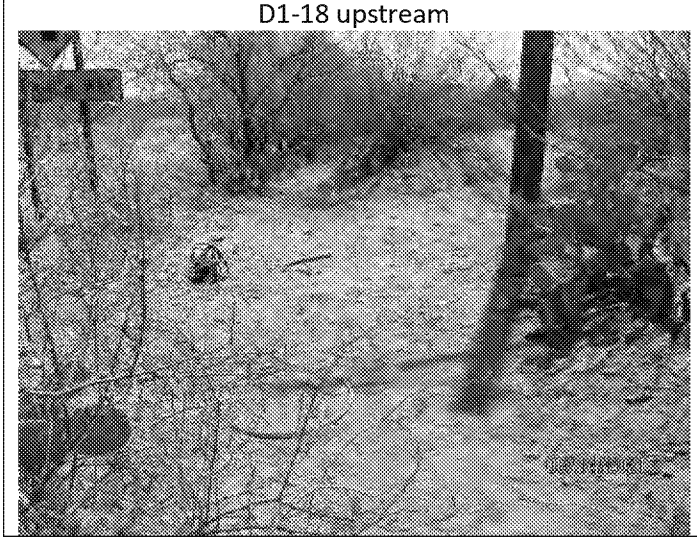
Drainage 1	
D1-1 upstream	D1-1 downstream
D1-2 upstream	D1-2 downstream
D1-3 upstream	D1-3 downstream
	

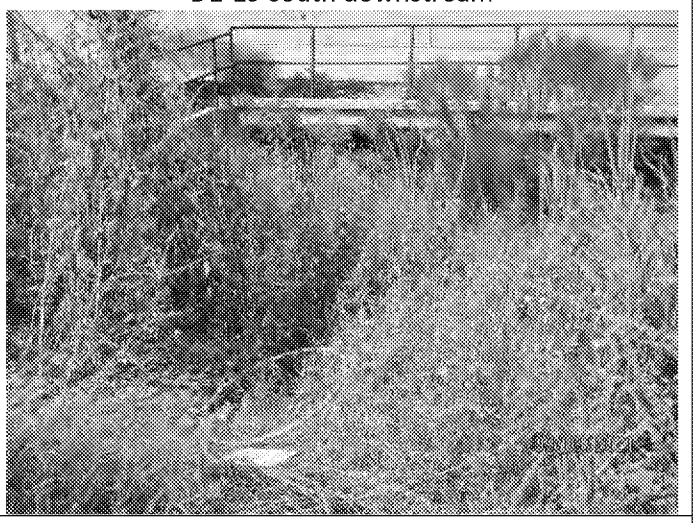
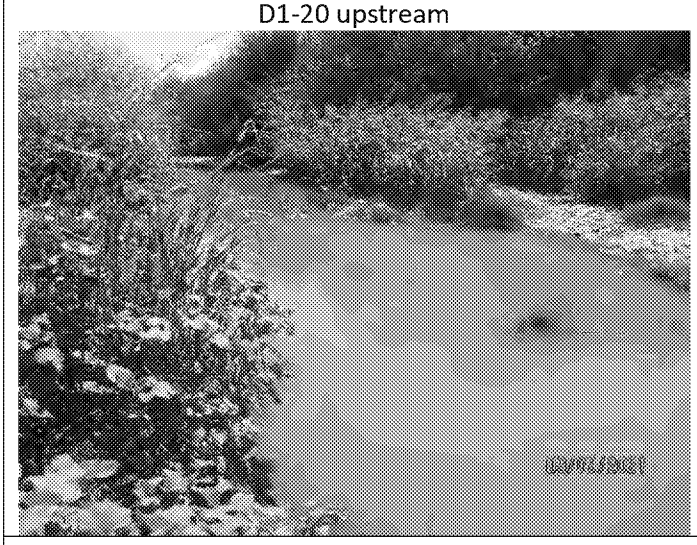
Drainage 1	
D1-4 upstream	D1-4 downstream
	
