LANL '10 TA-21

ENTERED

Roberts, Kathryn, NMENV

From: Roberts, Kathryn, NMENV
Sent: Monday, July 26, 2010 2:04 PM
To: 'Day, Emily'
Cc: Mark S. Thacker; Cobrain, Dave, NMENV
Subject: RE: Example figures with TD for DP Site Phase II

Emily/Mark,

The draft figures you provided are acceptable to NMED. This is a Phase II Report; therefore, there will be targeted intervals and constituents as in the example you provided. The figures do not need to reflect instances where only one constituent was analyzed. That type of information is explained in the text of the report.

Please let me know if you have any questions.

Thanks,
Katie

From: Day, Emily [mailto:Emily.Day@WestonSolutions.com]
Sent: Monday, July 26, 2010 9:22 AM
To: Roberts, Kathryn, NMENV
Cc: Mark S. Thacker
Subject: Example figures with TD for DP Site Phase II

Good morning-
Mark is out today and requested I go ahead and send you an example of figure edits. Attached are draft figures prepared for one SWMU.
We have labeled the TD for each location. At this site, inorganics were analyzed down to 3 ft while organics were analyzed down to 8 ft at location 21-25679. Therefore, location 21-25679 on the inorganic figure has TD to 3 ft and on the organic figure TD labeled as 8 ft.
Please let Mark and me know if this is acceptable or if you have any questions.
Also, in cases where only one metal was analyzed for (i.e., arsenic only), or one rad suite (i.e., only americium-241 in the deepest depth) do the figures need to indicate this? Right now, this info is in the samples collected tables in footnotes.

Thanks!
Emily

Emily Day
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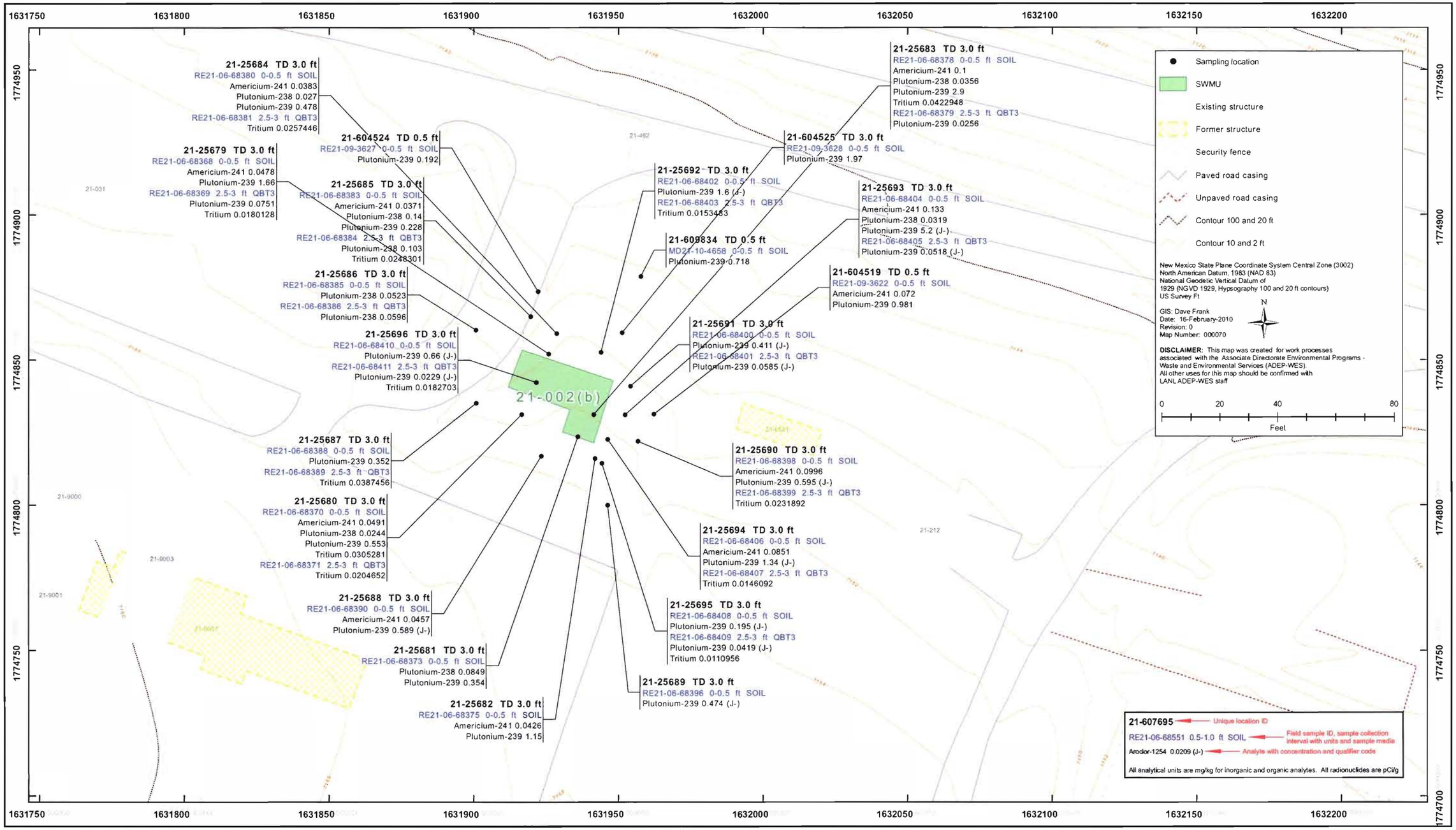
33824