D1-5 upstream	D1-5 downstream
	
D1-6 upstream	D1-6 downstream
	

Drainage 1	
D1-7 upstream	D1-7 downstream
D1-8 upstream	D1-8 downstream
D1-9 upstream	D1-9 downstream

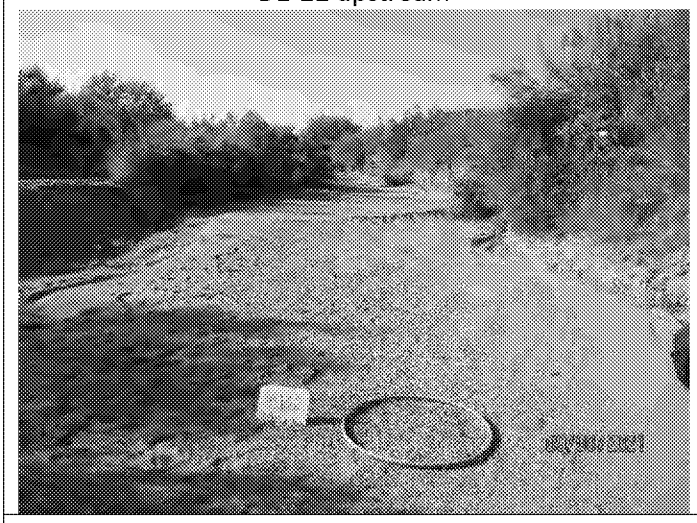
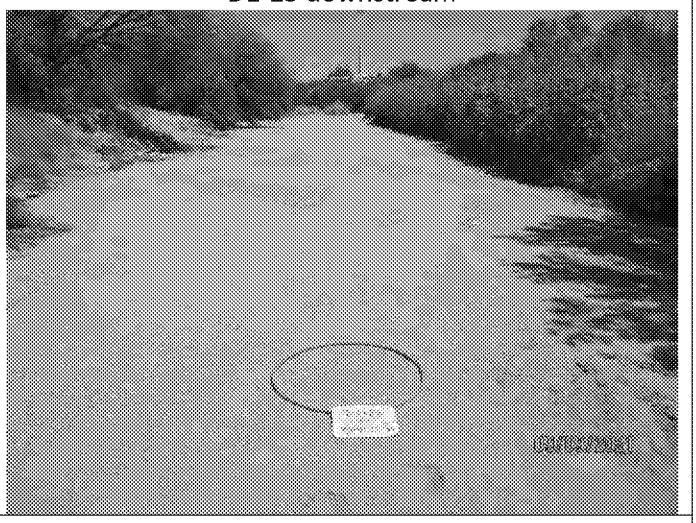
Drainage 1	
D1-10 upstream	D1-10 downstream
D1-11 upstream	D1-11 downstream
D1A-12 upstream	D1A-12 downstream
	

Drainage 1	
D1-13 upstream	D1-13 downstream
D1-14 upstream	D1-14 downstream
D1-15 upstream	D1-15 downstream

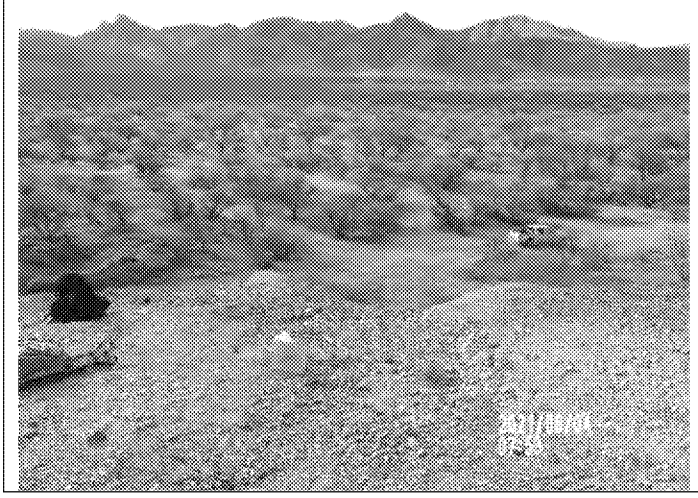
Drainage 1	
D1-16 upstream	D1-16 downstream
D1-17 upstream	D1-17 downstream
D1-18 upstream	D1-18 downstream
	

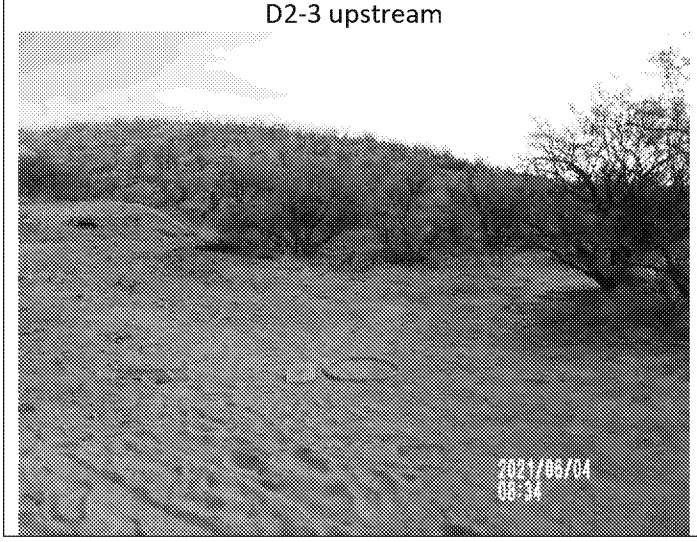
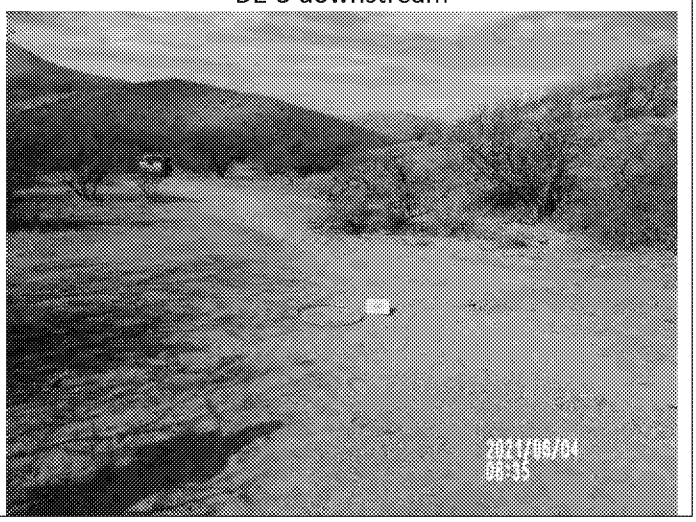
Drainage 1	
D1-19 upstream 	D1-19 downstream
D1-19 south upstream 	D1-19 south downstream 
D1-20 upstream 	D1-20 downstream

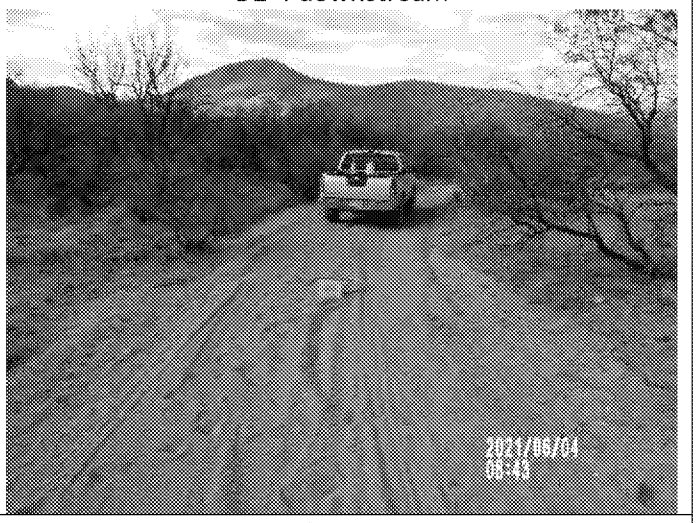
Drainage 1	
D1-20A upstream 	D1-20A downstream
D1-20B upstream 	D1-20B downstream
D1-21 upstream 	D1-21 downstream