7/26/2010


1631750
1631800
1631850
1631900
1631950
1632000
1632050
1632100
1632150
1632200
1774950
1774900
1774850
1774800
1774750
1774700
21-25684 TD 3.0 ft
RE21-06-68380 0-0.5 ft SOIL
Americium-241 0.0383
Plutonium-238 0.027
Plutonium-239 0.478
RE21-06-68381 2.5-3 ft QBT3
Tritium 0.0257446
21-25679 TD 3.0 ft
RE21-06-68368 0-0.5 ft SOIL
Americium-241 0.0478
Plutonium-239 1.66
RE21-06-68369 2.5-3 ft QBT3
Plutonium-239 0.0751
Tritium 0.0180128
21-604524 TD 0.5 ft
RE21-09-3627 0-0.5 ft SOIL
Plutonium-239 0.192
21-25685 TD 3.0 ft
RE21-06-68383 0-0.5 ft SOIL
Americium-241 0.0371
Plutonium-238 0.14
Plutonium-239 0.228
RE21-06-68384 2.5-3 ft QBT3
Plutonium-238 0.103
Tritium 0.0248301
21-25686 TD 3.0 ft
RE21-06-68385 0-0.5 ft SOIL
Plutonium-238 0.0523
RE21-06-68386 2.5-3 ft QBT3
Plutonium-238 0.0596
21-25696 TD 3.0 ft
RE21-06-68410 0-0.5 ft SOIL
Plutonium-239 0.66 (J-)
RE21-06-68411 2.5-3 ft QBT3
Plutonium-239 0.0229 (J-)
Tritium 0.0182703
21-25687 TD 3.0 ft
RE21-06-68388 0-0.5 ft SOIL
Plutonium-239 0.352
RE21-06-68389 2.5-3 ft QBT3
Tritium 0.0387456
21-25680 TD 3.0 ft
RE21-06-68370 0-0.5 ft SOIL
Americium-241 0.0491
Plutonium-238 0.0244
Plutonium-239 0.553
Tritium 0.0305281
RE21-06-68371 2.5-3 ft QBT3
Tritium 0.0204652
21-25688 TD 3.0 ft
RE21-06-68390 0-0.5 ft SOIL
Americium-241 0.0457
Plutonium-239 0.589 (J-)
21-25681 TD 3.0 ft
RE21-06-68373 0-0.5 ft SOIL
Plutonium-238 0.0849
Plutonium-239 0.354
21-25682 TD 3.0 ft
RE21-06-68375 0-0.5 ft SOIL
Americium-241 0.0426
Plutonium-239 1.15
21-25692 TD 3.0 ft
RE21-06-68402 0-0.5 ft SOIL
Plutonium-239 1.6 (J-)
RE21-06-68403 2.5-3 ft QBT3
Tritium 0.0153483
21-609834 TD 0.5 ft
MD21-10-4658 0-0.5 ft SOIL
Plutonium-239 0.718
21-25691 TD 3.0 ft
RE21-06-68400 0-0.5 ft SOIL
Plutonium-239 0.411 (J-)
RE21-06-68401 2.5-3 ft QBT3
Plutonium-239 0.0585 (J-)
21-002(b)
21-25690 TD 3.0 ft