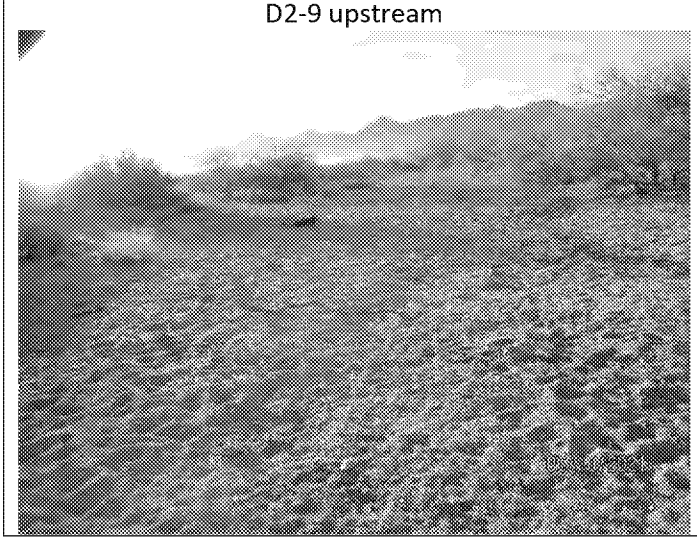
Drainage 1	
D1-22 upstream	D1-22 downstream
	
D1-23 upstream	D1-23 downstream
	
D1-24 upstream	D1-24 downstream

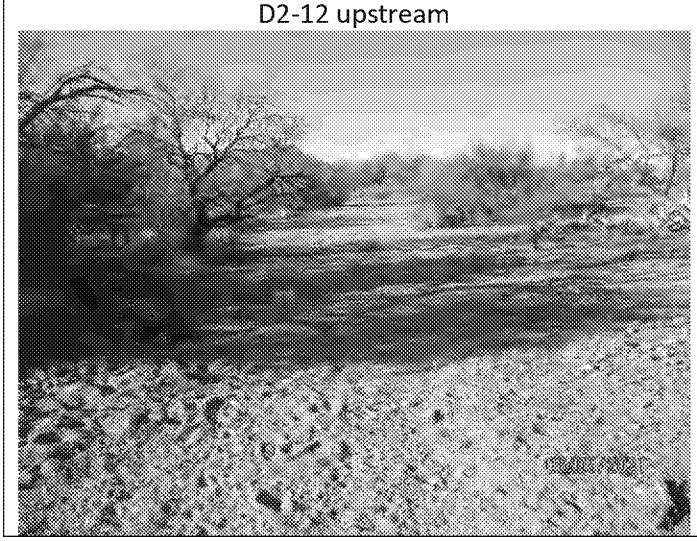
Drainage 1	
D1-25 upstream	D1-25 downstream

Drainage 2	
D2-S1 source - Ridley Mine looking southeast	D2-S1 source
D2-S2 source – Ridley Mine looking southeast	D2-S2
	