RE21-06-68398 0-0.5 ft SOIL
Americium-241 0.0996
Plutonium-239 0.595 (J-)
RE21-06-68399 2.5-3 ft QBT3
Tritium 0.0231892
21-25694 TD 3.0 ft
RE21-06-68406 0-0.5 ft SOIL
Americium-241 0.0851
Plutonium-239 1.34 (J-)
RE21-06-68407 2.5-3 ft QBT3
Tritium 0.0146092
21-25695 TD 3.0 ft
RE21-06-68408 0-0.5 ft SOIL
Plutonium-239 0.195 (J-)
RE21-06-68409 2.5-3 ft QBT3
Plutonium-239 0.0419 (J-)
Tritium 0.0110956
21-25689 TD 3.0 ft
RE21-06-68396 0-0.5 ft SOIL
Plutonium-239 0.474 (J-)
21-25683 TD 3.0 ft
RE21-06-68378 0-0.5 ft SOIL
Americium-241 0.1
Plutonium-238 0.0356
Plutonium-239 2.9
Tritium 0.0422948
RE21-06-68379 2.5-3 ft QBT3
Plutonium-239 0.0256
21-604525 TD 3.0 ft
RE21-09-3628 0-0.5 ft SOIL
Plutonium-239 1.97
21-25693 TD 3.0 ft
RE21-06-68404 0-0.5 ft SOIL
Americium-241 0.133
Plutonium-238 0.0319
Plutonium-239 5.2 (J-)
RE21-06-68405 2.5-3 ft QBT3
Plutonium-239 0.0518 (J-)
21-604519 TD 0.5 ft
RE21-09-3622 0-0.5 ft SOIL
Americium-241 0.072
Plutonium-239 0.981
21-031
21-462
21-9000
21-9003
21-9001
21-212
Sampling location
SWMU
Existing structure
Former structure
Security fence
Paved road casing
Unpaved road casing
Contour 100 and 20 ft
Contour 10 and 2 ft
New Mexico State Plane Coordinate System Central Zone (3002)
North American Datum, 1983 (NAD 83)
National Geodetic Vertical Datum of
1929 (NGVD 1929, Hypsography 100 and 20 ft contours)
US Survey Ft
GIS: Dave Frank
Date: 16-February-2010
Revision: 0
Map Number: 000070
N
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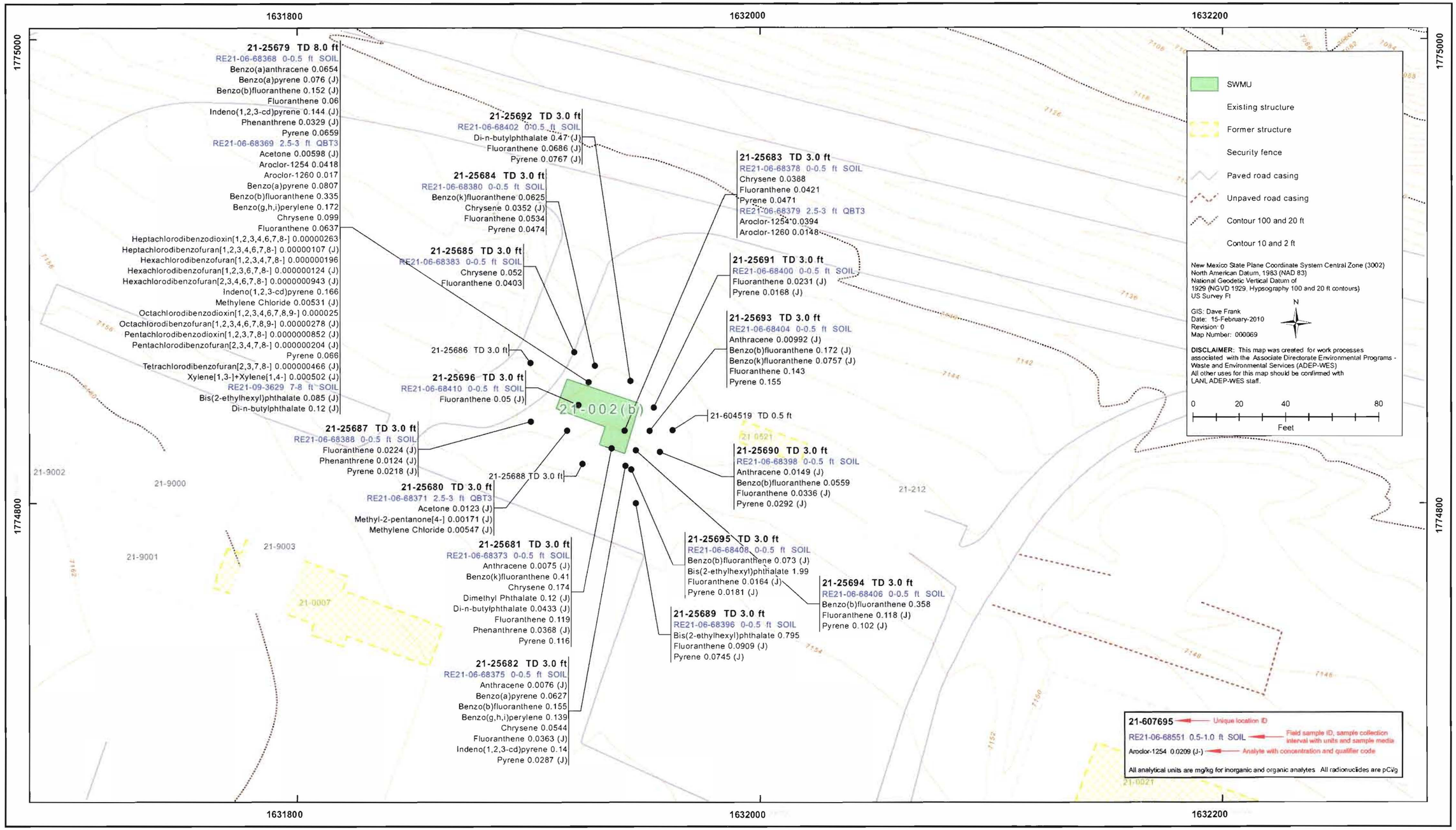
0
20
40
80
Feet
21-607695 Unique location ID
RE21-06-68551 0.5-1.0 ft SOIL Field sample ID, sample collection interval with units and sample media
Aroclor-1254 0.0209 (J-) Analyte with concentration and qualifier code
All analytical units are mg/kg for inorganic and organic analytes. All radionuclides are pCi/g


1631800
1632000
1632200
1775000
1774800
21-25679 TD 8.0 ft
RE21-06-68368 0-0.5 ft SOIL
Benzo(a)anthracene 0.0654
Benzo(a)pyrene 0.076 (J)
Benzo(b)fluoranthene 0.152 (J)
Fluoranthene 0.06
Indeno(1,2,3-cd)pyrene 0.144 (J)
Phenanthrene 0.0329 (J)
Pyrene 0.0659
RE21-06-68369 2.5-3 ft QBT3
Acetone 0.00598 (J)
Aroclor-1254 0.0418
Aroclor-1260 0.017
Benzo(a)pyrene 0.0807
Benzo(b)fluoranthene 0.335
Benzo(g,h,i)perylene 0.172
Chrysene 0.099
Fluoranthene 0.0637
Heptachlorodibenzodioxin[1,2,3,4,6,7,8-] 0.00000263
Heptachlorodibenzofuran[1,2,3,4,6,7,8-] 0.00000107 (J)
Hexachlorodibenzofuran[1,2,3,4,7,8-] 0.000000196
Hexachlorodibenzofuran[1,2,3,6,7,8-] 0.000000124 (J)
Hexachlorodibenzofuran[2,3,4,6,7,8-] 0.0000000943 (J)
Indeno(1,2,3-cd)pyrene 0.166
Methylene Chloride 0.00531 (J)
Octachlorodibenzodioxin[1,2,3,4,6,7,8,9-] 0.000025
Octachlorodibenzofuran[1,2,3,4,6,7,8,9-] 0.00000278 (J)
Pentachlorodibenzodioxin[1,2,3,7,8-] 0.0000000852 (J)
Pentachlorodibenzofuran[2,3,4,7,8-] 0.000000204 (J)
Pyrene 0.066
Tetrachlorodibenzofuran[2,3,7,8-] 0.000000466 (J)
Xylene[1,3-]+Xylene[1,4-] 0.000502 (J)
RE21-09-3629 7-8 ft SOIL
Bis(2-ethylhexyl)phthalate 0.085 (J)
Di-n-butylphthalate 0.12 (J)
21-25692 TD 3.0 ft
RE21-06-68402 0-0.5 ft SOIL
Di-n-butylphthalate 0.47 (J)
Fluoranthene 0.0686 (J)
Pyrene 0.0767 (J)
21-25684 TD 3.0 ft
RE21-06-68380 0-0.5 ft SOIL
Benzo(k)fluoranthene 0.0625
Chrysene 0.0352 (J)