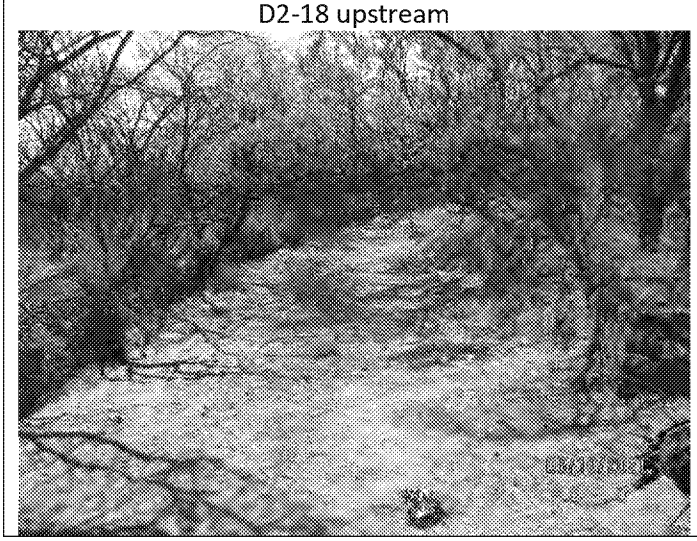
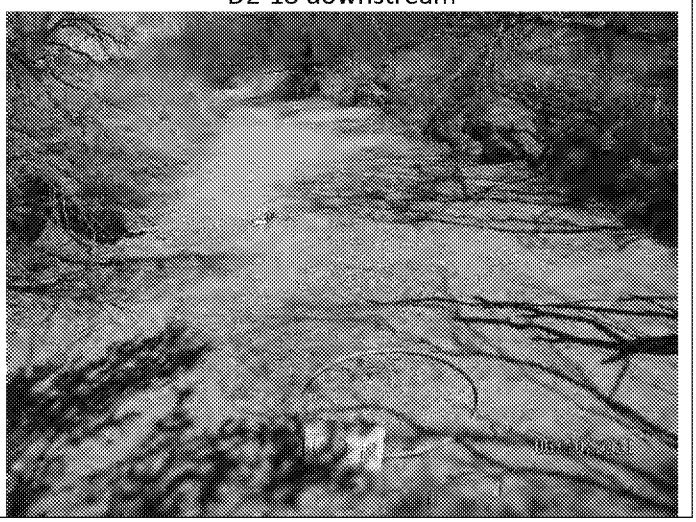
Drainage 2	
D2-1 upstream 	D2-1 downstream
D2-2 upstream 	D2-2 downstream
D2-3 upstream  	D2-3 downstream 

Drainage 2	
D2-4 upstream	D2-4 downstream
	
D2-5 upstream	D2-5 downstream
D2-6 upstream	D2-6 downstream

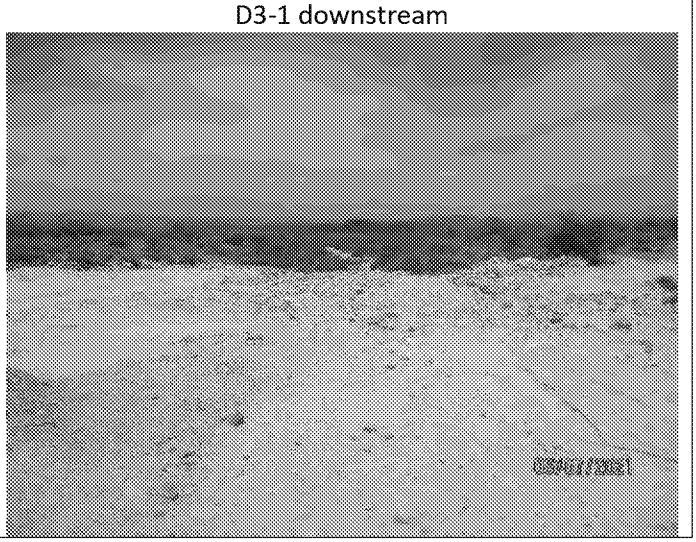
Drainage 2	
D2-7 upstream	D2-7 downstream
D2-8 upstream	D2-8 downstream
D2-9 upstream	D2-9 downstream
	