Fluoranthene 0.0534
Pyrene 0.0474
21-25685 TD 3.0 ft
RE21-06-68383 0-0.5 ft SOIL
Chrysene 0.052
Fluoranthene 0.0403
21-25686 TD 3.0 ft
21-25696 TD 3.0 ft
RE21-06-68410 0-0.5 ft SOIL
Fluoranthene 0.05 (J)
21-002(b)
21-25687 TD 3.0 ft
RE21-06-68388 0-0.5 ft SOIL
Fluoranthene 0.0224 (J)
Phenanthrene 0.0124 (J)
Pyrene 0.0218 (J)
21-25688 TD 3.0 ft
21-25680 TD 3.0 ft
RE21-06-68371 2.5-3 ft QBT3
Acetone 0.0123 (J)
Methyl-2-pentanone[4-] 0.00171 (J)
Methylene Chloride 0.00547 (J)
21-25681 TD 3.0 ft
RE21-06-68373 0-0.5 ft SOIL
Anthracene 0.0075 (J)
Benzo(k)fluoranthene 0.41
Chrysene 0.174
Dimethyl Phthalate 0.12 (J)
Di-n-butylphthalate 0.0433 (J)
Fluoranthene 0.119
Phenanthrene 0.0368 (J)
Pyrene 0.116
21-25682 TD 3.0 ft
RE21-06-68375 0-0.5 ft SOIL
Anthracene 0.0076 (J)
Benzo(a)pyrene 0.0627
Benzo(b)fluoranthene 0.155
Benzo(g,h,i)perylene 0.139
Chrysene 0.0544
Fluoranthene 0.0363 (J)
Indeno(1,2,3-cd)pyrene 0.14
Pyrene 0.0287 (J)
21-25683 TD 3.0 ft
RE21-06-68378 0-0.5 ft SOIL
Chrysene 0.0388
Fluoranthene 0.0421
Pyrene 0.0471
RE21-06-68379 2.5-3 ft QBT3
Aroclor-1254 0.0394
Aroclor-1260 0.0148
21-25691 TD 3.0 ft
RE21-06-68400 0-0.5 ft SOIL
Fluoranthene 0.0231 (J)
Pyrene 0.0168 (J)
21-25693 TD 3.0 ft
RE21-06-68404 0-0.5 ft SOIL
Anthracene 0.00992 (J)
Benzo(b)fluoranthene 0.172 (J)
Benzo(k)fluoranthene 0.0757 (J)
Fluoranthene 0.143
Pyrene 0.155
21-604519 TD 0.5 ft
21-25690 TD 3.0 ft
RE21-06-68398 0-0.5 ft SOIL
Anthracene 0.0149 (J)
Benzo(b)fluoranthene 0.0559
Fluoranthene 0.0336 (J)
Pyrene 0.0292 (J)
21-25695 TD 3.0 ft
RE21-06-68408 0-0.5 ft SOIL
Benzo(b)fluoranthene 0.073 (J)
Bis(2-ethylhexyl)phthalate 1.99
Fluoranthene 0.0164 (J)
Pyrene 0.0181 (J)
21-25694 TD 3.0 ft
RE21-06-68406 0-0.5 ft SOIL
Benzo(b)fluoranthene 0.358
Fluoranthene 0.118 (J)
Pyrene 0.102 (J)
21-25689 TD 3.0 ft
RE21-06-68396 0-0.5 ft SOIL
Bis(2-ethylhexyl)phthalate 0.795
Fluoranthene 0.0909 (J)
Pyrene 0.0745 (J)
21-9002
21-9000
21-9001
21-9003
21-0007
21-212
21-0521
21-0021
SWMU
Existing structure
Former structure
Security fence
Paved road casing
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New Mexico State Plane Coordinate System Central Zone (3002)
North American Datum, 1983 (NAD 83)
National Geodetic Vertical Datum of
1929 (NGVD 1929, Hypsography 100 and 20 ft contours)
US Survey Ft
N
GIS: Dave Frank
Date: 15-February-2010
Revision: 0
Map Number: 000069
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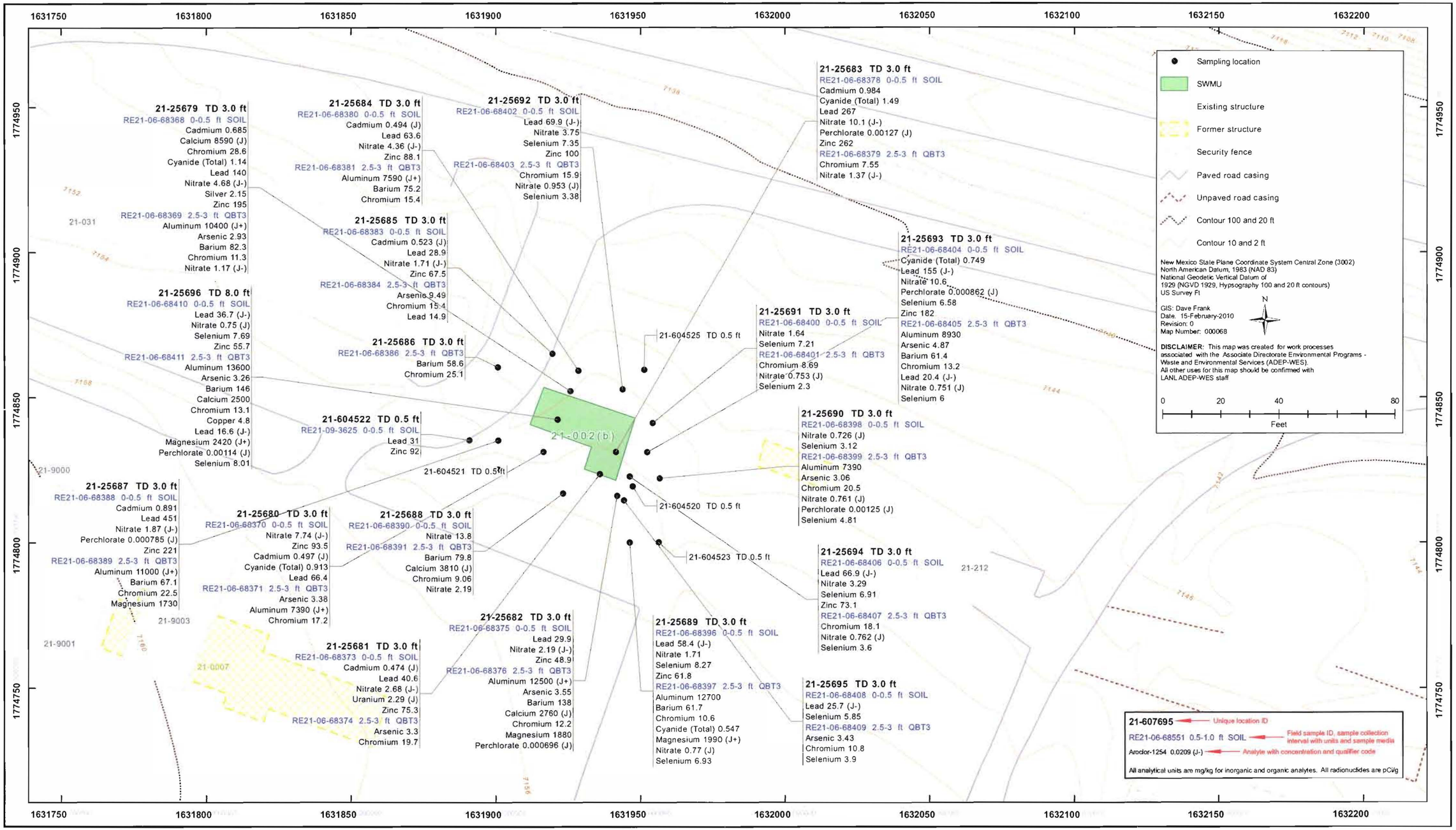
0 20 40 80
Feet
21-607695 Unique location ID
RE21-06-68551 0.5-1.0 ft SOIL Field sample ID, sample collection interval with units and sample media
Aroclor-1254 0.0209 (J-) Analyte with concentration and qualifier code
All analytical units are mg/kg for inorganic and organic analytes All radionuclides are pCi/g