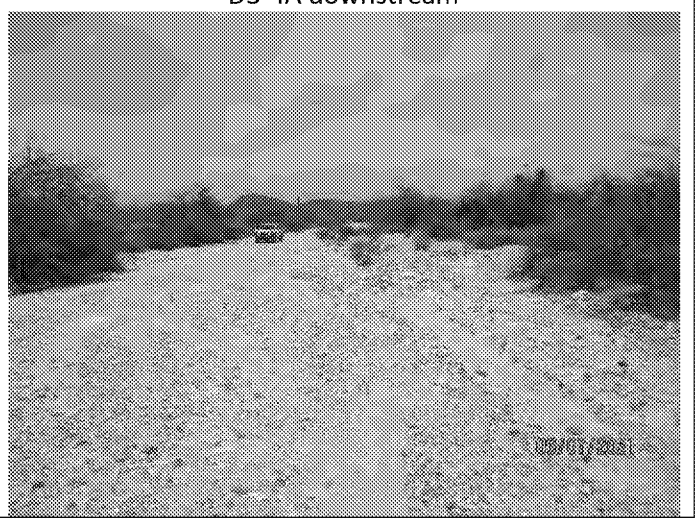
Drainage 2	
D2-10 upstream (D2-22 duplicate)	D2-10 downstream
D2-11 upstream	D2-11 downstream
D2-12 upstream	D2-12 downstream
	

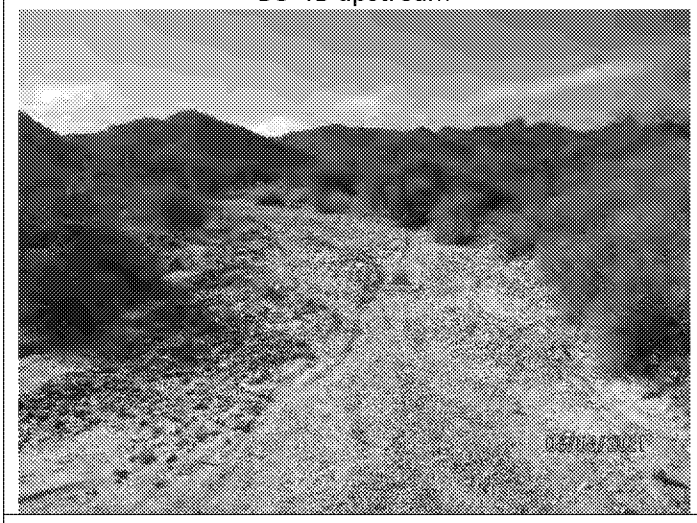
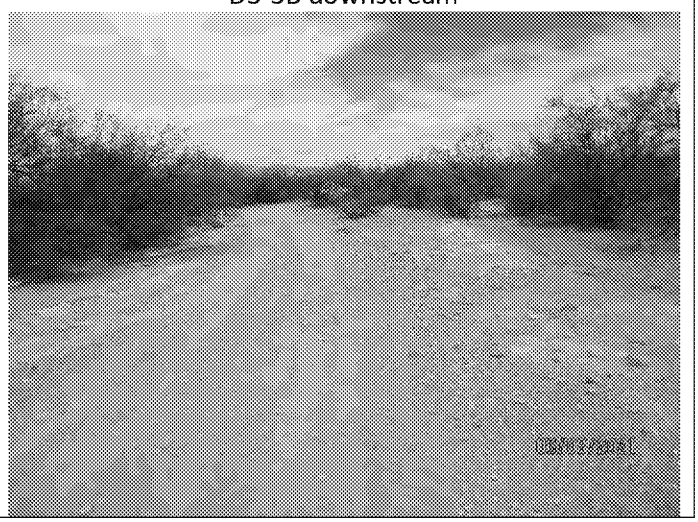
Drainage 2	
D2-13 upstream	D2-13 downstream
D2-14 upstream	D2-14 downstream
D2-15 upstream	D2-15 downstream