1631750
1631800
1631850
1631900
1631950
1632000
1632050
1632100
1632150
1632200
1774950
1774900
1774850
1774800
1774750
21-25679 TD 3.0 ft
RE21-06-68368 0-0.5 ft SOIL
Cadmium 0.685
Calcium 8590 (J)
Chromium 28.6
Cyanide (Total) 1.14
Lead 140
Nitrate 4.68 (J-)
Silver 2.15
Zinc 195
RE21-06-68369 2.5-3 ft QBT3
Aluminum 10400 (J+)
Arsenic 2.93
Barium 82.3
Chromium 11.3
Nitrate 1.17 (J-)
21-25684 TD 3.0 ft
RE21-06-68380 0-0.5 ft SOIL
Cadmium 0.494 (J)
Lead 63.6
Nitrate 4.36 (J-)
Zinc 88.1
RE21-06-68381 2.5-3 ft QBT3
Aluminum 7590 (J+)
Barium 75.2
Chromium 15.4
21-25692 TD 3.0 ft
RE21-06-68402 0-0.5 ft SOIL
Lead 69.9 (J-)
Nitrate 3.75
Selenium 7.35
Zinc 100
RE21-06-68403 2.5-3 ft QBT3
Chromium 15.9
Nitrate 0.953 (J)
Selenium 3.38
21-25683 TD 3.0 ft
RE21-06-68378 0-0.5 ft SOIL
Cadmium 0.984
Cyanide (Total) 1.49
Lead 267
Nitrate 10.1 (J-)
Perchlorate 0.00127 (J)
Zinc 262
RE21-06-68379 2.5-3 ft QBT3
Chromium 7.55
Nitrate 1.37 (J-)
21-25685 TD 3.0 ft
RE21-06-68383 0-0.5 ft SOIL
Cadmium 0.523 (J)
Lead 28.9
Nitrate 1.71 (J-)
Zinc 67.5
RE21-06-68384 2.5-3 ft QBT3
Arsenic 9.49
Chromium 15.4
Lead 14.9
21-25693 TD 3.0 ft
RE21-06-68404 0-0.5 ft SOIL
Cyanide (Total) 0.749
Lead 155 (J-)
Nitrate 10.6
Perchlorate 0.000862 (J)
Selenium 6.58
Zinc 182
RE21-06-68405 2.5-3 ft QBT3
Aluminum 8930
Arsenic 4.87
Barium 61.4
Chromium 13.2
Lead 20.4 (J-)
Nitrate 0.751 (J)
Selenium 6
21-25696 TD 8.0 ft
RE21-06-68410 0-0.5 ft SOIL
Lead 36.7 (J-)
Nitrate 0.75 (J)
Selenium 7.69
Zinc 55.7
RE21-06-68411 2.5-3 ft QBT3
Aluminum 13600
Arsenic 3.26
Barium 146
Calcium 2500
Chromium 13.1
Copper 4.8
Lead 16.6 (J-)
Magnesium 2420 (J+)
Perchlorate 0.00114 (J)
Selenium 8.01
21-25686 TD 3.0 ft
RE21-06-68386 2.5-3 ft QBT3
Barium 58.6
Chromium 25.1
21-604525 TD 0.5 ft
21-25691 TD 3.0 ft
RE21-06-68400 0-0.5 ft SOIL
Nitrate 1.64
Selenium 7.21
RE21-06-68401 2.5-3 ft QBT3
Chromium 8.69
Nitrate 0.753 (J)
Selenium 2.3
21-604522 TD 0.5 ft
RE21-09-3625 0-0.5 ft SOIL
Lead 31
Zinc 92
21-002(b)
21-604521 TD 0.5 ft
21-25690 TD 3.0 ft
RE21-06-68398 0-0.5 ft SOIL
Nitrate 0.726 (J)
Selenium 3.12
RE21-06-68399 2.5-3 ft QBT3
Aluminum 7390
Arsenic 3.06
Chromium 20.5
Nitrate 0.761 (J)
Perchlorate 0.00125 (J)
Selenium 4.81
21-25687 TD 3.0 ft
RE21-06-68388 0-0.5 ft SOIL
Cadmium 0.891
Lead 451
Nitrate 1.87 (J-)
Perchlorate 0.000785 (J)
Zinc 221
RE21-06-68389 2.5-3 ft QBT3
Aluminum 11000 (J+)
Barium 67.1
Chromium 22.5
Magnesium 1730
21-25680 TD 3.0 ft
RE21-06-68370 0-0.5 ft SOIL
Nitrate 7.74 (J-)
Zinc 93.5
Cadmium 0.497 (J)
Cyanide (Total) 0.913
Lead 66.4
RE21-06-68371 2.5-3 ft QBT3
Arsenic 3.38
Aluminum 7390 (J+)
Chromium 17.2
21-25688 TD 3.0 ft
RE21-06-68390 0-0.5 ft SOIL
Nitrate 13.8
RE21-06-68391 2.5-3 ft QBT3
Barium 79.8
Calcium 3810 (J)
Chromium 9.06
Nitrate 2.19
21-604520 TD 0.5 ft
21-604523 TD 0.5 ft
21-25694 TD 3.0 ft
RE21-06-68406 0-0.5 ft SOIL
Lead 66.9 (J-)
Nitrate 3.29
Selenium 6.91
Zinc 73.1
RE21-06-68407 2.5-3 ft QBT3
Chromium 18.1
Nitrate 0.762 (J)
Selenium 3.6
21-25682 TD 3.0 ft
RE21-06-68375 0-0.5 ft SOIL
Lead 29.9
Nitrate 2.19 (J-)
Zinc 48.9
RE21-06-68376 2.5-3 ft QBT3
Aluminum 12500 (J+)
Arsenic 3.55
Barium 138
Calcium 2760 (J)
Chromium 12.2
Magnesium 1880
Perchlorate 0.000696 (J)
21-25689 TD 3.0 ft
RE21-06-68396 0-0.5 ft SOIL
Lead 58.4 (J-)
Nitrate 1.71
Selenium 8.27
Zinc 61.8
RE21-06-68397 2.5-3 ft QBT3
Aluminum 12700
Barium 61.7
Chromium 10.6
Cyanide (Total) 0.547
Magnesium 1990 (J+)
Nitrate 0.77 (J)
Selenium 6.93
21-25695 TD 3.0 ft
RE21-06-68408 0-0.5 ft SOIL
Lead 25.7 (J-)
Selenium 5.85
RE21-06-68409 2.5-3 ft QBT3
Arsenic 3.43
Chromium 10.8
Selenium 3.9
21-25681 TD 3.0 ft
RE21-06-68373 0-0.5 ft SOIL
Cadmium 0.474 (J)
Lead 40.6
Nitrate 2.68 (J-)
Uranium 2.29 (J)
Zinc 75.3
RE21-06-68374 2.5-3 ft QBT3
Arsenic 3.3
Chromium 19.7
21-031
21-9000
21-9003
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21-0007
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0
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Feet
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