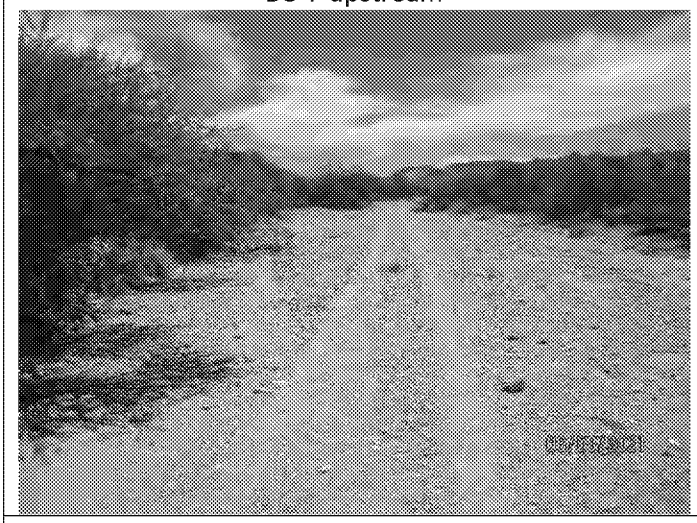
Drainage 2	
D2-16 upstream	D2-16 downstream
D2-17 upstream	D2-17 downstream
D2-18 upstream	D2-18 downstream
	

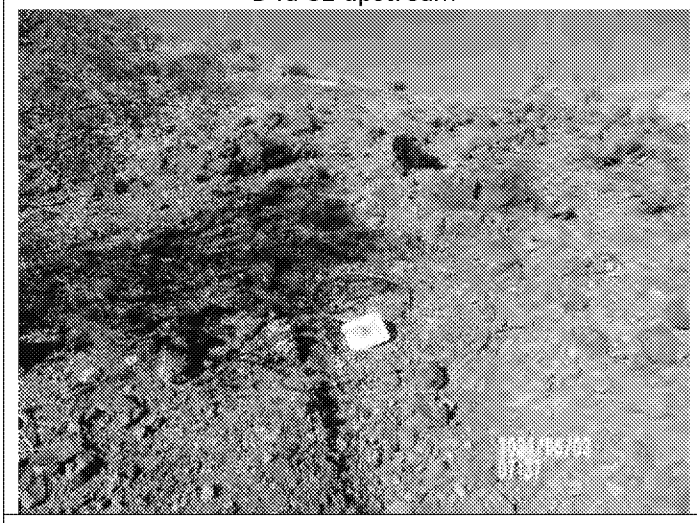
Drainage 2	
D2-19 upstream	D2-19 downstream
D2-20 upstream (D2-21 duplicate)	D2-20 downstream

Drainage 3	
D3-1 upstream	D3-1 downstream
	

Drainage 3	
D3-2 upstream	D3-2 downstream
D3-3 upstream	D3-3 downstream
D3-4A upstream	D3-4A downstream
	

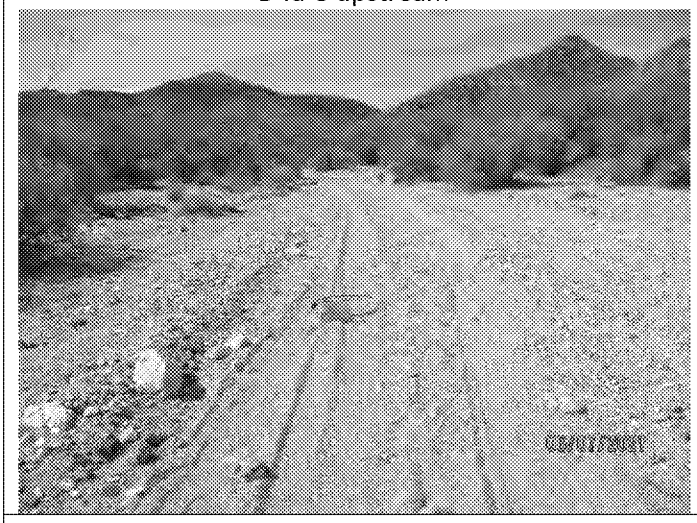
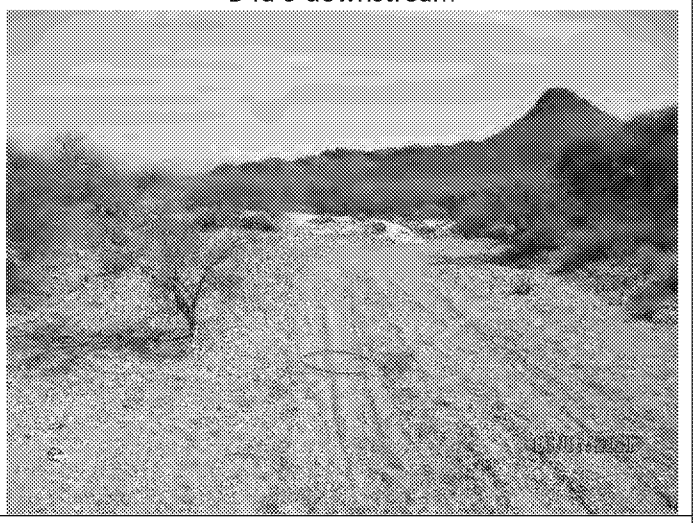
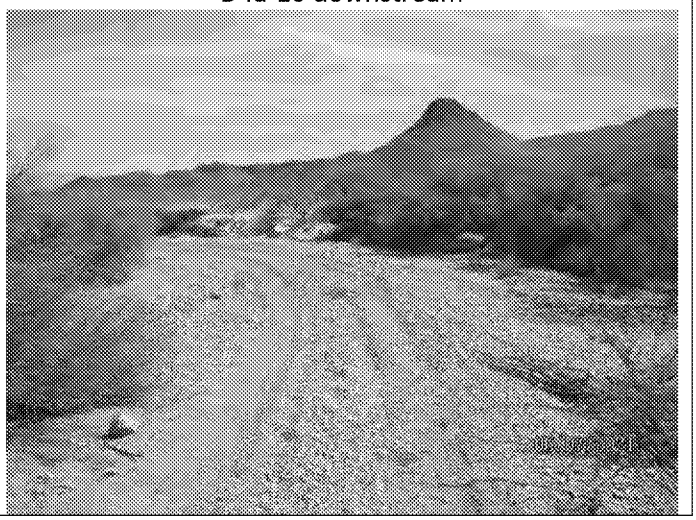
Drainage 3	
D3-4B upstream	D3-4B downstream
	
D3-5A upstream	D3-5A downstream
D3-5B upstream	D3-5B downstream
	

Drainage 3	
D3-6 upstream	D3-6 downstream
D3-7 upstream	D3-7 downstream
	
D3-8 upstream	D3-8 downstream

Drainage 4a	
D4a-S1 upstream	D4a-S1 downstream
	
D4a-S2 upstream	D4a-S2 downstream
D4a-1 upstream	D4a-1 downstream

Drainage 4a	
D4a-2 upstream	D4a-2 downstream
D4a-3 upstream	D4a-3 downstream
D4a-4 upstream	D4a-4 downstream

Drainage 4a	
D4a-5 upstream 	D4a-5 downstream
D4a-6 upstream 	D4a-6 downstream
D4a-7 upstream 	D4a-7 downstream

Drainage 4a	
D4a-8 upstream	D4a-8 downstream
	
D4a-9 upstream	D4a-9 downstream
	
D4a-10 upstream	D4a-10 downstream